GENERAL NOTES:

- 1. At least 72 hours prior to any excavation, contractor shall contact MISS UTILITIES OF VA at 811 or online to have utilities marked.
- 2. The owner/developer is responsible for replacing or repairing any and all damages to driveways, roads, sidewalks, and other public or private improvements and above and below ground utilities damaged during construction. Milling and/or overlay of the street may be required at the direction of the city inspector.
- 3. GPIN(s) 14698422470000
- 4. This lot or parcel survey was created by instrument #20051110001835770
- 5. Zoning: R20
- 6. AICUZ note: This site does not lie within aircraft Accident Potential Zone "NONE" and/or Clear Zone and/or Noise Zone(s) <65 dB and is not subject to aircraft accidents and/or above average noise levels due to its proximity to airport operations. Noise zone attenuation measures for new construction may be required in accordance with the airport noise attenuation and safety ordinance and height restrictions have been imposed in accordance with Section 202(b) of the City Zoning Ordinance.
- 7. Vertical Datum and Bench Mark Description (NAVD 88) Station #TJJ-21, Elev 16.93'.
- 8. The site is located in Watershed(s): Primary: Chesapeake Bay Secondary: Little Creek
- EPA: Lynnhaven-Poquoson (HUC 02080108)
- 9. Flood Hazard Zone Note: The property appears to fall within Flood Zone "X" as shown on the FEMA NFIP FIRM for the City of Virginia Beach, Community—Panel Number 515531—0118G, dated 01—16—2015.
- 10. The proposed dwelling is not located in a special flood hazard area.
- 11. Property is not located in a "Flood Zone Subject to Special Restrictions" per City Code, Appendix K, Floodplain Ordinance, Sec. 4.10
- 12. Lowest finished floor note: New construction or substantial improvement of any residential structure or manufactured home lowest proposed floor elevation, including basements, or bottom of lowest structural member, whichever is applicable, is at least two (2) feet above the base flood level.
- 13. Lot grading statement: The lot grading on this plan is in accordance with the latest subdivision construction plan submitted to and approved by the Director of Planning or his designee on _____N/A ___. (N/A if not applicable)
- 14. Per the approved subdivision construction plan, a 5' wide concrete sidewalk is not required along the frontage of this lot as shown.
- 15. Lot area: 27,982 SF = 0.64 Acres
- 16. Proposed impervious area: 5,000 SF
- 17. Percentage of lot covered by impervious area: 17.9%
- 18. Area of Land Disturbance: 19,500 SF = 0.45 Acres
- 19. Proposed Building Height (measured from the lowest grade 6' from structure to highest point on structure): 35 ft.
- 20. Required Residential Tree Canopy, per City Code Appendix E, Tree Planting, Preservation and Replacement: 2,000 SF
- 21. Trees and vegetation located in the city right of way are city property and cannot be cut, damaged or removed without permission from the Department of Parks and Recreation/Landscape Management office; call (757) 385—4461 for assistance. Removal without required permission is a punishable Class 3 misdemeanor per City Code Article 1, Section 23—39.
- 22. All trees in the city right of way and onsite to remain are required to have tree protection in compliance with the Virginia Department of Environmental Quality (DEQ) specifications and standards.
- 23. Erosion and Sediment (E&S) Control Agreement in Lieu of a Plan: All land disturbance of 2,500 square feet or greater requires an approved Erosion and Sediment Control Plan. The owner/developer of this single family residence chooses to utilize an "Agreement in Lieu of a Plan" to meet this requirement, therefore all E&S measures have not been shown hereon. At a minimum, silt fence shall be installed around the area of construction. A construction entrance and inlet protection shall also be installed and any other measures deemed necessary by the city inspector(s). All E&S measures and practices shall comply with the City of Virginia Beach and Virginia Department of Environmental Quality (DEQ) regulations, specifications and standards.
- 24. Stormwater Management Agreement in Lieu of a Plan: A Stormwater Management Plan is required for the construction of a single family residence with land disturbance of 2,500 square feet or greater located in the Chesapeake Bay Watershed, and land disturbance of 1 acre or greater in other watersheds. The owner/developer of this single family residence chooses to utilize an "Agreement in Lieu of a Plan" to meet this requirement, therefore stormwater management measures shown hereon are not intended for review, and are shown for inspection and owner's maintenance purposes only. All stormwater measures and practices shall comply with the City of Virginia Beach and Virginia Department of Environmental Quality (DEQ) regulations, specifications and standards.
- 25. Whether a stormwater management plan is or is not required, where drainage facilities (BMPs) are necessary due to inadequacy of the downstream system, the drainage facilities are reviewed and approved as shown hereon. Additional separate drainage calculations may be submitted and are considered a part of this plan.

UTILITY NOTES:

- 26. City water and sewer is available to this site.
- 27. Sewer and water connection installations, relocations and abandonments will be completed by a licensed utility contractor hired and paid by the developer.
- 28. Utilities to be installed by the developer's contractor in the city right of way or public easement require a Right of Way Permit, and posting of a surety (check, letter of credit or bond) based on an approved Engineer's Cost Estimate. Contact the Development Services Center (DSC) at (757) 385—8277 for additional information.
- 29. The owner/developer/contractor must contact Public Utilities Inspections at (757) 385-4175 at least 48 hours prior to any utility construction located in the city right of way or easements.
- 30. The owner/developer/contractor must contact Public Utilities Inspections at (757) 385-4175 to schedule an inspections prior to placing backfill over the service line(s).
- 31. The Department of Public Utilities requires the installation of a lateral wye connection to the sanitary sewer gravity main. In addition, a minimum of 10 feet of the existing main must be removed and replaced in conjunction with the installation of the wye
- 32. Brass fittings to meet CDA No. C89520, with no more than one quarter of one percent (0.25%) total lead content by weight shall be used for corporation stops, meter valves and service couplings.
- 33. Existing water and/or sewer services to be abandoned shall be abandoned at the main in accordance with Section 3.9 (sanitary sewer) and 4.9 (water) of the City of Virginia Beach Department of Public Utilities Design Standard Manual. Any lines not shown on the plan that are located during construction shall be abandoned per Public Utilities requirements at the developer's expense.
- 34. If structure is to be demolished include the following notes: a) Developer must verify and stake the location of the existing sanitary sewer cleanout or lateral at the right of way prior to demolition of existing structure. b) Prior to demolition, developer shall contact Public Utility Operations at (757) 385—1400 to remove existing water meter. A new x/x" water meter shall be installed by the City at the developer's expense.

continued, see right...

2	04-25-18	REVS PER CITY COMMENT LETTER DATED 02-26-18	PGE
1	02-05-18	REVS PER CITY COMMENT LETTER DATED 01-16-18	PGE
NO.	DATE	REVISION	BY

SINGLE FAMILY SITE PLAN

LOT 7, 0.633 ACRES, BAYSIDE

(LAKE SHORES SUBD.)
VIRGINIA BEACH, VIRGINIA
DSC FILE #D03-006828-SF

DRAWING INDEX

- 1. COVER / NOTE SHEET
- 2. EXISTING CONDITIONS

SEWER FLOW

ANTICIPATED SEWER FLOW

CITY SEWER: YES

0.215 GPM (AVG.)

0.538 GPM (PEAK)

- 3. DEMOLITION / E&SC PLAN
- 4. SITE DEVELOPMENT PLAN
- 5. GENERAL NOTES & DETAILS

LOT SIZE: 27,982 S.F. OR 0.64 AC.

UNDER THE V.S.M.P. GENERAL PERMIT.

SUBMIT REGISTRATION STATEMENT TO:

203 GOVERNOR STREET, SUITE 206

ATTN.:DEBRA BALLARD (482-8089)

765 S. BATTLEFIELD BLVD.

ATTN.:MS. PAULA MAUDER (466-5530)

NORFOLK, VA 23502

5200 CLEVELAND ST.

DOMINION VIRGINIA POWER

ATTN::THERESA JOHNSON (222-8901)

ENGINEERING DEPARTMENT

VIRGINIA BEACH, VA 23462

801 S. BATTLEFIELD BLVD.

CHESAPEAKE, VA 23322

ATTN:LISA ASHLEY (671-3410) (VA. BEACH)

MIKE CAMPBELL (671-3462) (VA. BEACH)

DOMINION VIRGINIA POWER ENGINEERING DEPARTMENT

WALTER MOYE (671-3500) (VA. BEACH)

OR KEVIN STARKE (461-7529)

5100 E. VIRGINIA BEACH BLVD.

CHESAPEAKE. VA 23322

STORMWATER PERMITTING

VERIZON COMMUNICATIONS

VIRGINIA NATURAL GAS:

COX COMMUNICATIONS

RICHMOND, VA 23219

SOIL AND WATER CONSERVATION DIVISION

AREA OF DISTRUBANCE: 19,500 S.F. OR 0.45 AC.

PURSUANT TO 4 VAC 50-60-380.B.1, LAND-DISTURBING

ACTIVITIES THAT ARE EITHER GREATER THAN ONE ACRE

SUBJECT TO THE CHESAPEAKE BAY PRESERVATION ACT

AND REGULATIONS MUST BE REGISTERED FOR COVERAGE

SEE REGISTRATION FORM & FEE INFORMATION ON-LINE AT:

http://www.dcr.virginia.gov/soil and water/vsmp.shtml.

DEPARTMENT OF CONSERVATION AND RECREATION

FRANCHISE UTILITY CONTACTS

ENGINEERING DEPARTMENT / FIELD PROJECT OFFICE

ENGINEERING DEPARTMENT / FIELD PROJECT OFFICE

___x__

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OR EXCEED AN AREA OF 2,500 SQ. FT. IN JURISDICTIONS

AWWA CALCULATIONS

42.7 (FIXTURE VALUE)

DFU CALCULATIONS:

18 UNITS

6. DETAILS

SEQUENCE OF CONSTRUCTION

1. OBTAIN ALL NECESSARY PERMITS

- 2. SETUP A PRE-CONSTRUCTION MEETING WITH THE CITY CIVIL
- 3. INFORM ADJOINING OWNERS OF PROPOSED WORK.
- 4. CALL MISS UTILITY TO MARK ANY UNDERGROUND LINES.
- *** IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UNDERGROUND LINES.
- 5. INSTALL SILT FENCE, TREE PROTECTION, AND CONSTRUCTION ENTRANCE.
- 6. DESIGNATE TEMPORARY CONSTRUCTION ENTRANCE AND STAGING AREAS
- 7. COMMENCE CONSTRUCTION WHILE MAINTAINING EROSION CONTROL.
- 8. REMOVE SILT FENCE AFTER VEGETATION IS FIRMLY ESTABLISHED.
- 9. PROVIDE AS-BUILT SURVEY OF SITE, IF REQUIRED.

continuation...

FIRE PROTECTION NOTES:

- 35. An existing public fire hydrant is not located within 500 feet of the proposed structure.
- 36. There is not a minimum of 20' wide paved access from the existing fire hydrant to within 150 feet of the proposed structure.
- 37. Fire suppression system is required to be constructed within the proposed dwelling. If either or both of the preceding notes is "Is Not", a residential fire sprinkler system per NFPA 13D is typically required unless the property is in the rural southern area of the city.
- 38. Standard concrete driveway apron and asphalt drive will be constructed off uncurbed street.

CITY WATER AND SEWER ARE AVAILABLE.

WATER AND SEWER SERVICE IN RIGHT-OF-WAY TO BE INSTALLED, RELOCATED OR ABANDONED BY DEVELOPER'S LICENSED UTILITY CONTRACTOR.

METER TO BE PLACED AT THE RIGHT-OF-WAY LINE.

STORMWATER MANAGEMENT CERTIFICATION

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL LAND CLEARING, CONSTRUCTION,
DEVELOPMENT ACTIVITY AND DRAINAGE SHALL BE IN ACCORDANCE WITH THE
APPROVED STORMWATER MANAGEMENT PLAN.

APPLICANT: HELEN WEN TITLE: DEVELOPER

DATE

04.25.18

DEVELOPER

MHM BAY DEVELOPMENT, LLC
1340 N. GREAT NECK ROAD,
#1272-208
VIRGINIA BEACH, VIRGINIA 23454
PHONE 757.450.2108
FAX N/A
email: hwen2004@yahoo.com

LEGEND **EXISTING PROPOSED** INLET PROTECTION SILT FENCE TREE PROTECTION CONSTRUCTION ENTRANCE CL DITCH / SWALE POWER POLE POWER POLE WITH LIGHT GUY WIRE -/--/- **-/--/-**OVERHEAD ELECTRIC UNDERGROUND ELECTRIC 4"G OVERHEAD ELECTRIC, TELEPHONE & CABLE OVERHEAD TELEPHONE & CABLE OVERHEAD TELEPHONE UNDERGROUND TELEPHONE <u>E/T</u> OVERHEAD ELECTRIC & TELEPHONE SANITARY SEWER SANITARY SEWER CLEAN-OUT <u>4" W</u> ___ WATER LINE WATER METER VALVES - FIRE HYDRANT ASPHALT PAVEMENT CONCRETE CURB AND GUTTER CATCH BASINS OR CURB INLETS DROP INLETS MANHOLES 2<u>4" RC</u>P STORM SEWER G14.5 SW14.5 SPOT ELEVATIONS TOP OF CURB CONTOURS WOOD FENCE ___ _ __



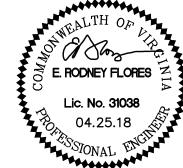
CHAIN LINK FENCE

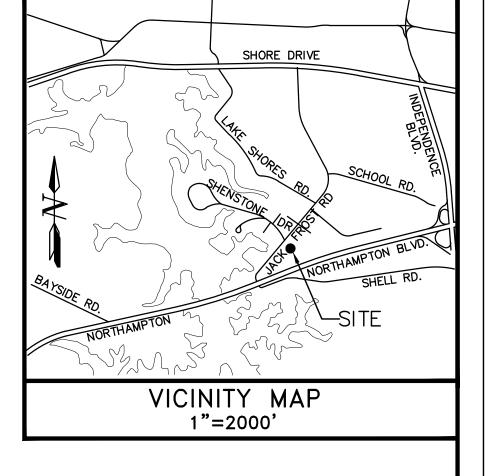
REMOVE LARGE AREAS

REMOVE AND DISPOSE

BUILDINGS

TREELINE





BENCHMARK DATA

THIS PLAN IS BASED ON THE NAVD 1988
DATUM. THE CITY OF VIRGINIA BEACH
CONTROL REFERENCE POINT USED FOR THE
SURVEY AND DESIGN OF THIS PLAN IS
STATION TJJ-21, ELEVATION 16.93'.

OWNER INFORMATION

MHM BAY DEVELOPMENT, LLC 1340 N. GREAT NECK ROAD, #1272-208 VIRGINIA BEACH, VIRGINIA 23454-2268 PHONE 757.450.2108 email: hwen2004@yahoo.com

IMPERVIOUS FOOTPRINT CALCULATIONS

BUILDING: 1,705 SQ. FT. OR 6.1% OF LOT CONCRETE: 450 SQ. FT. OR 1.6% OF LOT ASPHALT: 2,845 SQ. FT. OR 10.2% OF LOT BUILDING HEIGHT NOT TO EXCEED 35'

AREA RESERVED FOR CITY APPROVAL STAMPS

LOT 7, 0.633 ACRES, BAYSIDE SINGLE FAMILY SITE PLAN



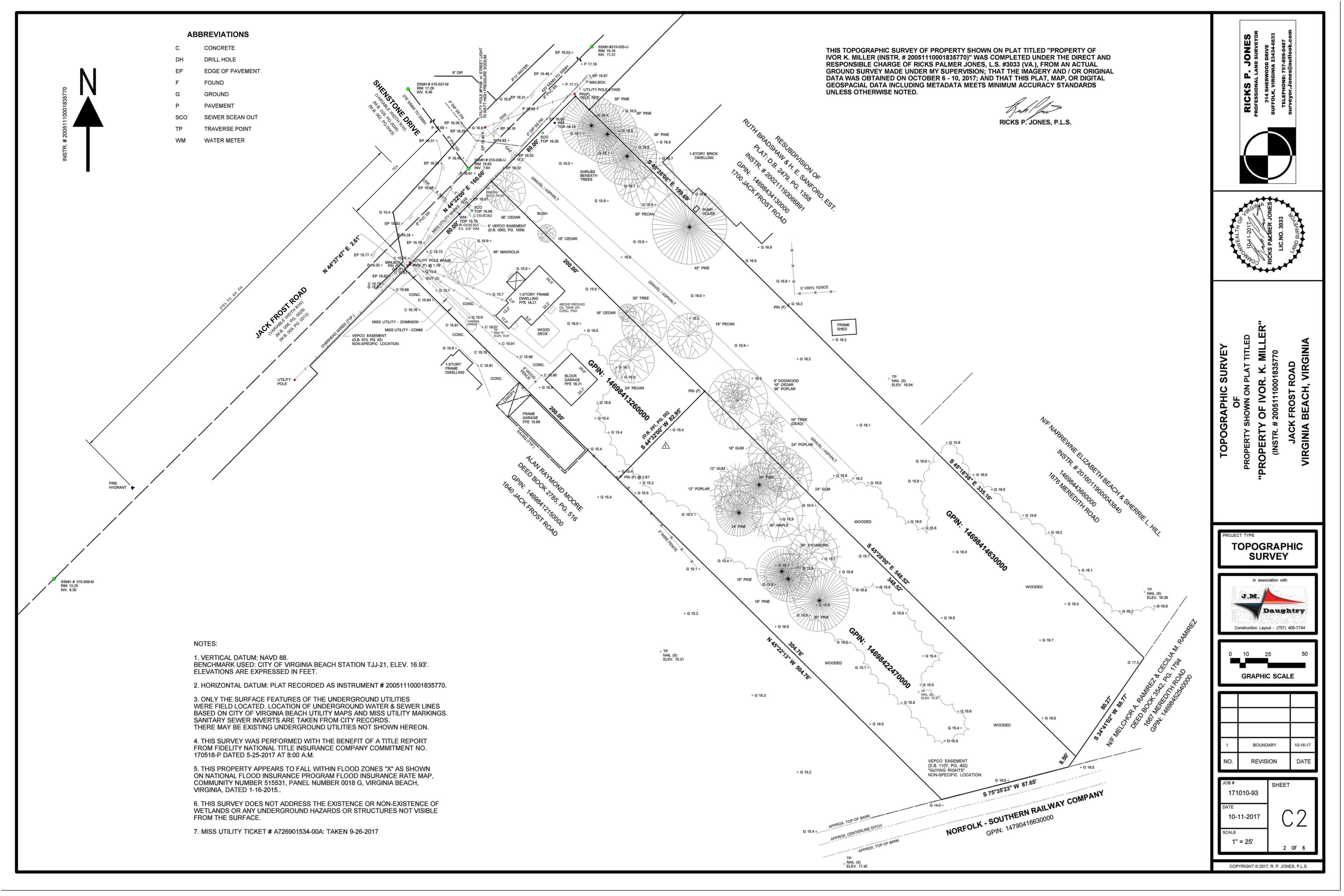
PINNACLE GROUP ENGINEERING, INC.

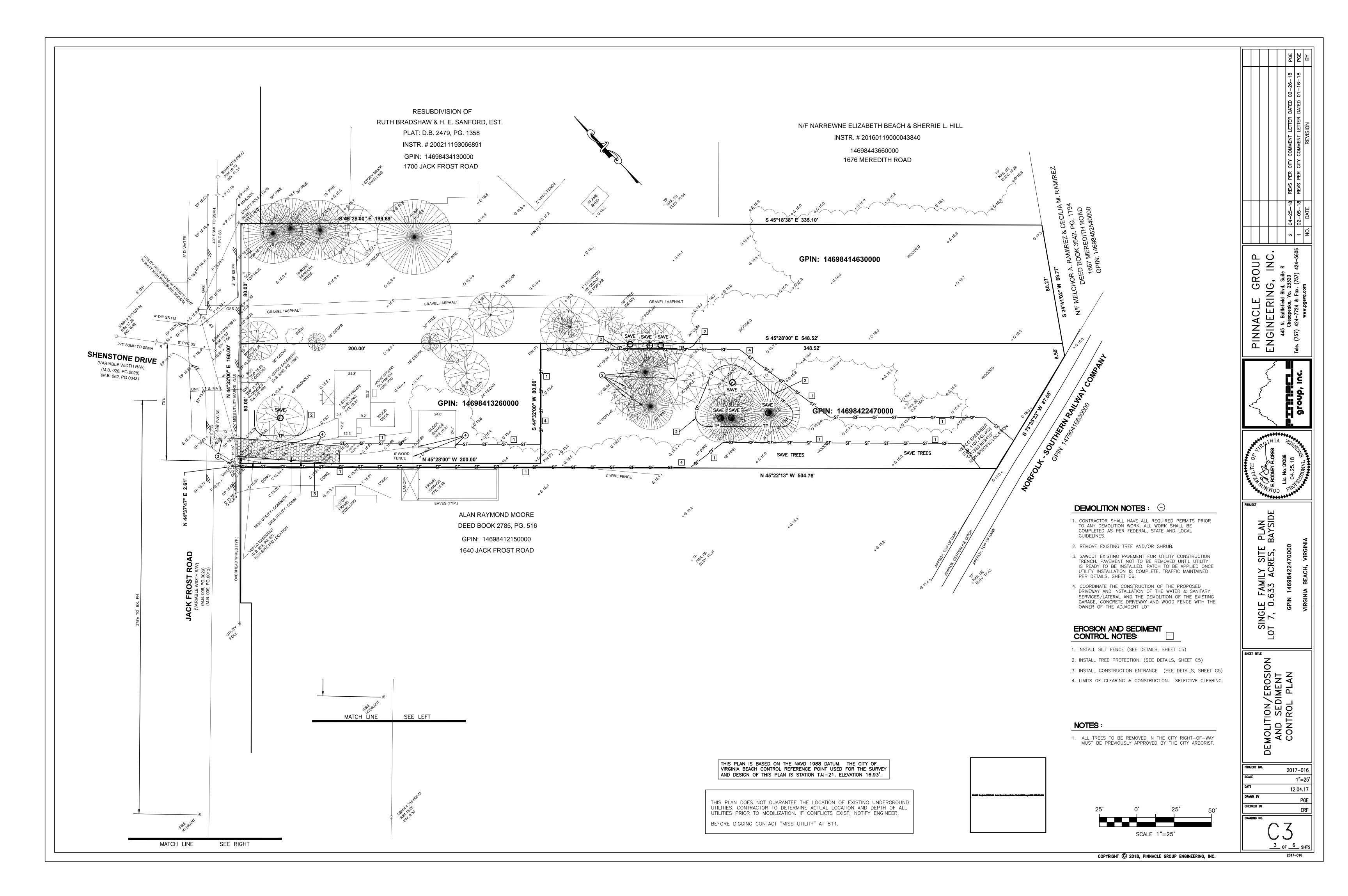
445 N. BATTLEFIELD BLVD., SUITE R
CHESAPEAKE, VIRGINIA 23320
TELEPHONE (757) 424-7724 FAX. (757) 424-5606
www.pgeva.com

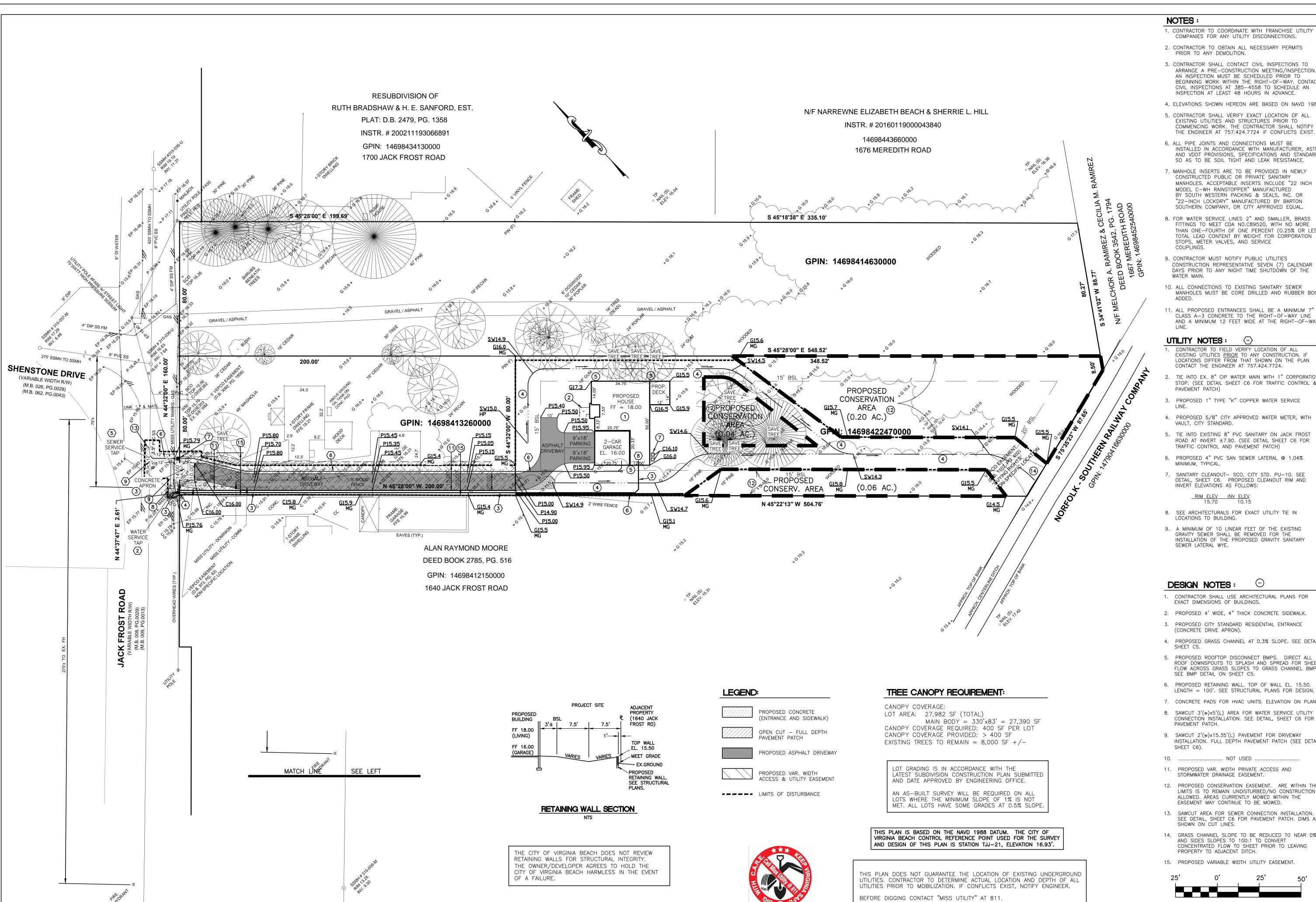
email: rflores@pgeva.com

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2017-016\C01 COVER







MATCH LINE

SEE RIGHT

NOTES:

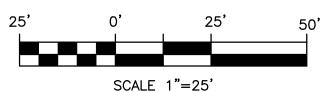
- COMPANIES FOR ANY UTILITY DISCONNECTIONS.
- 2. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY DEMOLITION.
- 3. CONTRACTOR SHALL CONTACT CIVIL INSPECTIONS TO ARRANGE A PRE-CONSTRUCTION MEETING/INSPECTION. AN INSPECTION MUST BE SCHEDULED PRIOR TO BEGINNING WORK WITHIN THE RIGHT-OF-WAY. CONTACT CIVIL INSPECTIONS AT 385-4558 TO SCHEDULE AN INSPECTION AT LEAST 48 HOURS IN ADVANCE.
- 4. ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 1988.
- 5. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL EXISTING UTILITIES AND STRUCTURES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT 757.424.7724 IF CONFLICTS EXIST.
- 6. ALL PIPE JOINTS AND CONNECTIONS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER, ASTM, AND VDOT PROVISIONS, SPECIFICATIONS AND STANDARDS SO AS TO BE SOIL TIGHT AND LEAK RESISTANCE.
- 7. MANHOLE INSERTS ARE TO BE PROVIDED IN NEWLY CONSTRUCTED PUBLIC OR PRIVATE SANITARY MANHOLES. ACCEPTABLE INSERTS INCLUDE "22 INCH MODEL C-WH RAINSTOPPER" MANUFACTURED BY SOUTH WESTERN PACKING & SEALS, INC. OR "22-INCH LOCKDRY" MANUFACTURED BY BARTON SOUTHERN COMPANY, OR CITY APPROVED EQUAL.
- 8. FOR WATER SERVICE LINES 2" AND SMALLER, BRASS FITTINGS TO MEET CDA NO.C89520, WITH NO MORE THAN ONE-FOURTH OF ONE PERCENT (0.25% OR LESS) TOTAL LEAD CONTENT BY WEIGHT FOR CORPORATION STOPS, METER VALVES, AND SERVICE
- 9. CONTRACTOR MUST NOTIFY PUBLIC UTILITIES CONSTRUCTION REPRESENTATIVE SEVEN (7) CALENDAR DAYS PRIOR TO ANY NIGHT TIME SHUTDOWN OF THE
- 10. ALL CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES MUST BE CORE DRILLED AND RUBBER BOOT
- 11. ALL PROPOSED ENTRANCES SHALL BE A MINIMUM 7" CLASS A-3 CONCRETE TO THE RIGHT-OF-WAY LINE AND A MINIMUM 12 FEET WIDE AT THE RIGHT-OF-WAY

UTILITY NOTES:

- 1. CONTRACTOR TO FIELD VERIFY LOCATION OF ALL EXISTING UTILITIES <u>PRIOR</u> TO ANY CONSTRUCTION. IF LOCATIONS DIFFER FROM THAT SHOWN ON THE PLAN CONTACT THE ENGINEER AT 757.424.7724.
- TIE INTO EX. 8" CIP WATER MAIN WITH 1" CORPORATION STOP. (SEE DETAIL SHEET C6 FOR TRAFFIC CONTROL & PAVEMENT PATCH)
- 3. PROPOSED 1" TYPE "K" COPPER WATER SERVICE
- 4. PROPOSED 5/8" CITY APPROVED WATER METER, WITH VAULT, CITY STANDARD.
- 5. TIE INTO EXISTING 8" PVC SANITARY ON JACK FROST ROAD AT INVERT ±7.90. (SEE DETAIL SHEET C6 FOR TRAFFIC CONTROL AND PAVEMENT PATCH)
- 6. PROPOSED 4" PVC SAN SEWER LATERAL @ 1.04%
- MINIMUM, TYPICAL. 7. SANITARY CLEANOUT- SCO, CITY STD. PU-10. SEE
- DETAIL, SHEET C6. PROPOSED CLEANOUT RIM AND RIM ELEV INV ELEV 15.70 10.15
- 8. SEE ARCHITECTURALS FOR EXACT UTILITY TIE IN
- LOCATIONS TO BUILDING. 9. A MINIMUM OF 10 LINEAR FEET OF THE EXISTING GRAVITY SEWER SHALL BE REMOVED FOR THE INSTALLATION OF THE PROPOSED GRAVITY SANITARY

DESIGN NOTES:

- 1. CONTRACTOR SHALL USE ARCHITECTURAL PLANS FOR EXACT DIMENSIONS OF BUILDINGS.
- 2. PROPOSED 4' WIDE, 4" THICK CONCRETE SIDEWALK.
- 3. PROPOSED CITY STANDARD RESIDENTIAL ENTRANCE
- 4. PROPOSED GRASS CHANNEL AT 0.3% SLOPE. SEE DETAIL,
- 5. PROPOSED ROOFTOP DISCONNECT BMPS. DIRECT ALL ROOF DOWNSPOUTS TO SPLASH AND SPREAD FOR SHEET FLOW ACROSS GRASS SLOPES TO GRASS CHANNEL BMP. SEE BMP DETAIL ON SHEET C5.
- 6. PROPOSED RETAINING WALL. TOP OF WALL EL. 15.50. LENGTH = 100'. SEE STRUCTURAL PLANS FOR DESIGN.
- 7. CONCRETE PADS FOR HVAC UNITS. ELEVATION ON PLAN.
- 8. SAWCUT 3'(w)x5'(L) AREA FOR WATER SERVICE UTILITY CONNECTION INSTALLATION. SEE DETAIL, SHEET C6 FOR PAVEMENT PATCH.
- 9. SAWCUT 2'(w)x15.35'(L) PAVEMENT FOR DRIVEWAY INSTALLATION. FULL DEPTH PAVEMENT PATCH (SEE DETAIL, SHEET C6).
- 10. NOT USED
- 11. PROPOSED VAR. WIDTH PRIVATE ACCESS AND STORMWATER DRAINAGE EASEMENT.
- 12. PROPOSED CONSERVATION EASEMENT. ARE WITHIN THE LIMITS IS TO REMAIN UNDISTURBED/NO CONSTRUCTION ALLOWED. AREAS CURRENTLY MOWED WITHIN THE EASEMENT MAY CONTINUE TO BE MOWED.
- 13. SAWCUT AREA FOR SEWER CONNECTION INSTALLATION.
 SEE DETAIL, SHEET C6 FOR PAVEMENT PATCH. DIMS AS SHOWN ON CUT LINES.
- 14. GRASS CHANNEL SLOPE TO BE REDUCED TO NEAR 0% AND SIDES SLOPES TO 100:1 TO CONVERT CONCENTRATED FLOW TO SHEET PRIOR TO LEAVING PROPERTY TO ADJACENT DITCH.
- 15. PROPOSED VARIABLE WIDTH UTILITY EASEMENT.



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PINNACLE

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2017-016 1"=25' 12.04.17

City of Virginia Beach Subdivision and Site **Development General Notes Criteria**

Development & Compliance Criteria Development in the City of Virginia Beach shall conform to the latest edition of: the City of Virginia Beach, Public Works Specifications and Standards Manual, the City of Virginia Beach Department of Public Utilities Design Standards Manual, the City of Virginia Beach Department of Public Utilities Standard Details, the Virginia Erosion and

ment Control Regulations, the Virginia Erosion and Sediment Control Handbook, the Virginia Stormwater Management Handbook, the Virginia Department of Transportation Road and Bridge Specifications. the Virginia Department of ransportation Road and Bridge Standards, the American Standard For Nursery stock and the Landscaping Guide City of Virginia Beach, and all other applicable ordinances and regulations unless otherwise noted.

An erosion and sediment control surety and/or stormwater management surety will be posted with the Development Services Center (DSC) and before the issuance of any permits, following plan approval, in the appropriate amount, to be determined during plan

The owner/developer/contractor will obtain a right-of-way permit from the DSC. City of Virginia Beach, Virginia, prior to construction within any existing public right-of-way or public easement. A copy of the approved traffic control plan must be submitted with the right-of-way permit application.

The owner/developer/contractor/responsible land disturber (RLD) will contact each appropriate inspections bureau to schedule an on-site pre-construction meeting and/or inspection activity 48 hours prior to the commencement of any land disturbance or construction activity. The stormwater management facility (SWMF) shall not be excavated beyond the typical

section(s) as shown on the approved plan unless written approval is obtained from the DSC. Site materials excavated beyond the typical section(s) shall not be used or sold offsite unless the owner/developer/contractor complies with the current City ordinances pertaining to the operation of borrow pits. Excavation materials from the SWMF that are roposed as backfill must be certified for that purpose, and approval is required by the DSC's Engineer prior to use. Backfill materials may be stockpiled and will not interfere with existing drainage in accordance with the PWSS Section 15.7 Horizontal Datum: This (plat, plan, drawing, survey, etc.) is based on the Virginia State

Plane Coordinate System, South Zone, NAD 1983/1993 (HARN). Coordinate values shown are expressed in U.S. Survey Feet. Vertical Control: This (survey, drawing, etc.) is based on NAVD, 1988. The City of Virginia Beach shall assume no responsibilities or liabilities for the damage or injury that may be incurred as a result of any encroachment into a public easement or

right-of-way. Since an encroachment is considered to be temporary in nature, the current owner(s) are required to remove the encroachment at their expense when deemed necessary by the City of Virginia Beach. As the easement runs with the land, the owner(s) will give notification to the heirs, assigns, successors in title or lessee of the

existence of any encroachment and the rights of the City of Virginia Beach. The owner/developer/contractor will be responsible for driveways, walks, curbs, pavement markings, etc., that must be cut, removed, or damaged during construction Caution: Wetlands may be involved within the boundary of development. The owner/developer/contractor/RLD must comply with the exact limits of construction.

Permits may be required from federal, state, and local agencies.

Erosion & Sediment Control (ESC) and Tree Protection Notes Unless otherwise indicated, all vegetative and structural erosion and sediment control and tree protection practices shall be constructed and maintained according to minimum standards and specifications of the Virginia Erosion and Sediment Control Handbook (VESCH) and the Virginia Erosion and Sediment Control Regulations (4VAC50-30 et seq), Chapter 30 and Appendix E (Tree Planting, Preservation and Replacement) and any other applicable sections of the Code of the City of Virginia Beach and the Planning

Department's Landscaping Guide. The contractor shall exercise every reasonable precaution, including the application of temporary and/or permanent measures deemed necessary before, during, and after construction to control erosion and prevent or minimize sediment runoff and protect trees and vegetation. The Planning Department/Permits and Inspections Division shall enforce these requirements. The City Inspector reserves the right to require other measures not specifically described herein to correct any erosion, siltation or tree protection condition. Non-compliance with any ESC regulation or policy may result in a Notice to Comply,

Stop Work Order (SWO) or other legal action. A copy of the erosion and sediment control plan approved by Planning Department/Development Services Center (DSC) shall be kept at the site at all times.

After obtaining the Land Disturbing Permit and at least 48-hours prior to any land disturbing activity, the contractor shall contact Planning/Civil Inspections at (757) 385-4558 to schedule a pre-construction meeting. Failure to contact Planning/Civil pections prior to any land disturbing activity may result in a Notice to Comply, Stop Work Order or other legal action. The contractor shall contact the Landscape Management Division, Department of Parks

and Recreation at (757) 385-4461 at least three (3) days prior to damaging, trimming, pruning or removing trees or other vegetation in the City right of way or in City nents or on City owned property and again immediately after completion of the

All erosion and sediment control and tree protection measures shall be installed with the first stage of construction and will remain in place until all disturbed areas are stabilized and their removal is directed by the Civil Inspector. All disturbed areas are to drain to approved sediment control measures at all times during land disturbing activities and during site development until final stabilization is achieved. The measures shown on the plan are the minimum necessary. The addition, deletion or modification of erosion and sediment control and tree protection measures will be at the direction of the Civil nspector. The Civil Inspector may determine when a plan revision is to be submitted to the DSC for review and approval.

Trapped sediment and the disturbed soil areas resulting from the removal of erosion and sediment control and tree protection measures at the end of construction shall be permanently stabilized to prevent further erosion and sedimentation. The original soil grade within any protected tree's drip line shall be preserved and maintained and shall not be disturbed by regrading.

The Responsible Land Disturbe a. during or immediately following initial installation of erosion and sediment

 at least once in every two-week period. c. within 48 hours following any runoff producing storm event, and

d. at the completion of the project. In addition, the RLD shall maintain written monitoring reports on-site and provide to the Civil Inspector upon request. 10. Stabilization measures shall be applied to earthen structures dams, dikes, diversions, side

slopes of sediment traps and basins immediately after installation. 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. Sediment basins shall be maintained as specified and not converted to permanent

stormwater management facilities during land disturbance. Conversion to a permanent stormwater management facility should only occur after permanent stabilization of disturbed areas draining to the basin has occurred. All borrow material shall be excavated from a lawfully permitted site and all excavated

material shall be disposed of at a lawfully permitted site. Prior to commencing land disturbing activities in areas other than indicated on these plans a separate Erosion and Sediment Control Plan approval and permit will be required for these off-site areas, if not already approved and permitted. Dewatering and well point discharge shall be pumped into an approved filtering device

that provides appropriate erosion and sediment control measures. The measures must be approved by the Civil Inspector prior to the commencement of discharge operations. Failure to comply may result in a Notice to Comply, Stop Work Order or other legal The contractor shall construct and maintain a temporary construction entrance at each

point of ingress/egress per VESCH Std & Spec 3.02. Sites with significant construction traffic may be required to install a larger width and/or longer length construction entrance as deemed necessary by the DSC Engineer or the Civil Inspector. A wash rack may be deemed necessary and required by the Civil Inspector. 16. The contractor shall construct, install, and maintain sufficient erosion and sediment control devices to prevent soil from being eroded and placed on streets, in drainage

ystems and watercourses. Devices will be clear of mud, debris, and eroded material during all stages of construction. Devices are subject to inspections after a storm event and as required by the Civil Inspector. Any and all material or debris tracked onto a public or private road surface shall be

removed thoroughly at the end of each day or as directed by the Civil Inspector. Sediment shall be removed from roads by shoveling or sweeping and be transported to a legally permitted disposal facility. 18. The contractor shall be responsible for preventing surface and air movement of dust from

exposed soils which may present health hazards, traffic safety problems, or harm animal or plant life. The contractor shall monitor and take precautions to control dust, by, including but not limited to, the use of water or chemical dust palliative, by limiting the number of vehicles allowed on-site, and minimizing the operating speed of all vehicles Silt fence fabric shall be constructed of standard 36" filter fabric, staked with 2" x 2"

hardwood stakes placed a maximum of 6-foot on center and entrenched in accordance with the VESCH Std & Spec 3.05.

20. The use of straw bales is prohibited for erosion and sediment control in Virginia Beach unless otherwise approved by the Civil Inspector. Due to local experience, some commercially available manufactured ESC devices have

been deemed not appropriate or approved in Virginia Beach. Check with the Civil Inspector for approval prior to installing manufactured devices. Prior to any clearing, grading, or construction, tree protection shall be placed around all trees to be retained. The tree protection shall be in accordance with the VESCH Std &

Spec 3.38 and the Planning Department Landscaping Guide. Tree Protection shall be installed in the locations shown on the approved plan. No items, including but not limited to, boards, wires, or signage, shall be nailed or attached to trees to be retained.

No stockpiling, placement of materials or equipment, or parking of vehicles shall occur 25. The contractor shall immediately notify the City Arborist of damage to trees located in City rights of way and public easements. Damaged tree limbs shall be cut back to the

next lateral branch or parent stem at the branch collar. Care for serious injury should be Trees located in City rights of way and public easements that are to be retained, but are destroyed during construction shall be replaced with species, sizes and quantities to be determined upon tree value assessment by the City Arborist. Replacement trees shall conform to the latest edition of The American Standard For Nursery Stock and Planning

epartment's Landscaping Guide. Trees on private property that are to be retained, but are destroyed during construction shall be replaced with species, sizes and quantities to be determined through a plan revision to be submitted to, reviewed and approved by the Planning artment/Development Services Center. Replacement trees shall conform to the latest edition of The American Standard For Nursery Stock and Planning Department's

Stormwater Management As-built plans must be prepared be a professional engineer or land surveyor licensed in

the Commonwealth of Virginia and must be submitted to and approved by the DSC for all SWMF, prior to the release of erosion and sediment control (E&S) and SWMF surety A test pit in the location of the infiltration SWMF is required prior to the construction of the SWMF. Contact the Planning Civil Inspector for the appropriate meeting. Exfiltration tests are required for all volume control infiltration SWMF's in accordance with PWSS.

excavation volumes and limits of excavation can only be determined during the actual

ld construction and must be approved by the Planning Civil Inspector in the location of The owner/developer/contractor/RLD must contact the Planning Civil Inspector at (757) 385-4558), prior to any construction. A minimum of five (5) inspections are required for infiltration structures. Failure to contact the Planning Civil Inspector, as directed, could result in removal and reconstruction of structures. The Planning Civil Inspector must be notified 48 hours prior to the beginning of construction.

If subgrade soils have been determined to be suitable for infiltration use based on soil information/evaluation, this information must be certified by a professional engineer and submitted to the DSC's Engineer for approval prior to the use for the project. The City of Virginia Beach will not be responsible for the design, functioning, maintenance, and/or repair of SWMF's, excluding those areas and/or improvements located within dedicated City drainage easements and right-of-way.

The owners will give notifications to their heirs, assigns, successors in title, or lessee of the SWMF, utilized with this development and of the above stated disclaimer (Note 5) by the City of Virginia Beach. All on-site SWMF's will be protected by silt fence or other approved devices at the direction of the Civil Inspector during all stages of construction to ensure optimum efficiency upon completion and to minimize erosion and sediment from entering into the

structure during construction Public or private utility facilities will not conflict with the structural prism of the proposed SWMF's as shown on the approved plans. If a conflict occurs, the owner/developer/contractor/RLD must immediately contact Planning/Civil Inspections Exfiltration tests for volume control SWMF or infiltration SWMF's will be performed at each trench location, in accordance with Planning/Civil Inspections policy, prior to the acceptance by the Planning Civil Inspector. Test results must show that the exfiltration trench is in accordance with the City of Virginia Beach performance criteria and approved certified soil report for infiltration SWMF's.

All stone sizes for SWMF's will be in accordance with Chapter 8, "Stormwater Management" of the PWSS. 11. All SWMF drainage structures will be protected with a minimum of four feet (4') of sod

around the structure and silt fencing will be installed surrounding the sod as required unless otherwise approved by the DSC's Engineer and noted in the plan details. All underground SWMF's must be marked with a 5" x 5" x 1/4" thick, or larger, steel plate at each corner or it must be marked with white metallic marking tape that is three inches (3") wide and placed on top of the SWMF, not to extend one foot (1') below the ground surface. In certain cases, at the option of the Planning Civil Inspector, it may be appropriate to use both.

All pipe joints and connections must be installed in accordance with the manufacturer, ASTM and VDOT provisions, specifications and standards so as to be soil tight and leak

All HDPE & PE pipe specified on the plans and delivered to the site shall be Type S pipe in no lengths less than ten (10) feet long and shall conform to AASHTO M252 and AASHTO M294 and ASTM F2306, for materials and installation with soil tight connections and/or gaskets conforming to ASTM F477. PVC ribbed pipe shall adhere to AASHTO M304 or ASTM F949. 15. All thermoplastic, HDPE, PE and non-concrete pipe must have minimum 2-feet of cover

during all phases of construction. 16. Flexible connectors must be installed when connecting HDPE pipe to concrete or brick structures.

Prior to construction or excavation, the contractor will be responsible for locating all underground utilities (public or private) that may exist and cross through the area of construction. "Miss Utility" of Virginia must be contacted a minimum of 72 hours prior to excavating at "811" or (1-800-552-7001). The contractor is responsible for repairing any existing utilities that are damaged during construction, at his own expense. The relocation of any utilities (public or private) located within the City's right-of-way.

will be at the developer's expense, and completed prior to the placement of any proposed roadway base material or pavement in conjunction with the site work. All new utility line installations must be underground (such as telephone, power, cable television, etc.). Water meters and sewer cleanouts must be placed at the right-of-way or at the public

utility easement line, (within the right-of-way/easement), outside of entrances and Deflecting, offsetting, or relocating existing utility mains will not be allowed except under extreme circumstances, such exemptions will be submitted to the DSC's Public

Utilities Engineer for approval. Type "K" soft drawn copper will be used for off-site water service lines, two-inch (2") lines and under, in right-of-ways and public utility easements. The owner/developer/contractor must contact Public Utility/Inspections at (757-385-4175) at least 48 hours prior to construction (public or private) located within the City's

Incidental Drainage

Temporary drainage during construction will be provided by the owner/developer/contractor to relieve areas that may cause damage to roadways and/or

adjacent properties as directed by Planning/Civil Inspections. The Planning/Civil Inspector will perform an on-site inspection of storm sewer pipe installation prior to any backfilling of the installed pipe. If precast drainage structures are used, shop drawings will be submitted to the DSC's Engineer by the owner/developer/contractor's design consultant, along with the proper

All proposed public storm drainage structures shall utilize inlet shaping with paved inverts, unless otherwise noted, on the plans for each structure. Minimum final height of cover, for all storm sewer pipes, shall be two feet (2') or manufacturer's recommendation. See the PWSS, Section 2.2.7 "Pipe Cover", for further

certifications, unless previously approved by the City Engineer's Office.

All concrete storm sewer pipes in the City right-of-ways and easements will be tongue and groove. Pipes subject to traffic loading will be reinforced concrete pipe and conform to the specifications for concrete storm sewer pipe, AASHTO designation M-170, with the modification that all pipes will be manufactured with 4.000-PSI concrete. All pipe joints will be sealed in accordance with Section 302.03 of the Virginia Department of ansportation Road and Bridge Specifications.

All storm sewer pipe joints will be installed, silt free, or will be completely wrapped with two feet (2') wide approved filter fabric, secured in place prior to backfilling. All pipe culverts (water, sewer, and storm sewer), located within right-of-way excavation areas that are subject to traffic loads will be backfilled with select or granular materials density in accordance with Section 302.03 of the Virginia Department of Transportation Road and Bridge Specifications.

All metal pipe culverts and storm sewers will be installed in accordance with drawings PB-1 of the Virginia Department of Transportation Road and Bridge Standards. 10. If metal pipe is used, the owner/developer/contactor will furnish pH certifications of the backfill material if the backfill material has not been previously tested. All non-concrete storm sewer pipes placed in the City right-of-way or in City drainage easements will incorporate the use and installation of locator tape/wire to aid in future

All concrete will be Class "A-3" Air Entrained (3,000 PSI) in accordance with

Section 217 of the Virginia Department of Transportation Road and Bridge Specifications unless otherwise specified. Both curb and gutter will be constructed in sections of uniform lengths, approximately ten feet (10') with no sections will be less than six feet (6'). Expansion joints will be formed at intervals of 100 feet using ½-inch premolded bituminous fiber joint filler. Construction joints are required as follows:

 a. Curb & Gutter b. Five feet (5') wide sidewalk 50' e. Ten feet (10') wide muli-use path 50'

All entrances will be made of a minimum of seven inches (7") thick concrete from the edge of pavement to the right-of-way line. The contractor shall provide expansion

material where new concrete meets existing concrete. All concrete work performed in the right-of-way will be inspected by the Planning Civil

Pavement and Open Cuts

No open cuts of a public roadway will be allowed except under extreme circumstances. Open cutting of public roadways will be permitted with prior written permission by the Minimum on-site (private property) pavement replacement and design will be 2-inches,

SM-9.5A bituminous concrete surface, over a six-inch (6") Type I or II aggregate base. Pavement replacement and design in City right-of-ways will be in accordance with Section 5.13 "Pavement Replacement and Patching" of the PWSS. The minimum pavement design with the right of way or easement will be 1 1/2-inches SM-9.5A bituminous concrete surface asphalt concrete, over 3-inches BM-25.0A Base Mix asphalt concrete, over a 6-inches Type I No. 21A aggregate base material, over

compacted subgrade in accordance with Section 5.13 of the Public Works Specifications and Standards. Materials that are determined unsuitable for foundations, subgrades, or other roadway purposes within the limits of construction, will be excavated by the contactor, at his own expense, below the grade shown on the plans. Excavated areas will be backfilled with approved suitable materials. Excavated materials suitable for backfill will be stockpiled

so as not to interfere with drainage. Unsuitable material will be removed from the site and shall be disposed of in a lawful manner. The replacement of pavement will be in accordance with standard pavement patching detail standards drawings C-3a, "Flexible Pavement Patch for Local & Collector Streets"; or C-3b, "Flexible Pavement Patch for Major & Minor Arterials"; or C-4, "Rigid Pavement Patching" and Section 5.13 of the PWSS.

Certification of materials and the test results (e.g., CBR and Proctor, etc.) from each source of supply for select borrow and select material will be submitted to Planning/Civil Inspections by the contractor prior to installation. Certification of materials and test results on the following items will be submitted to

Planning/Civil Inspections by the contactor before any road construction is performed: a. The proctor test on the native subgrade materials. b. The optimum moisture content of the aggregate. c. The theoretical maximum density of the aggregate.

9. All City infrastructure to be removed, i.e. brick pavers, light poles, planters, etc., must be delivered to the City, or arrangements must be made for pick-up by the proper 10. No construction is allowed within the rights of way of Atlantic and Pacific Avenues and

connecting numbered streets between Atlantic and Pacific avenues from Rudee Inlet to

Traffic Maintenance, Control & Lighting Type III barricades with public notice of street extension signs are required at the

termination of streets, as directed by Public Works/Traffic Engineering. Where parking areas will be illuminated, all sources of illumination must be shielded to prevent any direct reflection towards residential areas and City streets. All striping in the public right-of-way must be of thermoplastic material for lane lines, STOP bars, crosswalks, etc. All legends and arrows must be of VDOT approved Type B,

Class VI preformed payement message marking material. The City of Virginia Beach, Traffic Engineering Bureau is responsible for reviewing and approving all traffic maintenance and control plans and reviewing the sequence of construction plans essential to complete this project. All traffic maintenance and control devices, methods and applications will conform to the following publications including all current editions and revisions:

a. Manual on Uniform Traffic Control Devices for Street and Highways issued by the U.S. Department of Transportation, Federal Highway Administration. (MUTCD) b. Virginia Department of Transportation Road and Bridge Standards Vol. II.

c. Virginia Department of Transportation Road and Bridge Specifications.

d. Virginia Department of Transportation Work Area Protection Manual.

e. City of Virginia Beach, Public Works Specifications and Standards Manual 6. Work Hours in Roadway Open to Traffic and/or Pedestrian area: a. Monday through Saturday: Work will be completed between the hours of 9:00

a.m. and 4:00 p.m. only. 3:30 p.m. b. Sundays and Holidays: No work may be completed in the roadway or pedestrian areas unless otherwise noted or approved in writing by the Owner. Additional restrictions may apply based on traffic conditions. Extended work hours and workdays may be requested with a written request to the Owner. This request must be submitted at least five (5) working days prior to the extended work periods. (Please note that if work is to be conducted in the resort area, certain restrictions apply from April to October. Please contact Traffic Engineering

Traffic Control Plans: Traffic control plans are included in the construction plans for the referenced project; however, field conditions may require modifications. If the contractor feels that the traffic control plan(s) included with this project does not suit conditions at a work site, then the contractor shall submit to the Owner a revised plan to maintain traffic. The revised plan shall include site-specific traffic details and shall identify the sequence of construction. The contractor will submit the revised traffic control plan(s) a minimum 10 calendar days prior to the start of work. The contractor will not disrupt traffic patterns until the Owner has approved the revised traffic control plan. The Owner reserves the right to modify any traffic control plan(s) as necessary in the interest of public safety or traffic efficiency. Prior to beginning work, it is the contractor's responsibility to insure that all requirements have been met and that all traffic control devices have been installed according to the approved traffic control plan(s).

The contractor shall check all traffic maintenance and control devices and work zones before, during, and after each workday to ensure proper operation. On weekends, holidays, or any non-working day, the contractor shall be responsible for checking the traffic maintenance and control devices daily for proper operation. Two-way traffic will be maintained at all times during construction unless Traffic Engineering has approved another alternative for traffic control, such as a lane closure or

a temporary street closure. Resident and emergency access will be maintained at all times during construction regardless if a street closure is in effect or not. If there is an approval from Traffic Engineering for a lane closure or a temporary street closure, all lanes of traffic will be reopened to traffic at the conclusion of each construction day, unless a 24-hour temporary street closure is approved and in effect In all cases in which existing or established traffic patterns will be disrupted, the contractor will notify all affected residents and/or businesses a minimum of 48 hours in advance of the anticipated disruption by distributing door-to-door notices. A copy of the

beginning work. At night or during non-construction hours, all excavated areas are to be backfilled or secured and protected by using approved safety devices or materials. In accordance with the VIRGINIA OCCUPATIONAL SAFETY AND HEALTH

notice shall be forwarded to Traffic Engineering for review and approval prior to

STANDARDS (construction industrial) 29 cfr. part 1929, 1989 edition, all contractor employee and subcontractor(s) employees exposed to vehicular traffic will be provided with and required to wear warning vests marked with or made of reflectorized or high visibility materials. For construction operations lasting more than 14 days, the contractor will install "ROADWORK AHEAD" (W21-4, 48" x 48") and "END ROAD WORK" (G20-2a, 48" x 24")warning signs on 6" x 6"

wooden ground mounted posts. These signs must be installed prior to beginning construction work and will be removed after completion of all construction activities. For all approved construction/truck entrances, the contractor will install "TRUCKS ENTERING HIGHWAY" (48" x 48" orange and black) warning signs on 6" x 6" wooden ground mounted posts, These signs will be installed 500 feet in advance of all approved construction access/entrance points and

Any traffic control devices including but not limited to pavement markings, signs, and traffic control signal equipment damaged or destroyed by the contractor must be replaced at the contractor's expense inless their removal or destruction is called for by the plans. For any further information on traffic maintenance and control requirements, please contact the Traffic

Engineering Bureau, 2405 Courthouse Drive, Virginia Beach, Virginia23456-9031, (757) 385-4131

be installed a minimum 72" above the finished grade from the bottom of the sign.

BUILDING AND FOUNDATION 1. A PERMIT FOR ANY SIGN OR SIGN POLE MUST BE OBTAINED FROM PLANNING/PERMITS AND INSPECTIONS.

ONLY FLOOD RESISTANT MATERIAL MAY BE USED BELOW THE 100-YEAR FLOOD ELEVATION. 3. ALL STRUCTURES MUST BE PROPERLY ANCHORED WITH ADEQUATE FOOTING BELOW THE 100-YEAR FLOOD ELEVATION. NO MECHANICAL EQUIPMENT, ELECTRICAL EQUIPMENT, OR ELECTRICAL LINES WILL BE INSTALLED OR LOCATED BELOW ONE FOOT (1') ABOVE

E 100-YEAR FLOOD ELEVATION, EXCEPT UNDERGROUND WIRING OR SIMILAR MATERIALS. ALL BUILDINGS WILL BE ACCESSIBLE IN ACCORDANCE WITH THE AMERICAN FOR DISABILITIES ACT (ADA), (LATEST EDITION) STANDARDS. PARKING, RAMPS, AND BUILDING ACCESS ROUTES MUST BE IN

ACCORDANCE WITH THE AMERICAN FOR DISABILITIES ACT (ADA), (LATEST FDITION) STANDARDS. THERE WILL BE NO MORE THAN 1/2-INCH DIFFERENCE BETWEEN THE FINISHED FLOOR AND THE EXTERIOR SURFACE AT THE ENTRANCE DOOR 8. A PERMIT TO DEMOLISH ANY EXISTING STRUCTURE WILL BE OBTAINED FROM PLANNING/PERMITS AND INSPECTIONS, PRIOR TO ANY DEMOLITION.

SEQUENCE OF CONSTRUCTION

OBTAIN ALL NECESSARY PERMITS SET UP A PRECONSTRUCTION MEETING WITH THE CITY INSTALL PERIMETER SILT FENCE, ORANGE SAFETY FENCE, AND CONSTRUCTION ENTRANCE, MAINTAIN E & S CONTROL MEASURES THROUGHOUT

PERFORM LAND DISTURBING ACTIVITIES AS OUTLINED BELOW. ALL EXCAVATION NOT TO BE REUSED ONSITE SHALL BE DISPOSED OF IN ACCORDANCE WITH STATE AND CITY REQUIREMENTS. INSTALL GRASS SWALES. INSTALL SANITARY SEWER AND WATER

INSTALL BUILDING FOUNDATION AND BACKFILL AND GRADE ALL DISTURBED AREAS. STABILIZE AND SEED GRADED AREAS AND MAINTAIN DURING CONSTRUCTION PERIOD. REPAIR ANY ERODED AREAS. REGRADE AND SEED OR SOD ALL DISTURBED AREAS INSTALL WALKS, LANDSCAPING, AND OTHER SITE IMPROVEMENTS. O REMOVE ANY FRODED MATERIAL REPAIR ANY FRODED AREAS REMOVE ALL

TEMPORARY EQUIPMENT, CONSTRUCTION MATERIALS AND DEBRIS FROM THE 11. AFTER SOIL IS ESTABLISHED WITH VEGETATION, MULCH, OR OTHER MEANS. REMOVE SILT FENCE AND ANY OTHER EROSION CONTROL DEVICES AT THE DIRECTION OF THE CIVIL INSPECTOR WITHIN 30 DAYS AFTER FINAL STABILIZATION. REMOVE ALL TEMPORARY EQUIPMENT, CONSTRUCTION MATERIALS & DEBRIS FROM

REVEGETATION SCHEDULE:

1. COOL SEASON GRASS-SEED SEPTEMBER THRU APRIL: TURF TYPE FESCUES: 4-6 LBS./1000 SQ. FT. OF KY - 31 FESCUE: 8 LBS./100 SQ. FT.

2. WARM SEASON GRASS-SEED OR SOD APRIL THRU SEPTEMBER: AINT AUGUSTINE GRASS: SOD OR PLUGS. BERMUDA GRASS: 1-2 LBS./1000 SQ. FT. OR SOD OR PLUGS 70YSIA GRASS: SOD OR PLUGS AND CENTIPEDE GRASS: ??LBS./1000 S.E. OR USE MANUFACTURER'S RECOMMENDED RATES AND PLANTING TIMES.

LAND DISTURBING ACTIVITIES

1. SILT FENCES MUST BE 36-INCH PRE-INSTALLED WIDTH, 24-INCH ABOVE GROUND WITH 2"X2" HARDWOOD STAKES AT SIX FOOT (6') SPACING AT THE ENTIRE LIMITS OF THE PROJECT. 2. ALL LAND DISTURBING ACTIVITIES MUST CONFORM WITH THE APPLICABLE REGULATIONS OF THE CITY OF VIRGINIA BEACH CODES, ORDINANCES, AND

PUBLIC WORKS SPECIFICATIONS AND STANDARDS AND THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION EROSION AND SEDIMENT CONTROL HANDBOOK, THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION. INCLUDING THE NECESSARY BEFORE, DURING AND AFTER CONSTRUCTION TO CONTROL EROSION AND PREVENT OR MINIMIZE SEDIMENT RUNOFF. THE PLANNING DEPARTMENT/CIVIL INSPECTIONS BUREAU SHALL ENFORCE THESE REQUIREMENT. CIVIL INSPECTIONS RESERVES THE RIGHT TO REQUIRE OTHER MEASURES NOT SPECIFICALLY DESCRIBED HEREIN TO CORRECT ANY EROSION OR

. AFTER OBTAINING THE LAND DISTURBING PERMIT, AND AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT CIVIL INSPECTIONS AT 385-4558 TO SCHEDULE A PRECONSTRUCTION MEETING. FAILURE TO CONTACT CIVIL INSPECTION PRIOR TO ANY LAND DISTURBING ACTIVITY MAY RESULT IN A STOP WORK ORDER OR OTHER LEGAL ACTION.

2. MAXIMUM DEPTH IS 18 INCHES.

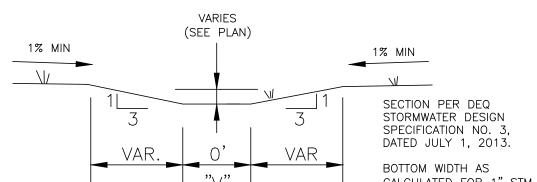
1. ARFA OF PROPOSED SWALES TO BE TOPSOILED, SEEDED, AND

PROPOSED GRASS SWALE DETAIL

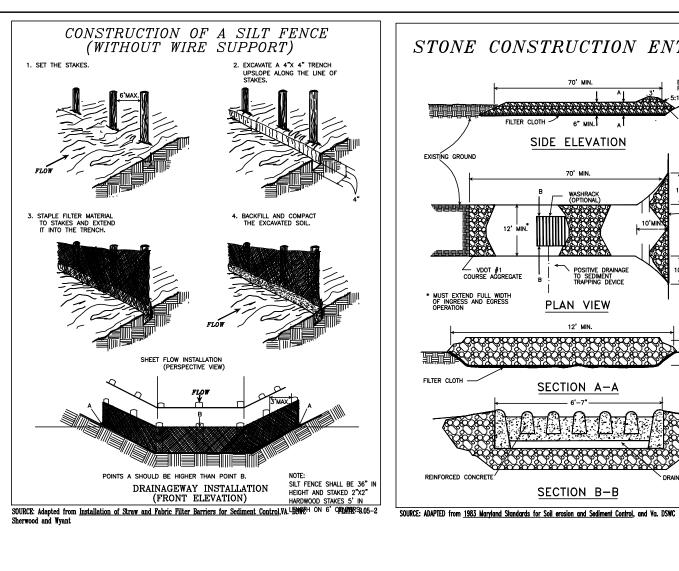
MULCHED IMMEDIATELY AFTER ACHIEVING FINAL GRADE.

1. AREA OF PROPOSED GRASS CHANNELS TO BE TOPSOILED, SEEDED, AND MULCHED IMMEDIATELY AFTER ACHIEVING FINAL GRADE.

2. MAXIMUM DEPTH IS 18 INCHES.



PROPOSED GRASS CHANNEL DETAIL



THERE ARE NO CRITICAL AREAS WITHIN THE SITE,

SILT FENCING, AND CONSTRUCTION ENTRANCE WILL

ANY DISTURBED AREAS ONSITE WILL BE SEEDED AND

VEGETATION ESTABLISHED ONLY AFTER SUBSTANTIAL

THIS SITE IS TREATED FOR WATER QUALITY &

BE USED FOR E&S. NO EXISTING STORM PIPE.

STRUCTURES OR DITCHES ON-SITE TO BE

PROTECTED.

COMPLETION OF WORK.

NOR WITHIN THE OFFSITE CONSTRUCTION AREAS.

TREE PROTECTION

CORRECT METHODS OF TREE FENCING

FENCING AND ARMORING

EROSION CONTROL NARRATIVE

CORRECT TRUNK ARMORING

TRIANGULAR BOARD FENCE

Source: Va. DSCW

THIS PROJECT IS A PROPOSED SINGLE FAMILY DWELLING SUBDIVISION DEVELOPMENT LOCATED AT 1648 JACK FROST ROAD. THE PROPERTY IS 0.64 ACRES. THE AREA OF LIMITS OF CONSTRUCTION AND DISTURBANCE IS APPROXIMATELY 0.59 ACRES.

THERE SITE IS CURRENTLY VACANT, BUT SOME MOWED AND SEVERAL TREES. SITE IS FLAT BUT APPEARS TO DRAIN TO THE TO REAR.

AND IS BOUNDED ON THE SOUTH, EAST AND WEST BY RESIDENTIAL USES.

TYPE 36).

THERE ARE NO OFFSITE DRAINAGE DRAINING THROUGH QUANTITY BY AN ONSITE PRIVATE BMP (GRASS THE SITE. WE WILL CONNECT TO PUBLIC UTILITIES IN CHANNELS & ROOFTOP DISCONNECT).

THE SITE FRONTS JACK FROST ROAD TO THE NORTH

JACK FROST ROAD.

THE SOIL TYPE ON THE SITE TETOTUM LOAM (SOIL

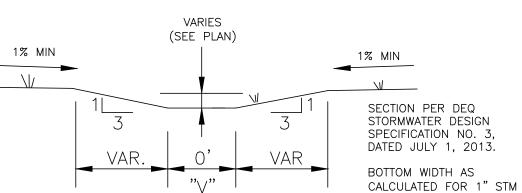
TABLE 3.31-C TEMPORARY SEEDING PLANT MATERIALS, SEEDING RATES, AND DATES

	SEEDING RATE		NORTH ^a			SOUTH			DI ANIT	
SPECIES	Acre	1000 ft ²	3/1 to 4/30	5/1 to 8/15	8/15 to 11/1	2/15 to 4/30	5/1 to 9/1	9/1 to 11/15	PLANT CHARACTERISTICS	
OATS (Avena sativa)	3 bu. (up to 100 lbs., not less than 50 lbs.)	2 lbs.	х	-	-	х	-	-	Use spring varieties (e.g., Noble).	
RYE ^d (Secale cereale)	2 bu. (up to 110 lbs., not less than 50 lbs.)	2.5 lbs.	Х	-	Х	Х	-	Х	Use for late fall seedings, winter cover. Tolerates cold and low moisture.	
GERMAN MILLET (Setaria italica)	50 lbs.	approx. 1 lb.	-	х	-	-	X	-	Warm-season annual. Dies at first frost. May be added to summer mixes.	
ANNUAL RYEGRASS ^c (Lolium multi-florum)	60 lbs.	1½ lbs.	х	-	х	х	1	Х	May be added in mixes. Will mow out of most stands.	
WEEPING LOVEGRASS (Eragrostis curvula)	15 lbs.	51/2 ozs.	-	х	-	-	х	1	Warm-season perennial. May bunch. Tolerates hot, dry slopes and acid, infertile soils. May be added to mixes.	
KOREAN LESPEDEZA ^c (<u>Lespedeza stipulacea</u>)	25 lbs.	approx. 1½ lbs.	х	х	-	х	Х	-	Warm season annual legume. Tolerates acid soils. May be added to mixes.	

Northern Piedmont and Mountain region. See Plates 3.22-1 and 3.22-2. Southern Piedmont and Coastal Plain.

May be used as a cover crop with spring seeding. May be used as a cover crop with fall seeding. May be planted between these dates.

May not be planted between these dates





MUST EXTEND FULL WIDTH OF INGRESS AND EGRESS

STONE CONSTRUCTION ENTRANCE

SIDE ELEVATION

SECTION A-A

SECTION B-B

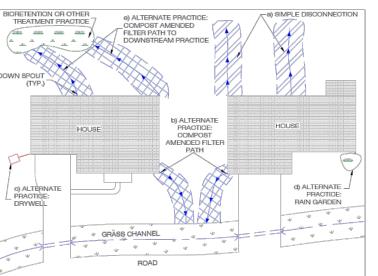


Figure 1.2. Residential Rooftop Treatment - Plan View: Disconnection – Alternate Practice: Compost-Amended Filter Path. connection - Alternate Practice: Rain Garden; onnection – Alternate Practice: Compost-Amended Filter Path to Downstream

SECTION 2: PERFORMANCE

With proper design and maintenance, the simple roofton disconnection options can provide relatively high runoff reduction rates, although they are not credited with nutrient EMC reduction (Table 1.1). If an alternate disconnection runoff reduction practice that does achieve EMC eduction in addition to volume reduction is employed to achieve rooftop disconnection, the highe total removal credit for that practice can be used for the contributing drainage area of the rooftop In some cases, the designer may choose to use one of the alternate disconnection practices noted above in order to provide both runoff reduction and nutrient removal, regardless of space

The runoff reduction achieved by rooftop disconnections can help reduce the overall channel protection and flood control volume for the site. Designers can use the Virginia Runoff Reduction

GRASS CHANNEL MAINTENANCE NOTES SECTION 9: MAINTENANCE

Version 2.0, April 1, 2013

9.1 Maintenance Agreements Section 4 VAC 50-60-124 of the regulations specifies the circumstances under which a maintenance agreement must be executed between the owner and the local program. This section sets forth inspection requirements, compliance procedures if maintenance is neglected, notification of the local program upon transfer of ownership, and right-of-entry for local program

All grass channels must be covered by a drainage easement to allow inspection and maintenance. If a grass channel is located in a residential private lot, the existence and purpose of the grass channel shall be noted on the deed of record. Homeowners will need to be provided a simple document that explains their purpose and routine maintenance needs. A deed restriction or other mechanism enforceable by the qualifying local program must be in place to help ensure that grass channels are maintained with proper line and grade. The mechanism should, if possible, grant authority for local agencies to access the property for inspection or corrective action.

9.2. Maintenance Inspections

the channel and a dense, healthy grass cover.

stabilize immediately.

Annual inspections are used to trigger maintenance operations such as sediment removal, spot revegetation and inlet stabilization. Several key maintenance inspection points are detailed in Table 3.5. Ideally, inspections should be conducted in the spring of each year. Example maintenance inspection checklists for Grass Channels can be accessed in Appendix C of Chapter 9 of the Virginia Stormwater Management Handbook (2010) or at the CWP website at:

9.3. Ongoing Maintenance Once established, grass channels have minimal maintenance needs outside of the spring clean up, regular mowing, repair of check dams and other measures to maintain the hydraulic efficiency of

http://www.cwp.org/Resource Library/Controlling Runoff and Discharges/sm.htm

(scroll to Tool6: Plan Review, BMP Construction, and Maintenance Checklists)

VA DEQ STORMWATER DESIGN SPECIFICATION NO. 3 GRASS CHANNELS

Add reinforcement planting to maintain 90% turf cover. Reseed any salt-killed Remove any accumulated sand or sediment deposits behind check dams erosion, and remove and trash or blockages at weepholes. Examine channel bottom for evidence of erosion, braiding, excessive ponding or dead grass.

Check inflow points for clogging and remove any sediment.

Inspect side slopes and grass filter strips for evidence of any rill or gully erosion and repair.

Look for any bare soil or sediment sources in the contributing drainage area and

Table 3.5. Suggested Spring Maintenance Inspections/Cleanups for Grass Channels

SECTION 10: COMMUNITY AND ENVIRONMENTAL CONCERNS

The main concerns of adjacent residents are perceptions that grass channels will create nuisance conditions or will be hard to maintain. Common concerns include the continued ability to mow grass, landscape preferences, weeds, standing water, and mosquitoes. Dry swales are a much better alternative, creating fewer objections and achieving greater pollution removal.

TABLE 3.32-E (Revised June 200) PERMANENT SEEDING SPECIFICATIONS FOR COASTAL PLAIN AREA APPLICATION RATES LAND USE SPECIES num Care Lawn mercial or Residentia 40 lbs. (unhulle Bermudagrass¹ (by other vegetative Red Top Grass or Creeping Red Fescue eneral Slope (3:1 or less) easonal Nurse Crop² 0-15 lbs ted Top Grass or Creeping Red Fescue Low-Maintenance Slope Seasonal Nurse Crop2 ericea Lespedeza When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommende urfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass ariety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html Use seasonal nurse crop in accordance with seeding dates as stated below February, March - April Annual Rye Foxtail Millet May 1st - August September, October - November 15th ... November 16th - January - May through October, use hulled seed. All other seeding periods, use unhulled seed. If Weeping Lovegrass sed, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40 lbs/acr FERTILIZER & LIME Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.) A soil test is necessary to determine the actual amount of time required to adjust the soil pH of site. When applying Slowly Available Nitrogen, use rates available in Frosion & Sediment Control Technical Bulletin # 03 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

Virginia Erosion and Sediment Control Plan Minimum Standards (MS) Checklist Describe how MS is addressed on MS Instructions for Contracto 4VAC50-30-40 Minimum Standards MS1: 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. mo2: During construction or 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.

SHEET C4 SILT FFNCING. MS2: During construction of the project, soil stock piles and borrow areas shall be stabilized or protected with sediment MS3: 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.

SHEET C6 SEEDING. MS4: 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. MS5: Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after MS6: 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 a. The minimum storage capacity of a sediment trap shall be 134 cubic yards per acre of drainage area less than three acres.
b. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to the 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. be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilizing measures until the problem is corrected. MS8: Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure. MS9: Whenever water seeps from a slope face, adequate drainage or other protection shall be provided. MS10: 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. MS11: 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.

MS12: 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. MS13: 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. MS14: All applicable federal, state and local chapters pertaining to working in or crossing live watercourses shall be met. MS15: The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed. MS16: Underground utility lines shall be installed in accordance with the following standards in addition to other applicable . No more than 500 linear feet of trench may be opened at one time. Excavated material shall be placed on the uphill side of trenches.

Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, robin, 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 behalf the property. Restabilization shall be accomplished in accordance with this chapter.
Applicable safety chapters shall be complied with. MS17: 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. CONSTRUCTION MS18: 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 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.

CONSTRUCTION SEQUENCE ON CONSTRUCTION SEQ MS19: 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 and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels and 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 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 of the project in question; or 2) (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.

(b) All previously constructed man-made channels shall be analyzed by the use of a two-year storm to demonstrate that stormwater will not overtop its banks and by the use of a two-year storm to verify that stormwater will not cause erosion of channel bed or banks; and (c) Pipes and storm sewer systems shall be analyzed by the use of a two-year storm to verify that stormwater will not overtop that the proviously constructed man-made channels or pipes are not adequate, but the contained within the pipe or system.

In the approvement vinces are option that induces acommand understood in the instant outside approvement 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.

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.

J. 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 valentways 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 matural or man-made channels shall satisfy the flow rate capacity and velocity requirements for matural or man-made channels shall satisfy the flow rate capacity and velocity requirements for matural or man-made channels shall satisfy the flow rate capacity and velocity requirements for matural or man-made channels shall satisfy the flow rate capacity and velocity requirements for matural or man-made channels shall satisfy the flow rate capacity and velocity requirements fo

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

III. reduce the allowable peak flow rate resulting from the s.1s. 2, and 10-year, 24-hour storms to a level in is less than or equal to the peak flow rate from the site assuming it was in a good forested condition, achiev 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 o man-made channels as defined in any regulations promulgated pursuant to § 10.1-502 of 20 10.1-570 of the For plans approved on and after July 1, 2014, the flow rate capacity and velocity requirements of § 10.1-561.

rmit regulations.
Compliance with the water quantity minimum standards set out in 4VAC50-60-66 of the Virginia Stormwater inagement Program (VSMP) Permit Regulations shall be deemed to satisfy the requirements of Minimum

reduce the allowable peak flow rate resulting from the 1.5. 2. and 10-year, 24-hour storms to a level that

f existing natural receiving channels or previously constructed man-made channels or pipes are not adequate, plicant shall:

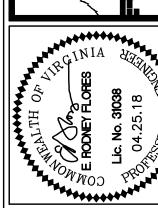
Improve the channels to a condition where a ten-year storm will not overtop the banks and a two-year storm will not cause erosion to channel the bed or banks; or
2) Improve the pipe or pipe system to a condition where the ten-year storm is contained within the appurtenances;
3) Develop a site design that will not cause the pre-development peak runoff rate from a twoyear 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 mammade channel; or
4) Provide a combination of channel inprovement, 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.
e. All hydrologic analyses shall be based on the existing watershed characteristics and the ultimate development condition of the subject project. ondition of the subject project.

If the applicant chooses an option that includes stormwater detention, he shall obtain approval from the VESCP fa plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the

PROJECT NO.

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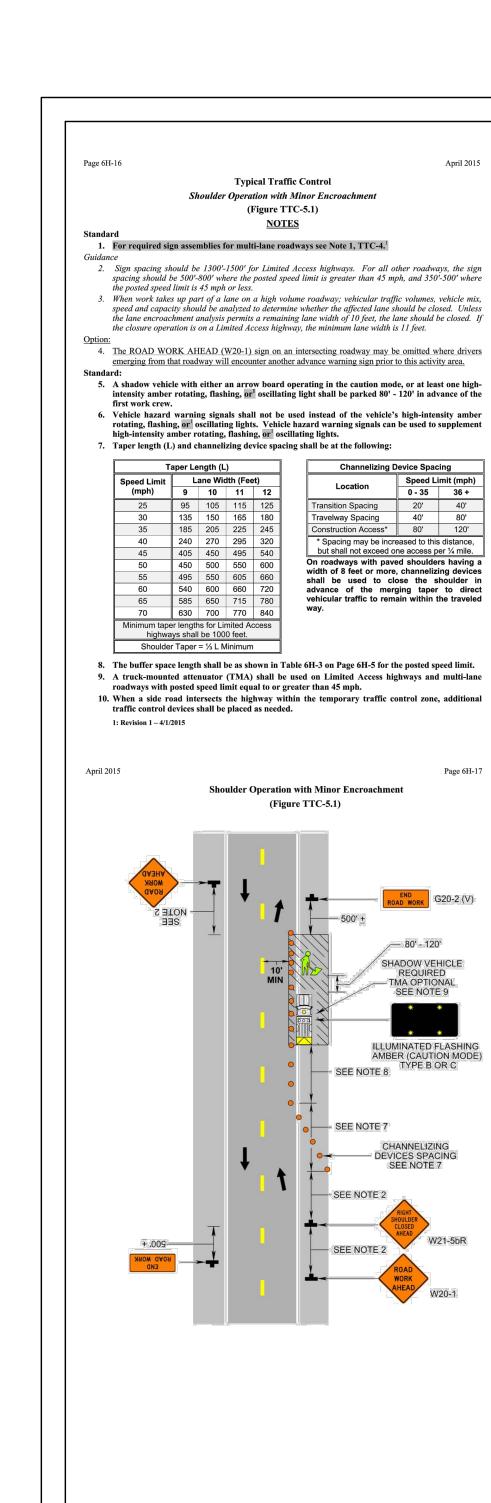
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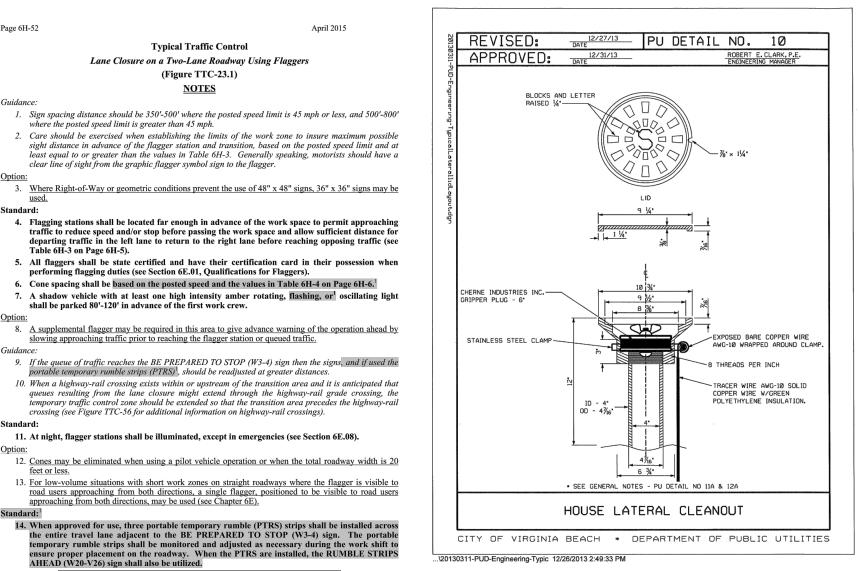
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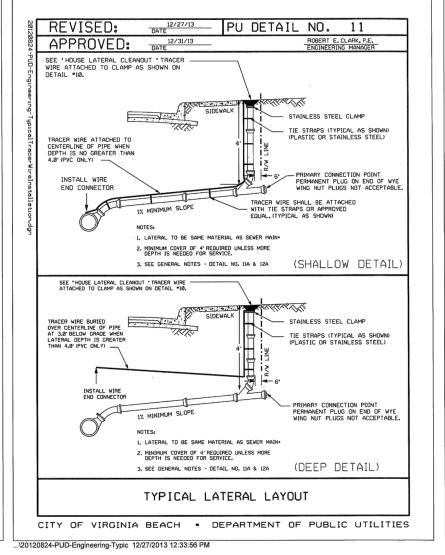
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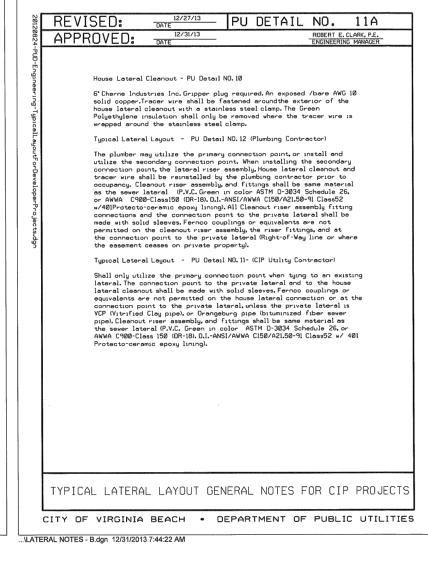
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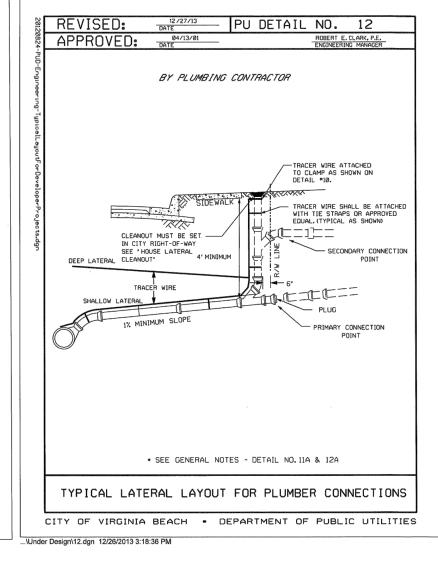
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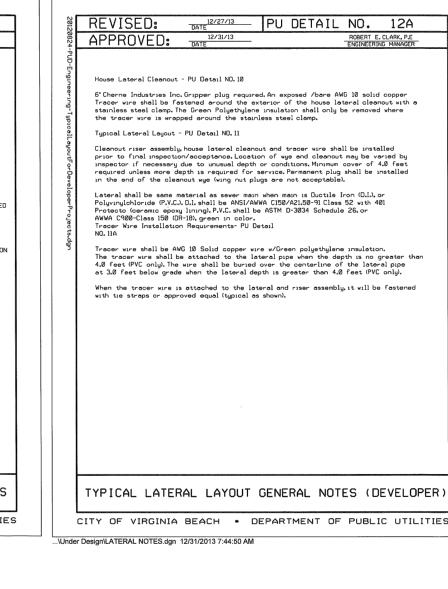


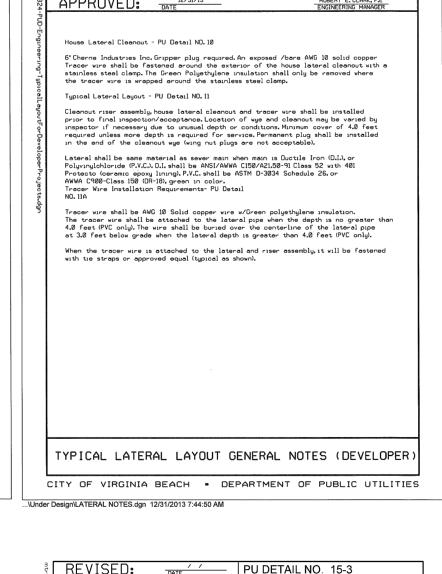


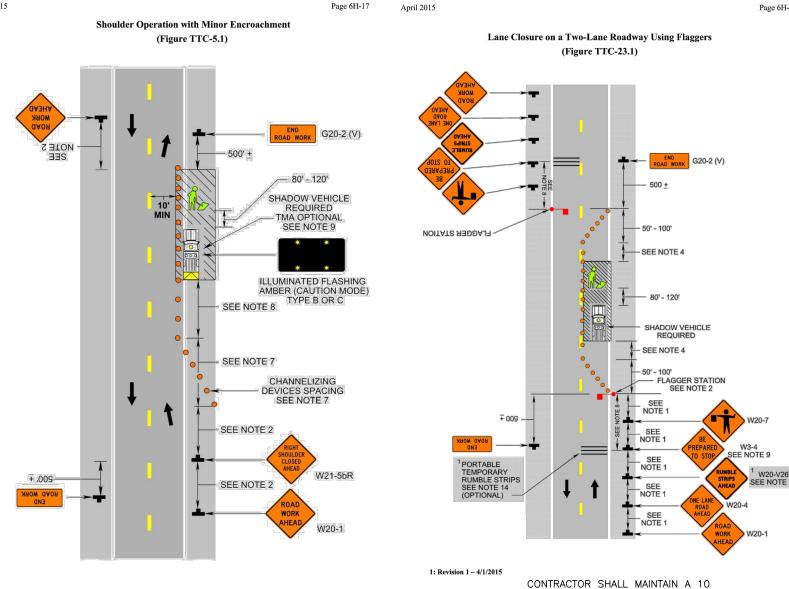












1: Revision 1 - 4/1/2015

Speed Limit (mph)

0 - 35 36 +

Typical Traffic Control

Lane Closure on a Two-Lane Roadway Using Flaggers

(Figure TTC-23.1)

NOTES

performing flagging duties (see Section 6E.01, Qualifications for Flaggers).

slowing approaching traffic prior to reaching the flagger station or queued traffic

table temporary rumble strips (PTRS)¹, should be readjusted at greater distances.

11. At night, flagger stations shall be illuminated, except in emergencies (see Section 6E.08).

 Posted Speed
 0 - 35 mph
 36 - 55 mph

 PTRS Spacing (Center to Center)
 5 Feet
 8 Feet

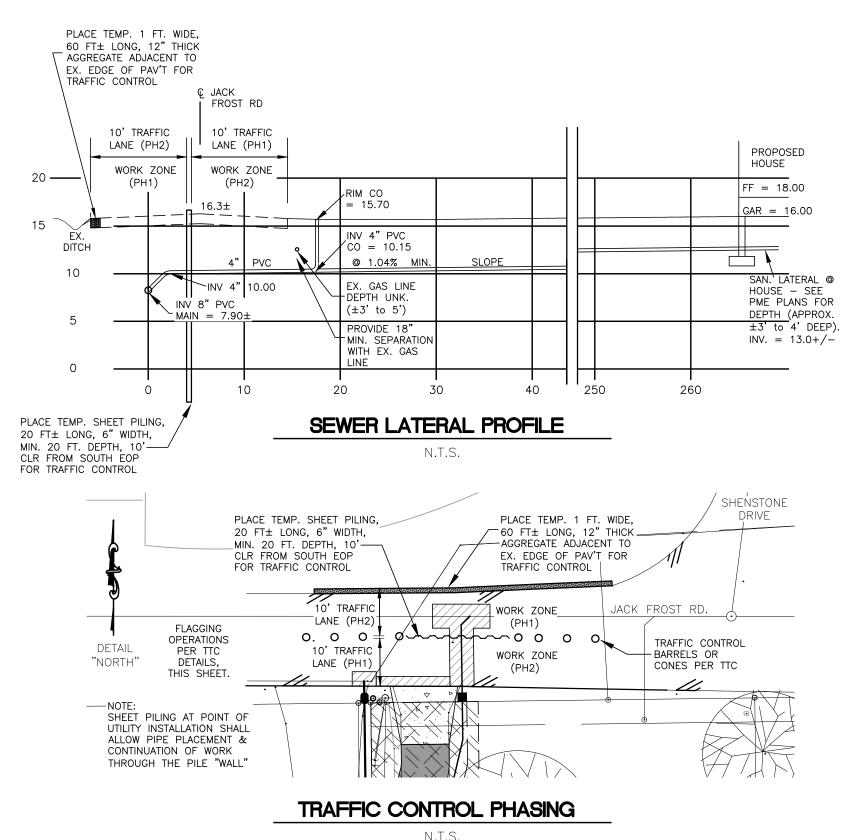
FOOT WIDE TRAVEL LANE AT ALL

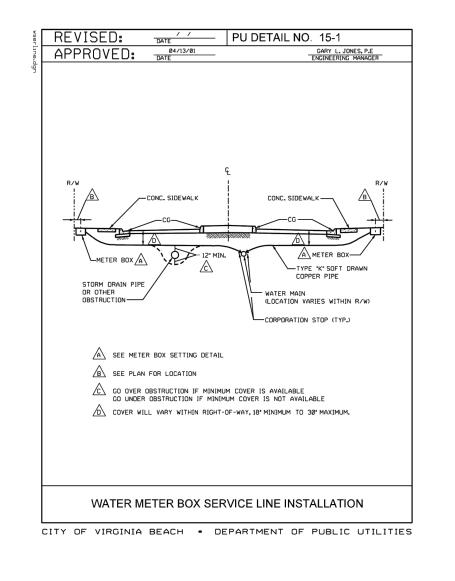
TIMES DURING FLAGGING OPERATIONS.

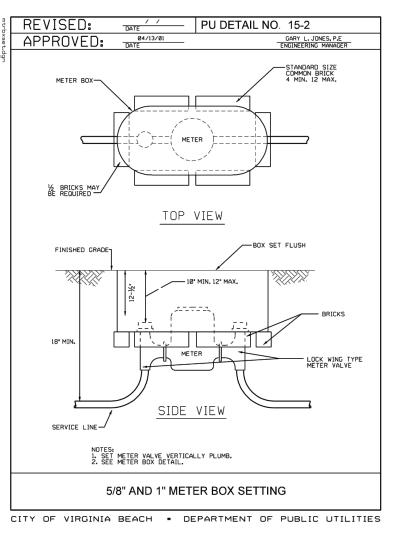
FOR MAJOR & MINOR ARTERIALS

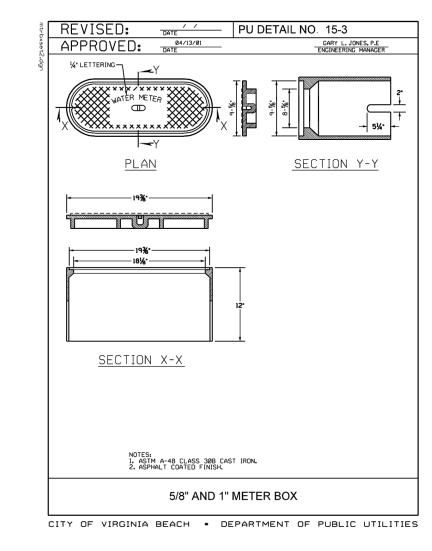
6. Cone spacing shall be based on the posted speed and the values in Table 6H-4 on Page 6H-6.

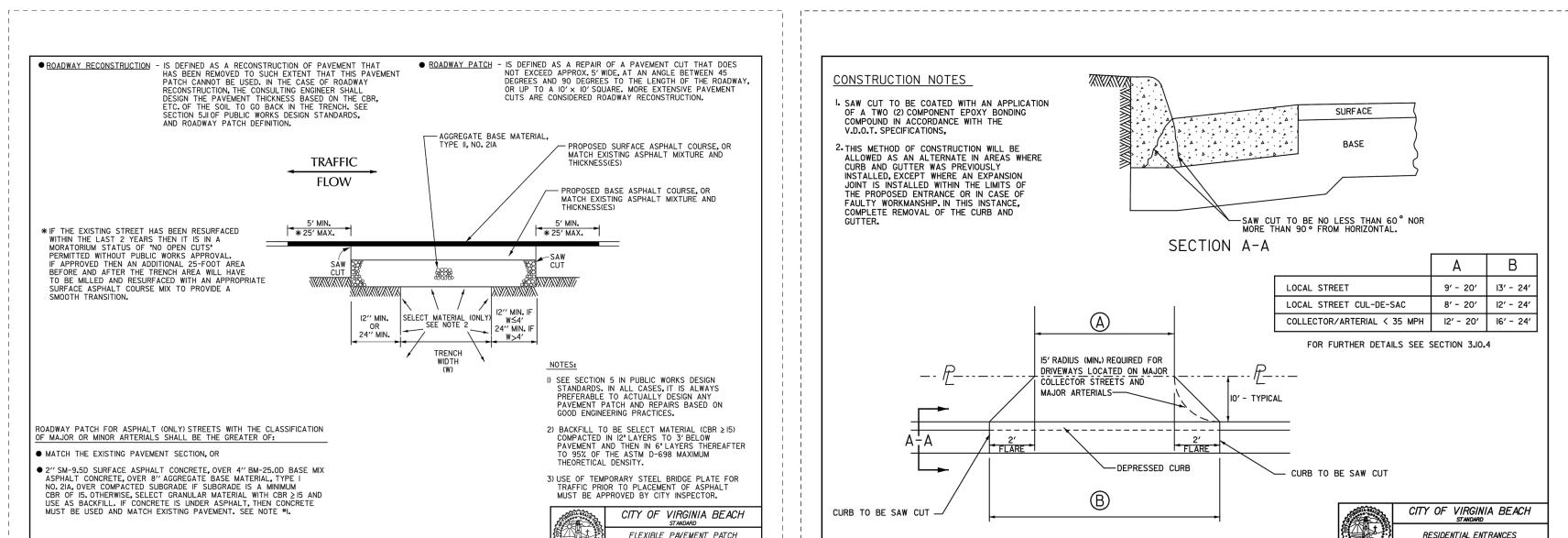
here the posted speed limit is greater than 45 mph.

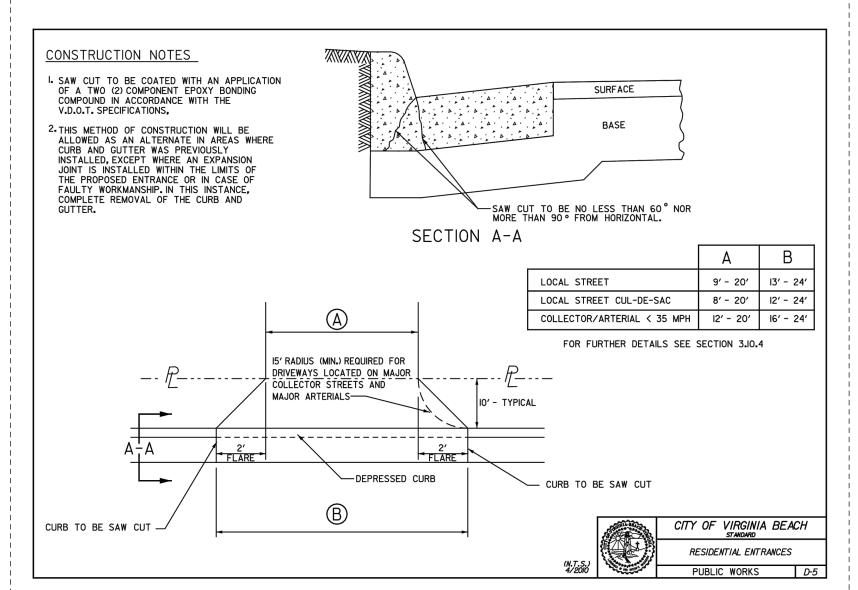


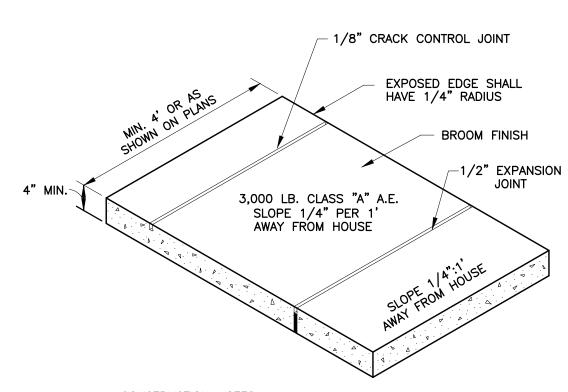












CONSTRUCTION NOTES CRACK CONTROL JOINTS TO BE PROVIDED AT INTERVALS EQUAL TO WIDTH OF SIDEWALK EXTENDING INTO CONCRETE FOR 1/4 OF DEPTH. EXPANSION JOINTS TO BE INSTALLED AT INTERVALS NOT EXCEEDING 50' AND JUNCTION OF POINTS OF CURBS AND ENTRANCES, AND ON BOTH SIDES OF ALL SIDEWALK SECTIONS CONTAINING UTILITIES. PREMOLDED 1/2" JOINT FILLER IS TO BE USED EXTENDING FROM BOTTOM OF SLAB TO 1/4" OF ITS TOP SURFACE

AS SOON AS SURFACE IRREGULARITIES ARE REMOVED, AND A LIGHT TRANSVERSE BROOM FINISH GIVE, A LIQUID MEMBRANE SEAL OR OTHER APPROVED CURING MEDIUM IS TO BE APPLIED. SIDEWALKS ACROSS ENTRANCES SHALL HAVE A DEPTH OF SEVEN

INCHES (7") WITH A MAXIMUM SLOPE OF 1":1'.

CONCRETE SIDEWALK MAY NOT BE PLACED IF TEMPERATURES LESS THAN 40° ARE LIKELY DURING FIRST 72 HOURS AFTER PLACING. ANY ASPECT OF CONSTRUCTION NOT COVERED HEREIN IS TO BE PER THE CURRENT VDOT, ROAD AND BRIDGE SPECIFICATIONS.

CONCRETE SIDEWALK DETAIL

N.T.S.

- CONTRACTOR TO COORDINATE WITH FRANCHISE UTILITY COMPANIES FOR ANY UTILITY DISCONNECTIONS.
- CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS PRIOR TO ANY DEMOLITION. CONTRACTOR SHALL CONTACT CIVIL INSPECTIONS TO ARRANGE A PRE-CONSTRUCTION MEETING/INSPECTION. AN INSPECTION MUST BE SCHEDULED PRIOR TO BEGINNING WORK WITHIN THE RIGHT-OF-WAY. CONTACT CIVIL INSPECTIONS AT 385-4558 TO SCHEDULE AN INSPECTION AT LEAST 48 HOURS IN ADVANCE.
- . CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL EXISTING UTILITIES AND STRUCTURES PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT 757-424-7724 IF CONFLICTS EXIST.

THIS PLAN DOES NOT GUARANTEE THE LOCATION OF EXISTING UNDERGROUND UTILITIES. CONTRACTOR TO DETERMINE ACTUAL LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO MOBILIZATION. IF CONFLICTS EXIST, NOTIFY ENGINEER. BEFORE DIGGING CONTACT "MISS UTILITY" AT 811.

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