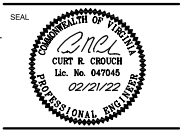


APPROVED Before you start work you are required to notify the site inspector at 703-324-1720. Failure to notify can result in a violation and a charge per the compliance inspection. Stamped By: Manish Joshi
 A VDOT Permit will be required for any activity disturbing VDOT right-of-way or impeding pedestrian or vehicular traffic. Plan Number: 09820-CON-002 Date: 03/01/22

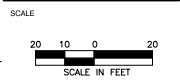
CURT R. CROUCH, P.E.

4995 CROUCH LANE
 MIDLAND, VIRGINIA 22728
 EMAIL: CURT.CROUCH@GMAIL.COM
 TELEPHONE: 540.359.1636

RIEGER, ANDREW L.
 THOMPSON ROAD PROPERTY
 LT 27
 12917 PERCHERON LANE
 OAK HILL, VA 20171
 FAIRFAX COUNTY, VIRGINIA



KEY PLAN



No.	DATE	BY	Description

REVISIONS
 DRAWN BY: CC
 APPROVED BY: CC
 CHECKED BY: CC
 DATE: NOVEMBER 2021

TITLE: **GRADING PLAN AND NOTES**

PROJECT NO: 9820-CON-002-1.1

CMPO NOTES
 THIS PLAN COMPLES FULLY WITH AMENDMENT CHAPTER 118 (CHESAPEAKE BAY PRESERVATION ORDINANCE) OF THE CODE OF THE COUNTY OF FAIRFAX, EFFECTIVE NOVEMBER 18, 2003.

EXISTING UTILITY NOTE
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK

GRADING NOTES

1. ALL FOOTING TO BE SET A MINIMUM OF 24" BELOW FINAL GRADE IN ORDER TO PROVIDE ADEQUATE FROST COVER PROTECTION
2. THE AREA LOCATED ADJACENT TO DWELLING IS TO BE SLOPED AT 5% AWAY FROM THE FOUNDATION WALL FOR A MINIMUM OF 10 FEET TO PROVIDE POSITIVE DRAINAGE.
3. NO DOWNSPOUTS TO BE DIRECTED STRAIGHT TO NEIGHBOR PROPERTY.
4. SITE WORK CONTRACTOR TO FIELD CHECK FINAL GRADING TO ENSURE THE DEVELOPMENT GRADING PLAN.
5. CONTRACTOR TO ENSURE POSITIVE DRAINAGE ACROSS ALL SURFACES TO PRECLUDE THE PONDING OF WATER IN YARDS OR ON PAVED SURFACES. THIS DOES NOT APPLY TO PONDING ASSOCIATED WITH STORMWATER MANAGEMENT FACILITIES.
6. THE SUB-BASE OF ALL PARKING AREAS AND TRAVEL LANES ON SITE SHALL BE PROOF ROLLED PRIOR TO THE REPLACEMENT OF ANY PAVING MATERIALS TO IDENTIFY ANY AREAS OF INADEQUATE OR STRUCTURALLY UNSATISFACTORY MATERIAL THAT MUST BE UNDERCUT.
7. IF STRUCTURAL FILL MATERIALS IS REQUIRED IT MUST BE APPROVED BY A GEOTECHNICAL CONSULTANT PRIOR TO PLACEMENT. FILL MATERIALS MUST BE COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS SPECIFICATIONS AND UNDER HIS/HER GUIDANCE.
8. FOUNDATION DRAIN WILL DISCHARGE INTO SUMP PIT AND PUMPED AWAY FROM THE HOUSE AS SHOWN ON THIS PLAN.
9. CONTRACTOR MUST VERIFY APPROVED ARCHITECTURAL PLANS FOR BUILDING FOOTPRINTS AND ELEVATIONS. IF ANY DISCREPANCIES, CONTRACTOR HAS TO NOTIFY ENGINEER OR OWNER PRIOR TO START OF THE CONSTRUCTION WORK.

SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCE, TREE PROTECTION FENCE PRIOR TO AND SITE DISTURBANCE OR DEMOLITION.
2. ONCE PERIMETER CONTROLS ARE INSTALLED, PRIOR TO FURTHER LAND DISTURBANCE, THE COUNTY SITE INSPECTOR MUST APPROVE THE INSTALLATION OF THE CONTROLS.
3. CLEAR AND GRUB SITE FOR INSTALLATION OF PERIMETER CONTROLS.
4. CLEAR, GRUB, STRIP TOP SOIL AND ROUGH GRADE SITE
5. COMPLETE NEW CONSTRUCTION AND FINAL GRADING
6. STABILIZE ALL DISTURBED AREAS, NOT BUILT OVER OR PAVED WITH TOPSOIL, MULCHING AND SEEDING.
7. ALL SEDIMENT AND EROSION CONTROLS ARE TO REMAIN IN PLACE UNTIL SITE IS STABILIZED AND CAN ONLY BE REMOVED AT THE DIRECTION OF THE COUNTY INSPECTOR.

LEGEND:

- 300 --- EXISTING CONTOUR
- 300 — PROPOSED CONTOUR
- PROPOSED LIMITS OF CLEARING AND GRADING
- x x x x x - FABRIC SILT FENCE OR BERM WITH GRAVEL FILTER
- 70.5 PROPOSED SPOT ELEVATION
- 70.7 EXISTING SPOT ELEVATION
- # DENOTES STREET ADDRESS
- ▲ DENOTES WALKOUT DOOR
- EXISTING TREE
- FAIRFAX COUNTY GIS 2003 RPA
- ⊕ EXISTING WELL
- EXISTING DRAINFIELD LINE

REAR YARD COVERAGE COMPUTATIONS

TOTAL REAR YARD AREA	3,106.6 SF
PROPOSED POOL AND PATIO AREA	0.0 SF
EXISTING SHED AND PATIO	0.0 SF
TOTAL REAR LOT COVERAGE (SQ.FT)	0.0 SF
% OF LOT COVERAGE (POST)=	$\frac{0.0 \times 100}{3,106.6} = 0.0\%$

IMPERVIOUS AREA/RUNOFF COMPUTATIONS (SQ. FT.)

DESCRIPTION	PRE-DEV	POST-DEV
EX. HOUSE	3,578.0	3,578.0
EX. SIDEWALK	699.0	699.0
EX. DRIVEWAY	1,634.0	1,634.0
DECK/PORCH	621.0	730.0
PATIO/POOL	1,013.0	2,124.0

TOTAL IMPERVIOUS AREA (SQ.FT)	7,545.0	8,765.0
PERVIOUS AREA/GRASS AREA (SQ.FT)	28,614.0	27,394.0
TOTAL SITE AREA (SQ.FT)	36,159.0	36,159.0
INCREASE IN IMPERVIOUS (SQ.FT)	1,220.0	

TOTAL % OF IMPERVIOUS AREA(POST)= $\frac{8,765 \times 100}{36,159.0} = 24.2\%$

"C" RUNOFF COEFFICIENT

A. PRE-DEVELOPMENT
 $7,545 \times 0.90 + 28,614 \times 0.35 = 0.46$
 $36,159.0$

A. POST-DEVELOPMENT *
 $8,765 \times 0.90 + 27,394 \times 0.35 = 0.48$
 $36,159.0$

RUNOFF Q=CIA

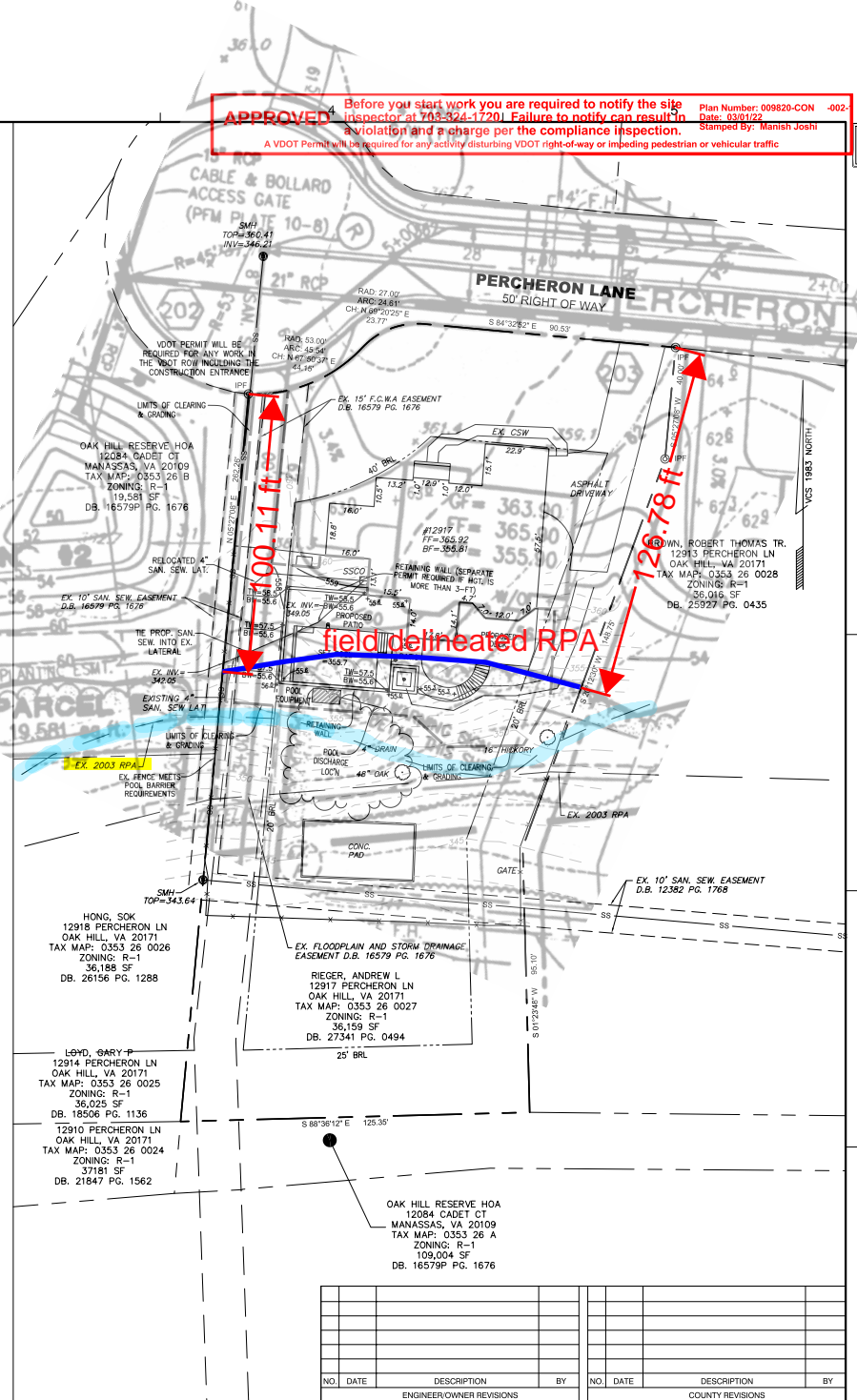
A. PRE-DEVELOPMENT
 $Q_2 = 0.46 \times 5.23 \times 0.83 = 2.00$ CFS
 $Q_0 = 0.46 \times 6.77 \times 0.83 = 2.58$ CFS

B. POST-DEVELOPMENT*
 $Q_2 = 0.48 \times 5.23 \times 0.83 = 2.08$ CFS
 $Q_0 = 0.48 \times 6.77 \times 0.83 = 2.70$ CFS

C. CHANGE IN RUNOFF*
 $Q_2 = 2.08 - 2.00 = +0.08$ CFS INCREASE IN RUNOFF
 $Q_0 = 2.70 - 2.58 = +0.12$ CFS INCREASE IN RUNOFF

-OUTFALL NARRATIVE ON SHEET 5

THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION METHODS, MATERIALS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROCEDURES IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S NEGLIGENCE 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.



NO.	DATE	DESCRIPTION	BY	NO.	DATE	DESCRIPTION	BY

C:\Users\mccormack\Documents\Submittals\09820-CON-002-1.1\09820-CON-002-1.1.dwg