

GENERAL NOTES

- WORK PERFORMED SHALL COMPLY WITH THE FOLLOWING:
 - THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUBC), 2021 EDITION
 - THE INTERNATIONAL RESIDENTIAL CODE (IRC), 2021 EDITION AS AMENDED BY THE VUBC.
 - ALL APPLICABLE STATE AND LOCAL CODES, ORDINANCES AND REGULATIONS.
- DESIGN LOADS:

A. BUILDING CLASSIFICATION CATEGORY	36 PSF	
B. GROUND SNOW P _g	15 MPH	
C. ULTIMATE WIND SPEED	B	
D. EXPOSURE	125 PCF	
E. RETAINED SOIL UNIT WEIGHT	UNIFORM	
F. DESIGN LOADS:	CONCENTRATED	
DRIVEWAY	250 PLF	200 LBS
PEDESTRIAN GUARDRAILS	50 PLF	
F. SEISMIC DESIGN:		
SITE SOIL CLASS	D	

- THE CONTRACTOR SHALL VERIFY UTILITY EASEMENTS, LOCATION OF RETAINING WALL, AND/OR DIMENSIONS IN FIELD PRIOR TO FABRICATION OF MEMBERS AND COMMENCING WORK.
- PROVIDE TEMPORARY BRACING AS REQUIRED TO RESIST WIND AND OTHER LOADS DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES, EQUIPMENT, ADJACENT GROUNDS AND PLANTS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE AT NO ADDITIONAL COSTS TO THE OWNER, ANY ITEMS DAMAGED DURING THE CONSTRUCTION.
- EXISTING ELEVATIONS SHOWN ARE BASED ON SITE PLAN PROVIDED BY CARDINAL CIVIL RESOURCES AND DATED MARCH 21, 2025. ANY VARIATION IN LOCATION OR ELEVATION OF RETAINING WALLS, ELEVATION IN THE GRADE EITHER ABOVE OR BELOW THE WALLS, OR THE RECOMMENDED INSTALLATION DETAILS, REQUIRE REVIEW BY THE ENGINEER OF RECORD.

FOUNDATION:

- FOUNDATION DESIGN HAS BEEN BASED ON GEOTECHNICAL REPORT PREPARED BY EGS MID-ATLANTIC, LLC & DATED SEPTEMBER 10, 2024.
- UNLESS NOTED OTHERWISE, ALL UTILITIES WHICH CROSS FOOTINGS MUST PASS ABOVE FOOTINGS THROUGH THE RETAINING WALL. STEP FOOTINGS WERE REQUIRED.
- CONTRACTOR SHALL NOTIFY "MISS UTILITY OF VIRGINIA" PRIOR TO BEGINNING EXCAVATION FOR LOCATIONS OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR COSTS ASSOCIATED WITH DAMAGE AND REPAIR OF ANY LINES MARKED BY MISS UTILITY OF VIRGINIA.
- FOOTINGS/LEVELING PADS WERE DESIGNED TO BEAR ON UNDISTURBED SOIL A MINIMUM OF 1'-6" BELOW EXISTING GRADE WITH A MINIMUM SOIL BEARING PRESSURE OF 2,000 PSF. THE OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO VERIFY THAT THIS ALLOWABLE SOIL BEARING PRESSURE IS ATTAINABLE. IF THIS IS NOT ATTAINABLE, OWNER TO VERIFY THE OWNER/CONTRACTOR SHALL CONTACT ENGINEER FOR REDESIGN.

RETAINING WALLS & BACKFILL MATERIAL:

- BACKFILL MATERIAL MUST BE COMPACTED TO 95% STANDARD PROCTOR DENSITY IN MAXIMUM 8" LIFTS USING A VIBRATORY PLATE COMPACTOR. ALL BACKFILL SHALL BE FREE-DRAINING, NON-FROST SUSCEPTIBLE GRANULAR MATERIAL, 5M OR BETTER, UNLESS NOTED TO BE STONE. RETAINED BACKFILL MATERIAL SHALL HAVE A MINIMUM FRICTION ANGLE OF 25 DEGREES, EXCEPT IN THE REINFORCED ZONE. BACKFILL MATERIAL TO BE USED IN THE REINFORCED ZONE SHALL BE 5M OR BETTER WITH MINIMUM FRICTION ANGLE OF 30 DEGREES.
- CHIMNEY DRAIN ADJACENT TO RETAINING WALLS AND MATERIAL USED TO FILL MODULAR WALL UNITS SHALL BE VIBRATORY PLATE COMPACTED NO. 57 STONE, OR NO. 21A STONE, 1/4" TO 1/2" DIAMETER WITH NO MORE THAN 10% PASSING THE #200 SIEVE.
- PLACE A 4" DIAMETER PERFORATED SCH40 PVC DRAIN PIPE WRAPPED IN FILTER CLOTH ADJACENT TO INSIDE FACE OF THE MODULAR CONCRETE UNIT RETAINING WALLS. PROVIDE DRAINAGE TO DAYLIGHT AT 25'-0" ON CENTER MAX UNLESS NOTED OTHERWISE.
- ALL GEOGRID REINFORCEMENT TO BE SYNTEN GEOGRID SF35 SERIES MANUFACTURED BY SYNTEN TECHNICAL FABRICS. LENGTH OF GEOGRID SHOWN ON DRAWINGS IS TAKEN FROM OUTSIDE FACE OF RETAINING WALL. GEOGRID SHALL BE PULLED TAUGHT PRIOR TO INFILLING BACKFILL.
- SEGMENTAL RETAINING WALL UNITS SHALL BE DIAMOND PRO MANUFACTURED BY ANCHOR WALL SYSTEMS, LLC.
- CONTRACTOR SHALL FOLLOW INSTRUCTIONS PROVIDED BY BLOCK MANUFACTURER REGARDING THE CONSTRUCTION OF THE MODULAR CONCRETE UNIT WALLS. ANY INSTRUCTIONS THAT DIFFER FROM THOSE INDICATED ON THE CONSTRUCTION DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
- PEDESTRIAN RAILING IS REQUIRED WHEN WALL HEIGHT EXCEEDS 30" ABOVE FINISH GRADE AT ANY POINT WITHIN 36" OF OPEN EDGE.
- RETAINING WALL MINIMUM DESIGN SAFETY FACTORS:
 - OVERTURNING - 2.0
 - SLIDING - 1.5
 - GLOBAL STABILITY - 1.3

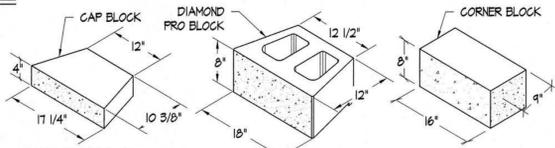
CONCRETE:

- CONCRETE FOR DRIVEWAY SLABS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS AND A MAXIMUM WATER/CEMENT RATIO OF 0.49.
- CONCRETE FOR FOUNDATION FOOTINGS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS AND A MAXIMUM WATER/CEMENT RATIO OF 0.55.
- ALL CONCRETE SHALL BE MIXED, PLACED AND TESTED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318.
- ALL CONCRETE SHALL HAVE A SLUMP OF 4" ± 1" UNLESS NOTED OTHERWISE.
- ALL CONCRETE TO BE POURED IN COLD WEATHER, AS DEFINED IN SECTION 11 OF ACI 306R, COLD WEATHER CONCRETING, SHALL FULLY COMPLY WITH ACI 306.1, STANDARD SPECIFICATIONS FOR COLD WEATHER CONCRETING, AND 306R.
- ALL CONCRETE TO BE POURED IN HOT WEATHER, AS DEFINED IN SECTION 12 OF ACI 305R, HOT WEATHER CONCRETING, SHALL FULLY COMPLY WITH ACI 305.1, STANDARD SPECIFICATIONS FOR HOT WEATHER CONCRETING, AND ACI 305R.
- SAW CUTTING CONTROL JOINTS SHALL BE PERFORMED AS SOON AS THE CONCRETE SLAB ON GRADE IS HARD ENOUGH TO SUPPORT THE CUTTING MACHINE WITHIN FIRST FOUR HOURS OF CURING. SAW CUT CONTROL JOINTS SHALL BE LOCATED WHERE INDICATED ON THE PLANS AND AT A MAXIMUM SPACING OF 12'-0" ON CENTER UNLESS NOTED OTHERWISE.
- ALL CONCRETE SLABS ON GRADE EXPOSED TO THE EXTERIOR ENVIRONMENT, SHALL BE A MINIMUM OF 6" THICK, AIR ENTRAINED CONCRETE AND REINFORCED WITH 6 X 6 #2.9 X #2.9 WWF PLACED IN TOP 1/3 OF SLAB AND SHALL BE PLACED OVER 10 MIL VAPOR BARRIER UNLESS SHOWN OTHERWISE ON DRAWING. WWF SHALL BE PROVIDED IN FLAT SHEETS AND SUPPORTED IN PLACE ON CONCRETE BLOCKS. AIR ENTRAINMENT FOR SLABS SHALL BE 6% BY VOLUME ± 1%.

WOOD:

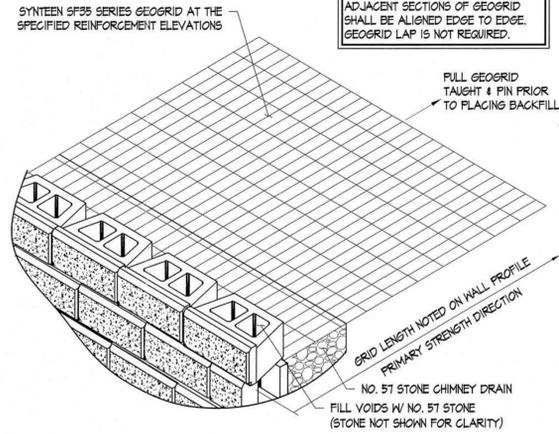
- TIMBER FOR EXTERIOR VEHICULAR GUARD ASSEMBLY SHALL BE TREATED WITH AN APPROVED PRESERVATIVE IN ACCORDANCE WITH AWPA STANDARDS.
- ALL FASTENERS FOR EXTERIOR VEHICULAR GUARD ASSEMBLY SHALL BE HOT DIPPED ZINC COATED GALVANIZED STEEL.
- ALL STRUCTURAL LUMBER, UNLESS OTHERWISE NOTED, SHALL BE NO. 2 SOUTHERN YELLOW PINE (KILN DRIED), SURFACED, WITH A MAXIMUM 18% MOISTURE CONTENT, WITH THE FOLLOWING MINIMUM NON-FACTORED ALLOWABLE STRESSES:

A. EXTREME FIBER STRESS	F _b =	4 x 6	8 x 6
B. HORIZONTAL SHEAR STRESS	F _v =	925 PSI	850 PSI
C. COMP. PERP. TO GRAIN	F _{c⊥} =	175 PSI	165 PSI
D. COMP. PARALLEL TO GRAIN	F _c =	565 PSI	575 PSI
E. MODULES OF ELASTICITY	E =	1,350,000 PSI	1,200,000 PSI



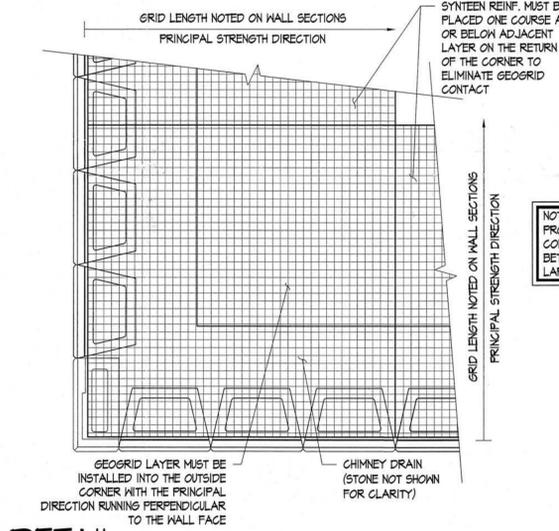
DETAIL

SCALE: 3/4" = 1'-0"



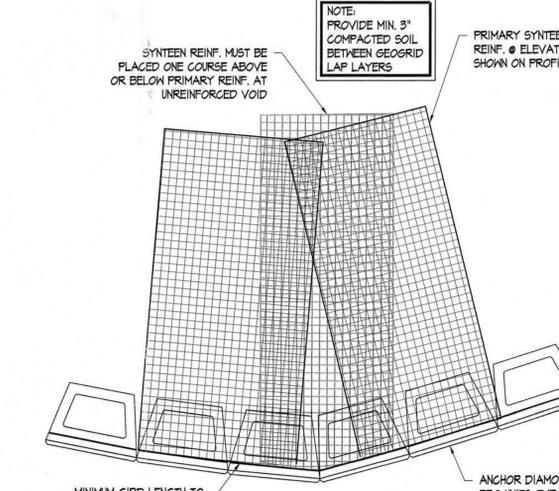
DETAIL

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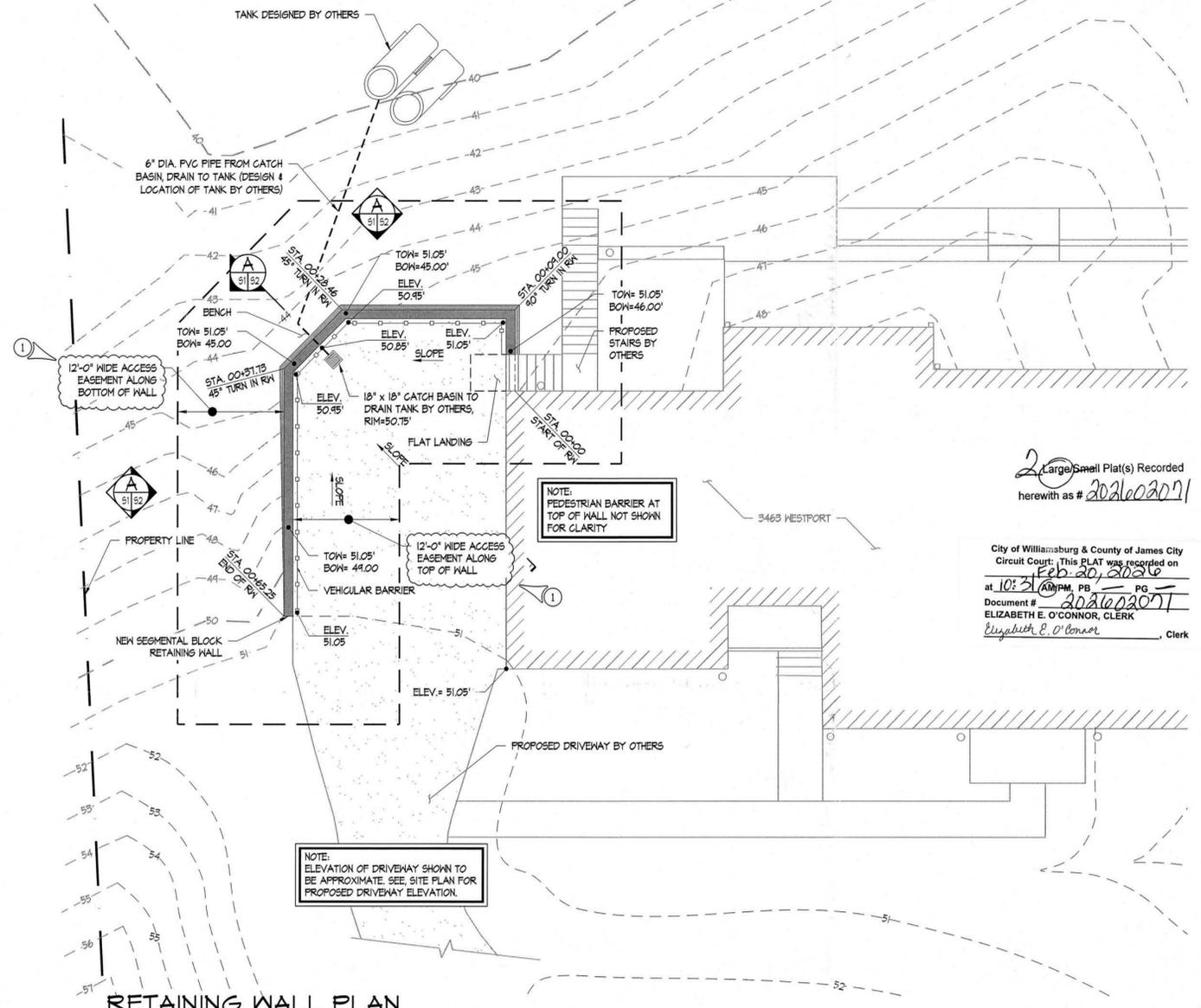
DETAIL

SCALE: 3/4" = 1'-0"



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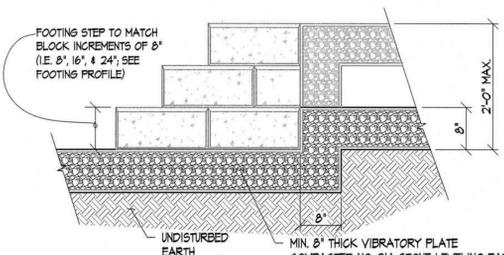


RETAINING WALL PLAN

SCALE: 1/8"=1'-0"

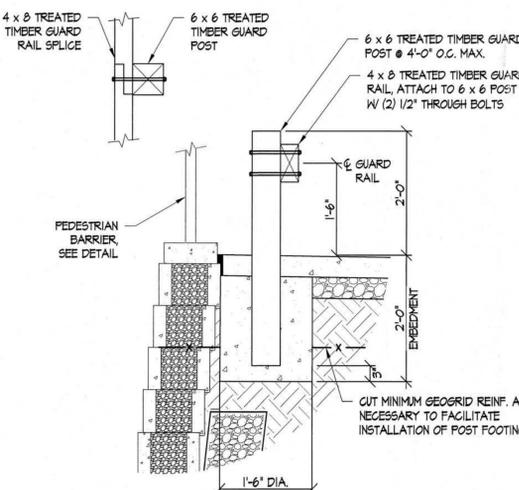
ABBREVIATIONS

APPROX. CONC. & CONT. DIA. ELEV. EQ. EX. HORIZ. MAX. MIN. NO.	APPROXIMATE CONCRETE CENTER LINE CONTINUOUS DIAMETER ELEVATION EQ. EX. HORIZ. MAX. MIN. NUMBER	O.C. REINF. DIA. STA. TYP. TON W/ VERT. WWF	ON CENTER REINFORCEMENT RETAINING WALL SIMILAR SQUARE FEET STATION TOP OF WALL WITH V.F. VERIFY IN FIELD VERTICAL WELDED WIRE FABRIC
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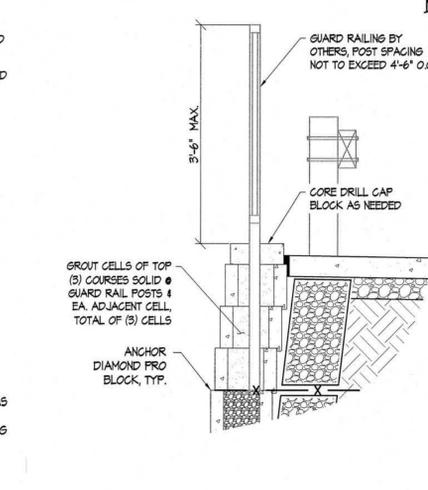
DETAIL

SCALE: 3/4" = 1'-0"



DETAIL

SCALE: 3/4" = 1'-0"



DETAIL

SCALE: 3/4" = 1'-0"

202602071

Reviewed by: JMK
 Drawn by: DAS
 Project #: VA25251DES
 Date: 12/25/25

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Date: 12/25/25

2 Large Small Plat(s) Recorded herewith as # 202602071

City of Williamsburg & County of James City Circuit Court; This PLAT was recorded on Feb. 20, 2026 at 10:51 AM PM, PG Document # 202602071 ELIZABETH E. O'CONNOR, CLERK Elizabeth E. O'Connor, Clerk

No.	Revisions	Comments	Date
1		COUNTY COMMENTS	2/12/26

RETAINING WALL PLAN & TYP. DETAILS
 FOR
 DENEY RESIDENCE
 3463 WESTPORT
 JAMES CITY COUNTY
 VIRGINIA

Sheet 51 of 2
 EXHIBIT B
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