ZONING DATA

Zoning: R-200 Minimum Lot Area = 20,000 sq. ft.

- Minimum Lot Width at R/W = 25 ft. Minimum Lot Width at B.R.L. = 100 ft.
- Side B.R.L. = 7 ft. min. each side [4] [5] [1] Per Montgomery County Code Section 4.4.1.A.4.b., for a corner lot, the applicant may may use front setbacks of the abutting buildings on both sides of the corner lot.
- [2] The existing abutting house on Quintana Drive was previously served by a private septic system, and therefore may be excluded from the EBL determination.
- [3] The existing abutting house on Carteret Road was previously served by a private septic system, and therefore may be excluded from the EBL determination.

Quintana Drive Front B.R.L. = 40.0 ft. [1] [2]

Carteret Road Front B.R.L. = 40.0 ft. [1] [3]

Rear B.R.L. = 20 ft.

[4] Per Montgomery County Code Section 7.7.1.D.2.c, a detached house on a platted lot, parcel, or part of a previously platted lot that has not changed in size or shape since June 1, 1958, exclusive of changes due to public acquisition, may be constructed or reconstructed in a manner that satisfies the maximum building height, lot coverage and established building line of its zone when the building permit is submitted and the side yard and rear setback required by its pre-1958 zoning in effect when the lot, parcel or part of a lot was first created. [5] This property was created prior to January 1, 1954, therefore 7 foot side setbacks are permitted.

Verify lot coverage in accordance with the Zoning Ordinance. Lot area equal to or greater than 16,000 square feet. Lot Coverage: The maximum area that may be covered by any building, including any accessory building and any weatherproofed floor area above a porch, but not including any bay window measuring 10 feet in width or less and 3 feet in depth or less, chimney, porch, or up to 240 square feet of a detached garage, if the garage is less than 350 square feet of floor area and less than 20 feet in height.

Allowable lot coverage: 20% of total lot area Lot 9 = 21,602 sq. ft. (per plat) 21,602 x 0.20 = 4,320.0 sq. ft

Maximum building lot coverage (including accessory buildings) = 4,320.0 sq. ft. Total area covered by buildings = 2,934.7 sq. ft. ±

- Verify main building height in accordance with the Zoning Ordinance. First floor elevation 251.70 ft Mean height of building from first floor: 28.77 ft (28'-9-1/4" Per Arch.) Elevation at mean height of building 280.47 ft Average elevation along front of building 247.49 ft Mean height of building = 280.47 - 247.49 = 32.98 feet Allowable mean height of building = 35 feet Proposed mean height of building = 32.98 feet
 - Digitally signed by Jared Sims-Carhart
 - DN: CN=Jared Sims-Carhart, Jared Sims-Carhart G=Jared, SN=Sims-Carhart, C=US Reason: I am the author of this document Date: 2024.04.16 15:26:06-04'00'

TREE CANOPY REQUIREMENTS TO BE COMPLETED BY THE CONSULTANT AND

PLACED ON THE I CONTROL/ STORM FOR ALL PROJEC	FIRST SHE	ET OF THE S	EDIMENT
EXEMPT: YES	NO 🖲		
If exempt under Se the applicable exe			
Total Property 21,602 S.F			isturbed Area ,600 S.F.
Shade Trees Re 15	quired	Shade T	rees Proposed 0
Fee in Lieu: (Trees Required -	Trees Propo	osed) x \$250	\$ 3,750.00
Required Number AREA OF THE LI DISTURBANCE (S	MITS OF		NUMBER OF SHADE TREES REQUIRED
1 SQ. FT.	6,000 SC	Q. FT.	3
6,001 SQ. FT.	8,000 SC	Q. FT.	6
8,001 SQ. FT.	12,000 5	SQ. FT.	9
12,001 SQ. FT.	14,000 S	SQ. FT.	12
14,001 SQ. FT.	40,000 \$	SQ. FT.	15
If the square footo more than 40,000 required must be (Number of Square	calculated (using the fol	owing formula:
Exemption Catego			<u>,</u>
 55-5(a) any activit 55-5(b) any comm with an approved a 55-5(f) any activit 55-5(g) routine or stormwater manage road, if the persor all required permit: 55-5(h) any stread 	ty that is sumercial loggin exemption from ty conducted remergency ement facility performing s;	g or timber h om Article II o by the Count maintenance o y, including an the maintenan	grvesting operation f Chapter 22A; y Parks Department; of an existing existing access ce has obtained
the work has obta	ined all nece	ssary permits;	, and performing

55-5(i) cutting or clearing any tree to comply with applicable provisions of any federal, state, or local law governing safety of dams; □ OTHER: Specify per Section 55–5 of the Code: This property is located within the Montgomery County incorporated municipality of ________, therefore it is not subject to the Tre

Canopy Law.

FRONT YARD PARKING AREA COVERAGE

R-200: 30% MAXIMUM FRONT YARD PARKING AREA: 1,512.55 SF FRONT YARD AREA: 5,104.80 SF COVERAGE: 29.6% (< 30%)

TOPSOIL NOTE TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREAS WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS".

DRAINAGE STATEMENT

I understand that DPS approval of this sediment control/stormwater management pla s for demonstrated compliance with required environmental runoff treatment standards. Th DPS sediment control/stormwater management plan approval does not relieve me of rofessional responsibility. I have analyzed the proposed design for Sediment Control Permit No. 291646 and hereby state that, based upon my background, training and experience, have determined that the proposed improvements shown on this plan meet relevant laws and regulations. I further acknowledge that I have analyzed the post development drainag patterns for this project from the standpoint of my responsibilities under current Maryland Law and have determined that if permission is required from adjacent property owners, it has been obtained and copies of those permissions have been made available to DPS. Jared M. Carhart/P 04/16/2024 Date

UTILITY INFORMATION

EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED. UTILITY LOCATIONS ARE BASED UPON AVAILABLE RECORDS AND ARE SHOWN TO THE BEST OF OUR ABILITY.

QUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.

FOR LOCATION OF UTILITIES, CALL "MISS UTILITY" AT 1-800-257-7777, OR LOG ON TO WWW.MISSUTILITY.NET/ITIC 48 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH DECOUPERATE OF CUADTED AT A THE AREA OF UTILOTIONERY CONDUCT WITH

RELATED TO BE COMPLETED BY THE CON SEDIMENT CONTROL/STORMW	SULTANT	AND PLAC	ED ON THE FIRS	T SHEET OF THE	
IT IS THE RESPONSIBILITY OF ALL REQUIRED PERMITS PRIOF					
TYPE OF PERMIT	REQ'D	NOT REQ'D	PERMIT NUMBER	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS Floodplain District		X			
WATERWAYS/WETLAND(S):		X			
a. Corps of Engineers		X			
b. MDE		X			
c. MDE Water Quality Certification		X			
MDE Dam Safety		X			
* DPS Roadside Trees Protection Plan	x		400229	Approval Date	
DES Roauside mees Flotection Flam	^		400229	04/12/2024	
** N.P.D.E.S Notice of Intent		x			
FEMA LOMR - Letter of Map Revision (Required Post Construction)		x			
OTHERS (Please List):		x			
 A copy of the Roadside Trees Protection Plan must be delivered to the S When a Notice of Intent is required, the sediment control permit may n MDE's 20-CP permit has been submitted to DPS. 			•	•	

CONSTRUCTION INSPECTION		
CHECK-OFF LIST FOR DRY WELL/RECHARGE CHAMBER STAGE	MCDPS INSPECTOR	OWNER/ DEVELOPER
MANDATORY NOTIFICATION: Inspection and approval of each practice is required at these points prior to proceeding with construction. The permittee is required to give the MCDPS Inspector twenty-four (24) hours notice (DPS telephone 240-777-0311). The DPS inspector may waive an inspection, and allow the owner/developer to make the required inspection per a prior scheduled arrangement which has been confirmed with the DPS inspector in writing. Work completed without MCDPS approval may result in the permittee having to remove and reconstruct the unapproved work. Upon completion of the project, a formal Stormwater Management As-Built must be submitted to MCDPS unless a Record Drawing Certification has been allowed instead. Each of the steps listed below must be verified by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE
1. Excavation for Dry Well conforms to approved plans		
2. Placement of backfill, perforated inlet pipe and observation well conforms to approved plans		
3. Placement of geotextiles and filter media conforms to approved plans		
4. Connecting pipes, including connection to downspout, constructed per the approved plans		
5. Final grading and permanent stabilization conforms to approved plans		
TOTAL NUMBER OF DRY WELLS INSTALLED PER THIS PERMIT: APPROVED COI		
RECORD DRAWING CERTIFICATION		
A record set of approved Sediment Control/Stormwater Management plans must be maintained onsite at all times.	In addition to stormwa	ater management

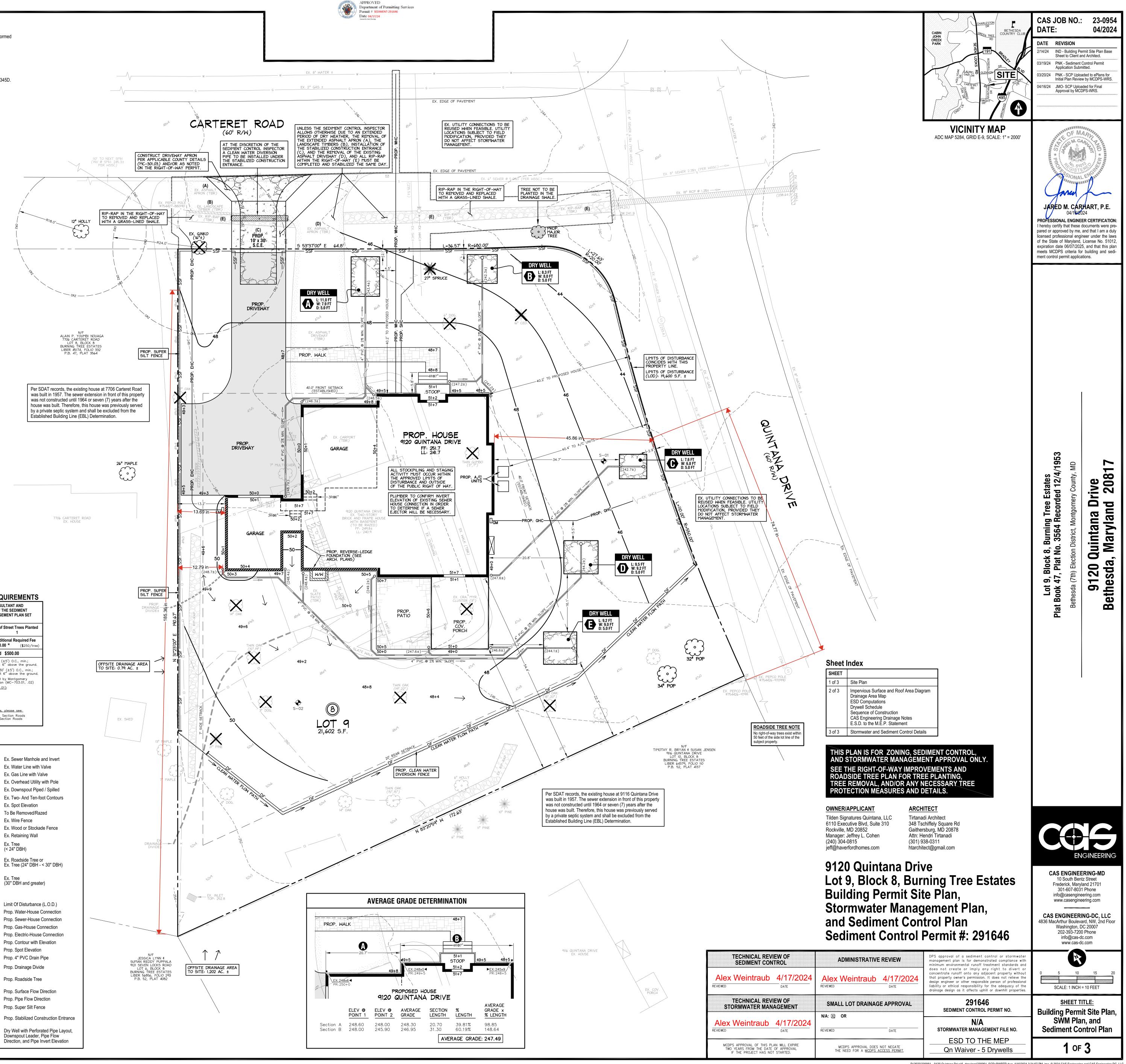
items, these plans must include the number and location of all trees proposed to be planted to comply with the Tree Canopy Law. Any approved modifications or deletions of stormwater practices or tree canopy plantings or information must be shown on this record set of plans and on the Tree Canopy Requirements table. Upon completion of the project, the record set of plans, including thereon this signed Record Drawing Certification, must be submitted to the MCDPS inspector. In addition to this Record Drawing Certification, a formal Stormwater Management As-Built submission 🗌 is required **I** is <u>not</u> required for this project. If this project is subject to a <u>Stormwater Management Right of Entry and Maintenance Agreement</u>, that document is recorded at Book <u>67886</u> Page <u>308</u>. This Record Drawing will serve as referenced in the recorded document. This record drawing accurately and completely represents the stormwater management practices and tree canopy plantings as they were constructed or planted. All stormwater management practices were constructed per the approved Sediment Control / Stormwater Management plans or subsequent approved revisions."

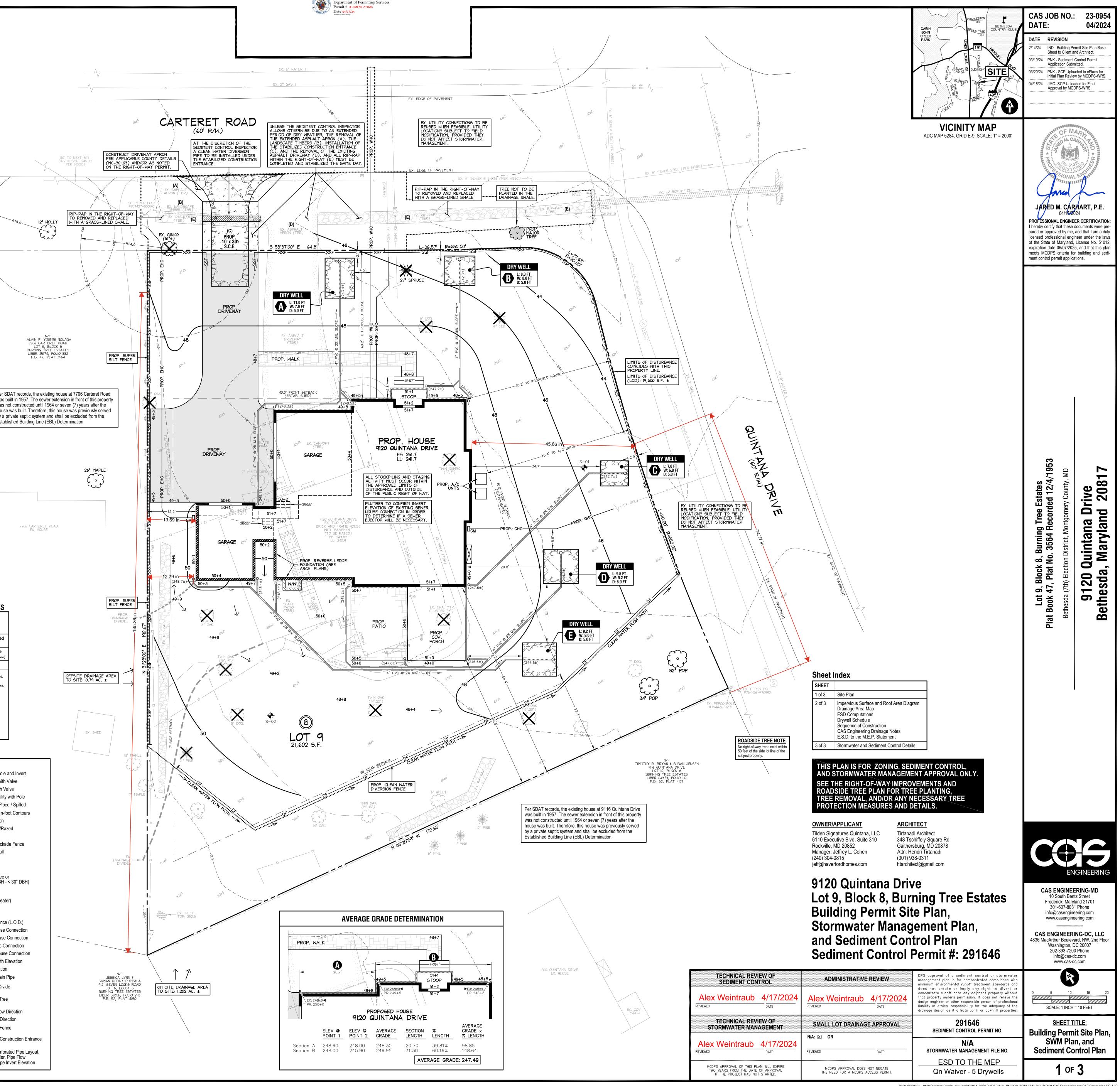
Dwner/Developer Signature	Date		
IELD CHECK OF RECORD DRAWING E	BY MCDPS INSPECTOR:	INITIALS	DATE

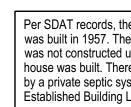
GENERAL NOTES

Boundary information and two-foot contour data are based upon surveys performed by CAS Éngineering, dated February, 2024.

- 2. Total lot area: Lot 9 = 21,602 sq. ft. (0.495 acres) 3. Property is located on Tax Map GP121 and WSSC 200' Sheet 211NW08. 4. Property is located on Soils Survey Map Number 23.
- Soil type(s): 2B, Glenelg Silt Loam, HSG "B". 2C, Glenelg Silt Loam, HSG "B". Flood zone "X" per F.E.M.A. Firm Maps, Community Panel Number 24031C0345D.
- Property is located in the Cabin John Creek Watershed, Use Class I,P. Water Category - 1, Sewer Category - 1
- 8. Local utilities include: Water / Sewer - Washington Suburban Sanitary Commission
- Electric PEPCO Telephone - Verizon Gas - Washington Gas
- 9. Property is not located in a Special Protection Area.
- 10. Property is not a Historic Site or located in a Historic District. 11. This plan was created without the benefit of a title report.









ROADSIDE TREE REQUIREMENTS

ILOADO			
PLACED O	IPLETED BY THE N THE FIRST SHEI STORMWATER M ROJECTS.	ET OF THE SI	EDIMENT
# of Street	Trees Removed 1	# of Stree	t Trees Planted 1
Street Tree \$500.00	Removal Fee (\$500/tree)	Additional \$000.00 *	Required Fee (\$250/tree)
	Total Fees Req	uired \$500).00
<u>Major (Shac</u> Height: 10'	<u>de) Trees:</u> Spacing min; Caliper size	: 50' (±5') (2" at 6" abo	D.C., min.; ove the ground.
<u>Minor (Flow</u> Height: 8'	<u>ering) Trees:</u> Spac min; Caliper size 1	ing: 30' (±5' 1.5" at 6" ab) 0.C., min.; ove the ground.
	species to be app artment of Transp		
	ee Clearances (MC	<u> — 700.01):</u>	
a) 5' from b) 5' from c) 5' from d) 10' from e) 15' from	water main gas box inlet of manhole fire hydrant streetlight		
For addition	nal planting require		

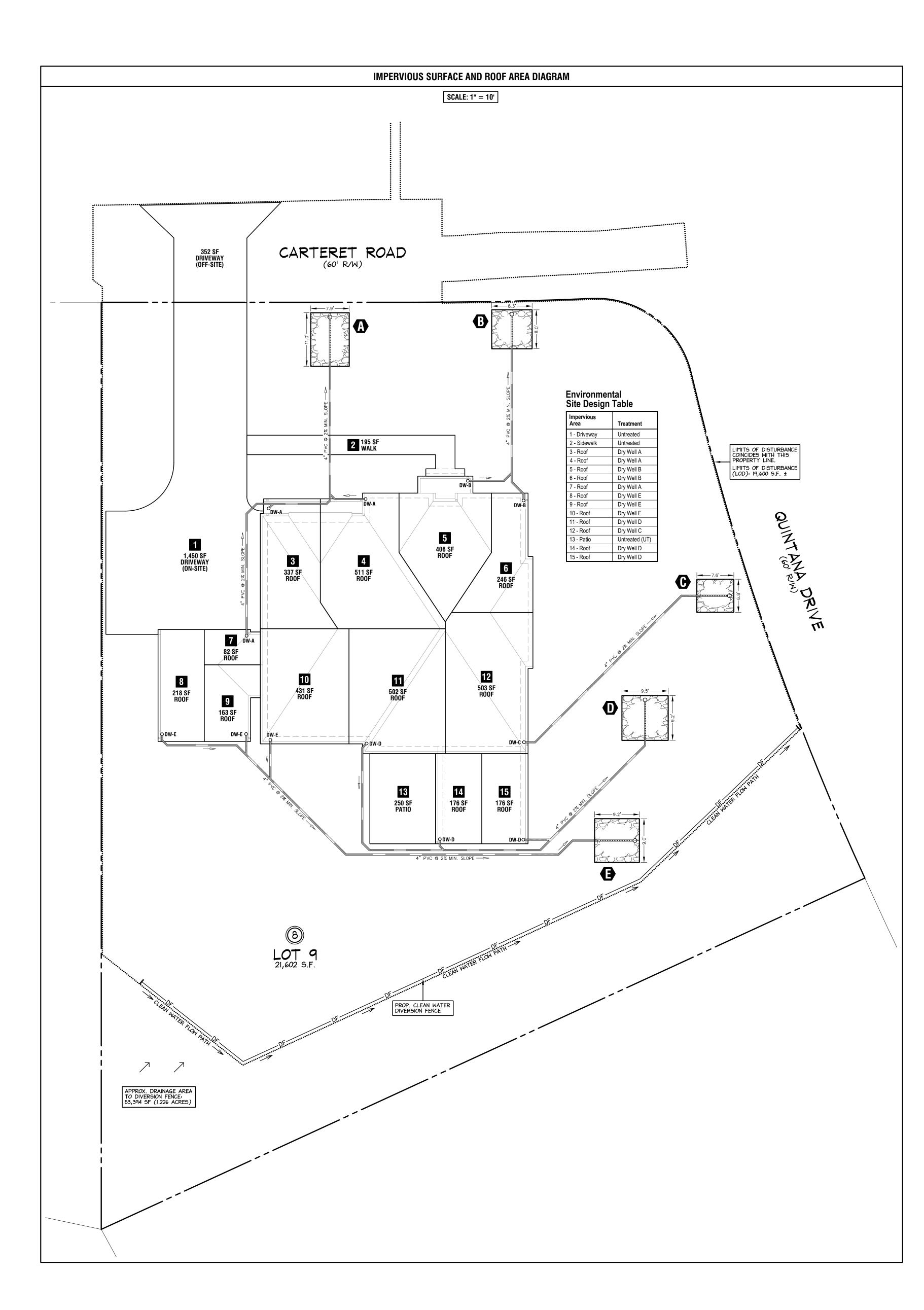
MC-700.01: Tree Locations, Closed Section Roads MC-701.01: Tree Locations, Open Section Roads MC-702.01: Tree Planting Detail

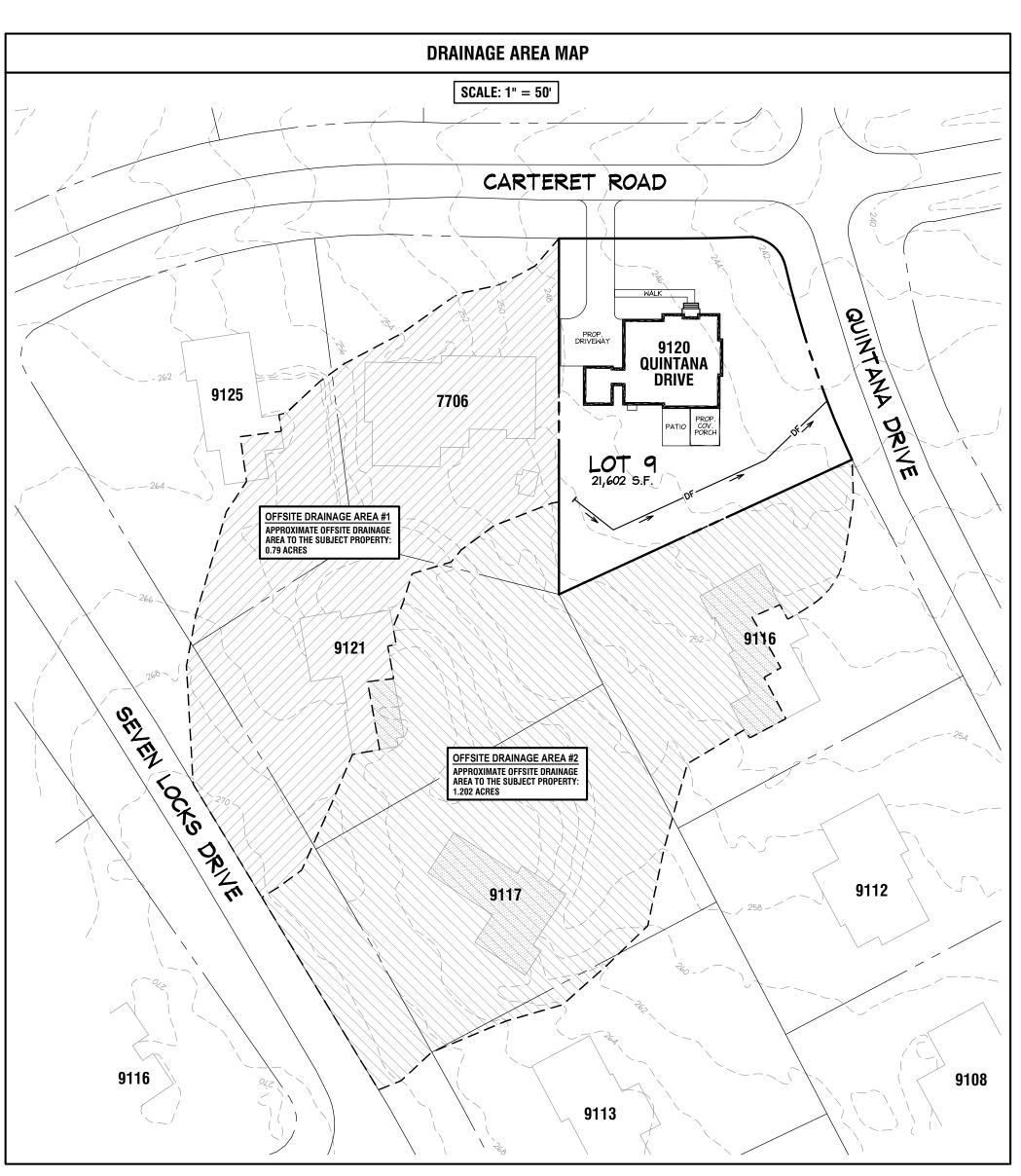
LEGEND

(354.4

EXISTING FEATURES	
s(62.7')	Ex. Sewer Manhole and Invert
- (6∠.7) ₩W	Ex. Water Line with Valve
G	Ex. Gas Line with Valve
OHLØ	Ex. Overhead Utility with Pole
O DSP O DSS	Ex. Downspout Piped / Spilled
— — 428 — — — — 430 — —	Ex. Two- And Ten-foot Contours
28x0	Ex. Spot Elevation
(T.B.R.)	To Be Removed/Razed
X X	Ex. Wire Fence
	Ex. Wood or Stockade Fence
	Ex. Retaining Wall
E *	Ex. Tree (< 24" DBH)
÷ 🛞	Ex. Roadside Tree or Ex. Tree (24" DBH - < 30" DBH)
$ \\ \\ \\ \\ \\ \end{matrix}$	Ex. Tree (30" DBH and greater)
PROPOSED FEATURES	
•••••	Limit Of Disturbance (L.O.D.)
	Prop. Water-House Connection
Prop. Shc	Prop. Sewer-House Connection
PROP GHC	Prop. Gas-House Connection
Prop Ehc	Prop. Electric-House Connection
16	Prop. Contour with Elevation
XX+X	Prop. Spot Elevation
	Prop. 4" PVC Drain Pipe
	Prop. Drainage Divide
Ê	Prop. Roadside Tree
\rightarrow	Prop. Surface Flow Direction
	Prop. Pipe Flow Direction
SSF	Prop. Super Silt Fence
PROP. S.C.E.	Prop. Stabilized Construction Entra
	Dry Well with Perforated Pipe Layou

P:\2023\230954_9120 Quintana Drive\6 drawings\230954_SCP+RWRTP.dwg, 4/16/2024 3:21:57 PM, jmo, © 2024 CAS Engineering and CAS Engineering-DC, LLC





APPROVED Department of Permitting Services Permit # SEDIMENT-29164 Date 04/17/24

			ESD	COMPUTAT	IONS - 9	120 QUINTANA	DRIVE (HY	DROLOG	GIC SOIL GROU	PB)			
	LOT AREA Termination		TOTAL LOT IMPI For P _e dete			lot impervious Area Percentage (I) Or P _e determination	-		RGET (INCHES) ERCENTAGE TO TABLE 5.3	3			
21,	,602 SF		5,884	1 SF		27.24 %		1.6	N		PER SECTION 5.2. Practice is limit		
TOTAL	L.O.D. AREA	то	TAL IMPERVIOUS /	AREA WITHIN L.O.D.		L.O.D. IMPERVIOUS		R _v = RUNOF			FROM THE 1-YEA		
	V DETERMINATION		FOR R _V DETE			AREA PERCENTAGE (I) OR R _V DETERMINATION		0.05 + 0.05 I = Impervious		(Q _F)	VOLUME = (Area) x	2.6 in (Pe	Max) x (R _v) / 12
19,	100 SF		6,236	3 SF		32.65%		0.34	1		VOLUME PROVIDED	•	
DETERMINE	ESDvREQUIRED				TARGET	$ESD_V = (PE) \times (RV) \times (A)$	/ 12			E	XCEED THE Q _E MAX	imum (1-yi	EAR STORM)
BASED 0	N THE L.O.D. DISTURBANCE)			TARGE	$ET ESD_V = 1.6$	(PE) x 0.34 (Rv) x 19100	(Area) / 12						
	Sio Toribinito Ej			TO	OTAL SITE ES	D VOLUME REQUIRED): 865.9 CF						
DRYWELL Structure	IMPERVIO AREA NUMBER	AREA	MINI	MUM REQUIRED ESD, P _e = 1.0 in (Cubic Feet)	v	DRY WELL DIMENSIONS (FEET)	DRY WELL Surface Area (Square Feet)		DTAL DRY WELL VOLUME (Cubic Feet)		(IMUM VOLUME CHE(Ear Storm: 2.6 in)		DRY WELL VOLUME PROVIDED (CUBIC FEET)
				D	DATA BELOW R	DUNDED TO 1 DECIMAL P	LACE; Rv FOR DRYW	ELLS IS 0.95	(100% IMPERVIOUS ROO	F AREA)			
	3	337 SF											
Α	4	511 SF 82 SF	$ ESDv = \frac{93}{2}$	0 (A) x 1.0 (Pe Min) x 12	0.95 (Rv)	11.1 (LENGTH) 8.6 (WIDTH)	A = 11.1 (L) x 8.6	(W) \	/ = 95.5 (A) x 5 (D) x 0.4	$ESDv = \frac{930}{2}$) (A) x 2.6 (Pe Max) x 12	0.95 (Rv)	191.0 CF
ROOF	,	02 01	E	SDv Min = 73.6 CF		5.0 (DEPTH)	A = 95.5 SF		V = 191.0 CF	ESI	Dv Max = 191.4 CF		
	TOTAL	930 SF											
	5	406 SF 246 SF		2 (A) x 1.0 (Pe Min) x	0.95 (Rv)	8.3 (LENGTH)	A = 8.3 (L) x 8 (M0 1	/ = 66.4 (A) x 5 (D) x 0.4	650	? (A) x 2.6 (Pe Max) x	0 95 (Bv)	
B ROOF			$ ESDv = \frac{00}{2}$	12	0.55 (110)	8.0 (WIDTH)	$A = 6.3 (L) \times 6 (R)$		$V = 00.4$ (A) $\times 3$ (D) $\times 0.4$ V = 132.8 CF	ESDV = 0.02	12	0.55 (114)	132.8 CF
			E	SDv Min = 51.6 CF		5.0 (DEPTH)	A = 00.4 3F		V = 152.0 OF	ESI	Dv Max = 134.2 CF		
	12	652 SF 503 SF											
_	12	000 01	ESDv = 50	3 (A) x 1.0 (Pe Min) x	0.95 (Rv)	7.6 (LENGTH)	A = 7.6 (L) x 6.8	w) \	l = 51.7 (A) x 5 (D) x 0.4	$ESDv = \frac{503}{5}$	3 (A) x 2.6 (Pe Max) x	0.95 (Rv)	
C ROOF				12		6.8 (WIDTH)	A = 51.7 SF		V = 103.4 CF		12		103.4 CF
	TOTAL	503 SF	B	SDv Min = 39.8 CF		5.0 (DEPTH)				ESI	Dv Max = 103.5 CF		
	11	502 SF											
D	14	176 SF	$ ESDv = \frac{85}{2}$	4 (A) x 1.0 (Pe Min) x 12	0.95 (Rv)	9.5 (LENGTH)	A = 9.5 (L) x 9.2	(W) \	/ = 87.4 (A) x 5 (D) x 0.4	$ESDV = \frac{854}{2}$	(A) x 2.6 (Pe Max) x 12	0.95 (Rv)	
ROOF	15	176 SF		SDv Min = 67.6 CF		9.2 (WIDTH) 5.0 (DEPTH)	A = 87.4 SF		V = 174.8 CF		Dv Max = 175.8 CF		174.8 CF
	TOTAL	854 SF		and an and an an							and Banda Ma		
	8	218 SF 163 SF			0.05 (D.)	9.2 (LENGTH)						0.05 (D.)	
E ROOF	10	431 SF	$$ ESDV = $\frac{81}{2}$	2 (A) x 1.0 (Pe Min) x 12	<u>0.95 (RV)</u>	9.0 (WIDTH)	$A = 9.2 (L) \times 9 (V)$	(V)	/ = 82.8 (A) x 5 (D) x 0.4	$ESDV = \frac{812}{2}$	(A) x 2.6 (Pe Max) x 12	<u>0.95 (RV)</u>	165.6 CF
noor			E	SDv Min = 64.3 GF		5.0 (DEPTH)	A = 82.8 SF		V = 165.6 CF	ESI	Dv Max = 167.1 CF		
	TOTAL	812 SF											
	1	1,450 SF 195 SF		NOT TREATED BY TH	,	LE TO DISCONNECT PES GREATER THAN 5%.							
AREAS NOT Treated	13	250 SF				A FOR A NON-ROOFTOP D	DISCONNECT						
	TOTAL	1,895 SF											
	MPERVIOUS AREA Ea in Right-of-Wa	5,646 SF Y 352.0 SF				ESDV PROVIDED Via DRY Wells	ESDV PROVID Via disconne		ESDV PROVIDED V Micro-infiltration 1		ESDV PROVIDED V Landscape infiltr		ESDV PROVIDED Via Permeable Pavements
		TOTAL ESD _V PRO	OVIDED			767.6 CF	0.0 CF		0.0 CF		0.0 CF		0.0 CF
		IS ESD _V ADEQU	JATE			767.6 CF <	865.9 CF					DED	
		IS P e Adequa	ATE			1.42 IN <	1.60 IN			COD TO THE MEP,	, QN WAIVER REQUI	NEU	
					DRYWE	LL SCHEDULE - 9	9120 QUINTA	NA DRIV	-				
				00175							70701		
DRYWELL STRUCTURE	FINISHED GRADE (LOW SIDE)	FINISHED GRADE (HIGH SIDE)	ELEVATION AT TOP OF GRAVEL (1'-3' cover)	COVER DEPTH OVER DRY WELL ON HIGH SIDE (3' MAX.)	PIPE INVEF IN FROM DOWNSPOU	OF GRAVEL	ELEVATION AT BOTTOM OF GRAVEL	TOTAL DEPTH OF SANE	AT BOTTOM	TOTAL DEPTH OF DRYWELL (gravel + sand, 5' max. depth)	TOTAL DEPTH OF DRYWELL FROM GRADE (8' max. depth)	RECOMN OVERFL	
A	246.4	247.4	244.4	3.0	243.4	4.0 ft	240.4	1.0 ft	239.4	5.0 ft	8.0 ft		
В	244.3	246.0	243.3	2.7	242.3	4.0 ft	239.3	1.0 ft	238.3	5.0 ft	7.7 ft	POPUP	EMITTER AT
C	244.2	245.4	242.7	2.7	241.7	4.0 ft	238.7	1.0 <mark>f</mark> t	237.7	5.0 ft	7.7 ft	DRY WE	LL CLEANOUTS URCHARGE PIPE
D	246.7	247.9	245.2	2.7	244.2	4.0 ft	241.2	1.0 ft	240.2	5.0 ft	7.7 ft		DOWNSPOUT.
E	247.1	247.7	245.1	2.6	244.1	4.0 ft	241.1	1.0 ft	240.1	5.0 ft	7.6 ft		
			100 a - 100 a								1000 EL 22		

SEQUENCE OF CONSTRUCTION

- 1. Prior to clearing of trees, installing sediment control measures, or grading, a preconstruction meeting must be conducted on-site with the Montgomery County Department of Permitting Services (MCDPS) sediment control inspector (240) 777-0311 (48 hours notice), the Owners representative, and the site Engineer. In order for the meeting to occur, the applicant must provide one paper set of approved sediment control plans to the MCDPS sediment control inspector at the preconstruction meeting. If no plans are provided, the meeting shall not occur and will need to be rescheduled prior to commencing any work.
- The limits of disturbance must be field marked prior to clearing of trees, installation of sediment control measures, construction, or other land disturbing activities.
- 3. Clear and grade for installation of sediment control devices. 4. Install sediment control devices (Super Silt Fence, Stabilized Construction Entrance, and Clean Water
- Diversion Fence).
- 5. Once the sediment control devices are installed, the permittee must obtain written approval from the MCDPS Sediment Control Inspector before proceeding with any additional clearing, grubbing, or grading.
- 6. Staging, access, and stockpiling activities may not occur in the public right-of-way or beyond the approved limits of disturbance (L.O.D.) defined by this plan.
- 7. The Stabilized Construction Entrance (SCE) is an erosion and sediment control practice and must remain
- in place until written permission is granted from the inspector for its removal. 8. Install base courses for driveway and construct house, etc.
- 9. Gutters and downspouts to be installed early as possible, subject to availability of materials and labor. 10. Install stormwater management devices, associated piping, and removable pop-up emitters, but do not
- connect to downspouts at this time. 11. Pave driveway, permanently stabilize all remaining areas.
- 12. Connect downspouts to roof drain piping and stormwater management devices.
- 13. Provide signed record set of plans to the sediment control inspector.
- 14. Obtain written approval from Sediment Control Inspector prior to the removal of any sediment control device.

•	0) through LI-N facility will dis trapezoidal channel design f	•	sive velocity using
mpervious Are	a 4,898 SF = 0.112 acres (9.	2%)	
C = 0.23	48,496 SF = 1.113 acres (9 110 = 5.00 in/hr es A = 1.226 acres	90.8%)	
Q10 = C x I10 Q10 = 0.23 x 5	хA		
Q10 = 1.41 CF	S		
	HANNEL, SOLVE FOR DEPTH:		
Lt Side Slope:	0.01:1 (H:V)	Velocity:	1.46 fps
Rt Side Slope:	24.0:1 (H:V)	Flow Area:	0.96 sf
	0.060 (grass gutter, < 6" flow)	Flow Top Width:	
Manning's n:		Watter Derimator	7.09 ft
Channel Slope:		Wetter Perimeter:	
Channel Slope: Depth:	0.0500 ft/ft 0.28 ft 1.41 cfs (see above)	Critical Depth: Critical Slope:	0.24 ft 0.1119 ft/ft

E.S.D. TO THE M.E.P. STATEMENT

Environmental Site Design (E.S.D.) volume has been provided to the Maximum Extent Practicable (M.E.P.) through the use of five (5) gravel dry wells.

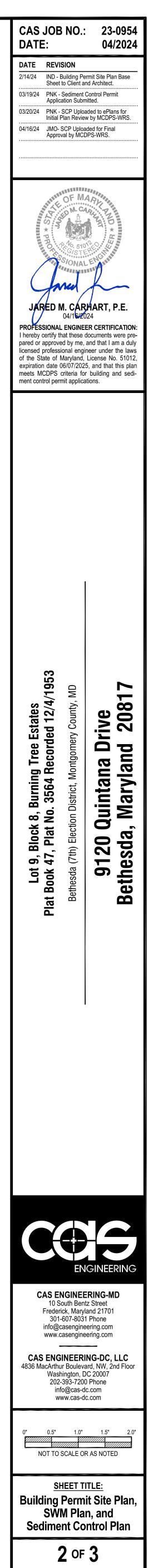
The application of other ESD practices, such as landscape infiltration facilities, micro bioretention, micro infiltration trenches, rain gardens and non-rooftop disconnects credits were considered as were permeable pavers. However, due to topographic constraints such as inability to cross-slope the driveway for disconnection, driveway run-on greater than 1:1 that precludes the use of permeable pavers, and rear yard swales that prevent disconnection of the patio, these devices were determined to not be feasible. Dry wells have been utilized for as many roof areas as possible.

Although a Pe of 1.6" cannot be achieved, a Pe of 1.42" is hereby proposed and a quantity waiver is requested. Appropriate fees will be paid at the time of sediment control permit issuance.

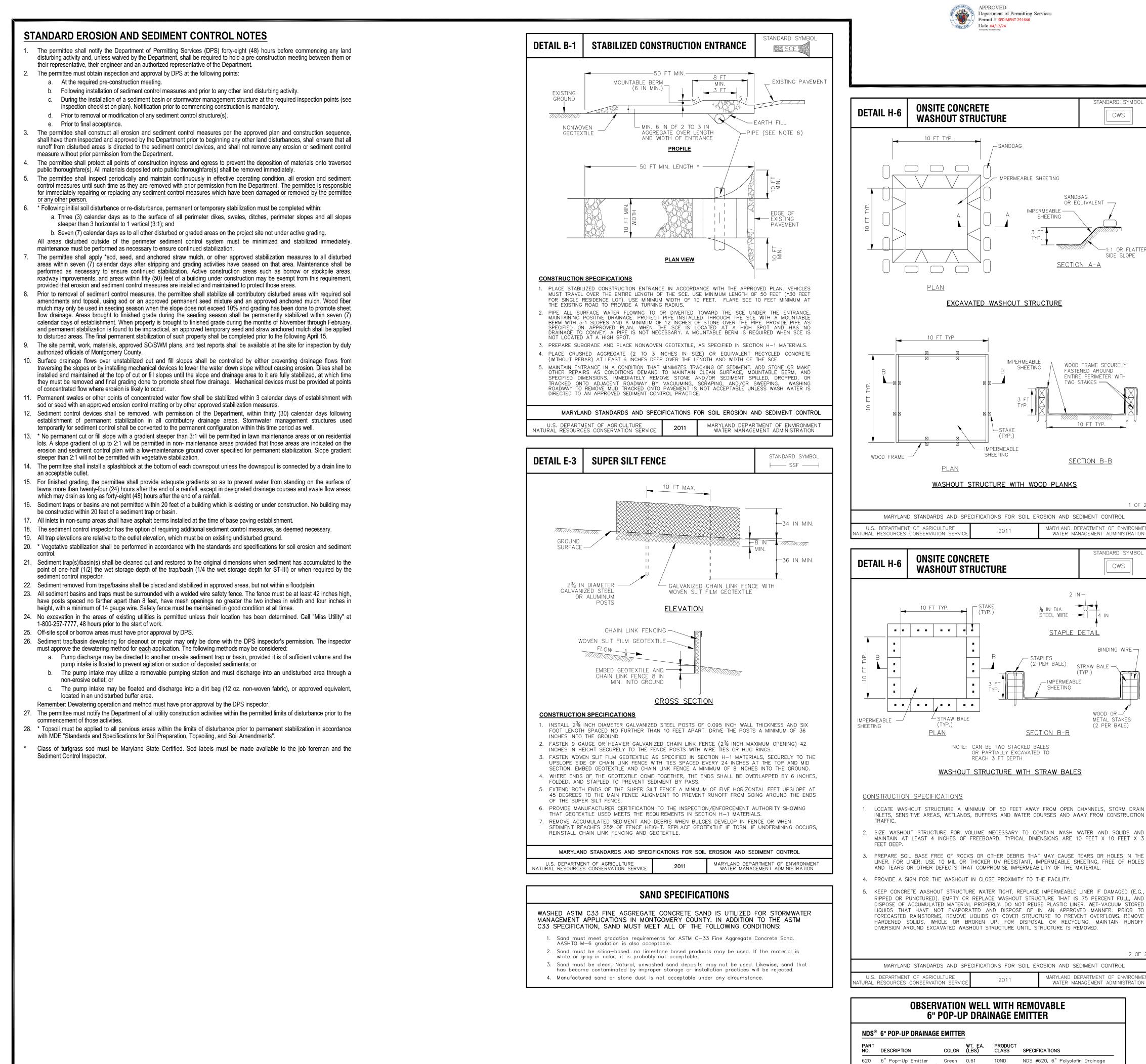
CAS ENGINEERING DRAINAGE NOTES

- 1. All storm drain pipe to be Schedule 40 PVC or of higher quality.
- 2. Downspout leaders originating directly from downspouts to be 4" diameter PVC, unless noted otherwise.
- 3. Maintain minimum 12" cover over all pipe. Pipe slopes to be 2% minimum. 4. All areaway and window well drains to sump pump - by plumber - unless noted otherwise.
- 5. Sump pump discharge to be located so as to avoid impact to the neighboring properties and to avoid
- recirculation of water. 6. The permittee shall install a splash block at the bottom of each downspout. 7. Maintenance of gutters, downspouts, leaf filters, inlets, drain pipes, drainage swales, drywells and other
- drainage related items should be performed as needed, but at least twice per year.
- 8. Drainage swales and drainage patterns shall not be impeded with trees, landscaping, fences, etc. 9. Window wells shall have a minimum freeboard of 6 inches and should be kept free of leaves and debris.
- 10. Ground cover (sod, seed, etc.) shall be selected based on soil conditions, drainage, sun exposure, final grade slopes, etc. per M.D.E. specifications. 11. Multi-Flow™ or equivalent drainage systems are recommended in lawn areas with a 3% slope or less.
- 12. Gutters and downspouts to be installed early as possible, subject to availability of materials and labor.
- 13. Sediment control devices must be inspected daily and with extra care before storm events. On disturbed sites they should be monitored during storm events. 14. Areas where construction is complete, such as side and rear yards, should be permanently stabilized as
- early as possible and in conformance with M.D.E. specifications. Sump pumps serving driveways, patios, areaways, and other large open impervious surfaces must be sized for a 100-year storm event.

9120 Quintana Drive Lot 9, Block 8, Burning Tree Estates Building Permit Site Plan, Stormwater Management Plan, and Sediment Control Plan Sediment Control Permit #: 291646



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NDS #620, 6" Polyolefin Drainage Pop-Up Drainage Emitter, Cente (Removable, not glued) Spring Loaded Drive Pop-Up with UV inhibitor. 100 G.P.M. www.ndspro.com/where-to-buy

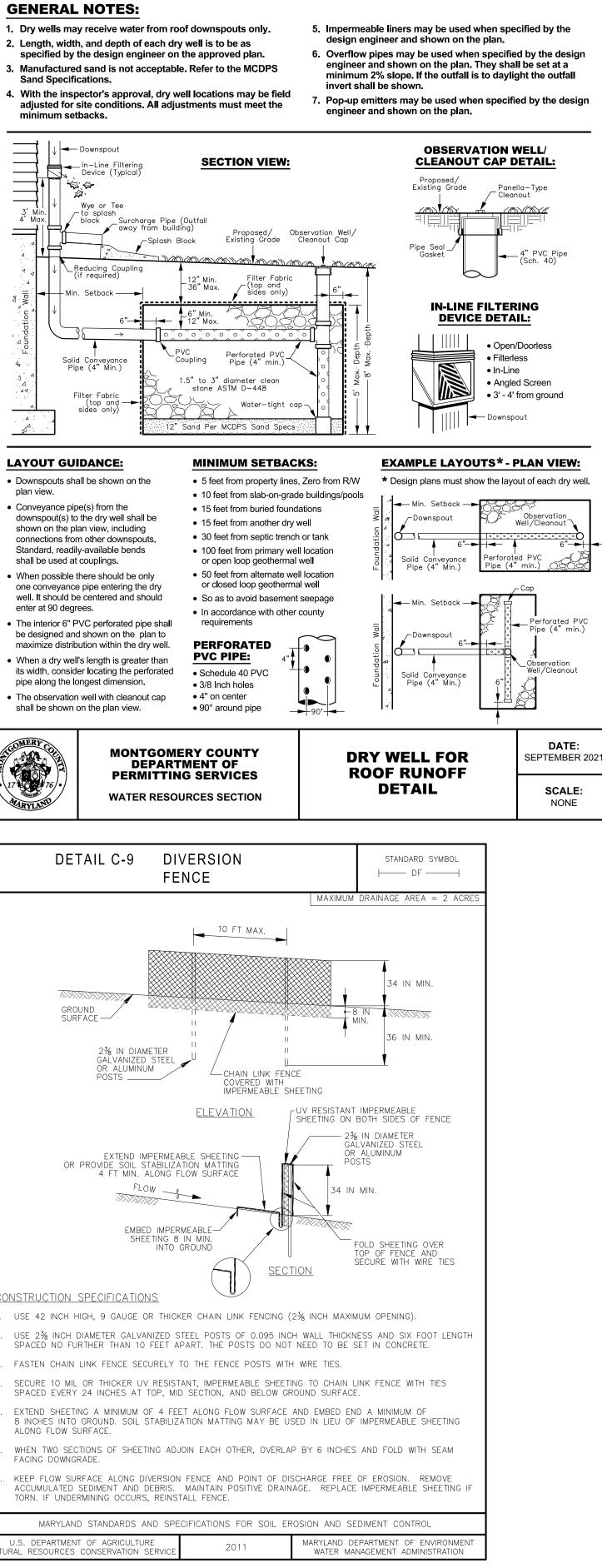
2 OF 2

| CWS |

1:1 OR FLATTE

1 OF 2

CWS



DESIGN CERTIFICATION

I hereby certify that this plan has been prepared in accordance with the "2011 Maryland Standards and Specification for Soil Erosion and Sediment Control," Montgomery County Department of Permitting Services Executive Regulations 5-90, 7-02AM and 36-90, and Montgomery County Department of Public Works and Transportation "Storm Drain Design Criteria" dated August 1988.

DESIGN EN JARED M/CARHART

PRINTED NAME AND TIT

04/16/2024 DATE No. 51012 REGISTRATION NUMBER

CERTIFICATION OF THE QUANTITIES

I hereby certify that the estimated total amount of excavation and fill as shown on these plans has been computed to 480 cubic yards of excavation, 25 cubic yards of fill and the total area to be disturbed as shown on these plans has been

determined to be_19,600 square feet. \sim DESIGN ENGINEER SIGNATU

04/16/2024 DATE No. 51012 REGISTRATION NUMBER

OWNER/DEVELOPER CERTIFICATION

I/We hereby certify that all clearing, grading, construction, and or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

 \bigcirc SIGNATURE

04/11/2024

Tilden Signatures Quintana, LLC 6110 Executive Blvd, Suite 310 Rockville, MD 20852 Manager: Jeffrey L. Cohen

9120 Quintana Drive Lot 9, Block 8, Burning Tree Estates **Building Permit Site Plan**, Stormwater Management Plan, and Sediment Control Plan Sediment Control Permit #: 291646



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