DESIGN TEAM

ARCHITECT OF RECORD Brasseur & Drobot Architects Attn: Jason Drobot 224 Datura Street Suite 311 West Palm Beach, Fl 33401 (561) 820-8088

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STRUCTURAL ENGINEER Botkin Parssi & Associates Inc. Attn: Fatih Acikgoz 2749 Exchange Court West Palm Beach, Fl 33409 (561) 965-4308

CONSULTING SURVEYORS Wallace Surveying 5553 Village Blvd. West Palm Beach, FL 33407 (561) 640-4551



first-23-030 final submittee A NEW ENTRY GATE ADDITION FOR: find desruissefiux



PROJECT LOCATION

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(NOT TO SCALE)

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20'-4" BTM. OF SOFFIT 11'-9" T.O. 2ND FIN. FLOOR 0'-0' T.O. FIN. FLOOR



















IMAGE OF EXISTING RESIDENCE LOOKING WEST





IMAGE OF EXISTING RESIDENCE LOOKING WEST



IMfIGES



STORMWATER RETENTION CALCULATIONS

A. <u>SITE INFORMATION</u>

Total Property Area = 13,937 sq.ft.

Drainage Area Impervious Surface = 8,006 sq.ft.

Drainage Area Pervious Surface = 5,931 sq.ft.

B. ESTIMATED STORMWATER RETENTION VOLUME

The retention volume is estimated using the Rational Method (Q=CiA)

where: C = 1.0 (impervious surface)

C = 0.2 (pervious surface) i = 2 in/hr

Impervious Surface Runoff Volume: 1.0×2 in/hr x 8,006 sq.ft. x 1 ft./12 in. = 1,334 cu.ft.

Pervious Runoff Volume:

0.2 x 2 in/hr x 5,931 sq.ft. x 1 ft./12 in. = 198 cu.ft.

Total Volume to be Retained = 1,532 cu.ft. C. PROPOSED EXFILTRATION TRENCH SIZING

= Total Length of Trench Provided = 33 ft

/	=	Trench Width	=	24 ft
	=	Hydraulic Conductivity	=	0.00005 cfs/sq.ft./ft. of head
2	=	Depth to Water Table	=	3.25 ft
U	=	Un-Saturated Trench Depth	=	2.50 ft
S	=	Saturated Trench Depth	=	0.50 ft
	=	Volume Treated	=	1,546 cu.ft.

Notes:

- 1) Exfiltration trenches and storm piping to be protected from roots with a root barrier.
- 2) Roof drain downspouts are to be connected to the proposed drainage system. Contractor to provide engineer with downspout locations prior to installation of drainage system.
- 3) Exfiltration trench design uses an assumed value of hydraulic conductivity. Client may obtain a site specific test for hydraulic conductivity prior to exfiltration trench installation.
- 4) Contractor shall mill and overlay all roadway cuts a minimum of 50 ft. on either side of the excavation the entire width of each affected lane.
- 5) Contractor is responsible for installing and maintaining erosion control measures during construction.
- 6) Video inspection of storm drainage system required prior to installation of sod.





Digitally signed by Chad M Gruber Date: 2023.01.21 16:37:03 -05'00'

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Chad M. Gruber

FL P.E. No. 57466

Sheet No.

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This item has been electronically signed and sealed by Chad M. Gruber on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

> Plan Background from Site Plan by Brasseur & Drobot Architects Received 1/9/23 ARC-23-030

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