

## McLeod • McCarthy & Associates, P.A.

Civil Engineers

January 10, 2022

Re: Villa L'Onz: A Townhouse Project

**Drainage Statement** 

11th Street and Wright Street | City of Riviera Beach, Florida (MMA #21-002)

## **Site Description**

The Villa L'Onz project is a (2) building residential townhome project consisting of 12 total units on 0.51 acres at the northeast corner of Wright Street and W. 11<sup>th</sup> Street in the City of Riviera Beach, Florida. The portion of the site west of the alleyway is currently undeveloped while the eastern portion of the site includes a small residence with parking area which will be demolished prior to commencement of this project. The site is located within the South Florida Water Management District's (SFWMD) Intracoastal Drainage Basin with existing elevations ranging from approximately 12.2 NAVD to 13.7 NAVD.

## **Proposed Drainage**

The proposed project includes a rear (northern) drive-aisle for vehicular access to the unit garages. A stormwater management system consisting of inlets, culverts, and exfiltration trench will be installed beneath this drive-aisle to provide stormwater attenuation and treatment prior to off-site discharge to the City's stormsewer system. An existing curb inlet is located at the northwest corner of Avenue E and 11th Street and will serve as the outfall connection for the proposed on-site drainage system. The system will be designed in accordance with SFWMD and City of Riviera Beach criteria with the following requirements:

- Minimum drive-aisle and hardscape elevations above the 3 year and 5 year, 1 day peak flood stages
- Post-Development 25 year 3 day offsite discharge rate limited to existing pre-development discharge rate
- Building Finished Floor Elevations (FFE) set at or above the 100 year 3 day (zero discharge) peak stage
- Water Quality Treatment and flood attenuation within proposed exfiltration trench
- Legal Positive Outfall to the City's stormsewer system at the Avenue E and 11th Street intersection

Based on the above, this project is anticipated to have no adverse impact on the City's existing drainage system. If you have any questions regarding this application, feel free to contact me at 561.689.9500 or todd@mcleodmccarthy.com.

Sincerely,
No. 69189

No. 69189

STATE OF

1/10/2022

Todd N. McLeod, P.E. Presidant

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