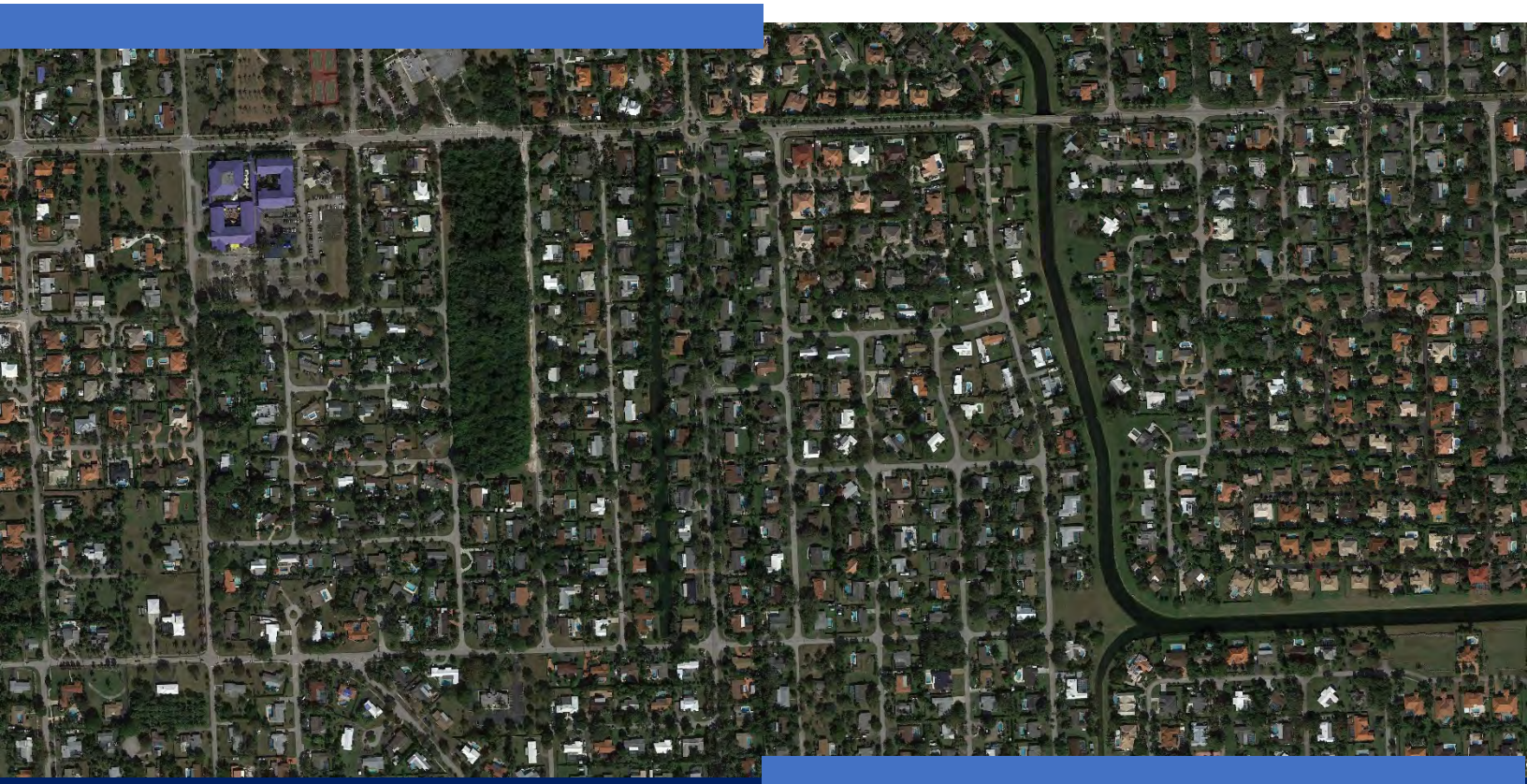
APRIL 2019



VILLAGE OF PALMETTO BAY

NEIGHBORHOOD ACCESS TRAFFIC STUDY

DRAFT REPORT

PREPARED FOR

Village of Palmetto Bay

PREPARED BY

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from SW 86th Avenue and SW 84th Avenue will take SW 87th Avenue at SW 168th Street. The remaining 10% is assumed to be the local residential traffic.

- Alternative 3 Proposed Conditions with Modified Traffic – This alternative includes installing signs to prohibit vehicles from turning onto the local streets located east of SW 87th Avenue within the limits of the Malbrook neighborhood, the same streets as shown under Alternative 2. However, under this alternative, a right turn lane is proposed to be constructed to facilitate the circulation of vehicles turning right (eastbound) from northbound SW 87th Avenue onto SW 168th Street. The proposed right turn lane will continue eastbound from this intersection to the bridge located east of SW 84th Avenue. The *Proposed Condition with Modified Traffic* represents the addition of an exclusive right turn lane (free-flow) at the intersection of SW 87th Avenue at SW 168th Street, and continuing it until the bridge on SW 168th Street and just east of SW 84th Avenue.

Separate traffic study analyses conducted for the Village of Palmetto Bay for various intersections along Old Cutler Road is anticipated to address the traffic intrusion associated with the Unnamed Neighborhood. Therefore, no alternatives were developed as part of this study.

LEVEL OF SERVICE ANALYSES

Level of Service (LOS) is a qualitative measure used to relate the quality of motor vehicle traffic service. LOS is used to analyze roadways and intersections by categorizing traffic flow and assigning quality levels of traffic based on performance measures like vehicle speed, density, congestion, and other factors.

As per the *Highway Capacity Manual 2010* (Transportation Research Board, 2010):

> "Signalized intersection level of service (LOS) is defined in terms of a weighted average control delay for the entire intersection. Control delay quantifies the increase in travel time that a vehicle experiences due to the traffic signal control as well as provides a surrogate measure for driver discomfort and fuel consumption. Signalized intersection LOS is stated in terms of average control delay per vehicle (in seconds) during a specified time period (e.g., weekday PM peak hour).

Level of Service Criteria for Signalized Intersections

LOS	Average Intersection Delay	General Description
A	Less than or equal to 10 seconds	Free flow
B	Greater than 10 to 20 seconds	Stable flow (slight delays)
C	Greater than 20 to 35 seconds	Stable flow (acceptable delays)
D	Greater than 35 to 55 seconds	Approaching unstable flow (tolerable delays)
E	Greater than 55 to 80 seconds	Unstable flow (intolerable delays)
F	Greater than 80 seconds	Forced flow (congested; queues failing to clear)

> Unsignalized intersection LOS criteria can be further reduced into three intersection types: all-way stop, two-way stop, and roundabout control. All-way stop and roundabout control