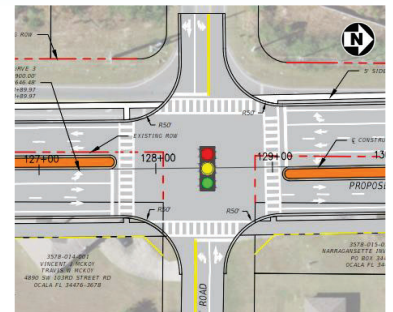
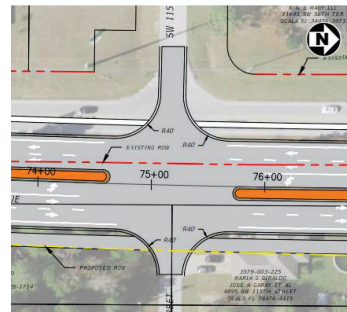
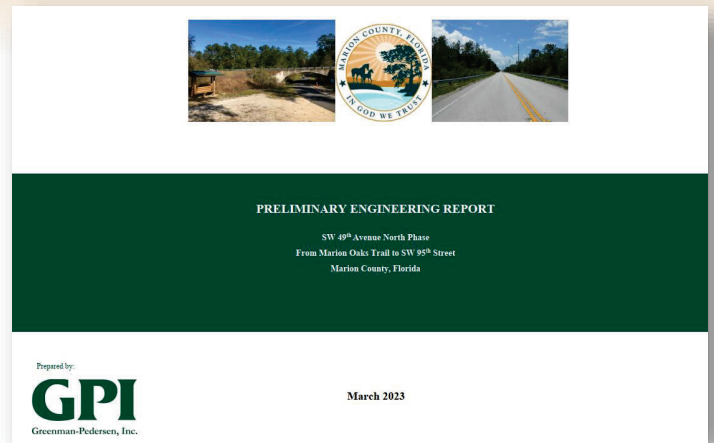






# History

- SW 49<sup>th</sup> Avenue North Phase PER was approved by the BOCC in November 2023
- Two existing signalized intersections within project limits
- Planned signalized intersection at SW 100<sup>th</sup> Street per Developers Agreement
- During design, two previous signalized intersections and one previous two-way stop-control intersection reviewed for roundabout control

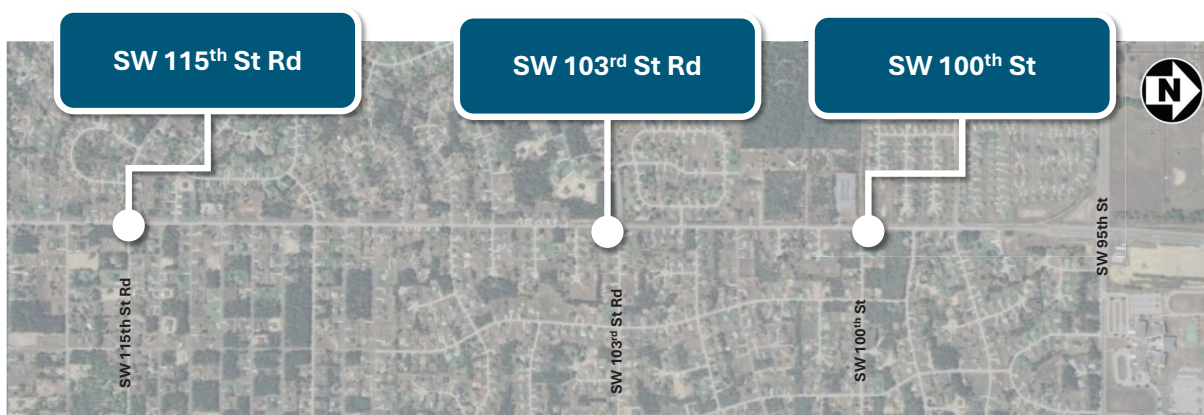


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# Intersection Evaluation

- Updated design traffic volumes
- Intersection Control Evaluation
- Operational Analysis
  - Opening year and design year, AM and PM peak hour



4



## Intersection Control Evaluation

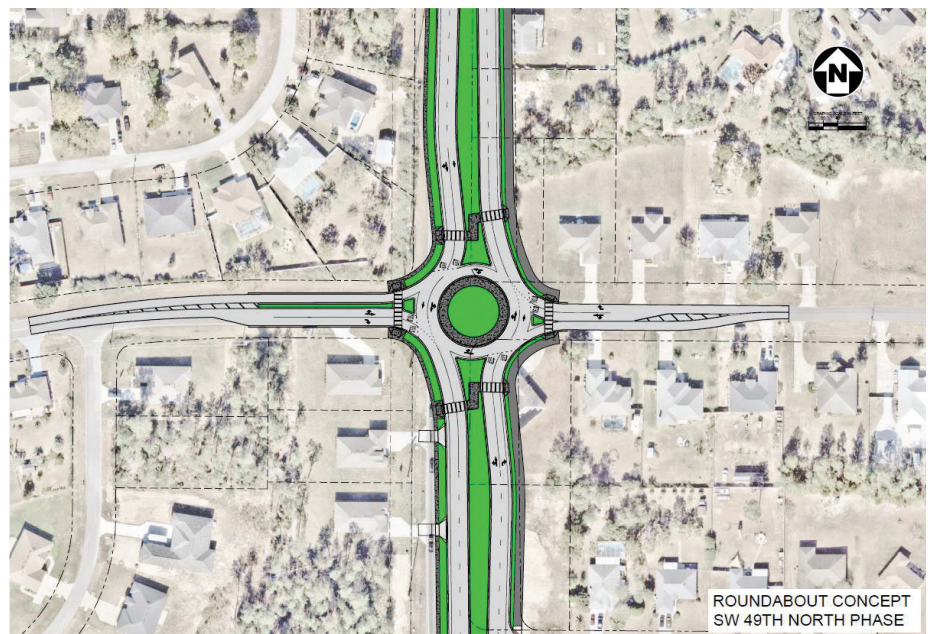
Scenario	Signal 2027		Roundabout 2027		Signal 2047		Roundabout 2047	
	AM	PM	AM	PM	AM	PM	AM	PM
SW 100 <sup>th</sup> St	B	A	A	A	B	A	A	A
SW 103 <sup>rd</sup> St Rd	C	C	C	C	C	C	C	C
SW 115 <sup>th</sup> St	B	B	B	B	B	B	B	B

- Both control types provide acceptable operations/LOS
- Signalized control shows higher delay and queueing for eastbound/westbound side streets
- Signalized control generally shows higher queueing
- Intersection Control Evaluation ranks signal control higher in the capacity evaluation, and roundabout control higher in the safety evaluation



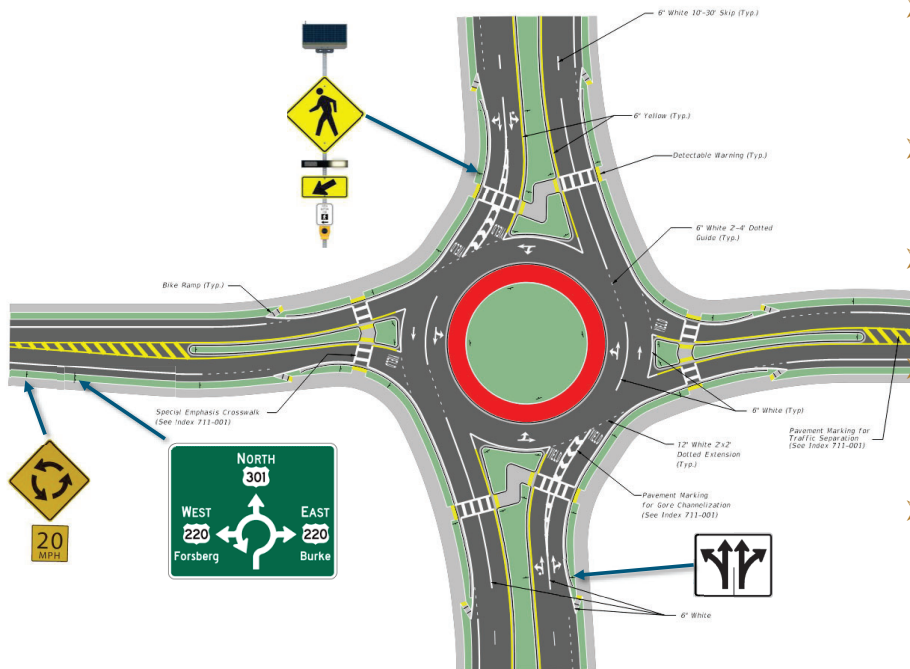
## Intersection Control Evaluation

- Roundabout recommended
  - Allows for continuous traffic flow through the intersection
  - Promotes reduced travel speeds
  - Has reduced conflict points
  - Has higher safety performance
  - Lower operating and maintenance costs
- Roundabout alternatives anticipated to be within existing / planned right-of-way
  - Grading tie-ins will be required





# Pavement Marking and Signage



- Plans will implement pavement marking and signage consistent with the Manual on Uniform Traffic Control (MUTCD) and FDOT Design Manual (FDM)
- Pavement markings/lane arrows will be implemented to clearly guide drivers through the intersection
- Advanced Signage will be installed to reduce speeds prior to reaching the roundabout circulatory roadway
- Directional signs and guide signs will be installed on all approaches of the Roundabout to provide drivers with an early indication of which lane to use for specific movements
- Rectangular Rapid Flashing Beacons (RRFB's) will be installed at all cross walks to provide additional visibility for pedestrians crossing the roadway

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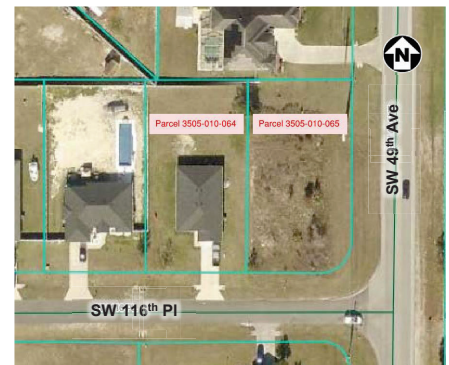
# Updated Drainage Retention Area Locations

## ➤ Drainage Retention Area (DRA) 7-E-1

- Previously proposed along the east side of SW 49<sup>th</sup> Ave within planned right-of-way.
- Due to poor soil conditions in this area, this DRA is proposed to be moved to the northwest corner of SW 49<sup>th</sup> Ave and SW 116<sup>th</sup> Pl.
- Parcel 3505-010-065 is a vacant County owned parcel. Parcel 3505-010-064 has an existing home on it which will need to be acquired.

## ➤ DRA 2-W-4

- Previously proposed on parcel 35695-038-04 along the west side of SW 49<sup>th</sup> Ave.
- This parcel is one of three contiguous parcels owned by the same property owner.
- This DRA will be moved south of the previously proposed location, to be on parcel 35695-038-05, also held by this owner.
- This will preserve the remaining contiguous parcel ownership.



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