

Coconut Road - Preliminary Engineering Report Safety Improvement Alternatives

November 3, 2021

Village of Estero – Village Council



VILLAGE OF ESTERO



Location Map



COCONUT ROAD



Scope of Study

- Analyze traffic conditions and existing right-of-way
- Design Parameters taken into account
 - Village of Estero Bicycle and Pedestrian Master Plan
 - Permitting
 - Long Range Transportation Planning
 - Utilities
 - Right of Way
 - Constructability
 - Cost
- Two typical sections were evaluated
- Three Roundabouts were analyzed
- Reviewed “Traffic Technical Memorandum Coconut Road from Estero Bay to US 41 Lee County” Prepared by Kisinger Campo and Associates, dated October 2019



COCONUT ROAD



Existing Conditions

- Village of Estero maintained Major Collector
- Existing 65' – 75' ROW
- 25' wide Utility Easement along south
- Two-lane Undivided Roadway
 - 12-foot Lanes
- 40 mph Speed Limit
- Residential communities along the north and south.
- Hyatt Regency Coconut Point at western end.



COCONUT ROAD



Goals & Approach

- Village & community goals for the corridor
 - Safe
 - Walkable / Bikeable
 - Efficient for vehicle and nonvehicular users
- Issues/Challenges
 - Dead-end road
 - Right of Way / ownership
 - Back ups and safe movements at 41 intersection & other intersections
- Transportation Solutions/Options
 - Complete street improvements – sidewalks, bike lanes, landscaping, transit
 - Roundabouts

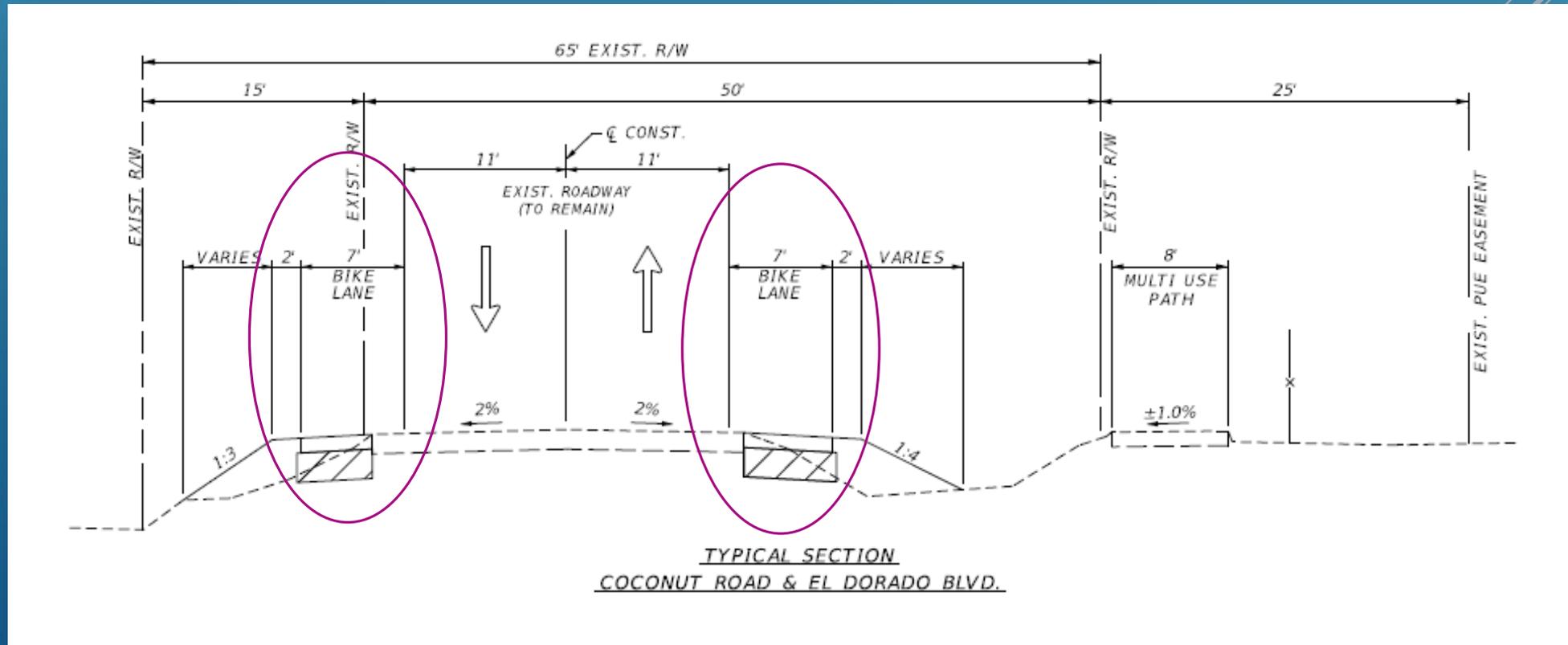


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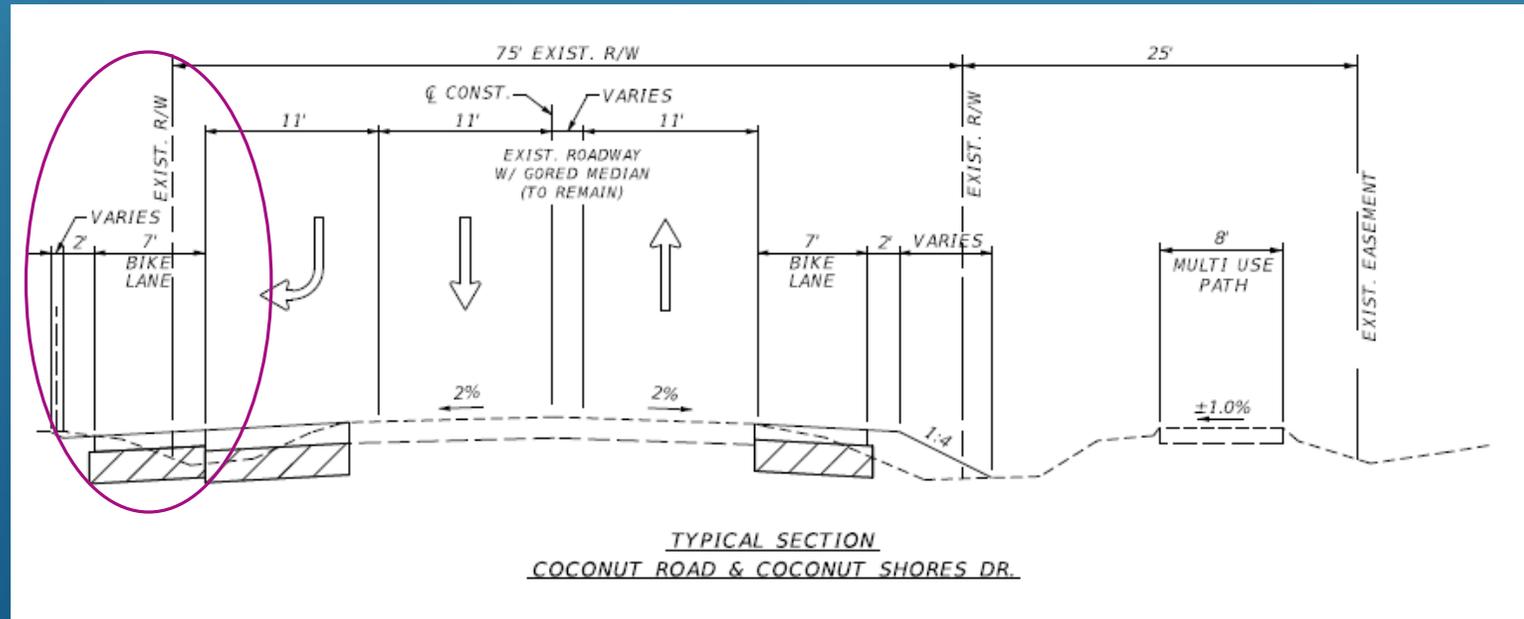
Typical Section – Option 1

7-foot Buffered Bike Lanes



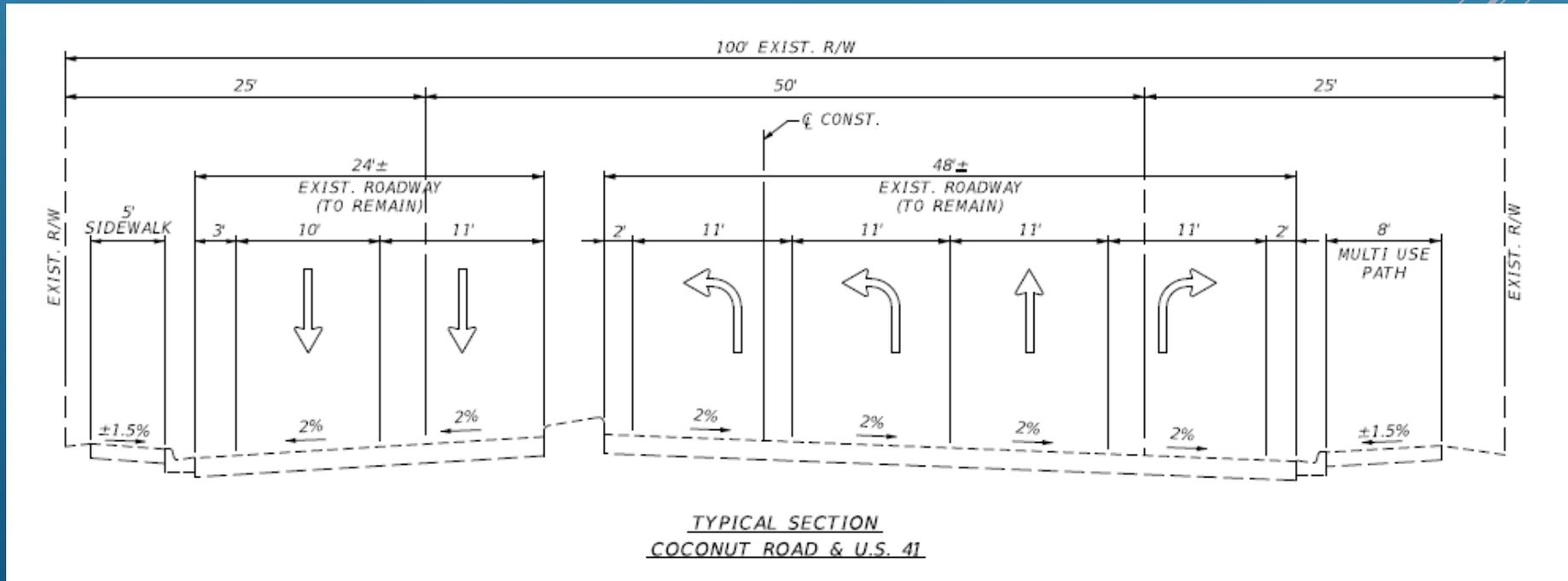
Typical Section – Option 1

7-foot Buffered Bike Lanes



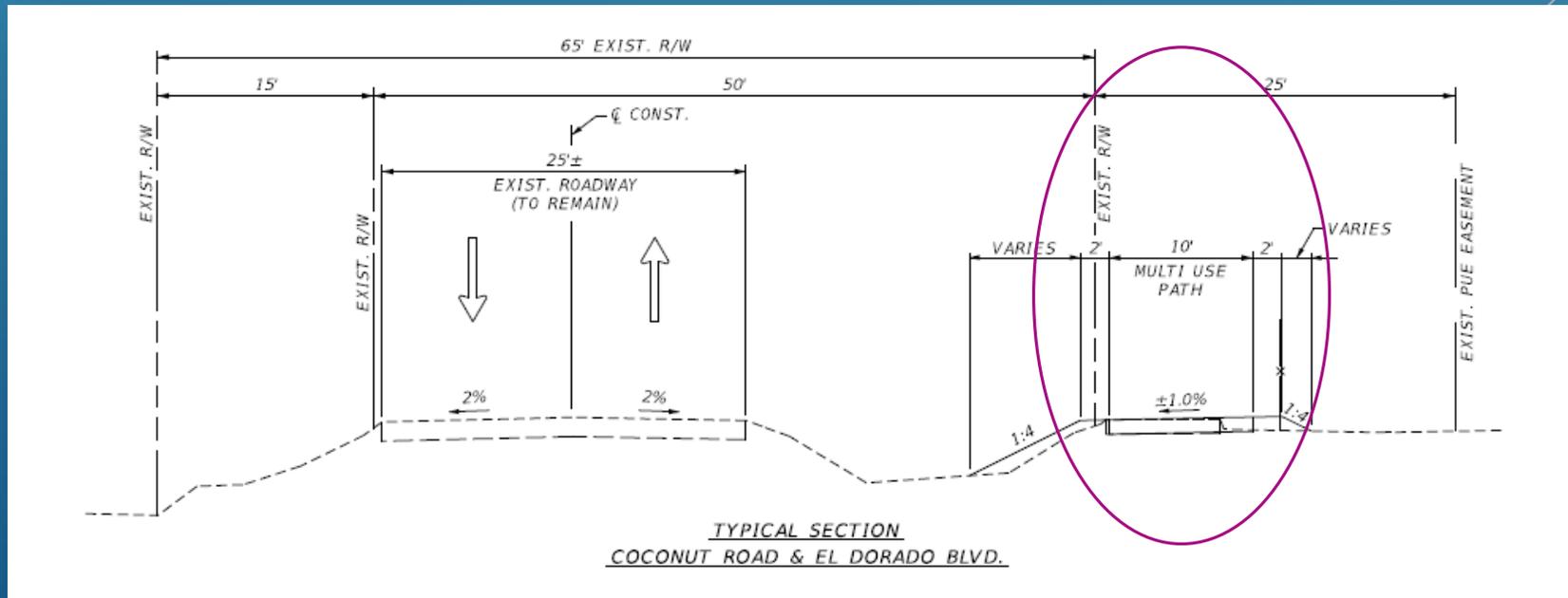
Typical Section – Option 1

7-foot Buffered Bike Lanes at US 41 Intersection



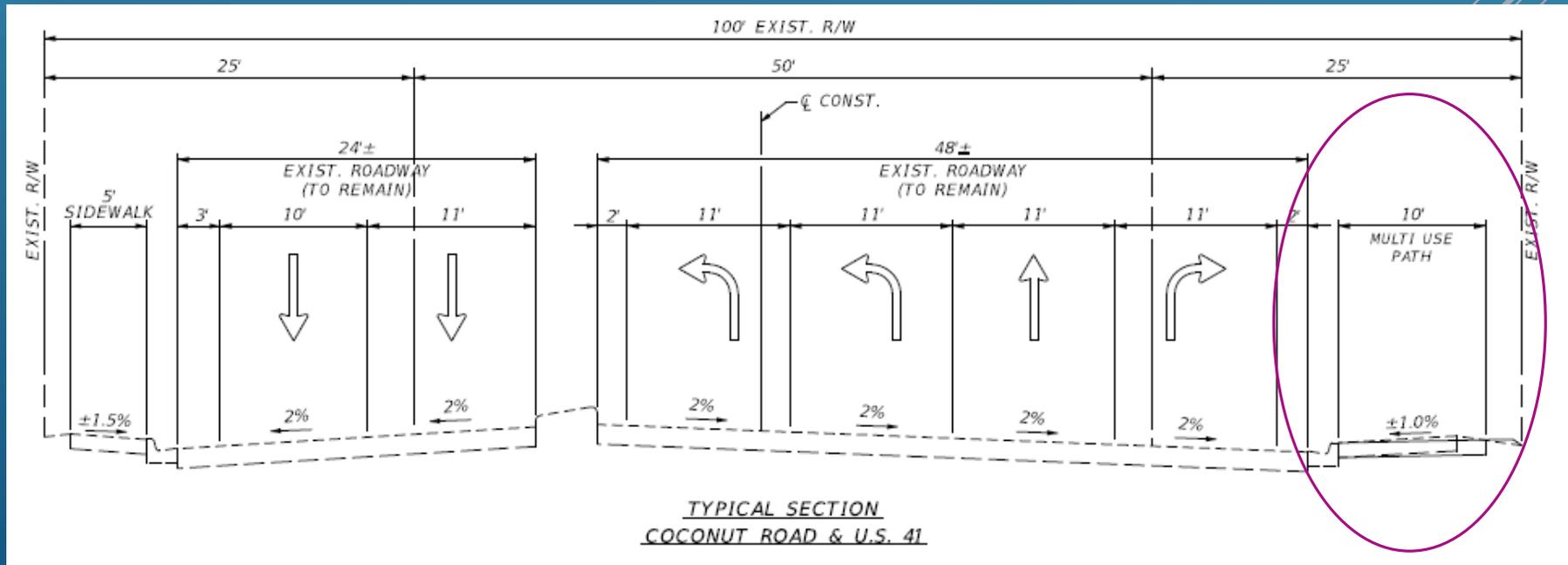
Typical Section – Option 2

10-foot Multi-Use Pathway

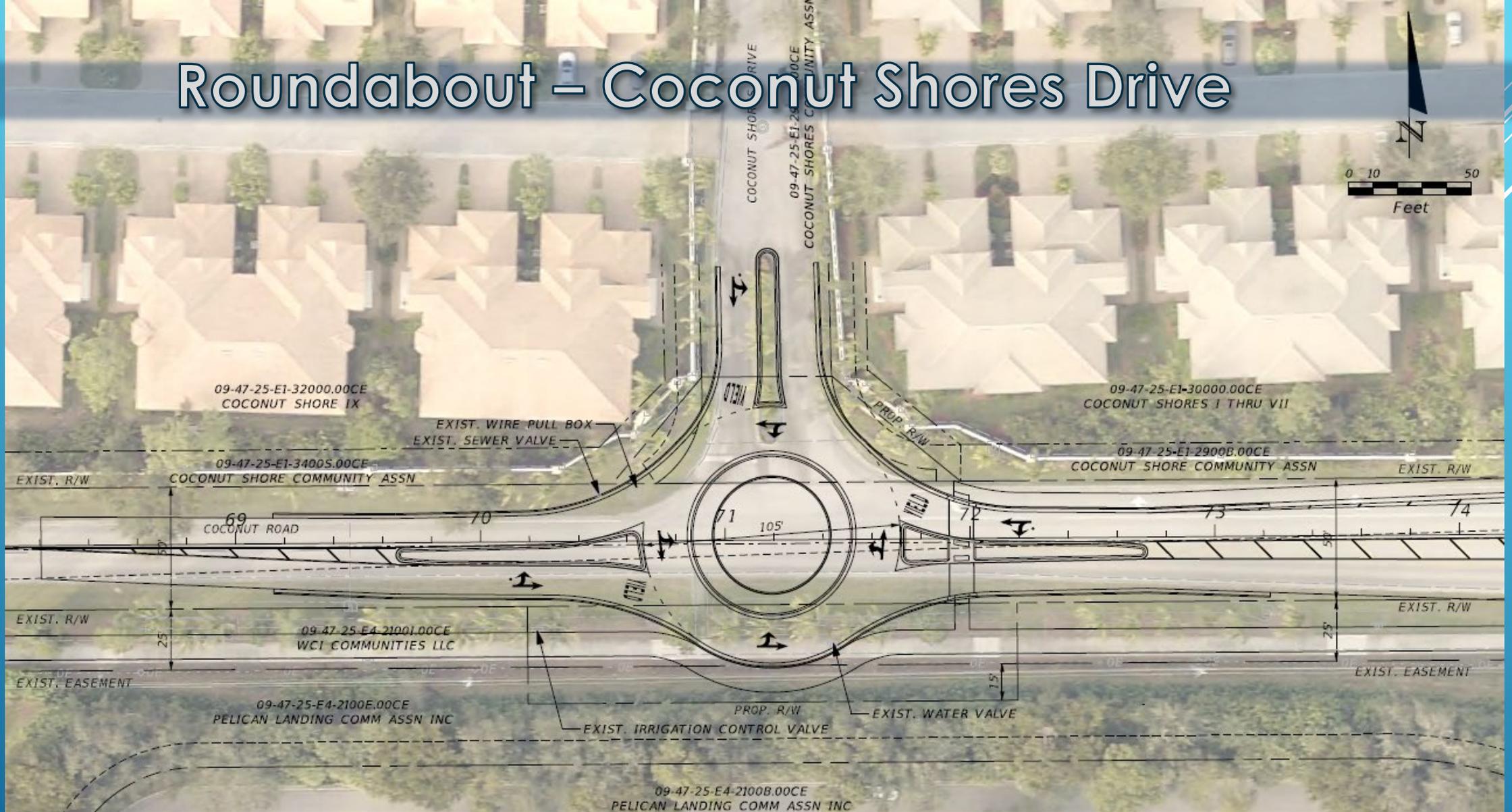


Typical Section – Option 2

10-foot Multi-Use Pathway at US 41 Intersection



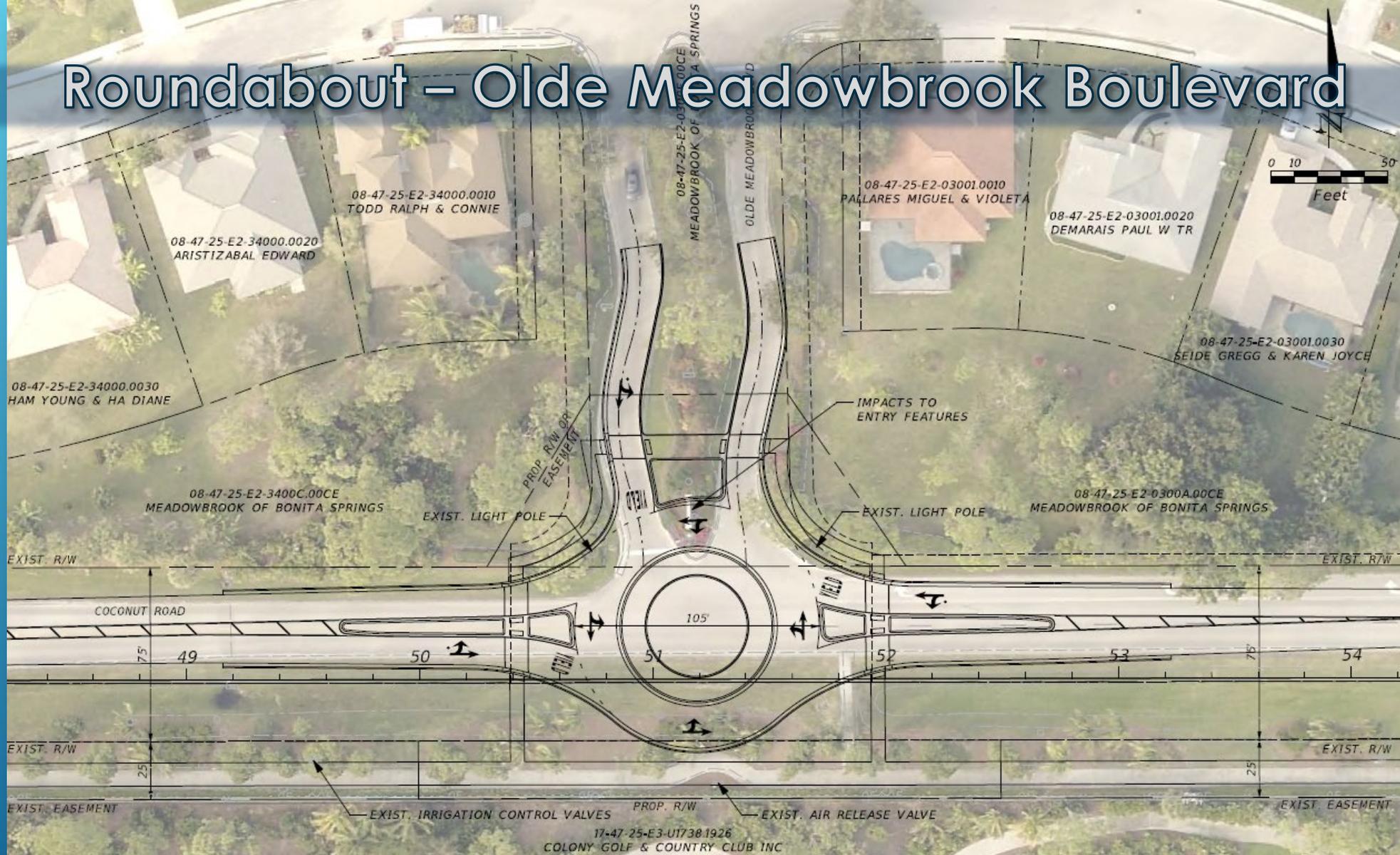
Roundabout - Coconut Shores Drive



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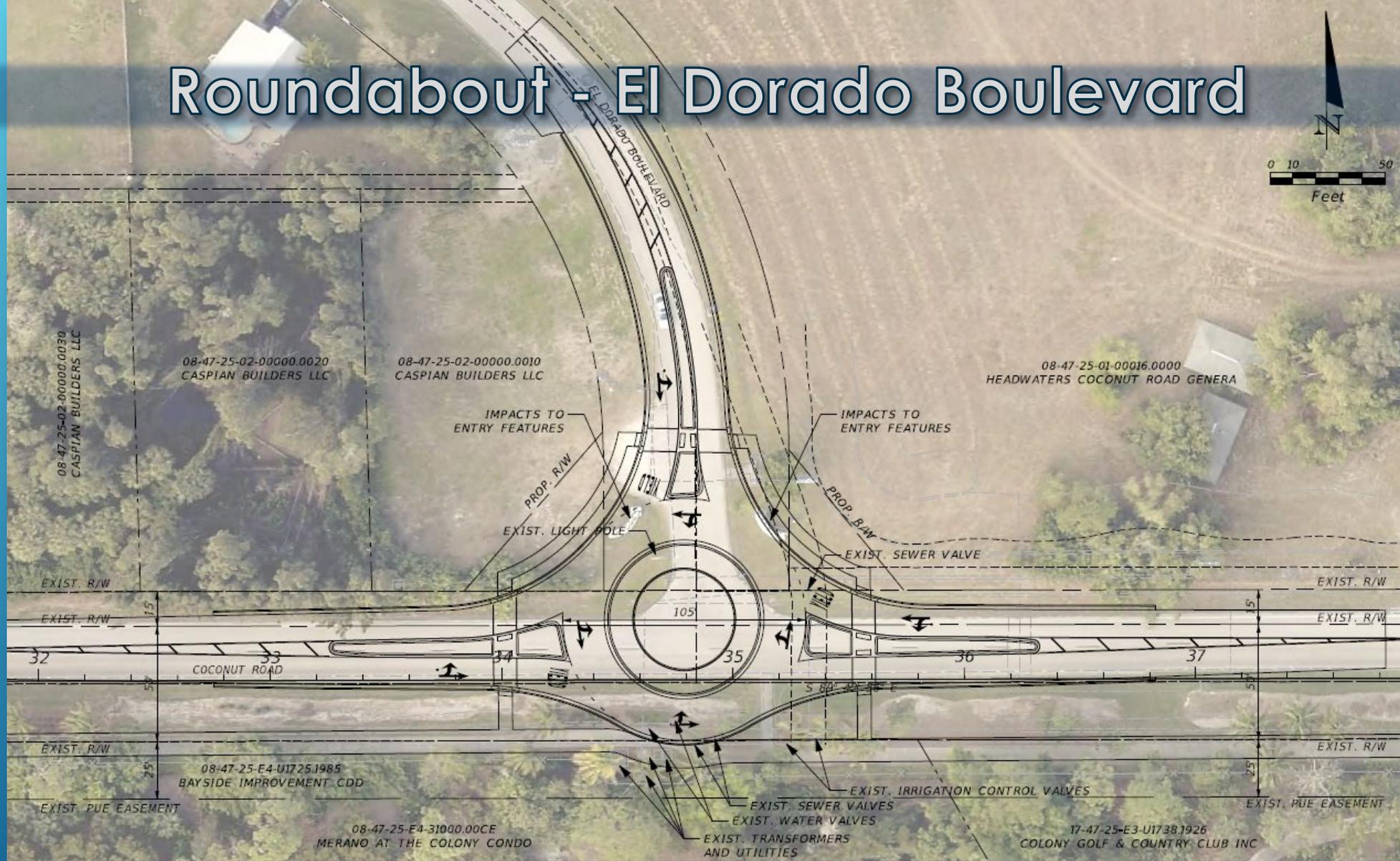
Roundabout - Olde Meadowbrook Boulevard



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Roundabout - El Dorado Boulevard



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Cost Summary

Option 1 – Buffered Bike Lanes	Segment 1	Segment 2
Total: \$2,360,000	\$2,360,000	Constrained
Option 2 – Multiuse Path Widening	Segment 1	Segment 2
Total: \$1,586,900	\$802,900	\$784,000

Coconut Shores Drive Roundabout –

Total: \$801,000	Additional Right-of-Way Required
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Olde Meadowbrook Boulevard Roundabout

Total: \$878,000	Additional Right-of-Way Required
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El Dorado Boulevard Roundabout

Total: \$938,000	Additional Right-of-Way Required
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Recommendations

- Option 2 (Pathway Widening) preferred due to constructability constraints in Option 1 (Buffered Bike Lanes)
- Construct roundabouts from east to west
 - Coconut Shores Drive
 - Olde Meadowbrook Boulevard
 - El Dorado Boulevard



Coconut Road looking East



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Questions?



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