



CRA BOARD MEETING

Central Beach District E-W Streets: Redundant Backflow Preventers and Street Raising Options

March 4, 2026



CENTRAL BEACH EW STREET EVALUATION

What is the purpose of each of these improvements?

1. Redundant Backflow Preventers

- Provides a back up measure to address tidal flooding in areas where the primary FDOT system backflow prevention is not working for the City's sidestreet's stormwater inlets that are below high tide elevation

Issues:

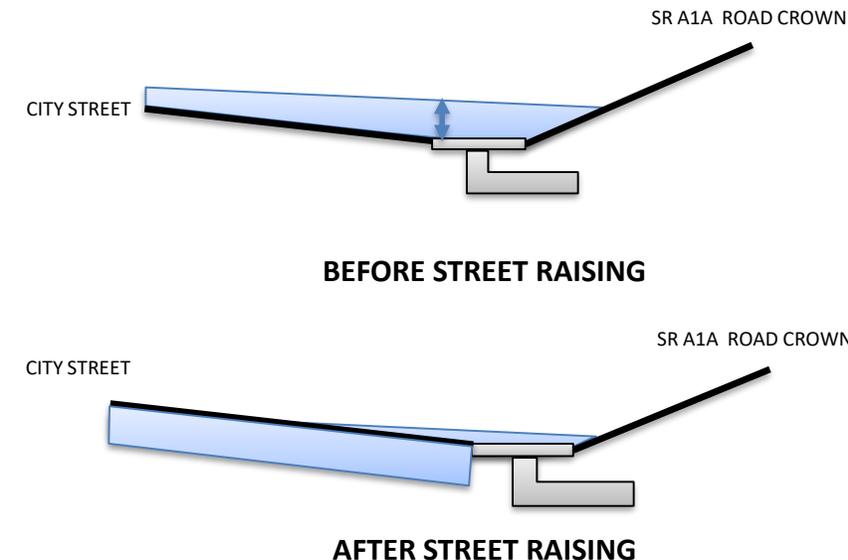
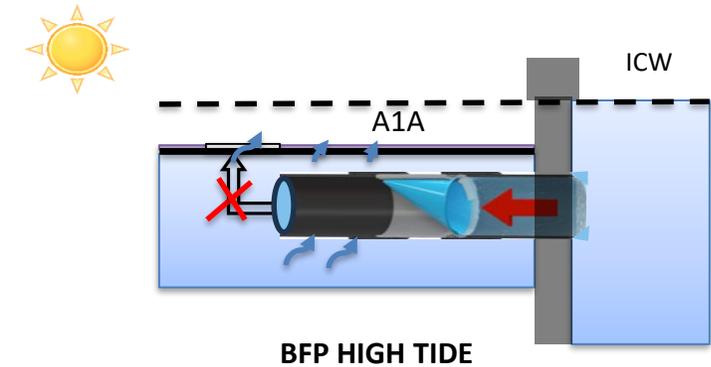
- Does not address stormwater flooding
- Continual maintenance is required
- Does not stop tidal flooding from other seepage

2. Street Raising:

- Addresses the City street roadway dips with low inlets below the high tide elevation so they do not tidally flood and also addresses stormwater flooding depth at the intersections with SR A1A

Issues:

- Due to harmonization, each street can have a different elevation increase so costs and improvement post-raising can vary by location
- Street dip elimination is part of Citywide SWMP recommendations

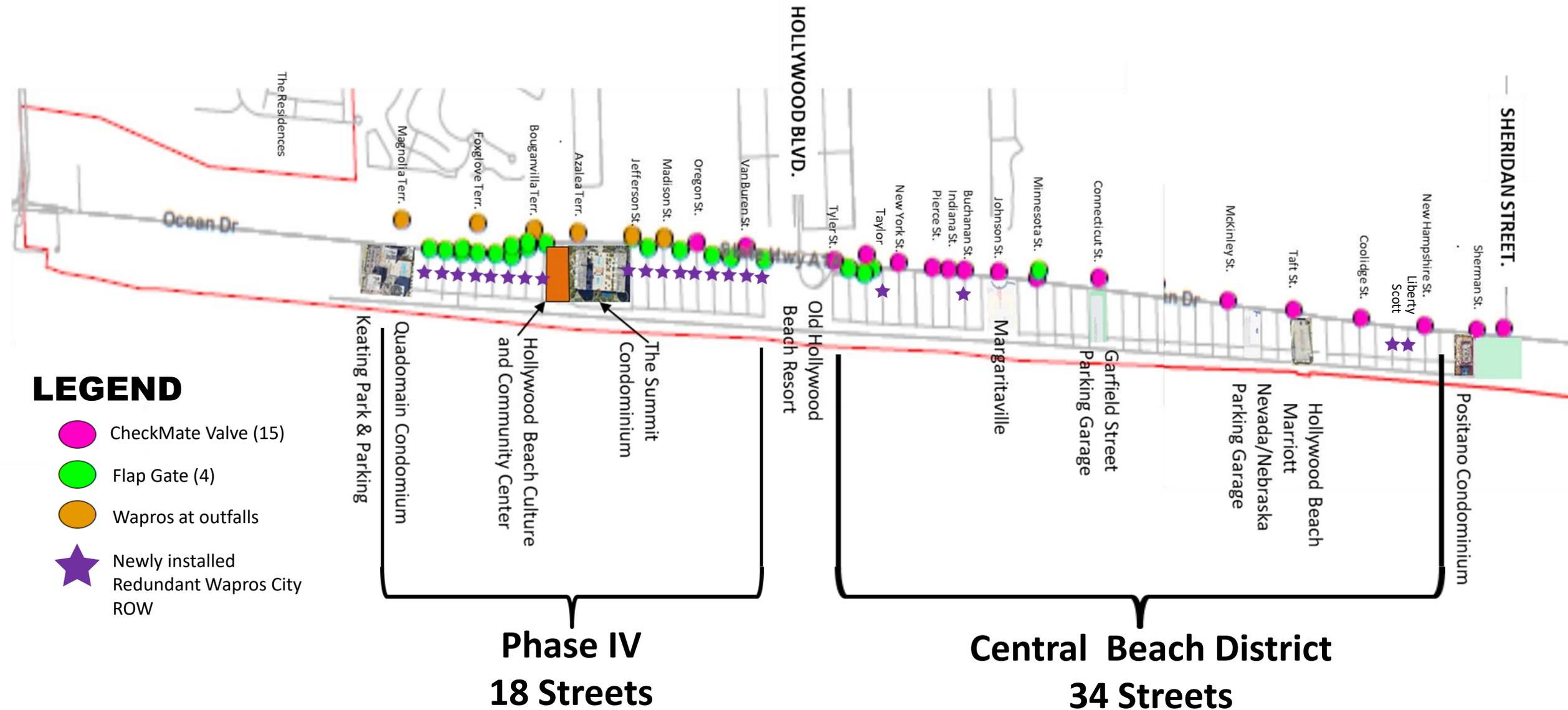


CURRENT CITY-INSTALLED REDUNDANT WAPROS (PHASE IV)

- Proactive action by CRA partially relieved the reliance on FDOT system maintenance and repair
- Provided an immediate measure to address tidal flooding while other needed stormwater infrastructure improvements area are being addressed (SWPSs and Street Raising projects)
- Feedback to-date for the existing installations has been generally positive by residents
- Relatively lower cost and more rapidly implementable measure at the typical sizes of City street pipe connections (18-24 inch)
- City must perform the additional maintenance on these valves annually prior to KT season
- Tidal flooding from other sources (leaky pipes, leaky primary valves) will still occur and flow into these areas - City valves only address the A1A east side street inlets
- Redundant tidal valves address a symptom, not the issue (which is low street inlet ELs on stormwater pipes attached to the tidally influenced gravity outfall system)



CRA GEOGRAPHICAL AREA & BFP LOCATIONS



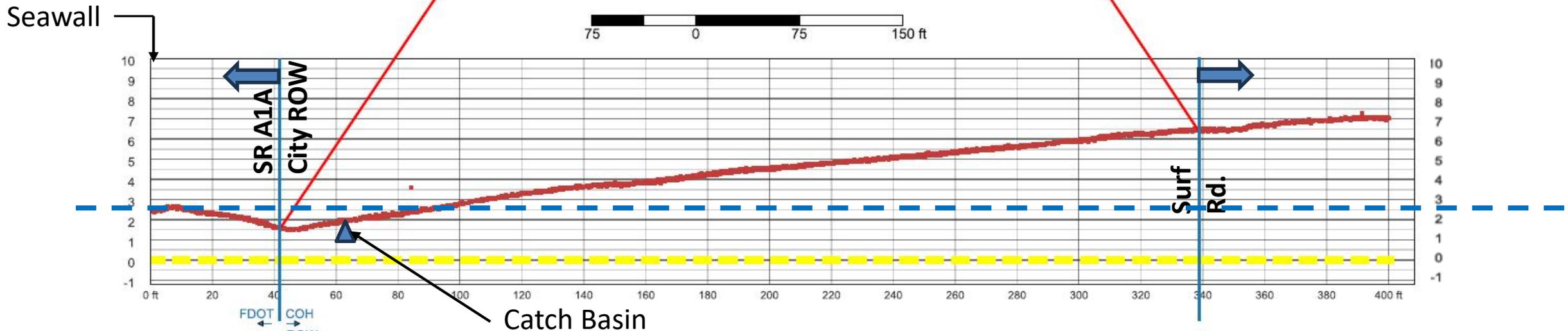
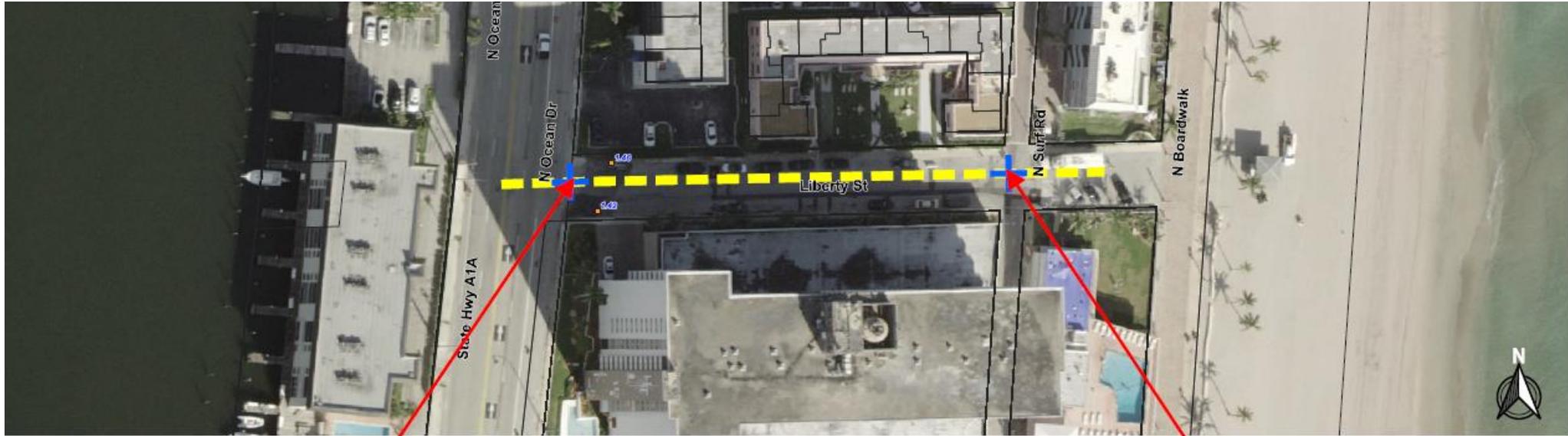
COST OF WAPROS 30 STREETS

STREET NAME	PIPE DIAMETER	WAPRO COST/ STREET (Based on pipe Dia)	TOTAL COST WAPRO INSTALLATION
Tyler	24"	\$ 56,702.00	\$1,321,043.10
Polk	24"	\$ 56,702.00	
Arizona	18"	\$ 42,895.00	
Taylor		★	
New York	24"	\$ 56,702.00	
Filmore	24"	\$ 56,702.00	
Pierce	18"	\$ 42,895.00	
Indiana	18"	\$ 42,895.00	
Buchanan		★	
Michigan	24"	\$ 56,702.00	
Johnson	24"	\$ 56,702.00	
Minnesota	18"	\$ 42,895.00	
Grant	18"	\$ 42,895.00	
Hayes	18"	\$ 42,895.00	
Garfield	18"	\$ 42,895.00	
Connecticut	18"	\$ 42,895.00	
Arthur	18"	\$ 42,895.00	
Cleveland	18"	\$ 42,895.00	
Oklahoma	18"	\$ 42,895.00	
McKinley	18"	\$ 42,895.00	
Nebraska	18"	\$ 42,895.00	
Nevada	18"	\$ 42,895.00	
Roosevelt	18"	\$ 42,895.00	
Taft	18"	\$ 42,895.00	
Carolina	18"	\$ 42,895.00	
Wilson	18"	\$ 42,895.00	
Harding	18"	\$ 42,895.00	
Coolidge	15"	\$ 34,497.00	
Missouri	15"	\$ 34,497.00	
Scott		★	
Liberty		★	
New Hampshire	15"	\$ 34,497.00	
New Mexico	18"	\$ 42,895.00	
Thomas	12"	\$ 19,440.10	

Cost includes Mobilization, MOT, inlet protection, drainage adjustments and restoration.

★ Denotes previously installed WAPROS

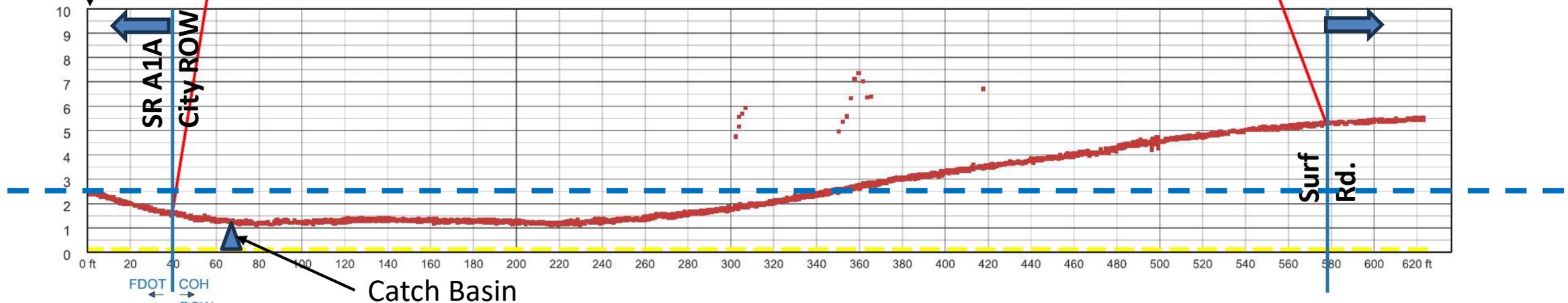
LIBERTY ST.



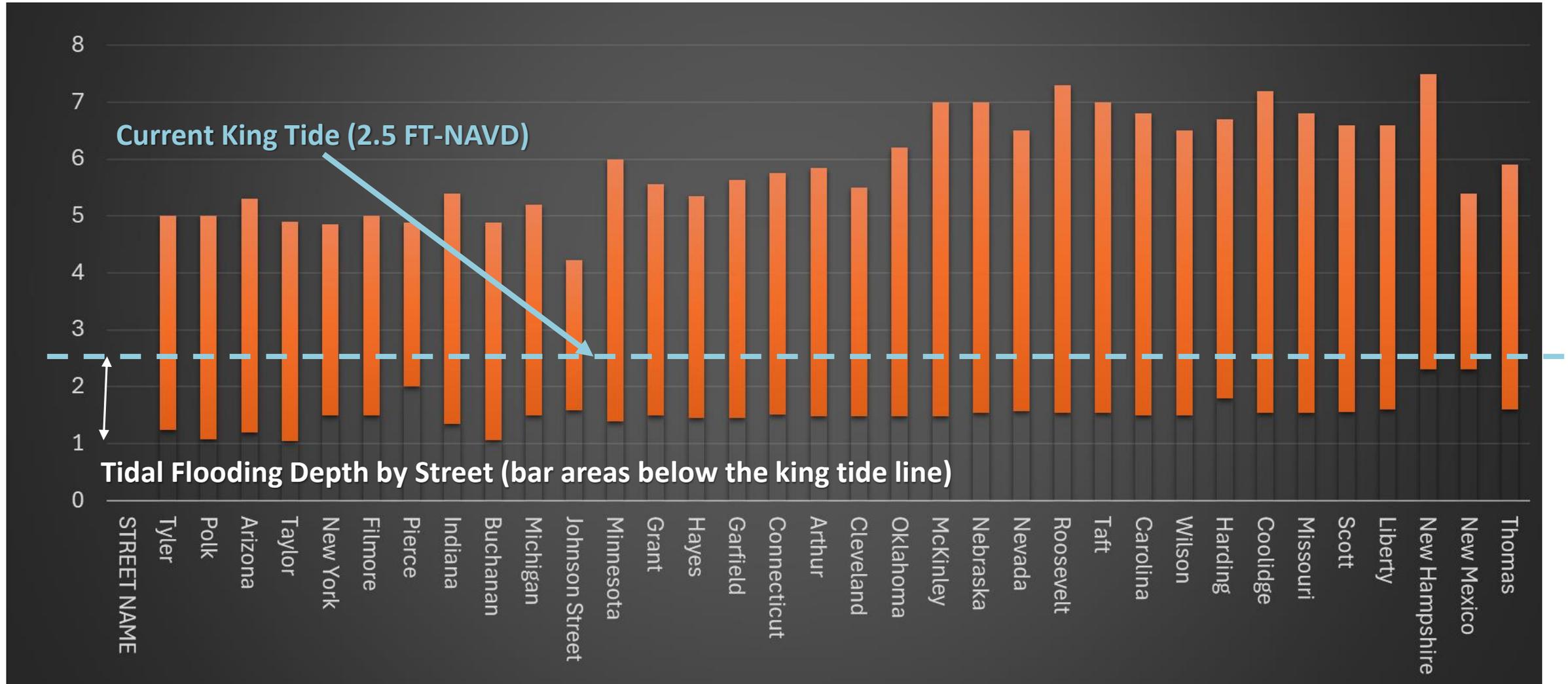
ARIZONA ST.



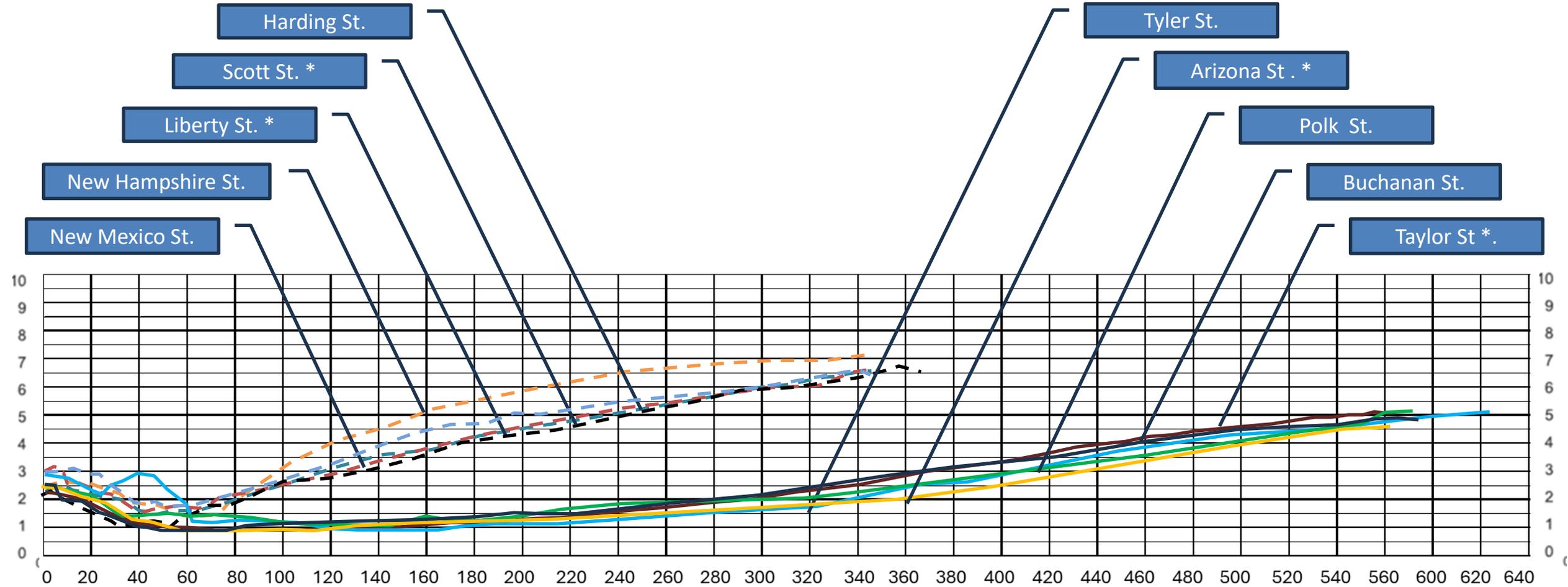
Seawall



STREET LOW AND HIGH ELEVATIONS COMPARED TO TIDE



STREET HIGHEST AND LOWEST PROFILES



EW STREET ELEVATIONS LOW TO HIGH AT FDOT/CITY ROW

INITIAL OPINION OF PROBABLE COST		
STREET NAME	RAISING STREET PROFILE	HARMONIZATION COST
Taylor	\$ 965,844.44	\$ 138,000.00
Buchanan	\$ 926,422.22	\$ 131,142.86
Polk	\$ 798,300.00	\$ 108,857.14
Arizona	\$ 955,988.89	\$ 136,285.71
Tyler	\$ 857,433.33	\$ 149,142.86
Indiana	\$ 926,422.22	\$ 131,142.86
Total	\$ 5,430,411.11	\$ 794,571.43
Consulting Fee's	\$622,498.25	
Grand total	\$6,224,982.54	

OPINION OF PROBABLE COST PHASED STREET RAISING COST

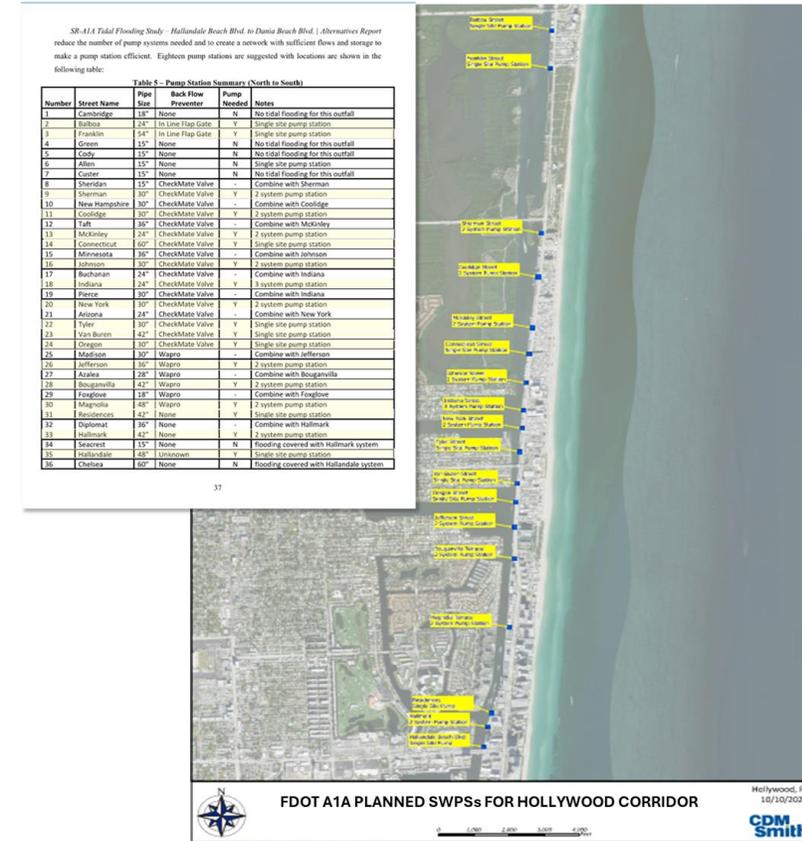
RAISE STEET PROFILE PRIORITY LIST	
Taylor, Buchanan, Polk , Arizona, Tyler, Indiana	\$6,847,480.79
New York, Filmore, Michigan Minnesota, Grant, Connecticut	\$6,702,484.73
Arthur, Cleveland, Oklahoma, McKinley, Wilson, Roosevelt	\$5,356,294.60
Taft, Carolina, Coolidge, Missouri, Garfield, Nebraska	\$4,983,907.94
Scott, Liberty, Nevada, Thomas, Hayes, Johnson, Harding	\$5,603,603.83

} Future Phases as
funding
becomes available



CONCLUSIONS

1. City streets redundant backflow prevention is a rapidly implementable measure to partially address tidal flooding at streets with inlets below current high tide levels and where the FDOT primary system is compromised
2. Street raising to the maximum elevation possible will provide immediate flood depth reduction results in these locations for both tidal flooding at the low elevation inlets, will address the dips at the intersections trapping stormwater with deeper flooding and decreased mobility, and will reduce the seepage of groundwater flooding through the street surface extending the life of the new street improvements.
3. SWPS are still required to meet the flooding LOS along SR-A1A and in conjunction with backflow prevention, seawall raising or repair, pipe leak correction, and street raising. This will allow the proposed SWPSs to be sized at a reasonable capacity and operate at their designed flow rate (and not re-pump seawater during rainfall periods).

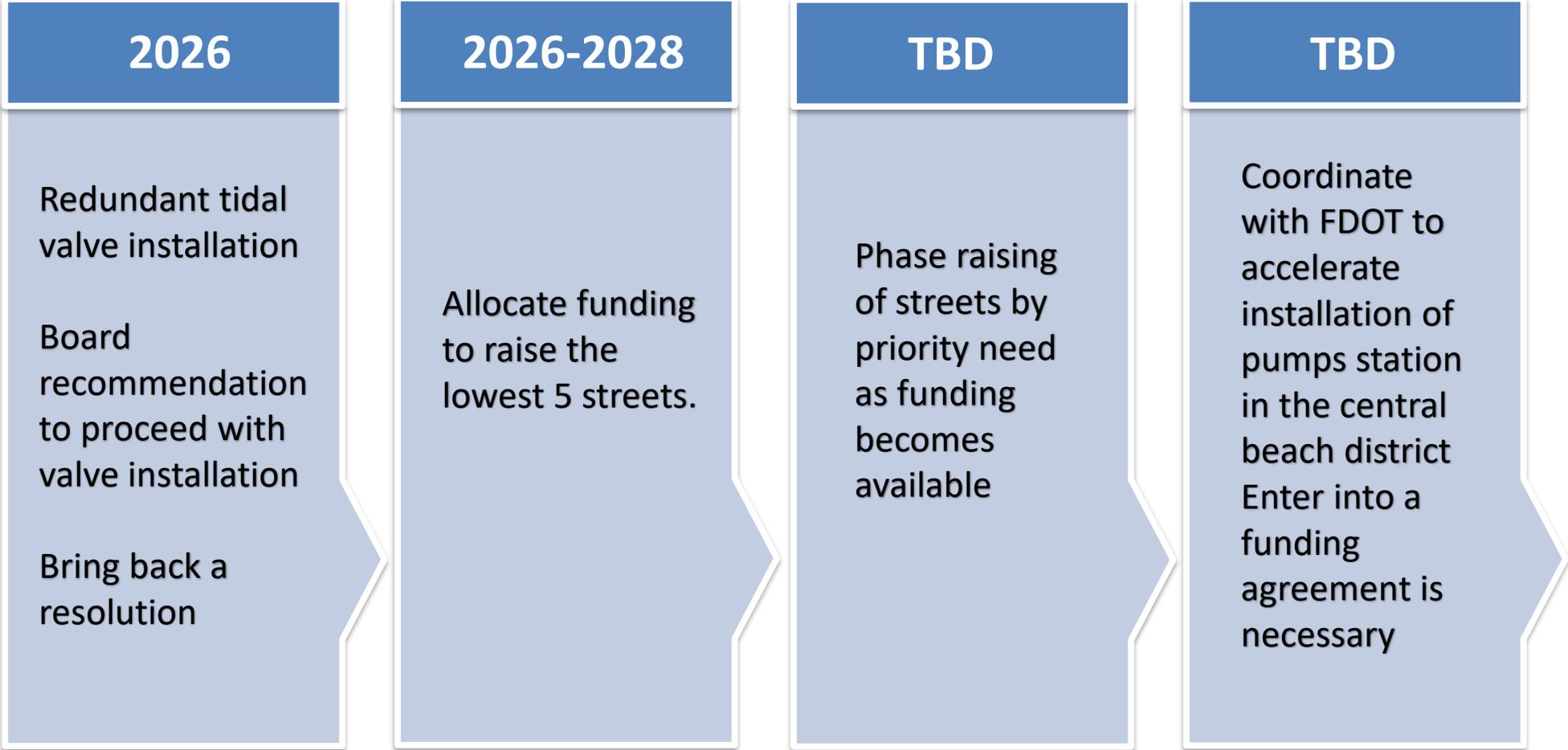


1. Finalize decision on installing City street's redundant BFPs on remaining low elevation inlet streets if desired for immediate action for tidal flooding reduction
2. Finalize decision on proceeding with the street raising and harmonization as funding allows as the CRA coastal resiliency, beautification, utility undergrounding and streetscape improvements occur along A1A
 - Can prioritize by lowest EL streets first if funding is limited
3. Finalize decision on returning back to completed streets where required and were not raised
4. Confirm that a City redundant BFPs will be installed on any streets not being raised during the streetscape/beautification project

THE MISSION:

"The Hollywood CRA is undertaking significant improvements along State Road A1A focusing on Coastal Resiliency Projects with key initiatives including undergrounding overhead utilities, installing marine-friendly lighting, widening medians, and improving drainage to boost coastal resilience."

POTENTIAL IMPLEMENTATION TIMELINE



QUESTIONS?

