

Existing Corridor Multimodal Short-Term Improvements

This document describes the existing issues and and multimodal short-term improvements at 83 locations along the Fairfax County Parkway and Franconia-Springfield Parkway study corridor. Planning level cost estimates are provided for each location. Where right-of-way impacts are expected, costs are presented separately for construction, design, contingency, and right-of-way. Otherwise, a single total cost is provided.

This document is interactive.

Scroll through each page to review issues and recommendations for locations along the corridor,

or click the map pins on the next page to jump to a specific location.

Aerial imagery provided by Fairfax County. The graphics are for illustrative purposes only and are not shown at a specific scale.

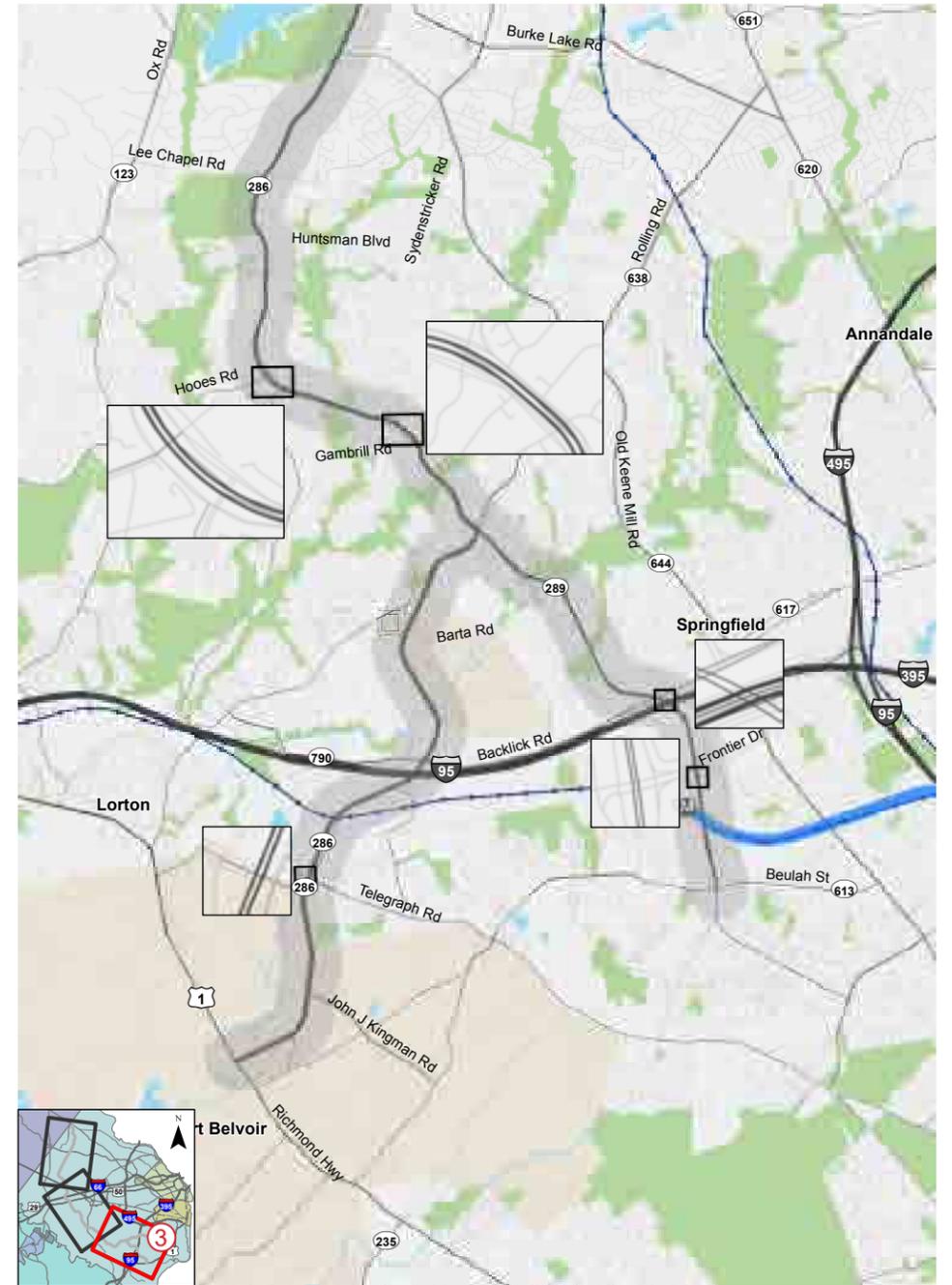
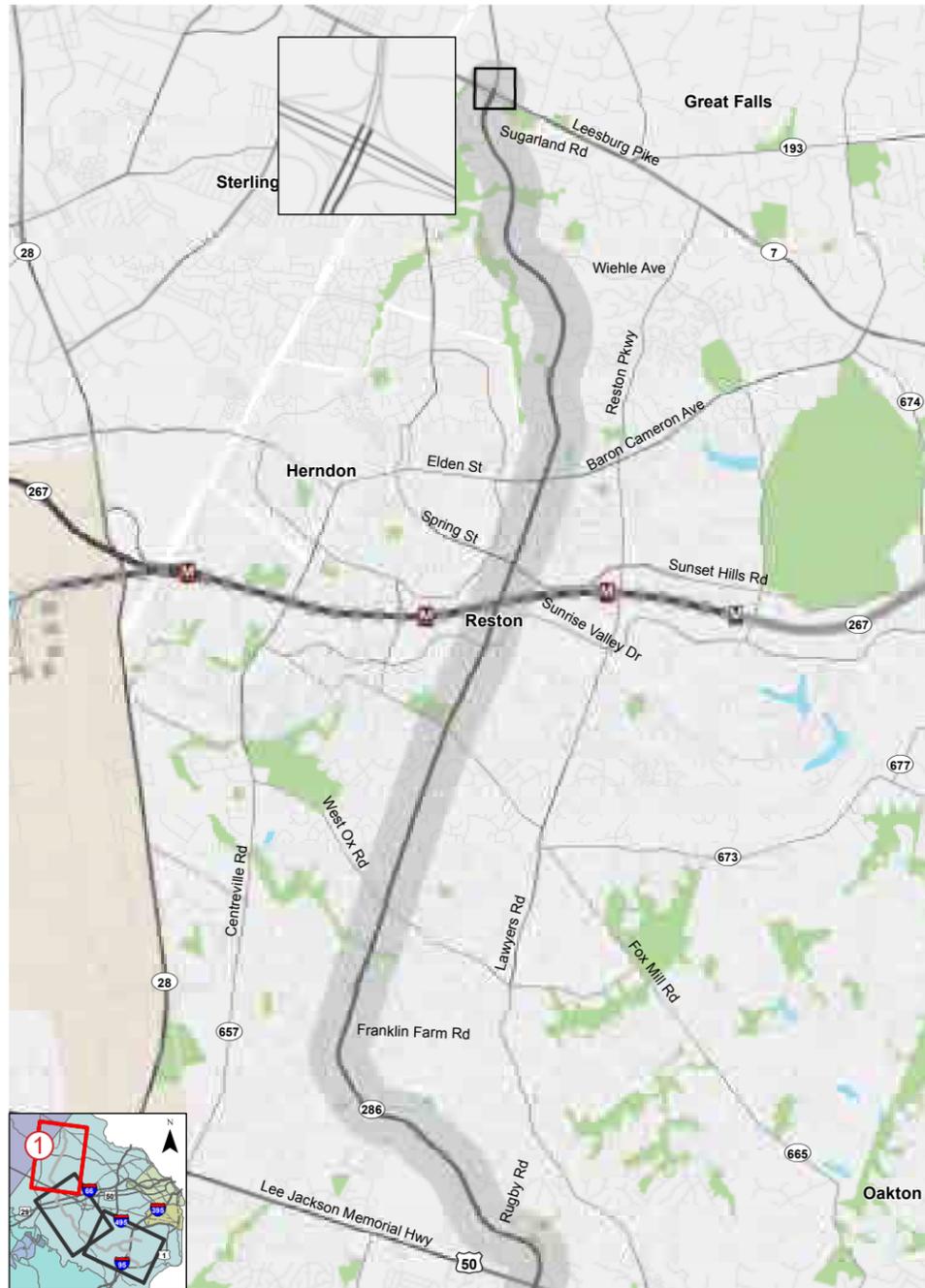
Map Navigation



Clicking on these pins will take you to the corresponding issues and recommended improvements summary

Back to Map

Clicking on this map icon will bring you back to this page



Note: Cardinal directions assume that Fairfax County Parkway is oriented north-south at all locations and side street approaches are oriented east-west

1121 – Fairfax County Parkway at Richmond Highway (Route 1)



Existing Transportation Issues

ISSUE

Intersection is over capacity, long queue lengths, and spillover from southbound left-turn lane storage*

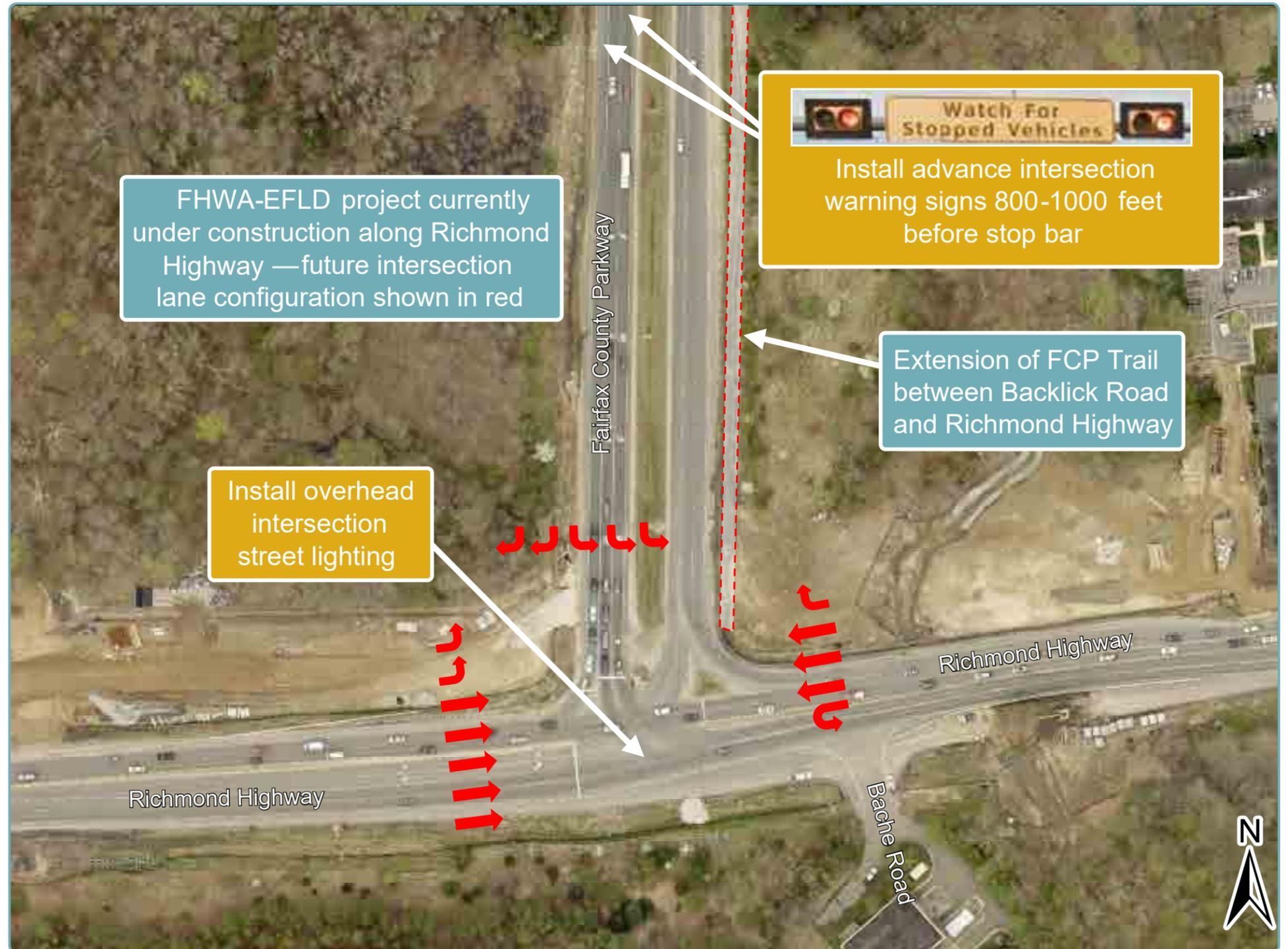
Vertical curve obstructs sight distance to queued vehicles in southbound direction

Poor nighttime visibility along southbound approach

* Federal Highway Administration-Eastern Federal Lands Division (FHWA-EFLD) project: <http://rte1ftbelvoir.com/>

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$530,000.00
High Cost	\$630,000.00

Existing Transportation Issues

ISSUE

Congestion due to heavy turning traffic to/from John Kingman Road*

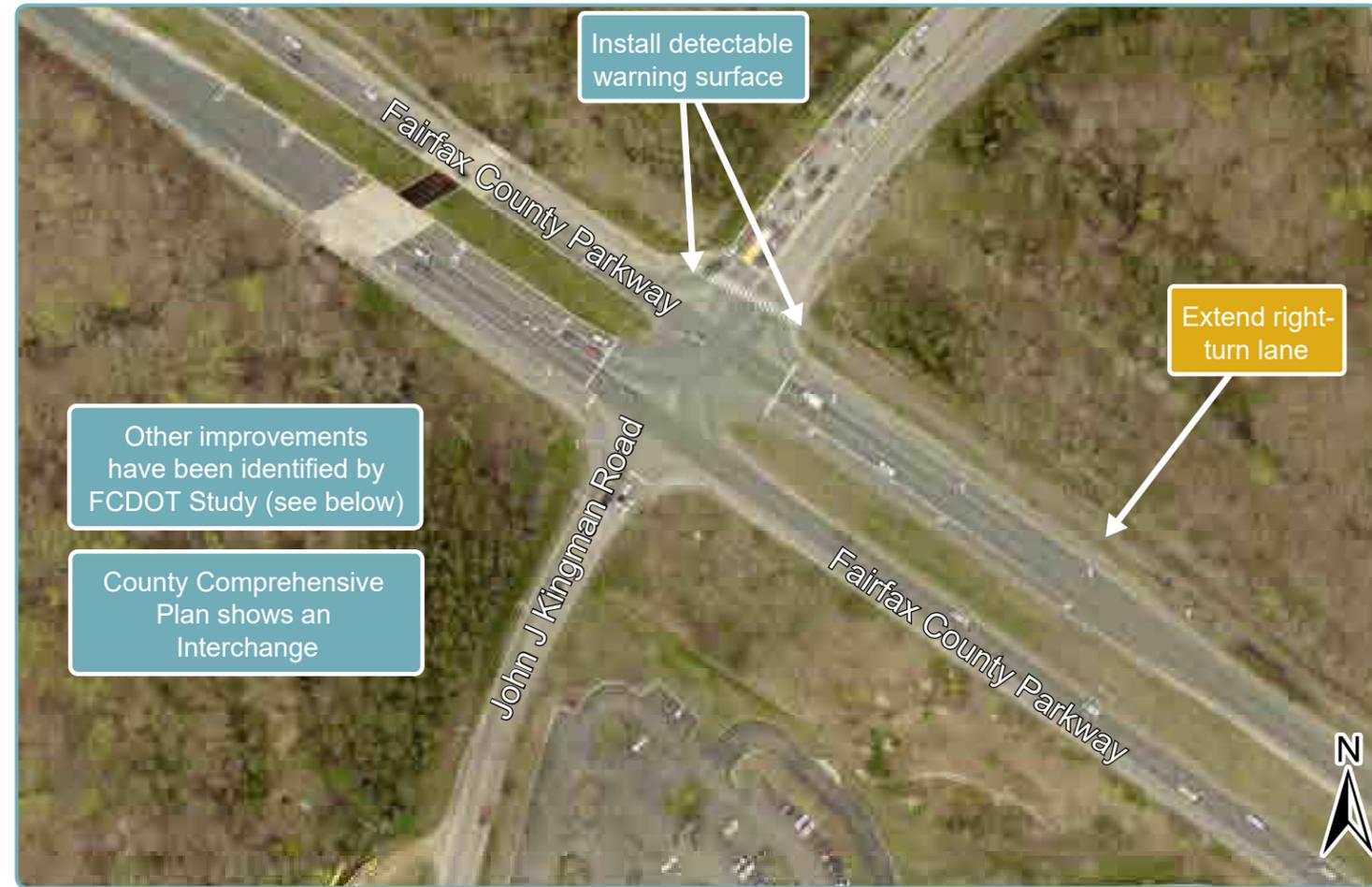
Northbound right-turn vehicles spill out of the available turn lane

No detectable warning surface

* Previous FCDOT study is complete. Study contains concept plans, traffic analyses, and cost estimates.

Recommended Improvements

 = Capital Improvement Project (CIP)



Previous Fairfax County Study Improvements:



Extend southbound left-turn lane storage



Widen westbound approach to provide dual left- and dual right-turn lanes



Add third southbound left-turn lane and extend storage



Add an auxiliary lane along southbound Route 286 to US Route 1

OPINION OF PROBABLE COST

Low Cost	\$4,000.00
High Cost	\$70,000.00

Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

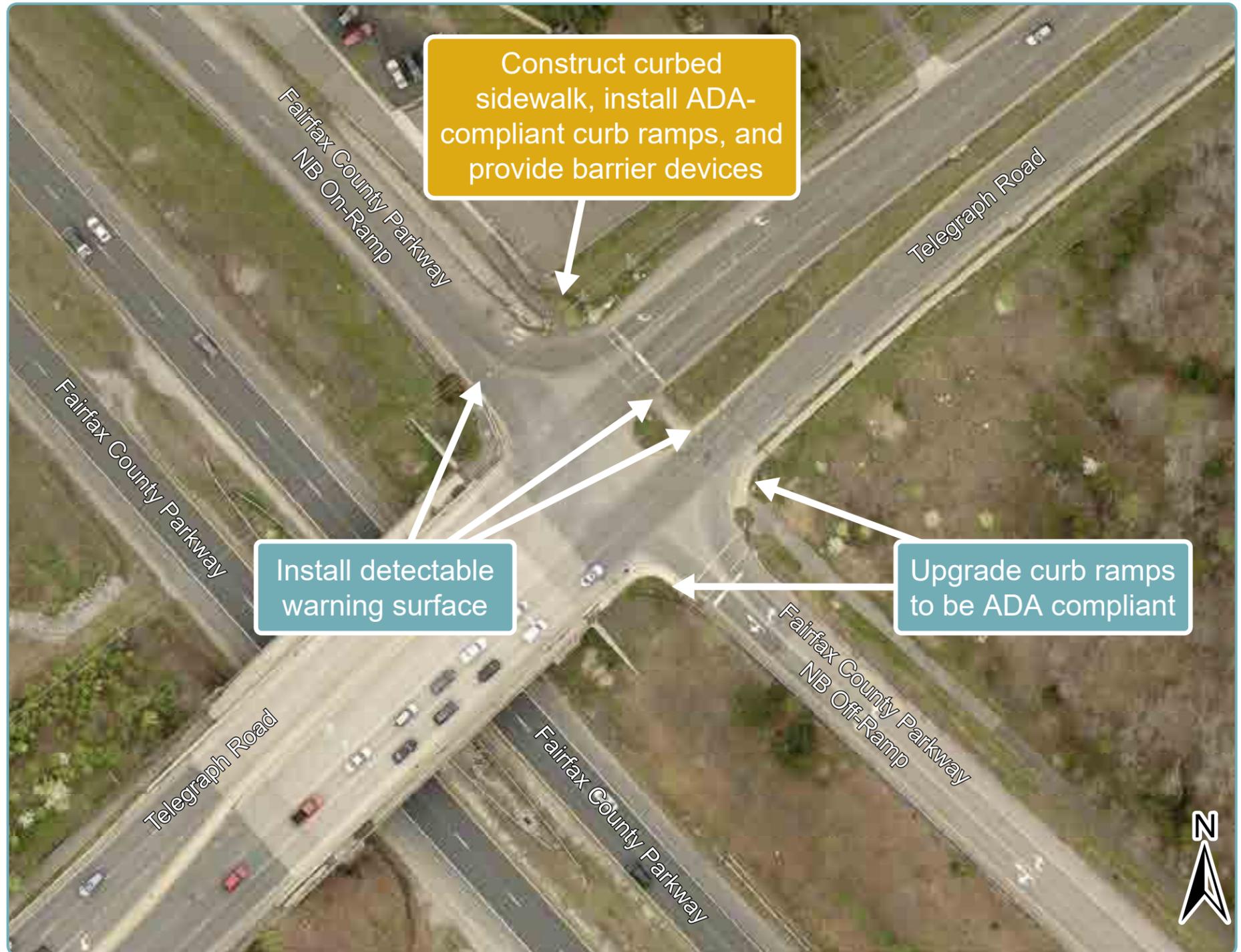
Substandard pedestrian accommodations on the northeast corner with pedestrian access hazards

No detectable warning surface—trail

No detectable warning surface—median refuge

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

	Construction	Right-of-Way	TOTAL
Low Cost	\$125,000.00	\$35,000.00	\$160,000.00
High Cost	\$260,000.00	\$140,000.00	\$400,000.00

Existing Transportation Issues

ISSUE

Long vehicle queues along southbound right turn lane, extending close to Fairfax County Parkway mainline*

No detectable warning surface—trail

* Previous Fairfax County study contains concept plans, traffic analyses, and cost estimates.

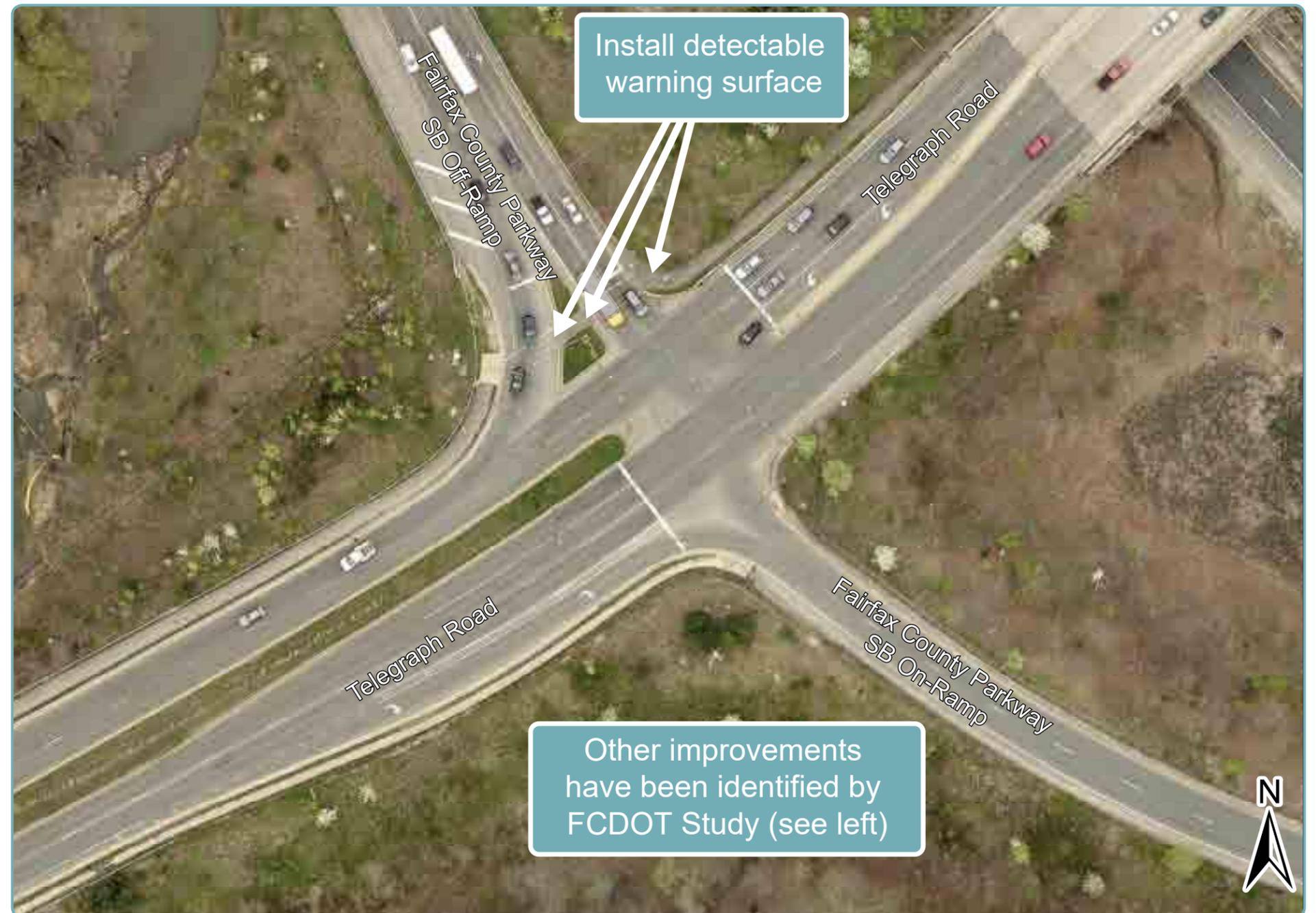
Previous Fairfax County Study Improvements:



Modify southbound right-turn lane to provide free-flow operation. The lighter color yellow represents a relocated shared use trail.

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST	
Low Cost	\$3,000.00
High Cost	\$3,000.00

Existing Transportation Issues

ISSUE

Long vehicle queues along eastbound approach*

Congestion along southbound approach†

Northbound next signal advance signage is only on right side of road and sign is small

Volume exceeds capacity during peak period

No pedestrian connectivity across Fairfax County Parkway to bus stop (located in island)

Bus stop located in channelizing island

Existing curb ramps are non-compliant with ADA

Existing northbound crosswalk is set back from FCP, requiring WBR traffic to encroach on the crosswalk

* Previous Fairfax County study contains concept plans, traffic analyses, and cost estimates.

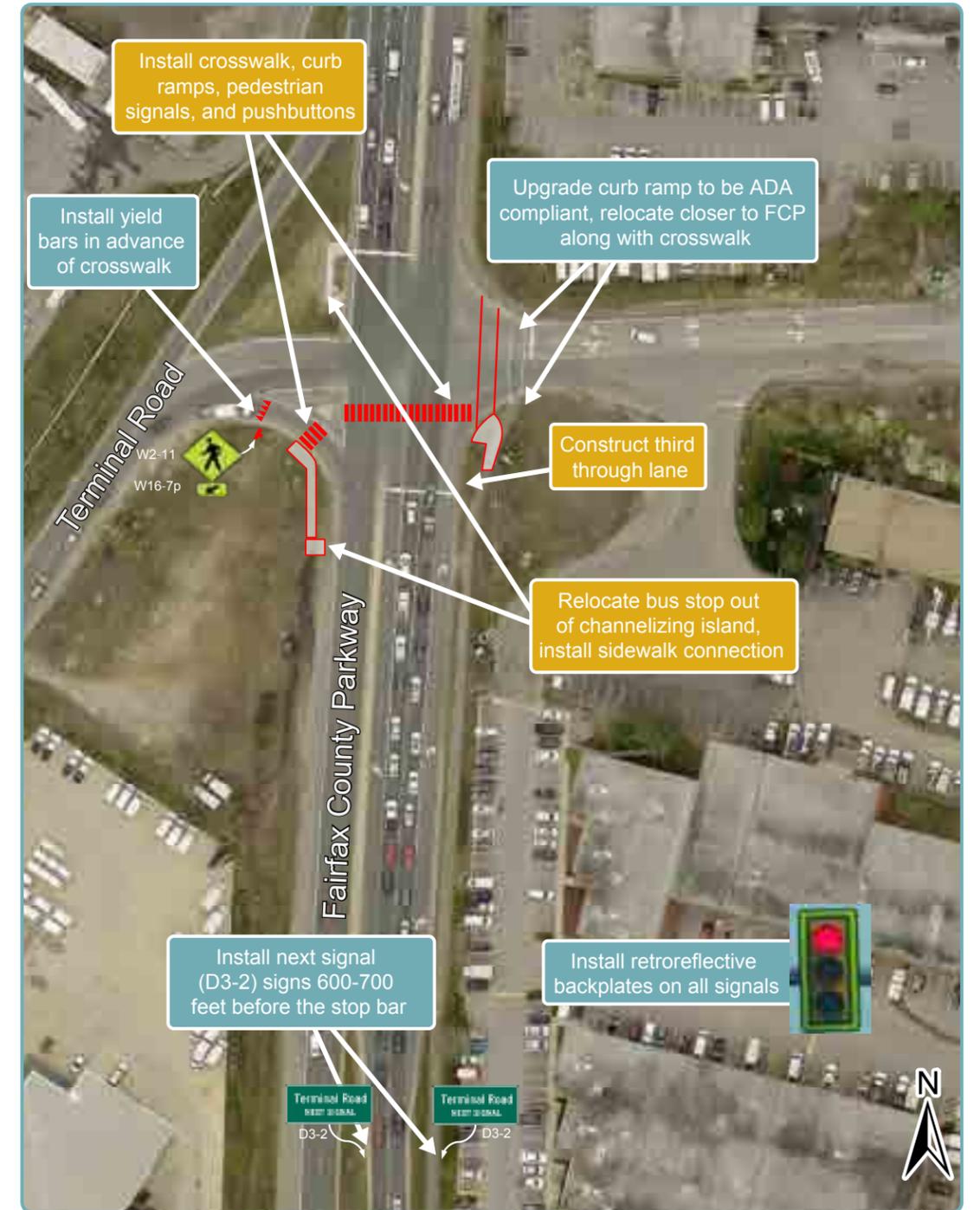
† VDOT has identified a safety improvement project (UPC 105501) to change the southbound right-turn lane into a shared through/right lane; VDOT is waiting for funding to construct improvements.

Previous Fairfax County Study and VDOT Improvements:



Add left-turn lane along eastbound approach; convert southbound right-turn lane into a through/right-turn lane

Recommended Improvements



= Capital Improvement Project (CIP)

OPINION OF PROBABLE COST

	Construction	Right-of-Way	TOTAL
Low Cost	\$1,260,000.00	\$600,000.00	\$1,860,000.00
High Cost	\$1,910,000.00	\$1,120,000.00	\$3,030,000.00

1806 – I-95 Northbound Off-Ramp to Northbound Fairfax County Parkway



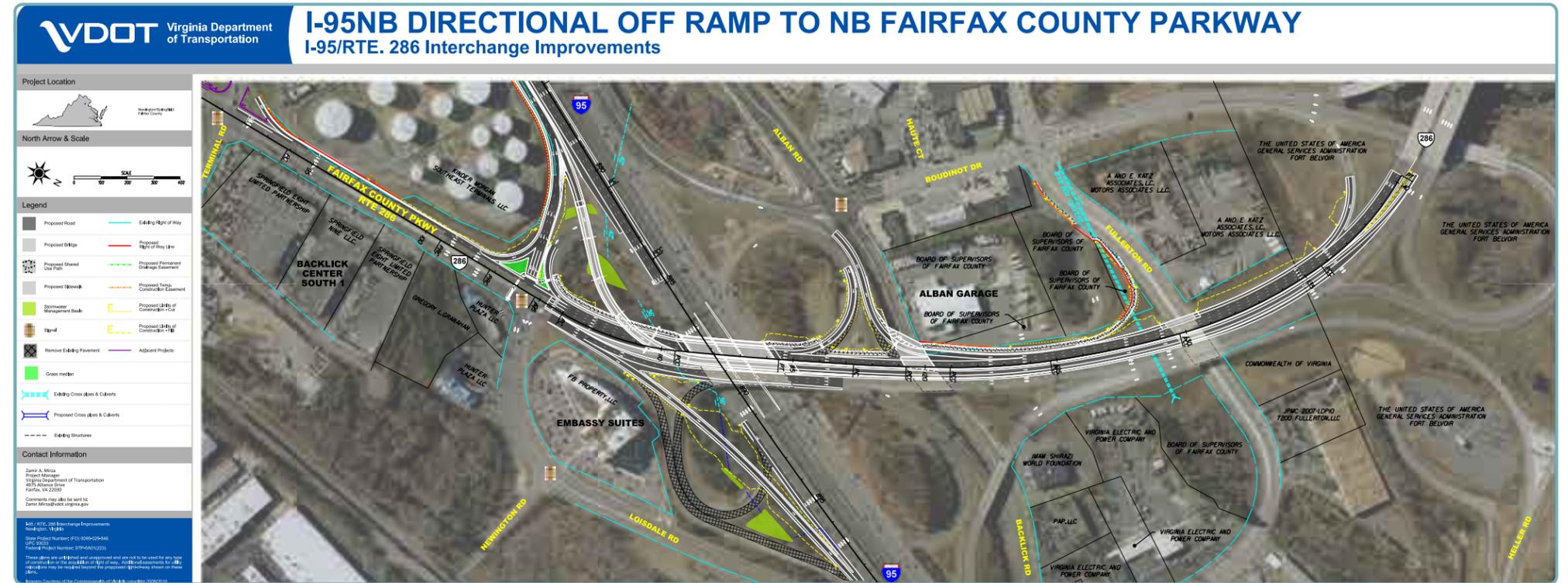
Existing Transportation Issues

ISSUE

Forecast volumes to the north are expected to increase due to the extension of Fairfax County Parkway, regional growth, and the Base Realignment and Closure (BRAC) affecting the Fort Belvoir North Area*

* VDOT project (UPC 93033) pending for funding of a directional flyover ramp to replace the existing one-lane loop ramp to accommodate increased traffic volumes and eliminate weaving on I-95 NB.
http://www.virginiadot.org/projects/northernvirginia/i-95-ffx_co_pkwy_flyover.asp

VDOT Project (UPC 93033) Concept Plan



Existing Transportation Issues

ISSUE

Intersection is over capacity, long vehicle queues on all approaches*

The rightmost through lane is ineffective at processing traffic given the short storage length of the lane

Trail leads into roadway with no receiving accommodations

Trail continuity not clearly defined

Weaving associated with vehicles heading to I-95 N on Fairfax County Parkway and Loisdale Road

Trail is adjacent to the roadway without any barriers

* Previous Fairfax County study contains concept plans, traffic analyses, and cost estimates. Fairfax County has collected some developer proffer money for these improvements.

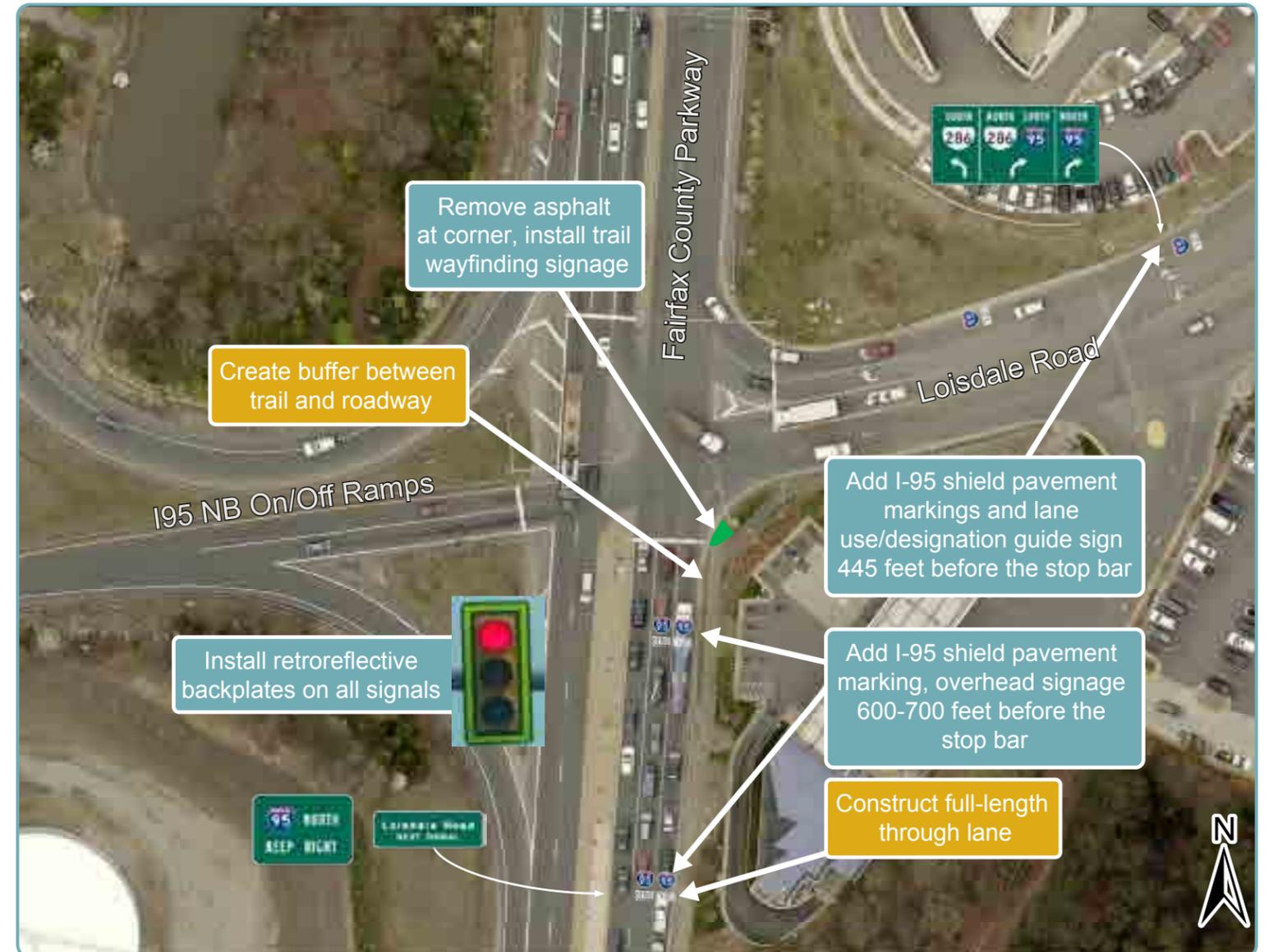
Previous Fairfax County Study Improvements:

Add southbound left-, westbound left-, and northbound right-turn lanes



Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

	Construction	Right-of-Way	TOTAL
Low Cost	\$950,000.00	\$400,000.00	\$1,350,000.00
High Cost	\$1,480,000.00	\$840,000.00	\$2,320,000.00

Existing Transportation Issues

ISSUE

North leg crosswalk is partially obstructed by raised median*

Vertical curve obstructs sight distance for left-turning vehicles from FCP†

Existing curb ramps are non-compliant with ADA‡

Last-minute weaving caused by southbound driver confusion about Fairfax County Parkway access

Trail continuity not clearly defined

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Inconsistent crosswalk marking for Fairfax County Parkway trail crosswalk

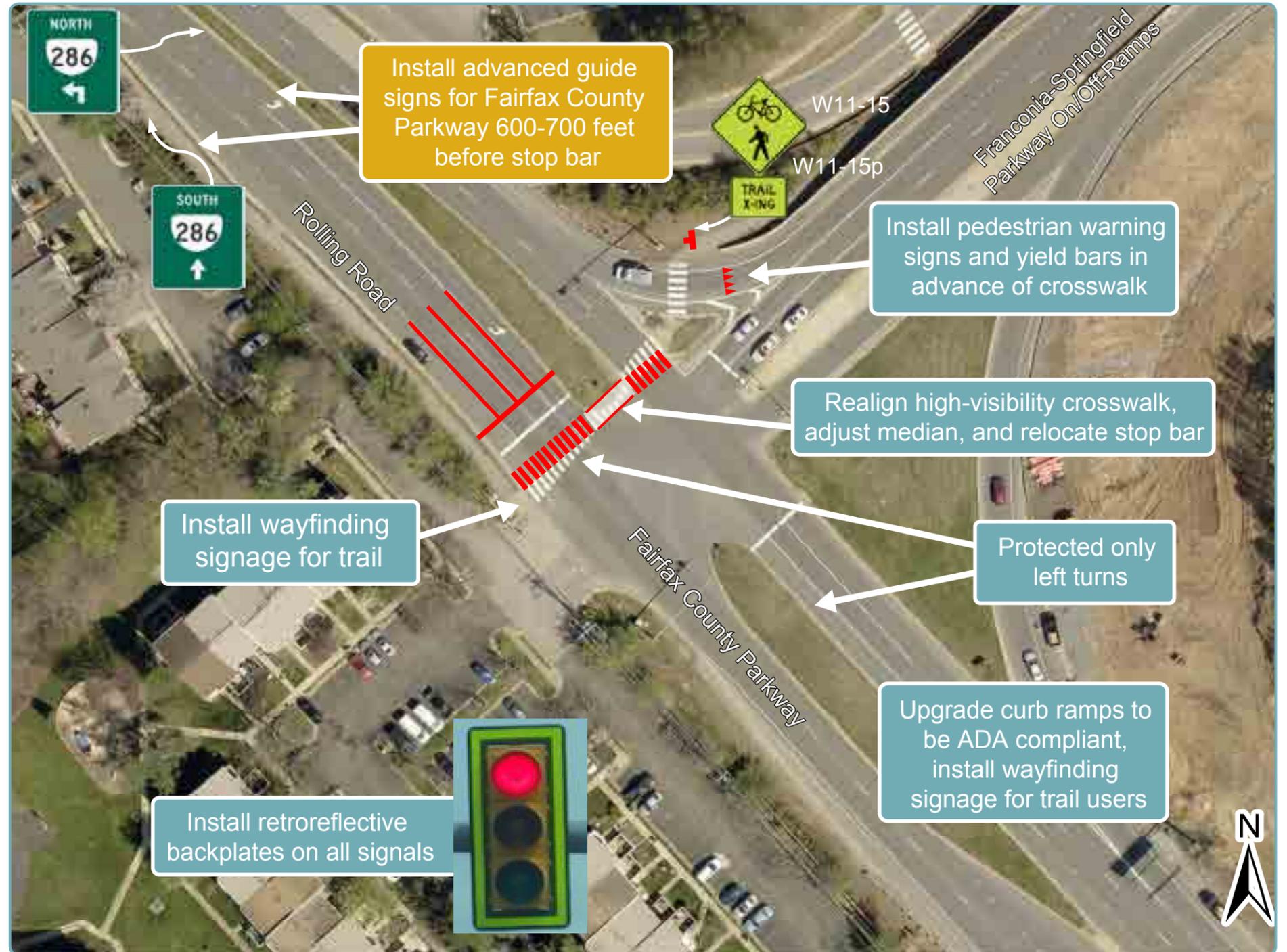
* VDOT project (UPC 100391) completed in August 2016

† Proposed intersection improvements by VDOT (UPC 100391) will provide for protected only left-turn movements

‡ Proposed intersection improvements by VDOT (UPC 100391) will upgrade curb ramps

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$40,000.00
High Cost	\$45,000.00

Existing Transportation Issues

ISSUE

Pedestrian ramp into roadway with no receiving ramp on the other side

Narrow sidewalk creates bottleneck for trail system

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$30,000.00	\$10,000.00	\$40,000.00
High Cost	\$50,000.00	\$30,000.00	\$80,000.00

Existing Transportation Issues

ISSUE

Turning movement lane assignments not indicated for eastbound and westbound approaches

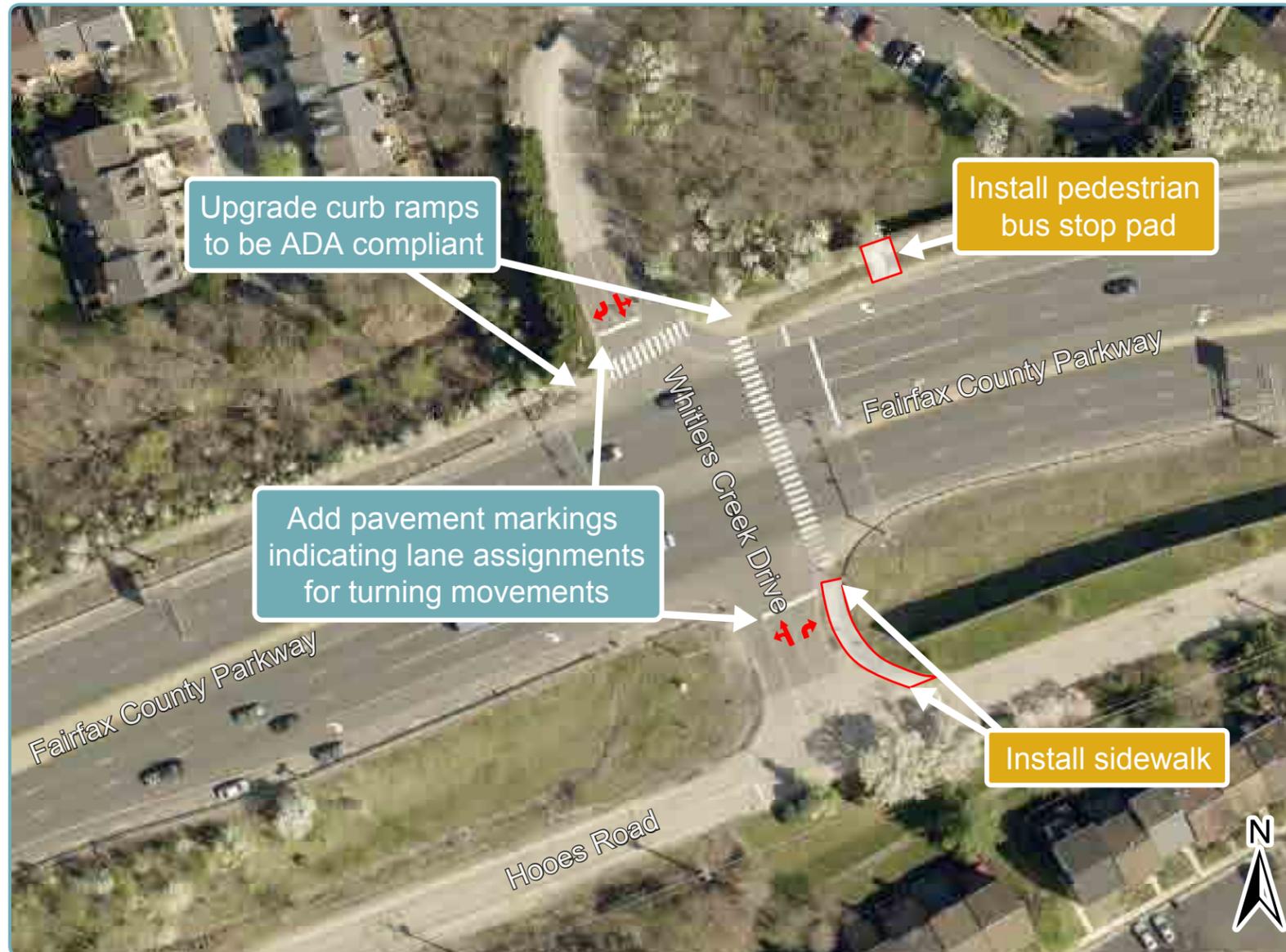
Existing curb ramps are non-compliant with ADA

Missing sidewalk connection to crosswalk and accessible path to pedestrian push button

No pedestrian bus stop pad

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$45,000.00
High Cost	\$60,000.00

Existing Transportation Issues

ISSUE

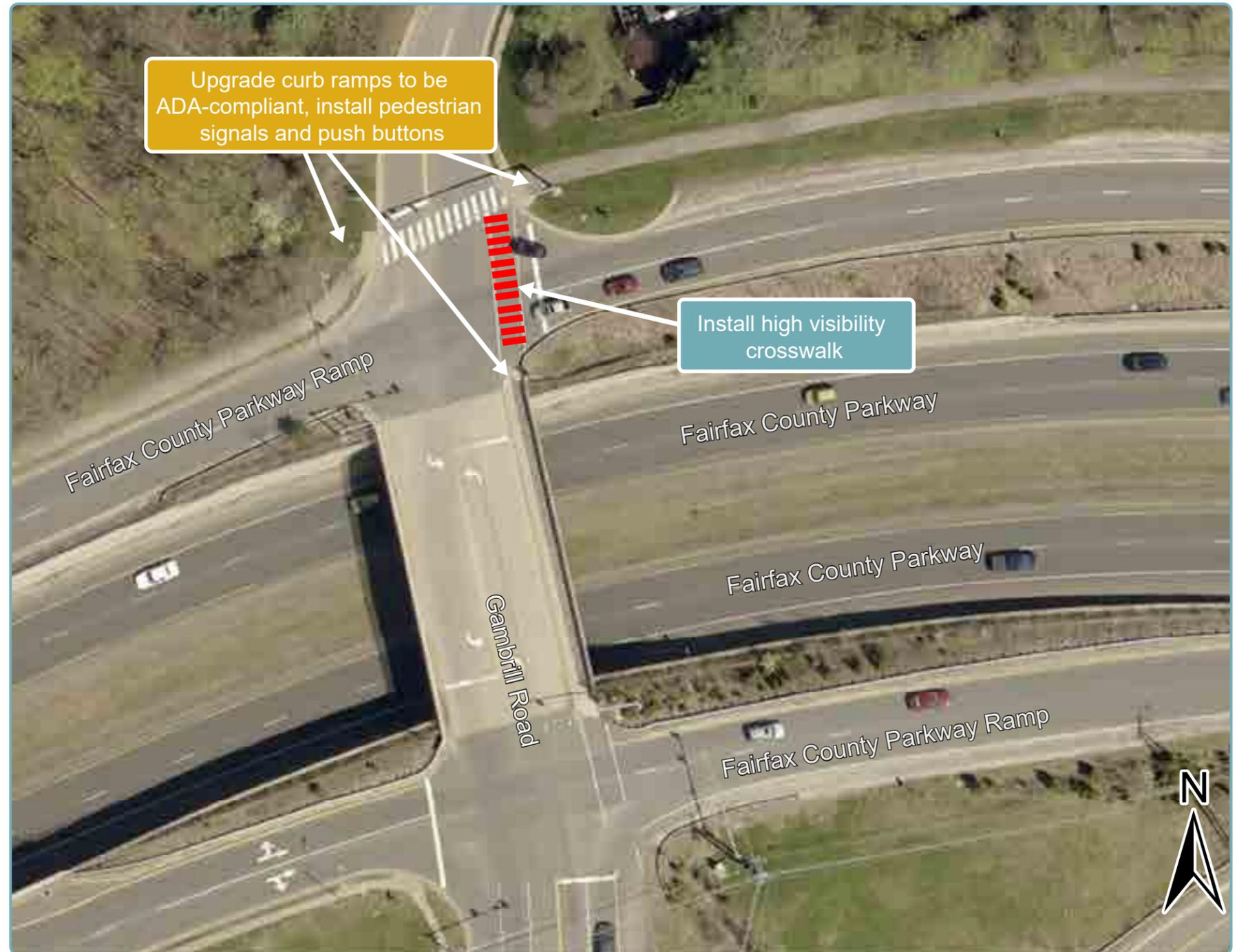
No pedestrian signals

Existing curb ramps are non-compliant with ADA

Inconsistent crosswalk marking for Fairfax County Parkway trail crosswalk

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$90,000.00
High Cost	\$100,000.00

Existing Transportation Issues

ISSUE

Pedestrian connectivity not provided across Gambrill Road

Inconsistent crosswalk marking for Fairfax County Parkway trail crosswalk

No pedestrian signals

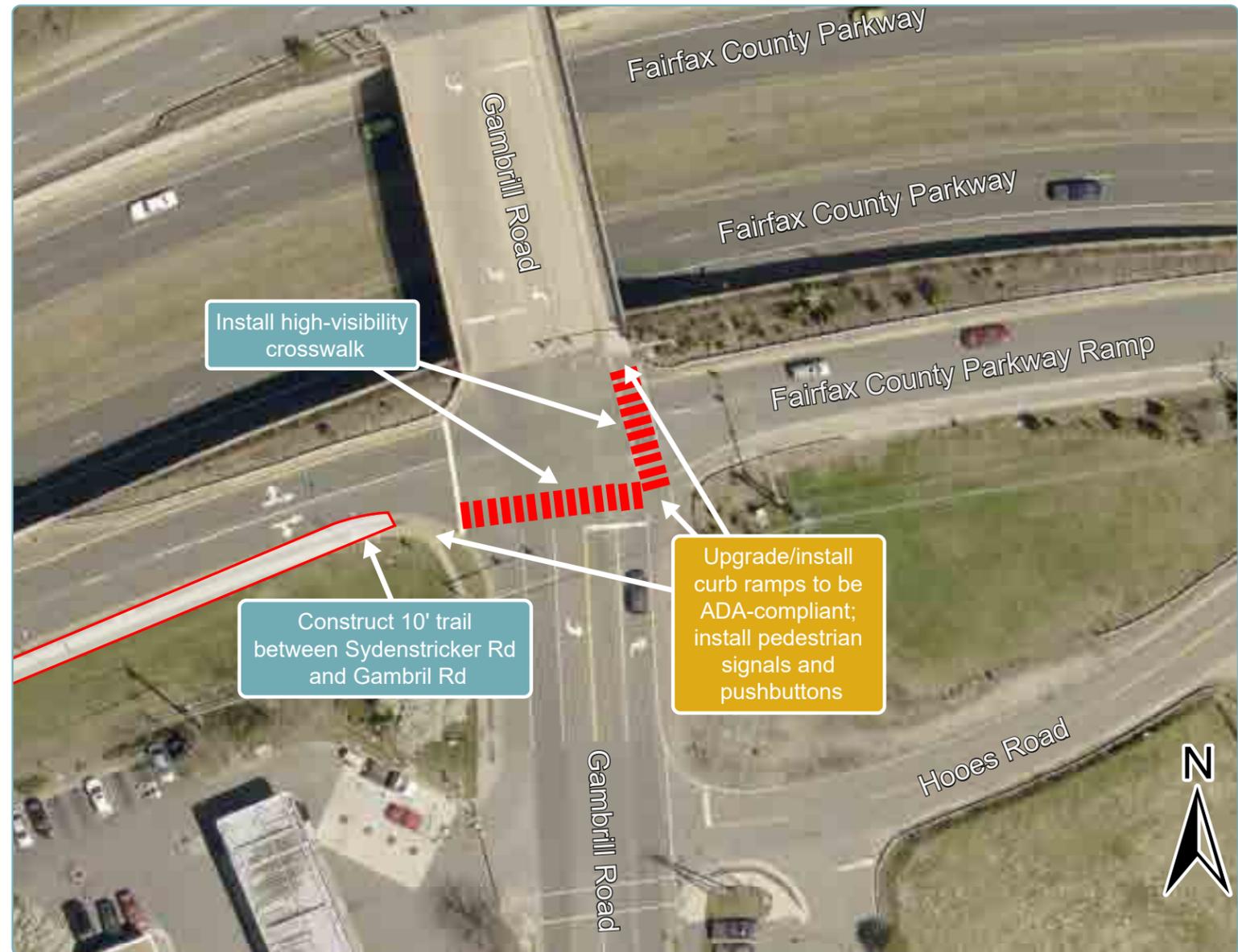
Existing curb ramps are non-compliant with ADA

Missing curb ramp in southwest corner

Insufficient sidewalk width for trail along the west side of FCP between Sydenstricker Road and Gambrill Road

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$330,000.00
High Cost	\$560,000.00

2521 Existing Transportation Issues

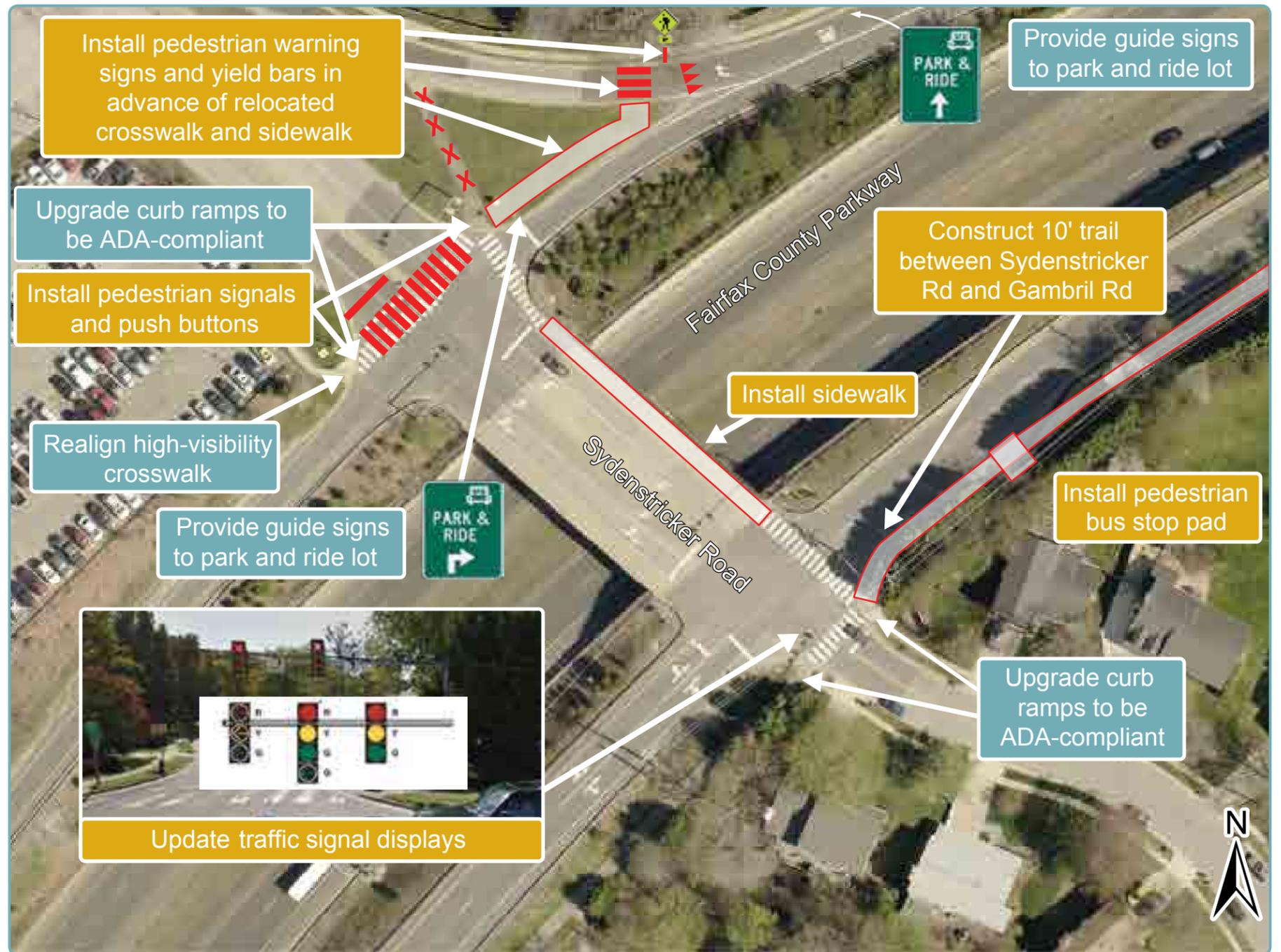
ISSUE
Crosswalk not aligned in a single direction
No pedestrian signals
Driver confusion about access to the Sydenstricker park and ride lot
Existing curb ramps are non-compliant with ADA
Missing sidewalk connection across Fairfax County Parkway bridge
The trail across the channelized right-turn to northbound Sydenstricker has poor visibility for approaching vehicles

2522 Existing Transportation Issues

ISSUE
Signal displays on eastbound Sydenstricker Road approach are not compliant with the <i>Manual on Uniform Traffic Control Devices (MUTCD)</i>
Existing curb ramps are non-compliant with ADA
Missing sidewalk connection
No pedestrian bus stop pad
Insufficient sidewalk width for trail along the west side of FCP between Sydenstricker Road and Gambrill Road

Recommended Improvements

 = Capital Improvement Project (CIP)



2521

OPINION OF PROBABLE COST	
Low Cost	\$220,000.00
High Cost	\$260,000.00

2522

OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$425,000.00	\$125,000.00	\$550,000.00
High Cost	\$680,000.00	\$300,000.00	\$980,000.00

Existing Transportation Issues

ISSUE

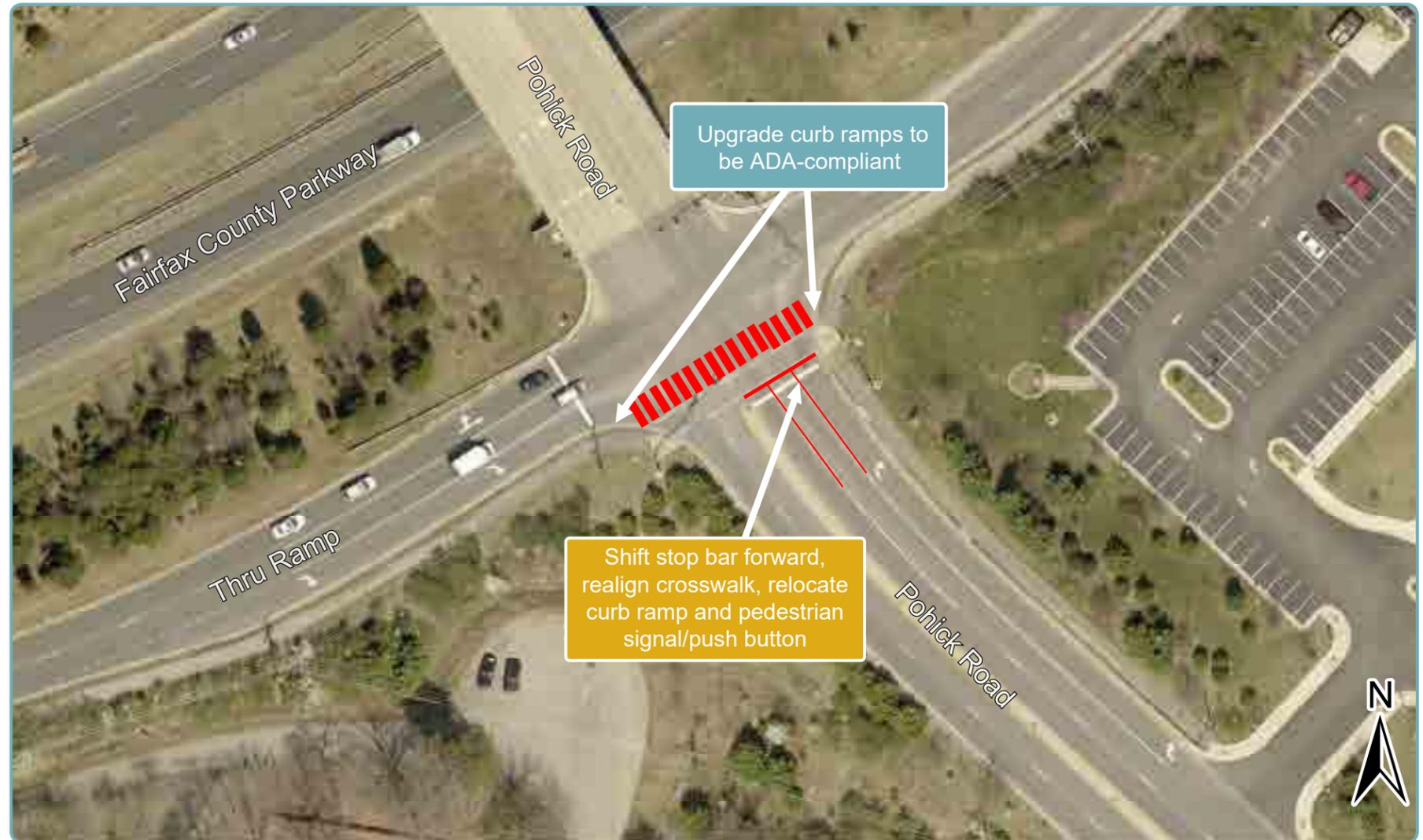
Sight distance limited for eastbound right-turn movement due to grade, roadside structures, and vegetation

Existing curb ramps are non-compliant with ADA

Poor nighttime visibility along southbound approach

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

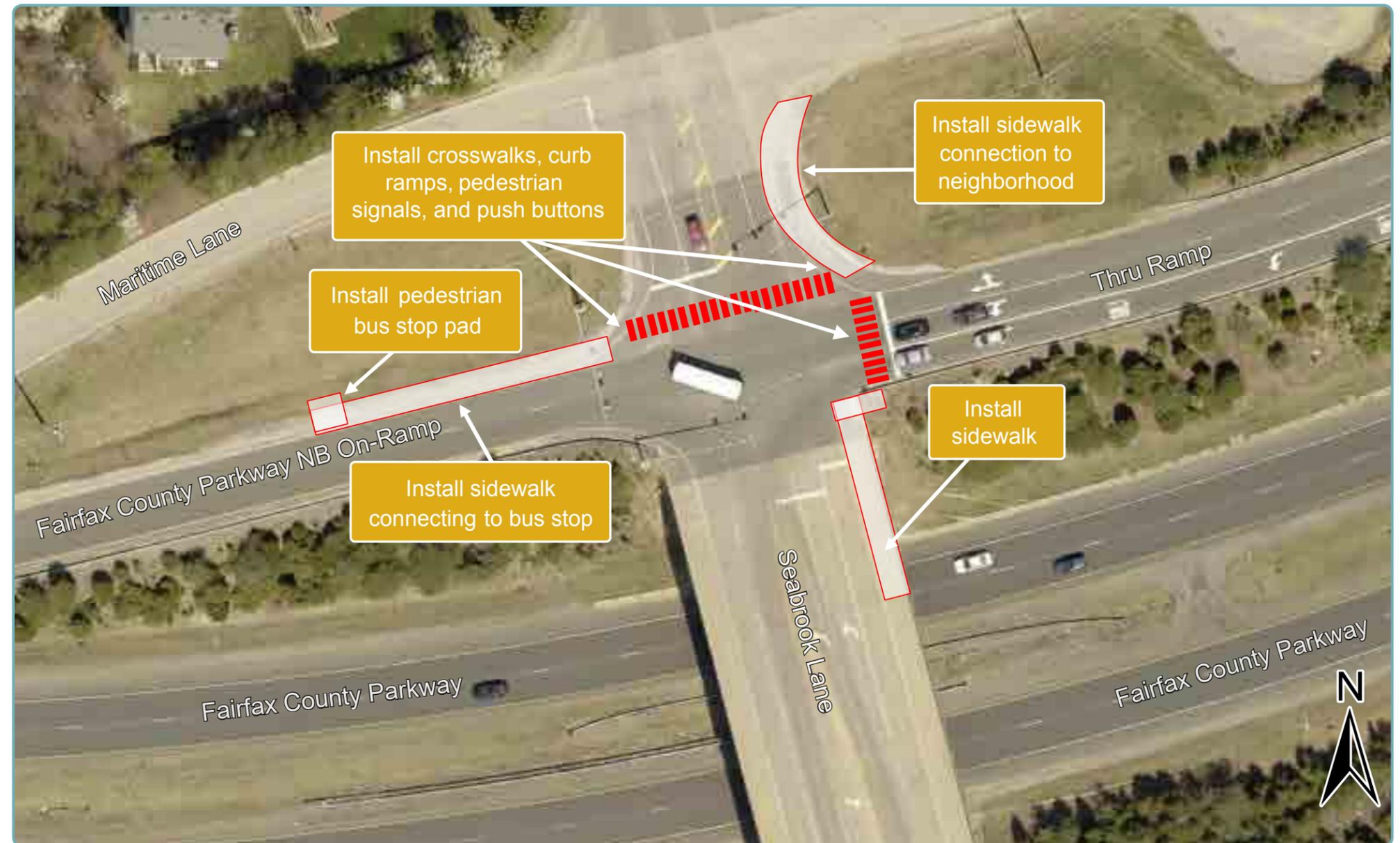
Low Cost	\$40,000.00
High Cost	\$50,000.00

Existing Transportation Issues

ISSUE
Pedestrian connectivity not provided across Seabrook Lane to bus stop
No pedestrian bus stop pad
No pedestrian connectivity across Fairfax County Parkway on bridge

Recommended Improvements

= Capital Improvement Project (CIP)



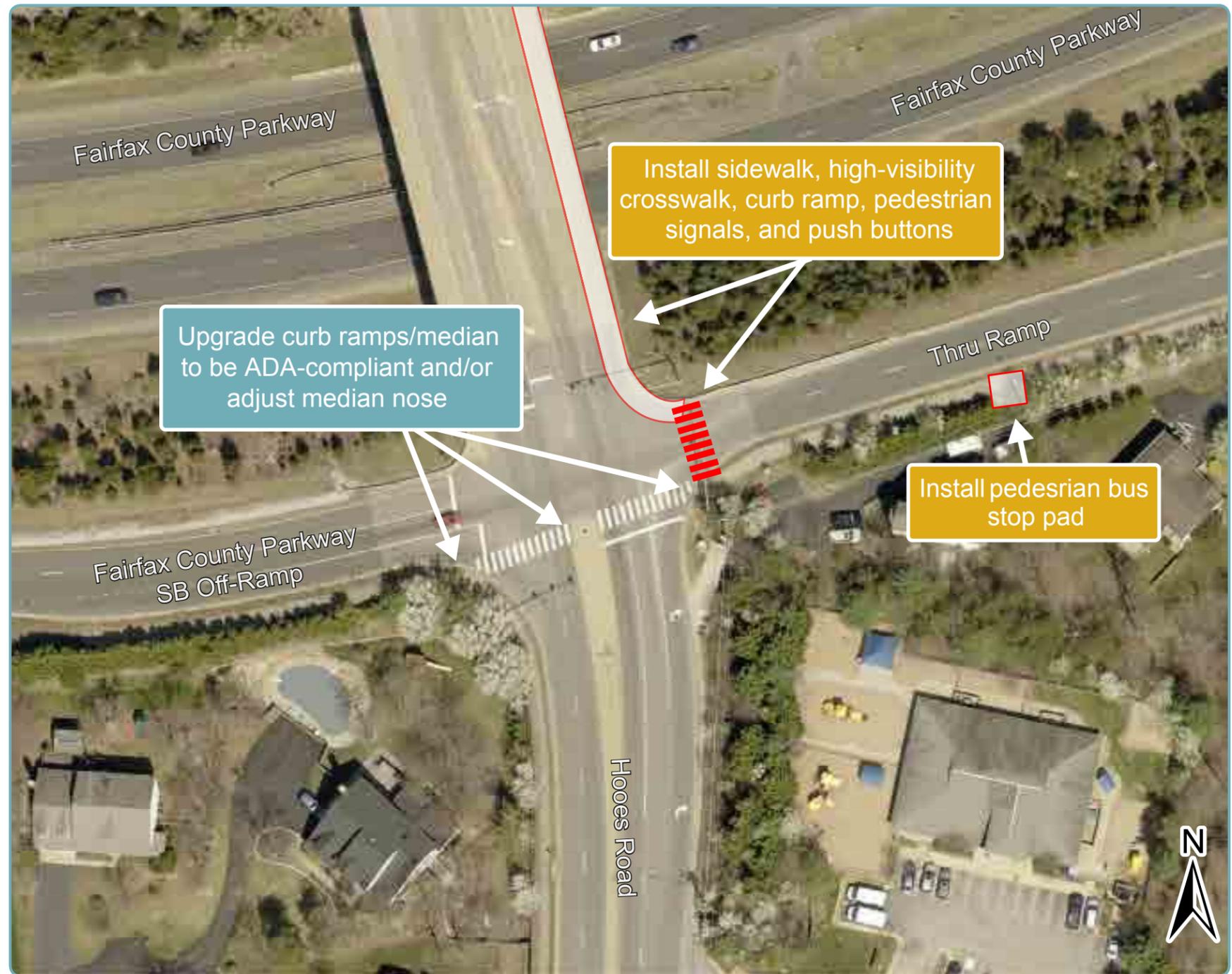
OPINION OF PROBABLE COST	
Low Cost	\$250,000.00
High Cost	\$300,000.00

Existing Transportation Issues

ISSUE
Crosswalk not aligned in a single direction, segmented by a wide median
No pedestrian bus stop pad
Existing curb ramps are non-compliant with ADA
No pedestrian connectivity across Fairfax County Parkway on bridge

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST	
Low Cost	\$250,000.00
High Cost	\$310,000.00

2831 – Fairfax County Parkway at Cervantes Lane



Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$15,000.00
High Cost	\$15,000.00

Existing Transportation Issues

ISSUE

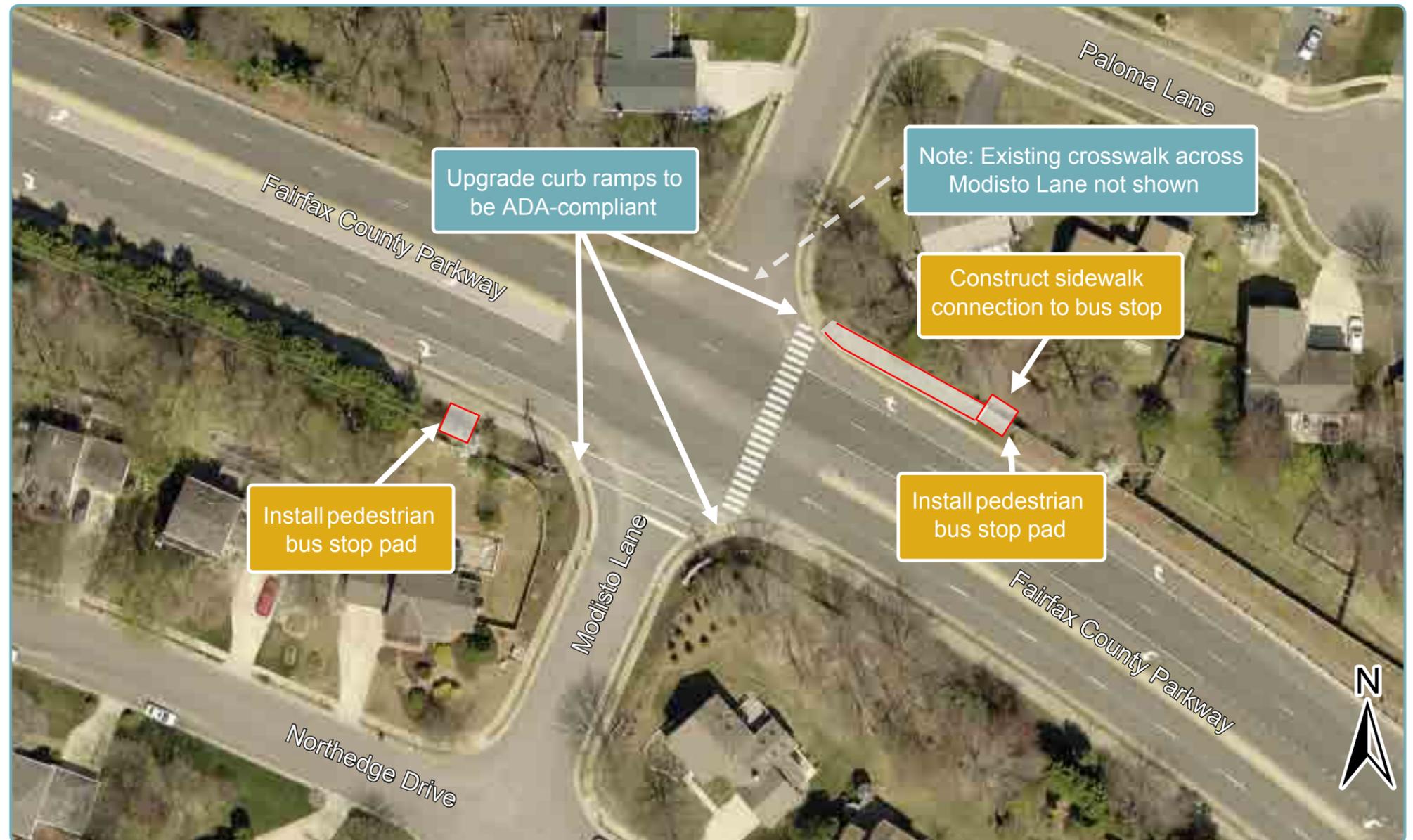
Existing curb ramps are non-compliant with ADA

Missing trail/sidewalk connection

No pedestrian bus stop pad

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$35,000.00
High Cost	\$60,000.00

3031 – Fairfax County Parkway at Huntsman Court



Existing Transportation Issues

ISSUE

No crosswalk across Huntsman Court

Existing curb ramps are non-compliant with ADA

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$15,000.00
High Cost	\$15,000.00

3121 – Fairfax County Parkway at Huntsman Boulevard

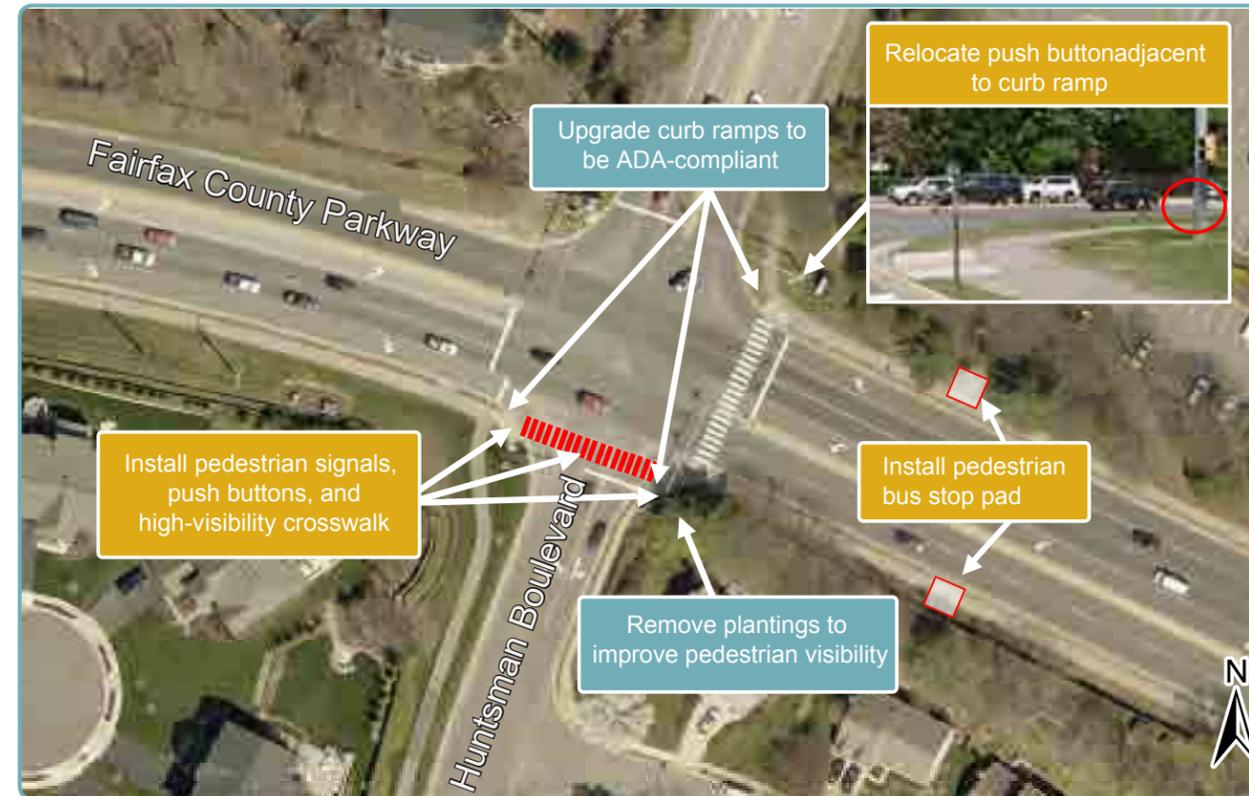


Existing Transportation Issues

ISSUE
No pedestrian signals
Inconsistent crosswalks for Fairfax County Parkway trail crossing
Existing curb ramps are non-compliant with ADA
Push button accessibility issue
No pedestrian bus stop pad (two locations)
Peak period congestion
Poor visibility of trail users for eastbound right-turn vehicles due to plantings on the southwest corner

Recommended Improvements

= Capital Improvement Project (CIP)



Intersection Capacity Improvements to Mitigate Congestion



OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$1,720,000.00	\$700,000.00	\$2,420,000.00
High Cost	\$2,740,000.00	\$1,250,000.00	\$3,990,000.00

3221 – Fairfax County Parkway at Reservation Drive

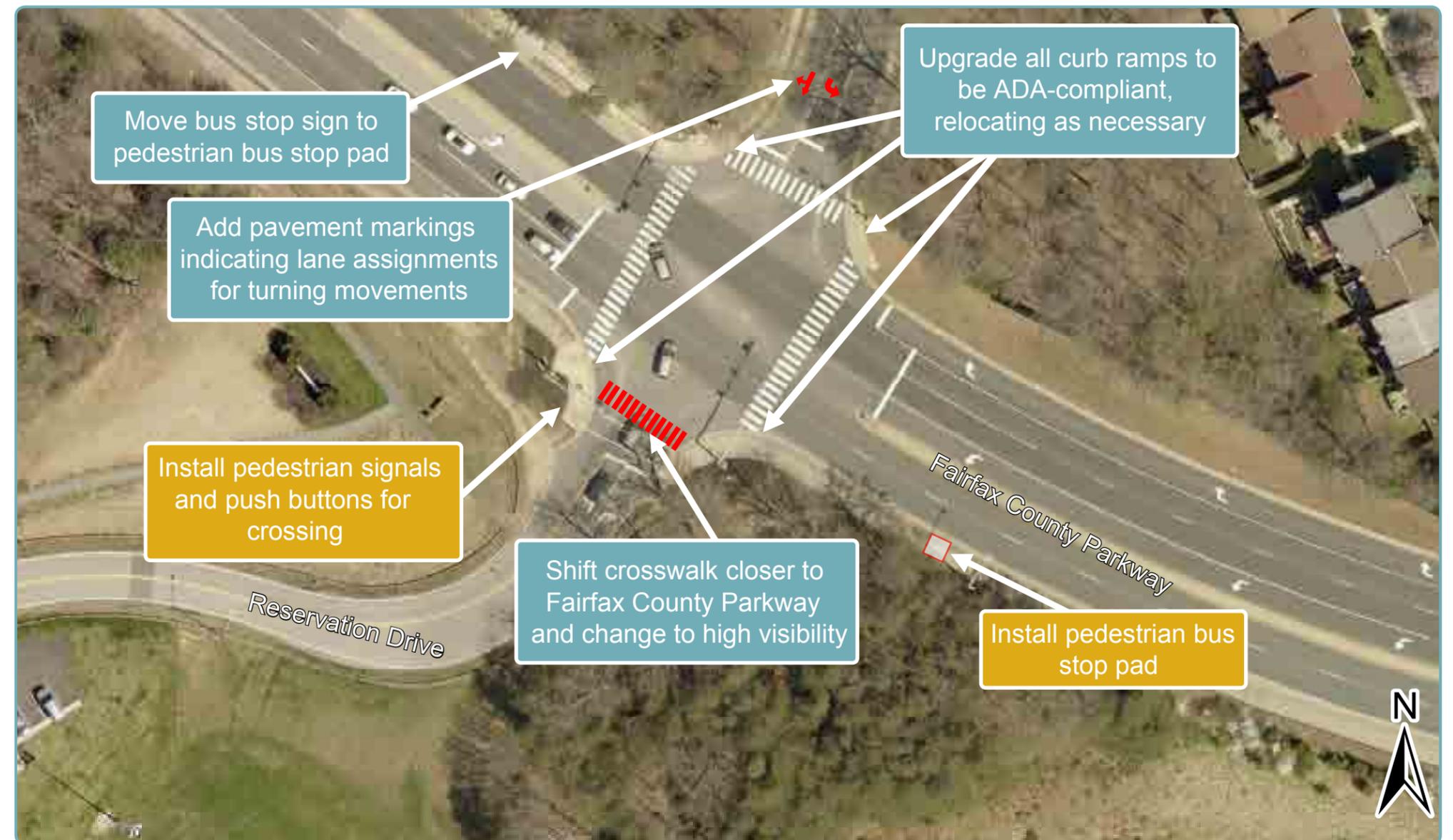


Existing Transportation Issues

ISSUE
No pedestrian signals
Crosswalk not adjacent to intersection and inconsistent with Fairfax County Parkway trail crosswalks
Existing curb ramps are non-compliant with ADA
Bus stop sign not located near pedestrian bus stop pad
Bus stop without pedestrian bus pad
Turning movement lane assignments not indicated for westbound approach
Poor visibility of trail users for southbound right-turn vehicles due to plantings on the northwest corner

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST	
Low Cost	\$90,000.00
High Cost	\$120,000.00

Existing Transportation Issues

ISSUE

Pedestrian sidewalks and ramps in channelizing islands are in poor condition

Existing curb ramps are non-compliant with ADA

Missing sidewalk connection to bus stop; no pedestrian bus stop pad

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

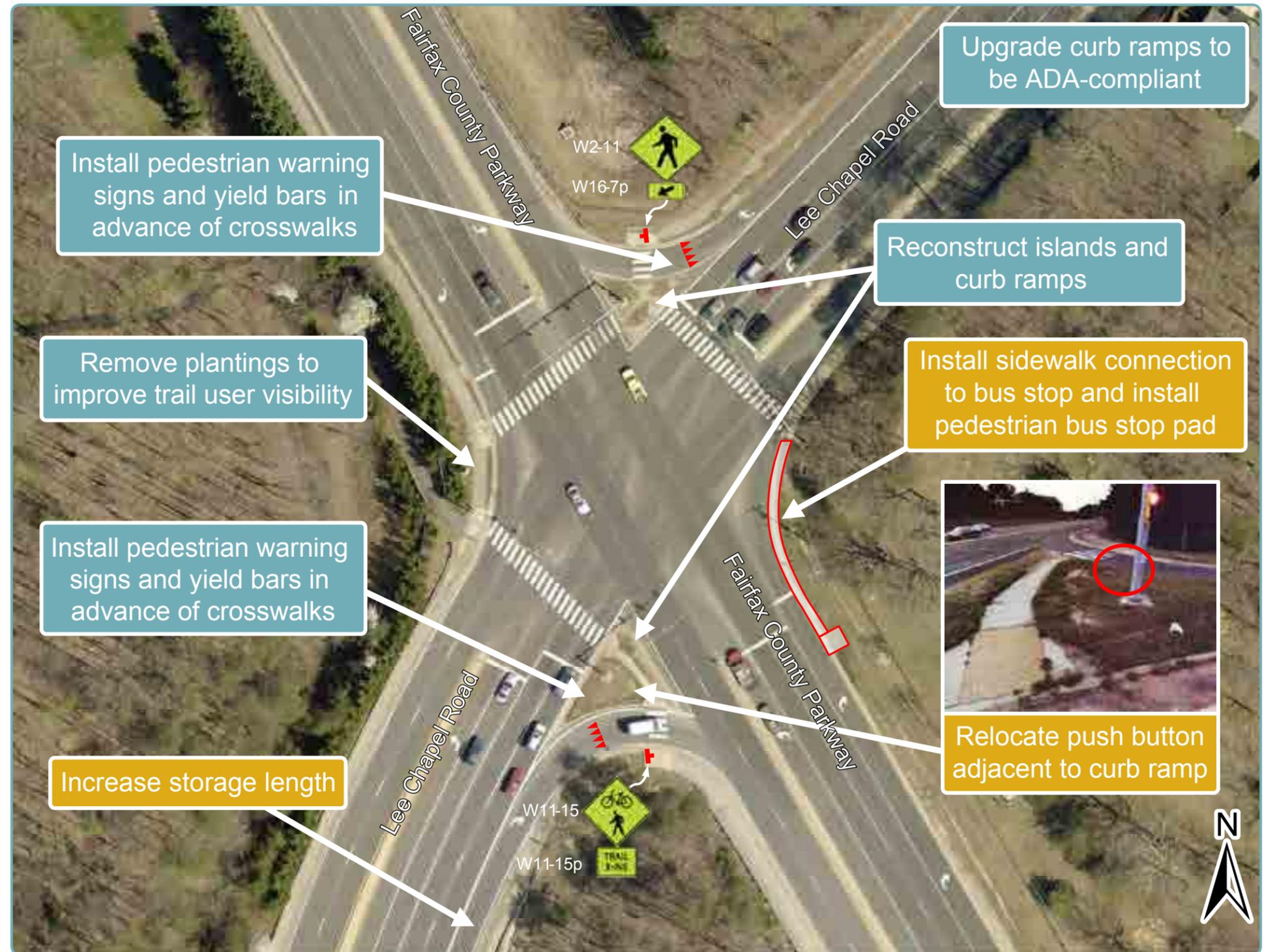
Push button accessibility issue

Eastbound right-turn movement queues block access to the adjacent through lane

The crossing of Lee Chapel Road intersection is most dangerous for southbound trail users as they need to look behind them for right turning vehicles and vegetation blocks the sight line of the right-turn lane.

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

	Construction	Right-of-Way	TOTAL
Low Cost	\$320,000.00	\$120,000.00	\$440,000.00
High Cost	\$450,000.00	\$210,000.00	\$660,000.00

Existing Transportation Issues

ISSUE

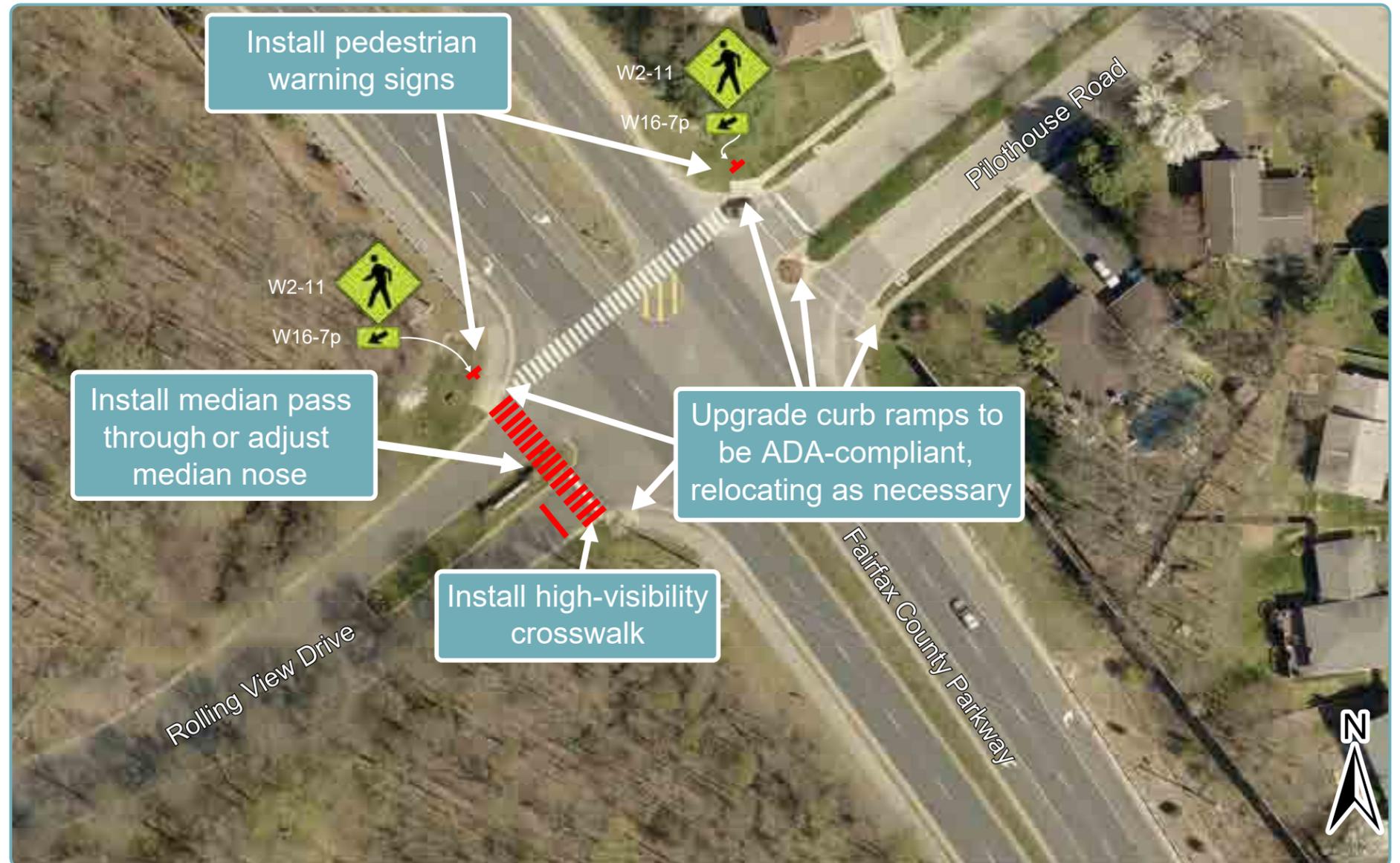
Inconsistent crosswalks for Fairfax County Parkway trail crossing

Existing curb ramps are non-compliant with ADA

Drivers do not stop for pedestrians trying to cross FCP

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$45,000.00
High Cost	\$60,000.00

Existing Transportation Issues

ISSUE
Inconsistent crosswalks for Fairfax County Parkway trail crossing
Existing curb ramps are non-compliant with ADA
No detectable warning surface

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST	
Low Cost	\$20,000.00
High Cost	\$20,000.00

Existing Transportation Issues

ISSUE

Eastbound Old Keene Mill Road lane reduction (east of Fairfax County Parkway) creates merge conflict that queues toward Fairfax County Parkway

Trail continuity not clearly defined

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$510,000.00
High Cost	\$770,000.00

Existing Transportation Issues

ISSUE

No pedestrian signal across west leg

Crosswalk not perpendicular to the roadway

Trail continuity not clearly defined

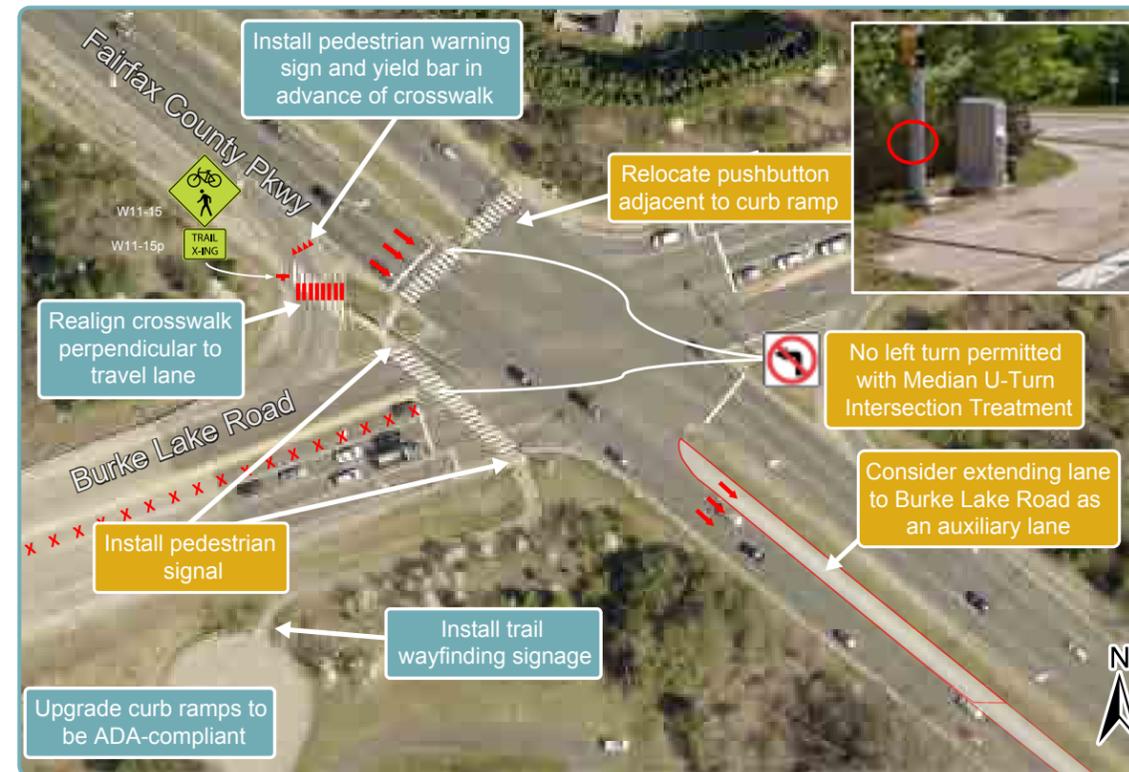
Existing curb ramps are non-compliant with ADA

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Push button accessibility issue

Recommended Improvements

= Capital Improvement Project (CIP)



Intersection Capacity Improvements to Mitigate Congestion



OPINION OF PROBABLE COST

Low Cost	\$1,740,000.00
High Cost	\$2,760,000.00

Existing Transportation Issues

ISSUE

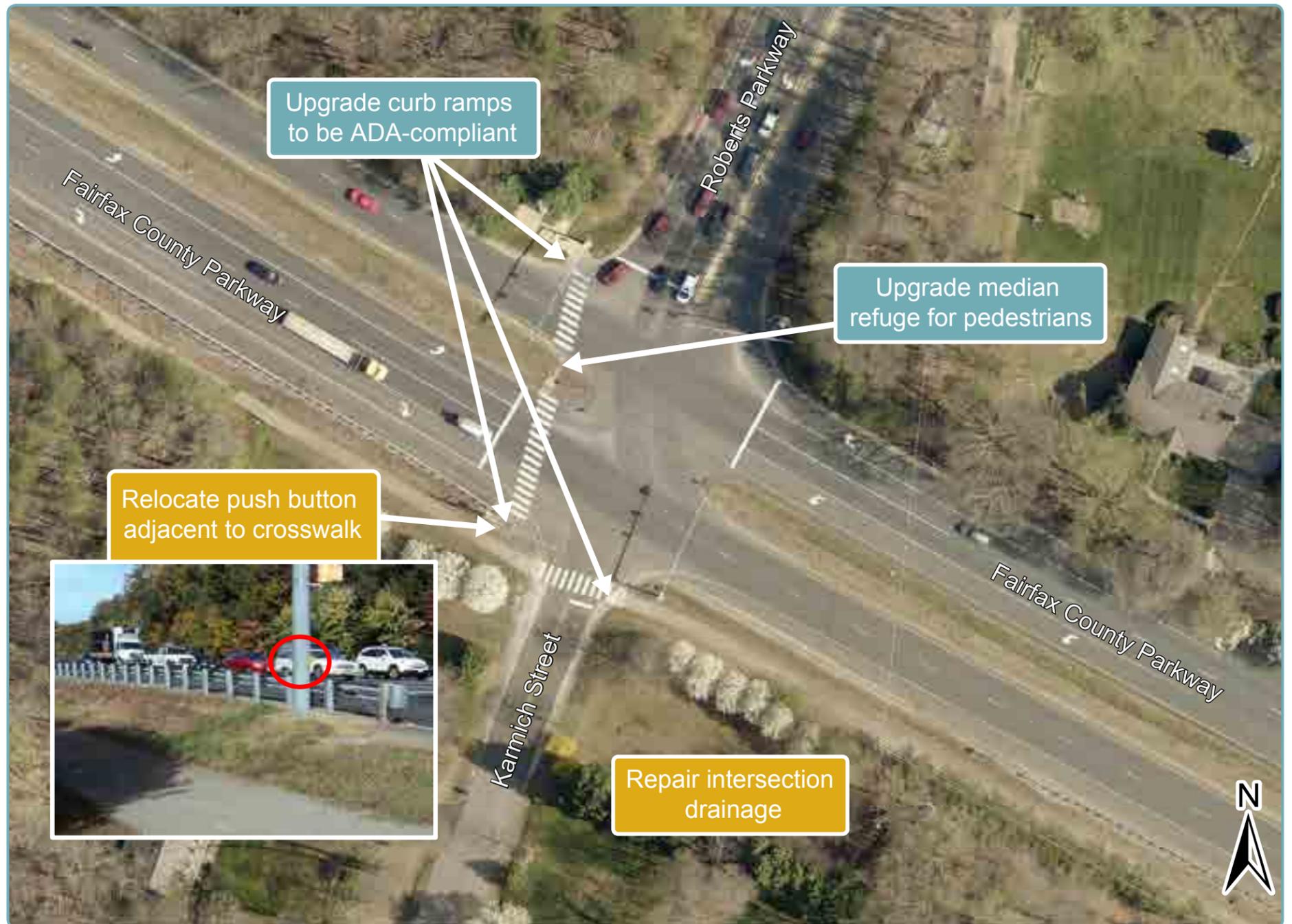
Sediment collecting at all sidewalk ramps

Existing curb ramps are non-compliant with ADA

Push button accessibility issue

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$210,000.00
High Cost	\$250,000.00

Existing Transportation Issues

ISSUE

Unprotected shoulder drop-off and multiuse path in the clear zone

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$4,000.00
High Cost	\$5,000.00

Existing Transportation Issues

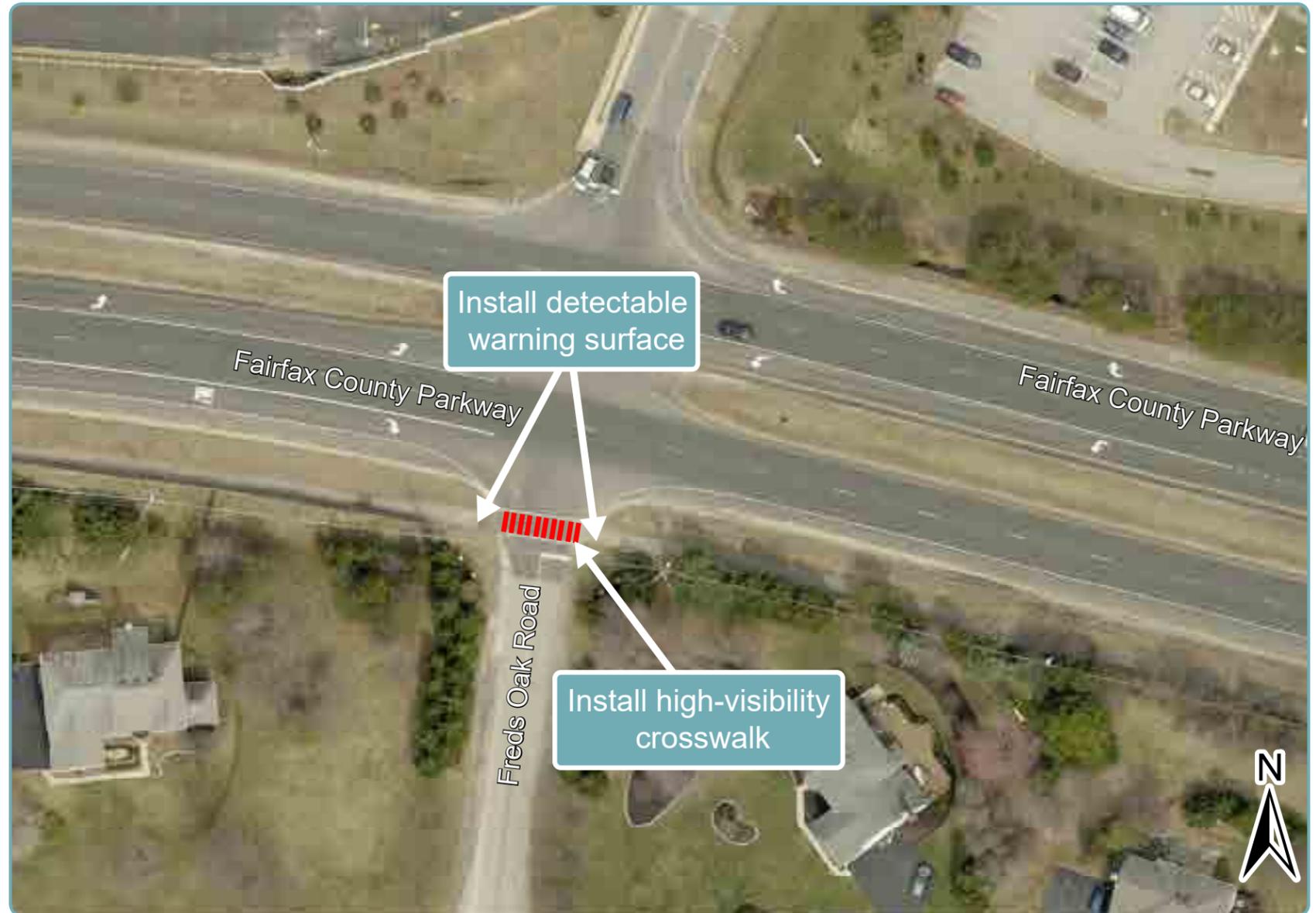
ISSUE

No detectable warning surface

Inconsistent crosswalk marking for Fairfax County Parkway trail crosswalk

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

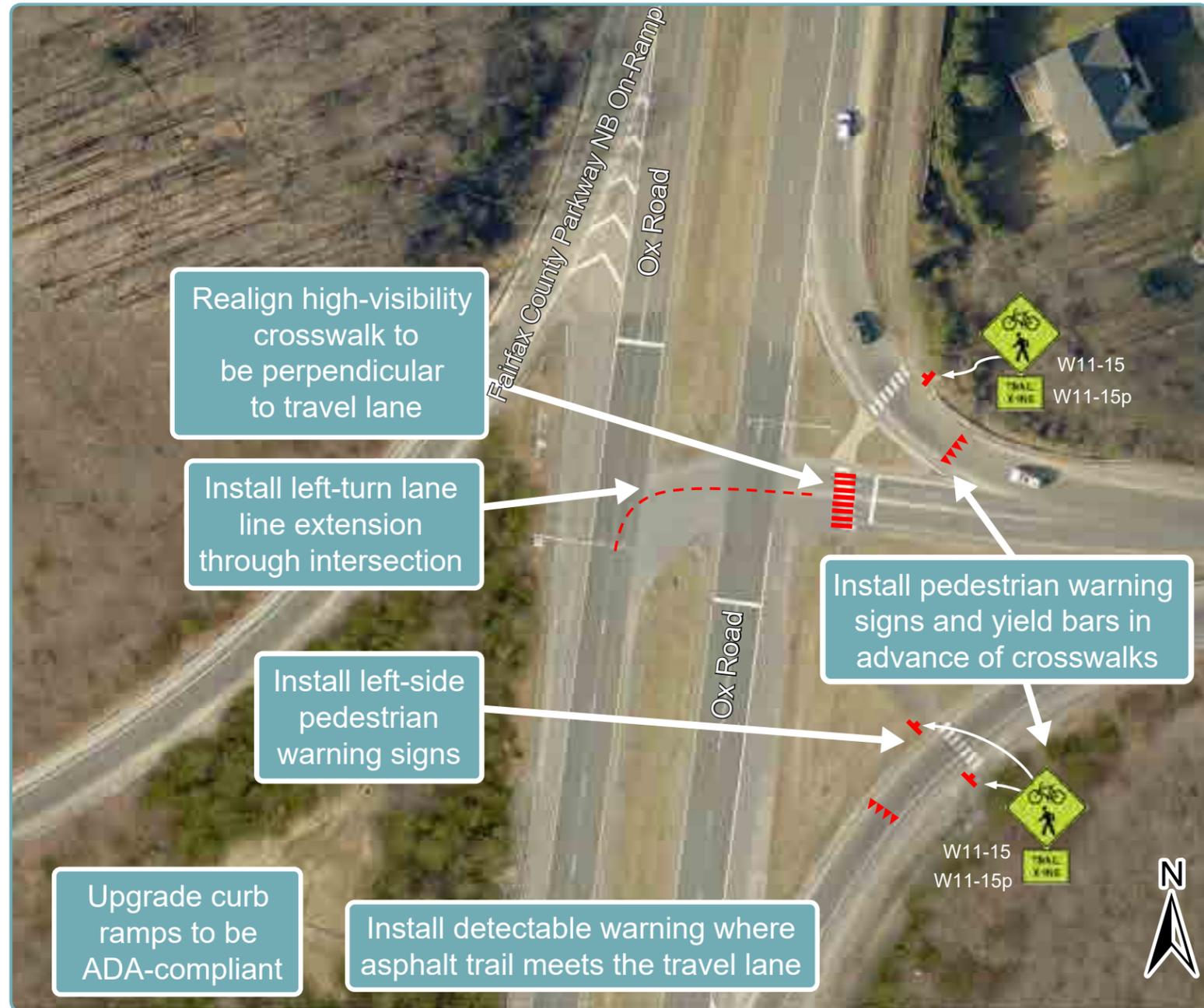
Low Cost	\$5,000.00
High Cost	\$6,000.00

Existing Transportation Issues

ISSUE
Dual left-turn lanes with no channelizing pavement markings through the intersection
Pedestrian crossing of channelized right-turn lane
Crosswalks not perpendicular to the roadway
Existing curb ramps are non-compliant with ADA
No detectable warning surface
Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$25,000.00
High Cost	\$35,000.00

Existing Transportation Issues

ISSUE

Crosswalks not perpendicular to the roadway across right-turn lane

Crosswalks are only 6 feet wide

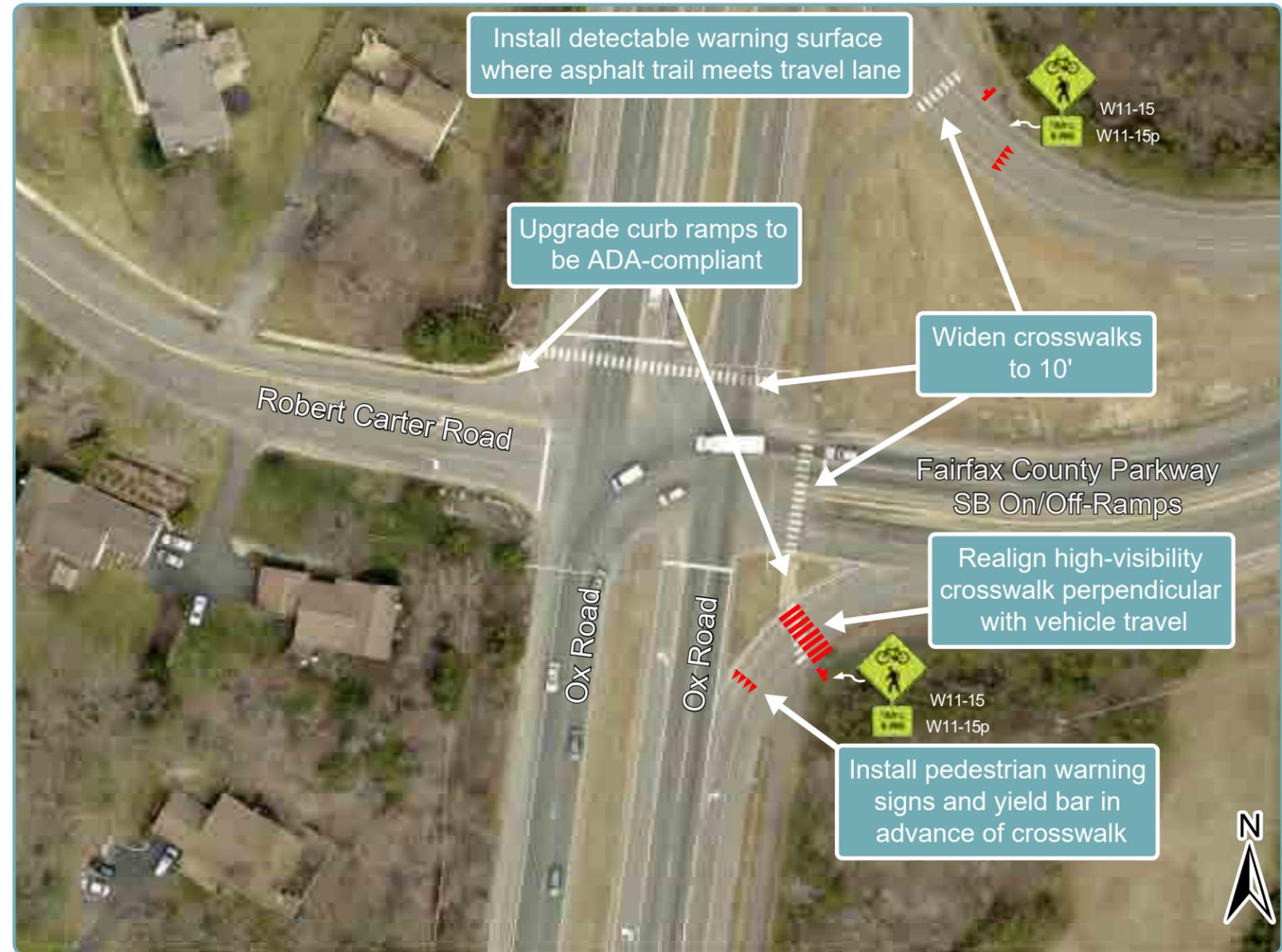
Existing curb ramps are non-compliant with ADA

No detectable warning surface

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

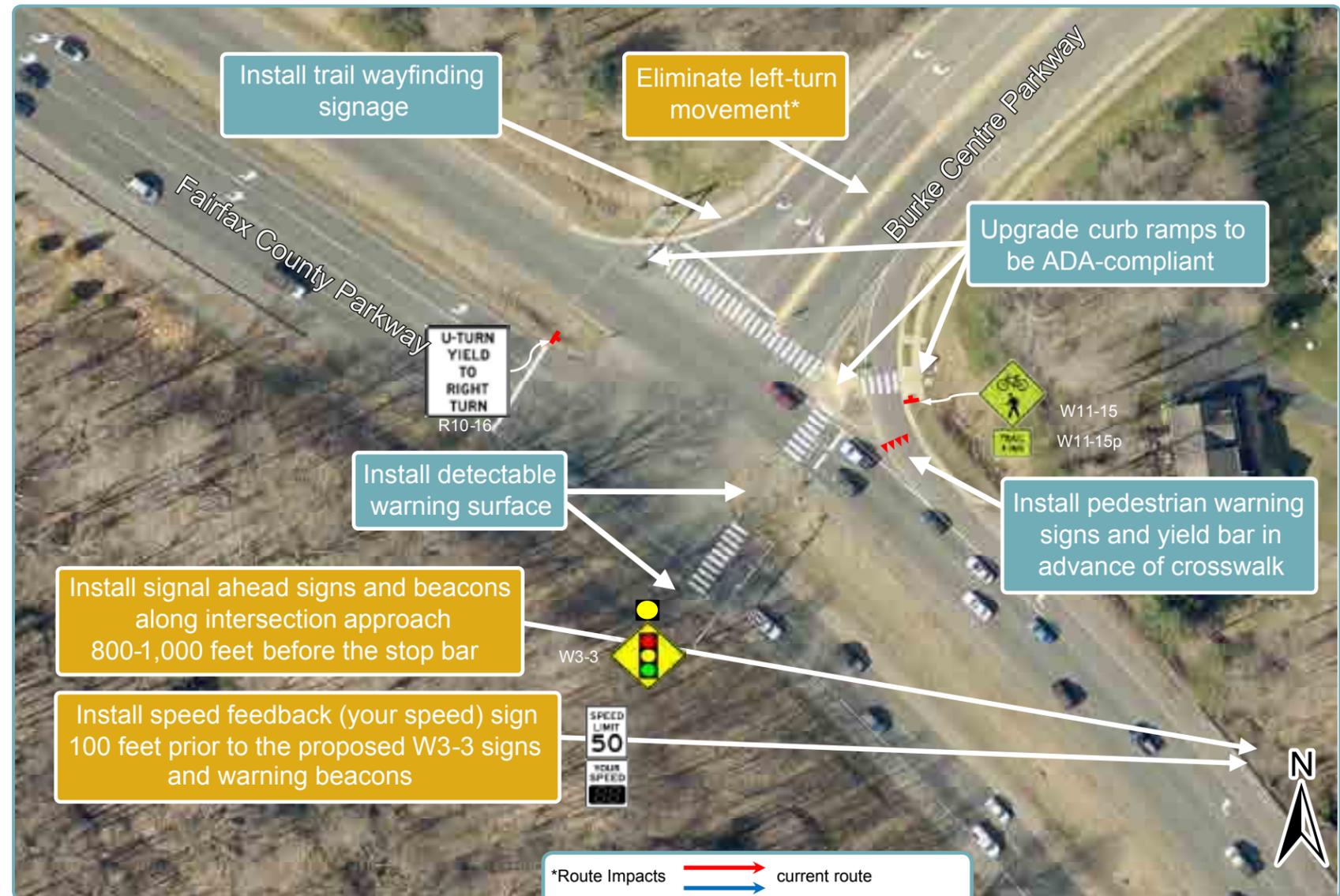
Low Cost	\$60,000.00
High Cost	\$70,000.00

Existing Transportation Issues

ISSUE

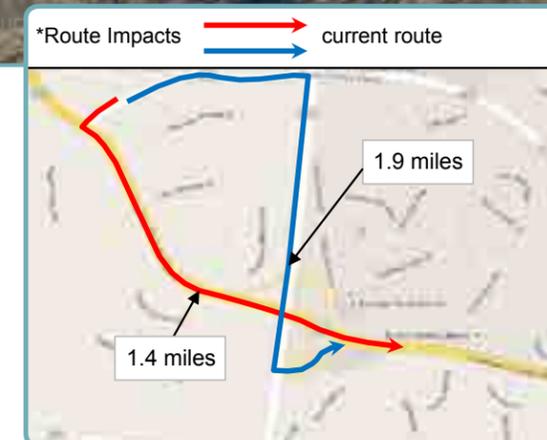
- Sediment collects on curb ramps
- Southbound U-Turn conflict with westbound right-turn
- Northbound horizontal and vertical curves may obstruct sight distance to queued vehicles
- Vertical grade in the northbound direction encourages high speeds
- Low left-turn volume westbound from Burke Centre Parkway interrupts high volume through movements
- Trail continuity not clearly defined
- Existing curb ramps are non-compliant with ADA
- No detectable warning surface
- Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Recommended Improvements = Capital Improvement Project (CIP)



Repair intersection drainage

Install retroreflective backplates on all signals



OPINION OF PROBABLE COST

Low Cost	\$530,000.00
High Cost	\$640,000.00

Existing Transportation Issues

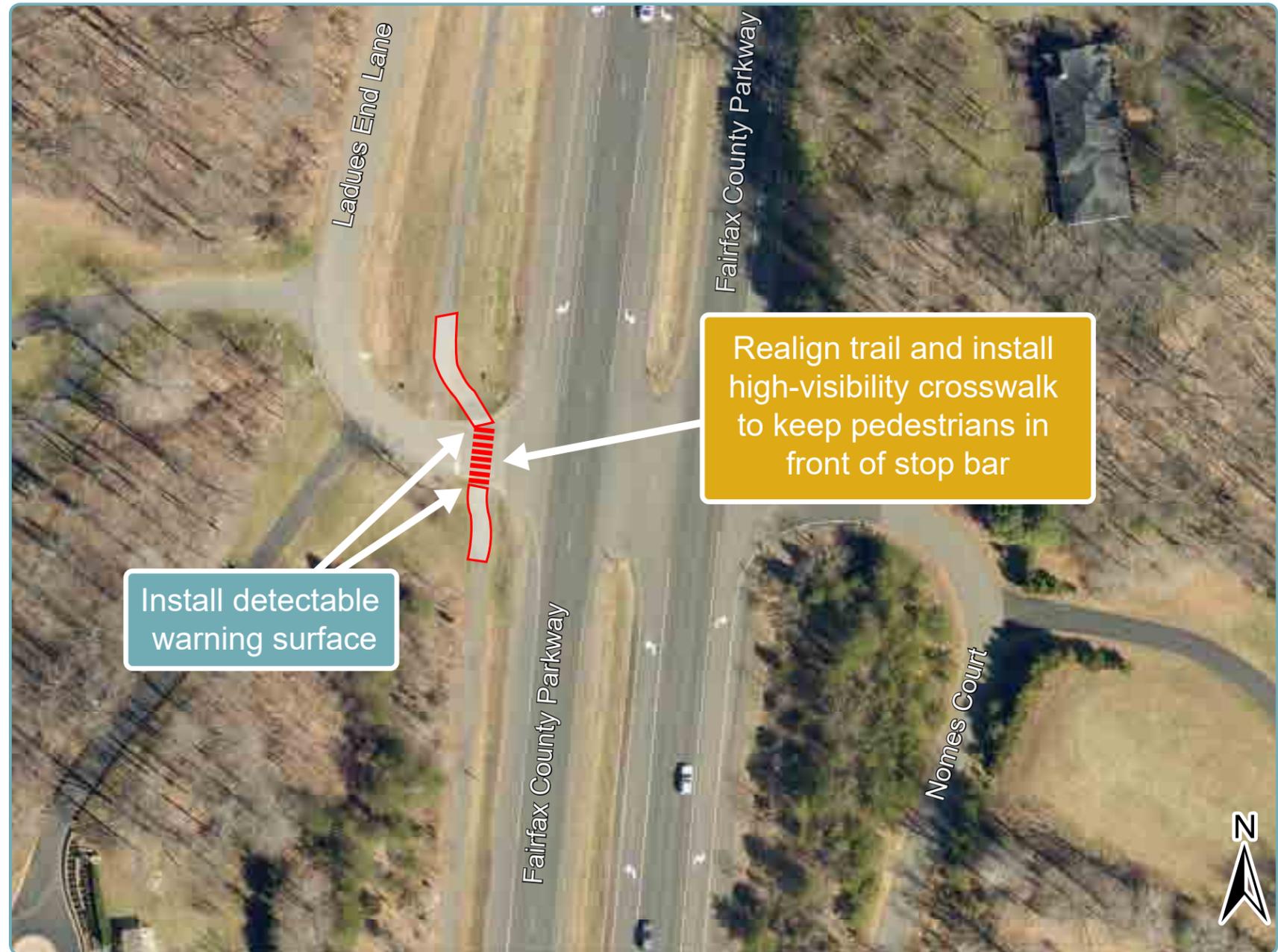
ISSUE

Pedestrian trailhead terminates behind the eastbound stop bar

No detectable warning surface

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$2,000.00
High Cost	\$2,000.00

4631 – Fairfax County Parkway at Colchester Meadow Lane



Existing Transportation Issues

ISSUE

No detectable warning surface

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$2,000.00
High Cost	\$2,000.00

Existing Transportation Issues

ISSUE

Operational and safety issues caused by high volume of left turns

Volume of traffic along Fairfax County Parkway exceeds the capacity of the intersection

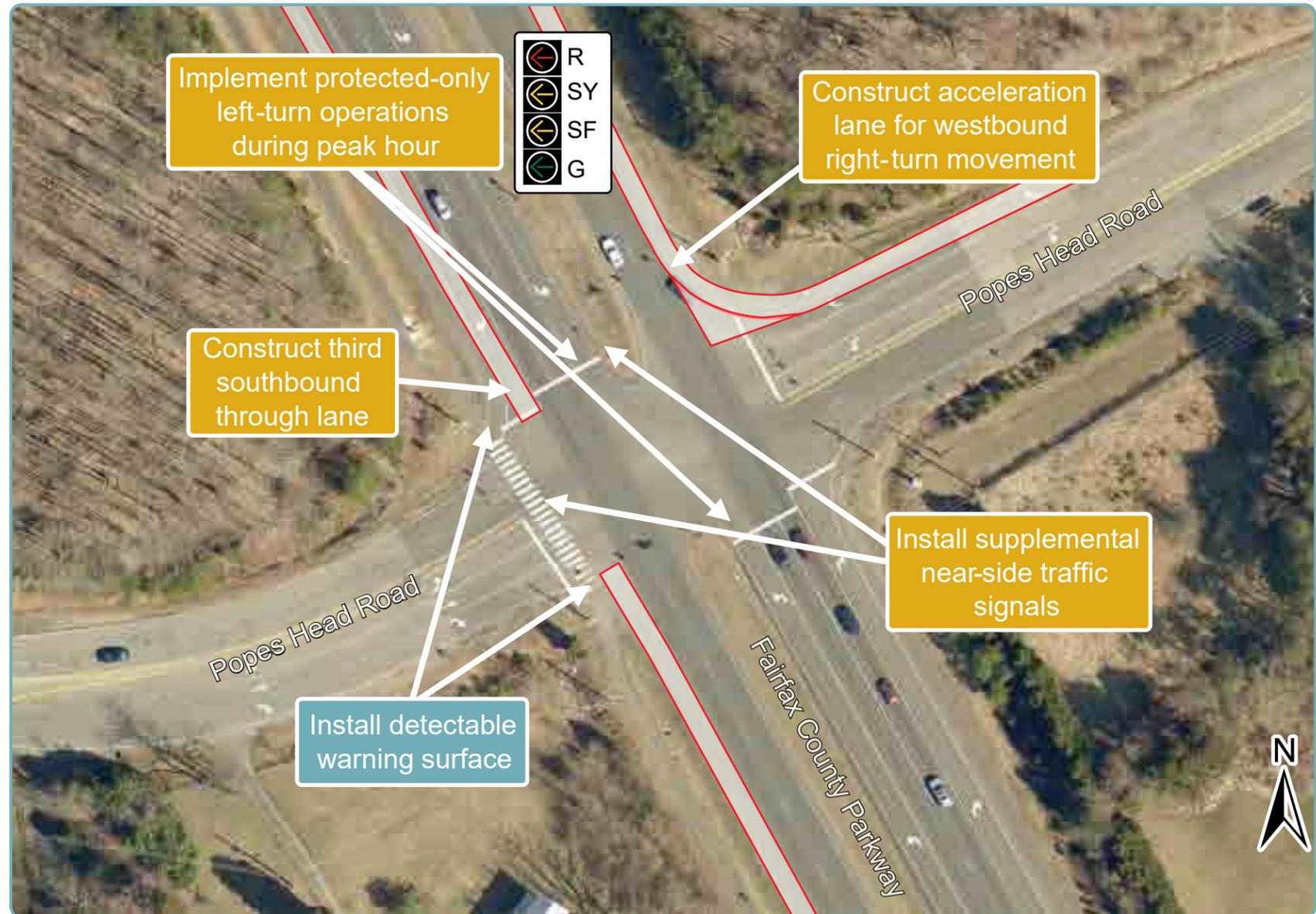
Limited signal visibility due to horizontal curves and dense vegetation

High volume of westbound right-turn movements

No detectable warning surface

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$3,070,000.00	\$1,630,000.00	\$4,700,000.00
High Cost	\$4,610,000.00	\$3,150,000.00	\$7,760,000.00

Existing Transportation Issues

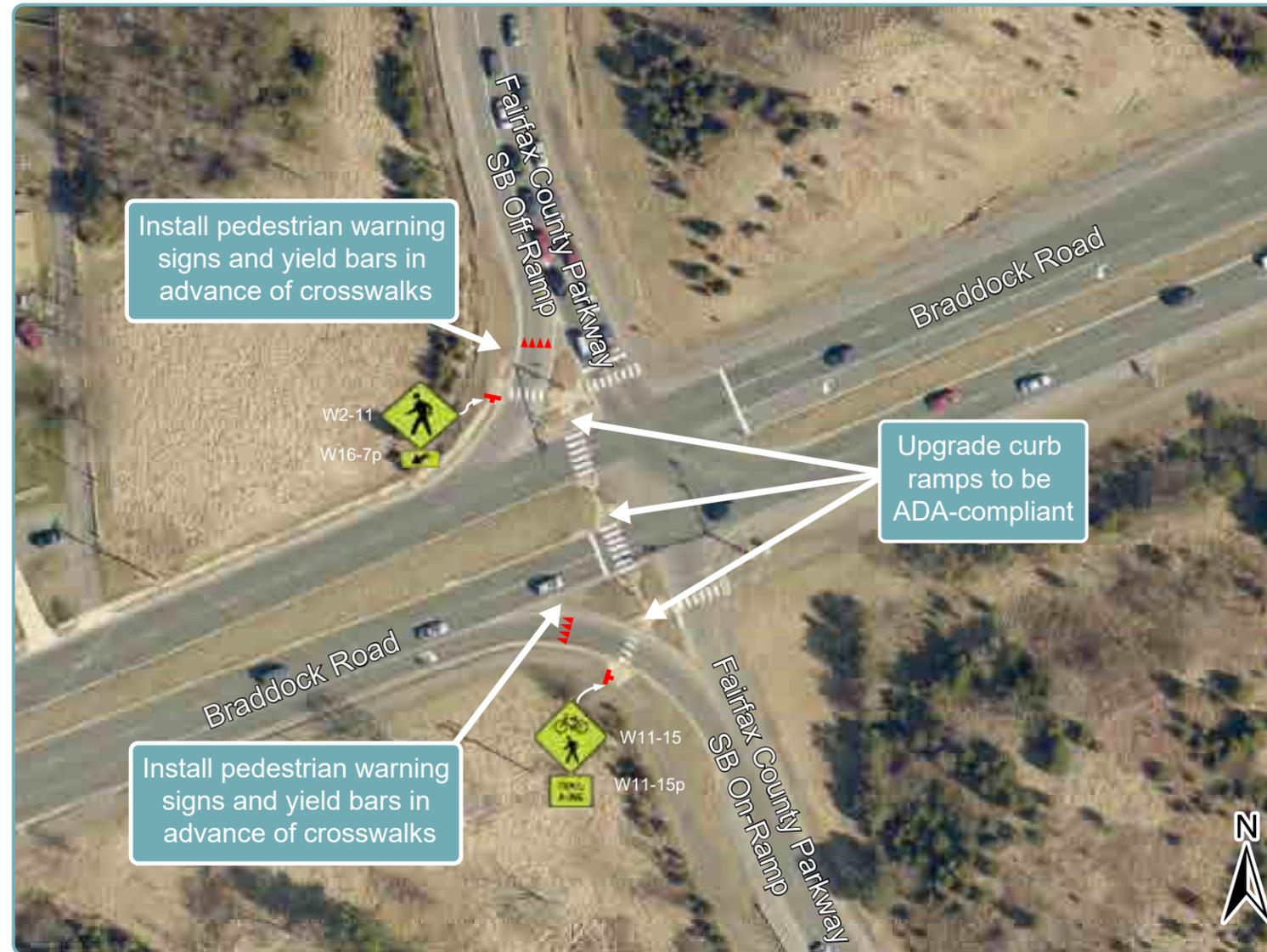
ISSUE

Existing curb ramps are non-compliant with ADA

Inconsistent signage/markings for channelized right-turn lane/ pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

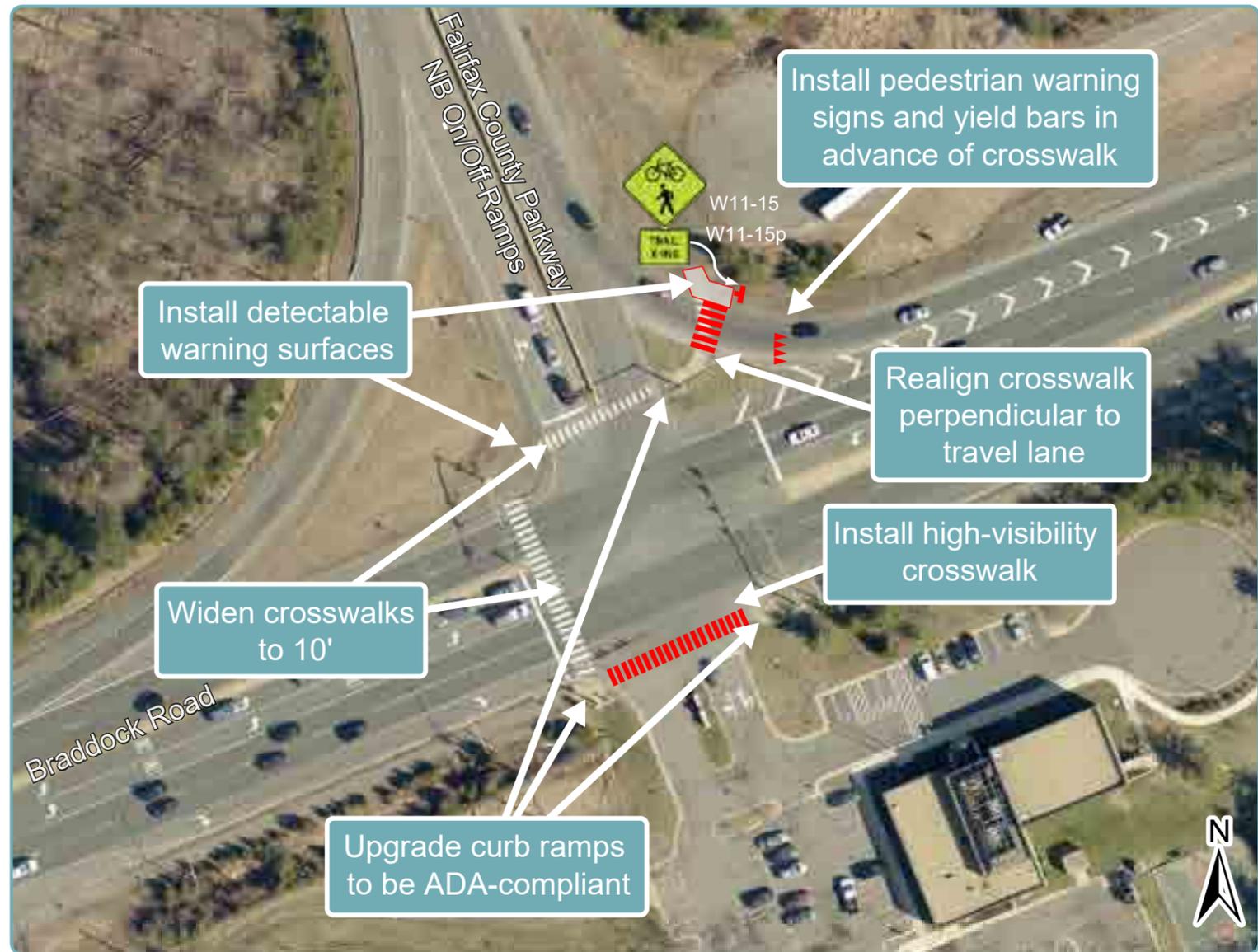
Low Cost	\$60,000.00
High Cost	\$70,000.00

Existing Transportation Issues

ISSUE
No crosswalk provided across Mott Community Center entrance
Existing curb ramps are non-compliant with ADA
No detectable warning surface
Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict
Crosswalks are only 6 feet wide

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST	
Low Cost	\$45,000.00
High Cost	\$50,000.00

Existing Transportation Issues

ISSUE

Short distance between signalized intersections limits conspicuity of traffic signal heads

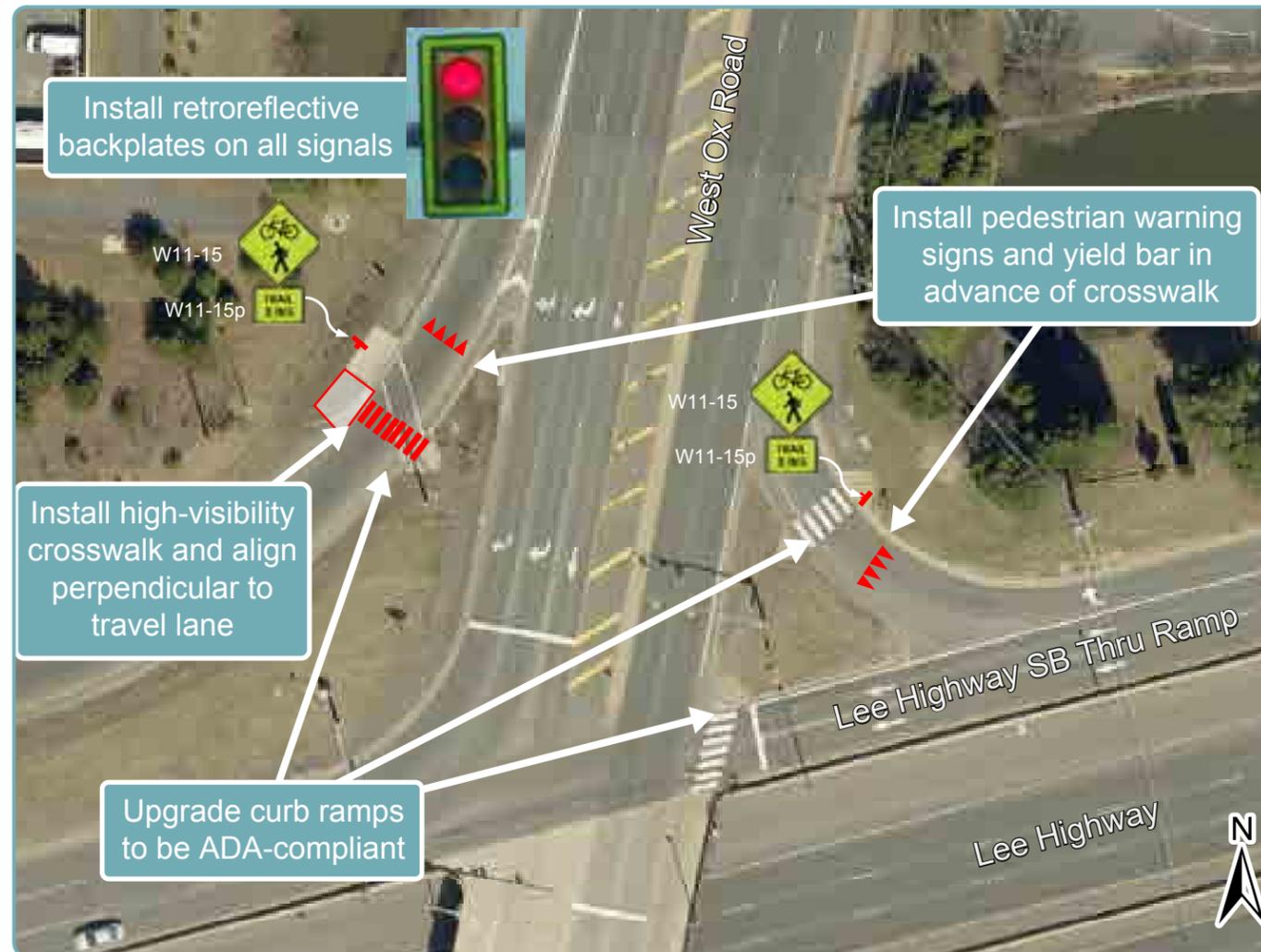
Existing curb ramps are non-compliant with ADA

Low-visibility crosswalk; crosswalk not perpendicular to travel lane

Inconsistent signage/markings for channelized right-turn lane/ pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$70,000.00
High Cost	\$80,000.00

Existing Transportation Issues

ISSUE

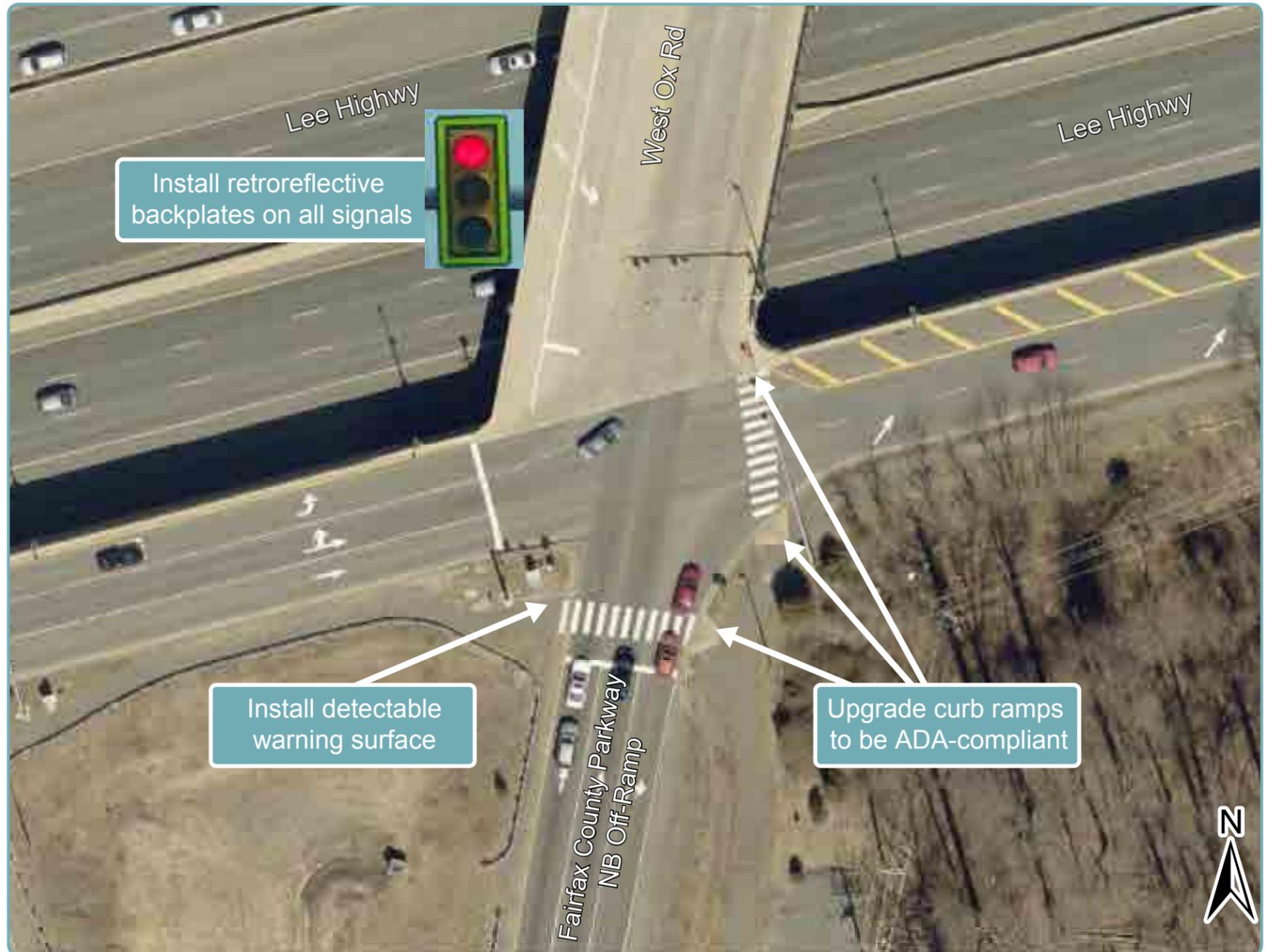
Short distance between signalized intersections limits conspicuity of traffic signal heads

Existing curb ramps are non-compliant with ADA

No detectable warning surface

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$40,000.00
High Cost	\$50,000.00

Existing Transportation Issues

ISSUE

Short distance between signalized intersections may limit driver perception-reaction time

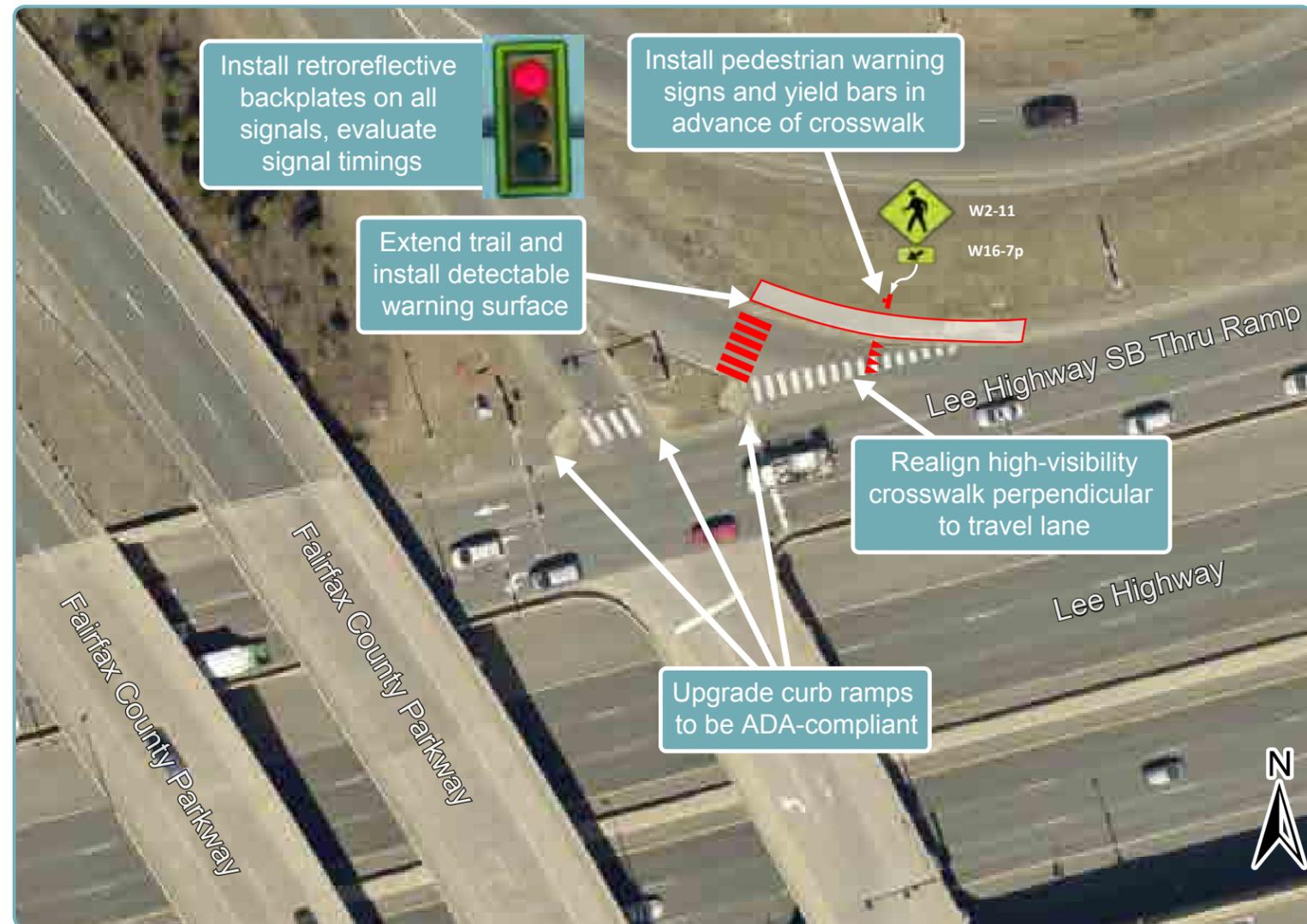
Short distance between signalized intersections limits conspicuity of traffic signal heads

Existing curb ramps are non-compliant with ADA

Skewed crosswalk of inconsistent width

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$120,000.00
High Cost	\$170,000.00

Existing Transportation Issues

ISSUE

Short distance between signalized intersections limits conspicuity of traffic signal heads

Existing curb ramps are non-compliant with ADA

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$30,000.00
High Cost	\$35,000.00

Existing Transportation Issues

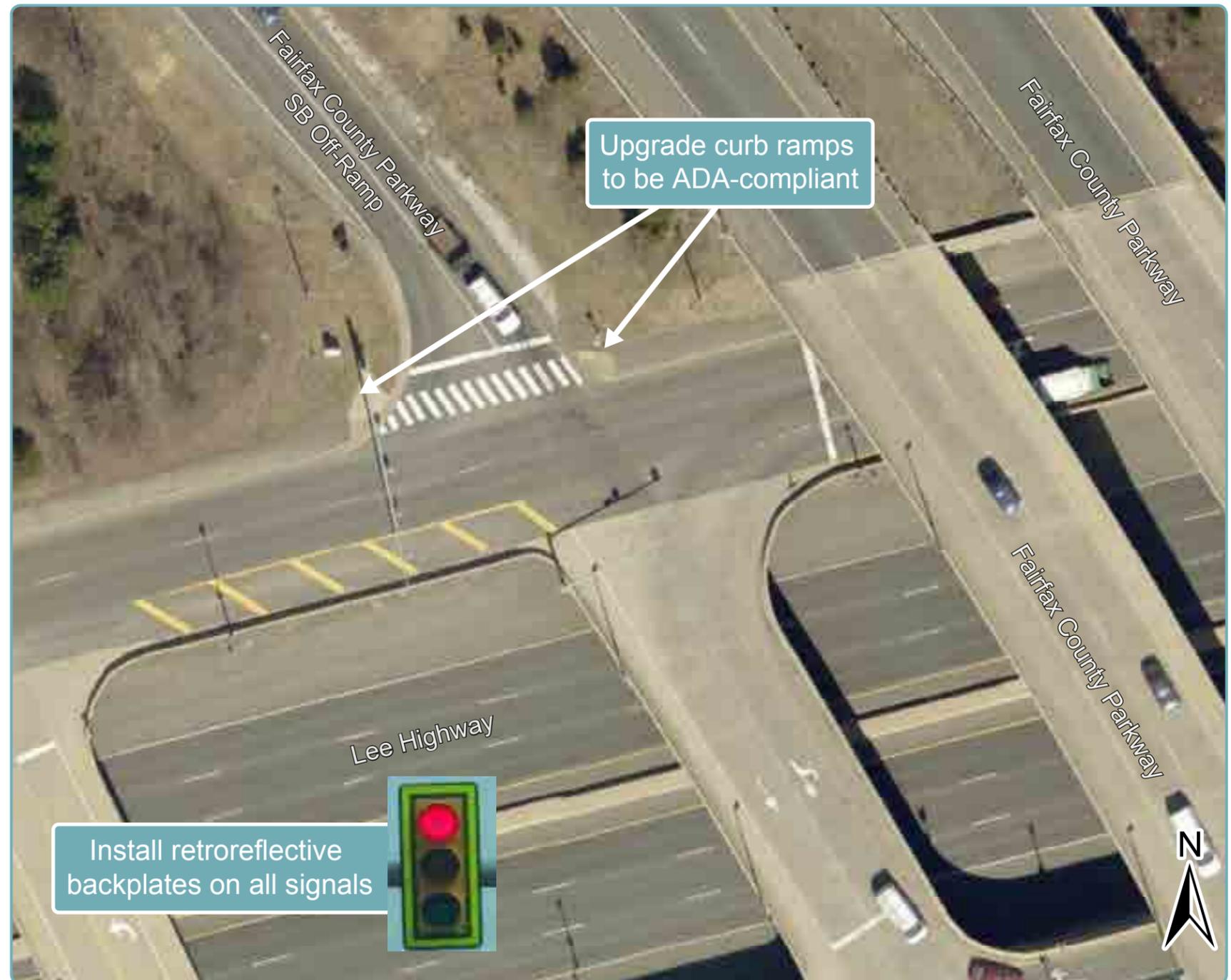
ISSUE

Short distance between signalized intersections limits conspicuity of traffic signal heads

Existing curb ramps are non-compliant with ADA

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$30,000.00
High Cost	\$35,000.00

Existing Transportation Issues

ISSUE

Short distance between signalized intersections limits conspicuity of traffic signal heads

Existing curb ramps are non-compliant with ADA

Recommended Improvements

= Capital Improvement Project (CIP)



Install retroreflective backplates on all signals



OPINION OF PROBABLE COST

Low Cost	\$30,000.00
High Cost	\$35,000.00

5000 – Fairfax County Parkway at I-66 Interchange

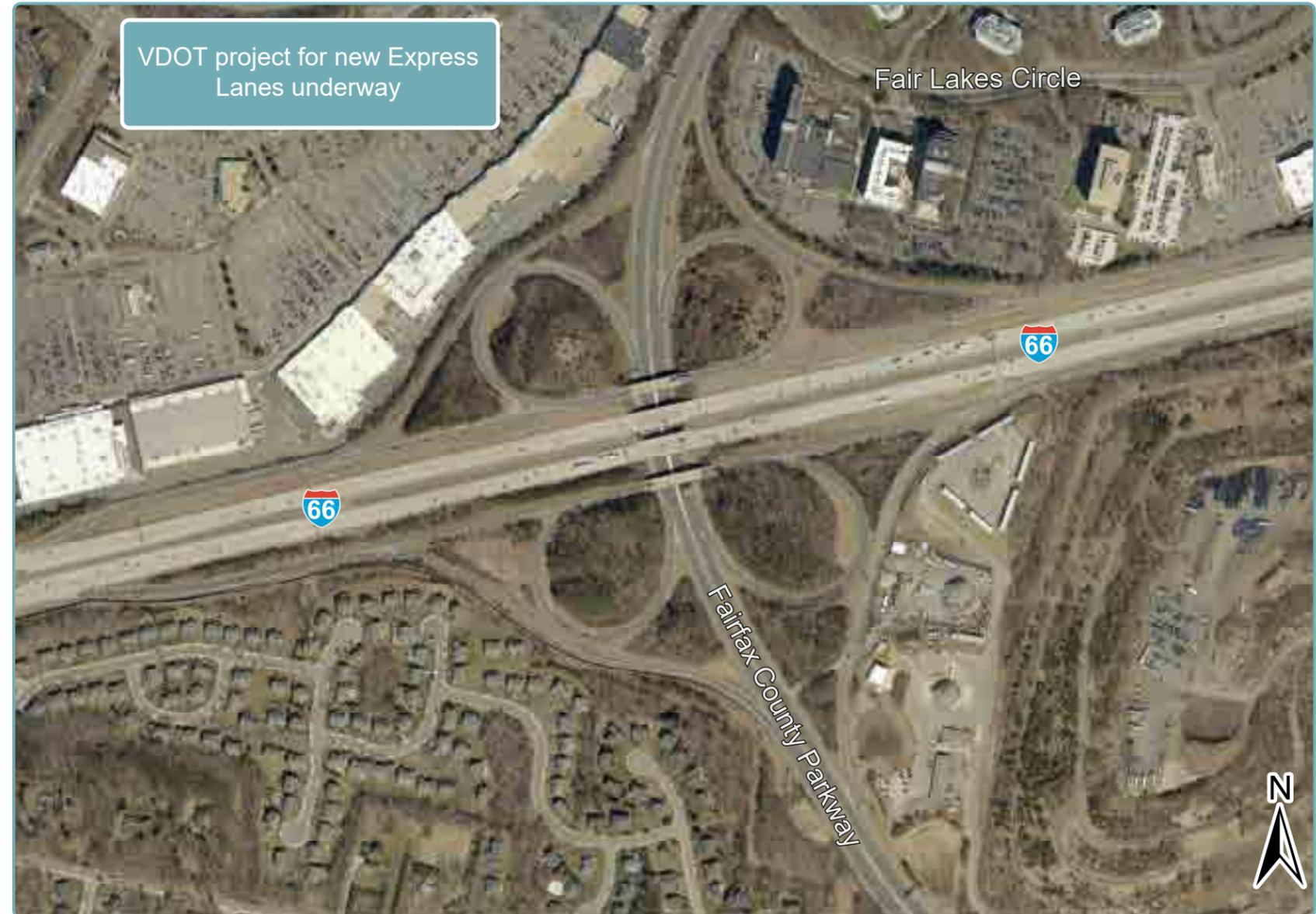


Existing Transportation Issues

ISSUE

Heavy congestion on I-66 ramps during peak travel periods*

* VDOT project (UPC 105500) underway to evaluate new Express Lanes and multimodal solutions for I-66 outside the I-495 Capital Beltway. <http://www.transform66.org>



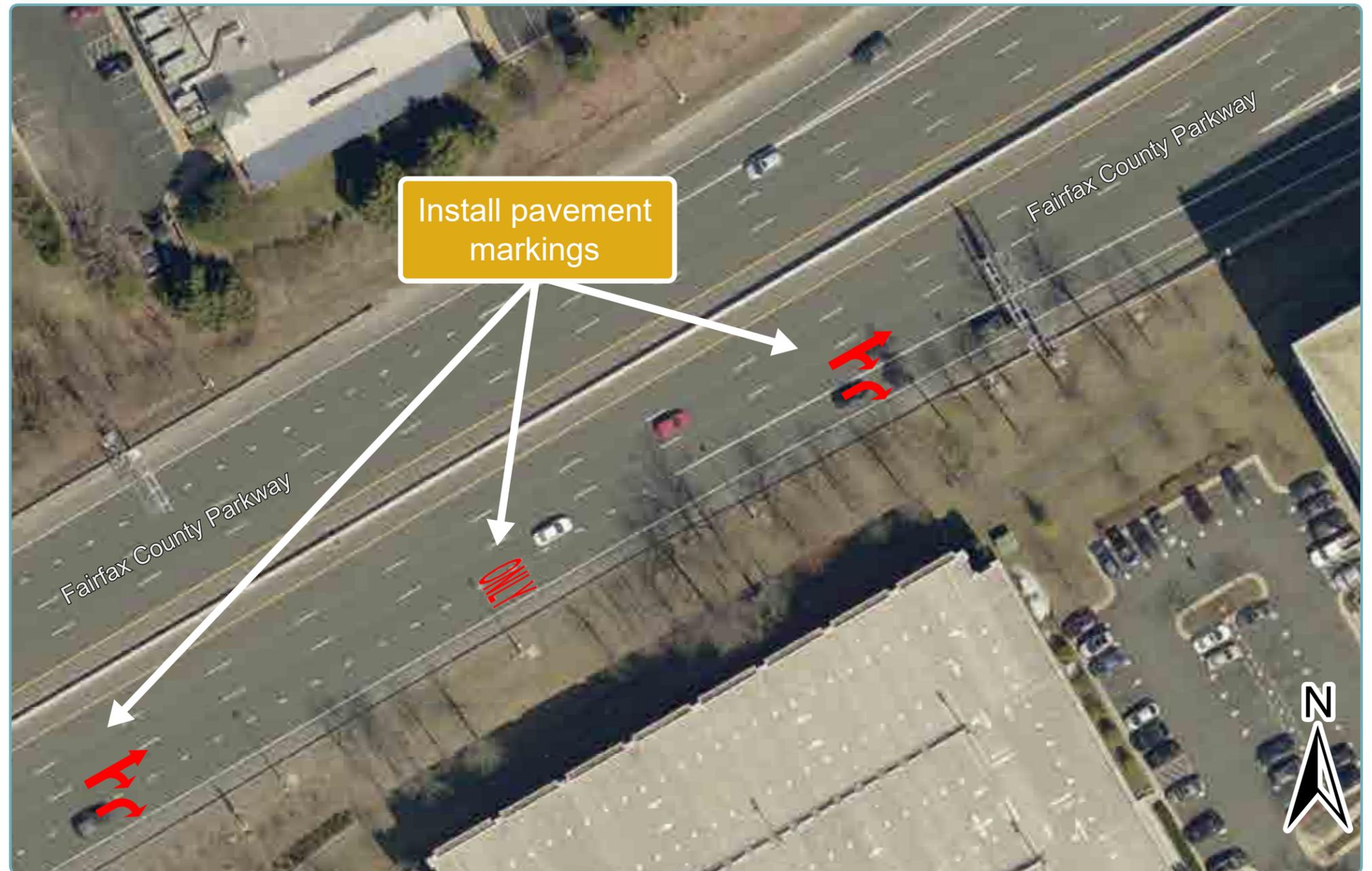
Existing Transportation Issues

ISSUE

Limited notification of the off-ramp to Fair Lakes Parkway and unclear lane designations on FCP

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$1,000.00
High Cost	\$2,000.00

Existing Transportation Issues

ISSUE

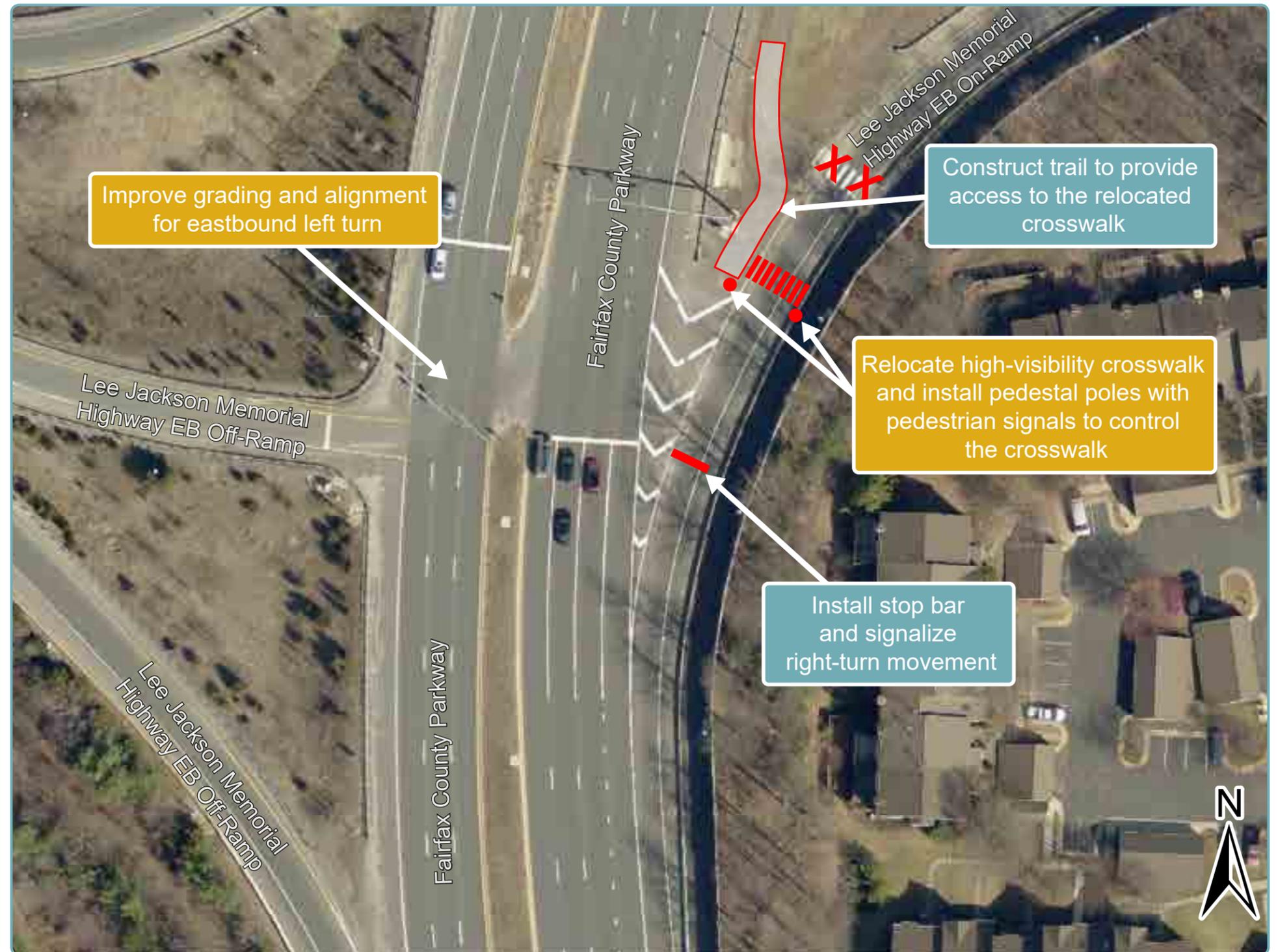
Scarring on roadway indicates eastbound left-turning vehicles are making contact with the roadway

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Uncontrolled crosswalk across the free-flow ramp to Eastbound Route 50 is difficult to cross with limited sight distance

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$140,000.00
High Cost	\$180,000.00

Existing Transportation Issues

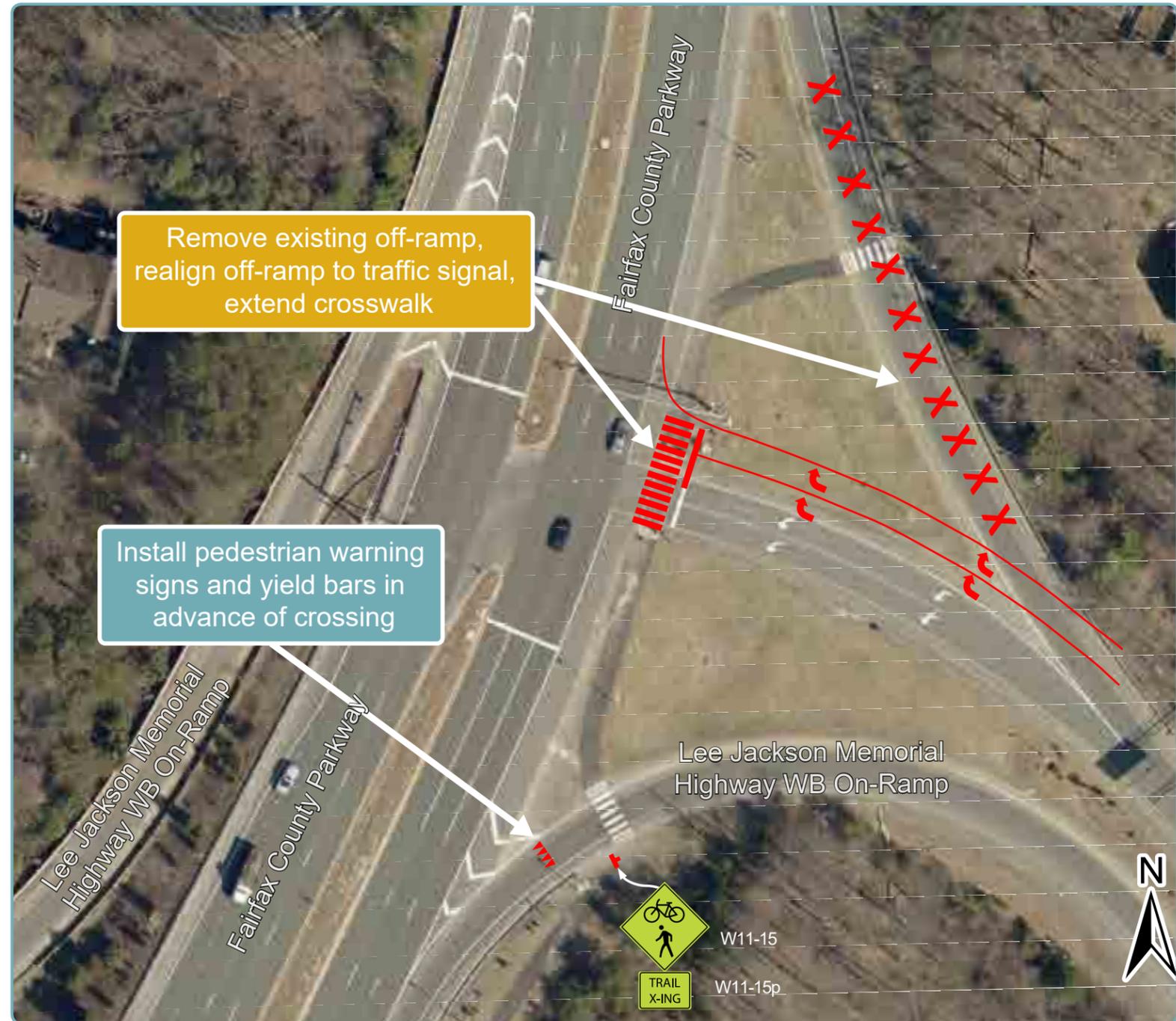
ISSUE

Inconsistent signage/markings for channelized right-turn lane/ pedestrian crossing conflict

Uncontrolled crosswalk across the free-flow ramp from Westbound Route 50 is difficult to cross with limited sight distance

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$150,000.00
High Cost	\$210,000.00

Existing Transportation Issues

ISSUE

Sight distance limited for eastbound right-turn movement due to grade, roadside structures, and vegetation

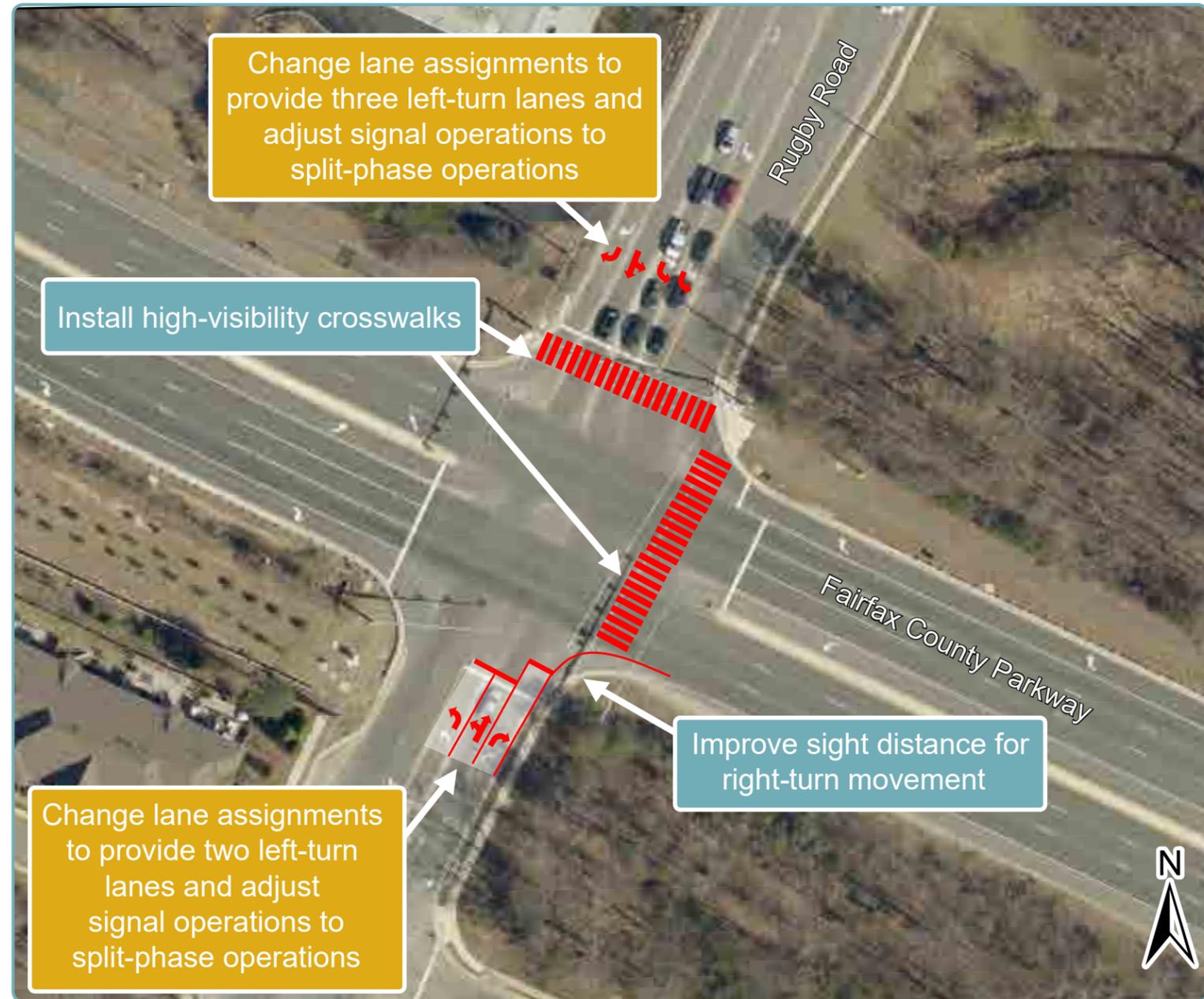
Low-visibility crosswalks

Heavy westbound left-turn and through volumes opposed by low eastbound volume

Operational issues caused by high westbound left-turn volume

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$100,000.00
High Cost	\$130,000.00

Existing Transportation Issues

ISSUE

No stop bar on eastbound approach

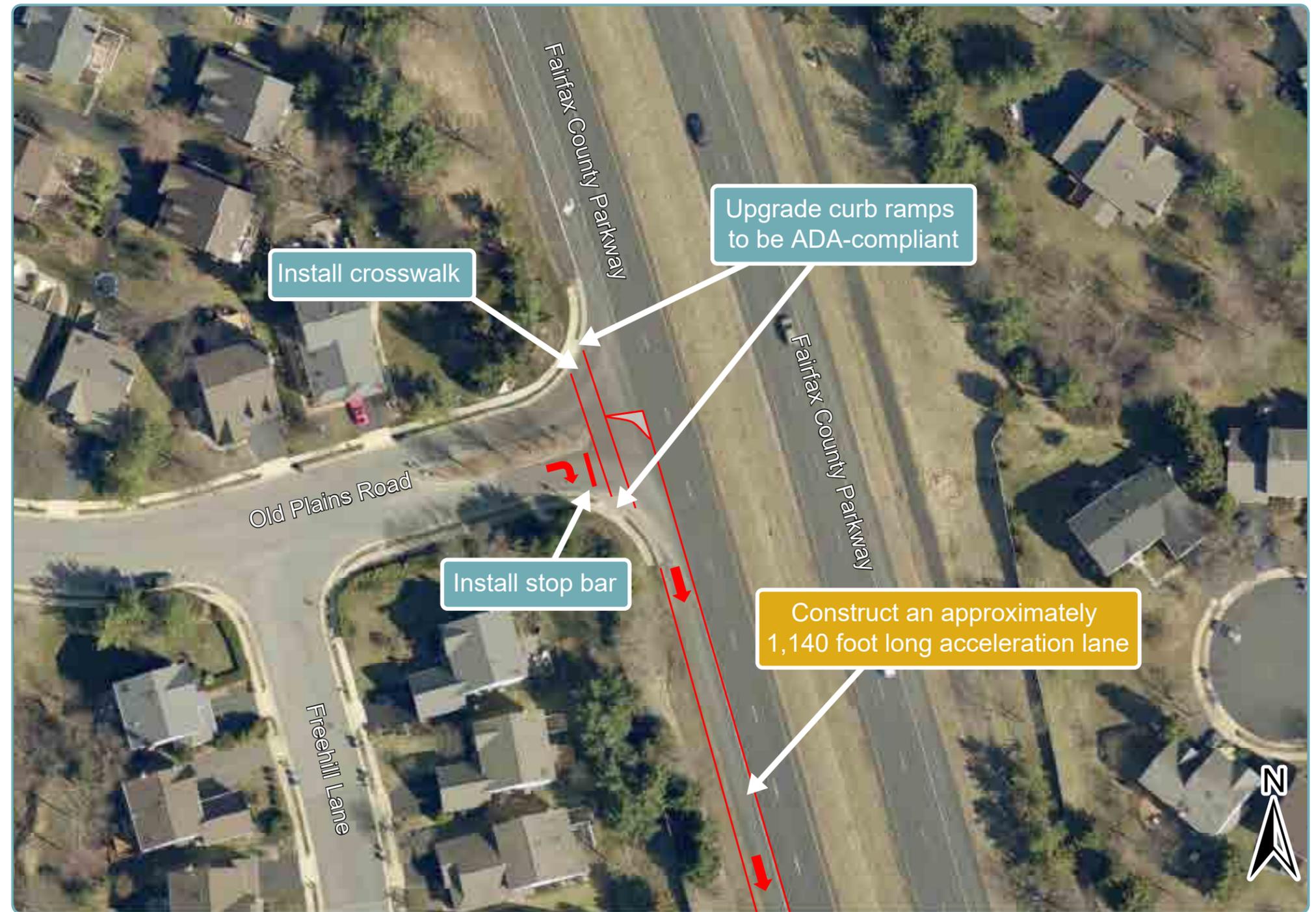
Existing curb ramps are non-compliant with ADA

No crosswalk across Old Plains Road

Difficult access onto SB FCP for the eastbound right-turn movement

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$740,000.00	\$540,000.00	\$1,280,000.00
High Cost	\$1,110,000.00	\$1,370,000.00	\$2,480,000.00

5621 – Fairfax County Parkway at Stringfellow Road/Stringfellow Court

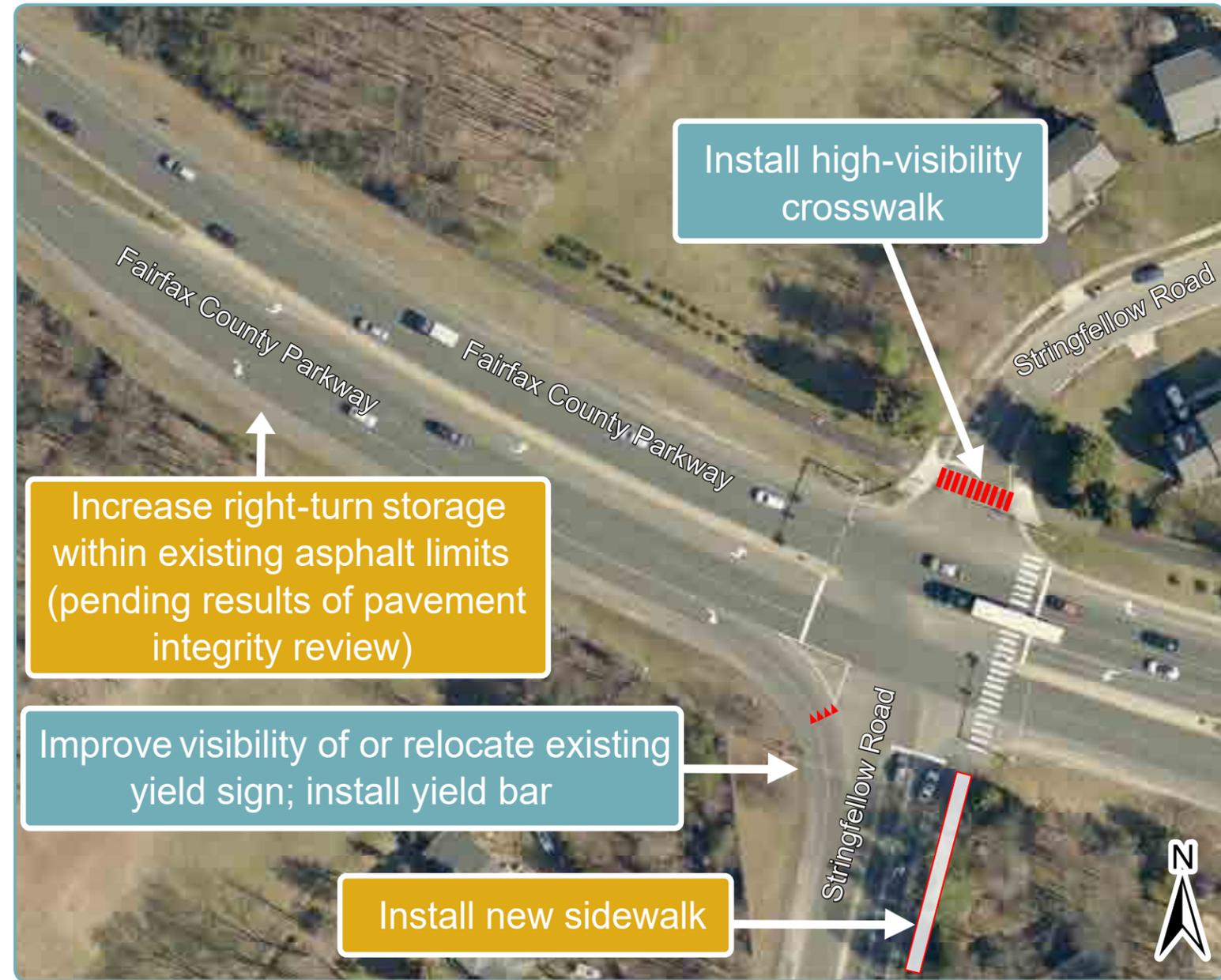


Existing Transportation Issues

ISSUE
Southbound right-turn yield sign not conspicuous
Right-turn vehicles driving along the shoulder to access turn lane
Inconsistent crosswalk marking for Fairfax County Parkway trail crosswalk
No sidewalk along Stringfellow Road between Coralberry Drive and the existing crosswalk across Fairfax County Parkway

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$45,000.00
High Cost	\$100,000.00

Existing Transportation Issues

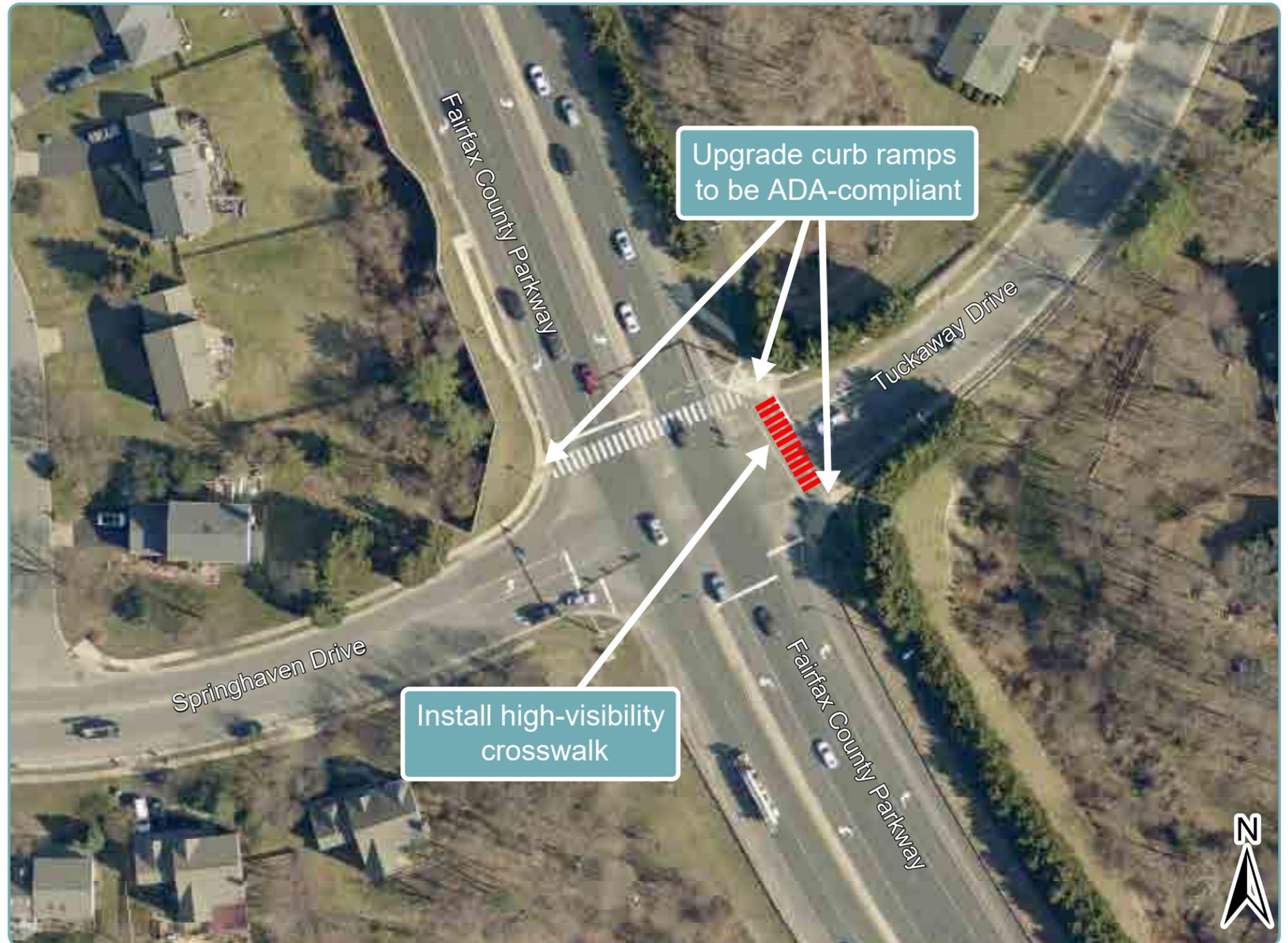
ISSUE

Existing curb ramps are non-compliant with ADA

Inconsistent crosswalk marking for Fairfax County Parkway trail crosswalk

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$25,000.00
High Cost	\$30,000.00

Existing Transportation Issues

ISSUE

Eastbound through movement vehicle queues block access to the left-turn lane

Northbound and southbound left-turn vehicles spill out of the available turn lanes

Eastbound left-turn and southbound right-turn vehicles spill out of the available turn lanes

Heavy eastbound right-turn volume

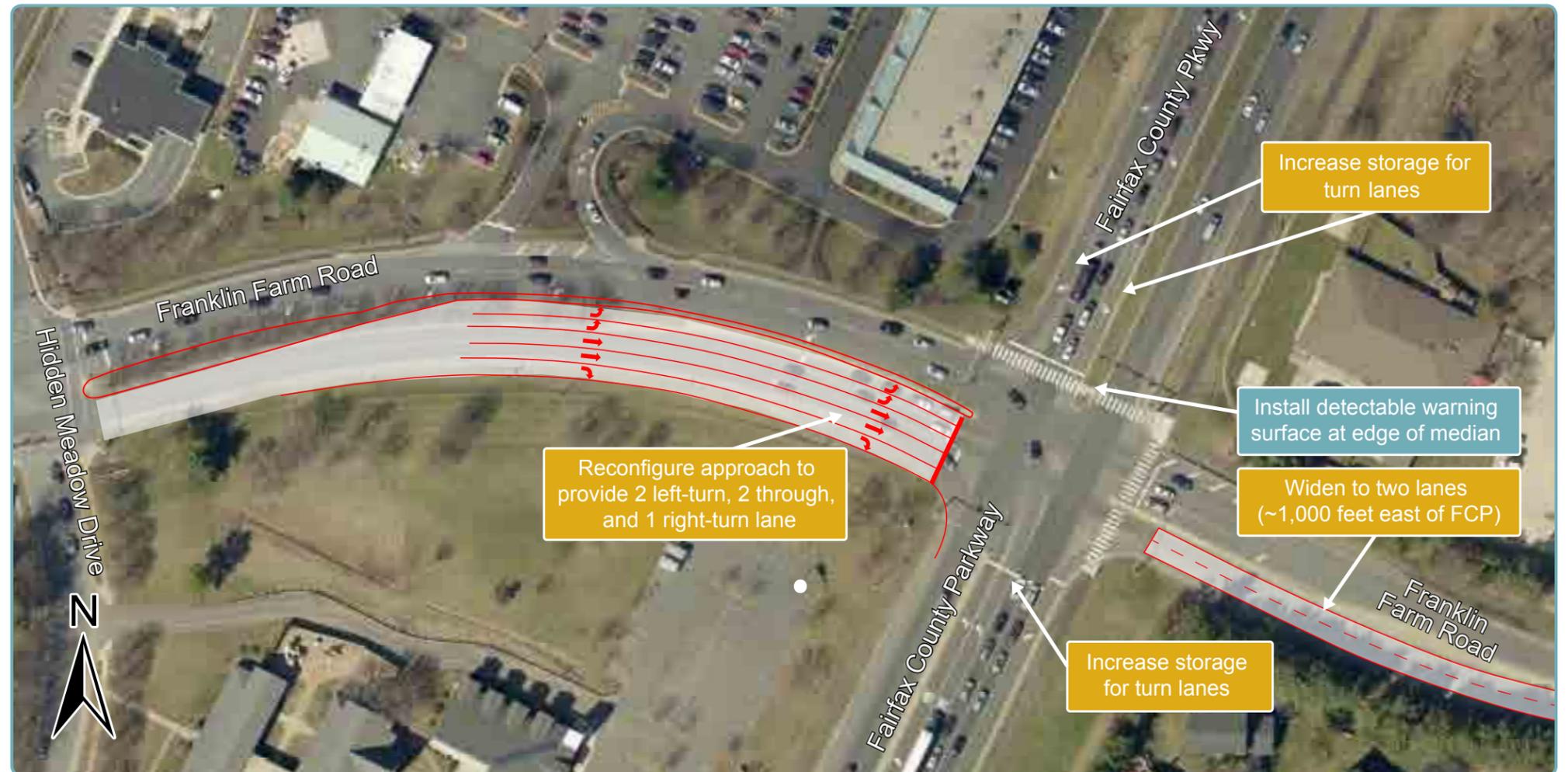
No detectable warning surface

The westbound left-turn lane at Franklin Farm Road and Hidden Meadow Drive is underutilized

Queues approaching FCP extend nearly to Centreville Road and right-turn queue lengths extend beyond available storage

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$1,130,000.00	\$340,000.00	\$1,470,000.00
High Cost	\$1,690,000.00	\$650,000.00	\$2,340,000.00

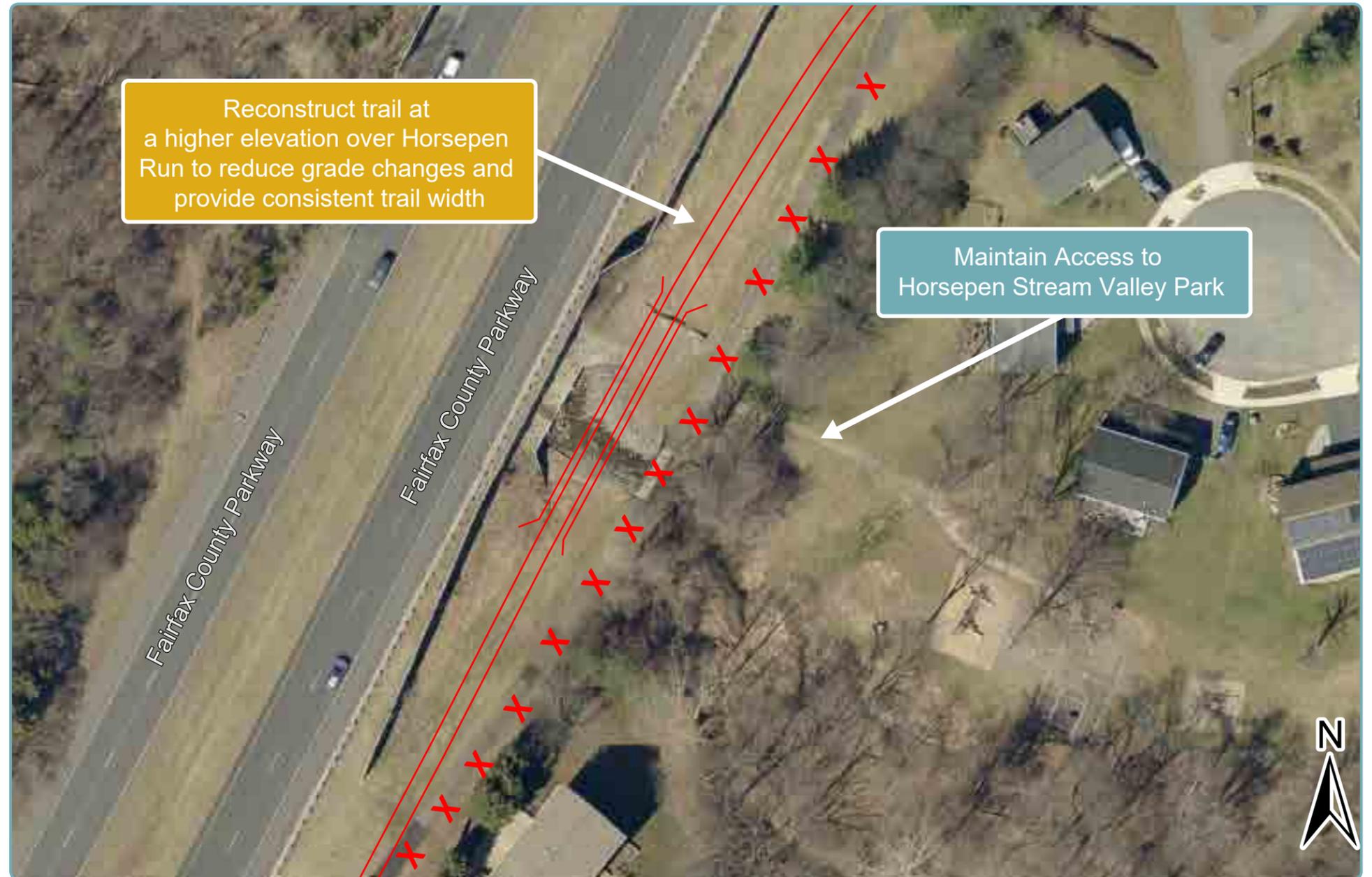
Existing Transportation Issues

ISSUE

Significant downward grade approaching the Horsepen Run Bridge from the south (trail north of the intersection) and insufficient bridge width (~6 feet)

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$-
High Cost	\$-

Existing Transportation Issues

ISSUE

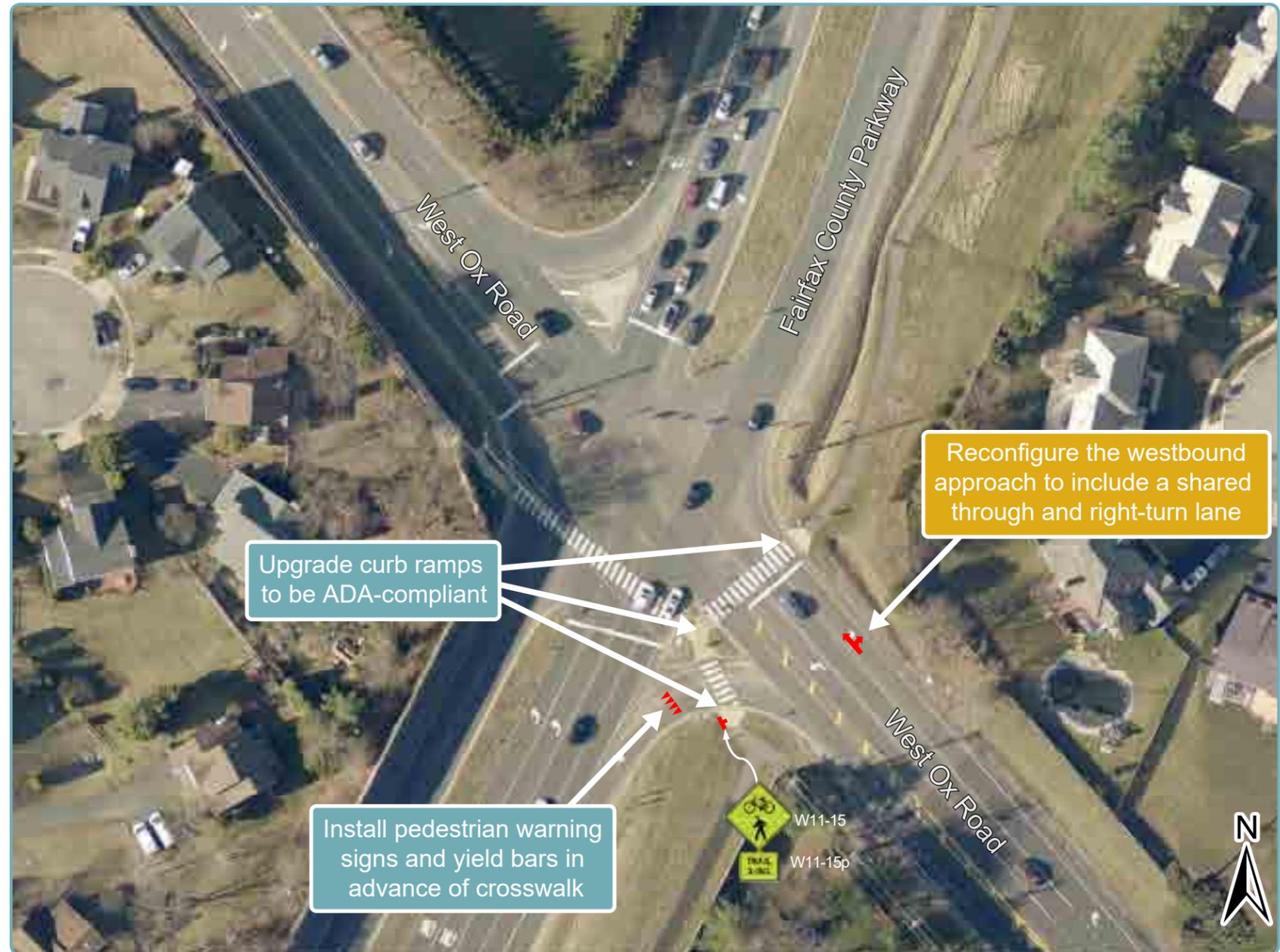
Existing curb ramps are non-compliant with ADA

Inconsistent signage and markings for channelized right-turn lane/ pedestrian crossing conflict

Peak period congestion along West Ox Road

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$25,000.00
High Cost	\$30,000.00

Existing Transportation Issues

ISSUE

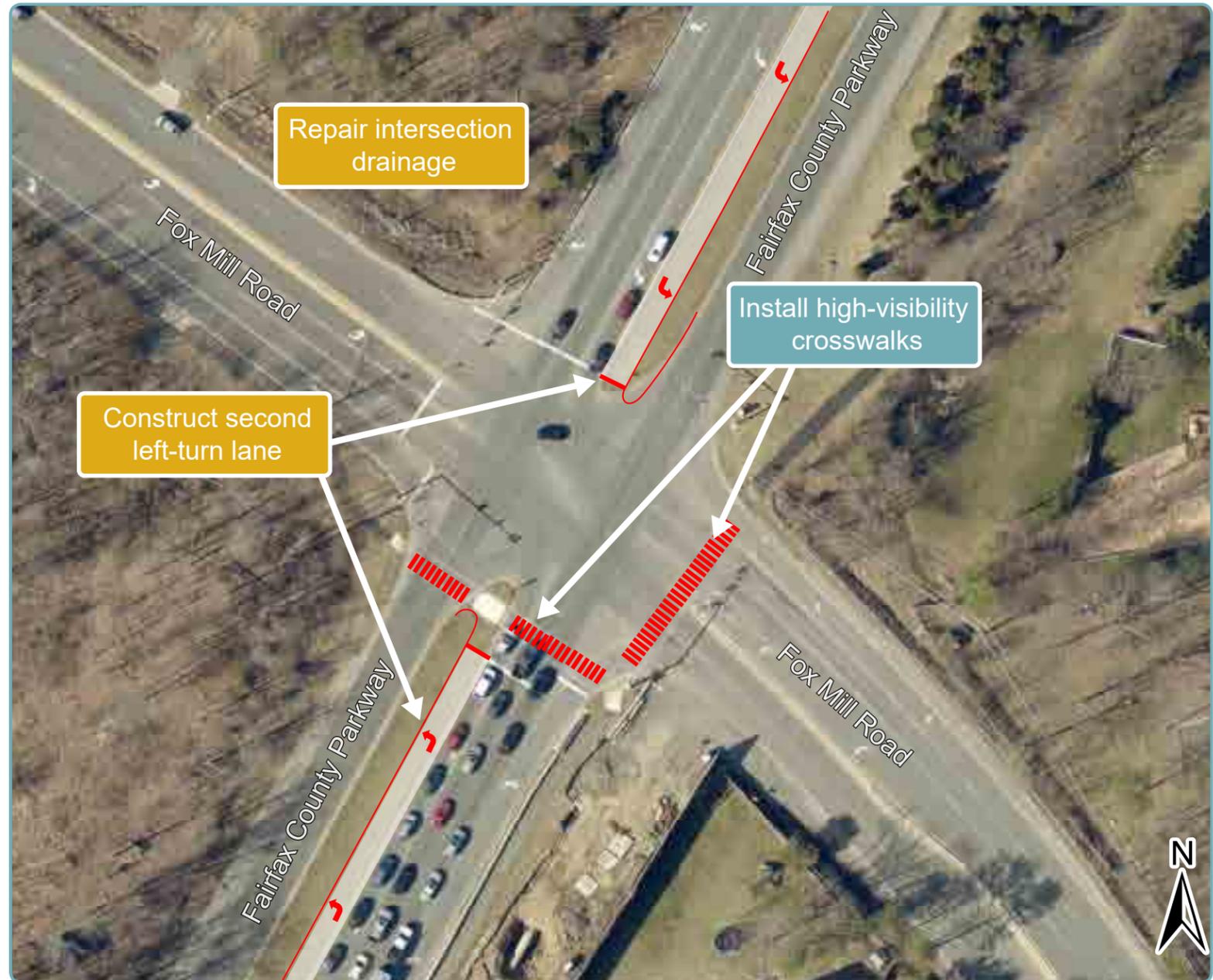
Low-visibility crosswalks; inconsistent with corridor

Sediment collects on sidewalk ramps

Mainline left-turn vehicles experience significant delay during peak periods

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$880,000.00
High Cost	\$1,140,000.00

Existing Transportation Issues

ISSUE

Improper signage for a right-angle right-turn movement

High-volume interchange to the north creates significant weaving patterns

Inadequate advance signage approaching the intersection

Intersection is over capacity

Long vehicle queues along eastbound approach

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$630,000.00	\$360,000.00	\$990,000.00
High Cost	\$1,020,000.00	\$1,040,000.00	\$2,060,000.00

Existing Transportation Issues

ISSUE

High volume interchange creates significant weaving patterns

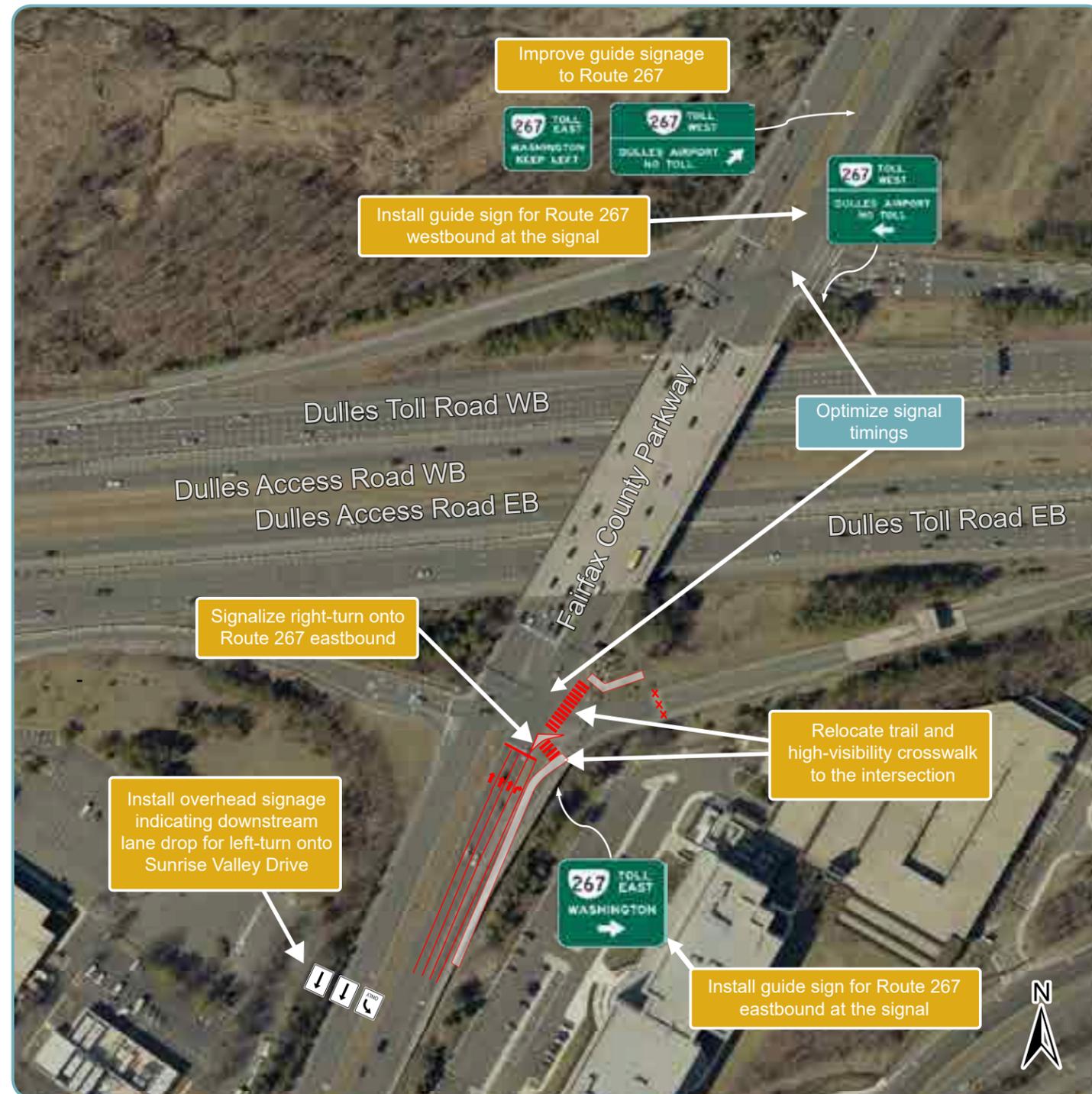
Heavy congestion

No detectable warning surface

High speed northbound right-turn movement creates potential conflict with uncontrolled trail crossing on ramp

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$880,000.00	\$140,000.00	\$1,020,000.00
High Cost	\$1,180,000.00	\$330,000.00	\$1,510,000.00

Existing Transportation Issues

ISSUE

Limited visibility of pedestrians and bicyclists in the crosswalk across a high-speed ramp

*FCDOT has recently prepared a similar concept design with RRFB and an adjustment to the sidewalk location. Design of the improvements is expected in 2017.

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$2,210,000.00
High Cost	\$4,350,000.00

Existing Transportation Issues

ISSUE

Inconsistent signage/markings for channelized right-turn lane/ pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$2,000.00
High Cost	\$3,000.00

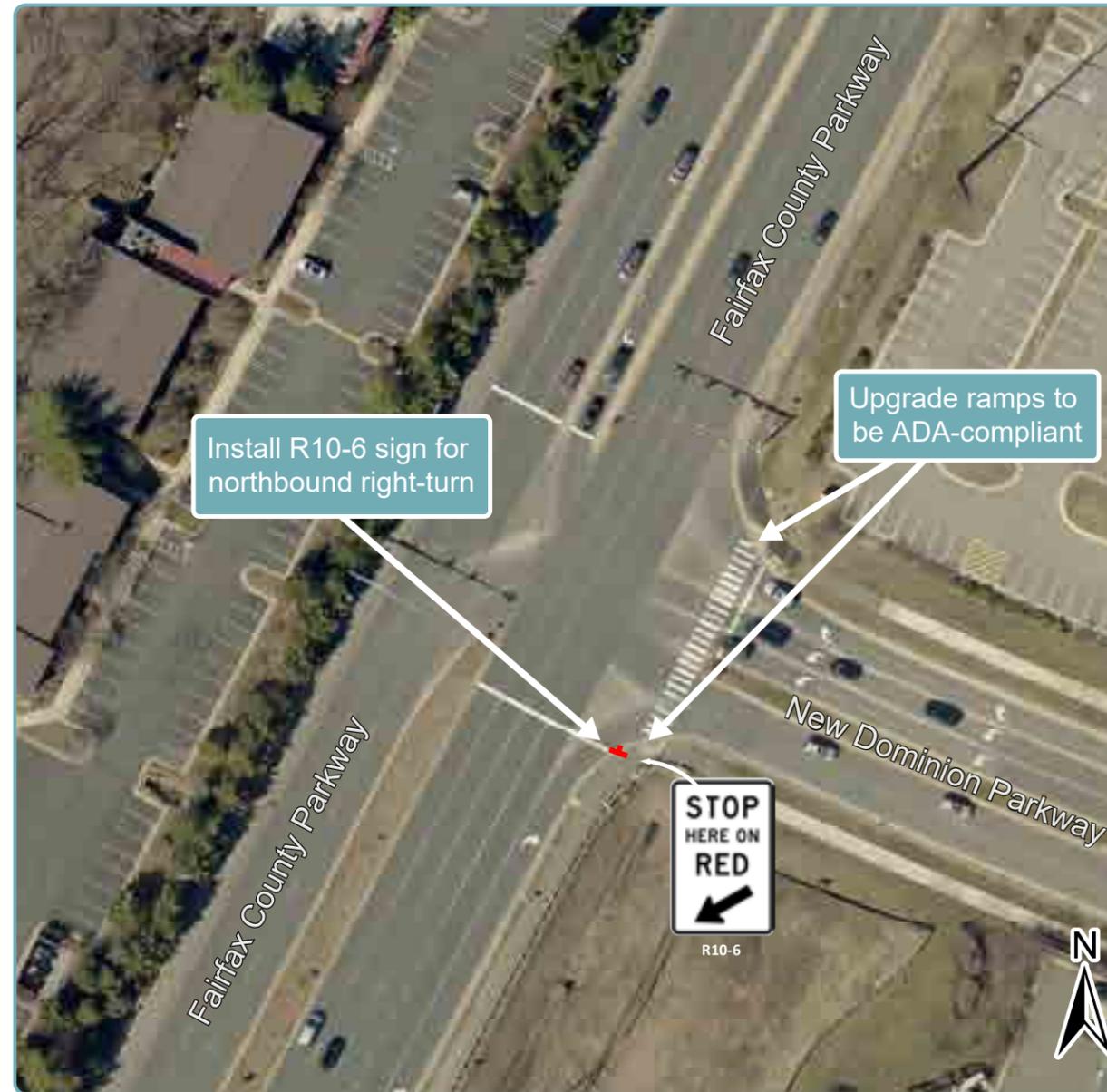
Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$15,000.00
High Cost	\$15,000.00

Existing Transportation Issues

ISSUE

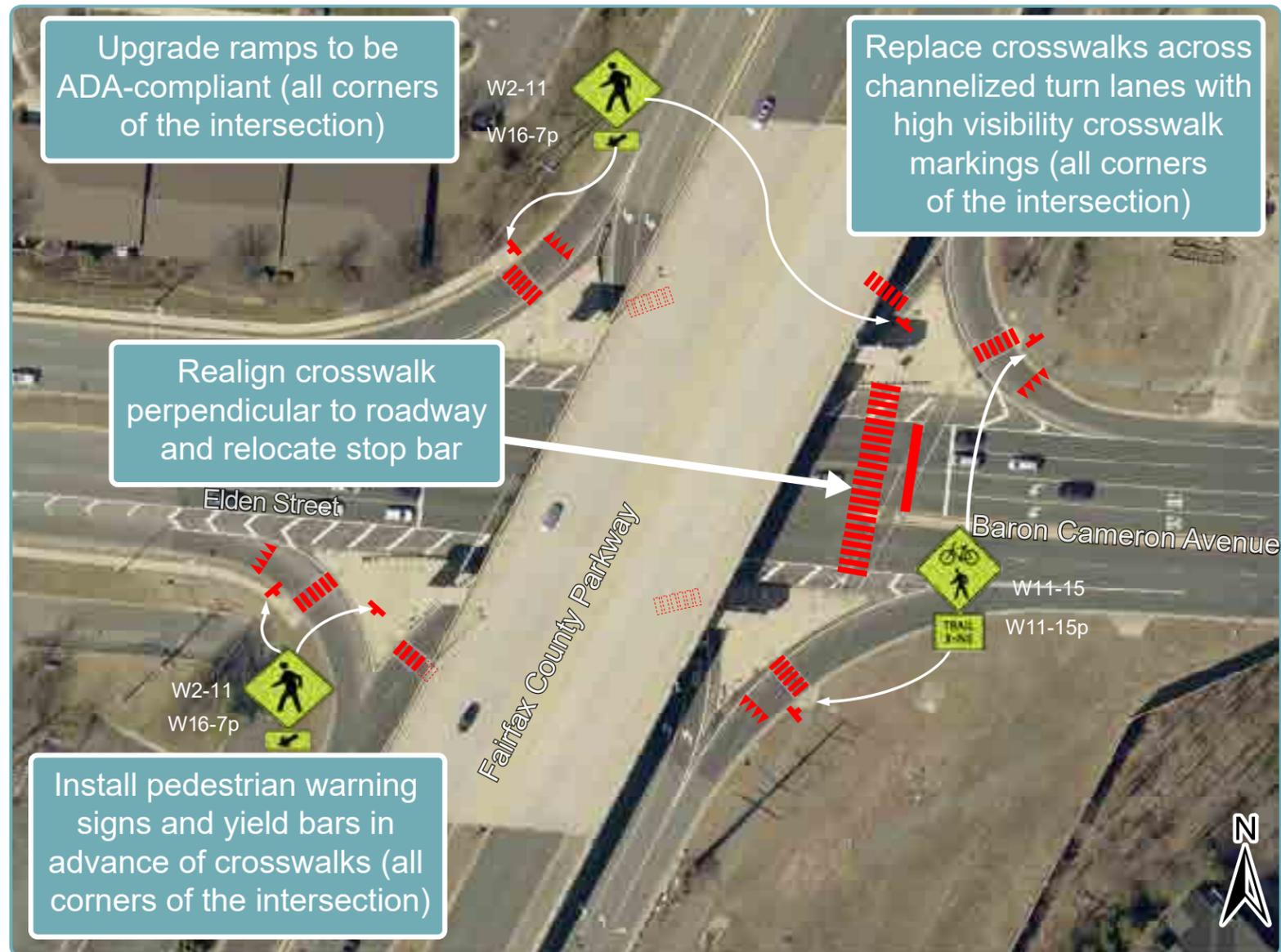
Existing curb ramps are non-compliant with ADA

Crosswalk not perpendicular to the roadway

Inconsistent signage/markings for channelized right-turn lane/ pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$150,000.00
High Cost	\$180,000.00

Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$40,000.00
High Cost	\$45,000.00

Existing Transportation Issues

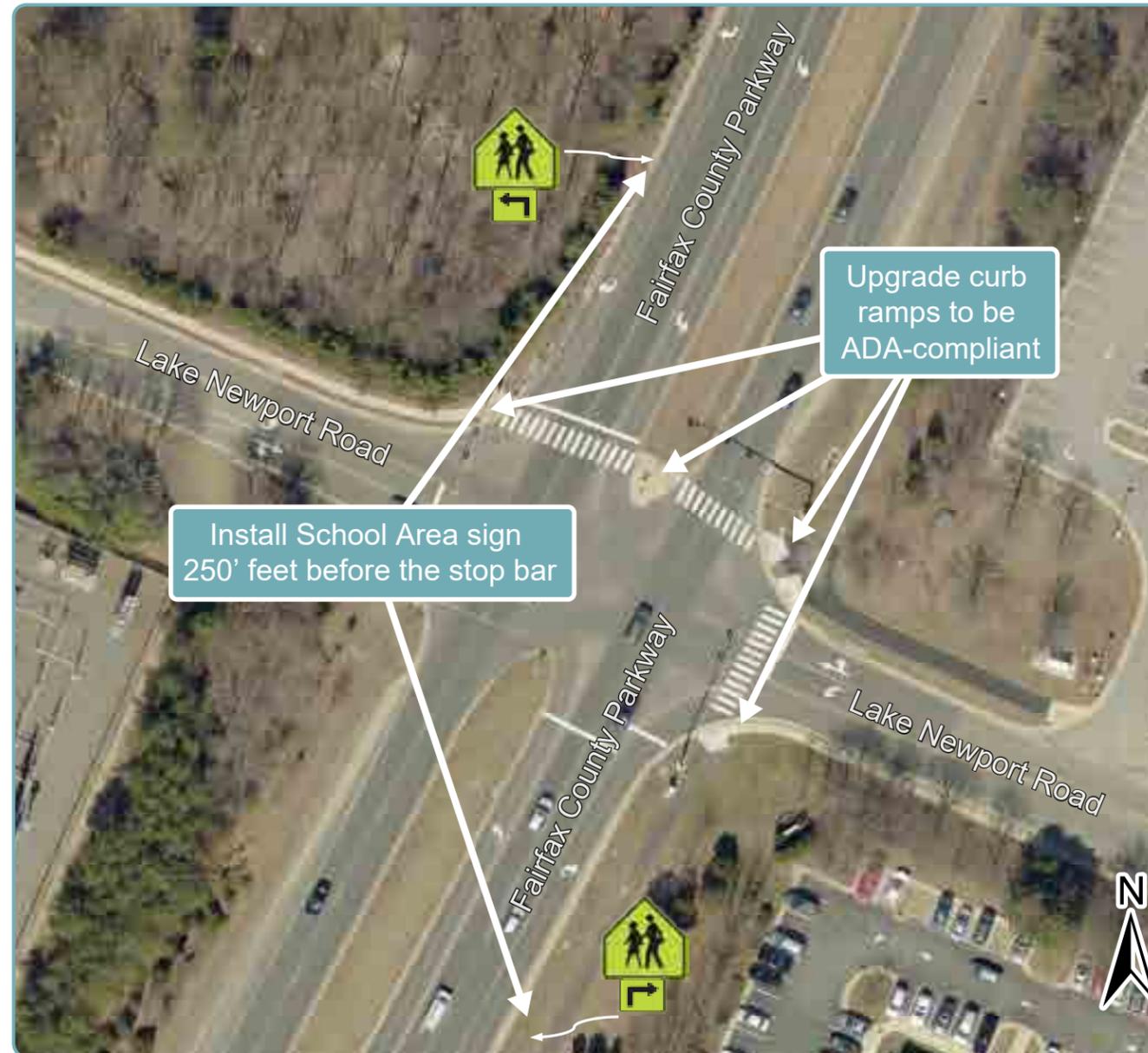
ISSUE

Existing curb ramps are non-compliant with ADA

No advance notice of Armstrong Elementary School on Lake Newport Road

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$40,000.00
High Cost	\$50,000.00

Existing Transportation Issues

ISSUE

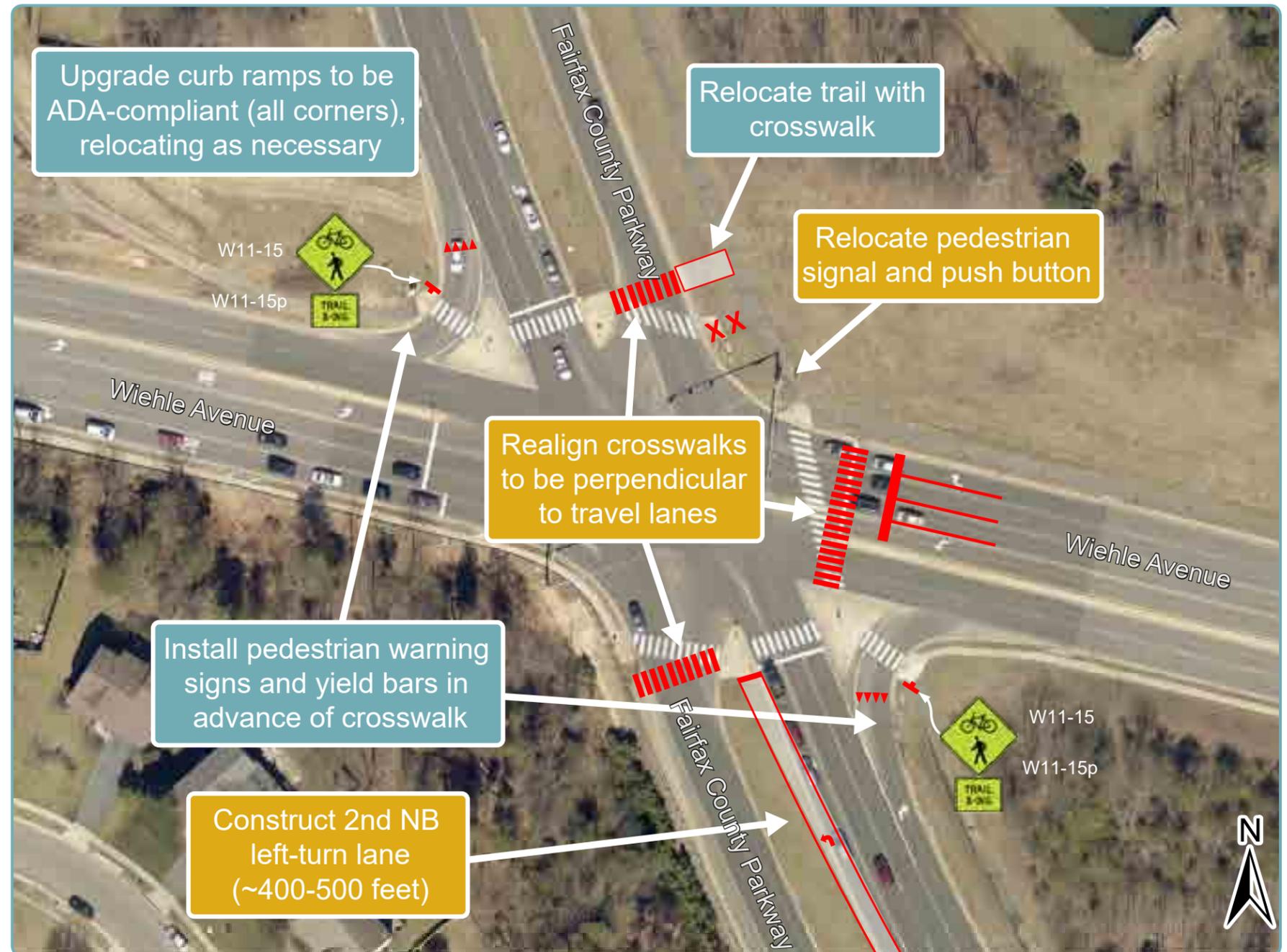
Crosswalks not aligned in a single direction

Existing curb ramps are non-compliant with ADA

Channelized right-turn lane/ pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$620,000.00
High Cost	\$840,000.00

7131 Fairfax County Parkway at Heather Way



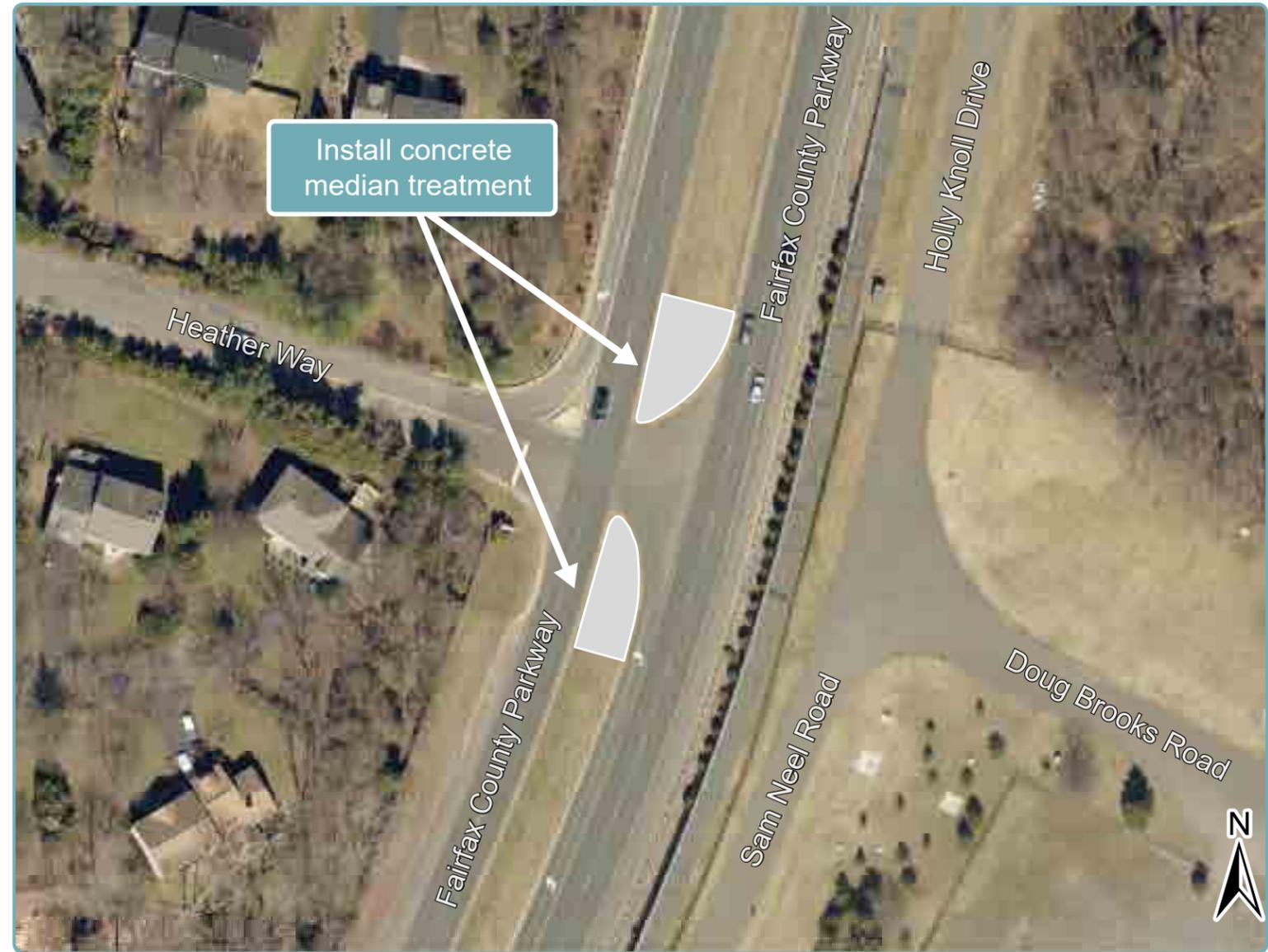
Existing Transportation Issues

ISSUE

Poor sight distance due to median grass height

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$90,000.00
High Cost	\$100,000.00

7221 – Fairfax County Parkway at Sugarland Road



Existing Transportation Issues

ISSUE

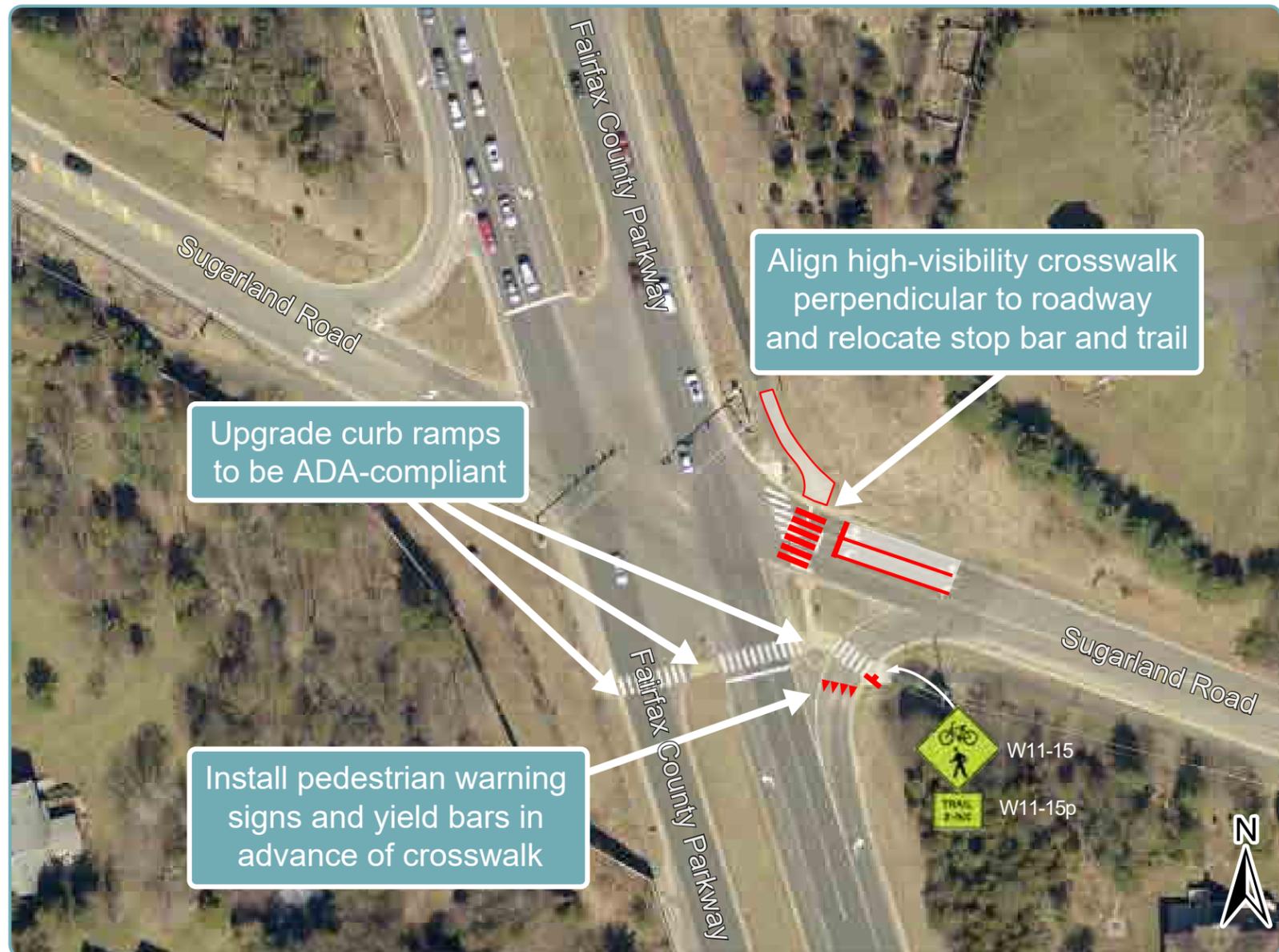
Existing curb ramps are non-compliant with ADA

Crosswalk not perpendicular to the roadway

Inconsistent signage/markings for channelized right-turn lane/ pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

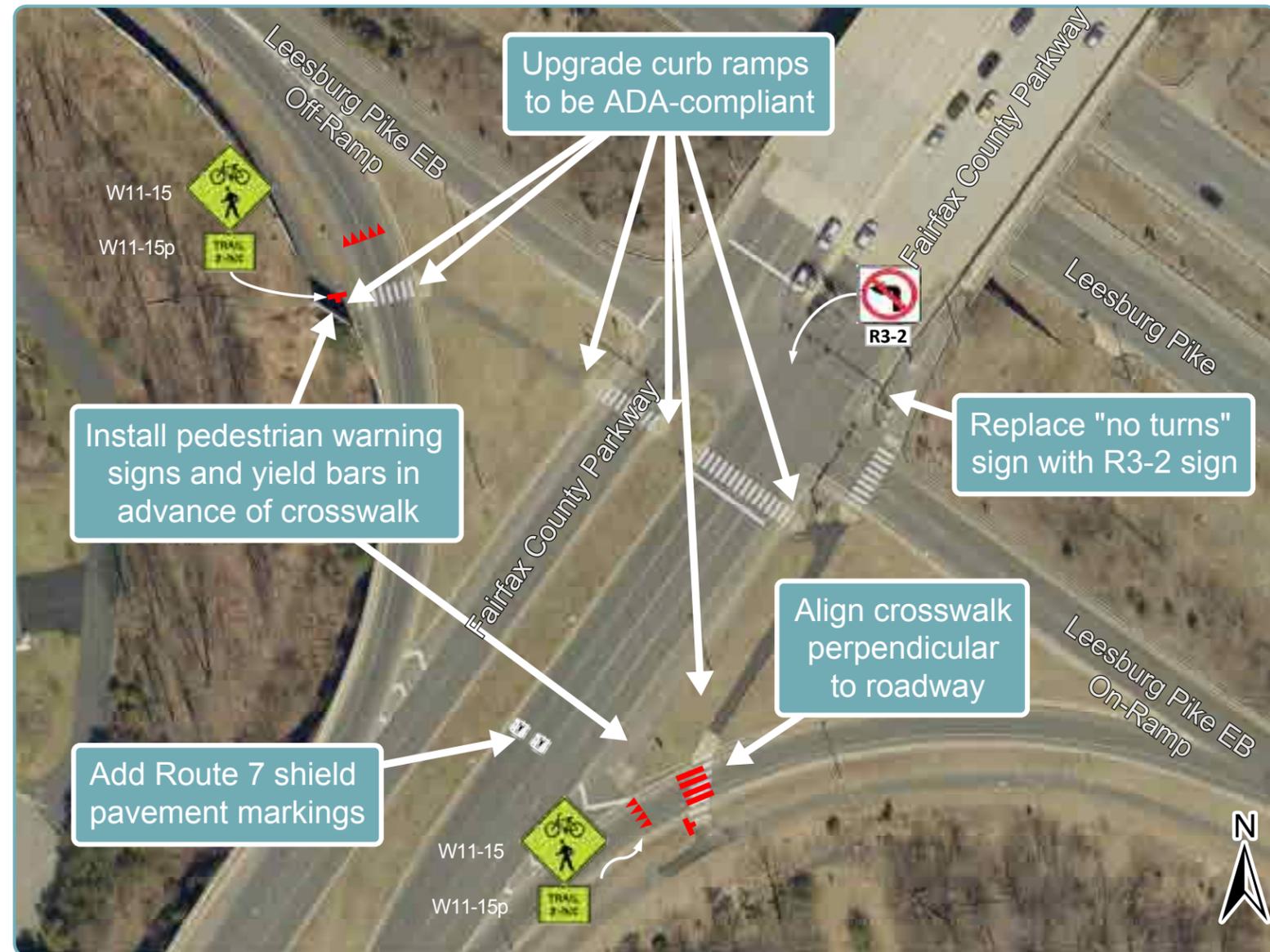
Low Cost	\$60,000.00
High Cost	\$70,000.00

Existing Transportation Issues

ISSUE
No turns (R3-3) sign displays legend, not graphical information
Crosswalk not perpendicular to the roadway
Existing curb ramps are non-compliant with ADA
Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$70,000.00
High Cost	\$80,000.00

Existing Transportation Issues

ISSUE

No turns (R3-3) sign displays legend, not graphical information

Turn-lane storage for upstream intersection may cause confusion

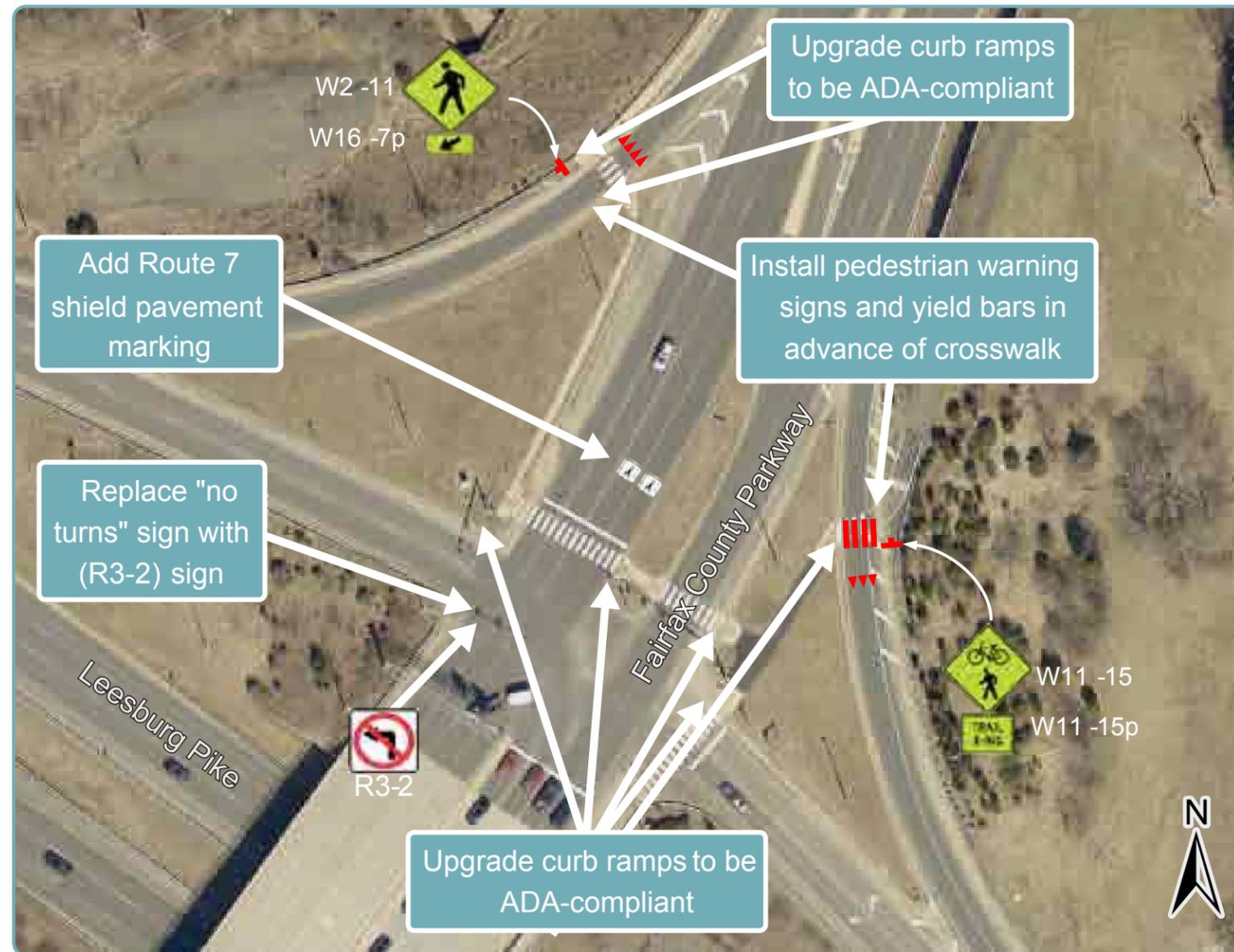
Crosswalk not perpendicular to the roadway

Existing curb ramps are non-compliant with ADA

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$70,000.00
High Cost	\$90,000.00

7521/7531 – Franconia-Springfield Parkway at Bonniemill Lane/Spring Village Drive and Bonniemill Lane at Hooes Road



 = Capital Improvement Project (CIP)

7521 Existing Transportation Issues

ISSUE
Push button accessibility issues
Existing curb ramps are non-compliant with ADA
No crosswalk across Bonniemill Lane
No pedestrian signal across north and south legs
Inconsistent crosswalk marking for trail crosswalk
Missing sidewalk connection to bus stop; no pedestrian bus stop pad
Trail continuity not clearly defined
Missing sidewalk connection along an apparent caddle path
Congestion along FSP associated with signal operations
Traffic signal displays located more than 150 feet from the stop bar in all directions
Existing signal cabinet obstructs visibility for the northbound right-turn traffic and is located within the clear zone
Substandard street name signs at the intersection
Inadequate advance signage approaching the intersection

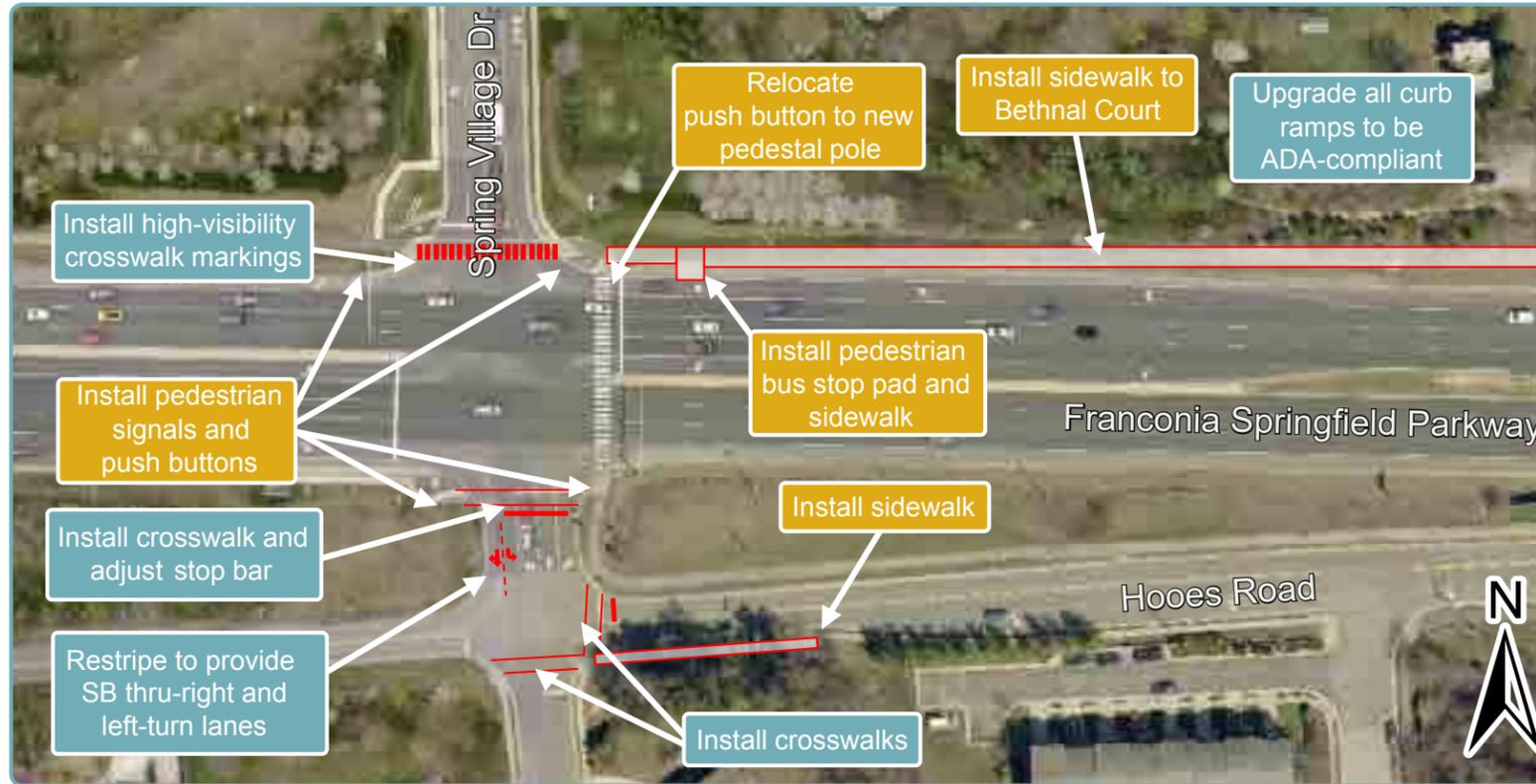
OPINION OF PROBABLE COST			
	Construction	Right-of-Way	TOTAL
Low Cost	\$1,440,000.00	\$50,000.00	\$1,490,000.00
High Cost	\$2,270,000.00	\$220,000.00	\$2,490,000.00

7531 Existing Transportation Issues

ISSUE
Existing curb ramps are non-compliant with ADA
No crosswalks
No sidewalk connectivity on the south side of Hooes Road
No storage for southbound left-turn onto Hooes Road

OPINION OF PROBABLE COST	
Low Cost	\$40,000.00
High Cost	\$70,000.00

Recommended Improvements



= Capital Improvement Project (CIP)

Install W3-3 signs approximately 1,400 feet in advance of the stop bar (eastbound and westbound) with "SIGNAL AHEAD" pavement marking legends in the travel lanes



Install retroreflective backplates on all signals



Intersection Capacity Improvements to Mitigate Congestion



Existing Transportation Issues

ISSUE

Push button accessibility issues

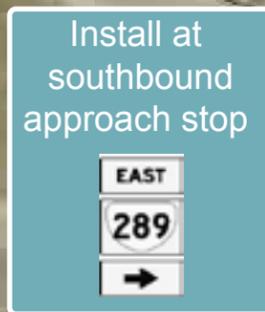
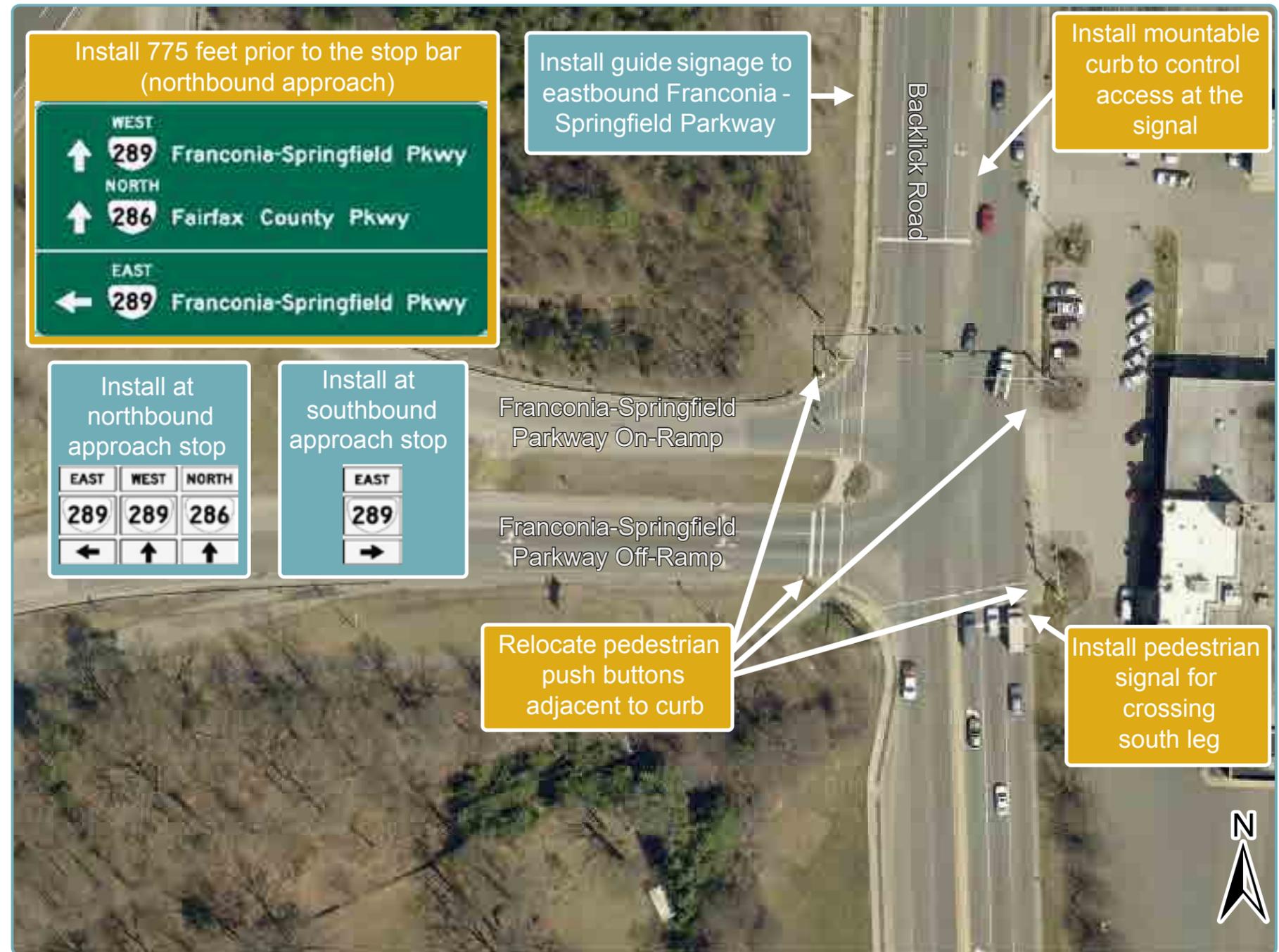
No pedestrian signal across the south leg

Driveway apron within the influence area of the signalized intersection

Limited visibility of guide signage to Franconia-Springfield Parkway

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$220,000.00
High Cost	\$260,000.00

7622 – Backlick Road at Franconia-Springfield Parkway Westbound Ramps



Existing Transportation Issues

ISSUE

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Pedestrian sidewalk and ramps in channelizing island are in poor condition

Crosswalk not aligned in a single direction

Lack of pedestrian accessibility across Backlick Road between Villa Park Road and the Franconia-Springfield Parkway eastbound off-ramp

Limited visibility of guide signage to Franconia-Springfield Parkway

Limited visibility of southbound conflicting vehicles from the eastbound right-turn lane

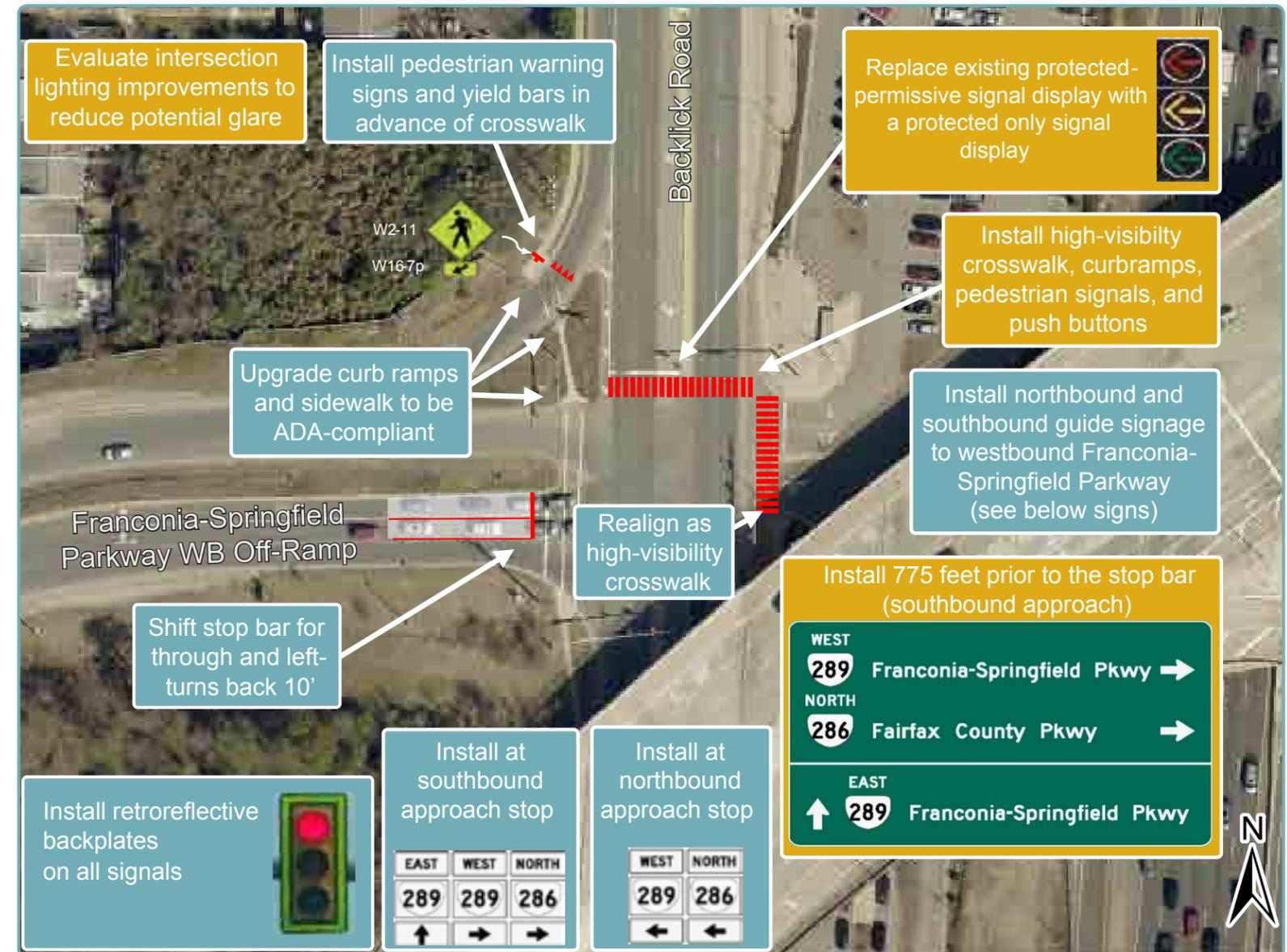
Poor visibility of conflicting northbound vehicles from the southbound left-turn lane due to roadway curvature

Limited visibility of signal displays due to overhead bridge structures on the northbound approach

Intersection lighting is limited, but ample lighting is provided along approaches and in the adjacent park and ride lot (potential glare)

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$220,000.00
High Cost	\$270,000.00

Existing Transportation Issues

ISSUE

Limited visibility of guide signage to Backlick Road

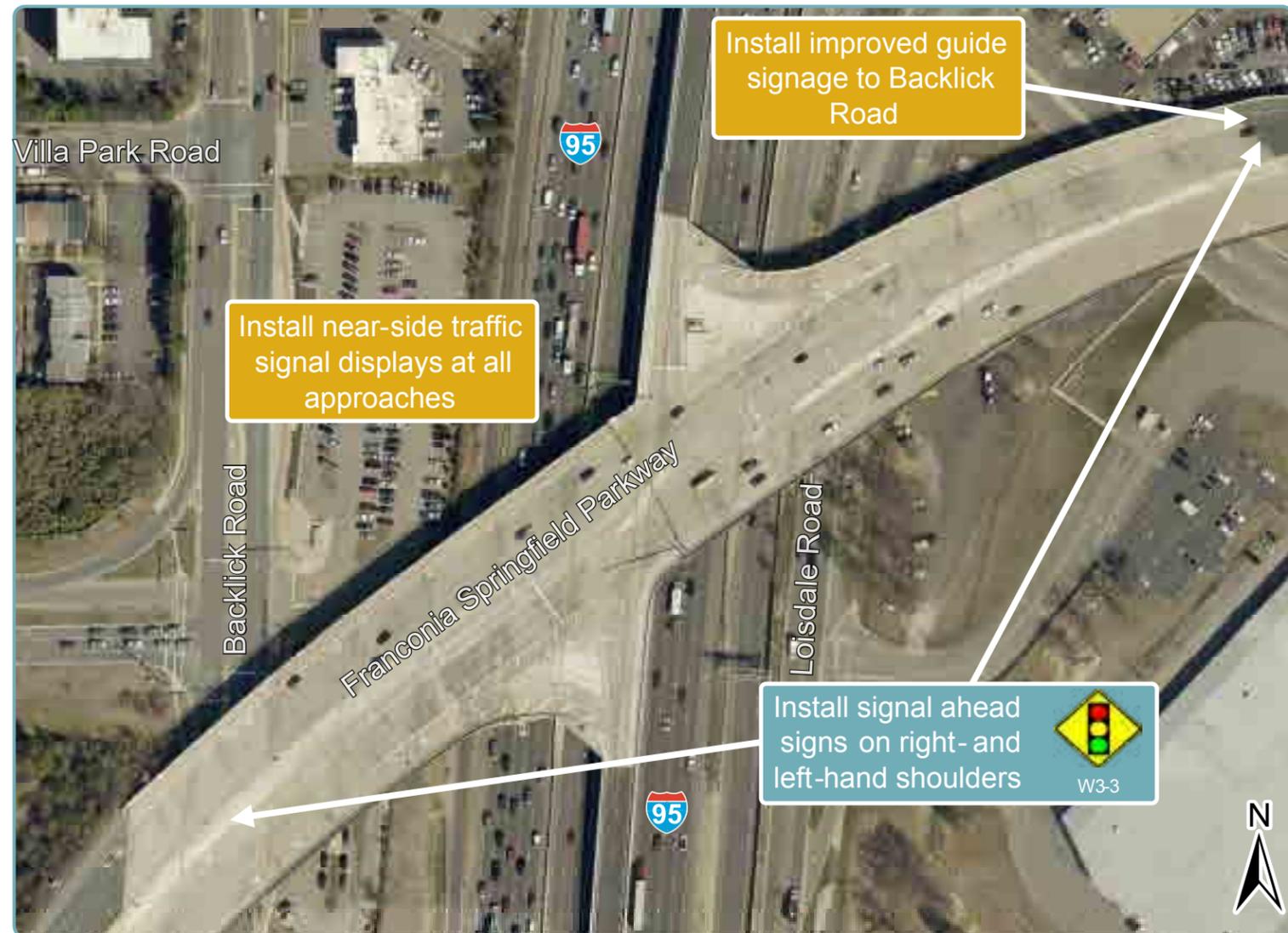
Traffic signal displays located more than 110' from the stop bar in all directions

Inadequate advance signage approaching the intersection

Somewhat limited signal visibility on the approach to the intersection in both directions

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$50,000.00
High Cost	\$60,000.00

7821/7822 – Frontier Drive at Franconia-Springfield Parkway Eastbound/ Westbound Ramps



7821 Existing Transportation Issues

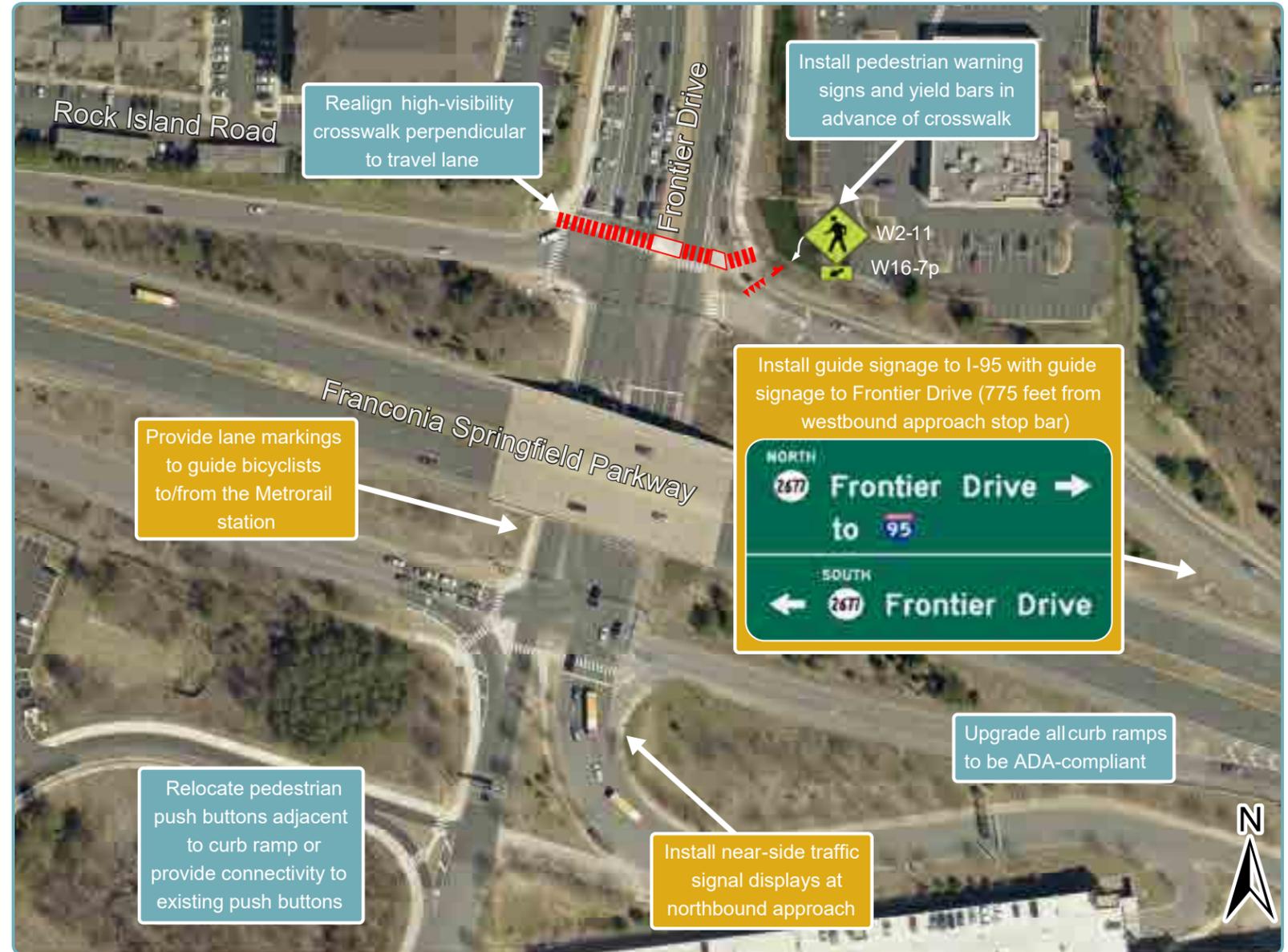
ISSUE
Existing curb ramps are non-compliant with ADA
Push button accessibility issues
Limited signal visibility due to horizontal curves and dense vegetation
Bike lanes along Frontier Drive do not connect with the Metrorail station

7822 Existing Transportation Issues

ISSUE
Existing curb ramps are non-compliant with ADA
Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict
Crosswalk not perpendicular to the roadway
Guidance to I-95 general purpose lanes not provided, only to HOV (Express Lanes)

Recommended Improvements

= Capital Improvement Project (CIP)



7821

OPINION OF PROBABLE COST	
Low Cost	\$150,000.00
High Cost	\$170,000.00

7822

OPINION OF PROBABLE COST	
Low Cost	\$210,000.00
High Cost	\$250,000.00

Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

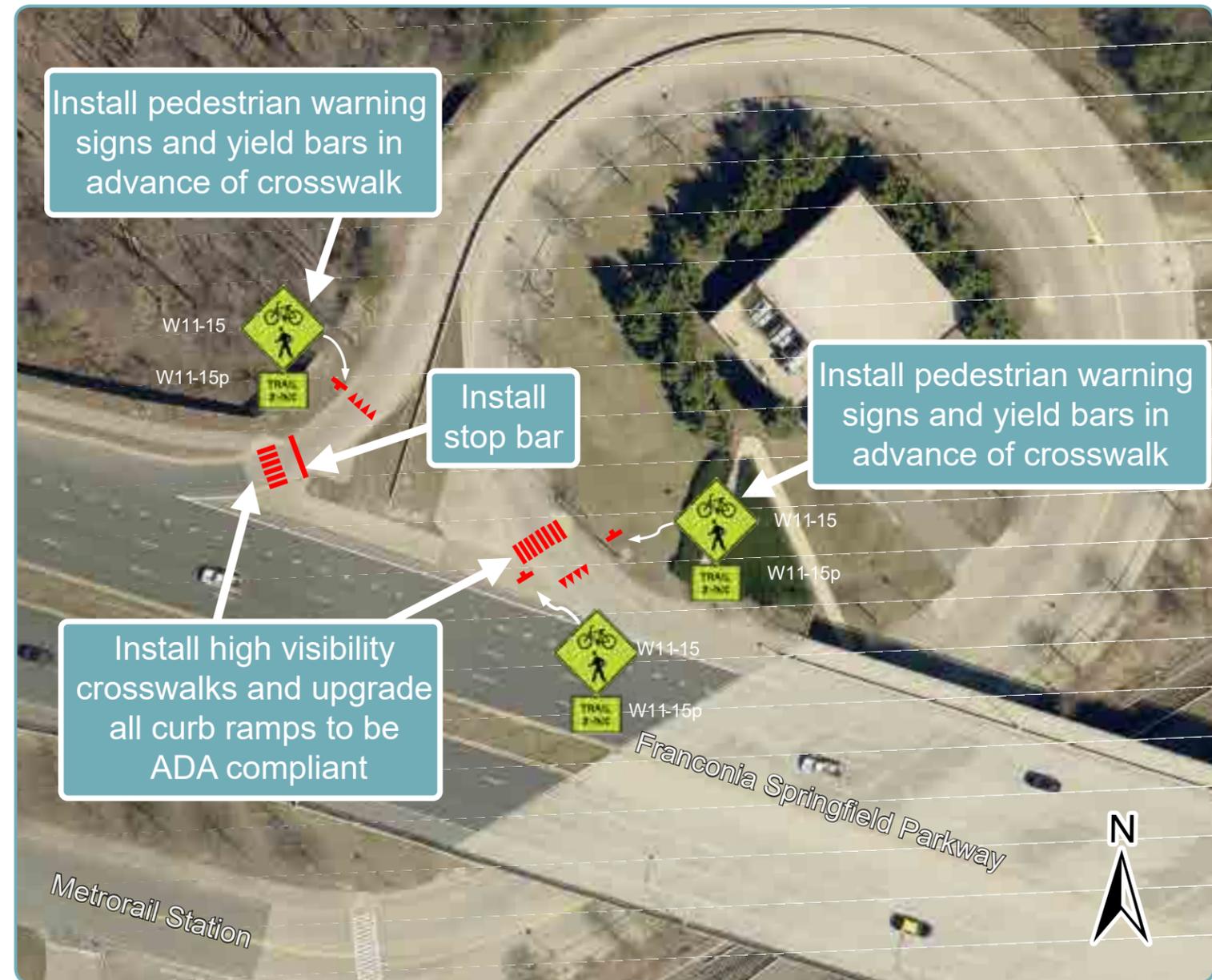
Inconsistent signage/markings for channelized right-turn lane/ pedestrian crossing conflict

No crosswalk across ramps

No stop bar on southbound approach

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST	
Low Cost	\$35,000.00
High Cost	\$40,000.00

Existing Transportation Issues

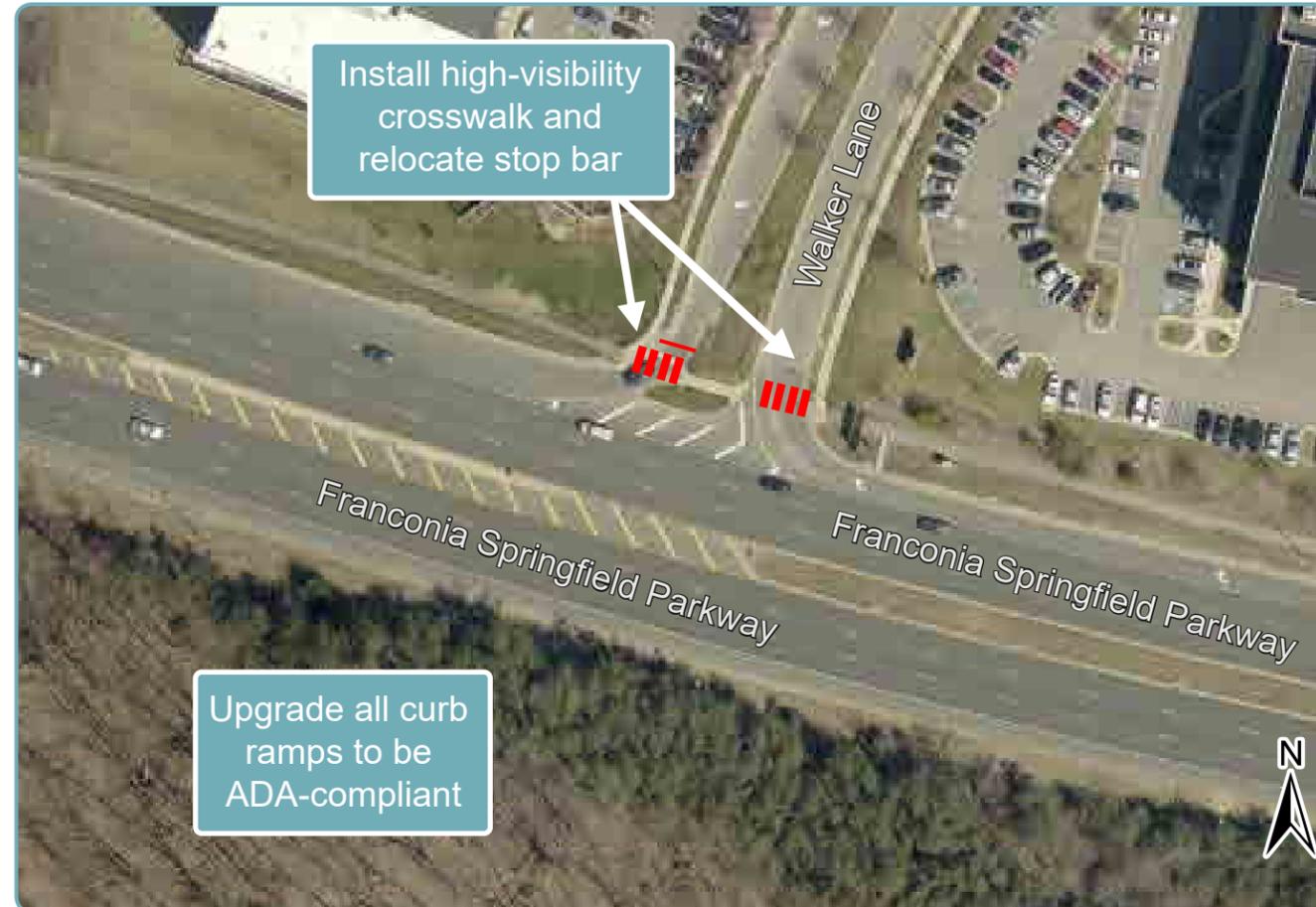
ISSUE

Existing curb ramps are non-compliant with ADA

No crosswalk across Walker Lane

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$30,000.00
High Cost	\$35,000.00

Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

Inconsistent signage/markings for channelized right-turn lane/pedestrian crossing conflict

Crosswalk not perpendicular to the roadway

Existing pedestrian refuge islands are not ADA-compliant and do not provide reasonable safety to pedestrians

Eastbound left-turn lane queue spillback

Queue spillback from the northbound and southbound left-turn lanes

Operational issues caused by high intersection volumes

High pedestrian volume conflicting with channelized right-turn lanes, which do not function as controlled pedestrian crosswalks

Bike lanes along Beulah Street are not carried through the intersection

Challenging pedestrian access from the trail head on the northwest corner across Beulah Street

Unclear right-of-way on the westbound departure lanes for through and right-turn traffic

Existing advance signal guide signage located too close to the intersection

Limited advance guide signage in advance of the traffic signal in the eastbound direction

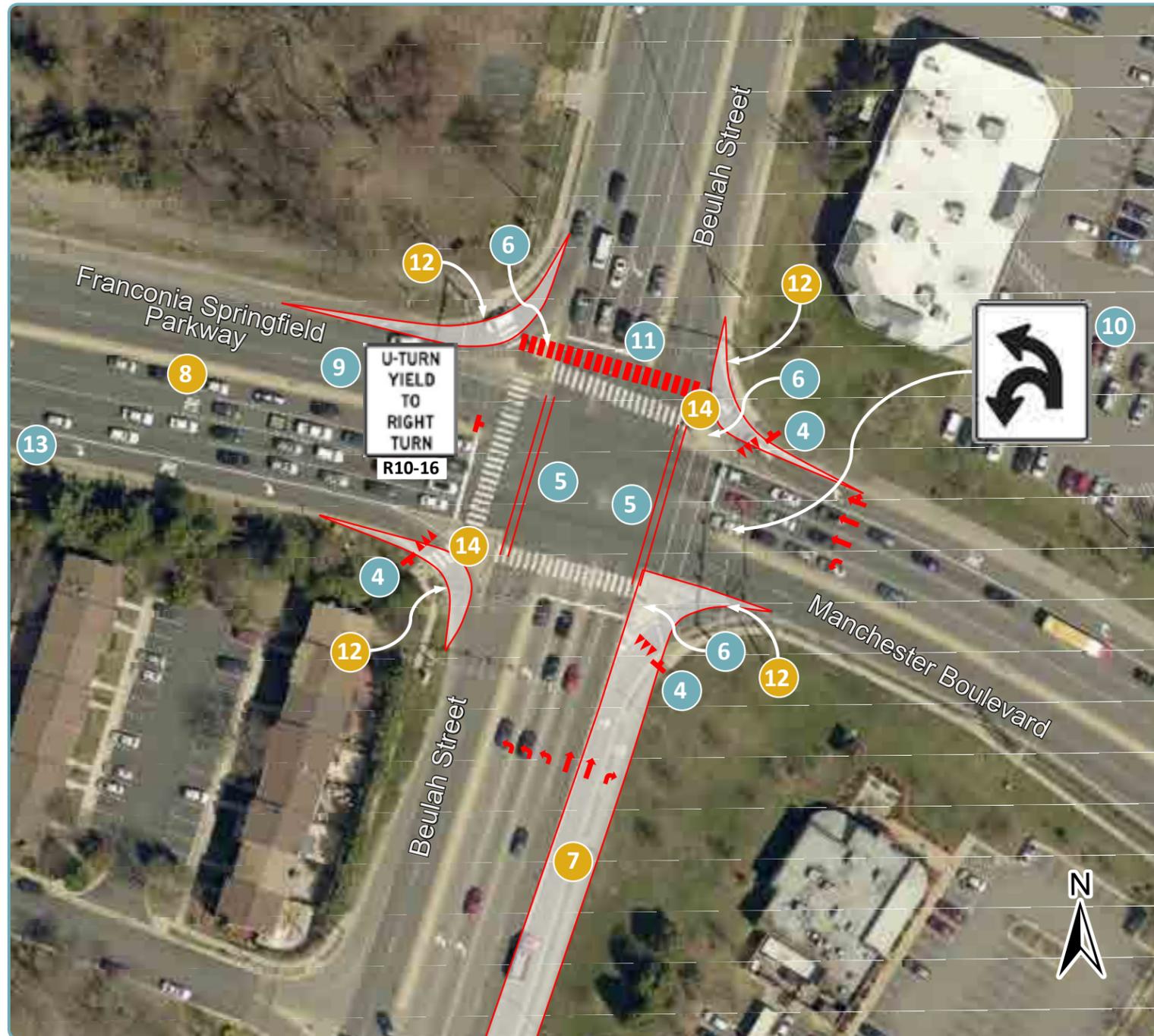
Vertical curvature and peak congestion limits driver reaction to the downstream signal in the eastbound direction

Heavy eastbound U-Turn volume

Traffic signal displays located more than 150' from the stop bar in all directions

Recommended Improvements

= Capital Improvement Project (CIP)



Install advance intersection warning signs 1,500' before stop bar, extend mini-skip markings for the right-turn lane, install right-turn pavement markings, and Right Lane Must Turn Right (R3-7) sign. Install next signal (D3-2) sign on the mast arm.

General

1. Upgrade all curb ramps to be ADA compliant
2. Relocate or replace Next Signal (D3-2) signs to be a minimum 565 feet before the stop bar (SB, WB)
3. Install near-side traffic signal displays at each approach
4. If channelized right-turn movements are retained, install pedestrian warning signs and yield bar in advance of crosswalk
5. Install bike lane striping through intersection
6. Reconstruct sidewalk and ramps



Location Specific

7. Modify geometry to provide 3 NBL turn lanes and 3 WB through lanes
8. Extend EB left-turn lanes
9. Install R10-16 sign for the EB left-turn
10. Install lane control sign to indicate the EB U-Turn is served by left-most lane
11. Realign crosswalk to be perpendicular to roadway, crossing all SB lanes
12. Consider eliminating all channelized right-turn movements (this would eliminate #4 above)
13. Extend mini-skip markings, install right-turn arrow markings and R3-7 sign
14. Install near-side signal displays

OPINION OF PROBABLE COST - ELIMINATE CHANNELIZED RIGHT

	Construction	Right-of-Way	TOTAL
Low Cost	\$2,220,000.00	\$800,000.00	\$3,020,000.00
High Cost	\$3,490,000.00	\$2,130,000.00	\$5,620,000.00

OPINION OF PROBABLE COST - DO NOT ELIMINATE

	Construction	Right-of-Way	TOTAL
Low Cost	\$2,120,000.00	\$800,000.00	\$2,920,000.00
High Cost	\$3,490,000.00	\$2,010,000.00	\$5,500,000.00

Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

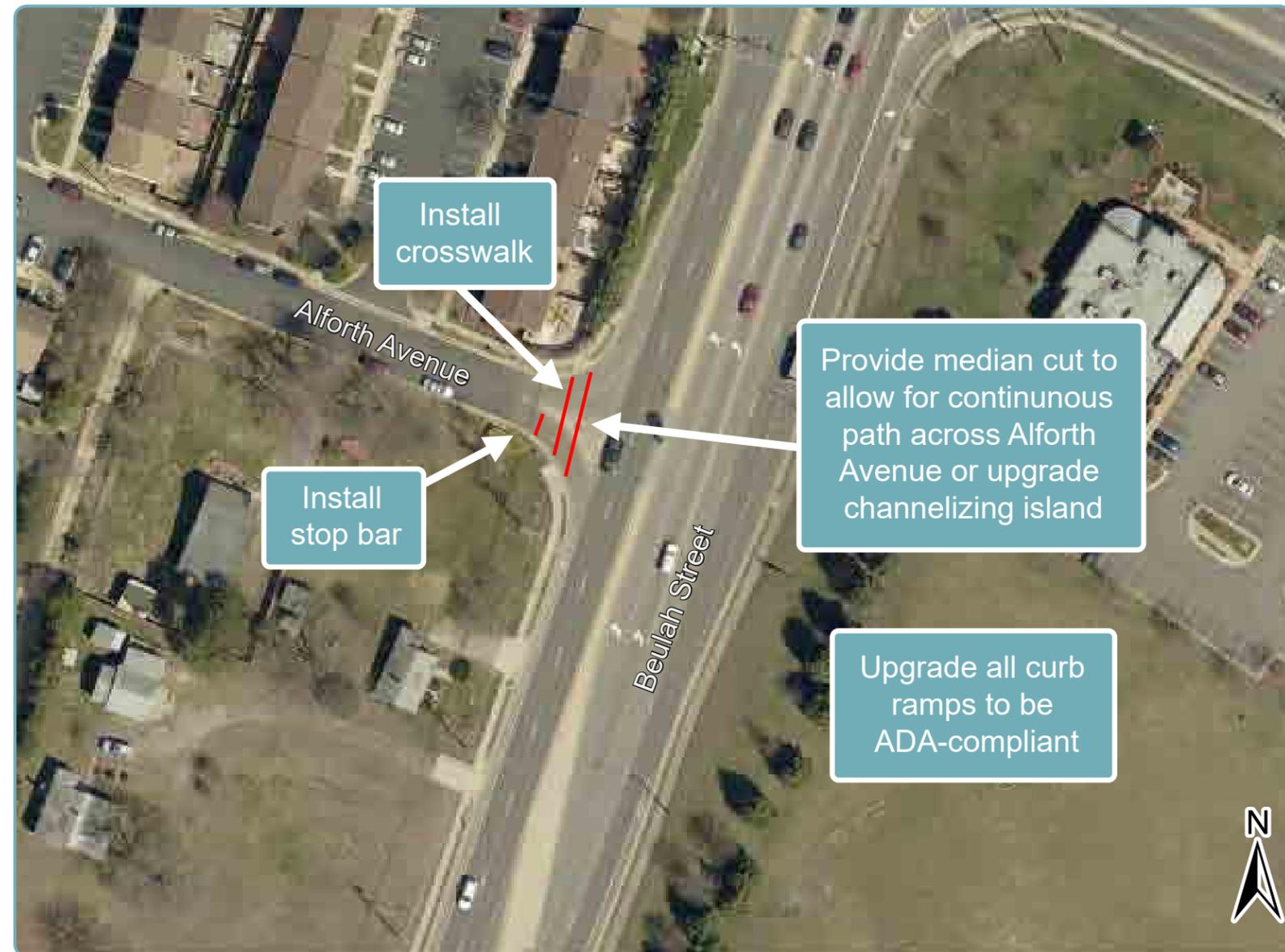
Channelizing island does not provide ADA-compliant access across Alforth Avenue

No crosswalk across Alforth Avenue

No stop bar on eastbound approach

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

Low Cost	\$15,000.00
High Cost	\$20,000.00

Existing Transportation Issues

ISSUE

Existing curb ramps are non-compliant with ADA

Recommended Improvements

 = Capital Improvement Project (CIP)



OPINION OF PROBABLE COST

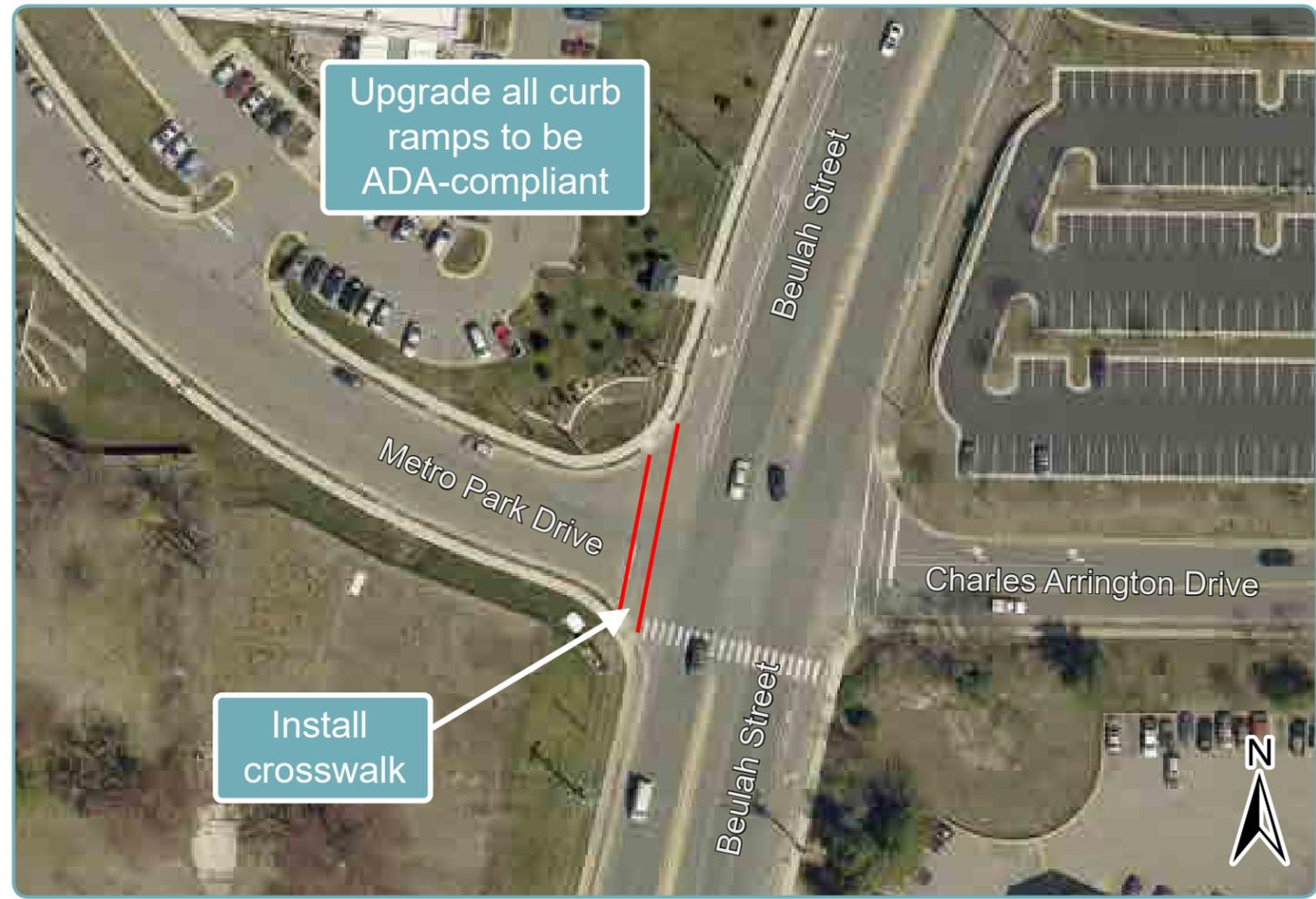
Low Cost	\$40,000.00
High Cost	\$50,000.00

Existing Transportation Issues

ISSUE
Existing curb ramps are non-compliant with ADA
No crosswalk across Metro Park Drive

Recommended Improvements

= Capital Improvement Project (CIP)



OPINION OF PROBABLE COST	
Low Cost	\$35,000.00
High Cost	\$40,000.00