

Planned Traffic Flow Changes Route 50/Route 659 Area

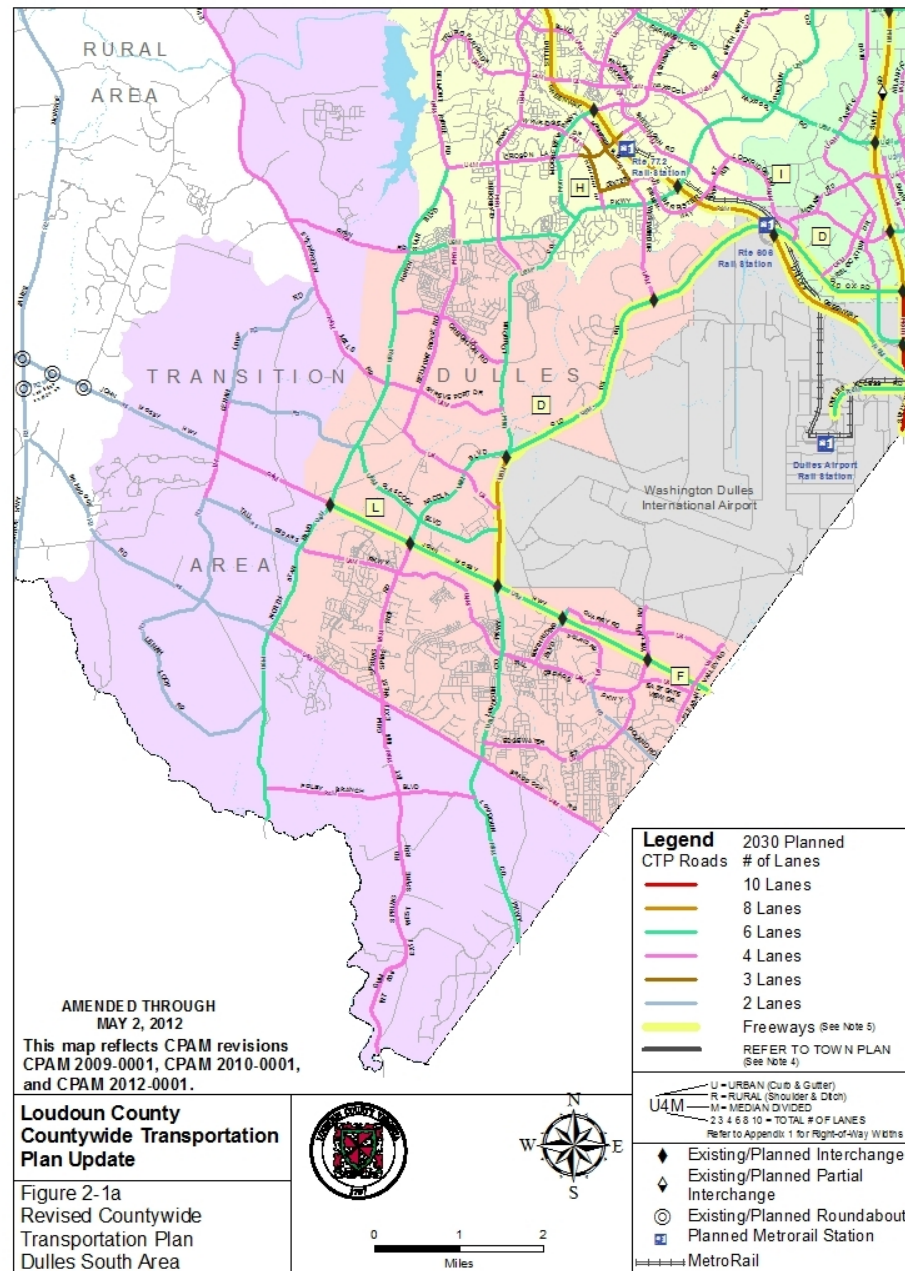
“Dulles Direct” Town Hall Meeting

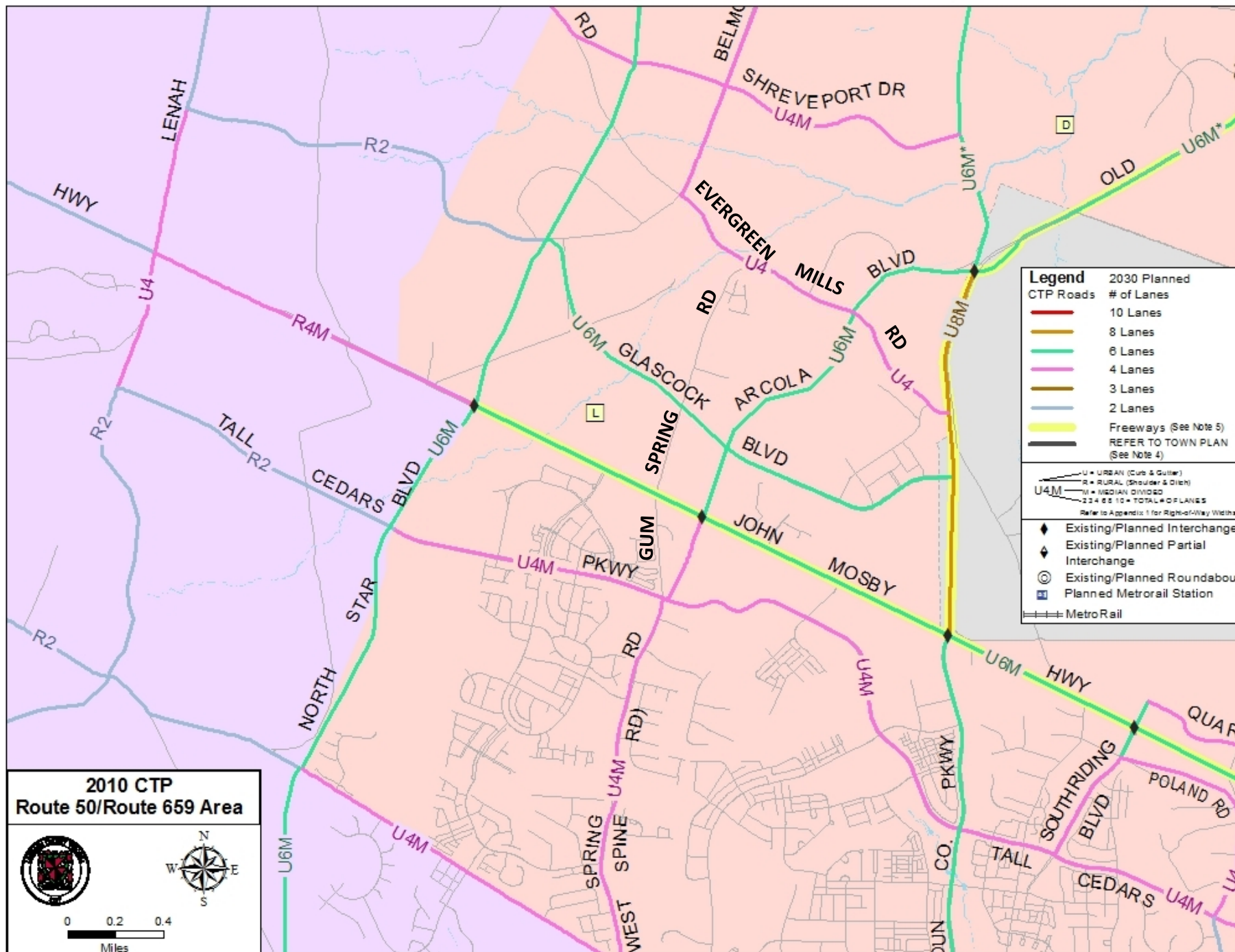
Mercer Middle School

September 26, 2012

Countywide Transportation Plan (CTP)

- County's Long Range Multi-Modal Transportation Plan - 2030 Horizon Year
- Current CTP Adopted by BOS in 2010, additional revisions approved in 2011 and 2012
- Since 1995 - Planned CTP Road Network includes realignment of Gum Spring Road ("West Spine Road") between Tall Cedars Parkway and Route 50
- Ultimate planned connection with future Arcola Boulevard north of Route 50 – direct connection to Route 606 and Loudoun County Parkway
- Ongoing Effort to Implement CTP – Phased approach in large part through proffered funds and construction by private sector



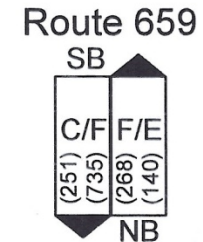
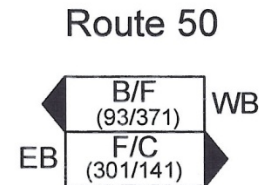
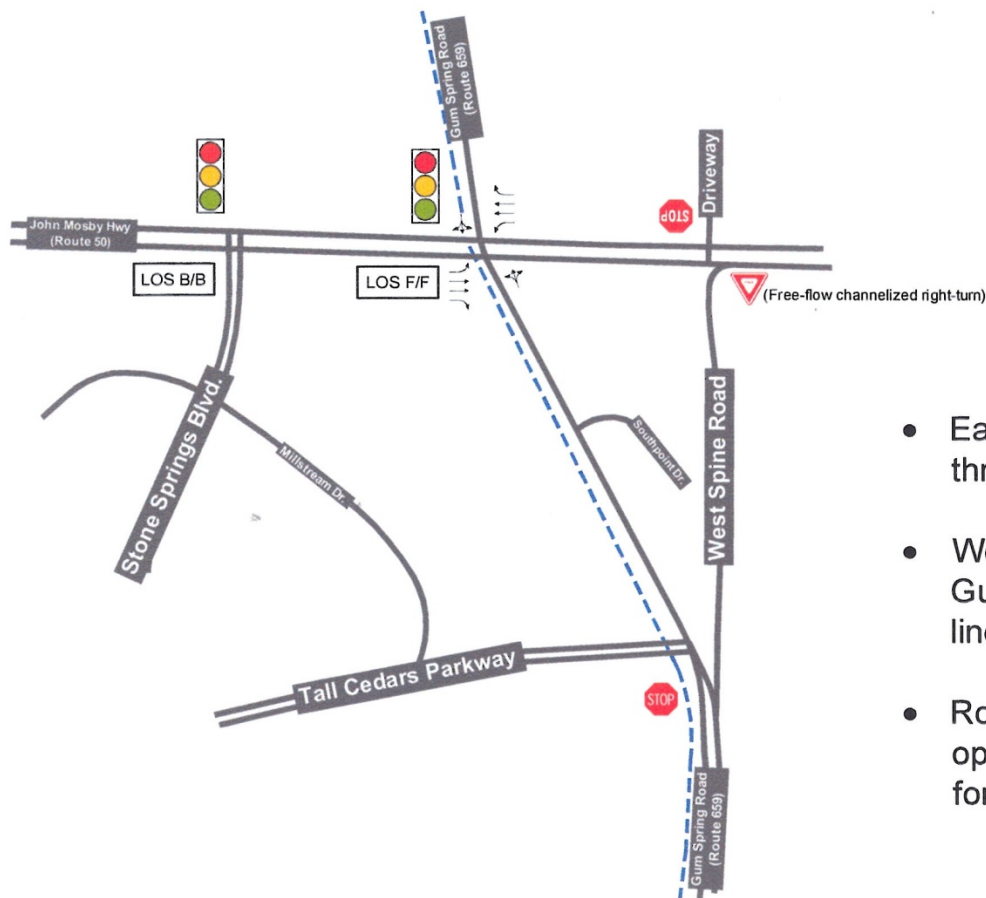


Route 50/Route 659 Area Existing Conditions (2012)

- Route 659 through traffic uses existing two-lane Gum Spring Road both north and south of Route 50
- Currently only northbound West Spine Road open to eastbound Route 50 only
 - Proffered and built as part of Kirkpatrick Farms Rezoning
- Southbound lanes of West Spine Road between Route 50 and Tall Cedars Parkway constructed but not yet open to traffic
 - Proffered and built as part of Virginia Manor (Seven Hills) and C.D. Smith Rezonings

EXISTING - 2011-2012

Arterial Level of Service



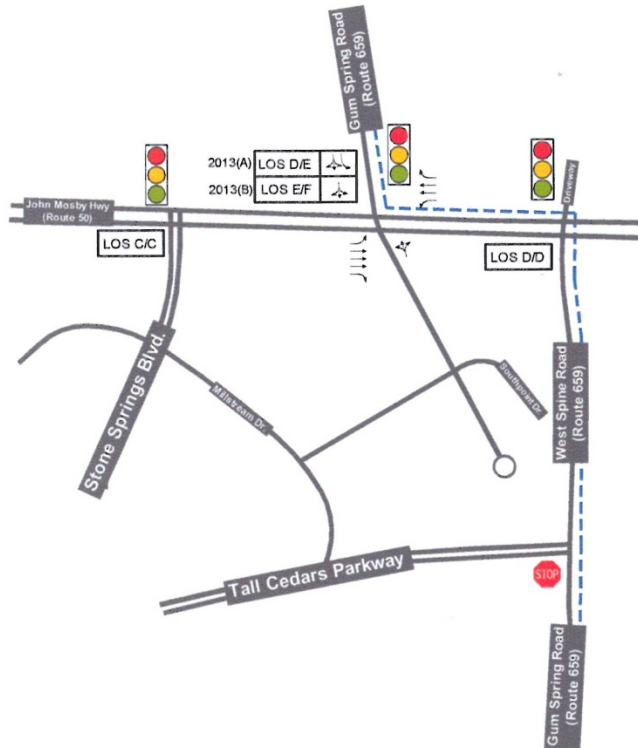
Notes

- Eastbound Route 50 thru queues spillback thru adjacent intersections (AM only).
- Westbound Route 50 left-turn queues at Gum Spring Road spillback and block main line thru traffic (PM only).
- Route 50/Gum Spring Road intersection operates beyond capacity with long delays for Gum Spring Road traffic.

Route 50/Route 659 Area Initial Changes (2013)

- Permanent closure of Gum Spring Road just north of Tall Cedars Parkway required in order to open southbound West Spine Road between Route 50 and Tall Cedars Parkway
- Turn lane improvements and signalization on Route 50 at new West Spine Road intersection
 - Proffered as part of Stone Ridge Rezoning
- Northbound Gum Spring Road through traffic will shift to new West Spine Road and use Route 50 west to Gum Spring Road north of Route 50
- Southbound Gum Spring Road through traffic will use Route 50 east to West Spine Road south of Route 50
- 3rd eastbound lane on Route 50 between Stone Springs Boulevard and Loudoun County Parkway – anticipated by end of 2012
 - Proffered as part of Stone Ridge Rezoning

FUTURE +/- 2013



2013(A) - (With Emergency Dept. Improvements)

Arterial Level of Service	
Route 50	Route 659
<div> <div>EB</div> <div> <div>B/C (111/144)</div> <div>D/C (169/144)</div> </div> <div>WB</div> </div>	<div> <div>SB</div> <div> <div>C/F (262/595)</div> <div>D/D (133/149)</div> </div> <div>NB</div> </div>

Notes

- 3 Traffic Signals.
- Route 50 improvements - Additional eastbound thru lane.
- Dual lefts provided on westbound Route 50 at West Spine Road. Queues contained within turn lanes.
- Southbound Gum Spring Road at Route 50 widened to 2 lanes (left, left/thru/right). Still continues to be full-movement intersection.

2013(B) - (Without Emergency Dept. Improvements)

Arterial Level of Service	
Route 50	Route 659
<div> <div>EB</div> <div> <div>B/D (112/172)</div> <div>D/C (175/143)</div> </div> <div>WB</div> </div>	<div> <div>SB</div> <div> <div>C/F (265/639)</div> <div>D/D (136/160)</div> </div> <div>NB</div> </div>

Notes

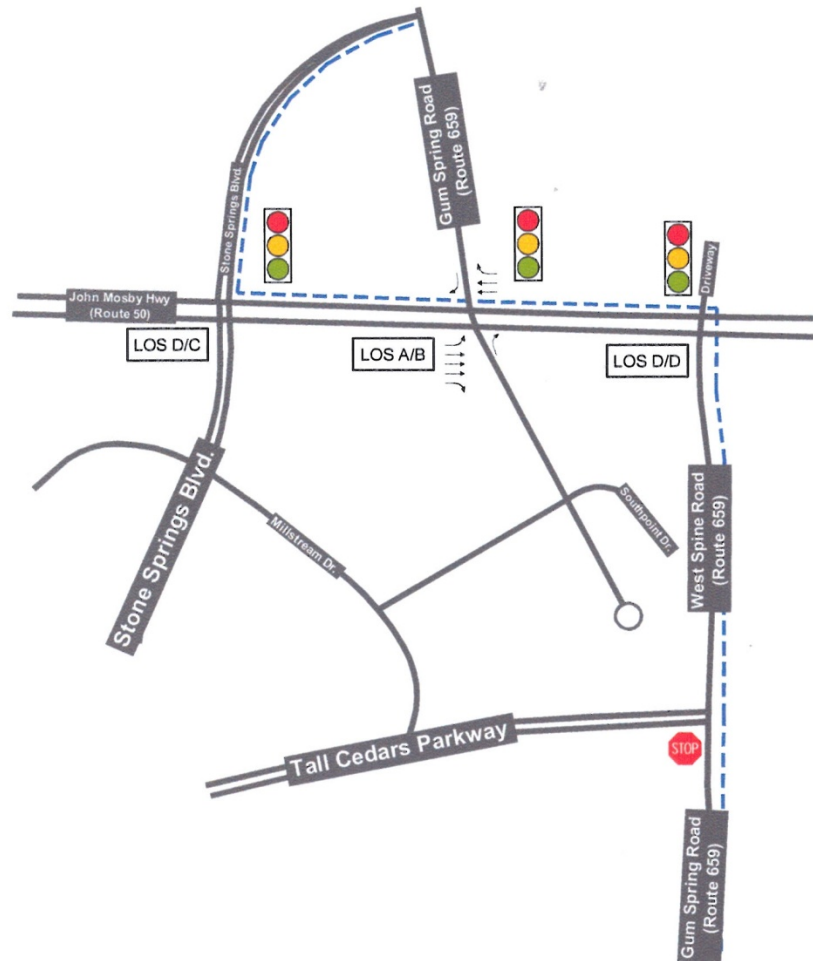
- 3 Traffic Signals.
- Route 50 improvements - Additional eastbound thru lane.
- Dual lefts provided on westbound Route 50 at West Spine Road. Queues contained within turn lanes.
- Southbound Gum Spring Road at Route 50 remains 1 lane (shared left/thru/right). Still continues to be full-movement intersection.

Source: US Route 50 Traffic Operations Study, Wells & Associates, Revised 7/9/12

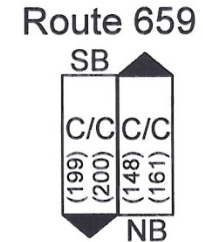
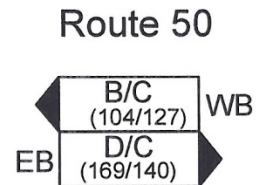
Route 50/Route 659 Area Future Changes (2014)

- Stone Springs Boulevard to be constructed as four-lane roadway north of Route 50
 - Proffered by Glascock Field at Stone Ridge Rezoning (including Stonespring Medical Center)
- Route 659 through traffic will shift from Gum Spring Road to Stone Springs Boulevard north of Route 50
- Southbound left turn from Gum Spring Road to Eastbound Route 50 is eliminated (right-out only)
- Eastbound left turn from Route 50 to Northbound Gum Spring Road remains open as signalized movement
- Signal eliminated for Eastbound Route 50 through traffic

FUTURE +/- 2014



Arterial Level of Service



Notes

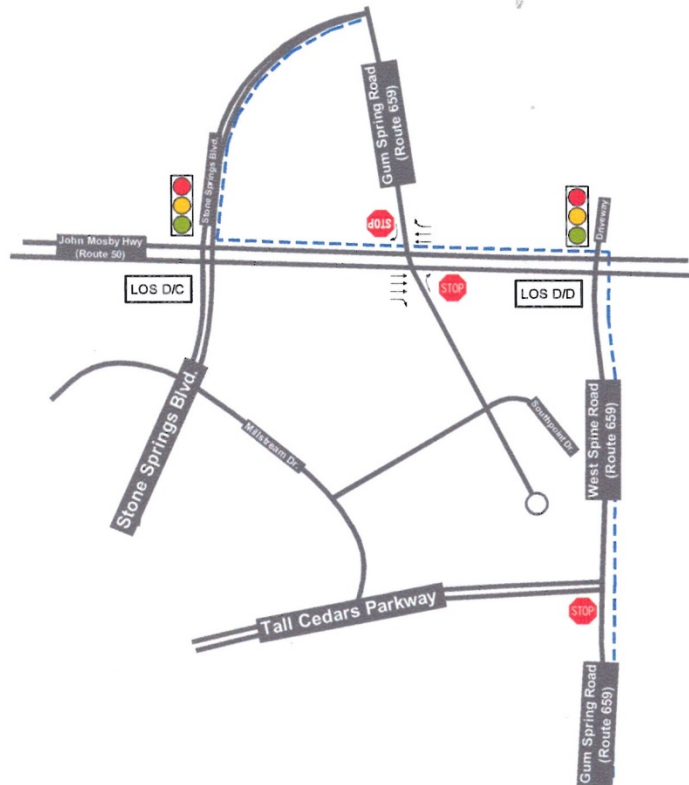
- Stone Spring Boulevard extended north to Gum Spring Road.
- Eastbound Route 50 left-turn maneuver signalized to access northbound Gum Spring Road.
- Eastbound thru traffic does not stop.

Source: US Route 50 Traffic Operations Study, Wells & Associates, Revised 7/9/12

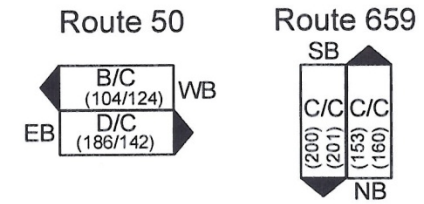
Route 50/Route 659 Area Future Changes (2016)

- Signal at Route 50 and Gum Spring Road completely eliminated
- Gum Spring Road becomes right-in, right-out only on both sides of Route 50 with median crossover closed
- Ultimately, Arcola Boulevard Extended north of Route 50 to connect with Evergreen Mills Road, Loudoun County Parkway and Route 606 - timeframe TBD
 - Proffered as part of Arcola Center Rezoning

FUTURE +/- 2016



Arterial Level of Service

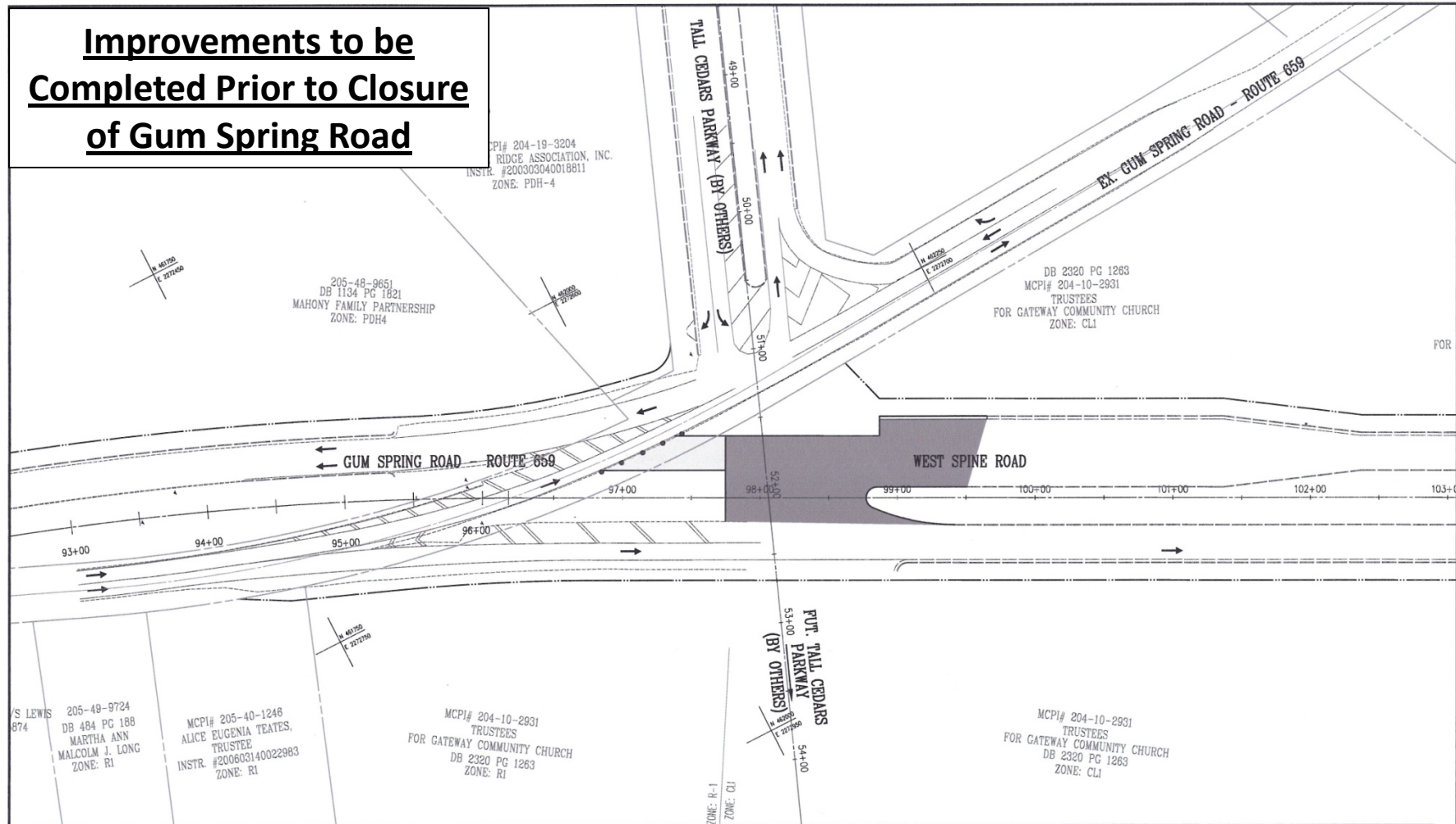


Notes

- Signal removed at Route 50/Gum Spring Road and converted to a right-in/right-out movement.

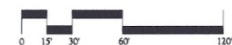
Source: US Route 50 Traffic Operations Study, Wells & Associates, Revised 7/9/12

Improvements to be Completed Prior to Closure of Gum Spring Road



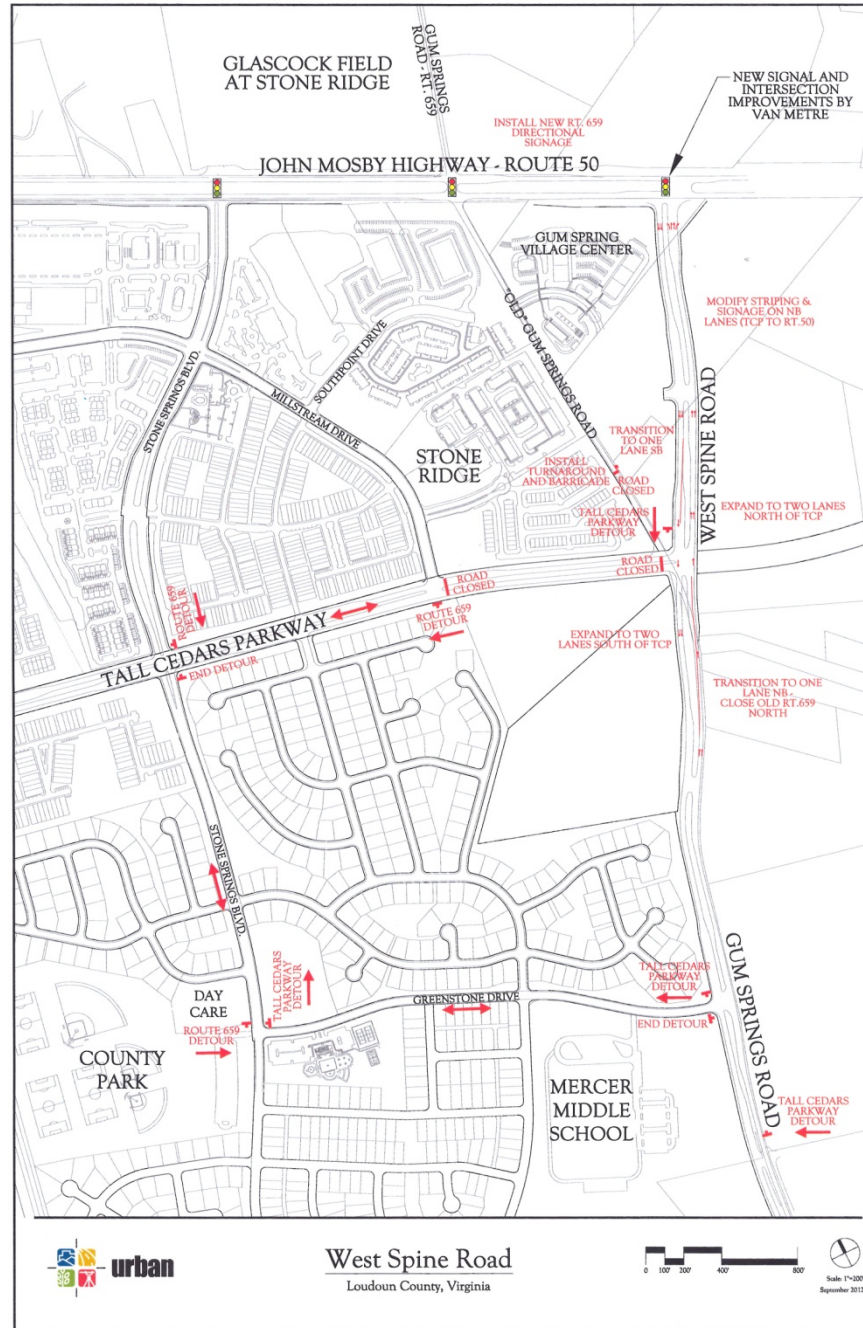
Route 659 - Tall Cedars Parkway Intersection - Phase 1

Loudoun County, Virginia

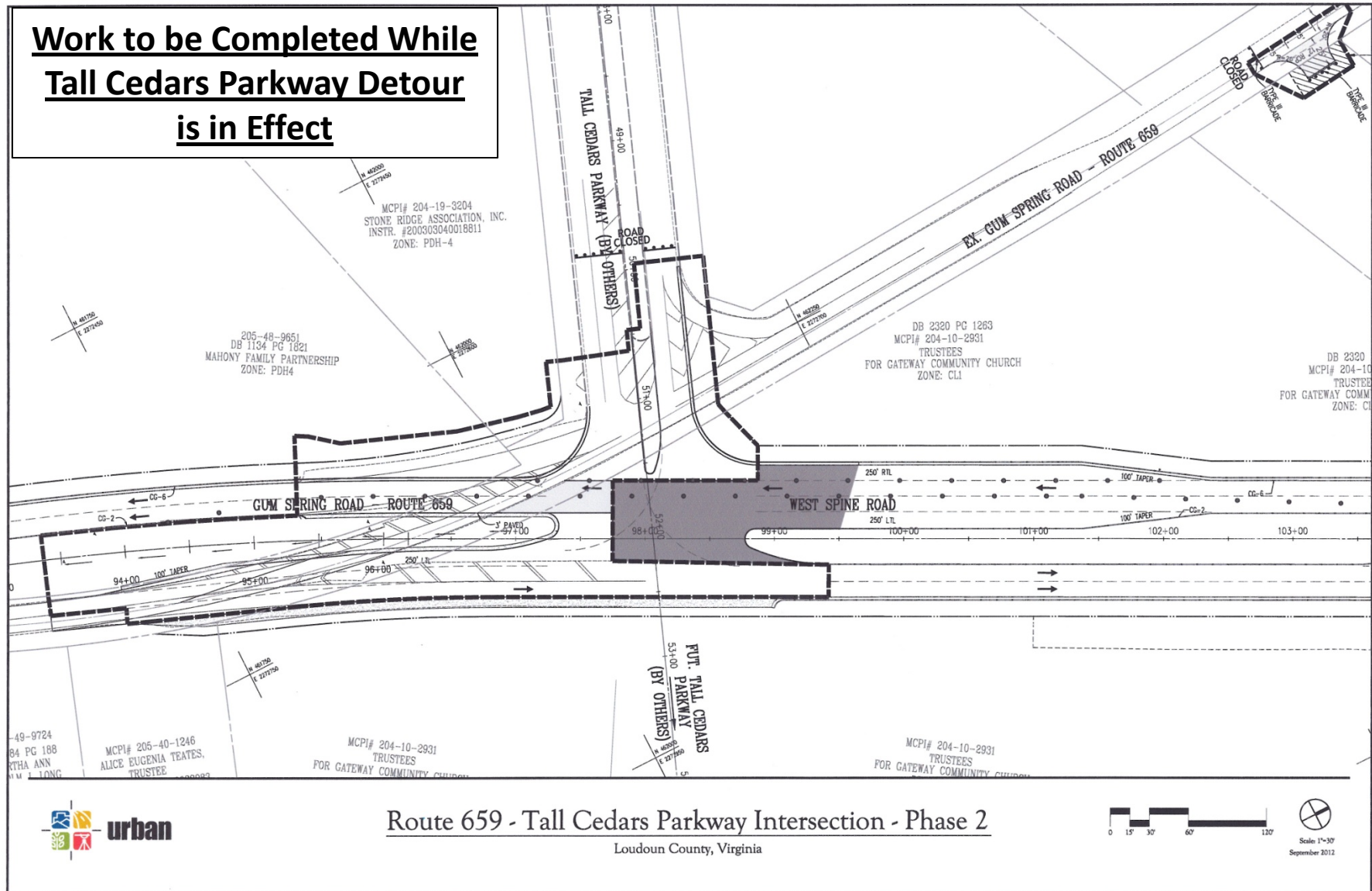


Scale 1"=30'
September 2012

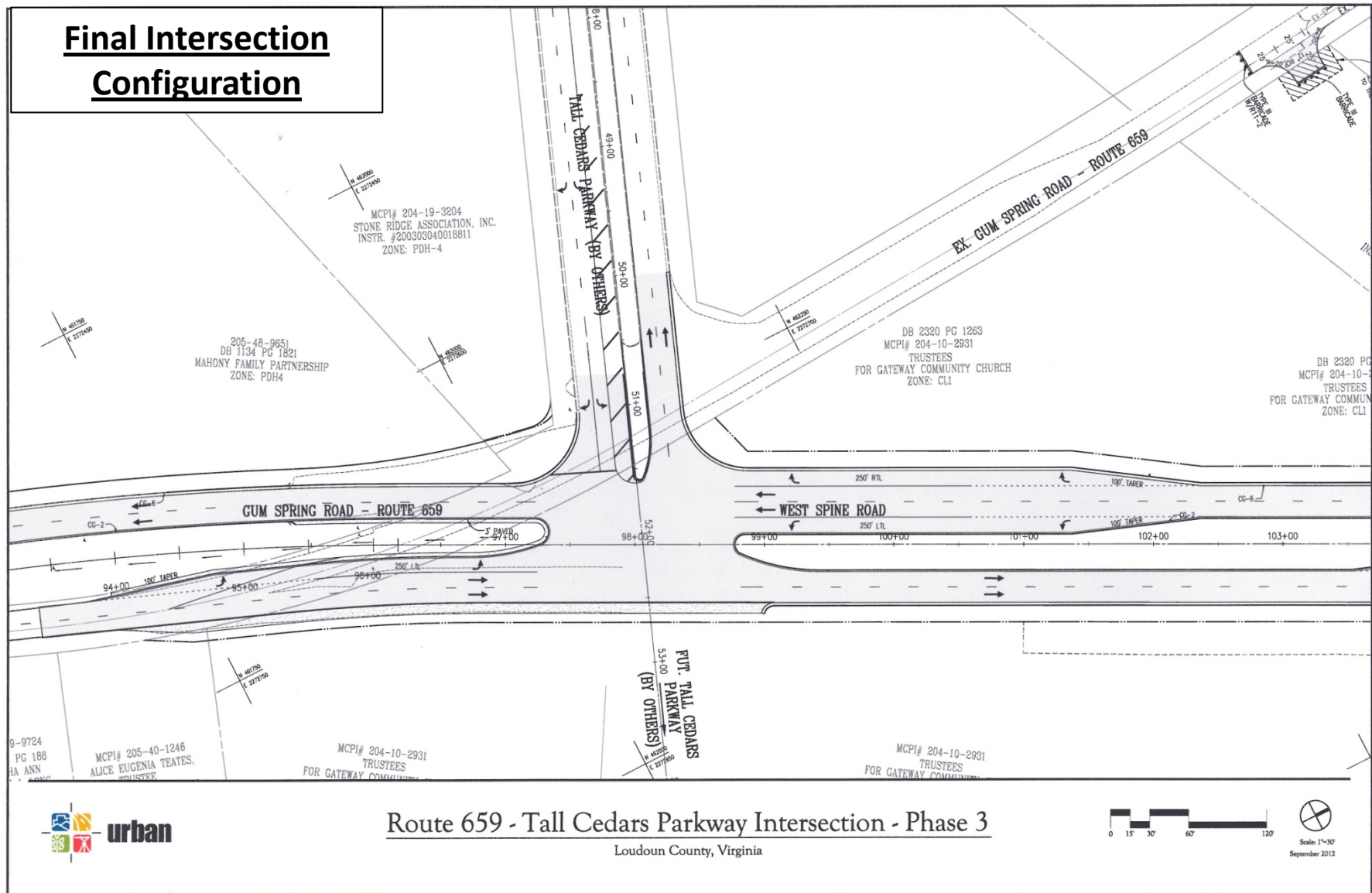
Proposed Tall Cedars Parkway Detour



**Work to be Completed While
Tall Cedars Parkway Detour
is in Effect**



Final Intersection Configuration



Planned Traffic Flow Changes Route 50/Route 659 Area

“Dulles Direct” Town Hall Meeting

Mercer Middle School

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