



MEMORANDUM

Date: September 5, 2014

Project #: 13942

To: Kris Morley-Nikfar
Fairfax County Department of Transportation

From: Zachary Horowitz, P.E.

Project: Seven Corners Transportation Study Part 2

Subject: Forecasted Travel Demand near the City of Falls Church

This memorandum addresses forecasted traffic demand, network circulation, and proposed roadway functional classification on and near N. Roosevelt for the year 2040 Comprehensive Plan and Concept B (the recommended Seven Corners transportation network in the draft Seven Corners Comprehensive Plan) scenarios.

Table 1 shows the peak hour forecasted traffic volumes along N. Roosevelt for the year 2040 Comprehensive Plan and Concept B. The source of the data is from Figures 35 and 36 in the Seven Corners Transportation Study Phase II report; they are attached at the end of this memorandum. Screenline locations can be seen in Figure 15 (attached). A screenline is an imaginary line drawn across a road that serves to mark locations where volume movements are summarized.

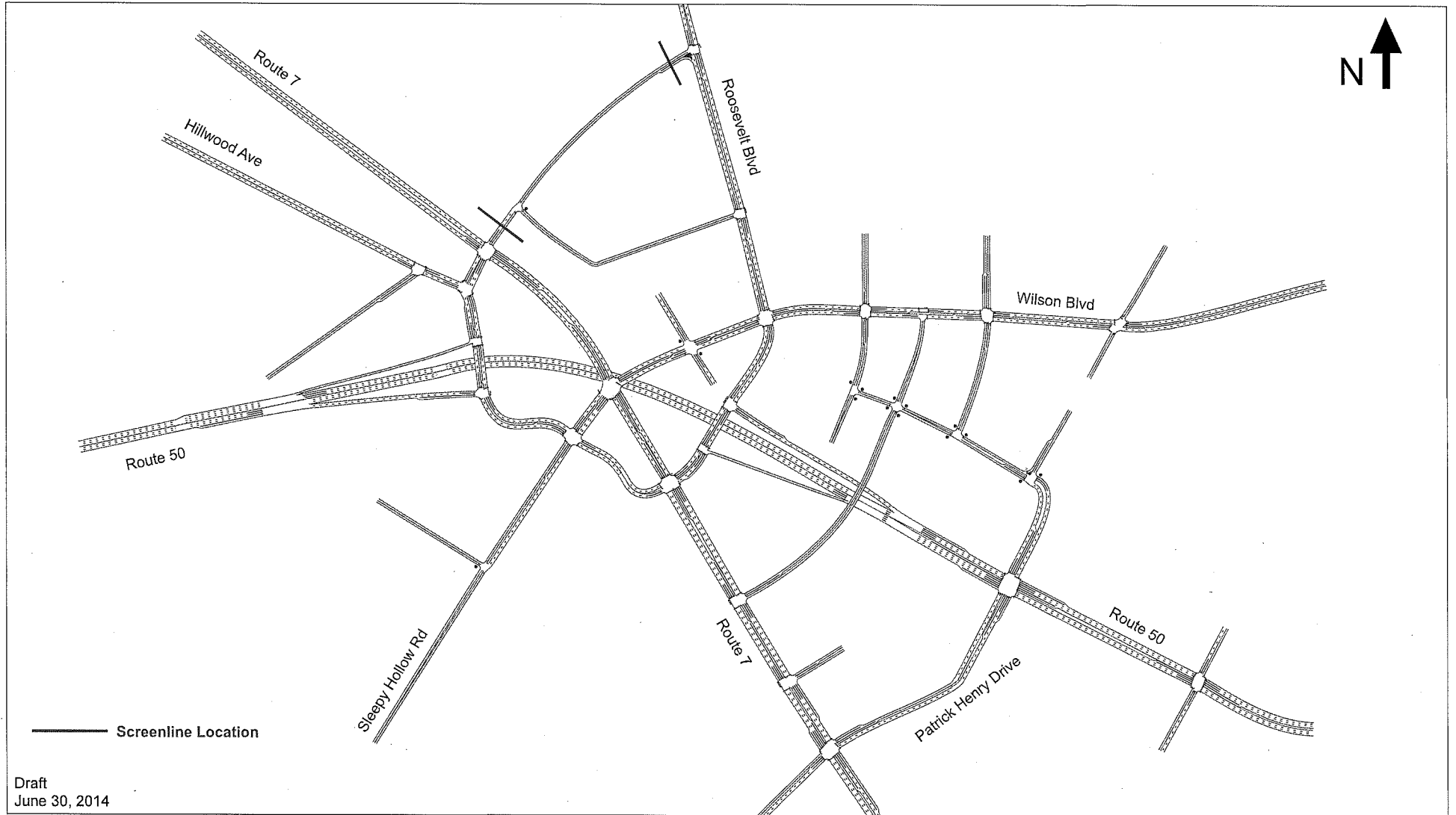
Table 1. Year 2040 Weekday PM Peak Hour Forecasted Two-Way Travel Volume for N. Roosevelt

Screenline Location	Comprehensive Plan	Concept B
N. Roosevelt north of Route 7	220	190
N. Roosevelt south of Roosevelt Blvd	170	155

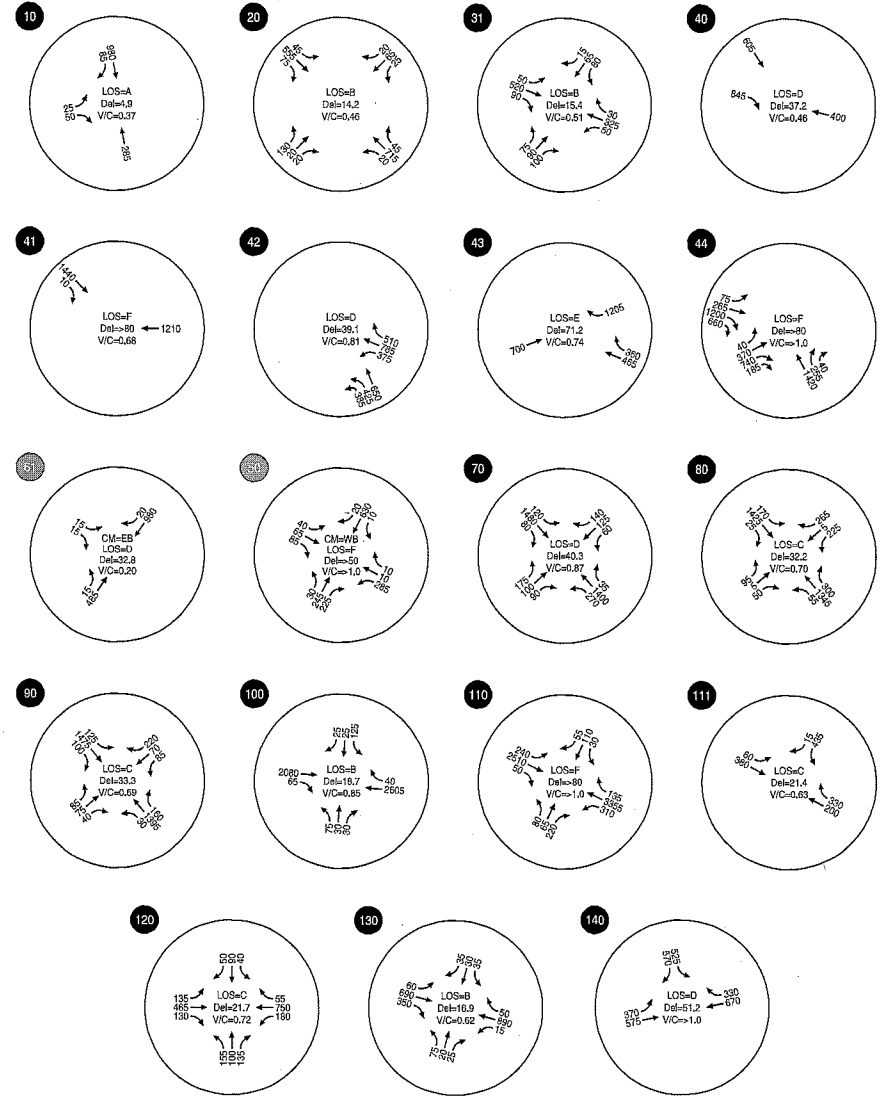
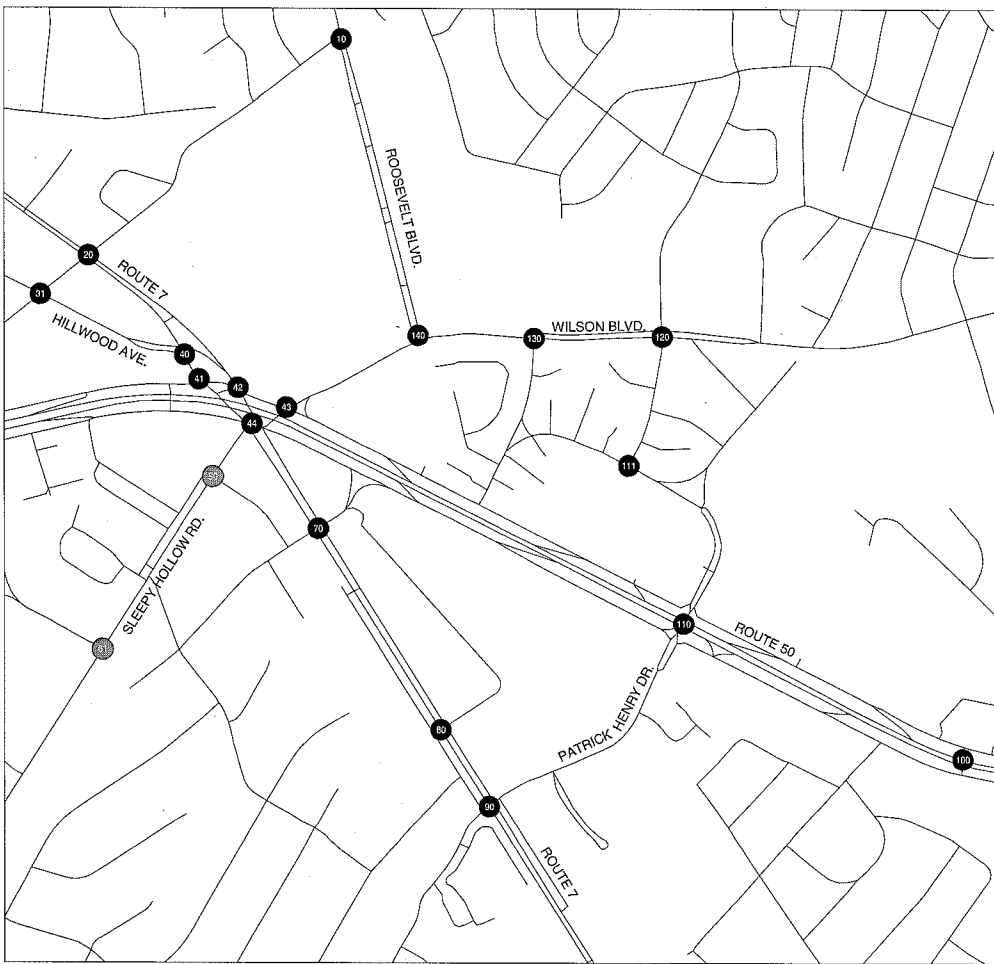
The results show that for both scenarios, N. Roosevelt would not be expected to carry a high volume of traffic. The differences in forecasted volumes for the locations in **Table 1** are related to changes in travel patterns caused by the modifications in roadway configuration for Concept B.

The street network diagram for Concept B is shown in Figure 15 in the Seven Corners Transportation Study Phase II report. This figure indicates that N. Roosevelt and the service roadway behind the Eden Center are proposed as two-lane (one-lane in each direction) roadways. The functional classification of a two-lane road corresponds to a neighborhood street; one that typically would be expected to carry low traffic volumes and serve as a possible route as part of the pedestrian and bicycle network. Neither of these roadways would be expected to serve as part of a circulating "ring road" in the Seven Corners area. The traffic volume data shown in **Table 1** provides further indication that there is little demand for traffic volume on these roadways. Removing the connection behind the Eden Center would have little effect on overall per-vehicle delay or intersection level-of-service on other intersections in the Seven Corners study area.

Figure 15. Synchro Network for Concept B with Lane Assignments



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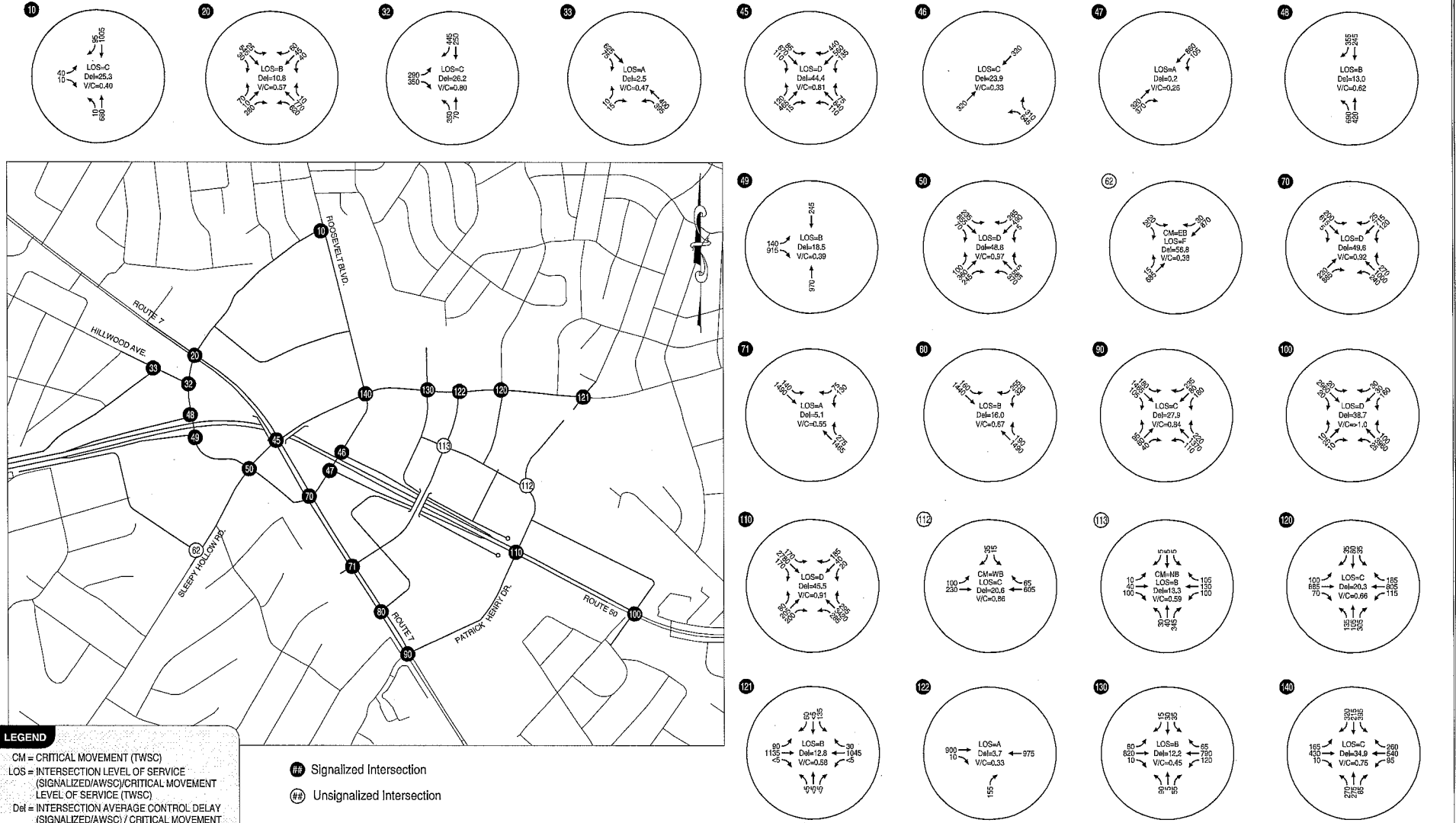


LEGEND

- CM = CRITICAL MOVEMENT (UNSIGNALIZED)
- LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
- Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED)/CRITICAL MOVEMENT CONTROL DELAY (UNSIGNALIZED)
- V/C = CRITICAL VOLUME-TO-CAPACITY RATIO
- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION

HCM RESULTS FOR THE COMPREHENSIVE PLAN WEEKDAY PM PEAK HOUR FAIRFAX COUNTY, VIRGINIA **FIGURE 35**

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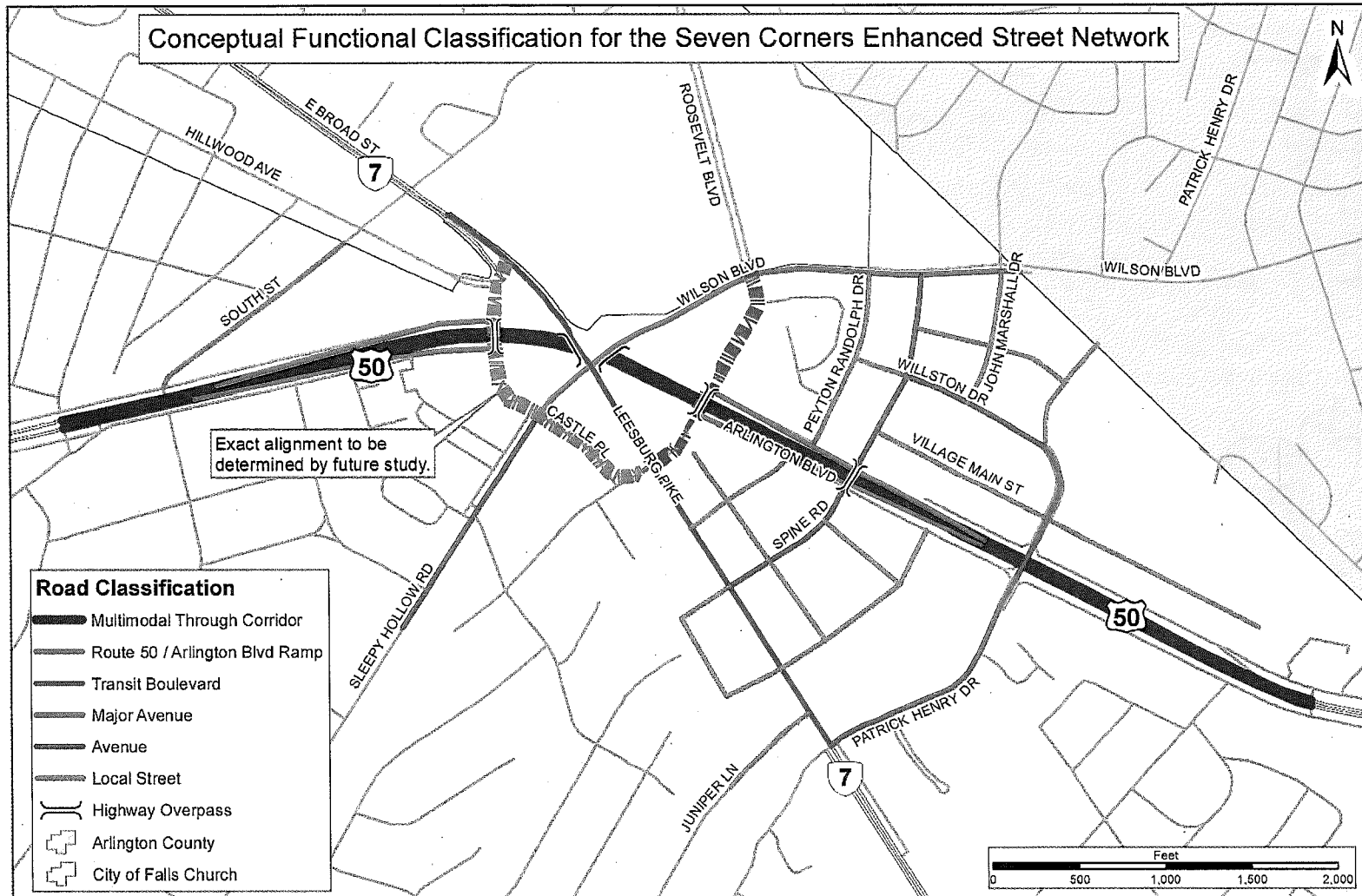


LEGEND

CM = CRITICAL MOVEMENT (TWSC)
 LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED/AWSC)/CRITICAL MOVEMENT LEVEL OF SERVICE (TWSC)
 Del = INTERSECTION AVERAGE CONTROL DELAY (SIGNALIZED/AWSC) / CRITICAL MOVEMENT CONTROL DELAY (TWSC)
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO
 TWSC = TWO-WAY STOP CONTROL
 AWSC = ALL-WAY STOP CONTROL

Ⓜ Signalized Intersection
 Ⓢ Un-signalized Intersection

HCM RESULTS FOR CONCEPT B
 WEEKDAY PM PEAK HOUR
 FAIRFAX COUNTY, VIRGINIA
FIGURE 36



Graphic above depicts the recommended Seven Corners roadway network included in the Seven Corners Comprehensive Plan update as of 9-9-14. It should be noted that the new Route 50 crossing, on the west side of the Seven Corners Interchange, has been shifted slightly to the east, moving it completely outside of the City of Falls Church.