

EXHIBIT F

TECHNICAL MEMORANDUM

To: Tim Chapman
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From: Jim Watson, PTP
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Date: January 15, 2015

Subject: Carver Terrace Traffic Statement

INTRODUCTION

This memorandum presents a traffic statement for the proposed Carver Terrace development located on a currently vacant lot on the south side of East Capitol Street between 47th Street and 49th Street in Southeast Washington, D.C., as shown on Figure 1. The project is planned to provide 21 market-rate townhomes and a 178-unit senior housing building on a parcel zoned R-5-A. Zoning requirements for parking will be met within the senior housing building with 120 parking spaces in a below grade parking garage and the townhomes will be individually parked with garages for each unit. Zoning Requirements for loading will be met with the development providing one 55-foot loading berth (with corresponding platform) and one 20-foot service space to serve the senior housing building. A site plan for the proposed project is shown on Figure 2.

Per Section 353.1 of the Zoning Regulations, all new residential developments in the R-5-A zone shall be reviewed by the Board of Zoning Adjustment (BZA) as a Special Exception, and the Board shall refer to the District Department of Transportation (DDOT) for comment and recommendations as to the adequacy of public streets to accommodate the residents of the project and the relationship of the proposed project to public plans and projects. Since the development meets Zoning Requirements for parking and loading, this traffic statement has been developed to review the anticipated vehicular trip generation of the development and its relation to the surrounding road infrastructure.

SITE REVIEW AND TRIP GENERATION

As mentioned previously, the development is located on a currently vacant lot on the south side of East Capitol Street between 47th Street and 49th Street in Southeast Washington, D.C., as shown on Figure 1. The project is planned to provide 21 market-rate townhomes and a 178-unit senior housing building on a parcel zoned as R-5-A. Zoning requirements for parking will be met with the senior housing building will provide 120 parking spaces in a below grade parking garage and the townhomes will be individually parked with garages for each unit. Zoning Requirements for loading will be met with the development providing one 55-foot loading berth (with corresponding platform) and one 20-foot service space to serve the senior housing building. A site plan for the proposed project is shown on Figure 2.

Vehicular access will be provided via one curb cut from 47th Street south of East Capitol Street for the below grade parking garage serving the senior housing building. Two additional curb cuts from 47th Street and 49th Street will access an internal private alley that will serve the townhomes as well as the loading facilities for the senior housing building. Pedestrian access for the senior housing building will be provided from the southeast corner of the East Capitol Street/47th Street intersection and pedestrian access for the townhomes will be provided from each unit along the 47th and 49th Street frontages.

The site is located approximately 1,100 feet (or less than one quarter of a mile) from the Benning Road Metro Station which serves the Blue and Silver Lines. In addition, five (5) Metrobus lines serve the site directly from a bus stop adjacent to the proposed main entrance of the senior housing building on East Capitol Street (96, 97, U5, U6, and W4 lines) and one additional line (U8 line) serves Benning Road, less than 1,000 feet from the site.

Mode split assumptions for the residential development were based on the location of nearby transit options, data from the recent traffic impact study performed for the nearby Capitol Gateway development, and census data from the 2008-2012 American Community Survey for Census Tract 99.06. No comparable sites were contained in WMATA's Development Related Ridership Survey; as a result, it was not used as a source for mode split comparison. The census data for census tract 99.06 depicted the distribution of transportation modes to work as the following:

- 55% transit,
- 45% auto,
- 0% walking, biking, and other modes.

For the residential component for the nearby Capitol Gateway study, the following conservative mode split was assumed and approved by DDOT:

- 35% transit,
- 60% auto,
- 5% walking, biking, and other modes.

Even though localized census data for the Carver Terrace development shows transit usage being higher than vehicle trips (which is supported by the proximity of transit to the site), the following mode split was assumed for the proposed residential development to be conservative and consistent with the mode split used by the nearby Capitol Gateway development and to account for any additional driving that may take place due to the availability of parking on-site:

- 35% transit,
- 60% auto,
- 4% walk,
- 1% bike.

Vehicular trips were calculated based on Institute of Transportation Engineers' (ITE) *Trip Generation, 9th Edition* rates and are shown on Table 1 below. Trips were calculated based on ITE Trip Generation rates for Residential Condominium/Townhouse (LU 230) and Senior Adult Housing - Attached (LU 252). Following the base vehicular-trip rate calculations, the vehicle-trips were converted to person-trips based on an average vehicle occupancy (AVO) of 1.1 persons per vehicle as obtained from the Summary of Travel Trends – 2009 National Household

Travel Survey performed by the U.S. Department of Transportation Federal Highway Administration and noted on Table 1 below.

Table 1: Base Trip Generation

Proposed Development	Quantity		AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Residential Condominium/Townhouse (230)	21	DU	3	12	15	11	6	17
Senior Adult Housing – Attached (252)	178	DU	12	23	35	24	20	44
Net Vehicle-Trips before Non-Auto Reduction			15	35	50	35	26	61
Converted Person Trips at 1.1 persons/vehicle			16	39	55	39	29	68

The person trips noted above were then delineated based on the mode split data discussed previously and shown on Table 2. As noted above, the mode splits assumed for this development should be considered conservative as it assumes an auto mode split 15 percentage points (or 33%) higher than the census tract the development is located in and accounts for the additional parking that is proposed for the development. The vehicle person-trips were then converted back into vehicular trips based on the same 1.1 persons per vehicle AVO described above.

Table 2: Multi-Modal Trip Generation

Trip Generation by Land Use & Mode		AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Residential							
Transit Person-Trips	35%	6	14	19	14	11	23
Walking Person-Trips	4%	1	2	2	2	1	3
Bicycling Person-Trips	1%	0	0	1	0	0	1
Vehicular Person-Trips	60%	10	23	33	23	17	40
Vehicle-Trips		9	21	30	21	15	36
Total Person-Trips		17	39	55	39	29	67
Total Vehicle-Trips		9	21	30	21	15	36

As shown above, the development is conservatively anticipated to generate 30 AM peak hour trips (9 inbound and 21 outbound) and 36 PM peak hour trips (21 inbound and 15 outbound). DDOT's threshold for further analysis of vehicle impacts in a Comprehensive Transportation Review (CTR) study is 25 vehicle trips in the peak direction. Since the Carver Terrace development is anticipated to generate 21 vehicle trips in the peak

direction, this threshold would not be met. This magnitude of trips will have a minimal impact on the surrounding roadway network and does not warrant that a traffic study be conducted.

SUMMARY

The vehicular impacts of the development on the surrounding transportation infrastructure are anticipated to be minimal. The development's proximity to Metrorail and Metrobus, the modal split common in the neighborhoods surrounding the site, and the minimal number of peak hour trips typically generated by senior housing (which is the primary occupant of the proposed site), minimal vehicular impact is anticipated in conjunction with the development of the Carver Terrace project.

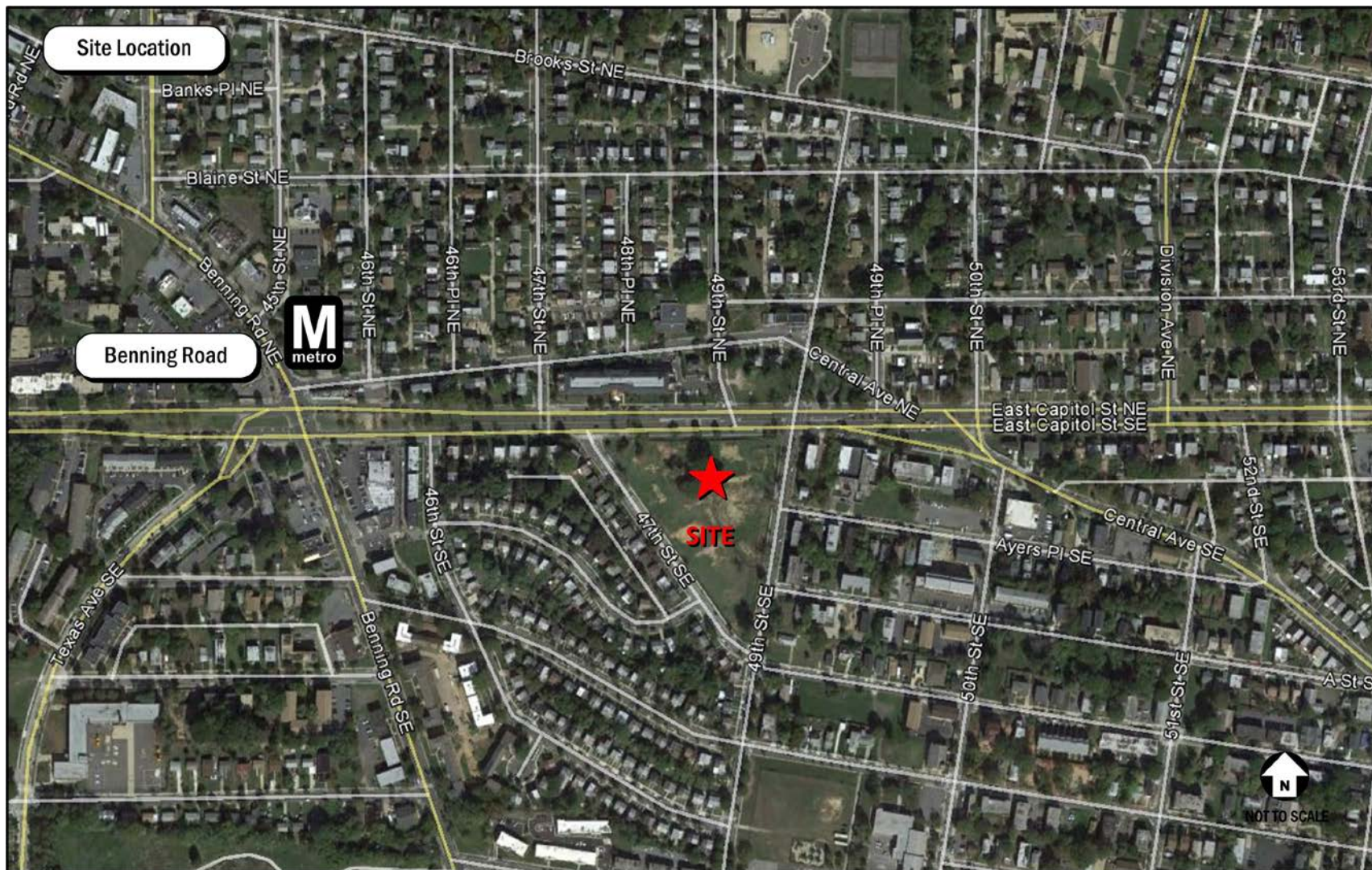


Figure 1: Site Location

