

## TECHNICAL MEMORANDUM

To: Jason Iannotti  
Bruno Clay Management

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Date: September 11, 2017

Subject: 211 Mill Street  
Trip Generation Comparison Memorandum

## INTRODUCTION

The following memorandum presents the findings of a trip generation comparison for the proposed mixed-use development located at 211 Mill Street in the Town of Vienna, Virginia. The site is situated in the northern quadrant of the intersection of Church Street and Mill Street and is governed by the Limited Industrial (CM) zoning as per the Town of Vienna Zoning Map. The site location map is shown in Figure 1 and the tax map is shown in Figure 2.

There is an existing development on the site which consists of a variety of specialty retail uses. The applicant is proposing to redevelop the site to construct the following mix of uses on the site:

- 25,679 square feet of specialty retail uses
- 116,531 square foot self-storage facility

A parking garage will be provided with reserved parking for patrons on the site. In addition, 130 public parking spaces in the garage are also being considered as public parking for visitors to the Town of Vienna for shopping and special events.

## EXISTING ROADWAY NETWORK

A description of the major roadways within the immediate vicinity of the site is presented below:

Mill Street is classified as an approximately 0.65 mile local street running northwest from Maple Avenue. There is no posted speed limit on the road. Based on available hourly counts conducted in 2014 at the intersection of Mill Street and Maple Avenue, Mill Street carries approximately 2,200 vehicles per day (vpd) on an average weekday.

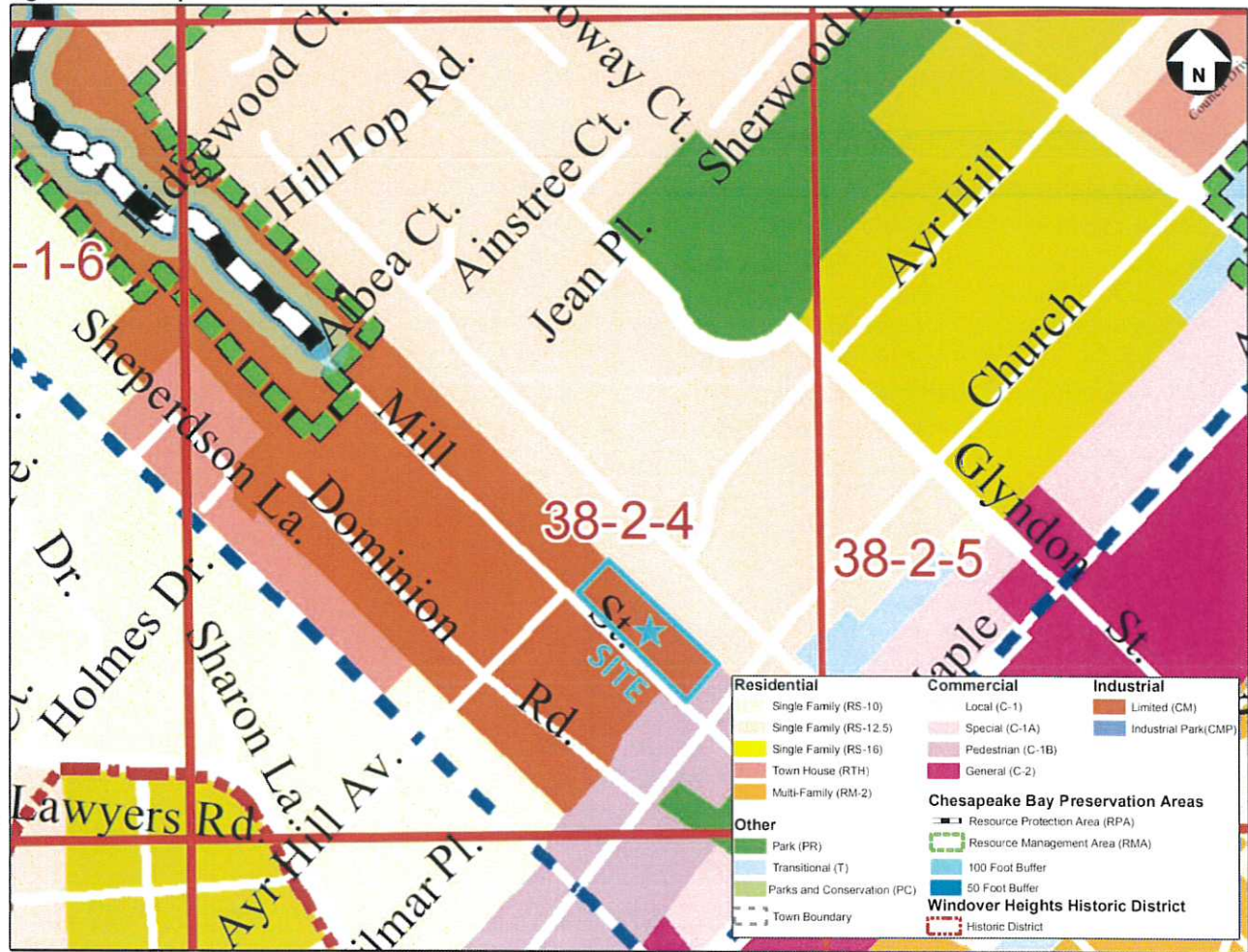
Church Street is classified as a collector street running southwest-northeast between Pleasant Street and East Street. The posted speed limit is 25 mph within the vicinity of the proposed development. Based on the data available on VDOT's Traffic Data website, the section of Church Street between Lawyers Road and Beulah Road carries approximately 6,400 vehicles per day (vpd) on an average weekday.

The intersection of Mill Street and Church Street currently operates as an all-way stop controlled intersection. The intersection has crosswalks on all approaches. Mill Street and Church Street are built to their ultimate conditions.

Figure 1: Site Location Map



Figure 2: Tax Map



## SITE DESCRIPTION AND SITE ACCESS

The site is currently governed by the Limited Industrial (CM) zoning as per the Town of Vienna Zoning Map. There is an existing development on the site which consists of a variety of specialty retail uses. The applicant is proposing to redevelop the site to construct the following mix of uses on the site:

- 25,679 square feet of specialty retail uses
- 116,531 square foot self-storage facility
- 288 parking space garage. A total of 130 parking spaces are being considered as public parking for visitors to the Town of Vienna for shopping and special events

The existing development is accessed from Mill Street and there are no well-defined driveways for the development. As part of the redevelopment, the site access will be consolidated and access will be provided by two driveways to the proposed garage.

## TRIP GENERATION COMPARISON

A trip generation comparison for the site is provided for the following uses:

- **Current Use:** There is an existing development on the site which consists of a variety of specialty retail uses.
- **Proposed Use:** The applicant is proposing to redevelop the site to construct the mix of uses on the site shown in Table 1 (with public parking) and Table 2 (without public parking).

In order to calculate the trips generated by the current and proposed uses on the site, ITE's Trip Generation, 9<sup>th</sup> Edition was used. Table 1 shows the results of the trip generation comparison.

**Table 1: Trip Generation Comparison for Current Use and Proposed Uses (With Public Parking)**

Land Use	ITE Code	Size	Units	----- Week day -----						
				<u>AM Peak Hour</u>			<u>PM Peak Hour</u>			<u>Weekday</u>
				In	Out	Total	In	Out	Total	Total
<u>Current Use</u>										
Specialty Retail	826	28.0	kSF	10	12	22	40	49	89	1,236
Total Current Use Trips				10	12	22	40	49	89	1,236
<u>Proposed Uses</u>										
Specialty Retail*	826	25.7	kSF	9	12	21	37	47	84	1,137
Self-Storage	151	116.5	kSF	9	7	16	16	15	31	292
Garage**	N/A	130	Spaces	9	12	21	37	47	84	1,150
Total Proposed Uses Trips				27	31	58	90	109	199	2,579
Difference (Proposed Uses - Current Use)				17	19	36	50	60	110	1,343

\* The AM peak hour trip generation rates for the Specialty Retail use (ITE Code: 826) are not provided in the ITE Trip Generation Manual. Hence, a trip generation rate equal to 25% of the PM peak hour rate was used.

\*\* The trip generation for the garage use was calculated using the rates for Specialty Retail use. Since approximately 130 spaces will be provided in the parking garage for visitors to the Town of Vienna for shopping, the trip generation was calculated based on a 26,000 square foot specialty retail center (1 parking space per 200 square foot retail).

As shown in Table 1, the proposed use with the public parking will generate approximately 58 AM peak hour trips, approximately 199 PM peak hour trips, and approximately 2,579 daily trips. Compared to the current use on the site, the proposed use will generate approximately 36 more AM peak hour trips, approximately 110 more PM peak hour trips, and approximately 1,343 more daily trips.

It should be noted that the public parking garage will not generate any additional regional trips. Hence, it will not add any additional regional traffic to the Town of Vienna. It will only result in a shift of trips from other parking facilities in the Town of Vienna.

An alternative trip generation is also shown in Table 2 in event that the additional public parking is not provided for visitors to the Town of Vienna.

**Table 2: Trip Generation Comparison for Current Use and Proposed Uses (Without Public Parking)**

Land Use	ITE Code	Size	Units	----- Week day -----								
				AM Peak Hour			PM Peak Hour			Weekday		
				In	Out	Total	In	Out	Total	Total		
<b>Current Use</b>												
Specialty Retail	826	28.0	kSF	10	12	22		40	49	89		1,236
<b>Total Current Use Trips</b>				<b>10</b>	<b>12</b>	<b>22</b>		<b>40</b>	<b>49</b>	<b>89</b>		<b>1,236</b>
<b>Proposed Uses</b>												
Specialty Retail*	826	25.7	kSF	9	12	21		37	47	84		1,137
Self-Storage	151	116.5	kSF	9	7	16		16	15	31		292
<b>Total Proposed Uses Trips</b>				<b>18</b>	<b>19</b>	<b>37</b>		<b>53</b>	<b>62</b>	<b>115</b>		<b>1,429</b>
<b>Difference (Proposed Uses - Current Use)</b>				<b>8</b>	<b>7</b>	<b>15</b>		<b>13</b>	<b>13</b>	<b>26</b>		<b>193</b>

\* The AM peak hour trip generation rates for the Specialty Retail use (ITE Code: 826) are not provided in the ITE Trip Generation Manual. Hence, a trip generation rate equal to 25% of the PM peak hour rate was used.

As shown in Table 2, the proposed use without the public garage will generate approximately 37 AM peak hour trips, approximately 115 PM peak hour trips, and approximately 1,429 daily trips. Compared to the current use on the site, the proposed use without the public garage will generate approximately 15 more AM peak hour trips, approximately 26 more PM peak hour trips, and approximately 193 more daily trips. Hence, the proposed development without the public parking is anticipated to generate minimal additional traffic compared to the current uses on the site.

## CONCLUSIONS

The analysis presented in this memorandum supports the following conclusions:

- The proposed use with the public parking will generate approximately 58 AM peak hour trips, approximately 199 PM peak hour trips, and approximately 2,579 daily trips. Compared to the current use on the site, the proposed use will generate approximately 36 more AM peak hour trips, approximately 110 more PM peak hour trips, and approximately 1,343 more daily trips. It should be noted that the public parking garage will not generate any additional regional trips. Hence, it will not add any additional regional traffic to the Town of Vienna. It will only result in a shift of trips from other parking facilities in the Town of Vienna.
- The proposed use without the public garage will generate approximately 37 AM peak hour trips, approximately 115 PM peak hour trips, and approximately 1,429 daily trips. Compared to the current use on the site, the proposed use without the public garage will generate approximately 15 more AM peak hour trips, approximately 26 more PM peak hour trips, and approximately 193 more daily trips. Hence, the proposed development without the public parking is anticipated to generate minimal additional traffic compared to the current uses on the site.
- The surrounding transportation network is anticipated to handle the additional traffic generated by the proposed development. The roadways are built to the ultimate conditions.
- The existing development is accessed from Mill Street and there are no well-defined driveways for the development. As part of the redevelopment, the site access will be consolidated and access will be provided by two driveways to the proposed garage, thereby improving site access.