

REZ2023-00030, LONEOAK LAND CO., LLC
CUP2023-00011, MILE BRANCH INVESTMENTS, LLC



Commercial Rezoning/Conditional Use Permit Report
 South Anna Magisterial District
 Board Meeting Date: April 24, 2024

Overview

| | |
|----------------------------|---|
| Proposed Zoning | B-2(c), Community Business District with conditions |
| Current Zoning | A-1, Agricultural District |
| Requested Use | Self-storage warehouse facility |
| Acreage | 17.33 acres |
| Site Address | None Assigned |
| Location | South line of Mountain Road (U.S. Route 33) approximately 1,000 feet west of its intersection with West Patrick Henry Road (State Route 54) |
| GPIN | 7821-59-5952 (part) |
| General Land Use Plan | Rural Village |
| Major Thoroughfare Plan | Mountain Road: Minor Collector (60' ultimate right-of-way) |
| Case Planner | Gretchen Biernot |
| Planning Commission Action | Denial as submitted but approval with changes |

Executive Summary

This is a request to rezone 17.33 acres of a 48.2-acre parcel to B-2(c), Community Business District with conditions, to permit the development of a single-story self-storage facility in Montpelier that includes RV and boat storage. In addition, since self-storage is only permitted as a conditional use in B-2, a conditional use permit (CUP) application has also been submitted.

Access to the site will be provided through a single full-movement driveway on Mountain Road (U.S. Route 33), which is designed with the following considerations:

- Based upon recommendations from a traffic study, Mountain Road (U.S. Route 33) in front of the proposed entrance will be restriped to accommodate a two-way left-turn lane.
- An Access Management Exception (AME) was required due to the proximity of the proposed entrance to an existing entrance (Valero gas station). VDOT granted approval of the AME, since the entrance was shifted west to maximize the distance from the closest existing entrance.

Based on Planning Commission feedback, the plan was amended to note perimeter buffers as “Undisturbed Natural Buffers”, and proffers were revised to limit boat storage to 20 of the 116 storage spaces.

Outstanding Issues

No known outstanding issues at this time.

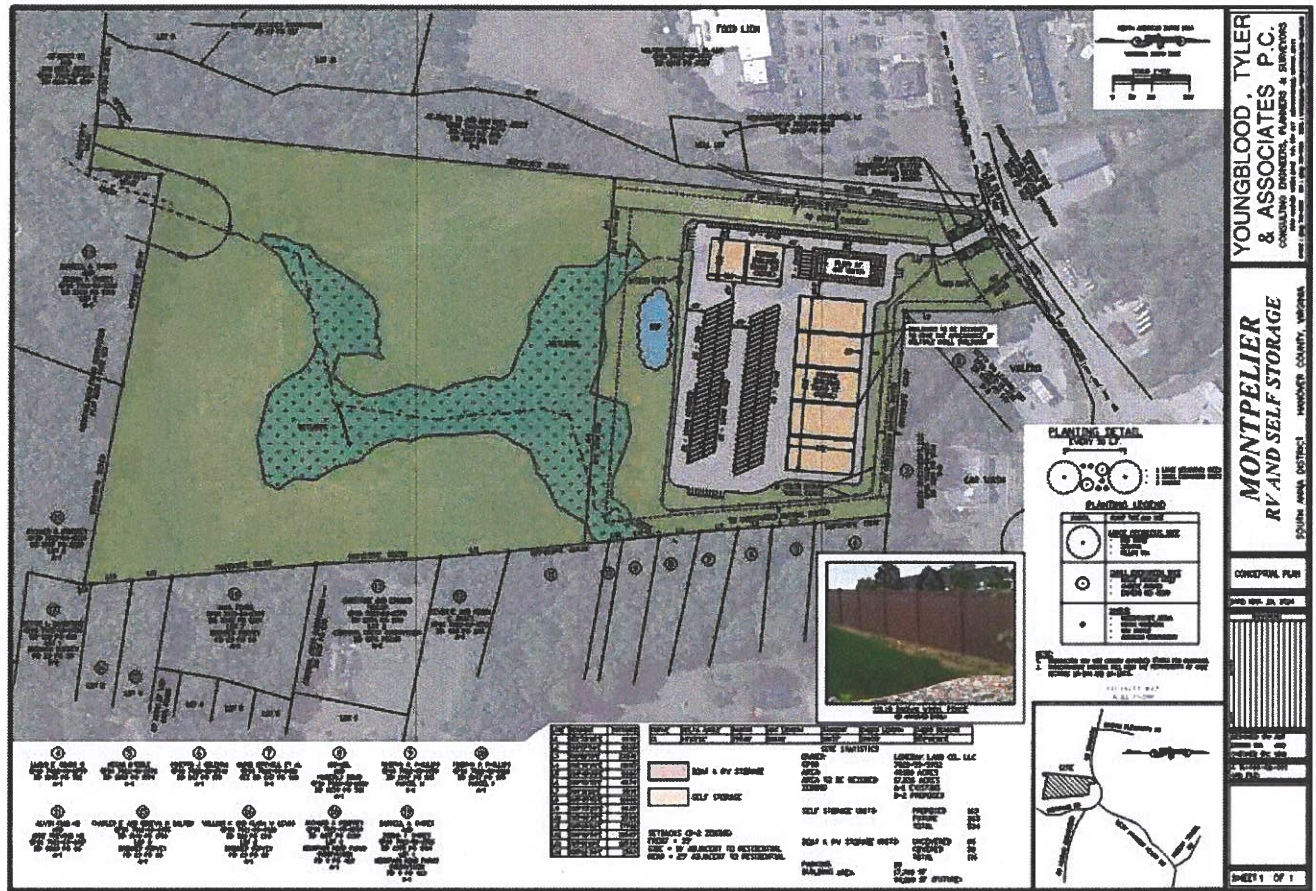
Draft Motions

I move that the Board of Supervisors (**two separate motions needed**):

- Approve of REZ2023-00030 with proffers dated April 1, 2024/ CUP2023-00011 with recommended conditions (or with the following amendments: _____).
- Deny REZ2023-00030/ CUP2023-00011.
- Defer REZ2023-00030/ CUP2023-00011 to the Board’s May meeting.

Planning Analysis

Conceptual Plan



The conceptual plan, which also serves as the CUP sketch plan, shows the layout of the proposed development. The plan includes the following features:

- **Buildings:** The plan shows several buildings of varying sizes with 534 units total (including the future phase):
 - *First Phase:* Two buildings in the initial phase will contain a maximum of 169 self-storage units:
 - A building near the front of the property will include up to 115 units within 15,200 square feet. These climate-controlled units will be accessed from internal hallways. Attached to this building are seven 300 square foot units with individual entrances opening directly to the drive aisle.
 - A long narrow building on the western side of the property will contain 47 drive-up units (each 100 square feet) with individual entrances opening directly to the drive aisle.
 - *Future Buildings:* Two of the buildings on the plan are designated as future buildings and are proposed to consist of 20,000 square feet and 78,000 square feet, respectively. Together, these self-storage buildings will contain a maximum of 365 units. These future units will also be climate-controlled with access from internal hallways.

This facility will not have a manned office since customers may rent spaces through a website. No dumpsters will be placed onsite.

- Boat and RV Storage Areas: The plan shows 116 boat and RV storage parking spaces, which includes 30 covered spaces. Per the proffers, only 20 boats will be permitted to be stored onsite. The surface of these storage areas will be gravel.
- Parking/Loading Areas: Thirty (30) foot wide drive aisles are shown along the one building with drive-up units to allow customers visiting the site to park and unload in front of each building. Drive aisles in other areas of the site will be at least 45 feet wide. Twenty parking spaces are provided throughout the property. This area of the site will be paved.
- Landscaping and Buffers:
 - *Thoroughfare Buffer*: A 100-foot thoroughfare buffer is provided along Mountain Road, which exceeds the minimum ordinance requirement of 25 feet. The Mountain Road buffer is shown to contain existing mature vegetation with new plantings along the entrance road. These plantings will consist of evergreen and deciduous trees and shrubs. This buffer must meet the thoroughfare planting requirements of Section 26-264 as well as the self-storage landscaping requirements of Section 26-297.5.
 - *Undisturbed Natural Buffers*: Natural buffers to remain undisturbed are provided around the perimeter of the site. Buffers that are 50 feet wide are located adjacent to residential and A-1-zoned properties, and 25-foot-wide buffers are provided adjacent to commercial properties.
- Fencing: A six (6) foot solid brown vinyl fence will be installed inside the buffers to provide screening and security for the self-storage facility. A photograph of the proposed fence is provided on the plan.
- Stormwater Management: One stormwater management basin is shown on the plan in the rear of the site, which should not be visible from the road or adjacent properties.

Note that the proposed facility is located on the portion of the property closest to Mountain Road, as rear portions of the site include streams, wetlands, and rolling topography. Most of the wetlands on the parcel are located outside of the CUP area and fenced compound (and outside of the rezoning request).

Self-Storage Facility Requirements

The following provisions apply to the operation of self-storage warehouses (Section 26-297):

1. *Parking requirements shall be based on the number of storage units provided and the square footage of the office area. These requirements are additive, and the spaces shall be located near the office at the rate of one (1) space per four hundred (400) square feet of office area (minimum two (2) spaces) plus one (1) space per fifty (50) storage units or fraction (minimum two (2) spaces).*

This facility will not have a manned office because customers may rent storage units online. With 534 units proposed, 11 parking spaces are required, and 20 are shown on the plan.

2. *Space shall be provided near the door to each storage unit, or near the access door for storage units inside a multi-story building, sufficient for a car or truck to unload. Within the project, aisles which have units (doors) on both sides shall be a minimum of thirty (30) feet wide (two (2) ten-foot parking lanes; one (1) ten-foot travel lane); for aisles with units (doors) on one (1) side only, the aisle shall be a minimum of twenty-five (25) feet wide (one (1) ten-foot parking lane; one (1) fifteen-foot travel lane).*

The drive aisle widths along the self-storage units meet or exceed the minimum requirements. Space is available in front of all units for unloading vehicles.

3. *The storage building shall be limited to three (3) stories (forty-five (45) feet) in height. Elevations for all proposed structures shall be provided with the application.*

Elevations have been provided, and the buildings are one story tall with a maximum height of 35 feet.

4. *All storage buildings shall face the center of the property. All circulation on-site shall be designed to be internal; no aisles shall be placed between a building and a property line unless only one (1) building is proposed on site.*

No overhead doors on storage units should be visible from adjacent properties due to the perimeter screening, buffering, and building orientation.

5. *The property shall be screened according to county standards around the perimeter of the property with either a fence or plantings. The front need not be screened, but landscaping shall be required as follows: per each twenty (20) linear feet of perimeter of the storage building, one (1) tree and two (2) shrubs shall be planted.*

The plan shows that the buildings will be screened in accordance with Section 26-263 using a fence and existing vegetation in a natural buffer. The front line of the property also meets the landscaping requirements within the proposed 100-foot thoroughfare buffer.

Elevations



Food Lion Parking Lot Elevation



Route 33 Elevation

Elevations have been provided that show the view of the buildings from Mountain Road and from the Food Lion Shopping Center. The buildings will consist of architectural shingles on the roof, storefront windows, and Hardiplank siding. One-story buildings are proposed with a maximum height of 35 feet.

Transportation

Self-storage facilities are generally low traffic generators, especially when compared to other uses permitted within the B-2 district. At build-out, the project is projected to generate 122 vehicle trips per day, including 8 in the AM Peak Hour and 12 in the PM Peak Hour. However, due to community concerns about traffic in this area, the applicant prepared and submitted a traffic impact analysis. A summary of the study is as follows:

- Capacity Analysis: The 2023 traffic conditions were compared to the No-Build 2025 conditions and the Build 2025 conditions at three intersections:
 - *Proposed Site Driveway*: Turning movements are expected to operate with acceptable levels of service and short delays in the AM and PM Peak Hours.
 - *Mountain Road at Dollar General Entrance*: In the AM Peak Hour, turning movements at the proposed site driveway are shown to continue to operate at Levels of Service (LOS) A and B with short delays in the Build condition. In the PM Peak Hour, turning movements will continue to operate at LOS A and C with short delays.
 - *Mountain Road at Valero Entrance*: At the adjacent Valero driveway, the analysis shows that there is very little difference between the 2025 Build and No Build traffic conditions for turning movements at this location.
- Turn Lane Warrant Analysis: Turn lane warrants were evaluated for the proposed site driveway. A westbound left-turn lane is warranted in the PM Peak Hour, and the existing three-lane section of Mountain Road provides this turn lane. An eastbound right-turn lane is not warranted.
- Access Management Evaluation: VDOT requires 470 feet between unsignalized T-intersections on Mountain Road. Because the proposed driveway is only 280 feet from the Valero driveway, the applicant was required to submit an Access Management Exception (AME). VDOT recently approved the AME, subject to:
 - Shifting the proposed entrance west to its maximum extent;
 - Constructing the driveway to commercial entrance standards; and
 - Restriping Mountain Road to allow for a two-way left turn lane.
- Sight Distance Evaluation: The proposed entrance was shifted west from the original location and now exceeds sight distance requirements in both directions.

Based on the recommendations of this traffic analysis, the applicant has proffered to restripe Mountain Road to provide a two-way left turn lane between the Dollar General driveway and the proposed site driveway.

Comprehensive Plan

The land use designation for this property is *Rural Village*, which is intended to accommodate a mix of institutional and commercial uses that serve the surrounding rural community. New development should complement the existing community with regard to scale, architecture, materials, and colors. The proposed self-storage use will serve the local community but careful consideration should be given to ensure the project also complements the Montpelier Village.

Below is an analysis of how the rezoning request aligns with Comprehensive Plan recommendations:

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| Overall Intent | Request generally aligns with plan recommendations: <ul style="list-style-type: none"> • The self-storage warehouse facility use is generally consistent with the <i>Rural Village</i> land use designation. |
|-----------------------|--|

| | |
|---|---|
| Mix of Uses | Request aligns with plan recommendations: <ul style="list-style-type: none"> • 100% commercial use |
| Open Space | Request generally aligns with plan recommendations: <ul style="list-style-type: none"> • Thoroughfare and perimeter buffers are provided (shown on the conceptual plan). • Recreational amenities within the open space would not be appropriate for this type of use. |
| Utilities and Infrastructure | Request aligns with some plan recommendations but not all. For example: <ul style="list-style-type: none"> • Natural buffers are located between stormwater management facilities and adjacent properties. • The area is far outside the Suburban Service Area, so public utilities are not available. |
| Landscaping and Buffers | Request aligns with plan recommendations. For example: <ul style="list-style-type: none"> • The applicant is providing a 100-foot thoroughfare buffer along Mountain Road where existing vegetation will be preserved, except for along the driveway where new landscaping is proposed. • Undisturbed natural buffers, 25 feet and 50 feet wide, are located around the perimeter of the property. |
| Building Design | Request generally aligns with plan recommendations: <ul style="list-style-type: none"> • Facades facing major thoroughfares feature Hardiplank siding and architectural shingles. • Rooftop and ground level HVAC will be screened. • Monument signs are being provided that will use similar architectural style and materials as the proposed structures. • The two future buildings exceed the recommended footprint of less than 15,000 square feet. However, a note has been placed on the plan and a proffer has been provided that describes how buildings will be designed as a collection of smaller buildings. |
| Signage | Request aligns with plan recommendations: <ul style="list-style-type: none"> • Monument signs that conform with the structures are proffered with the rezoning. |
| Parking and Loading | Request generally aligns with plan recommendations: <ul style="list-style-type: none"> • Parking will be located throughout the site along the drive aisles and designated parking areas, which will be screened from view. |
| Adjacent to Lower-Intensity Uses | Request generally aligns with plan recommendations: <ul style="list-style-type: none"> • The plan shows vegetative buffers (25-50 feet in width) and screening to provide a transition between this site and adjacent residential properties. |
| Transportation | Request generally aligns with plan recommendations: <ul style="list-style-type: none"> • The project is a low traffic generator, and the entrance received approval of a VDOT Access Management Exception. |
| Active Transportation | Request does not align with the plan recommendations: <ul style="list-style-type: none"> • No bike or pedestrian facilities are proposed. |

Compatibility with Surrounding Area

There are a mix of uses in the surrounding area, including commercial and rural residential. The property is located along Mountain Road, at the eastern side of the Montpelier Village. Because of the proposed screening and preservation of existing mature vegetation, the proposed facility should not negatively impact adjacent properties, as this screening and buffering will reduce visibility of the site from adjacent properties and roadways while minimizing impacts related to noise and lighting. Per the traffic study, the site is expected to generate limited traffic, with mitigation measures required per proffered conditions and VDOT's approval of the Access Management Exception (AME).

Community Meeting

The applicant held a community meeting on October 16, 2023, and approximately 30 nearby residents were in attendance. Topics raised at the meeting were related to the following:

- Lighting impacts
- Safety of proposed driveway, especially for trucks pulling boats onto Mountain Road
- Incompatibility of the proposed use
- Security onsite
- Type of fencing to be used
- Future plans for the rear of the site
- Construction timeframe
- Concerns about oil and other fluids spilling from the stored vehicles going into wells
- Preference for this low impact use if developed with high standards

Agency Analysis

Public Works

With the large increase in impervious area, it is likely that onsite detention of stormwater will be required.

- The conceptual plan is showing one location for a stormwater basin onsite. The applicant has indicated that all other comments will be addressed with the site plan.

VDOT

The proposed entrance will require an Access Management Exception due to its close proximity to the Valero gas station entrance.

- An Access Management Exception was approved by VDOT on February 28, 2024.

Proffers

The applicant has submitted the following proffers, dated April 1, 2024:

1. **Conceptual Plan. Accept.** The property will be developed in substantial conformity with the conceptual plan.
2. **Elevations. Accept.** The proposed buildings will be developed in substantial conformity with the elevations, which feature high-quality materials and architectural features on street-facing facades. Future buildings will be designed to give the appearance of multiple small buildings by including a wall offset or change in material at least once every forty (40) feet, with the offset or projection being at least ten (10) feet wide. A change in roofline, gable, and/or a dormer must occur at least once every forty (40) feet.
3. **HVAC Screening. Accept.** All HVAC equipment will be screened from view with either evergreen plantings or architectural materials compatible with the building.
4. **25' and 50' Natural Buffers. Accept.** Natural buffers will be maintained along the perimeter of the property.
5. **Thoroughfare Buffer. Accept.** The thoroughfare buffer along Mountain Road will contain existing vegetation, except for the sides of the entrance where new landscaping will be provided as shown on the conceptual plan.
6. **Monument Signs. Accept.** All signs installed on the property will be monument type and similar in style as the buildings on the property. All lighting will be externally illuminated.
7. **Hours of Construction. Accept.** The hours of construction are limited to 7:00 am to 8:00 pm, Monday through Saturday.
8. **Underground Utilities. Accept.** All utilities will be placed underground, with some limited exceptions.
9. **Lighting. Accept.** Lighting will be limited to 20 feet in height and will include house side shields.
10. **Permitted Uses. Accept.** The property will only be used for a self-storage facility with accessory boat and RV storage. A maximum of 20 boats may be stored on the property at a time.
11. **Road Improvements. Accept.** Mountain Road will be restriped to accommodate a two-way left turn lane to serve the proposed entrance and the Dollar General entrance.

Ordinance Required CUP Conditions

In accordance with Article 6, Division 3, Section 26-325, the site shall be developed and maintained in substantial conformity with the sketch plan titled, “Montpelier RV and Self-Storage,” dated March 11, 2024, and prepared by Youngblood, Tyler & Associates, Inc. and elevations titled, “Montpelier Self Storage” prepared by Johnson Construction Company, dated February 23, 2024. A site plan, prepared in accordance with the requirements of Chapter 26, Article 6, Division 2, of the Hanover County Zoning Ordinance, shall be submitted for review and approval prior to commencement of the requested use.

Staff-Recommended CUP Conditions

1. *Access for Emergency Response:* The owner must provide the Fire Department, Sheriff’s Office, and Emergency Medical Services with proper keys or codes for gaining access to the site in an emergency, if requested.
2. *Exterior Colors:* Building exteriors must utilize low-reflectance, subtle earth-toned colors, such as taupe, tan, brown, beige, black, and/or grey, to minimize their visual impact. Red, blue, yellow, orange, and other bright colors may not be used on the exterior of these structures, except for use on trim, shutters, signage, or accent areas that make up no more than 10% of each façade.
3. *Screening of HVAC/Mechanical Equipment:* All HVAC equipment, including roof-mounted equipment, must be screened by architectural features compatible with the building façade architecture.
4. *Hours of Operation:* The self-storage warehouse facility will be open to lessees of the facility between the hours of 6:00 a.m. to 10:00 p.m. only.
5. *Design of Wet BMPs:* Any wet BMP must be aerated.
6. *Signage:* Any freestanding sign on the property must be a monument-styled sign and must include materials and design that are compatible with the proposed materials and architectural theme of the proposed structures. All freestanding and building-mounted signage must be externally illuminated, with lighting oriented to minimize glare onto adjacent properties and roadways. Sign elevations must be submitted to the Planning Director for his/her review, and approval or disapproval, at his/her sole discretion, prior to final approval of the site plan.
7. *Exterior Lighting:* The maximum height of pole-mounted exterior lighting is twenty feet (20’). The maximum height of any building-mounted exterior light fixture is twenty feet (20’). All exterior lighting fixtures, including pole-mounted exterior lighting and building-mounted exterior lighting, must be fully shielded with house side shields installed. The uplighting of buildings is prohibited.
8. *Parking and Storage Area Surfaces.* All access drives, drive aisles, and parking areas shown on the conceptual plan must be paved with asphalt, cement, or a comparable hard-surfaced material. The boat and RV storage areas may be gravel or paved.
9. *Public Works Requirements:* All requirements of the Department of Public Works shall be met.
10. *Compliance with Development Regulations:* All development and use of the property must comply with all federal, State, and local statutes, ordinances, and regulations.

Planning Commission Recommendation

On March 21, 2024, the Planning Commission held a public hearing regarding these requests, and five people spoke in opposition with concerns related to boat storage, environmental impacts, and traffic. Following the hearing, the Commission, on a motion by Mr. Leadbetter, and seconded by Mr. Whittaker, voted unanimously to recommend **DENIAL** of REZ2023-00030 but **APPROVAL** of the request to rezone 7821-59-5952 (part), consisting of 17.33 acres, to B-2(c), Community Business District with conditions, with the following changes:

- Revise the plan to label the natural buffers as “undisturbed”
- Remove boat storage from the application.

On a motion by Mr. Leadbetter, and seconded by Mr. Whittaker, the Commission also voted unanimously to recommend **APPROVAL** of CUP2023-00011 to permit a self-storage facility.

Revised proffers and plans were submitted on April 1, 2024, which limited the number of boats stored on the property to 20 and added “undisturbed” to the natural buffer labels on the plan.

Attachments

- Maps (land use, vicinity, zoning, aerial)
- Photographs
- Rezoning Application
- CUP Application
- Traffic Study
- Approved Access Management Exception
- Approval Letter Proffers/Elevations/Conceptual Plan
- Historical Commission Recommendation
- Agency Review Comments
- Community Meeting Notes
- Citizen Correspondence
- Proffers
- Conceptual Plan/Sketch Plan
- Elevations
- Draft Ordinance


















Initials: GJWB

Maps

Hanover County, Virginia

Land Use Map

Legend

-  Rural/Agricultural
-  Town of Ashland
-  Business Flexible
-  Parks and Conserved Lands
-  Destination commerce
-  Employment Center
-  Multi-Family Residential
-  Highway Commercial
-  Industrial
-  Limited Industrial
-  Suburban Neighborhood Residential
-  Suburban High Residential
-  Suburban Center
-  Neighborhood Commercial
-  Natural Conservation
-  Rural Crossroads
-  Rural Village
-  Suburban Transitional Residential

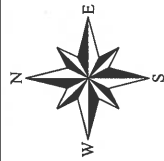
REZ2023-00030

Loneoak Land Company, L.L.C.

Rezone A-1 to B-3 & A-1

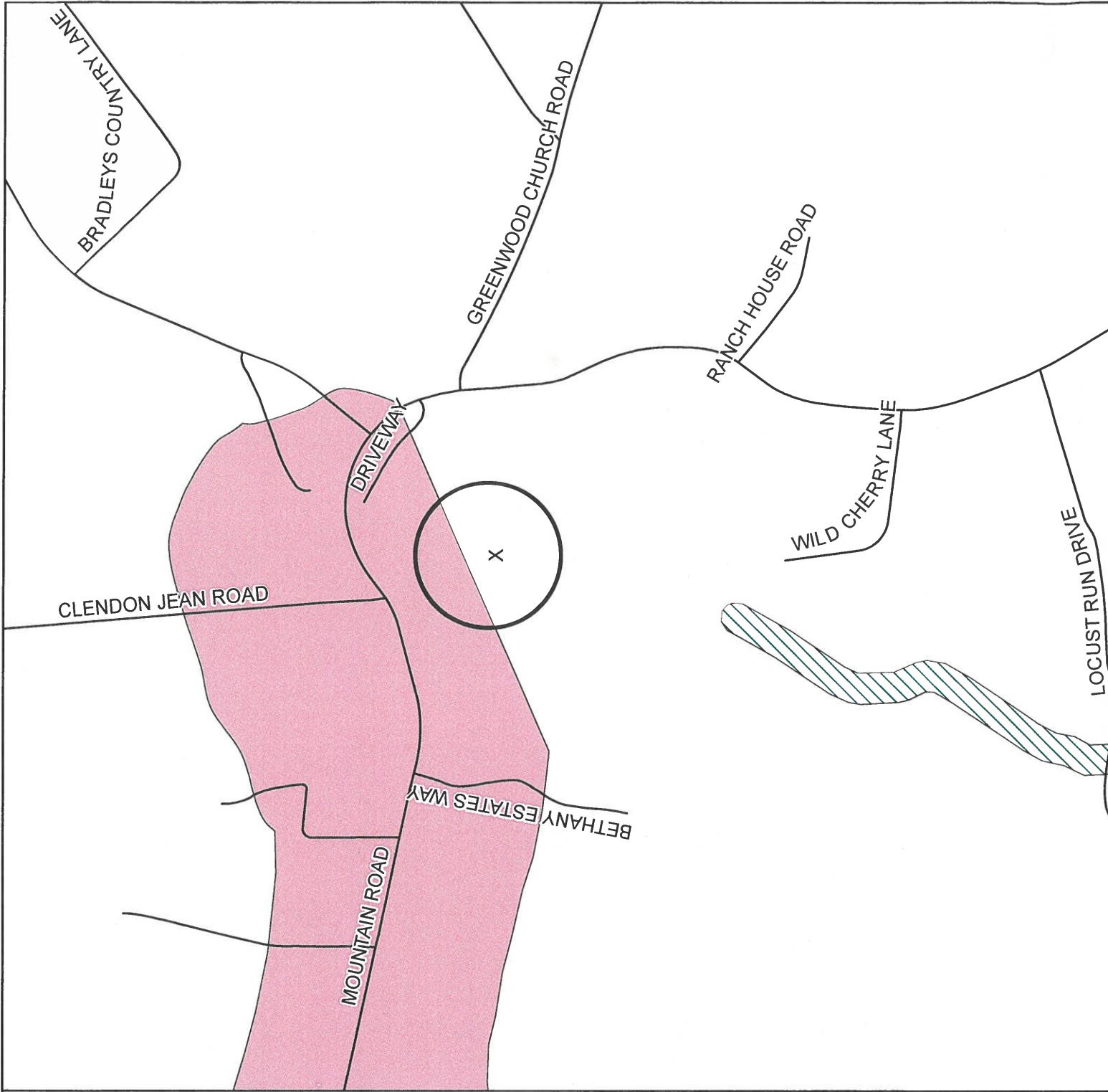
Rural Village & Rural/Agricultural
Land Use

GPIN: 7821-59-5952
South Anna Magisterial District



1 inch = 900 feet

August 07, 2023



**Hanover County,
Virginia**

General Parcel Map

Legend

- Roads
- - - Water
- Structures
- Parcels
- ▨ Trees

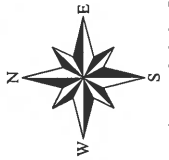
CUP2023-00011

Mile Branch Investments, L.L.C.

storage warehouse

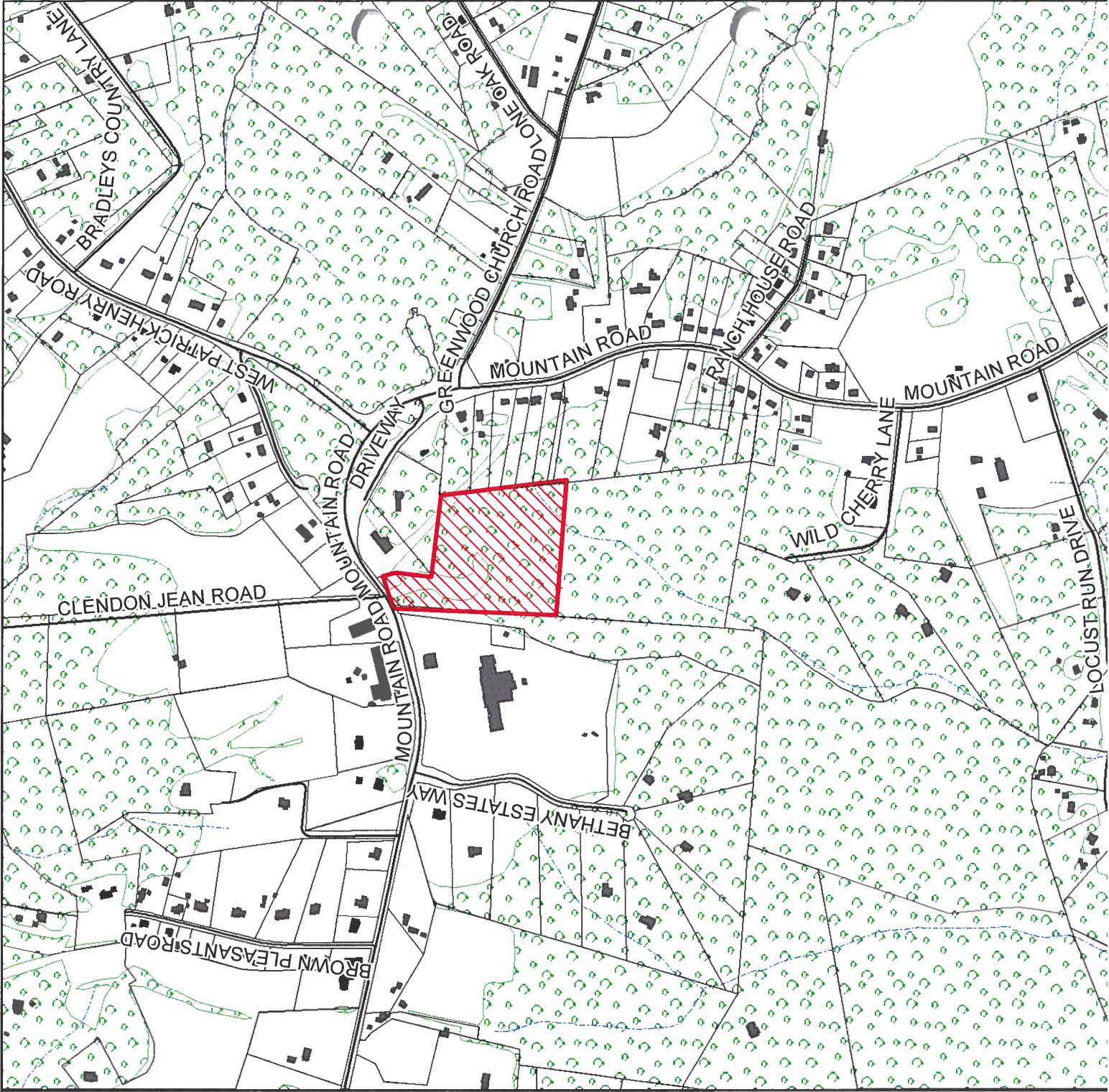
Zoned A-1

GPIN: 7821-59-5952
South Anna Magisterial District



1 inch = 900 feet

August 07 2023



Hanover County, Virginia

Zoning Map

Legend

| | | |
|---|---------|-----|
| — | Roads | R-1 |
| — | Water | R-2 |
| □ | Parcels | R-3 |
| □ | CUP | R-4 |
| □ | A-1 | R-5 |
| □ | PUD | R-6 |
| □ | RRC | RM |
| □ | RR-1 | MX |
| □ | RO-1 | B-1 |
| □ | PSC | B-2 |
| □ | POB | B-3 |
| □ | PMH | B-4 |
| □ | HE | O-S |
| □ | AR-1 | B-O |
| □ | AR-2 | M-1 |
| □ | AR-6 | M-2 |
| □ | RC | M-3 |
| □ | RS | |

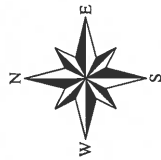
CUP2023-00011

Mile Branch Investments, L.L.C.

storage warehouse

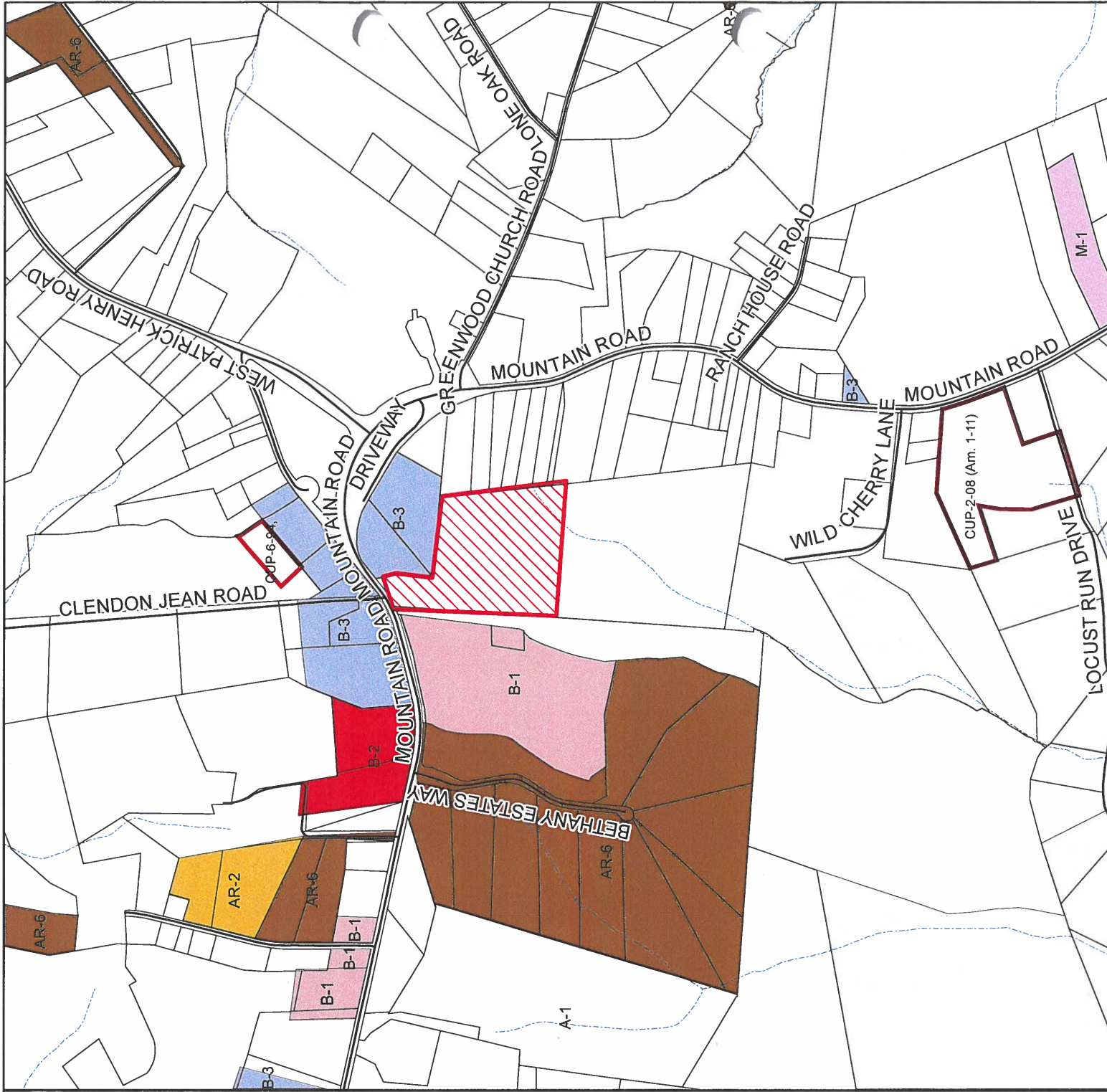
Zoned A-1

GPIN: 7821-59-5952
South Anna Magisterial District



1 inch = 900 feet

August 07, 2023



CUP2023-00011



Rezoning Application

Hanover County Planning Department Application

Request for REZONING

Case #: REZ 2023 - 00030

Please type or print in black ink.

| APPLICANT INFORMATION | |
|--|---|
| Owner: <u>LONEOAK LAND CO., LLC</u> Contact Name: _____ Address: <u>11033 DUDE RANCH ROAD</u> <u>GLEN ALLEN, VA 23059</u> | Telephone No. _____ Fax No. _____ Email Address _____ |
| Applicant/Contract Purchaser: <u>MILE BRANCH INVESTMENTS, LLC</u> Contact Name: <u>GRAYSON JOHNSON</u> Address: <u>2418 GRANITE RIDGE ROAD SUITE D</u> <u>ROCKVILLE, VA 23146</u> | Telephone No. <u>804-387-3060</u> Fax No. _____ Email Address _____ |

| PARCEL INFORMATION | For <u>multiple</u> parcels, please complete Page 4 1 |
|--|--|
| GPIN(s) (Tax ID #'s) <u>Part of 7821-59-5952</u> Deed Book <u>1267</u> Page <u>487</u> Magisterial District <u>SOUTH ANNA</u> Location Description (Street Address, if applicable) <input type="checkbox"/> <u>SOUTHEAST CORNER OF INTERSECTION OF</u> <u>MOUNTAIN ROAD AND W. PATRICK HENRY ROAD</u> | Total Area (acres/square feet) <u>17.33 AC.</u> Current Zoning <u>A-1</u> Requested Zoning <u>B-2</u> Requested Use <u>SELF STORAGE WAREHOUSE</u> <u>BOAT / RV STORAGE</u> |

| SIGNATURE OF OWNER <input type="checkbox"/> POWER OF ATTORNEY <input type="checkbox"/> CONTRACT PURCHASER <input checked="" type="checkbox"/> <i>(attach contract)</i> |
|--|
| As owner or authorized agent of this property, I hereby certify that this application is complete and accurate to the best of my knowledge, and I authorize County representatives entry onto the property for purposes of reviewing this request. |
| Signature <u></u> Date _____ Print Name <u>H. GRAYSON JOHNSON</u> |
| Signature _____ Date _____ Print Name _____ |

| QUESTIONS/ LETTERS/ REPORTS SHOULD BE FORWARDED TO THE FOLLOWING**: | |
|--|---|
| Name <u>MILE BRANCH INVESTMENTS, LLC</u> Address: <u>2418 Granite Ridge Road Suite D</u> <u>Rockville, VA 23146</u> | Telephone No. <u>804-387-3060</u> Fax No. _____ Email Address _____ |
| **It is the responsibility of the contact person to provide copies of all correspondence to other interested parties to the application. | |

ATTACHMENTS - For ALL REQUESTS you must submit the following:

- a. **Acknowledgement of Application Fee Payment Procedure** (Page 6)
- b. **Adjacent property owners, Board of Supervisors, and Planning Commissioner notification form** (Page 7) – please list all adjacent property owners including those across roadways, watercourses, and/or railroads as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property owners, Board members, and Planning Commissioners must be notified prior to submittal of this application. The form must include owners' names, address, and GPINs for all adjacent property owners. (This information is available from the County website or may be obtained from the Planning Department.) A sample letter has been provided (Page 9), and may be used to notify the adjacent property owners.
- c. **A plat of the subject property**, which accurately reflects the current property boundaries, includes metes and bounds, is drawn to scale, and shows existing structures. If the full-size plat is larger than 8 ½" x 11", the plat must be folded no larger than 9" x 12", and a reduction of the plat must be submitted which is 8 ½" x 11" in size. (Typically available from the County Clerk's Office in the Circuit Court building.)
- d. **Responses to questions on Pages 10 and 11**
- e. **Historic Impact Information** (Page 12) (This information is available on the County website or may be obtained from the Planning Department.)
- f. **Traffic Impact Analysis Certification Form** (Page 13) In compliance with VDOT's new Traffic Impact Analysis Regulations (24 VAC 30-155 *et seq.*, commonly known as "Chapter 527"), rezonings that meet certain thresholds require Traffic Impact Analyses (TIA).
The process for submitting a TIA is as follows:
 - 1) Submit the number of copies of the TIA required by VDOT to the Hanover County Planning Department with your comprehensive plan amendment/rezoning/conditional use permit submittal.
 - 2) The Hanover County Planning Department will stamp "received" on all copies of the TIA, and will keep a copy for its files.
 - 3) The applicant will deliver the remaining copies of the TIA to VDOT and pay the necessary TIA review fee directly to VDOT.
- g. **Community Meeting Guide** (Check the box if you have read and understand Pages 14 & 15. Please note that applicants that schedule community meetings without coordinating with the staff may be required to reschedule the meeting, which may cause the application process to be delayed.)
- h. **USPS Cluster Box Units (CBUs)**, please show the general location of USPS' Central Box Units (CBUs) along with elevations, access, parking and lighting, if provided. Please contact the local postmaster to obtain specific guidelines.
- i. **For applications requiring plans**, please submit ten (10) full-size plans, with sheets no larger than 24" x 36", folded to 9" x 12" in size, and **one – 8 ½" x 11" reduction**.
Specific district requirements:
 - RS*** - Conceptual plans that meet the requirements of Section 26-67 of the Zoning Ordinance.
 - RC** - Existing Feature and Site Analysis plans that meet the requirements of Section 26-54(a).
 - RM*** - Conceptual plans that meet the requirements of Section 26-84.
 - MX** - Master Plan that meets the requirements of Section 26-93.
 - BP** - Master Plan that meets the requirements of Section 26-157.

*RS and RM conceptual plans may also serve as the subdivision preliminary plat. In addition to the Zoning Ordinance requirements noted above, the preliminary plat requirements in Section 25-25 of the Subdivision Ordinance must also be addressed.

Check here if the conceptual plan will serve as the preliminary plat.

NOTE: When **conceptual plans and/or elevations** are requested by the Director of Planning which are larger in size than 8½" x 11" or are in color, please submit ten (10) full-size or colored plans, with sheets no larger than 24" x 36", folded to 9" x 12" in size, and **one - 8 ½" x 11" reduction**.

ACKNOWLEDGEMENT OF APPLICATION FEE PAYMENT PROCEDURE

Application fees are not accepted at the time of submittal. I hereby acknowledge that this application is not complete until the payment for all applicable application fees has been received by the Hanover County Planning Department. The Hanover County Planning Department shall notify me by mail, email and/or fax, (if selected below) of the applicable fee(s) at such time that they determine that the application is complete and acceptable. I acknowledge that I am responsible for ensuring that such fees are received by the Hanover County Planning Department by the Tuesday the week following the application deadline. I further acknowledge that any application fee submitted after this date shall result in the application being considered filed for the next application deadline.

Should the applicable fees not be submitted within forty-five (45) days of the date of the notification letter, it shall be my responsibility to arrange for the retrieval of all application materials. The application and any supplementary materials for incomplete applications that are not retrieved within forty-five (45) days of the date of the notification letter shall be destroyed by the Hanover County Planning Department.

Should my application be accepted, my fee payment will be due by _____. (To be filled in by a Planning Staff member.)

Signature of applicant/authorized agent [Signature] Date 8/4/23
 Print Name H. Grayson Johnson

Signature of applicant/authorized agent _____ Date _____
 Print Name _____

Address to which notification letter is to be sent:
MIILE BRANCH INVESTMENTS, LLC
2418 GRANITE RIDGE ROAD SUITE D
ROCKVILLE, VA 23146

If you would like your letter emailed and/or faxed, please make selections, and provide the information below:
 Email graysonjohnson@hanowntownrealtyservices.com Fax _____

FEES

Following application acceptance, make checks payable to Treasurer, Hanover County:

| | |
|--|--|
| A-1, OHP | \$500 |
| AR-6 (>2 lots), RC, RS, RM, MX | \$1500 + \$75/acre* for 1st 200 acres; \$30/acre* for acreage>200 acres |
| B, OS, M, BP | \$1100 |
| Amendment of Proffer or Planned Unit Development | \$1500 |

*Fractions of acreage are rounded up to the nearest whole number.

Please note: Applicants which request tax-exempt status may have their application fee waived upon presentation of official documentation of such status.

FOR STAFF USE ONLY:

| | |
|------------------------|------------------------------------|
| Base Fee _____ | Accepted by: _____ HTE #: _____ |
| Acreage Fee _____ | |
| TOTAL FEE _____ | |

NOTIFICATION OF ADJOINING PROPERTY OWNERS, BOARD OF SUPERVISORS, AND PLANNING COMMISSIONERS

Applicant's Statement:

I hereby certify that I have notified all adjacent property owners to the property, which is the subject of this request, as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property includes all property across roadways, water courses, railroads, and/or municipal boundaries. I further certify that the names and addresses below are those of the adjacent property owners as listed in the tax records of the Commissioner of Revenue of Hanover County.

Applicant's Signature: _____

COMMONWEALTH OF VIRGINIA)

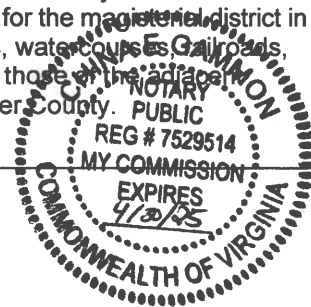
COUNTY OF HANOVER)

) to-wit:

The foregoing instrument was acknowledged before me this 4th day of August, 2023, by H Grayson Johnson (Name of Applicant).

My commission expires: 4/30/25

Notary Public



Board of Supervisors Representative: SUSAN P. DIBBLE

Planning Commission Representative: LARRY LEADBETTER

List of Adjacent Property Owners: Check here if list is attached.

| GPIN | Name | Address |
|--------------|---|---|
| 7822-51-4175 | GETTY VA LEASING, INC. | 8565 MAGELLAN PARKWAY SUITE 400 RICHMOND, VA 23227 |
| 7822-51-8115 | MOYER INVESTMENTS, LLC | 9080 ATLEE STATION ROAD MECHANICSVILLE, VA 23116 |
| 7822-60-2758 | LLOYD E. COMBS, II | 16515 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7722-60-2692 | MEGAN E. O'TOOLE | 16505 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7822-60-3540 | PINETTO J. COLEMAN | 16497 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7822-60-3420 | ANN JEFFERSON JEANETTE & MARIO YOLANDA MITCHELL | 16491 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7822-60-3320 | MICHAEL & KIMBERLY DOWD | 16487 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7822-60-3159 | TIMOTHY R. PHILLIPS | P.O. BOX 223 MONTPELIER, VA 23192 |
| 7822-60-3123 | TIMOTHY R. PHILLIPS | P.O. BOX 223 MONTPELIER, VA 23192 |

NOTIFICATION OF ADJOINING PROPERTY OWNERS continued

List of Adjacent Property Owners:

| GPIN | Name | Address |
|--------------|---|--|
| | | |
| 7821-69-4917 | ALVIN SIAO HO & ANNE TREVINO HO | 16467 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-69-4772 | KEVIN E. & PENNY C. BATES | 16457 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-69-2575 | CHRISTINE CHERE & EDWARD A. TAYLOR | 8515 SHOOTING STAR COURT GILROY, CA 95020 |
| 7821-69-2264 | PAUL FOMIN | 273 WHITNEY LANE BUMPASS, VA 23024 |
| 7821-68-4956 | CHARLES E. & GENEVA M. DALTON | 16411 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-68-4828 | WILLIAM K. LEWIS | 16407 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-68-3796 | BESSIE L. DANDRIDGE | 16401 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-68-0339 | RICHARD S. POMFREY | 16371 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-58-2506 | DARRELL A. & DONNA T. SHIRES | P.O. BOX 423 MONTPELIER, VA 23192 |
| 7821-47-0901 | ANNE NOEL JONES JOHN ERNEST JONES, III | 17055 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-49-9679 | ANNE NOEL JONES JOHN ERNEST JONES, III | 17055 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7822-51-1309 | JOHN PETRUCCI, JR. | 1060 GLEN OAK DRIVE YARDLEY, PA 19067 |
| 7822-51-3459 | MWW REALTY CORPORATION | 1713 WESTWOOD AVENUE RICHMOND, VA 23227 |
| | | |
| | | |
| | | |
| | | |

PLEASE RESPOND FOR ALL REZONING APPLICATIONS:

1. What is the General Land Use Plan Map designation for the subject property? Rural Village and Agricultural
2. What, if any, is the Major Thoroughfare Plan designation for the public road on which the subject property has frontage?
Mountain Road - Major Arterial.
3. Describe in detail the proposed use of the property. _____
Applicant proposes self storage warehouse facility containing approx. 524 units with associated parking and drive aisles as well as approx. 126 spaces of boat/rv storage.
4. List any sensitive environmental or unique features on the property. Are there any 150kV or greater transmission lines, transmission lines for natural gas, other public utilities, or other entity? _____
No major utilities are located on the property. The rear of the parcel contains a substantial amount of wetlands and a resource protection area.
5. Is the subject property located in a Dam Break Inundation Zone? Yes No (Please contact the Department of Planning or Public Works for assistance in addressing this question.) If yes, please contact the Department of Public Works for further information.

RESPOND FOR RS AND RM REZONING APPLICATIONS: (Attach additional pages, if needed)

1. Have you provided a conceptual plan of the proposed development, including general lot configurations and road locations? _____
2. How does your proposal preserve or protect the existing trees on the property? If the property is treeless, does your proposal contain provisions to provide trees on the property? _____

3. Are recreational amenities being proposed for the project? If so, specify in detail the amenities planned. _____

4. What provisions will be made to ensure safe and adequate access to the subject property? (Note: A second means of access should be provided for any project in which there will be fifty-one (51) or more lots.) _____

RESPOND FOR AR-6 and RC REZONING APPLICATIONS: (Attach additional pages, if needed)

1. For AR-6 rezoning requests: Have you provided a conceptual plan of the proposed development, including general lot configurations and road locations? Are the proposed lot sizes compatible with existing parcel sizes in the area?

2. How is the proposed subdivision compatible with the rural setting and sensitive to natural and cultural features?

3. What provisions will be made to ensure safe and adequate access to the subject property? (Note: A second means of access should be provided for any project in which there will be fifty-one (51) or more lots.) _____

**RESPOND FOR B-1, B-2, B-3, BO, OS, M-1, M-2, M-3 REZONING APPLICATIONS:
(Attach additional pages, if needed)**

1. Has a conceptual plan of the proposed development been provided, showing proposed building locations, parking lots, entrances, and other features? Yes, see attached.

2. What provisions will be made to ensure safe and adequate access to the subject property? _____

A commercial entrance to the site will be installed on Mountain Road.

3. How will the traffic impact of this development be addressed?: _____

The proposed use is a low traffic generator with only 99 trips per weekday.

4. Describe why the proposed use is desirable and appropriate for the area. What measures will be taken to assure that the proposed use will not have a negative impact on the surrounding vicinity? The site is located in the Village of

Montpelier adjacent to other commercial uses. Market studies have indicated the need for a self storage and boat/RV storage facility. Buffers have been provided along Mountain Road and the eastern property line. The rear +/- 30 acres of the site will remain wooded and undeveloped. The wetlands / streams on-site will be preserved.

5. What type of signage is proposed for the site? The site will have an entrance monument on Mountain Road.

6. Have architectural/building elevations been submitted with this application? _____

Photos / renderings of example architecture have been proffered.

HISTORIC SITE IMPACT ANALYSIS

Please identify any **known or suspected historic resources on both the subject property and adjacent properties**, to include both structural and non-structural resources, such as trenches, cemeteries, and archeological sites. Please include the GPIN (Tax Parcel Number) associated with the resource. Please attach additional sheets, if necessary. Should you need assistance completing this form, please contact the Planning Staff.

1. Historic Resource/File No. _____ GPIN _____
2. Historic Resource/File No. _____ GPIN _____
3. Historic Resource/File No. _____ GPIN _____
4. Historic Resource/File No. _____ GPIN _____
5. Historic Resource/File No. _____ GPIN _____

If you have identified known or suspected historic resources on the subject property or adjacent property, please provide the following information on each site:

- a) Is the historic site listed as a National or State Registered Landmark? No _____
- b) Is the historic site open to the public? _____
- c) Describe the impact the proposed request will have on the identified historic resources with regard to noise, traffic, dust, vibration, visual impact, and air pollution. _____

- d) Describe voluntary measures that will be undertaken to help mitigate the impact that the proposed use may have on the identified historic resources. _____

If there are no known or suspected historic resources on the subject property or immediately adjacent, including structural and non-structural resources, trenches, cemeteries, and archeological sites, **please sign and date.**

Signature:  Date: 8/4/23

COMPLIANCE WITH VDOT & COUNTY TRAFFIC IMPACT ANALYSIS REQUIREMENTS

The following must be completed for all applications: The selection below is based on a projected daily trip generation of 99 vehicles per day and a site peak hour trip generation of 11 AM / 11PM vehicles per hour, based on the stipulations of 24 VAC 30-155. The 11th edition (latest edition) of the ITE Trip Generation Manual was used in determining the trip generation (Code Number 151 and Page Number 119,122,123).

Choose one of the two options below:

- I certify that this proposal **DOES NOT EXCEED** 380 vehicle trips per day that would require submittal of a Traffic Impact Analysis.
- I certify that this proposal **DOES EXCEED** 380 vehicle trips per day that would require a Traffic Impact Analysis be submitted.

Choose one of the two options below:

- I certify that this proposal **DOES NOT MEET** any of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application.
- I certify that this proposal **MEETS** at least one of the VDOT thresholds identified in the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155) that would require a Traffic Impact Analysis to be submitted in conjunction with this application. A Traffic Impact Analysis, prepared in accordance with the Traffic Impact Analysis Regulations Administrative Guidelines (24 VAC 30-155), has been prepared and will be submitted to VDOT the same day.



(Signature of Applicant/Applicant's Representative)

0/3/23

(Date)

ANDREW BROWNING, P.E.

(Applicant/Applicant's Representative – Print Name)

CUP Application

Hanover County Planning Department Application

Request for a Conditional Use Permit

Case #: CUP 2023-00011


Please type or print in black ink.

| APPLICANT INFORMATION | |
|--|-----------------------------------|
| Owner/Applicant: <u>MILE BRANCH INVESTMENTS, LLC</u> | Telephone No. <u>804-387-3060</u> |
| Contact Name: <u>GRAYSON JOHNSON</u> | Fax No. _____ |
| Address: <u>2418 GRANITE RIDGE ROAD SUITE D</u> | Email Address <u>grayson</u> |
| <u>ROCKVILLE, VA 23146</u> | <u>johnson @ hometown realty</u> |
| | <u>services.com</u> |

| PARCEL INFORMATION | For multiple parcels, please also complete Page 4 <input type="checkbox"/> |
|---|--|
| GPIN(s)(Tax ID #'s) <u>7821-59-5952</u> | Total CUP Area (acres/square feet) <u>17.33 AC. / 754,895 SF.</u> |
| Total Area (acres/square feet) <u>48.10 AC. / 2,095,236 SF</u> | Current Zoning <u>A-1</u> |
| Magisterial District <u>SOUTH ANNA</u> | In accordance with Article 3, Division <input checked="" type="checkbox"/> Section <u>26-120</u> |
| Location Description (Street Address, if applicable) <input type="checkbox"/> | § <u>13</u> of the Ordinance the following use is requested: |
| <u>SOUTHEAST INTERSECTION OF MOUNTAIN ROAD</u> | <u>SELF STORAGE WAREHOUSE FACILITY WITH BOAT/RV</u> |
| <u>AND W. PATRICK HENRY ROAD</u> | <u>STORAGE</u> |

SIGNATURE OF OWNER **POWER OF ATTORNEY** **CONTRACT PURCHASER** (attach contract)

As owner or authorized agent of this property, I hereby certify that this application is complete and accurate to the best of my knowledge, and I authorize County representatives' entry onto the property for purposes of reviewing this request.

Signature  Date 8/4/23

Print Name H. GRAYSON JOHNSON

Signature _____ Date _____

Print Name _____

QUESTIONS/ LETTERS/ REPORTS SHOULD BE FORWARDED TO THE FOLLOWING:**

| | |
|---|-----------------------------------|
| Name <u>MILE BRANCH INVESTMENTS, LLC</u> | Telephone No. <u>804-387-3060</u> |
| Address: <u>2418 GRANITE RIDGE ROAD SUITE D</u> | Fax No. _____ |
| <u>ROCKVILLE, VA 23146</u> | Email Address <u>grayson</u> |
| | <u>johnson @ hometown</u> |
| | <u>realty services.com</u> |

**It is the responsibility of the contact person to provide copies of all correspondence to other interested parties to the application.

RECEIVED

AUG 04 2023

HANOVER COUNTY PLANNING OFFICE

REQUIREMENTS/ ATTACHMENTS FOR ALL REQUESTS you must submit the following:

- a. **Signature of Property Owner or Contract Purchaser (Page 3)** – If the contract purchaser signs the application, please provide a copy of the signed contract, with all sensitive information redacted.
- b. **Acknowledgement of Application Fee Payment Procedure (Page 6)**
- c. **Adjacent property owners, Board of Supervisors, and Planning Commissioner notification form (Page 7)** – please list all property owners including those across roadways, watercourses, and/or railroads as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property owners, Board members, and Planning Commissioners must be notified prior to submittal of this application. The form must include owners' names, address, and GPINs for all adjacent property owners. (This information is available from the County website or can be obtained from the Planning Department.) The form on Page 9 may be used to notify these property owners.
- d. **A plat of the subject property**, which accurately reflects the current property boundaries. If the full-size plat is larger than 8 ½" x 11", the plat must be folded no larger than 9"x12", and a reduction of the plat must be submitted which is 8 ½" x 11" in size. (Typically available from the County Clerk's Office in the Circuit Court building.)
- e. **Responses to questions on Page 10**
- f. **Historic Impact Information (Page 11)** (This information is available on the County website or may be obtained from the Planning Department.)
- g. **Traffic Impact Analysis Certification Form (Page 12)** In compliance with VDOT's new Traffic Impact Analysis Regulations (24 VAC 30-155 *et seq.*, commonly known as "Chapter 527"), Conditional Use Permits that meet certain thresholds require Traffic Impact Analyses (TIAs). The process for submitting TIAs is as follows: (1) you must submit the number of copies of the TIA required by VDOT to the Hanover County Planning Department with your comprehensive plan amendment/rezoning/conditional use permit submittal; (2) the Hanover County Planning Department will stamp "received" on all copies of the TIA, and will keep a copy for its files; and (3) you must deliver the remaining copies of the TIA to VDOT and pay the necessary TIA review fee directly to VDOT.
- h. **Sketch Plan Checklist (Page 13) and ten (10) copies of the sketch plan and architectural elevations**, folded no larger than 9" x 12", and 1 - 8 ½" x 11" reduction. Individual sheets should be no larger than 24" x 36". For Filling and/or Grading CUP Applications, a plan should be submitted that meets the Public Works Department's requirements for an Erosion and Sedimentation Control (E&S) Plan. However, please note that submittal of this plan will **not** be considered as a submittal of an E&S plan application. For a checklist of items to be included on this plan, please contact Public Works at (804) 365-6181.
- i. For CUP applications for telecommunication facilities, a **Telecommunications application** must be completed and include all of the required attachments.
- j. **Community Meeting Guide (Check the box if you have read and understand Pages 14 & 15. Please note that applicants that schedule community meetings without coordinating with the staff may be required to reschedule the meeting, which may cause the application process to be delayed.**

ACKNOWLEDGEMENT OF APPLICATION FEE PAYMENT PROCEDURE

Application fees are not accepted at the time of submittal. I hereby acknowledge that this application is not complete until the payment for all applicable application fees has been received by the Hanover County Planning Department. The Hanover County Planning Department shall notify me by mail, at the address listed below, (as well as by email and/or fax, if selected below) of the applicable fee(s) at such time that they determine that the application is complete and acceptable. I acknowledge that I am responsible for ensuring that such fees are received by the Hanover County Planning Department by the Tuesday the week following the application deadline. I further acknowledge that any application fee submitted after this date shall result in the application being considered filed for the next application deadline.

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Should my application be accepted, my fee payment will be due by _____. (To be filled in by a Planning Staff member.)

Signature of applicant/authorized agent  Date 8/4/23
 Print Name H. Grayson Johnson

Signature of applicant/authorized agent _____ Date _____
 Print Name _____

Address to which notification letter is to be sent:
MILE BRANCH INVESTMENTS, LLC
2418 GRANITE RIDGE ROAD SUITE D
ROCKVILLE, VA 23146

If you would like your letter emailed and/or faxed, please make selections, and provide the information below:
 Email graysonjohnson@hometownrealtyservices.com Fax _____

FEES

After application is accepted for review, make checks payable to Treasurer, Hanover County:

| | |
|----------------------------------|---------------------|
| Conditional Use Permit | \$1500 + \$75/acre* |
| Amendment (after final approval) | \$1500 |

*Fractions of acreage are rounded up to the nearest whole number
 Please note: Applicants who request tax-exempt status may have their application fee waived upon presentation of official documentation of such status.

FOR STAFF USE ONLY:

Fees: Base Fee _____
 Acreage Fee _____
TOTAL _____

Accepted by: _____
 HTE #: _____

NOTIFICATION OF ADJOINING PROPERTY OWNERS, BOARD OF SUPERVISORS, AND PLANNING COMMISSIONERS

Applicant's Statement:

I hereby certify that I have notified all adjacent property owners to the property, which is the subject of this request, as well as the members of the Board of Supervisors and Planning Commission for the magisterial district in which the property is located. Adjacent property includes all property across roadways, watercourses, railroads, and/or municipal boundaries. I further certify that the names and addresses below are those of the adjacent property owners as listed in the tax records of the Commissioner of Revenue of Hanover County.

Applicant's Signature: _____

COMMONWEALTH OF VIRGINIA)

COUNTY OF HANOVER)

) to-wit:

The foregoing instrument was acknowledged before me this 4th day of August, 2023, by H Grayson Johnson (Name of Applicant).

My commission expires:

4/30/25

Notary Public



Board of Supervisors Representative: SUSAN P. DIBBLE

Planning Commission Representative: LARRY LEADBETTER

List of Adjacent Property Owners: Check here if list is attached.

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| 7822-60-3123 | TIMOTHY R. PHILLIPS | P.O. BOX 223 MONTPELIER, VA 23192 |

NOTIFICATION OF ADJOINING PROPERTY OWNERS continued

List of Adjacent Property Owners:

| GPIN | Name | Address |
|--------------|---|--|
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| 7821-69-4772 | KEVIN E. & PENNY C. BATES | 16457 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-69-2575 | CHRISTINE CHERE & EDWARD A. TAYLOR | 8515 SHOOTING STAR COURT GILROY, CA 95020 |
| 7821-69-2264 | PAUL FOMIN | 273 WHITNEY LANE BUMPASS, VA 23024 |
| 7821-68-4956 | CHARLES E. & GENEVA M. DALTON | 16411 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-68-4828 | WILLIAM K. LEWIS | 16407 MOUNTAIN ROAD MONTPELIER, VA 23192 |
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| 7821-47-0901 | ANNE NOEL JONES JOHN ERNEST JONES, III | 17055 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7821-49-9679 | ANNE NOEL JONES JOHN ERNEST JONES, III | 17055 MOUNTAIN ROAD MONTPELIER, VA 23192 |
| 7822-51-1309 | JOHN PETRUCCI, JR. | 1060 GLEN OAK DRIVE YARDLEY, PA 19067 |
| 7822-51-3459 | MWW REALTY CORPORATION | 1713 WESTWOOD AVENUE RICHMOND, VA 23227 |
| | | |
| | | |
| | | |
| | | |

NOTIFICATION OF ZONING APPLICATION SUBMITTAL

TO: Adjacent Property Owner

FROM: MILE BRANCH INVESTMENTS, LLC

DATE: _____

The following application will be submitted for review to the Hanover County Planning Department:

- Rezoning
- Conditional Use Permit
- Special Exception

Applicant: MILE BRANCH INVESTMENTS, LLC

Property Location: SOUTHEAST CORNER OF THE INTERSECTION OF MOUNTAIN ROAD AND W. PATRICK HENRY ROAD

GPIN(s): 7821-59-5952

Requested Zoning District: B-3 W/ CUP

Requested Use/Exception: _____

APPLICANT PROPOSES TO REZONE THE FRONT +/- 17 ACRES OF THE PROPERTY FROM A-1 TO B-3 WITH PROFFERS TO ALLOW FOR A SELF STORAGE WAREHOUSE FACILITY WITH BOAT / RV STORAGE. THE SELF STORAGE WAREHOUSE FACILITY ALSO REQUIRES A CONDITIONAL USE PERMIT.

The application will be available for viewing at the Hanover County Planning Department. The Planning Department shall notify all adjacent property owners of the time, day, and place of the public hearings to be held on this application. Should you have any questions or comments, please contact the Planning Department at (804) 365-6171.

EXPLANATION: (Attach additional sheets, if necessary)

1. What type of use is being requested? SELF STORAGE WAREHOUSE FACILITY WITH BOAT/RV STORAGE

2. Briefly describe how you plan to develop the property for the proposed use and any associated uses. _____

THE FRONT +/- 17 ACRES OF THE PROPERTY WILL BE REZONED FROM A-1 TO B-3 WITH A CONDITIONAL USE PERMIT TO ALLOW FOR SELF STORAGE WAREHOUSE FACILITY WITH BOAT / RV STORAGE AND ASSOCIATED PARKING AND DRIVE AISLES. THE FACILITY WILL CONTAIN APPROX. 524 STORAGE UNITS AND APPROX. 126 BOAT/RV STORAGE SPACES.

3. Describe why the proposed use is desirable and appropriate for the area. What measures will be taken to assure that the proposed use will not have a negative impact on the surrounding vicinity? (For example, this may include traffic or environmental impacts.) _____

THE PROJECT IS LOCATED ADJACENT TO OTHER COMMERCIAL USES AND MARKET STUDIES HAVE INDICATED THAT THERE IS A NEED FOR A STORAGE FACILITY IN THIS AREA. THE SITE WILL BE BUFFERED FROM MOUNTAIN ROAD AND THE ADJACENT RESIDENTIAL USES. THE +/- 30 ACRES IN THE REAR OF THE SITE WILL PRESERVED AND REMAIN WOODED. THE EXISTING WETLANDS AND STREAMS ONSITE WILL BE PRESERVED. THE PROPOSED USE IS A LOW TRAFFIC GENERATOR.

4. Are there any deed restrictions concerning the type of use proposed? If so, provide the date the said restrictions expire. (You may attach a copy of the restrictions.) NO

5. Is the subject property located in a Dam Break Inundation Zone? Yes No (Please contact the Department of Planning or Public Works for assistance in addressing this question.) If yes, please contact the Department of Public Works for further information.

HISTORIC SITE IMPACT ANALYSIS

Please identify any **known or suspected historic resources on both the subject property and adjacent properties**, to include both structural and non-structural resources, such as trenches, cemeteries, and archeological sites. Please include the GPIN (Tax Parcel Number) associated with the resource. Please attach additional sheets, if necessary. Should you need assistance completing this form, please contact the Planning Staff.

1. Historic Resource/File No. _____ GPIN _____
2. Historic Resource/File No. _____ GPIN _____
3. Historic Resource/File No. _____ GPIN _____

If you have identified known or suspected historic resources on the subject property or adjacent property, please provide the following information on each site:

- a) Is the historic site listed as a National or State Registered Landmark? _____
- b) Is the historic site open to the public? _____
- c) Describe the impact the proposed request will have on the identified historic resources with regard to noise, traffic, dust, vibration, visual impact, and air pollution. _____

- d) Describe voluntary measures that will be undertaken to help mitigate the impact that the proposed use may have on the identified historic resources. _____

If there are no known or suspected historic resources on the subject property or immediately adjacent, including structural and non-structural resources, trenches, cemeteries, and archeological sites, please sign and date.

Signature:  Date: 8/4/23

SKETCH PLAN CHECKLIST

Use this checklist to prepare the required sketch plan for submittal with this application. Place a mark next to each item to verify its inclusion on the sketch plan. Please make sure the information listed below is shown on the sketch plan. Failure to include all necessary information may result in the application not being accepted for processing.

| Applicant: | | Staff: |
|-------------------------------------|---|--------------------------|
| <input checked="" type="checkbox"/> | 1. The proposed title of the project, the name of the developer, and the name of the preparer of the plan. | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 2. The north point, scale, and date. The required scale of the sketch plan shall be as follows: a) For projects containing more than 200 acres, not more than 1" = 200' b) For projects containing 50 acres to 200 acres, not more than 1" = 100' c) For projects containing 10 acres to 50 acres, not more than 1" = 50' d) For projects containing 10 acres or less, not more than 1" = 30' | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 3. Existing zoning and zoning district boundaries. (Available on County zoning maps.) | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 4. The boundaries of the property involved; County and/or town boundaries; property lines; existing streets, buildings, and/or waterways; Chesapeake Bay Resource Protection Areas (see Department of Public Works); and major tree masses. | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 5. Topography of the project area, with contours of five (5) feet or less. (Maps are available in the Planning Department.) | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 6. Proposed changes in zoning, if any. | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 7. The general location and character of construction of proposed streets, alleys, driveways, curb cuts, entrances, and exits. | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 8. Location(s) of all proposed buildings and structures, accessory and main; major excavations; and the use category for each building. | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 9. General location, height, and material for all fences, walls, screen plantings, berms, and landscaping. The required perimeter buffer, if any, shall be shown. | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 10. Architectural elevation(s) for the proposed structures on site, which provide detail on the proposed building materials. | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> | 11. Location(s) of any known or suspected historic resources, including cemeteries, trenches, and archeological sites as reflected in available County records. | <input type="checkbox"/> |

Traffic Study

Traffic Impact Analysis

Montpelier Self Storage

Hanover County, Virginia

February 2024

Prepared for:

Mile Branch Investments, LLC
2418 Granite Ridge Road
Suite D
Rockville, Virginia 23146



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Transportation Planners and Engineers

Prepared by:

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Executive Summary

This report summarizes the findings of the Traffic Impact Analysis (TIA) that was performed for the proposed self-storage facility on the south side of U.S. 33 (Mountain Road) between the Food Lion and the Valero in Montpelier, VA. The development plan includes 534 self-storage units and 126 RV / boat parking spaces. The proposed access plan includes one full-movement driveway on Mountain Road approximately 78 feet west of the Dollar General driveway and 280 feet west of the Valero driveway. If approved, the project is expected to be complete in 2025. This study was developed in accordance with the County and VDOT TIA guidelines.

Site Location and Study Area

Based on the October 30 scope meeting with the County and VDOT, the following scenarios were analyzed:

- Existing 2023 traffic conditions
- No-build 2025 traffic conditions
- Build 2025 traffic conditions

The weekday AM and PM peak hours were studied for the following intersections:

- Mountain Road at Proposed Site Driveway
- Mountain Road at Dollar General Driveway
- Mountain Road at Valero Driveway / Strawberry Street Catering Driveway

Recommendations

Based on the capacity analysis and turn lane warrant analysis, all three study intersections will operate acceptably at buildout of the proposed project with the following improvement:

- Restripe Mountain Road to provide a two-way left-turn lane between the Dollar General driveway and the proposed site driveway

Introduction

This report summarizes the findings of the TIA that was performed for the proposed self-storage facility on the south side of U.S. 33 (Mountain Road) between the Food Lion and the Valero in Montpelier, VA. The development plan includes 534 self-storage units and 126 RV / boat parking spaces. The proposed access plan includes one full-movement driveway on Mountain Road approximately 78 feet west of the Dollar General driveway and 280 feet west of the Valero driveway. If approved, the project is expected to be complete in 2025. This study was developed in accordance with the County and VDOT TIA guidelines.

Scope of the Traffic Analysis

Based on the scoping meeting with the County and VDOT on October 30, the study area includes the following intersections:

- Mountain Road at Proposed Site Driveway
- Mountain Road at Dollar General Driveway
- Mountain Road at Valero Driveway / Strawberry Street Catering Driveway



Figure 1: Site Location and Study Intersections

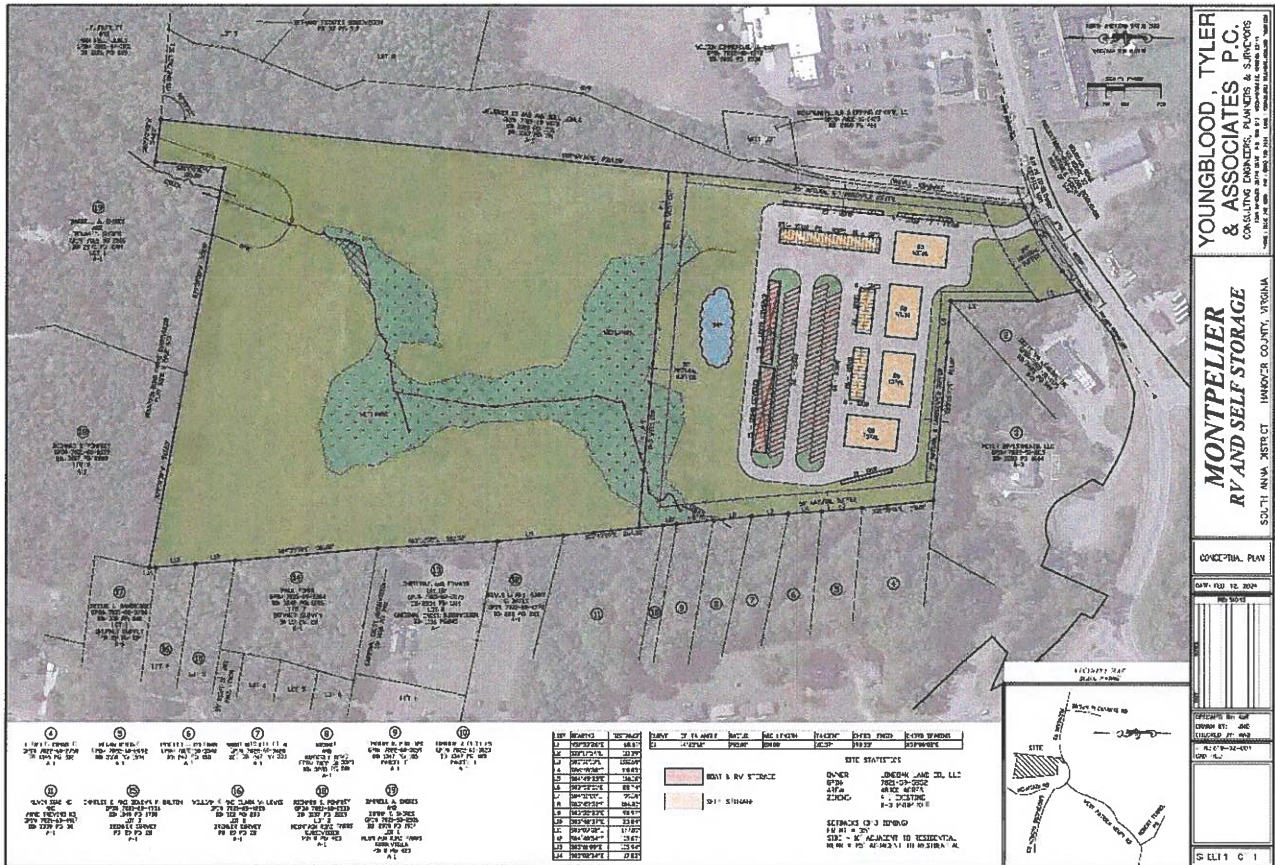


Figure 2: Preliminary Site Plan

Existing Conditions

Existing Roadway Network

Existing lane configurations and turn lane storage lengths were collected in the field by Gorve Slade. A description of the major roadways within the study area is presented below in Table 1. The existing lane configurations at the study intersections is illustrated in Figure 3.

Table 1: Existing Roadway Network

| Roadway | RTE # | VDOT Classification | Legal/Design Speed Limit (mph) | AADT (vpd) |
|---------------|-------|---------------------|--------------------------------|------------|
| Mountain Road | 33 | Arterial | 45 | 11000* |

*VDOT 2021 ADT Traffic Data

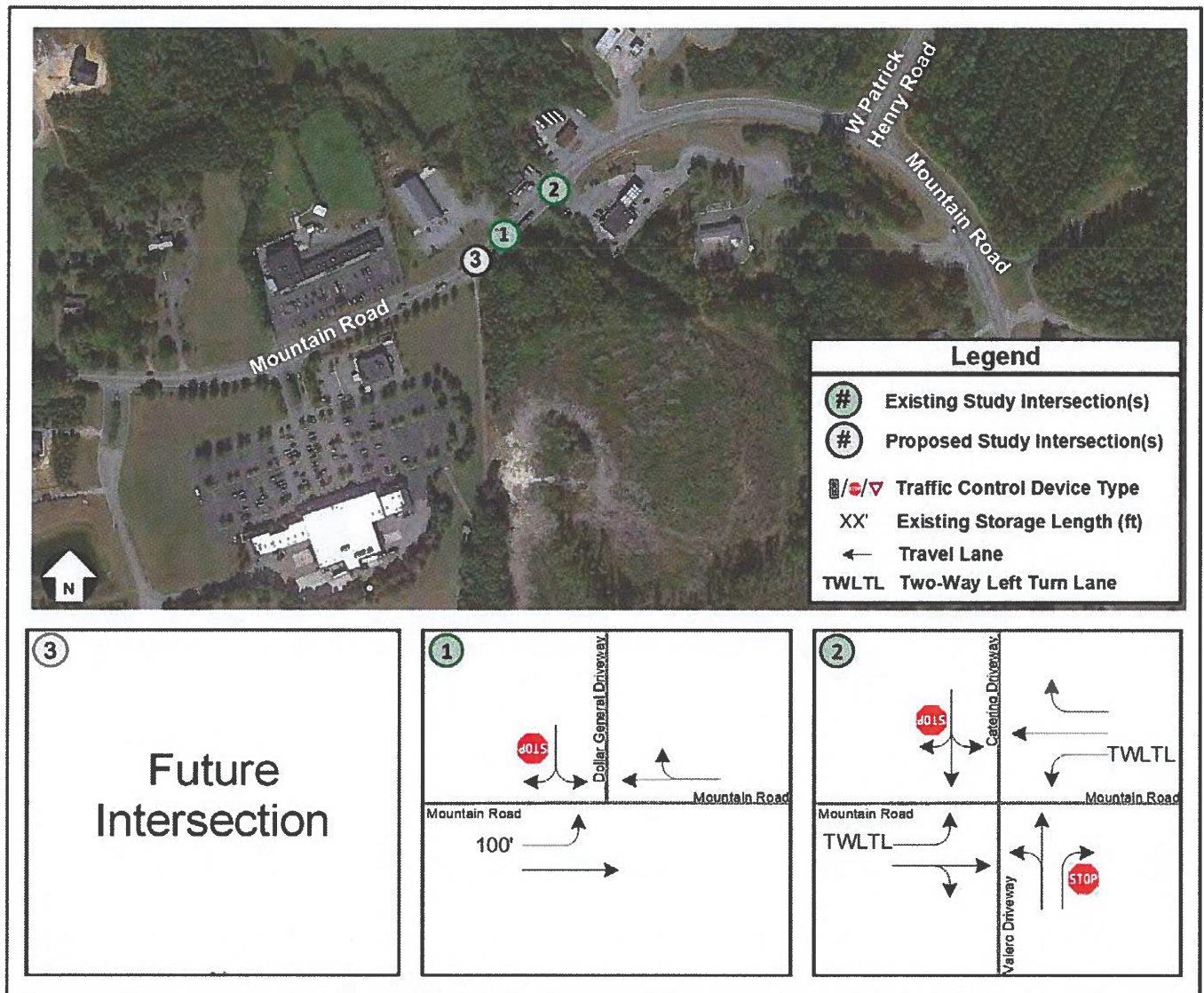


Figure 3: Existing Lane Configuration

Existing Traffic Volumes

The AM peak hour (7:00 to 9:00 AM) and PM peak hour (4:00 to 6:00 PM) turning movement counts were conducted by Burns Services, Inc. on November 11:

- Mountain Road at Dollar General Driveway
- Mountain Road at Valero Driveway / Strawberry Street Catering Driveway

The through movements on Mountain Road were increased to balance between intersections as necessary. The existing 2023 traffic volumes are shown in Figure 4, and the existing turning movement count data is included in the Appendix.

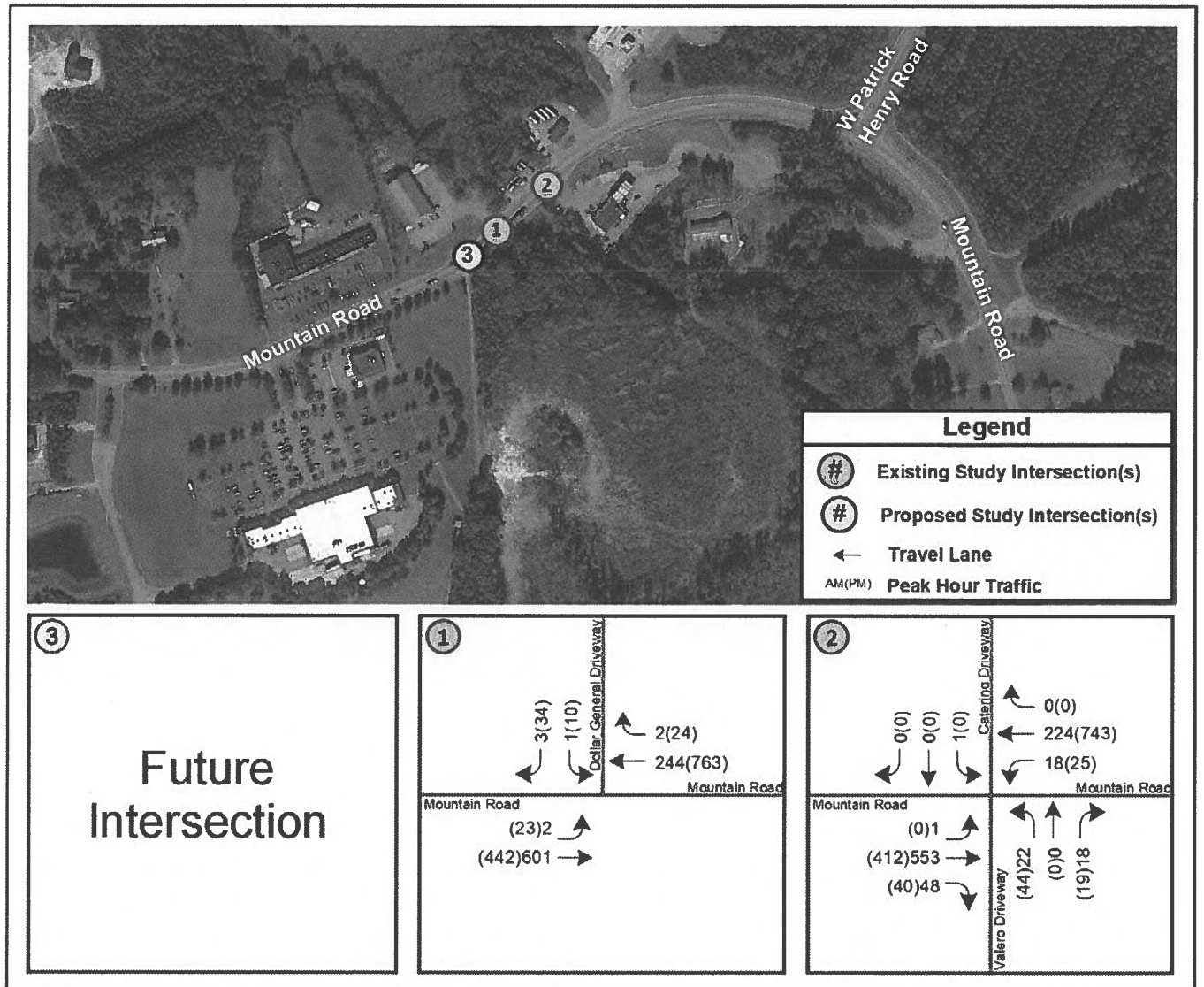


Figure 4: Existing 2023 Traffic Volumes

No-Build 2025 Conditions

In order to determine the traffic impact of the proposed development, a comparison of the future conditions of the study intersections must be made. This is achieved by analyzing the horizon year (2025) with and without the traffic generated by the proposed development. The future year condition without the development is called the no-build condition, and it is determined by projecting the existing traffic to the build-out year using an annualized growth rate and adding it the traffic from approved (but not yet built) developments in the study area.

Background Traffic Growth

Based on the TIA scope meeting with the County and VDOT, an annual traffic growth rate of 1.0% was applied to the existing traffic count volumes. The estimated no-build 2025 traffic volumes are shown in Figure 5.

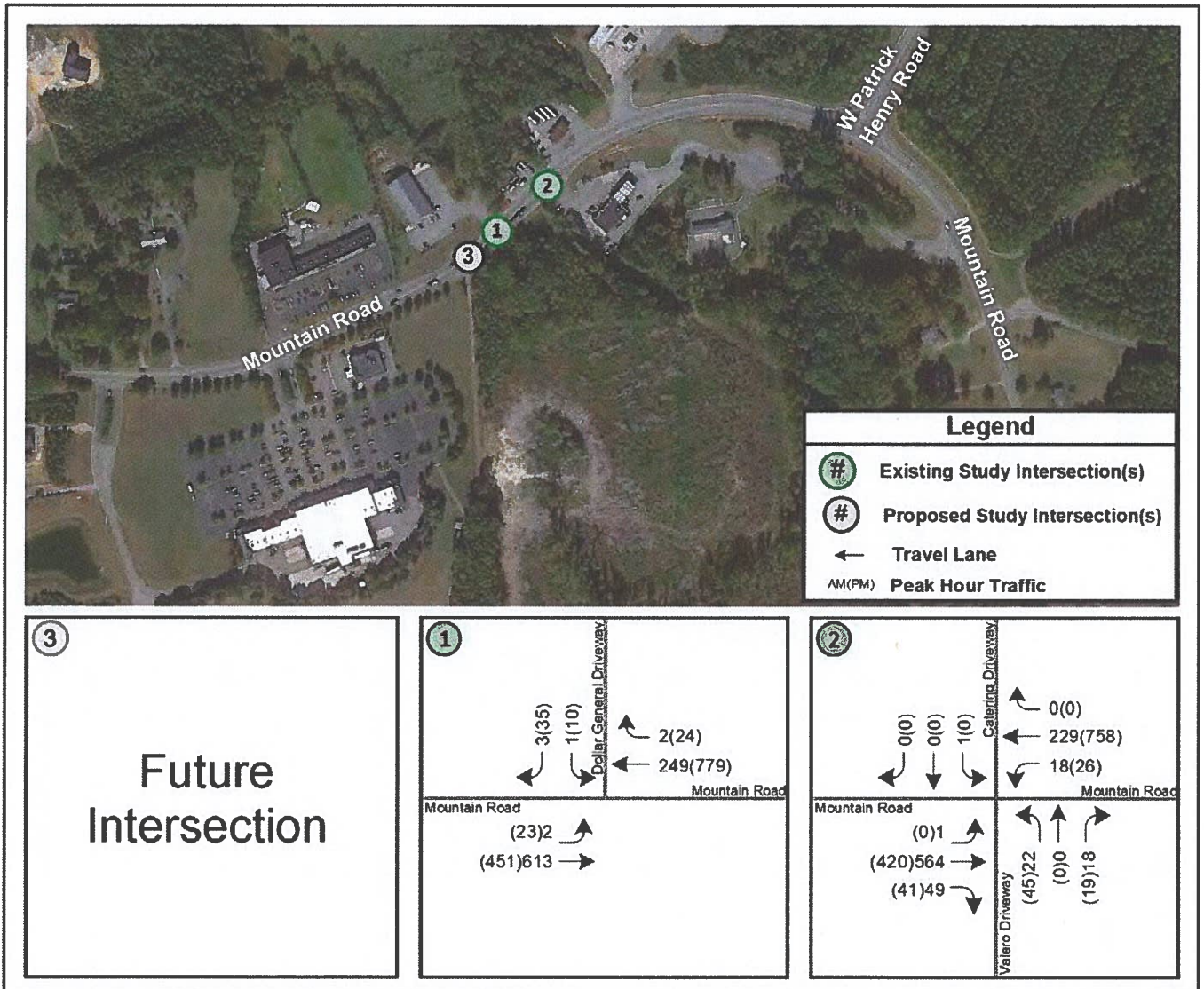


Figure 5: No-Build 2025 Peak Hour Traffic Volumes

Build 2025 Conditions

Build conditions were analyzed with the recommended lane configurations and traffic control.

Site Trip Generation

Table 2 shows the trip generation potential of the site based on the Institute of Transportation Engineer’s (ITE) *Trip Generation Manual*, 11th Edition.

Table 2: ITE Trip Generation – Typical Weekday – 11th Edition

| Land Use (ITE Land Use Code) | Size | Average Daily Traffic (vpd) | | AM Peak Hour (vph) | | PM Peak Hour (vph) | |
|---------------------------------|-------------------------|-----------------------------------|-----------|-----------------------|----------|-----------------------|----------|
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| Mini-Warehouse (151) | 535 units | 49 | 49 | 3 | 3 | 4 | 5 |
| Mini-Warehouse (151) | 130 RV / boat spaces | 12 | 12 | 1 | 1 | 2 | 1 |
| Total | | 61 | 61 | 4 | 4 | 6 | 6 |

To be conservative, the number of storage lockers was rounded up, and the trip potential of each RV / boat space was treated as one storage locker.

There are no sidewalks, bicycle lanes or transit routes on Mountain Road, so the trip potential of this project was not reduced to account for pedestrian, bicycle or transit trips.

Site Trip Distribution

The site trip distribution was determined based on discussions with the County and VDOT, a review of existing traffic patterns, surrounding land uses, and engineering judgement. The following site trip distribution was applied:

- 67% to / from the east on Mountain Road
- 33% to / from the west on Mountain Road

The site trip distribution and site trip assignment are shown in Figure 6.



Figure 6: Site Trip Distribution and Assignment

Build 2025 Traffic Volumes

The build 2025 traffic volumes were determined by adding the no-build 2025 volumes (Figure 5) and the total site trips (Figure 6) to estimate the build 2025 peak hour traffic volumes which are shown in Figure 7.

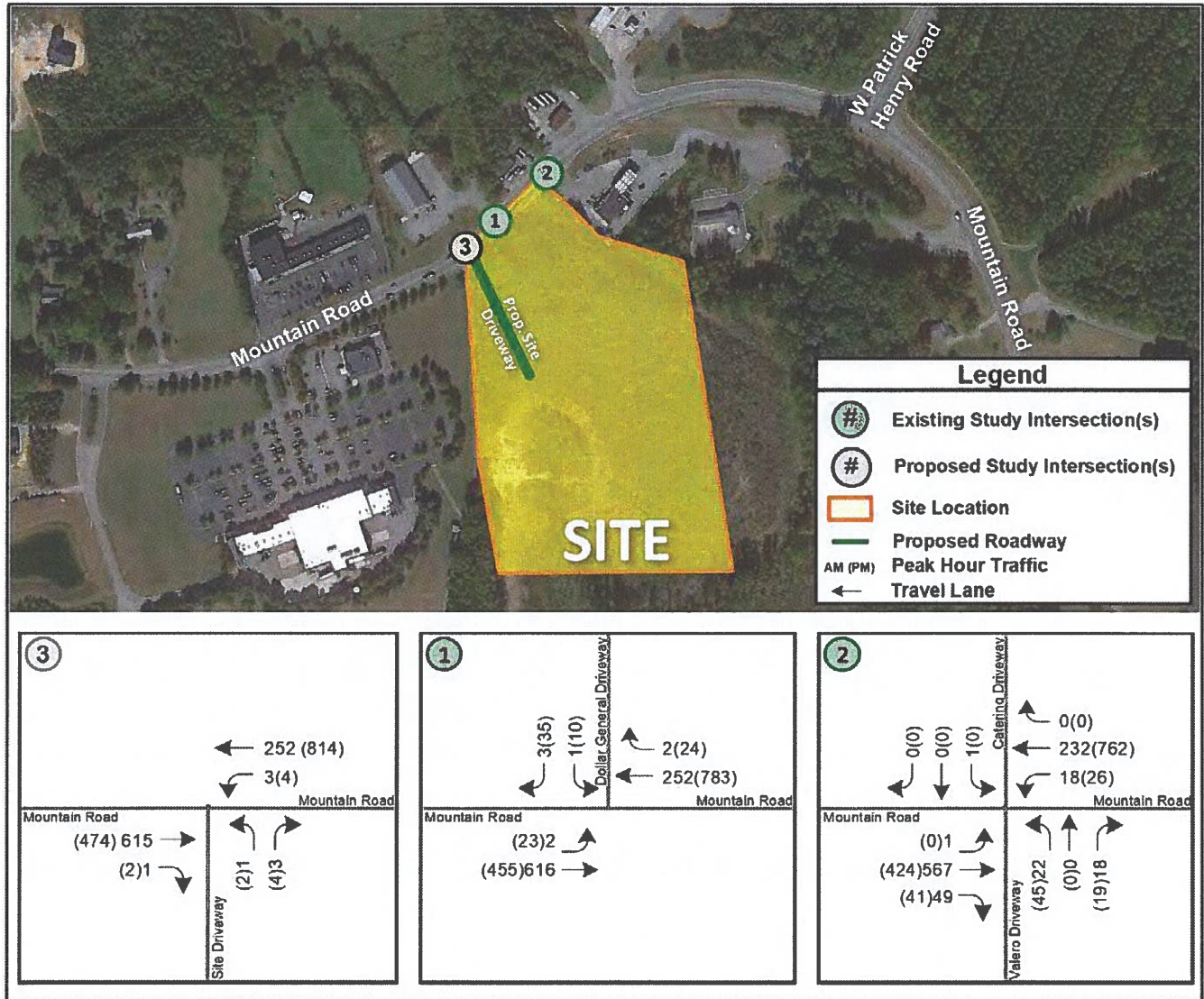


Figure 7: Build 2025 Peak Hour Traffic Volumes

Capacity Analysis

Capacity Analysis Procedure

Capacity analyses were performed at the study area intersections during the weekday AM and PM peak hours. Synchro, Version 11 was used to analyze the study intersections based on the Highway Capacity Manual (HCM) methodology and include level of service, delay, and queue length comparisons for the turning movements analyzed. For the purpose of this analysis, a peak hour factor of 0.92 for each approach was used for each of the study intersections only if existing PHF was less than 0.92. Otherwise, existing PHF was used.

Capacity Analysis Results

For unsignalized intersections, the average delays for the minor street left-turn movements are described as short delays (less than 25 seconds), moderate delays (between 25 and 50 seconds), and long delays (greater than 50 seconds). It is common for side street movements to experience long delays during peak hours at intersections with major thoroughfares. Capacity analysis results are summarized in Table 3 and Table 4.

Table 3: Level of Service Summary – Mountain Road at Dollar General Driveway

| Analysis Scenario | Lane Group | Storage Length (ft.) | AM Peak Hour | | | | PM Peak Hour | | | |
|----------------------------------|------------|----------------------|--------------|-----------------|--------------------|-------------|--------------|-----------------|--------------------|-------------|
| | | | LOS | Delay (sec/veh) | 95th % Queue (ft.) | Overall LOS | LOS | Delay (sec/veh) | 95th % Queue (ft.) | Overall LOS |
| Existing 2023 Traffic Conditions | EBL | TWLTL | A | 8.0 | 0 | N/A | A | 9.6 | 3 | N/A |
| | EBT | - | - | - | - | | - | - | - | |
| | WBT/R | - | - | - | - | | - | - | - | |
| | SBL/R | - | B | 12.3 | 0 | | C | 22.3 | 18 | |
| No-Build 2025 Traffic Conditions | EBL | TWLTL | A | 8.0 | 0 | N/A | A | 9.7 | 3 | N/A |
| | EBT | - | - | - | - | | - | - | - | |
| | WBT/R | - | - | - | - | | - | - | - | |
| | SBL/R | - | B | 12.2 | 0 | | C | 23.0 | 18 | |
| Build 2025 Traffic Conditions | EBL | TWLTL | A | 8.0 | 0 | N/A | A | 9.8 | 3 | N/A |
| | EBT | - | - | - | - | | - | - | - | |
| | WBT/R | - | - | - | - | | - | - | - | |
| | SBL/T/R | - | B | 11.7 | 0 | | C | 21.3 | 15 | |

Based on the capacity analysis, the minor street left-turn movement currently operates with short delays during the AM and PM peak hours. Under no-build conditions, the minor street left-turn movement is expected to continue to operate with short delays during the AM and PM peak hours.

Under build conditions, the minor street left-turn movement is expected to continue to operate with short delays during the AM and PM peak hours.

No improvements are warranted or recommended at this intersection at build-out of the proposed self-storage facility.

Table 4: Level of Service Summary – Mountain Road at Valero Driveway / Strawberry Street Catering Driveway

| Analysis Scenario | Lane Group | Storage Length (ft.) | AM Peak Hour | | | | PM Peak Hour | | | |
|----------------------------------|------------|----------------------|--------------|-----------------|--------------------|-------------|--------------|-----------------|--------------------|-------------|
| | | | LOS | Delay (sec/veh) | 95th % Queue (ft.) | Overall LOS | LOS | Delay (sec/veh) | 95th % Queue (ft.) | Overall LOS |
| Existing 2023 Traffic Conditions | EBL | - | A | 7.7 | 0 | N/A | A | 0 | 0 | N/A |
| | EBT/R | - | - | - | - | | - | - | - | |
| | WBL | - | A | 9.2 | 3 | | A | 8.5 | 3 | |
| | WBT | - | - | - | - | | - | - | - | |
| | WBR | 600 | - | - | - | | - | - | - | |
| | NBL/T | - | C | 22.2 | 8 | | E | 48.2 | 38 | |
| | NBR | - | B | 12.9 | 3 | | B | 11.3 | 3 | |
| SBL/T/R | - | C | 20.7 | 0 | A | 0.0 | 0 | | | |
| No-Build 2025 Traffic Conditions | EBL | - | A | 7.7 | 0 | N/A | A | 0 | 0 | N/A |
| | EBT/R | - | - | - | - | | - | - | - | |
| | WBL | - | A | 9.2 | 3 | | A | 8.5 | 3 | |
| | WBT | - | - | - | - | | - | - | - | |
| | WBR | 600 | - | - | - | | - | - | - | |
| | NBL/T | - | C | 22.1 | 8 | | F | 51.5 | 40 | |
| | NBR | - | B | 12.9 | 3 | | B | 11.3 | 3 | |
| SBL/T/R | - | C | 20.7 | 0 | A | 0.0 | 0 | | | |
| Build 2025 Traffic Conditions | EBL | - | A | 7.7 | 0 | N/A | A | 0 | 0 | N/A |
| | EBT/R | - | - | - | - | | - | - | - | |
| | WBL | - | A | 9.2 | 3 | | A | 8.5 | 3 | |
| | WBT | - | - | - | - | | - | - | - | |
| | WBR | 600 | - | - | - | | - | - | - | |
| | NBL/T | - | C | 22.3 | 8 | | F | 52.1 | 43 | |
| | NBR | - | B | 13.0 | 3 | | B | 11.4 | 3 | |
| SBL/T/R | - | C | 20.8 | 0 | A | 0.0 | 0 | | | |

Based on the capacity analysis, the minor street left-turn movements currently operate with short delays during the AM peak hour and moderate delays during the PM peak hour. Under no-build conditions, the minor street left-turn movements are expected to operate with short delays during the AM peak hour and long delays during the PM peak hour.

Under build conditions, the minor street left-turn movements are expected to continue to operate with short delays during the AM peak hour and long delays during the PM peak hour.

Long delays are common for minor street left-turn movements on major thoroughfares. The projected 2025 traffic volumes do not meet any of the Manual on Uniform Traffic Control Devices (MUTCD) traffic signal warrants.

No improvements are warranted or recommended at this intersection at build-out of the proposed self-storage facility.

Table 5: Level of Service Summary – Mountain Road at Proposed Site Driveway

| Analysis Scenario | Lane Group | Storage Length (ft.) | AM Peak Hour | | | | PM Peak Hour | | | |
|-------------------------------|------------|----------------------|--------------|-----------------|--------------------|-------------|--------------|-----------------|--------------------|-------------|
| | | | LOS | Delay (sec/veh) | 95th % Queue (ft.) | Overall LOS | LOS | Delay (sec/veh) | 95th % Queue (ft.) | Overall LOS |
| Build 2025 Traffic Conditions | EBT/R | - | - | - | - | N/A | - | - | - | N/A |
| | WBL | TWLTL | A | 9.1 | 0 | | A | 8.6 | 0 | |
| | WBT | - | - | - | - | | - | - | - | |
| | NBL/R | - | C | 15.0 | 0 | | C | 19.3 | 3 | |

Based on the capacity analysis, under build 2025 conditions, the minor street left-turn movement is expected to operate with short delays during the AM and PM peak hours.

Turn Lane Warrant Analysis

Turn lane warrants were evaluated for the proposed site driveway based on VDOT’s Access Management Standards Appendix F. Below is a summary of the results, and the turn lane warrant worksheets are included in the Appendix.

Mountain Road at Proposed Site Driveway:

- A westbound left-turn lane on Mountain Road is warranted in the PM peak hour
- An eastbound right-turn lane on Mountain Road is not warranted in either peak hour

Access Management Evaluation

VDOT requires at least 470 feet between unsignalized T-intersections on Mountain Road – measured center to center. The proposed site driveway is 280 feet west of the Valero driveway, and 655 feet east of the Food Lion driveway.

An Access Management Exception (AME) request for the spacing between the proposed driveway and the Valero driveway is being submitted with this TIA.

Sight Distance Evaluation

Mountain Road is posted 45 mph with a three-lane cross-section, so VDOT requires 565 feet of sight distance to the northeast and 530 feet to the west along Mountain Road for drivers exiting the proposed site driveway. The proposed site driveway exceeds the minimum sight distance in both directions along Mountain Road.

Figure 8 shows the intersection sight distances for drivers exiting the proposed site driveway.

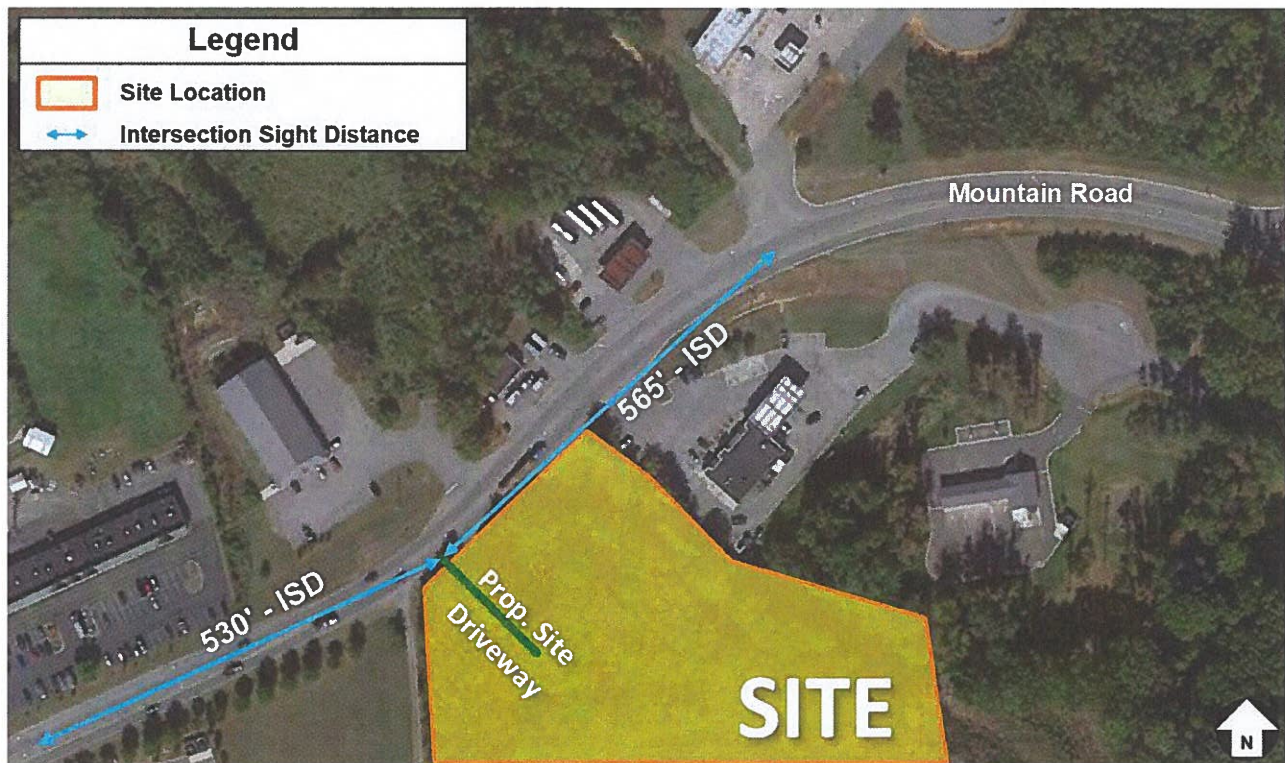


Figure 8: Sight Distance Requirements

Recommendations

Based on the capacity analysis, all three study intersections will operate acceptably at build-out of the proposed self-storage facility with the following improvement:

- Restripe Mountain Road to provide a two-way left-turn lane between the Dollar General driveway and the proposed site driveway

The recommended lane configuration is shown in Figure 9.

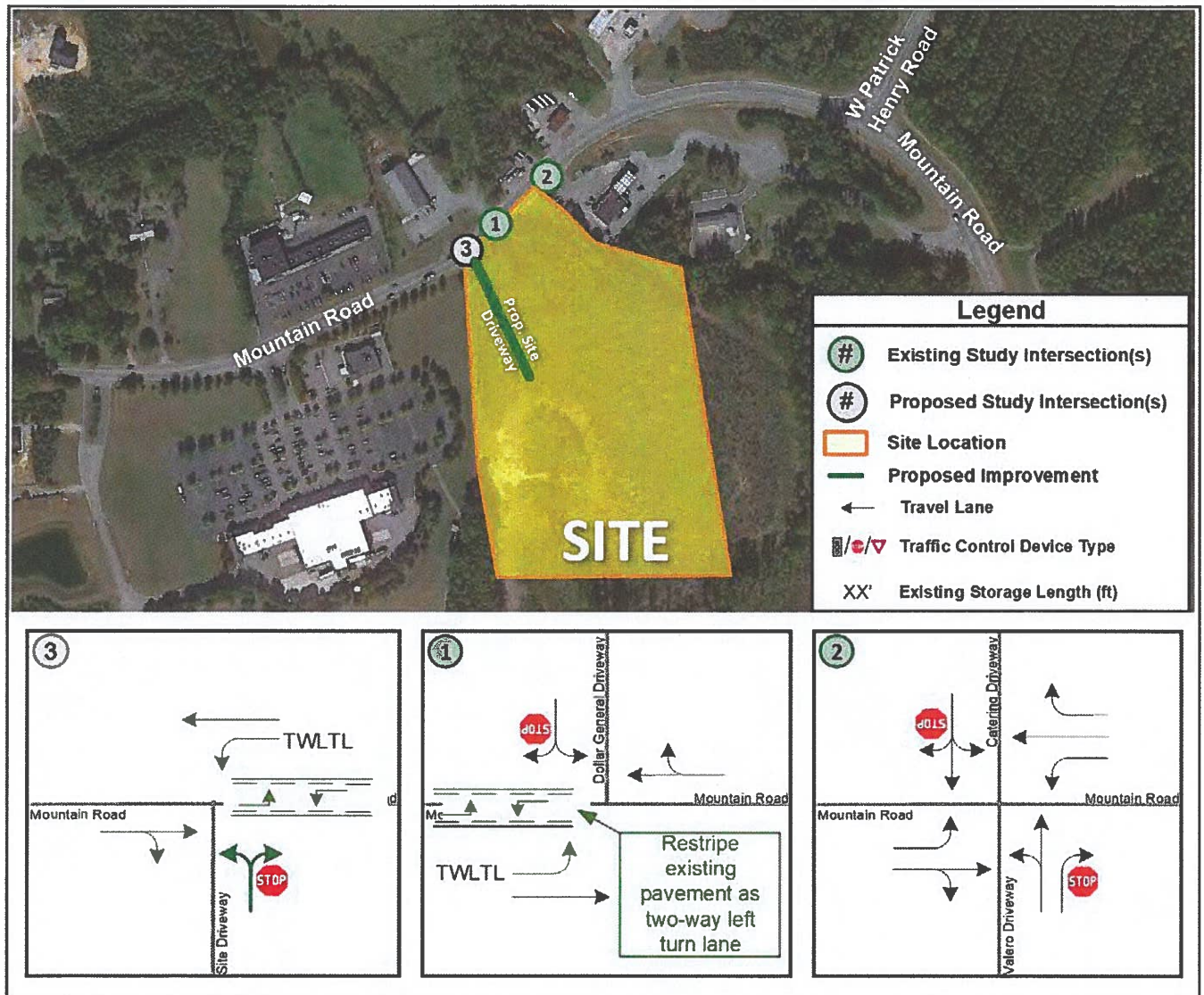


Figure 9: Recommended Lane Configuration

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APPENDIX A: TIA SCOPE DOCUMENT

| | |
|---|--|
|  | <h2 style="margin: 0;">PRE-SCOPE OF WORK MEETING FORM</h2> <p style="margin: 0;">Information on the Project Traffic Impact Analysis Base Assumptions</p> |
|---|--|

The applicant is responsible for entering the relevant information and submitting the form to VDOT and the locality no less than three (3) business days prior to the meeting. If a form is not received by this deadline, the scope of work meeting may be postponed.

| Contact Information | | | | |
|--|--|--|--|--|
| Consultant Name: | Carl Hultgren, P.E., PTOE – Gorove Slade | | | |
| Tele: | (804) 362-0578 | | | |
| E-mail: | ch@goroveslade.com | | | |
| Developer/Owner Name: | Grayson Johnson | | | |
| Tele: | (804) 387-3060 | | | |
| E-mail: | graysonjohnson@hometownrealtyservices.com | | | |
| Project Information | | | | |
| Project Name: | Montpelier Self-Storage | Locality/County: | Hanover County | |
| Project Location: <small>(Attach regional and site specific location map)</small> | See Figure 1 | | | |
| Submission Type | Comp Plan <input type="checkbox"/> | REZ/SUP <input checked="" type="checkbox"/> | Site Plan <input type="checkbox"/> | Subd Plat <input type="checkbox"/> |
| Project Description: <small>(Including details on the land use, acreage, phasing, access location, etc. Attach additional sheet if necessary)</small> | <p>The property is located on the south side of U.S. 33 (Mountain Road) across from the existing Dollar General driveway. The development plan includes 524 self-storage units and 126 RV / boat parking spaces. The access plan includes one full-movement driveway on Mountain Road.</p> <p>The proposed driveway requires an Access Management Exception (AME) request due to spacing from the Valero / Strawberry Street Catering driveways.</p> | | | |
| Proposed Use(s): <small>(Check all that apply; attach additional pages as necessary)</small> | Residential <input type="checkbox"/> | Commercial <input checked="" type="checkbox"/> | Mixed Use <input type="checkbox"/> | Other |
| | Residential Uses(s) N/A | | Commercial Use(s) See Trip Table | |
| Total Peak Hour Trip Projection: | Less than 100 <input checked="" type="checkbox"/> | 100 – 499 <input type="checkbox"/> | 500 – 999 <input type="checkbox"/> | 1,000 or more <input type="checkbox"/> |
| | | | | |

| Traffic Impact Analysis Assumptions | | | |
|---|--|--|--|
| Study Period | Existing Year: 2023 | Build-out Year: 2025 | Design Year: 2025 |
| Study Area Boundaries (Attach map) | North: Refer to Figure 1 | South: | |
| | West: | East: | |
| External Factors That Could Affect Project (Planned road improvements, other nearby developments) | None | | |
| Consistency With Comprehensive Plan (Land use, transportation plan) | Existing Zoning is A-1 Proposed Zoning is B-2 with CUP | | |
| Available Traffic Data (Historical, forecasts) | U.S. 33 (Mountain Road) – 12,000 vpd in 2016 / 11,000 vpd in 2021 | | |
| Trip Distribution (Please refer to attached Figure 2 in Supplement) | Road Name: See Figure 1 | | Road Name: |
| | Road Name: | | Road Name: |
| Annual Vehicle Trip Growth Rate: (See Note 3.) | 1.0 % | Peak Period for Study (check all that apply) | <input type="checkbox"/> AM <input type="checkbox"/> PM <input type="checkbox"/> SAT |
| | | Peak Hour of Generator | |
| Study Intersections and/or Road Segments (Attach additional sheets as necessary) (Please refer to attached Figure 1.) | 1. | U.S. 33 at Dollar General Driveway / Proposed Site Driveway | 7. |
| | 2. | U.S. 33 at Valero Driveway / Strawberry Street Catering Driveway | 8. |
| | 3. | | 9. |
| | 4. | | 10. |
| | 5. | | 11. |
| | 6. | | 12. |
| Trip Adjustment Factors | Internal allowance <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reduction: N/A | | Pass-by allowance <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reduction: N/A |
| | <input type="checkbox"/> Synchro <input type="checkbox"/> HCS (v.2000/+) <input type="checkbox"/> SIDRA <input type="checkbox"/> CORSIM <input type="checkbox"/> Other | | |
| Traffic Signal Proposed or Affected (Analysis software to be used, progression speed, cycle length) | None | | |
| Improvement(s) Assumed or to be Considered | The need for turn lanes and other off-site improvements will be determined based on the results of the TIA. | | |

| | |
|---------------------------------------|--|
| Background Traffic Studies Considered | None |
| Plan Submission | <input type="checkbox"/> Master Development Plan (MDP) <input type="checkbox"/> Generalized Development Plan (GDP) <input type="checkbox"/> Preliminary/Sketch Plan <input checked="" type="checkbox"/> Other Plan type (Final Site, Subd. Plan) |
| Additional Issues to be Addressed | <input checked="" type="checkbox"/> Queuing analysis <input type="checkbox"/> Actuation/Coordination <input type="checkbox"/> Weaving analysis <input type="checkbox"/> Merge analysis <input type="checkbox"/> Bike/Ped Accommodations <input type="checkbox"/> Intersection(s) <input type="checkbox"/> TDM Measures <input type="checkbox"/> Other (<u> AME Request </u>) |

NOTES on ASSUMPTIONS:

- The proposed full-movement driveway requires an Access Management Exception (AME) request due to spacing from the Valero / Strawberry Street Catering driveways.

Table 1: ITE Trip Generation – Typical Weekday – 11th Edition

| Land Use (ITE Land Use Code) | Size | Average Daily Traffic (vpd) | | AM Peak Hour (vph) | | PM Peak Hour (vph) | |
|---------------------------------|----------------------|-----------------------------|-----------|--------------------|----------|--------------------|----------|
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| Mini-Warehouse (151) | 535 units | 49 | 49 | 3 | 3 | 4 | 5 |
| Mini-Warehouse (151) | 130 RV / boat spaces | 12 | 12 | 1 | 1 | 2 | 1 |
| Total | | 61 | 61 | 4 | 4 | 6 | 6 |



Figure 1: Site Location and Trip Distribution

APPENDIX B: TURNING MOVEMENT COUNTS AND SPEED DATA



TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Dollar General)
 Site Code :
 Start Date : 11/9/2023
 Page No : 1

Groups Printed- Cars + - Trucks

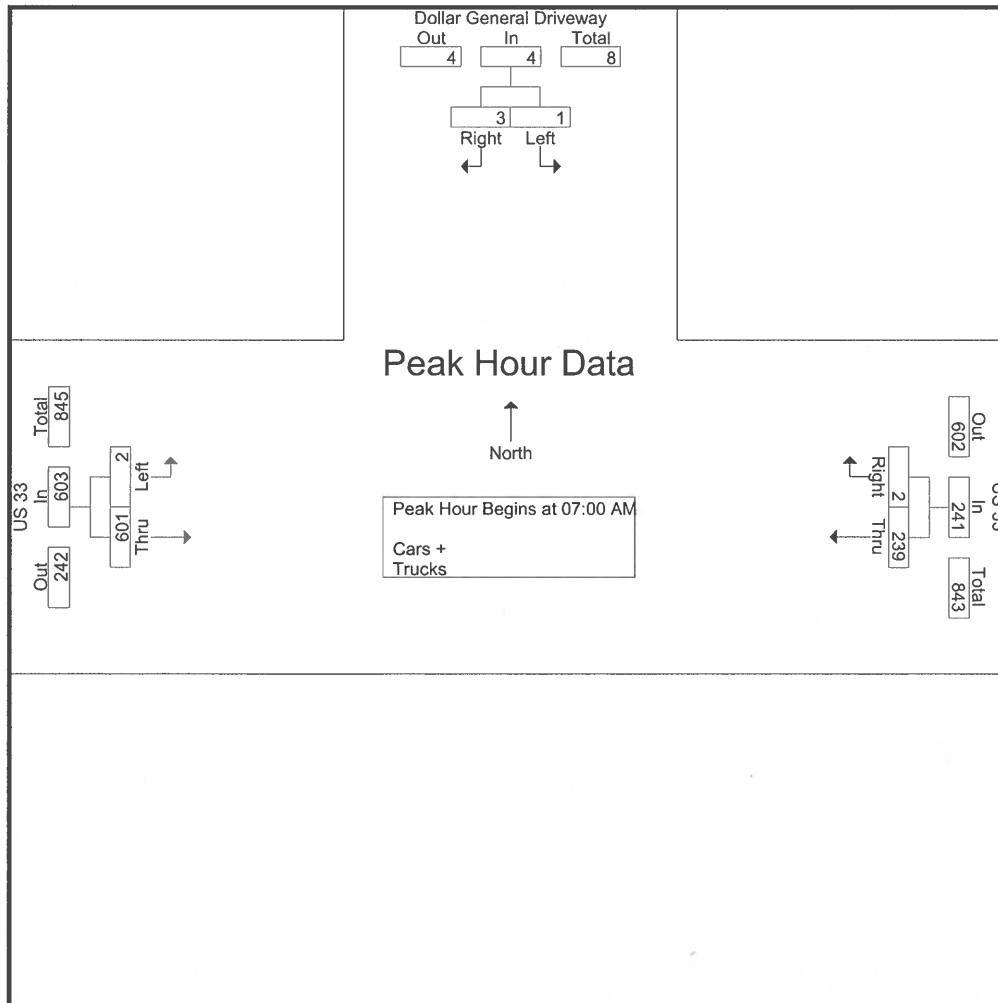
| Start Time | Dollar General Driveway Southbound | | | US 33 Westbound | | | US 33 Eastbound | | | Int. Total |
|-------------|------------------------------------|------|------------|-----------------|------|------------|-----------------|------|------------|------------|
| | Right | Left | App. Total | Right | Thru | App. Total | Thru | Left | App. Total | |
| 07:00 AM | 0 | 0 | 0 | 0 | 50 | 50 | 152 | 0 | 152 | 202 |
| 07:15 AM | 2 | 0 | 2 | 2 | 53 | 55 | 179 | 1 | 180 | 237 |
| 07:30 AM | 1 | 0 | 1 | 0 | 67 | 67 | 139 | 0 | 139 | 207 |
| 07:45 AM | 0 | 1 | 1 | 0 | 69 | 69 | 131 | 1 | 132 | 202 |
| Total | 3 | 1 | 4 | 2 | 239 | 241 | 601 | 2 | 603 | 848 |
| 08:00 AM | 0 | 2 | 2 | 1 | 55 | 56 | 133 | 2 | 135 | 193 |
| 08:15 AM | 0 | 0 | 0 | 1 | 56 | 57 | 153 | 1 | 154 | 211 |
| 08:30 AM | 1 | 1 | 2 | 0 | 70 | 70 | 103 | 1 | 104 | 176 |
| 08:45 AM | 0 | 2 | 2 | 1 | 66 | 67 | 88 | 0 | 88 | 157 |
| Total | 1 | 5 | 6 | 3 | 247 | 250 | 477 | 4 | 481 | 737 |
| Grand Total | 4 | 6 | 10 | 5 | 486 | 491 | 1078 | 6 | 1084 | 1585 |
| Apprch % | 40 | 60 | | 1 | 99 | | 99.4 | 0.6 | | |
| Total % | 0.3 | 0.4 | 0.6 | 0.3 | 30.7 | 31 | 68 | 0.4 | 68.4 | |
| Cars + | 4 | 6 | 10 | 4 | 433 | 437 | 1024 | 5 | 1029 | 1476 |
| % Cars + | 100 | 100 | 100 | 80 | 89.1 | 89 | 95 | 83.3 | 94.9 | 93.1 |
| Trucks | 0 | 0 | 0 | 1 | 53 | 54 | 54 | 1 | 55 | 109 |
| % Trucks | 0 | 0 | 0 | 20 | 10.9 | 11 | 5 | 16.7 | 5.1 | 6.9 |



TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Dollar General
 Site Code :
 Start Date : 11/9/2023
 Page No : 2

| Start Time | Dollar General Driveway Southbound | | | US 33 Westbound | | | US 33 Eastbound | | | Int. Total |
|--|------------------------------------|------|------------|-----------------|------|------------|-----------------|------|------------|------------|
| | Right | Left | App. Total | Right | Thru | App. Total | Thru | Left | App. Total | |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | 0 | 50 | 50 | 152 | 0 | 152 | 202 |
| 07:15 AM | 2 | 0 | 2 | 2 | 53 | 55 | 179 | 1 | 180 | 237 |
| 07:30 AM | 1 | 0 | 1 | 0 | 67 | 67 | 139 | 0 | 139 | 207 |
| 07:45 AM | 0 | 1 | 1 | 0 | 69 | 69 | 131 | 1 | 132 | 202 |
| Total Volume | 3 | 1 | 4 | 2 | 239 | 241 | 601 | 2 | 603 | 848 |
| % App. Total | 75 | 25 | | 0.8 | 99.2 | | 99.7 | 0.3 | | |
| PHF | .375 | .250 | .500 | .250 | .866 | .873 | .839 | .500 | .838 | .895 |





TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Dollar General)
 Site Code :
 Start Date : 11/9/2023
 Page No : 1

Groups Printed- Cars + - Trucks

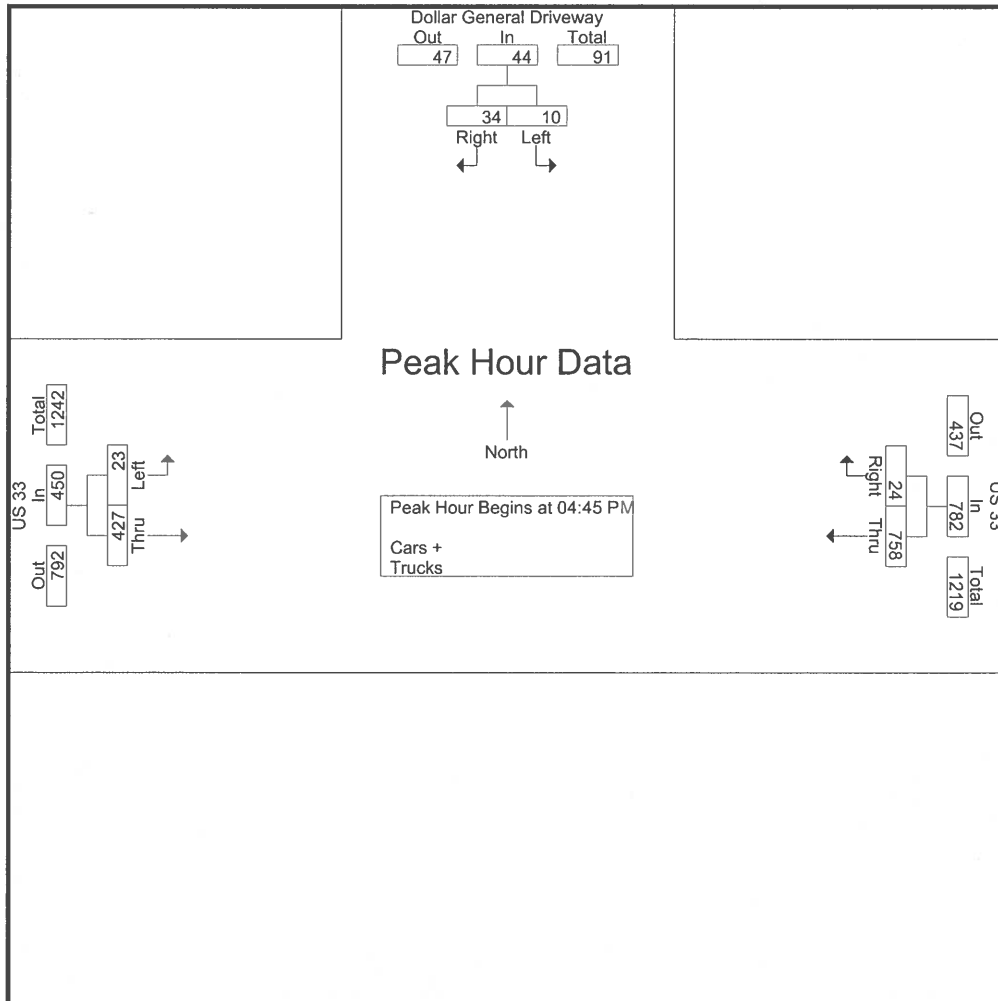
| Start Time | Dollar General Driveway Southbound | | | US 33 Westbound | | | US 33 Eastbound | | | Int. Total |
|-------------|---------------------------------------|------|------------|--------------------|------|------------|--------------------|------|------------|------------|
| | Right | Left | App. Total | Right | Thru | App. Total | Thru | Left | App. Total | |
| 04:00 PM | 10 | 5 | 15 | 6 | 150 | 156 | 97 | 9 | 106 | 277 |
| 04:15 PM | 5 | 2 | 7 | 1 | 165 | 166 | 88 | 5 | 93 | 266 |
| 04:30 PM | 3 | 0 | 3 | 4 | 163 | 167 | 71 | 0 | 71 | 241 |
| 04:45 PM | 9 | 0 | 9 | 7 | 202 | 209 | 97 | 5 | 102 | 320 |
| Total | 27 | 7 | 34 | 18 | 680 | 698 | 353 | 19 | 372 | 1104 |
| 05:00 PM | 8 | 4 | 12 | 7 | 181 | 188 | 100 | 5 | 105 | 305 |
| 05:15 PM | 7 | 3 | 10 | 5 | 207 | 212 | 117 | 3 | 120 | 342 |
| 05:30 PM | 10 | 3 | 13 | 5 | 168 | 173 | 113 | 10 | 123 | 309 |
| 05:45 PM | 9 | 0 | 9 | 2 | 174 | 176 | 99 | 10 | 109 | 294 |
| Total | 34 | 10 | 44 | 19 | 730 | 749 | 429 | 28 | 457 | 1250 |
| Grand Total | 61 | 17 | 78 | 37 | 1410 | 1447 | 782 | 47 | 829 | 2354 |
| Apprch % | 78.2 | 21.8 | | 2.6 | 97.4 | | 94.3 | 5.7 | | |
| Total % | 2.6 | 0.7 | 3.3 | 1.6 | 59.9 | 61.5 | 33.2 | 2 | 35.2 | |
| Cars + | 60 | 17 | 77 | 37 | 1348 | 1385 | 731 | 47 | 778 | 2240 |
| % Cars + | 98.4 | 100 | 98.7 | 100 | 95.6 | 95.7 | 93.5 | 100 | 93.8 | 95.2 |
| Trucks | 1 | 0 | 1 | 0 | 62 | 62 | 51 | 0 | 51 | 114 |
| % Trucks | 1.6 | 0 | 1.3 | 0 | 4.4 | 4.3 | 6.5 | 0 | 6.2 | 4.8 |



TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Dollar General
 Site Code :
 Start Date : 11/9/2023
 Page No : 2

| Start Time | Dollar General Driveway Southbound | | | US 33 Westbound | | | US 33 Eastbound | | | Int. Total |
|--|------------------------------------|------|------------|-----------------|------|------------|-----------------|------|------------|------------|
| | Right | Left | App. Total | Right | Thru | App. Total | Thru | Left | App. Total | |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | |
| 04:45 PM | 9 | 0 | 9 | 7 | 202 | 209 | 97 | 5 | 102 | 320 |
| 05:00 PM | 8 | 4 | 12 | 7 | 181 | 188 | 100 | 5 | 105 | 305 |
| 05:15 PM | 7 | 3 | 10 | 5 | 207 | 212 | 117 | 3 | 120 | 342 |
| 05:30 PM | 10 | 3 | 13 | 5 | 168 | 173 | 113 | 10 | 123 | 309 |
| Total Volume | 34 | 10 | 44 | 24 | 758 | 782 | 427 | 23 | 450 | 1276 |
| % App. Total | 77.3 | 22.7 | | 3.1 | 96.9 | | 94.9 | 5.1 | | |
| PHF | .850 | .625 | .846 | .857 | .915 | .922 | .912 | .575 | .915 | .933 |





TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Valero Driveway
 Site Code :
 Start Date : 11/9/2023
 Page No : 1

Groups Printed- Cars + - Trucks

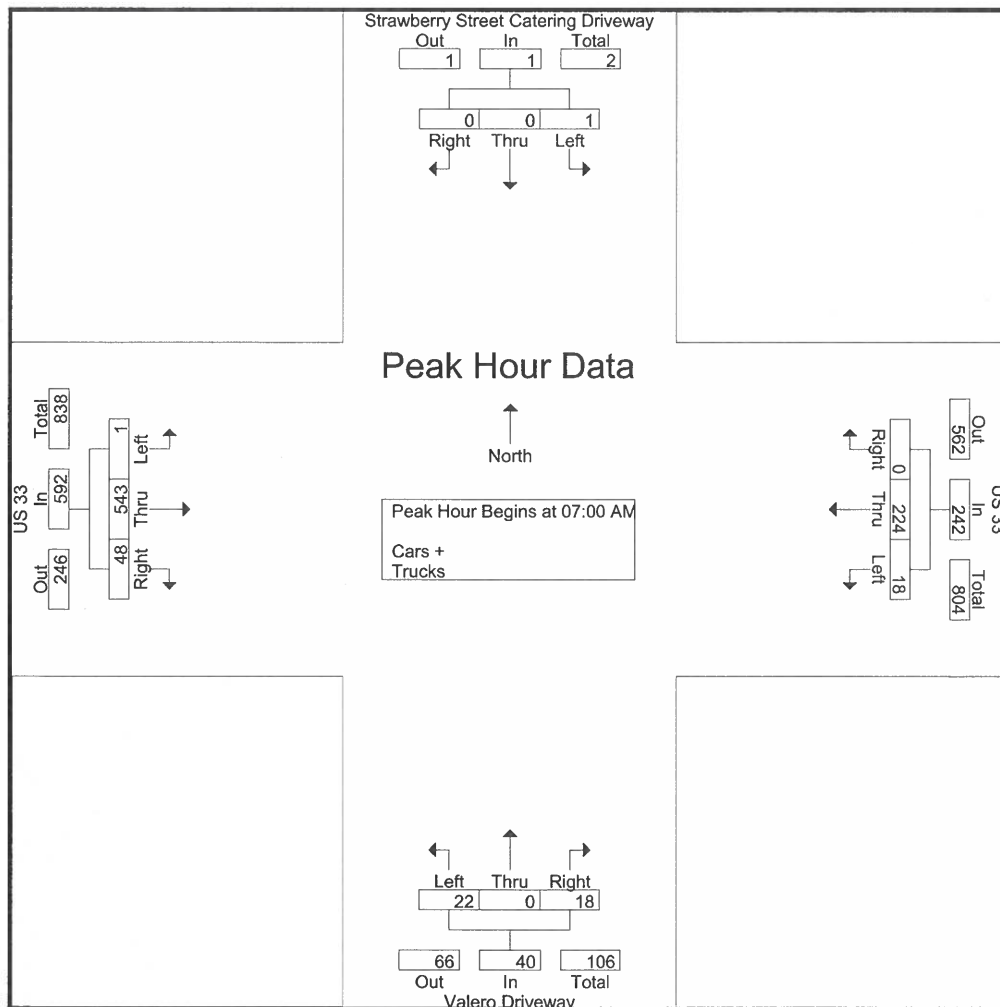
| Start Time | Strawberry Street Catering Driveway Southbound | | | | US 33 Westbound | | | | Valero Driveway Northbound | | | | US 33 Eastbound | | | | Int. Total |
|-------------|--|------|------|------------|-----------------|------|------|------------|----------------------------|------|------|------------|-----------------|------|------|------------|------------|
| | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | |
| 07:00 AM | 0 | 0 | 1 | 1 | 0 | 47 | 3 | 50 | 5 | 0 | 5 | 10 | 14 | 134 | 1 | 149 | 210 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 49 | 7 | 56 | 4 | 0 | 7 | 11 | 11 | 165 | 0 | 176 | 243 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 61 | 4 | 65 | 4 | 0 | 6 | 10 | 12 | 122 | 0 | 134 | 209 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 67 | 4 | 71 | 5 | 0 | 4 | 9 | 11 | 122 | 0 | 133 | 213 |
| Total | 0 | 0 | 1 | 1 | 0 | 224 | 18 | 242 | 18 | 0 | 22 | 40 | 48 | 543 | 1 | 592 | 875 |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 50 | 3 | 53 | 4 | 0 | 6 | 10 | 10 | 122 | 0 | 132 | 195 |
| 08:15 AM | 0 | 0 | 0 | 0 | 1 | 57 | 9 | 67 | 2 | 0 | 2 | 4 | 13 | 132 | 1 | 146 | 217 |
| 08:30 AM | 0 | 0 | 0 | 0 | 1 | 64 | 3 | 68 | 2 | 0 | 9 | 11 | 10 | 94 | 0 | 104 | 183 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 62 | 2 | 64 | 4 | 0 | 5 | 9 | 7 | 84 | 0 | 91 | 164 |
| Total | 0 | 0 | 0 | 0 | 2 | 233 | 17 | 252 | 12 | 0 | 22 | 34 | 40 | 432 | 1 | 473 | 759 |
| Grand Total | 0 | 0 | 1 | 1 | 2 | 457 | 35 | 494 | 30 | 0 | 44 | 74 | 88 | 975 | 2 | 1065 | 1634 |
| Apprch % | 0 | 0 | 100 | | 0.4 | 92.5 | 7.1 | | 40.5 | 0 | 59.5 | | 8.3 | 91.5 | 0.2 | | |
| Total % | 0 | 0 | 0.1 | 0.1 | 0.1 | 28 | 2.1 | 30.2 | 1.8 | 0 | 2.7 | 4.5 | 5.4 | 59.7 | 0.1 | 65.2 | |
| Cars + | 0 | 0 | 1 | 1 | 2 | 404 | 31 | 437 | 29 | 0 | 39 | 68 | 80 | 927 | 2 | 1009 | 1515 |
| % Cars + | 0 | 0 | 100 | 100 | 100 | 88.4 | 88.6 | 88.5 | 96.7 | 0 | 88.6 | 91.9 | 90.9 | 95.1 | 100 | 94.7 | 92.7 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 53 | 4 | 57 | 1 | 0 | 5 | 6 | 8 | 48 | 0 | 56 | 119 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 11.6 | 11.4 | 11.5 | 3.3 | 0 | 11.4 | 8.1 | 9.1 | 4.9 | 0 | 5.3 | 7.3 |



TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Valero Driveway)
 Site Code :
 Start Date : 11/9/2023
 Page No : 2

| Start Time | Strawberry Street Catering Driveway Southbound | | | | US 33 Westbound | | | | Valero Driveway Northbound | | | | US 33 Eastbound | | | | Int. Total |
|--|--|------|------|------------|-----------------|------|------|------------|----------------------------|------|------|------------|-----------------|------|------|------------|------------|
| | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 1 | 1 | 0 | 47 | 3 | 50 | 5 | 0 | 5 | 10 | 14 | 134 | 1 | 149 | 210 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 49 | 7 | 56 | 4 | 0 | 7 | 11 | 11 | 165 | 0 | 176 | 243 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 61 | 4 | 65 | 4 | 0 | 6 | 10 | 12 | 122 | 0 | 134 | 209 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 67 | 4 | 71 | 5 | 0 | 4 | 9 | 11 | 122 | 0 | 133 | 213 |
| Total Volume | 0 | 0 | 1 | 1 | 0 | 224 | 18 | 242 | 18 | 0 | 22 | 40 | 48 | 543 | 1 | 592 | 875 |
| % App. Total | 0 | 0 | 100 | | 0 | 92.6 | 7.4 | | 45 | 0 | 55 | | 8.1 | 91.7 | 0.2 | | |
| PHF | .000 | .000 | .250 | .250 | .000 | .836 | .643 | .852 | .900 | .000 | .786 | .909 | .857 | .823 | .250 | .841 | .900 |





TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Valero Driveway
 Site Code :
 Start Date : 11/9/2023
 Page No : 1

Groups Printed- Cars + - Trucks

| Start Time | Strawberry Street Catering Driveway Southbound | | | | US 33 Westbound | | | | Valero Driveway Northbound | | | | US 33 Eastbound | | | | Int. Total |
|-------------|--|------|------|------------|-----------------|------|------|------------|----------------------------|------|------|------------|-----------------|------|------|------------|------------|
| | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 143 | 4 | 147 | 5 | 0 | 9 | 14 | 14 | 91 | 0 | 105 | 266 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 157 | 8 | 165 | 5 | 0 | 14 | 19 | 5 | 89 | 0 | 94 | 278 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 156 | 8 | 164 | 3 | 0 | 13 | 16 | 5 | 69 | 0 | 74 | 254 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 198 | 6 | 204 | 4 | 0 | 17 | 21 | 8 | 89 | 0 | 97 | 322 |
| Total | 0 | 0 | 0 | 0 | 0 | 654 | 26 | 680 | 17 | 0 | 53 | 70 | 32 | 338 | 0 | 370 | 1120 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 177 | 6 | 183 | 3 | 0 | 9 | 12 | 10 | 97 | 0 | 107 | 302 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 203 | 7 | 210 | 8 | 0 | 8 | 16 | 13 | 107 | 0 | 120 | 346 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 165 | 6 | 171 | 4 | 0 | 10 | 14 | 9 | 119 | 0 | 128 | 313 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 182 | 5 | 187 | 8 | 0 | 6 | 14 | 10 | 95 | 0 | 105 | 306 |
| Total | 0 | 0 | 0 | 0 | 0 | 727 | 24 | 751 | 23 | 0 | 33 | 56 | 42 | 418 | 0 | 460 | 1267 |
| Grand Total | 0 | 0 | 0 | 0 | 0 | 1381 | 50 | 1431 | 40 | 0 | 86 | 126 | 74 | 756 | 0 | 830 | 2387 |
| Apprch % | 0 | 0 | 0 | 0 | 0 | 96.5 | 3.5 | | 31.7 | 0 | 68.3 | | 8.9 | 91.1 | 0 | | |
| Total % | 0 | 0 | 0 | 0 | 0 | 57.9 | 2.1 | 59.9 | 1.7 | 0 | 3.6 | 5.3 | 3.1 | 31.7 | 0 | 34.8 | |
| Cars + | 0 | 0 | 0 | 0 | 0 | 1319 | 48 | 1367 | 39 | 0 | 82 | 121 | 71 | 698 | 0 | 769 | 2257 |
| % Cars + | 0 | 0 | 0 | 0 | 0 | 95.5 | 96 | 95.5 | 97.5 | 0 | 95.3 | 96 | 95.9 | 92.3 | 0 | 92.7 | 94.6 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 62 | 2 | 64 | 1 | 0 | 4 | 5 | 3 | 58 | 0 | 61 | 130 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 4.5 | 4 | 4.5 | 2.5 | 0 | 4.7 | 4 | 4.1 | 7.7 | 0 | 7.3 | 5.4 |



TRAFFIC DATA COLLECTION

File Name : Montpelier(US 33 and Valero Driveway
 Site Code :
 Start Date : 11/9/2023
 Page No : 2

| Start Time | Strawberry Street Catering Driveway Southbound | | | | US 33 Westbound | | | | Valero Driveway Northbound | | | | US 33 Eastbound | | | | Int. Total |
|--|--|------|------|------------|-----------------|------|------|------------|----------------------------|------|------|------------|-----------------|------|------|------------|------------|
| | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 198 | 6 | 204 | 4 | 0 | 17 | 21 | 8 | 89 | 0 | 97 | 322 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 177 | 6 | 183 | 3 | 0 | 9 | 12 | 10 | 97 | 0 | 107 | 302 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 203 | 7 | 210 | 8 | 0 | 8 | 16 | 13 | 107 | 0 | 120 | 346 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 165 | 6 | 171 | 4 | 0 | 10 | 14 | 9 | 119 | 0 | 128 | 313 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 743 | 25 | 768 | 19 | 0 | 44 | 63 | 40 | 412 | 0 | 452 | 1283 |
| % App. Total | 0 | 0 | 0 | 0 | 0 | 96.7 | 3.3 | | 30.2 | 0 | 69.8 | | 8.8 | 91.2 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .915 | .893 | .914 | .594 | .000 | .647 | .750 | .769 | .866 | .000 | .883 | .927 |



APPENDIX C: SYNCHRO OUTPUT – EXISTING 2023 CONDITIONS

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 601 | 0 | 0 | 244 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |
| Future Vol, veh/h | 2 | 601 | 0 | 0 | 244 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 60 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 17 | 5 | 0 | 0 | 11 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 2 | 668 | 0 | 0 | 271 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|-----|--------|---|--------|-----|-----|-----|-----|-----|
| Conflicting Flow All | 273 | 0 | 0 | 668 | 0 | 0 | 946 | 945 | 668 | 944 | 944 | 272 |
| Stage 1 | - | - | - | - | - | - | 672 | 672 | - | 272 | 272 | - |
| Stage 2 | - | - | - | - | - | - | 274 | 273 | - | 672 | 672 | - |
| Critical Hdwy | 4.27 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.353 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1208 | - | - | 931 | - | - | 243 | 264 | 462 | 244 | 264 | 772 |
| Stage 1 | - | - | - | - | - | - | 449 | 458 | - | 738 | 688 | - |
| Stage 2 | - | - | - | - | - | - | 736 | 688 | - | 449 | 458 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1208 | - | - | 931 | - | - | 242 | 263 | 462 | 244 | 263 | 772 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 242 | 263 | - | 244 | 263 | - |
| Stage 1 | - | - | - | - | - | - | 448 | 457 | - | 737 | 688 | - |
| Stage 2 | - | - | - | - | - | - | 733 | 688 | - | 448 | 457 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|----|----|------|
| HCM Control Delay, s | 0 | 0 | 0 | 12.3 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-----|-----|-----|-------|
| Capacity (veh/h) | - | 1208 | - | - | 931 | - | - | 501 |
| HCM Lane V/C Ratio | - | 0.002 | - | - | - | - | - | 0.009 |
| HCM Control Delay (s) | | 0 | 8 | - | - | 0 | - | 12.3 |
| HCM Lane LOS | | A | A | - | - | A | - | B |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | 0 |

Montpelier Self-Storage
2: Valero Driveway/Catering Driveway & Route 33

Existing (2023) Conditions
Timing Plan: AM Peak Hour

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↔ | ↔ | | ↔ | ↔ | ↔ | | ↔ | ↔ | | ↔ | ↔ |
| Traffic Vol, veh/h | 1 | 553 | 48 | 18 | 224 | 0 | 22 | 0 | 18 | 1 | 0 | 0 |
| Future Vol, veh/h | 1 | 553 | 48 | 18 | 224 | 0 | 22 | 0 | 18 | 1 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 60 | - | - | 75 | - | 675 | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 0 | 5 | 9 | 11 | 12 | 0 | 11 | 0 | 3 | 0 | 0 | 0 |
| Mvmt Flow | 1 | 614 | 53 | 20 | 249 | 0 | 24 | 0 | 20 | 1 | 0 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | | Minor2 | | | | |
|----------------------|--------|---|--------|-------|--------|---|-------|--------|-------|-----|-----|-----|
| Conflicting Flow All | 249 | 0 | 0 | 667 | 0 | 0 | 932 | 932 | 641 | 942 | 958 | 249 |
| Stage 1 | - | - | - | - | - | - | 643 | 643 | - | 289 | 289 | - |
| Stage 2 | - | - | - | - | - | - | 289 | 289 | - | 653 | 669 | - |
| Critical Hdwy | 4.1 | - | - | 4.21 | - | - | 7.21 | 6.5 | 6.23 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.21 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.21 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.299 | - | - | 3.599 | 4 | 3.327 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1328 | - | - | 881 | - | - | 238 | 269 | 473 | 245 | 259 | 795 |
| Stage 1 | - | - | - | - | - | - | 447 | 472 | - | 723 | 677 | - |
| Stage 2 | - | - | - | - | - | - | 700 | 677 | - | 460 | 459 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1328 | - | - | 881 | - | - | 234 | 263 | 473 | 231 | 253 | 795 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 234 | 263 | - | 231 | 253 | - |
| Stage 1 | - | - | - | - | - | - | 447 | 472 | - | 722 | 661 | - |
| Stage 2 | - | - | - | - | - | - | 684 | 661 | - | 440 | 459 | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|-----|--|----|--|------|--|
| HCM Control Delay, s | 0 | | 0.7 | | 18 | | 20.7 | |
| HCM LOS | | | | | C | | C | |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 234 | 473 | 1328 | - | - | 881 | - | - | 231 |
| HCM Lane V/C Ratio | 0.104 | 0.042 | 0.001 | - | - | 0.023 | - | - | 0.005 |
| HCM Control Delay (s) | 22.2 | 12.9 | 7.7 | - | - | 9.2 | - | - | 20.7 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C |
| HCM 95th %tile Q(veh) | 0.3 | 0.1 | 0 | - | - | 0.1 | - | - | 0 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.9 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 23 | 442 | 0 | 0 | 763 | 24 | 0 | 0 | 0 | 10 | 0 | 34 |
| Future Vol, veh/h | 23 | 442 | 0 | 0 | 763 | 24 | 0 | 0 | 0 | 10 | 0 | 34 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 60 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Mvmt Flow | 25 | 475 | 0 | 0 | 820 | 26 | 0 | 0 | 0 | 11 | 0 | 37 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|------|--------|---|--------|------|-----|------|------|-------|
| Conflicting Flow All | 846 | 0 | 0 | 475 | 0 | 0 | 1377 | 1371 | 475 | 1358 | 1358 | 833 |
| Stage 1 | - | - | - | - | - | - | 525 | 525 | - | 833 | 833 | - |
| Stage 2 | - | - | - | - | - | - | 852 | 846 | - | 525 | 525 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.318 |
| Pot Cap-1 Maneuver | 800 | - | - | 1098 | - | - | 123 | 147 | 594 | 127 | 150 | 369 |
| Stage 1 | - | - | - | - | - | - | 540 | 533 | - | 366 | 386 | - |
| Stage 2 | - | - | - | - | - | - | 357 | 381 | - | 540 | 533 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 800 | - | - | 1098 | - | - | 108 | 142 | 594 | 124 | 145 | 369 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 108 | 142 | - | 124 | 145 | - |
| Stage 1 | - | - | - | - | - | - | 523 | 516 | - | 355 | 386 | - |
| Stage 2 | - | - | - | - | - | - | 322 | 381 | - | 523 | 516 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 0 | 22.3 |
| HCM LOS | | | A | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | 800 | - | - | 1098 | - | - | 255 |
| HCM Lane V/C Ratio | - | 0.031 | - | - | - | - | - | 0.186 |
| HCM Control Delay (s) | 0 | 9.6 | - | - | 0 | - | - | 22.3 |
| HCM Lane LOS | | A | A | - | A | - | - | C |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - | 0 | - | - | 0.7 |

Montpelier Self-Storage
2: Valero Driveway/Catering Driveway & Route 33

Existing (2023) Conditions
Timing Plan: PM Peak Hour

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↘ | | ↘ | ↘ | ↘ | | ↘ | ↘ | | ↘ | ↘ |
| Traffic Vol, veh/h | 0 | 412 | 40 | 25 | 743 | 0 | 44 | 0 | 19 | 0 | 0 | 0 |
| Future Vol, veh/h | 0 | 412 | 40 | 25 | 743 | 0 | 44 | 0 | 19 | 0 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 60 | - | - | 75 | - | 675 | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 8 | 4 | 4 | 5 | 0 | 5 | 0 | 3 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 443 | 43 | 27 | 799 | 0 | 47 | 0 | 20 | 0 | 0 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | | Minor2 | | | | |
|----------------------|--------|---|--------|-------|--------|---|-------|--------|-------|------|------|-----|
| Conflicting Flow All | 799 | 0 | 0 | 486 | 0 | 0 | 1318 | 1318 | 465 | 1328 | 1339 | 799 |
| Stage 1 | - | - | - | - | - | - | 465 | 465 | - | 853 | 853 | - |
| Stage 2 | - | - | - | - | - | - | 853 | 853 | - | 475 | 486 | - |
| Critical Hdwy | 4.1 | - | - | 4.14 | - | - | 7.15 | 6.5 | 6.23 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.15 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.15 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.236 | - | - | 3.545 | 4 | 3.327 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 833 | - | - | 1067 | - | - | 132 | 159 | 595 | 133 | 154 | 389 |
| Stage 1 | - | - | - | - | - | - | 572 | 566 | - | 357 | 378 | - |
| Stage 2 | - | - | - | - | - | - | 350 | 378 | - | 574 | 554 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 833 | - | - | 1067 | - | - | 129 | 155 | 595 | 126 | 150 | 389 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 129 | 155 | - | 126 | 150 | - |
| Stage 1 | - | - | - | - | - | - | 572 | 566 | - | 357 | 369 | - |
| Stage 2 | - | - | - | - | - | - | 341 | 369 | - | 554 | 554 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|------|----|
| HCM Control Delay, s | 0 | 0.3 | 37.1 | 0 |
| HCM LOS | | | E | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 129 | 595 | 833 | - | - | 1067 | - | - | - |
| HCM Lane V/C Ratio | 0.367 | 0.034 | - | - | - | 0.025 | - | - | - |
| HCM Control Delay (s) | 48.2 | 11.3 | 0 | - | - | 8.5 | - | - | 0 |
| HCM Lane LOS | E | B | A | - | - | A | - | - | A |
| HCM 95th %tile Q(veh) | 1.5 | 0.1 | 0 | - | - | 0.1 | - | - | - |

APPENDIX D: SYNCHRO OUTPUT – NO-BUILD 2025 CONDITIONS

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 613 | 0 | 0 | 249 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |
| Future Vol, veh/h | 2 | 613 | 0 | 0 | 249 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 60 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 17 | 5 | 0 | 0 | 11 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 2 | 666 | 0 | 0 | 271 | 2 | 0 | 0 | 0 | 1 | 0 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|-----|--------|---|--------|-----|-----|-----|-----|-----|
| Conflicting Flow All | 273 | 0 | 0 | 666 | 0 | 0 | 944 | 943 | 666 | 942 | 942 | 272 |
| Stage 1 | - | - | - | - | - | - | 670 | 670 | - | 272 | 272 | - |
| Stage 2 | - | - | - | - | - | - | 274 | 273 | - | 670 | 670 | - |
| Critical Hdwy | 4.27 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.353 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1208 | - | - | 933 | - | - | 244 | 265 | 463 | 245 | 265 | 772 |
| Stage 1 | - | - | - | - | - | - | 450 | 459 | - | 738 | 688 | - |
| Stage 2 | - | - | - | - | - | - | 736 | 688 | - | 450 | 459 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1208 | - | - | 933 | - | - | 243 | 264 | 463 | 245 | 264 | 772 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 243 | 264 | - | 245 | 264 | - |
| Stage 1 | - | - | - | - | - | - | 449 | 458 | - | 737 | 688 | - |
| Stage 2 | - | - | - | - | - | - | 733 | 688 | - | 449 | 458 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|----|----|------|
| HCM Control Delay, s | 0 | 0 | 0 | 12.2 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-----|-----|-----|-------|
| Capacity (veh/h) | - | 1208 | - | - | 933 | - | - | 502 |
| HCM Lane V/C Ratio | - | 0.002 | - | - | - | - | - | 0.009 |
| HCM Control Delay (s) | | 0 | 8 | - | 0 | - | - | 12.2 |
| HCM Lane LOS | | A | A | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - | - | 0 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↔ | ↔ | | ↔ | ↔ | ↔ | | ↔ | ↔ | | ↔ | ↔ |
| Traffic Vol, veh/h | 1 | 564 | 49 | 18 | 229 | 0 | 22 | 0 | 18 | 1 | 0 | 0 |
| Future Vol, veh/h | 1 | 564 | 49 | 18 | 229 | 0 | 22 | 0 | 18 | 1 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 60 | - | - | 75 | - | 675 | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 5 | 9 | 11 | 12 | 0 | 11 | 0 | 3 | 0 | 0 | 0 |
| Mvmt Flow | 1 | 613 | 53 | 20 | 249 | 0 | 24 | 0 | 20 | 1 | 0 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | | Minor2 | | | | |
|----------------------|--------|---|--------|-------|--------|---|-------|--------|-------|-----|-----|-----|
| Conflicting Flow All | 249 | 0 | 0 | 666 | 0 | 0 | 931 | 931 | 640 | 941 | 957 | 249 |
| Stage 1 | - | - | - | - | - | - | 642 | 642 | - | 289 | 289 | - |
| Stage 2 | - | - | - | - | - | - | 289 | 289 | - | 652 | 668 | - |
| Critical Hdwy | 4.1 | - | - | 4.21 | - | - | 7.21 | 6.5 | 6.23 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.21 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.21 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.299 | - | - | 3.599 | 4 | 3.327 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1328 | - | - | 882 | - | - | 238 | 269 | 474 | 245 | 260 | 795 |
| Stage 1 | - | - | - | - | - | - | 448 | 472 | - | 723 | 677 | - |
| Stage 2 | - | - | - | - | - | - | 700 | 677 | - | 460 | 459 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1328 | - | - | 882 | - | - | 234 | 263 | 474 | 231 | 254 | 795 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 234 | 263 | - | 231 | 254 | - |
| Stage 1 | - | - | - | - | - | - | 448 | 472 | - | 722 | 661 | - |
| Stage 2 | - | - | - | - | - | - | 684 | 661 | - | 441 | 459 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|----|------|
| HCM Control Delay, s | 0 | 0.7 | 18 | 20.7 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 234 | 474 | 1328 | - | - | 882 | - | - | 231 |
| HCM Lane V/C Ratio | 0.102 | 0.041 | 0.001 | - | - | 0.022 | - | - | 0.005 |
| HCM Control Delay (s) | 22.1 | 12.9 | 7.7 | - | - | 9.2 | - | - | 20.7 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C |
| HCM 95th %tile Q(veh) | 0.3 | 0.1 | 0 | - | - | 0.1 | - | - | 0 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 23 | 451 | 0 | 0 | 779 | 24 | 0 | 0 | 0 | 10 | 0 | 35 |
| Future Vol, veh/h | 23 | 451 | 0 | 0 | 779 | 24 | 0 | 0 | 0 | 10 | 0 | 35 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 60 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 7 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Mvmt Flow | 25 | 485 | 0 | 0 | 838 | 26 | 0 | 0 | 0 | 11 | 0 | 38 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|------|-------|
| Conflicting Flow All | 864 | 0 | 0 | 485 | 0 | 0 | 1405 | 1399 | 485 | 1386 | 1386 | 851 |
| Stage 1 | - | - | - | - | - | - | 535 | 535 | - | 851 | 851 | - |
| Stage 2 | - | - | - | - | - | - | 870 | 864 | - | 535 | 535 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.318 |
| Pot Cap-1 Maneuver | 787 | - | - | 1088 | - | - | 118 | 142 | 586 | 122 | 144 | 360 |
| Stage 1 | - | - | - | - | - | - | 533 | 527 | - | 358 | 379 | - |
| Stage 2 | - | - | - | - | - | - | 349 | 374 | - | 533 | 527 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 787 | - | - | 1088 | - | - | 103 | 137 | 586 | 119 | 139 | 360 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 103 | 137 | - | 119 | 139 | - |
| Stage 1 | - | - | - | - | - | - | 516 | 510 | - | 347 | 379 | - |
| Stage 2 | - | - | - | - | - | - | 313 | 374 | - | 516 | 510 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|----|----|
| HCM Control Delay, s | 0.5 | 0 | 0 | 23 |
| HCM LOS | | | A | C |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | 787 | - | - | 1088 | - | - | 248 |
| HCM Lane V/C Ratio | - | 0.031 | - | - | - | - | - | 0.195 |
| HCM Control Delay (s) | 0 | 9.7 | - | - | 0 | - | - | 23 |
| HCM Lane LOS | A | A | - | - | A | - | - | C |
| HCM 95th %tile Q(veh) | - | 0.1 | - | - | 0 | - | - | 0.7 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↙ | ↘ | | ↙ | ↘ | ↙ | | ↘ | ↙ | | ↘ | |
| Traffic Vol, veh/h | 0 | 420 | 41 | 26 | 758 | 0 | 45 | 0 | 19 | 0 | 0 | 0 |
| Future Vol, veh/h | 0 | 420 | 41 | 26 | 758 | 0 | 45 | 0 | 19 | 0 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 60 | - | - | 75 | - | 675 | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 8 | 4 | 4 | 5 | 0 | 5 | 0 | 3 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 452 | 44 | 28 | 815 | 0 | 48 | 0 | 20 | 0 | 0 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | | Minor2 | | | | |
|----------------------|--------|---|--------|-------|--------|---|-------|--------|-------|------|------|-----|
| Conflicting Flow All | 815 | 0 | 0 | 496 | 0 | 0 | 1345 | 1345 | 474 | 1355 | 1367 | 815 |
| Stage 1 | - | - | - | - | - | - | 474 | 474 | - | 871 | 871 | - |
| Stage 2 | - | - | - | - | - | - | 871 | 871 | - | 484 | 496 | - |
| Critical Hdwy | 4.1 | - | - | 4.14 | - | - | 7.15 | 6.5 | 6.23 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.15 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.15 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.236 | - | - | 3.545 | 4 | 3.327 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 821 | - | - | 1058 | - | - | 127 | 153 | 588 | 128 | 148 | 381 |
| Stage 1 | - | - | - | - | - | - | 566 | 561 | - | 349 | 371 | - |
| Stage 2 | - | - | - | - | - | - | 342 | 371 | - | 568 | 549 | - |
| Platoon blocked, % | | | | | | | | | | | | |
| Mov Cap-1 Maneuver | 821 | - | - | 1058 | - | - | 124 | 149 | 588 | 121 | 144 | 381 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 124 | 149 | - | 121 | 144 | - |
| Stage 1 | - | - | - | - | - | - | 566 | 561 | - | 349 | 361 | - |
| Stage 2 | - | - | - | - | - | - | 333 | 361 | - | 548 | 549 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|------|----|
| HCM Control Delay, s | 0 | 0.3 | 39.6 | 0 |
| HCM LOS | | | E | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 124 | 588 | 821 | - | - | 1058 | - | - | - |
| HCM Lane V/C Ratio | 0.39 | 0.035 | - | - | - | 0.026 | - | - | - |
| HCM Control Delay (s) | 51.5 | 11.3 | 0 | - | - | 8.5 | - | - | 0 |
| HCM Lane LOS | F | B | A | - | - | A | - | - | A |
| HCM 95th %tile Q(veh) | 1.6 | 0.1 | 0 | - | - | 0.1 | - | - | - |

APPENDIX E: SYNCHRO OUTPUT – BUILD 2025 CONDITIONS

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | ↘ | ↑ | ↗ | | ↘ | ↗ |
| Traffic Vol, veh/h | 2 | 616 | 252 | 2 | 1 | 3 |
| Future Vol, veh/h | 2 | 616 | 252 | 2 | 1 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 25 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 17 | 5 | 11 | 20 | 2 | 2 |
| Mvmt Flow | 2 | 670 | 274 | 2 | 1 | 3 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 276 | 0 | - | 0 | 949 275 |
| Stage 1 | - | - | - | - | 275 - |
| Stage 2 | - | - | - | - | 674 - |
| Critical Hdwy | 4.27 | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | 2.353 | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 1205 | - | - | - | 289 764 |
| Stage 1 | - | - | - | - | 771 - |
| Stage 2 | - | - | - | - | 506 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1205 | - | - | - | 288 764 |
| Mov Cap-2 Maneuver | - | - | - | - | 288 - |
| Stage 1 | - | - | - | - | 769 - |
| Stage 2 | - | - | - | - | 506 - |

| Approach | EB | WB | SB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 11.7 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1205 | - | - | - | 541 |
| HCM Lane V/C Ratio | 0.002 | - | - | - | 0.008 |
| HCM Control Delay (s) | 8 | - | - | - | 11.7 |
| HCM Lane LOS | A | - | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | ↗ | | ↖ | ↗ | | ↖↗ | |
| Traffic Vol, veh/h | 1 | 567 | 49 | 18 | 232 | 0 | 22 | 0 | 18 | 1 | 0 | 0 |
| Future Vol, veh/h | 1 | 567 | 49 | 18 | 232 | 0 | 22 | 0 | 18 | 1 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 60 | - | - | 75 | - | 675 | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 5 | 9 | 11 | 12 | 0 | 11 | 0 | 3 | 0 | 0 | 0 |
| Mvmt Flow | 1 | 616 | 53 | 20 | 252 | 0 | 24 | 0 | 20 | 1 | 0 | 0 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | | Minor2 | | | | |
|----------------------|--------|---|--------|-------|--------|---|-------|--------|-------|-----|-----|-----|
| Conflicting Flow All | 252 | 0 | 0 | 669 | 0 | 0 | 937 | 937 | 643 | 947 | 963 | 252 |
| Stage 1 | - | - | - | - | - | - | 645 | 645 | - | 292 | 292 | - |
| Stage 2 | - | - | - | - | - | - | 292 | 292 | - | 655 | 671 | - |
| Critical Hdwy | 4.1 | - | - | 4.21 | - | - | 7.21 | 6.5 | 6.23 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.21 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.21 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.299 | - | - | 3.599 | 4 | 3.327 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1325 | - | - | 880 | - | - | 236 | 267 | 472 | 243 | 258 | 792 |
| Stage 1 | - | - | - | - | - | - | 446 | 471 | - | 720 | 675 | - |
| Stage 2 | - | - | - | - | - | - | 697 | 675 | - | 458 | 458 | - |
| Platoon blocked, % | | | | | | | | | | | | |
| Mov Cap-1 Maneuver | 1325 | - | - | 880 | - | - | 232 | 261 | 472 | 229 | 252 | 792 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 232 | 261 | - | 229 | 252 | - |
| Stage 1 | - | - | - | - | - | - | 446 | 471 | - | 719 | 659 | - |
| Stage 2 | - | - | - | - | - | - | 681 | 659 | - | 439 | 458 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|------|------|
| HCM Control Delay, s | 0 | 0.7 | 18.1 | 20.8 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 232 | 472 | 1325 | - | - | 880 | - | - | 229 |
| HCM Lane V/C Ratio | 0.103 | 0.041 | 0.001 | - | - | 0.022 | - | - | 0.005 |
| HCM Control Delay (s) | 22.3 | 13 | 7.7 | - | - | 9.2 | - | - | 20.8 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | C |
| HCM 95th %tile Q(veh) | 0.3 | 0.1 | 0 | - | - | 0.1 | - | - | 0 |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑ | | ↓ | ↑ | ↓ | |
| Traffic Vol, veh/h | 615 | 1 | 3 | 252 | 1 | 3 |
| Future Vol, veh/h | 615 | 1 | 3 | 252 | 1 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 25 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 724 | 1 | 4 | 296 | 1 | 4 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 725 | 0 | 1029 |
| Stage 1 | - | - | - | - | 725 |
| Stage 2 | - | - | - | - | 304 |
| Critical Hdwy | - | - | 4.12 | - | 6.42 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 |
| Pot Cap-1 Maneuver | - | - | 878 | - | 259 |
| Stage 1 | - | - | - | - | 479 |
| Stage 2 | - | - | - | - | 748 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 878 | - | 258 |
| Mov Cap-2 Maneuver | - | - | - | - | 258 |
| Stage 1 | - | - | - | - | 479 |
| Stage 2 | - | - | - | - | 744 |

| Approach | EB | WB | NB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0 | 0.1 | 15 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 366 | - | - | 878 | - |
| HCM Lane V/C Ratio | 0.013 | - | - | 0.004 | - |
| HCM Control Delay (s) | 15 | - | - | 9.1 | - |
| HCM Lane LOS | C | - | - | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.9 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | ↘ | ↑ | ↗ | | ↘ | ↗ |
| Traffic Vol, veh/h | 23 | 455 | 783 | 24 | 10 | 35 |
| Future Vol, veh/h | 23 | 455 | 783 | 24 | 10 | 35 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 25 | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 7 | 4 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 495 | 851 | 26 | 11 | 38 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 877 | 0 | - | 0 | 1409 864 |
| Stage 1 | - | - | - | - | 864 - |
| Stage 2 | - | - | - | - | 545 - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 770 | - | - | - | 153 354 |
| Stage 1 | - | - | - | - | 413 - |
| Stage 2 | - | - | - | - | 581 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 770 | - | - | - | 148 354 |
| Mov Cap-2 Maneuver | - | - | - | - | 148 - |
| Stage 1 | - | - | - | - | 400 - |
| Stage 2 | - | - | - | - | 581 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0 | 21.3 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 770 | - | - | - | 270 |
| HCM Lane V/C Ratio | 0.032 | - | - | - | 0.181 |
| HCM Control Delay (s) | 9.8 | - | - | - | 21.3 |
| HCM Lane LOS | A | - | - | - | C |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.6 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↘ | ↗ | | ↘ | ↗ | ↗ | | ↗ | ↗ | | ↕ | |
| Traffic Vol, veh/h | 0 | 424 | 41 | 26 | 762 | 0 | 45 | 0 | 19 | 0 | 0 | 0 |
| Future Vol, veh/h | 0 | 424 | 41 | 26 | 762 | 0 | 45 | 0 | 19 | 0 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 60 | - | - | 75 | - | 675 | - | - | 0 | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 0 | 8 | 4 | 4 | 5 | 0 | 5 | 0 | 3 | 0 | 0 | 0 |
| Mvmt Flow | 0 | 456 | 44 | 28 | 819 | 0 | 48 | 0 | 20 | 0 | 0 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-------|--------|------|-----|
| Conflicting Flow All | 819 | 0 | 0 | 500 | 0 | 0 | 1353 | 1353 | 478 | 1363 | 1375 | 819 |
| Stage 1 | - | - | - | - | - | - | 478 | 478 | - | 875 | 875 | - |
| Stage 2 | - | - | - | - | - | - | 875 | 875 | - | 488 | 500 | - |
| Critical Hdwy | 4.1 | - | - | 4.14 | - | - | 7.15 | 6.5 | 6.23 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.15 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.15 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.236 | - | - | 3.545 | 4 | 3.327 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 818 | - | - | 1054 | - | - | 125 | 151 | 585 | 126 | 147 | 379 |
| Stage 1 | - | - | - | - | - | - | 563 | 559 | - | 347 | 370 | - |
| Stage 2 | - | - | - | - | - | - | 340 | 370 | - | 565 | 546 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 818 | - | - | 1054 | - | - | 123 | 147 | 585 | 119 | 143 | 379 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 123 | 147 | - | 119 | 143 | - |
| Stage 1 | - | - | - | - | - | - | 563 | 559 | - | 347 | 360 | - |
| Stage 2 | - | - | - | - | - | - | 331 | 360 | - | 545 | 546 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|----|----|
| HCM Control Delay, s | 0 | 0.3 | 40 | 0 |
| HCM LOS | | | E | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 123 | 585 | 818 | - | - | 1054 | - | - | - |
| HCM Lane V/C Ratio | 0.393 | 0.035 | - | - | - | 0.027 | - | - | - |
| HCM Control Delay (s) | 52.1 | 11.4 | 0 | - | - | 8.5 | - | - | 0 |
| HCM Lane LOS | F | B | A | - | - | A | - | - | A |
| HCM 95th %tile Q(veh) | 1.7 | 0.1 | 0 | - | - | 0.1 | - | - | - |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↶ | | ↷ | ↶ | ↷ | |
| Traffic Vol, veh/h | 474 | 2 | 4 | 814 | 2 | 4 |
| Future Vol, veh/h | 474 | 2 | 4 | 814 | 2 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 25 | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 558 | 2 | 5 | 958 | 2 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|-------------|
| Conflicting Flow All | 0 | 0 | 560 | 0 | 1527 559 |
| Stage 1 | - | - | - | - | 559 - |
| Stage 2 | - | - | - | - | 968 - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | - | - | 1011 | - | 129 529 |
| Stage 1 | - | - | - | - | 572 - |
| Stage 2 | - | - | - | - | 368 - |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1011 | - | 128 529 |
| Mov Cap-2 Maneuver | - | - | - | - | 128 - |
| Stage 1 | - | - | - | - | 572 - |
| Stage 2 | - | - | - | - | 366 - |

| Approach | EB | WB | NB |
|----------------------|----|----|------|
| HCM Control Delay, s | 0 | 0 | 19.3 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 259 | - | - | 1011 | - |
| HCM Lane V/C Ratio | 0.027 | - | - | 0.005 | - |
| HCM Control Delay (s) | 19.3 | - | - | 8.6 | - |
| HCM Lane LOS | C | - | - | A | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

APPENDIX F: VDOT TURN LANE WARRANTS

| General Project Information | | Enter a value for all input cells | |
|-----------------------------|--|-----------------------------------|-----------|
| Project Name: | Montpelier Self Storage - Route 33 at Proposed Site Driveway | | |
| County: | Hannover County | | |
| Reviewer: | Build 2025 AM Peak Hour | Date: | 2/15/2024 |

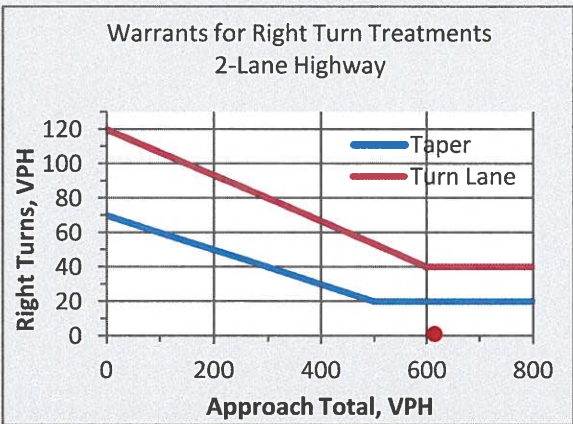
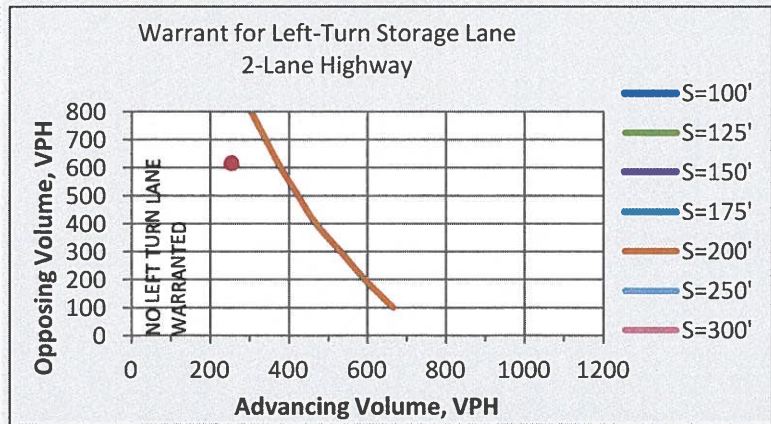
| Adjacent Roadway Data | | | |
|-----------------------|-----------|------------------|---|
| Adjacent Road Name: | Route 33 | Number of Lanes: | 2 |
| Posted Speed: | 45 mph * | Classification: | Minor Rural Arterial |
| AADT: | 11000 VPD | D: | N/A |
| | | k: | N/A <i>enter N/A if factors are unknown</i> |

*Use Design Speed if available

| Trip Generation | | | |
|------------------|---------|-----------------------|----------------------------|
| Generated Trips: | 122 VPD | % Trucks in Entrance: | 2 % |
| Right In: | 1 VPH | Advancing Volume: | 255 VPH |
| Left In: | 3 VPH | 1% | Opposing Volume: 616 VPH** |

**Also used as Approaching Volume for Rt. Turns

| Entrance Criteria | | Entrance is a Standard Commercial Entrance | |
|--|----------------------|--|--------|
| Entrance Type: | Full Access Entrance | | |
| Minimum Spacing: | 470 ft | SDL: | 500 ft |
| | | SDR: | 500 ft |
| Left Turn Lane Warrant: Advancing Volume \geq | 374 VPH | No Left Turn Lane | |
| Right Turn Taper Warrant: Rt. Turn Volume \geq | 20 VPH | No Taper Required | |
| Right Turn Lane Warrant: Rt. Turn Volume \geq | 40 VPH | No Right Turn Lane Required | |



- The minimum warranted left turn lane length shall be 100' for speeds \leq 40 mph and 200' for speeds \geq 45 mph
- Left turn lanes with high truck volume shall be increased as calculated and tabulated below:

| Left Turn Storage Length Increase Required for Truck Ratio (in Feet) | | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| S = 100' | S = 125' | S = 150' | S = 175' | S = 200' | S = 250' | S = 300' |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| General Project Information | | Enter a value for all input cells | |
|-----------------------------|--|-----------------------------------|-----------|
| Project Name: | Montpelier Self Storage - Route 33 at Proposed Site Driveway | | |
| County: | Hannover County | | |
| Reviewer: | Build 2025 PM Peak Hour | Date: | 2/15/2024 |

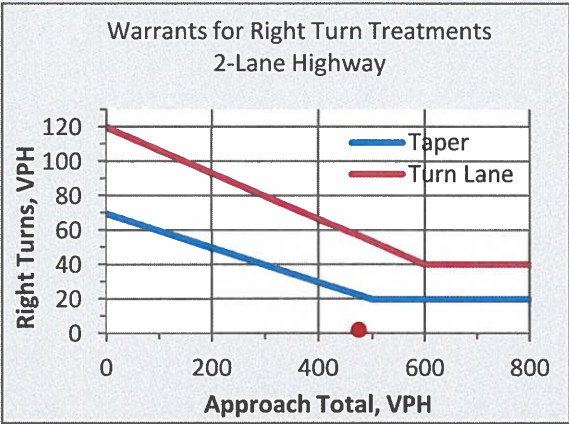
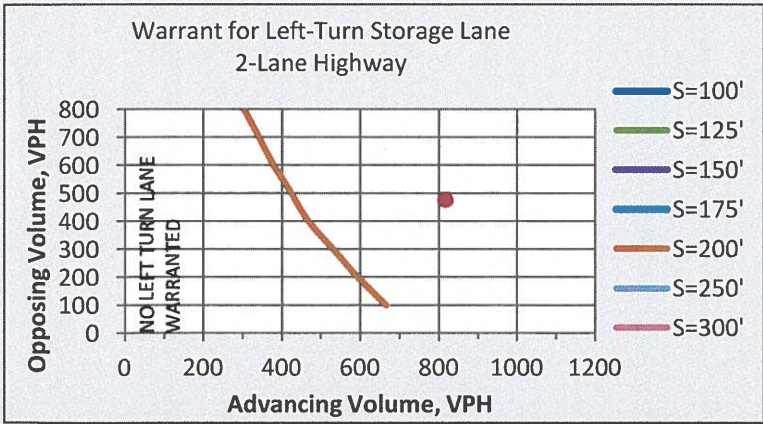
| Adjacent Roadway Data | | | |
|-----------------------|-----------|------------------|---|
| Adjacent Road Name: | Route 33 | Number of Lanes: | 2 |
| Posted Speed: | 45 mph * | Classification: | Minor Rural Arterial |
| AADT: | 11000 VPD | D: | N/A |
| | | k: | N/A <i>enter N/A if factors are unknown</i> |

*Use Design Speed if available

| Trip Generation | | | |
|------------------|---------|-----------------------|----------------------------|
| Generated Trips: | 122 VPD | % Trucks in Entrance: | 2 % |
| Right In: | 2 VPH | Advancing Volume: | 818 VPH |
| Left In: | 4 VPH | 0% | Opposing Volume: 476 VPH** |

**Also used as Approaching Volume for Rt. Turns

| Entrance Criteria | | Entrance is a Standard Commercial Entrance | |
|--|----------------------|--|--------|
| Entrance Type: | Full Access Entrance | | |
| Minimum Spacing: | 470 ft | SDL: | 530 ft |
| | | SDR: | 565 ft |
| Left Turn Lane Warrant: Advancing Volume \geq | 435 VPH | Left Turn Lane Required with 200' taper | |
| Right Turn Taper Warrant: Rt. Turn Volume \geq | 22 VPH | No Taper Required | |
| Right Turn Lane Warrant: Rt. Turn Volume \geq | 57 VPH | No Right Turn Lane Required | |



- The minimum warranted left turn lane length shall be 100' for speeds \leq 40 mph and 200' for speeds \geq 45 mph
- Left turn lanes with high truck volume shall be increased as calculated and tabulated below:

| Left Turn Storage Length Increase Required for Truck Ratio (in Feet) | | | | | | |
|--|----------|----------|----------|----------|----------|----------|
| S = 100' | S = 125' | S = 150' | S = 175' | S = 200' | S = 250' | S = 300' |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Approved Access Management Exception

ACCESS MANAGEMENT EXCEPTION REQUEST: AM-E
ACCESS MANAGEMENT REGULATIONS 24 VAC 30-73
SECTION 120

| | | |
|---|---|------------------------------|
| Submitted by: Carl Hultgren, P.E., PTOE | | Date: 02/26/24 |
| Email Address: ch@groveslade.com | | Phone: (804) 362-0578 |
| Address: 4951 Lake Brook Drive, Suite 250, Glen Allen, VA 23060 | | |
| Project Name: Montpelier Self-Storage | Rte # 33 | Locality: Hanover |
| Description of Project: Proposed self-storage facility on the south side of Route 33 (Mountain Road) between the Food Lion and the Valero in Montpelier, VA. The applicant is proposing 534 storage lockers and 126 RV / boat parking spaces. The proposed site driveway is approximately 280 feet west of the Valero driveway. | | |
| VDOT District: Richmond | Area Land Use Engineer: Adam Moore, P.E. | |

- NOTES:**
- (1). Submit this form and any attachments to one of the District's Area Land Use Engineers.
 - (2). See Section 120 of the Regulations for details on the requirements, exceptions, and exception request review process.
 - (3). Attach additional information as necessary to justify the exception request(s).
 - (4). If a traffic engineering study is required, the decision on the request will be based on VDOT engineering judgment.
 - (5). Use the LD-440 Design Exception or the LD-448 Design Waiver forms for *design and engineering standards*, e.g. radius, grade, sight distance. See [IIM-LD-227](#) on VDOT web site for additional instructions.

Select the Exception(s) Being Requested

- Exception to the shared commercial entrance requirement.** (Access M. Regulations Section 120 C.2)
- Reason for exception:**
- A. An agreement to share the entrance could not be reached with adjoining property owner.**
 - Attached:** Written evidence that adjoining property owner will not share the entrance.
 - B. Physical constraints: topography, adjacent hazardous land use, stream, wetland, other.**
 - Specify constraint:** _____
 - Attached:** Documentation of constraint such as aerial photo or topographic map.
- Exception to the vehicular connection to adjoining undeveloped property requirement.** (Section 120 C.4)
- Reason for exception:**
- A. Physical constraints: topography, adjacent hazardous land use, stream, wetland, other.**
 - Specify constraint:** _____
 - Attached:** Documentation of constraint such as aerial photo or topographic map.
 - B. Other reason:** _____

Exception to the commercial entrance shall not be located within the functional area of an intersection requirement. (See Regulation Section 120 C. 1; Appendix F, Rd Design Manual)

Attached: A traffic engineering study documenting that the operation of the intersection and public safety will not be adversely impacted.

EXCEPTION TO THE SPACING STANDARDS FOR:

- **Commercial entrances; intersections/median crossovers (Table 2-2);**
- **Commercial entrances/intersections near interchange ramps (Tables 2-3, 2-4); or**
- **Corner clearance (Figure 4-4).** Appendix F, Road Design Manual

Information on the Exception Request

ON A STATE HIGHWAY
 Functional classification: Principal Arterial: Minor Arterial: Collector: Local:
 Posted speed limit: 45 mph

NEAR AN INTERCHANGE RAMP (Submittal of a traffic engineering study required)

CORNER CLEARANCE (Submittal of a traffic engineering study required)

Type of intersection/entrance: Signalized Unsignalized Full Access Partial Access

Required spacing distance 470 ft

Proposed spacing distance 280 ft

Requested exception: Reduction in required spacing 190 ft

REASON FOR EXCEPTION:

A. To be located on an older, established business corridor along a highway where existing spacing did not meet the standards prior to 7/1/08 or 10/14/09. (Regulation Section 120 C.3.c)

Attached: Dated aerial photo of corridor identifying proposed entrance/intersection location.

B. Not enough property frontage to meet spacing standard, but the applicant does not want a partial access right-in/right-out entrance. (Section 120 C.3.f)

Handwritten signature/initials in blue ink.

Attached: A traffic engineering study documenting that left turn movements at the entrance will not have a negative impact on highway operation or safety.

C. To be located within a new urbanism mixed use type development. (Section 120 C.3.d)

Attached: The design of the development and compliance with intersection sight distance.

D. The proposed entrance meets the signal warrants but does not meet the signalized intersection spacing standard. The applicant requests an exception to the spacing standard.

Attached: A traffic engineering study that (i) evaluates the location's suitability for a roundabout and (ii) provides documentation that the proposed signal will not impact safety and traffic flow. (Section 120 C.5)

- E. The development's 2nd (or additional) entrance does not meet the spacing standards but is necessary for the streets to be accepted into the secondary system. (Section 120 C.3.e)
 - Attached: Information on the development that identifies the location of entrances.

- F. To be located within the limits of a VDOT and locality approved access management corridor plan.
 - Attached: Aerial photo of corridor identifying proposed entrance/intersection location. (Sect 120 C.3.b)

FOR VDOT USE ONLY

| | | |
|--|--|----------------------------------|
| Recommendation on Exception Request: Approve <input checked="" type="checkbox"/> Deny <input type="checkbox"/> | | Date: 2/28/24 |
| Area Land Use Engineer or: _____ | | Name: Adam J. Moore, P.E. |
| Remarks: I recommend approval based on the following factors: | | |
| 1. The entrance spacing from the nearest entrance, serving a Valero station, has been maximized to the extent of the frontage. 2. Approval should be contingent upon construction of a commercial entrance meeting all relevant standards. 3. The proposed two way left turn lane design should serve the needs of the self storage and retail across the street acceptably. | | |
| The Residency Administrator, Marshall Winn, provided concurrence with this recommendation via email on 2/28/24. | | |

| | | |
|---|--|----------------------|
| Exception Request Action: Approved <input checked="" type="checkbox"/> Denied <input type="checkbox"/> | | Date: 2-28-24 |
| District Administrator or Designee: <u>HE Joseph Jr</u> | | |
| Name (and position if Designee) Harley E. Joseph, Jr., PE - District Land Use Engineer | | |
| Remarks: | | |

District Staff: Please email copy to Blair.Toombs@VDOT.Virginia.gov

Community Meeting Notes

Community Meeting
REZ2023-00030/CUP2023-00011
Loneoak Land Company, LLC/Mile Branch Investments, LLC

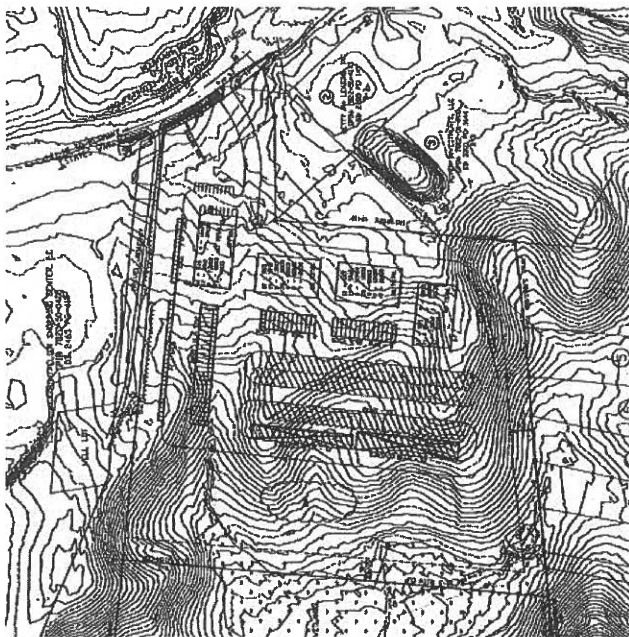
A community meeting for REZ2023-00030/CUP2023-00011, Loneoak Land Company, LLC/Mile Branch Investments, LLC was held on October 16, 2023 at 6:00 p.m. at Montpelier Center. The applicant is requesting to rezone to B-3 and a conditional use permit to allow a self-storage facility on Mountain Road.

Approximately thirty (30) citizens were in attendance. The following Hanover County representatives were also in attendance:

Board of Supervisors: Sue Dibble (South Anna District)

Planning Commission: Larry Leadbetter (South Anna District) and Edmonia Iverson (Beaverdam District)

Staff members: Jo Ann Hunter and Gretchen Biernot



The following questions and concerns were raised at the meeting:

- Lighting impacts
- Proposed driveway that intersects with Mountain Road is on a blind curve. Trucks with large trailers pulling out of this driveway may be dangerous in this area, and it is an accident waiting to happen. It is difficult to get out of Food Lion now.
 - The applicant must get a permit from VDOT and meet sight distance requirements.
- Self-storage is not the kind of development wanted in this community; People who do not live in the area will store their stuff here; Development is not benefiting this community;

- no new jobs; people who do live in this area have large lots who can store RVs and boats on their own property
- Use is a low traffic generator, and other commercial uses would have more impacts.
 - How many boat/RV slots? Number of self-storage units? 100-120 RV/Boat storage spaces and 400 self-storage units.
 - Who is your targeted market? How did you pick this location?
 - The property is for sale, and market studies showed there is a demand in this area for this use.
 - Will there be a nightwatchman? Can people stay overnight?
 - Security cameras will be used, and people will not be allowed to stay overnight.
 - Height of fencing to be used? 6' tall
 - Are we seeing the whole project? Nothing is proposed beyond what is shown on the plan
 - Nothing is planned for the back half of the lot, and this area will not be rezoned.
 - Lighting height? Roughly 8' with hoods.
 - Construction timeframe? Asphalt pad would come first and then the self-storage buildings. Buildings would be built prior to RV/Boat storage to screen this area
 - Concerns about oil and other fluids spilling from the vehicles going into wells
 - Project must meet stormwater regulations and will consider other ways to address drainage and oil/water separators.
 - Don't want fast food or other commercial uses, and this low impact use is preferred with high development standards.

These applications are tentatively scheduled for the January 2024 Planning Commission meeting.

Citizen Correspondence

Biernot, Gretchen W.

From: Miles Diamond <mvdiamond@icloud.com>
Sent: Thursday, March 21, 2024 3:26 PM
To: Bailey, Jerry W.; Iverson, Edmonia P.; laledbetter@hanovercounty.gov; McGhee, Jr, Fredric I.; Whittaker, Randolph A.; Abbott, Alan C.; Hadra, Steven F.
Cc: Biernot, Gretchen W.
Subject: Proposed Rezoning and CUP for Self Storage in Montpelier

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Planning Commissioners
Hanover County

I am writing to you today to express my great concern with the application for rezoning and a CUP for development of the proposed self storage and boat/RV storage in Montpelier. This isn't personal — I do not know the developer. And I have nothing against the storage industry, but this location is terrible. And the people who live around here do not want it here. The proposed development of three story buildings and storage of over a hundred boats and RVs does not benefit us at all. We do not want it here.

The proposed storage facility with one to three huge buildings and outside space for over a hundred RVs and boats would be behind the car wash and gas station on Mountain Road. This is a bad location for the following reasons.

The first reason is the dangerous traffic conditions that would result. The entrance/exit would be immediately across the road from the entrance to the Dollar General. Mountain Road, driving from the southeast towards town, makes a large sweeping left turn at the intersection of Patrick Henry Road. That curve already limits visibility of present day drivers exiting the Valero gas station who turn left onto Mountain Road. When turning to the left they cannot see drivers to the right who are speeding around the curve. This is already a dangerous location.

Drivers exiting the proposed storage facility turning left entering Mountain Road will be towing a lumbering twenty five to forty five foot long camping trailer or large boat. Once they are committed to the left turn, and take up the entire road, they are vulnerable to speeding westbound traffic. Nothing can change this reality. Stripes and turn lanes will not straighten the curve or slow down drivers who choose to speed.

Of note, the applicant's traffic study was not conducted during the April through September peak recreational activity months. The traffic study conclusions are statistically invalid because the samples do not represent the driving population and conditions of concern. The traffic engineers provide only estimates. In the real world we call those guesses. These wishful fantasies wrapped in scientific lingo serve only to support the man who paid them.

But here is the reality of the road. We already have too many accidents on Mountain Road. The accident just prior to Christmas was a very bad one. Several people sustained serious and life threatening injuries. The accident in January was also bad, and closed the road for many hours. How many more people have to be injured or killed? And why does the county government even consider bad development that will only make conditions worse? Is the incremental increase in taxable land value worth the lives of our families?

The second reason is the encroachment into wetlands and resulting contamination of the aquifer that feeds the water wells of the surrounding community. The development enters Wolf Swamp. Runoff from fuel, solvents and cleaners will drain into the wetlands. You may ask why there will be so much chemical pollutants being absorbed into the ground and thus contaminate groundwater. The answer is simple. Boats and RVs have to be maintained. Boats require cleaning following use. They also require periodic preventative maintenance and winterization for outdoor storage. Cleaners, antifreeze, fuel, fuel additive, and oil are frequently spilled or drained onto the ground. The ground will not filter the petrochemicals that ultimately will reach the aquifer that feeds the water wells of the surrounding community. Here is the boat winterization task list from the website DiscoverBoating.com:

How to Winterize a Boat

1. Start by prepping your engine; ensure all water has been drained and removed.
2. Apply corrosion protection to your engine.
3. Consult your owner's manual for specific instructions, and complete fogging, if needed.
4. Add a fuel-stabilizing additive to your fuel system; then run the engine.
5. Change your engine's fuel filters and any fuel/water separators in the system.
6. Drain your boat's freshwater plumbing systems (sinks, tanks, and heads).
7. Add antifreeze to your plumbing systems.
8. Ensure water is removed from all additional systems (raw water washdowns, livewells, bilge pump, etc.).
9. Remove drain plugs.
10. Cover your boat or place it into winter storage.

Ironically, it's water that poses the most danger to your boat during the off-season. Freeze-damage is the biggest potential problem, but water in and on your boat can also promote winter-time mold and mildew growth, and corrosion. So as you consider all of these tasks, remember that your main goal is to keep out water and moisture to the greatest extent possible.

Be sure to concentrate on these systems during the winterization process:

- The engine
- Fuel systems
- Plumbing systems
- All other systems that can hold water

So there you have it. And numerous scientific studies support the danger of chemical pollution migrating to the aquifer. You have to realize that pools to catch runoff will not prevent chemical penetration of the soil. If you think me a climate change environmentalist activist, then think again. I am a conservative. But I exercise critical thought and moral clarity on this issue that is not at all political. And I offer you three

words if you think conservatives are not concerned with toxic water: East Palestine, Ohio. The only difference is that they got their poison in one big dose while we will get it on the installment plan. But will the cancers and birth defects be worth it? Are the lives of our people worth a few bucks to the developers? Are our friends and neighbors expendable? You have a moral obligation to act on this.

Finally, this is not the type of ugly development we should accept in Montpelier. It's big, ugly and unnecessary. There are few three story buildings in the county, and I know of none in Montpelier. So why would the county approve this ugly, out of place monstrosity forced upon us in our own rural community? We don't want this. Furthermore, this won't provide a single job in Montpelier. No one will work onsite to manage this monstrosity and monitor what happens there. And we already have a storage facility next to the fire station. We don't need another. There are also other self storage and RV/ boat storage facilities on Mountain Road. The real customers will be the rich men from Richmond who can zoom into town on Friday afternoon and grab their toys on the way to Lake Anna. And we get stuck with the traffic risk, the pollutants to the aquifer and water wells, and one more big ugly development. No one who lives here wants this here.

Please have the clarity and common sense to see through the smoke and mirrors, and the moral courage to say no to the applicant. Serve the people of Montpelier, not the developer who would ruin our community. Say no to the rezoning and the CUP.

Respectfully,
Miles Diamond

Proffers

RECEIVED

APR 01 2024

HANOVER COUNTY
PLANNING DEPARTMENT

March 29, 2024

PROFFERS: REZ2023-00030, LONEOAK LAND COMPANY, LLC

The undersigned, Loneoak Land Company, LLC, owners of parcel designated as GPIN 7821-59-5852, (the "Property"), voluntarily agree for themselves, their agents, personal representatives, successors, and assigns (collectively "the Property Owners") that, in the event the Property is rezoned from A-1 to B-2, the development and use of the Property shall be subject to the following conditions:

1. **Conceptual Plan.** The Property under consideration in this case (the "Property") shall be developed in substantial conformance with the exhibit titled "Montpelier RV & Self Storage" by Youngblood, Tyler & Associates dated March 29, 2024.
2. **Elevations.** Sides of buildings facing the property line will be designed and constructed to be substantially similar in architectural treatment with the elevations attached hereto entitled "Montpelier Self Storage" prepared by Johnson Construction Company, dated February 23, 2024. The outward facing side of future buildings will be designed to give the appearance of multiple small buildings, and compliance with this standard will be reviewed and approved by the Director of Planning. To achieve this, a wall offset (e.g. projection or recess in the façade plan) or change in material must occur at least once every forty (40) feet, with the offset or projection being at least ten (10) feet wide. A change in roofline, gable, and/or a dormer must occur at least once every forty (40) feet.
3. **HVAC.** Any mechanical units placed on the rooftop of the building shall be screened by architectural features which are compatible with building façade architecture. Screening shall be designed to block such units from view on any public streets immediately adjoining the Property. In addition, ground-mounted units shall be screened with either vegetation or with materials that are compatible with the architecture of the building.
4. **25' and 50' Natural Buffers.** Landscaping and buffers shall be provided as shown on the proffered conceptual plan. Buffers will retain existing mature trees that are healthy and suitable for a landscaped buffer. Utility crossings shall be perpendicular to the greatest extent possible.
5. **Thoroughfare Buffer.** A one hundred (100) foot natural and landscaped buffer will be provided along the property frontage of Mountain Road, as shown on the proffered conceptual plan. The buffer will remain undisturbed and in its natural state except for the area necessary for clearing and grading for the access road and shoulders. Areas adjacent to the access road will be landscaped in accordance with the details shown on the conceptual plan. Trees may be removed in the natural buffer if dead or diseased.

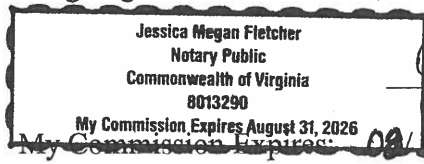
6. **Monument Signs.** All freestanding signs on the Property shall be monument type. Signs shall reflect the architectural style and incorporate materials used for the storage facility. Signage will be externally illuminated in accordance with Section 26-273.
7. **Hours of Construction.** During the construction of the development on the property, the hours of exterior construction shall be limited to 7:00 a.m. to 8:00 p.m., Monday through Saturday, except in emergencies or where unusual circumstances require extending the specific hours to complete such work as concrete pours or utility connections. Exceptions shall require the approval of the Director of Planning. Construction signs shall be posted stating the hours of construction.
8. **Underground Utility Lines.** All utility lines on the Property shall be underground, except for existing utilities, junction boxes, meters, utility lines in wetland areas, and utility lines required to be above ground by the utility company.
9. **Lighting.** Lighting on the property will be limited to twenty (20) feet and will include house side shields.
10. **Permitted Uses.** The following uses will be permitted on the Property.
 - a. Self-storage facility with a Conditional Use Permit.
 - b. Boat and RV storage associated with the self-storage facility. A maximum of twenty (20) boats may be stored on the Property.
11. **Road Improvements.** Mountain Road will be restriped to provide a two-way left turn lane between the Dollar General driveway and the proposed site driveway.

Ronald N. Walton
Owner

4-1-2024
Date

COMMONWEALTH OF VIRGINIA,
COUNTY OF HANOVER, to-wit:

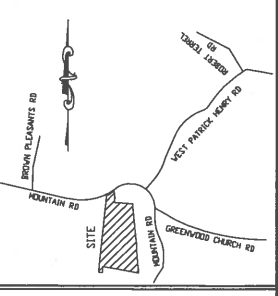
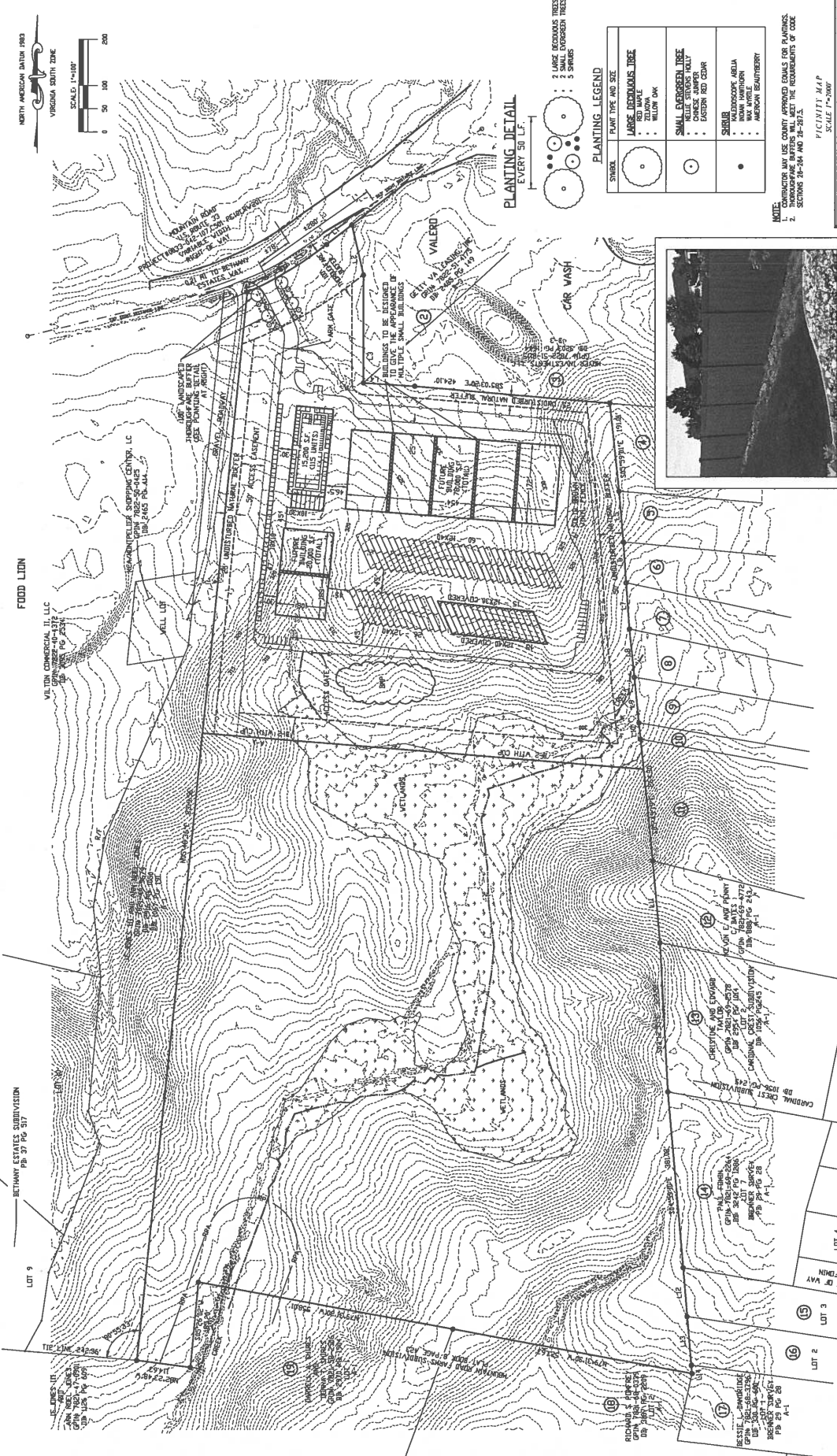
I, Jessica Megan Fletcher, do hereby certify that
Ronald N. Walton has acknowledged the
foregoing Proffers before me, this 1st day of April, 2024.



Jessica Megan Fletcher (SEAL)
Notary Public

~~My Commission Expires:~~ 08/31 / 2026

Conceptual Plan/Sketch Plan



PLANTING DETAIL EVERY 50' L.F.

1 LARGE FORESTARY TREE
2 SMALL FORESTARY TREES
3 SHRUBS

PLANTING LEGEND

| SYMBOL | PLANT TYPE AND SIZE |
|----------------|---|
| (Large circle) | LARGE FORESTARY TREE : REDWOOD : LILAC : WILLOW DAW |
| (Small circle) | SMALL FORESTARY TREE : CHESTNUT LEAF : BELLE VEVOUS HALLY : CHESTNUT LEAF : BROWN PINE COBURN |
| (Star symbol) | SHRUBS : HILLODOROPHE AEMILA : WAX MYRTLE : AMERICAN BEAUBERRY |

NOTE:
1. CONTRACTOR MAY USE COUNTY APPROVED EQUALS FOR PLANTINGS.
2. CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF CODE SECTIONS 24-254 AND 24-267.5.

SITE STATISTICS

| OWNER | TRACT AREA | TRACT LENGTH | TRACT WIDTH | TRACT PERCENTAGE |
|-----------------------|--------------|--------------|-------------|------------------|
| LONEDAK LAND CO., LLC | 7821-59-5952 | 10857' | 19355' | 100% |
| GPPN | 7821-59-5952 | | | |
| AREA TO BE REZONED | 17.206 ACRES | | | |
| ZONING | A-1 EXISTING | | | |
| | B-2 PROPOSED | | | |

SELF STORAGE UNITS

| UNITS | PROPOSED | FUTURE |
|-------------------------|----------|--------|
| TOTAL | 169 | 365 |
| BOAT & RV STORAGE UNITS | 86 | 534 |
| UNCOVERED | 30 | 86 |
| COVERED | 56 | 30 |
| TOTAL | 86 | 116 |

PARKING BUILDING AREA:
20 17,300 SF (FUTURE)
98,000 SF

STRECKS (B-2 ZONING)

| STRECK | ANGLE | RADIUS | ARC LENGTH | BEARING |
|--------|-----------|--------|------------|-------------|
| ST1 | 14°20'22" | 79580' | 19540' | 105°30'32"E |
| ST2 | 14°20'22" | 79580' | 19540' | 105°30'32"E |

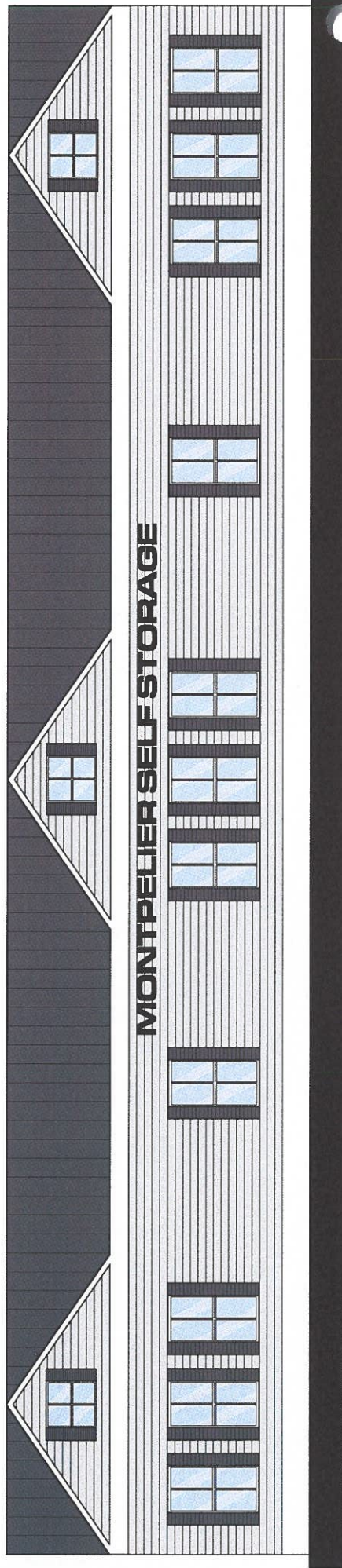
ADJACENT PARCELS

| LOT # | OWNER | ADDRESS | AREA | ZONING |
|-------|-------------------------------|--------------|--------------|--------|
| 1 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 2 | ALVIN STAD RD | 7821-59-5952 | 17.206 ACRES | A-1 |
| 3 | CHARLES E AND GENEVA M DALTON | 7821-59-5952 | 17.206 ACRES | A-1 |
| 4 | ALVIN STAD RD | 7821-59-5952 | 17.206 ACRES | A-1 |
| 5 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 6 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 7 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 8 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 9 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 10 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 11 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 12 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 13 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 14 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 15 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 16 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 17 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 18 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 19 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |
| 20 | MEAN BUTLER | 7821-59-5952 | 17.206 ACRES | A-1 |

Elevations

Montpelier Self Storage
Adjoining Food Lion Shopping Center in Montpelier, VA

JOHNSON CONSTRUCTION
COMPANY 2/23/2024
ARCHITECTURAL SHINGLES
HARDI-PLANK SIDING
MAX. BUILDING HEIGHT 35'



Food Lion Parking Lot Elevation

Montpelier Self Storage

Montpelier, VA across from Food Lion Shopping Center

JOHNSON CONSTRUCTION COMPANY
ARCHITECTURAL SHINGLES
2/23/2024
HARDIPLANK SIDING
MAX. BUILDING HEIGHT 35'



Route 33 Elevation

Ordinance

ORDINANCE REZ2023-00030

OWNER OF RECORD: LONEOAK LAND CO., L.L.C.

WHEREAS the Planning Commission of Hanover County has held an advertised public hearing and forwarded this case to the Board of Supervisors with a recommendation of **APPROVAL** of the adoption of the following amendment to the Zoning Ordinance and Zoning District Map of Hanover County; and

WHEREAS the Board of Supervisors has held public hearings on the 24th day of April 2024, and advertised in the Mechanicsville Local once a week for two successive weeks as required by Virginia Code Section 15.2-2204; and

WHEREAS the Board of Supervisors has determined that the public necessity, convenience, general welfare, and good zoning practices require this amendment.

NOW, THEREFORE, BE IT ORDAINED by the Board of Supervisors of Hanover County that the Zoning Ordinance and the Zoning District Map of this County are amended with conditions by the rezoning of the property described as on GPIN 7821-59-5952 (part), consisting of approximately 17.33 acres, and located on the south line of Mountain Road (U.S. Route 33) approximately 1,000 feet west of its intersection with West Patrick Henry Road (State Route 54), from A-1, Agricultural District, to B-2(c), Community Business District with conditions, subject to the following conditions, which were proffered by the applicant on April 1, 2024 and accepted by the Board:

1. **Conceptual Plan.** The Property under consideration in this case (the “Property”) shall be developed in substantial conformance with the exhibit titled “Montpelier RV & Self Storage” by Youngblood, Tyler & Associates dated March 29, 2024.
2. **Elevations.** Sides of buildings facing the property line will be designed and constructed to be substantially similar in architectural treatment with the elevations attached hereto entitled “Montpelier Self Storage” prepared by Johnson Construction Company, dated February 23, 2024. The outward facing side of future buildings will be designed to give the appearance of multiple small buildings, and compliance with this standard will be reviewed and approved by the Director of Planning. To achieve this, a wall offset (e.g. projection or recess in the façade plan) or change in material must occur at least once every forty (40) feet, with the offset or projection being at least ten (10) feet wide. A change in roofline, gable, and/or a dormer must occur at least once every forty (40) feet.
3. **HVAC.** Any mechanical units placed on the rooftop of the building shall be screened by architectural features which are compatible with building façade architecture. Screening shall be designed to block such units from view on any public streets immediately adjoining the Property. In addition, ground-mounted units shall be screened with either vegetation or with materials that are compatible with the architecture of the building.

4. **25' and 50' Natural Buffers.** Landscaping and buffers shall be provided as shown on the proffered conceptual plan. Buffers will retain existing mature trees that are healthy and suitable for a landscaped buffer. Utility crossings shall be perpendicular to the greatest extent possible.
5. **Thoroughfare Buffer.** A one hundred (100) foot natural and landscaped buffer will be provided along the property frontage of Mountain Road, as shown on the proffered conceptual plan. The buffer will remain undisturbed and in its natural state except for the area necessary for clearing and grading for the access road and shoulders. Areas adjacent to the access road will be landscaped in accordance with the details shown on the conceptual plan. Trees may be removed in the natural buffer if dead or diseased.
6. **Monument Signs.** All freestanding signs on the Property shall be monument type. Signs shall reflect the architectural style and incorporate materials used for the storage facility. Signage will be externally illuminated in accordance with Section 26-273.
7. **Hours of Construction.** During the construction of the development on the property, the hours of exterior construction shall be limited to 7:00 a.m. to 8:00 p.m., Monday through Saturday, except in emergencies or where unusual circumstances require extending the specific hours to complete such work as concrete pours or utility connections. Exceptions shall require the approval of the Director of Planning. Construction signs shall be posted stating the hours of construction.
8. **Underground Utility Lines.** All utility lines on the Property shall be underground, except for existing utilities, junction boxes, meters, utility lines in wetland areas, and utility lines required to be above ground by the utility company.
9. **Lighting.** Lighting on the property will be limited to twenty (20) feet and will include house side shields.
10. **Permitted Uses.** The following uses will be permitted on the Property.
 - a. Self-storage facility with Conditional Use Permit.
 - b. Boat and RV storage associated with the self-storage facility. A maximum of twenty (20) boats may be stored on the Property.
11. **Road Improvements.** Mountain Road will be restriped to provide a two-way left turn lane between the Dollar General driveway and the proposed site driveway.

BE IT FURTHER ORDAINED that this Ordinance is effective on the date of adoption and the Planning Director is hereby directed to designate the boundaries of the foregoing area as rezoned, subject to conditions, on the Zoning District Map of Hanover County.

On motion of _____, seconded by _____, the members of the Board of Supervisors voted to approve Ordinance REZ2023-00030, as follows:

Vote:

Ms. Dibble – Chair
Mr. Herzberg – Vice-Chair
Mr. Davis
Ms. Floyd
Mr. Hudson
Ms. Prichard
Mr. Stoneman

Public Hearings:

Planning Commission: March 21, 2024

Board of Supervisors: April 24, 2024

Adopted: April 24, 2024

This is to certify that the above is a true copy of REZ2023-00030 adopted by the Hanover County Board of Supervisors on April 24, 2024.

Dated: _____

John A. Budesky
County Administrator/Clerk Hanover County
Board of Supervisors