TOWN OF HERNDON, VIRGINIA
PLANNING COMMISSION PUBLIC HEARING AGENDA
MARCH 28, 2022
HERNDON COUNCIL CHAMBERS BUILDING
765 LYNN STREET
7:00 P.M.

CALL TO ORDER

1. Roll Call
2. Determination of Quorum

APPROVAL OF AGENDA

APPROVAL OF MINUTES

3. February 14, 2022, Planning Commission Work Session Draft Minutes

4. February 28, 2022, Planning Commission Public Hearing Draft Minutes

COMMENTS

5. Comments from the Staff Members

6. Comments from the Commissioners

7. Comments from the Audience

PUBLIC HEARING

8. **ZONING MAP AMENDMENT – ZMA #21-01, 315 Elden Street,** a zoning map amendment from CS, Commercial Services, to PD-UR, Planned Development – Urban Residential, with proffered conditions to allow the conversion of an existing hotel to multi-family residential with a workforce housing component. Fairfax County Tax Map Reference Number 0171-02-0007. Agent: Ken Wire, Wire Gill LLP. Applicant and property owner: Elden Street Owner, LLC.

ADJOURNMENT

TOWN OF Herndon VIRGINIA

STAFF REPORT

Planning Commission
March 14, 2022

Title: ZONING MAP AMENDMENT – ZMA #21-01, 315 Elden Street, a zoning map amendment from CS, Commercial Services, to PD-UR, Planned Development – Urban Residential, with proffered conditions to allow the conversion of an existing hotel to multi-family residential with a workforce housing component.

Staff Contact: David Stromberg, AICP, Zoning Administrator
david.stromberg@herndon-va.gov (703) 787-7380

Summary Information

Applicant Request	An application to rezone the property from CS to PD-UR in order to convert the existing buildings from a hotel use to a multi-family use.
Address	315 Elden Street, Herndon, VA
Fairfax County Tax Map Numbers	0171-02-0007
Owner & Applicant	Elden Street Owner, LLC, represented by Peter Kleeblatt
Agent	Wire Gill, LLP, represented by Ken Wire
Existing Zoning	CS, Commercial Services & FPO, Floodplain Overlay
Adjacent Zoning	North: CS, Commercial Services East: O&LI, Office & Light Industrial South: O&LI, Office & Light Industrial West: CS, Commercial Services, and CO, Commercial Office
Land Use Designation	Adaptive Area - Residential
Community Flood Number	510052
Flood Map Panel	51059C0110E
Total Site Area	~6.4 acres or ~ 278,000 square feet
Existing Hotel Rooms	168
Proposed Multi-family units	Up to 170
Proposed Density	Up to 27 dwelling units per acre (du/ac)

Staff Recommendation	Recommendation is being withheld while staff review is ongoing.

Anticipated Impacts:

This application, as proposed and with conditions recommended by staff, would not adversely impact adjacent properties.

Location Map



Site Description

The existing site is approximately 6.4 acres and was developed in 1990 as a Residence Inn. The 168 hotel rooms are distributed across ten, three-story buildings. The hotel rooms are a mix of efficiencies, one bedroom, and two bedroom, all with kitchenettes. There is also a two-story building that contains the reception, amenity, and staff areas.

The site has 187 surface parking spaces that are located on a ring road that circles the perimeter of the site. There is an in-ground pool and sports courts internal to the site.

A portion of the property is located in FPO, Floodplain Overlay District. No physical improvements to the site are proposed within the FPO and draft flood maps provided by

FEMA show this site in its entirety will be located outside of the FPO (see sheet C-4A of the GDP). Additional information regarding development in the FPO is contained in Special Exception SE #22-01.

Background

The Comprehensive Plan designation for this parcel was changed from Business Corridor to Adaptive Area – Residential on November 17, 2020 by town council legislative action (CPA #20-01). The rationale for this change was because the physical development of the site reflects a residential form and the accompanying amenity space would be more suitable for a multifamily use versus the traditional commercial uses that are recommended in the Business Corridor designation.

There was not a zoning district in the town's zoning ordinance that could accommodate the conversion of a hotel to multi-family use when the property owner first approached the town. The Planned Development Urban Residential district was the closest zoning district that could allow this use when looking at density and development standards. A zoning text amendment (ZOTA #21-02) was adopted on August 10, 2021 that increased the density up to 28 dwelling units per acre in the Planned Development Urban Residential zoning district when the proposed project is an adaptive reuse project meeting other specific criteria.

This application was presented as a discussion item before the Architectural Review Board (ARB) on February 2, 2022, as is required per Section 78-155.1(h)(2) of the zoning ordinance. The ARB expressed support for the bicycle shelter specifically and raised no concerns about the proposed repainting scheme or the proposed dumpster enclosures. The memo is included as attachment #6.

Proposal

The applicant is proposing to renovate and convert the existing hotel rooms to individual multi-family units. No additional buildings are proposed and Floor Area Ratio (FAR) is not changing. The proposed conversion would result in a maximum of 170 dwelling units, and those units would be distributed as 28 studio units, 98 one-bedroom units, and 44 two-bedroom units. There may be minor changes in the unit distribution, but the maximum unit count is limited to 170 dwelling units.

The applicant is also proposing a commitment, through proffers and deed restrictions, to offer at least 50 percent of the units as Workforce Dwelling Units (WDUs). For this application, that means that the maximum rent allowed for the WDUs will be affordable to households earning up to 80 percent of the Area Median Income (AMI). The U.S. Department of Housing for Washington-Arlington-Alexandria, DC-VA-MD lists the 80 percent AMI as $57,650 for a family of one and $82,300 for a family of four.

Staff Analysis

Zoning Ordinance Compliance

This is an already developed site and the proposal is to reuse the existing buildings for the newly proposed multifamily units. The applicant has requested several modifications to the zoning ordinance primarily due to limitations inherent in the repurposing of an already constructed site with limited site modifications proposed. The proposal meets the requirements of the zoning ordinance with the exception of the modification requests listed below.

Modification Requests

Section 78-50.2(d) of the zoning ordinance allows the town council to modify sections of the zoning ordinance in planned development zoning districts when such modifications would afford equal or greater assurance of meeting the goals of the zoning chapter and the statement of intent of the relevant division. Below is an analysis of the requested modifications.

1. Minimum off-street parking requirements (Section 78-100.2(a)) – The zoning ordinance requires a minimum of 263 parking spaces to serve the proposed 170 multi-family units. The applicant is seeking a modification to allow 184 parking spaces. The full applicant request is included in attachment #5. Staff generally concurs with the data provided by the applicant; which includes a parking analysis of existing multi-family properties in town and information from the Institute of Transportation Engineers (ITE) parking manual. Staff has also worked with the applicant over multiple submissions to improve the multi-modal infrastructure that already exists in proximity to the site. There are two bus lines that already serve this site and the applicant has proffered $10,000 towards improvements to the bus stop located on Herndon Parkway. The applicant has also included proffers to provide bicycle parking for up to 72 bikes, 48 of those spaces are in a secure and weather protected structure (attachment #7). Other proffers to support this reduction are new crosswalks that connect the site to the existing sidewalks and are Americans with Disabilities Act (ADA) compliant and a proffer for a Traffic Demand Management (TDM) plan. Staff is supportive of this modification with the most recent version of the proffer statement.

2. Maximum 15-foot setback from the public right-of-way (Section 78-51.1(e) – New construction in the PD-UR district is intended to be located close to the street to encourage a more pedestrian scale. This is an adaptive reuse project and the existing buildings are currently 56 to 85 feet from the right-of-way. Staff is supportive of this modification.

3. Minimum 18-foot separation between structures (Section 78-51.1(e)) – New construction of buildings, typically townhouses or stacked townhouses, in PD-UR

have a minimum separation distance of 18 feet from each row of houses. This is an adaptive reuse project and existing buildings are 12 feet apart in several locations. Staff is supportive of this modification.

4. Minimum 10-foot buffer strip (Section 78-110.4(e)(3)(b)) – New construction in PD-UR requires a 10-foot landscape buffer. This is an adaptive reuse site with a 7.5-foot buffer and requiring a 10-foot buffer would require significant portions of the site to be torn up and would exacerbate the loss of parking. A wooden privacy fence will need to be installed if this rezoning is approved. See attachment #5 for the request. Staff is supportive of this modification.

5. Planting Standards (Section 78-110.4) – The applicant is proposing an alternative landscape plan that will increase the plantings beyond the existing condition but will not meet the minimums specified in the ordinance. The proposal includes 24 new trees, 200 new shrubs, and a new privacy fence. See attachment #5 for the request and Sheet L-2 of the GDP for the proposed landscape plan. Staff is supportive of this modification.

Staff evaluated the criteria for review of zoning map amendments found in Zoning Ordinance Section 78-155.1(i)(2), which incorporates the requirements of §15.2-2284 of the Code of Virginia.

Criteria from Section 78-155.1(i)(2)	**Meets or Does Not Meet**	**Why the application meets or does not meet the criteria of Section 78-155.1(i)(2)**
Is consistent with the Comprehensive Plan	Meets with proffers	This site was designated as Adaptive Area – Residential in 2020 because the location of the property and existing structures on the site were identified as having potential viability for multi-family use. The PD-UR zoning district was specifically created for sites that are designated Adaptive Area – Residential. The proffers submitted by the applicant, which include a workforce housing commitment of 50 percent of the units, improvements to transit, and contributions to public facilities are consistent with the comprehensive plan.
There are changed conditions that justify an amendment	Meets	The site and buildings were constructed in 1990 and the hotel, currently a Residence Inn by Marriott, is set to lose

		its flag because it cannot meet the standards of the brand anymore. Other commercial uses allowed by-right in the CS, Commercial Services, zoning district are likely not feasible without a complete teardown and redevelopment of the entire site. The proposed rezoning will provide rental housing, 50% of which will be considered workforce housing, of which there is a significant shortage within the Washington Metropolitan Area.
Addresses a demonstrated community need	Meets	The Herndon Community Plan identified the need for housing that is attainable at various income levels when it was adopted in 2008. The need for housing in the community has increased since then. The town does not have an adopted "Affordable Housing" ordinance but the Housing section of the Community Plan lists goals of including affordable or workforce housing into market driven residential products and that is what this application proposes.
Compatible with existing and proposed uses surrounding the subject land, and is the appropriate zoning district for the land	Meets	The property is nearby to parkland, restaurants, retail, and other service uses. The proximity of residents to retail and service uses is both a convenience to future residents and a source of customers to existing businesses.
Results in a logical and orderly development pattern consistent with accepted or emerging planning practices	Meets	The existing buildings on this site are similar to other garden style apartment complexes. Alternative commercial uses would require clearing and redeveloping the site. Conversion of this site to a residential use will also create an area of horizontal mixed use. Horizontal mixed use is when a mix of uses exist on the same parcel or adjacent parcels, as opposed to vertical mixed use, where the mixture of uses occurs within the same building. Vertical mixed use is more

		appropriate in high density areas while horizontal mixed use is appropriate in medium density areas.
Avoids the creation of an isolated zoning district unrelated to adjacent and surrounding zoning district	Meets	The intent section of the PD-UR zoning district states that, "PD-UR districts provide multimodal options and connections allowing residents to benefit from non-motorized vehicle connections to adjacent commercial areas and access to transit." Adjacency to commercial districts is a fundamental component of PD-UR. Furthermore, the comprehensive plan designates this area as Adaptive Area – Residential, which is the only designation where it is appropriate for a rezoning to PD-UR.
Avoids adverse impact on the property values of surrounding lands	Meets with proffers	Continued use of a hotel would likely result in adverse impacts on property values. The hotel was scheduled to be down-branded prior to the COVID-19 pandemic and the hospitality industry has still not recovered. Other, lower brand hotels within the town have generated complaints from adjacent property owners. Conversion to residential with the associated site and infrastructure improvements is not expected to adversely impact nearby property values.
Avoids adverse impact on the natural environment, including but not limited to, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment	Meets with proffers	Adaptive reuse of the existing buildings eliminates construction pollution and sending materials to the landfill. The applicant will also be increasing the amount of landscaping on site.
Results in development that is adequately served by transportation facilities, including whether or not a substantial deterioration of	Meets with proffers	The site is currently served by the RIBS 5 and Fairfax Connector Route 950 routes, which provide connections to the Reston Town Center Transit Station, Herndon Park&Ride, and Wiehle-Reston East

the level of service on the town's transportation network would occur.		Metro Station (page 10 of Transportation Impact Study [TIS], attachment #8). There is an existing bus stop and shelter at the Atrium office building at 381 Elden Street. There is another existing bus stop at 340 Herndon Parkway. The applicant has proffered $10,000 for bus stop improvements at the current location or if the location is moved to the public right-of-way along the Herndon Parkway frontage. Conclusions from the TIS show the conversion to residential will not adversely impact nearby intersections or the site's existing entrances.
Results in development that is adequately served by public facilities (potable water and sewage, schools, parks, police, and fire and emergency medical facilities)	Meets with proffers	The conversion from hotel use to multifamily use will result in a reduction of approximately 40-50,000 gallons per day of water and sewer generation. This works out to a 14-15 percent reduction. The applicant has also included proffers for off-site recreation and public safety to offset increased demand for services.
If infill and redevelopment is consistent with the redevelopment criteria and other applicable guidelines as stated in the Herndon 2030 Comprehensive Plan (adopted August 12, 2008), as amended.	Not Applicable	This proposal is to use the existing buildings.

Analysis of Proffers (Conditional Rezoning)

Proffers are voluntary promises by landowners to donate land, money, or to perform an act in order to address the effects of changing a land use. Localities are allowed to accept proffers provided they are consistent with the provisions of Virginia Code §15.2-2303. Proffers must be voluntary and must be reasonably related to the rezoning request. Below is a summary of the proffers being offered by the applicant.

#	**Proffer subject**	**Analysis of proffer**
1a,b	Development plan	This is standard legal language that establishes the proffer statement and Generalized Development Plan as the legal zoning that regulates the property.

2a	Permitted uses	The applicant is not proposing to limit any uses listed in Table 78-51.1(c)(4). Staff is recommending that the applicant proffer out retail and personal service uses.
3a	Workforce Housing – Number of units	This proffer commits that at least 50 percent of the total residential units will be dedicated as Workforce Dwelling Units. The proffer further states the WDUs will be distributed across unit types with no less than 20 percent of any unit type being WDUs. See sheet C-3 of the GDP for minimums.
3b	Workforce Housing – Affordability	This proffer states that the WDUs will be affordable to households earning up to 80 percent AMI. Affordable is defined as spending up to 30 percent of gross annual income on housing. The proffer specifies that AMI and maximum rent will be established annually by Virginia Housing (formerly VHDA – Virginia Housing and Development Authority).
3c	Workforce Housing – Term	This proffer guarantees that the WDUs will remain for 30 years.
3d	Workforce Housing – Program Management	This proffer states that the applicant will enter into a Memorandum of Agreement (MOA) with the town to establish the details of managing the WDU program. This includes the applicant's process for verifying income and eligibility, reporting requirements to the town on lease up and annually, periodic town inspection, and procedures for families who must leave the WDU program because of income increases. The MOA must be finalized prior to occupancy.
3e	Workforce Housing – Covenant	This proffer commits the applicant to record a covenant that 50 percent of the units will be WDUs.
4	Architecture and Site Design	This proffer references the proposed design as shown on Sheet C-7 of the GDP with final approval by the Architectural Review Board.
5a,b,c	Transportation – TDM and parking	This proffer commits to the establishment of a Transportation Demand Management plan that contains contributions to resident Metro fare cards, contributions to WMATA bus service, dedicated on-site ride-share areas, and new resident information packets on transit options. This also proffers that parking fees will be unbundled from the lease.

5d	Transportation – Bicycles	This proffer commits the applicant to install bicycle parking for 72 bikes. A weather protected, secure bike storage facility will accommodate 48 bicycles (attachment #7) and the remaining 24 bicycle spaces will be distributed throughout the site as shown on sheet C-3 of the GDP.
5e	Transportation – Pedestrian infrastructure	This proffer commits the applicant to installing new internal crosswalks and new crosswalks to the public sidewalks on Elden Street and Herndon Parkway as shown on Sheet C-3 of the GDP.
5f	Transportation – Dedication	This proffer commits the applicant to donating 884 square feet of the site to the town to become right-of-way for future streetscape improvements.
5g	Transportation – Bus stop	This proffer commits the applicant to contributing $10,000 towards improvements to the bus stop along Herndon Parkway. The contribution can be used to improve the existing stop at 340 Herndon Parkway or to improve a new stop in the 29' by 67' right-of-way adjacent to this site, if approved by the Fairfax Connector.
6	Green building	This proffer commits the applicant to install energy efficient fixtures and appliances as well as low flow sinks and toilets.
7	Universal design	This proffer commits the applicant to providing three ground floor accessible units and ensuring all public spaces are accessible. It also commits the applicant to making all ground floor units "adaptable." This means the units will provide framing for future grab bars in bathrooms, lever handles on doors, faucets, and wall switches.
8a,b	Contributions - Recreation	This proffer commits the applicant to maintaining the existing amenities shown on Sheet C-5 of the GDP and contributing $350 per market rate unit to the town for off-site recreation amenities. This contribution would result in up to $29,750 if 50 percent of the units are market rate. This amount is lower than other contributions for market rate apartments, most recently $1,800 per unit for the Fairbrook development. There are no direct comparisons because this is the first multi-family proposal with a WDU component.

8c	Contributions – Schools	This proffer commits the applicant to contributing $12,262 per child to Fairfax County Public Schools (FCPS). FCPS prepared a memo estimating that the project will generate a total of 19 new students. Therefore, the total contribution to FCPS will be $232,978, paid prior to the first occupancy.
8d	Contributions – Public safety	This proffer commits the applicant to contributing $10,000 to the Herndon Police Department, paid at the time of site plan approval.
9	Escalation	This proffer ties the monetary contributions to the Consumer Price Index.
10&11	Successors and assigns and counterparts	This is standard legal language that binds the proffers to current and future owners of the property.

Planning Commission Alternatives

The following alternatives are available to the Planning Commission for its decision on Zoning Map Amendment ZMA #21-01.

1. Recommend approval to the town council.
2. Recommend denial to the town council.
3. Recommend continuance of the application to the April 25, 2022 Planning Commission public hearing.

Staff Recommendation

Staff is recommending continuance of ZMA #22-01 in accordance with Alternative #3 for the following reasons:

- The most recent submission was received on March 2, 2022 and not all departments have had the opportunity to review the latest submission materials.
- A continuance will allow the applicant additional time to respond to the issues raised in the staff report and any issues raised by the planning commission.
- This is the first proposal in town for a multi-family development with a WDU component and additional time will allow staff and the applicant to work through any unexpected concerns.

Attachments

1. Draft Planning Commission Resolution
2. Applicant's statement of Justification dated March 2, 2022
3. Applicant's proffer statement dated March 2, 2022
4. Generalized Development Plan dated March 2, 2022
5. List of requested modifications

6. Architectural Review Board Memo to the Planning Commission
7. Proposed Cycle Station
8. Traffic Impact Study dated October 26, 2022 with supplemental memo dated March 1, 2022

Staff Signature



David Stromberg, AICP, Zoning Administrator

TOWN OF HERNDON, VIRGINIA

PLANNING COMMISSION

DRAFT RESOLUTION

April 25, 2022

Resolution- to recommend _____ of Zoning Map Amendment ZMA #21-01, 315 Elden Street, a zoning map amendment from CS, Commercial Services, to PD-UR, Planned Development Urban Residential, with proffered conditions to allow the conversion of an existing hotel to multi-family residential with a workforce housing component.

WHEREAS, the applicant, Elden Street Owner, LLC, has submitted a zoning map amendment, ZMA #21-01, on land identified as Fairfax County Tax Map Number 0171-02-0007, to convert an existing hotel development to multi-family use with a workforce housing component of at least 50 percent; and

WHEREAS, the request includes a proffer statement dated March 2, 2022 and a generalized development plan dated March 2, 2022; and

WHEREAS, the request _____ to the Town of Herndon 2030 Comprehensive Plan; and

WHEREAS, the applicant Is requesting modifications to the following sections of the zoning ordinance: Section 78-100.2(a), regarding minimum off-street parking, Section 78-51.1(e), regarding maximum 15 foot setback and minimum 18 foot building separation, Section 78-110.4(e)(3)(b), regarding minimum buffer strip, and Section 78-110.4, regarding planting standards; and

WHEREAS on March 28, 2022 and April 25, 2022, the Planning Commission held public hearings to consider ZMA #21-01; and

WHEREAS, the Planning Commission has determined that the above referenced proffer statement and generalized development plan _____ to Section 78-155.1(i)(2) of the zoning ordinance and Section 15.2-2284 of the Code of Virginia; and

WHEREAS, the Planning Commission has determined that the applicant has demonstrated that the requested modifications afford equal or greater assurances of meeting the applicable goals of the zoning ordinance.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the Town of Herndon, Virginia, that the Commission hereby recommends that the Town Council _____ ZMA #21-01 with the following proffers.

[Insert Proffer Statement]

STATEMENT OF JUSTIFICATION
315 ELDEN ADAPTIVE REUSE
ZONING MAP AMENDMENT

~~January 05, 2022~~
March 02, 2022

I. Overview

This project seeks to adaptively convert an existing aging garden style hotel (Residence Inn Herndon-Reston) into a modern multifamily residential use with a combination of workforce and market-rate units.

A. Application: Zoning Map Amendment
B. Applicant: Elden Street Owner, LLC
C. Address: 315 Elden Street, Herndon, VA 20170
D. Parcels: 017-1 ((02)) 0007 (the "Site" or "Property")
E. Site Area: 282,465 sf (approximately 6.48 acres)
F. Existing Use: Hotel
G. Proposed Use: multifamily residential
H. Proposed Zoning District: Planned Development - Urban Residential

II. Background

The Town of Herndon approved a change in the property's Comprehensive Plan designation on November 07, 2020 (CPA #20-01) from "Business Corridor" to "Adaptive Area Residential." In addition, the Town approved a Zoning Ordinance Text Amendment, ZOTA #21-02, to amend Chapter 78 (Zoning), Article V (Planned Development Districts), Section 78-51.1, entitled PD-UR (Planned Development-Urban Residential) to allow for an increase in permitted density when a zoning map amendment includes adaptive reuse of existing buildings for residential dwelling units.

This Zoning Map Amendment (ZMA) application is filed on behalf of Elden Street Owner, LLC (the "Applicant") as title owner of the property located at 315 Elden Street (the "Property) also identified as Tax Map parcel 017-1 ((02)) 0007. The existing hotel layout, amenities and interior finishes no longer meet top tier hotel brand standards. However, the physical layout of the various buildings on the property, the interior unit configuration and the good condition of the underlying building structures, presents a unique opportunity within the Town of Herndon to repurpose the current building as multifamily units. The Applicant is submitting this application to covert the property into a multifamily residential project while dedicating 50% of the units as workforce housing units.

III. Location and Existing Conditions

The approximately 6.48-acre Property is located south of Elden Street, west of Herndon Parkway, and north of Grove Street. The Property is surrounded by office developments to the west and south. To the north there is retail use across Elden Street and to the east across Herndon Parkway is a park including the Sugarland Run stream and multiuse trail.

The Property is developed with a 168 key (room) hotel that was built in 1990 and is 121,441 square feet. The 168 keys are spread across 11 buildings with surface parking. There are 187 parking spaces, including 4 accessible spaces. The buildings are 2 stories and include a brick and stucco exterior finish with gabled roofs. There is mature landscaping throughout the Property and a centrally located outdoor pool, sport court, and patio with areas for gathering, seating and grilling. Both the site and building design are very similar to many multifamily developments built in the 1990s.

The Property is currently zoned Commercial Services District (CS) with Floodplain Overlay District (FPO) in the far eastern edge. The Property is planned for "Adaptive Area Residential" according to the Town's 2030 Comprehensive Plan Map. This Application seeks to rezone from CS to Planned Development - Urban Residential (PD-UR).

IV. Development Program

This project seeks to adaptively reuse an existing out-of-date hotel (Residence Inn Herndon-Reston) for updated multifamily residential use, specifically a combination of workforce and market-rate multifamily. However, there is no proposed increase in density or FAR. The project would retain existing structures, site design, and site amenities. The project would retain the existing building shells while renovating, updating, and modernizing the interiors and exteriors of the existing structures, and make minor modifications to existing site design and site amenities, if required.

Unit Types: The project would convert the existing hotel rooms on a roughly one-for-one basis, with a maximum of ~~174~~170 total multifamily units. The potential addition of up to ~~6~~2 units (beyond the existing 168 keys) would be achieved within the current Gatehouse in the northeast. The potential unit types and mix includes +/-~~30~~28 studios, +/-98 1-bedroom units, and +/-~~46~~44 2-bedroom units. The ~~174~~170 total units are the maximum number of proposed units. Final unit count will be determined during final site plan.

Workforce Housing Commitment: The proposal includes a commitment to provide at least 50% of units as Workforce Dwelling Units (WDUs). The maximum rent allowed for the WDUs will be affordable to households earning up to 80% of Area Median Income ("AMI"). Affordable means those households spend up to 30% of their gross annual income towards rent. As an example, with a program of ~~174~~170 total units, ~~87~~85 units would be affordable with the final mix to include at least 20% of each different unit type as WDUs. If the total units are reduced, the number of workforce units would be reduced, but the project would always maintain at least 50% units as WDUs.

The WDU units will be spread across the Property. With at least 20% of each unit represented, the Property will provide WDUs as studios, one bedrooms, and two bedrooms. In addition, the WDUs will have the same level of interior finishes and access to Property amenities as the market rate units. In addition, we will assess parking fees separately from rent, which will further the affordability of those WDU residents who choose to not purchase parking passes.

Parking: The existing onsite surface parking would be retained, with minor modifications such as restriping to meet ADA requirements. The project will request a parking reduction, with the exact reduction depending on the final unit count and mix of unit types.

Today there are 187 surface parking spaces with four (4) of these being accessible spaces. The adaptive reuse from hotel to multifamily residential will reduce the total available parking to ~~185~~184 spaces with eight (8) of these being accessible.

The ~~185~~184 total spaces would serve up to ~~174~~170 total multifamily units. This total unit count would consist of:

- +/-~~30~~28 studios (~~17.2~~16.5%)
- +/-98 one bedrooms (~~56.3~~57.6%)
- +/-~~46~~44 two bedrooms (~~26.4~~25.9%)
- ~~174~~170 TOTAL (100%)

The Town's minimum parking rate (Z.O. 78-100.2) for each of the unit types is:

- Studio: 1 space/unit
- One bedroom: 1.5 spaces/unit
- Two bedroom: 2 spaces/unit

In order to meet these minimums, the project would have to provide:

- +/-~~30~~28 studios with ~~30~~28 spaces
- +/-98 one bedrooms with 147 spaces
- +/-~~46~~44 two bedrooms with ~~92~~88 spaces
- ~~174~~170 TOTAL units with ~~269~~263 spaces

The Applicant is requesting an overall parking reduction of approximately ~~31.2~~30% for a total of ~~185~~184 spaces. This would result in the overall Project providing +/-~~1.06~~1.08 spaces/unit or +/-~~0.84~~0.86 spaces/bed.

The proposed parking supply of ~~185~~184 spaces is sufficient to meet the demand. We believe the requested parking supply will be sufficient for a number of reasons including:

- Actual parking demand at local residential sites demonstrates that parking demand is generally below the parking supply proposed by the Applicant.
- Based on the ITE Parking Manual's parking rates for "affordable" housing at the 85th percentile, the demand for parking spaces is 0.82 spaces/bed for "general urban/ suburban settings". We believe this project falls under this category of sample real-world examples that these statistics were derived from.
- The project's overall proposed unit mix consists of about 74% studios and one bedrooms and no three bedrooms. This unit mix results in a smaller demand for parking spaces than a similarly located project with a unit mix that has more 2 or 3-bedroom units.
- Transit (2 bus lines) serves the site 7 days a week, and the site is just over a mile from 2 future Metro stations, offering alternative modes of transport beyond single occupancy vehicles.
- For bicyclists, the project is located less than ¼ mile from the Washington and Old Dominion (W&OD) multiuse trail and is connected to this trail by continuous and well-lit sidewalks as well as the paved Sugarland Run trail. The W&OD trail connects to several nearby employment centers such as Downtown Herndon and Reston Town Center.
- There are a number of retail, service, and employment options within a 10-minute walk along continuous public sidewalks.

- There will be provision of plentiful onsite bicycle parking, including secured weather-protected parking, as well as a bicycle repair and maintenance station which aids in bicycle ownership and convenience for bicycle commuters.
- Parking will be unbundled from the unit rental rates encouraging residents to minimize their car ownership.

Beyond the above reasons, the proposed parking supply will support several additional policy objectives of the Town including:

- Provision of at least 50% workforce dwelling units to support the Town's affordable housing goals and objectives.
- Retention of mature trees and landscaping in furtherance of the Town's tree retention goals and objectives which reduce impacts on the environment and maintain aesthetic appeal.

In addition, in order to further the affordability goals for households that do not own vehicles, or own fewer vehicles, parking will be unbundled from unit rental rates. Parking fees will be assessed separately and are not limited by the maximum allowable rent. Parking fees for workforce unit occupants will not be greater than the fees assessed to market rate unit occupants.

For more information on parking, please see the Parking Rate Modification Request from Wire Gill LLP, and Transportation and Parking Scoping Letter from Wells + Associates attached to the application package for more information.

Refuse and Recycling: The refuse and recycling bins will ~~continue to~~ be located in a new enclosure in the southwestern portion of the site and will be enclosed by a new 6-foot tall decorative wooden and brick fence to provide screening and maintain the site's aesthetics. Additionally, there is an existing dumpster enclosure in the northeast quadrant of the site that is to be reused to provide more proximity to refuse service for all residents. The bins are serviced completely within the site and do not affect any nearby rights of way. Sheet C-6 in the Development Plan demonstrates trash and recycling truck turning movements.

Open Space: The existing configuration of the open space will remain. The applicant proposes to maintain and update the existing on-site pool, sport court and outdoor grill areas.

Transportation Impacts: Wells + Associates is the traffic consultant for this project and on September 29, 2021 provided the Town of Herndon a draft Traffic Impact Study and Parking Reduction Scoping letter in order to establish the parameters for these two transportation impact items.

The proposal is to retain all three existing vehicular access points from Elden Street, Herndon Parkway, and Grove Street. The Herndon Parkway and Grove Street access points would continue to be right-in, right-out. The Elden Street access point is currently full access but will become right-in, right-out after completion of the Elden Street widening and improvement project set to begin construction in 2024.

The proposal is to study two nearby signalized intersections (Herndon Parkway and Elden Street, and Herndon Parkway and Grove Street) as well as the 3 access points described above.

The scoping letter indicates that the proposed adaptive reuse from hotel to multifamily residential use would result in an increase of about 24 trips for the overall site for the AM peak hour and an increase of about 35 trips for the overall site for the PM peak hour. These modest increases would be spread fairly evenly across the 3 vehicular access points.

Mitigation of these impacts will be discussed with Town staff during the ZMA public process. For more information, please see Wells + Associates Traffic Impact Study/Parking Reduction Scope letter dated September 29, 2021 included in the Zoning Map Amendment submittal package.

Summary: In summary, we believe this project will benefit the Town and help to meet several of its planning objectives. Both the Herndon 2030 Comprehensive Plan (Section VIII-4) and the Zoning Ordinance (Section 78-50) identify a number of development goals and objectives that we believe this project will achieve. These include:

- Provision of at least 50% workforce dwelling units to support the Town's affordable housing goals and objectives.
- Provision of a diverse mix of unit types for residents.
- Provision of appropriately placed multifamily residential housing in close proximity to retail, service, and employment uses and supportive transportation infrastructure.
- Maintenance and enhancement of neighborhood appearance with conversion to multifamily residential with updated facades – given that the alternative is a down-branding of an outdated hotel.
- Retention of mature trees and landscaping in furtherance of the Town's tree retention goals and objectives which reduce impacts on the environment and maintain aesthetic appeal.

We believe the site is well positioned for success as both a workforce housing and market-rate housing project due to the site's proximity to the future Metro station to the south and east, existing nearby public transit service, existing and planned pedestrian and bicycle facilities, and importantly, nearby employment in Downtown Herndon and along the Dulles Toll Road and Route 28 corridors, providing easy access to more than 100,000 existing jobs along the corridor.

V. Compliance with the review criteria for Zoning Map Amendments Zoning Ordinance Section 78-155.1.i.2

a. Consistent with the comprehensive plan.

- **a. Response**: The proposal is consistent with the Comprehensive Plan. The Property is planned for "Adaptive Area Residential" according to the Town's 2030 Comprehensive Plan Map. With this designation, the Town encourages these areas to rezone and redevelop with a residential use in accordance with the Residential Redevelopment Criteria for Adaptive Area Residential. See below for a response to those criteria.

b. There are changed conditions that justify an amendment.

- **a. Response**: The site and buildings have aged to a point that their branding type is no longer viable in the market. However, this aging itself out of the market presents an opportunity for a unique, and beneficial workforce housing and market rate multifamily residential project.

c. Addresses a demonstrated community need.

   a. **Response**: The Town's Comprehensive Plan has identified provision of affordable housing as an important Town objective, as well as provision of a variety of housing types to serve the diverse needs of the Town's residents. This project will meet both needs.

d. Compatible with existing and proposed uses surrounding the subject land, and is the appropriate zoning district for the land.

   a. **Response**: The proposed Planned Development – Urban Residential District zoning will be compatible and complimentary to the existing and planned uses surrounding the site. The nearby retail and services uses along Elden Street will complement the multifamily perfectly and the nearby offices may serve as employment for the proposed residents. Sufficient structure setbacks and landscape buffering will enhance compatibility while abundant multi-modal transportation options further make this proposal the right fit for the neighborhood.

e. Results in a logical and orderly development pattern, or deviate from logical and orderly development patterns. Accepted or emerging planning practices may be considered.

   a. **Response**: This site was the subject of a Comprehensive Plan Amendment by the Town (CPA #20-01) and a Zoning Text Amendment (#21-02) in recognition of the unique opportunity for logical and orderly development to support a number of the Town's policy objectives while also maintaining logical and quality development within this eastern entryway to the Town.

f. Avoids the creation of an isolated zoning district unrelated to adjacent and surrounding zoning districts.

   a. **Response**: The proposal creates a development that is related to and connected with the surrounding development. The uses themselves complement one another, as well as the transportation infrastructure. The proposal meets the purpose and intent of the PD-UR District which is to encourage harmonious and creative new residential development that allows for a mix of housing types and create attractive and appropriate transitions between commercial, commercial mixed-use, and existing adjacent residential districts. This proposal does just that.

g. Avoids adverse impact on the property values of surrounding lands.

   a. **Response**: The proposal will have a beneficial impact on the surrounding property values. Instead of allowing a down-branding of the current hotel use, which would reduce the quality of the existing building and site, we propose to adaptively reuse the hotel buildings and site for a new high-quality residential project.

h. Avoids adverse impact on the natural environment, including but not limited to water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment.

   a. **Response**: An adaptive reuse of a site with minimal change is the least environmentally impactful development path for this site. As we plan to maintain as much existing landscaping and mature trees onsite as possible, this further reduces the environmental impacts of this project on nearby streams, land, air, and forest.

i. Results in development that is adequately served by transportation facilities, including whether or not a substantial deterioration of the level of service on the town's transportation network would occur.

   a. **Response**: The site is well situated to have minimal impact upon the existing nearby transportation system. We plan to utilize the multiple existing vehicular access points, public transit lines, bike trails, and public sidewalks to minimize the transportation impacts of the project.

j. **Results in development that is adequately served by other public facilities (potable water and sewage, schools, parks, police, and fire and emergency medical facilities).**
    a. **Response**: There will be adequate public facilities for this proposal as is demonstrated by our submittal information.

k. **If considered infill and redevelopment, is consistent with the redevelopment criteria and other applicable guidelines as stated in the Herndon 2030 Comprehensive Plan (adopted August 12, 2008), as amended.**
    a. **Response:** The proposal is consistent with the residential redevelopment criteria as detailed below.

VI. Comprehensive Plan – Land Use Section III - Residential Redevelopment Criteria

The proposed adaptive reuse of a hotel for multifamily residential with at least 50% workforce dwelling units conforms with the Town's recently approved Comprehensive Plan designation of "Adaptive Area Residential." In addition, proposal conforms with the Town's recently approved Zoning Ordinance Text Amendment for the Planned Development-Urban Residential District to allow for an increase in permitted density when a zoning map amendment includes adaptive reuse of existing buildings for residential dwelling units.

VII. Modification Requests

As an existing, operating hotel, the structures and site layout are already generally fixed. Therefore, we are respectfully requesting several modifications as permitted under Zoning Ordinance 78-50.2-d and e. These are briefly summarized below, with each modification request included in the ZMA submittal package for Staff's review.

A. Minimum Parking Rate Reduction Z.O. 78-100.2

The Zoning Ordinance Section 78-100.2 requires ~~269~~263 parking spaces to serve the proposed ~~174~~170 units. The request is to allow ~~185~~184 parking spaces to serve the proposed ~~174~~170 units, or an overall reduction of ~~31.2~~30%. Please see the Parking Reduction Request attached to the ZMA application package for the Parking Reduction Request and its detailed information.

B. Maximum 15-foot Structure Setback from Public ROW Z.O 78-51.1e

Request for an increase in the maximum structure setback due to existing structures onsite. Existing structure setbacks range from between approximately 56 and approximately 85 feet from public right-of-way. Please see the Maximum 15-foot Structure Setback from ROW Increase Request attached to the ZMA application package for detailed information.

C. Minimum 18-foot Structure Separation Z.O 78-51.1e

Request for a reduction in the minimum structure separation to approximately 12 feet due to existing structures. Most existing structures met the minimum 18-foot structure separation, however several buildings maintain approximately 12 feet separation. Please see the Minimum 18-foot Structure Separation Decrease Request attached to the ZMA application package for detailed information.

D. Minimum 10-foot Perimeter Buffer Strip Z.O 78-110.4.d and 78-110.4.e.3.b

Request for a reduction in the minimum perimeter buffer landscaping requirement from both public right-of-way and adjacent properties to between 0-feet and 7.5 feet due to existing driveways and parking areas. Please see the Minimum 10-foot Perimeter Buffer Strip Decrease Request attached to the ZMA application package for detailed information.

E. Alternative to Planting Standards for Landscaping Z.O. 78-110.2

The Applicant requests alternatives to the required landscape standards due to an existing site design that includes perimeter buffers strips that are more narrow than today's Ordinance permits. Due to the narrowness of these existing landscape strips, we are unable to accommodate the required landscaping. We are proposing an incremental approach to revegetating the site over time, without the requirement to remove existing parking stalls. The approach will provide the optimal landscaping solution given this existing constraint and others. A 6-foot wooden fence along the western property line will also be provided.

DRAFT PROFFERS
315 Elden Street Adaptive Reuse
~~**January 05, 2022**~~ **March 02, 2022**

Pursuant to Section 15.2-2303 of the Code of Virginia (1950, as amended) and Section 78-50.8 of the Town of Herndon Zoning Ordinance, as amended (the "Zoning Ordinance"), the undersigned, for themselves and their successors and/or assigns (referred to hereafter, both collectively and, where appropriate, individually, as the "Applicant"), hereby proffers that the development (the "Development") of the parcels that are the subject of this application, which are shown on the Fairfax County 2021 Real Property Map as parcels 017-1 ((02)) 0007 (the "Property") shall be in substantial conformance with the conditions set forth below· (the "Proffers") if, and only if, the rezoning of the Property to Planned Development – Urban Residential ("PD-UR") and Development Plan # _____ ("Development Plan") are approved by the Town Council.

1. DEVELOPMENT PLAN.

    a. The Property shall be developed in substantial conformance with the development plan entitled General Development Plan for 315 Elden Street Adaptive Reuse prepared by Bohler dated ~~January 05, 2022~~ March 02, 2022 (the "Development Plan") and these Proffers. It is understood by the Applicant that all other applicable regulations and policies governing land development within the Town of Herndon (the "Town") shall apply to the Property and its development unless specifically modified by the language of this approval.

    b. Minor modifications of the Development Plan may be permitted without the need for an amendment to this approval when necessitated by final engineering or site design provided that the development is in substantial conformance with the Development Plan, these Proffers, and as approved by the Architectural Review Board ("ARB"), if applicable. Substantial conformity shall be determined as provided in the Zoning Ordinance.

2. PERMITTED USES.

    a. Unless modified by an amendment to the approved Development Plan, any use or combination of uses permitted in the PD-UR Zone may be established on the Property.

3. WORKFORCE HOUSING.

    a. NUMBER OF UNITS.

        i. The Applicant shall provide no less than 50% of the total number of residential units on the Property as dedicated Workforce Dwelling Units (WDUs). The number of WDU units will be based upon the final number of total units that the Applicant constructs on the Property, not to exceed

~~174~~ 170 units.

ii. The WDU units will be distributed across the Property and no fewer than 20% of any unit type will be allocated as WDUs.

iii. The WDU will have the same level of interior finishes and access to Property amenities as the market rate units.

iv. Units designated as WDU units may change as residents move in and out of the building or have incomes that exceed AMI limits.

b. AFFORDABILITY.

i. The maximum rent allowed for the WDUs will be affordable to households earning up to 80% of Area Median Income ("AMI"). Affordable means those households spend up to 30% of their gross annual income towards rent. AMI and maximum rent for such units is established annually by the non-profit Virginia Housing for the Washington Metropolitan Statistical Area and is based on number of persons in each household.

ii. The maximum rent allowed for the WDUs will be limited to the annual Virginia Housing AMI limits. Parking fees and utilities will be assessed separately and are not limited by the maximum allowable rent. Parking and utility fees shall not be greater than the fees assessed to market rate units.

c. TERM.

i. The WDUs in this program will be provided for 30 years beginning with the occupancy of the first WDU unit.

d. WDU PROGRAM MANAGEMENT.

i. Prior to occupancy of any market rate or WDU unit, the Applicant shall enter into a written agreement (WDU Agreement) with the Town of Herndon regarding management of this WDU Proffer commitment. The WDU Agreement shall address the following to the satisfaction of the Town:

1. Applicant's process for verifying resident income and eligibility to lease WDU unit.

2. Reporting requirements to Town upon lease up and, no less than

annually thereafter, to verify compliance with these WDU Proffers. Reporting to include number of units leased, household size, household income and term of lease.

3. Process for periodic Town inspection of units and rental records.

4. Procedures and guidelines in the event that individuals or families already in the WDU program exceed the income limits. Individuals or families who initially qualify for a WDU unit and then have increase in income beyond the 80% AMI limit will have the option of staying within the same unit for one additional year at the rental rates under these Proffers. After which that unit will be reclassified as a market rate unit, and the Applicant will need to provide a replacement WDU unit within 30 days.

e. COVENANT.
   i. The Applicant shall record a covenant memorializing the Property's commitment for 50% of residential units to be set aside as Workforce Dwelling Units for a period of 30 years beginning with the occupancy of the first WDU unit.

4. ARCHITECTURE AND SITE DESIGN

   a. The final architectural treatment and exterior design of all buildings within the Development Plan shall create a sense of identity and place through the use of unifying elements such as color, materials, and landscaping as generally reflected in the exhibits contained in the Development Plan.

   b. Refuse and Recycling Enclosure. The Development Plan designates a general location and general design details for a refuse and recycling enclosure as shown on Sheet C-3. Additionally, there is an existing dumpster enclosure in the northeast quadrant of the site that is to be reused to provide more proximity to refuse service for all residents. The refuse and recycling will be serviced by a private provider.

5. TRANSPORTATION.

   a. Transportation Mitigation. Transportation Impact Analysis and discussions with Town to determine what off-site transportation improvements may be required.

   b. Transportation Demand Management (TDM). The TDM Plan will include the below elements:

a. Contributions to resident Metro fare cards.
b. Contributions to County and WMATA bus service fare.
c. Carpool parking space.
d. Rideshare drop-off area in northeast corner of site
e. New resident information packets regarding all of the above and additional information about transit, carpool, vanpool, and bicycle options.

c. Parking. Parking will be unbundled from the lease of the units to further the TDM objectives of the project.

d. Bicycles. As shown in the GDP, the applicant is providing (3) bike parking pads onsite, ~~along~~ near the street frontages to provide a total of (12) bike parking spaces. In addition, onsite there is secure, weather-protected bike parking for at least ~~18~~(48) bikes, and bike parking within an existing parking space for at least (12) bike parking spaces, as well as a space and equipment for bicycle repair and maintenance. This results in the project providing bike parking for at least (72) bikes, the majority of which would be secure and weather-protected.

e. New Pedestrian Infrastructure. New ADA-accessible pedestrian connections are provided to the public sidewalks along Elden Street, Grove Street, and Herndon Parkway. In addition, crosswalks have been added onsite to improve pedestrian safety. See GDP sheet C-3.

f. Dedication. Approximately 884 square feet of land abutting the existing Elden Street public right-of-way along the western portion of the property's frontage will be dedicated to the Town of Herndon at no cost to the Town. See GDP sheet C-3. The land will be used for future streetscape improvements. The value of this land, if valuated similarly to the adjacent land that VDOT recently purchased from the applicant, would provide the Town a dedication worth approximately $29,172

g. Bus Stop. The Applicant shall provide a $10,000 monetary contribution to the Town for the improvement and/or relocation of the existing bus stop along Herndon Parkway currently in front of the office property to the southeast at Tax Map #017-1 ((06)) G.

6. GREEN BUILDING.

In furtherance of the Green Building goals of the Town, the Applicant shall provide each residential building with energy efficient light fixtures and appliances. In addition, low-flow toilets and sinks shall be provided in each residential building.

7. UNIVERSAL DESIGN.

In furtherance of the Urban Design objectives of the Planned Development - Urban ~~Design~~Residential District, the Applicant shall provide for Universal Design features within select residential units. This includes a commitment to provide three (3) ground floor Accessible units.

In addition, all public open spaces will be Accessible. Finally, all ground floor units will apply the "adaptable" concept identified by the Fair Housing Act. Some examples of "adaptable" design concepts are walls that provide framing for future grab bars in bathrooms, lever handles on doors and faucets, and electrical wall switches requiring less dexterity by users.

8. CONTRIBUTIONS.

a. Recreation/Community Amenities/Civic Facilities. The applicant shall commit to maintaining the extensive existing onsite resident amenities. These high-quality amenities will be available to all residents and include outdoor patios with seating, barbecue grills, lighting, pavers, and trash receptacles, an outdoor pool, an outdoor sport court, and other outdoor gathering areas with seating.

b. Offsite Recreation Contribution. Prior to the issuance of the first certificate of occupancy, the Applicant must contribute a lump sum of $350 per market-rate residential unit to the Town of Herndon for use at off-site recreational facilities within the Town.

~~b.~~c. School Contribution.

i. Prior to the issuance of the first certificate of occupancy, the Applicant will contribute funds for ~~a number of students to be agreed upon between the Applicant and Fairfax County Public Schools.~~ (19) nineteen students. The contribution amount is $232,978.00. ~~This number will be multiplied by $12,262.00 per student generated, per the Residential Development Criteria Implementation Motion adopted by the Fairfax County Board of Supervisors on January 7, 2003, as amended,~~ This number was derived from the latest Fairfax County Public Schools Student Yield Ratio for mid/high-rise multifamily, multiplied by the total number of residential units constructed (170), multiplied by $12,262.00 per student generated, per the Residential Development Criteria Implementation Motion adopted by the Fairfax County Board of Supervisors on January 7, 2003, as amended, to the Board of Supervisors for transfer to the Fairfax County School Board to be used for capital improvements and capacity enhancements to schools that serve the Town of Herndon. The contributions will be based on the actual number of residential units constructed, as the total amount may vary. Following approval of this Development Plan and prior to the Applicant's payment of the amount(s) set forth in this Proffer, if Fairfax County should

Commented [FD1]: From the 555 Herndon project approved several years ago:
$0.35 contribution per residential GFA
475,000 residential GFA
475 residential units

475,000 x $0.35 = $166,250 total contribution or $350/unit

315 ELDEN EQUIVALENT WOULD BE:

$350 contribution/MARKET RATE unit or $29,750 total contribution ($350 x 85 market rate units = $29,750)

modify the ratio of students per units of the amount of the contribution per student, the Applicant will pay the modified contribution amount to reflect the then current ratio and/or contribution for mid/high-rise residential (or equivalent).

d. Public Safety Contribution. The Applicant shall contribute a total of $10,000.00 to the Town of Herndon Police Department. The contribution shall be paid upon site plan approval.

~~c.~~e.

9. ESCALATION. All monetary contributions required by these proffers, with the exception of the proffer relating to the public school contribution, shall escalate on a yearly basis from the base year of 2022 and change effective each January 1 thereafter, based on the Consumer Price Index as published by the Bureau of Labor Statistics, the U.S. Department of Labor for the Washington-Baltimore, MD-VA-DC-WV Consolidated Metropolitan Statistical Area (the "CPI"), as permitted by Virginia State Code Section 15.2-2303.3.3.

10. SUCCESSORS AND ASSIGNS. These proffers shall bind and inure to the benefit of the Applicant and his/her successors and assigns

11. COUNTERPARTS. These proffers may be executed in one or more counterparts, each of which when so executed and delivered shall be deemed an original document and all of which taken together shall constitute but one and the same instrument.

TITLE OWNER/APPLICANT SIGNATURE TO FOLLOW ON THE NEXT PAGE:

ELDEN STREET OWNER LLC

Title Owner of Tax Map 017-1 ((02)) 0007

By: _____

Name: _____

Title: _____

COMMONWEALTH OF _____

CITY/COUNTY OF_____, to-wit:

The foregoing instrument was acknowledged before me this ___ day of _____, 2022 by _____ as _____ of and on behalf of _____.

_____

Notary Public

Notary Registration No: _____

My Commission Expires:_____

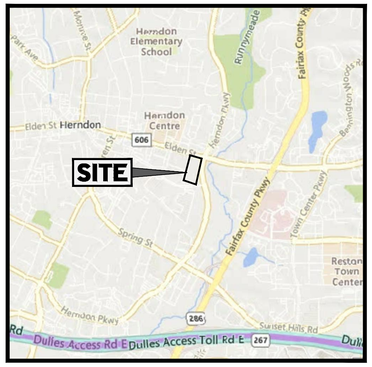
GENERAL DEVELOPMENT PLAN

Attachment #4

FOR

315 ELDEN STREET ADAPTIVE REUSE

LOCATION OF SITE
315 ELDEN STREET
TOWN OF HERNDON
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT



LOCATION MAP
SCALE: 2000'

SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-1
ALTA SURVEY (BY OTHERS)	C-2
GENERAL DEVELOPMENT PLAN	C-3
FLOODPLAIN MAP	C-4
FLOODPLAIN MAP (REGION III CHANGES)	C-4A
OPEN SPACE PLAN	C-5
TRUCK MOVEMENTS PLAN	C-6
CORRESPONDENCE	C-7
EXISTING TREE SURVEY PLAN	L-1
LANDSCAPE PLAN	L-2
LANDSCAPE NOTES & DETAILS	L-3

MODIFICATIONS REQUESTED

1. MINIMUM PARKING RATE REDUCTION Z.O. 78-100.2:
   THE ZONING ORDINANCE SECTION 78-100.2 REQUIRES 263 PARKING SPACES TO SERVE THE PROPOSED 170 UNITS. THE REQUEST IS TO ALLOW 184 PARKING SPACES TO SERVE THE PROPOSED 170 UNITS, OR AN OVERALL REDUCTION OF 30.0%.
2. MAXIMUM 15-FOOT STRUCTURE SETBACK FROM PUBLIC ROW Z.O 78-51.1E:
   REQUEST FOR AN INCREASE IN THE MAXIMUM STRUCTURE SETBACK DUE TO EXISTING STRUCTURES ONSITE. EXISTING STRUCTURE SETBACKS RANGE FROM BETWEEN APPROXIMATELY 37 AND APPROXIMATELY 85 FEET FROM PUBLIC RIGHT-OF-WAY.
3. MINIMUM 18-FOOT STRUCTURE SEPARATION Z.O 78-51.1E:
   REQUEST FOR A REDUCTION IN THE MINIMUM STRUCTURE SEPARATION TO 11.9 FEET DUE TO EXISTING STRUCTURES. MOST EXISTING STRUCTURES MET THE MINIMUM 18-FOOT STRUCTURE SEPARATION, HOWEVER FEW BUILDINGS MAINTAIN AS LITTLE AS 11.9 FEET SEPARATION.
4. MINIMUM 10-FOOT PERIMETER BUFFER STRIP Z.O 78-110.4.D AND 78-110.4.E.3.B:
   REQUEST FOR A REDUCTION IN THE MINIMUM PERIMETER BUFFER LANDSCAPING REQUIREMENT FROM BOTH PUBLIC RIGHT-OF-WAY AND ADJACENT PROPERTIES TO BETWEEN 0-FEET AND 7.5 FEET DUE TO EXISTING DRIVEWAYS AND PARKING AREAS.A REDUCTION IN PLANTINGS FOR REQUIRED LANDSCAPE BUFFERS AND INTERIOR PARKING LANDSCAPE SUBJECT TO ARTICLE XI OF THE TOWN OF HERNDON ZONING ORDINANCE IS REQUESTED.
5. MODIFICATION REQUEST FROM LANDSCAPE STANDARDS Z.O. 78-110.2:
   MODIFY PLANTING STANDARDS FROM LANDSCAPING, PRIMARILY FOR THE EXISTING BUFFER STRIPS ALONG PUBLIC RIGHT-OF-WAY AND ADJOINING PROPERTY. THE MODIFICATION REQUEST IS A COMPANION TO THE ALREADY SUBMITTED MODIFICATION REQUEST FOR A DECREASE IN THE REQUIRED 10-FOOT PERIMETER BUFFER STRIP REQUIREMENT TO ALLOW A 7.5-FOOT WIDE BUFFER.

OWNER/DEVELOPER
ELDEN STREET OWNER LLC
900 17TH STREET NW
SUITE 1050
WASHINGTON, DC 20006
PETER KLEEBLATT
240-380-3602

TRAFFIC CONSULTANT
WELLS & ASSOCIATES
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KEVIN FELLIN, P.E.
703-676-3652

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1750 TYSONS BLVD
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KEN WIRE
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HERNDON, VA 20170
NICK GEORGAS, PLA
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CIVIL ENGINEER
BOHLER
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CONTACT: NICK GEORGAS, PLA
703-709-9500
CONTACT: GREG ELLWOOD, PE
703-709-9500

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/05/2022	REV. PER 1ST SUB COMMENTS	AW / GE
2	02/25/2022	REV. PER COMMENTS	MR / GE

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NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: S212133
DRAWN BY: AND
CHECKED BY: GE
DATE: 12/30/2021
CAD I.D.: GDVL - 2

PROJECT:
GENERAL DEVELOPMENT PLAN
FOR
315 ELDEN STREET RESIDENTIAL
LOCATION OF SITE
315 ELDEN STREET
TOWN OF HERNDON
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT

BOHLER
12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
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VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA
MICHAEL J. BIRKLAND
Lic. No. 031693
03/02/2022
PROFESSIONAL ENGINEER

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C-1

REVISION 2 - 02/25/2022

Mar 02, 2022
H:\212133\CAD\DRAWINGS\PLAN SETS\REZONING PLANS\212133 - CVDS - 2 - LAYOUT C-1 COVER
MR

SCHEDULE B-II ITEMS

(7) — EASEMENT GRANTED TO VIRGINIA ELECTRIC AND POWER COMPANY BY AN AGREEMENT DATED OCTOBER 29, 1948, RECORDED ON JANUARY 3, 1949 IN DEED BOOK 669 AT PAGE 4 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA. (DOES NOT APPEAR TO AFFECT SUBJECT PROPERTY)

(8) — EASEMENT GRANTED TO VIRGINIA ELECTRIC AND POWER COMPANY BY AN AGREEMENT DATED JUNE 18, 1979, RECORDED ON AUGUST 7, 1979 IN DEED BOOK 5257 AT PAGE 225 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA. (DOES NOT APPEAR TO AFFECT. NO ANCHORS, GUYS OR STUBS WERE OBSERVED ON THIS SITE)

(9) — EASEMENT AND RIGHT OF WAY GRANTED TO THE TOWN OF HERNDON BY A DEED OF SANITARY SEWER EASEMENT AND AGREEMENT DATED APRIL 12, 1984, RECORDED ON APRIL 16, 1984 IN DEED BOOK 5926 AT PAGE 894 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.(AFFECTS AS SHOWN. LOCATION ESTABLISHED FROM MANHOLES)

(10) — EASEMENT AND RIGHT OF WAY GRANTED TO THE TOWN OF HERNDON BY DEED OF STORM SEWER EASEMENT AND CONVEYANCE DATED MARCH 20, 1986, RECORDED ON MARCH 27, 1986 IN DEED BOOK 6342 AT PAGE 1661 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA. (AFFECTS AS SHOWN)

(11) — EASEMENT AND RIGHT OF WAY GRANTED TO THE TOWN OF HERNDON BY DEED OF SANITARY SEWER EASEMENT AND CONVEYANCE DATED MARCH 20, 1986, RECORDED ON MARCH 27, 1986 IN DEED BOOK 6342 AT PAGE 1669 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.(AFFECTS AS SHOWN)

(12) — EASEMENT AND RIGHT OF WAY GRANTED TO THE TOWN OF HERNDON BY DEED OF WATERLINE EASEMENT AND CONVEYANCE DATED MARCH 20, 1986, RECORDED ON MARCH 27, 1986 IN DEED BOOK 6342 AT PAGE 1677 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.(AFFECTS AS SHOWN)

SITE PICTURE



VICINITY MAP

NOT TO SCALE



LAND AREA

278,537 SQUARE FEET±

6.394 ACRES±

PARKING SPACES

REGULAR= 183 HANDICAP= 4

TOTAL= 187

ZONING DATA

ZONING ITEM	REQUIRED	PARKING REQUIREMENTS
ZONING DISTRICT	CS COMMERCIAL SERVICES	HOTEL: 1 SPACE PER GUEST ROOM MINIMUM.
PERMITTED USE	HOTEL	
MINIMUM LOT AREA (SQ.FT.)	NO MINIMUM	
MAX BUILDING COVERAGE	NO MINIMUM	
MAX BUILDING HEIGHT	45' MAXIMUM	
BUILDING SETBACKS		CONTACT: LISA GILLERAN
FRONT	50' MINIMUM 100' MAXIMUM	
SIDE	7.5' MINIMUM	PHONE: (703)435-6800
REAR	7.5' MINIMUM	
		REPORT DATE: 6/11/2019
		GRS# 19-40508.2

FLOOD NOTE

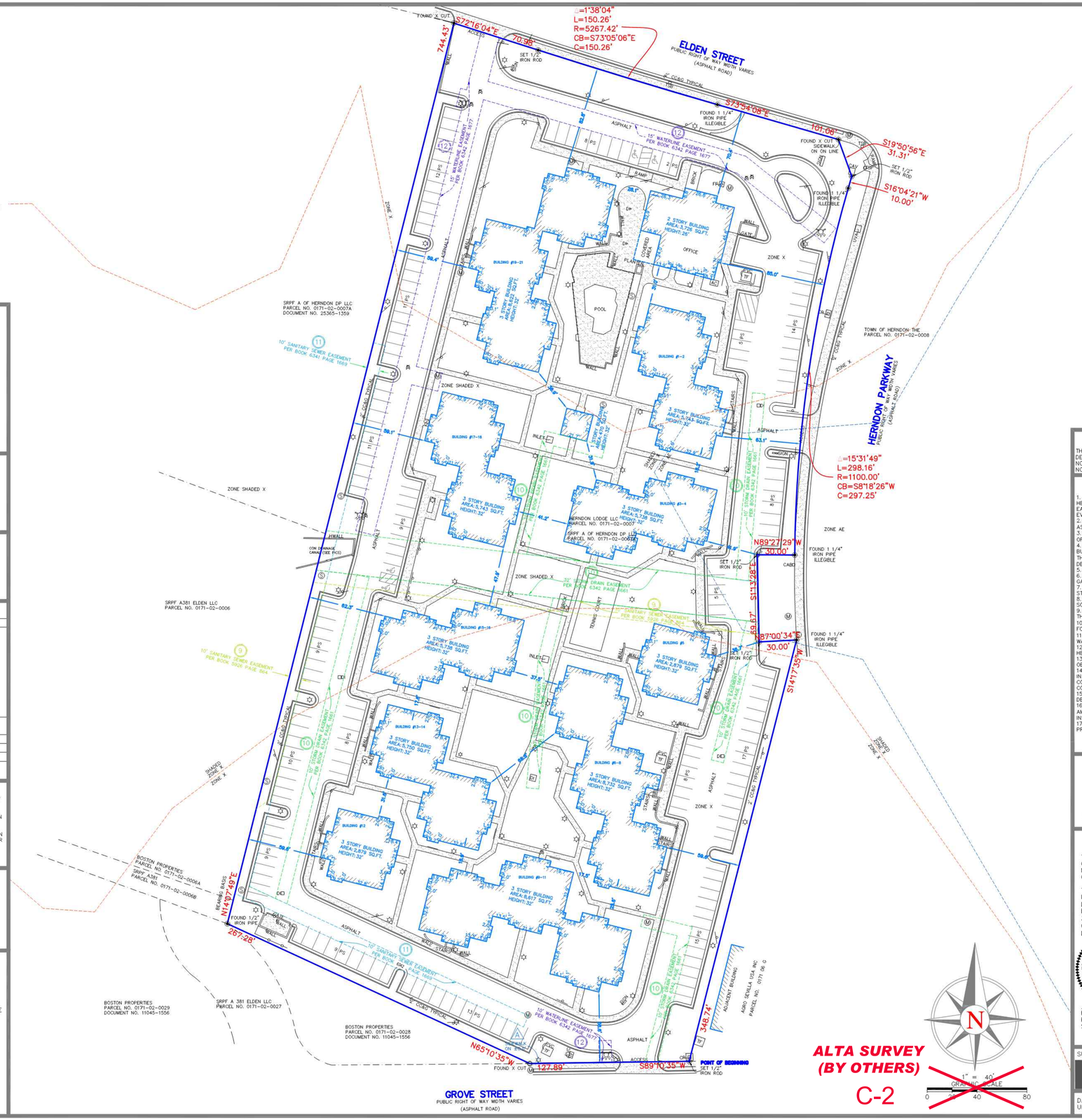
FLOOD NOTE: BASED ON MAPS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AVAILABLE ONLINE AT WWW.MSC.FEMA.GOV, AND BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE X, SHADED X AND AE ON FLOOD INSURANCE RATE MAP NUMBER 51059C0130E, WHICH BEARS AN EFFECTIVE DATE OF 09/17/2010 AND IS & IS NOT IN A SPECIAL FLOOD HAZARD AREA. BY REVIEWING FLOOD MAPS PROVIDED BY THE NATIONAL FLOOD INSURANCE PROGRAM WE HAVE LEARNED THIS COMMUNITY DOES PARTICIPATE IN THE PROGRAM. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THE ACCURACY OF THE MAPS AND/OR TO APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

SIGNIFICANT OBSERVATIONS

⚠ SIDEWALK ENCROACHES ON SUBJECT PROPERTY BY ±0.5' AT MOST.

LEGEND

		SQ.FT.	
PS	PARKING SPACE(S)		SQUARE FEET
DI	DRAINAGE INLET		CONCRETE SURFACE
TF	TRANSFORMER		NO PARKING AREA
AC	AIR CONDITIONER		HANDICAP PARKING SPACE
CO	CLEAN OUT		WATER VALVE
CR	CABLE RISER		SANITARY MANHOLE
FP	FLAG POLE		MANHOLE
CAB	CABLE BOX		LIGHT POLE
CVA	CABLE VAULT		FIRE HYDRANT
UVA	UTILITY VAULT		SIGN
TSP	TRAFFIC SIGNAL POLE		METAL FENCE
TSB	TRAFFIC SIGNAL CONTROL BOX		WOOD FENCE
CC&G	CONCRETE CURB AND GUTTER		PLASTIC FENCE



RECORD DESCRIPTION

SHEET 1 OF 1

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF HERNDON, COUNTY OF FAIRFAX, STATE OF VIRGINIA, AND IS DESCRIBED AS FOLLOWS:

ALL THAT CERTAIN PIECE OR PARCEL OF LAND, TOGETHER WITH THE IMPROVEMENTS THEREON AND APPURTENANCES THEREUNTO BELONGING, LYING, SITUATE AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF GROVE STREET, SAID POINT MARKING THE SOUTHWESTERLY CORNER OF AGRO SEVILLA USA, INC.; THENCE WITH THE NORTHERLY RIGHT-OF-WAY LINE OF GROVE STREET S89°10'35"W, 127.89 FEET TO A POINT MARKING THE MOST EASTERLY CORNER OF OUTLOT "A," NEW DOMINION TECHNOLOGY PARK; THENCE WITH THE NORTHEASTERLY LINE OF SAID OUTLOT "A" N65°10'35"W, 267.28 FEET TO A POINT MARKING THE SOUTHEASTERLY CORNER OF OUTLOT "B," VACATED BUCHANAN DRIVE; THENCE WITH THE EASTERLY LINES OF SAID OUTLOT "B," 381 ELDEN STREET LLC AND ELDEN STREET LLC N14°07'49"E, 744.43 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF ELDEN STREET (ROUTE 606); THENCE WITH THE SOUTHERLY RIGHT-OF-WAY LINES OF ELDEN STREET THE FOLLOWING COURSES: S72°16'04"E, 70.98 FEET; WITH A CURVE TO THE LEFT, WHOSE RADIUS IS 5,267.42 FEET AND WHOSE CHORD IS S73°05'06"E, 150.26 FEET, AN ARC DISTANCE OF 150.26 FEET; S73°54'08"E, 101.06 FEET AND S 19°50'56"E, 31.31 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF HERNDON PARKWAY; THENCE WITH THE WESTERLY RIGHT-OF-WAY LINES OF HERNDON PARKWAY THE FOLLOWING COURSES: S16°04'21 "W, 10.00 FEET; WITH A CURVE TO THE LEFT, WHOSE RADIUS IS 1,100.00 FEET AND WHOSE CHORD IS S08°18'26"W, 297.25 FEET, AN ARC DISTANCE OF 298.16 FEET; N89°27'29"W, 30.00 FEET; S01°13'28"E, 69.67 FEET AND N87°00'34"E, 30.00 FEET TO A POINT MARKING THE MOST NORTHERLY CORNER OF AGRO SEVILLA USA, INC.; THENCE WITH THE WESTERLY LINE OF AGRO SEVILLA USA, INC. S14°17'35"W, 348.74 FEET TO THE POINT OF BEGINNING, CONTAINING 6.3942 ACRES OF LAND.

BEING THE SAME PROPERTY CONVEYED TO MSCI 2007-TOP27 ELDEN STREET, LLC, A DELAWARE LIMITED LIABILITY COMPANY BY DEED FROM DAVID L. LINGERFELT, SUBSTITUTE TRUSTEE, DATED MAY 30, 2019, RECORDED JULY 8, 2019 IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF FAIRFAX COUNTY, VIRGINIA IN DEED BOOK 25808, PAGE 1018.

APN: 0171 02 0007

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT FILE NO.: 30762VA-510-510, WITH AN EFFECTIVE DATE OF JULY 15, 2019. AMENDMENT DATE: NOVEMBER 4, 2019.

GENERAL SURVEY NOTES

1. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTY WALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS ARE BASED SOLELY ON ABOVE GROUND, VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
2. THIS DRAWING MEETS OR EXCEEDS THE SURVEYING STANDARDS AND STANDARDS OF CARE AS SET FORTH IN SECTION 3 OF THE 2016 ALTA/NSPS SURVEYING REQUIREMENTS.
3. ALL FIELD MEASUREMENTS MATCH RECORD DIMENSIONS WITHIN THE PRECISION REQUIREMENTS OF ALTA/NSPS SPECIFICATIONS.
4. AT THE TIME OF SURVEY, THERE IS NO RECORD OR OBSERVED EVIDENCE OF A CEMETERY, BURIAL GROUNDS OR LOCATION OF ISOLATED GRAVESITES.
THE BEARINGS ARE BASED ON THE WEST LINE OF THIS PARCEL BEING N14°07'49"E, PER RECORD DESCRIPTION.
5. THE TITLE LINES AND LINES OF ACTUAL POSSESSION ARE THE SAME.
6. THE PARCELS CONTAINED IN THE RECORD LEGAL DESCRIPTION ARE CONTIGUOUS WITHOUT ANY GAP, GORES OR OVERLAYS.
7. THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO ELDEN STREET AND GROVE STREET, BEING DEDICATED PUBLIC STREET OR HIGHWAY.
8. AT THE TIME OF THE FIELD WORK, THERE IS NO OBSERVABLE EVIDENCE OF THE SITE USE AS SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
9. AT THE TIME OF THE FIELD WORK , OWNERSHIP OF FENCING SHOWN HEREON IS UNKNOWN TO THIS SURVEYOR.
10. IN REGARDS TO TABLE "A" ITEM 7(A), THE BUILDING AREA SHOWN HEREON IS FOR THE FOOTPRINT OF THE BUILDING ONLY AT GROUND LEVEL.
11. IN REGARDS TO TABLE "A" ITEM 10(A), AT THE TIME OF THIS SURVEY, THERE WERE NO PARTY WALLS DESIGNATED BY THE CLIENT TO REFERENCE HEREON.
12. IN REGARDS TO TABLE "A" ITEM 14, THE NEAREST INTERSECTION OF STREET IS THAT OF HERNDON PARKWAY.
13. IN REGARDS TO TABLE "A" ITEM 16, AT THE TIME OF THIS SURVEY, THERE IS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
14. IN REGARDS TO TABLE "A" ITEM 17, AT THE TIME OF THIS SURVEY, NO APPARENT CHANGES IN STREET RIGHT OF WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION. THERE NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
15. IN REGARDS TO TABLE "A" ITEM 18, AT THE TIME OF THIS SURVEY, NO VISIBLE FIELD DELINEATION MARKERS FOR WETLANDS WERE OBSERVED TO REFERENCES ON THIS SURVEY.
16. PROFESSIONAL LIABILITY INSURANCE POLICY OBTAINED BY THE SURVEYOR IN THE MINIMUM AMOUNT OF $1,000,000.00 TO BE IN EFFECT THROUGHOUT THE CONTRACT TERM. CERTIFICATE OF INSURANCE TO BE FURNISHED UPON REQUEST.
17. THERE ARE NO PLOTTABLE OFFSITE EASEMENTS OR SERVITUDES BENEFITING SUBJECT PROPERTY EITHER OBSERVED OR DISCLOSED BY TITLE COMMITMENT.

REVISION HISTORY	DATE
CLIENT COMMENTS	10/31/19
REVISED TITLE	11/04/19

JOB NO. 190605
DRS PROJECT NO. 19-40508.1
SCALE: 1" = 40'
DRAWN BY: CN/TM
APPROVED BY: MWS

ALTA/NSPS LAND TITLE SURVEY

RESIDENCE INN
315 ELDEN STREET
FAIRFAX COUNTY HERNDON, VA 20170

SURVEYOR'S CERTIFICATE

TO: MSCI 2007-TOP27 ELDEN STREET, LLC; A DELAWARE LIMITED LIABILITY COMPANY; LNR PARTNERS, LLC; A FLORIDA LIMITED LIABILITY COMPANY; NOVARE NATIONAL SETTLEMENT SERVICE; FIDELITY NATIONAL TITLE INSURANCE COMPANY; GRS GROUP:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6(a), 6 (b), 7(a), 7(b)(1), 7(c), 8, 9, 13, 14, 16, 17, 18, 19 AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 06/15/2019.
DATE OF PLAT OR MAP: 10/31/2019

COMMONWEALTH OF VIRGINIA
KIMBERLY D. SOLITRO
Lic. No. 0403003342
LAND SURVEYOR

REGISTERED SURVEYOR: KIMBERLY D. SOLITRO
PROFESSIONAL LAND SURVEYOR NO.: 0403003342
STATE OF VIRGINIA

11/5/19
DATE

SURVEYED BY:

REPUBLIC NATIONAL
480 NEEDLES TRAIL
LONGWOOD, FLORIDA 32779
RNSURVEYS@REPUBLICNATIONAL.NET
PHONE 407.862.4200 FAX 407.862.6229

DATED 2019 – USE OF THIS DOCUMENTS FORMAT IS PROHIBITED AND CONTINGENT UPON THE WRITTEN CONSENT & PERMISSION BY THE GRS GROUP, LLC.

ALTA SURVEY (BY OTHERS)

C-2

N

1" = 40' GRAPHIC SCALE
0 20 40 80

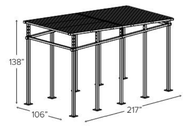
SURVEY COORDINATED BY:

GRS GROUP

360 SPECTRUM CENTER DRIVE, SUITE 145, IRVINE, CALIFORNIA 92618 | FIELDSURVEYS@GRS-GLOBAL.COM | PHONE: 330-779-1167

DERO | Cycle Station

Submittal Sheet



CAPACITY See diagrams below and to the left

MATERIALS
Uprights: 4" x 3/16" square tube.
Feet: 5/2" plate
Roof Truss: 4"x 3" x 3/16" square tube
Roof Purlins: 3" x 1/8" square tube
Roof Panels: 24g Type S deck galvanized steel
Panels: 1/4" clear polycarbonate with 1.77" square aluminum framing
Panels: 2" x 3/16" steel wire mesh with 2" steel framing

FINISHES
☐ **Galvanized**
An after fabrication hot dipped galvanized finish is our standard option.

☐ **Powder Coat**
Our powder coat finish assures a high level of adhesion and durability by following these steps:
1. Sandblast
2. Epoxy primer electrostatically applied
3. Final thick TGIC polyester powder coat

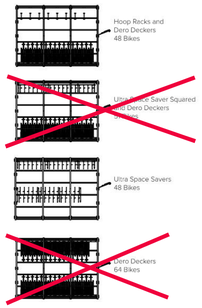
MOUNT OPTIONS **Surface Only**
It is the responsibility of the installer to ensure that all base materials into which the shelter will be installed can support the rack and will not be damaged by any required installation procedures. See structural drawings for details.

SETBACKS Consult local building codes for acceptable setbacks and placement.

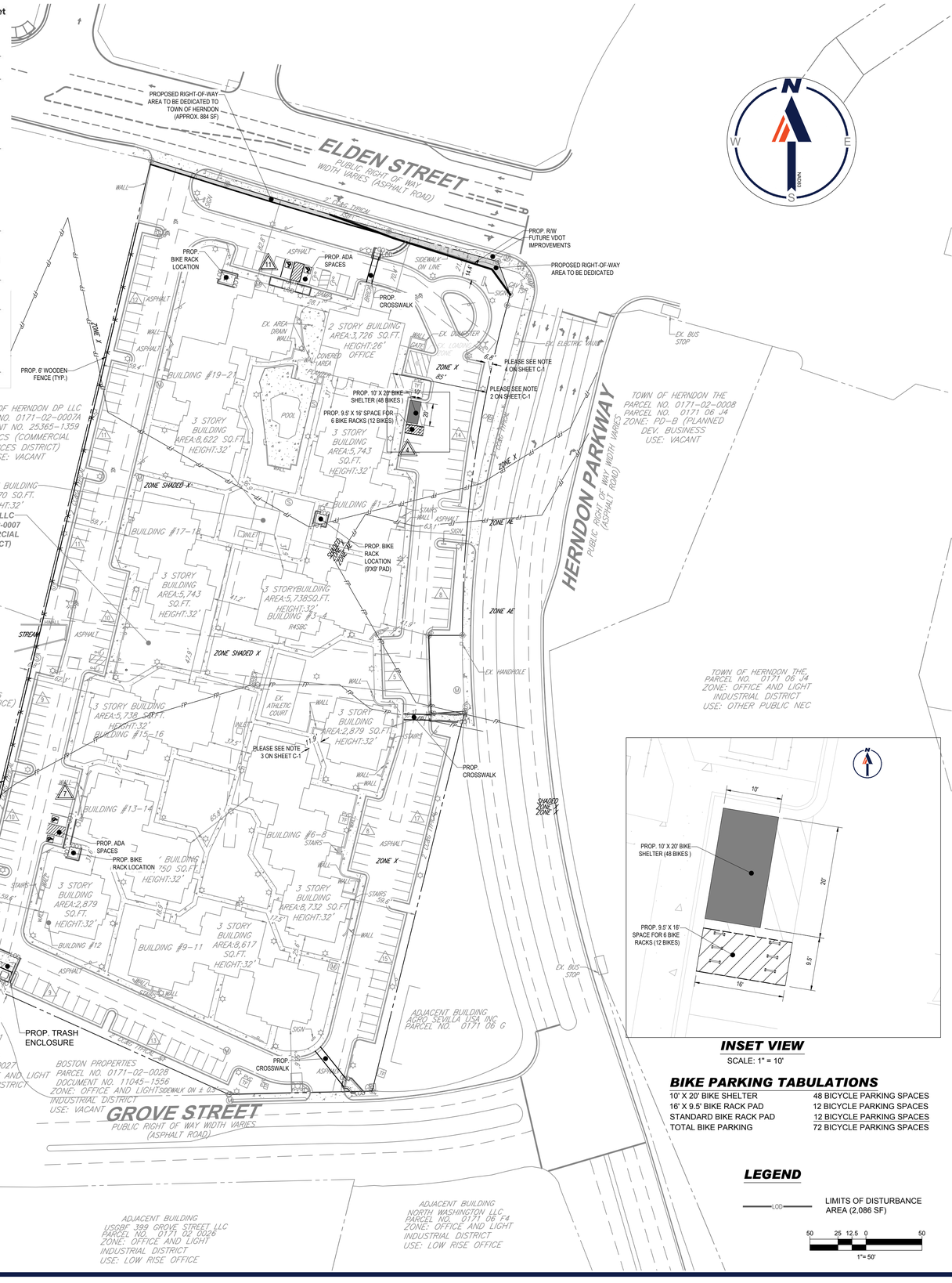
LOAD DATA
Dead Load: self weight of structure
Live Load: 40 psf
Wind Load: 90 mph exposure B
Seismic Load: moderate to high
Footing: see page 4
Anchors: 5/8" x 4½2" embed Simpson Strong-Bolt 2 wedge anchors

LIGHTING ☐ Solar powered lights are available for an additional charge

Sample capacities for a 3 unit shelter



Dero Shelters can be used in a modular fashion (shared uprights) however, when used in this manner, please consult a Dero Bike Rack sales associate for layout, as the rack spacing and bike capacity can change!



INSET VIEW

SCALE: 1" = 10'

BIKE PARKING TABULATIONS

10' X 20' BIKE SHELTER	48 BICYCLE PARKING SPACES
16' X 9.5' BIKE RACK PAD	12 BICYCLE PARKING SPACES
STANDARD BIKE RACK PAD	12 BICYCLE PARKING SPACES
TOTAL BIKE PARKING	72 BICYCLE PARKING SPACES

LEGEND

LOD — LIMITS OF DISTURBANCE AREA (2,086 SF)

50 25 12.5 0 50
1"= 50'

GENERAL NOTES:

1. THIS PLAN IS BASED ON AN ALTA SURVEY BY GRS GROUP, ENTITLED "ALTA/NSPS LAND TITLE SURVEY, RESIDENCE INN, 315 ELDEN STREET, FAIRFAX COUNTY, HERNDON, VA 20170." PROJECT #: 19-40508.1. DATE: 11/5/19.
2. ALL ELEVATIONS SHOWN ARE BASED ON THE SURVEYOR'S BENCHMARK, AS REFERENCED IN THE SURVEY, AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK.
3. OWNER / DEVELOPER / APPLICANT

   ELDEN STREET OWNER LLC
   900 17TH STREET NW, SUITE 1050
   WASHINGTON, DC 20006
   PETER KLEEBLATT
   (240-380-3602)
4. PARCEL DATA:
   TAX MAP: #0171-02-0007 - 278,537 SF.
5. ZONE:
   EXISTING ZONE: CS (COMMERCIAL SERVICES DISTRICT)
   PROPOSED ZONE: PD-UR (PLANNED DEVELOPMENT URBAN RESIDENTIAL DISTRICT)
6. BULK REQUIREMENTS

	ALLOWED/REQUIRED	PROVIDED
A. MIN. LOT AREA	NONE	278,537 SF (6.394 ACRES)
B. MAXIMUM BUILDING SETBACK FROM R.O.W.*		
FRONT SETBACK (ELDEN STREET)	15'	±83'
FRONT SETBACK (HERNDON PARKWAY)	15'	±85'
REAR SETBACK (GROVE STREET LINE)	15'	±57'
C. MINIMUM LANDSCAPE BUFFER^		
FRONT SETBACK (ELDEN STREET)	10'	±14.4'
FRONT SETBACK (HERNDON PARKWAY)	10'	±6.8'
REAR SETBACK (WEST PROPERTY LINE)	10'	±6.8'
REAR SETBACK (GROVE STREET LINE)	10'	±7.2'
D. MINIMUM DISTANCE BETWEEN BUILDINGS AND DEVELOPMENT BOUNDARIES	18'	±60'
E. RIGHT-OF-WAY VDOT DEDICATION AREA	NONE	±0.02 ACRES
F. TOWN OF HERNDON DEDICATION AREA	NONE	±884 SF
G. DENSITY (DWELLING UNITS/ACRE)	28 UNITS/ACRE	28 UNITS/ACRE
H. MAX. BUILDING HEIGHT	40'	35' MAX
I. OPEN SPACE (SEE SHEET C-5 FOR OPEN SPACE PLAN)	20% (8% RECREATION AREA)	40% (8%)
J. LOADING (ONE FOR GSF BELOW 40,000)	1	1
K. MINIMUM LOT WIDTH	NONE	±320
L. MINIMUM DISTANCE BETWEEN BUILDINGS^	18'	±11.9'

*MODIFICATION REQUESTED FOR MAXIMUM BUILDING SETBACK DUE TO EXISTING LAYOUT DESIGN. SEE NOTE 2 ON SHEET C-1 FOR LIST OF MODIFICATIONS REQUESTED.

^MODIFICATION REQUESTED FOR MINIMUM LANDSCAPE BUFFER DUE TO EXISTING LAYOUT DESIGN. SEE NOTE 4 ON SHEET C-1 FOR LIST OF MODIFICATIONS REQUESTED.

^MODIFICATION REQUESTED FOR MINIMUM DISTANCE BETWEEN BUILDINGS DUE TO EXISTING LAYOUT DESIGN. SEE NOTE 3 ON SHEET C-1 FOR LIST OF MODIFICATIONS REQUESTED.

7. NO KNOWN BURIAL GROUNDS EXIST WITHIN THE LIMITS OF THE REZONING AREA.
8. THE PROPERTY IS LOCATED IN ZONE AE (AREA DETERMINED TO BE INUNDATED BY THE 100-YEAR FLOOD), PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, FAIRFAX COUNTY, VIRGINIA, UNINCORPORATED AREAS, PANEL 130 OF 450" MAP NUMBER 51059C0130E, MAP EFFECTIVE DATE SEPTEMBER 17,2010. SEE SHEET C-4 FOR FLOODPLAIN MAP. SEE SHEET C-4A SHOWING A DRAFT OF THE REVISED FEMA FLOODPLAIN MAPS TO BE APPROVED BY END OF 2022. A SPECIAL EXCEPTION AND APPLICATION ARE TO BE SUBMITTED UNDER A SEPARATE COVER.
9. NO ENVIRONMENTAL QUALITY CORRIDOR IS KNOWN TO EXISTING ON THIS SITE. FLOODPLAIN IS KNOWN TO EXIST ON THIS SITE.
10. MINOR IMPROVEMENTS SHOWN ON REZONING PLAN ARE SUBJECT TO FINAL ENGINEERING.
11. SITE LIGHTING WILL CONFORM TO TOWN OF HERNDON CODE SEC. 78-130.9 AT TIME OF SITE PLAN.
12. ALL REQUIRED FIRE PROTECTION DEVICES, SIGNAGE, AND STRIPING WILL BE PROVIDED PER THE STATEWIDE BUILDING CODE, APPLICABLE FAIRFAX COUNTY CODE, AND STATEWIDE FIRE PREVENTION CODE.
13. THE PROPOSED DEVELOPMENT SHALL CONFORM TO ALL APPLICABLE ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS, WITH THE EXCEPTION OF THE MODIFICATIONS LISTED ON THE COVER.
14. PROPOSED DUMPSTER SHOWN ON THIS SHEET SHALL MEET FAIRFAX COUNTY PFM DESIGN STANDARDS.
15. MAILBOXES WILL BE LOCATED INSIDE THE BUILDING CLOSEST TO THE INTERSECTION OF HERNDON PARKWAY AND ELDEN STREET.
16. BIKE RACKS TO BE PLACED THROUGHOUT THE PROPERTY AND ALONG EACH PUBLIC R.O.W. PER Z.O. 78-51.1.G.9. EACH BIKE RACK PAD CONTAINS TWO (2) BIKE RACKS. EACH RACK SECURES TWO (2) BIKES. THREE (3) BIKE PADS HAVE BEEN PROVIDED, PROVIDING STORAGE FOR A TOTAL OF 12 BIKES. AN ADDITIONAL 16' X 9.5' BIKE PAD CONTAINS SIX (6) BIKE RACKS WHICH WILL PROVIDE FOR A TOTAL OF 12 BIKES. A SECURE, WEATHER PROTECTED BIKE SHELTER WHERE A MINIMUM OF FORTY-EIGHT (48) BIKES CAN BE STORED ON-SITE HAS BEEN PROVIDE. BETWEEN THE ENCLOSED SHELTER, ADJACENT BIKE PARKING, AND BIKE PARKING THROUGHOUT THE SITE, A TOTAL OF 72 BIKE PARKING SPACES HAVE BEEN PROVIDED.
17. IF PROPOSED LAND DISTURBANCE REACHES 2,500SF OF DISTURBANCE, STORMWATER MANAGEMENT MEASURES MEETING TOWN OF HERNDON REQUIREMENTS FOR QUANTITY AND QUALITY WILL BE REQUIRED. APPROXIMATE DISTURBANCE PROVIDED WITH THIS APPLICATION IS 2,086 SQUARE FEET.
18. PARKING REQUIREMENTS AND UNIT DISTRIBUTION BELOW:

UNIT DISTRIBUTION:

TOTAL UNITS: **170** **WORKFORCE DWELLING UNITS (WDU): ** A MINIMUM OF 50% OF OVERALL UNIT TOTAL TO BE WDU. A MINIMUM OF 20% OF EACH UNIT TYPE TO BE WDU.

EFFICIENCY/STUDIO	28	EFFICIENCY/STUDIO	MIN 6		
ONE BEDROOM UNITS	98	ONE BEDROOM UNITS	MIN 20		
TWO BEDROOM UNITS	44	TWO BEDROOM UNITS	MIN 10		

PARKING:

PARKING REQUIREMENTS	UNITS	REQUIRED	EXISTING	PROPOSED
EFFICIENCY/STUDIO UNIT (1/UNIT)	30	28		
ONE BEDROOM UNIT (1.5/UNIT)	98	147		
TWO BEDROOMS OR MORE (2/UNIT)	46	44		
TOTAL PARKING		**263 (7ADA)**	**187 (4 ADA)**	**184 (8 ADA)*^**
LOADING (1/20,000)		1	1	1

*THE REDUCTION IN THE AMOUNT OF REQUIRED PAVEMENT WILL PRESERVE THE ROOT ZONES OF EXISTING HEALTHY TREES WITH A DIAMETER AT BREAST HEIGHT OF TEN INCHES OR GREATER, ALLOW FOR UP TO 5% PARKING REDUCTION PER SEC. 78-111.5(B)

^A MODIFICATION REQUEST SEEKING A PARKING RATE REDUCTION IS INCLUDED WITH ZONING MAP AMENDMENT APPLICATION PACKAGE.

*PLEASE SEE NOTE 1 ON SHEET C-1.

WATER AND SEWER DEMAND CALCULATIONS
(TOTAL BUILDING COVERAGE - 121,441 SF)

WATER DEMAND (PER 1000 SQ.FT OF GSF)

EX. HOTEL USE - 210 GPD/1000SF = 254,940 GPD
MAX DEMAND = 254,940 X 1.6 = 407,904 GPD

PROP. APT USE = 180 GPD/1000SF = 218,520 GPD
MAX DEMAND = 218,520 X 1.6 = 349,632 GPD

SEWER DEMAND = WATER DEMAND X 1.15

EX. HOTEL USE = 254,940 X 1.15 = 293,181 GPD

PROP. APT USE = 218,520 X 1.15 = 251,298 GPD

ABOVE CALCULATION SHOWS APPROXIMATELY 14-15% REDUCTION IN FLOWS FROM CHANGE IN USE

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/05/2022	REV. PER 1ST SUB COMMENTS	AW / GE
2	02/25/2022	REV. PER COMMENTS	MR / GE

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: S212133
DRAWN BY: AND
CHECKED BY: GE
DATE: 12/30/2021
CAD I.D.: GDVL - 2

PROJECT:

GENERAL DEVELOPMENT PLAN

FOR

315 ELDEN STREET RESIDENTIAL

LOCATION OF SITE

315 ELDEN STREET
TOWN OF HERNDON
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT

BOHLER
12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
Fax: (703) 709-9501
VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA
MICHAEL J. BIRKLAND
Lic. No. 031693
03/02/2022
PROFESSIONAL ENGINEER

SHEET TITLE:

GENERAL DEVELOPMENT PLAN

SHEET NUMBER:

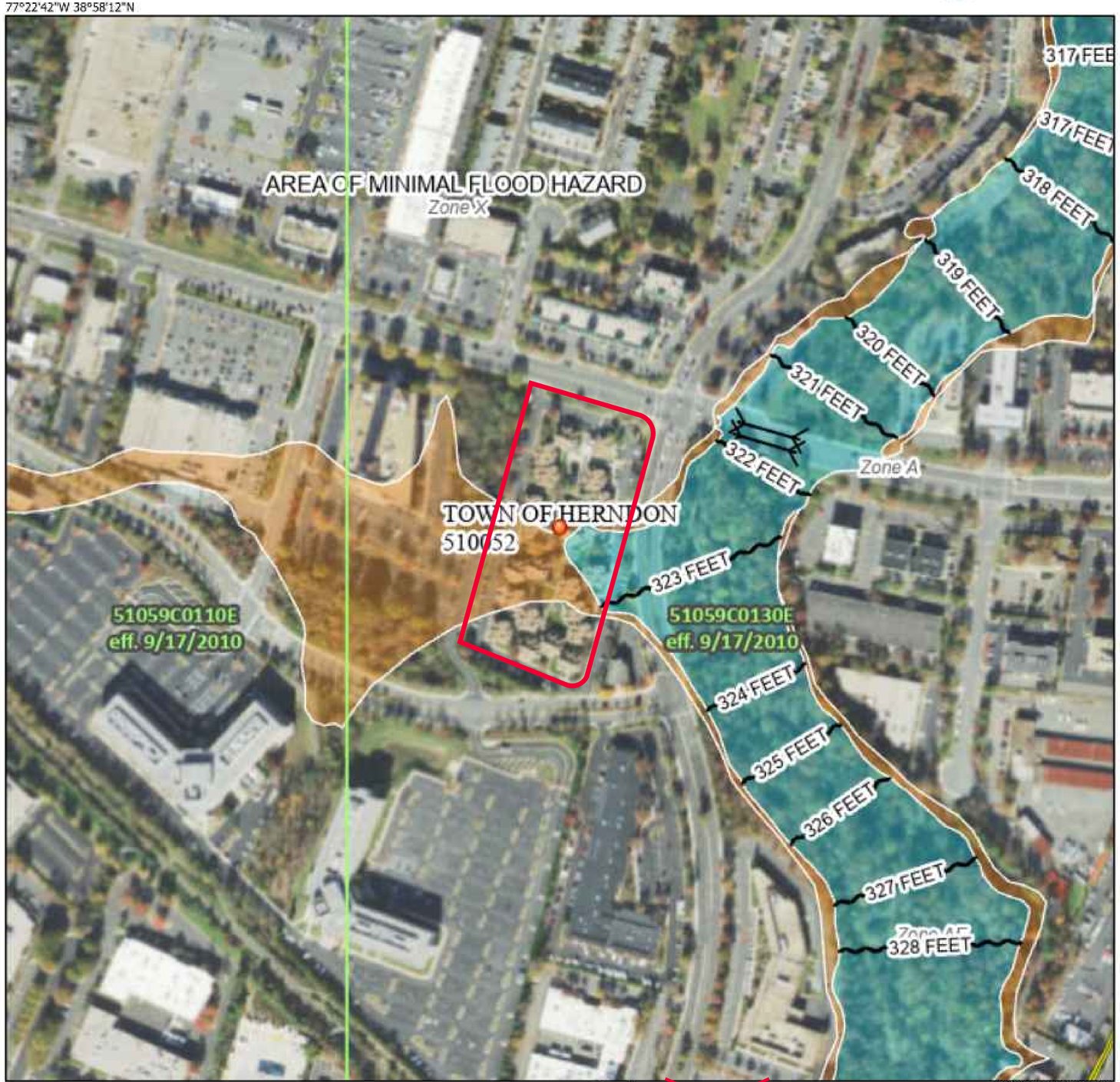
C-3

REVISION 2 - 02/25/2022

Mar 02, 2022
11:21:52 I:\S\CAD\DRAWINGS\PLAN SET\REZONING PLANS\212133 GDVL 2---LAYOUT C-3 GDP

National Flood Hazard Layer FIRMette

77°22'42"W 38°58'12"N



Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/20/2021 at 10:50 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

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LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
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PROJECT No.:	S212133
DRAWN BY:	AND
CHECKED BY:	GE
DATE:	12/30/2021
CAD I.D.:	GDVL - 2

PROJECT:

GENERAL DEVELOPMENT PLAN

FOR

315 ELDEN STREET RESIDENTIAL

LOCATION OF SITE

315 ELDEN STREET
TOWN OF HERNDON
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT

BOHLER
12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
Fax: (703) 709-9501
VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA
MICHAEL J. BIRKLAND
Lic. No. 031693
03/02/2022
PROFESSIONAL ENGINEER

SHEET TITLE:

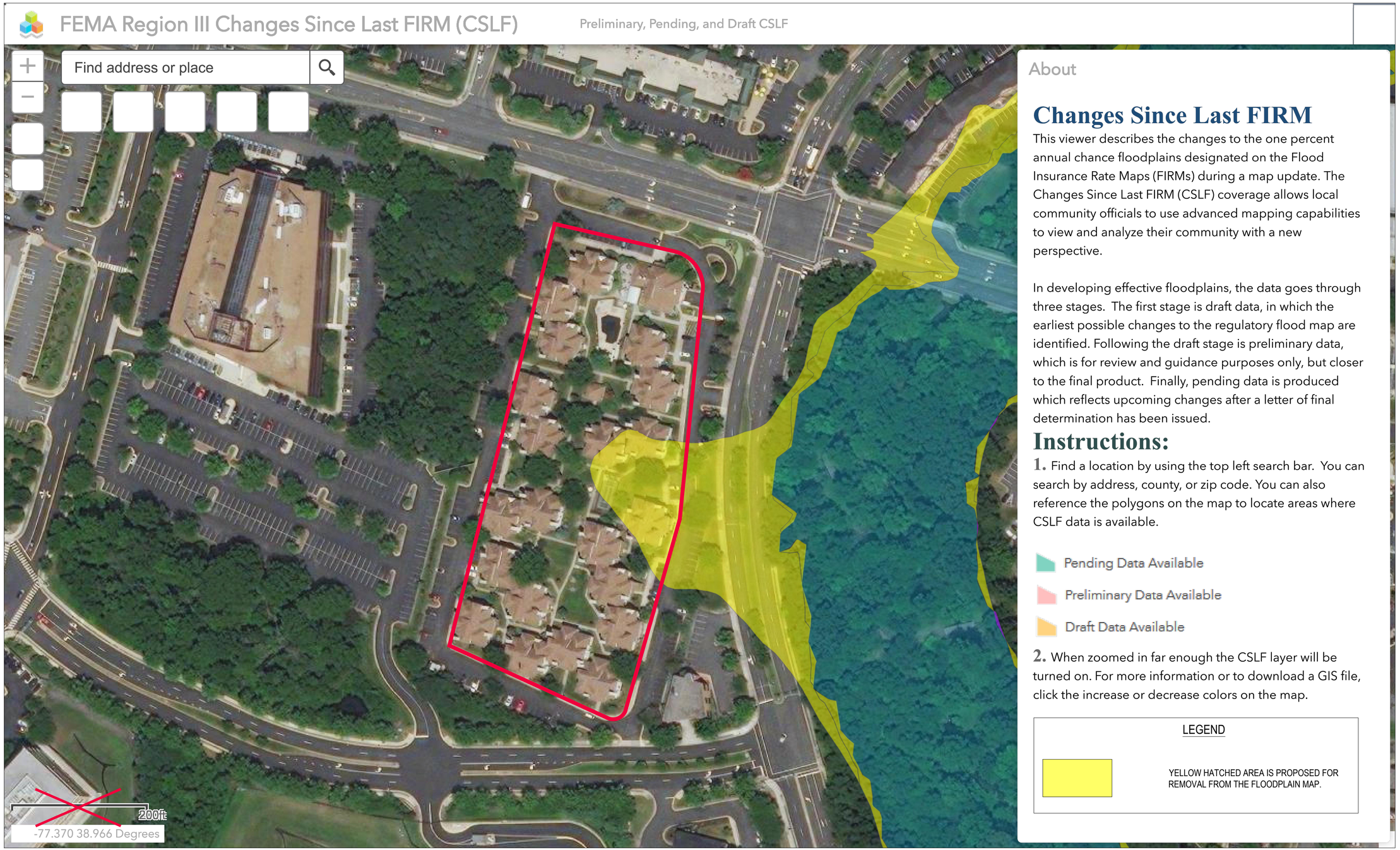
FLOODPLAIN MAP

SHEET NUMBER:

C-4

REVISION 2 - 02/25/2022

Mar 02, 2022
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CAD I.D.:	GDVL - 2

PROJECT:

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SHEET TITLE:

FLOODPLAIN MAP (REGION III CHANGES)

SHEET NUMBER:

C-4A

REVISION 2 - 02/25/2022

Mar 02, 2022
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OPEN SPACE TABULATIONS

TOTAL AREA - 6.394 ACRES

TOTAL AREA AFTER ROW DEDICATION - 6.374 ACRES

REQUIRED OPEN SPACE - 20% (1.27 ACRES)

PROPOSED OPEN SPACE - 40% (2.54 ACRES)

REQUIRED RECREATION SPACE - 8% (0.50 ACRES)

PROPOSED RECREATION SPACE - 8% (0.50 ACRES)

LEGEND

OPEN SPACE

OPEN SPACE (RECREATION AREA) [SPORT COURT; OUTDOOR SEATING]

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SHEET TITLE:

OPEN SPACE PLAN

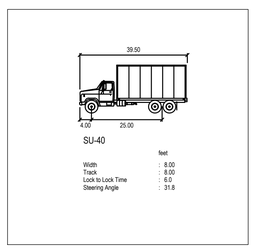
SHEET NUMBER:

C-5

REVISION 2 - 02/25/2022

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MR





NOTE: ANY CONFLICTS TO BE ADDRESSED BY THE APPLICANT DURING SITE PLAN REVIEW.

50 25 12.5 0 50

1"= 50'

Mar 02, 2022
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PROJECT:

GENERAL DEVELOPMENT PLAN

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03/02/2022
PROFESSIONAL ENGINEER

SHEET TITLE:

TRUCK MOVEMENTS PLAN

SHEET NUMBER:

C-6

REVISION 2 - 02/25/2022



The PINKARD Group



The PINKARD Group

315 Elden Street

DERO





Cycle Station

The Dero Cycle Station provides high-capacity, covered bike parking for bicycle commuters. With a high roof and open platform, the Dero Cycle Station allows bike corrals, vertical, or two-tiered bike racks configured to meet your specific needs. Optional side and back panels are available for additional protection.

DERO

Cycle Station





The PINKARD Group

315 Elden Street

DERO

loop Rack





DERO





Hoop Rack

The Hoop Rack is a proven design that provides high security and easy bike parking. The Hoop Rack uses thick pipe construction and the full radius of the bend makes the Hoop an attractive and functional bike rack. This bike rack can also be put on rails for mobility and is popular in bike corrals.

The PINKARD Group

THIS PLAN TO BE UTILIZED FOR INFORMATIONAL PURPOSES ONLY

Mar 02, 2022
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GENERAL DEVELOPMENT PLAN

FOR

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COMMONWEALTH OF VIRGINIA
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SHEET TITLE:

CORRESPONDENCE

SHEET NUMBER:

C-7

REVISION 2 - 02/25/2022



NOTES:
1. THE TWO TREES THAT WERE DEAD BASED ON A SITE VISIT WILL BE REPLACED IN KIND IN THE SAME LOCATION AS SHOWN ON THIS SURVEY.

315 Elden Street
Tree Condition Analysis Performed by Nicholas Georgas, ISA Certified Arborist MA-5061A on 09/24/2021

#	COMMON NAME	BOTANICAL NAME	CONDITION RATING	CIRCUMFERENCE	DIAMETER (DBH)	DIAMETER (DBH)	CRITICAL ROOT ZONE (CRZ)	REMOVE	NATIVE	COMMENTS
			%	INCHES	INCHES	FEET	FEET			
2182	Red Oak	Quercus Rubra	75%	66.88"	21.30"	1.78'	22'		Y	Dieback, Low Branch, Dieback in Crown
2183	Red Maple	Acer Rubrum	70%	57.78"	18.40"	1.53'	19'		Y	Codominant Leader, Lichen, x3, Cut Back
2184	Pin Oak	Quercus Palustris	55%	58.72"	18.70"	1.56'	19'		Y	Major Dieback, Codominant Leader, Broken Branch
2185	Red Oak	Quercus Rubra	85%	72.53"	23.10"	1.93'	24'		Y	Minor Lichen, Codominant Leader
2186	Japanese Pagoda Tree	Styphnolobium Japonicum	60%	43.33"	13.80"	1.15'	14'			Cut Back, Major Dieback
2187	Red Oak	Quercus Rubra	90%	64.68"	20.60"	1.72'	21'		Y	
2188	Honey Locust	Gleditsia Triacanthos	75%	32.03"	10.20"	0.85'	11'			Dieback, Minor Vine
2189	White Spruce	Picea Glauca	0%	30.77"	9.80"	0.82'	10'			Dead
2190	White Spruce	Picea Glauca	75%	32.66"	10.40"	0.87'	11'			Dieback, Limbed Up
2191	Red Maple	Acer Rubrum	75%	41.45"	13.20"	1.10'	14'		Y	Codominant Leader, Low Branch
2192	Willow Oak	Quercus Phellos	80%	36.11"	11.50"	0.96'	12'		Y	
2193	Eastern Red Cedar	Juniperus Virginiana	85%	28.26"	9.00"	0.75'	9'		Y	Dieback
2194	Eastern Red Cedar	Juniperus Virginiana	85%	28.26"	9.00"	0.75'	9'		Y	Dieback
2195	Eastern Red Cedar	Juniperus Virginiana	85%	32.34"	10.30"	0.86'	11'		Y	Minor Vine
2196	Eastern Red Cedar	Juniperus Virginiana	85%	27.95"	8.90"	0.74'	9'		Y	Minor Dieback
2197	Eastern Red Cedar	Juniperus Virginiana	75%	32.66"	10.40"	0.87'	11'		Y	Dieback
2198	Norway Spruce	Picea Abies	70%	29.52"	9.40"	0.78'	10'			Major Dieback
2199					Not Used					
2200					Not Used					
2201	Eastern Red Cedar	Juniperus Virginiana	70%	29.83"	9.50"	0.79'	10'		Y	Dieback
2202	Norway Spruce	Picea Abies	75%	36.74"	11.70"	0.98'	12'			Dieback
2203	Eastern Red Cedar	Juniperus Virginiana	85%	30.14"	9.60"	0.80'	10'		Y	
2204	American Sycamore	Platanus Occidentalis	90%	31.40"	10.00"	0.83'	10'		Y	
2205	American Sycamore	Platanus Occidentalis	90%	36.42"	11.60"	0.97'	12'		Y	
2206	American Sycamore	Platanus Occidentalis	90%	37.68"	12.00"	1.00'	12'		Y	
2207	Sugar Maple	Acer Saccharum	80%	59.66"	19.00"	1.58'	19'		Y	Cut Back, Low Branch, Codominant Leader
2208	White Pine	Pinus Strobus	60%	40.82"	13.00"	1.08'	13'		Y	Major Dieback
2209	White Pine	Pinus Strobus	40%	35.80"	11.40"	0.95'	12'		Y	Major Dieback, Codominant Leader
2210	Red Maple	Acer Rubrum	65%	32.66"	10.40"	0.87'	11'		Y	Crooked, Codominant Leader
2211	White Pine	Pinus Strobus	60%	43.02"	13.70"	1.14'	14'		Y	Major Dieback
2212		Unknown	0%	51.81"	16.50"	1.38'	17'			Dead
2213	Red Maple	Acer Rubrum	80%	48.36"	15.40"	1.28'	16'		Y	Codominant Leader, Yellow Leaf
2214	Red Maple	Acer Rubrum	75%	45.84"	14.60"	1.22'	15'		Y	Codominant Leader
2215	Sugar Maple	Acer Saccharum	75%	43.33"	13.80"	1.15'	14'		Y	Lichen, Codominant Leader
2216	Red Maple	Acer Rubrum	70%	54.95"	17.50"	1.46'	18'		Y	Codominant Leader, Dieback
2217	Cherry Tree 'Yoshino'	Prunus x Yedoensis	70%	54.01"	17.20"	1.43'	18'			x3, Codominant Leader
2218	Red Maple	Acer Rubrum	80%	54.01"	17.20"	1.43'	18'		Y	Weak Branch, Codominant Leader
2219	White Pine	Pinus Strobus	70%	47.41"	15.10"	1.26'	16'		Y	Crooked Cut Back
2220	Red Maple	Acer Rubrum	70%	57.15"	18.20"	1.52'	19'		Y	Trunk Scar, Major Dieback
2221	White Pine	Pinus Strobus	40%	52.12"	16.60"	1.38'	17'		Y	Major Dieback
2222	White Pine	Pinus Strobus	75%	42.39"	13.50"	1.13'	14'		Y	Dieback
2223	Red Maple	Acer Rubrum	85%	34.23"	10.90"	0.91'	11'		Y	Codominant Leader
2224	White Spruce	Picea Glauca	80%	51.81"	16.50"	1.38'	17'			Low Branch
2225	Red Maple	Acer Rubrum	85%	36.74"	11.70"	0.98'	12'		Y	Low Branch
2226	Willow Oak	Quercus Phellos	90%	31.71"	10.10"	0.84'	11'		Y	
2227	Blue Spruce	Picea Pungens	60%	38.31"	12.20"	1.02'	13'			Major Dieback
2228	Red Maple	Acer Rubrum	85%	38.62"	12.30"	1.03'	13'		Y	Codominant Leader
2229	River Birch	Betula Nigra	80%	53.19"	16.94"	1.41'	17'		Y	Minor Dieback, Crooked x3
2230	River Birch	Betula Nigra	85%	47.25"	15.05"	1.25'	16'		Y	x3, Lean
2231	Red Oak	Quercus Rubra	90%	53.38"	17.00"	1.42'	17'		Y	Trunk Scar, Minor Dieback
2232	River Birch	Betula Nigra	90%	39.30"	12.52"	1.04'	13'		Y	x2
2233	American Holly	Ilex Opaca	85%	45.37"	14.45"	1.20'	15'		Y	x2, Limbed Up
2234	Southern Magnolia	Magnolia Grandiflora	80%	28.26"	9.00"	0.75'	9'		Y	Dieback
2235	American Holly	Ilex Opaca	85%	44.63"	14.21"	1.18'	15'		Y	x2
2236	White Pine	Pinus Strobus	90%	58.72"	18.70"	1.56'	19'		Y	
2237	Scarlet Oak	Quercus Coccinea	60%	70.65"	22.50"	1.88'	23'		Y	Codominant Leader, Major Dieback
2238	American Holly	Ilex Opaca	90%	35.17"	11.20"	0.93'	12'		Y	
2239	Red Maple	Acer Rubrum	80%	55.69"	17.80"	1.48'	18'		Y	Codominant Leader, Dieback
2240	Scarlet Oak	Quercus Coccinea	85%	74.10"	23.60"	1.97'	24'		Y	Codominant Leader
2241	Crape Myrtle	Lagerstroemia	90%	31.65"	10.08"	0.84'	11'			x5
2242	Crape Myrtle	Lagerstroemia	90%	25.93"	8.26"	0.69'	9'			x3
2243	American Beach	Fagus Grandifolia	90%	75.67"	24.10"	2.01'	25'		Y	Codominant Leader
2244	Red Bud	Cercis Canadensis	90%	23.55"	7.50"	0.63'	8'		Y	
2245	Chinese Holly	Ilex Cornuta	85%	48.77"	15.53"	1.29'	16'			x3
2246	Red Maple	Acer Rubrum	55%	59.66"	19.00"	1.58'	19'		Y	Cut Back, Weak Branch
2247	Crape Myrtle	Lagerstroemia	90%	34.48"	10.98"	0.92'	11'			x5
2248	Red Bud	Cercis Canadensis	90%	23.86"	7.60"	0.63'	8'		Y	
2249	Red Bud	Cercis Canadensis	90%	25.12"	8.00"	0.67'	8'		Y	
2250	Hedge Maple	Acer Campestre	50%	50.24"	16.00"	1.33'	16'			Codominant Leader, Gurdled Root, Dieback
2251	Red Oak	Quercus Rubra	90%	83.52"	26.60"	2.22'	27'		Y	Minor Dieback, Codominant Leader
2252	Cherry Tree 'Yoshino'	Prunus x Yedoensis	80%	32.66"	10.40"	0.87'	11'			Trunk Scar
2253	Red Bud	Cercis Canadensis	90%	18.53"	5.90"	0.49'	6'		Y	
2254	Cherry Tree 'Yoshino'	Prunus x Yedoensis	80%	43.33"	13.80"	1.15'	14'			x2, Codominant Leader, Low Branch
2255	Crape Myrtle	Lagerstroemia	90%	30.23"	9.63"	0.80'	10'			x6
2256	Pin Oak	Quercus Palustris	65%	61.54"	19.60"	1.63'	20'		Y	Major Dieback
2257	Sweetbay Magnolia	Magnolia Virginiana	85%	33.23"	10.58"	0.88'	11'		Y	x4, Low Branch
2258	Japanese Maple	Acer Palmatum	70%	31.40"	10.00"	0.83'	10'			Dieback, Low Branch
2259	Japanese Maple	Acer Palmatum	75%	35.17"	11.20"	0.93'	12'			Low Branch
2260	Red Maple	Acer Rubrum	80%	54.01"	17.20"	1.43'	18'		Y	Dodominant Leader
2261	Blue Spruce	Picea Pungens	85%	36.11"	11.50"	0.96'	12'			Minor Dieback
2262	Pin Oak	Quercus Palustris	65%	80.70"	25.70"	2.14'	26'		Y	Major Dieback
2263	Crape Myrtle	Lagerstroemia	90%	27.97"	8.91"	0.74'	9'			x5
2264	Blue Spruce	Picea Pungens	75%	31.40"	10.00"	0.83'	10'			Dieback Interior
2265	Crape Myrtle	Lagerstroemia	90%	26.14"	8.32"	0.69'	9'			x5
2266	Red Oak	Quercus Rubra	80%	53.07"	16.90"	1.41'	17'		Y	Minor Dieback
2267	Headge Maple	Acer Campestre	70%	49.72"	15.83"	1.32'	16'			x3, Dieback
2268	Scarlet Oak	Quercus Coccinea	85%	69.08"	22.00"	1.83'	22'		Y	
2269	Red Maple	Acer Rubrum	70%	41.45"	13.20"	1.10'	14'		Y	Codominant Leader, Trunk Scar
2270	Crape Myrtle	Lagerstroemia	90%	21.67"	6.90"	0.58'	7'			x5
2271	Pin Oak	Quercus Palustris	65%	74.10"	23.60"	1.97'	24'		Y	Codominant Leader, Dieback, Lichen
2272	Japanese Pagoda Tree	Styphnolobium Japonicum Schott	60%	36.42"	11.60"	0.97'	12'			Major Lean, Dieback, Low Branch
2273	Red Oak	Quercus Rubra	80%	58.72"	18.70"	1.56'	19'		Y	Dieback, Limbed Up
2274	Crape Myrtle	Lagerstroemia	90%	24.28"	7.73"	0.64'	8'			x4

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REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	01/05/2022	REV. PER 1ST SUB COMMENTS	AW / GE
2	02/25/2022	REV. PER COMMENTS	MR / GE

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PROJECT No.: S212133
DRAWN BY: AND
CHECKED BY: GE
DATE: 12/30/2021
CAD I.D.: GDVL - 2

PROJECT:

GENERAL DEVELOPMENT PLAN

FOR

315 ELDEN STREET RESIDENTIAL

LOCATION OF SITE

315 ELDEN STREET
TOWN OF HERNDON
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT

BOHLER
12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
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COMMONWEALTH OF VIRGINIA
MICHAEL J. BIRKLAND
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03/02/2022
PROFESSIONAL ENGINEER

SHEET TITLE:

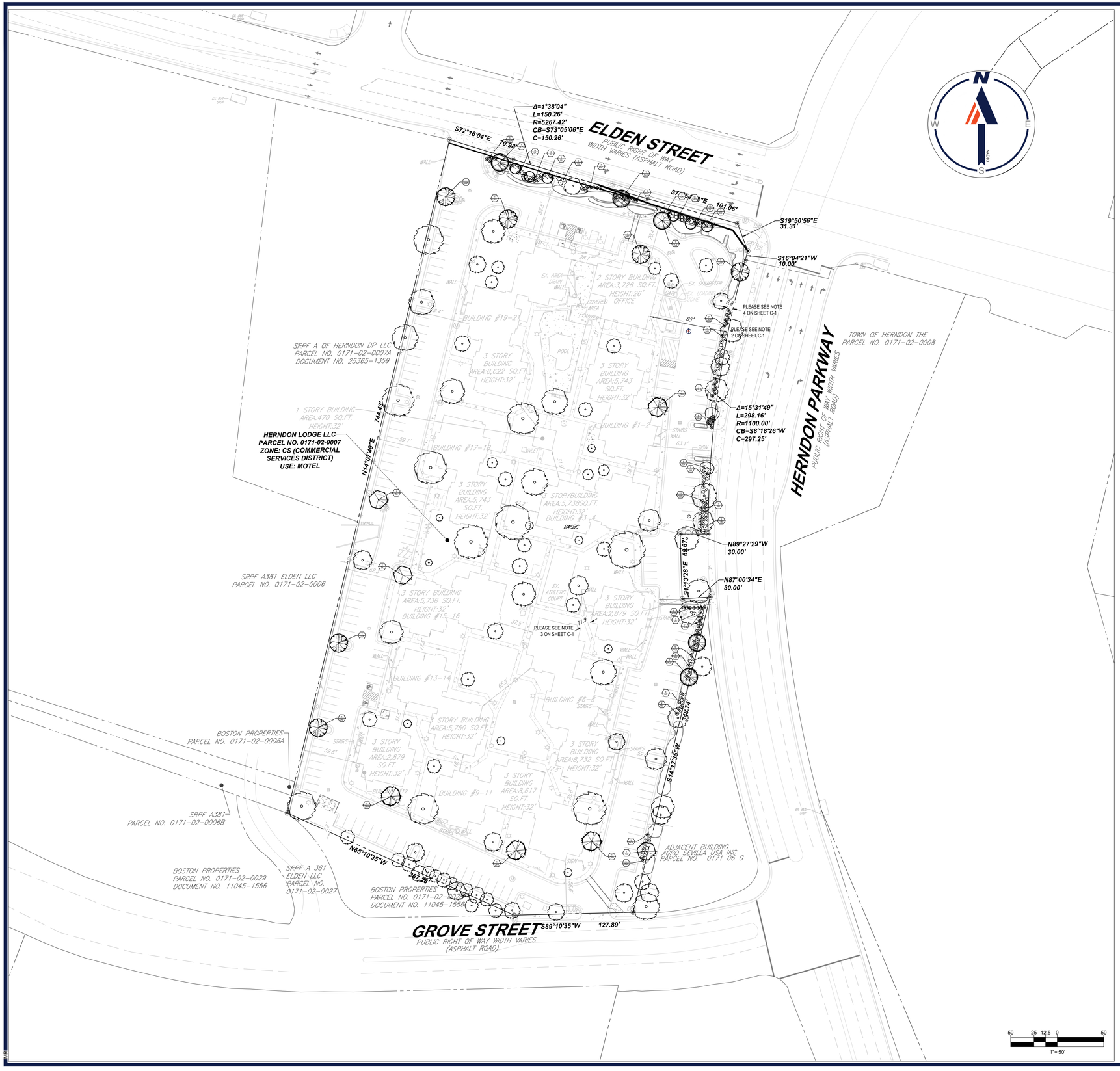
EXISTING TREE SURVEY PLAN

SHEET NUMBER:

L-1

REVISION 2 - 02/25/2022

Mar 02, 2022
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MR



LEGEND

EXISTING SHRUBS TO REMAIN

LANDSCAPE SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL.	CONT.
SHADE TREES					
PLO	5	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	3-3 1/2" CAL. / 10-12'	B+B
QPH	4	QUERCUS PHELLOS	WILLOW OAK	3-3 1/2" CAL. / 10-12'	B+B
TA	3	TILIA AMERICANA	BASSWOOD	3-3 1/2" CAL. / 10-12'	B+B
UAP	6	ULMUS AMERICANA 'PRINCETON'	PRINCETON AMERICAN ELM	3-3 1/2" CAL. / 10-12'	B+B
SUBTOTAL:	18				
ORNAMENTAL TREES					
CC	6	CERCIS CANADENSIS	EASTERN REDBUD	2-2 1/2" CAL. / 8-10'	B+B
SUBTOTAL:	6				
DECIDUOUS SHRUBS					
CA	26	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	24-30" HT. & SPREAD	#3 CAN
IV	23	ITEA VIRGINICA 'HENRY'S GARNET'	GARNET SWEETSPIRE	24-30" HT. & SPREAD	#3 CAN
IVRS	10	ILEX X 'VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	24-30" HT. & SPREAD	#3 CAN
VD	10	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	24-30" HT. & SPREAD	#3 CAN
SUBTOTAL:	69				
EVERGREEN SHRUBS					
ICBUR	34	ILEX CORNUTA 'BURFORDII'	BURFORD HOLLY	24-30" HT. & SPREAD	#3 CAN
IGS	22	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY HOLLY	24-30" HT. & SPREAD	#3 CAN
MYC	24	MYRICA CERIFERA	WAX MYRTLE	24-30" HT. & SPREAD	#3 CAN
PXOL	25	PRUNUS LAUROCERASUS 'OTTO LUYKEN'	OTTO LUYKEN CHERRY LAUREL	24-30" HT. & SPREAD	#3 CAN
RM	26	RHODODENDRON MAXIMUM 'ROSEBAY'	ROSEBAY RHODODENDRON	24-30" HT. & SPREAD	#3 CAN
SUBTOTAL:	131				
NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN THE AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN WILL DICTATE.					

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PROJECT No.: S212133
DRAWN BY: AND
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PROJECT:

GENERAL DEVELOPMENT PLAN

FOR

315 ELDEN STREET RESIDENTIAL

LOCATION OF SITE

315 ELDEN STREET
TOWN OF HERNDON
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT

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12825 WORLDGATE DR. SUITE 700
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PROFESSIONAL ENGINEER
03/02/2022

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

L-2

REVISION 2 - 02/25/2022

Mar 02, 2022
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LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:
THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS
A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES.
1.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS.
1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

E. FERTILIZER
1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL
1.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
1.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED.PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
1.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
1.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS
A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
1.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
1.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
1.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING
A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA):
1.1. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL
1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING
A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
1.1. PLANTS: MARCH 15 TO DECEMBER 15
1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULOUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBER STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

I. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
  A) 2 TABLETS PER 1 GALLON PLANT
  B) 3 TABLETS PER 5 GALLON PLANT
  C) 4 TABLETS PER 15 GALLON PLANT
  D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

M. GROUND COVER AREAS SHALL RECEIVE A ½" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)
A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING
A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE
A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

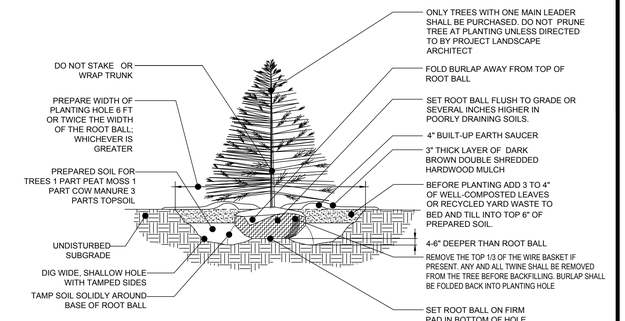
B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

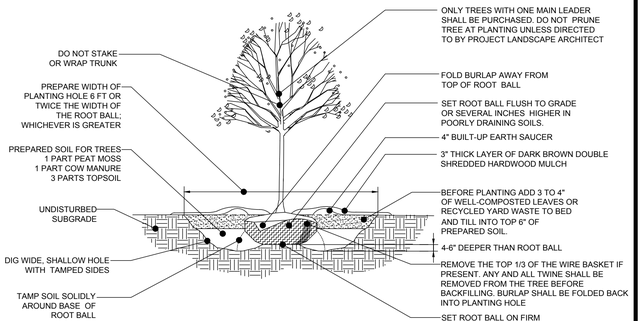
B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

EVERGREEN TREE PLANTING DETAIL

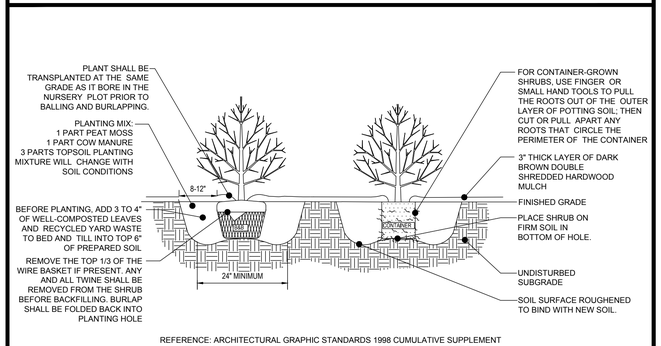
NOT TO SCALE



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

DECIDUOUS TREE PLANTING DETAIL

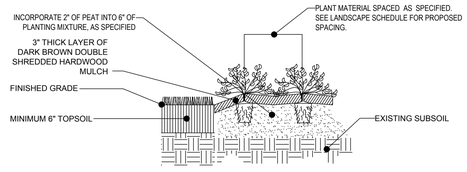
NOT TO SCALE



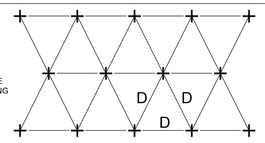
REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE



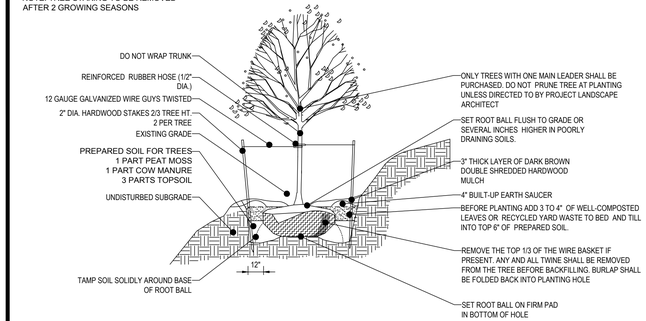
TYPICAL PERENNIAL AND GROUND COVER PLANTING



TYPICAL PERENNIAL AND GROUND COVER SPACING & LAYOUT

PERENNIAL/GROUND COVER PLANTING DETAIL

NOT TO SCALE



TREE PLANTING ON SLOPE DETAIL

NOT TO SCALE

SEEDING SPECIFICATIONS

1. MATERIAL:

1.1. SEED MIXTURE MUST BE COMPRISED OF THE FOLLOWING VARIETIES AND AT THE SPECIFIED COMPOSITION:
1.1.1. 80% - TURF TYPE TALL FESCUE SEED
1.1.2. 10% - KENTUCKY BLUEGRASS SEED
1.1.3. 10% - ANNUAL RYE GRASS SEED
1.2. INSTALLATION RATES:
1.2.1. SEED: LAWN SEED SHOULD BE APPLIED AT A RATE OF 7 LBS/1,000 SF
1.2.2. LIME: AGRICULTURAL OR PELLETIZED LIME SHOULD BE APPLIED AT SPECIFIED RATE ACCORDING TO SOIL ANALYSIS OR 2,000 LBS PER ACRE (46 LBS/1,000 SF) IF NO SOIL ANALYSIS IS PERFORMED.
1.2.3. FERTILIZER: COMMERCIAL GRADE 12-20-12 SHOULD BE APPLIED AT A RATE OF 250 LBS PER PER ACRE (5.8 LBS/ 1,000 SF)
1.2.4. LIQUID OR DRY LIME: LIQUID LIME SHOULD BE APPLIED AT A RATE OF 2.5 GALLONS PER ACRE OR NEUTRA LIME DRY APPLIED AT A RATE OF 80LBS PER ACRE IN AREAS OF ACIDIC SOILS TO ASSURE GERMINATION AND INITIAL ESTABLISHMENT.
1.2.5. MULCH: W

October 01, 2021

VIA HAND DELIVERY AND EMAIL
David Stromberg, Zoning Administrator
Town of Herndon
777 Lynn Street
Herndon, VA 20170

RE: 315 Elden Adaptive Reuse, Modification Request for Minimum Parking Rate Reduction

Dear Mr. Stromberg:

As you know my client, Elden Street Owner, LLC (the "Applicant"), is the owner of the property located at 315 Elden Street (the "Property"). On behalf of the Applicant, I am submitting this request for a modification of Zoning Ordinance Section 78-100.2(a) for the minimum required parking rates for efficiency/studio units, one bedroom units, and two bedroom units. This modification request is submitted as part of a Zoning Map Amendment application. A modification is permitted by Zoning Ordinance Section 78-50.2(e). The Applicant requests a reduction of the parking rate by 31.2% as detailed below.

Analysis:

Today there are 187 surface parking spaces with four (4) of these being accessible spaces. The adaptive reuse from hotel to multifamily residential will reduce the total available parking to 185 spaces with eight (8) of these being accessible. The 185 total spaces would serve up to 174 total multifamily units. This total unit count would consist of approximately:

- +/-30 studios (17.2%)
- +/-98 one bedrooms (56.3%)
- +/-46 two bedrooms (26.4%)
- +/-174 TOTAL (100%)

The Town's minimum parking rate (Z.O. 78-100.2) for each of the unit types is:

- Studio: 1 space/unit
- One bedroom: 1.5 spaces/unit
- Two bedroom: 2 spaces/unit

In order to meet these minimums, the project would have to provide:

- +/-30 studios with 30 spaces
- +/-98 one bedrooms with 147 spaces
- +/-46 two bedrooms with 92 spaces
- 174 TOTAL units with 269 spaces

The Applicant is requesting an overall parking reduction of approximately 31.2% (185 / 269 = 0.6877, 1.0 – 0.6877 = 31.2) for a total of 185 spaces rather than the required 269 spaces. This would result in the overall Project providing +/-1.06 spaces/unit or +/-0.84 spaces/bed.

This modification request meets the standards set forth in Zoning Ordinance Section 78-50.2(e) by demonstrating that the proposed parking supply is sufficient for the anticipated demand, and by demonstrating that the proposed parking supply meets the intent and purpose of the off-street parking and loading standards of Article X, Parking, Loading and Circulation. Below we detail how the request meets the standards.

In 2021, the Applicant completed a parking assessment that evaluated five (5) multi-family properties that covered 1,224 units within the Town of Herndon. In comparison to the subject hotel conversion site that was constructed in 1990, the evaluated sites were predominately constructed in the 1970s with the exception of two (2) sites that were constructed in 1962 and 1995. Based on an analysis of each site's parking supply and bedroom unit mix, four (4) of the five (5) sites provide an effective parking supply ranging between 0.56 to 0.67 spaces per bed. The remaining site provided 0.86 spaces per bed. All of the sites reported a current occupancy that was greater than 95 percent and according to the individual property managers, the sites currently experience a parking utilization between 75 and 90 percent of their respective parking supplies. This survey and analysis of actual parking demand at local residential sites is comparable to the Applicant's proposal and demonstrates that parking demand is generally below the parking supply proposed by the Applicant.

The proposed parking supply of 185 spaces is sufficient to meet the demand. We believe the requested parking supply will be sufficient for a number of reasons including:

- Actual parking demand at local residential sites demonstrates that parking demand is generally below the parking supply proposed by the Applicant.
- Based on the ITE Parking Manual's parking rates for "affordable" housing at the 85th percentile, the demand for parking spaces is 0.82 spaces/bed for "general urban/ suburban settings". We believe this project falls under this category of sample real-world examples that these statistics were derived from.
- The project's overall proposed unit mix consists of about 74% studios and one bedrooms and no three bedrooms. This unit mix results in a smaller demand for parking spaces than a similarly located project with a unit mix that has more 2 or 3-bedroom units.
- Transit (2 bus lines) serves the site 7 days a week, and the site is just over a mile from 2 future Metro stations, offering alternative modes of transport beyond single occupancy vehicles.
- For bicyclists, the project is located less than ¼ mile from the Washington and Old Dominion (W&OD) multiuse trail and is connected to this trail by continuous and well-lit sidewalks as well as the paved Sugarland Run trail. The W&OD trail connects to several nearby employment centers such as Downtown Herndon and Reston Town Center.
- There are a number of retail, service, and employment options within a 10 minute walk along continuous public sidewalks.
- There will be onsite bicycle parking provided which aids in bicycle ownership and convenience for bicycle commuters.
- Parking will be unbundled from the unit rental rates encouraging residents to minimize their car ownership.

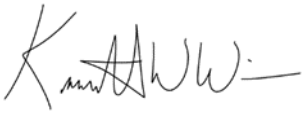
Beyond the above reasons, the proposed parking supply will support several additional policy objectives of the Town including:

- Provision of at least 50% workforce dwelling units to support the Town's affordable housing goals and objectives.
- Retention of mature trees and landscaping in furtherance of the Town's tree retention goals and objectives which reduce impacts on the environment and maintain aesthetic appeal.

In addition, in order to further the affordability goals for households that do not own vehicles, or own fewer vehicles, parking will be unbundled from unit rental rates. Parking fees will be assessed separately and are not limited by the maximum allowable rent. Parking fees for workforce unit occupants will not be greater than the fees assessed to market rate unit occupants. This unbundling of parking may attract tenants who own fewer or no cars and wish to take advantage of this cost saving approach.

For additional information regarding this modification request, please see the Traffic Impact Study/Parking Reduction Scope letter by Wells and Associates dated September 29, 2021. For each of the above reasons, the Applicant respectfully submits this modification request.

Sincerely,



Kenneth W. Wire

Attachment #5

October 01, 2021

VIA HAND DELIVERY AND EMAIL
David Stromberg, Zoning Administrator
Town of Herndon
777 Lynn Street
Herndon, VA 20170

RE: 315 Elden Adaptive Reuse, Modification Request for Minimum 18-Foot Structure Separation

Dear Mr. Stromberg:

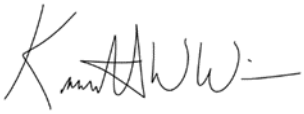
As you know my client, Elden Street Owner, LLC (the "Applicant"), is the owner of the property located at 315 Elden Street (the "Property"). On behalf of the Applicant, I am submitting this request for a modification of Zoning Ordinance Section 78-51.1(e) for the minimum structure separation within a development site within the PD-UR dimensional standards table. This modification request is submitted as part of a Zoning Map Amendment application. A modification is permitted by Zoning Ordinance Section 78-50.2(d).

The Applicant requests a decrease in the permitted 18-foot structure separation within a development site to allow for an approximately 12-foot structure separation. This modification is requested because the structures are existing, and we are seeking to adaptively reuse the structures in order to achieve multiple policy objectives identified within the Town's Comprehensive Plan and Zoning Ordinance including:

- Provision of at least 50% workforce dwelling units to support the Town's affordable housing goals and objectives.
- Provision of a diverse mix of unit types for residents.
- Provision of appropriately placed multifamily residential housing in close proximity to retail, service, and employment uses and supportive transportation infrastructure.
- Maintenance and enhancement of neighborhood appearance with conversion to multifamily residential with updated facades – given that the alternative is a down-branding of a soon-to-be outdated hotel.
- Retention of mature trees and landscaping in furtherance of the Town's tree retention goals and objectives which reduce impacts on the environment and maintain aesthetic appeal.

We believe this modification request meets the standards set forth in Zoning Ordinance Section 78-50.2(d) as described above. For additional information regarding this modification request, please see the General Development Plans submitted with this Zoning Map Amendment submittal, including sheets C-2 and C-3 by Bohler. For each of the above reasons, the Applicant respectfully submits this modification request.

Sincerely,



Kenneth W. Wire

October 01, 2021

VIA HAND DELIVERY AND EMAIL
David Stromberg, Zoning Administrator
Town of Herndon
777 Lynn Street
Herndon, VA 20170

RE: 315 Elden Adaptive Reuse, Modification Request for Minimum 10-Foot Perimeter Buffer Strip

Dear Mr. Stromberg:

As you know my client, Elden Street Owner, LLC (the "Applicant"), is the owner of the property located at 315 Elden Street (the "Property"). On behalf of the Applicant, I am submitting this request for a modification of Zoning Ordinance Section 78-110.4.d and 78-110.4.e.3.b for the minimum perimeter buffer strip requirement from both public Right-of-Way and adjoining property. This modification request is submitted as part of a Zoning Map Amendment application. A modification is permitted by Zoning Ordinance Section 78-50.2(d).

The Applicant requests a decrease in the required 10-foot perimeter buffer strip requirement (from both public right-of-way and from adjacent property) to allow for a 0 to 7.5-foot buffer strip from the subject property's drive aisles and parking areas. Zoning Ordinance Section 78-110.4.d (Perimeter buffer strip requirements adjacent to public rights-of-ways) requires a 10-foot buffer strip. The Applicant requests a 7.5-foot buffer strip along Elden Street, and 0 to 7.5-foot buffer strip along Herndon Parkway, and a 7.5-foot buffer strip along Grove Street. In addition, Zoning Ordinance Section 78-110.4.e.3.b (Perimeter buffer strip requirements not adjacent to public right-of-way) requires a 10-foot buffer strip between the subject property's drive aisles and parking areas and the abutting land zoned CS, CO, and O&LI along the west and south. The Applicant requests at 7.5-foot buffer strip along these properties and a 0-foot buffer strip in the far northwest of the site abutting the CS-zoned land.

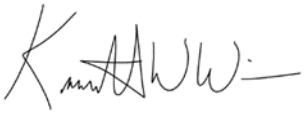
This modification is requested because the structure is existing, and we are seeking to adaptively reuse the structures in order to achieve multiple policy objectives identified within the Town's Comprehensive Plan and Zoning Ordinance including:

- Provision of at least 50% workforce dwelling units to support the Town's affordable housing goals and objectives.
- Provision of a diverse mix of unit types for residents.
- Provision of appropriately placed multifamily residential housing in close proximity to retail, service, and employment uses and supportive transportation infrastructure.

- Maintenance and enhancement of neighborhood appearance with conversion to multifamily residential with updated facades – given that the alternative is a down-branding of a soon-to-be outdated hotel.
- Retention of mature trees and landscaping in furtherance of the Town's tree retention goals and objectives which reduce impacts on the environment and maintain aesthetic appeal.

We believe this modification request meets the standards set forth in Zoning Ordinance Section 78-50.2(d) as described above. For additional information regarding this modification request, please see the General Development Plans submitted with this Zoning Map Amendment submittal, including sheets C-2 and C-3 by Bohler. For each of the above reasons, the Applicant respectfully submits this modification request.

Sincerely,



Kenneth W. Wire

WIRE GILL LLP

Attachment #5

Kenneth W. Wire
kwire@wiregill.com
703-677-3129

January 05, 2022

VIA HAND DELIVERY AND EMAIL
David Stromberg, Zoning Administrator
Town of Herndon
777 Lynn Street
Herndon, VA 20170

RE: 315 Elden Adaptive Reuse, Modification Request for Landscape Standards

Dear Mr. Stromberg:

As you know my client, Elden Street Owner, LLC (the "Applicant"), is the owner of the property located at 315 Elden Street (the "Property"). On behalf of the Applicant, I am submitting this request for a modification of Zoning Ordinance Section 78-110.2. - Planting standards for landscaping, primarily for the existing perimeter buffer strips along public Right-of-Way and adjoining property. The modification request is a companion to the already submitted Modification Request for a decrease in the required 10-foot perimeter buffer strip requirement to allow a 7.5-foot wide buffer. Today's modification request is submitted as part of a Zoning Map Amendment application resubmittal responding to Staff comments dated December 06, 2021. A modification is permitted by Zoning Ordinance Section 78-50.2(d).

The Applicant requests alternatives to the required landscape standards due to an existing site design that includes perimeter buffers strips that are more narrow than today's Ordinance permits. Due to the narrowness of these existing landscape strips, we are unable to accommodate the required landscaping. We are proposing an incremental approach to revegetating the site over time, without the requirement to remove existing parking stalls. For example, required trees typically need 8-feet of space to be health, grow, and thrive, and in many areas we have less than 8 feet of landscape area. We will plant these areas with shrubs. In other areas where we have room, particularly along Herndon Parkway, we plant trees. We will also replace dead trees. Overall, we are providing 24 new trees and 200 new shrubs as shown on the GDP's Landscape Plan.

This modification is requested because the structure is existing, and we are seeking to adaptively reuse the structures in order to achieve multiple policy objectives identified within the Town's Comprehensive Plan and Zoning Ordinance including:

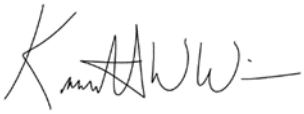
- Provision of at least 50% workforce dwelling units to support the Town's affordable housing goals and objectives.
- Provision of a diverse mix of unit types for residents.
- Provision of appropriately placed multifamily residential housing in close proximity to retail, service, and employment uses and supportive transportation infrastructure.

Attachment #5

- Maintenance and enhancement of neighborhood appearance with conversion to multifamily residential with updated facades – given that the alternative is a down-branding of a soon-to-be outdated hotel.
- Retention of mature trees and landscaping in furtherance of the Town's tree retention goals and objectives which reduce impacts on the environment and maintain aesthetic appeal.

We believe this modification request meets the standards set forth in Zoning Ordinance Section 78-50.2(d) as described above. For additional information regarding this modification request, please see the General Development Plans submitted with this Zoning Map Amendment submittal, including sheets L-1 and L-2 by Bohler. For each of the above reasons, the Applicant respectfully submits this modification request.

Sincerely,



Kenneth W. Wire

TOWN OF Herndon VIRGINIA

MEMORANDUM

To: Chair Michael Romeo, Planning Commission

From: Chair Leslie Blaker-Glass, Architectural Review Board

Date: February 10, 2022

Subject: ARB Review of ZMA#21-01, 315 Elden Street, Herndon Virginia

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This memo serves as a report of the ARB's preliminary review of the architectural changes included in Zoning Map Amendment case #21-01, which proposes a hotel to multi-family housing conversion project at 315 Elden Street. This review occurred at the ARB work session on February 2nd, 2022.

As this was a pre-application discussion item, the review was preliminary and not comprehensive. The applicant specified three changes to the property which were discussed by the board:

1) Exterior dark gray paint applied to the brown, currently unpainted brick facades
2) The addition of a secured bicycle shelter to be placed within the current parking lot area
3) Construction of a refuse and recycling enclosure

Prior to the review, the applicant provided renderings of the paint changes, catalog sheets showing the bicycle shelter, and a plan showing the location and size of the refuse enclosure.

Board Discussion:

After presentations by Town staff and the project representatives, the board discussed the project and provided feedback. While acknowledging the housing needs this project helps to address in the town, the Board expressed an overall support for the architectural updates proposed. Given the limited scope of the changes proposed, the discussion was short however the following items were discussed as considerations for the applicant when preparing the formal review by the ARB following ZMA and site plan approval.

- Color Appropriateness. The proposed dark grey colors serve as a strong contrast to the warmer color palette of the existing buildings and should be explored further for suitability against the colors and materials to remain especially the existing roof shingles. The Formal ARB review would need to include more renderings showing the change in color's impact across the site.

- Bicycle Shelter. The board expressed encouragement about the design of the bicycle enclosure as presented.
- Refuse Enclosure. The board questioned whether more than one additional enclosure would be sufficient and expressed the need to include all proposed enclosures in the formal ARB review. The enclosures should be designed to coordinate and complement the architecture and materials of the principal building on the site.
- Accessibility. The Board inquired whether any changes to the exterior of the buildings would be necessary to improve accessibility to units and explained that such changes should also be included in the formal ARB review.

Overall, the Board is positive about this project and looks forward to reviewing a formal application in the coming months. The board found no major issues and is pleased with the type of improvements being proposed.

DERO
A PLAYCORE Company





Cycle Station

The Dero Cycle Station provides high-capacity, covered bike parking for bicycle commuters. With a high roof and open platform, the Dero Cycle Station allows bike corrals, vertical, or two-tiered bike racks configured to meet your specific needs. Optional side and back panels are available for additional protection.

©2021

Cycle Station







FINISH OPTIONS

Galvanized



Powder Coat

White	Black	Deep Red RAL 3003	Yellow RAL 1023
CNH Bright Yellow	Orange RAL 2004	Beige RAL 1001	Hunter Green RAL 6005
Light Green RAL 6018	Green RAL 6016	Sky Blue RAL 5015	Blue RAL 5005
Dark Purple	Flat Black	Wine Red RAL 3005	Iron Gray RAL 7011
Light Gray RAL 7042	Silver RAL 9007	Sepia Brown RAL 8014	Bronze

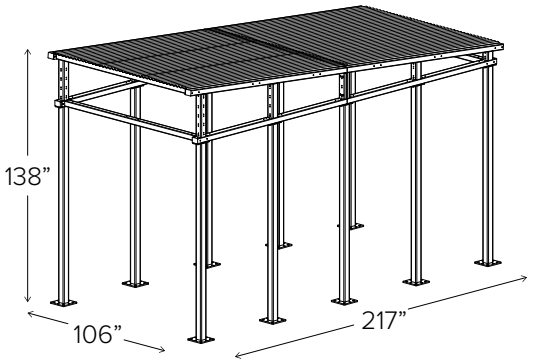
SOLAR POWERED LIGHTING AVAILABLE



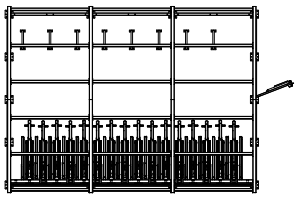
©2021

DERO A PLAYCORE Company | **Cycle Station**

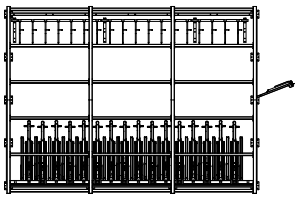
Attachment #7
Submittal Sheet



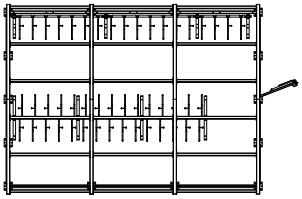
Sample capacities for a 3 unit shelter



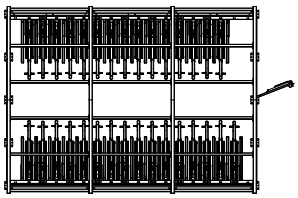
Hoop Racks and
Dero Deckers
48 Bikes



Ultra Space Saver Squared
and Dero Deckers
51 Bikes



Ultra Space Savers
48 Bikes



Dero Deckers
64 Bikes

Dero Shelters can be used in a modular fashion (shared uprights) however, when used in this manner, please consult a Dero Bike Rack sales associate for layout, as the rack spacing and bike capacity can change!

CAPACITY See diagrams below and to the left

MATERIALS
Uprights: 4” x 3/16” square tube.
Feet: 1/2” plate
Roof Truss: 4”x 3” x 3/16” square tube
Roof Purlins: 3” x 1/8” square tube
Roof Panels: 24g Type S deck galvanized steel
Panels: 1/4” clear polycarbonate with 1.77” square aluminum framing
Panels: 2” x 3/16” steel wire mesh with 2” steel framing

FINISHES

☐ **Galvanized**
An after fabrication hot dipped galvanized finish is our standard option.

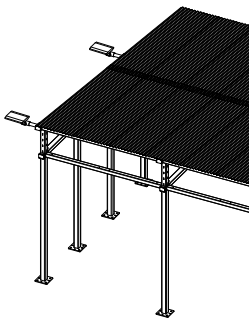
☐ **Powder Coat**
Our powder coat finish assures a high level of adhesion and durability by following these steps:
1. Sandblast
2. Epoxy primer electrostatically applied
3. Final thick TGIC polyester powder coat

MOUNT OPTIONS
Surface Only
It is the responsibility of the installer to ensure that all base materials into which the shelter will be installed can support the rack and will not be damaged by any required installation procedures. See structural drawings for details.

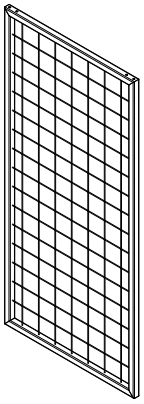
SETBACKS Consult local building codes for acceptable setbacks and placement.

LOAD DATA
Dead Load: self weight of structure
Live Load: 40 psf
Wind Load: 90 mph exposure B
Seismic Load: moderate to high
Footing: see page 4
Anchors: 5/8” x 41/2” embed Simpson Strong-Bolt 2 wedge anchors

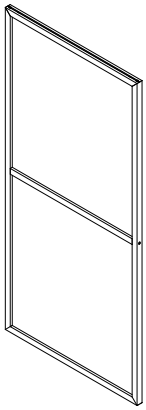
LIGHTING ☐ Solar powered lights are available for an additional charge



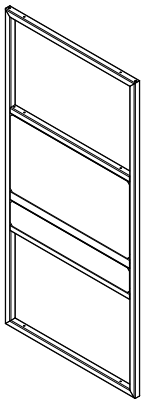
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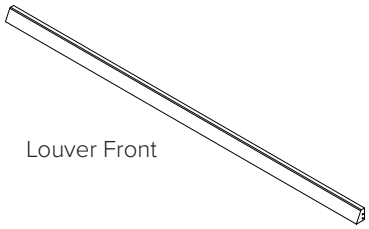
Wire Mesh Panel



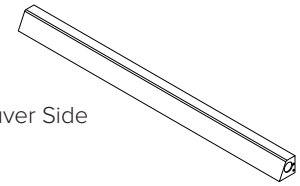
Polycarbonate Panel



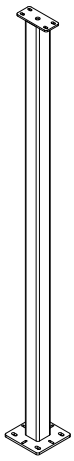
Door



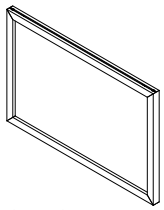
Louver Front



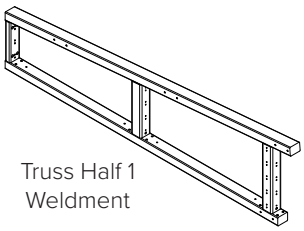
Louver Side



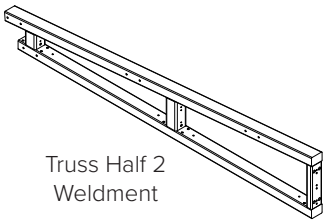
Upright Weldment



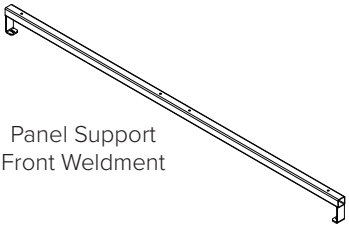
Door Polycarbonate Panel



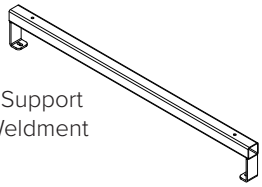
Truss Half 1 Weldment



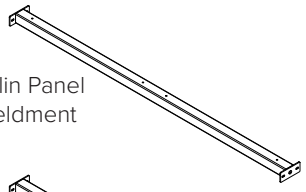
Truss Half 2 Weldment



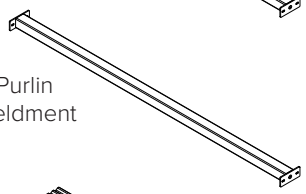
Panel Support Front Weldment



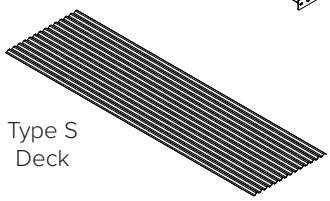
Panel Support Side Weldment



Purlin Panel Weldment



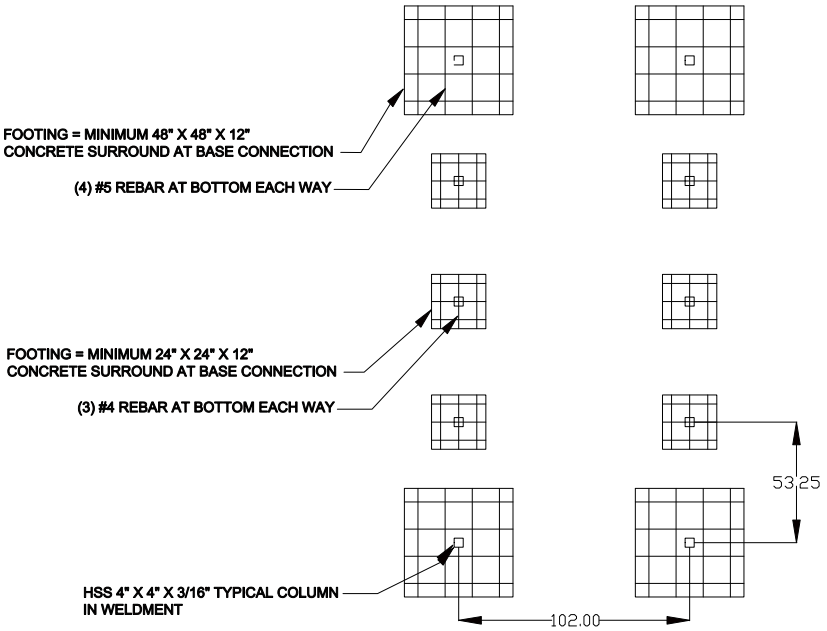
Purlin Weldment

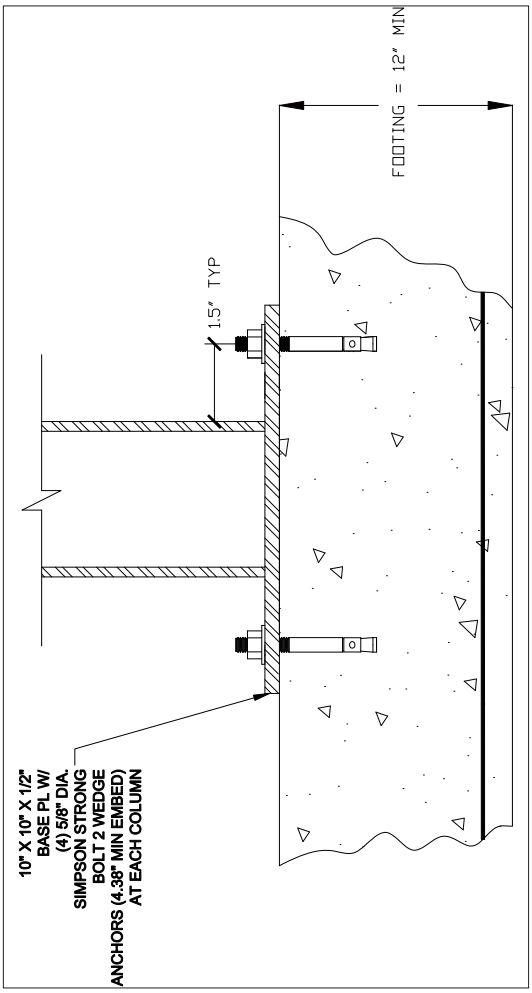


Type S Deck

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(1) STARTER SHELTER

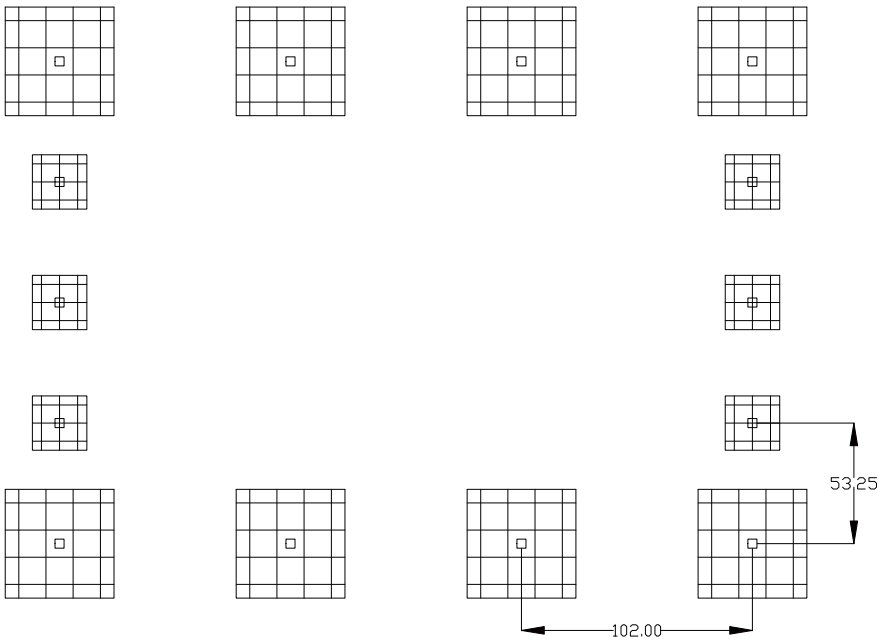




EXAMPLE

(1) STARTER SHELTER

(2) ADD-ON SHELTERS



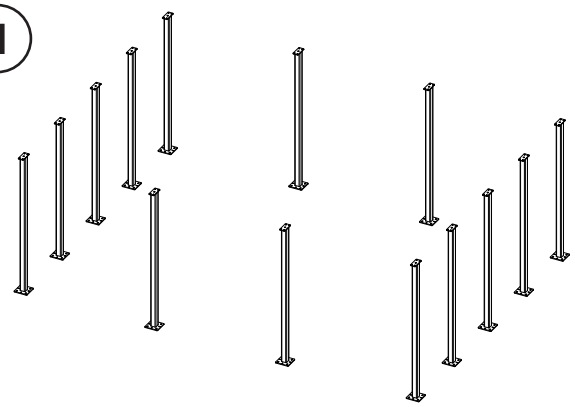
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TOOLS NEEDED

Hammer Drill
Masonry Bits: 3/8”, 5/8”
Large Hammer
Level
Chalk Line
Tape Measure
Tall Ladder
Material Lift or Forklift

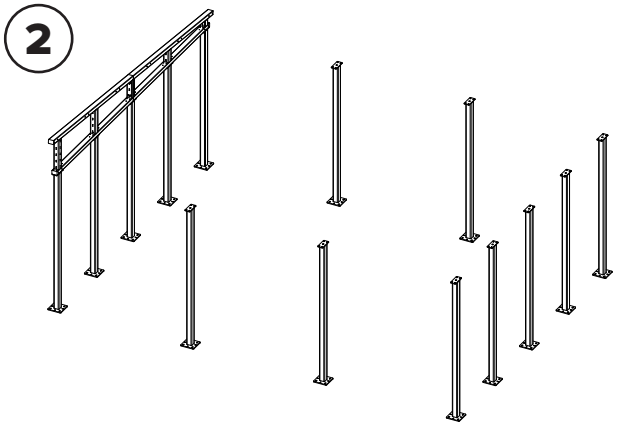
Wrenches: 7/16”, 1/2”, 9/16”, 3/4”, 15/16”, 1 1/8”, 13mm
Socket Wrench with Sockets: 7/16”, 1/2”, 9/16”, 3/4”, 15/16”, 1 1/8”
Spud Wrench
Drill
Drill Bit 7/32”
Drive Socket 5/16”
Driver Torx T30

1



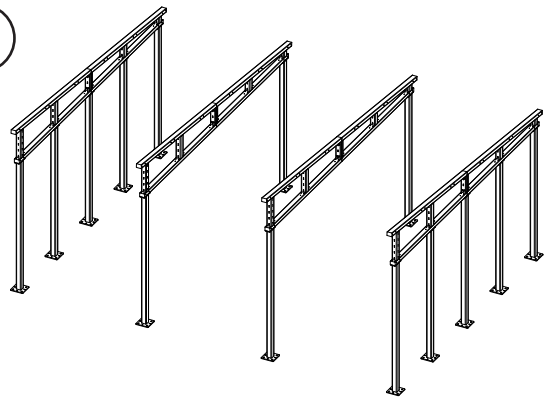
Place uprights on concrete pad over footings (see footing drawing). Confirm all uprights are properly spaced and square. Using the upright foot as a template, drill (4) 5/8” diameter x 6” holes at each upright. Install wedge anchors with nuts finger-tight. See shelter assembly drawing for specific upright placement locations.

2



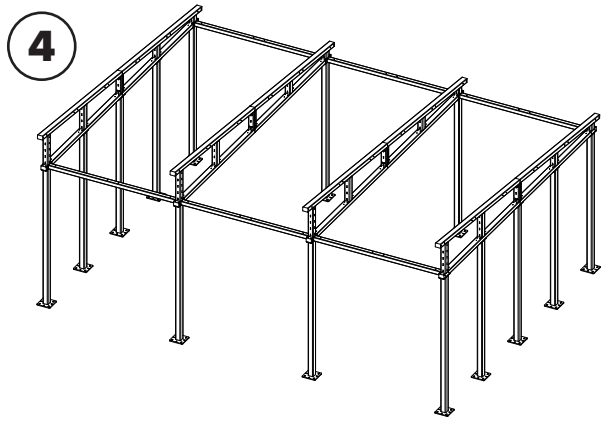
Lift both truss halves into place and fasten to uprights with (4) ½” x 4.5” bolts, (4) lock washers, and (4) nuts at each upright. Leave finger-tight. Fasten truss halves to each other with (4) ¾” x 5.5” bolts, (8) lock washers, and (4) nuts each. Fully tighten.

3



Install the remaining trusses. For middle trusses, fasten truss halves to each other before lifting.

4

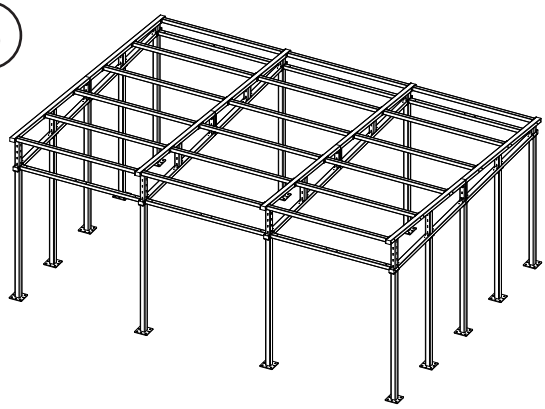


For shelters with side panels, install the purlins for panels (these are the same as the other purlins but with (4) holes through the tube) with (4) 3/8” x 5.5” bolts, (4) washers, (4) lock washers, and (4) nuts each. Leave finger-tight.

For shelters without side panels, these purlins are the same as all other purlins.

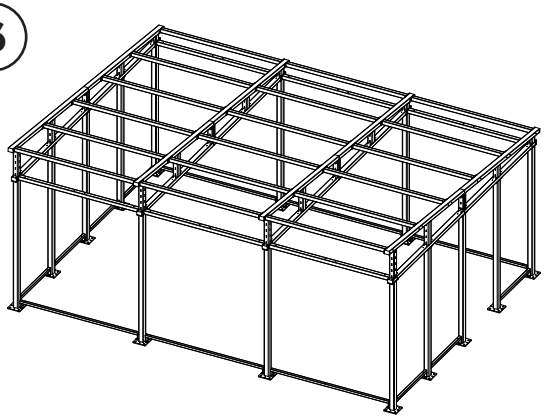
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5



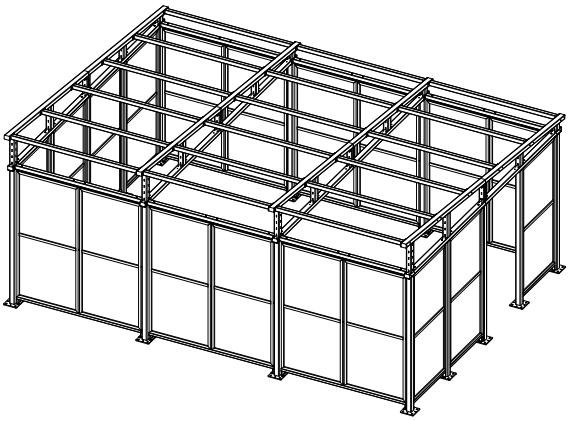
Install the purlins with (4) 3/8” x 5.5” bolts, (4) washers, (4) lock washers, and (4) nuts each. Fully tighten all purlins.

6



For shelters with side panels, install the front and side panel supports between every upright, except where the door will be installed. Align slots in the panel support with the slots in the upright, drill 3/8” diameter holes, and fasten with 3/8” wedge anchors with nuts finger-tight.

7



For polycarbonate panels, install the panels with (4) 8mm bolts and (4) lock washers. (2) 130mm bolts on top and (2) 65mm bolts on the bottom. The bolts will be received by square nuts that slide into the panel grooves. The gap on top of the panel will be filled with (2) 1.25” aluminum spacers and several washers if needed. The uprights and panel supports may be slightly moved in order to get the panels as square as possible.

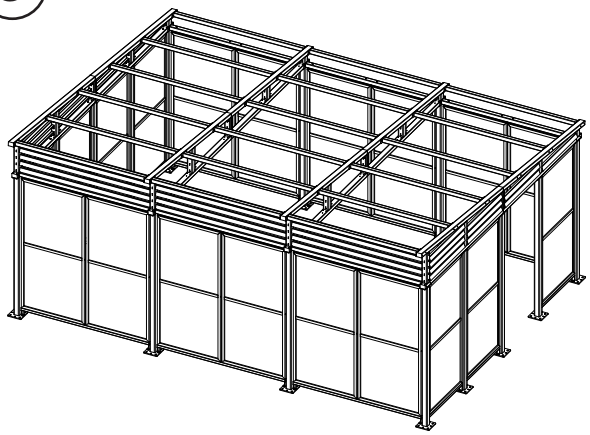
For wire mesh panels, install the panels with (4) 5/16” bolts and (4) lock washers. (2) 5.5” bolts on top and (2) 3” bolts on the bottom. The bolts will be received by rivet nuts in the panels. The gap on top of the panel will be filled with (2) 1.25” aluminum spacers and several washers if needed.

8

Once all the panels are properly placed, tighten all the upright anchors and bolts attaching the trusses.

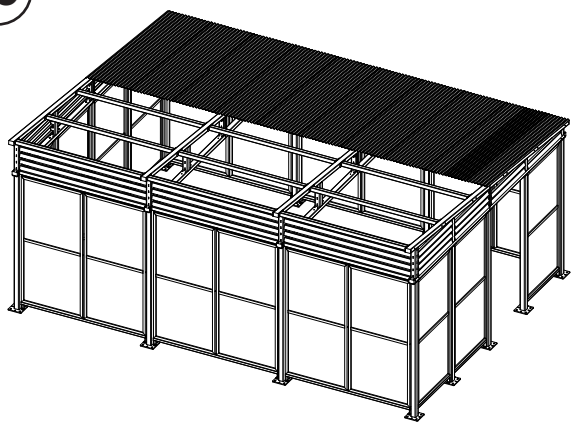
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9



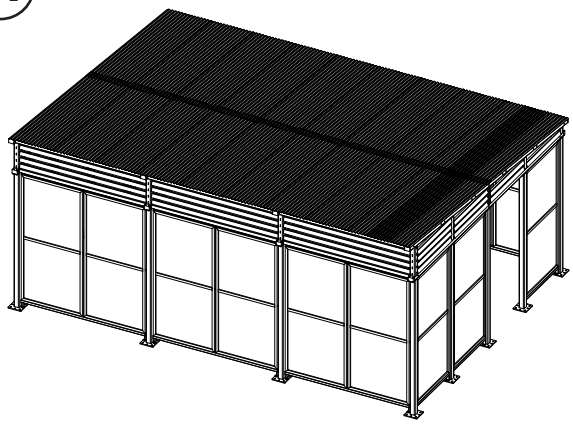
Install front and side louvers with (4) ¼” x 5” bolts, (4) washers, (4) lock washers, and (4) nuts. Tighten all.

10



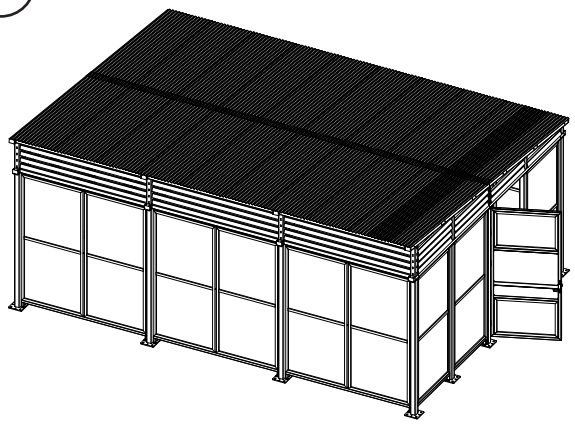
Place the first row of type S decks and fasten with (6) self-drilling screws each to the purlins and trusses. Each deck will provide 30” of coverage; the last deck will overlap more.

11



Place the second row of type S decks and fasten with (6) self-drilling screws each.

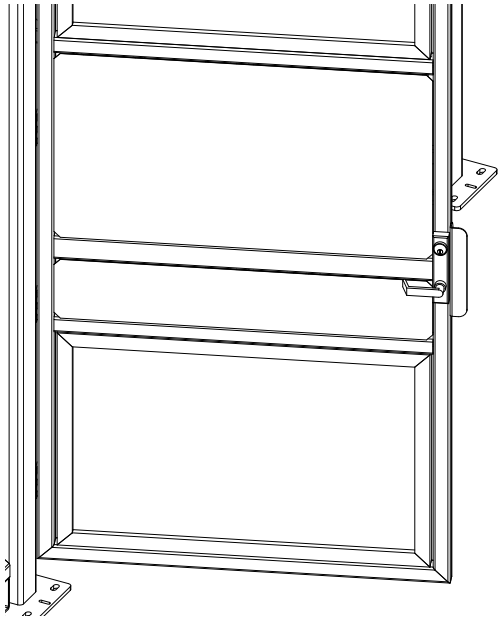
12



Attach door with (4) hinges and (8) ¼” x 1” thread-cutting screws each. A 7/32” pilot hole will need to be drilled for each thread-cutting screw. Lubricate each thread-cutting screw before installing. The door bottom should be 4.5” off the ground and the door front should be flush with the uprights. See individual product instructions to install door trim, crash bar, door closer.

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13



Install strike guard with (4) self-drilling screws. Door should close just enough to allow the latch to engage the strike.

14

See shelter assembly drawing for specific bike rack placement locations.

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WELLS + ASSOCIATES

MEMORANDUM

11220 Assett Loop
Suite 202,
Manassas, VA 20109
703-365-9262
WellsandAssociates.com

TO: David Stromberg, AICP
Town of Herndon, Virginia

FROM: Kevin R. Fellin, P.E.

SUBJECT: Traffic Impact Study: The Use of 2021 Traffic Counts

RE: 315 Elden Street Adaptive Reuse
ZMA #21-01

DATE: March 1, 2022

The purpose of this memorandum is to provide additional information concerning the existing traffic counts that were utilized in the Traffic Impact Study (TIS) for the 315 Elden Street Adaptive Reuse application [Zoning Map Amendment Application (ZMA) #21-01].

Site Location

The property is located at the southwest quadrant of the Elden Street/Herndon Parkway intersection at 315 Elden Street. The 6.48-acre property is also identified as Parcel # 017-1 ((02)) 0007 and is currently occupied by the Residence Inn Marriott that operates as an extended stay hotel.

Background

A TIS dated October 26, 2021 was submitted to Town staff that evaluated the traffic impacts associated with the proposed adaptive reuse of an existing Residence Inn Marriott hotel (±168 rooms) to a new residential community with up to 174 multi-family residential dwelling units (DUs). A scoping meeting was held with Town staff on October 6, 2021 to discuss the parameters of the traffic impact study (e.g. traffic counts, study intersections, build out year, and other general assumptions). At the scoping meeting it was agreed the TIS would utilize existing traffic counts that were collected in September 2021 while providing a section in the TIS that discussed the traffic counts were collected during the on-going, worldwide COVID-19 pandemic. The TIS would also compare the existing traffic counts to any available nearby traffic counts that were collected pre-pandemic.

WELLS + ASSOCIATES

MEMORANDUM

Traffic Counts

Overview. Throughout the region, collecting new traffic counts for traffic impact studies or related studies during the COVID-19 has been considered on a case-by-case. Emphasis to consideration has been given for those jurisdictions where public schools have fully returned to in-person learning. Ideally, traffic studies would still use historical traffic counts that were collected pre-pandemic.

Fairfax County's Protocal. On December 21, 2021, the Fairfax County Department of Transportation (FCDOT) released an executive summary that permits the universal collection of new traffic counts to proceed on January 4, 2022 for Non-Chapter 870 traffic impact studies where previous consideration was limited to a case-by-case consideration. FCDOT's executive summary applies to all traffic studies in Fairfax County with the exception of traffic studies submitted in accordance with Chapter 870 requirements where a Chapter 870 required traffic study is required for projects that add more than 5,000 vehicles per day to the adjacent road network. The subject Adaptive Reuse application was estimated to add only ±520 daily trips (24 AM peak hour trips/35 PM peak hour trips) to the adjacent road network.

FCDOT noted the following:

> "Retail and other uses that were previously closed or operating at a limited capacity, are now fully operational with a few exceptions. Schools have been in session since the beginning of Fall 2021 and many commuters have returned to the office on at least a Part-time basis. FCDOT acknowledges that the traffic volumes today may still be lower than pre-pandemic; however, volumes have normalized to a point where reasonable baselines can be established."

315 Elden Street Adaptive Reuse – Traffic Counts. The traffic counts collected for the 315 Edlen Street Adaptive Reuse project were collected on Thursday, September 16th and Tuesday, September 21st of last year (2021). The consideration to collect traffic counts was in part due to the lack of historical traffic counts at the site's driveways and adjacent intersections. In keeping with typical requirements to conduct traffic counts, the data was collected on typical weekday (Tuesday, Wednesday, or Thursday) when local public schools had returned to in-person learning.

In the traffic study, the September 2021 traffic counts that were collected at the Elden Street/Herndon Parkway study intersection were compared to a traffic count that was collected in year 2017 at the Elden Street/Carlisle Drive intersection located approximately 900 feet to the east on Elden Street. The comparison concluded that the impacts of COVID-19 resulted in a reduction of through traffic along Elden Street ranging from 36% to 42% during the weekday AM peak hour and 20% to 31% during the weekday PM peak hour.

WELLS + ASSOCIATES

MEMORANDUM

Traffic Impact Study

The purpose of the submitted traffic impact study is to provide a comparative analysis of two (2) relatively similar uses: existing extended stay hotel versus proposed multifamily residential. As noted previously, the change in use will relatively result in a minor increase in traffic. As noted in traffic impact study, the proposed change in use would not have an appreciable impact on the study intersections. The traffic study did apply a regional growth factor to the existing traffic counts at a rate of one percent compounded per year from 2021 to 2026 to account for any other approved, unbuilt projects in the area.

Based on the Town's review of the traffic impact study, the Town commented on the extent traffic had reduced as a result of COVID-19.

Updated Traffic Analyses

To best address comments associated with traffic counts collected during COVID-19, the baseline traffic counts from the traffic impact study were adjusted by increasing the existing traffic counts by approximately 30% to account for the overall average peak hour increase in traffic as noted in the traffic impact study. In review of the results, the minor increase in new site generated trips as a result of the proposed adaptive reuse continues to be minimal and all of the key study intersections would continue to operate at acceptable levels of service. The reported intersection level of service from the submitted traffic impact study is included as Attachment I. The reported intersection level of service that incorporates a 30% adjusted increase to the existing traffic counts is included as Attachment II.

Summary

Based on relatively minor change in trips resulting from the proposed adaptive reuse from an existing hotel to residential, the comparative traffic analysis concluded the proposal would not have an appreciable impact on the road network whether using the existing traffic counts collected in 2021 or an adjusted version that increased traffic to pre-pandemic conditions.

I hope the information provided herein addresses any remaining questions and/or comments.

Table 3-2
315 Elden Street Adaptive Reuse
Level of Service Summary

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2021 AM	Existing 2021 PM	Background 2026 AM	Background 2026 PM	Total Future 2026 AM	Total Future 2026 PM
1 Elden Street/**Site Entance**	STOP	Elden Street	EBTR	A [0.0]	A [0.0]	*NA*	*NA*	*NA*	*NA*
		Elden Street	WBT	A [0.0]	A [0.0]	*NA*	*NA*	*NA*	*NA*
		Site Entance	NBLR	B [10.7]	B [12.4]	*NA*	*NA*	*NA*	*NA*
VDOT Widening	*STOP*	*Elden Street*	*EBTR*	*NA*	*NA*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*A [0.0]*
Right-in/out only from site entance		*Elden Street*	*WBT*	*NA*	*NA*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*A [0.0]*
		Site Entance	*NBR*	*NA*	*NA*	*B [10.1]*	*B [11.2]*	*B [10.2]*	*B [11.3]*
2 Elden Street/**Herndon Parkway**	Signal	Elden Street	EBL	D (42.4)	C (31.4)	NA	NA	NA	NA
			EBTR	E (57.3)	D (46.8)	NA	NA	NA	NA
			WBL	D (38.1)	C (31.0)	NA	NA	NA	NA
		Elden Street	WBT	D (44.4)	D (39.2)	NA	NA	NA	NA
			WBR	D (40.4)	C (32.5)	NA	NA	NA	NA
			NBL	B (18.0)	C (26.2)	NA	NA	NA	NA
		Herndon Parkway	NBT	C (20.4)	C (29.3)	NA	NA	NA	NA
			NBR	B (17.7)	E (64.2)	NA	NA	NA	NA
			SBL	B (14.1)	B (16.4)	NA	NA	NA	NA
		Herndon Parkway	SBTR	B (18.4)	C (20.9)	NA	NA	NA	NA
			Overall	**D (36.5)**	**D (37.8)**	**NA**	**NA**	**NA**	**NA**
VDOT Widening	*Signal*	*Elden Street*	*EBL*	*NA*	*NA*	*D (41.6)*	*C (30.9)*	*D (41.2)*	*C (30.7)*
Reconfigure existing dual WBR to single, continuous lane			*EBTR*	*NA*	*NA*	*E (57.5)*	*D (47.0)*	*E (57.3)*	*D (47.0)*
Add EB receiving lane on Elden Street			*WBL*	*NA*	*NA*	*D (39.0)*	*C (32.1)*	*D (38.6)*	*C (34.2)*
Increase storage length at EBL		*Elden Street*	*WBT*	*NA*	*NA*	*D (43.1)*	*D (38.8)*	*D (43.0)*	*D (38.3)*
Decrase storage length at WBL, NBL, NBR, and SBL			*WBR*	*NA*	*NA*	*D (39.4)*	*C (32.3)*	*D (39.3)*	*C (32.0)*
			NBL	*NA*	*NA*	*B (19.1)*	*C (27.1)*	*B (19.3)*	*C (27.4)*
		Herndon Parkway	*NBT*	*NA*	*NA*	*C (21.8)*	*C (30.3)*	*C (22.0)*	*C (30.6)*
			NBR	*NA*	*NA*	*B (19.1)*	*E (66.8)*	*B (19.3)*	*E (67.5)*
			SBL	*NA*	*NA*	*B (15.3)*	*B (17.1)*	*B (15.5)*	*B (17.3)*
		Herndon Parkway	*SBTR*	*NA*	*NA*	*B (19.7)*	*C (21.9)*	*B (19.9)*	*C (22.1)*
			Overall	***NA***	***NA***	***D (36.8)***	***D (38.1)***	***D (36.9)***	***D (38.1)***
3 **Herndon Parkway**/Site Entance	STOP	Site Entance	EBR	A [9.1]	A [9.1]	A [9.1]	A [9.2]	A [9.2]	A [9.2]
		Herndon Parkway	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Herndon Parkway	SBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
4 **Herndon Parkway**/Grove Street	Signal	Grove Street	EBL	E (64.6)	D (50.6)	E (62.8)	D (50.7)	E (62.8)	D (50.7)
			EBR	D (53.5)	D (43.0)	D (51.6)	D (42.7)	D (51.6)	D (42.6)
			NBL	A (2.0)	A (3.4)	A (2.4)	A (3.3)	A (2.4)	A (3.4)
		Herndon Parkway	NBT	A (1.4)	A (3.6)	A (1.7)	A (3.5)	A (1.7)	A (3.5)
		Herndon Parkway	SBTR	A (5.5)	A (6.9)	A (6.0)	A (6.8)	A (6.1)	A (6.8)
			Overall	**A (7.6)**	**B (17.9)**	**A (7.7)**	**B (17.8)**	**A (7.7)**	**B (17.6)**
5 Grove Street/ **Site Entance**	STOP	Grove Street	EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Grove Street	WBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Site Entance	SBR	A [9.3]	A [8.6]	A [9.4]	A [8.7]	A [9.5]	A [8.7]

Notes (1) Numbers in parentheses ( ) represent delay at signalized intersections in seconds per vehicle.
(2) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(3) Roadway names in bold are considered north/south for purposes of this analysis

WELLS + ASSOCIATES
ATTACHMENT #2

Table 3-2 - Adjusted
315 Elden Street Adaptive Reuse
Level of Service Summary

Intersection	Operating Condition	Street Name	Approach/ Movement	Adjusted Background 2026 AM	Adjusted Background 2026 PM	Adjusted Total Future 2026 AM	Adjusted Total Future 2026 PM	Difference (Total Future - Background) AM	Difference (Total Future - Background) PM
1 Elden Street/**Site Entance**	STOP	Elden Street	EBTR	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
		Elden Street	WBT	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
		Site Entance	NBLR	*NA*	*NA*	*NA*	*NA*	*NA*	*NA*
VDOT Widening	*STOP*	*Elden Street*	*EBTR*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*0*	*0*
Right-in/out only from site entance		*Elden Street*	*WBT*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*0*	*0*
		Site Entance	*NBR*	*B [10.6]*	*B [12.1]*	*B [10.7]*	*B [12.2]*	*0.1*	*0.1*
2 Elden Street/**Herndon Parkway**	Signal	Elden Street	EBL	NA	NA	NA	NA	NA	NA
			EBTR	NA	NA	NA	NA	NA	NA
			WBL	NA	NA	NA	NA	NA	NA
		Elden Street	WBT	NA	NA	NA	NA	NA	NA
			WBR	NA	NA	NA	NA	NA	NA
			NBL	NA	NA	NA	NA	NA	NA
		Herndon Parkway	NBT	NA	NA	NA	NA	NA	NA
			NBR	NA	NA	NA	NA	NA	NA
		Herndon Parkway	SBL	NA	NA	NA	NA	NA	NA
			SBTR	NA	NA	NA	NA	NA	NA
			Overall	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
VDOT Widening	*Signal*	*Elden Street*	*EBL*	*D (38.5)*	*C (28.8)*	*D (38.2)*	*C (28.7)*	*-0.3*	*-0.1*
Reconfigure existing dual WBR to single, continuous lane			*EBTR*	*E (58.0)*	*D (51.7)*	*E (58.0)*	*D (52.0)*	*0*	*0.3*
Add EB receiving lane on Elden Street			*WBL*	*D (44.0)*	*D (41.5)*	*D (44.7)*	*D (46.8)*	*0.7*	*5.3*
Increase storage length at EBL		*Elden Street*	*WBT*	*D (39.9)*	*D (39.5)*	*D (39.9)*	*D (39.2)*	*0*	*-0.3*
Decrase storage length at WBL, NBL, NBR, and SBL			*WBR*	*D (35.8)*	*C (30.8)*	*D (35.7)*	*C (30.6)*	*-0.1*	*-0.2*
			NBL	*C (22.6)*	*C (29.6)*	*C (22.7)*	*C (29.7)*	*0.1*	*0.1*
		Herndon Parkway	*NBT*	*C (25.8)*	*C (34.5)*	*C (25.9)*	*C (34.7)*	*0.1*	*0.2*
			NBR	*C (22.6)*	*F (83.1)*	*C (22.7)*	*F (83.5)*	*0.1*	*0.4*
		Herndon Parkway	*SBL*	*B (19.2)*	*C (20.7)*	*B (19.3)*	*C (20.9)*	*0.1*	*0.2*
			SBTR	*C (23.8)*	*C (25.8)*	*C (23.9)*	*C (26.0)*	*0.1*	*0.2*
			Overall	***D (37.9)***	***D (41.9)***	***D (38.1)***	***D (42.2)***	***0.2***	***0.3***
3 **Herndon Parkway/**Site Entance	STOP	Site Entance	EBR	A [9.2]	A [9.4]	A [9.3]	A [9.5]	0.1	0.1
		Herndon Parkway	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	0	0
		Herndon Parkway	SBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	0	0
4 **Herndon Parkway**/Grove Street	Signal	Grove Street	EBL	E (63.1)	D (50.7)	E (63.1)	D (50.7)	0	0
			EBR	D (50.4)	D (44.0)	D (50.4)	D (43.9)	0	-0.1
			NBL	A (2.7)	A (3.8)	A (2.8)	A (3.9)	0.1	0.1
		Herndon Parkway	NBT	A (1.7)	A (3.9)	A (1.7)	A (3.9)	0	0
		Herndon Parkway	SBTR	A (6.1)	A (8.7)	A (6.2)	A (8.7)	0.1	0
			Overall	**A (7.8)**	**B (18.8)**	**A (7.8)**	**B (18.7)**	**0**	**-0.1**
5 Grove Street/ **Site Entance**	STOP	Grove Street	EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	0	0
		Grove Street	WBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	0	0
		Site Entance	SBR	A [9.8]	A [8.7]	A [9.8]	A [8.7]	0	0

Notes: (1) Numbers in parentheses ( ) represent delay at signalized intersections in seconds per vehicle.
(2) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(3) Roadway names in bold are considered north/south for purposes of this analysis

ATTACHMENT II

WELLS + ASSOCIATES

315 ELDEN ADAPTIVE REUSE
TRAFFIC IMPACT STUDY
TOWN OF HERNDON, VIRGINIA

1ST Submission

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315 ELDEN STREET ADAPTIVE REUSE
TRAFFIC IMPACT STUDY
TOWN OF HERNDON, VIRGINIA

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315 ELDEN STREET ADAPTIVE REUSE
TRAFFIC IMPACT STUDY
TOWN OF HERNDON, VIRGINIA

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315 ELDEN STREET ADAPTIVE REUSE
TRAFFIC IMPACT STUDY
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TRAFFIC IMPACT STUDY
TOWN OF HERNDON, VIRGINIA

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B	Levels of Service Descriptions
C	Traffic Signal Timing Sheets
D	Traffic Count Data
E	Existing Synchro Worksheets
F	Background Future without Development (2026) Synchro Worksheets
G	Total Future with Development (2026) Synchro Worksheets

Section 1
INTRODUCTION

STUDY SCOPE

PURPOSE

This report presents the results a traffic impact study (TIS) for the proposed adaptive reuse of an existing Residence Inn Marriott hotel to provide a new residential community with up to 174 multi-family residential dwelling units (DUs) ("the Project").

In the Commonwealth of Virginia, all land development proposals which meet certain specific trip generation thresholds, are subject to the regulations outlined in VDOT's *Traffic Impact Analysis Regulations Administrative Guidelines* dated December 2018 (the "Administrative Guidelines" or "Guidelines"). According to the Guidelines, a development proposal is generally considered to substantially impact the transportation network if it generates 5,000 or more daily vehicle trips. Based on a review of the Applicant's proposed development plan, a Chapter 870 compliant TIA was **not** required.

However, a TIS is required by the Town of Herndon in order to assess the impacts, if any, associated with the conversion from an existing hotel to the proposed new residential development. The purpose of this report is then to address the results of such an analysis. To that end, representatives of the development team met with Town of Herndon staff to identify the study scope and agree on certain specific study parameters. A copy of the scoping letter is included in Appendix A.

STUDY OBJECTIVES

The primary objectives of the TIS are to:

- Evaluate existing weekday AM and weekday PM peak hour traffic conditions for year 2021.
- Provide an analysis of peak hour traffic conditions without and with the new Project for year 2026.
- Identify development-related traffic impacts (if any), and
- Recommend improvements to mitigate potential adverse effects which might be caused by the Project.

Utilizing a four-step process consisting of trip generation, trip distribution, trip adjustments and traffic assignments, future conditions were forecasted and intersections were evaluated in terms of levels of service and queuing both with and without the Project for year of 2026. Appropriate mitigation measures would then be identified and evaluated to remediate impacted levels of service, where applicable and appropriate.

Sources of data for this analysis included traffic counts conducted by Wells + Associates; VDOT; the Institute of Transportation Engineers (ITE); Town of Herndon; VDOT; Elden Street Owner, LLC; Bohler; Wire Gill LLP; the Highway Capacity Manual 2000; Synchro version 10.3; and the files and libraries of Wells + Associates.

Tasks undertaken in this study included the following:

1. Reviewed the Applicant's proposed plans and other background data.

2. Conducted a field reconnaissance of existing roadway and intersection geometries, and traffic controls.

3. Participated in meetings/correspondence with Town of Herndon staff, and the project team to establish the general study scope and specific analysis parameters.

4. Conducted existing traffic counts at the study intersections during the weekday AM and weekday PM peak periods in year 2021.

5. Analyzed existing 2021 levels of service and vehicle queues at each of the key study intersections during typical weekday peak hours.

6. Reassigned existing traffic associated with traffic pattern changes as a result of the planned Elden Street widening project.

7. Estimated the number of weekday peak hour trips that would be generated by the existing hotel (i.e. pipeline projects) on the subject site and add the difference between what hotel trips that were measured in the field to the adjacent roadway. Trip estimates are based on standard Institute of Transportation Engineers (ITE) 10th edition, Trip Generation Manual rates and/or equations. Regional traffic growth (one percent compounded) was also applied to the study intersections to account for any other approved, unbuilt projects in the area.

8. For year 2026, background future traffic forecasts (without the proposed development) were developed using the existing traffic counts, reassigned existing traffic, regional traffic growth, and assigned pipeline traffic forecasts.

9. Calculated weekday peak hour background (without the proposed development) levels of service and vehicle queues at each of the key study intersections for year 2026 based on background traffic forecasts and existing/planned intersection traffic controls and geometries.

10. Removed existing and forecasted trips associated with the existing hotel.

11. Estimated the number of weekday AM and weekday PM peak hour trips that would be generated by build-out of the proposed residential Project using ITE 10th edition, Trip Generation Manual.

12. Developed weekday AM and PM peak hour total future traffic forecasts for year 2026 based on the background future traffic forecasts, removed hotel trips, and the added new residential site-generated traffic assignments.

13. Calculated peak hour total future levels of service and vehicle queues for each of the key study intersections based on projected total future traffic forecasts, future lane use and traffic controls, and planned intersection geometries for year 2026.

14. Identified improvements and/or enhancements that would benefit future traffic volumes with the proposed Project, if any.

STUDY METHODOLOGY

Synchro software (version 10.3) was used to evaluate levels of service at the study intersections during the weekday AM and weekday PM peak hours. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses. The software can model existing traffic signal timings or optimize splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized intersections analyzed herein were taken from the Highway Capacity Manual 2000 (HCM) reports generated by Synchro version 10.3. Level of service descriptions are included in Appendix B. The base Synchro files were developed based on traffic signal timings obtained from the Town of Herndon that are included in Appendix C.

STUDY AREA

This study was conducted in accordance with the parameters set forth in the scoping letter that was agreed to by the Town of Herndon and the Applicant's representatives (see Appendix A). The study area was selected based on those intersections potentially affected by the proposed development. The study area intersections are shown on Figure 1-1.

For purposes of this analysis, the following intersections are included in the study area:

1. Elden Street/Existing Site Entrance
2. Herndon Parkway/Elden Street
3. Herndon Parkway/Existing Site Entrance
4. Herndon Parkway/Grove Street
5. Grove Street/Existing Site Entrance

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Figure 1-1
Study Intersections

Site Location
Study Intersections

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

Section 2
BACKGROUND INFORMATION

SITE LOCATION

As shown in Figure 2-1, the Project is comprised of a single parcel and located at 315 Elden Street on approximately 6.48 acres in the southwest quadrant of the Elden Street/Herndon. The property is also identified as Parcel # 017-1 ((02)) 0007. The site area for the proposed residential development is currently developed with the Residence Inn Marriott.

DESCRIPTION OF PROPOSED DEVELOPMENT

The Applicant is seeking a Zoning Map Amendment application that would convert the existing Residence Inn Marriott hotel into a multi-family residential use, all within the existing hotel buildings. The Residence Inn Marriott currently operates as extended stay hotel with "apartment-inspired suites" that feature fully equipped kitchens and practical home accommodations and leisure (e.g pool and sport court). The existing hotel is approximately 121,441 square feet (SF) and comprised of multiple two-story/garden style buildings with a total of 168 keys (hotel rooms). The subject proposal would convert the existing hotel use to a residential community with up to 174 multi-family residential dwellings units (DUs) of which approximately 50 percent will be designated as work force housing. The Project will also feature approximately 73.5 percent 0-1 bedroom units (17.1 percent studio and 56.4 percent 1-BR) and approximately 26.5 percent 2-BR units. No 3 or more-bedroom units are proposed. A portion of the ancillary hotel space (office, meeting areas) may be converted into new dwelling units to potentially increase the site's unit count above the existing 168 hotel rooms.

Vehicular access to the site would continue to be provided via the site's three (3) existing commercial entrances: one (1) each on Elden Street, Herndon Parkway, and Grove Street. The entrances on Herndon Parkway and Grove Street are currently and will remain right-in/right-out driveways. The entrance on Elden Street currently acts as a full-movement entrance but will be restricted to a right-in/right-out upon completion of the Elden Street widening improvement project that is scheduled to go under construction in 2026. For planning purposes, the traffic impact study will evaluate a single future study year in 2026 that assumes completion of the Elden Street Widening project.

A plan reduction of the General Development Plan is shown on Figure 2-2.

SITE ZONING

The site is currently zoned Commercial Services District (CS) with Floodplain Overlay District (FPO) in the far eastern edge. The Property is planned for "Adaptive Area Residential" according to the Town's 2030 Comprehensive Plan Map. This Application seeks to rezone from CS to Planned Development - Urban Residential (PD-UR).

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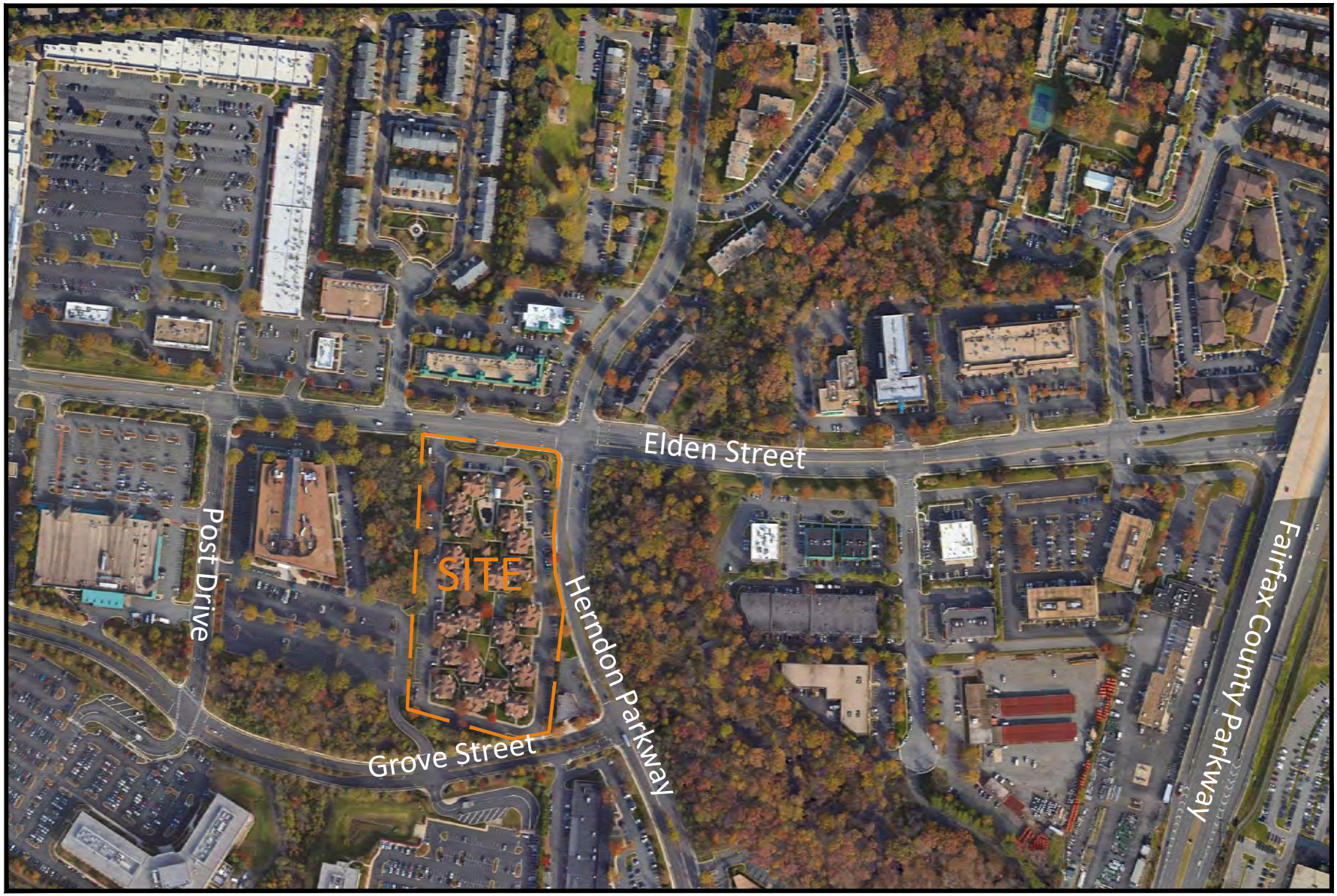


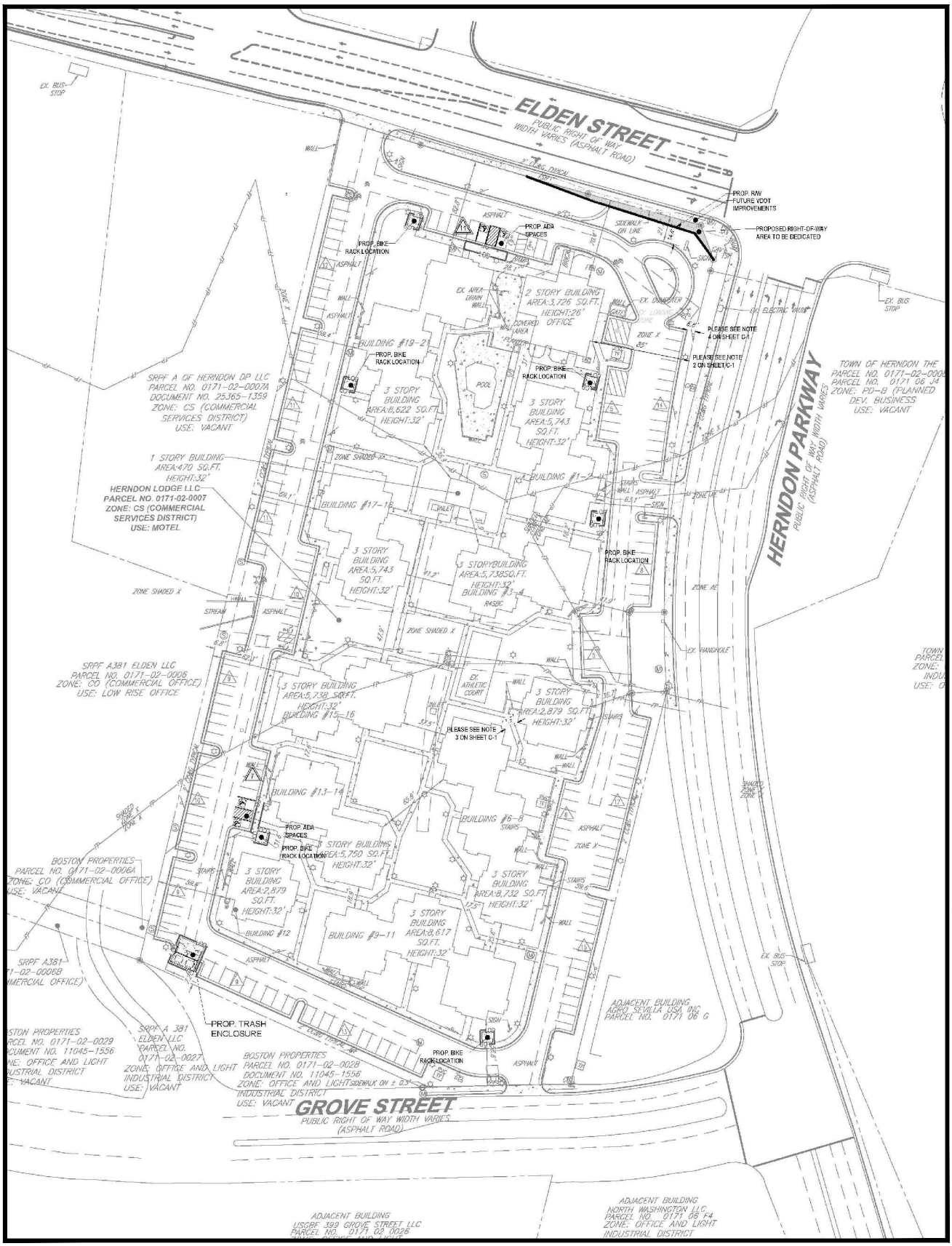
Figure 2-1
Site Location

Site Location

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

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Sourced by Bohler, Sheet C-3

Figure 2-2
General Development Plan (Reduction)

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

COMPREHENSIVE PLAN

The Town of Herndon approved a change in the property's Comprehensive Plan designation on November 07, 2020 (CPA #20-01) from "Business Corridor" to "Adaptive Area Residential." In addition, the Town approved a Zoning Ordinance Text Amendment, ZOTA #21-02, to amend Chapter 78 (Zoning), Article V (Planned Development Districts), Section 78-51.1, entitled PD-UR (Planned Development-Urban Residential) to allow for an increase in permitted density when a zoning map amendment includes adaptive reuse of existing buildings for residential dwelling units.

ELDEN STREET WIDENING PROJECT

The Elden Street widening project within the Town of Herndon seeks to make pedestrian, bicycle, and vehicular improvements along Elden Street between Monroe Street and the Fairfax County Parkway. Approximately 1/3 mile of the project will widen Elden Street from four (4) to six (6) lanes between Herndon Parkway and the Fairfax County Parkway. According to the project's website, the following improvements are included:

- Adding bike lanes from Monroe Street to Herndon Parkway
- Adding from Herndon Parkway to Fairfax County Parkway cycle tracks, which combine the user experience of a separated path with the on-street infrastructure of a conventional bike lane
- Replacing the culverts over Sugarland Run with a new bridge to provide better stream flow and reduce potential flooding
- Pedestrian enhancements
- Landscaping and planted medians where feasible

Right-of-Way (ROW) acquisition was anticipated to begin in May 2019. The widening and bicycle improvements are anticipated to begin in early 2025.

As shown on Figure 2-3, within the immediate vicinity of the site, the future widening project will construct a raised median along the subject site's frontage along Elden Street that would restrict the site's existing entrance to a right-in/right-out.

TRANSIT SERVICE

The subject area is served directly by the Fairfax Connector and RIBS 5 with existing bus connections to the Wiehle-Reston East Metrorail Station, Reston Town Center Transit Station, and Herndon-Park&Ride. The bus routes that directly serve the site are summarized below and shown on Figure 2-4:

- **Route 950 (Herndon-Reston)** - Provides Weekday, Saturday, and Sunday service to/from the Reston Town Center TransitStation, Herndon-Park&Ride, Wiehle-Reston East Metro Station

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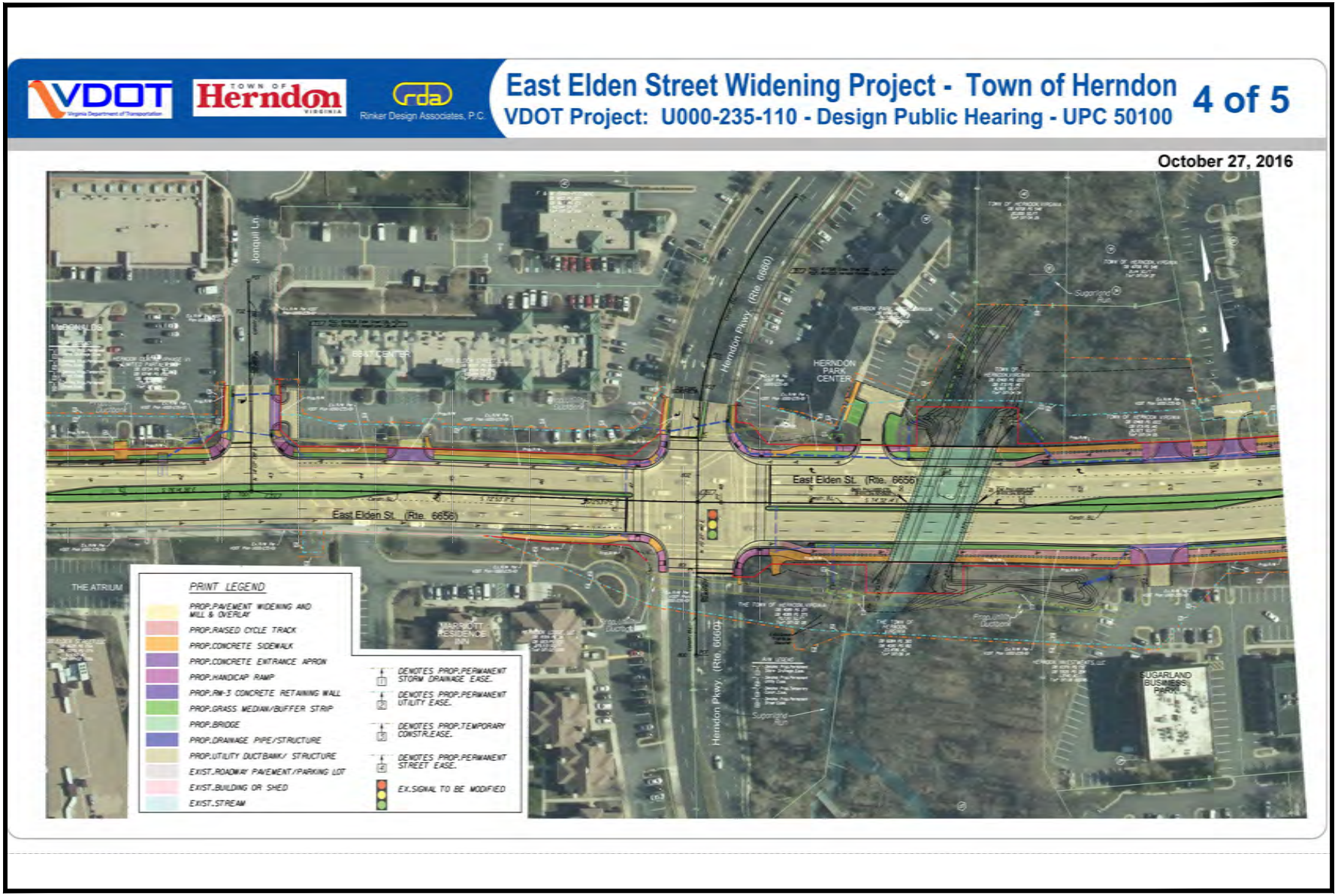


Figure 2-3
Elden Street Widening Project

Obtained from VDOT

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

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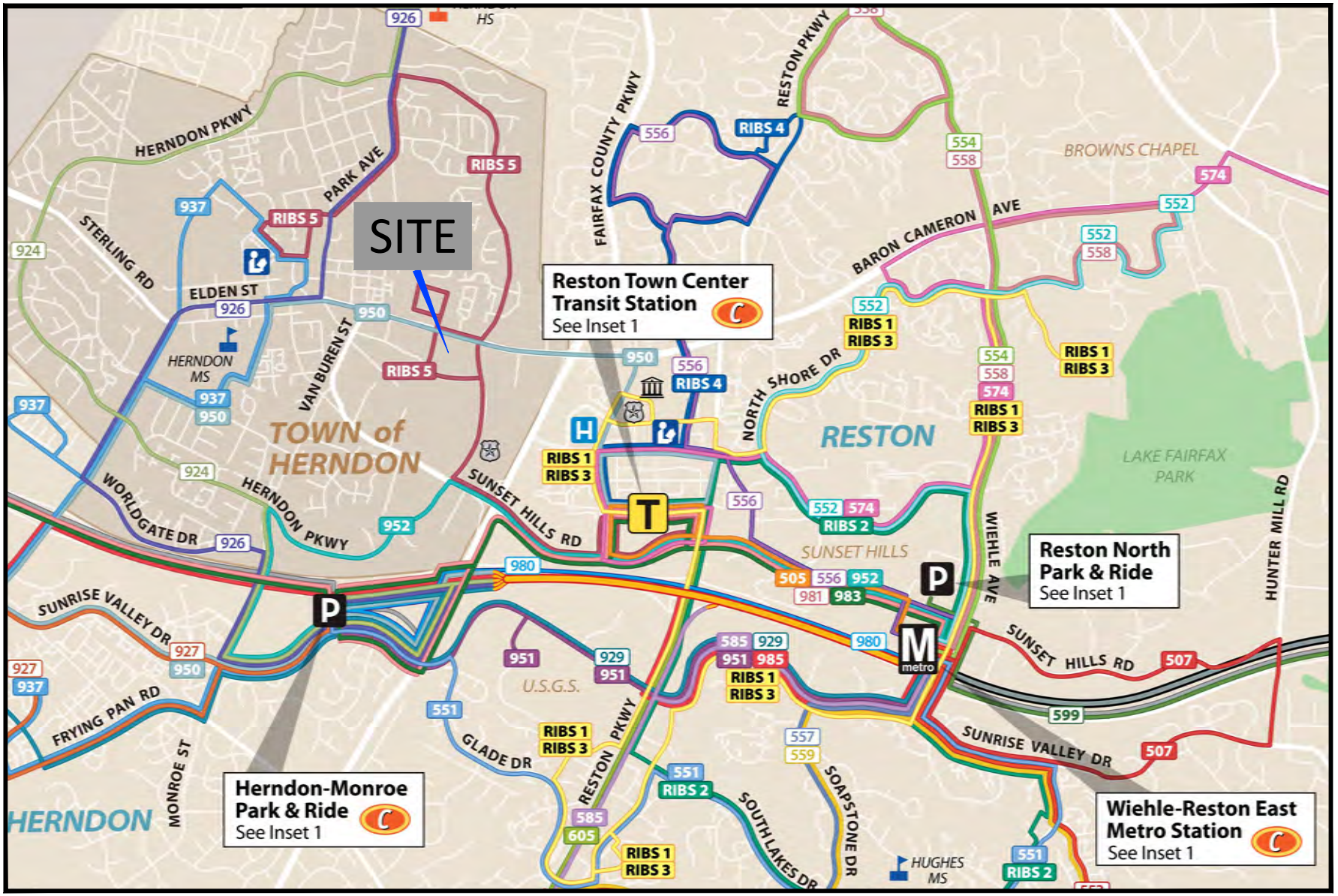


Figure 2-4
Bus Route Map

Obtained from Fairfax Connector

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

- **RIBS 5 (Herndon)** - Provides Weekday, Saturday, and Sunday service to/from the Reston Town Center Transit Station, Herndon Centre, Herndon Parkway, Dranesville Road, and Herndon Harbor House.

The site is also located just outside the one (1) mile radius from the future Reston Town Center and Herndon metrorail stations. It is anticipated that the existing bus routes will have modified routes and/or schedules when the Silver Line – Phase 2 formally opens in the coming year(s).

BICYCLE AND PEDESTRIAN CONNECTIONS

For bicyclists and pedestrians, the Project is located less than ¼ mile from the Washington and Old Dominion (W&OD) multiuse trail and is connected to this trail by continuous and well-lit sidewalks as well as the paved Sugarland Run trail. The W&OD trail connects to several nearby employment centers such as Downtown Herndon and Reston Town Center. The Project proposes to add on-site bicycle racks capable of holding approximately 24 bicycles.

Section 3
ANALYSIS OF EXISTING CONDITIONS

TRAFFIC COUNTS

Vehicle turning movement, pedestrian, and bicycle counts were obtained for the following key study intersections:

1. Elden Street/Existing Site Entrance
2. Herndon Parkway/Elden Street
3. Herndon Parkway/Existing Site Entrance
4. Herndon Parkway/Grove Street
5. Grove Street/Existing Site Entrance

The peak period traffic counts were conducted on Thursday, September 16, 2021 from 6 AM to 9 AM and from 4 PM to 7 PM when area public school were in session with in-person learning. The inbound and outbound traffic movements were recorded at each existing site entrance (Intersection #1, #3, and #5) where the mainline through volumes along Elden Street, Herndon Parkway, and Grove Street were then carried through from the traffic counts collected at Herndon Parkway/Elden Street (Intersection #2) and Herndon Parkway/Grove Street (Intersection #4) intersections. The intersection peak hours generally occurred from 8 AM to 9 AM and 4:30 PM to 5:30 PM.

Due a technical issue, the weekday PM peak period traffic count at the Grove Street/Existing Site Entrance study intersection (Intersection #5) was re-counted on Tuesday, September 21, 2021.

Around the time the existing traffic counts were collected, the Residence Inn Marriott reported the following hotel occupancy rates ranging from 39.9 to 50.6 percent occupancy:

- **Wednesday, September 15, 2021:** 75 of 168 rooms occupied or 44.6 percent occupied
- **Thursday, September 16, 2021:** 67 of 168 rooms occupied or 39.9 percent occupied
- **Monday, September 20, 2021:** 85 of 168 rooms occupied or 50.6 percent occupied
- **Tuesday, September 21, 2021:** 72 of 168 rooms occupied or 42.9 percent occupied

The individual intersection peak hour traffic volumes were utilized at the study intersections where applicable. The resulting baseline peak hour volumes used in this analysis are summarized on Figure 3-1, the pedestrian counts are shown on Figure 3-2, and bicycle counts are shown on Figure 3-3. The count data summary sheets are included for reference in Appendix D.

Historical Traffic Counts. Given the on-going Covid-19 pandemic conditions, it would be anticipated the traffic counts collected in September 2021 would continue to reflect abnormal conditions when compared to pre-Covid conditions before year 2020. However, current conditions have reflected a more stable condition than last year (2020) this same time. In review of VDOT's historical traffic counts as published by VDOT and shown on Table 3-1, between years 2015 and 2019, the average daily traffic along Elden Street had generally remained fairly stable

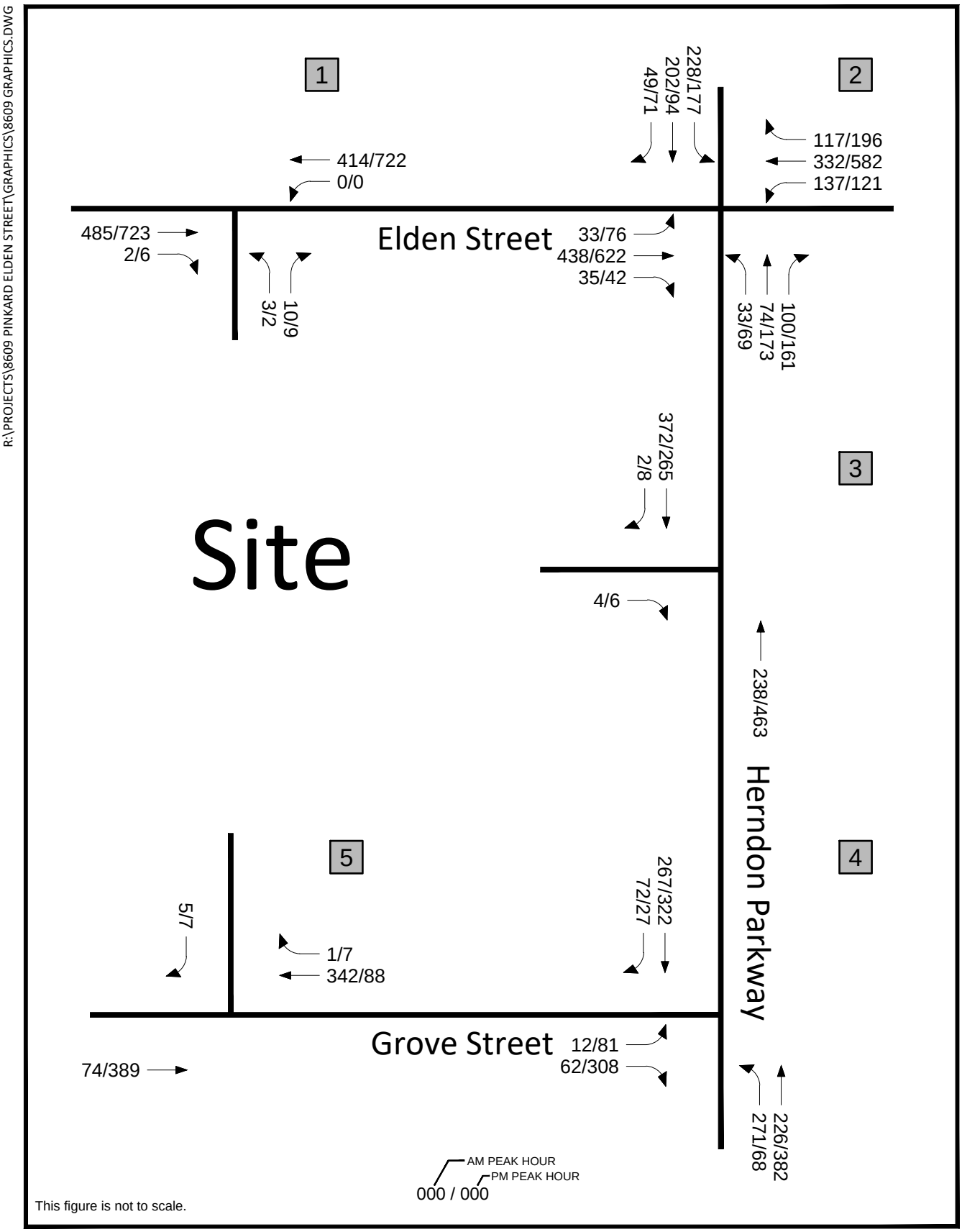


Figure 3-1
Existing Peak Hour Vehicular Traffic Volumes

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

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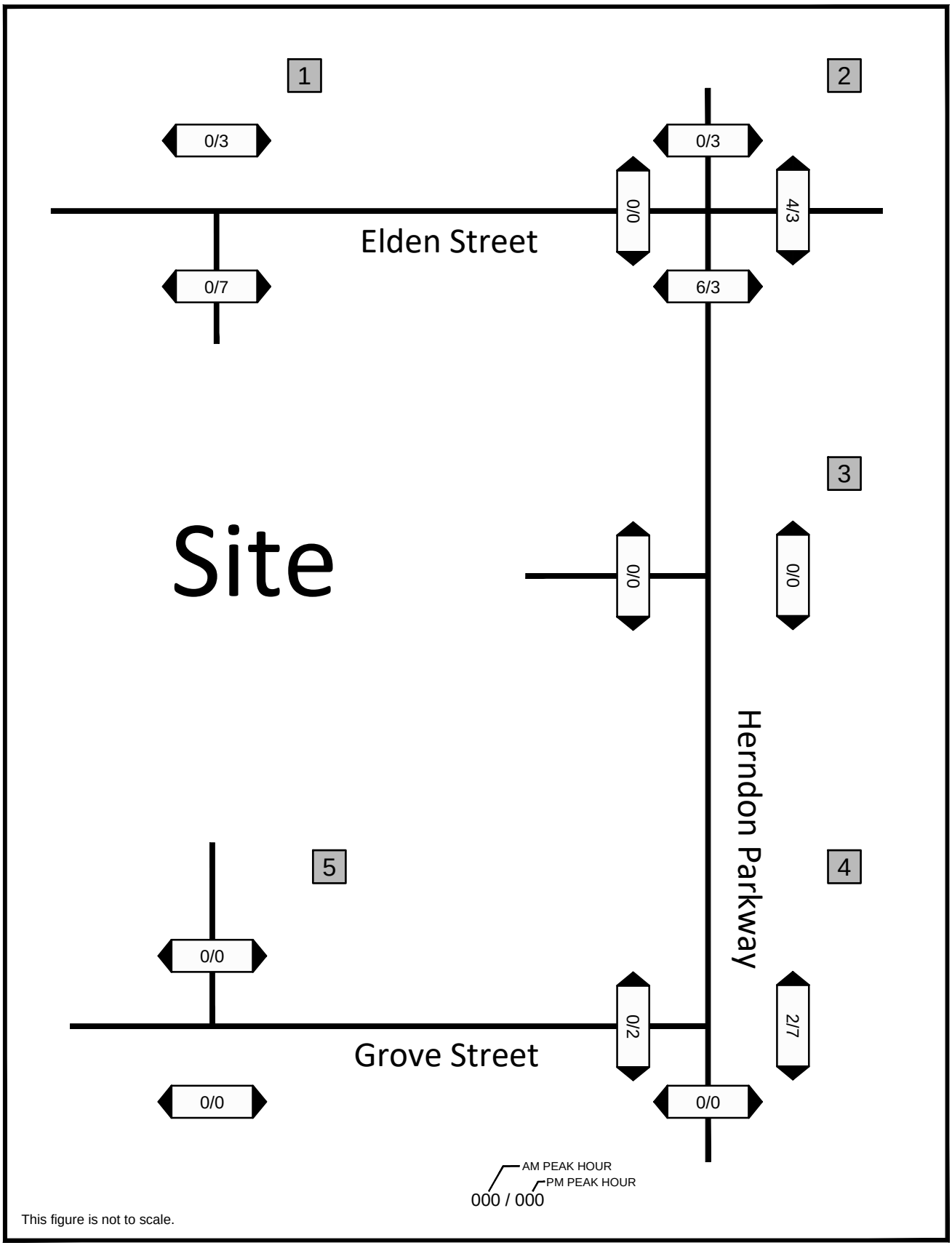


Figure 3-2
Existing Peak Hour Pedestrian Traffic Volumes

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

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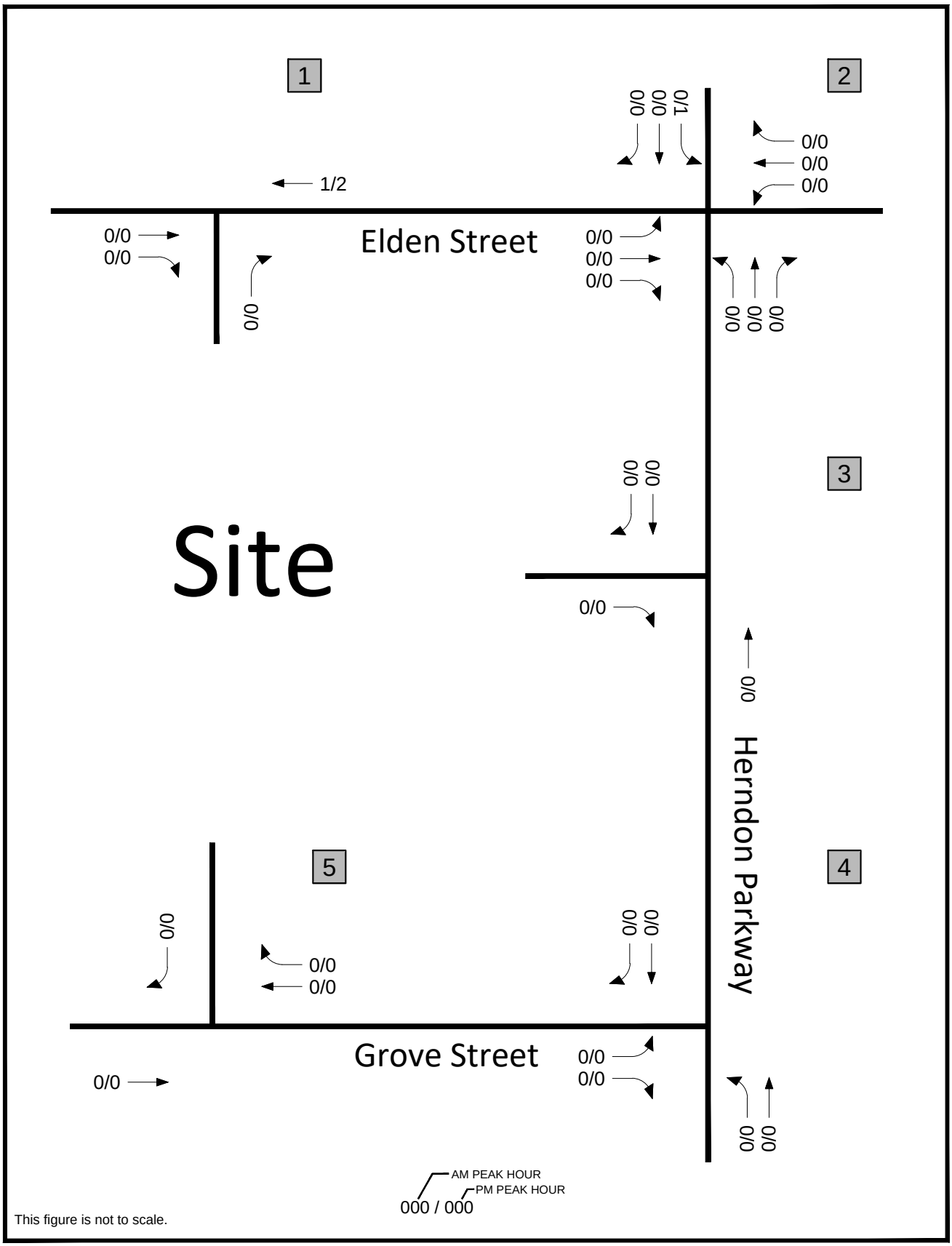


Figure 3-3
Existing Peak Hour Bicycle Traffic Volumes

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

Table 3-1
315 Elden Adaptive Reuse
Histroical Traffic Count Summary **(1)**

Year	Elden Street *(Between Herndon Pkwy - ECL Herndon)* Annual Average Daily Traffic
2015	31,000
2016	31,000
2017	30,000
2018	30,000
2019	30,000
2020	22,000

Year	Elden Street *(Between Herndon Parkway and Carlisle Drive)* AM Peak Hour	PM Peak hour
2017 (Westbound Thru Traffic) **(2)**	914	1,545
2021 (Westbound Thru Traffic) **(3)**	586	899
Difference (2021 Minus 2017)	**(328)**	**(646)**
% Difference	**-36%**	**-42%**
2017 (Eastbound Thru Traffic) **(2)**	1,110	1,199
2021 (Eastbound Thru Traffic) **(3)**	766	960
Difference (2021 Minus 2017)	**(344)**	**(239)**
% Difference	**-31%**	**-20%**

Note(s):

(1) AADT volumes obtained from VDOT

(2) Obtained from the "Virgina Tire & Auto Herndon" Traffic Impact Analysis dated December 26, 2017. Intersection traffic counts collected on Thursday, October 19, 2017.

(3) Intersection traffic counts collected on Thursday, September 16, 2021.

carrying between 30,000 to 31,000 vehicles per day (vpd). In year 2020, the daily traffic fell to 22,000 vpd. In comparison to a previous intersection traffic count that was collected on Thursday, October 19, 2017 at the nearby Elden Street/Carlisle Drive intersection to the east, it would suggest that the through traffic along Elden Street east of Herndon Parkway has decreased in 2021 from 20 to 42 percent. A comparison of the Elden Street through traffic east of Herndon Parkway as recorded in 2021 and 2017 is also summarized on Table 3-1. The traffic count data summary sheets for the 2017 traffic count at the Elden Street/Carlisle Drive intersection is also included in Appendix D.

OPERATIONAL ANALYSIS

Capacity/level of service (LOS) analyses were conducted at the study intersections based on the, the existing baseline traffic volumes shown on Figure 3-1, the pedestrian counts shown on Figure 3-2, the bicycle counts shown on Figure 3-3, and the existing lane use and traffic controls shown on Figure 3-4.

Synchro software (version 10.3) was used to evaluate levels of service, the 95th/50th percentile queues at the study intersections during the weekday AM and PM peak hours. Synchro is a macroscopic model used for optimizing traffic signal timing and performing capacity analyses at both signalized and unsignalized intersections. The software can model existing traffic signal timings or optimize splits, offsets, and cycle lengths for individual intersections, an arterial, or a complete network. Synchro allows the user to evaluate the effects of changing intersection geometrics, traffic demands, traffic control, and/or traffic signal settings as well as optimize traffic signal timings.

The levels of service reported for the signalized and unsignalized intersections were taken from the Highway Capacity Manual 2000 (HCM) reports generated by Synchro. Descriptions of level of service are included in Appendix B. The levels of service and 95th/50th percentile queues are presented in Appendix E. Levels of service are summarized in Table 3-2, and the 95th percentile queues are summarized in Table 3-3.

Levels of Service. Below is a summary of the level of service results as shown on Table 3-2:

Intersection #1 – Elden Street/Existing Site Entrance**:** The unsignalized traffic movements currently operate at an acceptable LOS "B" or better during the weekday AM and PM peak hours.

Intersection #2 – Herndon Parkway/Elden Street: This signalized study intersection currently operates at an overall acceptable LOS "D" during the weekday AM and PM peak hours. The eastbound shared-thru right and the northbound right traffic movements operate at LOS "E" during the weekday AM and PM peak hours, respectively.

Intersection #3 – Herndon Parkway/Existing Site Entrance: The unsignalized traffic movements currently operate at an acceptable LOS "A" during the weekday AM and PM peak hours.

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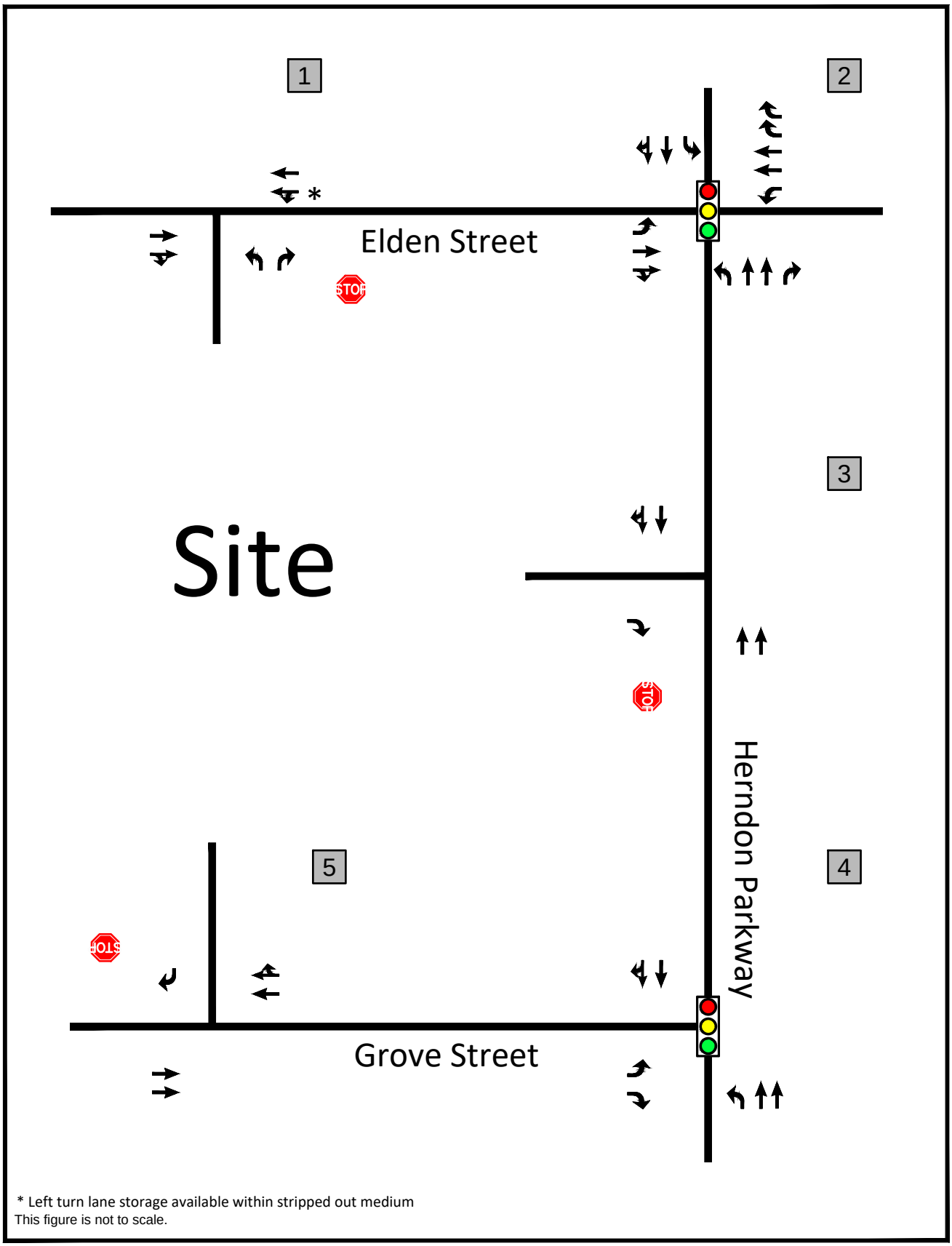


Figure 3-4
Existing Lane Use and Traffic Controls

Represents One Travel Lane
Signalized Intersection
Stop Sign

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

Table 3-2
315 Elden Street Adaptive Reuse
Level of Service Summary

Intersection	Operating Condition	Street Name	Approach/ Movement	Existing 2021 AM	Existing 2021 PM	Background 2026 AM	Background 2026 PM	Total Future 2026 AM	Total Future 2026 PM
1 Elden Street/**Site Entance**	STOP	Elden Street	EBTR	A [0.0]	A [0.0]	*NA*	*NA*	*NA*	*NA*
		Elden Street	WBT	A [0.0]	A [0.0]	*NA*	*NA*	*NA*	*NA*
		Site Entance	NBLR	B [10.7]	B [12.4]	*NA*	*NA*	*NA*	*NA*
VDOT Widening	*STOP*	*Elden Street*	*EBTR*	*NA*	*NA*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*A [0.0]*
Right-in/out only from site entance		*Elden Street*	*WBT*	*NA*	*NA*	*A [0.0]*	*A [0.0]*	*A [0.0]*	*A [0.0]*
		Site Entance	*NBR*	*NA*	*NA*	*B [10.1]*	*B [11.2]*	*B [10.2]*	*B [11.3]*
2 Elden Street/**Herndon Parkway**	Signal	Elden Street	EBL	D (42.4)	C (31.4)	NA	NA	NA	NA
			EBTR	E (57.3)	D (46.8)	NA	NA	NA	NA
			WBL	D (38.1)	C (31.0)	NA	NA	NA	NA
		Elden Street	WBT	D (44.4)	D (39.2)	NA	NA	NA	NA
			WBR	D (40.4)	C (32.5)	NA	NA	NA	NA
			NBL	B (18.0)	C (26.2)	NA	NA	NA	NA
		Herndon Parkway	NBT	C (20.4)	C (29.3)	NA	NA	NA	NA
			NBR	B (17.7)	E (64.2)	NA	NA	NA	NA
			SBL	B (14.1)	B (16.4)	NA	NA	NA	NA
		Herndon Parkway	SBTR	B (18.4)	C (20.9)	NA	NA	NA	NA
			Overall	**D (36.5)**	**D (37.8)**	**NA**	**NA**	**NA**	**NA**
VDOT Widening	*Signal*	*Elden Street*	*EBL*	*NA*	*NA*	*D (41.6)*	*C (30.9)*	*D (41.2)*	*C (30.7)*
Reconfigure existing dual WBR to single, continuous lane			*EBTR*	*NA*	*NA*	*E (57.5)*	*D (47.0)*	*E (57.3)*	*D (47.0)*
Add EB receiving lane on Elden Street			*WBL*	*NA*	*NA*	*D (39.0)*	*C (32.1)*	*D (38.6)*	*C (34.2)*
Increase storage length at EBL		*Elden Street*	*WBT*	*NA*	*NA*	*D (43.1)*	*D (38.8)*	*D (43.0)*	*D (38.3)*
Decrase storage length at WBL, NBL, NBR, and SBL			*WBR*	*NA*	*NA*	*D (39.4)*	*C (32.3)*	*D (39.3)*	*C (32.0)*
			NBL	*NA*	*NA*	*B (19.1)*	*C (27.1)*	*B (19.3)*	*C (27.4)*
		Herndon Parkway	*NBT*	*NA*	*NA*	*C (21.8)*	*C (30.3)*	*C (22.0)*	*C (30.6)*
			NBR	*NA*	*NA*	*B (19.1)*	*E (66.8)*	*B (19.3)*	*E (67.5)*
			SBL	*NA*	*NA*	*B (15.3)*	*B (17.1)*	*B (15.5)*	*B (17.3)*
		Herndon Parkway	*SBTR*	*NA*	*NA*	*B (19.7)*	*C (21.9)*	*B (19.9)*	*C (22.1)*
			Overall	***NA***	***NA***	***D (36.8)***	***D (38.1)***	***D (36.9)***	***D (38.1)***
3 **Herndon Parkway/**Site Entance	STOP	Site Entance	EBR	A [9.1]	A [9.1]	A [9.1]	A [9.2]	A [9.2]	A [9.2]
		Herndon Parkway	NBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Herndon Parkway	SBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
4 **Herndon Parkway**/Grove Street	Signal	Grove Street	EBL	E (64.6)	D (50.6)	E (62.8)	D (50.7)	E (62.8)	D (50.7)
			EBR	D (53.5)	D (43.0)	D (51.6)	D (42.7)	D (51.6)	D (42.6)
			NBL	A (2.0)	A (3.4)	A (2.4)	A (3.3)	A (2.4)	A (3.4)
		Herndon Parkway	NBT	A (1.4)	A (3.6)	A (1.7)	A (3.5)	A (1.7)	A (3.5)
		Herndon Parkway	SBTR	A (5.5)	A (6.9)	A (6.0)	A (6.8)	A (6.1)	A (6.8)
			Overall	**A (7.6)**	**B (17.9)**	**A (7.7)**	**B (17.8)**	**A (7.7)**	**B (17.6)**
5 Grove Street/ **Site Entance**	STOP	Grove Street	EBT	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Grove Street	WBTR	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]	A [0.0]
		Site Entance	SBR	A [9.3]	A [8.6]	A [9.4]	A [8.7]	A [9.5]	A [8.7]

Notes (1) Numbers in parentheses ( ) represent delay at signalized intersections in seconds per vehicle.
(2) Numbers in brackets [] represent delay at unsignalized intersections in seconds per vehicle.
(3) Roadway names in bold are considered north/south for purposes of this analysis

Table 3-3
315 Elden Street Adaptive Reuse
95th/50th Percentile Queue Summary (1)(2)(3)

Intersection	Operating Condition	Street Name	Approach/ Movement	Available Storage (ft)	Existing 2021				Background 2026				Total Future 2026			
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
					50th Pecentile	95th Pecentile	50th Pecentile	95th Pecentile	50th Pecentile	95th Pecentile	50th Pecentile	95th Pecentile	50th Pecentile	95th Pecentile	50th Pecentile	95th Pecentile
1 Elden Street/**Site Entance**	STOP	Elden Street	EBTR	-	-	0	-	0	NA	NA	NA	NA	NA	NA	NA	NA
		Elden Street	WBT	-	-	0	-	0	NA	NA	NA	NA	NA	NA	NA	NA
		Site Entance	NBLR	-	-	2	-	2	NA	NA	NA	NA	NA	NA	NA	NA
VDOT Widening	*STOP*	*Elden Street*	*EBTR*	-	*NA*	*NA*	*NA*	*NA*	-	*0*	-	*0*	-	*0*	-	*0*
Right-in/out only from site entance		*Elden Street*	*WBT*	-	*NA*	*NA*	*NA*	*NA*	-	*0*	-	*0*	-	*0*	-	*0*
		Site Entance	*NBR*	-	*NA*	*NA*	*NA*	*NA*	-	*1*	-	*2*	-	*3*	-	*2*
2 Elden Street/**Herndon Parkway**	Signal	Elden Street	EBL	226	22	42	39	65	NA	NA	NA	NA	NA	NA	NA	NA
			EBTR	-	230	265	264	306	NA	NA	NA	NA	NA	NA	NA	NA
			WBL	443	98	132	65	97	NA	NA	NA	NA	NA	NA	NA	NA
		Elden Street	WBT	-	145	171	220	259	NA	NA	NA	NA	NA	NA	NA	NA
			WBR	176	0	25	0	29	NA	NA	NA	NA	NA	NA	NA	NA
			NBL	213	12	34	31	68	NA	NA	NA	NA	NA	NA	NA	NA
		Herndon Parkway	NBT	-	19	41	51	88	NA	NA	NA	NA	NA	NA	NA	NA
			NBR	250	0	28	0	79	NA	NA	NA	NA	NA	NA	NA	NA
			SBL	153	96	183	71	133	NA	NA	NA	NA	NA	NA	NA	NA
		Herndon Parkway	SBTR	-	58	107	23	53	NA	NA	NA	NA	NA	NA	NA	NA
VDOT Widening	*Signal*	*Elden Street*	*EBL*	*275*	*NA*	*NA*	*NA*	*NA*	*24*	*43*	*42*	*70*	*26*	*46*	*41*	*70*
Reconfigure existing dual WBR to single, continuous lane			*EBTR*	-	*NA*	*NA*	*NA*	*NA*	*244*	*283*	*278*	*325*	*251*	*290*	*281*	*329*
Add EB receiving lane on Elden Street			*WBL*	*300*	*NA*	*NA*	*NA*	*NA*	*109*	*144*	*68*	*103*	*107*	*143*	*75*	*112*
Increase storage length at EBL		*Elden Street*	*WBT*	-	*NA*	*NA*	*NA*	*NA*	*152*	*180*	*230*	*273*	*152*	*180*	*229*	*273*
Decrase storage length at WBL, NBL, NBR, and SBL			*WBR*	-	*NA*	*NA*	*NA*	*NA*	*0*	*47*	*0*	*55*	*0*	*47*	*0*	*55*
			NBL	*180*	*NA*	*NA*	*NA*	*NA*	*13*	*36*	*34*	*72*	*13*	*36*	*34*	*72*
		Herndon Parkway	*NBT*	-	*NA*	*NA*	*NA*	*NA*	*21*	*43*	*55*	*93*	*21*	*43*	*55*	*93*
			NBR	*225*	*NA*	*NA*	*NA*	*NA*	*0*	*32*	*0*	*82*	*0*	*32*	*0*	*82*
		Herndon Parkway	*SBL*	*135*	*NA*	*NA*	*NA*	*NA*	*108*	*198*	*78*	*139*	*109*	*198*	*79*	*139*
			SBTR	-	*NA*	*NA*	*NA*	*NA*	*65*	*116*	*25*	*56*	*66*	*115*	*26*	*57*
3 **Herndon Parkway/**Site Entance	STOP	Site Entance	EBR	-	-	0	-	1	-	1	-	1	-	2	-	1
		Herndon Parkway	NBT	-	-	0	-	0	-	0	-	0	-	0	-	0
		Herndon Parkway	SBTR	-	-	0	-	0	-	0	-	0	-	0	-	0
4 **Herndon Parkway**/Grove Street	Signal	Grove Street	EBL	-	12	30	71	103	12	31	68	106	12	31	68	106
			EBR	-	0	32	72	121	0	32	58	128	0	32	59	129
		Herndon Parkway	NBL	200	0	111	11	34	36	119	11	36	36	119	12	39
			NBT	-	0	43	35	77	13	45	34	80	13	45	34	80
		Herndon Parkway	SBTR	-	46	108	44	80	59	114	42	82	62	120	43	82
5 Grove Street/ **Site Entance**	STOP	Grove Street	EBT	-	-	0	-	0	-	0	-	0	-	0	-	0
		Grove Street	WBTR	-	-	0	-	0	-	0	-	0	-	0	-	0
		Site Entance	SBR	-	-	0	-	1	-	1	-	1	-	1	-	1

Notes (1) Turning movement queue length is based on the 50th and 95th percentile queue as reported by Synchro, Version 10.
(2) Roadway names in bold are considered north/south for purposes of this analysis
(3) Highlighted values indicate queue exceeds storage length

Intersection #4 – Herndon Parkway/Grove Street: This signalized study intersection currently operates at an overall acceptable LOS "B" or better during the weekday AM and PM peak hours. The eastbound left traffic movement operates at LOS "E" during the weekday AM peak hour.

Intersection #5 – Grove Street/Existing Site Entrance: The unsignalized traffic movements currently operate at an acceptable LOS "A" during the weekday AM and PM peak hours.

Queues. The 95th/50th percentile queues associated with existing conditions are used to establish a datum against which to compare future conditions. The 95th percentile queue is defined as the maximum back of queue with 95th percentile traffic volumes. The 95th percentile queue is not necessarily observed, it is simply based on statistical calculations. The 50th percentile queue is defined as the average queue. The results are summarized in Table 3-3 and included in Appendix E. As shown in Table 3-3, existing queues exceed the available turn lane storage at the following location:

- Intersection #2 – Herndon Parkway/Elden Street:
  - SBL during the PM peak hour (95th Percentile Condition)

This southbound left (SBL) turning movement does not carry any traffic associated with the subject site.

Section 4
ANALYSIS OF BACKGROUND FUTURE CONDITIONS WITHOUT DEVELOPMENT (2026)

TRAFFIC VOLUMES

Methodology/Assumptions. Traffic forecasts without the proposed development in the year 2026 were derived based on a composite of existing traffic counts, reassignment of existing traffic to account for the Elden Street Widening project, the application of a regional traffic growth rate to account for regionally approved, yet unbuilt (i.e., "pipeline") developments, and pipeline trips associated with the inherent vacancies currently realized by the existing, on-site Residence Inn Marriott hotel.

Site Traffic Reassignments. Per the scoping agreement shown in Appendix A, the Elden Street Widening Project that is depicted on Figure 2-3 is assumed to be constructed and complete for the future conditions analysis year (2026). As such, the site's existing site entrance on Elden Street would be restricted in the future to a right-in/right-out when a raised median is constructed along Elden Street on the north side of the site. As a result, any left-ins or left-outs that were measured at this driveway under existing conditions were reassigned to the other site driveways as appropriate. The reassignment of existing site traffic is reflected on Figure 4-1. The resulting reassignment of the existing peak hour traffic volumes is shown on Figure 4-2 (=Figure 3-1 + Figure 4-1).

Regional Traffic Growth. Per the scoping agreement shown in Appendix A, a growth rate of one (1) percent compounded annually was applied to the 2021 existing traffic volumes for the through movements along Elden Street, Herndon Parkway, and Grove Street as well as applicable turning movements at the traffic signal study intersections. The increases in peak hour traffic as a result of regional traffic growth to year 2026 are summarized on Figure 4-3.

Pipeline Development. In Section 3 of this TIS, it was reported that the existing Residence Inn Marriott was operating at approximately 39.9 to 50.6 percent occupancy. For the purpose of this analysis, the field measured trip generation was compared to what ITE would estimate and the positive difference between ITE and the field count was added to the site driveways as new pipeline trips to best reflect typical hotel conditions. A summary of the hotel trip generation is shown in Table 4-1 and summarized below:

- Field Count: 27 AM peak hour trips (5 in, 22 out) and 45 PM peak hour trips (21 in, 24 out)
- ITE Estimate: 57 AM peak hour trips (30 in, 27 out) and 62 PM peak hour trips (30 in, 30 out)

Difference: ITE Estimate minus Field Count
+30 AM peak hour trips (+25 in, +5 out) and +17 PM peak hour trips (+9 in, +8 out)

The pipeline trip assignments associated with the difference between ITE and the field count are shown on Figure 4-4. The hotel trips were assigned to the road network based on existing hotel

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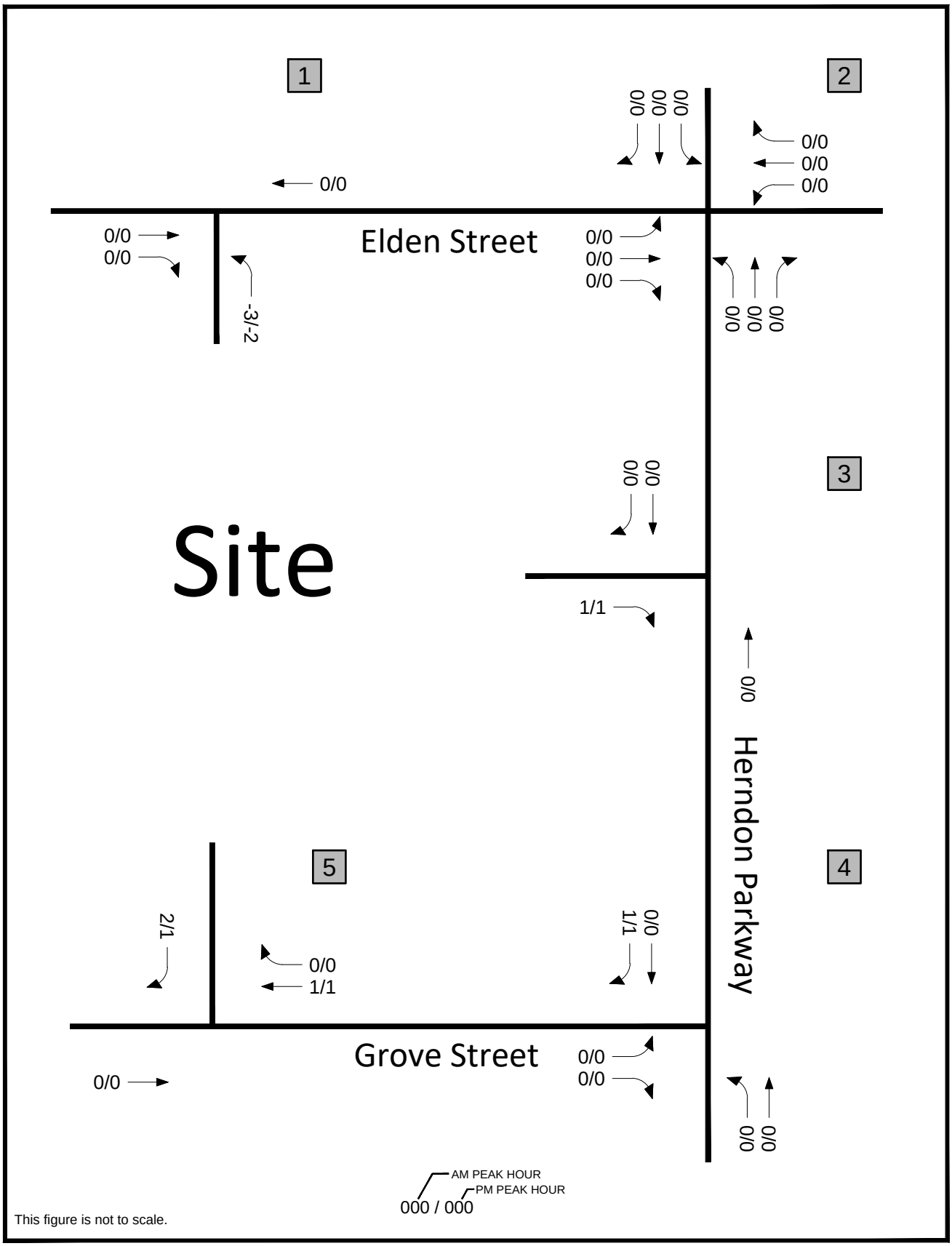


Figure 4-1
Reassignment of Existing Site Traffic
(Elden Street Widening Project)

NORTH
315 Elden Adaptive Reuse
Town of Herndon, Virginia

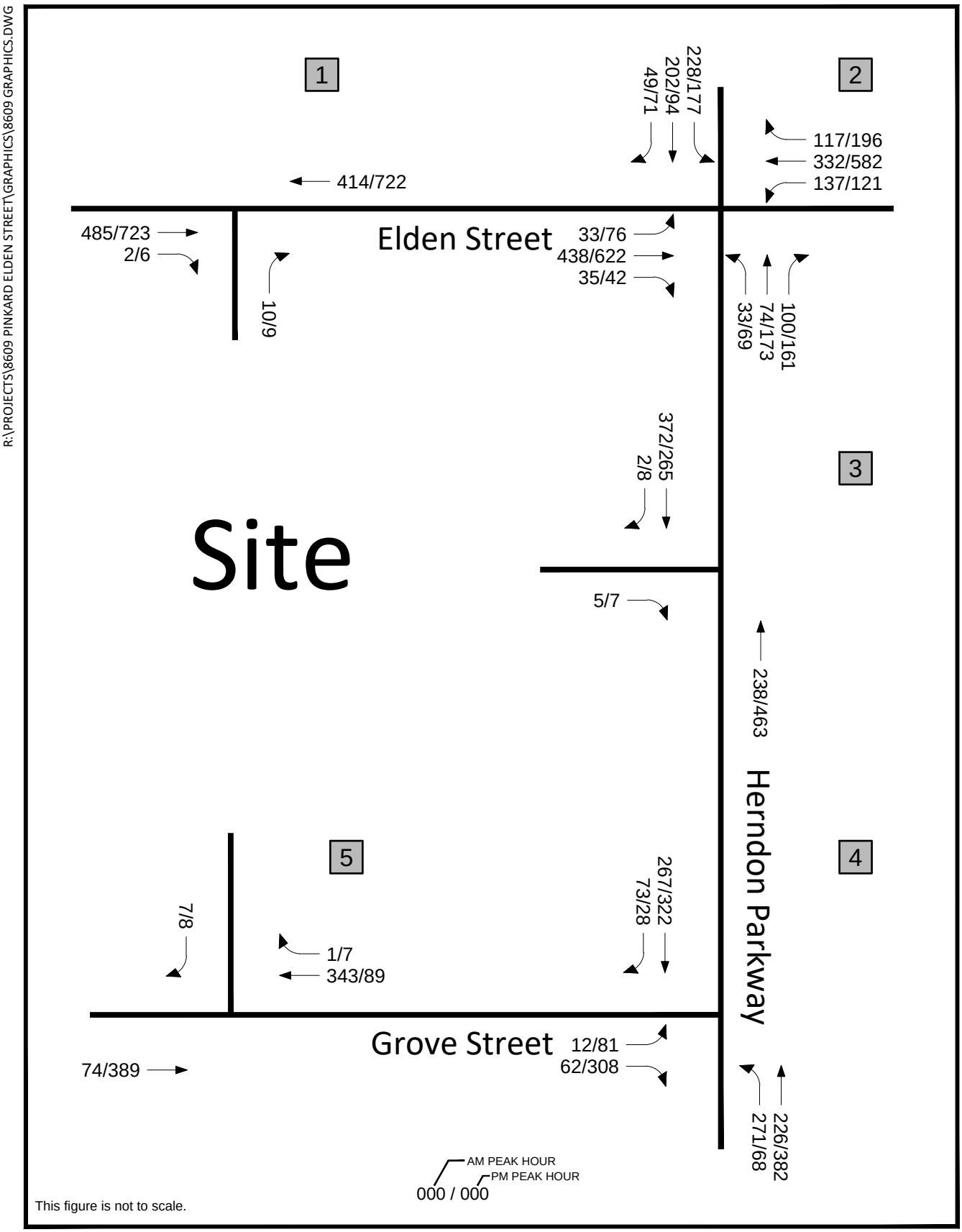


Figure 4-2
Reassigned, Existing Peak Hour Vehicular Traffic Volumes
(Fig. 3-1 + Fig. 4-1)

NORTH
315 Elden Adaptive Reuse
Town of Herndon, Virginia

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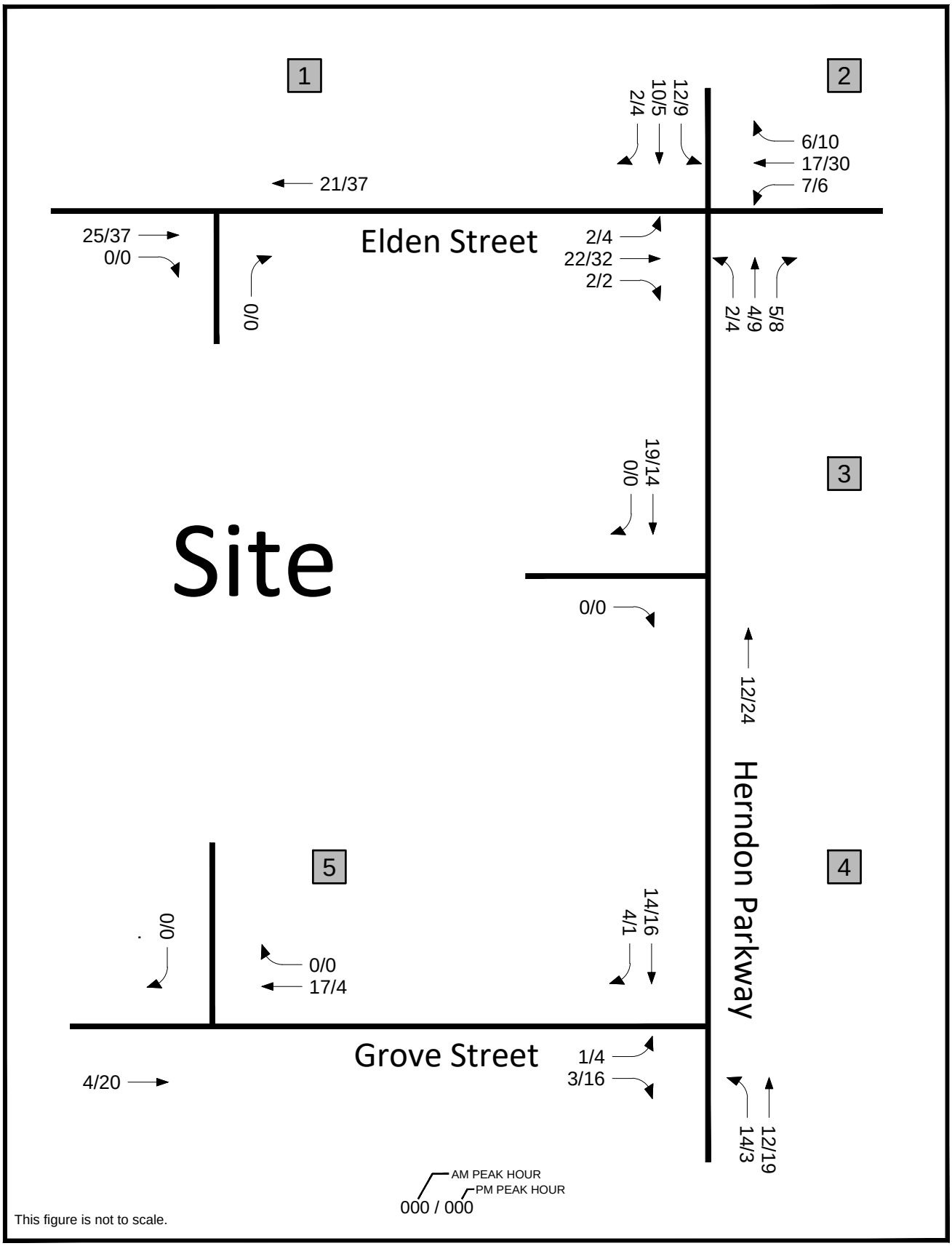


Figure 4-3
Regional Traffic Growth

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

Table 4-1
315 Elden Adapitive Reuse
Pipeline Trip Generation Summary **(1) (2) (3)**

Use	ITE Land Use (4)	ITE Land Use Code	Amount	Units	Weekday						
					AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street			Average Daily Trips
					In	Out	Total	In	Out	Total	
Residence Inn Marriott (Based on ITE)	All Suites Hotel	311	168	Rooms	30	27	57	30	32	62	755
Residence Inn Marriott (Based on Field Count)	All Suites Hotel	Field Count **(5) (6)**	168	Rooms	5	22	27	21	24	45	N/A
Difference (ITE Minus Field Count)					**25**	**5**	**30**	**9**	**8**	**17**	**N/A**

Note(s):

(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation Manual, 10th Edition.

(2) The weekday AM and PM peak hours are based on the peak hour of the adjacent street.

(3) "N/A" = Not Available.

(4) An "All Suites Hotel" is a place of lodging that provides sleeping accomodations, a small restaurant and lounge, and small amounts of meeting space. Each suite includes a sitting room and separate bedroom; limited kitchen facilities are provided within the suite.

(5) Field count collected at the hotel's site entrances on Thursday, September 16, 2021 with a recount at one entrance occuring on Tuesday, Septemer 21, 2021.

(6) The hotel occupancy during the period of the field count ranged from 39.9 to 50.6 percent occupancy.

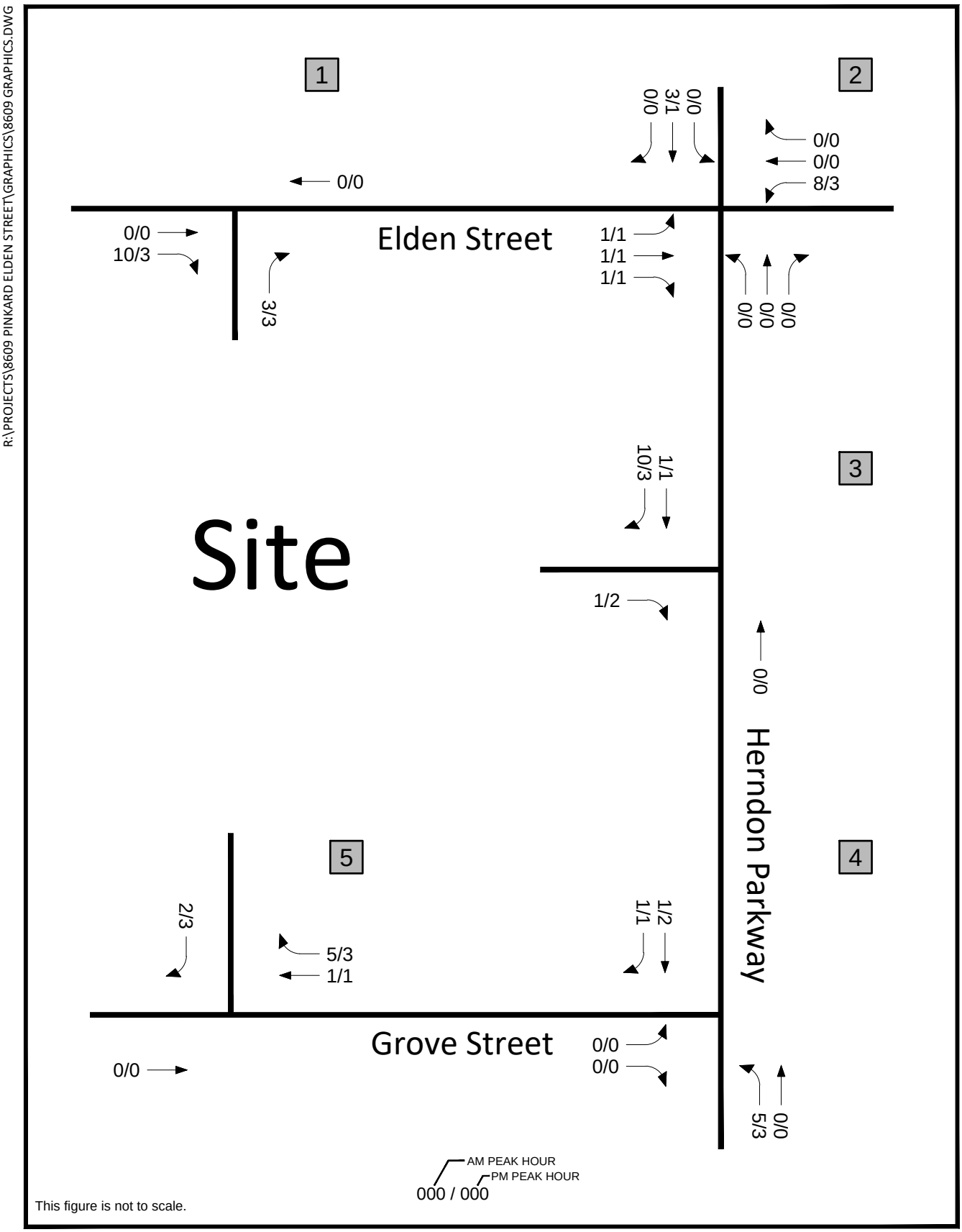


Figure 4-4
Pipeline (Hotel) Trip Assignments

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

travel patterns and applicable reassignments associated with the Elden Street Widening Project. No other pipeline developments were identified within the immediate vicinity of the study area.

BACKGROUND FUTURE TRAFFIC FORECASTS

The resultant peak hour traffic forecasts for year 2026 conditions without the development are shown on Figure 4-5. These volumes are a composite of the resulting reassigned existing peak hour traffic volumes shown in Figure 4-2, the regional traffic growth traffic forecasts shown on Figure 4-3, and the pipeline site trip assignments shown on Figure 4-4.

FUTURE LANE USE AND TRAFFIC CONTROL

As discussed previously and per the scoping agreement shown in Appendix A, the Elden Street Widening Project that is depicted on Figure 2-3 is assumed to be constructed and complete for the future conditions analysis year (2026). The corresponding future lane use and traffic controls that are based on these future improvements and evaluated herein for the future year 2026 conditions is shown on Figure 4-6.

OPERATIONAL ANALYSIS

Capacity analyses without the Project were performed for the study intersections using the future lane use and traffic controls shown on Figure 4-5, the future traffic forecasts without the development shown on Figure 4-4, and the observed pedestrian/bicycle counts. Levels of service are summarized in Table 3-2, and the 95th/50th percentile queues are summarized in Table 3-3. The levels of service and the 95th/50th percentile queue results are presented in Appendix F.

Levels of Service. With the addition of the forecasted regional background growth and pipeline development trips to the existing reassigned traffic volumes associated with the Elden Street Widening project, certain locations would experience negligible to only minor increases in delay. Overall, the study intersections would operate at the same level of service as existing conditions where all the site entrances would continue to operate at acceptable LOS “B” or better and the traffic signal study intersections would continue to operate at an overall acceptable LOS “D” or better.

Queues. The results are summarized in Table 3-3 and included in Appendix F. As shown in Table 3-3, certain existing turn bays would have reduced vehicle storage as result of Elden Street Widening project that will shorten certain turn lanes. Overall, future conditions would experience increase vehicle queues but would continue to fall within the available turn lane storage provided. The exception is the southbound left-turn bay at the Elden Street/Herndon Parkway intersection (study intersection #2). Consistent with existing conditions, the future queues at this turning movement would continue to exceed available turn lane storage. This southbound left traffic movement does not carry any traffic associated with the subject site.

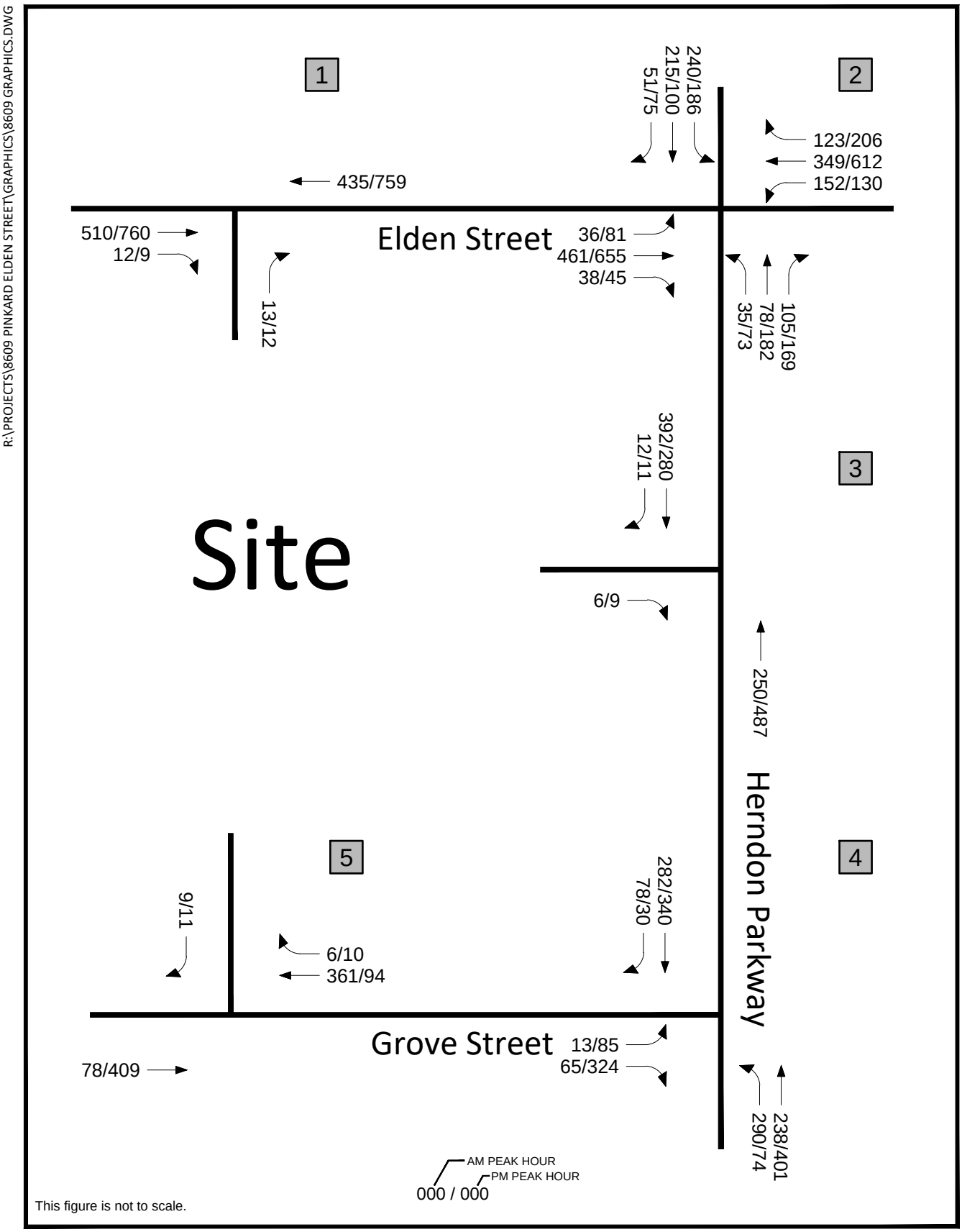


Figure 4-5

2026 Background Future Traffic Forecasts (without Proposed Development)
(Fig. 4-2 + Fig. 4-3 + Fig. 4-4)

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

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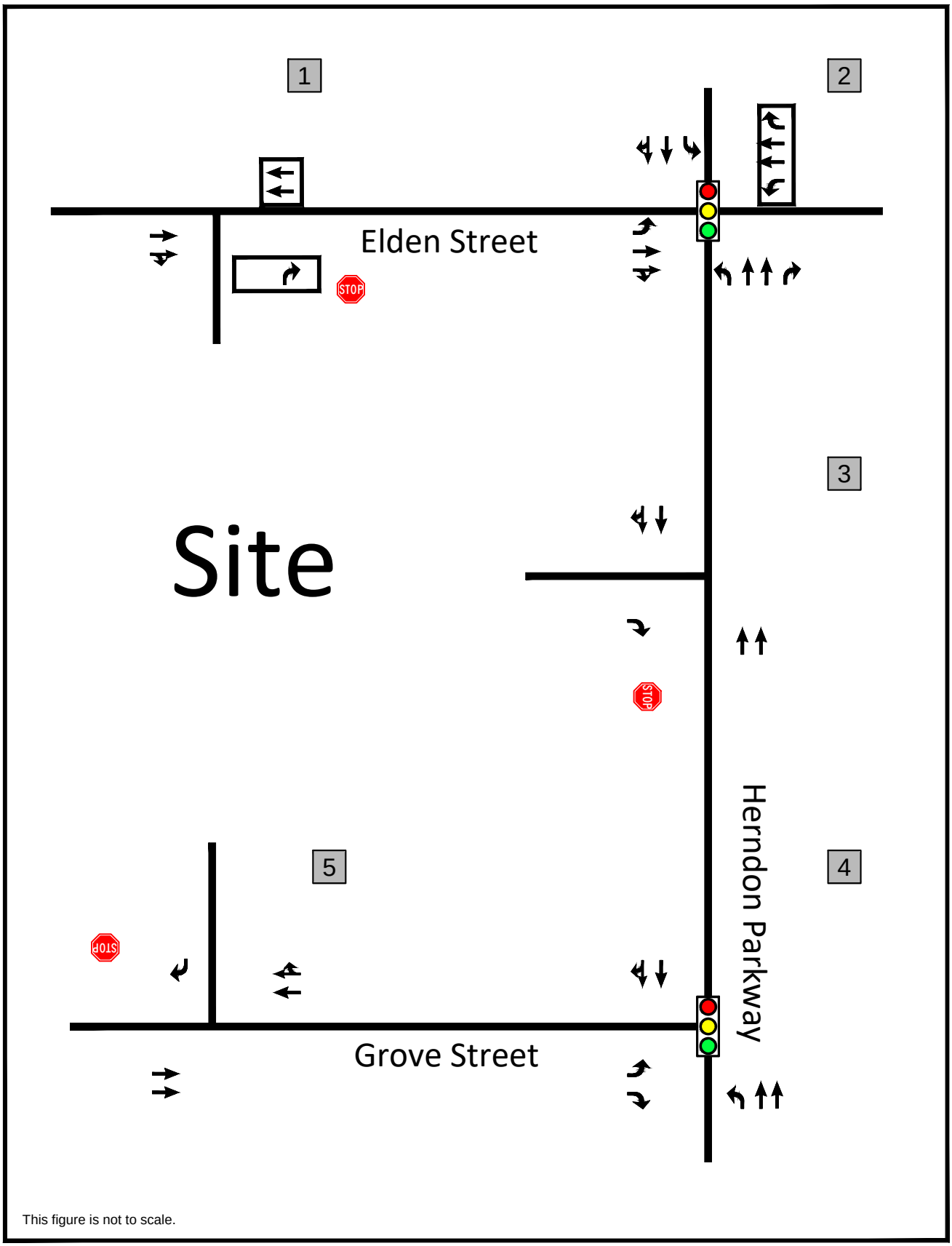


Figure 4-6
Future Lane Use and Traffic Controls

Modified as a Result of Elden Street Widening Project
Represents One Travel Lane
Signalized Intersection
Stop Sign

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

Section 5
SITE TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

OVERVIEW

The Applicant has filed a Zoning Map Amendment application that would convert the existing 168 room hotel use to a residential community with up to 174 multi-family residential dwellings units (DUs) of which approximately 50 percent will be designated as work force housing. All of the multi-family units will be located within the existing hotel buildings. A portion of the ancillary hotel space (e.g. office, meeting areas, etc.) would be converted into new dwelling units to increase the site's unit count above the existing 168 hotel rooms.

SITE TRIP GENERATION ANALYSIS

The number of trips that would be generated by the proposed development were estimated based on the ITE 10th Edition, *Trip Generation Manual* using the peak hour of the adjacent street rates/equations, where applicable. Land Use Code 220 [Multifamily Housing (Low-Rise)] was utilized for the residential use with the number of dwelling units as the independent variable. Further, a transportation demand management (TDM) trip reduction that is supported by the project's affordability, unit mix, proximity to transit/non-auto facilities was not applied for a worst-case scenario and to provide an overly conservative analysis. The trip generation for the proposed development is summarized on Table 5-1 and described below:

- 81 weekday AM peak hour trips (19 inbound, 62 outbound)
- 97 weekday PM peak hour trips (61 inbound, 36 outbound)
- 1,275 average daily trips

In comparison to the existing hotel use, and absent any consideration of trip reductions associated with proffered TDM commitments, the subject proposal according to ITE trip generation estimates would add the following net new trips to the adjacent road network over the existing use:

- 24 more weekday AM peak hour trips (11 fewer inbound, 35 more outbound)
- 35 more weekday PM peak hour trips (31 more inbound, 4 more outbound)
- 520 more average daily trips

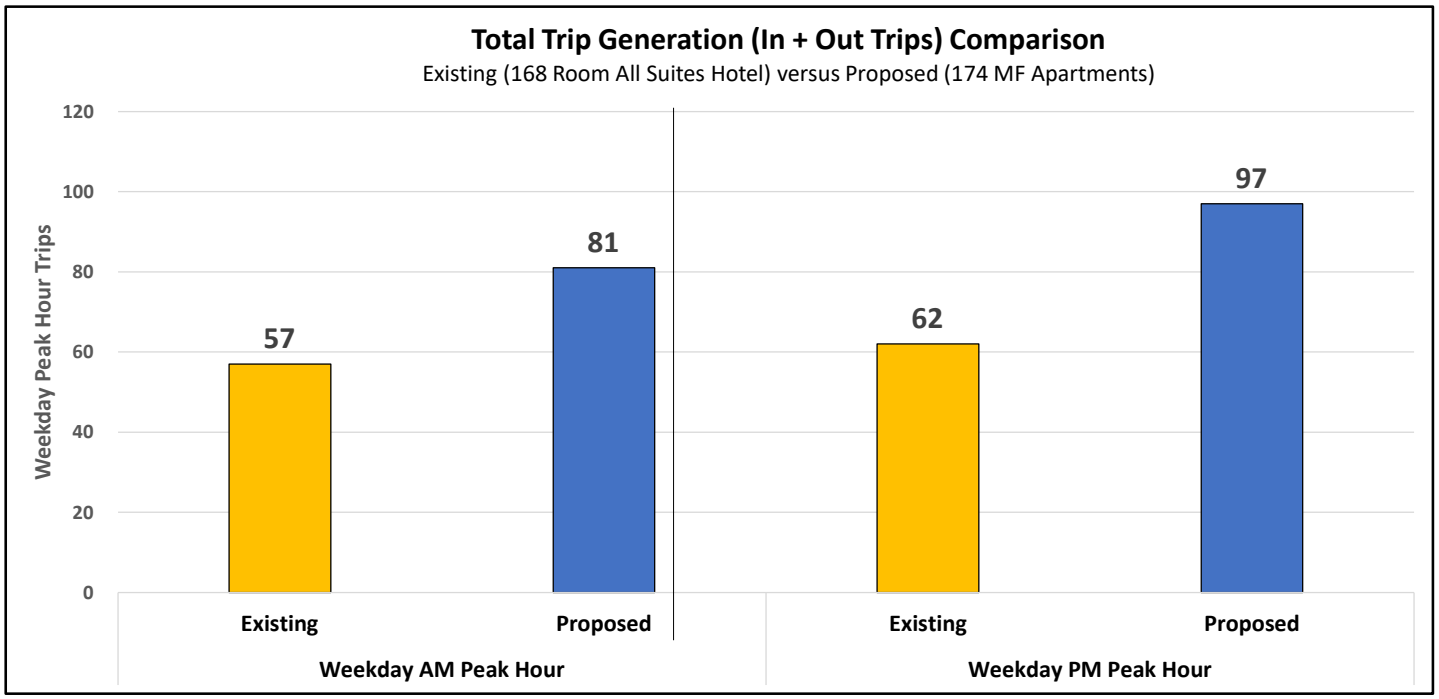
SITE ACCESS

Vehicular access to the site would continue to be provided via the site's three (3) existing commercial entrances: one (1) each on Elden Street, Herndon Parkway, and Grove Street. The entrances on Herndon Parkway and Grove Street are currently and will remain right-in/right-out driveways. The entrance on Elden Street currently acts as a full-movement entrance but will be

Table 5-1
315 Elden Adaptive Reuse
Trip Generation Analysis **(1) (2)**

Use	ITE Land Use (3) (4)	Land Use Code	Amount	Units (5)	Weekday AM Peak Hour of Adjacent Street In	AM Out	AM Total	Weekday PM Peak Hour of Adjacent Street In	PM Out	PM Total	Average Daily Trips
EXISTING: Residence Inn Marriott	All Suites Hotel	311	168	Rooms	30	27	57	30	32	62	755
PROPOSED: Apartments	Multifamily Housing (Low-Rise)	220	174	DU	19	62	81	61	36	97	1,275
Difference (Proposed Minus Existing)					**(11)**	**35**	**24**	**31**	**4**	**35**	**520**

Note(s):
(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation, 10th Edition.
(2) The weekday AM and PM peak hours are based on the peak hour of the adjacent street.
(3) An "All Suites Hotel" is a place of lodging that provides sleeping accomodations, a small restaurant and lounge, and small amounts of meeting space. Each suite includes a sitting room and separate bedroom; limited kitchen facilities are provided within the suite.
(4) "Multifamily Housing (Low-Rise)" includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors).
(5) DU = Dwelling Unit



restricted to a right-in/right-out upon completion of the Elden Street widening improvement project that is scheduled to go under construction in 2026. For planning purposes, the traffic impact study evaluates a single future study year in 2026 that assumes the Elden Street widening project is complete.

HOTEL SITE TRIPS REMOVED

The hotel site trips reflected on Figure 4-5 were removed from the study intersections as reflected on Figure 5-1.

SITE TRIP PERCENT DISTRIBUTION AND ASSIGNMENTS

Distributions associated with the proposed Project were developed based on the location of the site, accessibility and proximity to regional roadways, local knowledge, and engineering judgment. As a result, below are the distributions for the new site trips that were agreed to with Town of Herndon staff during the scoping process (see Appendix A):

- To/From the west on Elden Street and Grove Street: 25%
- To/From the north on Herndon Parkway: 10%
- To/From the east on Elden Street: 35%
- To/From the south on Herndon Parkway: 30%

The new vehicle peak hour trips summarized in Table 5-1 were assigned to the public roadway network according to the directional distributions summarized above with consideration of the hotel's existing driveway utilization. The resulting site trip assignments and percent distributions are depicted on Figure 5-2.

INFLUENCE AREA

Figure 5-3 reflects the net new trips added to the study intersections which is derived by combining the new residential trips shown on Figure 5-2 and the removed hotel trips shown on Figure 5-1. As shown on Figure 5-3, the subject proposal would add the following net new trips beyond the study intersections:

- To/From the south on Herndon Parkway:
  - 13 AM / 2 PM trips to the south
  - 0 AM / 8 PM trips from the south
- To/From the west on Grove Street:
  - 0 AM / -1 PM trips to the west
  - 0 AM / 0 PM trips from the west

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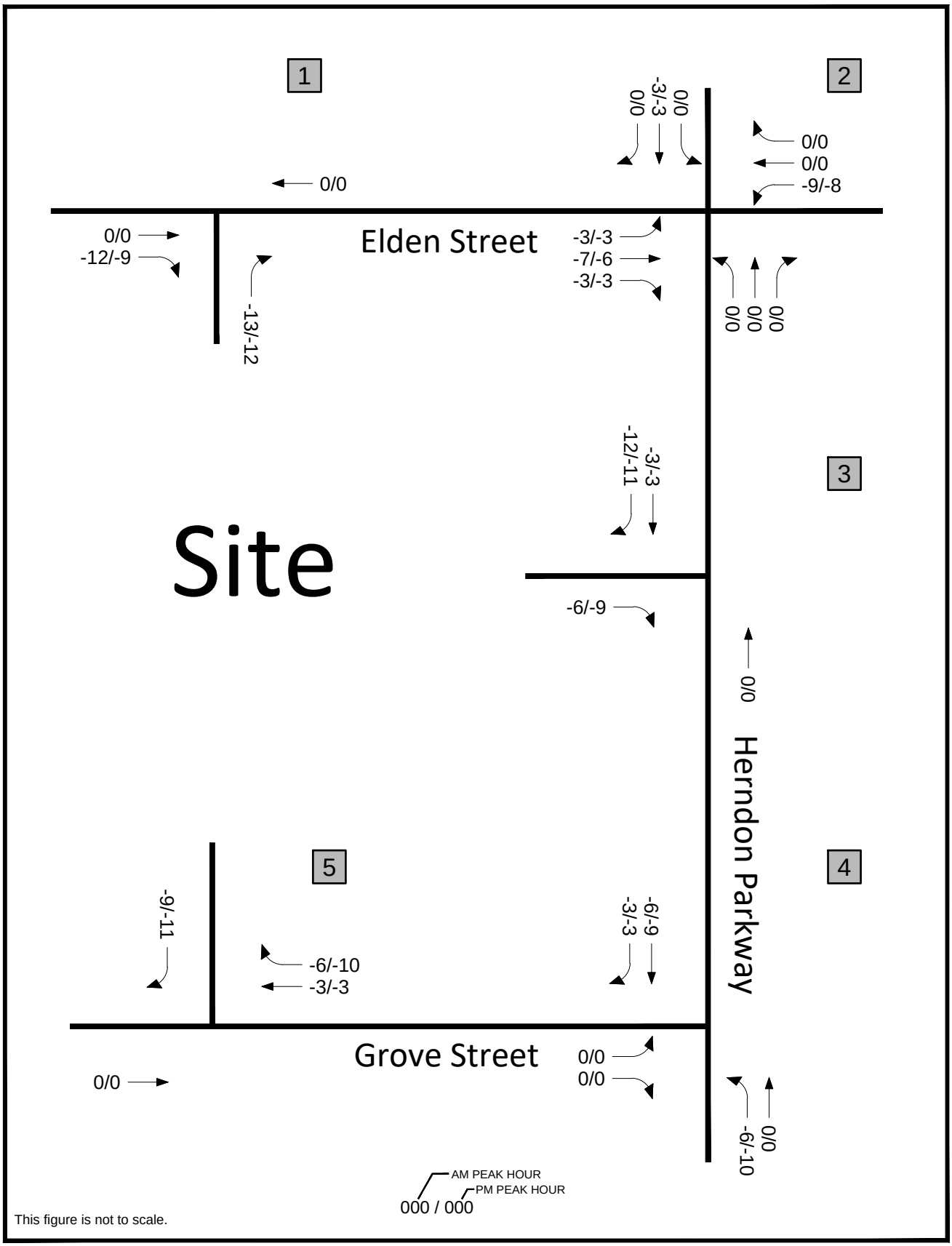


Figure 5-1
Hotel Site Trips Removed

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

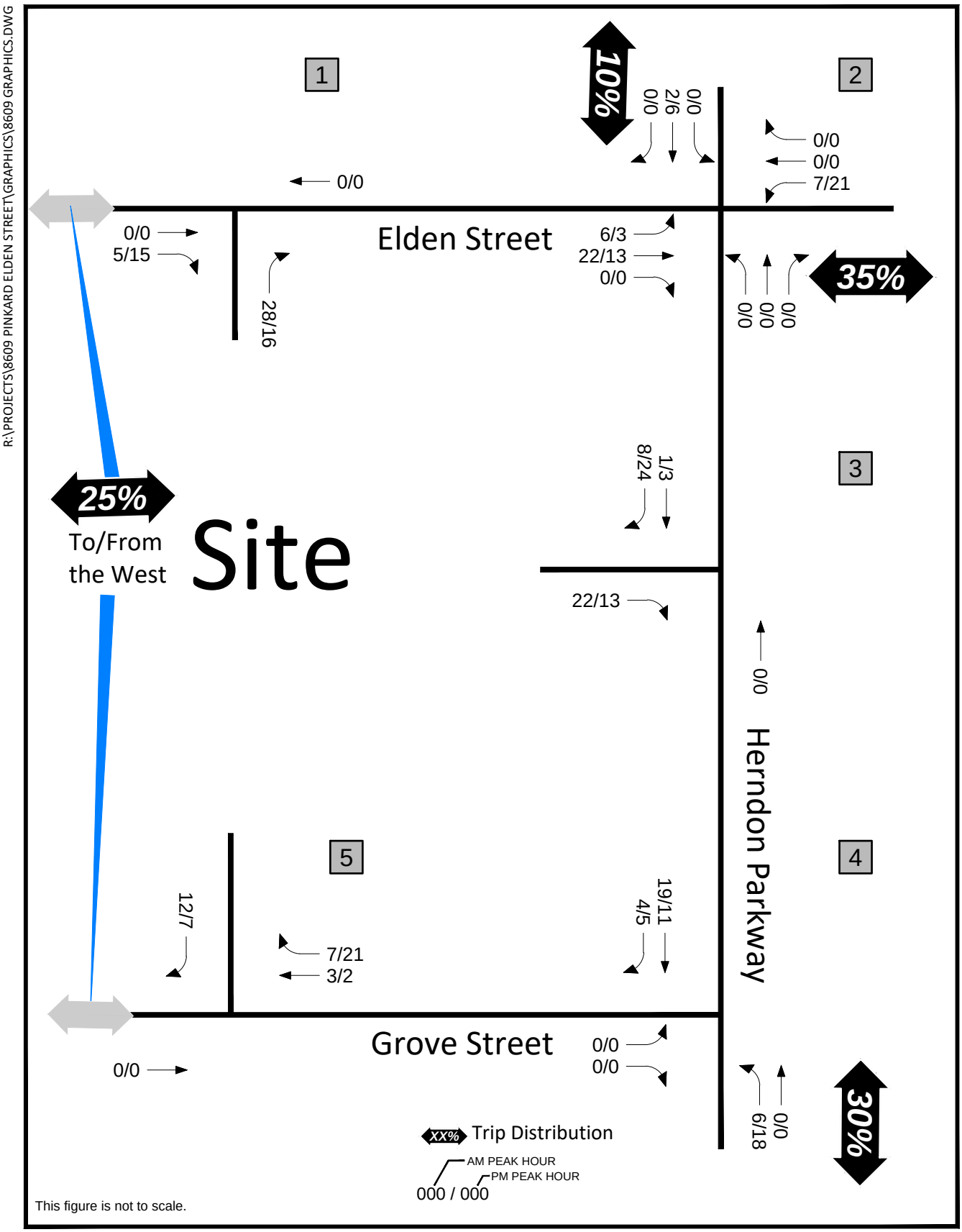


Figure 5-2
New Site Trip Assignments and Percent Distributions

NORTH

315 Elden Adaptive Reuse
Town of Herndon, Virginia

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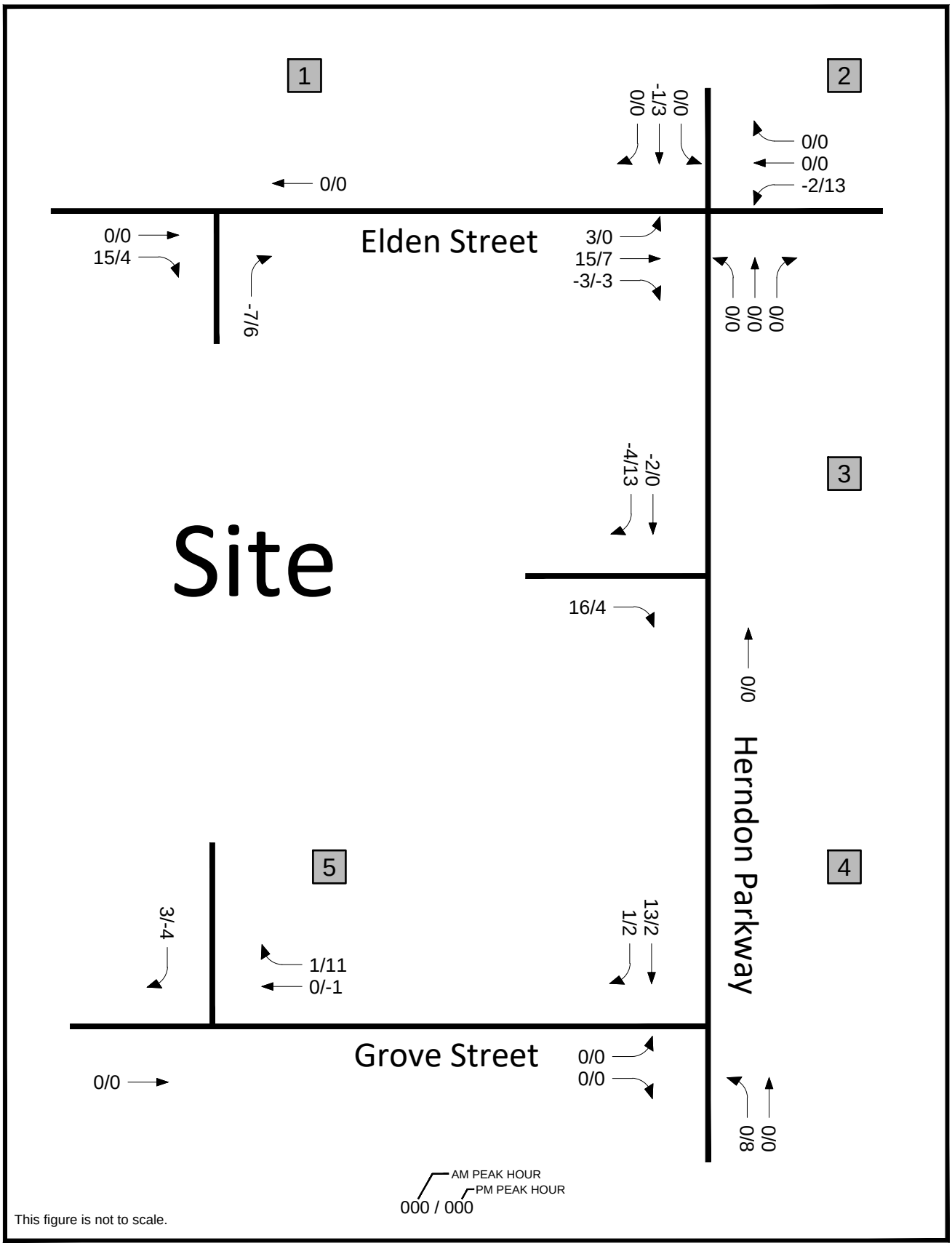


Figure 5-3
Net New Site Trips Added to the Roadway Network
(Fig. 5-1 + Fig. 5-2)

NORTH
315 Elden Adaptive Reuse
Town of Herndon, Virginia

- To/From the west on Elden Street:
  - 0 AM / 0 PM trips to the west
  - -7 AM / 6 PM trips from the west
- To/From the north on Herndon Parkway:
  - -1 AM / 3 PM trips to the west
  - 3 AM / 0 PM trips from the west
- To/From the east on Elden Street:
  - 15 AM / 8 PM trips to the west
  - -2 AM / 13 PM trips from the west

The minimal net new additional trips added to the area road network would result in negligible traffic impacts beyond the evaluated study intersections.

Section 6
ANALYSIS OF FUTURE CONDITIONS WITH DEVELOPMENT (2026)

TOTAL FUTURE TRAFFIC FORECASTS

The total future traffic forecasts were developed by combining the 2026 Background Future Traffic Forecasts shown on Figure 4-5, the removed hotel trips shown on Figure 5-1, and the site trip assignments shown on Figure 5-2. The resulting total future traffic forecasts are provided on Figure 6-1.

TOTAL FUTURE OPERATIONAL ANALYSIS

Capacity analyses with the Project were performed for the study intersections using the future lane use and traffic controls shown on Figure 4-6 and the total future traffic forecasts shown on Figure 6-1. Levels of service are summarized in Table 3-2, and the 95th/50th percentile queues are summarized in Table 3-3. The levels of service and the 95th/50th-percentile queue results are presented in Appendix G.

Levels of Service. Adding the forecasted new site trips to the background future traffic volumes while removing the trips associated with the existing hotel use would add only minor increases in delay, however the levels of service in future conditions with development (2026) would remain generally consistent with existing (2026) conditions and background future conditions without the development. Overall, the study intersections would operate at the same level of service as future conditions without the development where all the site entrances would continue to operate at acceptable LOS "B" or better and the traffic signal study intersections would continue to operate at an overall acceptable LOS "D" or better.

Queues. The results are summarized in Table 3-3 and included in Appendix G. As shown in Table 3-3, the total future vehicle queues would continue to fall within the available turn lane storage provided, consistent with background future conditions without the development. The exception is the southbound left-turn bay at the Elden Street/Herndon Parkway intersection (study intersection #2). Consistent again with existing and background future conditions, the future queues at this turning movement would continue to exceed available turn lane storage. This southbound left traffic movement does not carry any traffic associated with the subject site.

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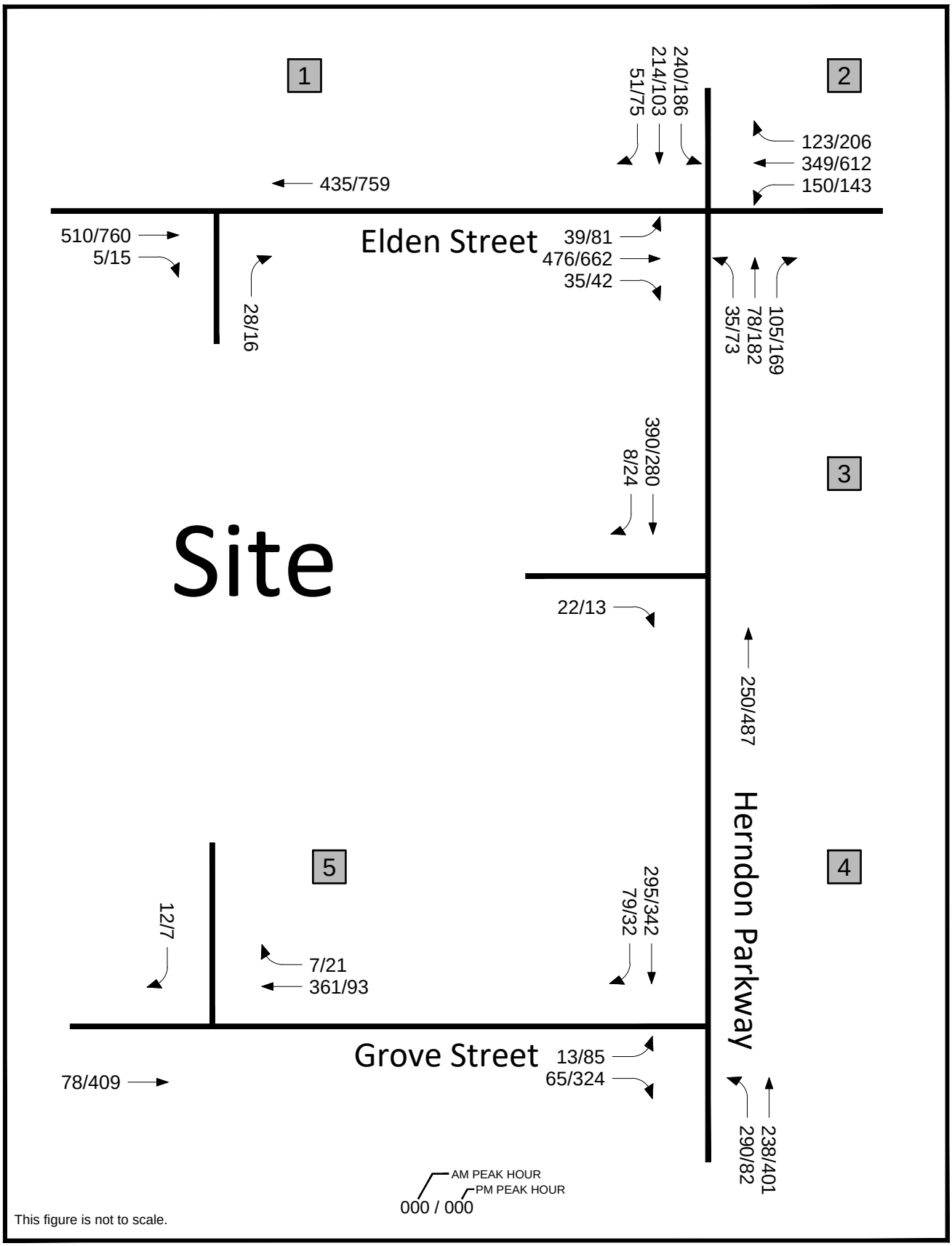


Figure 6-1
2026 Total Future Traffic Forecasts
(Fig. 4-5 + Fig. 5-1 + Fig. 5-2)

NORTH
315 Elden Adaptive Reuse
Town of Herndon, Virginia

Section 7
CONCLUSIONS

Based on this assessment, the traffic generated by the proposed new residential development will not adversely impact nearby intersections or the site's existing site entrances. The overall conclusions are as follows:

1. Area roadways continue to realize lower traffic volumes when compared to pre-Covid conditions from 2019 and earlier. However, the comparative analysis of future conditions with and without the proposed project conclude that the conversion of the existing hotel to residential would not have an appreciable impact to the existing site entrances or area study intersections.

2. Under existing conditions, all of the signalized study intersections currently operate at overall acceptable levels of service (LOS) "D" or better during the weekday peak hours. The traffic movements at the unsignalized site entrances operate at an acceptable LOS "B" or better during the weekday peak hours. The existing queues exceed the available turn lane storage at the following location:

   - Intersection #2 – Herndon Parkway/Elden Street:
     - SBL during the PM peak hour (95th Percentile Condition)

   This southbound left (SBL) turning movement does not carry any traffic associated with the subject site.

3. Roadway intersections within the study area would experience increases in traffic as a result of background regional traffic growth and future pipeline traffic associated with the existing hotel.

4. Under 2026 background future conditions that considers the Elden Street Widening project, all the study intersections would operate consistent with existing conditions with only minor increases in vehicle delay and vehicle queues.

5. According to ITE and absent any trip reduction measures (e.g. TDM), the proposed conversion from 168 hotel rooms to 174 multifamily residential units would generate the following net new trips to the area road network:

   - 24 more weekday AM peak hour trips (11 fewer inbound, 35 more outbound)
   - 35 more weekday PM peak hour trips (31 more inbound, 4 more outbound)
   - 520 more average daily trips

6. No trip reductions were applied to provide an overly conservative traffic impact analysis. Proffered Transportation Demand Management (TDM) elements supported by the site's

affordability, unit mix, and proximity to transit/bicycle-pedestrian facilities would further reduce the proposals site traffic impacts.

7. Under 2026 total future conditions (with the development), all the study intersections would generally operate consistent to future conditions without the proposed development. All of the signalized study intersections would continue to operate at overall acceptable levels of service (LOS) "D" or better during the weekday peak hours. The traffic movements at the unsignalized site entrances would continue to operate at an acceptable LOS "B" or better during the weekday peak hours. Consistent with existing and background future conditions with the development, vehicle queues would exceed the available turn lane storage at the southbound left at the Herndon Parkway/Elden Street intersection. This southbound left traffic movement does not carry any traffic associated with the subject site.

APPENDIX A
SIGNED SCOPE OF WORK DOCUMENT

WELLS + ASSOCIATES

11220 Assett Loop
Suite 202,
Manassas, VA 20109
703-365-9262
WellsandAssociates.com

September 29, 2021
Revised October 6, 2021

VIA ELECTRONIC DELIVERY

Bryce Perry
Deputy Director of Community Development
Town of Herndon
777 Lynn Street
Herndon, Virginia 20170-4602

RE: 315 Elden Adaptive Reuse
Traffic Impact Study;
Town of Herndon, Virginia

Dear Mr. Perry,

The purpose of this letter is to summarize a traffic impact study (TIS) scoping meeting that is associated with the proposed conversion from an existing hotel to a multifamily residential use in the Town of Herndon.

Meeting Date/Time: Wednesday, October 6, 2021/11 AM

Meeting Location: WebEx Virtual Meeting

Meeting Attendees: Bryce Perry, Town of Herndon
Lisa Gilleran, Town of Herndon
David Stromberg, Town of Herndon
Christopher Garcia, Town of Herndon
Eric Asher, The Pinkard Group
Kevin Fellin, Wells+Associates
Ken Wire, Wire Gill LLP
Faheem Darab, Wire Gill LLP

Applicant: Elden Street Owner, LLC

Site Location: The property is located at the southwest quadrant of the Elden Street/Herndon Parkway intersection at 315 Elden Street (**see ATTACHMENT I**). The property is also identified as **Parcel # 017-1 ((02)) 0007**. The 6.48-acre property is currently occupied by the Residence Inn Marriott that operates as extended stay hotel with "apartment-inspired suites" that feature fully equipped kitchens and practical home accommodations and leisure (e.g pool and sport court). The existing hotel is approximately 121,441 square feet (SF) and comprised of multiple two-story/garden style buildings with a total of 168 keys (hotel rooms).

WELLS + ASSOCIATES

Proposal: The subject proposal is seeking to submit a Zoning Map Amendment application that would convert the existing hotel use to a residential community with up to 174 multi-family residential dwellings units (DUs) of which approximately 50 percent will be designated as work force housing. All of the multi-family units will be located within the existing hotel buildings.

With up to 174 DUs, the project would yield the following unit mix:

- ±30 efficiency/studios units (17.2%)
- ±98 1-BR units (56.3%)
- ±46 2-BR units (26.4%)

The proposed zoning district will be Planned Development – Urban Residential (PD-UR). A portion of the ancillary hotel space (e.g. office, meeting areas, etc.) would be converted into new dwelling units to increase the site's unit count above the existing 168 hotel rooms.

Vehicular Access: Vehicular access to the site would continue to be provided via the site's three (3) existing commercial entrances: one (1) each on Elden Street, Herndon Parkway, and Grove Street. The entrances on Herndon Parkway and Grove Street are currently and will remain right-in/right-out driveways. The entrance on Elden Street currently acts as a full-movement entrance but will be restricted to a right-in/right-out upon completion of the Elden Street widening improvement project that is scheduled to go under construction in 2026. For planning purposes, the traffic impact study will evaluate a single future study year in 2026 that assumes the Elden Street widening project is complete.

The scope presented below is based on our review of the project and recent meeting with yourself and Town of Herndon staff.

TRAFFIC IMPACT STUDY SCOPE

A. Study Period(s) to be Addressed in the Traffic Impact Study

- Existing Year: 2021
- Background Future Study Year (without proposal): 2026
  - *As applicable, the existing peak hour site driveway volumes will be adjusted to reflect the Institute of Transportation Engineer's (ITE, 10th Edition) trip generation estimates based on an "All Suites Hotel" (LUC 311). Any change in driveway trips will be reflected at the off-site study intersections.*
- Total Future Study Year (with proposal): 2026
  - *The existing peak hour driveway volumes will be removed from the study network and replaced with the proposed site trips as generated by ITE "Multifamily Housing (Low-Rise)" (LUC 220).*

B. Trip Generation

The trip generation estimates for the existing and proposed uses are shown in **ATTACHMENT II**. No trip adjustment factors are assumed for this traffic impact study.

C. Percent Trip Distribution (see ATTACHMENT I)

The site trip assignments for the proposed use will be assigned to the public road network based on the following percent distribution:

- To/From the west on Elden Street and Grove Street: 25%
- To/From the north on Herndon Parkway: 10%
- To/From the east on Elden Street: 35%
- To/From the south on Herndon Parkway:30%

D. Study Intersections (see ATTACHMENT I)

1. Elden Street/Existing Site Entrance
2. Herndon Parkway/Elden Street
3. Herndon Parkway/Existing Site Entrance
4. Herndon Parkway/Grove Street
5. Grove Street/Existing Site Entrance

Peak period traffic counts were collected on a typical weekday (Tuesday, Wednesday, or Thursday) in September 2021 from 6 AM to 9 AM and 4 PM to 7 PM when public schools were in full-day session. The traffic impact study will document that the traffic counts were collected during the on-going, worldwide COVID-19 pandemic. These counts will also be compared to any available nearby traffic counts that were collected pre-pandemic.

E. Use of the current Highway Capacity Software (HCS) version or other software

The Synchro capacity analysis software (Version 10) will be used to analyze the aforementioned intersections. If the analysis indicates volumes exceeding capacity, SimTraffic will be used to calculate queueing. Existing and future conditions without and with the project will be included for comparison purposes.

F. Currently Programmed or Planned Transportation Improvements (see ATTACHMENT III)

The Elden Street widening plan will be included for the analysis of future conditions.

WELLS + ASSOCIATES

G. Critical Points for the Traffic

The study intersections will include two (2) off-site traffic signals proximate to the site and the future widening of Elden Street.

H. Other Developments nearby which should be considered in the Traffic Impact Study

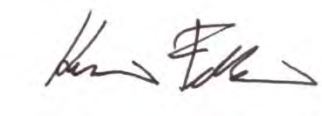
- The existing measured on-site hotel driveway trips will be increased for future background conditions (without proposed development) in accordance with applicable ITE trip generation estimates.
- There are no other future off-site developments to be considered in the immediate vicinity of the site.
- A one (1.0) percent growth rate per year will be applied to non-fixed traffic movements at the subject intersections.

I. Special Considerations

- Traffic signal timing information has been requested and received for the existing signals at Herndon Parkway/Elden Street and Herndon Parkway/Grove Street.
- The traffic impact study will recommend mitigation for those locations that result in a degraded LOS by a letter grade when compared to future conditions without the proposed development.
- The traffic impact study will discuss relative impacts to off-site intersections located outside of the study area intersections.

Feel free to call or email me at 703-676-3652 or krfellin@wellsandassociates.com with any questions and/or comments.

Sincerely,



Kevin R. Fellin, P.E.
Principal

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Site Location
Study Intersections
XX% Trip Distribution

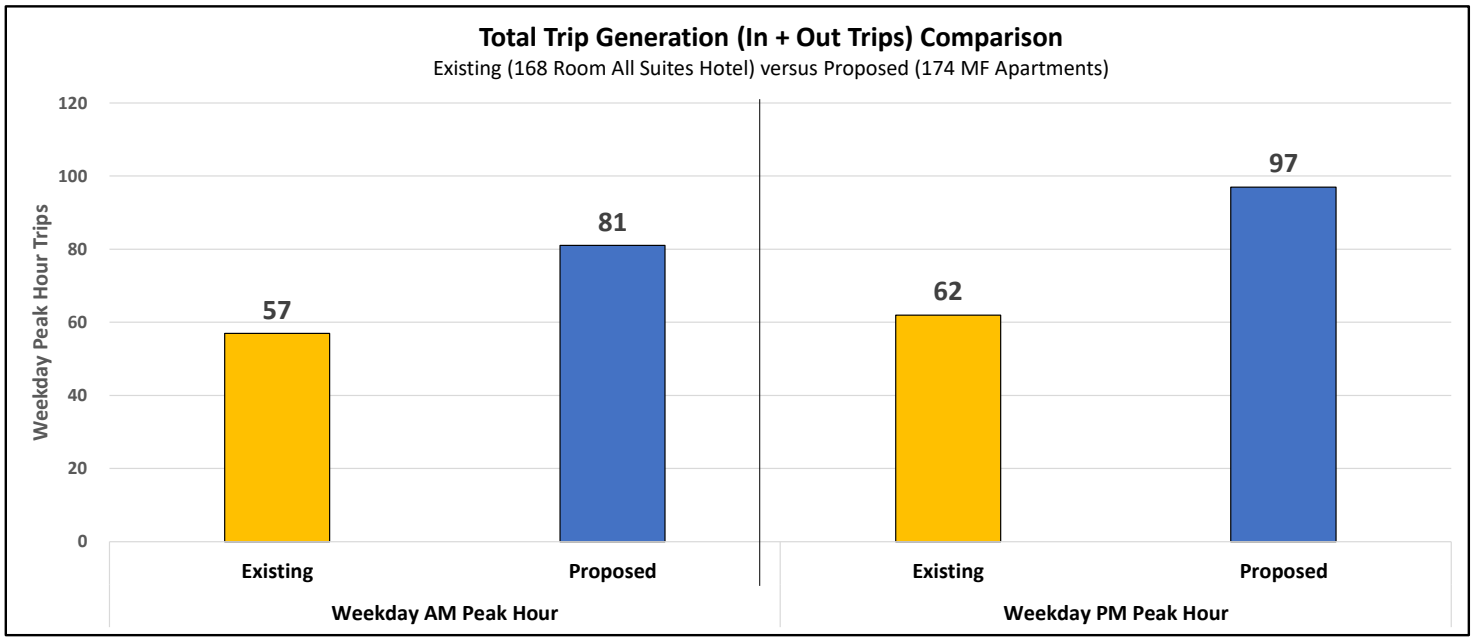
Site Location/Study Intersections/
Site Trip Distributions

NORTH
Pinkard Elden Street
Town of Herndon, Virginia

Table 1
315 Elden Adaptive Reuse
Trip Generation Analysis **(1) (2)**

Use	ITE Land Use	Land Use Code	Amount	Units **(5)**	Weekday AM Peak Hour of Adjacent Street In	AM Out	AM Total	Weekday PM Peak Hour of Adjacent Street In	PM Out	PM Total	**Weekday Average Daily Trips**
EXISTING: Residence Inn Marriott	All Suites Hotel **(3)**	311	168	Rooms	**30**	**27**	**57**	**30**	**32**	**62**	**755**
PROPOSED: Apartments	Multifamily Housing (Low-Rise) **(4)**	220	174	DU	**19**	**62**	**81**	**61**	**36**	**97**	**1,275**
				PROPOSED MINUS EXISTING	**(11)**	**35**	**24**	**31**	**4**	**35**	**520**
				Percent Difference	*-37%*	*130%*	*42%*	*103%*	*13%*	*56%*	*69%*

Note(s):
(1) Trip generation based on the Institute of Transportation Engineers' Trip Generation, 10th Edition.
(2) The weekday AM and PM peak hours are based on the peak hour of the adjacent street.
(3) An "All Suites Hotel" is a place of lodging that provides sleeping accomodations, a small restaurant and lounge, and small amounts of meeting space. Each suite includes a sitting room and separate bedroom; limited kitchen facilities are provided within the suite.
(4) "Multifamily Housing (Low-Rise)" includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have one or two levels (floors).
(5) DU = Dwelling Unit



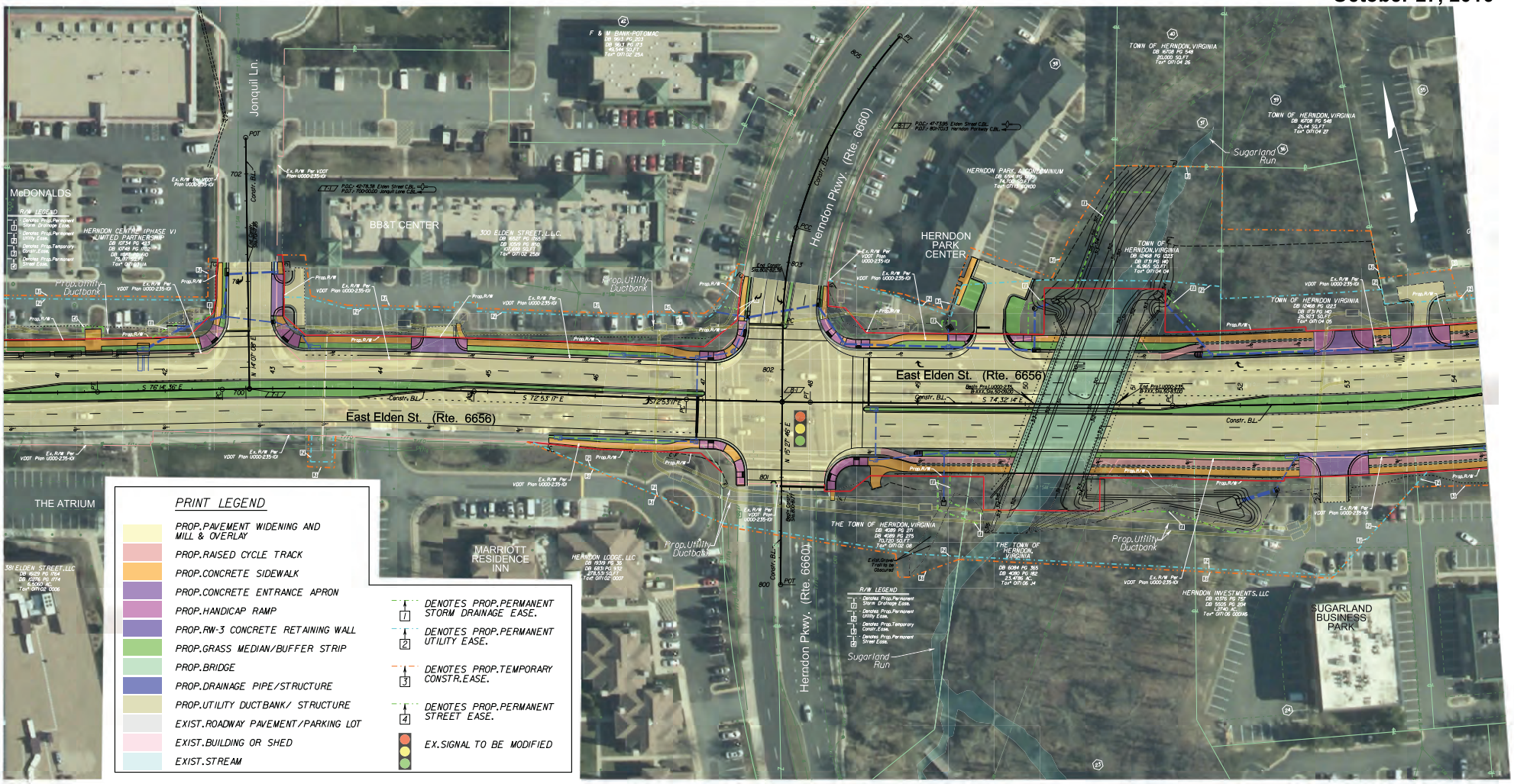
ATTACHMENT III

Rinker Design Associates, P.C.

East Elden Street Widening Project - Town of Herndon

VDOT Project: U000-235-110 - Design Public Hearing - UPC 50100

October 27, 2016



APPENDIX B
LEVELS OF SERVICE DESCRIPTIONS

Level of Service for Signalized Intersections

Level of service for signalized intersections is defined in terms of delay, which is a measure of driver discomfort and frustration, fuel consumption, and lost travel time. Specifically, level-of-service (LOS) criteria are stated in terms of the average stopped delay per vehicle for a 15-min analysis period. The criteria are given in Exhibit 16-2. Delay may be measured in the field or estimated using procedures presented later in this chapter. Delay is a complex measure and is dependent on a number of variables, including the quality of progression, the cycle length, the green ratio, and the *v/c* ratio for the lane group in question.

LOS A describes operations with very low delay, up to 10 sec per vehicle. This level of service occurs when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.

LOS B describes operations with delay greater than 10 and up to 20 sec per vehicle. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.

Exhibit 16-2. Level-of-Service Criteria for Signalized Intersections

LEVEL OF SERVICE	STOPPED DELAY PER VEHICLE (SEC)
A	≤10.0
B	> 10.0 and ≤20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 80.0
F	>80.0

LOS C describes operations with delay greater than 20 and up to 35 sec per vehicle. These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.

LOS D describes operations with delay greater than 35 and up to 55 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high *v/c* ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.

LOS E describes operations with delay greater than 55 and up to 80 sec per vehicle. This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high *v/c* ratios. Individual cycle failures are frequent occurrences.

LOS F describes operations with delay in excess of 80 sec per vehicle. This level, considered to be unacceptable to most drivers, often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high *v/c* ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

Level of Service Criteria for Stop Sign Controlled Intersections

The level of service criteria are given in Table 17-2. As used here, control delay is defined as the total elapsed time from the time a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position, including deceleration of vehicles from free-flow speed to the speed of vehicles in queue.

The average total delay for any particular minor movement is a function of the service rate or capacity of the approach and the degree of saturation. . . .

Table 17-2. Level of Service Criteria for TWSC Intersections

LEVEL OF SERVICE	AVERAGE CONTROL DELAY (sec/veh)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Average total delay less than 10 sec/veh is defined as Level of Service (LOS) A. Follow-up times of less than 5 sec have been measured when there is no conflicting traffic for a minor street movement, so control delays of less than 10 sec/veh are appropriate for low flow conditions. To remain consistent with the AWSC intersection analysis procedure described later in this chapter, a total delay of 50 sec/veh is assumed as the break point between LOS E and F.

The proposed level of service criteria for TWSC intersections are somewhat different from the criteria used in Chapter 16 for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, several driver behavior considerations combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, where drivers on the minor approaches to unsignalized intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized than signalized intersections. For these reasons, it is considered that the total delay threshold for any given level of service is less for an unsignalized intersection than for a signalized intersection. . . .

LOS F exists when there are insufficient gaps of suitable size to allow a side street demand to cross safely through a major street traffic stream. This level of service is generally evident from extremely long total delays experienced by side street traffic and by queueing on the minor approaches. The method, however, is based on a constant critical gap size - that is, the critical gap remains constant, no matter how long the side street motorist waits. LOS F may also appear in the form of side street vehicles' selecting smaller-than-usual gaps. In such cases, safety may be a problem and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues but may result in adjustments to normal gap acceptance behavior. The latter is more difficult to observe on the field than queueing, which is more obvious.

Source: Highway Capacity Manual, 2000. Transportation Research Board, National Research Council

APPENDIX C
TRAFFIC SIGNAL TIMING SHEETS

Local 19 HP @ Elden (East) Page 1
Sec Code-4096

Phase 1-8	1	2	3	4	5	6	7	8
Initial	5.0	8.0	5.0	5.0	5.0	8.0	5.0	5.0
Passage	2.5	5.0	2.0	2.0	2.0	2.5	2.0	2.0
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk	0.0	7.0	0.0	7.0	0.0	7.0	0.0	7.0
Ped Clearance	0.0	22.0	0.0	29.0	0.0	23.0	0.0	22.0
Max 1	25.0	65.0	35.0	60.0	20.0	65.0	35.0	60.0
Max 2	25.0	45.0	35.0	50.0	20.0	45.0	15.0	50.0
Max Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Auto Max Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Max Red Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sec/Actuation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time before Reduce	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Gap	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0
Max Variable Init	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0

Last Car Passage	Recall Phase
Flash DW thru Yellow	On
Controller Seq	Dual Ring
Lead/Lag Seq Barriers	On

Phase 1-8	1	2	3	4	5	6	7	8
Phases Used	ON	ON	ON	ON	ON	ON	ON	ON
Memory On/Off	off	off	off	off	off	off	off	off
Extendable Recall	off	ON	off	off	off	ON	off	off
Max Recall	off	off	off	off	off	off	off	off
Ped Recall	off	off	off	off	off	off	off	off
Call Phase Not Act 1	off	off	off	off	off	off	off	off
Call Phase Not Act 2	off	off	off	off	off	off	off	off
Flashing Walk	off	off	off	off	off	off	off	off
Soft Recall	off	off	off	off	off	off	off	off
Acutated Walk Rest	off	off	off	off	off	off	off	off
Conditional Red	off	off	off	off	off	off	off	off
Flash Wlk thru PCLR	off	off	off	off	off	off	off	off

Remote Flash Entry Phase	Ring 1:4	Ring 2:8
Remote Flash Exit Phase	Ring 1:2	Ring 2:6
Remote Flash Exit Interval	Green	
Startup Controller Phase	Ring 1:2	Ring 2:6
Startup Controller Interval	Green	
Fast Flash Rate	60/Min	
Test B Input	Dimming	

Local 19 HP @ Elden (East) Page 2

Startup Red Time	5.0 Sec.
Startup Flash Time	0.0 Sec.
Red Revert Time	0.0 Sec.
Inc Yel/Red Time	0 %
TBC Backup Delay	0 Mins
Auto Ped Clear	Off
Ped Enhancement	Off

5 Head Yellow Blank	ON	ON	ON	ON	ON	ON	ON	ON
5 Head Phase Restrict	ON	ON	ON	ON	ON	ON	ON	ON
Dual Entry Mode	On							
Phase 1-8								
Dual Entry Phase	None	None	None	None	None	2	None	None
Phs Pair	1/2		3/4		5/6		7/8	
Cond. Serv/Reservice	Off		Off		Off		Off	
Cond. Max Times	0		0		0		0	
Phase 1-8								
Simultaneous Gap Out	R	R	R	R	R	R	R	R
Phase 1-8								
Overlap A	off	off	off	off	off	off	off	off
Overlap B	off	off	off	off	off	off	off	off
Overlap C	off	off	off	off	off	off	off	off
Overlap D	off	off	off	off	off	off	off	off

Phase 1-8 & Overlap A-D												
Overlap A Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap A Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap A Red Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap B Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap B Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap B Red Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap C Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap C Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap C Red Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap D Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap D Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap D Red Inh	X	X	X	X	X	X	X	X	X	X	X	X

	Delay	Yellow	Red
Delay A Overlap	0.0	4.0	2.0
Delay B Overlap	0.0	4.0	2.0
Delay C Overlap	0.0	4.0	2.0
Delay D Overlap	0.0	4.0	2.0

Local 19 HP @ Elden (East) Page 3

Detector Fail Sample Period 0

Detector Params

Volume Sample Period	15 Minutes								
Alternate Sample Period	30 Minutes								
Det Vol Enable 1 to 8	off	off	off	off	off	off	off	off	
Det Vol Enable 9 to 16	off	off	off	off	off	off	off	off	
Det Vol Enable 17 to 24	ON	ON	ON	ON	off	off	off	off	

Detectors 1 to 8

Detector Memory	off	off	off	off	off	off	off	off		
Call Phase	1	2	3	4	5	6	7	8		
Extend/Switch	6/1	2/2	8/3	4/4	5/5	6/6	4/7	8/8		
Detector Delay Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Detector Stretch Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Enable Del Det	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd		
Detector Fail Monitoring	off	off	off	off	off	off	off	off		
Detector Fail Max	0	0	0	0	0	0	0	0		
Det Count Min	0	0	0	0	0	0	0	0	0	0
Det Count Max	0	0	0	0	0	0	0	0	0	0

Detectors 9 to 16

Detector Memory	off	off	off	off	off	off	off	off		
Call Phase	None	None	None	None	None	None	None	None		
Extend/Switch	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0		
Detector Delay Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Detector Stretch Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Enable Del Det	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd		
Detector Fail Monitoring	off	off	off	off	off	off	off	off		
Detector Fail Max	0	0	0	0	0	0	0	0		
Det Count Min	0	0	0	0	0	0	0	0	0	0
Det Count Max	0	0	0	0	0	0	0	0	0	0

Detectors 17 to 24

Detector Memory	off	off	off	off	off	off	off	off		
Call Phase	None	None	None	None	None	None	None	None		
Extend/Switch	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0		
Detector Delay Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Detector Stretch Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Enable Del Det	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd		
Detector Fail Monitoring	off	off	off	off	off	off	off	off		
Detector Fail Max	0	0	0	0	0	0	0	0		
Det Count Min	0	0	0	0	0	0	0	0	0	0
Det Count Max	0	0	0	0	0	0	0	0	0	0

Printer Params

Printer Parity	7 Bits Space Parity
Printer Baud Rate	1200 Baud

Printer Baud Rate 1200 Baud

Local 19 HP @ Elden (East) Page 4

Service Plan 1

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 2

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 3

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 4

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 5

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 6

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 7

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Service Plan 8

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Max Plans (Phase 1 to 8)

Max Plan Mode	TOD/CY	TOD/CY	TOD/CY	TOD/CY	TOD/CY	TOD/CY	TOD/CY	TOD/CY
Max Plan 1								
Max Plan Normal	15	25	15	20	10	25	15	20
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 2								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 3								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 4								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 5								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 6								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 7								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 8								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0

Dial Up

Phone Number 1	0
Phone Number 2	0
Modem Init String	

Connect Mode	Direct
Monitor Port	Port A RS232

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Report Function Scheduling

User Defined 1	None
User Defined 2	None
User Defined 3	None
User Defined 4	None
User Defined 5	None
User Defined 6	Schedule A
User Defined 7	Schedule A
User Defined 8	None
Clock Fail	Schedule A
Power On/Off	Schedule A
Not Used	None
Monitor Status Bits	Schedule A
Checksum Fail	Schedule A
Detector Fail	None
Remote Flash	Schedule A
Manual Control Enable	Schedule A
High Priority PE	None
Cycle Fail	Schedule A
Coordination Fail	Schedule A
Keyboard Operation	Schedule A
System/Free	Schedule A
Flasher Monitor	None
Low Priority PE	None
Local Cycle MOE'S	Schedule A

Report Schedule	A	B	C	Vol
Report Schedule Delay	0 Mins	0 Mins	0 Mins	0 Mins

Phase 1 to 8

Phase 1 Overlap	off	off	off	off	off	off	off	off
Phase 2 Overlap	off	off	off	off	off	off	off	off
Phase 3 Overlap	off	off	off	off	off	off	off	off
Phase 4 Overlap	off	off	off	off	off	off	off	off
Phase 5 Overlap	off	off	off	off	off	off	off	off
Phase 6 Overlap	off	off	off	off	off	off	off	off
Phase 7 Overlap	off	off	off	off	off	off	off	off
Phase 8 Overlap	off	off	off	off	off	off	off	off
Overlap Delays	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases 1 to 8

Overlapping Peds 1	off	off	off	off	off	off	off	off
Overlapping Peds 2	off	off	off	off	off	off	off	off
Overlapping Peds 3	off	off	off	off	off	off	off	off
Overlapping Peds 4	off	off	off	off	off	off	off	off
Overlapping Peds 5	off	off	off	off	off	off	off	off
Overlapping Peds 6	off	off	off	off	off	off	off	off

Overlapping Peds 7	off	off	off	off	off	off	off	off
Overlapping Peds 8	off	off	off	off	off	off	off	off

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Red Yellow Green	Red None	Yellow None	Green None
Dimming Phase 1	Red None	Yellow None	Green None
Dimming Phase 2	Red None	Yellow None	Green None
Dimming Phase 3	Red None	Yellow None	Green None
Dimming Phase 4	Red None	Yellow None	Green None
Dimming Phase 5	Red None	Yellow None	Green None
Dimming Phase 6	Red None	Yellow None	Green None
Dimming Phase 7	Red None	Yellow None	Green None
Dimming Phase 8	Red None	Yellow None	Green None
Dimming OVL A	Red None	Yellow None	Green None
Dimming OVL B	Red None	Yellow None	Green None
Dimming OVL C	Red None	Yellow None	Green None
Dimming OVL D	Red None	Yellow None	Green None
Walk Don't Walk Ped Clr			
Walk Dim Phs 1	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 2	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 3	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 4	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 5	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 6	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 7	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 8	Walk None	Don't Walk None	Ped Clr None

Max Trap Speed Limit	0
Speed Trap A (Det 9/10)	0 Inches
Speed Trap B (Det 11/12)	0 Inches
Speed Trap C (Det 13/14)	0 Inches
Speed Trap D (Det 15/16)	0 Inches

Comp Speed Det 1	0/100ths Sec
Comp Speed Det 2	0/100ths Sec
Comp Speed Det 3	0/100ths Sec
Comp Speed Det 4	0/100ths Sec
Comp Speed Det 5	0/100ths Sec
Comp Speed Det 6	0/100ths Sec
Comp Speed Det 7	0/100ths Sec
Comp Speed Det 8	0/100ths Sec
Comp Speed Det 9	0/100ths Sec
Comp Speed Det 10	0/100ths Sec
Comp Speed Det 11	0/100ths Sec
Comp Speed Det 12	0/100ths Sec
Comp Speed Det 13	0/100ths Sec
Comp Speed Det 14	0/100ths Sec
Comp Speed Det 15	0/100ths Sec
Comp Speed Det 16	0/100ths Sec

Comp Speed Det 17	0/100ths Sec							
Comp Speed Det 18	0/100ths Sec							
Comp Speed Det 19	0/100ths Sec							
Comp Speed Det 20	0/100ths Sec							
Comp Speed Det 21	0/100ths Sec							
Comp Speed Det 22	0/100ths Sec							
Comp Speed Det 23	0/100ths Sec							
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Comp Speed Det 24	0/100ths Sec							

Phase 1 to 8								
Advance Warn On/Off	off	off	off	off	off	off	off	off
Overlap A to D								
Advance Warn On/Off		Off		Off		Off	Off	

Phase 1 to 8 (9-12=Over A/D)		
Cond Overlaps Phs 1	Overlap 0	Overlap 0
Cond Overlaps Phs 2	Overlap 0	Overlap 0
Cond Overlaps Phs 3	Overlap 0	Overlap 0
Cond Overlaps Phs 4	Overlap 0	Overlap 0
Cond Overlaps Phs 5	Overlap 0	Overlap 0
Cond Overlaps Phs 6	Overlap 0	Overlap 0
Cond Overlaps Phs 7	Overlap 0	Overlap 0
Cond Overlaps Phs 8	Overlap 0	Overlap 0
Cond Overlaps O/L A	Overlap 0	Overlap 0
Cond Overlaps O/L B	Overlap 0	Overlap 0
Cond Overlaps O/L C	Overlap 0	Overlap 0
Cond Overlaps O/L D	Overlap 0	Overlap 0

Phase 1 to 8 (9-12=Over A/D)	
Adv Warn Deact Phs 1	0 Secs
Adv Warn Deact Phs 2	0 Secs
Adv Warn Deact Phs 3	0 Secs
Adv Warn Deact Phs 4	0 Secs
Adv Warn Deact Phs 5	0 Secs
Adv Warn Deact Phs 6	0 Secs
Adv Warn Deact Phs 7	0 Secs
Adv Warn Deact Phs 8	0 Secs
Adv Warn Deact O/L A	0 Secs
Adv Warn Deact O/L B	0 Secs
Adv Warn Deact O/L C	0 Secs
Adv Warn Deact O/L D	0 Secs

MOE Norm Sample Period	0 Min
MOE Alt Sample Period	0 Min

Phases 1 to 8 0=Unassigned								
MOE Det Ass 1 to 8	0	0	0	0	0	0	0	0
MOE Det Ass 9 to 16	0	0	0	0	0	0	0	0
MOE Det Ass 17 to 24	0	0	0	0	0	0	0	0

Map Phases 1 - 4

System Wide Map	2	4	6	8
Day Plans				
Day Program 1	7:00:00	Circuit #13 On		
Day Program 1	7:00:00	Cycle 2 Split 2 Offset 4		
Day Program 1	11:00:00	Cycle 1 Split 3 Offset 3		
Day Program 1	14:30:00	Cylce 1 Split 2 Offset 2		
Day Program 1	20:30:00	Circuit #13 Off		

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Day Program 2	9:00:00	Cycle 1 Split 4 Offset 4
Day Program 2	9:00:00	Circuit # 13 On
Day Program 2	19:00:00	Circuit # 13 Off

Week Programs	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Week Prog 1	DP 2	DP 1	DP 1	DP 1	DP 1	DP 1	DP 2
Week Prog 2	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 3	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 4	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 5	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 6	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 7	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 8	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 9	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 10	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1

Exception Day 1	Month 0	Day 0	->	Day Program 0
Exception Day 2	Month 0	Day 0	->	Day Program 0
Exception Day 3	Month 0	Day 0	->	Day Program 0
Exception Day 4	Month 0	Day 0	->	Day Program 0
Exception Day 5	Month 0	Day 0	->	Day Program 0
Exception Day 6	Month 0	Day 0	->	Day Program 0
Exception Day 7	Month 0	Day 0	->	Day Program 0
Exception Day 8	Month 0	Day 0	->	Day Program 0
Exception Day 9	Month 0	Day 0	->	Day Program 0
Exception Day 10	Month 0	Day 0	->	Day Program 0
Exception Day 11	Month 0	Day 0	->	Day Program 0
Exception Day 12	Month 0	Day 0	->	Day Program 0
Exception Day 13	Month 0	Day 0	->	Day Program 0
Exception Day 14	Month 0	Day 0	->	Day Program 0
Exception Day 15	Month 0	Day 0	->	Day Program 0
Exception Day 16	Month 0	Day 0	->	Day Program 0
Exception Day 17	Month 0	Day 0	->	Day Program 0
Exception Day 18	Month 0	Day 0	->	Day Program 0
Exception Day 19	Month 0	Day 0	->	Day Program 0
Exception Day 20	Month 0	Day 0	->	Day Program 0
Exception Day 21	Month 0	Day 0	->	Day Program 0
Exception Day 22	Month 0	Day 0	->	Day Program 0

Exception Day 23	Month 0	Day 0	->	Day Program 0
Exception Day 24	Month 0	Day 0	->	Day Program 0
Exception Day 25	Month 0	Day 0	->	Day Program 0
Exception Day 26	Month 0	Day 0	->	Day Program 0
Exception Day 27	Month 0	Day 0	->	Day Program 0
Exception Day 28	Month 0	Day 0	->	Day Program 0
Exception Day 29	Month 0	Day 0	->	Day Program 0
Exception Day 30	Month 0	Day 0	->	Day Program 0
Exception Day 31	Month 0	Day 0	->	Day Program 0

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Exception Day 32	Month 0	Day 0	->	Day Program 0
Exception Day 33	Month 0	Day 0	->	Day Program 0
Exception Day 34	Month 0	Day 0	->	Day Program 0
Exception Day 35	Month 0	Day 0	->	Day Program 0

Daylight Savings Time	Enabled
Coord/Time Clock Out	Time Clock
Synch Reference Time	8-Cycle
External Time Synch	Std

Cycle Reference Times

Cycle 1 Synch Reference Time	0:00:00
Cycle 2 Synch Reference Time	0:00:00
Cycle 3 Synch Reference Time	0:00:00
Cycle 4 Synch Reference Time	0:00:00
Cycle 5 Synch Reference Time	0:00:00
Cycle 6 Synch Reference Time	0:00:00
Cycle 7 Synch Reference Time	0:00:00
Cycle 8 Synch Reference Time	0:00:00

Cycle Reference Times

Year Plans By Week

Week Number 1	-->	Day Plan 01
Week Number 2	-->	Day Plan 01
Week Number 3	-->	Day Plan 01
Week Number 4	-->	Day Plan 01
Week Number 5	-->	Day Plan 01
Week Number 6	-->	Day Plan 01
Week Number 7	-->	Day Plan 01
Week Number 8	-->	Day Plan 01
Week Number 9	-->	Day Plan 01
Week Number 10	-->	Day Plan 01
Week Number 11	-->	Day Plan 01
Week Number 12	-->	Day Plan 01
Week Number 13	-->	Day Plan 01
Week Number 14	-->	Day Plan 01
Week Number 15	-->	Day Plan 01
Week Number 16	-->	Day Plan 01
Week Number 17	-->	Day Plan 01
Week Number 18	-->	Day Plan 01

Week Number 19 --> Day Plan 01
Week Number 20 --> Day Plan 01
Week Number 21 --> Day Plan 01
Week Number 22 --> Day Plan 01
Week Number 23 --> Day Plan 01
Week Number 24 --> Day Plan 01
Week Number 25 --> Day Plan 01
Week Number 26 --> Day Plan 01
Week Number 27 --> Day Plan 01
Week Number 28 --> Day Plan 01
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Week Number 29 --> Day Plan 01
Week Number 30 --> Day Plan 01
Week Number 31 --> Day Plan 01
Week Number 32 --> Day Plan 01
Week Number 33 --> Day Plan 01
Week Number 34 --> Day Plan 01
Week Number 35 --> Day Plan 01
Week Number 36 --> Day Plan 01
Week Number 37 --> Day Plan 01
Week Number 38 --> Day Plan 01
Week Number 39 --> Day Plan 01
Week Number 40 --> Day Plan 01
Week Number 41 --> Day Plan 01
Week Number 42 --> Day Plan 01
Week Number 43 --> Day Plan 01
Week Number 44 --> Day Plan 01
Week Number 45 --> Day Plan 01
Week Number 46 --> Day Plan 01
Week Number 47 --> Day Plan 01
Week Number 48 --> Day Plan 01
Week Number 49 --> Day Plan 01
Week Number 50 --> Day Plan 01
Week Number 51 --> Day Plan 01
Week Number 52 --> Day Plan 01
Week Number 53 --> Day Plan 01
Manual Circuits
Manual Circuit 9 Auto
Manual Circuit 10 Auto
Manual Circuit 11 Auto
Manual Circuit 12 Auto
Manual Circuit 13 Auto
Manual Circuit 14 Auto
Manual Circuit 15 Auto
Manual Circuit 16 Auto
Manual Circuit 17 Auto
Manual Circuit 18 Auto
Manual Circuit 19 Auto
Manual Circuit 20 Auto
Manual Circuit 21 Auto
Manual Circuit 22 Auto

Manual Circuit	23	Auto
Manual Circuit	24	Auto
Manual Circuit	25	Auto
Manual Circuit	26	Auto
Manual Circuit	27	Auto
Manual Circuit	28	Auto
Manual Circuit	29	Auto
Manual Circuit	30	Auto
Manual Circuit	31	Auto
Manual Circuit	32	Auto
Manual Circuit	33	Auto

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Manual Circuit	34	Auto
Manual Circuit	35	Auto
Manual Circuit	36	Auto
Manual Circuit	37	Auto
Manual Circuit	38	Auto
Manual Circuit	39	Auto
Manual Circuit	40	Auto
Manual Circuit	41	Auto
Manual Circuit	42	Auto
Manual Circuit	43	Auto
Manual Circuit	44	Auto
Manual Circuit	45	Auto
Manual Circuit	46	Auto
Manual Circuit	47	Auto
Manual Circuit	48	Auto
Manual Circuit	49	Auto
Manual Circuit	50	Auto
Manual Circuit	51	Auto
Manual Circuit	52	Auto
Manual Circuit	53	Auto
Manual Circuit	54	Auto
Manual Circuit	55	Auto
Manual Circuit	56	Auto
Manual Circuit	57	Auto
Manual Circuit	58	Auto
Manual Circuit	60	Auto
Manual Circuit	61	Auto
Manual Circuit	62	Auto
Manual Circuit	63	Auto
Manual Circuit	64	Auto
Manual Circuit	65	Auto
Manual Circuit	66	Auto
Manual Circuit	67	Auto
Manual Circuit	68	Auto
Manual Circuit	69	Auto
Manual Circuit	70	Auto
Manual Circuit	71	Auto
Manual Circuit	72	Auto
Manual Circuit	73	Auto
Manual Circuit	74	Auto

Manual Circuit 75	Auto		
Manual Circuit 76	Auto		
Manual Circuit 77	Auto		
Manual Circuit 78	Auto		
Manual Circuit 79	Auto		
Manual Circuit 80	Auto		
Manual Circuit 81	Auto		
Manual Circuit 82	Auto		
Manual Circuit 83	Auto		
Manual Circuit 84	Auto		
Manual Circuit 85	Auto		
Manual Circuit 86	Auto		
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Manual Circuit 87	Auto		
Manual Circuit 88	Auto		
Manual Circuit 89	Auto		
Manual Circuit 90	Auto		
Manual Circuit 91	Auto		
Manual Circuit 92	Auto		
Manual Circuit 93	Auto		
Manual Circuit 94	Auto		
Manual Circuit 95	Auto		
Manual Circuit 96	Auto		
Manual Circuit 97	Auto		
Manual Circuit 98	Auto		
Manual Circuit 99	Auto		
Manual Circuit 100	Auto		
Manual Circuit 101	Auto		
Manual Circuit 102	Auto		
Manual Circuit 103	Auto		
Manual Circuit 104	Auto		
Manual Circuit 105	Auto		
Manual Circuit 106	Auto		
Manual Circuit 107	Auto		
Manual Circuit 108	Auto		
Manual Circuit 109	Auto		
Manual Circuit 110	Auto		
Manual Circuit 111	Auto		
Manual Circuit 112	Auto		
Manual Circuit 113	Auto		
Manual Circuit 114	Auto		
Manual Circuit 115	Auto		
Manual Circuit 116	Auto		
Manual Circuit 117	Auto		
Manual Circuit 118	Auto		
Manual Circuit 119	Auto		
Manual Circuit 120	Auto		
Manual Circuit 121	Auto		
Manual Circuit 122	Auto		
Manual Circuit 123	Auto		
Manual Circuit 124	Auto		
Manual Circuit 125	Auto		

Manual Circuit 126	Auto
Manual Circuit 127	Auto
Manual Circuit 128	Auto
Manual Circuit 129	Auto
Manual Circuit 130	Auto
Manual Circuit 131	Auto
Manual Circuit 132	Auto
Manual Circuit 133	Auto
Manual Circuit 134	Auto
Manual Circuit 135	Auto
Manual Circuit 136	Auto
Manual Circuit 137	Auto
Manual Circuit 138	Auto

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Manual Circuit 139	Auto
Manual Circuit 140	Auto
Manual Circuit 141	Auto
Manual Circuit 142	Auto
Manual Circuit 143	Auto
Manual Circuit 144	Auto
Manual Circuit 145	Auto
Manual Circuit 146	Auto
Manual Circuit 147	Auto
Manual Circuit 148	Auto
Manual Circuit 149	Auto
Manual Circuit 150	Auto

Functions 1 to 8								
Special Functions	0	0	0	0	0	0	0	0
Spcl Functions Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Functions 9 to 16								
Special Functions	0	0	0	0	0	0	0	0
Spcl Functions Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Functions 17 to 24								
Special Functions	0	0	0	0	0	0	0	0
Spcl Functions Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cycle Select	Use T/C
Split Select	Use T/C
Offset Select	Use T/C
Remote Flash	Off
Remote System	Use T/C
Subordinated Coord Mode	Off
Floating Force Offs	Off
Offset Seeking Mode	Shortway
Man CSO to Free: Cycle	Disabled
Man CSO to Free: Split	Disabled
Man CSO to Free: Offset	Disabled

Cycle 1 to 8								
Max Dwell Time (Seconds)	0	0	0	0	0	0	0	0

Loss to Switch	off
System Max 2	off
System to CAN	off

Force Offs (Cycle/Split/Phase FO in Seconds)

	FO 1	FO 2	FO 3	FO 4	FO 5	FO 6	FO 7	FO 8
1/1	0	0	0	0	0	0	0	0
1/2	78	0	17	60	76	0	15	6
1/3	75	0	15	57	73	0	15	57
1/4	81	0	20	64	79	0	26	64
2/1	84	0	21	63	79	0	21	63
2/2	89	0	25	68	89	0	20	68
2/3	0	0	0	0	0	0	0	0
2/4	104	0	39	83	99	0	18	83

3/1	112	0	48	91	112	0	25	91
3/2	112	0	48	91	112	0	25	91
3/3	112	0	48	91	112	0	25	91
3/4	112	0	48	91	112	0	25	91
4/1	112	0	48	91	112	0	25	91
4/2	112	0	48	91	112	0	25	91
4/3	112	0	48	91	112	0	25	91
4/4	112	0	48	91	112	0	25	91
5/1	112	0	48	91	112	0	25	91
5/2	112	0	48	91	112	0	25	91
5/3	112	0	48	91	112	0	25	91
5/4	112	0	48	91	112	0	25	91
6/1	112	0	48	91	112	0	25	91
6/2	112	0	48	91	112	0	25	91
6/3	112	0	48	91	112	0	25	91
6/4	112	0	48	91	112	0	25	91
7/1	112	0	48	91	112	0	25	91
7/2	112	0	48	91	112	0	25	91
7/3	112	0	48	91	112	0	25	91
7/4	112	0	48	91	112	0	25	91
8/1	112	0	48	91	112	0	25	91
8/2	112	0	48	91	112	0	25	91
8/3	112	0	48	91	112	0	25	91
8/4	112	0	48	91	112	0	25	91
	112	0	48	91	112	0	25	91

Force Offs (Cycle/Split/ Phase FO in Seconds)

Permissive Times (Cycle/Split/Phase FO Start->End)

	Perm 1	Perm 2	Perm 3	Perm 4	Perm 5	Perm 6	Perm 7	Perm 8
1/1	0->5	0->5	0->5	0->5	0->5	0->5	0->5	0->5
1/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
1/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
1/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
2/1	0->5	0->5	0->5	0->5	0->5	0->5	0->5	0->5
2/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
2/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
2/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0

3/1	0->5	0->5	0->5	0->5	0->5	0->5	0->5	0->5
3/2	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
3/3	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
3/4	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/1	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/2	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/3	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/4	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/1	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/2	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/3	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/4	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
6/1	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
6/2	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
6/3	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0

6/4	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/1	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/2	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/3	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/4	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/1	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/2	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/3	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/4	0->0	0->0	0->0	0->0	0->0	0->0	0->0	0->0

Permissive Times (Cycle/Split/Phase Start -> End)

Offset Times (Cycle/Offset Offset in Seconds)

1/1/1 0	1/1/2 99	1/1/3 118	1/1/4 5	1/1/5 0	1/1/6 0	1/1/7 0	1/1/8 0
1/2/1 0	1/2/2 47	1/2/3 0	1/2/4 13	1/2/5 0	1/2/6 0	1/2/7 0	1/2/8 0
1/3/1 56	1/3/2 56	1/3/3 56	1/3/4 56	1/3/5 56	1/3/6 56	1/3/7 56	1/3/8 56
1/4/1 56	1/4/2 56	1/4/3 56	1/4/4 56	1/4/5 56	1/4/6 56	1/4/7 56	1/4/8 56
1/5/1 56	1/5/2 56	1/5/3 56	1/5/4 56	1/5/5 56	1/5/6 56	1/5/7 56	1/5/8 56
1/6/1 56	1/6/2 56	1/6/3 56	1/6/4 56	1/6/5 56	1/6/6 56	1/6/7 56	1/6/8 56
1/7/1 56	1/7/2 56	1/7/3 56	1/7/4 56	1/7/5 56	1/7/6 56	1/7/7 56	1/7/8 56
1/8/1 56	1/8/2 56	1/8/3 56	1/8/4 56	1/8/5 56	1/8/6 56	1/8/7 56	1/8/8 56

Offset Times (Cycle/Offset Offset in Seconds)

Cycle Times (Seconds)	120	140	160	160	160	160	160	160
Phase 1 to 8								
Force Off 1 Phase Assoc	ON	off	off	off	off	off	off	off
Force Off 2 Phase Assoc	off	ON	off	off	off	off	off	off
Force Off 3 Phase Assoc	off	off	ON	off	off	off	off	off
Force Off 4 Phase Assoc	off	off	off	ON	off	off	off	off
Force Off 5 Phase Assoc	off	off	off	off	ON	off	off	off
Force Off 6 Phase Assoc	off	off	off	off	off	ON	off	off
Force Off 7 Phase Assoc	off	off	off	off	off	off	ON	off
Force Off 8 Phase Assoc	off	off	off	off	off	off	off	ON

Phase 1 to 8								
Permissive 1 Phase Assoc	ON	ON	ON	ON	ON	ON	ON	ON
Permissive 2 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 3 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 4 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 5 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 6 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 7 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 8 Phase Assoc	off	off	off	off	off	off	off	off

Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
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Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled

(Cycle1) Split: 1	1	2	3	4
Coord Phases	2-6	2-6	2-6	2-6
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle2)				
Coord Phases	2-6	2-6	2-6	2-6
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle3)				
Coord Phases	2-6	2-6	2-6	2-6
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle4)				
Coord Phases	2-6	2-6	2-6	2-6
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle5)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle6)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0

(Cycle7)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle8)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0

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(0=Auto Calc 1-255 Secs)	
Ped Permissive	3 Secs
Permissive Type	Yield
AutoCalc Permissive Mode	Start at Cycle 0
Extendible Green Band %	0 Percent
Normal/CAN Option	Normal
Permissive Mode	Standard Permissive

Split Percentages (Cy/Spl/Ph)

1/1/1 0	1/1/2 0	1/1/3 0	1/1/4 0	1/1/5 0	1/1/6 0	1/1/7 0	1/1/8 0
1/2/1 0	1/2/2 0	1/2/3 0	1/2/4 0	1/2/5 0	1/2/6 0	1/2/7 0	1/2/8 0
1/3/1 0	1/3/2 0	1/3/3 0	1/3/4 0	1/3/5 0	1/3/6 0	1/3/7 0	1/3/8 0
1/4/1 0	1/4/2 0	1/4/3 0	1/4/4 0	1/4/5 0	1/4/6 0	1/4/7 0	1/4/8 0
2/1/1 0	2/1/2 0	2/1/3 0	2/1/4 0	2/1/5 0	2/1/6 0	2/1/7 0	2/1/8 0
2/2/1 0	2/2/2 0	2/2/3 0	2/2/4 0	2/2/5 0	2/2/6 0	2/2/7 0	2/2/8 0
2/3/1 0	2/3/2 0	2/3/3 0	2/3/4 0	2/3/5 0	2/3/6 0	2/3/7 0	2/3/8 0
2/4/1 0	2/4/2 0	2/4/3 0	2/4/4 0	2/4/5 0	2/4/6 0	2/4/7 0	2/4/8 0
3/1/1 0	3/1/2 0	3/1/3 0	3/1/4 0	3/1/5 0	3/1/6 0	3/1/7 0	3/1/8 0
3/2/1 0	3/2/2 0	3/2/3 0	3/2/4 0	3/2/5 0	3/2/6 0	3/2/7 0	3/2/8 0
3/3/1 0	3/3/2 0	3/3/3 0	3/3/4 0	3/3/5 0	3/3/6 0	3/3/7 0	3/3/8 0
3/4/1 0	3/4/2 0	3/4/3 0	3/4/4 0	3/4/5 0	3/4/6 0	3/4/7 0	3/4/8 0
4/1/1 0	4/1/2 0	4/1/3 0	4/1/4 0	4/1/5 0	4/1/6 0	4/1/7 0	4/1/8 0
4/2/1 0	4/2/2 0	4/2/3 0	4/2/4 0	4/2/5 0	4/2/6 0	4/2/7 0	4/2/8 0
4/3/1 0	4/3/2 0	4/3/3 0	4/3/4 0	4/3/5 0	4/3/6 0	4/3/7 0	4/3/8 0
4/4/1 0	4/4/2 0	4/4/3 0	4/4/4 0	4/4/5 0	4/4/6 0	4/4/7 0	4/4/8 0
5/1/1 0	5/1/2 0	5/1/3 0	5/1/4 0	5/1/5 0	5/1/6 0	5/1/7 0	5/1/8 0
5/2/1 0	5/2/2 0	5/2/3 0	5/2/4 0	5/2/5 0	5/2/6 0	5/2/7 0	5/2/8 0
5/3/1 0	5/3/2 0	5/3/3 0	5/3/4 0	5/3/5 0	5/3/6 0	5/3/7 0	5/3/8 0
5/4/1 0	5/4/2 0	5/4/3 0	5/4/4 0	5/4/5 0	5/4/6 0	5/4/7 0	5/4/8 0
6/1/1 0	6/1/2 0	6/1/3 0	6/1/4 0	6/1/5 0	6/1/6 0	6/1/7 0	6/1/8 0
6/2/1 0	6/2/2 0	6/2/3 0	6/2/4 0	6/2/5 0	6/2/6 0	6/2/7 0	6/2/8 0
6/3/1 0	6/3/2 0	6/3/3 0	6/3/4 0	6/3/5 0	6/3/6 0	6/3/7 0	6/3/8 0
6/4/1 0	6/4/2 0	6/4/3 0	6/4/4 0	6/4/5 0	6/4/6 0	6/4/7 0	6/4/8 0

7/1/1 0	7/1/2 0	7/1/3 0	7/1/4 0	7/1/5 0	7/1/6 0	7/1/7 0	7/1/8 0
7/2/1 0	7/2/2 0	7/2/3 0	7/2/4 0	7/2/5 0	7/2/6 0	7/2/7 0	7/2/8 0
7/3/1 0	7/3/2 0	7/3/3 0	7/3/4 0	7/3/5 0	7/3/6 0	7/3/7 0	7/3/8 0
7/4/1 0	7/4/2 0	7/4/3 0	7/4/4 0	7/4/5 0	7/4/6 0	7/4/7 0	7/4/8 0
8/1/1 0	8/1/2 0	8/1/3 0	8/1/4 0	8/1/5 0	8/1/6 0	8/1/7 0	8/1/8 0
8/2/1 0	8/2/2 0	8/2/3 0	8/2/4 0	8/2/5 0	8/2/6 0	8/2/7 0	8/2/8 0
8/3/1 0	8/3/2 0	8/3/3 0	8/3/4 0	8/3/5 0	8/3/6 0	8/3/7 0	8/3/8 0
8/4/1 0	8/4/2 0	8/4/2 0	8/4/4 0	8/4/5 0	8/4/6 0	8/4/7 0	8/4/8 0

Cycles per Sample Period	0
Split Mode	Queuing Detectors
Min Q's/FO's to Select Split	0

Phase 1 to 8								
Split Phase Assoc	off	off	off	off	off	off	off	off
Split Phase Assoc	off	off	off	off	off	off	off	off
Split Phase Assoc	off	off	off	off	off	off	off	off
Split Phase Assoc	off	off	off	off	off	off	off	off
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Phase 1 Queue Detectors	0	0
Phase 2 Queue Detectors	0	0
Phase 3 Queue Detectors	0	0
Phase 4 Queue Detectors	0	0
Phase 5 Queue Detectors	0	0
Phase 6 Queue Detectors	0	0
Phase 7 Queue Detectors	0	0
Phase 8 Queue Detectors	0	0

Phase 1 Queue Det Delays	0.0	0.0
Phase 2 Queue Det Delays	0.0	0.0
Phase 3 Queue Det Delays	0.0	0.0
Phase 4 Queue Det Delays	0.0	0.0
Phase 5 Queue Det Delays	0.0	0.0
Phase 6 Queue Det Delays	0.0	0.0
Phase 7 Queue Det Delays	0.0	0.0
Phase 8 Queue Det Delays	0.0	0.0

Split Inhibits (Spl 2 to 4) ,21,1,Split Inhibits Cyc %d/Off %d
Split Inhibits (Spl 2 to 4) ,21,1,Split Inhibits Cyc %d/Off %d

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Sec Code-4096

Phase 1-8	1	2	3	4	5	6	7	8
Initial	8.0	20.0	0.0	8.0	0.0	20.0	0.0	0.0
Passage	4.0	4.0	0.0	4.0	0.0	4.0	0.0	0.0
Yellow	4.0	4.0	0.0	4.0	0.0	4.0	0.0	0.0
Red	2.0	2.0	0.0	2.0	0.0	2.0	0.0	0.0
Walk	0.0	7.0	0.0	7.0	0.0	0.0	0.0	0.0
Ped Clearance	0.0	22.0	0.0	20.0	0.0	0.0	0.0	0.0
Max 1	30.0	45.0	0.0	30.0	0.0	45.0	0.0	0.0
Max 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Auto Max Ext	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Added Max Red Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sec/Actuation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time before Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to Reduce	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Variable Init	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Last Car Passage	Recall Phase
Flash DW thru Yellow	Off
Controller Seq	Dual Ring
Lead/Lag Seq Barriers	On

Phase 1-8	1	2	3	4	5	6	7	8
Phases Used	ON	ON	off	ON	ON	ON	off	ON
Memory On/Off	off	off	off	off	off	off	off	off
Extendable Recall	off	ON	off	off	off	ON	off	off
Max Recall	off	off	off	off	off	off	off	off
Ped Recall	off	off	off	off	off	off	off	off
Call Phase Not Act 1	off	off	off	off	off	off	off	off
Call Phase Not Act 2	off	off	off	off	off	off	off	off
Flashing Walk	off	off	off	off	off	off	off	off
Soft Recall	off	off	off	off	off	off	off	off
Acutated Walk Rest	off	off	off	off	off	off	off	off
Conditional Red	off	off	off	off	off	off	off	off
Flash Wlk thru PCLR	off	off	off	off	off	off	off	off

Remote Flash Entry Phase	Ring 1:0	Ring 2:0
Remote Flash Exit Phase	Ring 1:0	Ring 2:0
Remote Flash Exit Interval	Undef.	
Startup Controller Phase	Ring 1:2	Ring 2:6
Startup Controller Interval	Green	
Fast Flash Rate	60/Min	
Test B Input	Dimming	

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Startup Red Time	0.0 Sec.
Startup Flash Time	0.0 Sec.
Red Revert Time	0.0 Sec.
Inc Yel/Red Time	0 %
TBC Backup Delay	0 Mins
Auto Ped Clear	Off
Ped Enhancement	Off

5 Head Yellow Blank	ON	ON	ON	ON	ON	ON	ON	ON
5 Head Phase Restrict	ON	ON	ON	ON	ON	ON	ON	ON
Dual Entry Mode	off							
Phase 1-8								
Dual Entry Phase	None	None	None	None	None	None	None	None
Phs Pair	1/2		3/4		5/6		7/8	
Cond. Serv/Reservice	Off		Off		Off		Off	
Cond. Max Times	0		0		0		0	
Phase 1-8								
Simultaneous Gap Out	R	R	R	R	R	R	R	R
Phase 1-8								
Overlap A	ON	off	off	off	off	off	off	off
Overlap B	off	off	off	off	off	off	off	off
Overlap C	off	off	off	off	off	off	off	off
Overlap D	off	off	off	off	off	off	off	off

Phase 1-8 & Overlap A-D												
Overlap A Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap A Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap A Red Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap B Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap B Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap B Red Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap C Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap C Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap C Red Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap D Grn Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap D Yel Inh	X	X	X	X	X	X	X	X	X	X	X	X
Overlap D Red Inh	X	X	X	X	X	X	X	X	X	X	X	X

	Delay	Yellow	Red
Delay A Overlap	0.0	4.0	2.0
Delay B Overlap	0.0	4.0	2.0
Delay C Overlap	0.0	4.0	2.0
Delay D Overlap	0.0	4.0	2.0

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Detector Fail Sample Period 0

Detector Params

Volume Sample Period	15 Minutes									
Alternate Sample Period	15 Minutes									
Det Vol Enable 1 to 8	ON	ON	ON	ON	ON	ON	ON	ON		
Det Vol Enable 9 to 16	off	off	off	off	off	off	off	off		
Det Vol Enable 17 to 24	off	off	off	off	off	off	off	off		

Detectors 1 to 8

Detector Memory	off	off	off	off	off	off	off	off		
Call Phase	1	2	3	4	5	6	7	8		
Extend/Switch	1/1	2/2	3/3	4/4	5/5	6/6	7/7	8/8		
Detector Delay Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Detector Stretch Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Enable Del Det	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd		
Detector Fail Monitoring	off	off	off	off	off	off	off	off		
Detector Fail Max	0	0	0	0	0	0	0	0		
Det Count Min	0	0	0	0	0	0	0	0	0	0
Det Count Max	0	0	0	0	0	0	0	0	0	0

Detectors 9 to 16

Detector Memory	off	off	off	off	off	off	off	off		
Call Phase	None	None	None	None	None	None	None	None		
Extend/Switch	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0		
Detector Delay Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Detector Stretch Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Enable Del Det	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd		
Detector Fail Monitoring	off	off	off	off	off	off	off	off		
Detector Fail Max	0	0	0	0	0	0	0	0		
Det Count Min	0	0	0	0	0	0	0	0	0	0
Det Count Max	0	0	0	0	0	0	0	0	0	0

Detectors 17 to 24

Detector Memory	off	off	off	off	off	off	off	off		
Call Phase	None	None	None	None	None	None	None	None		
Extend/Switch	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0		
Detector Delay Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Detector Stretch Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Enable Del Det	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd	Stnd		
Detector Fail Monitoring	off	off	off	off	off	off	off	off		
Detector Fail Max	0	0	0	0	0	0	0	0		
Det Count Min	0	0	0	0	0	0	0	0	0	0
Det Count Max	0	0	0	0	0	0	0	0	0	0

Printer Params

Printer Parity	7 Bits Space Parity
Printer Baud Rate	1200 Baud

Printer Baud Rate 1200 Baud

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Service Plan 1

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	5.0	30.0	0.0	8.0	5.0	30.0	0.0	8.0
Passage Time	3.0	3.0	0.0	3.0	3.0	3.0	0.0	3.0
Walk Time	0.0	7.0	0.0	7.0	0.0	7.0	0.0	7.0
Ped Clear Time	0.0	12.0	0.0	18.0	0.0	12.0	0.0	18.0

Service Plan 2

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 3

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 4

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 5

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 6

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Service Plan 7

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Service Plan 8

Mode Phs 1 to 8	Omit	Omit	Omit	Omit	Omit	Omit	Omit	Omit
Min Green Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Passage Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ped Clear Time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Max Plans (Phase 1 to 8)

Max Plan Mode	Nema	Nema	Nema	Nema	Nema	Nema	Nema	Nema
Max Plan 1								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 2								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 3								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 4								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 5								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 6								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 7								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0
Max Plan 8								
Max Plan Normal	0	0	0	0	0	0	0	0
Max Plan Failed	0	0	0	0	0	0	0	0

Dial Up

Phone Number 1	0
Phone Number 2	0
Modem Init String	

Connect Mode	Direct
Monitor Port	Port A RS232

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Report Function Scheduling

User Defined 1	None
User Defined 2	None
User Defined 3	None
User Defined 4	None
User Defined 5	None
User Defined 6	Schedule A
User Defined 7	Schedule A
User Defined 8	None
Clock Fail	Schedule A
Power On/Off	Schedule A
Not Used	None
Monitor Status Bits	Schedule A
Checksum Fail	Schedule A
Detector Fail	None
Remote Flash	Schedule A
Manual Control Enable	Schedule A
High Priority PE	None
Cycle Fail	Schedule A
Coordination Fail	Schedule A
Keyboard Operation	Schedule A
System/Free	Schedule A
Flasher Monitor	None
Low Priority PE	None
Local Cycle MOE'S	Schedule A

Report Schedule	A	B	C	VOL
Report Schedule Delay	0 Mins	0 Mins	0 Mins	0 Mins

Phase 1 to 8

Phase 1 Overlap	off	off	off	off	off	off	off	off
Phase 2 Overlap	off	off	off	off	off	off	off	off
Phase 3 Overlap	off	off	off	off	off	off	off	off
Phase 4 Overlap	off	off	off	off	off	off	off	off
Phase 5 Overlap	off	off	off	off	off	off	off	off
Phase 6 Overlap	off	off	off	off	off	off	off	off
Phase 7 Overlap	ON	off	ON	off	ON	ON	ON	ON
Phase 8 Overlap	off	off	off	off	off	off	off	off
Overlap Delays	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Phases 1 to 8

Overlapping Peds 1	off	off	off	off	off	off	off	off
Overlapping Peds 2	off	off	off	off	off	off	off	off
Overlapping Peds 3	off	off	off	off	off	off	off	off
Overlapping Peds 4	off	off	off	off	off	off	off	off
Overlapping Peds 5	off	off	off	off	off	off	off	off
Overlapping Peds 6	off	off	off	off	off	off	off	off

Overlapping Peds 7	off	off	off	off	off	off	off	off
Overlapping Peds 8	off	off	off	off	off	off	off	off

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Red Yellow Green	Red None	Yellow None	Green None
Dimming Phase 1	Red None	Yellow None	Green None
Dimming Phase 2	Red None	Yellow None	Green None
Dimming Phase 3	Red None	Yellow None	Green None
Dimming Phase 4	Red None	Yellow None	Green None
Dimming Phase 5	Red None	Yellow None	Green None
Dimming Phase 6	Red None	Yellow None	Green None
Dimming Phase 7	Red None	Yellow None	Green None
Dimming Phase 8	Red None	Yellow None	Green None
Dimming OVL A	Red None	Yellow None	Green None
Dimming OVL B	Red None	Yellow None	Green None
Dimming OVL C	Red None	Yellow None	Green None
Dimming OVL D	Red None	Yellow None	Green None
Walk Don't Walk Ped Clr			
Walk Dim Phs 1	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 2	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 3	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 4	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 5	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 6	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 7	Walk None	Don't Walk None	Ped Clr None
Walk Dim Phs 8	Walk None	Don't Walk None	Ped Clr None

Max Trap Speed Limit	0
Speed Trap A (Det 9/10)	0 Inches
Speed Trap B (Det 11/12)	0 Inches
Speed Trap C (Det 13/14)	0 Inches
Speed Trap D (Det 15/16)	0 Inches

Comp Speed Det 1	0/100ths Sec
Comp Speed Det 2	0/100ths Sec
Comp Speed Det 3	0/100ths Sec
Comp Speed Det 4	0/100ths Sec
Comp Speed Det 5	0/100ths Sec
Comp Speed Det 6	0/100ths Sec
Comp Speed Det 7	0/100ths Sec
Comp Speed Det 8	0/100ths Sec
Comp Speed Det 9	0/100ths Sec
Comp Speed Det 10	0/100ths Sec
Comp Speed Det 11	0/100ths Sec
Comp Speed Det 12	0/100ths Sec
Comp Speed Det 13	0/100ths Sec
Comp Speed Det 14	0/100ths Sec
Comp Speed Det 15	0/100ths Sec
Comp Speed Det 16	0/100ths Sec

Comp Speed Det 17	0/100ths Sec
Comp Speed Det 18	0/100ths Sec
Comp Speed Det 19	0/100ths Sec
Comp Speed Det 20	0/100ths Sec
Comp Speed Det 21	0/100ths Sec
Comp Speed Det 22	0/100ths Sec
Comp Speed Det 23	0/100ths Sec

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Comp Speed Det 24	0/100ths Sec

Phase 1 to 8

Advance Warn On/Off	off	off	off	off	off	off	off	off

Overlap A to D

Advance Warn On/Off	Off	Off	Off	Off

Phase 1 to 8 (9-12=Over A/D)

Cond Overlaps Phs 1	Overlap 0	Overlap 0
Cond Overlaps Phs 2	Overlap 0	Overlap 0
Cond Overlaps Phs 3	Overlap 0	Overlap 0
Cond Overlaps Phs 4	Overlap 0	Overlap 0
Cond Overlaps Phs 5	Overlap 0	Overlap 0
Cond Overlaps Phs 6	Overlap 0	Overlap 0
Cond Overlaps Phs 7	Overlap 0	Overlap 0
Cond Overlaps Phs 8	Overlap 0	Overlap 0
Cond Overlaps O/L A	Overlap 0	Overlap 0
Cond Overlaps O/L B	Overlap 0	Overlap 0
Cond Overlaps O/L C	Overlap 0	Overlap 0
Cond Overlaps O/L D	Overlap 0	Overlap 0

Phase 1 to 8 (9-12=Over A/D)

Adv Warn Deact Phs 1	0 Secs
Adv Warn Deact Phs 2	0 Secs
Adv Warn Deact Phs 3	0 Secs
Adv Warn Deact Phs 4	0 Secs
Adv Warn Deact Phs 5	0 Secs
Adv Warn Deact Phs 6	0 Secs
Adv Warn Deact Phs 7	0 Secs
Adv Warn Deact Phs 8	0 Secs
Adv Warn Deact O/L A	0 Secs
Adv Warn Deact O/L B	0 Secs
Adv Warn Deact O/L C	0 Secs
Adv Warn Deact O/L D	0 Secs

MOE Norm Sample Period	0 Min
MOE Alt Sample Period	0 Min

Phases 1 to 8 0=Unassigned

MOE Det Ass 1 to 8	0	0	0	0	0	0	0	0
MOE Det Ass 9 to 16	0	0	0	0	0	0	0	0
MOE Det Ass 17 to 24	0	0	0	0	0	0	0	0

Map Phases 1 - 4

System Wide Map 2 4 6 8
Day Plans

Day Program 1 7:00:00 Cycle 2 Split 4 Offset 4
Day Program 1 7:00:00 Circuit #13 On
Day Program 1 11:00:00 Cycle 1 Split 3 Offset 3
Day Program 1 14:30:00 Cycle 1 Split 2 Offset 2
Day Program 1 20:30:00 Circuit #13 Off
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Day Program 2 9:00:00 Cycle 1 Split 4 Offset 4
Day Program 2 9:00:00 Circuit #13 On
Day Program 2 19:00:00 Circuit #13 Off

Week Programs	Sun	Mon	Tues	Wed	Thurs	Fri	Sat
Week Prog 1	DP 2	DP 1	DP 1	DP 1	DP 1	DP 1	DP 2
Week Prog 2	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 3	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 4	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 5	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 6	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 7	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 8	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 9	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1
Week Prog 10	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1	DP 1

Exception Day 1	Month 0	Day 0	->	Day Program 0
Exception Day 2	Month 0	Day 0	->	Day Program 0
Exception Day 3	Month 0	Day 0	->	Day Program 0
Exception Day 4	Month 0	Day 0	->	Day Program 0
Exception Day 5	Month 0	Day 0	->	Day Program 0
Exception Day 6	Month 0	Day 0	->	Day Program 0
Exception Day 7	Month 0	Day 0	->	Day Program 0
Exception Day 8	Month 0	Day 0	->	Day Program 0
Exception Day 9	Month 0	Day 0	->	Day Program 0
Exception Day 10	Month 0	Day 0	->	Day Program 0
Exception Day 11	Month 0	Day 0	->	Day Program 0
Exception Day 12	Month 0	Day 0	->	Day Program 0
Exception Day 13	Month 0	Day 0	->	Day Program 0
Exception Day 14	Month 0	Day 0	->	Day Program 0
Exception Day 15	Month 0	Day 0	->	Day Program 0
Exception Day 16	Month 0	Day 0	->	Day Program 0
Exception Day 17	Month 0	Day 0	->	Day Program 0
Exception Day 18	Month 0	Day 0	->	Day Program 0
Exception Day 19	Month 0	Day 0	->	Day Program 0
Exception Day 20	Month 0	Day 0	->	Day Program 0
Exception Day 21	Month 0	Day 0	->	Day Program 0
Exception Day 22	Month 0	Day 0	->	Day Program 0

Exception Day 23	Month 0	Day 0	->	Day Program 0
Exception Day 24	Month 0	Day 0	->	Day Program 0
Exception Day 25	Month 0	Day 0	->	Day Program 0
Exception Day 26	Month 0	Day 0	->	Day Program 0
Exception Day 27	Month 0	Day 0	->	Day Program 0
Exception Day 28	Month 0	Day 0	->	Day Program 0
Exception Day 29	Month 0	Day 0	->	Day Program 0
Exception Day 30	Month 0	Day 0	->	Day Program 0
Exception Day 31	Month 0	Day 0	->	Day Program 0

Exception Day 32	Month 0	Day 0	->	Day Program 0
Exception Day 33	Month 0	Day 0	->	Day Program 0
Exception Day 34	Month 0	Day 0	->	Day Program 0
Exception Day 35	Month 0	Day 0	->	Day Program 0

Daylight Savings Time	Enabled
Coord/Time Clock Out	Time Clock

Synch Reference Time	8-Cycle
External Time Synch	Std

Cycle Reference Times

Cycle 1 Synch Reference Time	0:00:00
Cycle 2 Synch Reference Time	0:00:00
Cycle 3 Synch Reference Time	0:00:00
Cycle 4 Synch Reference Time	0:00:00
Cycle 5 Synch Reference Time	0:00:00
Cycle 6 Synch Reference Time	0:00:00
Cycle 7 Synch Reference Time	0:00:00
Cycle 8 Synch Reference Time	0:00:00

Cycle Reference Times

Year Plans By Week

Week Number 1	-->	Day Plan 01
Week Number 2	-->	Day Plan 01
Week Number 3	-->	Day Plan 01
Week Number 4	-->	Day Plan 01
Week Number 5	-->	Day Plan 01
Week Number 6	-->	Day Plan 01
Week Number 7	-->	Day Plan 01
Week Number 8	-->	Day Plan 01
Week Number 9	-->	Day Plan 01
Week Number 10	-->	Day Plan 01
Week Number 11	-->	Day Plan 01
Week Number 12	-->	Day Plan 01
Week Number 13	-->	Day Plan 01
Week Number 14	-->	Day Plan 01
Week Number 15	-->	Day Plan 01
Week Number 16	-->	Day Plan 01
Week Number 17	-->	Day Plan 01
Week Number 18	-->	Day Plan 01

Week Number 19 --> Day Plan 01
Week Number 20 --> Day Plan 01
Week Number 21 --> Day Plan 01
Week Number 22 --> Day Plan 01
Week Number 23 --> Day Plan 01
Week Number 24 --> Day Plan 01
Week Number 25 --> Day Plan 01
Week Number 26 --> Day Plan 01
Week Number 27 --> Day Plan 01
Week Number 28 --> Day Plan 01
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Week Number 29 --> Day Plan 01
Week Number 30 --> Day Plan 01
Week Number 31 --> Day Plan 01
Week Number 32 --> Day Plan 01
Week Number 33 --> Day Plan 01
Week Number 34 --> Day Plan 01
Week Number 35 --> Day Plan 01
Week Number 36 --> Day Plan 01
Week Number 37 --> Day Plan 01
Week Number 38 --> Day Plan 01
Week Number 39 --> Day Plan 01
Week Number 40 --> Day Plan 01
Week Number 41 --> Day Plan 01
Week Number 42 --> Day Plan 01
Week Number 43 --> Day Plan 01
Week Number 44 --> Day Plan 01
Week Number 45 --> Day Plan 01
Week Number 46 --> Day Plan 01
Week Number 47 --> Day Plan 01
Week Number 48 --> Day Plan 01
Week Number 49 --> Day Plan 01
Week Number 50 --> Day Plan 01
Week Number 51 --> Day Plan 01
Week Number 52 --> Day Plan 01
Week Number 53 --> Day Plan 01
Manual Circuits
Manual Circuit 9 Auto
Manual Circuit 10 Auto
Manual Circuit 11 Auto
Manual Circuit 12 Auto
Manual Circuit 13 Auto
Manual Circuit 14 Auto
Manual Circuit 15 Auto
Manual Circuit 16 Auto
Manual Circuit 17 Auto
Manual Circuit 18 Auto
Manual Circuit 19 Auto
Manual Circuit 20 Auto
Manual Circuit 21 Auto
Manual Circuit 22 Auto

Manual Circuit	23	Auto
Manual Circuit	24	Auto
Manual Circuit	25	Auto
Manual Circuit	26	Auto
Manual Circuit	27	Auto
Manual Circuit	28	Auto
Manual Circuit	29	Auto
Manual Circuit	30	Auto
Manual Circuit	31	Auto
Manual Circuit	32	Auto
Manual Circuit	33	Auto

Manual Circuit	34	Auto
Manual Circuit	35	Auto
Manual Circuit	36	Auto
Manual Circuit	37	Auto
Manual Circuit	38	Auto
Manual Circuit	39	Auto
Manual Circuit	40	Auto
Manual Circuit	41	Auto
Manual Circuit	42	Auto
Manual Circuit	43	Auto
Manual Circuit	44	Auto
Manual Circuit	45	Auto
Manual Circuit	46	Auto
Manual Circuit	47	Auto
Manual Circuit	48	Auto
Manual Circuit	49	Auto
Manual Circuit	50	Auto
Manual Circuit	51	Auto
Manual Circuit	52	Auto
Manual Circuit	53	Auto
Manual Circuit	54	Auto
Manual Circuit	55	Auto
Manual Circuit	56	Auto
Manual Circuit	57	Auto
Manual Circuit	58	Auto
Manual Circuit	60	Auto
Manual Circuit	61	Auto
Manual Circuit	62	Auto
Manual Circuit	63	Auto
Manual Circuit	64	Auto
Manual Circuit	65	Auto
Manual Circuit	66	Auto
Manual Circuit	67	Auto
Manual Circuit	68	Auto
Manual Circuit	69	Auto
Manual Circuit	70	Auto
Manual Circuit	71	Auto
Manual Circuit	72	Auto
Manual Circuit	73	Auto
Manual Circuit	74	Auto

Manual Circuit 75	Auto		
Manual Circuit 76	Auto		
Manual Circuit 77	Auto		
Manual Circuit 78	Auto		
Manual Circuit 79	Auto		
Manual Circuit 80	Auto		
Manual Circuit 81	Auto		
Manual Circuit 82	Auto		
Manual Circuit 83	Auto		
Manual Circuit 84	Auto		
Manual Circuit 85	Auto		
Manual Circuit 86	Auto		
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Manual Circuit 87	Auto		
Manual Circuit 88	Auto		
Manual Circuit 89	Auto		
Manual Circuit 90	Auto		
Manual Circuit 91	Auto		
Manual Circuit 92	Auto		
Manual Circuit 93	Auto		
Manual Circuit 94	Auto		
Manual Circuit 95	Auto		
Manual Circuit 96	Auto		
Manual Circuit 97	Auto		
Manual Circuit 98	Auto		
Manual Circuit 99	Auto		
Manual Circuit 100	Auto		
Manual Circuit 101	Auto		
Manual Circuit 102	Auto		
Manual Circuit 103	Auto		
Manual Circuit 104	Auto		
Manual Circuit 105	Auto		
Manual Circuit 106	Auto		
Manual Circuit 107	Auto		
Manual Circuit 108	Auto		
Manual Circuit 109	Auto		
Manual Circuit 110	Auto		
Manual Circuit 111	Auto		
Manual Circuit 112	Auto		
Manual Circuit 113	Auto		
Manual Circuit 114	Auto		
Manual Circuit 115	Auto		
Manual Circuit 116	Auto		
Manual Circuit 117	Auto		
Manual Circuit 118	Auto		
Manual Circuit 119	Auto		
Manual Circuit 120	Auto		
Manual Circuit 121	Auto		
Manual Circuit 122	Auto		
Manual Circuit 123	Auto		
Manual Circuit 124	Auto		
Manual Circuit 125	Auto		

Manual Circuit 126	Auto
Manual Circuit 127	Auto
Manual Circuit 128	Auto
Manual Circuit 129	Auto
Manual Circuit 130	Auto
Manual Circuit 131	Auto
Manual Circuit 132	Auto
Manual Circuit 133	Auto
Manual Circuit 134	Auto
Manual Circuit 135	Auto
Manual Circuit 136	Auto
Manual Circuit 137	Auto
Manual Circuit 138	Auto

Manual Circuit 139	ON
Manual Circuit 140	Auto
Manual Circuit 141	Auto
Manual Circuit 142	Auto
Manual Circuit 143	Auto
Manual Circuit 144	Auto
Manual Circuit 145	Auto
Manual Circuit 146	Auto
Manual Circuit 147	Auto
Manual Circuit 148	Auto
Manual Circuit 149	Auto
Manual Circuit 150	Auto

Functions 1 to 8								
Special Functions	0	0	0	0	0	0	0	0
Spcl Functions Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Functions 9 to 16								
Special Functions	0	0	0	0	0	0	0	0
Spcl Functions Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Functions 17 to 24								
Special Functions	0	0	0	0	0	0	0	0
Spcl Functions Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Cycle Select	Use T/C
Split Select	Use T/C
Offset Select	Use T/C
Remote Flash	Off
Remote System	Off
Subordinated Coord Mode	Off
Floating Force Offs	Off
Offset Seeking Mode	Shortway
Man CSO to Free: Cycle	Disabled
Man CSO to Free: Split	Disabled
Man CSO to Free: Offset	Disabled

Cycle 1 to 8								
Max Dwell Time (Seconds)	0	0	0	0	0	0	0	0

Loss to Switch	off
System Max 2	off
System to CAN	off

Force Offs (Cycle/Split/Phase FO in Seconds)

	FO 1	FO 2	FO 3	FO 4	FO 5	FO 6	FO 7	FO 8
1/1	0	0	0	0	0	0	0	0
1/2	73	0	0	46	0	0	0	0
1/3	53	0	0	33	0	0	0	0
1/4	62	0	0	34	0	0	0	0
2/1	0	0	0	0	0	0	0	0
2/2	83	0	0	51	0	0	0	0
2/3	0	0	0	0	0	0	0	0
2/4	86	0	0	50	0	0	0	0

3/1	80	0	0	40	0	0	0	0
3/2	0	0	0	0	0	0	0	0
3/3	0	0	0	0	0	0	0	0
3/4	0	0	0	0	0	0	0	0
4/1	0	0	0	0	0	0	0	0
4/2	0	0	0	0	0	0	0	0
4/3	0	0	0	0	0	0	0	0
4/4	0	0	0	0	0	0	0	0
5/1	0	0	0	0	0	0	0	0
5/2	0	0	0	0	0	0	0	0
5/3	0	0	0	0	0	0	0	0
5/4	0	0	0	0	0	0	0	0
6/1	0	0	0	0	0	0	0	0
6/2	0	0	0	0	0	0	0	0
6/3	0	0	0	0	0	0	0	0
6/4	0	0	0	0	0	0	0	0
7/1	0	0	0	0	0	0	0	0
7/2	0	0	0	0	0	0	0	0
7/3	0	0	0	0	0	0	0	0
7/4	0	0	0	0	0	0	0	0
8/1	0	0	0	0	0	0	0	0
8/2	0	0	0	0	0	0	0	0
8/3	0	0	0	0	0	0	0	0
8/4	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

Force Offs (Cycle/Split/ Phase FO in Seconds)

Permissive Times (Cycle/Split/Phase FO Start->End)

	Perm 1	Perm 2	Perm 3	Perm 4	Perm 5	Perm 6	Perm 7	Perm 8
1/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
1/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
1/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
1/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
2/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
2/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
2/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
2/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0

3/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
3/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
3/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
3/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
4/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
5/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
6/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
6/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
6/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0

6/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
7/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/1	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/2	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/3	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0
8/4	0->5	0->0	0->0	0->0	0->0	0->0	0->0	0->0

Permissive Times (Cycle/Split/Phase Start -> End)

Offset Times (Cycle/Offset Offset in Seconds)

1/1/1 0	1/1/2 60	1/1/3 10:	1/1/4 10	1/1/5 0	1/1/6 0	1/1/7 0	1/1/8 0
1/2/1 0	1/2/2 39	1/2/3 0	1/2/4 11	1/2/5 0	1/2/6 0	1/2/7 0	1/2/8 0
1/3/1 61	1/3/2 61	1/3/3 61	1/3/4 61	1/3/5 0	1/3/6 0	1/3/7 0	1/3/8 0
1/4/1 61	1/4/2 61	1/4/3 61	1/4/4 61	1/4/5 0	1/4/6 0	1/4/7 0	1/4/8 0
1/5/1 61	1/5/2 61	1/5/3 61	1/5/4 61	1/5/5 0	1/5/6 0	1/5/7 0	1/5/8 0
1/6/1 61	1/6/2 61	1/6/3 61	1/6/4 61	1/6/5 0	1/6/6 0	1/6/7 0	1/6/8 0
1/7/1 61	1/7/2 61	1/7/3 61	1/7/4 61	1/7/5 0	1/7/6 0	1/7/7 0	1/7/8 0
1/8/1 0	1/8/2 0	1/8/3 0	1/8/4 0	1/8/5 0	1/8/6 0	1/8/7 0	1/8/8 0

Offset Times (Cycle/Offset Offset in Seconds)

Cycle Times (Seconds)	120	140	160	160	160	160	160	160
Phase 1 to 8								
Force Off 1 Phase Assoc	off	off	off	off	off	off	off	off
Force Off 2 Phase Assoc	off	off	off	off	off	off	off	off
Force Off 3 Phase Assoc	off	off	off	off	off	off	off	off
Force Off 4 Phase Assoc	off	off	off	off	off	off	off	off
Force Off 5 Phase Assoc	off	off	off	off	off	off	off	off
Force Off 6 Phase Assoc	off	off	off	off	off	off	off	off
Force Off 7 Phase Assoc	off	off	off	off	off	off	off	off
Force Off 8 Phase Assoc	off	off	off	off	off	off	off	off

Phase 1 to 8								
Permissive 1 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 2 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 3 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 4 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 5 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 6 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 7 Phase Assoc	off	off	off	off	off	off	off	off
Permissive 8 Phase Assoc	off	off	off	off	off	off	off	off

Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
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Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled
Lead/Lag Seq	Disabled

(Cycle1) Split: 1	1	2	3	4
Coord Phases	2-6	2-6	2-6	2-6
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle2)				
Coord Phases	2-6	2-6	2-6	2-6
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle3)				
Coord Phases	2-6	2-6	2-6	2-6
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle4)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle5)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle6)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0

(Cycle7)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0
(Cycle8)				
Coord Phases	0-0	0-0	0-0	0-0
Service Plan	0	0	0	0
Max Plan	0	0	0	0

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(0=Auto Calc 1-255 Secs)	
Ped Permissive	0 Secs
Permissive Type	Yield
AutoCalc Permissive Mode	Start at Cycle 0
Extendible Green Band %	0 Percent
Normal/CAN Option	Normal
Permissive Mode	Standard Permissive

Split Percentages (Cy/Spl/Ph)

1/1/1 0	1/1/2 0	1/1/3 0	1/1/4 0	1/1/5 0	1/1/6 0	1/1/7 0	1/1/8 0
1/2/1 0	1/2/2 0	1/2/3 0	1/2/4 0	1/2/5 0	1/2/6 0	1/2/7 0	1/2/8 0
1/3/1 0	1/3/2 0	1/3/3 0	1/3/4 0	1/3/5 0	1/3/6 0	1/3/7 0	1/3/8 0
1/4/1 0	1/4/2 0	1/4/3 0	1/4/4 0	1/4/5 0	1/4/6 0	1/4/7 0	1/4/8 0
2/1/1 0	2/1/2 0	2/1/3 0	2/1/4 0	2/1/5 0	2/1/6 0	2/1/7 0	2/1/8 0
2/2/1 0	2/2/2 0	2/2/3 0	2/2/4 0	2/2/5 0	2/2/6 0	2/2/7 0	2/2/8 0
2/3/1 0	2/3/2 0	2/3/3 0	2/3/4 0	2/3/5 0	2/3/6 0	2/3/7 0	2/3/8 0
2/4/1 0	2/4/2 0	2/4/3 0	2/4/4 0	2/4/5 0	2/4/6 0	2/4/7 0	2/4/8 0
3/1/1 0	3/1/2 0	3/1/3 0	3/1/4 0	3/1/5 0	3/1/6 0	3/1/7 0	3/1/8 0
3/2/1 0	3/2/2 0	3/2/3 0	3/2/4 0	3/2/5 0	3/2/6 0	3/2/7 0	3/2/8 0
3/3/1 0	3/3/2 0	3/3/3 0	3/3/4 0	3/3/5 0	3/3/6 0	3/3/7 0	3/3/8 0
3/4/1 0	3/4/2 0	3/4/3 0	3/4/4 0	3/4/5 0	3/4/6 0	3/4/7 0	3/4/8 0
4/1/1 0	4/1/2 0	4/1/3 0	4/1/4 0	4/1/5 0	4/1/6 0	4/1/7 0	4/1/8 0
4/2/1 0	4/2/2 0	4/2/3 0	4/2/4 0	4/2/5 0	4/2/6 0	4/2/7 0	4/2/8 0
4/3/1 0	4/3/2 0	4/3/3 0	4/3/4 0	4/3/5 0	4/3/6 0	4/3/7 0	4/3/8 0
4/4/1 0	4/4/2 0	4/4/3 0	4/4/4 0	4/4/5 0	4/4/6 0	4/4/7 0	4/4/8 0
5/1/1 0	5/1/2 0	5/1/3 0	5/1/4 0	5/1/5 0	5/1/6 0	5/1/7 0	5/1/8 0
5/2/1 0	5/2/2 0	5/2/3 0	5/2/4 0	5/2/5 0	5/2/6 0	5/2/7 0	5/2/8 0
5/3/1 0	5/3/2 0	5/3/3 0	5/3/4 0	5/3/5 0	5/3/6 0	5/3/7 0	5/3/8 0
5/4/1 0	5/4/2 0	5/4/3 0	5/4/4 0	5/4/5 0	5/4/6 0	5/4/7 0	5/4/8 0
6/1/1 0	6/1/2 0	6/1/3 0	6/1/4 0	6/1/5 0	6/1/6 0	6/1/7 0	6/1/8 0
6/2/1 0	6/2/2 0	6/2/3 0	6/2/4 0	6/2/5 0	6/2/6 0	6/2/7 0	6/2/8 0
6/3/1 0	6/3/2 0	6/3/3 0	6/3/4 0	6/3/5 0	6/3/6 0	6/3/7 0	6/3/8 0
6/4/1 0	6/4/2 0	6/4/3 0	6/4/4 0	6/4/5 0	6/4/6 0	6/4/7 0	6/4/8 0

7/1/1 0	7/1/2 0	7/1/3 0	7/1/4 0	7/1/5 0	7/1/6 0	7/1/7 0	7/1/8 0
7/2/1 0	7/2/2 0	7/2/3 0	7/2/4 0	7/2/5 0	7/2/6 0	7/2/7 0	7/2/8 0
7/3/1 0	7/3/2 0	7/3/3 0	7/3/4 0	7/3/5 0	7/3/6 0	7/3/7 0	7/3/8 0
7/4/1 0	7/4/2 0	7/4/3 0	7/4/4 0	7/4/5 0	7/4/6 0	7/4/7 0	7/4/8 0
8/1/1 0	8/1/2 0	8/1/3 0	8/1/4 0	8/1/5 0	8/1/6 0	8/1/7 0	8/1/8 0
8/2/1 0	8/2/2 0	8/2/3 0	8/2/4 0	8/2/5 0	8/2/6 0	8/2/7 0	8/2/8 0
8/3/1 0	8/3/2 0	8/3/3 0	8/3/4 0	8/3/5 0	8/3/6 0	8/3/7 0	8/3/8 0
8/4/1 0	8/4/2 0	8/4/2 0	8/4/4 0	8/4/5 0	8/4/6 0	8/4/7 0	8/4/8 0

Cycles per Sample Period	0
Split Mode	Queuing Detectors
Min Q's/FO's to Select Split	0

Phase 1 to 8								
Split Phase Assoc	off	off	off	off	off	off	off	off
Split Phase Assoc	off	off	off	off	off	off	off	off
Split Phase Assoc	off	off	off	off	off	off	off	off
Split Phase Assoc	off	off	off	off	off	off	off	off
Local 22		HP@Grove				Page 19		

Phase 1 Queue Detectors	0	0
Phase 2 Queue Detectors	0	0
Phase 3 Queue Detectors	0	0
Phase 4 Queue Detectors	0	0
Phase 5 Queue Detectors	0	0
Phase 6 Queue Detectors	0	0
Phase 7 Queue Detectors	0	0
Phase 8 Queue Detectors	0	0

Phase 1 Queue Det Delays	0.0	0.0
Phase 2 Queue Det Delays	0.0	0.0
Phase 3 Queue Det Delays	0.0	0.0
Phase 4 Queue Det Delays	0.0	0.0
Phase 5 Queue Det Delays	0.0	0.0
Phase 6 Queue Det Delays	0.0	0.0
Phase 7 Queue Det Delays	0.0	0.0
Phase 8 Queue Det Delays	0.0	0.0

Split Inhibits (Spl 2 to 4) ,21,1,Split Inhibits Cyc %d/Off %d
Split Inhibits (Spl 2 to 4) ,21,1,Split Inhibits Cyc %d/Off %d

APPENDIX D
TRAFFIC COUNT DATA

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Elden St. & Site Entrance
LOCATION: Faitfax County,VA

DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan

SOUTHBOUND ROAD: Placa Driveway
NORTHBOUND ROAD: Site Entrance
WESTBOUND ROAD: Elden Street
EASTBOUND ROAD: Elden Street

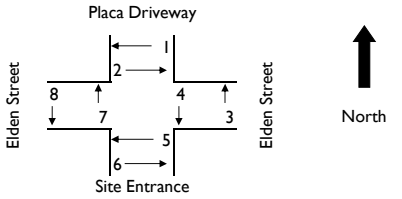
Time Period	Southbound Placa Driveway						Westbound Elden Street						Northbound Site Entrance						Eastbound Elden Street						North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	1	0	0	0	1		2	0	0	0	2		0	0	0	0	0		1	0	0	0	1		1	3	4
6:15 AM - 6:30 AM	1	0	0	0	1		1	0	0	0	1		1	0	0	0	1		0	0	0	0	0		2	1	3
6:30 AM - 6:45 AM	0	0	0	0	0		0	0	1	0	1		1	0	1	0	2		1	0	0	0	1		2	2	4
6:45 AM - 7:00 AM	3	0	0	0	3		3	0	0	0	3		0	0	0	0	0		1	0	0	0	1		3	4	7
7:00 AM - 7:15 AM	0	0	0	0	0		2	0	0	0	2		1	0	0	0	1		0	0	0	0	0		1	2	3
7:15 AM - 7:30 AM	2	0	0	0	2		0	0	0	0	0		1	0	1	0	2		0	0	0	0	0		4	0	4
7:30 AM - 7:45 AM	0	0	0	0	0		4	0	0	0	4		1	0	0	0	1		0	0	0	0	0		1	4	5
7:45 AM - 8:00 AM	1	0	0	0	1		3	0	1	0	4		2	0	0	0	2		2	0	0	0	2		3	6	9
8:00 AM - 8:15 AM	0	0	0	0	0		3	0	0	0	3		1	0	0	0	1		2	0	0	0	2		1	5	6
8:15 AM - 8:30 AM	2	0	0	0	2		5	0	0	0	5		5	0	2	0	7		0	0	0	0	0		9	5	14
8:30 AM - 8:45 AM	4	0	0	0	4		5	0	0	0	5		2	0	0	0	2		0	0	0	0	0		6	5	11
8:45 AM - 9:00 AM	4	0	0	0	4		9	0	0	0	9		2	0	1	0	3		0	0	0	0	0		7	9	16
4:00 PM - 4:15 PM	4	0	0	0	4		3	0	0	0	3		3	0	1	0	4		0	0	0	0	0		8	3	11
4:15 PM - 4:30 PM	1	0	0	0	1		6	0	0	0	6		1	0	2	0	3		2	0	1	0	3		4	9	13
4:30 PM - 4:45 PM	2	0	0	0	2		7	0	0	0	7		1	0	0	0	1		0	0	0	0	0		3	7	10
4:45 PM - 5:00 PM	2	0	0	0	2		6	0	0	0	6		3	0	0	0	3		3	0	0	0	3		5	9	14
5:00 PM - 5:15 PM	4	0	0	0	4		5	0	0	0	5		4	0	0	0	4		1	0	0	0	1		8	6	14
5:15 PM - 5:30 PM	0	0	0	0	0		4	0	0	0	4		1	0	1	0	2		2	0	0	0	2		2	6	8
5:30 PM - 5:45 PM	2	0	0	0	2		6	0	0	0	6		2	0	0	0	2		1	0	0	0	1		4	7	11
5:45 PM - 6:00 PM	3	0	0	0	3		7	0	0	0	7		0	0	0	0	0		4	0	0	0	4		3	11	14
6:00 PM - 6:15 PM	2	0	0	0	2		9	0	0	0	9		0	0	0	0	0		0	0	0	0	0		2	9	11
6:15 PM - 6:30 PM	1	0	0	0	1		2	0	1	0	3		2	0	0	0	2		1	0	0	0	1		3	4	7
6:30 PM - 6:45 PM	2	0	0	0	2		1	0	1	0	2		2	0	1	0	3		2	0	0	0	2		5	4	9
6:45 PM - 7:00 PM	2	0	0	0	2		2	0	0	0	2		1	0	0	0	1		2	0	0	0	2		3	4	7
Total	43	0	0	0	43		95	0	4	0	99		37	0	10	0	47		25	0	1	0	26		90	125	215
One Hour Volumes																											
6:00 AM - 7:00 AM	5	0	0	0	5	0.417	6	0	1	0	7	0.583	2	0	1	0	3	0.375	3	0	0	0	3	0.75	8	10	18
6:15 AM - 7:15 AM	4	0	0	0	4	0.333	6	0	1	0	7	0.583	3	0	1	0	4	0.5	2	0	0	0	2	0.5	8	9	17
6:30 AM - 7:30 AM	5	0	0	0	5	0.417	5	0	1	0	6	0.5	3	0	2	0	5	0.625	2	0	0	0	2	0.5	10	8	18
6:45 AM - 7:45 AM	5	0	0	0	5	0.417	9	0	0	0	9	0.563	3	0	1	0	4	0.5	1	0	0	0	1	0.25	9	10	19
7:00 AM - 8:00 AM	3	0	0	0	3	0.375	9	0	1	0	10	0.625	5	0	1	0	6	0.75	2	0	0	0	2	0.25	9	12	21
7:15 AM - 8:15 AM	3	0	0	0	3	0.375	10	0	1	0	11	0.688	5	0	1	0	6	0.75	4	0	0	0	4	0.5	9	15	24
7:30 AM - 8:30 AM	3	0	0	0	3	0.375	15	0	1	0	16	0.8	9	0	2	0	11	0.393	4	0	0	0	4	0.5	14	20	34
7:45 AM - 8:45 AM	7	0	0	0	7	0.438	16	0	1	0	17	0.85	10	0	2	0	12	0.429	4	0	0	0	4	0.5	19	21	40
8:00 AM - 9:00 AM	10	0	0	0	10	0.625	22	0	0	0	22	0.611	10	0	3	0	13	0.464	2	0	0	0	2	0.25	23	24	47
4:00 PM - 5:00 PM	9	0	0	0	9	0.563	22	0	0	0	22	0.786	8	0	3	0	11	0.688	5	0	1	0	6	0.5	20	28	48
4:15 PM - 5:15 PM	9	0	0	0	9	0.563	24	0	0	0	24	0.857	9	0	2	0	11	0.688	6	0	1	0	7	0.583	20	31	51
4:30 PM - 5:30 PM	8	0	0	0	8	0.5	22	0	0	0	22	0.786	9	0	1	0	10	0.625	6	0	0	0	6	0.5	18	28	46
4:45 PM - 5:45 PM	8	0	0	0	8	0.5	21	0	0	0	21	0.875	10	0	1	0	11	0.688	7	0	0	0	7	0.583	19	28	47
5:00 PM - 6:00 PM	9	0	0	0	9	0.563	22	0	0	0	22	0.786	7	0	1	0	8	0.5	8	0	0	0	8	0.5	17	30	47
5:15 PM - 6:15 PM	7	0	0	0	7	0.583	26	0	0	0	26	0.722	3	0	1	0	4	0.5	7	0	0	0	7	0.438	11	33	44
5:30 PM - 6:30 PM	8	0	0	0	8	0.667	24	0	1	0	25	0.694	4	0	0	0	4	0.5	6	0	0	0	6	0.375	12	31	43
5:45 PM - 6:45 PM	8	0	0	0	8	0.667	19	0	2	0	21	0.583	4	0	1	0	5	0.417	7	0	0	0	7	0.438	13	28	41
6:00 PM - 7:00 PM	7	0	0	0	7	0.875	14	0	2	0	16	0.444	5	0	1	0	6	0.5	5	0	0	0	5	0.625	13	21	34

Wells + Associates, Inc.

Tysons, Virginia

Pedestrian Volume Survey

PROJECT: Pinkard Elden Street
W + A JOB NO: 8609
INTERSECTION: Elden St. & Site Entrance
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan



Time Period	Movement 1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7+ 8	Total
15 Minute Volumes													
6:00 AM - 6:15 AM									0	0	0	0	0
6:15 AM - 6:30 AM									0	0	0	0	0
6:30 AM - 6:45 AM									0	0	0	0	0
6:45 AM - 7:00 AM	1				1	1			1	0	2	0	3
7:00 AM - 7:15 AM									0	0	0	0	0
7:15 AM - 7:30 AM	1					1			1	0	1	0	2
7:30 AM - 7:45 AM									0	0	0	0	0
7:45 AM - 8:00 AM									0	0	0	0	0
8:00 AM - 8:15 AM									0	0	0	0	0
8:15 AM - 8:30 AM									0	0	0	0	0
8:30 AM - 8:45 AM									0	0	0	0	0
8:45 AM - 9:00 AM									0	0	0	0	0
4:00 PM - 4:15 PM		1			1				1	0	1	0	2
4:15 PM - 4:30 PM					2	3			0	0	5	0	5
4:30 PM - 4:45 PM									0	0	0	0	0
4:45 PM - 5:00 PM		3			2				3	0	2	0	5
5:00 PM - 5:15 PM									0	0	0	0	0
5:15 PM - 5:30 PM	1								1	0	0	0	1
5:30 PM - 5:45 PM						1			0	0	1	0	1
5:45 PM - 6:00 PM									0	0	0	0	0
6:00 PM - 6:15 PM									0	0	0	0	0
6:15 PM - 6:30 PM									0	0	0	0	0
6:30 PM - 6:45 PM									0	0	0	0	0
6:45 PM - 7:00 PM									0	0	0	0	0
Total	3	4	0	0	6	6	0	0	7	0	12	0	19
One Hour Volumes													
6:00 AM - 7:00 AM	1	0	0	0	1	1	0	0	1	0	2	0	3
6:15 AM - 7:15 AM	1	0	0	0	1	1	0	0	1	0	2	0	3
6:30 AM - 7:30 AM	2	0	0	0	1	2	0	0	2	0	3	0	5
6:45 AM - 7:45 AM	2	0	0	0	1	2	0	0	2	0	3	0	5
7:00 AM - 8:00 AM	1	0	0	0	0	1	0	0	1	0	1	0	2
7:15 AM - 8:15 AM	1	0	0	0	0	1	0	0	1	0	1	0	2
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	4	0	0	5	3	0	0	4	0	8	0	12
4:15 PM - 5:15 PM	0	3	0	0	4	3	0	0	3	0	7	0	10
4:30 PM - 5:30 PM	1	3	0	0	2	0	0	0	4	0	2	0	6
4:45 PM - 5:45 PM	1	3	0	0	2	1	0	0	4	0	3	0	7
5:00 PM - 6:00 PM	1	0	0	0	0	1	0	0	1	0	1	0	2
5:15 PM - 6:15 PM	1	0	0	0	0	1	0	0	1	0	1	0	2
5:30 PM - 6:30 PM	0	0	0	0	0	1	0	0	0	0	1	0	1
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

Wells + Associates, Inc.

Tysons, Virginia

Turning Movement Count - Bicycles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Elden St. & Site Entrance
LOCATION: Faitfax County,VA

DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan

SOUTHBOUND ROAD: Placa Driveway
NORTHBOUND ROAD: Site Entrance
WESTBOUND ROAD: Elden Street
EASTBOUND ROAD: Elden Street

Time Period	Southbound Placa Driveway				Westbound Elden Street				Northbound Site Entrance				Eastbound Elden Street				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
15 Minute Volumes																			
6:00 AM - 6:15 AM				0				0				0				0	0	0	0
6:15 AM - 6:30 AM				0				0				0				0	0	0	0
6:30 AM - 6:45 AM				0		1		1				0				0	0	1	1
6:45 AM - 7:00 AM				0				0				0		1		1	0	1	1
7:00 AM - 7:15 AM				0				0				0				0	0	0	0
7:15 AM - 7:30 AM				0				0				0		1		1	0	1	1
7:30 AM - 7:45 AM				0				0				0				0	0	0	0
7:45 AM - 8:00 AM				0				0				0		1		1	0	1	1
8:00 AM - 8:15 AM				0				0				0				0	0	0	0
8:15 AM - 8:30 AM				0				0				0				0	0	0	0
8:30 AM - 8:45 AM				0				0				0		1		1	0	1	1
8:45 AM - 9:00 AM				0				0				0				0	0	0	0
4:00 PM - 4:15 PM				0				0				0				0	0	0	0
4:15 PM - 4:30 PM				0				0				0		2		2	0	2	2
4:30 PM - 4:45 PM				0				0				0				0	0	0	0
4:45 PM - 5:00 PM				0				0				0				0	0	0	0
5:00 PM - 5:15 PM				0				0				0				0	0	0	0
5:15 PM - 5:30 PM				0				0				0				0	0	0	0
5:30 PM - 5:45 PM				0				0				0				0	0	0	0
5:45 PM - 6:00 PM				0				0				0				0	0	0	0
6:00 PM - 6:15 PM				0				0				0	2			2	0	2	2
6:15 PM - 6:30 PM				0				0				0				0	0	0	0
6:30 PM - 6:45 PM				0				0				0				0	0	0	0
6:45 PM - 7:00 PM				0				0				0				0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	2	6	0	8	0	9	9
One Hour Volumes																			
6:00 AM - 7:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	2	2
6:15 AM - 7:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	2	2
6:30 AM - 7:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	0	3	3
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	2
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	2

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Elden St.
LOCATION: Faitfax County,VA

DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan

SOUTHBOUND ROAD: Herndon Parkway
NORTHBOUND ROAD: Herndon Parkway
WESTBOUND ROAD: Elden Street
EASTBOUND ROAD: Elden Street

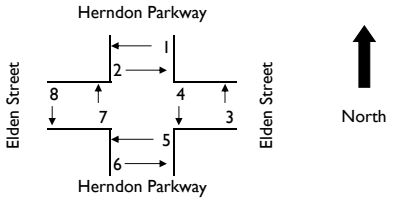
Time Period	Southbound Herndon Parkway						Westbound Elden Street						Northbound Herndon Parkway						Eastbound Elden Street						North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	3	13	26	0	42		9	34	14	0	57		15	3	2	0	20		1	39	2	0	42		62	99	161
6:15 AM - 6:30 AM	4	15	22	0	41		8	43	23	0	74		12	2	0	0	14		2	64	2	0	68		55	142	197
6:30 AM - 6:45 AM	5	21	35	0	61		12	53	14	0	79		10	4	5	0	19		3	55	1	0	59		80	138	218
6:45 AM - 7:00 AM	9	28	33	0	70		14	39	25	0	78		14	8	3	0	25		1	68	1	0	70		95	148	243
7:00 AM - 7:15 AM	14	37	42	0	93		19	69	32	0	120		18	17	4	0	39		5	74	5	0	84		132	204	336
7:15 AM - 7:30 AM	8	41	56	0	105		25	83	37	0	145		25	18	6	0	49		5	93	3	0	101		154	246	400
7:30 AM - 7:45 AM	9	50	60	0	119		25	83	25	0	133		25	18	6	0	49		2	108	6	0	116		168	249	417
7:45 AM - 8:00 AM	12	58	65	0	135		31	94	34	0	159		28	16	5	0	49		8	110	7	0	125		184	284	468
8:00 AM - 8:15 AM	14	49	64	0	127		22	73	26	0	121		16	21	10	0	47		8	118	7	0	133		174	254	428
8:15 AM - 8:30 AM	9	48	47	0	104		28	81	39	0	148		28	15	5	0	48		9	114	8	0	131		152	279	431
8:30 AM - 8:45 AM	14	47	52	0	113		36	84	38	0	158		28	22	13	0	63		10	96	11	0	117		176	275	451
8:45 AM - 9:00 AM	13	33	44	0	90		31	100	37	0	168		36	18	8	0	62		4	101	8	0	113		152	281	433
4:00 PM - 4:15 PM	10	22	42	0	74		50	118	27	0	195		33	38	13	0	84		9	134	11	0	154		158	349	507
4:15 PM - 4:30 PM	10	21	29	0	60		50	108	34	0	192		39	41	12	0	92		10	117	13	0	140		152	332	484
4:30 PM - 4:45 PM	15	24	41	0	80		50	127	34	0	211		44	36	16	0	96		16	173	22	0	211		176	422	598
4:45 PM - 5:00 PM	11	22	50	0	83		48	143	29	0	220		37	37	24	0	98		8	159	21	0	188		181	408	589
5:00 PM - 5:15 PM	20	22	42	0	84		53	155	28	0	236		44	56	13	0	113		8	125	18	0	151		197	387	584
5:15 PM - 5:30 PM	25	26	44	0	95		45	157	30	0	232		36	44	16	0	96		10	165	15	0	190		191	422	613
5:30 PM - 5:45 PM	21	39	43	0	103		52	131	34	0	217		33	44	18	0	95		23	122	13	0	158		198	375	573
5:45 PM - 6:00 PM	20	28	35	0	83		46	126	38	0	210		29	34	21	0	84		20	152	13	0	185		167	395	562
6:00 PM - 6:15 PM	23	26	43	0	92		43	128	35	0	206		32	48	16	0	96		16	118	12	0	146		188	352	540
6:15 PM - 6:30 PM	18	24	31	0	73		39	119	31	0	189		35	30	14	0	79		12	131	20	0	163		152	352	504
6:30 PM - 6:45 PM	21	19	28	0	68		25	106	20	0	151		28	20	7	0	55		9	121	17	0	147		123	298	421
6:45 PM - 7:00 PM	14	15	26	0	55		20	115	19	0	154		23	21	12	0	56		6	138	16	0	160		111	314	425
Total	322	728	1000	0	2050		781	2369	703	0	3853		668	611	249	0	1528		205	2695	252	0	3152		3578	7005	10583
One Hour Volumes																											
6:00 AM - 7:00 AM	21	77	116	0	214	0.764	43	169	76	0	288	0.911	51	17	10	0	78	0.78	7	226	6	0	239	0.854	292	527	819
6:15 AM - 7:15 AM	32	101	132	0	265	0.712	53	204	94	0	351	0.731	54	31	12	0	97	0.622	11	261	9	0	281	0.836	362	632	994
6:30 AM - 7:30 AM	36	127	166	0	329	0.783	70	244	108	0	422	0.728	67	47	18	0	132	0.673	14	290	10	0	314	0.777	461	736	1197
6:45 AM - 7:45 AM	40	156	191	0	387	0.813	83	274	119	0	476	0.821	82	61	19	0	162	0.827	13	343	15	0	371	0.8	549	847	1396
7:00 AM - 8:00 AM	43	186	223	0	452	0.837	100	329	128	0	557	0.876	96	69	21	0	186	0.949	20	385	21	0	426	0.852	638	983	1621
7:15 AM - 8:15 AM	43	198	245	0	486	0.9	103	333	122	0	558	0.877	94	73	27	0	194	0.99	23	429	23	0	475	0.893	680	1033	1713
7:30 AM - 8:30 AM	44	205	236	0	485	0.898	106	331	124	0	561	0.882	97	70	26	0	193	0.985	27	450	28	0	505	0.949	678	1066	1744
7:45 AM - 8:45 AM	49	202	228	0	479	0.887	117	332	137	0	586	0.921	100	74	33	0	207	0.821	35	438	33	0	506	0.951	686	1092	1778
8:00 AM - 9:00 AM	50	177	207	0	434	0.854	117	338	140	0	595	0.885	108	76	36	0	220	0.873	31	429	34	0	494	0.929	654	1089	1743
4:00 PM - 5:00 PM	46	89	162	0	297	0.895	198	496	124	0	818	0.93	153	152	65	0	370	0.944	43	583	67	0	693	0.821	667	1511	2178
4:15 PM - 5:15 PM	56	89	162	0	307	0.914	201	533	125	0	859	0.91	164	170	65	0	399	0.883	42	574	74	0	690	0.818	706	1549	2255
4:30 PM - 5:30 PM	71	94	177	0	342	0.9	196	582	121	0	899	0.952	161	173	69	0	403	0.892	42	622	76	0	740	0.877	745	1639	2384
4:45 PM - 5:45 PM	77	109	179	0	365	0.886	198	586	121	0	905	0.959	150	181	71	0	402	0.889	49	571	67	0	687	0.904	767	1592	2359
5:00 PM - 6:00 PM	86	115	164	0	365	0.886	196	569	130	0	895	0.948	142	178	68	0	388	0.858	61	564	59	0	684	0.9	753	1579	2332
5:15 PM - 6:15 PM	89	119	165	0	373	0.905	186	542	137	0	865	0.932	130	170	71	0	371	0.966	69	557	53	0	679	0.893	744	1544	2288
5:30 PM - 6:30 PM	82	117	152	0	351	0.852	180	504	138	0	822	0.947	129	156	69	0	354	0.922	71	523	58	0	652	0.881	705	1474	2179
5:45 PM - 6:45 PM	82	97	137	0	316	0.859	153	479	124	0	756	0.9	124	132	58	0	314	0.818	57	522	62	0	641	0.866	630	1397	2027
6:00 PM - 7:00 PM	76	84	128	0	288	0.783	127	468	105	0	700	0.85	118	119	49	0	286	0.745	43	508	65	0	616	0.945	574	1316	1890

Wells + Associates, Inc.

Tysons, Virginia

Pedestrian Volume Survey

PROJECT: Pinkard Elden Street
W + A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Elden St.
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan



Time Period	Movement 1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7+ 8	Total
15 Minute Volumes													
6:00 AM - 6:15 AM									0	0	0	0	0
6:15 AM - 6:30 AM									0	0	0	0	0
6:30 AM - 6:45 AM									0	0	0	0	0
6:45 AM - 7:00 AM									0	0	0	0	0
7:00 AM - 7:15 AM	2					1		2	2	0	1	2	5
7:15 AM - 7:30 AM				2	1				0	2	1	0	3
7:30 AM - 7:45 AM		1		1		2			1	1	2	0	4
7:45 AM - 8:00 AM									0	0	0	0	0
8:00 AM - 8:15 AM									0	0	0	0	0
8:15 AM - 8:30 AM			3			3			0	3	3	0	6
8:30 AM - 8:45 AM			1		1	2			0	1	3	0	4
8:45 AM - 9:00 AM					2				0	0	2	0	2
4:00 PM - 4:15 PM									0	0	0	0	0
4:15 PM - 4:30 PM				7					0	7	0	0	7
4:30 PM - 4:45 PM						1			0	0	1	0	1
4:45 PM - 5:00 PM		2			2				2	0	2	0	4
5:00 PM - 5:15 PM	1		2	1					1	3	0	0	4
5:15 PM - 5:30 PM									0	0	0	0	0
5:30 PM - 5:45 PM									0	0	0	0	0
5:45 PM - 6:00 PM	1		2	1					1	3	0	0	4
6:00 PM - 6:15 PM									0	0	0	0	0
6:15 PM - 6:30 PM									0	0	0	0	0
6:30 PM - 6:45 PM				1					0	1	0	0	1
6:45 PM - 7:00 PM									0	0	0	0	0
Total	4	3	8	13	6	9	0	2	7	21	15	2	45
One Hour Volumes													
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	2	0	0	0	0	1	0	2	2	0	1	2	5
6:30 AM - 7:30 AM	2	0	0	2	1	1	0	2	2	2	2	2	8
6:45 AM - 7:45 AM	2	1	0	3	1	3	0	2	3	3	4	2	12
7:00 AM - 8:00 AM	2	1	0	3	1	3	0	2	3	3	4	2	12
7:15 AM - 8:15 AM	0	1	0	3	1	2	0	0	1	3	3	0	7
7:30 AM - 8:30 AM	0	1	3	1	0	5	0	0	1	4	5	0	10
7:45 AM - 8:45 AM	0	0	4	0	1	5	0	0	0	4	6	0	10
8:00 AM - 9:00 AM	0	0	4	0	3	5	0	0	0	4	8	0	12
4:00 PM - 5:00 PM	0	2	0	7	2	1	0	0	2	7	3	0	12
4:15 PM - 5:15 PM	1	2	2	8	2	1	0	0	3	10	3	0	16
4:30 PM - 5:30 PM	1	2	2	1	2	1	0	0	3	3	3	0	9
4:45 PM - 5:45 PM	1	2	2	1	2	0	0	0	3	3	2	0	8
5:00 PM - 6:00 PM	2	0	4	2	0	0	0	0	2	6	0	0	8
5:15 PM - 6:15 PM	1	0	2	1	0	0	0	0	1	3	0	0	4
5:30 PM - 6:30 PM	1	0	2	1	0	0	0	0	1	3	0	0	4
5:45 PM - 6:45 PM	1	0	2	2	0	0	0	0	1	4	0	0	5
6:00 PM - 7:00 PM	0	0	0	1	0	0	0	0	0	1	0	0	1

Wells + Associates, Inc.

Tysons, Virginia

Turning Movement Count - Bicycles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Elden St.
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan
SOUTHBOUND ROAD: Herndon Parkway
NORTHBOUND ROAD: Herndon Parkway
WESTBOUND ROAD: Elden Street
EASTBOUND ROAD: Elden Street

Time Period		Southbound Herndon Parkway				Westbound Elden Street				Northbound Herndon Parkway				Eastbound Elden Street				North & South	East & West	Total
		Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
15 Minute Volumes																				
6:00 AM	- 6:15 AM				0				0				0				0	0	0	0
6:15 AM	- 6:30 AM				0				0				0				0	0	0	0
6:30 AM	- 6:45 AM				0		1		1				0				0	0	1	1
6:45 AM	- 7:00 AM				0				0				0	1			1	0	1	1
7:00 AM	- 7:15 AM				0				0				0				0	0	0	0
7:15 AM	- 7:30 AM		1	1	2				0				0				0	2	0	2
7:30 AM	- 7:45 AM				0			1	1				0				0	0	1	1
7:45 AM	- 8:00 AM			1	1				0				0				0	1	0	1
8:00 AM	- 8:15 AM				0				0				0				0	0	0	0
8:15 AM	- 8:30 AM				0				0				0				0	0	0	0
8:30 AM	- 8:45 AM				0				0				0				0	0	0	0
8:45 AM	- 9:00 AM				0				0				0				0	0	0	0
4:00 PM	- 4:15 PM				0				0				0				0	0	0	0
4:15 PM	- 4:30 PM				0				0				0				0	0	0	0
4:30 PM	- 4:45 PM				0				0				0				0	0	0	0
4:45 PM	- 5:00 PM				0				0				0				0	0	0	0
5:00 PM	- 5:15 PM				0				0				0				0	0	0	0
5:15 PM	- 5:30 PM				0				0				0				0	0	0	0
5:30 PM	- 5:45 PM				0				0				0				0	0	0	0
5:45 PM	- 6:00 PM				0				0				0				0	0	0	0
6:00 PM	- 6:15 PM				0				0				0				0	0	0	0
6:15 PM	- 6:30 PM				0				0	2			2				0	2	0	2
6:30 PM	- 6:45 PM				0				0				0				0	0	0	0
6:45 PM	- 7:00 PM				0				0				0				0	0	0	0
Total		0	1	2	3	0	1	1	2	2	0	0	2	1	0	0	1	5	3	8
One Hour Volumes																				
6:00 AM	- 7:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	0	2	2
6:15 AM	- 7:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1	0	2	2
6:30 AM	- 7:30 AM	0	1	1	2	0	1	0	1	0	0	0	0	1	0	0	1	2	2	4
6:45 AM	- 7:45 AM	0	1	1	2	0	0	1	1	0	0	0	0	1	0	0	1	2	2	4
7:00 AM	- 8:00 AM	0	1	2	3	0	0	1	1	0	0	0	0	0	0	0	0	3	1	4
7:15 AM	- 8:15 AM	0	1	2	3	0	0	1	1	0	0	0	0	0	0	0	0	3	1	4
7:30 AM	- 8:30 AM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	1	2
7:45 AM	- 8:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	- 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	- 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	- 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	- 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	- 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	- 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	- 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	- 6:30 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2	0	2
5:45 PM	- 6:45 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2	0	2
6:00 PM	- 7:00 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2	0	2

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Site Entr.
LOCATION: Faitfax County,VA

DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan

SOUTHBOUND ROAD: Herndon Parkway
NORTHBOUND ROAD: Herndon Parkway
WESTBOUND ROAD: 0
EASTBOUND ROAD: Site Entrance

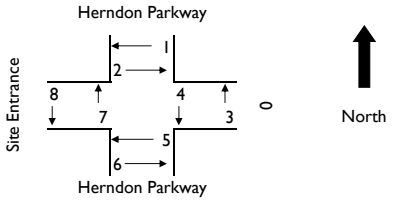
Time Period	Southbound Herndon Parkway						Westbound 0						Northbound Herndon Parkway						Eastbound Site Entrance						North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
6:15 AM - 6:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
6:30 AM - 6:45 AM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
6:45 AM - 7:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		0	2	2
7:00 AM - 7:15 AM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		3	0	0	0	3		1	3	4
7:15 AM - 7:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		0	2	2
7:30 AM - 7:45 AM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		3	0	0	0	3		1	3	4
7:45 AM - 8:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
8:00 AM - 8:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		0	2	2
8:15 AM - 8:30 AM	2	0	0	0	2		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	2
8:30 AM - 8:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
8:45 AM - 9:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
9:00 AM - 9:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
9:15 AM - 9:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
9:30 AM - 9:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
9:45 AM - 10:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
4:00 PM - 4:15 PM	3	0	0	0	3		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		3	1	4
4:15 PM - 4:30 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
4:30 PM - 4:45 PM	2	0	0	0	2		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		2	2	4
4:45 PM - 5:00 PM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		1	2	3
5:00 PM - 5:15 PM	3	0	0	0	3		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		3	1	4
5:15 PM - 5:30 PM	2	0	0	0	2		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		2	1	3
5:30 PM - 5:45 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		0	1	1
5:45 PM - 6:00 PM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
6:00 PM - 6:15 PM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1		1	1	2
6:15 PM - 6:30 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		4	0	0	0	4		0	4	4
6:30 PM - 6:45 PM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
6:45 PM - 7:00 PM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2		1	2	3
7:00 PM - 7:15 PM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
Total	20	0	0	0	20		0	0	0	0	0		0	0	0	0	0		31	0	0	0	31		20	31	51
One Hour Volumes																											
6:00 AM - 7:00 AM	1	0	0	0	1	0.25	0	0	0	0	0		0	0	0	0	0		2	0	0	0	2	0.25	1	2	3
6:15 AM - 7:15 AM	2	0	0	0	2	0.5	0	0	0	0	0		0	0	0	0	0		5	0	0	0	5	0.417	2	5	7
6:30 AM - 7:30 AM	2	0	0	0	2	0.5	0	0	0	0	0		0	0	0	0	0		7	0	0	0	7	0.583	2	7	9
6:45 AM - 7:45 AM	2	0	0	0	2	0.5	0	0	0	0	0		0	0	0	0	0		10	0	0	0	10	0.833	2	10	12
7:00 AM - 8:00 AM	2	0	0	0	2	0.5	0	0	0	0	0		0	0	0	0	0		9	0	0	0	9	0.75	2	9	11
7:15 AM - 8:15 AM	1	0	0	0	1	0.25	0	0	0	0	0		0	0	0	0	0		8	0	0	0	8	0.667	1	8	9
7:30 AM - 8:30 AM	3	0	0	0	3	0.375	0	0	0	0	0		0	0	0	0	0		6	0	0	0	6	0.5	3	6	9
7:45 AM - 8:45 AM	2	0	0	0	2	0.25	0	0	0	0	0		0	0	0	0	0		4	0	0	0	4	0.5	2	4	6
8:00 AM - 9:00 AM	2	0	0	0	2	0.25	0	0	0	0	0		0	0	0	0	0		4	0	0	0	4	0.5	2	4	6
8:15 AM - 9:15 AM	2	0	0	0	2	0.25	0	0	0	0	0		0	0	0	0	0		2	0	0	0	2	0.5	2	2	4
8:30 AM - 9:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	0	0	2	0.5	0	2	2
8:45 AM - 9:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	0	1	1
9:00 AM - 10:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
3:15 PM - 4:15 PM	3	0	0	0	3	0.25	0	0	0	0	0		0	0	0	0	0		1	0	0	0	1	0.25	3	1	4
3:30 PM - 4:30 PM	3	0	0	0	3	0.25	0	0	0	0	0		0	0	0	0	0		2	0	0	0	2	0.5	3	2	5
3:45 PM - 4:45 PM	5	0	0	0	5	0.417	0	0	0	0	0		0	0	0	0	0		4	0	0	0	4	0.5	5	4	9
4:00 PM - 5:00 PM	6	0	0	0	6	0.5	0	0	0	0	0		0	0	0	0	0		6	0	0	0	6	0.75	6	6	12
4:15 PM - 5:15 PM	6	0	0	0	6	0.5	0	0	0	0	0		0	0	0	0	0		6	0	0	0	6	0.75	6	6	12
4:30 PM - 5:30 PM	8	0	0	0	8	0.667	0	0	0	0	0		0	0	0	0	0		6	0	0	0	6	0.75	8	6	14
4:45 PM - 5:45 PM	6	0	0	0	6	0.5	0	0	0	0	0		0	0	0	0	0		5	0	0	0	5	0.625	6	5	11
5:00 PM - 6:00 PM	6	0	0	0	6	0.5	0	0	0	0	0		0	0	0	0	0		3	0	0	0	3	0.75	6	3	9
5:15 PM - 6:15 PM	4	0	0	0	4	0.5	0	0	0	0	0		0	0	0	0	0		3	0	0	0	3	0.75	4	3	7
5:30 PM - 6:30 PM	2	0	0	0	2	0.5	0	0	0	0	0		0	0	0	0	0		6	0	0	0	6	0.375	2	6	8
5:45 PM - 6:45 PM	3	0	0	0	3	0.75	0	0	0	0	0		0	0	0	0	0		5	0	0	0	5	0.313	3	5	8
6:00 PM - 7:00 PM	3	0	0	0	3	0.75	0	0	0	0	0		0	0	0	0	0		7	0	0	0	7	0.438	3	7	10

Wells + Associates, Inc.

Tysons, Virginia

Pedestrian Volume Survey

PROJECT: Pinkard Elden Street
W + A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Site Entr.
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan



Time Period	Movement 1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7+ 8	Total
15 Minute Volumes													
6:00 AM - 6:15 AM									0	0	0	0	0
6:15 AM - 6:30 AM									0	0	0	0	0
6:30 AM - 6:45 AM									0	0	0	0	0
6:45 AM - 7:00 AM									0	0	0	0	0
7:00 AM - 7:15 AM									0	0	0	0	0
7:15 AM - 7:30 AM									0	0	0	0	0
7:30 AM - 7:45 AM									0	0	0	0	0
7:45 AM - 8:00 AM									0	0	0	0	0
8:00 AM - 8:15 AM									0	0	0	0	0
8:15 AM - 8:30 AM									0	0	0	0	0
8:30 AM - 8:45 AM									0	0	0	0	0
8:45 AM - 9:00 AM									0	0	0	0	0
4:00 PM - 4:15 PM									0	0	0	0	0
4:15 PM - 4:30 PM									0	0	0	0	0
4:30 PM - 4:45 PM									0	0	0	0	0
4:45 PM - 5:00 PM									0	0	0	0	0
5:00 PM - 5:15 PM									0	0	0	0	0
5:15 PM - 5:30 PM									0	0	0	0	0
5:30 PM - 5:45 PM									0	0	0	0	0
5:45 PM - 6:00 PM									0	0	0	0	0
6:00 PM - 6:15 PM									0	0	0	0	0
6:15 PM - 6:30 PM									0	0	0	0	0
6:30 PM - 6:45 PM									0	0	0	0	0
6:45 PM - 7:00 PM									0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
One Hour Volumes													
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

Wells + Associates, Inc.

Tysons, Virginia

Turning Movement Count - Bicycles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Site Entr.
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan
SOUTHBOUND ROAD: Herndon Parkway
NORTHBOUND ROAD: Herndon Parkway
WESTBOUND ROAD: 0
EASTBOUND ROAD: Site Entrance

Time Period	Southbound Herndon Parkway				Westbound 0				Northbound Herndon Parkway				Eastbound Site Entrance				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
15 Minute Volumes																			
6:00 AM - 6:15 AM				0				0				0				0	0	0	0
6:15 AM - 6:30 AM				0				0				0				0	0	0	0
6:30 AM - 6:45 AM				0				0				0				0	0	0	0
6:45 AM - 7:00 AM				0				0				0				0	0	0	0
7:00 AM - 7:15 AM				0				0				0				0	0	0	0
7:15 AM - 7:30 AM				0				0				0				0	0	0	0
7:30 AM - 7:45 AM				0				0				0				0	0	0	0
7:45 AM - 8:00 AM				0				0				0				0	0	0	0
8:00 AM - 8:15 AM				0				0				0				0	0	0	0
8:15 AM - 8:30 AM				0				0				0				0	0	0	0
8:30 AM - 8:45 AM				0				0				0				0	0	0	0
8:45 AM - 9:00 AM				0				0				0				0	0	0	0
4:00 PM - 4:15 PM				0				0				0				0	0	0	0
4:15 PM - 4:30 PM				0				0				0				0	0	0	0
4:30 PM - 4:45 PM				0				0				0				0	0	0	0
4:45 PM - 5:00 PM				0				0				0				0	0	0	0
5:00 PM - 5:15 PM				0				0				0				0	0	0	0
5:15 PM - 5:30 PM				0				0				0				0	0	0	0
5:30 PM - 5:45 PM				0				0				0				0	0	0	0
5:45 PM - 6:00 PM				0				0				0				0	0	0	0
6:00 PM - 6:15 PM				0				0				0				0	0	0	0
6:15 PM - 6:30 PM				0				0				0				0	0	0	0
6:30 PM - 6:45 PM				0				0				0				0	0	0	0
6:45 PM - 7:00 PM				0				0				0				0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
One Hour Volumes																			
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Grove St.
LOCATION: Faitfax County,VA

DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan

SOUTHBOUND ROAD: Herndon Parkway
NORTHBOUND ROAD: Herndon Parkway
WESTBOUND ROAD: 0
EASTBOUND ROAD: Grove Street

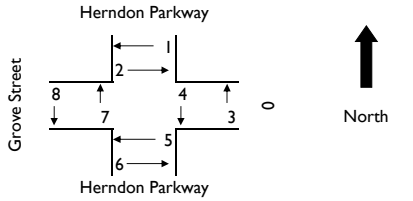
Time Period	Southbound Herndon Parkway						Westbound 0						Northbound Herndon Parkway						Eastbound Grove Street						North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	8	16	0	0	24		0	0	0	0	0		0	22	41	0	63		2	0	0	0	2		87	2	89
6:15 AM - 6:30 AM	17	20	0	0	37		0	0	0	0	0		0	14	44	0	58		3	0	1	0	4		95	4	99
6:30 AM - 6:45 AM	10	25	0	0	35		0	0	0	0	0		0	19	47	0	66		7	0	0	0	7		101	7	108
6:45 AM - 7:00 AM	21	38	0	0	59		0	0	0	0	0		0	23	47	0	70		6	0	1	0	7		129	7	136
7:00 AM - 7:15 AM	27	37	0	0	64		0	0	0	0	0		0	26	59	0	85		13	0	2	0	15		149	15	164
7:15 AM - 7:30 AM	29	48	0	0	77		0	0	0	0	0		0	33	69	0	102		12	0	1	0	13		179	13	192
7:30 AM - 7:45 AM	19	59	0	0	78		0	0	0	0	0		0	49	44	0	93		14	0	4	0	18		171	18	189
7:45 AM - 8:00 AM	19	78	0	0	97		0	0	0	0	0		0	55	66	0	121		6	0	4	0	10		218	10	228
8:00 AM - 8:15 AM	19	61	0	0	80		0	0	0	0	0		0	41	66	0	107		10	0	4	0	14		187	14	201
8:15 AM - 8:30 AM	21	75	0	0	96		0	0	0	0	0		0	60	66	0	126		10	0	3	0	13		222	13	235
8:30 AM - 8:45 AM	19	62	0	0	81		0	0	0	0	0		0	62	75	0	137		19	0	1	0	20		218	20	238
8:45 AM - 9:00 AM	13	69	0	0	82		0	0	0	0	0		0	63	64	0	127		23	0	4	0	27		209	27	236
4:00 PM - 4:15 PM	7	48	0	0	55		0	0	0	0	0		0	63	11	0	74		82	0	22	0	104		129	104	233
4:15 PM - 4:30 PM	3	65	0	0	68		0	0	0	0	0		0	78	16	0	94		76	0	15	0	91		162	91	253
4:30 PM - 4:45 PM	9	67	0	0	76		0	0	0	0	0		0	63	16	0	79		69	0	25	0	94		155	94	249
4:45 PM - 5:00 PM	9	95	0	0	104		0	0	0	0	0		0	154	19	0	173		119	0	27	0	146		277	146	423
5:00 PM - 5:15 PM	6	95	0	0	101		0	0	0	0	0		0	87	17	0	104		44	0	14	0	58		205	58	263
5:15 PM - 5:30 PM	5	64	0	0	69		0	0	0	0	0		0	84	9	0	93		56	0	11	0	67		162	67	229
5:30 PM - 5:45 PM	5	92	0	0	97		0	0	0	0	0		0	69	8	0	77		38	0	12	0	50		174	50	224
5:45 PM - 6:00 PM	2	79	0	0	81		0	0	0	0	0		0	73	8	0	81		41	0	11	0	52		162	52	214
6:00 PM - 6:15 PM	3	70	0	0	73		0	0	0	0	0		0	82	12	0	94		39	0	7	0	46		167	46	213
6:15 PM - 6:30 PM	3	60	0	0	63		0	0	0	0	0		0	64	8	0	72		21	0	11	0	32		135	32	167
6:30 PM - 6:45 PM	0	49	0	0	49		0	0	0	0	0		0	55	8	0	63		21	0	5	0	26		112	26	138
6:45 PM - 7:00 PM	0	42	0	0	42		0	0	0	0	0		0	53	6	0	59		20	0	1	0	21		101	21	122
Total	274	1414	0	0	1688		0	0	0	0	0		0	1392	826	0	2218		751	0	186	0	937		3906	937	4843
One Hour Volumes																											
6:00 AM - 7:00 AM	56	99	0	0	155	0.657	0	0	0	0	0		0	78	179	0	257	0.918	18	0	2	0	20	0.714	412	20	432
6:15 AM - 7:15 AM	75	120	0	0	195	0.762	0	0	0	0	0		0	82	197	0	279	0.821	29	0	4	0	33	0.55	474	33	507
6:30 AM - 7:30 AM	87	148	0	0	235	0.763	0	0	0	0	0		0	101	222	0	323	0.792	38	0	4	0	42	0.7	558	42	600
6:45 AM - 7:45 AM	96	182	0	0	278	0.891	0	0	0	0	0		0	131	219	0	350	0.858	45	0	8	0	53	0.736	628	53	681
7:00 AM - 8:00 AM	94	222	0	0	316	0.814	0	0	0	0	0		0	163	238	0	401	0.829	45	0	11	0	56	0.778	717	56	773
7:15 AM - 8:15 AM	86	246	0	0	332	0.856	0	0	0	0	0		0	178	245	0	423	0.874	42	0	13	0	55	0.764	755	55	810
7:30 AM - 8:30 AM	78	273	0	0	351	0.905	0	0	0	0	0		0	205	242	0	447	0.887	40	0	15	0	55	0.764	798	55	853
7:45 AM - 8:45 AM	78	276	0	0	354	0.912	0	0	0	0	0		0	218	273	0	491	0.896	45	0	12	0	57	0.713	845	57	902
8:00 AM - 9:00 AM	72	267	0	0	339	0.883	0	0	0	0	0		0	226	271	0	497	0.907	62	0	12	0	74	0.685	836	74	910
4:00 PM - 5:00 PM	28	275	0	0	303	0.728	0	0	0	0	0		0	358	62	0	420	0.607	346	0	89	0	435	0.745	723	435	1158
4:15 PM - 5:15 PM	27	322	0	0	349	0.839	0	0	0	0	0		0	382	68	0	450	0.65	308	0	81	0	389	0.666	799	389	1188
4:30 PM - 5:30 PM	29	321	0	0	350	0.841	0	0	0	0	0		0	388	61	0	449	0.649	288	0	77	0	365	0.625	799	365	1164
4:45 PM - 5:45 PM	25	346	0	0	371	0.892	0	0	0	0	0		0	394	53	0	447	0.646	257	0	64	0	321	0.55	818	321	1139
5:00 PM - 6:00 PM	18	330	0	0	348	0.861	0	0	0	0	0		0	313	42	0	355	0.853	179	0	48	0	227	0.847	703	227	930
5:15 PM - 6:15 PM	15	305	0	0	320	0.825	0	0	0	0	0		0	308	37	0	345	0.918	174	0	41	0	215	0.802	665	215	880
5:30 PM - 6:30 PM	13	301	0	0	314	0.809	0	0	0	0	0		0	288	36	0	324	0.862	139	0	41	0	180	0.865	638	180	818
5:45 PM - 6:45 PM	8	258	0	0	266	0.821	0	0	0	0	0		0	274	36	0	310	0.824	122	0	34	0	156	0.75	576	156	732
6:00 PM - 7:00 PM	6	221	0	0	227	0.777	0	0	0	0	0		0	254	34	0	288	0.766	101	0	24	0	125	0.679	515	125	640

Wells + Associates, Inc.

Tysons, Virginia

Pedestrian Volume Survey

PROJECT: Pinkard Elden Street
W + A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Grove St.
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan



Time Period	Movement 1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7+ 8	Total
15 Minute Volumes													
6:00 AM - 6:15 AM									0	0	0	0	0
6:15 AM - 6:30 AM									0	0	0	0	0
6:30 AM - 6:45 AM									0	0	0	0	0
6:45 AM - 7:00 AM									0	0	0	0	0
7:00 AM - 7:15 AM									0	0	0	0	0
7:15 AM - 7:30 AM									0	0	0	0	0
7:30 AM - 7:45 AM								1	0	0	0	1	1
7:45 AM - 8:00 AM							2	1	0	0	0	3	3
8:00 AM - 8:15 AM			2						0	2	0	0	2
8:15 AM - 8:30 AM									0	0	0	0	0
8:30 AM - 8:45 AM									0	0	0	0	0
8:45 AM - 9:00 AM									0	0	0	0	0
4:00 PM - 4:15 PM									0	0	0	0	0
4:15 PM - 4:30 PM								1	0	0	0	1	1
4:30 PM - 4:45 PM				5					0	5	0	0	5
4:45 PM - 5:00 PM			1				1		0	1	0	1	2
5:00 PM - 5:15 PM			1						0	1	0	0	1
5:15 PM - 5:30 PM				2					0	2	0	0	2
5:30 PM - 5:45 PM								1	0	0	0	1	1
5:45 PM - 6:00 PM			2						0	2	0	0	2
6:00 PM - 6:15 PM							2		0	0	0	2	2
6:15 PM - 6:30 PM									0	0	0	0	0
6:30 PM - 6:45 PM									0	0	0	0	0
6:45 PM - 7:00 PM									0	0	0	0	0
Total	0	0	6	7	0	0	5	4	0	13	0	9	22
One Hour Volumes													
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	1	0	0	0	1	1
7:00 AM - 8:00 AM	0	0	0	0	0	0	2	2	0	0	0	4	4
7:15 AM - 8:15 AM	0	0	2	0	0	0	2	2	0	2	0	4	6
7:30 AM - 8:30 AM	0	0	2	0	0	0	2	2	0	2	0	4	6
7:45 AM - 8:45 AM	0	0	2	0	0	0	2	1	0	2	0	3	5
8:00 AM - 9:00 AM	0	0	2	0	0	0	0	0	0	2	0	0	2
4:00 PM - 5:00 PM	0	0	1	5	0	0	1	1	0	6	0	2	8
4:15 PM - 5:15 PM	0	0	2	5	0	0	1	1	0	7	0	2	9
4:30 PM - 5:30 PM	0	0	2	7	0	0	1	0	0	9	0	1	10
4:45 PM - 5:45 PM	0	0	2	2	0	0	1	1	0	4	0	2	6
5:00 PM - 6:00 PM	0	0	3	2	0	0	0	1	0	5	0	1	6
5:15 PM - 6:15 PM	0	0	2	2	0	0	2	1	0	4	0	3	7
5:30 PM - 6:30 PM	0	0	2	0	0	0	2	1	0	2	0	3	5
5:45 PM - 6:45 PM	0	0	2	0	0	0	2	0	0	2	0	2	4
6:00 PM - 7:00 PM	0	0	0	0	0	0	2	0	0	0	0	2	2

Wells + Associates, Inc.

Tysons, Virginia

Turning Movement Count - Bicycles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Herndon Pkwy. & Grove St.
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan
SOUTHBOUND ROAD: Herndon Parkway
NORTHBOUND ROAD: Herndon Parkway
WESTBOUND ROAD: 0
EASTBOUND ROAD: Grove Street

Time Period	Southbound Herndon Parkway				Westbound 0				Northbound Herndon Parkway				Eastbound Grove Street				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
15 Minute Volumes																			
6:00 AM - 6:15 AM				0				0				0				0	0	0	0
6:15 AM - 6:30 AM				0				0				0				0	0	0	0
6:30 AM - 6:45 AM				0				0				0				0	0	0	0
6:45 AM - 7:00 AM				0				0				0				0	0	0	0
7:00 AM - 7:15 AM	2			2				0				0				0	2	0	2
7:15 AM - 7:30 AM				0				0				0				0	0	0	0
7:30 AM - 7:45 AM				0				0				0				0	0	0	0
7:45 AM - 8:00 AM				0				0				0				0	0	0	0
8:00 AM - 8:15 AM				0				0				0				0	0	0	0
8:15 AM - 8:30 AM				0				0				0				0	0	0	0
8:30 AM - 8:45 AM				0				0				0				0	0	0	0
8:45 AM - 9:00 AM				0				0				0				0	0	0	0
4:00 PM - 4:15 PM				0				0				0				0	0	0	0
4:15 PM - 4:30 PM				0				0				0				0	0	0	0
4:30 PM - 4:45 PM				0				0				0				0	0	0	0
4:45 PM - 5:00 PM				0				0				0				0	0	0	0
5:00 PM - 5:15 PM				0				0				0				0	0	0	0
5:15 PM - 5:30 PM				0				0				0				0	0	0	0
5:30 PM - 5:45 PM				0				0				0				0	0	0	0
5:45 PM - 6:00 PM				0				0				0				0	0	0	0
6:00 PM - 6:15 PM				0				0				0				0	0	0	0
6:15 PM - 6:30 PM				0				0				0				0	0	0	0
6:30 PM - 6:45 PM				0				0				0				0	0	0	0
6:45 PM - 7:00 PM				0				0				0				0	0	0	0
Total	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
One Hour Volumes																			
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
6:30 AM - 7:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
6:45 AM - 7:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
7:00 AM - 8:00 AM	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wells + Associates,Inc

Tysons, Virginia

Turning Movement Count - Total Vehicles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Grove St. & site Entr.
LOCATION: Faitfax County,VA

DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan

SOUTHBOUND ROAD: Site Entrance
NORTHBOUND ROAD: 0
WESTBOUND ROAD: Grove Street
EASTBOUND ROAD: Grove Street

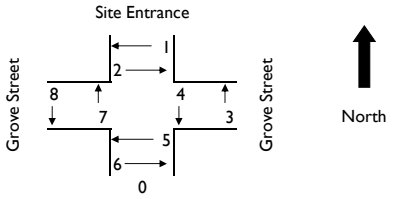
Time Period	Southbound Site Entrance						Westbound Grove Street						Northbound 0						Eastbound Grove Street						North & South	East & West	Total
	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF	Right	Thru	Left	U-Turn	Total	PHF			
15 Minute Volumes																											
6:00 AM - 6:15 AM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
6:15 AM - 6:30 AM	1	0	0	0	1		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		1	1	2
6:30 AM - 6:45 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
6:45 AM - 7:00 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
7:00 AM - 7:15 AM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
7:15 AM - 7:30 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
7:30 AM - 7:45 AM	3	0	0	0	3		2	0	0	0	2		0	0	0	0	0		0	0	0	0	0		3	2	5
7:45 AM - 8:00 AM	3	0	0	0	3		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		3	0	3
8:00 AM - 8:15 AM	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0
8:15 AM - 8:30 AM	2	0	0	0	2		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		2	0	2
8:30 AM - 8:45 AM	0	0	0	0	0		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	1	1
8:45 AM - 9:00 AM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
4:00 PM - 4:15 PM	3	0	0	0	3		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		3	1	4
4:15 PM - 4:30 PM	3	0	0	0	3		3	0	0	0	3		0	0	0	0	0		0	0	0	0	0		3	3	6
4:30 PM - 4:45 PM	1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
4:45 PM - 5:00 PM	1	0	0	0	1		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		1	1	2
5:00 PM - 5:15 PM	2	0	0	0	2		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		2	1	3
5:15 PM - 5:30 PM	2	0	0	0	2		3	0	0	0	3		0	0	0	0	0		0	0	0	0	0		2	3	5
5:30 PM - 5:45 PM	2	0	0	0	2		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		2	1	3
5:45 PM - 6:00 PM	1	0	0	0	1		2	0	0	0	2		0	0	0	0	0		0	0	0	0	0		1	2	3
6:00 PM - 6:15 PM	0	0	0	0	0		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		0	1	1
6:15 PM - 6:30 PM	1	0	0	0	1		2	0	0	0	2		0	0	0	0	0		0	0	0	0	0		1	2	3
6:30 PM - 6:45 PM	2	0	0	0	2		1	0	0	0	1		0	0	0	0	0		0	0	0	0	0		2	1	3
6:45 PM - 7:00 PM	1	0	0	0	1		3	0	0	0	3		0	0	0	0	0		0	0	0	0	0		1	3	4
Total	31	0	0	0	31		23	0	0	0	23		0	0	0	0	0		0	0	0	0	0		31	23	54
One Hour Volumes																											
6:00 AM - 7:00 AM	2	0	0	0	2	0.5	1	0	0	0	1	0.25	0	0	0	0	0		0	0	0	0	0		2	1	3
6:15 AM - 7:15 AM	2	0	0	0	2	0.5	1	0	0	0	1	0.25	0	0	0	0	0		0	0	0	0	0		2	1	3
6:30 AM - 7:30 AM	1	0	0	0	1	0.25	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		1	0	1
6:45 AM - 7:45 AM	4	0	0	0	4	0.333	2	0	0	0	2	0.25	0	0	0	0	0		0	0	0	0	0		4	2	6
7:00 AM - 8:00 AM	7	0	0	0	7	0.583	2	0	0	0	2	0.25	0	0	0	0	0		0	0	0	0	0		7	2	9
7:15 AM - 8:15 AM	6	0	0	0	6	0.5	2	0	0	0	2	0.25	0	0	0	0	0		0	0	0	0	0		6	2	8
7:30 AM - 8:30 AM	8	0	0	0	8	0.667	2	0	0	0	2	0.25	0	0	0	0	0		0	0	0	0	0		8	2	10
7:45 AM - 8:45 AM	5	0	0	0	5	0.417	1	0	0	0	1	0.25	0	0	0	0	0		0	0	0	0	0		5	1	6
8:00 AM - 9:00 AM	3	0	0	0	3	0.375	1	0	0	0	1	0.25	0	0	0	0	0		0	0	0	0	0		3	1	4
4:00 PM - 5:00 PM	8	0	0	0	8	0.667	5	0	0	0	5	0.417	0	0	0	0	0		0	0	0	0	0		8	5	13
4:15 PM - 5:15 PM	7	0	0	0	7	0.583	5	0	0	0	5	0.417	0	0	0	0	0		0	0	0	0	0		7	5	12
4:30 PM - 5:30 PM	6	0	0	0	6	0.75	5	0	0	0	5	0.417	0	0	0	0	0		0	0	0	0	0		6	5	11
4:45 PM - 5:45 PM	7	0	0	0	7	0.875	6	0	0	0	6	0.5	0	0	0	0	0		0	0	0	0	0		7	6	13
5:00 PM - 6:00 PM	7	0	0	0	7	0.875	7	0	0	0	7	0.583	0	0	0	0	0		0	0	0	0	0		7	7	14
5:15 PM - 6:15 PM	5	0	0	0	5	0.625	7	0	0	0	7	0.583	0	0	0	0	0		0	0	0	0	0		5	7	12
5:30 PM - 6:30 PM	4	0	0	0	4	0.5	6	0	0	0	6	0.75	0	0	0	0	0		0	0	0	0	0		4	6	10
5:45 PM - 6:45 PM	4	0	0	0	4	0.5	6	0	0	0	6	0.75	0	0	0	0	0		0	0	0	0	0		4	6	10
6:00 PM - 7:00 PM	4	0	0	0	4	0.5	7	0	0	0	7	0.583	0	0	0	0	0		0	0	0	0	0		4	7	11

Wells + Associates, Inc.

Tysons, Virginia

Pedestrian Volume Survey

PROJECT: Pinkard Elden Street
W + A JOB NO: 8609
INTERSECTION: Grove St. & site Entr.
LOCATION: Faitfax County,VA
DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan



Time Period	Movement 1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7+ 8	Total
15 Minute Volumes													
6:00 AM - 6:15 AM									0	0	0	0	0
6:15 AM - 6:30 AM									0	0	0	0	0
6:30 AM - 6:45 AM									0	0	0	0	0
6:45 AM - 7:00 AM									0	0	0	0	0
7:00 AM - 7:15 AM									0	0	0	0	0
7:15 AM - 7:30 AM									0	0	0	0	0
7:30 AM - 7:45 AM									0	0	0	0	0
7:45 AM - 8:00 AM									0	0	0	0	0
8:00 AM - 8:15 AM									0	0	0	0	0
8:15 AM - 8:30 AM									0	0	0	0	0
8:30 AM - 8:45 AM									0	0	0	0	0
8:45 AM - 9:00 AM									0	0	0	0	0
4:00 PM - 4:15 PM									0	0	0	0	0
4:15 PM - 4:30 PM									0	0	0	0	0
4:30 PM - 4:45 PM									0	0	0	0	0
4:45 PM - 5:00 PM									0	0	0	0	0
5:00 PM - 5:15 PM									0	0	0	0	0
5:15 PM - 5:30 PM									0	0	0	0	0
5:30 PM - 5:45 PM									0	0	0	0	0
5:45 PM - 6:00 PM									0	0	0	0	0
6:00 PM - 6:15 PM									0	0	0	0	0
6:15 PM - 6:30 PM									0	0	0	0	0
6:30 PM - 6:45 PM									0	0	0	0	0
6:45 PM - 7:00 PM									0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
One Hour Volumes													
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0

Wells + Associates, Inc.

Tysons, Virginia

Turning Movement Count - Bicycles

PROJECT: Pinkard Elden Street
W+A JOB NO: 8609
INTERSECTION: Grove St. & site Entr.
LOCATION: Faitfax County,VA

DATE: 9/16/2021
DAY: Thursday
WEATHER: clear AM, rain PM
COUNTED BY: Agan
INPUTED BY: Agan

SOUTHBOUND ROAD: Site Entrance
NORTHBOUND ROAD: 0
WESTBOUND ROAD: Grove Street
EASTBOUND ROAD: Grove Street

Time Period	Southbound Site Entrance				Westbound Grove Street				Northbound 0				Eastbound Grove Street				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
15 Minute Volumes																			
6:00 AM - 6:15 AM				0				0				0				0	0	0	0
6:15 AM - 6:30 AM				0				0				0				0	0	0	0
6:30 AM - 6:45 AM				0				0				0				0	0	0	0
6:45 AM - 7:00 AM				0				0				0				0	0	0	0
7:00 AM - 7:15 AM				0				0				0				0	0	0	0
7:15 AM - 7:30 AM				0				0				0				0	0	0	0
7:30 AM - 7:45 AM				0				0				0				0	0	0	0
7:45 AM - 8:00 AM				0				0				0				0	0	0	0
8:00 AM - 8:15 AM				0				0				0				0	0	0	0
8:15 AM - 8:30 AM				0				0				0				0	0	0	0
8:30 AM - 8:45 AM				0				0				0				0	0	0	0
8:45 AM - 9:00 AM				0				0				0				0	0	0	0
4:00 PM - 4:15 PM				0				0				0				0	0	0	0
4:15 PM - 4:30 PM				0				0				0				0	0	0	0
4:30 PM - 4:45 PM				0				0				0				0	0	0	0
4:45 PM - 5:00 PM				0				0				0				0	0	0	0
5:00 PM - 5:15 PM				0				0				0				0	0	0	0
5:15 PM - 5:30 PM				0				0				0				0	0	0	0
5:30 PM - 5:45 PM				0				0				0				0	0	0	0
5:45 PM - 6:00 PM				0				0				0				0	0	0	0
6:00 PM - 6:15 PM				0				0				0				0	0	0	0
6:15 PM - 6:30 PM				0				0				0				0	0	0	0
6:30 PM - 6:45 PM				0				0				0				0	0	0	0
6:45 PM - 7:00 PM				0				0				0				0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
One Hour Volumes																			
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM - 7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM - 7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM - 7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM - 8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM - 8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM - 8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM - 5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM - 5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM - 5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM - 5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM - 6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM - 6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM - 6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM - 6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM - 7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

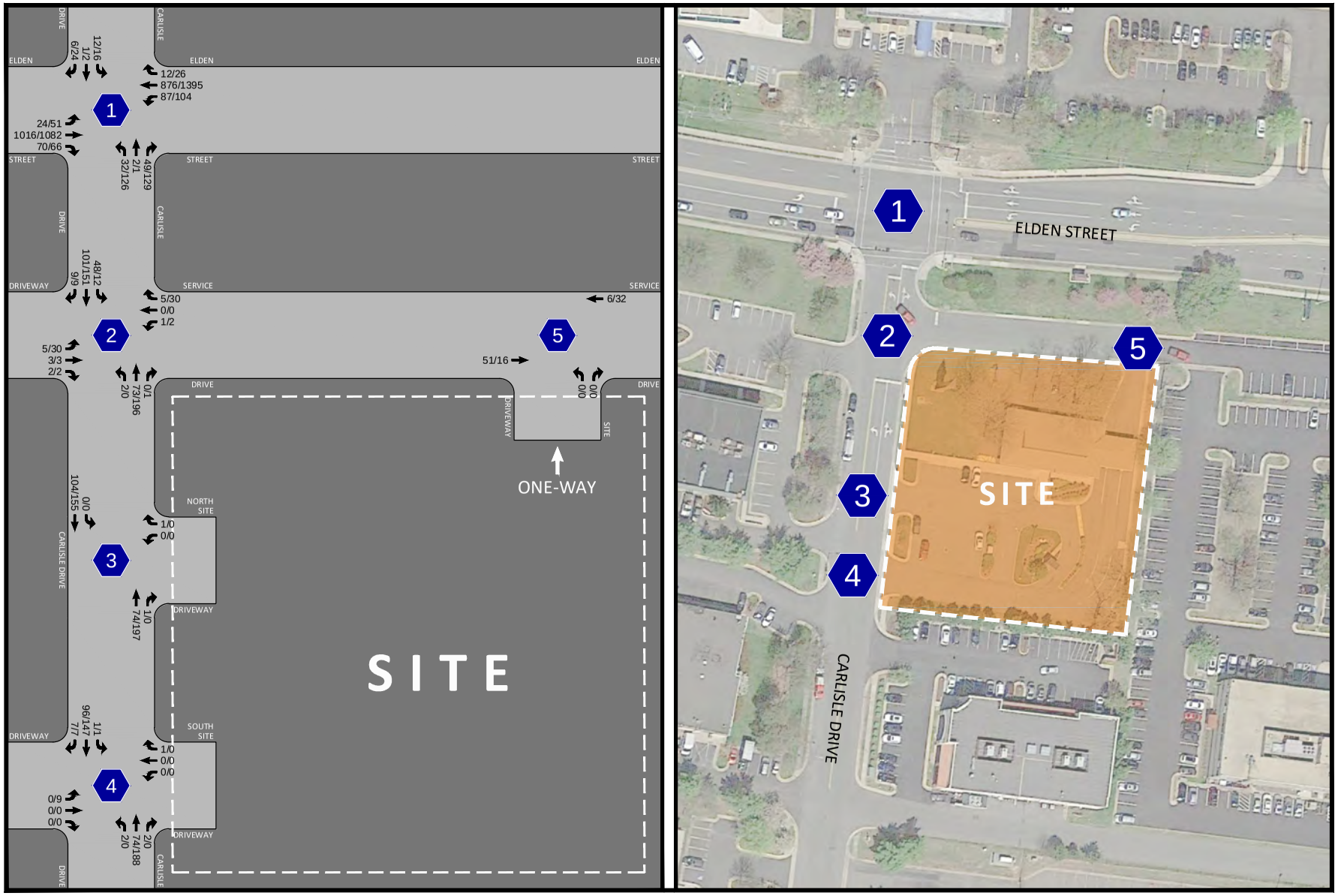


Figure 3
Existing Peak Hour Vehicular Traffic Volumes (Balanced Counts)

AM PEAK HOUR
PM PEAK HOUR
000 / 000

NORTH
Virginia Tire & Auto
Town of Herndon, Virginia

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT: Virginia Tire & Auto Herndon
W+A JOB NO: 0
INTERSECTION: Elden St. & Carlisle Dr.
LOCATION: Fairfax County,VA

DATE: 10/19/2017
DAY: Thursday
WEATHER: clear
COUNTED BY: Matt & Ali
INPUTED BY: agan

SOUTHBOUND ROAD: Carlisle Drive
NORTHBOUND ROAD: Carlisle Drive
WESTBOUND ROAD: Elden Street
EASTBOUND ROAD: Elden Street

Time Period	Southbound Carlisle Drive					Westbound Elden Street					Northbound Carlisle Drive					Eastbound Elden Street					North & South	East & West	Total
	Right	Thru	Left	Total	PHF	Right	Thru	Left	Total	PHF	Right	Thru	Left	Total	PHF	Right	Thru	Left	Total	PHF			
AM 15 Minute Volumes																							
6:00 AM - 6:15 AM	2	0	1	3		1	68	7	76		2	0	0	2		7	92	4	103		5	179	184
6:15 AM - 6:30 AM	2	0	6	8		1	85	5	91		1	0	0	1		1	96	1	98		9	189	198
6:30 AM - 6:45 AM	2	0	2	4		3	110	5	118		0	0	1	1		1	130	2	133		5	251	256
6:45 AM - 7:00 AM	1	1	0	2		0	125	3	128		0	0	4	4		5	134	4	143		6	271	277
7:00 AM - 7:15 AM	4	0	6	10		2	163	8	173		7	0	8	15		17	185	4	206		25	379	404
7:15 AM - 7:30 AM	2	0	2	4		2	177	23	202		13	1	10	24		9	175	1	185		28	387	415
7:30 AM - 7:45 AM	1	0	3	4		4	184	10	198		13	0	6	19		11	218	4	233		23	431	454
7:45 AM - 8:00 AM	1	0	1	2		4	221	14	239		13	0	4	17		5	235	5	245		19	484	503
8:00 AM - 8:15 AM	0	1	6	7		0	197	18	215		9	2	4	15		11	230	1	242		22	457	479
8:15 AM - 8:30 AM	4	0	2	6		8	201	15	224		12	0	8	20		18	291	6	315		26	539	565
8:30 AM - 8:45 AM	2	0	1	3		1	195	23	219		8	0	9	17		15	234	12	261		20	480	500
8:45 AM - 9:00 AM	0	0	3	3		3	283	21	307		16	0	8	24		18	261	5	284		27	591	618
Total	21	2	33	56		29	2009	152	2190		94	3	62	159		118	2281	49	2448		215	4638	4853
AM One Hour Volumes																							
6:00 AM - 7:00 AM	7	1	9	17	0.53	5	388	20	413	0.81	3	0	5	8	0.50	14	452	11	477	0.83	25	890	915
6:15 AM - 7:15 AM	9	1	14	24	0.60	6	483	21	510	0.74	8	0	13	21	0.35	24	545	11	580	0.70	45	1090	1135
6:30 AM - 7:30 AM	9	1	10	20	0.50	7	575	39	621	0.77	20	1	23	44	0.46	32	624	11	667	0.81	64	1288	1352
6:45 AM - 7:45 AM	8	1	11	20	0.50	8	649	44	701	0.87	33	1	28	62	0.65	42	712	13	767	0.82	82	1468	1550
7:00 AM - 8:00 AM	8	0	12	20	0.50	12	745	55	812	0.85	46	1	28	75	0.78	42	813	14	869	0.89	95	1681	1776
7:15 AM - 8:15 AM	4	1	12	17	0.61	10	779	65	854	0.89	48	3	24	75	0.78	36	858	11	905	0.92	92	1759	1851
7:30 AM - 8:30 AM	6	1	12	19	0.68	16	803	57	876	0.92	47	2	22	71	0.89	45	974	16	1035	0.82	90	1911	2001
7:45 AM - 8:45 AM	7	1	10	18	0.64	13	814	70	897	0.94	42	2	25	69	0.86	49	990	24	1063	0.84	87	1960	2047
8:00 AM - 9:00 AM	**6**	**1**	**12**	**19**	**0.68**	**12**	**876**	**77**	**965**	**0.79**	**45**	**2**	**29**	**76**	**0.79**	**62**	**1016**	**24**	**1102**	**0.87**	**95**	**2067**	**2162**
PM 15 Minute Volumes																							
4:00 PM - 4:15 PM	6	0	1	7		9	309	18	336		39	0	23	62		15	237	4	256		69	592	661
4:15 PM - 4:30 PM	3	0	5	8		10	310	22	342		23	1	31	55		22	258	7	287		63	629	692
4:30 PM - 4:45 PM	5	0	2	7		5	326	14	345		20	0	28	48		19	263	3	285		55	630	685
4:45 PM - 5:00 PM	1	0	1	2		7	322	21	350		26	0	23	49		18	257	10	285		51	635	686
5:00 PM - 5:15 PM	13	0	2	15		10	345	30	385		35	0	33	68		17	256	17	290		83	675	758
5:15 PM - 5:30 PM	3	1	3	7		4	366	25	395		35	0	29	64		9	290	13	312		71	707	778
5:30 PM - 5:45 PM	7	1	10	18		5	362	18	385		30	1	38	69		16	279	11	306		87	691	778
5:45 PM - 6:00 PM	7	1	10	18		6	285	27	318		7	0	11	18		6	184	3	193		36	511	547
6:00 PM - 6:15 PM	6	0	2	8		8	345	26	379		14	1	21	36		7	208	7	222		44	601	645
6:15 PM - 6:30 PM	4	0	0	4		4	338	12	354		24	0	16	40		23	208	10	241		44	595	639
6:30 PM - 6:45 PM	4	1	5	10		4	318	18	340		27	0	20	47		18	252	9	279		57	619	676
6:45 PM - 7:00 PM	3	0	1	4		1	304	20	325		26	0	16	42		12	273	9	294		46	619	665
Total	62	4	42	108		73	3930	251	4254		306	3	289	598		182	2965	103	3250		706	7504	8210
PM One Hour Volumes																							
4:00 PM - 5:00 PM	15	0	9	24	0.75	31	1267	75	1373	0.98	108	1	105	214	0.86	74	1015	24	1113	0.97	238	2486	2724
4:15 PM - 5:15 PM	22	0	10	32	0.53	32	1303	87	1422	0.92	104	1	115	220	0.81	76	1034	37	1147	0.99	252	2569	2821
4:30 PM - 5:30 PM	22	1	8	31	0.52	26	1359	90	1475	0.93	116	0	113	229	0.84	63	1066	43	1172	0.94	260	2647	2907
4:45 PM - 5:45 PM	**24**	**2**	**16**	**42**	**0.58**	**26**	**1395**	**94**	**1515**	**0.96**	**126**	**1**	**123**	**250**	**0.91**	**60**	**1082**	**51**	**1193**	**0.96**	**292**	**2708**	**3000**
5:00 PM - 6:00 PM	30	3	25	58	0.81	25	1358	100	1483	0.94	107	1	111	219	0.79	48	1009	44	1101	0.88	277	2584	2861
5:15 PM - 6:15 PM	23	3	25	51	0.71	23	1358	96	1477	0.93	86	2	99	187	0.68	38	961	34	1033	0.83	238	2510	2748
5:30 PM - 6:30 PM	24	2	22	48	0.67	23	1330	83	1436	0.93	75	2	86	163	0.59	52	879	31	962	0.79	211	2398	2609
5:45 PM - 6:45 PM	21	2	17	40	0.56	22	1286	83	1391	0.92	72	1	68	141	0.75	54	852	29	935	0.84	181	2326	2507
6:00 PM - 7:00 PM	17	1	8	26	0.65	17	1305	76	1398	0.92	91	1	73	165	0.88	60	941	35	1036	0.88	191	2434	2625

APPENDIX E
EXISTING SYNCHRO WORKSHEETS

HCM Unsignalized Intersection Capacity Analysis
1: Site Entrance & Elden Street

2021 Existing
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	485	2	0	414	3	10
Future Volume (Veh/h)	485	2	0	414	3	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	511	2	0	436	3	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				362		
pX, platoon unblocked					0.92	
vC, conflicting volume			513		730	256
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			513		534	256
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			1049		438	743

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	341	172	218	218	14
Volume Left	0	0	0	0	3
Volume Right	0	2	0	0	11
cSH	1700	1700	1700	1700	646
Volume to Capacity	0.20	0.10	0.13	0.13	0.02
Queue Length 95th (ft)	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	10.7
Lane LOS					B
Approach Delay (s)	0.0		0.0		10.7
Approach LOS					B

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Herndon Pkwy & Elden Street

2021 Existing
AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	35	498	144	349	123	35	78	105	240	265
v/c Ratio	0.13	0.78	0.59	0.40	0.16	0.06	0.05	0.13	0.31	0.15
Control Delay	31.3	62.1	43.5	45.2	6.4	14.8	23.1	3.5	16.2	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.3	62.1	43.5	45.2	6.4	14.8	23.1	3.5	16.2	18.1
Queue Length 50th (ft)	22	230	98	145	0	12	19	0	96	58
Queue Length 95th (ft)	42	265	132	171	25	34	41	28	183	107
Internal Link Dist (ft)		282		746			187			156
Turn Bay Length (ft)	226		443		176	213		250	153	
Base Capacity (vph)	360	928	305	1073	912	694	1631	780	771	1819
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.54	0.47	0.33	0.13	0.05	0.05	0.13	0.31	0.15

Intersection Summary

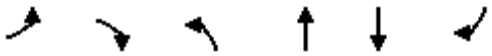
HCM Signalized Intersection Capacity Analysis
2: Herndon Pkwy & Elden Street

2021 Existing
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	438	35	137	332	117	33	74	100	228	202	49
Future Volume (vph)	33	438	35	137	332	117	33	74	100	228	202	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	0.88	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3495		1769	3539	2727	1770	3539	1555	1764	3435	
Flt Permitted	0.54	1.00		0.19	1.00	1.00	0.59	1.00	1.00	0.64	1.00	
Satd. Flow (perm)	1011	3495		358	3539	2727	1096	3539	1555	1194	3435	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	35	461	37	144	349	123	35	78	105	240	213	52
RTOR Reduction (vph)	0	5	0	0	0	93	0	0	58	0	11	0
Lane Group Flow (vph)	35	493	0	144	349	30	35	78	47	240	254	0
Confl. Peds. (#/hr)			6	6					4	4		
Confl. Bikes (#/hr)						1						
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	32.2	26.7		45.8	34.3	34.3	68.2	63.3	63.3	82.2	71.3	
Effective Green, g (s)	32.2	26.7		45.8	34.3	34.3	68.2	63.3	63.3	82.2	71.3	
Actuated g/C Ratio	0.23	0.19		0.33	0.24	0.24	0.49	0.45	0.45	0.59	0.51	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	5.0	5.0	2.5	2.5	
Lane Grp Cap (vph)	262	666		249	867	668	557	1600	703	753	1749	
v/s Ratio Prot	0.01	c0.14		c0.05	0.10		0.00	0.02		c0.03	0.07	
v/s Ratio Perm	0.03			0.13		0.01	0.03		0.03	c0.16		
v/c Ratio	0.13	0.74		0.58	0.40	0.05	0.06	0.05	0.07	0.32	0.15	
Uniform Delay, d1	42.3	53.4		36.1	44.3	40.3	18.8	21.5	21.7	14.0	18.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.96	0.95	0.81	1.00	1.00	
Incremental Delay, d2	0.1	3.9		2.0	0.1	0.0	0.0	0.1	0.2	0.2	0.2	
Delay (s)	42.4	57.3		38.1	44.4	40.4	18.0	20.4	17.7	14.1	18.4	
Level of Service	D	E		D	D	D	B	C	B	B	B	
Approach Delay (s)		56.3			42.1			18.7			16.4	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	36.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	4	0	238	372	2
Future Volume (Veh/h)	0	4	0	238	372	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	4	0	251	392	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				518	267	
pX, platoon unblocked	0.97	0.97	0.97			
vC, conflicting volume	518	197	394			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	446	115	318			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	525	890	1204			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	4	126	126	261	133
Volume Left	0	0	0	0	0
Volume Right	4	0	0	0	2
cSH	890	1700	1700	1700	1700
Volume to Capacity	0.00	0.07	0.07	0.15	0.08
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	9.1	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.1	0.0		0.0	
Approach LOS	A				

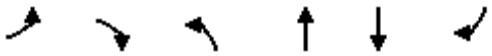
Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	20.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Queues
4: Herndon Pkwy & Grove Street



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	13	65	282	235	353
v/c Ratio	0.09	0.23	0.31	0.07	0.13
Control Delay	56.1	9.6	3.3	2.1	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	56.1	9.6	3.3	2.1	6.6
Queue Length 50th (ft)	12	0	0	0	46
Queue Length 95th (ft)	30	32	111	43	108
Internal Link Dist (ft)	159			237	438
Turn Bay Length (ft)			207		
Base Capacity (vph)	556	493	1022	3239	2643
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.02	0.13	0.28	0.07	0.13

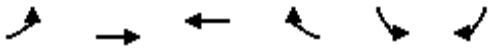
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	62	271	226	267	72
Future Volume (vph)	12	62	271	226	267	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1770	3539	3426	
Flt Permitted	0.95	1.00	0.51	1.00	1.00	
Satd. Flow (perm)	1770	1583	952	3539	3426	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	12	65	282	235	278	75
RTOR Reduction (vph)	0	57	0	0	7	0
Lane Group Flow (vph)	13	8	282	235	346	0
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	4	1	1	6	2	
Permitted Phases		4	6			
Actuated Green, G (s)	7.1	17.9	120.9	120.9	104.1	
Effective Green, g (s)	7.1	17.9	120.9	120.9	104.1	
Actuated g/C Ratio	0.05	0.13	0.86	0.86	0.74	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	89	270	885	3056	2547	
v/s Ratio Prot	c0.01	0.00	c0.02	0.07	0.10	
v/s Ratio Perm		0.00	c0.25			
v/c Ratio	0.15	0.03	0.32	0.08	0.14	
Uniform Delay, d1	63.6	53.5	1.7	1.4	5.1	
Progression Factor	1.00	1.00	1.00	1.00	1.05	
Incremental Delay, d2	1.0	0.1	0.3	0.0	0.1	
Delay (s)	64.6	53.5	2.0	1.4	5.5	
Level of Service	E	D	A	A	A	
Approach Delay (s)	55.4			1.8	5.5	
Approach LOS	E			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	53.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	74	342	1	0	5
Future Volume (Veh/h)	0	74	342	1	0	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	77	356	1	0	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			239			
pX, platoon unblocked						
vC, conflicting volume	357				395	178
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	357				395	178
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1198				582	834

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	38	38	237	120	5
Volume Left	0	0	0	0	0
Volume Right	0	0	0	1	5
cSH	1700	1700	1700	1700	834
Volume to Capacity	0.02	0.02	0.14	0.07	0.01
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	9.3
Lane LOS					A
Approach Delay (s)	0.0		0.0		9.3
Approach LOS					A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	19.5%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
1: Site Entrance & Elden Street

2021 Existing
PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	723	6	0	722	2	9
Future Volume (Veh/h)	723	6	0	722	2	9
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	745	6	0	744	2	9
Pedestrians					7	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				362		
pX, platoon unblocked					0.85	
vC, conflicting volume			758		1127	382
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			758		804	382
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	99
cM capacity (veh/h)			843		271	611

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	497	254	248	496	11
Volume Left	0	0	0	0	2
Volume Right	0	6	0	0	9
cSH	1700	1700	843	1700	498
Volume to Capacity	0.29	0.15	0.00	0.29	0.02
Queue Length 95th (ft)	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	12.4
Lane LOS					B
Approach Delay (s)	0.0		0.0		12.4
Approach LOS					B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Herndon Pkwy & Elden Street

2021 Existing
PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	78	684	125	600	202	71	178	166	182	170
v/c Ratio	0.33	0.82	0.57	0.62	0.23	0.12	0.13	0.23	0.29	0.11
Control Delay	27.3	51.7	35.1	41.4	4.8	21.8	31.2	12.9	17.5	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.3	51.7	35.1	41.4	4.8	21.8	31.2	12.9	17.5	13.9
Queue Length 50th (ft)	39	264	65	220	0	31	51	0	71	23
Queue Length 95th (ft)	65	306	97	259	29	68	88	79	133	53
Internal Link Dist (ft)		282		746			187			156
Turn Bay Length (ft)	226		443		176	213		250	153	
Base Capacity (vph)	259	1084	235	1150	1018	621	1398	716	635	1505
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.63	0.53	0.52	0.20	0.11	0.13	0.23	0.29	0.11

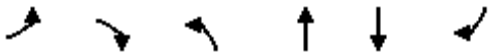
Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: Herndon Pkwy & Elden Street

2021 Existing
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	622	42	121	582	196	69	173	161	177	94	71
Future Volume (vph)	76	622	42	121	582	196	69	173	161	177	94	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	0.88	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1769	3503		1769	3539	2714	1770	3539	1559	1767	3311	
Flt Permitted	0.29	1.00		0.15	1.00	1.00	0.64	1.00	1.00	0.58	1.00	
Satd. Flow (perm)	537	3503		288	3539	2714	1200	3539	1559	1086	3311	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	78	641	43	125	600	202	71	178	166	182	97	73
RTOR Reduction (vph)	0	5	0	0	0	147	0	0	102	0	42	0
Lane Group Flow (vph)	78	679	0	125	600	55	71	178	64	182	128	0
Confl. Peds. (#/hr)	3		3	3		3			3	3		
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	36.1	29.5		42.3	32.6	32.6	52.4	46.3	46.3	61.2	50.7	
Effective Green, g (s)	36.1	29.5		42.3	32.6	32.6	52.4	46.3	46.3	61.2	50.7	
Actuated g/C Ratio	0.30	0.25		0.35	0.27	0.27	0.44	0.39	0.39	0.51	0.42	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	5.0	5.0	2.5	2.5	
Lane Grp Cap (vph)	229	861		221	961	737	552	1365	601	613	1398	
v/s Ratio Prot	0.02	c0.19		c0.05	c0.17		0.01	0.05		c0.03	0.04	
v/s Ratio Perm	0.08			0.15		0.02	0.05		0.04	c0.13		
v/c Ratio	0.34	0.79		0.57	0.62	0.07	0.13	0.13	0.11	0.30	0.09	
Uniform Delay, d1	31.1	42.3		29.0	38.3	32.5	19.8	23.8	23.6	16.2	20.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.32	1.22	2.71	1.00	1.00	
Incremental Delay, d2	0.3	4.5		2.0	0.9	0.0	0.0	0.2	0.4	0.2	0.1	
Delay (s)	31.4	46.8		31.0	39.2	32.5	26.2	29.3	64.2	16.4	20.9	
Level of Service	C	D		C	D	C	C	C	E	B	C	
Approach Delay (s)		45.2			36.7			42.7			18.6	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	6	0	463	265	8
Future Volume (Veh/h)	0	6	0	463	265	8
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	6	0	477	273	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				518	267	
pX, platoon unblocked	0.99					
vC, conflicting volume	516	140	281			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	493	140	281			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	501	882	1278			

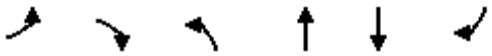
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	238	238	182	99
Volume Left	0	0	0	0	0
Volume Right	6	0	0	0	8
cSH	882	1700	1700	1700	1700
Volume to Capacity	0.01	0.14	0.14	0.11	0.06
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.1	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.1	0.0		0.0	
Approach LOS	A				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	17.6%	ICU Level of Service		A
Analysis Period (min)	15			



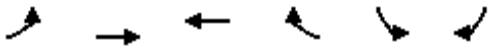
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	95	362	80	449	411
v/c Ratio	0.44	0.62	0.11	0.16	0.18
Control Delay	53.0	15.9	4.5	4.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	53.0	15.9	4.5	4.2	7.6
Queue Length 50th (ft)	71	72	11	35	44
Queue Length 95th (ft)	103	121	34	77	80
Internal Link Dist (ft)	159			237	438
Turn Bay Length (ft)			207		
Base Capacity (vph)	590	716	841	2748	2283
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.51	0.10	0.16	0.18

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	81	308	68	382	322	27
Future Volume (vph)	81	308	68	382	322	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1769	3539	3494	
Flt Permitted	0.95	1.00	0.47	1.00	1.00	
Satd. Flow (perm)	1770	1583	883	3539	3494	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	95	362	80	449	379	32
RTOR Reduction (vph)	0	203	0	0	3	0
Lane Group Flow (vph)	95	159	80	449	408	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	4	1	1	6	2	
Permitted Phases		4	6			
Actuated Green, G (s)	14.8	23.7	93.2	93.2	78.3	
Effective Green, g (s)	14.8	23.7	93.2	93.2	78.3	
Actuated g/C Ratio	0.12	0.20	0.78	0.78	0.65	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	218	391	751	2748	2279	
v/s Ratio Prot	0.05	c0.03	0.01	0.13	c0.12	
v/s Ratio Perm		0.07	0.07			
v/c Ratio	0.44	0.41	0.11	0.16	0.18	
Uniform Delay, d1	48.7	42.0	3.3	3.4	8.2	
Progression Factor	1.00	1.00	1.00	1.00	0.82	
Incremental Delay, d2	1.9	0.9	0.1	0.1	0.2	
Delay (s)	50.6	43.0	3.4	3.6	6.9	
Level of Service	D	D	A	A	A	
Approach Delay (s)	44.6			3.5	6.9	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.26		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	389	88	7	0	7
Future Volume (Veh/h)	0	389	88	7	0	7
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	458	104	8	0	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			239			
pX, platoon unblocked						
vC, conflicting volume	112				337	56
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	112				337	56
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1475				633	999

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	229	229	69	43	8
Volume Left	0	0	0	0	0
Volume Right	0	0	0	8	8
cSH	1700	1700	1700	1700	999
Volume to Capacity	0.13	0.13	0.04	0.03	0.01
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	8.6
Lane LOS					A
Approach Delay (s)	0.0		0.0		8.6
Approach LOS					A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	14.1%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX F
BACKGROUND FUTURE WITHOUT DEVELOPMENT (2026) SYNCHRO WORKSHEETS

HCM Unsignalized Intersection Capacity Analysis
1: Site Entrance & Elden Street

2026 Background
AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	510	12	0	435	0	13
Future Volume (Veh/h)	510	12	0	435	0	13
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	543	13	0	463	0	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				362		
pX, platoon unblocked					0.92	
vC, conflicting volume			556		781	278
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			556		578	278
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			1011		409	719

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	362	194	232	232	14
Volume Left	0	0	0	0	0
Volume Right	0	13	0	0	14
cSH	1700	1700	1700	1700	719
Volume to Capacity	0.21	0.11	0.14	0.14	0.02
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	10.1
Lane LOS					B
Approach Delay (s)	0.0		0.0		10.1
Approach LOS					B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	24.5%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Herndon Pkwy & Elden Street



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	38	530	162	371	131	37	83	112	255	283
v/c Ratio	0.14	0.80	0.64	0.41	0.26	0.07	0.05	0.15	0.34	0.16
Control Delay	30.4	62.4	44.4	43.9	6.9	15.7	24.3	4.3	17.4	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	62.4	44.4	43.9	6.9	15.7	24.3	4.3	17.4	19.4
Queue Length 50th (ft)	24	244	109	152	0	13	21	0	108	65
Queue Length 95th (ft)	43	283	144	180	47	36	43	32	198	116
Internal Link Dist (ft)		282		746			187			156
Turn Bay Length (ft)	275		300			180		225	135	
Base Capacity (vph)	364	928	304	1077	567	667	1569	754	749	1767
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.57	0.53	0.34	0.23	0.06	0.05	0.15	0.34	0.16

Intersection Summary

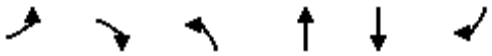
HCM Signalized Intersection Capacity Analysis
2: Herndon Pkwy & Elden Street

2026 Background
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	461	38	152	349	123	35	78	105	240	215	51
Future Volume (vph)	36	461	38	152	349	123	35	78	105	240	215	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3494		1769	3539	1563	1770	3539	1555	1765	3438	
Flt Permitted	0.53	1.00		0.18	1.00	1.00	0.58	1.00	1.00	0.64	1.00	
Satd. Flow (perm)	989	3494		330	3539	1563	1077	3539	1555	1184	3438	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	38	490	40	162	371	131	37	83	112	255	229	54
RTOR Reduction (vph)	0	5	0	0	0	97	0	0	63	0	11	0
Lane Group Flow (vph)	38	525	0	162	371	34	37	83	49	255	272	0
Confl. Peds. (#/hr)			6	6					4	4		
Confl. Bikes (#/hr)						1						
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	33.3	27.7		47.8	36.2	36.2	66.0	60.9	60.9	80.2	69.1	
Effective Green, g (s)	33.3	27.7		47.8	36.2	36.2	66.0	60.9	60.9	80.2	69.1	
Actuated g/C Ratio	0.24	0.20		0.34	0.26	0.26	0.47	0.43	0.43	0.57	0.49	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	5.0	5.0	2.5	2.5	
Lane Grp Cap (vph)	266	691		257	915	404	532	1539	676	733	1696	
v/s Ratio Prot	0.01	c0.15		c0.06	0.10		0.00	0.02		c0.03	0.08	
v/s Ratio Perm	0.03			0.15		0.02	0.03		0.03	c0.17		
v/c Ratio	0.14	0.76		0.63	0.41	0.08	0.07	0.05	0.07	0.35	0.16	
Uniform Delay, d1	41.6	53.0		35.3	43.0	39.3	20.0	22.9	23.1	15.1	19.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.96	0.95	0.82	1.00	1.00	
Incremental Delay, d2	0.1	4.4		3.7	0.1	0.0	0.0	0.1	0.2	0.2	0.2	
Delay (s)	41.6	57.5		39.0	43.1	39.4	19.1	21.8	19.1	15.3	19.7	
Level of Service	D	E		D	D	D	B	C	B	B	B	
Approach Delay (s)		56.4			41.4			20.1			17.6	
Approach LOS		E			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	6	0	250	392	12
Future Volume (Veh/h)	0	6	0	250	392	12
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	6	0	266	417	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				518	267	
pX, platoon unblocked	0.97	0.97	0.97			
vC, conflicting volume	556	215	430			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	472	119	342			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	503	880	1174			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	6	133	133	278	152
Volume Left	0	0	0	0	0
Volume Right	6	0	0	0	13
cSH	880	1700	1700	1700	1700
Volume to Capacity	0.01	0.08	0.08	0.16	0.09
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.1	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.1	0.0		0.0	
Approach LOS	A				

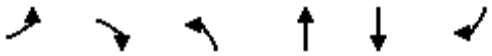
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	21.2%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
4: Herndon Pkwy & Grove Street



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	14	68	302	248	375
v/c Ratio	0.09	0.21	0.34	0.08	0.15
Control Delay	56.2	9.0	3.8	2.4	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	56.2	9.0	3.8	2.4	7.2
Queue Length 50th (ft)	12	0	36	13	59
Queue Length 95th (ft)	31	32	119	45	114
Internal Link Dist (ft)	159			237	438
Turn Bay Length (ft)			207		
Base Capacity (vph)	556	525	989	3137	2556
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.03	0.13	0.31	0.08	0.15

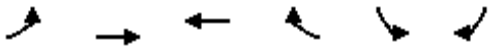
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	13	65	290	238	282	78
Future Volume (vph)	13	65	290	238	282	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1770	3539	3425	
Flt Permitted	0.95	1.00	0.50	1.00	1.00	
Satd. Flow (perm)	1770	1583	931	3539	3425	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	14	68	302	248	294	81
RTOR Reduction (vph)	0	58	0	0	7	0
Lane Group Flow (vph)	14	10	302	248	368	0
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	4	1	1	6	2	
Permitted Phases		4	6			
Actuated Green, G (s)	8.7	20.2	119.3	119.3	101.8	
Effective Green, g (s)	8.7	20.2	119.3	119.3	101.8	
Actuated g/C Ratio	0.06	0.14	0.85	0.85	0.73	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	109	296	862	3015	2490	
v/s Ratio Prot	c0.01	0.00	c0.03	0.07	0.11	
v/s Ratio Perm		0.00	c0.27			
v/c Ratio	0.13	0.03	0.35	0.08	0.15	
Uniform Delay, d1	62.1	51.5	2.0	1.6	5.8	
Progression Factor	1.00	1.00	1.00	1.00	1.01	
Incremental Delay, d2	0.7	0.1	0.3	0.1	0.1	
Delay (s)	62.8	51.6	2.4	1.7	6.0	
Level of Service	E	D	A	A	A	
Approach Delay (s)	53.5			2.1	6.0	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	78	361	6	0	9
Future Volume (Veh/h)	0	78	361	6	0	9
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	81	376	6	0	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			239			
pX, platoon unblocked						
vC, conflicting volume	382				420	191
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	382				420	191
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1173				562	818

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	40	40	251	131	9
Volume Left	0	0	0	0	0
Volume Right	0	0	0	6	9
cSH	1700	1700	1700	1700	818
Volume to Capacity	0.02	0.02	0.15	0.08	0.01
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	9.4
Lane LOS					A
Approach Delay (s)	0.0		0.0		9.4
Approach LOS					A

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
1: Site Entrance & Elden Street

2026 Background
PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	760	9	0	759	0	12
Future Volume (Veh/h)	760	9	0	759	0	12
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	784	9	0	782	0	12
Pedestrians					7	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				362		
pX, platoon unblocked					0.85	
vC, conflicting volume			800		1186	404
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			800		855	404
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			813		250	593

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	523	270	391	391	12
Volume Left	0	0	0	0	0
Volume Right	0	9	0	0	12
cSH	1700	1700	1700	1700	593
Volume to Capacity	0.31	0.16	0.23	0.23	0.02
Queue Length 95th (ft)	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	11.2
Lane LOS					B
Approach Delay (s)	0.0		0.0		11.2
Approach LOS					B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	31.3%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Herndon Pkwy & Elden Street

2026 Background
PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	84	721	134	631	212	75	188	174	192	180
v/c Ratio	0.35	0.84	0.62	0.63	0.36	0.13	0.14	0.25	0.32	0.12
Control Delay	27.3	52.1	36.7	41.0	5.9	22.3	31.9	12.9	18.3	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.3	52.1	36.7	41.0	5.9	22.3	31.9	12.9	18.3	14.3
Queue Length 50th (ft)	42	278	68	230	0	34	55	0	78	25
Queue Length 95th (ft)	70	325	103	273	55	72	93	82	139	56
Internal Link Dist (ft)		282		746			187			156
Turn Bay Length (ft)	275		300			180		225	135	
Base Capacity (vph)	256	1083	231	1150	649	602	1356	704	616	1470
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.67	0.58	0.55	0.33	0.12	0.14	0.25	0.31	0.12

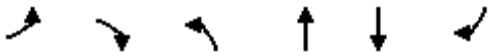
Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: Herndon Pkwy & Elden Street

2026 Background
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	655	45	130	612	206	73	182	169	186	100	75
Future Volume (vph)	81	655	45	130	612	206	73	182	169	186	100	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1769	3502		1769	3539	1559	1770	3539	1559	1767	3312	
Flt Permitted	0.27	1.00		0.14	1.00	1.00	0.64	1.00	1.00	0.58	1.00	
Satd. Flow (perm)	508	3502		263	3539	1559	1189	3539	1559	1071	3312	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	84	675	46	134	631	212	75	188	174	192	103	77
RTOR Reduction (vph)	0	4	0	0	0	152	0	0	109	0	45	0
Lane Group Flow (vph)	84	717	0	134	631	60	75	188	65	192	135	0
Confl. Peds. (#/hr)	3		3	3		3			3	3		
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	37.2	30.5		43.6	33.7	33.7	51.1	44.8	44.8	60.1	49.3	
Effective Green, g (s)	37.2	30.5		43.6	33.7	33.7	51.1	44.8	44.8	60.1	49.3	
Actuated g/C Ratio	0.31	0.25		0.36	0.28	0.28	0.43	0.37	0.37	0.50	0.41	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	5.0	5.0	2.5	2.5	
Lane Grp Cap (vph)	227	890		219	993	437	536	1321	582	599	1360	
v/s Ratio Prot	0.02	c0.20		c0.05	c0.18		0.01	0.05		c0.03	0.04	
v/s Ratio Perm	0.09			0.17		0.04	0.05		0.04	c0.13		
v/c Ratio	0.37	0.81		0.61	0.64	0.14	0.14	0.14	0.11	0.32	0.10	
Uniform Delay, d1	30.5	42.0		28.6	37.8	32.3	20.7	24.9	24.6	16.9	21.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.31	1.21	2.70	1.00	1.00	
Incremental Delay, d2	0.4	5.1		3.5	1.0	0.1	0.0	0.2	0.4	0.2	0.1	
Delay (s)	30.9	47.0		32.1	38.8	32.3	27.1	30.3	66.8	17.1	21.9	
Level of Service	C	D		C	D	C	C	C	E	B	C	
Approach Delay (s)		45.3			36.5			44.3			19.4	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	9	0	487	280	11
Future Volume (Veh/h)	0	9	0	487	280	11
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	9	0	502	289	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				518	267	
pX, platoon unblocked	0.99					
vC, conflicting volume	546	150	300			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	513	150	300			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	100			
cM capacity (veh/h)	484	870	1258			

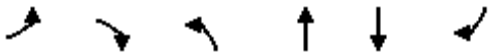
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	9	251	251	193	107
Volume Left	0	0	0	0	0
Volume Right	9	0	0	0	11
cSH	870	1700	1700	1700	1700
Volume to Capacity	0.01	0.15	0.15	0.11	0.06
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.2	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.2	0.0		0.0	
Approach LOS	A				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	18.1%	ICU Level of Service		A
Analysis Period (min)	15			



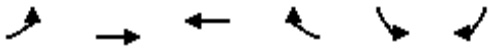
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	92	352	80	436	403
v/c Ratio	0.43	0.60	0.11	0.16	0.18
Control Delay	52.9	14.1	4.5	4.2	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	14.1	4.5	4.2	7.7
Queue Length 50th (ft)	68	58	11	34	42
Queue Length 95th (ft)	106	128	36	80	82
Internal Link Dist (ft)	159			237	438
Turn Bay Length (ft)			207		
Base Capacity (vph)	590	720	845	2753	2288
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.49	0.09	0.16	0.18

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	85	324	74	401	340	30
Future Volume (vph)	85	324	74	401	340	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1769	3539	3492	
Flt Permitted	0.95	1.00	0.48	1.00	1.00	
Satd. Flow (perm)	1770	1583	891	3539	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	352	80	436	370	33
RTOR Reduction (vph)	0	211	0	0	3	0
Lane Group Flow (vph)	92	141	80	436	400	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	4	1	1	6	2	
Permitted Phases		4	6			
Actuated Green, G (s)	14.6	23.4	93.4	93.4	78.6	
Effective Green, g (s)	14.6	23.4	93.4	93.4	78.6	
Actuated g/C Ratio	0.12	0.19	0.78	0.78	0.65	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	215	387	757	2754	2287	
v/s Ratio Prot	0.05	c0.03	0.01	0.12	c0.11	
v/s Ratio Perm		0.06	0.07			
v/c Ratio	0.43	0.36	0.11	0.16	0.18	
Uniform Delay, d1	48.8	41.9	3.3	3.4	8.1	
Progression Factor	1.00	1.00	1.00	1.00	0.83	
Incremental Delay, d2	1.9	0.8	0.1	0.1	0.2	
Delay (s)	50.7	42.7	3.3	3.5	6.8	
Level of Service	D	D	A	A	A	
Approach Delay (s)	44.3			3.5	6.8	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	409	94	10	0	11
Future Volume (Veh/h)	0	409	94	10	0	11
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	445	102	11	0	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			239			
pX, platoon unblocked						
vC, conflicting volume	113				330	56
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	113				330	56
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1474				639	998

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	222	222	68	45	12
Volume Left	0	0	0	0	0
Volume Right	0	0	0	11	12
cSH	1700	1700	1700	1700	998
Volume to Capacity	0.13	0.13	0.04	0.03	0.01
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	8.7
Lane LOS					A
Approach Delay (s)	0.0		0.0		8.7
Approach LOS					A

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX G
TOTAL FUTURE WITH DEVELOPMENT (2026) SYNCHRO WORKSHEETS

HCM Unsignalized Intersection Capacity Analysis
1: Site Entrance & Elden Street

2026 Total Future
AM Peak Hour

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	510	5	0	435	0	28
Future Volume (Veh/h)	510	5	0	435	0	28
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	543	5	0	463	0	30
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				362		
pX, platoon unblocked					0.92	
vC, conflicting volume			548		777	274
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			548		573	274
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	96
cM capacity (veh/h)			1018		412	724

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	362	186	232	232	30
Volume Left	0	0	0	0	0
Volume Right	0	5	0	0	30
cSH	1700	1700	1700	1700	724
Volume to Capacity	0.21	0.11	0.14	0.14	0.04
Queue Length 95th (ft)	0	0	0	0	3
Control Delay (s)	0.0	0.0	0.0	0.0	10.2
Lane LOS					B
Approach Delay (s)	0.0		0.0		10.2
Approach LOS					B

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	24.3%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Herndon Pkwy & Elden Street

2026 Total Future
AM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	41	543	160	371	131	37	83	112	255	282
v/c Ratio	0.15	0.80	0.64	0.40	0.26	0.07	0.05	0.15	0.34	0.16
Control Delay	30.4	62.7	44.4	43.9	6.9	15.7	24.4	4.3	17.5	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	62.7	44.4	43.9	6.9	15.7	24.4	4.3	17.5	19.5
Queue Length 50th (ft)	26	251	107	152	0	13	21	0	109	66
Queue Length 95th (ft)	46	290	143	180	47	36	43	32	198	115
Internal Link Dist (ft)		282		746			187			156
Turn Bay Length (ft)	275		300			180		225	135	
Base Capacity (vph)	367	928	304	1076	566	665	1562	751	747	1761
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.59	0.53	0.34	0.23	0.06	0.05	0.15	0.34	0.16

Intersection Summary

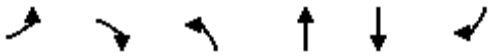
HCM Signalized Intersection Capacity Analysis
2: Herndon Pkwy & Elden Street

2026 Total Future
AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	476	35	150	349	123	35	78	105	240	214	51
Future Volume (vph)	39	476	35	150	349	123	35	78	105	240	214	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3499		1769	3539	1563	1770	3539	1555	1765	3438	
Flt Permitted	0.53	1.00		0.17	1.00	1.00	0.58	1.00	1.00	0.64	1.00	
Satd. Flow (perm)	989	3499		321	3539	1563	1078	3539	1555	1183	3438	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	41	506	37	160	371	131	37	83	112	255	228	54
RTOR Reduction (vph)	0	4	0	0	0	97	0	0	64	0	11	0
Lane Group Flow (vph)	41	539	0	160	371	34	37	83	48	255	271	0
Confl. Peds. (#/hr)			6	6					4	4		
Confl. Bikes (#/hr)						1						
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	34.0	28.2		48.1	36.3	36.3	65.6	60.5	60.5	79.9	68.8	
Effective Green, g (s)	34.0	28.2		48.1	36.3	36.3	65.6	60.5	60.5	79.9	68.8	
Actuated g/C Ratio	0.24	0.20		0.34	0.26	0.26	0.47	0.43	0.43	0.57	0.49	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	5.0	5.0	2.5	2.5	
Lane Grp Cap (vph)	272	704		254	917	405	530	1529	671	730	1689	
v/s Ratio Prot	0.01	c0.15		c0.06	0.10		0.00	0.02		c0.03	0.08	
v/s Ratio Perm	0.03			0.15		0.02	0.03		0.03	c0.17		
v/c Ratio	0.15	0.77		0.63	0.40	0.08	0.07	0.05	0.07	0.35	0.16	
Uniform Delay, d1	41.1	52.8		35.1	42.9	39.3	20.2	23.1	23.3	15.2	19.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.96	0.95	0.82	1.00	1.00	
Incremental Delay, d2	0.1	4.5		3.5	0.1	0.0	0.0	0.1	0.2	0.2	0.2	
Delay (s)	41.2	57.3		38.6	43.0	39.3	19.3	22.0	19.3	15.5	19.9	
Level of Service	D	E		D	D	D	B	C	B	B	B	
Approach Delay (s)		56.1			41.2			20.3			17.8	
Approach LOS		E			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	22	0	250	390	8
Future Volume (Veh/h)	0	22	0	250	390	8
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	23	0	266	415	9
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				518	267	
pX, platoon unblocked	0.97	0.97	0.97			
vC, conflicting volume	552	212	424			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	468	116	335			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	100			
cM capacity (veh/h)	506	884	1180			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	23	133	133	277	147
Volume Left	0	0	0	0	0
Volume Right	23	0	0	0	9
cSH	884	1700	1700	1700	1700
Volume to Capacity	0.03	0.08	0.08	0.16	0.09
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	9.2	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.2	0.0		0.0	
Approach LOS	A				

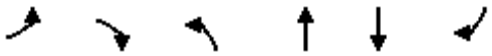
Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	21.0%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
4: Herndon Pkwy & Grove Street



Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	14	68	302	248	389
v/c Ratio	0.09	0.21	0.35	0.08	0.15
Control Delay	56.2	9.0	3.9	2.4	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	56.2	9.0	3.9	2.4	7.3
Queue Length 50th (ft)	12	0	36	13	62
Queue Length 95th (ft)	31	32	119	45	120
Internal Link Dist (ft)	159			237	438
Turn Bay Length (ft)			207		
Base Capacity (vph)	556	525	980	3137	2556
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.03	0.13	0.31	0.08	0.15

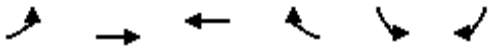
Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	13	65	290	238	295	79
Future Volume (vph)	13	65	290	238	295	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1770	3539	3427	
Flt Permitted	0.95	1.00	0.49	1.00	1.00	
Satd. Flow (perm)	1770	1583	918	3539	3427	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	14	68	302	248	307	82
RTOR Reduction (vph)	0	58	0	0	7	0
Lane Group Flow (vph)	14	10	302	248	382	0
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	4	1	1	6	2	
Permitted Phases		4	6			
Actuated Green, G (s)	8.7	20.2	119.3	119.3	101.8	
Effective Green, g (s)	8.7	20.2	119.3	119.3	101.8	
Actuated g/C Ratio	0.06	0.14	0.85	0.85	0.73	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	109	296	852	3015	2491	
v/s Ratio Prot	c0.01	0.00	c0.03	0.07	0.11	
v/s Ratio Perm		0.00	c0.27			
v/c Ratio	0.13	0.03	0.35	0.08	0.15	
Uniform Delay, d1	62.1	51.5	2.0	1.6	5.9	
Progression Factor	1.00	1.00	1.00	1.00	1.01	
Incremental Delay, d2	0.7	0.1	0.3	0.1	0.1	
Delay (s)	62.8	51.6	2.4	1.7	6.1	
Level of Service	E	D	A	A	A	
Approach Delay (s)	53.5			2.1	6.1	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	78	361	7	0	12
Future Volume (Veh/h)	0	78	361	7	0	12
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	0	81	376	7	0	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			239			
pX, platoon unblocked						
vC, conflicting volume	383				420	192
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	383				420	192
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	98
cM capacity (veh/h)	1172				561	818

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	40	40	251	132	13
Volume Left	0	0	0	0	0
Volume Right	0	0	0	7	13
cSH	1700	1700	1700	1700	818
Volume to Capacity	0.02	0.02	0.15	0.08	0.02
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	9.5
Lane LOS					A
Approach Delay (s)	0.0		0.0		9.5
Approach LOS					A

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
1: Site Entrance & Elden Street

2026 Total Future
PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	760	15	0	759	0	16
Future Volume (Veh/h)	760	15	0	759	0	16
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	784	15	0	782	0	16
Pedestrians					7	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					3.5	
Percent Blockage					1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)				362		
pX, platoon unblocked					0.85	
vC, conflicting volume			806		1190	406
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			806		861	406
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			809		248	590

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	523	276	391	391	16
Volume Left	0	0	0	0	0
Volume Right	0	15	0	0	16
cSH	1700	1700	1700	1700	590
Volume to Capacity	0.31	0.16	0.23	0.23	0.03
Queue Length 95th (ft)	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	11.3
Lane LOS					B
Approach Delay (s)	0.0		0.0		11.3
Approach LOS					B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	31.5%	ICU Level of Service	A
Analysis Period (min)	15		

Queues
2: Herndon Pkwy & Elden Street



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	84	727	147	631	212	75	188	174	192	183
v/c Ratio	0.35	0.84	0.67	0.63	0.36	0.13	0.14	0.25	0.32	0.13
Control Delay	27.0	52.1	39.5	40.6	5.8	22.4	32.0	12.9	18.5	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	52.1	39.5	40.6	5.8	22.4	32.0	12.9	18.5	14.5
Queue Length 50th (ft)	41	281	75	229	0	34	55	0	79	26
Queue Length 95th (ft)	70	329	112	273	55	72	93	82	139	57
Internal Link Dist (ft)		282		746			187			156
Turn Bay Length (ft)	275		300			180		225	135	
Base Capacity (vph)	259	1083	231	1150	649	598	1345	700	612	1462
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.67	0.64	0.55	0.33	0.13	0.14	0.25	0.31	0.13

Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: Herndon Pkwy & Elden Street

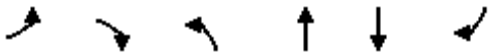
2026 Total Future
PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	663	42	143	612	206	73	182	169	186	103	75
Future Volume (vph)	81	663	42	143	612	206	73	182	169	186	103	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1769	3505		1769	3539	1559	1770	3539	1559	1767	3316	
Flt Permitted	0.28	1.00		0.14	1.00	1.00	0.64	1.00	1.00	0.58	1.00	
Satd. Flow (perm)	517	3505		258	3539	1559	1186	3539	1559	1070	3316	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	84	684	43	147	631	212	75	188	174	192	106	77
RTOR Reduction (vph)	0	4	0	0	0	152	0	0	110	0	46	0
Lane Group Flow (vph)	84	723	0	147	631	60	75	188	64	192	137	0
Confl. Peds. (#/hr)	3		3	3		3			3	3		
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2		2	6		
Actuated Green, G (s)	37.4	30.7		44.2	34.1	34.1	50.7	44.4	44.4	59.7	48.9	
Effective Green, g (s)	37.4	30.7		44.2	34.1	34.1	50.7	44.4	44.4	59.7	48.9	
Actuated g/C Ratio	0.31	0.26		0.37	0.28	0.28	0.42	0.37	0.37	0.50	0.41	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	5.0	5.0	2.5	2.5	
Lane Grp Cap (vph)	231	896		222	1005	443	531	1309	576	595	1351	
v/s Ratio Prot	0.02	c0.21		c0.06	0.18		0.01	0.05		c0.03	0.04	
v/s Ratio Perm	0.09			c0.19		0.04	0.05		0.04	c0.13		
v/c Ratio	0.36	0.81		0.66	0.63	0.14	0.14	0.14	0.11	0.32	0.10	
Uniform Delay, d1	30.3	41.9		28.5	37.4	32.0	20.9	25.2	24.8	17.1	22.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.31	1.21	2.70	1.00	1.00	
Incremental Delay, d2	0.4	5.1		5.6	0.9	0.1	0.0	0.2	0.4	0.2	0.2	
Delay (s)	30.7	47.0		34.2	38.3	32.0	27.4	30.6	67.5	17.3	22.1	
Level of Service	C	D		C	D	C	C	C	E	B	C	
Approach Delay (s)		45.3			36.4			44.7			19.7	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
3: Herndon Pkwy & Site Entrance

2026 Total Future
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	13	0	487	280	24
Future Volume (Veh/h)	0	13	0	487	280	24
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	0	13	0	502	289	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				518	267	
pX, platoon unblocked	0.99					
vC, conflicting volume	552	157	314			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	520	157	314			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	98	100			
cM capacity (veh/h)	479	861	1243			

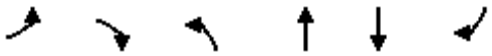
Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	251	251	193	121
Volume Left	0	0	0	0	0
Volume Right	13	0	0	0	25
cSH	861	1700	1700	1700	1700
Volume to Capacity	0.02	0.15	0.15	0.11	0.07
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.2	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	9.2	0.0		0.0	
Approach LOS	A				

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	18.5%	ICU Level of Service		A
Analysis Period (min)	15			



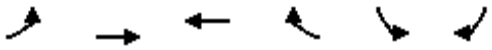
Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	92	352	89	436	407
v/c Ratio	0.43	0.60	0.12	0.16	0.18
Control Delay	52.9	14.2	4.5	4.2	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.9	14.2	4.5	4.2	7.7
Queue Length 50th (ft)	68	59	12	34	43
Queue Length 95th (ft)	106	129	39	80	82
Internal Link Dist (ft)	159			237	438
Turn Bay Length (ft)			207		
Base Capacity (vph)	590	719	844	2753	2283
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.16	0.49	0.11	0.16	0.18

Intersection Summary



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	85	324	82	401	342	32
Future Volume (vph)	85	324	82	401	342	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1769	3539	3489	
Flt Permitted	0.95	1.00	0.48	1.00	1.00	
Satd. Flow (perm)	1770	1583	887	3539	3489	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	352	89	436	372	35
RTOR Reduction (vph)	0	209	0	0	3	0
Lane Group Flow (vph)	92	143	89	436	404	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot	pm+ov	pm+pt	NA	NA	
Protected Phases	4	1	1	6	2	
Permitted Phases		4	6			
Actuated Green, G (s)	14.6	23.5	93.4	93.4	78.5	
Effective Green, g (s)	14.6	23.5	93.4	93.4	78.5	
Actuated g/C Ratio	0.12	0.20	0.78	0.78	0.65	
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	215	389	755	2754	2282	
v/s Ratio Prot	0.05	c0.03	0.01	0.12	c0.12	
v/s Ratio Perm		0.06	0.08			
v/c Ratio	0.43	0.37	0.12	0.16	0.18	
Uniform Delay, d1	48.8	41.8	3.3	3.4	8.1	
Progression Factor	1.00	1.00	1.00	1.00	0.82	
Incremental Delay, d2	1.9	0.8	0.1	0.1	0.2	
Delay (s)	50.7	42.6	3.4	3.5	6.8	
Level of Service	D	D	A	A	A	
Approach Delay (s)	44.3			3.5	6.8	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	409	93	21	0	7
Future Volume (Veh/h)	0	409	93	21	0	7
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	445	101	23	0	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			239			
pX, platoon unblocked						
vC, conflicting volume	124				335	62
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	124				335	62
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	99
cM capacity (veh/h)	1461				635	990

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	222	222	67	57	8
Volume Left	0	0	0	0	0
Volume Right	0	0	0	23	8
cSH	1700	1700	1700	1700	990
Volume to Capacity	0.13	0.13	0.04	0.03	0.01
Queue Length 95th (ft)	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	0.0	8.7
Lane LOS					A
Approach Delay (s)	0.0		0.0		8.7
Approach LOS					A

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		