#### LEXINGTON PLANNING COMMISSION

#### June 22, 2023 - 5:00 P.M Rockbridge County Administrative Offices – First Floor Meeting Room 150 South Main Street, Lexington, VA 24450

#### **AGENDA**

- 1. CALL TO ORDER
- 2. APPROVAL OF THE AGENDA
- 3. APPROVAL OF MINUTES

Minutes from June 8, 2023\*

- 4. CITIZENS' COMMENTS ON MATTERS NOT ON THE AGENDA
- 5. NEW BUSINESS
  - A. Discussion of Conflicts of Interest
    - 1) Memo from City Attorney\*
  - B. EC COA 2023-03: An application by Hugh Latimer for approval of a Certificate of Appropriateness (COA) for construction of the Williams School expansion building at 216
     W. Washington Street (Tax Map #16-1-1), owned by Washington & Lee University.
    - 1) Staff Report\*
    - 2) Applicant Statement
    - 3) Public Comment
    - 4) Commission Discussion & Decision
  - C. <u>SP 2023-03</u>: An application by Hugh Latimer requesting approval of a site plan for the construction of the Williams School expansion building at 216 W. Washington Street (Tax Map #16-1-1), owned by Washington & Lee University.
    - 1) Staff Report\*
    - 2) Applicant Statement
    - 3) Public Comment
    - 4) Commission Discussion & Decision
  - D. ZOA 2023-01: Annual Zoning Ordinance Amendments. Accessory Dwelling Units (A.D.U).
    - 1) Staff Report\* and continued Commission Discussion
    - 2) Public Comment
- 6. OTHER BUSINESS
  - A. Zoning and Planning Report If applicable

- B. Key Annual PC Milestones: Ongoing. Remaining items:
  - 1) Zoning Text Amendments: Ongoing. Remaining items:
    - a. Cottage Housing
    - b. What else, if any?
  - 2) Comp Plan Review: Ongoing
  - 3) Major Project Update

#### 7. CITY COUNCIL REPORT

#### 8. ADJOURN

\*indicates attachment

#### **MINUTES**

# The Lexington Planning Commission Thursday, June 8, 2023 – 5:00 p.m. Rockbridge County Administrative Offices – First Floor Meeting Room 150 South Main Street, Lexington, VA 24450

Planning Commission: City Staff:

Presiding: Blake Shester, Chair Arne Glaeser, Planning Director
Present: Pat Bradley Kate Beard, Administrative Assistant

John Driscoll Gladys Hopkins Shannon Spencer

Leslie Straughan, Council Liaison

Matt Tuchler, Vice-Chair (arrived 5:04 p.m.)

#### **CALL TO ORDER**

Chair Shester called the meeting to order at 5:00 p.m.

#### **AGENDA**

At J. Driscoll's request, Chair Shester suggested amending the agenda to add a discussion of Commissioner Driscoll's proposal for a City Council Work Session on the PD-MU zoning district as the first item of Other Business. The agenda was unanimously approved with that amendment. (P. Bradley / J. Driscoll)

#### **MINUTES**

The minutes from the May 25, 2023 meeting were unanimously approved as presented. (S. Spencer / L. Straughan)

#### CITIZENS' COMMENTS ON MATTERS NOT ON THE AGENDA

None

#### **NEW BUSINESS**

- A. PS 2023-03: An application by Pierson Hotchkiss proposing a Preliminary Subdivision Plat (boundary line adjustment and boundary line vacation) for parcels located at 111 Rebel Ridge Road (Tax Parcels #21-2-20 & #21-6-A) and 597 Ross Road (Tax Parcel #22-1-3).
  - 1) Staff Report The owners of 111 Rebel Ridge Road have listed their property for sale, and in anticipation of a sale, they request to a) vacate a boundary line between two existing parcels (TM#s 21-2-20 & 21-6-A) owned by the applicants, and to b) adjust a boundary line so that all of the driveway that serves their residence is located on the same parcel as the residence. Currently, that portion of the driveway closest to the cul-de-sac at the end of Rebel Ridge Road, as well as a portion of the retaining wall and front yard of 111 Rebel Ridge Road are not located on the same parcel as the residence. The owners of 111 Rebel Ridge Road have entered into an agreement with their neighbor at 597 Ross Road to adjust the boundary line to wholly include all of the improvements that serve the residence at 111

Rebel Ridge Road on one parcel. The applicants are also requesting vacating the boundary line between Tax Parcels #21-2-20 and #21-6-A which are both owned by Christian and Margaret Haskett and associated with 111 Rebel Ridge Road.

Director Glaeser added that the parcel owned by the Hasketts is nonconforming with respect to lot width and the proposed boundary line adjustment would lessen that nonconformity. The reduction of frontage along Rebel Ridge Road for the property at 597 Ross Road was not a concern since that parcel has sufficient lot width, is provided access to Ross Road via a private alley, and retains a driveway access to Rebel Ridge Road. Lastly, Tax Parcel #21-6-A is nonconforming with respect to lot width, lot size and lack of frontage along a public road. The proposed boundary line vacation would resolve these nonconformities. He recommended approval of the preliminary plat as submitted. He stated there had been no inquiries or comments from nearby property owners.

- 2) Applicant Statement None
- 3) Public Comment None
- 4) Commission Discussion & Decision L. Straughan moved to approve Preliminary Subdivision Application PS 2023-03 for a) the adjustment of boundary lines between 111 Rebel Ridge Road (Tax Map #21-1-20) and 597 Ross Road (Tax Map #22-1-3), and b) the vacation of the boundary line between Tax Parcels #21-1-20 and #21-2-A, in accordance with the Boundary Line Adjustment Plat for Christian Haskett & Margaret Shapiro Haskett, completed by Perkins & Orrison, as submitted by the applicant. S. Spencer seconded and the motion passed unanimously. (7-0)

## B. <u>ZOA 2023-01:</u> Annual Zoning Ordinance Amendments. Accessory Dwelling Units (A.D.U.).

1) Staff Report –

A. Glaeser began the discussion by restating the distinction between an illegal accessory apartment in a detached structure (a dwelling in any accessory structure that could not be proven by the owner to have been in existence prior to the adoption of the zoning ordinance) and a legal, nonconforming accessory structure (an accessory structure that was legal when established, but fails to conform to current standards or regulations) He noted he had decoupled the language about illegal detached ADUs from the Nonconformities section and had created a new Legalizing ADUs section. P. Bradley pointed out that the process for legalizing an ADU that is conforming with respect to the use and design standards would be relatively painless and that only nonconforming structures would be problematic.

Summarizing the prior discussion of ADUs in existing, nonconforming structures, A. Glaeser said the Commission had agreed to allow them, provided they complied with the section of the zoning ordinance addressing nonconformities and certain additional conditions which he hoped could be finalized during the current discussion. He reiterated that any new structure being constructed as an ADU would have to meet the use & design standards already developed, and that these conditions would only be applied to existing structures that are nonconforming in some way. He first asked the Commission to consider an existing structure that is considerably larger than the 800 square feet maximum proposed

for new detached ADUs. He asked if there was a desire to cap the amount of space that can be used for an ADU in such a structure. S. Spencer indicated she saw no reason to limit the amount of ADU space in an existing structure, given that it exists and people are used to it, provided it meets all of the setback requirements. There was then discussion about whether a similar allowance should be made for interior ADUs. Noting that the maximum allowable square footage for attached ADUs could prevent owners of very large houses from converting an entire basement or third floor into an ADU, P. Bradley suggested striking the maximum square footage cap for attached ADUs and relying on a percentage of the overall area to limit size. He also remarked that allowing a 1,400 square foot existing structure to be used in its entirety as an ADU would effectively allow an ADU nearly double the size of what is allowable for a new ADU, opening up the question of how many occupants were going to be allowed. He pointed out that Arlington County seemed to place no restrictions on ADUs to be located in existing, detached accessory structures and suggested it might be worthwhile to reach out and ask if they had had any problems stemming from that lack of restrictions. Noting that a number of dwelling units in accessory buildings already exist in Lexington, L. Straughan expressed some hesitancy to create a circumstance whereby those dwellings would have to reduce their living area to become legal. She therefore agreed that the size of the dwelling space within an existing accessory structure should not be limited. There was general agreement to tentatively specify no maximum square footage for an ADU in an existing, detached, accessory structure. Addressing a question from L. Straughan, A. Glaeser indicated he would double check section 16 of the zoning ordinance to confirm that it contains a provision specifying that a legal nonconforming ADU may continue to exist as is.

There was discussion of the use of the phrase "interior alterations" in an earlier paragraph and whether it would allow the addition of external walls, which then led to a discussion of what type of existing structure should qualify as appropriate for conversion into an ADU. Commissioners Spencer and Straughan expressed concern about a structure without any exterior walls, such as a gazebo, being altered to house an ADU. P. Bradley indicated he did not understand the concern given that a property owner with an accessory structure can do what they want to the structure as long as they comply with the building code and zoning regulations. He said the paragraph including the "interior alterations" phrase was simply adding that, in addition to the external things allowed by the building code, the property owner also has the option to make internal changes to create a separate dwelling unit. A. Glaeser added he had not seen any regulations from another jurisdiction specifying which types of existing structures could be converted into a dwelling unit.

S. Spencer again voiced her position that any detached structure should comply with setback requirements if it was to be used as an ADU. She argued the setback requirements were likely to provide neighbors with the greatest protection against the increased impact of the new, residential use. L. Straughan did not disagree, but indicated she believed there should be some flexibility on the setback requirements for existing buildings. After P. Bradley interjected that he believed the discussion had strayed from its earlier focus, Chair Shester suggested the conversation return to the second item in the list of possible conditions for existing nonconforming structures, with a focus on providing firm guidance

to staff. S. Spencer requested the word *interior* in paragraph (a) be highlighted as a reminder that it needed additional consideration.

Moving on to the second item on the list, A. Glaeser offered that there had been concern voiced during a previous discussion that an ADU on an alley not have its main entrance located directly on the alley. S. Spencer said she would prefer entrances on the first floor not be allowed to open directly onto the alley for safety reasons. Commissioners Straughan and Bradley indicated they would be comfortable allowing an entrance onto an alley, provided there was a 5 foot setback from the alley. A. Glaeser requested guidance as to how that setback would be measured, given that most alleys are not paved. Commissioners Spencer and Straughan agreed it should be measured from the property line. Responding to a question from M. Tuchler, A. Glaeser stated that an alley ADU would likely receive an address associated with the public street onto which the primary residence fronts.

Addressing the third item, A. Glaeser read from the Arlington County use and design standards which addressed the requirements for nonconforming structures located on interior lots. Noting that Lexington's existing setback requirements for new accessory structures on an interior lot are 5 feet from the rear property line and 10 feet (in the R-1) or 15 feet (in the R-2) from the side property line, he asked whether an allowance should be made for existing structures that do not conform to those setbacks. L. Straughan pointed out that setback requirements for primary structures are considerably higher and asked that be kept in mind. P. Bradley said he had listened to the audio of the last meeting and found himself disagreeing with the importance given to setbacks during that discussion. He said he thought most of the requests for ADUs would be for existing buildings which, in Lexington, tend to be nonconforming with respect to setbacks. He argued that requiring mandatory setbacks would likely defeat the purpose of allowing ADUs as it would effectively disqualify most of Lexington's existing accessory structures. He suggested considering the distance between the ADU and the neighboring residence, rather than a setback from the property line, as a means of providing an adequate buffer between the properties. He made the observation that many existing homes in Lexington are located in very close proximity to one another and said he did not foresee the impact from a 500 – 600 square foot ADU as likely to create much disturbance to the neighbors. He added that other requirements could include restricting HVAC units or windows from the side of the ADU closest to the neighbor if necessary. B. Shester agreed and pointed out that each application for a nonconforming structure would have a distinct set of circumstances which would be considered on a case by case basis during the conditional use permit public hearing process. L. Straughan expressed concern that if no limits are set, the density of a neighborhood could change dramatically. She agreed there should be flexibility for existing structures but was not comfortable with no setbacks, and she advocated for increasing the setback requirements for new ADUs to more closely conform to the setback requirements for primary residences. J. Driscoll stated he found Commissioner Bradley's argument compelling and added the intent should also be to encourage ADUs in areas with smaller parcels. He asked Director Glaeser if the conditional use permit process for ADUs could be tailored to address the issues and concerns voiced during the discussion. A. Glaeser responded that the use and design standards for ADUs, currently under discussion, would

be the standards considered during the conditional use permit approval process. Due to concerns about how it might adversely affect the rights of a neighboring property owner, Commissioners Tuchler and Spencer objected to the suggestion of a prescribed distance between structures in lieu of setback requirements. However A. Glaeser confirmed that such a condition could be written so as not to constrain the neighbor from building out a residence within the setbacks.

There was general agreement that having visual aids would help the Commission with future discussions, especially with respect to nonconformities. A. Glaeser said staff would provide visual aids and asked the Commissioners to forward examples of existing accessory structures they are aware of for staff to inventory. B. Shester reminded the Commission that there is a limited number of structures that currently exist.

2) Public Comment – Mirabai McLeod, 451 Lime Kiln Road, noted she is the property owner with the proposal to convert her carport into an ADU and expressed her appreciation for the attention the Commission has paid to her concerns, particularly with respect to allowing an ADU on the parcel of a small primary residence to be a livable size. She explained the issue she has now is that her accessory structure is on her property line with not one inch of a setback. She said her building has been there for over 50 years, and for 11 years she has used it for her business. She does not believe an ADU will create a greater impact on the neighbors than her business has. She said there were 26 feet between her carport and the neighboring house, and she added that her neighbor was aware of and supportive of her proposal. Her neighbor also indicated that he did not believe an ADU on her property would have a negative impact on the value of his property. Ms. McLeod invited the Commissioners to visit her property and take a tour.

#### **OTHER BUSINESS**

- A. Proposal for a Dedicated Council Work Session for the PD-MU Zoning District for the VDOT Property
  - J. Driscoll presented a proposal to recommend that City Council have a work session on the application of the PD-MU zoning district. He argued that a better understanding of the intent, purpose and character of development highlighted in the PD-MU zoning text would be helpful to Council as development of the VDOT property is being considered, and he advocated for the work session to be undertaken early in the development process. L. Straughan explained that Council's expectation was for the Planning Commission to do the heavy lifting in determining whether the details of a proposal are acceptable. P. Bradley said that it seemed clear during the work session that Echelon had not taken the PD-MU into consideration when developing their design. He suggested the design process would likely benefit if the PD-MU was brought to everyone's attention and informed the design earlier rather than later. L. Straughan then explained where Council was in the process and that the current deliberations were not on design so much as whether the proposal was the best use of the property and whether they were comfortable with having only one proposal. She emphasized how much Council relies on the Commission's recommendations and said she was uncomfortable with Commission making this recommendation procedurally. M. Tuchler

suggested that rather than making a formal recommendation, the Planning Commission's support of the proposal would be included in the minutes and Council member Straughan could include it in her report to Council. Chair Shester then summarized the discussion by saying the Planning Commission feels passionately about the intent and application of the new PD-MU zoning district and believes it would be beneficial, for all parties to the design and decision making process be as familiar with it as possible, if that is the route to be taken on the VDOT property.

- B. Zoning and Planning Report Director Glaeser reported the following:
  - Earlier in the day he attended the kick-off meeting for the City Hall feasibility study which will include a space needs assessment and an assessment of the building.
  - Public Works tasked one of their on-call consultants to review sewer capacity for the VDOT property. The initial assessment was positive, largely due to the City's recent investment in pipe lining to prevent inflow and infiltration.
  - The City is investigating whether a one or two day "windshield survey" of housing conditions would be a worthwhile expenditure.

#### **CITY COUNCIL REPORT -**

L. Straughan reported that at its meeting on June 1<sup>st</sup>, City Council approved the amendments to the Planning Commission by-laws and interviewed four candidates for the opening on the School Board. Council also held a work session on June 5<sup>th</sup> having for a presentation by Echelon for their proposal for the VDOT property, as discussed earlier.

#### **ADJOURN**

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B. Shester, Chair, Planning Commission

## Memorandum

**To**: Arne Glaeser, Zoning Administrator

From: Jeremy E. Carroll **Date**: June 16, 2023

**Re**: Conflict of Interests Inquiry

The Lexington Planning Commission is considering a site plan from Washington & Lee University pursuant to the City of Lexington Zoning Ordinance. Lexington Code §§ 420-2.4–420-2.7. The site plan relates to the proposed expansion of the Williams School to a parcel located on the south side of Washington Street where Baker and Davis dorms currently are located. The use of this parcel for the Williams School expansion was approved by City Council on June 16, 2022, as part of the Washington & Lee master plan. Ord. No. 2022-07. Facilities, such as the Williams School expansion, that are approved as part of a master plan become uses permitted as a matter of right. Lexington Code § 420-7.6; *see also id.* § 420-7.5 ("For uses, buildings and structures approved as a part of an institutional master plan, the approved conditions shall control all matters covered by the plan, including lot area, lot width, street frontage, setback, height, yards, parking and signs.").

Two members of the City of Lexington Planning Commission are employed by Washington & Lee. Two other members of the Planning Commission are married to Washington & Lee employees. You have asked whether these four Planning Commission members have conflicts of interest under the State and Local Government Conflict of Interests Act ("Act") and City Council's recently amended Code of Ethics and Conduct that require their recusal from the Planning Commission's consideration of Washington & Lee's site plan. For the reasons discussed below, it is my opinion that these four members must disqualify themselves from participating in this transaction under Virginia Code § 2.2-3112. They also must disclose their personal interest as required by Virginia Code § 2.2-3115(F).

The first step in this analysis is to determine if the Planning Commission members are officers or employees with a personal interest in a transaction. *See* Va. Code § 2.2-3112. In my opinion, each of these four Planning Commission members is an officer with a personal interest in this transaction.

First, an appointed member of the Planning Commission is an "officer" under the Act. *Id.* § 2.2-3101. Second, the Planning Commission's consideration of, and vote concerning, the Washington & Lee site plan is a "transaction." *Id.* As to the third issue, a "personal interest" includes certain financial benefits accruing to the officer or a member of his or her "immediate family," including a spouse. *Id.* Financial benefits that give rise to a "personal interest" include \$5,000 in salary or other compensation. *Id.* I presume the Washington & Lee employees relevant to this analysis make more than \$5,000 per year in compensation and benefits from the university. Lastly, a "personal interest in a transaction" exists when an officer "or a member of his immediate family has a personal interest in property or a business . . . and such property [or]

business . . . (i) is the subject of the transaction . . . ." *Id.* Washington & Lee and its property plainly are the subjects of this transaction. For these reasons, I conclude that these individual Planning Commission members have a personal interest in the transaction pending before the Planning Commission concerning the Washington & Lee site plan.

Not all personal interests in a transaction require disqualification, however. Under Virginia Code § 2.2-3112(A):

Each officer and employee of any state or local governmental or advisory agency who has a personal interest in a transaction shall disqualify himself from participating in the transaction if (i) the transaction has application solely to property or a business or governmental agency in which he has a personal interest or a business that has a parent-subsidiary or affiliated business entity relationship with the business in which he has a personal interest or (ii) he is unable to participate pursuant to subdivision B 1, 2, or 3.<sup>1</sup>

Here, since it is clear these members have a personal interest in Washington & Lee, the controlling issue is whether "the transaction has application *solely* to" Washington & Lee and its property.<sup>2</sup> When considering this issue, it is important to note that the Act is to be construed liberally (i.e., to protect against conflicts). *See* Va. Code § 2.2-3100.

It also is important in this analysis to recognize where the site plan approval comes in the overall zoning process. Determinations of permissible *uses* – such as rezonings, conditional use permits, and master plan approvals – require consideration of the impact the proposed uses will have on the character and development of the surrounding community. In my opinion, such *use* determinations rarely relate solely to the applicant or its property. As a result, there typically would not be a mandatory disqualification under Virginia Code § 2.2-3112(A)(i) for such a transaction.<sup>3</sup>

Unlike a use determination, a site plan approval is a primarily ministerial act that confirms whether the proposed plan of development complies with the zoning ordinance. Va. Code § 15.2-2286(A)(8). While the issues relevant to the analysis may impact adjoining property owners, the analysis itself is limited to whether the proposed development – which is permitted as a matter of right – complies with the zoning ordinance. *See* Lexington Code § 420-2.7 (listing criteria). Because the focus is on whether the plan of development for the parcel complies with

<sup>&</sup>lt;sup>1</sup> In my opinion, the members could participate under subdivision B 1, if they were not required to disqualify themselves under subdivision A(i).

<sup>&</sup>lt;sup>2</sup> It is notable that § 2.2-3101 refers to the "subject of the transaction" while § 2.2-3112 requires disqualification where "the transaction has application solely to" the business or property that gives rise to the personal interest. Because the two code sections use different terminology, disqualification under § 2.2-3112 would requires a closer connection than merely having an interest in property or a business that is the subject of the transaction.

<sup>&</sup>lt;sup>3</sup> The officer's participation would still have to pass muster under subdivision B 1, 2, or 2, however.

the zoning ordinance, it is my opinion that a site plan review is a transaction that has application solely to the subject parcel and applicant.

A design review under Lexington Code § 420-2.9 is a closer call; however, I still believe it requires disqualification. Again, the use of the parcel at issue is a use permitted as a matter of right. Thus, neighbor and community impacts already have been taken into consideration. While the design standards do mitigate impacts on neighbors, it remains my opinion that the design review applies solely to the subject property. *See* Lexington Code § 420-6.8.

Conflict questions often are complicated and open to interpretation. If you have questions about this opinion, I am happy to take the issue up with the Commonwealth's Attorney to see if he has a different opinion.

**Project Name** Construction of the Williams School expansion building

**Property Location** 216 W. Washington Street

**Zoning** R-1 Residential, I-1 Institutional Overlay District Zoning Districts

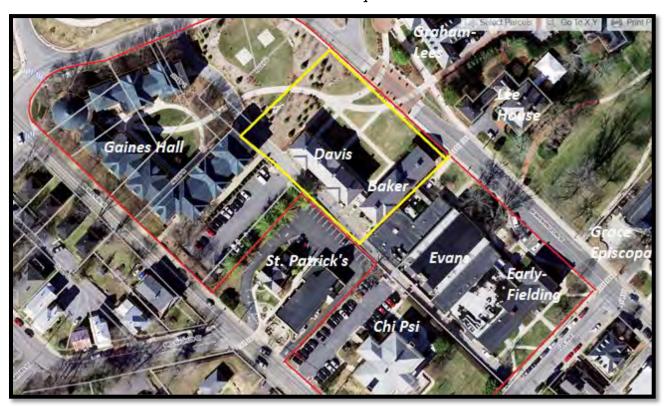
Owner/Applicant Washington & Lee University / Hugh Latimer

#### **OVERVIEW OF REQUEST**

This is a request for a Certificate of Appropriateness for the construction of a new building at 216 W. Washington Street. The parcel is located in the General Residential (R-1) zoning district and in the Institutional Overlay District (I-1).

A Washington and Lee University Campus Master Plan update was approved on June 16, 2022 by the City, and that Plan included a new faculty office and classroom building located on the Baker-Davis site, just west of W. Washington Street. This new building is an expansion for the Williams School of Commerce, Economics and Politics that is currently located in Huntley and Holekamp Halls. While the Campus Master Plan also proposed interior renovation of Huntley Hall, that renovation project is not part of the current request for a new Williams School expansion building to be located just west of W. Washington Street. The Campus Master Plan in 2022 also approved a building height for the proposed Williams School expansion building not to exceed 54 feet in height.

#### Location map



216 W. Washington Street existing conditions



Proposed elevation of new building



#### APPLICABLE ZONING DISTRICT SECTIONS

Article XII, Section 420-7.9 (I-1 Institutional District) requires design review in accordance with the design review standards of the Entrance Corridor Overlay District found in Article VI.

#### APPLICABLE ENTRANCE CORRIDOR REGULATIONS

The purpose of the Entrance Corridor Overlay District is to protect and enhance the City's attractiveness; protect the City's scenic, historic, architectural and cultural resources; support and stimulate development which is appropriate and complimentary to the numerous properties of historic, architectural and cultural significance throughout the City; protect and enhance the architectural and scenic character of significant access routes to the City's historic downtown; promote orderly and attractive development along these significant access routes; and ensure that development within this district is compatible with these resources through architectural control of development.

Article XV, Section 420-6.8 specifically states all applications for entrance corridor certificates of appropriateness must satisfy the following design standards for landscaping, signage, architecture, site planning, and lighting.

#### A. Landscaping.

- 1. Landscaping shall be used to soften the visual impact of development and enhance the appearance of the area.
- 2. Landscaping shall be sufficient to soften the visual effects of parking lots, reduce the effective visual mass of large buildings and provide screening between development, the street and surrounding lots.
- 3. Landscape buffers shall be provided adjacent to public streets of sufficient size to permit street trees and plantings to be installed to reduce the visibility into parking lots.
- 4. Landscaping shall be compatible with landscaping on adjacent properties.

(The application submittal includes a Landscape & Lighting Location Plan on Sheet L3-01.)

#### B. Signage.

- 1. Each parcel shall have an overall sign plan which reflects a consistent style and specifies the size and color scheme for proposed signage.
- 2. Materials used in signs and their support structures should reflect the building served by the sign.
- 3. Sign colors should be harmonious with the building which they serve

(The application submittal includes a Signage & Striping details on C5.2.)

#### C. Architecture.

- 1. Materials, colors and general style of buildings within a development should be coordinated.
- 2. Heating and air-conditioning units, ventilation units, and mechanical equipment shall be screened from view from public streets.

- 3. Loading docks, trash containers and mechanical equipment shall be screened from view from public streets.
- 4. The effective visual mass of large buildings should be reduced by variations in roofline, building angles, dimensional relief, color, architectural detailing and landscaping.
- 5. Architectural styles, building and roofing materials, and colors shall be reflective of the traditional architecture of Lexington. This may be accomplished through building scale, materials and forms, all of which may be embodied in architecture which is contemporary as well as traditional.
- 6. Trademark buildings and related features shall be modified to meet these design standards.

(The application submittal includes a colored elevation of the proposed new building, a description of exterior materials, and a more detailed Overall Building Elevation on Sheet A2.01.)

#### D. Site planning.

- 1. Parking lot layouts shall respond to the topographic characteristics of the site.
- 2. The number of access points to parking lots from a street will be minimized and shall relate to other existing curb cuts whenever possible.
- 3. Parking lots will be interconnected on adjacent parcels whenever possible.
- 4. Small, landscaped and interconnected parking lots, rather than large, central parking lots, shall be encouraged.
- 5. Parking lots shall not dominate the image of a site.
- 6. Pedestrian access from the sidewalk into individual project sites, as well as within sites and between sites, shall be provided.

(The application submittal includes a Site Layout Plan C5.0.)

#### E. Lighting.

- 1. Lighting should be of uniform style for each project site.
- 2. Lighting should be contained within the site and designed to limit spillover and minimize the amount of light that is directed to the sky.
- 3. Light poles shall not exceed 24 feet in height.

(The application submittal includes a Landscape & Lighting Location Plan on Sheet L3-01.)

In making its determination, the Planning Commission may consider any architectural feature which influences appearance, such as, but not limited to, motif and style, color, texture and materials, configuration, orientation, mass, shape, height and location of buildings, location and configuration of parking areas, landscaping and buffering.

#### STAFF RECOMMENDATION

In staff's opinion the proposed Williams School expansion building meets all of the design standards included in the Entrance Corridor Overlay District. The proposed landscaping is consistent with the remainder of the W&L campus. The proposed signage is minimal and primarily intended to provide directions. The architectural details are generally consistent with other buildings on the W&L campus. The proposed building is set back from W. Washington Street and in the same overall location of the existing Baker and Davis Halls that will be demolished. The lighting is also consistent with existing lighting fixtures on the W&L campus and the new fixtures will meet dark sky requirements.

#### **SUGGESTED MOTION**

I move to approve/deny the Entrance Corridor Certificate of Appropriateness application EC 2023-03 for the construction of the new Williams School Expansion Building at 216 West Washington Street as proposed by the applicant.



## Planning & Development Department 300 East Washington Street

Lexington, Virginia 24450

Phone: (540) 462-3704 Fax: (540) 463-5310

## APPLICATION FOR CERTIFICATE OF APPROPRIATENESS -**ENTRANCE CORRIDOR OVERLAY DISTRICT**

Applicant <sup>1</sup>	
Name: Hugh Latimer	_ Phone: _ 540 - 855 - 8959
Company: Washington and Lee Universit	y Fax:
Address: 204 W. Washington St.	Email: hlatimere wlu.edu
11/1/	Date:
Property Owner	
Name: Washington and Lee University	¥Phone: _540 - 855 - 8959
Address: 204 W. Washington St.	_Email: hlatimer cwlu.edu
110 1	Date: <u>6/13/23</u>
Architect/Designer	
Name: Victor Ortale	Phone: 617 262 - 2760
Company: Ctoody Claricy & Associates	_ Fax:
Company: Ctoody Clauscy & Associates 420 Boylston St. Address: Boston, MA 02116	Email: Www. goody clancy.com
Administration	
Application is hereby made to the Lexington Planning Co (COA) to make repairs, alterations, or improvements Chapter 28, Article XV of the Lexington City Code.	mmission for a Certificate of Appropriateness in the Entrance Corridor in accordance with
This document shall constitute a valid COA upon its con Acting Chairperson of the Planning Commission. The re any and all other certificates and permits required by t Office of the Planning and Development Administrator.	ecipient of a COA is responsible for obtaining
1. Prior to submitting an application, the applicant is requi	ed to meet with staff for a pro application



Planning & Development Department 300 East Washington Street Lexington, Virginia 24450 Phone: (540) 462-3704 Fax: (540) 463-5310

Addre	ess (or	Information <sup>2</sup> (attach list of properties if request includes multiple properties) location description): 216 Washington Street
		Deed book and Page #: N/A
Acrea	ge	2 1 acre Zoning (attach any existing conditions or proffers): R-1; I-1 overlap
Prope	rty Do	ing Business As: Washington and Lee University
2.	Any a	pplication deemed incomplete by staff will not be accepted.
Alte	ratio	on Description (complete a City Sign Permit Application for sign alterations)
1.	Please	e check action(s) for which this COA is requested:
		Total restoration of the exterior of a building
		Painting of any building exterior
		Cleaning of wall surfaces or architectural elements
		Repair of all surfaces or architectural elements
		Any removal, alternation, repair, or construction of amenities such as fences or walls
		Demolition of part or all of an existing building
		Moving a building (complete Part III)
		Construction of a new building (complete Part III)
		Construction of any addition to an existing building (complete Part III)
11.	For AL	L projects, please attach the following:
		Photographs or drawings from the site showing adjoining structures, streets, and sidewalks
		Scale drawings of the improvements
		Detailed drawings of significant decorative or architectural elements
		Indication of exterior lighting adequate to determine its character and impact on the public
		and adjoining properties
		Samples of exterior materials and paint colors to be used
		Any other documentation or visual aid necessary to determine compliance with 5 420 444
		and bearington city code
ш.	For NE	W CONSTRUCTION, please provide the above attachments in addition to the following:
		Difficultions, orientation, and acreage of each lot or plot to be built upon
		Layout of the project and its relation to surrounding structures
		pattern and parking facilities
		The size, shape, and location of existing and proposed construction on the parcel
		Location of walls, fences, and railings, and the indication of their height and the materials of their construction



Planning & Development Department 300 East Washington Street Lexington, Virginia 24450 Phone: (540) 462-3704 Fax: (540) 463-5310

THIS SECTION TO BE COMPLETED BY STAFF ONLY	
Application Fee: \$120 - Sign Permit Application Fee: \$60 Amou	nt Paid:
Date Received: Received By:	
Staff Review	
<ul> <li>Applicant's project would meet all district requirements.</li> </ul>	
<ul> <li>Applicant fails to meet the district requirements.</li> </ul>	
Comments:	
Action by Planning Commission	Date
Approved Approved	Date
Action by Planning Commission  Denied	Date
Approved	Date

## New Williams School Building 216 Washington Street

### **Description of Exterior Materials**

The New Williams Building will utilize a selection of materials to approximately match the adjacent and surrounding Washington and Lee buildings on Washington Street- Gaines Hall, Graham Lees Hall, Evans Hall, the President's House and the Indoor Athletic Facility. These materials comprising the New Williams Building include:

- Red brick and off-white pointing mortar
- Stone beige wainscot (base stonework)
- Cast stone beige belt courses and window sills and window heads
- Painted white eave, gable and soffit metal extruded profile trim
- Painted white double hung profile clad windows
- Painted white metal spandrel panels between windows spanning floors
- Painted white storefront glazing frames
- Standing seam metal roofing in dark grey finish
- Louver frames in dark grey color, louvers in white color
- Railings and similar metalwork painted black



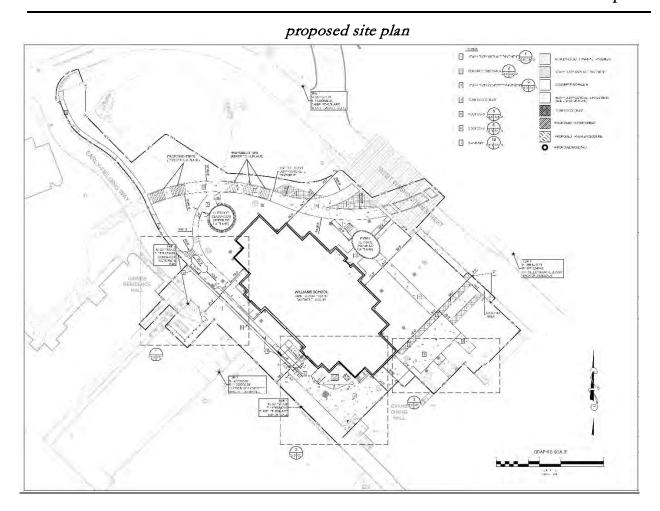
Property Location	216 West Washington Street (TM# 16-1-1)
Zoning	R-1 (General Residential District) with the I-1 (Institutional District) overlay
Owner/Applicant	Washington & Lee University / Hugh Latimer
	PLANNING COMMISSION RECOMMENDATION: Pending STAFF RECOMMENDATION: Approval

#### **Background**

This project proposes the construction of the Williams School expansion building with associated grading, utilities, landscaping, signage, and stormwater management on the site of the existing Baker and Davis Halls. While the Williams School of Commerce, Economics and Politics will continue to be housed in Huntley and Holekamp Halls, the proposed 39,000 square foot  $\pm$  new facility just west of W. Washington Street will provide additional faculty offices and classrooms for the Williams School. An updated traffic study was also submitted with the site plan application as required by the updated Campus Master Plan for W&L.

#### Approximate site location map





#### **Zoning Authority and Requirements**

The Planning Commission has the authority and responsibility to review all site plans required by the zoning ordinance. Site plans are required and shall be submitted for all new structures, all renovated structures and all additions to existing structures per §420-2.4 of the zoning ordinance.

In addition to the site plan requirements listed further below, the Washington & Lee Campus Master Plan was amended on June 16, 2022 and included approval of the Williams School expansion building with a building height not to exceed 54 feet. Approval of the W&L Campus Master Plan also included a number of additional conditions, and of those additional conditions approved with the Campus Master Plan, are the following conditions that will apply specifically to the proposed site plan:

- 1. The uses and layout of the subject properties shall be in substantial compliance with the Campus Master Plan by Sasaki date stamped March 18, 2022, as amended, with revised pages 84 85, and with the Campus Master Plan Proffer Statement submitted on May 4, 2022.
- 2. This Master Plan Amendment does not authorize the exterior alteration of buildings, structures, or properties.

The Campus Plan Proffer Statement submitted on May 4, 2022 includes the following with respect to the subject site plan application:

1. The new Williams School Building is to be located on Washington Street at the site of the existing Davis and Baker Halls. The site's underlying Zoning District is R-1. The building height (front door entry to top of roof) is expected to be about 54 feet, 9 feet higher than the 45-foot height limitation. This 9-foot height approximately equals the height of the sloping roof above the eave line.

The increased height up to <u>54 feet</u> for the new Williams School expansion building was approved with the W&L Campus Master Plan update.

#### 2. Traffic Engineering Study

The University has contracted with Whitney, Bailey, Cox and Magnani (WBCM), a full-service, multidisciplinary engineering and construction firm with offices throughout the Mid-Atlantic with an office in Lexington, to undertake a Traffic Engineering Study for the neighborhood within and extending beyond Washington Street, Lee Avenue, and W. Nelson Street. This engineering study's scope includes vehicular traffic, pedestrian movement, street layouts and crosswalks and safety features. To date existing conditions and data have been surveyed and evaluated. In Phase 2 of the Traffic Study we will revalidate existing data, comprise future traffic projections and future traffic operations for the complete neighborhood described above, specifically including impacts of the four building projects near the edge of the campus. As site plans are prepared for a) the Williams School expansion building, b) the Admission and Financial Center building, c) the Institutional History Museum and parking deck, and d) the Wilson Hall addition capital projects, the traffic study data and corresponding modeling findings will be updated/validated.

#### Yard Setbacks

The proposed building is sited closer to Early Fielding Way than it is to W. Washington Street, similar to the location of the existing Davis Hall and in conformance with the location approved in the 2022 W&L Campus Master Plan.

#### **Parking**

There are no off-street parking spaces provided on the current site of Davis and Baker Halls and the site plan for the Williams School expansion building purposely does not include new off-street parking spaces. Parking is provided for this facility in the nearby parking garage adjacent to the indoor athletic center that is located across W. Washington Street.

#### <u>Landscape Buffering</u>

The Zoning Ordinance requires a prescribed landscape buffer where a commercially zoned development abuts a residential zoning district, or where multi-family residential development abuts any property zoned R-1 or R-2. Neither of those conditions occur with the R-1 zoned St. Patrick's Catholic Church parcel and the subject parcel that is zoned R-1 with an Institutional Overlay.

Landscaping is however proposed (see Sheet L3.01 of the submittal) and the landscape plan meets the site plan requirement found in §420-2.7.B.8 to provide screening between the development and the street and surrounding lots.

#### **Screening**

Screening is required to conceal specific areas from both on-site and off-site views, and screening is expressly required for large waste receptacles (dumpsters), refuse collection points, loading and service areas, outdoor storage areas (including storage tanks), ground-based utility equipment with size in excess of 12 cubic feet, and for ground level and wall-mounted mechanical equipment visible from a public street.

Dumpsters are located to the rear of the proposed building and adjacent to Early Fielding Way. A new generator is also proposed and it will be located in a portion of the parking lot between Gaines Hall and Early Fielding Way. Sheet C5.2 of the submittal shows both of these areas screened by a fence that is a minimum of 6 feet in height and meeting screening requirements.

#### **Exterior Lighting**

New exterior lighting must consist of full cut-off fixtures and be directed downward below the horizontal plane per §420-15.1 of the Zoning Ordinance. The lighting legend on Sheet L3.01 of the submittal contains a note stating "site light fixtures shall be dark sky compliant."

#### **Public Works**

The Public Works department requested several clarifications during the first review of this site plan for the Williams School expansion building and the subsequent site plan submittals adequately addressed the concerns raised by Public Works.

#### **Fire Protection**

Similar to the clarifications needed by the Public Works department, the Fire Marshal requested a number of clarifications during the first review of this site plan and those queries have also been adequately addressed.

#### **Police**

No comments.

#### **Building Official**

No comments.

#### Section 420-2.7.B of the Lexington Zoning Ordinance

Pursuant to Code of Virginia, §15.2-2259, a site plan shall be approved if it is found to be adequate with respect to:

- (1) Locations and design of vehicular entrances and exits in relation to streets giving access to the site and in relation to pedestrian traffic.
- (2) Locations and adequacy of automobile parking areas.
- (3) Adequate provision for traffic circulation and control within the site and provision for access to adjoining property.

- (4) Compliance with the requirements for setback and screening.
- (5) Adequacy of drainage, water supply, fire protection and sanitary sewer facilities.
- (6) Compliance with applicable established design criteria, construction standards and specifications for all improvements.
- (7) Approval by the City Health Officer or his agents if septic tank and other sewage disposal facilities other than sanitary sewers are involved.
- (8) Adequacy of proposed landscaping for softening the harsh visual effects of parking lots and for providing screening between the development and the street and surrounding lots.

#### **Staff Conclusions and Recommendations**

It is staff's opinion that the proposed site plan for the Williams School expansion building complies with all zoning requirements pertaining to site design and use, and is in compliance with other City codes related to drainage, water supply, fire protection, sanitary sewer facilities, and construction standards.

#### Planning Commission Recommendation

Pending

#### **Suggested Motion**

I move to approve/deny Site Plan number SP 2023-03 and find the submitted site plan for the Williams School expansion building at 216 W. Washington Street to be in compliance with applicable City codes.



Planning & Development Department 300 East Washington Street

Lexington, Virginia 24450 Phone: (540) 462-3704 Fax: (540) 463-5310

## SITE PLAN APPLICATION AND CHECKLIST

Applicant <sup>1</sup>				
Name: Hugh Latimer Phone: 540-458-8959				
Company: Washington and Lee University Fax:				
Address: 204 W. Washington St. Email: hlatimere wlu. edu				
Applicant's Signature: Date: Date:				
Site Plan Preparer				
Name: Randolph Rivinus Phone: 804-264-2228				
Company: TRC Companies Fax:				
1030 Wilmer Ave.  Address: Richmond, VA 23227 Email: rrivinus e tracompanies. com				
Property Owner				
Name: Washington and Lee University Phone: 540-458-8959				
Address: 204 W. Washington St. Email: hlatimere wlu.edu				
Owner's Signature:				
Proposal Information <sup>2</sup> (attach list of properties if request includes multiple properties)				
Address (or location description):				
Tax Map: 1611 Deed Book and Page #: N/a				
Acreage:				



#### **Planning & Development Department**

300 East Washington Street Lexington, Virginia 24450

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## **Notice to Adjacent Property Owners**

Per § 420-222-B(1) of the Lexington City Code, the City shall give written notice to those persons who own property any portion of which abuts the subject property and all property which is across the street from any portion of the subject property as determined by the City's real property tax records. This notice shall give the date, time and place of the Planning Commission meeting at which the site plan is being reviewed, identify the property which is the subject of the application and give a brief description of the proposed action. This notice shall be mailed a minimum of 10 days prior to the date of the meeting of the Planning Commission at which the site plan is first considered.

## **Posting of the Property**

Per § 420-222-B(2) of the Lexington City Code, the City will place a sign provided on the subject property which indicates that an action is pending. The sign will be located to be clearly visible from the street.

THIS SECTION TO BE COMPLETED BY STAFF ONLY					
Application Fee: \$350+\$25/acre Amount Paid:  Case Number: SP					
Date Received: Received By:					
Staff F	Review				
Planning:	Public Works:				
Police: Fire/Rescue:					
Appr	ovals				
Planning Commission Administrator					
Adj. Property Notifications:	Action:				
Meeting Date:	Action Date:				
Action:	Signature:				



#### **Planning & Development Department**

300 East Washington Street Lexington, Virginia 24450

Phone: (540) 462-3704 Fax: (540) 463-5310

## **Site Plan Checklist**

#### **Contents**

	site plan prepared and submitted in accordance with Article XXII of the Lexington City Code shall n the following information:
Hla	A boundary survey of the tract.
N/a	A certificate, signed by the surveyor or engineer, setting forth the source of title of the owner of the tract and the place of record of the last instrument in the chain of title.
· C1.0	All existing and proposed streets and easements, their names, numbers and widths, existing and proposed utilities, owners, zoning and present use of adjoining property.
· C5.2	Location, type and size of vehicular entrances to the site.
· L1.01	Locations, types, sizes and heights of fencing, retaining walls and screen planting where required.
· C5.2	All off-street parking, loading spaces and walkways, indicating type of surfacing, size, angle of stalls, width of aisles and a specific schedule showing the number of parking spaces provided and the number required in accordance with Article XX.
. L\$0.00	Number of floors, floor area, height and location of each building and proposed general use for each building. If a multifamily residential building, the number, size and type of dwelling units.
· C6.0	All existing and proposed water and sanitary sewer facilities, indicating all pipe sizes, types and grades and where connection is to be made.
· C4.2	Provisions for the adequate disposition of natural and storm water, indicating locations, sizes, types and grades of ditches, catch basins and pipes and connections to existing drainage system.
· C1.0	Existing topography, with a maximum of two-foot contour intervals. Where existing ground is on a slope of less than 2%, either one-foot contours or spot elevations where necessary, but not more than 50 feet apart in both directions.
· C7.0	Proposed finished grading by contours, supplemented where necessary by spot elevations.
L3.01	A landscape buffering and screening plan, if requested by the City Manager, his authorized agent or the Planning Commission.

#### **Preparation and Submission**

Site plans, or any portion thereof, involving engineering, architecture, landscape architecture or
land surveying shall be prepared and certified respectively by an engineer, architect, landscape
architect or land surveyor duly authorized by the state to practice as such.

 $\hfill \Box$  Site plans shall be prepared on a scale of one inch equals 50 feet or larger.



#### **Planning & Development Department**

300 East Washington Street Lexington, Virginia 24450

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A clear, legible, blue or black line copy of the site plan shall be submitted to the Zoning Administrator. The Zoning Administrator shall be responsible for checking the site plan for general completeness and compliance with such administrative requirements as may be established prior to routing copies thereof for review.

#### **Planning Commission Review**

forth in Article XXII of the Lexington City Code shall be forwarded to the Planning Commission for approval.

All site plans which are appropriately submitted and conform to the standards and requirements set The site plan shall be approved by the Planning Commission if it is found to be adequate with respect to: □ Locations and design of vehicular entrances and exits in relation to streets giving access to the site and in relation to pedestrian traffic. Locations and adequacy of automobile parking areas. □ Adequate provision for traffic circulation and control within the site and provision for access to adjoining property. Compliance with the requirements for setback and screening. ☐ Adequacy of drainage, water supply, fire protection and sanitary sewer facilities. ☐ Compliance with applicable established design criteria, construction standards, and specifications for all improvements. Approval by the City Health Officer or his agents if septic tank and other sewage disposal facilities other than sanitary sewers are involved. ☐ Adequacy of proposed landscaping for softening the harsh visual effects of parking lots and for providing screening between the development and the street and surrounding lots. **Required Improvements** ☐ Screening, fences, walls, curbs and gutters as required. ☐ Easements of rights-of-way for all facilities to be publicly maintained. Such easements shall be clearly defined for the purpose intended. ☐ Curbs and gutters for travel lanes or driveways that provide vehicular travel to and from adjacent parking areas or adjacent property for the purpose of separating such areas or property from parking areas and walkways.

☐ Adequate "no parking" signs along such travel lanes or driveways to prohibit parking on such.

☐ An adequate drainage system for the disposition of storm and natural waters.

☐ Landscaping sufficient to soften the visual effects of parking lots and to provide screening between the development, the street and surrounding lots.

#### APPLICABLE CODES

Building	2018 Virginia Uniform Statewide Building Code (USBC), which is an amended version of the
	2018 International Building Code (IBC)

## **Fire** 2018 Virginia Statewide Fire Prevention Code (SFPC), which is an amended version of the 2018 International Fire Code (IFC)

## **Accessibility** 2018 USBC Chapter 11 and Appendix E

2009 Edition of ICC A117.1, Accessible and Usable Buildings and Facilities

#### Electrical 2014 Edition of NFPA 70, National Electrical Code

Mechanical 2018 Virginia Mechanical Code, which is an amended version of the 2018 International

Mechanical Code (IMC)

**Plumbing** 2018 Virginia Plumbing Code, which is an amended version of the 2018 International Plumbing

Fuel Gas 2018 Virginia Fuel Gas Code, which is an amended version of the 2018 International Fuel Gas

Code (IFGC)

Energy 2018 Virginia Energy Conservation Code, which is an amended version of the 2018

International Energy Conservation Code (IECC)

**Elevator** 2016 ASME A17.1, Safety Code for Elevators and Escalators

Other National Fire Protection Association (NFPA) Standards, as referenced by the above codes,

- including the following:
- 2018 NFPA 10: Standard for Portable Fire Extinguishers
- 2016 NFPA 13: Standard for the Installation of Sprinkler Systems
- 2016 NFPA 14: Standard for the Installation of Standpipe and Hose Systems
- 2016 NFPA 72: National Fire Alarm and Signaling Code

## FIRE PROTECTION/ LIFE SAFETY ANALYSIS

#### USE AND OCCUPANCY CLASSIFICATION

The primary occupancies within the building consist of offices, conference rooms, breakout rooms, and classrooms (**Group A-3 & Group B**). Storage spaces throughout the building are classified as accessory **Group S-2** occupancies since the combined area of the spaces is less than 10% of the floor in which they are located (USBC 508.2.3).

The building is designed as a non-separated, mixed occupancy (USBC 508.3).

## CONSTRUCTION TYPE/ HEIGHT AND AREA

The First Floor of the building is located more than 12 feet above the ground level on the side of the building facing Early-Fielding Way. Therefore, the Ground Floor is classified as a story above grade (USBC 202 Story Above Grade Plane Definition). As a four story building the minimum construction type required is **Type IIA** (1-hour rated, non-combustible). It should be noted that the Attic Level is not classified as a story above grade (USBC 202 – Attic Definition).

The height and area limitations for Type IIA buildings with primary Group A-3, B, and S-2 occupancies are as follows. The area limitations noted below do not include increases for open frontage as this increase is not required to meet the most restrictive area limitations (Group A-3).

Allowable Height and Area		Actual Height and Area		
Maximum Footprint Area:	46,500 ft. <sup>2</sup>	Footprint Area:	11,323 ft. <sup>2</sup>	
Maximum Aggregate Area:	139,500 ft. <sup>2</sup>	Aggregate Area:	39,830 ft. <sup>2</sup>	
Maximum Height:	4 Stories/85 ft.	Height:	4 Stories / < 85 ft.	

## FIRE RESISTANCE RATING OF BUILDING ELEMENTS

The following table indicates the minimum fire-resistance ratings required for the building elements (USBC 602).

Fire-Resistance Ratings		
Building Element	Type IIA	
Primary structural frame	1 Hour <sup>1</sup>	
Exterior bearing walls	1 Hours 1, 2	
Interior bearing walls	1 Hours	
Nonbearing exterior walls	See Exterior Walls Section Below	
Floor construction and secondary members	1 Hours	
Roof construction and secondary members	1 Hour <sup>1</sup>	

- 1. Fire protection of structural members in roof construction are not required, including protection of primary structural frame members, roof framing and decking where every part of the roof construction is 20 ft. or more above any floor immediately below (USBC Table 601 Note b.)
- 2. Not less than the rating required based on the fire separation distance (USBC 602).

All supporting construction for fire-rated assemblies is required to be supported by structure that affords the same required fire resistance rating of the supported horizontal assembly (USBC 711.2.3).

## EXTERIOR WALLS

The opening limitations for nonbearing exterior walls are based on the fire separation distance for each wall, measured from the building face to the closest interior lot line, the centerline of a street, alley, or public way, or to an imaginary lot line between two buildings (USBC 202). The table below indicates the opening limitations required for the exterior walls based on fire separation distance of a fully sprinklered building (USBC 602 & 705.8).

Nonbearing Exterior Wall Fire Rating and Opening Limitations			
Fire Separation Distance (ft)	Fire Resistance Rating <sup>1</sup>	Allowable Area	
$0 \le X \le 3$	1 Hour	Not Permitted	
3 ≤ X < 5	1 Hour	15%	
$5 \le X \le 10$	1 Hour	25%	
$10 \le X \le 15$	1 Hour	45%	
$15 \le X < 20$	1 Hour	75%	
X ≥ 20	0 Hour	Unlimited	
	(7.707.0 (2.00))		

Load bearing walls require a 1-hour rating (USBC 602).

The exterior wall of the building is located 20 feet to Evans Dining Hall. The existing wall on the Evans Dining Hall is a brick with no openings and a combustible cornice at the roofline that projects less than 2 feet. A typical brick has 4.5" of thickness. Per USBC Table 721.1(2) the existing exterior wall is at least 2-hour rated. Due to the combustible cornice, the fire separation distance required for the existing building is 3 feet (USBC 705.2). With 17 feet of fire separation distance, the exterior wall of the new building is required to be 1-hour rated and the openings are limited to 75% per floor in this location (USBC 602 & 705.8). The new exterior wall is also permitted to have a combustible cornice since the fire separation distance is greater than 3 feet.

#### EXIT STAIR EXPOSURE

Where walls and unprotected openings enclose the exterior of exit stairways and the walls are exposed to other parts of the building at an angle of less than 180 degrees, the building exterior walls and openings within 10 feet horizontally of a nonrated wall or unprotected opening are required to have a fire-resistance rating of not less than 1-hour with 45-minute opening protection. The construction is required to extend vertically from the ground to a point 10 feet above the topmost landing of the stairway or the roof line, whichever is lower (USBC 1023.7).

### INTERIOR WALLS

The following table Identifies the requirements for interior walls and partitions throughout the building that are required to be composed of fire/ smoke resistive assemblies.

Fire/ Smoke Resistive Assemblies			
Type of Assembly	Construction	Code Reference	
Corridors	No rating required	USBC 1020.1	
Nonsprinklered Electrical Room	2-hour fire barrier	NFPA 13 8.15.10.3	
Elevator Machine Room/ Controls Room	2-hour fire barrier	USBC 3005.4	
Furnace room where any equipment is > 400,000	Wall capable of resisting the	USBC 509	
BTU per hour input	passage of smoke 1	USDC 309	
Boiler room where the largest piece of equipment	Wall capable of resisting the	LICEC EOO	
is > 15 psi and 10 horsepower	passage of smoke 1	USBC 509	
Shafts Connecting 3 Stories or Less	1-hour fire barrier	USBC 713.4	
Shafts Connecting More than 3 Stories	2-hour fire barrier	USBC 713.4	

1. Wall must extend from the top of the foundation or floor assembly below to the underside of a fire-resistance rated floor/roof assembly or to the underside of the floor or roof sheathing, deck, or slab above.

#### DOORS AND FIRE SHUTTERS

New doors, fire shutters, and their corresponding components are required to have fire-resistance ratings and meet the required testing standards as specified in the table below. All doors and fire shutters required to be fire-resistance-rated must be designed, installed, and labeled in accordance with NFPA 80 (USBC 716.5):

Fire and Smoke Door Rating Summary Table				
Wall Type		Performance Criteria for Doors/Shutters <sup>1</sup>	Code Reference	
Fire barriers	2-hours	1½-hours	NFPA 252 or UL 10C /	USBC Table
	1-hour	1-hour	NFPA 252 or UL 10B	716.1(2)
Wall capable of resisting the passage of smoke	No rating	No rating	No air transfer openings, max 3/4" undercut	USBC 509.4.2

1. All doors are required to be self- or automatic closing and provided with an active latch bolt that will secure the door when it is closed (USBC 716.2.6.1).

## IDENTIFICATION

Where there is an accessible concealed floor, floor-ceiling, or attic space, new fire walls, fire barriers, fire partitions, smoke barriers or any other wall required to have protected openings or penetrations are required to be designated above ceilings and on the inside of all ceiling access doors that provide access to such fire rated assemblies by signage having letters no smaller than one inch in height. Such signage is required to indicate the fire-resistance rating of the assembly and the type of assembly and be provided at horizontal intervals of no more than eight feet (USBC 703.7). An example of suggested formatting for the signage would be "ONE HOUR FIRE BARRIER."

## <u>PENETRATIONS</u>

Penetration of fire-resistance-rated walls and horizontal assemblies that are not protected with dampers or a shaft are required to comply with this section. Ducts and air transfer openings that are protected by dampers are required to comply with the following section of this evaluation.

Through and membrane penetrations of fire-resistance-rated walls and fire-resistance-rated horizontal assemblies are required to be protected by an approved penetration firestop system installed as tested in accordance with ASTM E 814 or UL 1479, with a minimum positive pressure differential of 0.01 inch of water (USBC 714.4 & 714.5). Penetrations of fire-resistance-rated walls must have an F rating of not less than the required fire-resistance rating of the wall penetrated (USNC 714.4.1). Penetrations of fire-resistance rated horizontal assemblies must have an F rating/T rating of not less than 1 hour but not less than the required rating of the floor penetrated (USBC 714.5.1.2).

## DUCTS AND AIR TRANSFER OPENINGS

Fire and smoke dampers are required where ducts and air transfer openings penetrate walls as specified in the USBC. Where dampers are installed, they are required to be listed and bear the label of an approved testing agency (USBC 717.3.1). Fire dampers must be tested in accordance with UL 555 and smoke dampers must be tested in accordance with UL 555S. Combination fire/smoke dampers must comply with both test standards.

Fire dampers are required to be rated for 1.5 hours, unless they are installed in a 3-hour or greater assembly, in which case they are required to be 3-hour rated (USBC 717.3.2.1). For this project, all fire dampers are expected to be 1.5 hour since there are no 3-hour fire resistance rated walls. Smoke damper leakage ratings must be Class I or II. Elevated temperature ratings must not be less than 250°F (USBC 717.3.2.2). Combination fire/smoke dampers must comply with both rating requirements (USBC 717.3.2.3). Refer to the USBC 717.3.3 for required damper actuation methods.

Fire, smoke, and fire/smoke dampers are required to be provided with an approved means of access that permits inspection and maintenance of the damper and its operating parts (USBC 717.4). Access points are required to have permanent labels with letters that are not less than  $\frac{1}{2}$  inch in height that reads "FIRE/SMOKE DAMPER, or FIRE DAMPER".

## VERTICAL OPENINGS

The building is served by two enclosed exit stairways, an elevator and a mechanical shaft connecting the Ground Floor through the Third Floor that are enclosed with two-hour rated construction. Two additional enclosed shafts within the building connect the First through Third Floor enclosed in 1-hour rated construction.

The building includes a vertical opening that connects the First and Second Floor. The vertical opening will be separated from the Ground Floor and Third Floor with minimum 1-hour rated construction that maintains a separation equivalent to the floor rating. The current code approach includes the use of Tyco WS or CWS sprinkler heads that are listed as an alternative to a 2-hour wall at the Third Floor.

### INTERIOR FINISHES

The following table outlines the minimum new construction interior wall and ceiling finish requirements throughout a sprinklered building (USBC Table 803.11).

Interior Wall & Ceiling Finish Requirements			
Occupancy	Exit	Corridors, Exit Access	Rooms and Enclosed
Classification	Enclosures	Stairways/Ramps	Spaces
A-3	Class A or B	Class A or B	Class A, B or C
В	Class A or B	Class A, B or C	Class A, B or C
S-2	Class A, B or C	Class A, B or C	Class A, B or C

1. Interior finishes are grouped in the following classes: Class A – flame spread index 0-25, Class B – flame spread index 26-75, Class C – flame spread index 76-200. All classes must have a smokedeveloped index that does not exceed 450 (USBC 803.1.2).

New floor finishes and coverings of a traditional type, such as wood, vinyl, linoleum or terrazzo, and resilient floor covering materials that are not comprised of fibers are permitted throughout (USBC 804.1 Exception). Newly installed interior floor covering materials are required to comply with the requirements of the DOC FF-1 "pill test" (CPSC 16 CFR Part 1630) (USBC 804.4.1 & 804.4.2 Exception).

#### AUTOMATIC SPRINKLER SYSTEM

The building will be protected with an automatic sprinkler system (USBC 903.2).

#### STANDPIPE SYSTEM

All stairs in buildings where the floor level of the highest story is more than 30 feet above the lowest level of fire department vehicle access are required to be provided with a Class I standpipe system in accordance with NFPA 14 (USBC 905.3.1 Exception 1). The Class I standpipe hose connections are required to be provided in all of the following locations (USBC 905.4):

- In every required stairway, hose connections must be located at the main landings of all floor levels, unless otherwise approved by the fire official.
- In every exit passageway, at the entrance from the exit passageway to other areas of the building, unless the floor areas adjacent to the exit passageway are reachable from an exit stairway hose connection by a 30-foot hose stream and 100 feet of hose.
- Where the roof has a slope less than 33.3%, a hose connection must be located to serve the roof or at the highest landing of a stairway with stair access to the roof.
- Where the most remote portion of a floor is more than 200 feet from a hose connection, the fire code official is authorized to required additional hose connections to be provided.

### FIRE EXTINGUISHERS

Portable fire extinguishers are required in all occupancies within the building and must be selected and installed in accordance with this section and NFPA 10 (USBC 906.1).

## FIRE ALARM AND DETECTION SYSTEMS

The building is required to be provided with a fire alarm system throughout (USBC 907.2).

#### EMERGENCY RESPONDER RADIO COVERAGE

For localities utilizing public safety wireless communications, dedicated infrastructure to accommodate and perpetuate continuous in-building emergency communication equipment to allow emergency public safety personnel to send and receive emergency communications shall be provided in new buildings and structures in accordance with USBC 916.1.

## OCCUPANT LOAD

The number of occupants is computed at the rate of one occupant per unit of area (USBC 1004.1.2). The table below summarizes the potential occupant load applicable to the renovation areas. The occupant load is permitted to be increased from the occupant load established for the given use where all other requirements of USBC are met (USBC 1004.2).

Occupant Load Factors		
Function of Space	Occupant Load Factor	
Assembly, Standing Space	5 net	
Assembly, Unconcentrated (Tables and Chairs)	15 net	
Classroom	20 net	
Office	150 gross	
Storage, Building Service Areas	300 gross	

Refer to Sheets LS0.10-LS0.04 for detailed occupant load calculations.

## EGRESS WIDTH FACTORS

The required egress capacity for any means of egress component is based on the following capacity factors with consideration towards the building's voice evacuation capability (USBC 1005.3):

Egress Width Factors	
Stairways	All Other Components
(inches of width per person)	(inches of width per person)
0.3	0.2

Refer to Sheets LS0.10-LS0.04 for detailed occupant load calculations.

## NUMBER OF EXITS

The number of exits or access to exits required from every story is not permitted to be less than that specified in the table below (USBC 1006.3.2), unless otherwise noted within this report.

Minimum Number of Exits Required	
Occupant Load	Number of Exits Required
1 - 500	2
501 – 1,000	3
> 1 000	1

Two exits or exit access doorways are also required to be provided where the occupant load or common path of travel distances in the following table are exceeded (USBC Table 1006.2.1):

Spaces with One Exit or Exit Access Doorway		
Occupancy	Maximum Occupant Load	Maximum Common Path of Travel Distance
A-3	50	75 feet
В	50	100 feet
S-2	29	100 feet

## WASHINGTON AND LEE UNIVERSITY

# NEW BUILDING ON WASHINTON STREET

204 W. Washington Street Lexington, Virginia 24450

## ARCHITECT

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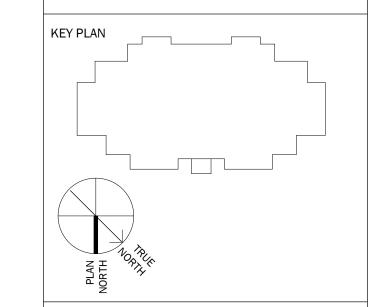
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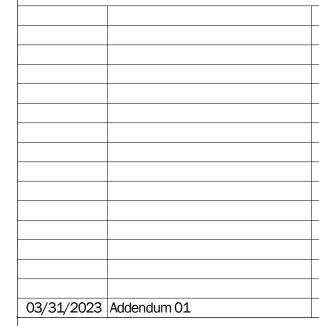


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**CODE SUMMARY** 

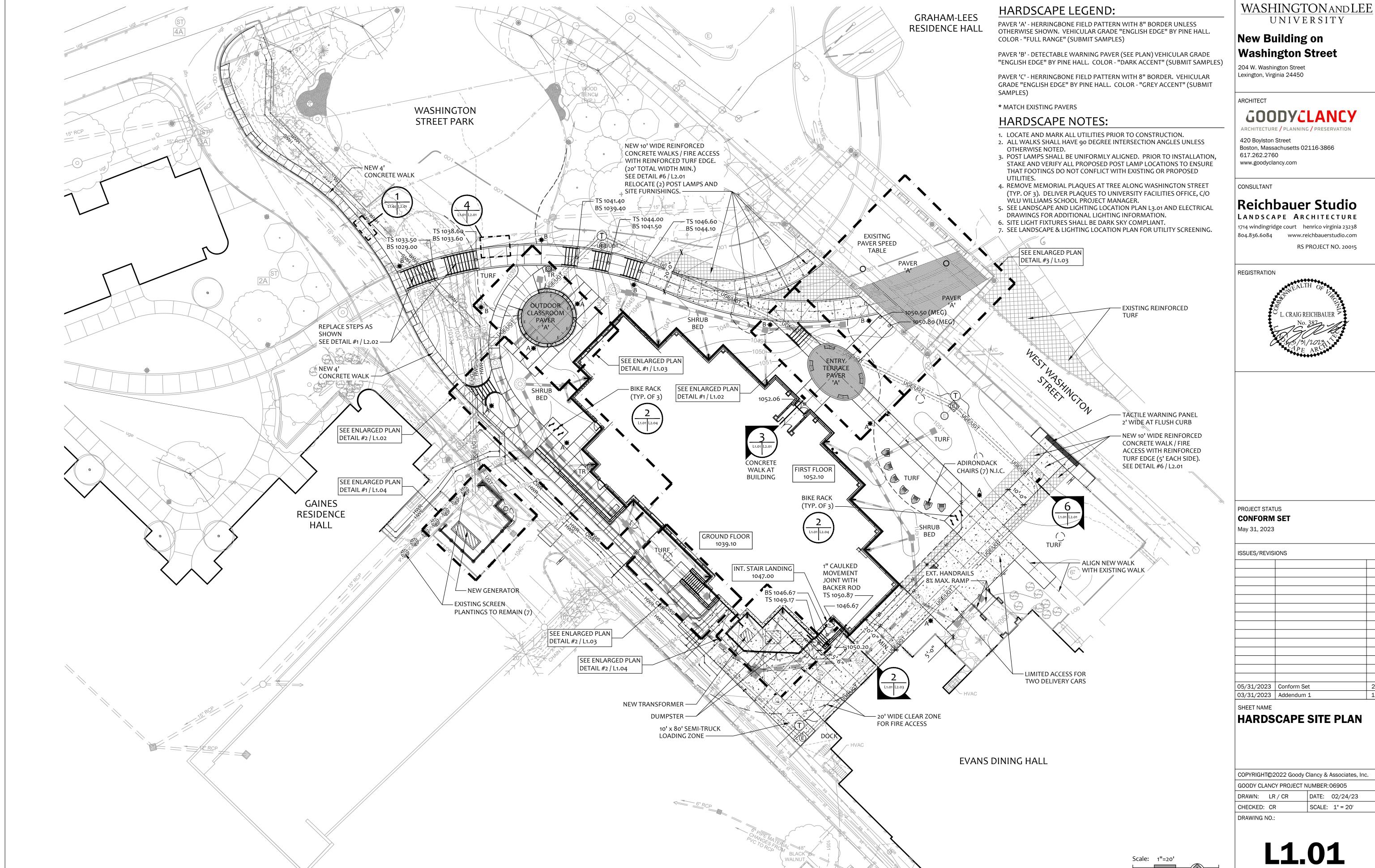
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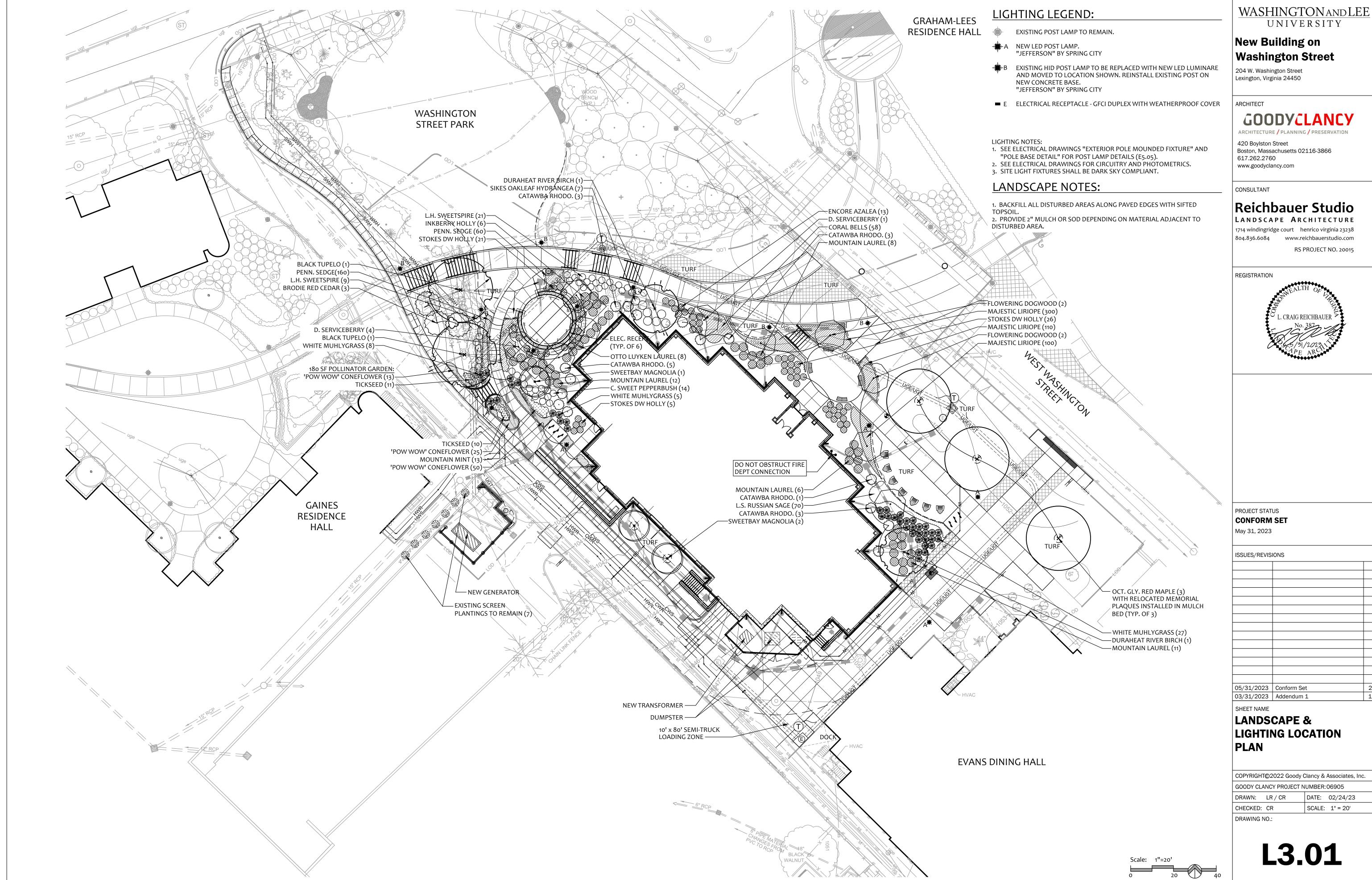
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DRAWING NO.:

LS0.00



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05/31/2023 03/31/2023	Addendum 1	1



204 W. Washington Street

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1030 Wilmer Avenue, Suite 100 Richmond, VA 23227 804-264-2228 **REGISTRATION** 

GREGORY A. SMITH Lic. No. 0402042512 5/31/2023

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ISSUES/REVISIONS

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MAY 31, 2023

SHEET NAME

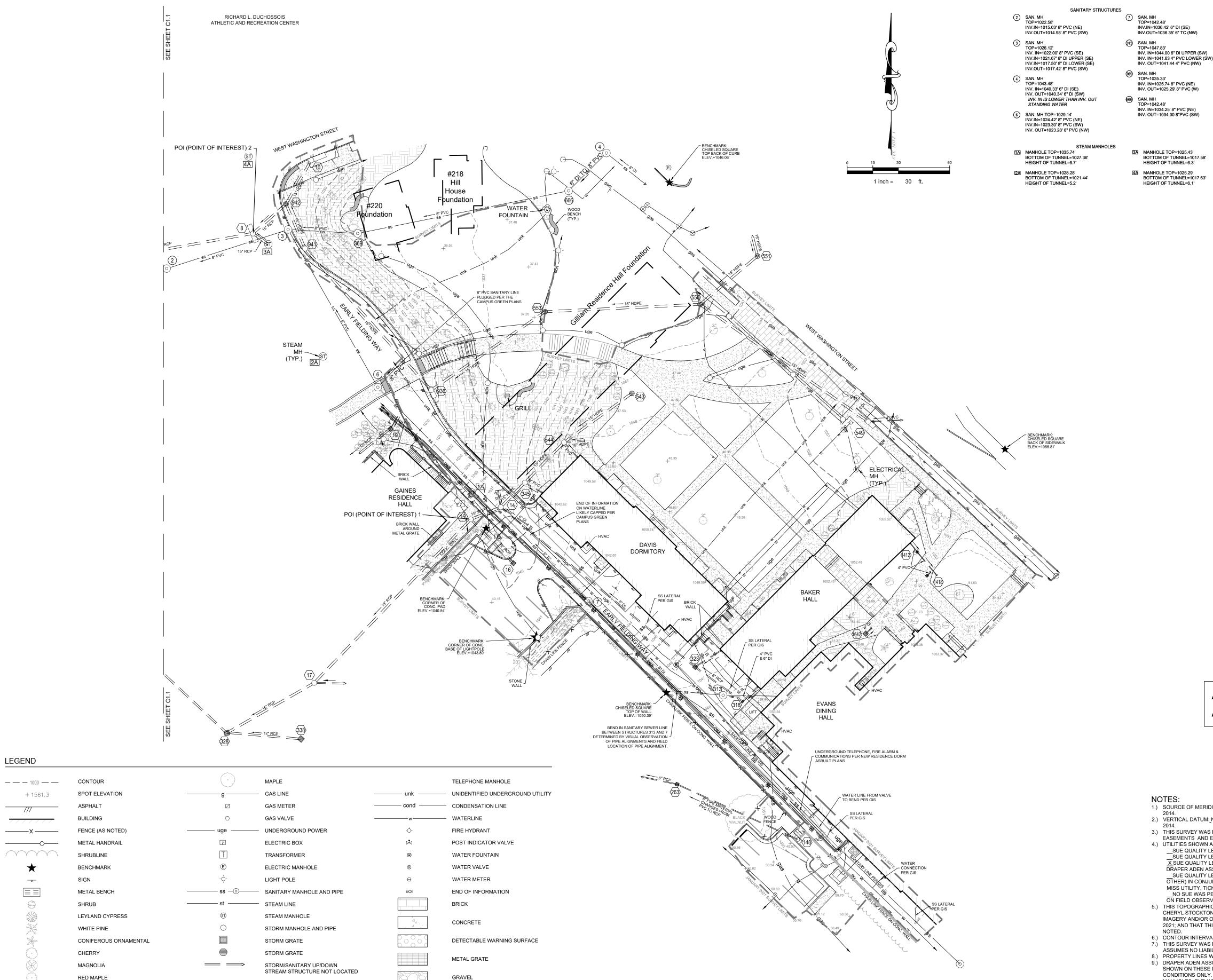
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DRAWING NO.:

CHECKED: KM/GS



1.) SOURCE OF MERIDIAN: NAD 83 BASED UPON GPS OBSERVATION BY DRAPER ADEN ASSOCIATES ON JUNE 27

ALL SOILS ON THIS SITE

ARE 29C PER NRCS

STORM STRUCTURES

TOP=1004.03' INV.IN=999.95' 12" RCP (N)

7 DROP INLET W/GRATE

TOP=1018.57'

TOP=1025.71

6 CURB INLET

8 CURB INLET

(10) CURB INLET

14 STORM MH TOP=1038.31'

(15) STORM MH

TOP=1037.45

(19) GRATE INLET

25 CURB INLET

31 DROP INLET

GRATE INLET TOP=1050.24'

GRATE INLET TOP=996.60'

STORM MANHOLE TOP=998.94'

GRATE INLET TOP=1008.00'

TOP=1037.71

DROP INLET W/GRATE

INV.IN=999.99' 18" RCP (NE)

INV.OUT=1005.57' 15" RCP (SE)

INV.IN=1014.10' 15" RCP (NE) INV.OUT=1013.72' 15" RCP (SW)

INV.IN=1019.11' 15" RCP (NE) INV.IN=1019.04' 15" RCP (SE)

INV.OUT=1018.45' 15" RCP (SW)

INV.OUT=1023.73' 15" HDPE (SW)

INV. IN=1036.36 6" DI (NW) PLUGGED INV. IN=1034.03 15" HDPE

INV.IN=1035.16 6" DI UPPER (SE)

INV OUT=1033.59' 15" RCP (SW)

INV.IN=1033.03' 15" RCP (NE) INV.IN=1033.06' 12" RCP (SE)

INV.OUT=1032.81' 15" RCP (SW)

TOP=1039.83' INV.OUT=1036.34' 12" RCP (NW)

INV.IN=1031.59' 15" RCP (NE)

INV.OUT=1025.75' 12" RCP (SW)

TOP=1005.64' INV.IN=1000.26' 18" RCP (SE)

INV.IN=1000.12' 12" DI (SSE) INV. IN=1000.07' 18" RCP (SW)

INV.OUT=999.71' 24" RCP (NW

INV.IN=1000.67 8" PVC (NE)

INV.IN=999.43' 24" RCP (SE) INV.OUT=999.52' 24" RCP (NW)

INV. IN=1005.21' 15" RCP (NW) INV. IN=1001.8'± 15" RCP (NE) INV. OUT=1001.4'± 15" RCP (SW)

STANDING WATER

\( \begin{align\*}
 & STORM MH & TOP=1050.12' & INV. OUT=1046.33' 6" PVC (NW) \end{align\*}

INV. IN=1047.82' 6" RCP (SE) PIPE MATERIAL CHANGES FROM PVC INV. OUT=1047.94' 6" PVC (NW)

INV. TO TOP OF DEBRIS=995.63'

INV. IN=996.19 4" STEEL (NW)

INV IN=1001.27' 12" RCP (NE)

INV. IN=1004.17' 15" RCP (SW) INV. OUT=1001.08' 18" RCP (NW)

TOP=1048.77' INV. IN=1045.73' SQUARE CHAMBER (NE) PIPE NOT VISIBILE INV. OUT= PIPE NOT VISIBLE (NW)

INV. IN=1003.38' 6" DI (SE)

318 DROP INLET W/ GRATE

(323) DROP INLET W/ GRATE

INV. IN=1044.61' 6" DI (NE) INV. IN=1043.52' 8" RCP (SE

INV. OUT=1043.29' 8" DI (NW

INV. OUT=996.16' 18" HDPE (NE)

PIPE MATERIAL CHANGES TO RCP

6" RCP IN IS LOWER THAN 6" PVC OUT

FILLED WITH DEBRIS. NO PIPE VISIBLE

24" RCP IN IS LOWER THAN 24" RCP OUT

INV.IN=1032.82' 8" DI (E)

TOP=1029.60 INV.IN=1025.79' 4 DI (NE)

DROP INLET W/GRATE

INV. IN=1034.42' 8" DI LOWER (SE)

INV.IN=998.19' 24" RCP (SW) INV.OUT=997.26' 24" RCP (SW) 324 STORM MANHOLE TOP=1008.41' INV. OUT=1004.53' 15" RCP (NE)

INV. IN=1030.65' 15" RCP (E)

INV. IN=1030.85' 12" RCP (SE)

GRATE INLET TOP=1039.88' INV. OUT=1037.02' 12" RCP (NW)

345 STORM MH - NYOPLAST

544 STORM MH - NYOPLAST

TOP=1045.01'

549 STORM MH

TOP=1052.66'

551 DRIP INLET W/ GRATE

936 CURB INLET

941 CURB INLET

942 DROP INLET W/ GRATE

DROP INLET W/ GRATE

1418 DROP INLET W/ GRATE

DROP INLET W/ GRATE TOP=1051.31' INV. OUT=1049.94' 6" DI (NE)

FILLED W/ DEBRIS

DROP INLET W/ GRATE

DROP INLET W/ GRATE

STORM MH

TOP=1002.31'

TOP=996.25' INV. IN=991.51' 12" RCP (NE)

INV. IN=989.89' 24" CMP (SE)

TOP=995.22' INV. IN=990.93' 12" RCP (SE)

INV. IN=990.57' 24" CMP (SE)

INV. OUT=990.53' 24" CMP (NW)

TOP=995.70' INV. OUT=992.81' 12" RCP (NE)

INV. IN=997.40' 24" RCP (NE) INV. OUT=997.38 24" RCP (NW)

STORM MH - NYOPLAST W/ WEIR

STANDING WATER

TOP=975.82' INV. IN=973.14' 24" HDPE (SE)

NV. OUT=973'.14 24" HDPE (NW)

INV. OUT=989.89' 24" CMP (NW)

1798 STORM MH

TOP=1039.66'

INV. OUT=1028.00' 15" RCP (NW)

INV. IN=1035.09 15" HDPE (NE)

DROP INLET W/ GRATE - NYOPLAST

TOP=1047.01' INV. OUT= 1042.63' 15" HDPE (SW)

INV. IN= 1039.91' 15" HDPE (NE)

INV IN=1038 12' 10" HDPF (NF)

INV. IN=1036.12 10 11B1 E (NE) INV. IN=1041.86' 6" PVC (SE) INV. OUT=1036.51' 15" HDPE (SW)

INV. IN=1050.19' 4" PVC (E) INV. OUT=1047.45' 15" HDPE (NW)

DROP INLET W/ GRATE - NYOPLAST

INV. IN=1041.47' 15" HDPE (NE) INV. IN=1041.47 15" HDPE (SE)

INV. OUT=1037.67' 15" HDPE (W)

TOP=1047.23' INV. IN=1043.76' 15" HDPE (NW)

DRIP INLET W/ GRATE - NYOPLAST

TOP=1037.20' INV. IN=1033.14' 15" HDPE (E)

TOP=1029.52' INV. IN=1025.22' 15" HDPE (NE)

TOP=1026.44' INV. IN=1020.61' 15" HDPE (SE)

TOP=1026.85' INV. IN=1021.61' 15" HDPE (NE)

INV. IN=1019.36' 15" HDPE (SE) INV. OUT=1019.20' 15" RCP (SW)

TOP=1050.94' INV. IN=1049.37' 4" PVC (NW) INV. OUT=1049.37' 4" PVC (SE)

TOP=1051.34' INV. OUT=1050.29 4" PVC (NE)

INV. OUT=1020.56' 15" HDPE (NW)

INV. OUT=1024.86' 15" HDPE (NW)

INV. OUT=1042.94' 15" HDPE (SW)

INV. OUT=1033.01' 15" HDPE (SW)

INV. OUT=1035.09' 15" HDPÉ (SW)

INV. IN=1036.54 6" PVC (SE)

GRATE INLET TOP=1036.14'

2.) VERTICAL DATUM: NAVD 88 BASED UPON GPS OBSERVATION BY DRAPER ADEN ASSOCIATES ON JUNE 27,

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HOLLY

DOGWOOD

SPRUCE

HEMLOCK

**DECIDUOUS ORNAMENTAL** 

STORM/SANITARY PIPE UP/DOWN

STREAM STRUCTURE NOT FOUND

STORM/SANITARY UP/DOWN

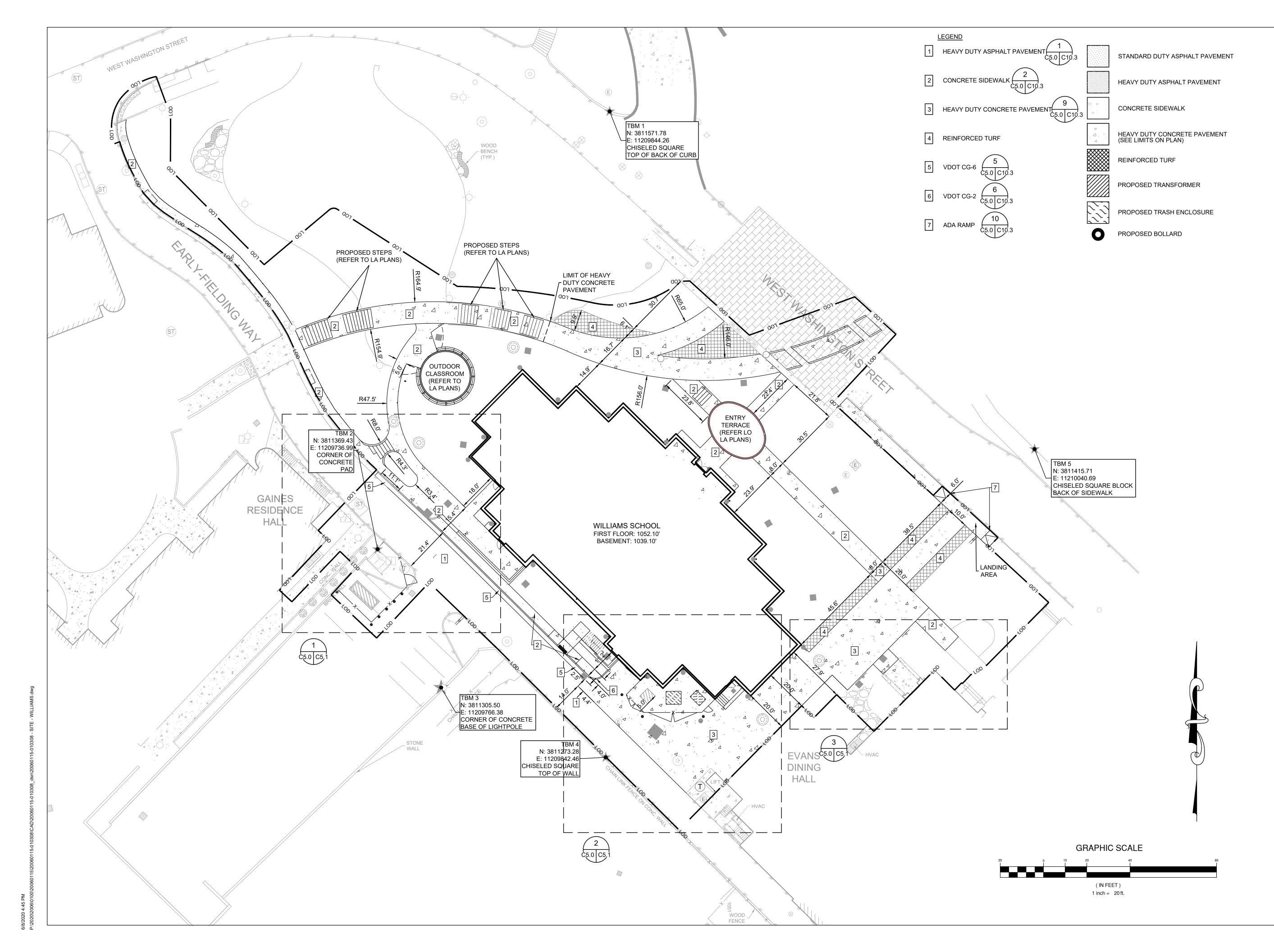
UNDERGROUND TELEPHONE

UNDERGROUND TELEPHONE PER PLANS

ROOF DRAIN

STREAM STRUCTURE PLUGGED

LANDSCAPED AREA



WASHINGTON AND LEE UNIVERSITY

# New Building on Washington Street

204 W. Washington Street Lexington, Virginia 24450

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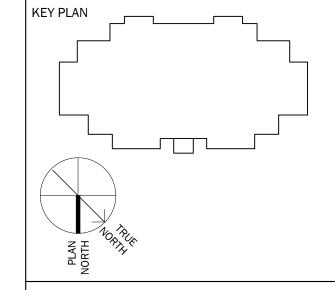
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804-264-2228

TH OF

Shegory a. Smith

Lic. No. 0402042512

5/31/2023



PROJECT STATUS
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MAY 31, 2023

03/31/23 ADDENDUM #1

## SITE LAYOUT PLAN

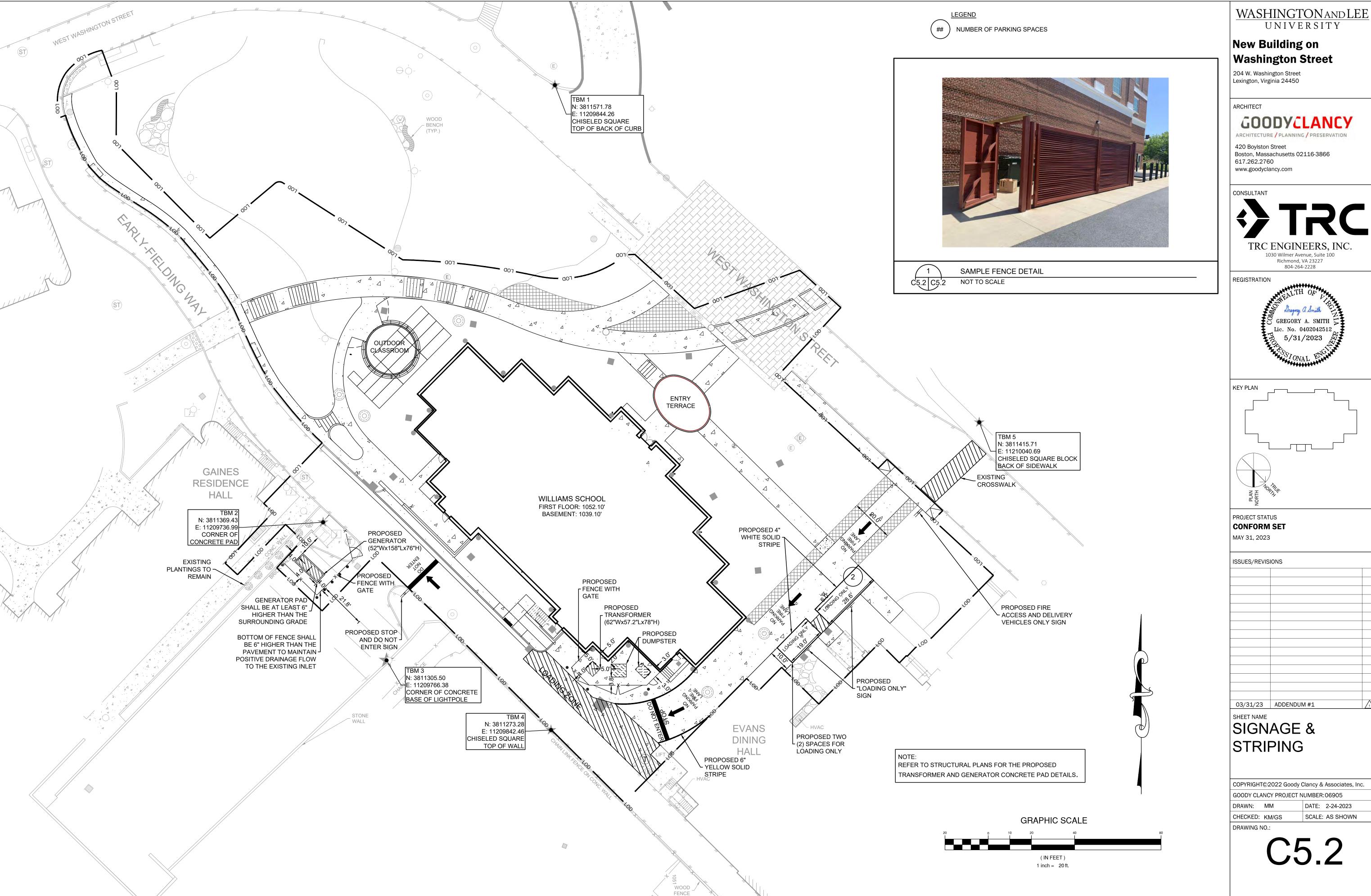
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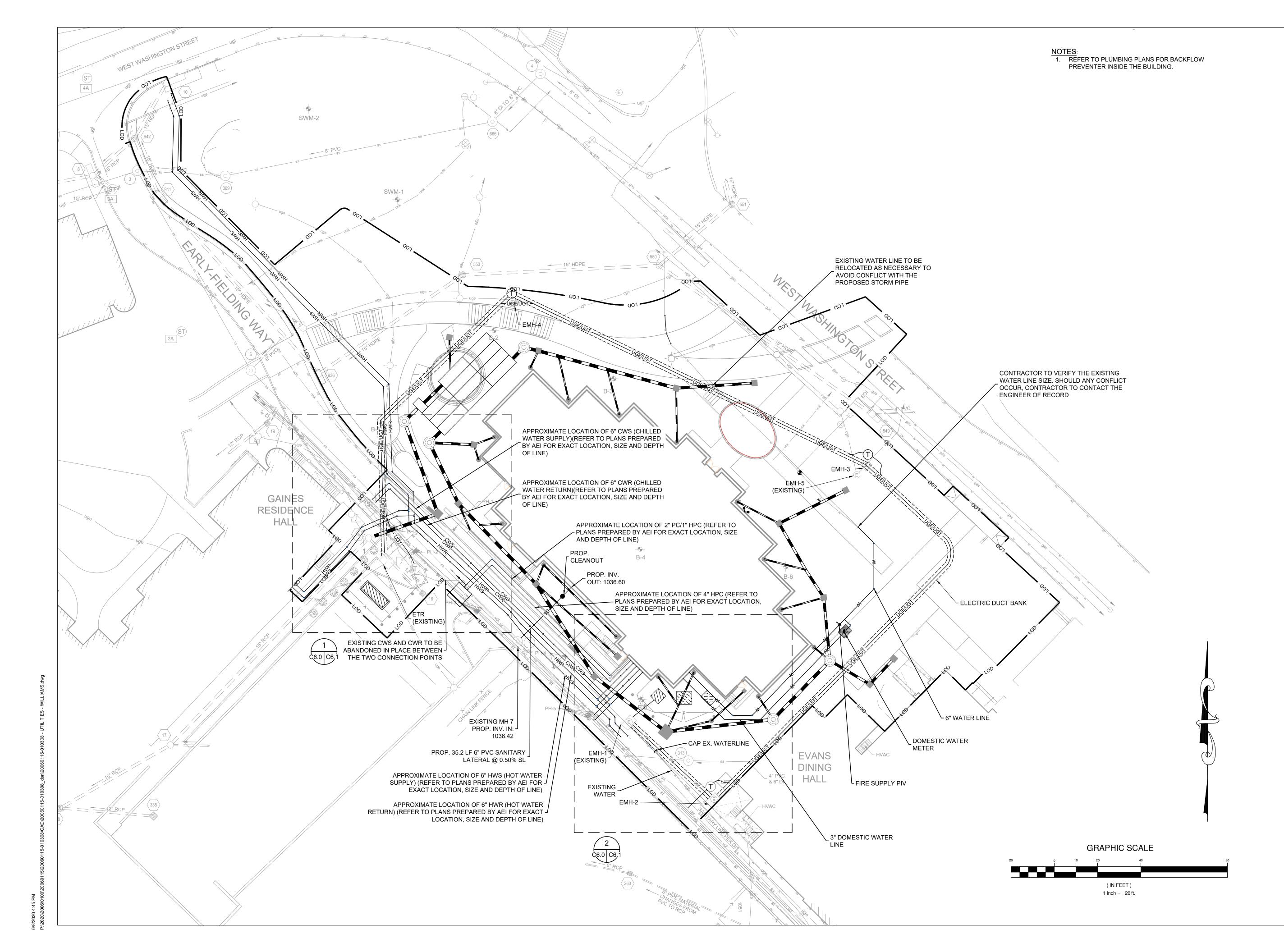
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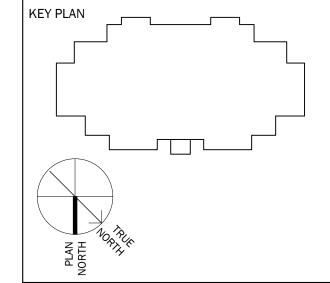


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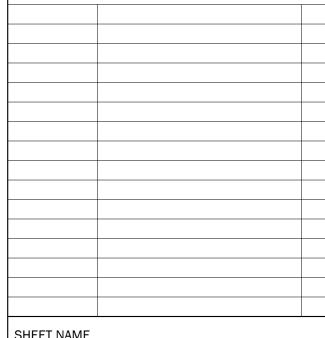
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UTILITY PLAN

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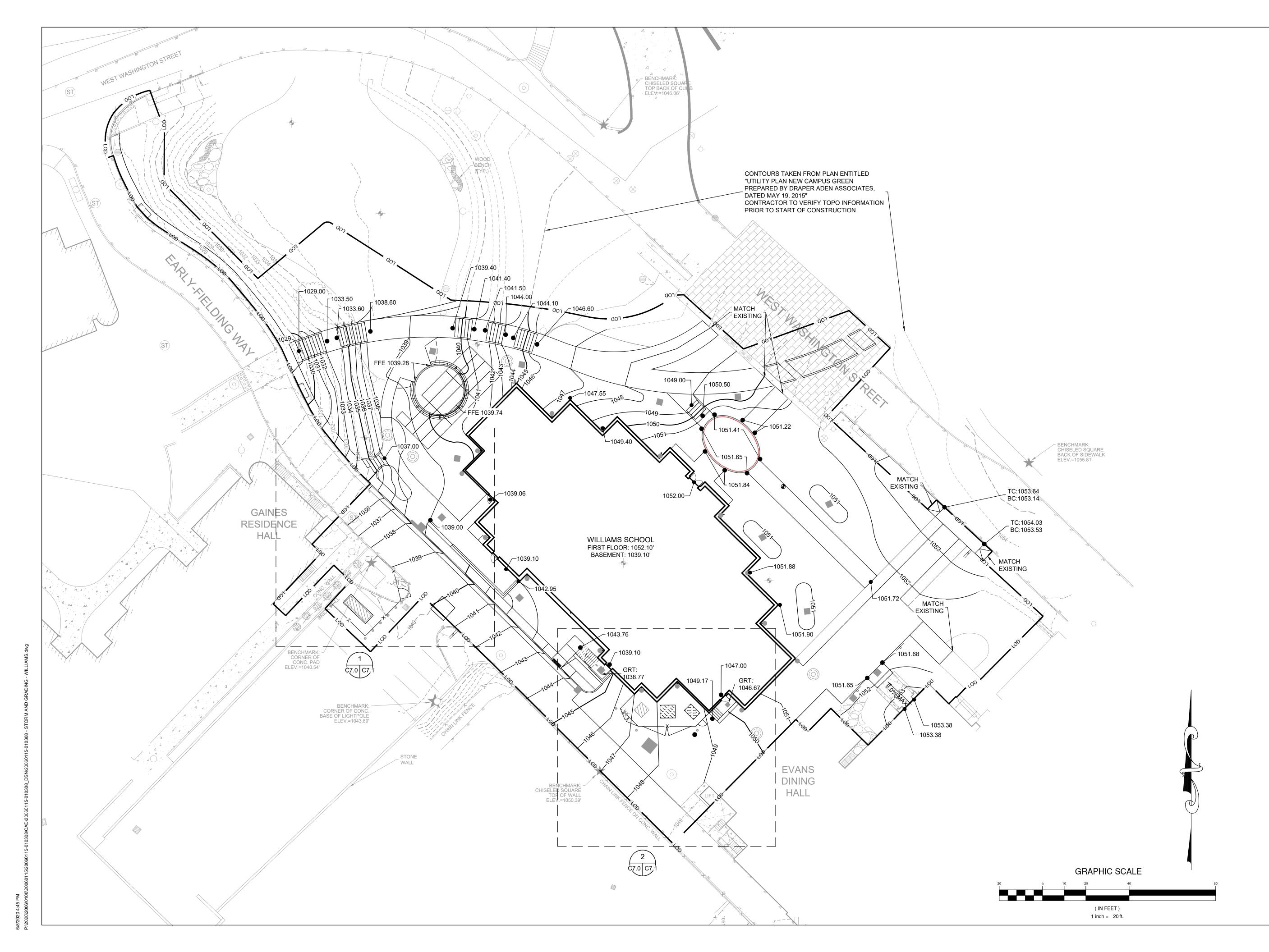
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# New Building on Washington Street

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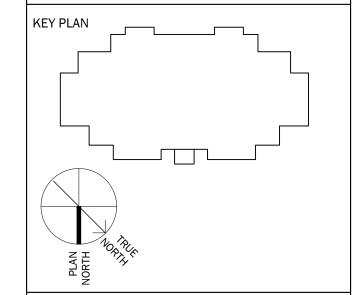
> TRC

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The Op Smith GREGORY A. SMITH Lic. No. 0402042512
5/31/2023



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03/31/23 ADDENDUM #1

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GRADING PLAN

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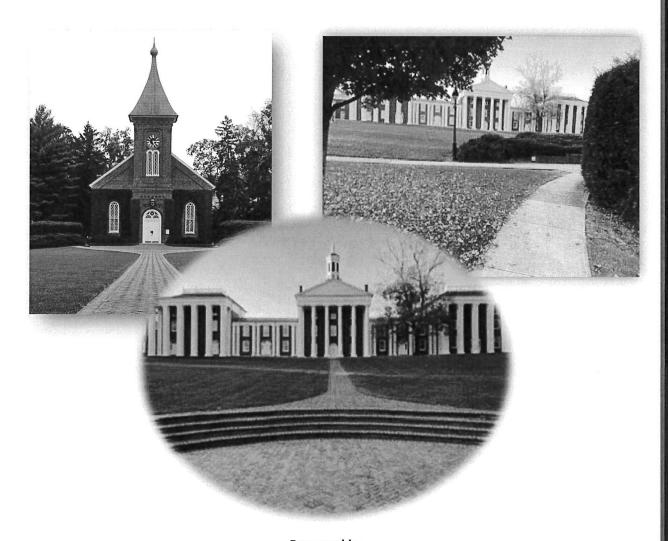
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# Washington & Lee University New Williams Building Traffic Impact Study



Prepared by



Whitney, Bailey, Cox & Magnani, LLC
203 South Main Street
Lexington, Virginia 24450
540-442-3750
March 2023

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#### **Traffic Impact Study**

#### **New Williams Building**

#### March 2023

#### INTRODUCTION

Two of the major elements of campus life that must be addressed by Washington & Lee University are:

- ✓ Providing a safe campus environment for their students
- ✓ Providing state-of-the-art facilities for the students and faculty

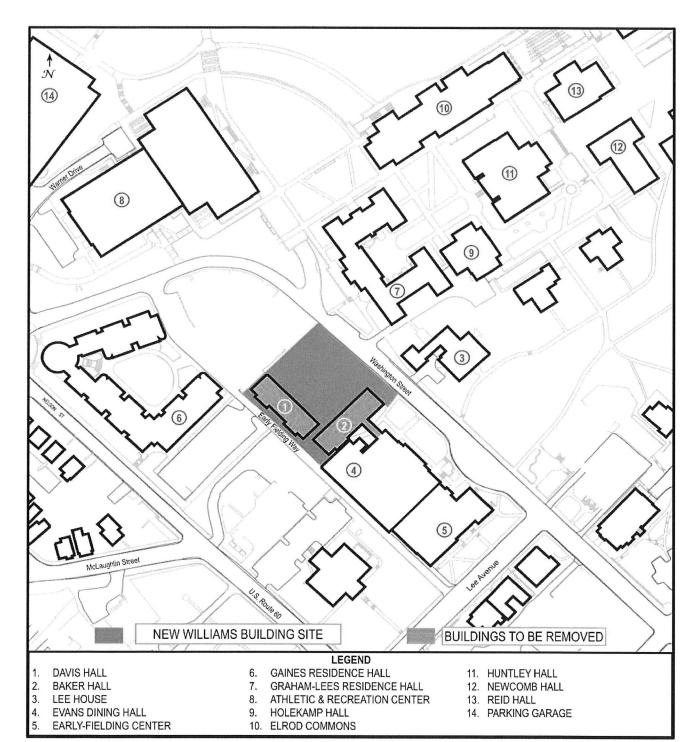
When the University is considering development of a new building to meet the needs of students and faculty, the planning process must include an assessment of traffic safety and operations. The University is in the planning stages for construction of a new classroom and faculty office complex — New Williams Building. In an effort to ensure the transportation safety and operational needs are met, the University has tasked Whitney, Bailey, Cox & Magnani, LLC (WBCM), to conduct a Traffic Impact Study for the New Williams Building.

The study is divided into the following sections:

- <u>Proposed Building Plan:</u> Summarizes the existing buildings to be removed and associated number of students and faculty to be displaced. Also provides a summary of the new facility build-out.
- Existing Travel Patterns: Provides a discussion of the existing faculty and student travel patterns.
- <u>Future Traffic Operations During Construction:</u> Addresses the impacts of construction related traffic and measures to provide for transportation safety and operational efficiency.
- <u>Future Traffic Operations Pedestrian Traffic:</u> Assess the potential pedestrian trip generation crossing West Washington Street associated with the New Williams Building.
- <u>Summary and Conclusions:</u> Review the proposed building plan, construction schedule, effects on traffic safety and operations and proposed upgrades.
- Recommendations: Outlines measure to address safety and operations.

#### PROPOSED BUILDING PLAN

Washington & Lee University has a need for additional classroom and faculty office space to better accommodate the existing demand. In an effort to provide for the existing requirements, the University has proposed construction of a new facility – New Williams Building. The proposed facility will be located where Davis and Baker Halls are currently located along West Washington Street as noted in Figure 1. Both Davis and Baker Halls will be demolished to make way for the New Williams Building. Demolition is expected to begin in the mid to late summer of 2023. The new building should be ready for occupancy in July of 2025.





#### PROJECT AREA MAP

NEW WILLIAMS BUILDING TRAFFIC IMPACT STUDY WASHINGTON & LEE UNIVERSITY

DATE: MARCH 2023 SCALE: NTS FIGURE:

#### New Williams Building Traffic Impact Study

# WASHINGTON AND LEE UNIVERSITY

The proposed New Williams Building will accommodate the following:

Lower Level 100 Students

2<sup>nd</sup> Floor

**16 Faculty Offices** 

151 Students

Main Level

14 Faculty Offices

172 Students

3<sup>rd</sup> Floor

21 Faculty Offices

116 Students

The resultant total potential maximum occupancy of the new building will be 51 faculty and 539 students.

The two existing buildings to be demolished to make way for New Williams Building are Baker and Davis Halls. Baker Hall has recently housed 37 students. Davis Hall houses the student Health Center with a staff of 16 people and the first through third floors has recently included space for the IT staff of 50. The IT Staff has transferred to 115 Nelson Street. A portion of faculty offices and classroom activities housed in Huntley Hall for the Williams School of Commerce, Economics and Politics, will be transferred to the New Williams Building. Existing Huntley Hall will continue to serve the business school and the New Williams Building will serve additional classrooms and offices as demand for business classes continues to grow.

#### **EXISTING TRAVEL PATTERNS**

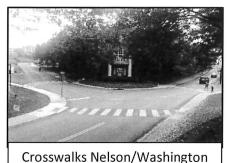
As noted above, the New Williams Building is not being developed to accommodate any new demand associated with an increase in the number of students. The enrolment of Washington & Lee University has remained relatively consistent over the last six years ranging from 2,160 to 2,235 students. The facility

is being planned to accommodate growing demand for business school classes versus classes in the college (Liberal Arts).

Pedestrian Accommodations: A major pedestrian crossing is located along West Washington Street in the vicinity of existing Baker and Davis Halls. A road "Crossing Table" has been constructed along West Washington Street to act as a traffic calming measure for improved safety and conspicuity of pedestrians crossing West Washington Street. In addition to the Crossing Table, several other crosswalks are present along West Washington Street as noted in Figure 2.



Crossing Table at Davis/Baker/Graham-Lees Halls

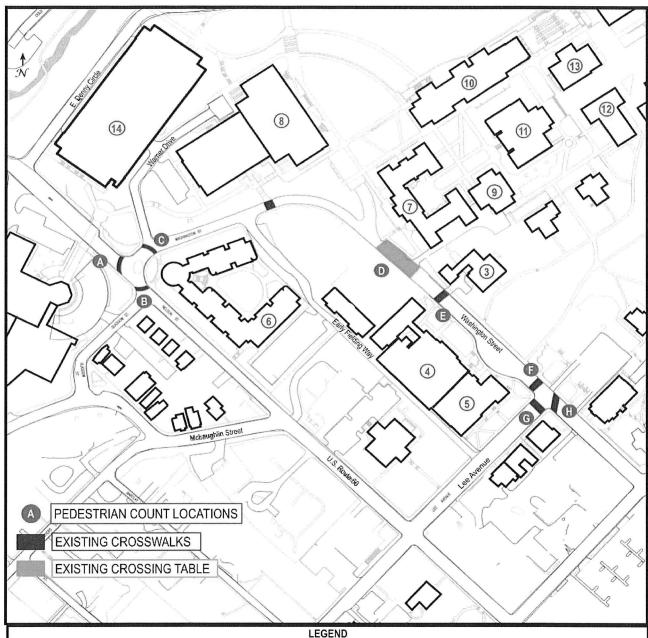




Crosswalk at Gymnasium



Crosswalk at Lee House/Evans



- DAVIS HALL
- BAKER HALL
- LEE HOUSE
- EVANS DINING HALL
- **EARLY-FIELDING CENTER**

- GAINES RESIDENCE HALL
- GRAHAM-LEES RESIDENCE HALL
- ATHLETIC & RECREATION CENTER
- HOLEKAMP HALL
- 10. ELROD COMMONS

- 11. HUNTLEY HALL
- 12. NEWCOMB HALL
- 13. REID HALL
- 14. PARKING GARAGE



#### **EXISTING PEDESTRIAN FACILITIES**

**NEW WILLIAMS BUILDING TRAFFIC IMPACT STUDY WASHINGTON & LEE UNIVERSITY** 

MARCH 2023
SCALE:
NTS

DATE:

FIGURE:

<u>Pedestrian Traffic Control Devices:</u> Crosswalks are marked as noted in Figure 2. The Crossing Table has different brick patterns to denote crossing areas. Advanced "Speed Hump" signing is provided for the Crossing Table and a "yield to pedestrians" sign for each approach at the Crossing Table.

<u>Vehicular Traffic:</u> Traffic volume counts were conducted as part of the *Washington & Lee University Master Plan Existing Conditions Report* prepared by WBCM in 2020. Counts sites included the intersection of West Washington Street with Lee Avenue. The count data is provided in Appendix A. Results of the counts indicate that the maximum mid-day hourly volumes along West Washington Street in the vicinity of the proposed New Williams Building and Evans Dining Hall were 103 northbound and 71 southbound. The hourly morning and mid-day volumes are summarized in Table 1.

Table 1

Hourly Two -Way Vehicular Volumes Along West Washington Street

Washington & Lee University

Time Period	Northbound	Southbound	Total
8:00 AM to 9:00 AM	86	40	126
9:00 AM to 10:00 AM	98	48	146
10:00 AM to 11:00 AM	68	47	115
11:00 AM to 12:00 N	96	71	167
12:00 N to 1:00 PM	103	47	150
1:00 PM to 2:00 PM	103	71	174
2:00 PM to 3:00 PM	99	54	153

Pedestrian Volumes: Sample pedestrian counts were conducted from 8:10 AM to 2:45 PM on Wednesday March 22 and Friday March 24, 2023, at the Crossing Table (Site D) and at the adjacent crossing at the Evans Dining Hall (Site E). The counts were conducted during the change of classes and during the lunchtime break; thus, the maximum crossing volumes were recorded. The class schedule is provided in Appendix B. As noted in the schedule, 15 minutes is allocated for students to change classes. To account for potential early dismissals, the pedestrian counts were conducted for a 20 minute period to include five minutes prior to the official class dismissal time. In addition, pedestrian counts were conducted at the intersection of Washington Street and Lee Avenue as part of the Washington & Lee University Master Plan Existing Conditions Report. Copies of the count data are provided in Appendix C. Table 2 provides a summary of the pedestrian volumes collected during the class change interval for crossing Sites D and E along with the conflicting vehicular traffic volumes.

<u>Field Observations</u>: A side note to the data collection was observations of vehicular and pedestrian behavior. Vehicles along West Washington Street typically traveled at low speeds and would stop for pedestrians to let them cross. The pedestrians were vigilant about staying within the constraints of the marked crosswalk and not crossing at unmarked locations along West Washington Street.

# Table 2 Peak Period Pedestrian Volumes Along Washington Street Washington & Lee University

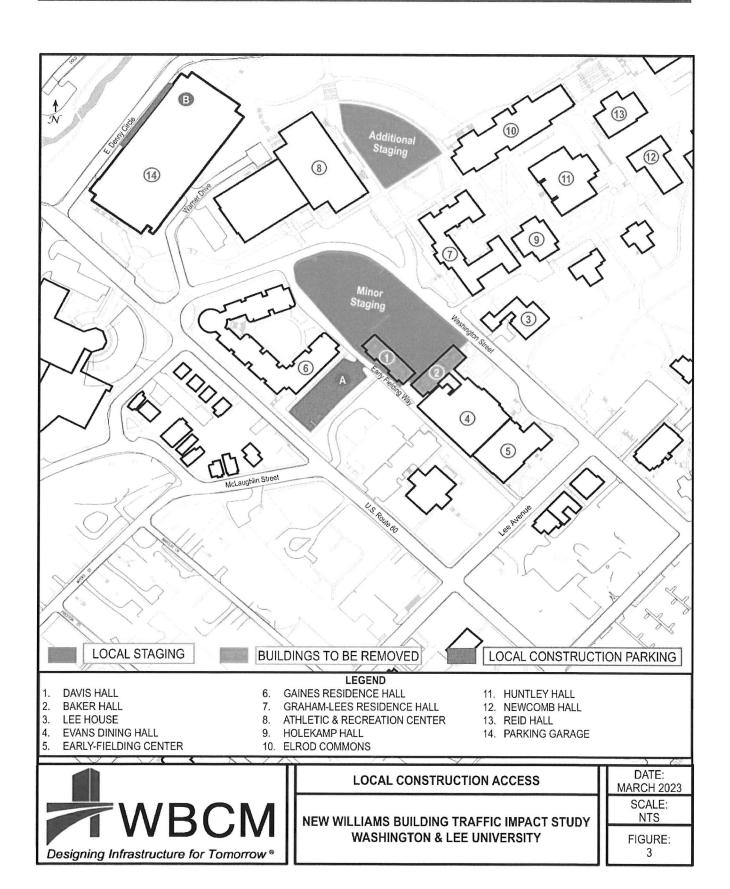
Pedestrian	Pedestrian From			To		Hourly		
Count Time Period	Evans	Williams	Evans	Williams	From/To Evans	From/To Williams	Total	Vehicles
8:10 AM to 8:30 AM	23	43	8	10	31	53	84	126
9:25 AM to 9:45 AM	30	63	24	44	54	107	161	146
10:40 AM to 11:00 AM	21	52	36	62	57	114	171	115
11:55 AM to 12:15 PM	44	43	84	33	128	76	204	150
1:10 PM to 1:30 PM	33	45	40	54	73	99	172	174
2:25 PM to 2:45 PM	17	46	45	67	62	113	175	153

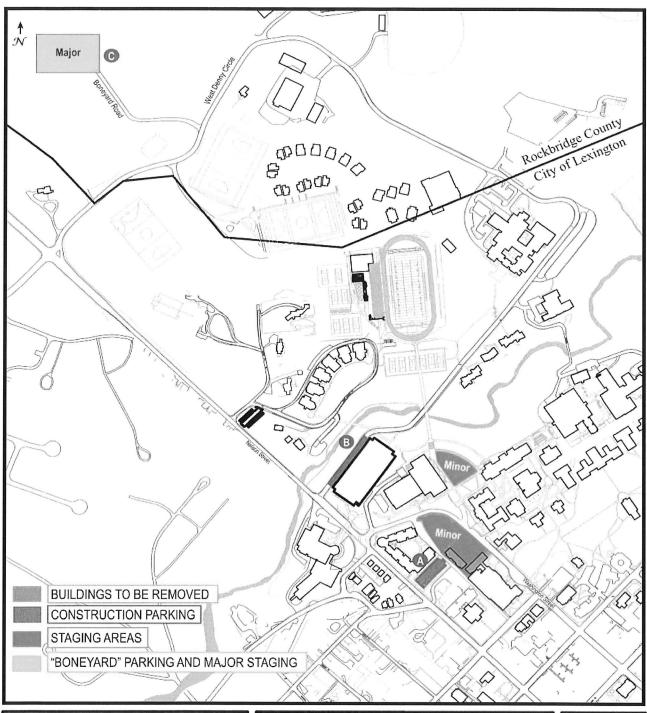
Review of Table2 indicates that vehicular/pedestrian conflict volumes are minimal.

#### FUTURE TRAFFIC OPERATIONS DURING CONSTRUCTION

When considering traffic safety and operations for a new development, two elements must be considered – construction traffic and site generated traffic. Washington & Lee University has a proven plan to deal with construction-related traffic that was employed successfully during the construction of the new Duchossois Athletic and Recreation Center in 2020. The construction staging plan will include local and remote staging areas and parking.

Construction Traffic: Figure 3 illustrates the local parking areas for construction traffic. Site A will accommodate the construction trailer and staff, provide parking for site visitors and a drop-off point for the employee shuttle. Signing will be required throughout the project site to direct visitors to Site A. Site B will be reserved for additional parking. The majority of the construction workers will park in the "Boneyard" shown in Figure 4. A shuttle will be used to transport the workers to the project site. The shuttle system was employed successfully for the construction of the athletic and recreation center. With the use of the "Boneyard" for the majority of the construction employee parking, vehicular trips into the heart of campus would be minimized. In addition, similar to the Athletic and Recreation Center construction, the project specifications will stipulate that all construction traffic must enter and exit to the north along US 60 and not pass through Downtown Lexington. Route 60 intersects with I-64 to the north to facilitate access. Operational analyses conducted at the Nelson Street/Washington Street intersection as part of the Washington & Lee University Master Plan Existing Conditions Report, indicated the intersection currently operates at a Level of Service A in the morning and in the evening peak hours. Thus, ample reserve capacity is available to accommodate the shuttle bus traffic and site visitors. The count data and analysis worksheets for the intersection of Nelson Street and West Washington Street are provided in Appendix D.







CONSTRUCTION STAGING SUMMARY

NEW WILLIAMS BUILDING TRAFFIC IMPACT STUDY WASHINGTON & LEE UNIVERSITY

DATE: MARCH 2023 SCALE: NTS

FIGURE:

<u>Construction Staging:</u> Figure 3 illustrates areas for minor staging adjacent to the construction site. The major staging area will be the "Boneyard" as illustrated in Exhibit 4. As noted above, the specifications for the project will limit contractor access to and from the north along US Route 60. As part of the contractor's maintenance of traffic plan, measures to safely maintain pedestrian access during demolition and construction will be required.

#### FUTURE TRAFFIC OPERATIONS PEDESTRIAN TRAFFIC

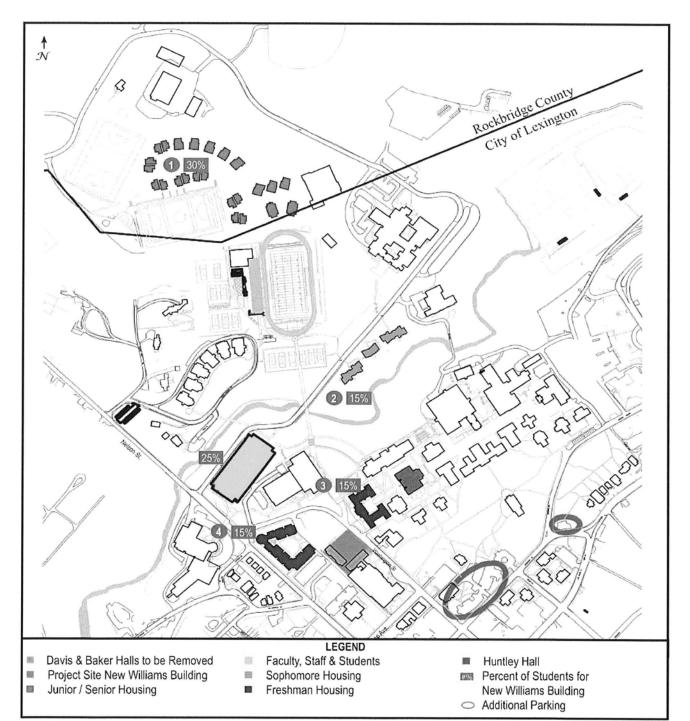
<u>Trip Generation:</u> The New Williams Building will not be developed to address an increase in faculty or students. As noted above, the student and faculty population will remain static. The intent of the new facility is to better address the needs of existing students and faculty. The University will not issue new parking passes for faculty; thus, no additional or diverted vehicular trips are anticipated. The New Williams Building will be designed for a maximum capacity of 539 students and 51 faculty. Unlike a typical land use, such as an office or residential, traditional sources of trip generation are not available from the ITE Trip Generation Manual for pedestrian volume generation of a classroom. Thus, a series of assumptions were developed to derive potential pedestrian crossing volumes along West Washington Street at the New Williams Building. The following assumptions were made concerning the new or diverted pedestrian trips.

- The origins of the student trips are illustrated in Figure 5.
- The trips from the parking garage will enter the new building from the west along Early-Fielding Way and not cross in the vicinity of the Crossing Table.
- The trips from the Gaines Residence Hall will enter the building from the west along Early-Fielding Way and no longer cross at the Crossing Table as they do today to access Huntley Hall.
- The trips from the Graham-Lees Residence Hall will now cross at the Crossing Table to access the new building.
- It was assumed that the classrooms would operate at 60% occupancy based on university norms in classroom usage.

Based on the above noted assumptions the following derivation of potential pedestrian trips is provided:

Total Students at Full Occupancy	539
Total Faculty at Full Occupancy	51
Less 40% for 60% Student Occupancy	323
Less 40% for 60% Faculty Occupancy	31
Sub-total	354
Less Existing Health Center Trips	- 16
Less 15% to/from Gaines Hall	- 48
Less 25% to/from Parking Garage	- 81
Total New One-Way Trips	209

<u>Pedestrian Level of Service</u>: Level of Service is an expression that has been developed by the transportation community to express how well a facility operates based on a letter grade of "A" through





#### STUDENT / FACULTY ACCESS PATTERNS

NEW WILLIAMS BUILDING TRAFFIC IMPACT STUDY WASHINGTON & LEE UNIVERSITY

DATE: MARCH 2023 SCALE: NTS FIGURE:

"F." Level of Service "A" is considered very good operations with minimal delays and "D" is the minimum acceptable level of delay or congestion that is tolerated before measures are needed to improve operations. Level of Service "E" and "F" are considered unacceptable delays or congestion. Significant research has been conducted on developing a level of service for pedestrian facilities. Typical measures employed are the number of pedestrians per minute per foot, Person Space and walking speed. The college student is a unique pedestrian. Typically college students travel in groups so Person Space is not as applicable as in an urban setting with strangers. Also, college students tend to walk faster than a typical older adult pedestrian.

The Highway Capacity Manual (HCM) produced by the Federal Highway Administration provides analysis procedures to determine levels of service for different types of roadway and signalized and unsignalized intersections. The HCM also has a chapter devoted to pedestrian facilities. The HCM was employed to determine the Pedestrian Level of Service. The measures of effectiveness include walking speed, area per pedestrian and number of pedestrians per minute per foot. The wide area provided by the Crossing Table for pedestrian crossings and the anticipated multiple access points for the new building facilitates pedestrian flow since pedestrians will not be concentrated into a single crosswalk. The highest potential crossing volume at the Crossing Table would be the existing two-way trips and the potential 418 new two-way trips. Based on the HCM analyses, with two-way trips, the associated Level of Service at the Crossing Table at the New Williams Building would be "B." The computation form is located in Appendix E.

#### SUMMARY AND CONCLUSIONS

In an effort to better accommodate existing classroom and faculty needs, Washington & Lee University has proposed demolition of Davis and Baker Halls to make way for construction of the New Williams Building.

- ✓ A Crossing Table for traffic calming has been constructed along West Washington Street in the vicinity of the proposed New Williams Building.
- ✓ Marked crosswalks are present on West Washington Street.
- ✓ The maximum occupancy of the New Williams Building will be 539 students and 51 faculty.
- ✓ During demolition/construction the construction related traffic and staging areas will be accommodated locally and with the "Boneyard" site north of campus. A shuttle will be employed to bring construction workers to the project site. The shuttle and use of the "Boneyard" lot was successfully used recently for construction of the athletic and recreation center.
- ✓ Existing peak hour vehicular two-way traffic along West Washington Street in the vicinity of the crossings is only about 174 vehicles.
- ✓ The New Williams Building will generate approximately 209 new peak 20 minute trips each way crossing West Washington Street during the class change based on anticipated classroom occupancy and sources of pedestrian traffic.
- ✓ Peak existing two-way 20 minute crossing volumes along West Washington Street on the Crossing Table are 114 pedestrians.

- ✓ Peak existing 20 minute crossing volume along West Washington Street was at the Evans Dining Hall with 128 two-way crossings.
- ✓ The peak 20 minute combined two-way crossing volume for the Crossing Table and Evans Hall was 204 pedestrians.
- ✓ The resultant total potential pedestrian 20 minute volume crossing West Washington Street in the vicinity of proposed New Williams Building and the existing Evans Dining Hall in the noon period peak is 622 students and faculty.
- ✓ The resultant total potential pedestrian 20 minute volume crossing West Washington Street at the Crossing Table is 532 students and faculty.
- ✓ Based on a projected 20 minute volume of 532 students and faculty, the resultant Level of Service of the Crossing Table would be an excellent LOS "B."

#### RECOMMENDATIONS

The existing volume of vehicular traffic is minimal along West Washington Street in the vicinity of the major crossings at the proposed New Williams Building and the existing Evans Dining Hall. Vehicles were observed stopping to allow students to cross when pedestrian and vehicles were both present. The increase in pedestrian traffic warrants additional traffic control devices to improve pedestrian conspicuity and provide traffic calming along West Washington Street. The following measures are recommended:

- 1. Install advance pedestrian crossing signs with "Zone Ahead" supplemental plaque using fluorescent yellow-green background and black text and legend. The signs would be mounted to the left and right along the West Washington Street approaches to the crosswalks.
- 2. Refresh all other crosswalks along West Washington Street.
- 3. Remove existing crosswalk that is no longer applicable.
- 4. Design the New Williams Building with multiple access points along West Washington Street to facilitate pedestrian access by reducing concentrations.
- 5. Install edge lines and double center lines to provide traffic calming by reducing the width of the traveled way.

#### **APPENDIX A**

WEST WASHINGTON STREET AT LEE AVENUE TRAFFIC COUNT DATA



	Traffic Volume Summary Table					
Location:	5: W. Washington Street at Lee Avenue	City/County:	Rockbridge			
Date & Day:	10/6/2020	Weather:	Sunny			

Type Of Count: Turning Movement Count Recorders: WBCM

Names Of		Driveway	(One-way	y)		Lee Avenue				W. Washington Street			W. Washington Street				Grand
Streets		From	n North			From South				From East			From West				Total
Start Time	L	T	R	Tot.	L	Т	R	Tot.	L	Т	R	Tot.	L	T	R	Tot.	
6:00 AM	0	0	0	0	1	0	2	3	8	26	0	34	0	11	3	14	51
7:00 AM	0	0	0	0	3	0	22	25	27	49	1	77	0	46	1	47	149
8:00 AM	0	0	0	0	4	0	29	33	38	82	1	121	0	36	4	40	194
9:00 AM	0	0	0	0	4	0	30	34	38	94	0	132	0	38	10	48	214
10:00 AM	0	0	0	0	3	0	26	29	45	65	0	110	0	45	2	47	186
11:00 AM	0	0	0	0	5	0	41	46	64	91	0	155	0	56	15	71	272
12:00 PM	0	0	0	0	6	0	39	45	50	97	2	149	0	42	5	47	241
1:00 PM	0	0	0	0	12	0	46	58	66	91	0	157	0	58	13	71	286
2:00 PM	0	0	0	0	10	0	42	52	51	89	0	140	0	43	11	54	246
3:00 PM	0	0	0	0	10	0	30	40	54	72	1	127	0	51	5	56	223
4:00 PM	0	0	0	0	4	1	27	32	61	97	2	160	0	38	5	43	235
5:00 PM	0	0	0	0	7	0	19	26	49	91	0	140	0	37	5	42	208
6:00 PM	0	0	0	0	3	2	19	24	36	67	2	105	2	39	7	48	177
Total	0	0	0	0	72	3	372	447	587	1,011	9	1,607	2	540	86	628	2,682

# APPENDIX B WASHINGTON & LEE CLASS SCHEDULE

60 min	ock Schedu 90 min	120 min	120 min	180 min	240 min	10.00
8:30-9:30 MWF (or MTWF / MTWRF)	8:00-9:30 TR/MW	8:00-10:00 TR / MW				8:00 8:05 8:10 8:15 8:20 8:25 8:30 8:35 8:40 8:55 9:00 9:05 9:15 9:15 9:20 9:25
9:45-10:45				8:30-11:30 lab / studio	8:00-12:00 lab / studio	9:30 9:35 9:40 9:45 9:50 9:55
MWF (or MTWF / MTWRF)	9:45-11:15 TR		9:45-11:45	MTWRF	MTWRF	10:0 10:1 10:1 10:2 10:2 10:3 10:3
11:00-12:00	2000 200 10 10 10 10 10 10 10 10 10 10 10 10 1	10:15-12:15	MW (studio / lab only)			10:4 10:5 10:5 11:0 11:0 11:1
MWF (or MTWF / MTWRF)		TR				11:2 11:3 11:3 11:4 11:4 11:5
12:15-1:15	11:45-1:15 TR					11:5: 12:0: 12:1: 12:1: 12:1: 12:2: 12:2: 12:3:
MWF (or MTWF, MTRF / MTWRF)	TK .					12:3: 12:4: 12:4: 12:5: 12:5: 1:00 1:05
		12:30-2:30	12:30-2:30 MW (studio/			1:10 1:15 1:20 1:25
1:30- 2:30MWF (or MTRF / MTWRF)	1:30-3:00 TR	TR	lab only)			1:30 1:45 1:45 1:50 1:55 2:00 2:05 2:10 2:15 2:20 2:25
2:45-3:45 MWF (or MTRF /				1:30-4:30 lab / studio / 180 min class		2:30 2:35 2:40 2:45 2:50 2:55 3:00 3:05
MTWRF) or 2:45-4:15 MW	3:15 - 4:45	2:45-4:45 TR / MW		MTWRF	1:30-5:30 lab / studio MTWRF	3:10 3:15 3:20 3:25 3:30 3:35 3:40 3:45 3:50
4:00-5:00 MWF	TR					3:55 4:00 4:05 4:10 4:15 4:20 4:25 4:30
(or MTRF / MTWRF)						4:35 4:40 4:45 4:50 4:55 5:00
						5:00 5:05 5:10 5:15 5:20 5:25

#### **APPENDIX C**

PEDESTRIAN TRAFFIC COUNT DATA WEST WASHINGTON STREET AT LEE AVENUE

#### Washington and Lee University Master Plan

Location: Date: Recorder: Interval (dd) : (In Minutes)

5: W. Washington Street at Lee Avenue
10/6/2020 Tuesday
WBCM
15

Bicycles 0 0

0

0 0 0

0

County: Town: Weather:

Rockbridge Lexington Sunny

#### LES

			From North	
Hour		Dri	veway (One-w	ay)
Ending			Pedestrians	BI
06:15			0	
06:30			2	
06:45			4	
07:00			0	
07:15			1	
07:30			5	
07:45			5	
08:00			3	
08:15			10	
08:30			10	
08:45			2	
09:00			4	
09:15			11	
09:30			9	
09:45			33	
10:00			16	
10:15			16	
10:30			16	
10:45			16	
11:00			10	
11:15			28	
11:30			25	_
11:45			20	_
12:00			33	_
12:15			30	_
12:30			24	_
12:45			34	_
13:00			8	_
13:15			10	_
13:30			15	_
13:45			26	_
14:00			22 15	_
14:15			15	-
14:30			7	$\vdash$
14:45 15:00			15	$\vdash$
15:15			10	$\vdash$
15:30			6	-
15:45			5	$\vdash$
16:00			3	$\vdash$
16:15			6	
16:30			10	-
16:45			8	$\overline{}$
17:00			7	
17:15			7	
17:30	1		3	
17:45	1		5	
18:00	1		5	
18:15	1		11	
18:30	1		7	
18:45	1		8	
19:00	1		10	
TOTAL	1	0	611	

	From South	1
	Lee Avenue	
	Pedestrians	Bicycles
	1	0
	3	0
	0	0
	2	0
	0	0
	1	0
	3	0
	1	0
	4	0
	4	0
	1	0
	4	0
	3	0
	9	0
	1	0
	1	0
	2	0
	5	0
	4	0
	6	0
	5	0
	4	0
	6	0
	2	0
	8	0
	6	0
	6	0
	3	0
	5	0
	1	0
	8	0
	2	0
	2	0
	3	0
	0	0
	3	0
	4	0
	4	0
	5	0
	3	1
	1	0
	4	0
	10	1
	1	0
	3	0
	2	1
	9	0
	10	0
0	186	4

	From East	
W.	Washington S	
	Pedestrians	Bicycles
	0	0
	1	0
	0	0
	2	0
	0	0
	2	0
	2	0
	5	0
	6	1
	4	1
	2	0
	4	1
	4	0
	1	0
	4	0
	5	0
	3	0
	10	0
	0	0
	4	0
	6	0
	6	0
	10	0
	11	0
	8	0
	4	0
	6	0
	16	0
	4	0
	2	0
	9	0
	10	0
	6	0
	9	0
	2	0
	0	0
	3	0
	3	0
	1	0
	3	0
	9	0
	4	1
	3	0
	1	0
	5	0
	4	0
	8	1
	2	0
	2	0
	4	0
	2	0
	10	0
0	232	5

From West							
W. W	ashington S	treet					
	Pedestrians	Bicycles					
	0	0					
	3	0					
	0	0					
	1	0					
	4	0					
	2	0					
	7	0					
	6	0					
	7	0					
	9	0					
	7	1					
	1	0					
	5	0					
	5	0					
	8	1					
	9	0					
	6	0					
	4	0					
	0	0					
	5	0					
	3	0					
	8	2					
	4	0					
	7	1					
	5	1					
	5	0					
	8	0					
	5	2					
	9	0					
	2	0					
	7	1					
	14	0					
	8	1					
	7	1					
	3	0					
	2	0					
	2	0					
	9	1					
	10	0					
	6	0					
	7	0					
	2	0					
	2	1					
	6	0					
	3	1					
	3	0					
	4	3					
	0	0					
	4	0					
	1	0					
	5	1					
0	261	19					
		•					

#### APPENDIX D

NELSON STREET AT WEST WASHINGTON STREET TRAFFIC COUNTS AND LEVEL OF SERVICE COMPUTATION SHEETS



# **Traffic Volume Summary Table**

Location:	1: US 60 (W. Nelson St) at W. Washington Street	City/County:	Rockbridge	
Date & Day:	10/7/2020	Weather:	Sunny	
Type Of Count:	Turning Movement Count	Recorders:	WBCM	

Names Of	1	W. Washi	ngton Stre	et		Glasgow Street				US 60 (W	. Nelson S	St)		US 60 (W	. Nelson S	St)	Grand
Streets		From	North			From	South			Fror	n East				West		Total
Start Time	L	Т	R	Tot.	L	Т	R	Tot.	L	T	R	Tot.	L	T	R	Tot.	
6:00 AM	1	3	19	23	2	0	1	3	0	30	6	36	19	50	1	70	132
7:00 AM	6	3	44	53	14	4	1	19	5	81	9	95	45	127	7	179	346
8:00 AM	10	8	56	74	41	1	6	48	7	132	14	153	48	181	24	253	528
9:00 AM	10	4	57	71	14	2	4	20	8	109	6	123	37	129	14	180	394
10:00 AM	13	7	51	71	13	2	6	21	8	146	15	169	40	158	14	212	473
11:00 AM	25	11	74	110	15	3	8	26	3	122	19	144	43	196	10	249	529
12:00 PM	32	7	69	108	21	6	2	29	8	156	18	182	42	201	19	262	581
1:00 PM	33	8	63	104	23	4	5	32	6	145	16	167	51	152	13	216	519
2:00 PM	32	9	85	126	19	8	5	32	5	173	12	190	39	160	14	213	561
3:00 PM	45	10	94	149	18	8	9	35	6	193	5	204	34	218	22	274	662
4:00 PM	22	8	89	119	17	5	6	28	3	195	11	209	42	198	16	256	612
5:00 PM	32	13	79	124	14	1	4	19	6	186	9	201	35	202	25	262	606
6:00 PM	33	9	76	118	15	1	3	19	7	175	15	197	39	190	16	245	579
Total	294	100	856	1,250	226	45	60	331	72	1,843	155	2,070	514	2,162	195	2,871	6,522



### Traffic Volume Table - Morning Peak Period

Location: 1: US 60 (W. Nelson St) at W. Washington Street

City/County:

Rockbridge

Date & Day:

10/7/2020

Weather:

Sunny

Type Of Count:

Turning Movement Count

Recorders:

WBCM

Names Of		W. Washi	ngton Stre	eet		Glasgow Street				US 60 (W	. Nelson S	St)		US 60 (W	. Nelson S	St)	Grand
Streets		From	North			From	South			Fror	n East				n West		Total
Time	L	T	R	Tot.	L	T	R	Tot.	L	Т	R	Tot.	L	Т	R	Tot.	
6:00 AM	0	0	4	4	0	0	0	0	0	2	1	3	3	3	0	6	13
6:15 AM	0	1	0	1	1	0	0	1	0	4	2	6	6	20	0	26	34
6:30 AM	1	1	6	8	0	0	0	0	0	9	1	10	5	12	0	17	35
6:45 AM	0	1	9	10	1	0	1	2	0	15	2	17	5	15	1	21	50
7:00 AM	0	0	8	8	1	0	0	1	0	19	4	23	13	31	0	44	76
7:15 AM	3	0	10	13	5	1	0	6	2	14	5	21	5	16	2	23	63
7:30 AM	0	3	11	14	4	2	0	6	0	17	0	17	13	42	1	56	93
7:45 AM	3	0	15	18	4	1	1	6	3	31	0	34	14	38	4	56	114
8:00 AM	3	2	11	16	8	1	1	10	0	38	5	43	12	45	5	62	131
8:15 AM	1	1	16	18	14	0	1	15	2	36	3	41	11	54	9	74	148
8:30 AM	3	3	14	20	8	0	3	11	2	26	3	31	13	42	4	59	121
8:45 AM	3	2	15	20	11	0	1	12	3	32	3	38	12	40	6	58	128
Total	17	11	119	150	57	5	8	70	12	243	29	284	112	358	31	502	1,006



# Traffic Volume Table - Evening Peak Period

Location:	1: US 60 (W. Nelson St) at W. Washington Street	City/County:	Rockbridge
Date & Day:	10/7/2020	Weather:	Sunny
Type Of Count:	Turning Movement Count	Recorders:	WBCM

Names Of	W	. Washi	ngton St	reet		Glasgow Street				S 60 (W	. Nelson	St)	U	S 60 (W	. Nelson	St)	Grand
Streets		From	n North			From	South			Fror	n East			From	n West		Total
Time	L	T	R	Tot.	L	T	R	Tot.	L	Т	R	Tot.	L	Т	R	Tot.	1
4:00 PM	8	1	24	33	5	1	2	8	1	62	4	67	16	64	3	83	191
4:15 PM	3	1	17	21	3	2	3	8	0	43	5	48	11	31	2	44	121
4:30 PM	2	4	24	30	3	0	0	3	2	42	0	44	5	43	5	53	130
4:45 PM	9	2	24	35	6	2	1	9	0	48	2	50	10	60	6	76	170
5:00 PM	5	3	21	29	2	0	1	3	2	52	2	56	8	55	9	72	160
5:15 PM	10	6	22	38	5	1	0	6	1	56	1	58	8	58	5	71	173
5:30 PM	13	2	17	32	1	0	2	3	3	47	3	53	9	44	6	59	147
5:45 PM	4	2	19	25	6	0	1	7	0	31	3	34	10	45	5	60	126
6:00 PM	7	8	24	39	5	0	2	7	4	47	5	56	11	69	5	85	187
6:15 PM	9	0	22	31	2	1	0	3	0	45	2	47	12	41	1	54	135
6:30 PM	8	1	18	27	4	0	0	4	3	36	4	43	6	39	5	50	124
6:45 PM	9	0	12	21	4	0	1	5	0	47	4	51	10	41	5	56	133
Total	87	30	244	361	46	7	13	66	0	556	35	607	116	590	57	763	1,797

#### Washington and Lee University Master Plan

Location: Date: Recorder: Interval (dd): (In Minutes)

1: US 60 (Nelson St) at Washington Street

| 10/7/2020 | Wednesday | WBCM | 15 | |

Bicycles

County: Town: Weather:

Rockbridge Lexington Sunny

#### CLES

Hour	,		From North	
Hour	4	V	ashington Str	e
Ending			Pedestrians	
06:15			0	Γ
06:30	]		0	Γ
06:45	1		1	Γ
07:00	1		1	Γ
07:15	1		0	Γ
07:30	1		1	Γ
07:45	1		0	Γ
08:00	1		3	Γ
08:15	1		0	Γ
08:30	1		1	Γ
08:45	1		2	r
09:00	1		2	r
09:15	1		2	r
09:30	1		0	r
09:45	1		3	r
10:00	1		1	r
10:15	1		1	r
10:30	1		2	r
10:45	1		2	r
11:00	1		0	r
11:15	1		2	r
11:30	1		1	r
11:45	1		1	r
12:00	1		3	Γ
12:15	1		2	r
12:30	1		3	r
12:45	1		8	r
13:00	1		1	r
13:15	1		3	r
13:30	1		5	Г
13:45	1		9	Г
14:00	1		7	Г
14:15	1		4	Г
14:30	1		3	Г
14:45	1		3	Г
15:00	1		1	Г
15:15	1		2	Г
15:30	1		2	Г
15:45			1	Ε
16:00			2	Γ
16:15			5	Г
16:30			7	Π
16:45			5	Г
17:00			9	
17:15			11	
17:30			3	
17:45			2	Ĺ
18:00			4	
18:15			10	Ĺ
18:30			5	
18:45			10	Ĺ
19:00			5	Ĺ
TOTAL		0	161	ſ

PEDES	From South	& BICY
	Glasgow Stree	t
	Pedestrians	Bicycles
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0	37	1

Pedestrians	US	From East 60 (Nelson Str	reet)
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2			0
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8			0
12   6   6   6   6   6   6   6   6   6			0
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8			0
27			0
21			0
8			0
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5   C   C   C   C   C   C   C   C   C			0
12			0
28			0
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US	From West US 60 (Nelson Street)											
	Pedestrians	Bicycles										
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10/29/2020

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			43	
Traffic Volume (vph)	43	196	10	3	122	19	15	3	8	25	11	74
Future Volume (vph)	43	196	10	3	122	19	15	3	8	25	11	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11	12	12	12	13	12	13
Grade (%)		2%			-10%			0%			-8%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995			0.982			0.957			0.909	
Flt Protected		0.991			0.999			0.972			0.989	
Satd. Flow (prot)	0	1741	0	0	1855	0	0	1733	0	0	1742	0
FIt Permitted		0.991			0.999			0.972			0.989	
Satd. Flow (perm)	0	1741	0	0	1855	0	0	1733	0	0	1742	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1020			883			333			1129	
Travel Time (s)		23.2			20.1			9.1			30.8	
Confl. Peds. (#/hr)	7					7	8		61	61		8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	47	213	11	3	133	21	16	3	9	27	12	80
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	271	0	0	157	0	0	28	0	0	119	0
<b>Enter Blocked Intersection</b>	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			65			0	
Crosswalk Width(ft)		0			0			12			0	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.01	0.94	0.98	0.98	1.00	1.00	1.00	0.91	0.95	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	
Intersection Summary												

Intersection Summary

Area Type:

Other

Control Type: Unsignalized

Intersection Capacity Utilization 44.5%

Analysis Period (min) 15

ICU Level of Service A

Baseline Synchro 10 Report Page 1

Intersection													
Int Delay, s/veh	3.6		AND DESCRIPTION OF THE PARTY OF										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4			4			4			4		
Traffic Vol, veh/h	43	196	10	3	122	19	15	3	8	25	11	74	
Future Vol, veh/h	43	196	10	3	122	19	15	3	8	25	11	74	
Conflicting Peds, #/hr	7	0	0	0	0	7	8	0	61	61	0	8	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	None	-	-	None	-		None	-	-	None	
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage	,# -	0	•		0	-	-	0	-	-	0	-	
Grade, %	-	2	-	-	-10	-	-	0	-	-	-8	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2	
Mvmt Flow	47	213	11	3	133	21	16	3	9	27	12	80	
Major/Minor I	Major1		1	Major2			Minor1			Minor2			
Conflicting Flow All	161	0	0	224	0	0	517	480	280	537	475	159	
Stage 1	-	-	-	-	-	-	313	313	-	157	157	-	
Stage 2	-	-	-	-	-	-	204	167	-	380	318	-	
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	5.52	4.92	5.42	
Critical Hdwy Stg 1	-	-	-	-	-	_	6.12	5.52	-	4.52	3.92	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52		4.52	3.92	-	
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	The second of th
Pot Cap-1 Maneuver	1412	-	-	1345	-	-	469	485	759	577	603	918	
Stage 1	-	-	-		-	-	698	657	-	906	823	-	
Stage 2	-	-	-	-	-	•	798	760	-	760	753	•	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	1403	-	-	1345	-	-	405	462	719	517	575	906	
Mov Cap-2 Maneuver	-	-	_	-	_	-	405	462	-	517	575	-	
Stage 1	-	-	-	-	-	•	671	632	-	866	816	-	
Stage 2	-	-	-	-	_	-	710	753	-	680	724	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	1.3			0.2			13			10.8			
HCM LOS	2010/03/2004				and the second		В		AND EACHT, MINN	В	2002015582300000		THE RESIDENCE AND ADDRESS OF THE PARTY OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON
Minor Lane/Major Mvm	it N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)		476	1403	-		1345	-	-	737				
HCM Lane V/C Ratio		0.059	0.033	-	_	0.002	-	-	0.162	and the second			
HCM Control Delay (s)		13	7.7	0	-	7.7	0	-	Managoria Pila				
HCM Lane LOS		В	Α	Α	-	Α	Α	-	В				
HCM 95th %tile Q(veh)		0.2	0.1		-	0	_	-	0.6				

10/29/2020

	۶	<b>→</b>	*	1	4	4	4	<b>†</b>	<i>&gt;</i>	<b>&gt;</b>	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	46	220	23	6	199	8	17	6	10	44	8	101
Future Volume (vph)	46	220	23	6	199	8	17	6	10	44	8	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	11	12	12	12	13	12	13
Grade (%)		2%			-10%			0%			-8%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.989			0.995			0.960			0.911	
Flt Protected		0.992			0.999			0.975			0.986	
Satd. Flow (prot)	0	1699	0	0	1879	0	0	1744	0	0	1740	0
FIt Permitted		0.992			0.999			0.975			0.986	
Satd. Flow (perm)	0	1699	0	0	1879	0	0	1744	0	0	1740	0
Link Speed (mph)		30			30			25			25	
Link Distance (ft)		1020			883			333			1129	
Travel Time (s)		23.2			20.1			9.1			30.8	
Confl. Peds. (#/hr)	10		2	2		10	14		30	30		14
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	51	244	26	7	221	9	19	7	11	49	9	112
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	321	0	0	237	0	0	37	0	0	170	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			65			0	
Crosswalk Width(ft)		0			0			12			0	
Two way Left Turn Lane												
Headway Factor	1.06	1.06	1.01	0.94	0.98	0.98	1.00	1.00	1.00	0.91	0.95	0.91
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	annual Ala
Intersection Summary												

Area Type:

Other

Control Type: Unsignalized

Intersection Capacity Utilization 49.1%

Analysis Period (min) 15

ICU Level of Service A

Intersection													
Int Delay, s/veh	4.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4			4			4			4		
Traffic Vol, veh/h	46	220	23	6	199	8	17	6	10	44	8	101	
Future Vol, veh/h	46	220	23	6	199	8	17	6	10	44	8	101	
Conflicting Peds, #/hr	10	0	2	2	0	10	14	0	30	30	0	14	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized		-	None	-	-	None		-	None			None	
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-	and the second s
Veh in Median Storage	,# -	0	-	-	0	-	-	0		-	0	•	
Grade, %	-	2	-	-	-10	-	-	0	-	-	-8	-	
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90	
Heavy Vehicles, %	5	5	5	2	2	2	2	2	2	2	2	2	
Mvmt Flow	51	244	26	7	221	9	19	7	11	49	9	112	
	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	240	0	0	272	0	0	675	615	289	648	624	250	
Stage 1	-	-	-	-	-	-	361	361	-	250	250	•	
Stage 2		-	-	-	-	-	314	254	-	398	374	-	
Critical Hdwy	4.15	-	-	4.12	-	-	7.12	6.52	6.22	5.52	4.92	5.42	
Critical Hdwy Stg 1	-		_	-	-	-	6.12	5.52	-	4.52	3.92	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	4.52	3.92	-	
	2.245		_	2.218	-	-	0.0.0	4.018	3.318		4.018		
Pot Cap-1 Maneuver	1309	-	-	1291	-	-	368	407	750	511	530	834	
Stage 1			-	-	euramous a metar	-	657	626	-	843	782	_	
Stage 2	•	-	-	-	-	-	697	697	-	749	729	•	
Platoon blocked, %		-	-			-	0.500549454949	UKSUISTIS NIMI	NAME OF TAXABLE PARTY.	SATE AT THE RESIDENCE OF THE PARTY OF THE PA	ON A PROPERTY OF THE PARTY OF T		TIES COMMINISTRATION DISCUSSION AND MAINTAIN
Mov Cap-1 Maneuver	1297	-	-	1289	-	-	297	381	729	460	497	816	
Mov Cap-2 Maneuver	-	-	_			-	297	381	-	460	497	_	
Stage 1	-	-	-	-	-	-	625	596	-	797	769	-	
Stage 2	-	-	-	-	-	-	583	686	-	678	694	-	
Approach	EB			WB			NB			SB			
HCM Control Delay, s	1.3			0.2			15.5	K L		12.5	1.1016		
HCM LOS	1.0			0.2			C		PASSES SALE	12.3 B			
100							J			U			
Minor Lane/Major Mvm	t N	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		4 4 7 7		
Capacity (veh/h)		381	1297		-	1289	-		650				
HCM Lane V/C Ratio		0.096	0.039	-	-	0.005	-	-	0.262	- Control of the Cont		The second second	
HCM Control Delay (s)		15.5	7.9	0	-	7.8	0	-	12.5				
HCM Lane LOS		С	Α	Α	-	Α	Α	-	В				

#### **APPENDIX E**

WEST WASHINGTON STREET PEDESTRIAN LEVEL OF SERVICE COMPUTATION FORMS

#### PEDESTRIAN LEVEL OF SERVICE

#### Step 1 - Determine the effective walkway width

$$W_e = W_t - W_o$$

We - Effective walkway width (ft)

Wt- Total walkway width at a given point along walkway (ft)

Wo - Sum of fixed-object effective widths

$$W_t = 49.02ft$$

 $W_o = 2.5$  ft (Light pole), 3.0 ft (Trash can), 5.0 ft (Planter boxes)

Therefore,  $W_e = 49.02 - (2.5+3.0+5.0)$ 

=49.02-10.5

= 38.52 approximately 40 ft

#### Step 2 - Calculate Pedestrian Flow Rate (20 minute peak)

$$V_{15} = \frac{V_h}{4 \times PHF}$$
 Use this formula if 1 hour pedestrian volumes are available

V<sub>15</sub> - Pedestrian flow rate during peak 15 min (p/h)

V<sub>h</sub> – Pedestrian demand during analysis hour (p/h)

PHF - Peak Hour Factor

\*Since 20 min pedestrian volumes are available, skip formula above and use formula provided below\*

$$V_p = \frac{V_{15}}{15 \times W_e} = \frac{V_{20}}{20 \times W_e}$$

V<sub>p</sub> – Pedestrian flow per unit width (p/ft/min)

V<sub>20</sub> - Pedestrian flow rate during peak 20 minutes (p/h)

V<sub>p1</sub> – Current pedestrian flow per unit width (p/ft/min)

V<sub>p2</sub> - Proposed pedestrian flow per unit width (p/ft/min)

Therefore, 
$$V_{p1} = \frac{V_{20}}{20 \times W_e} = \frac{114}{20 \times 40} = 0.1425 \text{ p/ft/min}$$

Therefore, 
$$V_{p1} = \frac{V_{20}}{20 \times W_e} = \frac{114}{20 \times 40} = 0.1425 \text{ p/ft/min}$$
  
Therefore,  $V_{p2} = \frac{V_{20}}{20 \times W_e} = \frac{646}{20 \times 40} = 0.8075 \text{ p/ft/min}$ 

#### Step 3 - Calculate average pedestrian space

$$A_p = \frac{S_P}{V_p}$$

 $A_p$  – Pedestrian Space (ft<sup>2</sup>/p)

Sp - Pedestrian speed (ft/min)

V<sub>p</sub> – pedestrian flow per unit width (p/ft/min)

 $A_{p1}$  – Current pedestrian space (ft<sup>2</sup>/p)

 $A_{p2}$  – Proposed pedestrian space (ft<sup>2</sup>/p)

\*Using an average pedestrian speed of 3.75 ft/s = 222 ft/min

#### PEDESTRIAN LEVEL OF SERVICE

Therefore, 
$$A_{p1} = \frac{222}{0.1425} = 1557.9 \text{ ft}^2/p$$
  
Therefore,  $A_{p2} = \frac{222}{0.8075} = 274.9 \text{ ft}^2/p$ 

#### Step 4 - Determine Level of Service

Using LOS Table - Exhibit 24-2 (walkways with platooning) shown below

- -With 114 trips both ways (20 min peak) LOS A
- -With additional 532 trips both ways (20 min peak) LOS B

#### Exhibit 24-2

Exhibit 24-2 Platoon-Adjusted LOS Criteria for Walkways

LOS	Average Space (ft²/p)	Related <u>Measure</u> Flow Rate <sup>a</sup> (p/min/ft) <sup>b</sup>	Comments
Α	>530	≤0.5	Ability to move in desired path, no need to alter movements
В	>90-530	>0.5-3	Occasional need to adjust path to avoid conflicts
C	>40-90	>3-6	Frequent need to adjust path to avoid conflicts
D	>23-40	>6-11	Speed and ability to pass slower pedestrians restricted
E	>11-23	>11-18	Speed restricted, very limited ability to pass slower pedestrians
F	≤11 <sup>c</sup>	>18	Speeds severely restricted, frequent contact with other users

<sup>a</sup> Rates in the table represent average flow rates over a 5-min period. Flow rate is directly related to space; however, LOS is based on average space per pedestrian.
<sup>a</sup> Pedestrians per minute per foot of walkway width.

<sup>c</sup> In cross-flow situations, the LOS E-F threshold is 13 ft<sup>2</sup>/p.

#### Draft Accessory Dwelling Unit ordinance language (6.22.2023)

#### §420-11.1. Residential Uses.

- 1. Accessory Dwelling Unit (ADU).
  - A. Purpose. In Lexington, accessory dwellings are intended to provide additional housing options in the City for the benefit and convenience of families and households with changing economic conditions and/or family structure. Accessory dwellings are expected to increase housing opportunities for individuals and households who might have difficulty finding housing in Lexington. In addition, these provisions are provided to formally recognize previously established apartments and provide for improved safety and physical appearance
  - B. Definitions. The following words and phrases, as used in this subsection, shall have the following meanings:
    - "Accessory Dwelling Unit Attached" means a complete independent dwelling unit, with kitchen and bath, designed, arranged, used, or intended for occupancy by not more than ? persons for living purposes, and meeting the standards of §11.1.1. Accessory dwelling units are clearly incidental and subordinate to, and remain under the same ownership as the main dwelling on the lot. When contained within the principal structure of a single-family dwelling, such accessory dwelling unit constitutes an "attached accessory dwelling unit," for which a separate entrance and street address are required.
    - "Accessory Dwelling Unit Detached" means a complete independent dwelling unit, with kitchen and bath, designed, arranged, used, or intended for occupancy by not more than persons for living purposes, and meeting the standards of §11.1.1. Accessory dwelling units are clearly incidental and subordinate to, and remain under the same ownership as the main dwelling on the lot. When contained in a separate, fully detached structure from the principal structure of a single-family dwelling, such accessory dwelling unit constitutes a "detached accessory dwelling unit," for which a separate street address is required.
  - C. General standards. Accessory Dwelling Units shall be subject to the following minimum standards:
    - (1) No more than one ADU shall be allowed per parcel, provided the parcel meets the minimum lot size and the structure meets the minimum setback requirements for the district. (with exceptions for C.(5), E.(9), and any others?)
    - (2) Accessory dwelling units must comply with all applicable building code regulations.
    - (3) Same minimum lot size for the accessory dwelling unit as the minimum lot size for the primary dwelling.
    - (4) The underlying zoning district development standards for lot coverage, height, setbacks and floor area ratio that apply to the primary dwelling shall also include the accessory dwelling unit in the calculation of these standards.

- (5) Accessory dwelling units may be created within or attached to an existing primary dwelling located on a lot that is smaller than the minimum lot size provided the primary dwelling is a legal nonconforming use.
- (6) The owner of the principal building or lot shall be the occupant of the principal dwelling or of the accessory dwelling unit.
- (7) The separate sale of an accessory dwelling unit is prohibited.
- (8) Only one short term rental registration shall be allowed per parcel.
- (9) Accessory dwelling units shall not be included in calculations of density.
- (10) Allowable square feet for accessory dwelling units shall be calculated as the sum of the total horizontal areas of all floors of the building, measured from the interior faces of exterior walls. Rooms with structural headroom of less than 6' 6" shall not be counted, nor shall garage space, provided the area of the garage does not exceed the counted floor area. Covered porches, balconies, etc. shall not be counted unless they are enclosed, but shall not exceed 50 percent (50%) of the area of the counted floor area. (decks?)
- (11) Any accessory dwelling units shall comply with the following parking requirements:
  - If no parking spaces exist prior to an application for approval of an ADU, 1 space shall be created, provided, however, that if an applicant can demonstrate to the Zoning Administrator that adequate on-street parking exists on the block on which the main dwelling is located, such new space may not be required.
  - ii. Where either 1 or 2 spaces exist prior to the issuance of the accessory dwelling permit, all such space(s) shall be maintained.
  - iii. Where more than 2 spaces exist prior to issuance of the accessory dwelling permit, at least two spaces shall be maintained.

-OR-

- (11) One parking pace per accessory dwelling unit shall be required in addition to the number of parking spaces associated with the primary dwelling existing as of the date of approval.
- D. Accessory Dwelling Unit Attached standards. Attached Accessory Dwelling Units shall be subject to the following additional standards:
  - (1) The gross floor area of an attached accessory dwelling unit may not exceed forty (40) percent of the gross floor area of the principal structure in which it is located nor more than the total of 750 square feet *(possibly strike the square footage cap)*.
  - (2) No attached accessory dwelling unit with an entrance above the first floor shall have exterior stairs to that entrance on the side of the lot fronting a street. Accessory dwelling units facing an alley as determined by the Zoning Administrator may have external stairs on the side of the lot facing the alley.

- E. Accessory Dwelling Unit Detached standards. Detached Accessory Dwelling Units shall be subject to the following additional standards:
  - (1) The gross floor area of a detached accessory dwelling unit may not exceed forty (40) percent of the gross floor area of the primary dwelling on the property nor more than the total of 800 square feet. Additionally, detached accessory buildings and structures cumulatively shall not occupy more than ?? percent of a rear yard.
  - (2) Detached accessory buildings containing accessory dwellings shall exceed neither 25 feet nor 1 ½ stories in height.
  - (3) Any detached accessory building approved after \_\_\_\_\_, containing an accessory dwelling shall comply with setbacks as follows:
    - i. For lots in the R-1 zoning district, the nearest wall of the accessory building shall not be located closer than fifteen (or ten) feet to a side lot line or fifteen feet to a rear lot line;
    - ii. For lots in the R-2 zoning district, the nearest wall of the accessory building shall not be located closer than twenty (or fifteen) feet to a side lot line or twenty feet to a rear lot line; and
    - iii. When a garage situated within a required rear yard is entered from an alley, the garage shall not be nearer than ten (10) feet to the property line adjacent to the alley or side street.
  - (4) No detached accessory dwelling unit with an entrance above the first floor shall have exterior stairs to that entrance on the side of the lot fronting a street unless the accessory building was built prior to the date of the adoption of this ordinance.
  - (5) A detached accessory dwelling unit located in the Residential Historic District must be reviewed by the Architectural Review Board for consistency with the Historic District Design Guidelines.
  - (6) An accessory building in which the accessory apartment is located shall not be required to be separately metered for utilities from the principal single family home.
  - (7) A modular dwelling affixed to a permanent foundation may be used as an accessory dwelling unit in any zone in which an accessory dwelling unit is permitted.
  - (8) An accessory building in which the accessory apartment is located shall not be required to be separately metered for utilities from the principal single-family home.
  - (9) Detached nonconforming accessory buildings existing prior to May 18, 2019, may be altered to make interior *(strike interior?)* alterations, whether structural or non-structural, in accordance with all requirements of Article 16, to create an accessory dwelling provided the detached accessory dwelling unit can meet the following additional requirements:
    - 1) Maximum square footage of \_\_\_\_\_ (only so much can be used for the ADU)
    - 2) Any entrance to an ADU located on an alley must be at least 5 feet from the property line.

- 3) On interior lots ... the nearest wall of the accessory building shall not be located closer than five feet to a side or rear lot line UNLESS the nearest wall of the accessory building is at least 15 feet from the nearest wall of the neighboring structure. If an ADU is located in an accessory building that is within the setback, no window or HVAC unit shall be located on the wall closest to the property line.
- 4) On corner lots ...
- 5) Some allowance for ADU reduced rear and/or side yard setback when adjacent to an alley
- 6) Bigger setbacks to road than to alley (see Arlington County B.3.)
- 7) Maximum height (similar to what is in maximum height Detached accessory buildings containing accessory dwellings shall exceed neither 25 feet nor 1½ stories in height)
- 8) Bay window additional allowance to encroach into setback (or just reference Article 4 that allows this additional encroachment for bay windows?)

#### F. Administration.

- (1) Illegal accessory apartments in detached structures are required to seek approval for the detached accessory apartment though the conditional use permit and the accessory apartment must meet all requirements thereof.

  Legal nonconforming ADUs may continue to exist as is.
- (2) Reiterate the accessory cannot be constructed without the primary dwelling existing on the parcel.

#### §420-20.1. Definitions

#### **ACCESSORY APARTMENT**

A residential use having the external appearance of a single family residence in which there is located a second dwelling unit that comprises no more than 25% of the gross floor area of the building nor more than a total of 750 square feet.

#### **ACCESSORY DWELLING UNIT - ATTACHED**

A complete independent dwelling unit, with kitchen and bath, designed, arranged, used, or intended for occupancy by not more than <a href="Persons">? persons</a> for living purposes, and meeting the standards of §11.1.1. Accessory dwelling units are clearly incidental and subordinate to, and remain under the same ownership as the main dwelling on the lot. When contained within the principal structure of a single-family dwelling, such accessory dwelling unit constitutes an "attached accessory dwelling unit," for which a separate entrance and street address are required.

#### **ACCESSORY DWELLING UNIT - DETACHED**

A complete independent dwelling unit, with kitchen and bath, designed, arranged, used, or intended for occupancy by not more than <a href="Persons">? persons</a> for living purposes, and meeting the standards of §11.1.1. Accessory dwelling units are clearly incidental and subordinate to, and remain under the same

ownership as the main dwelling on the lot. When contained in a separate, fully detached structure from the principal structure of a single-family dwelling, such accessory dwelling unit constitutes a "detached accessory dwelling unit," for which a separate street address is required.

# Article III. Use Matrix.

Zoning District	FP, Floodplain Overlay	P-OS, Parks and Open Space District	R-1, Residential General	R-2, Suburban Residential	R-M, Residential Multifamily	R-LC, Residential- Light Commercial	C-1, Central Business District	C-2, General Commercial District
B = By-right uses, $C = Conditional$ uses								
Use Types								
Residential								
Accessory <del>apartment</del> Dwelling Unit - Attached			В	В	В	В	В	
Accessory Dwelling Unit - Detached			<u>C</u>	<u>C</u>	<u>C</u>	<u>C</u>		
Dish Antennas (not meeting use and design Standards in §420-11.1.1)			С	С	С	С		
Family Health Care Structure, temporary			В	В	В	В		
Fraternity/Sorority House, University Administered			С		С			
Group home			В	В	В	В		
Guest room			В	В	В	В		
Live-work dwelling					В	В	В	В
Multi-family dwelling					В	С	$B^{1}, C^{2}$	
Single-family dwelling, attached			В	В	В	В		
Single-family dwelling, detached			В	В	В	В		
Townhouse					В	В	В	С
Two-family dwelling			В		В	В		