Public Hearing: YES ☒ NO ☐ **Department:** Planning & Sustainability

SUBJECT:
COMMISSION DISTRICT(S): 2 & 6

Application of Stein Investment Co., LLC c/o Dennis J Webb to request a rezoning of properties from C-1 (Local Commercial) and C-2 (General Commercial) to HR-3 (High Density Residential-3) district to allow for the construction of a mixed use development consisting of approximately 10,000 square feet of accessory restaurant and retail space and 264 multi-family apartments, at 2814 Clairmont Road.

PETITION NO: D2. Z-20-1244108 2020-0835

PROPOSED USE: Mixed Residential and Commercial Development

LOCATION: 2794, 2778, 2804, 2806, 2810, 2814, 3080, & 3070 Clairmont Road and 3068 Briarcliff Road, Atlanta, GA.
PARCEL NOS.: 18-196-04-029, -033, -034, -035, -037, -038, -039, -040, -041

INFO. CONTACT: Melora Furman

PHONE NUMBER: 404-371-2155 x4

PURPOSE:
Application of Stein Investment Co., LLC c/o Dennis J Webb to request a rezoning of properties from C-1 (Local Commercial) and C-2 (General Commercial) to HR-3 (High Density Residential-3) district to allow for the construction of a mixed use development consisting of approximately 10,000 square feet of accessory restaurant and retail space and 264 multi-family apartments. The property is located on the northwest corner of Clairmont Road and Briarcliff Road, approximately 120 feet south of Interstate 85 at 2794, 2778, 2804, 2806, 2810, 2814, 3080 and 3070 Clairmont Road, and 3068 Briarcliff Road in Atlanta, Georgia. The property has approximately 670 feet of frontage along Clairmont Road and approximately 196 feet of frontage on Briarcliff Road and contains 3.85 acres.

RECOMMENDATIONS:
COMMUNITY COUNCIL: (10/27/2020) Approval. **(8/11/2020)** Deferral.

PLANNING COMMISSION: (11/5/2020) Pending. **(9/1/2020)** Full Cycle Deferral.

PLANNING STAFF: Deferral.

STAFF ANALYSIS: The Briarcliff Road-Clairmont Road Small Area Study is currently underway. The study is in its preliminary stages. Therefore, the Department of Planning and Sustainability recommends "deferral" to allow time for the study to be completed and evaluated in relation to the development proposal for the subject property. For the September zoning cycle, staff recommended "Denial" for the following reasons: The proposal is not consistent with the policy and intent of Regional Centers as stated in the 2035 Comprehensive Plan. The Plan describes Regional Activity Centers as "a concentration of regional serving activities" that have "a high intensity of regional commercial, office, employment areas and higher-education facilities" characterized by "high vehicular traffic and high transit use, including stops, shelters and transfer points". While the proposed restaurant might draw customers from the entire region, the store and services that would comprise the retail component are unlikely to do so, and the development doesn't provide an employment center that would employ a regional work force. The site is too small to accommodate a transit stop, let alone the mixture of transit and other uses that are visualized by the Comprehensive Plan. Moreover, rezoning to the HR-3 zoning classification could establish a precedent that would lead to further rezonings for higher-density or more intense developments with which the street, utility, and service infrastructure would not be able to keep pace. In addition, the 69 units/acre density of the residential portion of the development (earned through a density bonus), and the six-

story height of the proposed residential buildings is inconsistent with that of nearby apartment and condominium developments. Therefore, it is the recommendation of Staff that this application be "Deferred, Full Cycle".

PLANNING COMMISSION VOTE: (11/5/2020) Pending. **(9/1/2020) Full Cycle Deferral 7-0-0.** J. West moved, J. Johnson seconded for a "Full Cycle Deferral". The motion passed unanimously 7-0-0. V. Moore was no longer present.

COMMUNITY COUNCIL VOTE/RECOMMENDATION: **(10/27/2020) Approval 3-0-0. (8/11/2020) (Deferral 4-0-0)** The Community Council Board recommended deferral to allow more time for community input.

DeKalb County Department of Planning & Sustainability

330 Ponce De Leon Avenue, Suite 500
Decatur, GA 30030
(404) 371-2155 / plandev@dekalbcountyga.gov

Planning Commission Hearing Date: November 5, 2020
Board of Commissioners Hearing Date: November 19, 2020

Deferred Full Cycle from September 2020

STAFF ANALYSIS

Case No.:	Z-20-1244108 **Agenda #:** D. 2
Location/Address:	2794, 2778, 2804, 2806, 2810, 2814, 3080 & 3070 Clairmont Road and 3068 Briarcliff Road, Atlanta, Georgia. **Commission District:** 2 **Super District:** 6
Parcel ID(s):	18-196-04-029, -033, -034, -035, -037, -038, 040, & -041
Request:	Rezoning of property from the C-1 (Local Commercial) and the C-2 (General Commercial) districts to the HR-3 (High Density Residential-3) district to allow for the construction of a mixed use development consisting of approximately 14,000 square feet of ~~accessory~~ restaurant and retail space and 264 multi-family apartments.
Property Owner(s):	JMAR Investors, LP and 3068 Briarcliff, LLC
Applicant/Agent:	Stein Investment Co., LLC c/o Dennis J. Webb, Jr.
Acreage:	3.85 acres
Existing Land Use:	Various uses related to auto repair
Surrounding Properties:	To the west: (zoned MR-2) The Rivera Terrace Condominiums; to the northwest and north: (zoned HGR-2) an open space portion of the Camden St. Clair Apartments, and the Interstate-85 right-of-way; to the northeast: (zoned MR-2) the Audubon Briarcliff Apartments; to the east: (zoned C-1) a Popeye's restaurant and the Williamsburg Retail Plaza; to the southeast: (zoned C-1) a Chevron gas station; to the south: (zoned C-1) a Quick Trip gas station/convenience store and the Briarcliff shopping center (formerly containing a Piggly Wiggly grocery store); to the southwest: the Kings Ridge Senior Residence.
Comprehensive Plan:	NC (Neighborhood Center) **Consistent** [ ] **Inconsistent** [X] See LP-20-1244107

Proposed Density: 69 units/acre	**Existing Density:** Not applicable
Proposed Units/Square Ft. Non-Res.: 264/approx. 14,000 s.f.	**Existing Units/Square Feet:** N.A./Info. not provided.
Proposed Lot Coverage: 84%	**Existing Lot Coverage:** Information not provided

Companion Application: LP-20-1244107: An application to amend the Future Land Use Map from NC (Neighborhood Center) to RC (Regional Center) to allow rezoning of the property to HR-3 classification.

Zoning History: In May 2018, rezoning and SLUP applications (Z-18-22035, SLUP-18-22037, SLUP-18-22038, and SLUP-18-22039) were filed to allow development of a RaceTrac convenience store with alcohol sales and fuel pumps and a Wendy's drive-through restaurant. The Board of Commissioners granted the applicant's request to withdraw the applications in June 2018.

Based on DeKalb County records, it appears that the C-1 and C-2 zoning of the property has not changed since adoption of the first zoning ordinance and map in 1956.

PLAN CONTEXT

Briarcliff Road-Clairmont Road Small Area Study

The proposal under consideration prompted a small area study to plan growth management and development strategies for the Neighborhood Center in which the subject property is located; (*the activity center is re-named in the study as the Briarcliff-Clairmont Activity Center*). The study locates the subject property in the Core Mixed-Use subarea, which is comprised of the subject property as well as the Williamsburg Plaza shopping center located on the west side of Clairmont Road. Recommendations for this subarea are:

- Building heights: base maximum height of 8 stories or 100 feet; SLUPs for 10 stories along I-85
- Residential densities: 70 – 90 units per acre with bonuses for additional densities
- Use common driveways and access points to minimum curb cuts and conflict points along Clairmont and Briarcliff Roads
- A new roadway connection between Briarcliff Road and the I-85 frontage road (described as "aspirational and will require further study and engineering, as well as the involvement of multiple landowners, DeKalb County, and GDOT)
- Buildings to be located along public roads/back of sidewalk, with parking located behind or beside buildings and with screening from the public ROW
- Pedestrian amenities as per DeKalb County guidelines (zoning ordinance).
- New residential developments to provide a range of housing types and sizes to reflect the needs of the community and area workforce

The Briarcliff Road-Clairmont Road Small Area Study is currently in draft form. Planning staff has raised questions about the conclusions of the study and the process used to formulate the recommendations. The citizen participation process used to formulate the study relied on the input of a core group of stakeholders instead of the broad spectrum of community residents and landowners who are typically involved in such a study. In addition, the questions raised about the conclusions in the study act to caution against using the it as the basis for a recommendation on the development proposal under consideration in this staff report. While the study recommendations support the land use mix, density, and height of the proposed development, these questions also raise a larger issue, since the proposed development could serve as a precedent for redevelopment of the Williamsburg Plaza property. For example, traffic impact is a concern. If the core area were to be built out at the densities and intensities recommended, how would levels of service on Clairmont Road and Briarcliff Road be affected? A roadway connection between Briarcliff Road and I-85 would help alleviate the traffic that would be generated by the type and intensity of development recommended in the study, but such development could outpace the timeframe for study, possible land acquisition, and construction for the roadway.

PROJECT ANALYSIS

The subject property is a 3.85-acre tract located at the northwest corner of Clairmont Road, a major arterial, and Briarcliff Road, a minor arterial. The tract is comprised of nine lots; five of the lots are occupied with an auto-related business, some which occupy more than one lot: an auto repair business, an oil-change business, and an auto salvage/storage business. Three of the lots, including a land-locked lot, are developed with vacant commercial buildings and asphalt parking areas that appear to have been used for auto-related businesses.–The remaining lot at the north end of the parcel is undeveloped open space.

The property is located approximately 135 feet south of the on and offramps to Interstate 85. The cities of Brookhaven and Chamblee are located on the other side of the Interstate, to the northwest and the northeast, respectively.

The intersection of Clairmont Road and Briarcliff Road forms the center of a commercial/multifamily residential node that is designated as a Neighborhood Center activity area. Commercial uses in the Neighborhood Center include the Williamsburg and Williamsburg Village shopping centers, the Briarcliff shopping center, several chain restaurants, two service stations, and a wide range of single-use commercial buildings that contain retail and service businesses. Five multifamily and single-family attached developments are located within the Neighborhood Center, listed by starting with the development that is closest to the Clairmont Road-Briarcliff Road intersection and ending with the development that is furthest to the intersection: Rivera Condominiums (approximately 19 units/acre); Camden St. Clair Apartments (26 units/acre); Audubon Briarcliff apartments (8 units per acre); Kings Bridge senior housing development (49 units/acre), .the Villas on Briarcliff (12 units/acre).

The proposal is for a mixed-use development comprised of:

- a 5,020 square foot, two-story restaurant at the corner of Clairmont and Briarcliff Roads;
- a 77,854 square foot, six-story residential building with ground floor retail; and
- a 204,865 square foot, five and six story residential building with internal parking deck and walk-out units onto Clairmont Road.

The site plan shows bike lanes along both Clairmont and Briarcliff Roads. In addition, streetscaping is provided along both frontages, consisting of landscape strips back of curb, planted with street trees, and sidewalks six to eight feet wide.

Access and Transportation Considerations:

The proposal would consolidate fifteen separate curb cuts into one access point: a right in/right-out access point on Clairmont Road. A second access point would be provided through the use of an easement from a driveway on the adjoining property to the west, the Rivera Condominiums property at 3042 Briarcliff Road. Vehicular circulation through the site is dependent on the ability of the developer to obtain this easement.

The bicycle lanes and sidewalks shown on the site plan are consistent with improvements for Clairmont Road called for in the *2014 DeKalb County Comprehensive Transportation Plan (CTP),* as well as the sidewalk requirements of the zoning ordinance and the Chapter 14 requirement for bike lanes.

GDOT has programmed improvements for Clairmont Road between the I-285 intersection with Clairmont Road to Lavista Road, involving installation of a raised concrete median with no breaks except at intersections; this will improve traffic flow by limiting left turns. Clairmont Road will be widened and resurfaced. The site plan incorporates these improvements.

A traffic study, prepared by Kimley Horn, for the applicant states that certain site improvements are needed to serve the background road network traffic plus the traffic from the proposed development, including turn lanes on Briarcliff Road. This would require revisions to the site plan, which currently does not depict the turn lanes, and may necessitate building setback variances. The traffic study states that existing peak hour levels of service at the Briarcliff Road-Clairmont Road intersection are D-E (level of service F is considered to be a failure of the road system to provide adequate traffic circulation). The study states that future levels of service would be D-E, which represent an improvement over current levels, partly as a result of GDOT's plan to construct an additional southbound lane on Clairmont.

Compliance with District Standards:

HR-3 STANDARD	REQUIRED/ALLOWED	PROVIDED/PROPOSED	COMPLIANCE
MAX. D.U.s/ACRE (BASE, W/BONUSES)	Base: 60 units/acre W/Bonuses: 120 units/acre	69 units/acre	Yes (see bonus calculations)
DENSITY BONUSES	Provision of structured parking allows 20% density bonus. (60/acre base + 12/acre bonus units = 72/acre allowed)	Structured parking provided for residential component.	Yes
MIN. OPEN SPACE	15%	21%	
MIN. OPEN SPACE /ENHANCED OPEN SPACE (Applicable if project is > 5 ac. or ≥ 36 d.u.s)	No minimum	N.A.	N.A.
MIN. LOT AREA	None required.	N.A.	N.A.
MIN. LOT WIDTH	100 feet	196 feet (Briarcliff Rd.)	Yes
MINIMUM UNIT SIZE	650 square feet	Information not provided.	Non-compliance will necessitate a variance.
MAX. LOT COVERAGE	85%	84%	Yes
MAX. BLDG. HEIGHT	No limit.	2 – 6 stories	Yes
MIN. TRANSITIONAL BUFFER	(along west property line): 30 feet & 6-foot high fence	30 feet	Yes
PERIMETER LANDSCAPE STRIP	Required along rear property line.	Not provided.	No; a variance will be necessary.

HR-3 STANDARD		REQUIRED/ALLOWED	PROVIDED/PROPOSED	COMPLIANCE
BUILDING SETBACKS	FRONT (For entire bldg. site)	(Briarcliff Road): Minimum 10 feet Maximum 20 feet	Before road widening– 12 ft. After road widening – 0 ft.	Yes After road widening, a variance will be needed.
	INTERIOR SIDE	0 ft.; w/ 3-ft. separation between buildings	Superceded by transitional buffer	N.A.
	SIDE - CORNER LOT	(Clairmont Road): Minimum 10 feet Maximum 20 feet	Before road widening – 18.5 ft.; After road widening -- 2 ft.;	Yes After road widening, a variance will be needed.
	REAR W/O ALLEY	MF & MU:20 ft. CM/OF/MU: 15 ft.	20 feet	Yes
PARKING		MF- Res.: Min. – 1.5 spaces/unit = 396 spaces; Max. – *3* spaces/unit = 792 spaces Commercial (including restaurant): Min. – 1 space/150 s.f. = 66 spaces; Max. – 1 space/75 s.f. = 133 spaces	370 spaces 57 spaces	Does not meet minimum; a variance will be necessary. Does not meet minimum; a variance will be necessary.
BIKE LANES		4 feet on Briarcliff and Clairmont	4 feet on Briarcliff and Clairmont	Yes
MIN. STREETSCAPE DIMENSIONS - PROPERTY FRONTAGES ON ARTERIALS IN ACTIVITY CENTERS		10-ft. landscape strip back of curb, 6-ft. sidewalk, street trees planted min. 40 ft. on center	(Relative to existing ROW): Briarcliff Rd.: 4-ft. landscape strip; 6-ft. sidewalk; trees approx. 35’ on center Clairmont Rd.: 6-ft. and 2-ft landscape strips; 8-ft. sidewalk; trees approx. 35’ on center	No; variances will be needed for non-compliance of landscape strips

LAND USE AND ZONING ANALYSIS

Section 27-832 of the Zoning Ordinance, “Standards and factors governing review of proposed amendments to the official zoning map” states that the following standards and factors shall govern the review of all proposed amendments to the zoning maps.

A. Whether the zoning proposal is in conformity with the policy and intent of the comprehensive plan:

The zoning proposal is a companion to a land use amendment that would re-designate the property as a Regional Center in order to establish consistency with the proposed residential density of 69 units per acre. However, the proposal is not consistent with the policy and intent visualized for Regional Centers in the 2035 Comprehensive Plan. The Plan describes Regional Activity Centers as "a concentration of regional serving activities" that have "a high intensity of regional commercial, office, employment areas and higher-education facilities" characterized by "high vehicular traffic and high transit use, including stops, shelters and transfer points". While the proposed restaurant might draw customers from the entire region, the store and services that would comprise the retail component are unlikely to do so, and the development doesn't provide an employment center that would employ a regional work force. The site is too small to accommodate a transit stop, let alone the mixture of transit and other uses that are visualized by the *Comprehensive Plan*. Over time, the area designated in The Briarcliff Road-Clairmont Road Small Area Study might develop into a regional center, and then it would be appropriate to designate the subject property, along with other properties in the Activity Center, as a Regional Center.

The proposed development is consistent with individual Regional Center policies contained in the *2035 Comprehensive Plan*, such as: "Create pedestrian scale communities that focus on the relationship between the street, buildings, streetscaping, and people." (No. 4); Create compact mixed-use districts and reduce automobile dependency and travel to obtain basic services." (No. 5) However, it should be noted that Regional Center Policies 4 and 5 are the same as Neighborhood Center Policies 4 and 5. And, while the proposal itself would not organize circulation patterns throughout the activity center, or street interconnections as called for in Regional Center Policy No. 18, it would provide a bike lane as a traffic calming measure and does provide sidewalks as required by the zoning regulations. The development would not provide a greater transitional buffer next to the lower-density Rivera Condominium property than what is required by the zoning regulations, as called for in Regional Center policy No. 6.

B. Whether the zoning proposal will permit a use that is suitable in view of the use and development of adjacent and nearby properties:

The 69 units/acre density of the residential portion of the development (earned through a density bonus), and the six-story height of the proposed residential buildings are inconsistent with that of nearby apartment and condominium developments. Densities of existing residential developments within the Neighborhood Center are an average of 22 units per acres, consistent with Neighborhood Center densities. Redevelopment of the site with contemporary design and a pedestrian-oriented street edge is suitable at this location but the magnitude and scale of the proposed development is inappropriate without a planning rationale in the form of an approved plan ~~for~~ that has been generated through community input.

C. Whether the property to be affected by the zoning proposal has a reasonable economic use as currently zoned:

It appears that the property has reasonable economic use as currently zoned. The May 2018 proposal to redevelop the site for auto-oriented commercial uses is an indicator of market interest in developing the site as currently zoned with the C-1 and C-2 classifications; the proposal was withdrawn largely as a result of community opposition. Other uses allowed in the C-1 and C-2 districts, such as retail or a restaurant, might have drawn community support. At the same time, economic use for C-1 and C-2 does not negate the desirability of rezoning to another classification for a suitable purpose; a mixed-use development at an appropriate scale and density is a good use of the site.

D. Whether the zoning proposal will adversely affect the existing use or usability of adjacent or nearby property:

The proposed development is well buffered and separated by streets from adjoining and nearby properties and is not likely to adversely affect their use and usability.

E. Whether there are other existing or changing conditions affecting the use and development of the property, which give supporting grounds for either approval or disapproval of the zoning proposal:

The Briarcliff Road-Clairmont Road Small Area Study is currently underway. ~~staff has reconsidered this recommendation.~~ The study is still in draft form. ~~and~~ Planning staff has raised questions about the conclusions of the study and the process used to formulate the recommendations.

F. Whether the zoning proposal will adversely affect historic buildings, sites, districts, or archaeological resources:

No historic buildings, sites, districts, or archaeological resources are located on the property or in the surrounding area.

G. **Whether the zoning proposal will result in a use which will or could cause an excessive or burdensome use of existing streets, transportation facilities, utilities, or schools:**

There has been no indication from reviewing agencies and departments that the proposed development would be excessively burdensome on the existing infrastructure. The traffic study prepared by Kimley Horn calls for site improvements, including turn lanes on Briarcliff Road. This would require revisions to the site plan, which currently does not depict the turn lanes, and may necessitate building setback variances and/or adjustments to the site plan during building permitting. If the Planning Commission recommends approval of the proposal, Staff suggests that any recommendation for a conditional site plan state that it is to be subject to standards implemented by the Transportation Division. At the time this report is being written, the Board of Education has not yet commented on the impact of the development on the school system.

H. Whether the zoning proposal adversely impacts the environment or surrounding natural resources:

The buildings and paved portions of the proposed development would be located on property that is already paved, and redevelopment of the property would offer an opportunity to improve the quality and reduce the amount of water runoff from the site.

STAFF RECOMMENDATION: DEFERRAL

For the September zoning cycle, staff recommended "Denial" for the following reasons:

The proposal is not consistent with the policy and intent of Regional Centers as stated in the 2035 Comprehensive Plan. The Plan describes Regional Activity Centers as "a concentration of regional serving activities" that have "a high intensity of regional commercial, office, employment areas and higher-education facilities" characterized by "high vehicular traffic and high transit use, including stops, shelters and transfer points". While the proposed restaurant might draw customers from the entire region, the store and services that would comprise the retail component are unlikely to do so, and the development doesn't provide an employment center that would employ a regional work force. The site is too small to accommodate a transit stop, let alone the mixture of transit and other uses that are visualized by the Comprehensive Plan. Moreover, rezoning to the HR-3 zoning classification

could establish a precedent that would lead to further rezonings for higher-density or more intense developments with which the street, utility, and service infrastructure would not be able to keep pace. In addition, the 69 units/acre density of the residential portion of the development (earned through a density bonus), and the six-story height of the proposed residential buildings is inconsistent with that of nearby apartment and condominium developments.

The Briarcliff Road-Clairmont Road Small Area Study is currently underway. The study is in its preliminary stages. Therefore, the Department of Planning and Sustainability recommends "deferral" to allow time for the study to be completed and evaluated in relation to the development proposal for the subject property.

Attachments:

1. Department and Division Comments
2. Board of Health Comments
3. Application
4. Site Plan
5. Zoning Map
6. Land Use Plan Map
7. Aerial Photograph
8. Site Photographs

NEXT STEPS

Following an approval of this zoning action, one or several of the following may be required:

- ☑ **Land Disturbance Permit** *(Required for of new building construction on non-residential properties, or land disturbance/improvement such as storm water detention, paving, digging, or landscaping.)*

- ☑ **Building Permit** *(New construction or renovation of a building (interior or exterior) may require full plan submittal or other documentation. Zoning, site development, watershed and health department standards will be checked for compliance.)*

- ☑ **Certificate of Occupancy** *(Required prior to occupation of a commercial or residential space and for use of property for a business. Floor plans may be required for certain types of occupants.)*

- **Plat Approval** *(Required if any parcel is being subdivided, re-parceled, or combined. Issued "administratively"; no public hearing required.)*

- **Sketch Plat Approval** *(Required for the subdivision of property into three lots or more. Requires a public hearing by the Planning Commission.)*

- **Overlay Review** *(Required review of development and building plans for all new construction or exterior modification of building(s) located within a designated overlay district.)*

- **Historic Preservation** (*A* Certificate of Appropriateness *is required for any proposed changes to building exteriors or improvements to land when located within the Druid Hills or the Soapstone Geological Historic Districts. Historic Preservation Committee public hearing may be required.)*

- ☑ **Variance** *(Required to seek relief from any development standards of the Zoning Ordinance. A public hearing and action by the Board of Appeals are required for most variances.)*

- **Minor Modification** *(Required if there are any proposed minor changes to zoning conditions that were approved by the Board of Commissioners. The review is administrative if the changes are determined to be minor as described by Zoning Code.)*

- **Major Modification** *(Required submittal of a complete zoning application for a public hearing if there are any proposed major changes to zoning conditions that were approved by the Board of Commissioner for a prior rezoning.)*

- **Business License** *(Required for any business or non-residential enterprise operating in Unincorporated DeKalb County, including in-home occupations).*

- **Alcohol License** *(Required permit to sell alcohol for consumption on-site or packaged for off-site consumption. Signed and sealed distance survey is required. Background checks will be performed.)*

Each of the approvals and permits listed above requires submittal of application and supporting documents, and payment of fees. Please consult with the appropriate department/division.

PUBLIC WORKS DEPARTMENT, TRANSPORTATION DIVISION
COMMENTS

N.2 & N.3A: Clairmont Road is SR 155. GDOT review and approval required prior to permitting. Clairmont Road is classified as a major arterial. Right of way dedication of 50 foot from centerline or such that all public infrastructure is within the right of way, whichever greater, required. Six-foot wide sidewalks, bike lanes (or ten-foot wide multiuse path in lieu of bike lanes), 10-foot landscape area, streetlights required. Briarcliff Road is classified as a minor arterial. Right of way dedication of 40 foot from centerline or such that all public infrastructure is within the right of way, whichever greater, required. Six-foot wide sidewalks, bike lanes (or ten-foot wide multiuse path in lieu of bike lanes), 10-foot landscape area, streetlights required. Verify intersection and turning sight distances meet AASHO requirements at permitting. Access points are to remain as far away from the intersection of Clairmont Rd and Briarcliff Rd as possible. Coordinate and donate right of way necessary for GDOT PIs 0015680 and 0015956. Provide pedestrian connections between site destinations and sidewalks on public right of way. Verify intersection and turning sight distances meet AASHO requirements at permitting.

DEKALB COUNTY GOVERNMENT
PLANNING DEPARTMENT
DISTRIBUTION FORM

NOTE: PLEASE RETURN ALL COMMENTS VIA EMAIL OR FAX TO EXPEDITE THE PROCESS TO MADOLYN SPANN MSPANN@DEKALBCOUNTYGA.GOV OR JOHN REID JREID@DEKALBCOUNTYGA.GOV

COMMENTS FORM:

PUBLIC WORKS TRAFFIC ENGINEERING

Case No.: LP-20-1244107

Parcel I.D. #: 18-196-04-029, 033, 034 035, 037, 038, 039, 040 041, 2814 Clairmont Rd Atlanta Ga. 30329

Address: 2778, 2804, 2806, 2910, 2814, 3080 Clairmont Rd

3068 Briarcliff Rd Atlanta Ga.

Adjacent Roadway (s):

_____ _____

_____ _____

(classification) (classification)

Capacity (TPD)_____	Capacity (TPD)_____
Latest Count (TPD) _____	Latest Count (TPD) _____
Hourly Capacity (VPH)_____	Hourly Capacity (VPH) _____
Peak Hour. Volume (VPH)_____	Peak Hour. Volume (VPH)_____
Existing number of traffic lanes _____	Existing number of traffic lanes _____
Existing right of way width _____	Existing right of way width _____
Proposed number of traffic lanes _____	Proposed number of traffic lanes _____
Proposed right of way width _____	Proposed right of way width _____

Please provide additional information relating to the following statement.

According to studies conducted by the Institute of Traffic Engineers (ITE) 6/7TH Edition (whichever is applicable), churches generate an average of fifteen (15) vehicle trip end (VTE) per 1, 000 square feet of floor area, with an eight (8%) percent peak hour factor. Based on the above formula, the _____square foot place of worship building would generate _____ vehicle trip ends, with approximately ___ peak hour vehicle trip ends.

Single Family residence, on the other hand, would generate ten (10) VTE's per day per dwelling unit, with a ten (10%) percent peak hour factor. Based on the above referenced formula, the _____ (Single Family Residential) District designation which allows a maximum of ____units per acres, and the given fact that the project site is approximately ____ acres in land area, _____ daily vehicle trip end, and ___ peak hour vehicle trip end would be generated with residential development of the parcel.

COMMENTS:

Plans And field Reviewed. No problem That would interfere with Traffic Flow.

Signature: Jerry White

DEKALB COUNTY GOVERNMENT
PLANNING DEPARTMENT
DISTRIBUTION FORM

NOTE: PLEASE RETURN ALL COMMENTS VIA EMAIL OR FAX TO EXPEDITE THE PROCESS TO MICHELLE M ALEXANDER mmalexander@dekalbcountyga.gov OR JOHN REID JREID@DEKALBCOUNTYGA.GOV

COMMENTS FORM:
PUBLIC WORKS WATER AND SEWER

Case No.: Z-20-1244108

Parcel I.D. #: 18-196-04-029, 18-196-04-033, 18-196-04-034, 18-196-04-035, 18-196-04-037, 18-196-04-038, 18-196-04-039, 18-196-04-040, 18-196-04-041

Address: 2794, 2778, 2804, 2806, 2810, 2814, 3080, and 3070 Clairmont Road and 3068 Briarcliff Road

Atlanta, Georgia

WATER:

Size of existing water main: 8" DI & 30" DI Water Main (adequate/inadequate)

Distance from property to nearest main: Adjacent to Property

Size of line required, if inadequate: N/A

SEWER:

Outfall Servicing Project: North Fork Peachtree Creek Basin

Is sewer adjacent to property: Yes (X) No ( ) **If no, distance to nearest line:**____

Water Treatment Facility: R M Clayton WTF ( ) adequate ( ) inadequate

Sewage Capacity; * (MGPD) **Current Flow:** 127 (MGPD)

COMMENTS:

* Please note that the sewer capacity has not been reviewed or approved for this project. A Sewer Capacity Request (SCR) must be completed and submitted for review. This can be a lengthy process and should be addressed early in the process.

Signature:

08/13/2020

To: Current Planning
From: Ryan Cira, Environmental Health Manager
Cc: Alan Gaines, Technical Services Manager
Re: Rezone Application Review

General Comments:

DeKalb County Health Regulations prohibit use of on-site sewage disposal systems for:

- multiple dwellings
- food service establishments
- hotels and motels
- commercial laundries
- funeral homes
- schools
- nursing care facilities
- personal care homes with more than six (6) clients
- child or adult day care facilities with more than six (6) clients
- residential facilities containing food service establishments

If proposal will use on-site sewage disposal, please contact the Land Use Section (404) 508-7900.

Any proposal, which will alter wastewater flow to an on-site sewage disposal system, must be reviewed by this office prior to construction.

This office must approve any proposed food service operation or swimming pool prior to starting construction.

Public health recommends the inclusion of sidewalks to continue a preexisting sidewalk network or begin a new sidewalk network. Sidewalks can provide safe and convenient pedestrian access to a community-oriented facility and access to adjacent facilities and neighborhoods.

For a public transportation route, there shall be a 5ft. sidewalk with a buffer between the sidewalk and the road. There shall be enough space next to sidewalk for bus shelter's concrete pad installation. Recommendation: Provide trash can with liner at each bus stop with bench and monitor for proper removal of waste.

Since DeKalb County is classified as a Zone 1 radon county, this office recommends the use of radon resistant construction.

New Cases:

N.1 SLUP-20-12244105 2020-0833 / 18-111-03-018
2933 North Druid Hills Road, Atlanta, GA 30329

- **Please review general comments.**
- **Septic system installed on location surrounding 2933 North Druid Hills. The location with septic system installed was 2814 North Druid Hills Road on 08/02/1963.**

N.2 LP-20-1244107 / 2020-0834 /18-196-04,18-196-04-033, 18-196-04-034, 18-196-04-035, 18-196-04-037, 18-196-04-038, 18-196-04-039, 18-196-04-040, 18-196-04-041
2814 Clairemont Road, Atlanta, GA 30329

- **Please review general comments.**
- **Septic installed on property 2920 Clairmont Road on 04/07/1974 within the vicinity of property 2814 Clairemont.**
-

N.3 Z-20-1244108 / 2020-0835 / 18-196004-029, 18-196-04-033, 18-196-04-034, 18-196-04-035, 18-196-04-037, 18-196-04-038, 18-196-04-039, 18-196-04-040, 18-196-04-041
2814 Clairmont Road, Atlanta, GA 30329

- **Please review general comments.**
-

N.4 SLUP-20-1244110 / 2020-0836 / 18-283-02-012, 18-283-02-007, 18-283-02-008
3214 Chamblee-Tucker Road, Chamblee, GA 30341

- **Please review general comments.**
- **Septic system installed on property 04/13/1961**

N.5 LP-20-1244114 / 2020-0837 / 16-252-02-002
8400 Pleasant Hill Way, Lithonia, GA 30058

- **Please review general comments.**
- **Septic system installed on property near vicinity at 8406 Pleasant Hill Way**
-

N.6 Z-20-1244113 / 2020-0838 / 16-254-02-002
8400 Pleasant Hill Way, Lithonia, GA 30058

- **Please review general comments.**
-

N.7 Z-20-1244119 / 2020-0839 / 18-050-12-005
1377 Scott Blvd., Decatur, GA 30030

- **Please review general comments.**

BRIARCLIFF WOODS
CIVIC ASSOCIATION

August 11, 2020

Subject: Proposal by Stein Investment Co., LP 20 1244107 2814, parts 1 and 2,
Z 20 1244108 2814, part 3 (Agenda items N2 and N3)
2814 Clairmont Rd., Atlanta, GA 30329

Dear Community Council Members:

On behalf of the Briarcliff Woods Civic Association, we wish to express our support for the proposed changes in land use from Neighborhood Center (NC) to Regional Center (RC), and the proposed rezoning from C-1 (Local Commercial) and C-2 (General Commercial) to HR-3 (High Density Residential-3).

We believe that the proposed redevelopment of this property is appropriate for the parcels, and that it will add value to the neighborhood, without unduly burdening traffic and infrastructure.

Signed on behalf of the Briarcliff Woods Civic Association Board of Directors.
Sincerely,
Gunter Sharp

Chair, Zoning and Public Planning Committee

DeKalb County Department of Planning & Sustainability

Michael L. Thurmond
Chief Executive Officer

Andrew A. Baker, AICP
Director

APPLICATION TO AMEND OFFICIAL ZONING MAP OF DEKALB COUNTY, GEORGIA

Z/CZ No._____

Filing Fee: _____

Date Received: _____ Application No.: _____

Applicant: Stein Investment Co, LLC (Virginia), c/o Dennis J. Webb, Jr. E-Mail: dwebb@sgrlaw.com

Applicant Mailing Address:
1230 Peachtree Street, N.E., Suite 3100, Atlanta, Georgia 30309

Applicant Phone: (404) 815-3620 Fax: (404) 685-6920

****

Owner(s): See Exhibit "A" E-Mail: _____
(If more than one owner, attach as Exhibit "A")

Owner's Mailing Address:
See Exhibit "A"

Owner(s) Phone: _____ Fax: _____

Address/Location of Subject Property: See Exhibit "A"

District(s): 18th Land Lot(s): 196 Block: 04 Parcel(s): See Exhibit "A"

Acreage: +/- 3.845 Commission District(s): 2nd and 6th

Present Zoning Category: C-1/C-2 Proposed Zoning Category: HR-3

Present Land Use Category: NC

****

PLEASE READ THE FOLLOWING BEFORE SIGNING

This form must be completed in its entirety before the Planning Department accepts it. It must include the attachments and filing fees identified on the attachments. An application, which lacks any of the required attachments, shall be determined as incomplete and shall not be accepted.

Disclosure of Campaign Contributions

In accordance with the Conflict of Interest in Zoning Act, O.C.G.A., Chapter 36-67A, the following questions must be answered:
Have you the applicant made $250 or more in campaign contributions to a local government official within two years immediately preceding the filling of this application? X Yes ____ No

If the answer is yes, you must file a disclosure report with the governing authority of DeKalb County showing;

1. The name and official position of the local government official to whom the campaign contribution was made.
2. The dollar amount and description of each campaign contribution made during the two years immediately preceding the filing of this application and the date of each such contribution.

The disclosure must be filed within 10 days after the application is first filed and must be submitted to the C.E.O. and the Board of Commissioners, DeKalb County, 1300 Commerce Drive, Decatur, Ga. 30030.

Sheila Johnson
NOTARY

SHEILA JOHNSON NOTARY PUBLIC FULTON COUNTY, GA My Comm. Exp. Dec. 29, 2023

_____
SIGNATURE OF APPLICANT / DATE

12/29/2023
EXPIRATION DATE / SEAL

Check One: Owner _____ Agent X

EXHIBIT “A”

Address/Location of Subject Property

JMAR Investors, LP

2814 Clairmont Road/18 196 04 029
2810 Clairmont Road/18 196 04 040
2806 Clairmont Road/18 196 04 039
2804 Clairmont Road/18 196 04 037
2794 Clairmont Road/18 196 04 035
2778 Clairmont Road/18 196 04 034
3080 Clairmont Road/18 196 04 033
3070 Clairmont Road/18 196 04 038

3068 Briarcliff, LLC

3068 Briarcliff Road/18 196 04 041

Promenade, Suite 3100
1230 Peachtree Street, N.E.
Atlanta, Georgia 30309-3592
Main: 404 815-3500
www.sgrlaw.com

SMITH, GAMBRELL & RUSSELL, LLP
Attorneys at Law

Dennis J. Webb, Jr.
Direct Tel: 404-815-3620
Direct Fax: 404-685-6920
dwebb@sgrlaw.com

June 16, 2020

Re: Community Meeting

Dear Neighbor:

You are receiving this notification because you are a property owner within 500' of the following properties:

Property Address:	Parcel No.
2814 Clairmont Road	18 196 04 029
2810 Clairmont Road	18 196 04 040
2806 Clairmont Road	18 196 04 039
2804 Clairmont Road	18 196 04 037
2794 Clairmont Road	18 196 04 035
2778 Clairmont Road	18 196 04 034
3080 Clairmont Road	18 196 04 033
3070 Clairmont Road	18 196 04 038
3068 Briarcliff Road	18 196 04 041

Stein Investment Co, LLC, will be submitting an Application to the Amend Official Zoning Map of DeKalb County from C-1 (Local Commercial) and C-2 (General Commercial) to HR-3 (High Density Rsidential-3) or MU-5 (Mixed-Use Very High Density) and an Application to Amend Comprehensive Land Use Plan to change the current land use designation from NC (Neighborhood Center) to RC (Regional Center), all to allow for a mixed use development with +/-14,000 square feet of commercial/restaurant space and 264 multi-family units.

You are invited to participate in a virtual Community Meeting on July 1, 2020 at 7:00 PM.

To join the meeting via internet, use the following instructions

Meeting number: 129 702 6789
Password: maYuJ6tX4w8

Wednesday, July 1, 2020
7:00 pm | (UTC-04:00) Eastern Time (US & Canada) | 2 hrs

From an internet browser navigate to sgrlaw.webex.com
Enter the meeting number in the "join a meeting" field.
Press Enter
Enter the meeting password
Click Ok
Click Join Meeting

Note there may be some software to install/run depending on the user's computer configuration.

To join by phone, use the following

+14043971516 US Toll
8773093457 US Toll Free
Access code: 129 702 6789

Note the system will ask for an "attendee ID" to be entered or for # to be pressed to bypass - there is no attendee ID, so press #.

Should you have any questions regarding this application, please feel free to contact me.

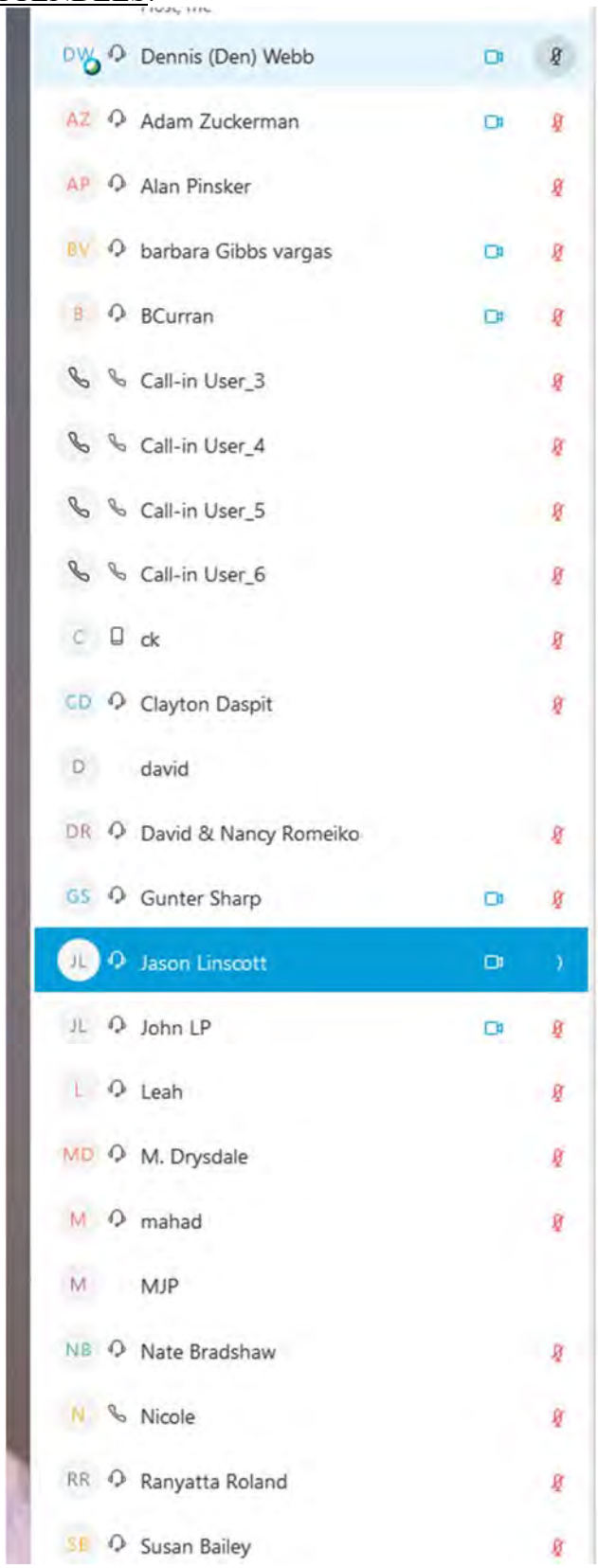
Sincerely,

Dennis J. Webb, Jr.
Attorney at Law

DJW/vmo

BRIARCLIFF WEST – PRE-APPLICATION COMMUNITY MEETING
JULY 1, 2020 (7:00PM) VIA WEBEX CONFERENCE

LIST OF MEETING ATTENDEES:



ALTA/NSPS LAND TITLE SURVEY FOR:

STEIN INVESTMENT COMPANY, LLC, a Virginia limited liability company, FIRST AMERICAN TITLE INSURANCE COMPANY

LAND LOT 196 – 18TH DISTRICT

DEKALB COUNTY, GEORGIA

DATE OF FIELD WORK 11-20-2017 (TRAVERSE), 8-9-2019 (FIELD OBSERVATION)
DATE OF PLAT PREPARATION 8-8-2019
EQUIPMENT USED: TRIMBLE S6

30 0 30 60
SCALE: 1"=30'

THIS SURVEY WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 180-7 OF THE RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN THE GEORGIA PLAT ACE O.C.G.A. 15-6-167. AUTHORITY O.C.G.A. SECS. 15-6-67, 43-15-4, 43-15-6, 43-15-19 AND 43-15-22.

UTILITY NOTE: PATRICK & ASSOCIATES, INC. NOR THE LICENSED PROFESSIONAL ASSUME ANY LIABILITY FOR THE EXISTENCE, LOCATION, MATERIAL OR SIZE OF ANY UNDERGROUND UTILITY SHOWN ON THIS SURVEY. IT IS THE RESPONSIBILITY OF THE OWNER/CONTRACTOR TO VERIFY THE EXISTENCE, EXACT LOCATION, MATERIAL AND SIZE OF ANY UNDERGROUND UTILITY ASSOCIATED WITH THE PROJECT.

Survey Notes

The field data upon which this plat is based has a closure precision of one foot in 137,721 feet, an angular error of 02 seconds per angle point, and was adjusted using compass rule.

This plat has been calculated for closure and found to be accurate within one foot in 240,744 feet.

There are no parking space on this property.

The property has direct access to Briarcliff Road and Clairmont Road which is an accepted public street or highway.

There is no evidence of earth moving work.

There is no evidence of currently ongoing building construction and building additions.

There is no evidence of any changes in street right of way.

There is no evidence of cemeteries or burial grounds.

There is no evidence of the site being used as a solid waste dump, storage of hazardous waste, a sump, or sanitary landfill.

There are no party walls with adjoining property owners.

No wetlands report was provided for this survey.

Patrick & Associates, Inc. has a Professional Liability Insurance policy in the amounty of $1,000,000.

FLOOD NOTE:
By graphic plotting only, this property is not in zone "X" Flood Insurance Rate Map No.13089c0054J and 13089c0058J which bears an effective date May 16, 2013. No field surveying was performed to determine this zone.

Utility Notes

The existence and location of the surface and sub-surface utilities shown are based upon available records and surface visible evidence as of FEBRUARY 1, 2018. The extent and liability of this information is limited to Standards for a Quality Level C Utility Investigation as defined by the American Society of Civil Engineers (ASCE_ Publication 38-02).

Before digging in this area, call utility locators at 1-800-282-7411 for field locations (request for ground markings) of underground utility lines.

Field Measured Legal Description

TRACT ONE AND TRACT TWO (COMBINED)

ALL THAT TRACT or parcel of land lying and being in land lot 196 of the 18th district of Dekalb County, Georgia and being more particularly as follows:

Commencing at the north end of mitered right-of-way of Clairmont Road and Briarcliff Road this beingthe true point of beginning.

THENCE South 34 degrees 51 minutes 46 seconds West for a distance of 31.02 feet to a point;
THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 100.01 feet to a point;
THENCE North 18 degrees 10 minutes 25 seconds West for a distance of 5.29 feet to a point;
THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 83.93 feet to a MAG N/F;
THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 51.03 feet to a MAG N/F;
THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 70.82 feet to an IPS 1\2"rb;
THENCE North 09 degrees 12 minutes 08 seconds West for a distance of 351.60 feet to an IPF1/2"RB;
THENCE North 09 degrees 12 minutes 08 seconds West for a distance of 169.97 feet to a NF IN 2.5"OTP;
THENCE North 08 degrees 47 minutes 55 seconds West for a distance of 86.89 feet to an IPF 5/8"RB;
THENCE North 86 degrees 08 minutes 29 seconds East for a distance of 190.23 feet to an IPS 1\2"rb;
THENCE South 28 degrees 51 minutes 41 seconds East for a distance of 53.52 feet to an IPS 1\2"rb;
THENCE South 28 degrees 13 minutes 38 seconds East for a distance of 102.61 feet to a R/W MON;
THENCE South 19 degrees 37 minutes 21 seconds East for a distance of 70.04 feet to a point;
THENCE along a curve to the right having a radius of 2814.44 feet and an arc length of 62.39 feet, being subtended by a chord of South 17 degrees 27 minutes 23 seconds East for a distance of 62.38 feet to a point;
THENCE North 73 degrees 10 minutes 43 seconds East for a distance of 5.00 feet to a point;
THENCE along a curve to the right having a radius of 2819.44 feet and an arc length of 32.86 feet, being subtended by a chord of South 16 degrees 29 minutes 15 seconds East for a distance of 32.86 feet to a point;
THENCE South 18 degrees 22 minutes 53 seconds East for a distance of 321.30 feet to a point at the true point of beginning.

Said property contains 3.845 acres.

Field Measured Legal Description

TRACT ONE

ALL THAT TRACT or parcel of land lying and being in land lot 196 of the 18th district of Dekalb County, Georgia and being more particularly as follows:

Commencing at the north end of mitered right-of-way of Clairmont Road and Briarcliff Road this being the true point of beginning.

THENCE South 34 degrees 51 minutes 46 seconds West for a distance of 31.02 feet to a point;
THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 100.01 feet to a point;
THENCE North 18 degrees 10 minutes 25 seconds West for a distance of 5.29 feet to a point;
THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 83.93 feet to a MAG N/F;
THENCE North 13 degrees 37 minutes 52 seconds West for a distance of 148.95 feet to a MAG N/F;
THENCE South 75 degrees 54 minutes 26 seconds West for a distance of 25.96 feet to a MAG-N/F;
THENCE North 83 degrees 17 minutes 17 seconds West for a distance of 25.00 feet to a point;
THENCE South 13 degrees 37 minutes 52 seconds East for a distance of 144.65 feet to a MAG N/F;
THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 70.82 feet to an IPS 1 \2"RB;
THENCE North 09 degrees 12 minutes 08 seconds West for a distance of 351.60 feet to an IPF1/2"RB;
THENCE North 09 degrees 12 minutes 08 seconds West for a distance of 169.97 feet to a IPF 2.5"OTP;
THENCE North 08 degrees 47 minutes 55 seconds West for a distance of 86.89 feet to an IPF 5/8"RB;
THENCE North 86 degrees 08 minutes 29 seconds East for a distance of 190.23 feet to an IPS 1 \2"RB;
THENCE South 28 degrees 51 minutes 41 seconds East for a distance of 53.52 feet to an IPS 1 \2"RB;
THENCE South 28 degrees 13 minutes 38 seconds East for a distance of 102.61 feet to a R/W MON;
THENCE South 19 degrees 37 minutes 21 seconds East for a distance of 70.04 feet to a point;
THENCE along a curve to the right having a radius of 2814.44 feet and an arc length of 62.39 feet, being subtended by a chord of South 17 degrees 27 minutes 23 seconds East for a distance of 62.38 feet to a point;
THENCE North 73 degrees 10 minutes 43 seconds East for a distance of 5.00 feet to a point;
THENCE along a curve to the right having a radius of 2819.44 feet and an arc length of 32.86 feet, being subtended by a chord of South 16 degrees 29 minutes 15 seconds East for a distance of 32.86 feet to a point;
THENCE South 18 degrees 22 minutes 53 seconds East for a distance of 321.30 feet to a point at the true point of beginning.

Said property contains 3.681 acres.

TRACT TWO

ALL THAT TRACT or parcel of land lying and being in land lot 196 of the 18th district Dekalb County, Georgia and being more particularly described as follows:

Commencing at the north end of mitered right-of-way of Briarcliff Road and Clairmont Road, thence South 34 degrees 51 minutes 46 seconds West 31.02 feet, thence North 89 degrees 07 minutes 58 seconds West 100.01 feet, thence North 18 degrees 10 minutes 25 seconds West 5.29 feet, thence North 89 degrees 07 minutes 58 seconds West 83.93 feet to an Nail Fnd. at the true point of beginning.

THENCE North 89 degrees 07 minutes 58 seconds West for a distance of 51.03 feet to a MAG N/F;
THENCE North 13 degrees 37 minutes 52 seconds West for a distance of 144.65 feet to a point;
THENCE South 83 degrees 17 minutes 17 seconds East for a distance of 25.00 feet to a MAG-N/F;
THENCE North 75 degrees 54 minutes 26 seconds East for a distance of 25.96 feet to a MAG N/F;
THENCE South 13 degrees 37 minutes 52 seconds East for a distance of 148.95 feet to a Nail Fnd. at the true point of beginning.

Said property contains 0.164 acres.

Items Corresponding to Schedule B

Notes Corresponding to Special Exceptions Schedule B - Section II
STEIN INVESTMENT COMPANY, LLC
FIRST AMERICAN TITLE INSURANCE COMPANY
Commitment No: NCS-938604-ATL
Effective Date: July 12, 2019 @ 8:00 a.m.

12. Easement from J.T. Hill to Georgia Power Company, dated January 28, 1947, filed for record June 27, 1947, and recorded in Deed Book 689, Page 236, DeKalb County, Georgia records. Unable to determine location to plot on survey.

13. Right-of-Way Easement from Mrs. Julia Jones Hill to Georgia Power Company, dated May 7, 1958, filed for record May 19, 1958, and recorded in Deed Book 1338, Page 312, aforesaid records. Unable to determine location to plot on survey. Adress list on deed (2804 Clairmont Road) is part of subject property. The affect of this easement would be limited to the parcel listed on the deed.

14. Easements as conveyed in Right-of-Way Deed from Julia Jones Hill and Pierce Oil Company to State Highway Department of Georgia, dated October 18, 1961, filed for record October 20, 1961 and recorded in Deed Book 1617, Page 199, aforesaid records. Does not affect subject property.

15. Right-of-Way Easement from Mrs. Julia Jones Hill to Georgia Power Company, dated June 14, 1963, filed for record July 9, 1963, and recorded in Deed Book 1785, Page 312, aforesaid records. Deed describes a blanket easement, could affect property. The affect of this easement would be limited to the parcel listed on the deed.

16. Right-of-Way Easement from Mrs. Julia J. Hill to Georgia Power Company, dated November 16, 1965, filed for record January 27, 1966, and recorded in Deed Book 2069, Page 470, aforesaid records. Deed describes a blanket easement, could affect property. The affect of this easement would be limited to the parcel listed on the deed.

17. Right-of-Way Easement from Mrs. Julia Jones Hill to Georgia Power Company, dated September 20, 1972, filed for record October 9, 1972, and recorded in Deed Book 2894, Page 338, aforesaid records. Deed describes a blanket easement, could affect property. The affect of this easement would be limited to the parcel listed on the deed.

18. Easements as conveyed in Right of Way Deed from Julia Jones Hill to Department of Transportation, dated August 5, 1977, filed for record August 31, 1977 and recorded in Deed Book 3696, Page 933, aforesaid records. As shown on survey.

19. Easement from Tune-Up-Clinic Incorporated to Georgia Power Company, dated December 1, 1982, filed for record February 16, 1983, and recorded in Deed Book 4717, Page 518, aforesaid records. Deed describes a blanket easement, could affect property. The affect of this easement would be limited to the parce listed on the deed.

20. Matters as shown on that certain plat recorded in Plat Book 10, Page 63, aforesaid records. Plat is of parent tract as shown on survey.

21. Matters as shown on that certain plat recorded in Plat Book 30, Page 100, aforesaid records. Plat lies within subject property, no adverse affect on property.

22. Matters as shown on that certain plat recorded in Plat Book 40, Page 115, aforesaid records. Plat lies within subject property, no adverse affect on property.

23. Terms and provisions of that certain unrecorded lease as evidenced by Memorandum of Lease from Julia Jones Hill to BP Oil Company, an Ohio corporation, dated September 13, 1990, filed for record September 21, 1990 and recorded in Deed Book 6799, Page 232, aforesaid records. As shown on survey.

24. Terms and provisions of that certain unrecorded lease as evidenced by Lease Modification from Julia Jones Hill to Waffle House, Inc., dated May 21, 1993, filed for record June 6, 1993 and recorded in Deed Book 7739, Page 269, aforesaid records. As shown on survey.

Statement of Encroachments

Fence meanders along west property line.

Zoning Information

No zoning report provided for survey.

Area

Total LAND area of subject property is 3.845 Acres
TRACT ONE is 3.681 Acres.
TRACT TWO is 0.164 Acres.

ALTA/NSPS Land Title Survey

Surveyor's Certification:

To: STEIN INVESTMENT COMPANY,LLC. a Virginia limited liability company
FIRST AMERICAN TITLE INSURANCE COMPANY.

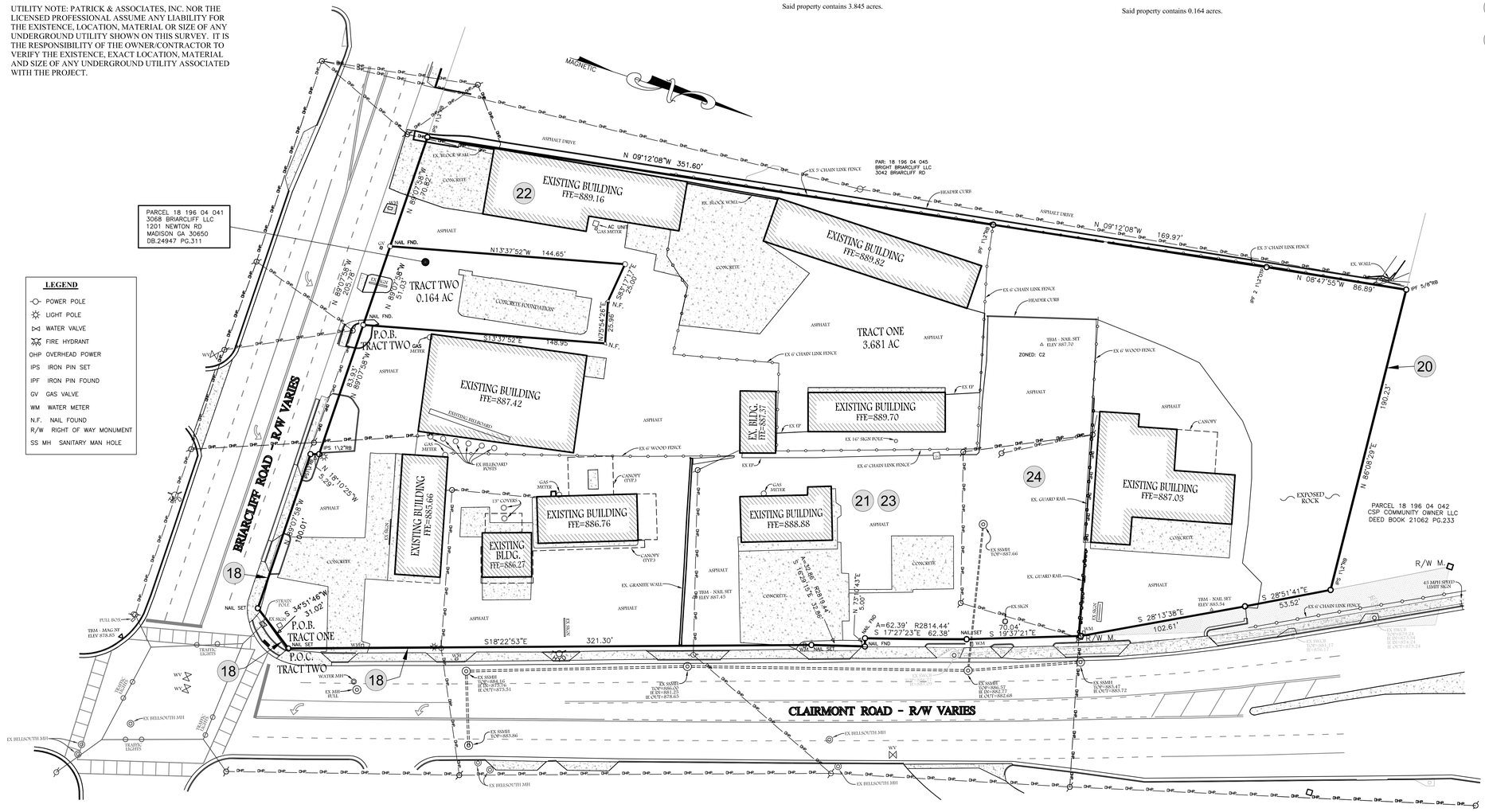
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes Items 1, 3, 4, 8, 11, 13, 14, 16, 17, 18 and 19 of Table A thereof.

The field work was completed on: Survey Traverse November 20, 2017
Field Observation August 9, 2019.

Date of Plat or Map: August 8, 2019
Equipment used: Trimble S6

James S. Hull, Jr
Registration/License No. 2856

GEORGIA REGISTERED NO. 2856 LAND SURVEYOR JAMES S. HULL, JR



PATRICK & ASSOCIATES, INC.
SURVEYING & ENGINEERING
928 BLACKLAWN ROAD
CONYERS, GEORGIA 30094
PH: 770-483-9745

MASTER 29131
JOB NO. 19-607
DWG. NO. 32903

STREETSCAPE SUMMARY:

BRIARCLIFF ROAD NORTHEAST
(MINOR ARTERIAL - DEKALB CLASSIFICATION)
EDGE OF EXISTING TRAVEL LANE
4' BIKE LANE
30" CURB AND GUTTER
4' LANDSCAPE STRIP
6' SIDEWALK (MINIMUM WIDTH)
6' LANDSCAPE STRIP (INTERMITTENT)

CLAIRMONT ROAD
STATE ROUTE 155 (MAJOR ARTERIAL - DEKALB CLASSIFICATION)
EDGE OF PROPOSED TRAVEL LANE (ROAD WIDENING)
4' BIKE LANE
30" CURB AND GUTTER
6' LANDSCAPE STRIP
8' SIDEWALK
2' LANDSCAPE STRIP

DEVELOPMENT SUMMARY:

LAND USE

APARTMENTS	
ALLOWED (BASE+20% BONUS)	276 (72 UNITS/ACRE)
PROPOSED	264 (68.7 UNITS/ACRE)
COMMERCIAL	
PROPOSED	10,000 SF
BUILDING SUMMARY	
BUILDING A	204,865 SF
BUILDING B	77,854 SF
BUILDING C	5,020 SF

PARKING SUMMARY

APARTMENTS	
REQ'D	396 SPACES (1.5 PER UNIT)
PROVIDED	370 (1.4 PER UNIT)
COMMERCIAL	
REQ'D (RESTAURANT)	67 SPACES (1/150 SF)
PROVIDED	57 SPACES (1/167 SF)

LOADING SUMMARY

REQUIRED	4 SPACES (INCL. 1 x XL SPACE)
PROVIDED	2 SPACES (12' x 35' x 14' CLEAR)

BUILDING HEIGHT

BUILDING	MAX (BASE / BONUS)	PROPOSED
A	8 STORIES / NO LIMIT	6 STORIES
B	10 STORIES / NO LIMIT	6 STORIES
C	--	2 STORIES

FLOOD PLAIN
THIS PROJECT DOES NOT LIE WITHIN A 100 YEAR FLOOD HAZARD ZONE AS DEFINED BY THE F.E.M.A. "FLOOD HAZARD BOUNDARY MAP" COMMUNITY PANEL NUMBER 13089C0054K, DATED 8/15/2019.

ZONING SUMMARY:

SITE AREA
EXISTING 3.845 ACRES

ZONING
ZONING CLASSIFICATION
EXISTING C1 & C2
PROPOSED HR-3

OVERLAY DISTRICT
N/A

FUTURE LAND USE (COMPREHENSIVE PLAN)
EXISTING NC (NEIGHBORHOOD CENTER)
PROPOSED RC (REGIONAL CENTER)

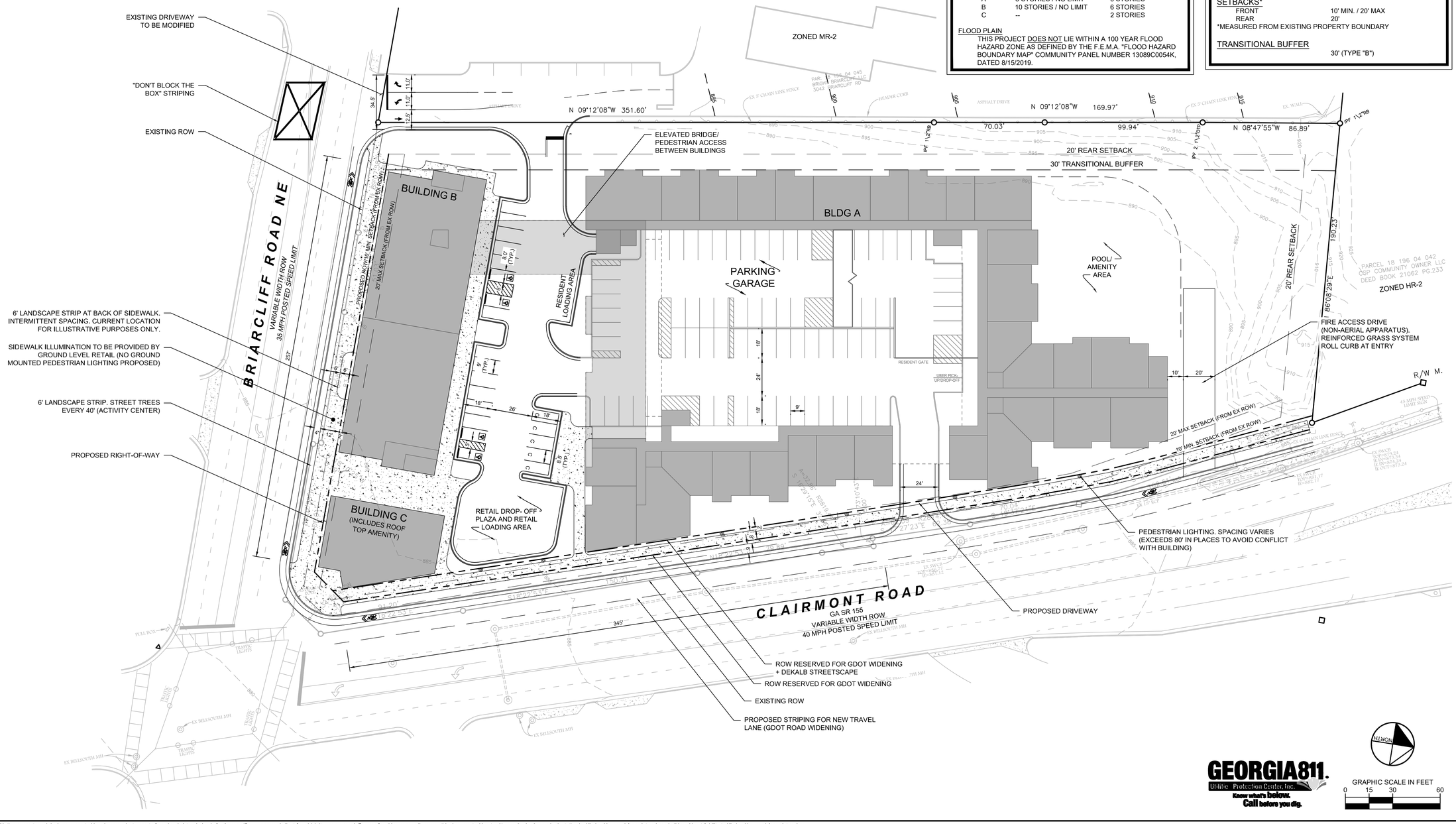
OPEN SPACE
REQ'D 15%
PROVIDED 21%

OUTDOOR RECREATION AREA (5.7.7(G))
REQ'D 5%
PROVIDED 5%

LOT COVERAGE (PERCENT IMPERVIOUS)
MAX 85%
PROPOSED 84%

SETBACKS*
FRONT 10' MIN. / 20' MAX
REAR 20'
*MEASURED FROM EXISTING PROPERTY BOUNDARY

TRANSITIONAL BUFFER
30' (TYPE "B")



GEORGIA811. Utility Protection Center, Inc. Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 15 30 60

PREPARED BY
Kimley»Horn

3930 EAST JONES BRIDGE ROAD, SUITE 350
PEACHTREE CORNERS, GEORGIA 30092
PHONE: 770.496.1704
WWW.KIMLEY-HORN.COM

PREPARED FOR
STEIN INVESTMENT GROUP
5607 GLENRIDGE DRIVE, SUITE 200
ATLANTA, GA 30342
PHONE: 770.580.2480

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

PROJECT
BRIARCLIFF WEST
3080 BRIARCLIFF ROAD
ATLANTA, GA 30329
DEKALB COUNTY

GEORGIA REGISTERED NO. 033065 PROFESSIONAL ENGINEER BRADLEY L. HOWARD
7/1/20

GSWCC NO. (LEVEL II)	22363
DRAWN BY	RWB
DESIGNED BY	RWB
REVIEWED BY	BLH
DATE	7/1/20
PROJECT NO.	017481003

TITLE
REZONING SITE PLAN

SHEET NUMBER
C0.10

Drawing name: C:\Users\robert.barcliff\KHPTC Development Services - Documents\017481003_3086 Briarcliff Road\CAD\PlanSheets\C2-00 - SITE PLAN.dwg C2-00 SITE PLAN Jul 01, 2020 5:35pm by: Robert Barcliff

LEGEND:

- TREE TO REMAIN
- TREE TO REMOVE
- TRANSITIONAL BUFFER TYPE B
- LOD — LIMIT OF DISTURBANCE

CALCULATIONS:

SITE DENSITY:

TOTAL SITE AREA: 3.845 ACRES
30 UNITS PER ACRE REQUIRED
3.845 x 30 = 115.35 UNITS REQUIRED

EXISTING UNITS: 83.8
115.35 - 83.8 = 31.55 REPLACEMENT UNITS REQUIRED
REPLACEMENT UNITS PROVIDED: 31.8
REQUIREMENT SATISFIED

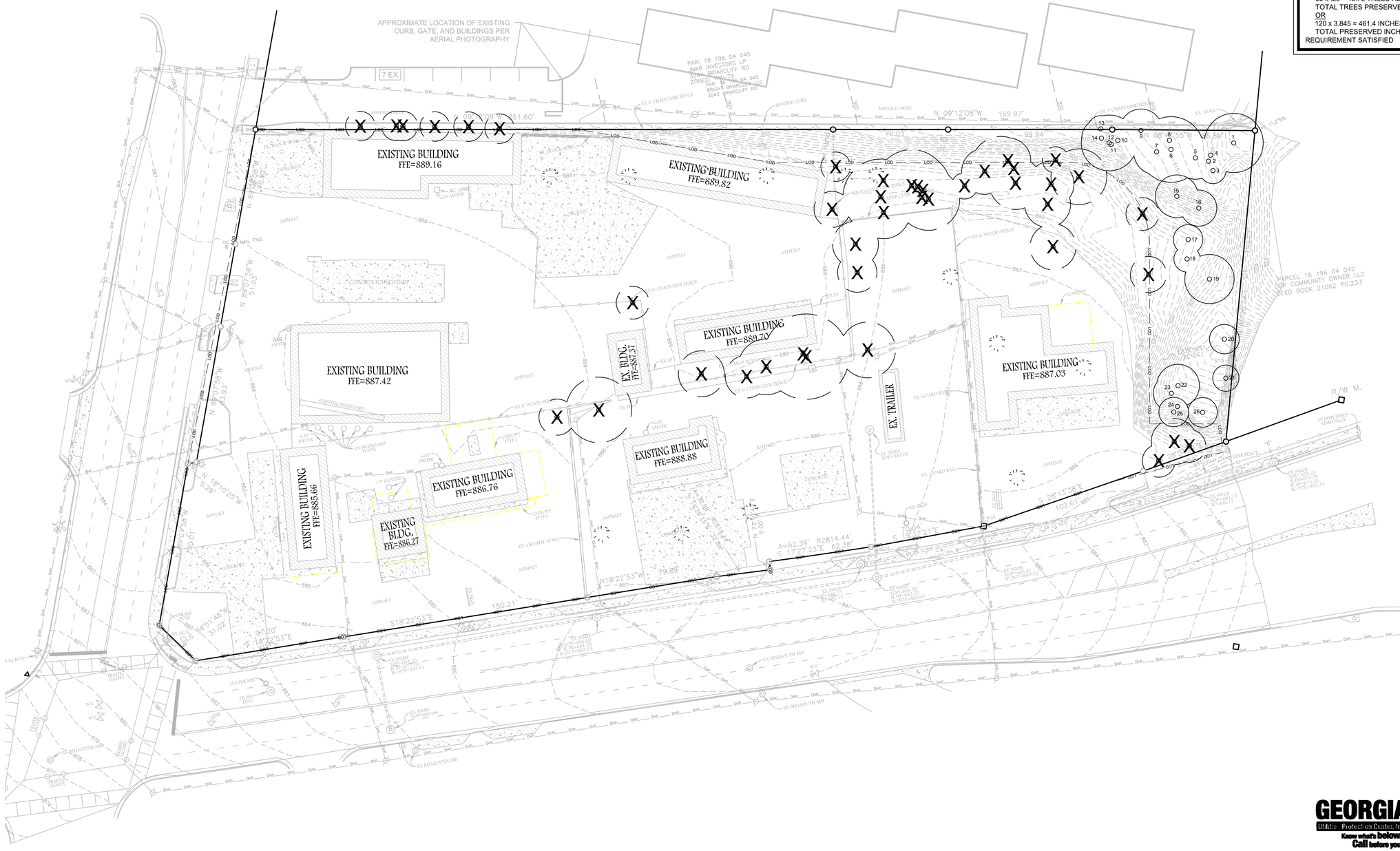
PARKING LOT:

1 TREE REQUIRED PER 8 PARKING SPACES
TOTAL PARKING SPACES IN SURFACE LOT: 21
21 / 8 = 3 TREES REQUIRED
TOTAL TREES PROVIDED IN PARKING LOT: 3
REQUIREMENT SATISFIED

SIGNIFICANT TREE PRESERVATION:

120" PER ACRE OR 25% (WHICHEVER IS LESS) OF EXISTING SIGNIFICANT TREES TO BE PRESERVED
TOTAL SITE AREA: 3.845 ACRES
TOTAL SIGNIFICANT TREES: 63 TREES
63 x .25 = 15.75 TREES REQUIRED TO BE PRESERVED
TOTAL TREES PRESERVED: 26 TREES
OR
120 x 3.845 = 461.4 INCHES REQUIRED TO BE PRESERVED
TOTAL PRESERVED INCHES: 292 INCHES
REQUIREMENT SATISFIED

TREE #	EXISTING TREES TO REMAIN (IN INCHES)	UNITS
1	18	4.8
2	10	3.2
3	8	2.4
4	8	2.4
5	13	4
6	20	5.4
7	14	4
8	8	2.4
9	13	4
10	12	3.2
11	8	2.4
12	17	4.8
13	8	2.4
14	12	3.2
15	13	4
16	11	3.2
17	9	2.4
18	8	2.4
19	15	4
20	9	2.4
21	8	2.4
22	13	4
23	11	3.2
24	8	2.4
25	9	2.4
26	9	2.4
SUBTOTALS:	**292**	**83.8**



PREPARED BY

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No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

PROJECT

BRIARCLIFF WEST

3080 BRIARCLIFF ROAD
ATLANTA, GA 30329
DEKALB COUNTY

PRELIMINARY
NOT FOR CONSTRUCTION

TML

GSWCC NO. (LEVEL II)	22363
DRAWN BY	KCW
DESIGNED BY	KCW
REVIEWED BY	TML
DATE	7/1/2020
PROJECT NO.	017481003

TITLE

TREE PROTECTION PLAN

SHEET NUMBER

L1-00

GEORGIA811.
Utilities Protection Center, Inc.
Know what's below.
Call before you dig.

GRAPHIC SCALE IN FEET
0 15 30 60

Drawing name: C:\Users\Kate.Winn\KHPTC Development Services - Documents\017481003_3086 Briarcliff Road\CAD\PlanSheets\L1-00 LANDSCAPE PLAN.dwg L1-00 TREE PROTECTION PLAN Jun 30, 2020 2:00pm by: Kate.Winn

CONCEPT PLANT SCHEDULE

	QTY	SIZE	UNITS	TOTAL UNITS
COLUMNAR DECIDUOUS TREE	13	2" CAL	.4	5.2
EVERGREEN TREE	31	2" CAL	.2	6.2
OVERSTORY TREE	36	3" CAL	.5	18.0
UNDERSTORY TREE	6	2" CAL	.4	2.4

CALCULATIONS:

SITE DENSITY:

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GEORGIA811. Utilities Protection Center, Inc. Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 15 30 60

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No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

PROJECT
BRIARCLIFF WEST
3080 BRIARCLIFF ROAD
ATLANTA, GA 30329
DEKALB COUNTY

PRELIMINARY NOT FOR CONSTRUCTION
7/1/20

GSWCC NO. (LEVEL II)	22363
DRAWN BY	KCW
DESIGNED BY	KCW
REVIEWED BY	TML
DATE	7/1/2020
PROJECT NO.	017481003

TITLE
TREE REPLACEMENT PLAN

SHEET NUMBER
L2-00

Drawing name: C:\Users\Kate.Winn\KHPTC Development Services - Documents\017481003_3086 Briarcliff Road\CAD\PlanSheets\L1-00 LANDSCAPE PLAN.dwg L2-00 TREE REPLACEMENT PLAN Jun 30, 2020, 2:01pm by:Kate.Winn

PART 1 – GENERAL

1.1 DESCRIPTION

A. EXTENT OF PLANTING IS SHOWN ON THE DRAWINGS AND IN THE SCHEDULES.

B. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED BY OR REFERENCED FROM THE DRAWINGS AND SPECIFICATIONS TO COMPLETE THE WORK OF THIS SECTION.

C. CONTRACTOR SHALL VERIFY PLANT COUNT FROM PLAN, AND SHALL PROVIDE AND INSTALL ALL PLANT MATERIAL ON PLAN.

D. GRADES TO WITHIN ONE INCH OF FINAL GRADE THROUGHOUT SITE SHALL BE PROVIDED BY OTHERS AND IS NOT IN LANDSCAPE CONTRACT.

1.2 QUALITY ASSURANCE

A. ALL PLANTS SHALL CONFORM TO OR SURPASS MINIMUM QUALITY STANDARDS AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMAN, CURRENT EDITION OF AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY AMERICAN ASSOCIATION OF NURSERYMAN, INC. AND IN ADDITION SHALL CONFORM TO SIZES AND DESCRIPTIONS IN THE PLANT LIST.

B. SUBSTITUTION FROM THE SPECIFIED PLANT LIST WILL BE ACCEPTED ONLY WHEN SATISFACTORY EVIDENCE IN WRITING IS SUBMITTED TO THE LANDSCAPE ARCHITECT, SHOWING THAT THE SPECIFIED PLANT MATERIAL IS NOT AVAILABLE. REQUESTS FOR APPROVAL OF SUBSTITUTE PLANT MATERIAL SHALL INCLUDE COMMON AND BOTANICAL NAMES AND THE SIZE OF SUBSTITUTE MATERIAL. ONLY THOSE SUBSTITUTIONS OF AT LEAST EQUIVALENT SIZE AND HAVING ESSENTIAL CHARACTERISTICS SIMILAR TO THE ORIGINALLY SPECIFIED MATERIAL WILL BE APPROVED. ACCEPTANCE OR REJECTION OF SUBSTITUTE PLANT MATERIAL WILL BE ISSUED IN WRITING BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.

C. THE SELECTION OF ALL MATERIALS AND THE EXECUTION OF ALL OPERATIONS REQUIRED UNDER THE DRAWINGS AND SPECIFICATIONS IS SUBJECT TO THE APPROVAL OF THE OWNER AND LANDSCAPE ARCHITECT. THEY HAVE THE RIGHT TO REJECT ANY AND ALL MATERIALS, AND ANY WORK AND ALL WORK WHICH, IN THEIR OPINION, DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AT ANY STAGE OF THE OPERATIONS. REMOVE REJECTED WORK OR MATERIALS FROM THE PROJECT SITE AND REPLACE PROMPTLY AT NO ADDITIONAL COST TO THE OWNER.

D. INSTALL ALL PLANT MATERIALS IN A NEAT AND PROFESSIONAL MANNER.

E. MAKE MINOR ADJUSTMENTS TO LAYOUT AS MAY BE REQUIRED AND REQUESTED AT NO ADDITIONAL COST TO THE OWNER.

1.3 DELIVERY, STORAGE AND HANDLING

A. DELIVER MATERIALS IN SUCH A MANNER AS TO NOT DAMAGE OR DECREASE THE HEALTH AND VIGOR OF THE PLANT MATERIALS.

B. STORE MATERIALS AWAY FROM DETRIMENTAL ELEMENTS. COORDINATE WITH GENERAL CONTRACTOR TO SECURE A SAFE STAGING AREA.

C. HANDLE, LOAD, UNLOAD, AND TRANSPORT MATERIALS CAREFULLY TO AVOID DAMAGE.

D. MAINTAIN AND PROTECT PLANT MATERIALS AS NECESSARY TO INSURE HEALTH AND VIGOR.

1.4 GUARANTEE

A. GUARANTEE PLANT MATERIALS AND LAWN AREAS FOR ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION. CONTRACTOR SHALL REPLACE PLANTS AND LAWNS, THAT FAIL TO GROW PROPERLY WITH PLANTS AS ORIGINALLY SPECIFIED AT THE EARLIEST PRACTICAL DATE FOLLOWING PLANT FAILURE, WITHOUT ADDITIONAL CHARGES TO THE OWNER. REPLACEMENT MATERIALS WILL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF REPLACEMENT. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR REPLACING PLANTS WHICH ARE DAMAGED BY ABUSE OR IMPROPER MAINTENANCE BY OWNER AS REPORTED BY THE CONTRACTOR AS OUTLINED IN SECTION 1.5 BELOW, OR BY ACTS OF GOD OCCURRING AFTER ACCEPTANCE.

1.5 CONTRACTOR'S PERIODIC INSPECTION

A. DURING THE GUARANTEE PERIOD, CONTRACTOR SHALL MAKE PERIODIC INSPECTIONS OF THE PROJECT TO SATISFY HIMSELF THAT MAINTENANCE BY THE OWNER IS ADEQUATE. ANY METHODS OR PRODUCTS WHICH HE DEEMS NOT NORMAL OR DETRIMENTAL TO GOOD PLANT GROWTH SHALL BE REPORTED TO THE OWNER IN WRITING. FAILURE TO INSPECT AND REPORT SHALL BE INTERPRETED AS APPROVAL AND THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY AND ALL NECESSARY REPLACEMENTS.

PART 2 – MATERIALS

2.1 TOP SOIL

A. TOPSOIL SHALL BE FERTILE, FRIABLE, SANDY LOAM, AND SHALL BE A NATURAL SURFACE SOIL OBTAINED FROM WELL DRAINED AREAS. TOPSOIL SHALL BE CHARACTERISTIC OF REPRESENTATIVE SOILS IN THE PROJECT VICINITY THAT PRODUCE HEAVY GROWTHS OF CROPS, GRASS, OR OTHER VEGETATION. TOPSOIL SHALL BE FREE OF SUBSOIL, BRUSH, ORGANIC LITTER, OBJECTIONAL WEEDS, CLAY, CLOTS, STUMPS, ROOTS OR OTHER MATERIAL HARMFUL TO PLANT GROWTH OR HINDERANCE TO PLANTING OR MAINTENANCE OPERATIONS. SHOULD REGENERATIVE MATERIALS BE PRESENT IN THE SOIL, CONTRACTOR SHALL ERADICATE AND REMOVE SUCH GROWTH, BOTH SURFACE AND ROOT, WHICH MAY APPEAR IN THE IMPORTED MATERIAL WITHIN ONE YEAR FOLLOWING ACCEPTANCE OF THE WORK. TOPSOIL SHALL NOT BE HANDLED IN A FROZEN OR MUDDY CONDITION. THE ACIDITY RANGE SHALL BE BETWEEN 5.0 AND 7.0 INCLUSIVE. THE MECHANICAL ANALYSIS OF THE SOIL SHALL BE AS FOLLOWS:

SIEVE SIZE PERCENT PASSING

1 INCH MESH 99 – 100 PERCENT
1/4 INCH MESH 97 – 99 PERCENT
NO. 100 MESH 40 – 60 PERCENT
NO. 200 MESH 20 – 40 PERCENT

2.2 PLANTING SOIL MIXTURE

A. PROVIDE PLANTING SOIL MIX AMENDED AS PER LABORATORY RECOMMENDATIONS. BASIC PLANTING SOIL MIX CONSISTS OF:

50% TOPSOIL (AS DESCRIBED ABOVE)
50% PREPARED ADDITIVES (BY VOLUME AS FOLLOWS)
3 PARTS HUMUS (FOREST OR PEAT)
1 PART STERILIZED COW MANURE, COMMERCIAL FERTILIZER AND LIME AS RECOMMENDED IN SOIL ANALYSIS

B. THE COMPONENTS SHALL BE THOROUGHLY MIXED TO A UNIFORM CONSISTENCY BY HAND OR MACHINE METHODS.

C. SEASONAL COLOR BEDS SHALL BE PREPARED WITH A MIXTURE CONSISTING OF:

1. LIME AT 50 LB/1000 SQUARE FEET.
2. FERTILIZER AT 30 LB/1000 SQUARE FEET.
3. TWO INCHES OF RIVER SAND.
4. TWO INCHES OF OLD HUMUS BARK AND TILLING MATERIAL.
5. TILLED TO DEPTH OF 12".
6. BED RAISED 3" – 5" ABOVE EXISTING GRADE.

THE BED SHALL THEN BE COVERED WITH TWO INCHES OF PINEBARK MINI-NUGGETS.

2.3 FERTILIZER

A. FERTILIZER FOR ALL TREES, SHRUBS AND GROUNDCOVERS SHALL BE STA-GREEN NURSERY SPECIAL OR EQUAL DELIVERED TO THE SITE IN UNOPENED CONTAINERS.

B. FERTILIZER FOR GRASS SHALL BE STA-GREEN FERTILIZER CONTAINING THE FOLLOWING PERCENTAGES BY WEIGHT:

18% NITROGEN
24% PHOSPHOROUS
10% POTASH

OR APPROVED EQUAL. FERTILIZER SHALL BE UNIFORM IN COMPOSITION, DRY AND FREE FLOWING, AND SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL, UNOPENED CONTAINER, BEARING THE MANUFACTURER'S GUARANTEED ANALYSIS. FERTILIZER SHALL NOT HAVE BEEN EXPOSED TO WEATHER PRIOR TO DELIVERY TO THE SITE. AFTER DELIVERY UNTIL USED, IT SHALL BE COMPLETELY PROTECTED AT ALL TIMES. IT SHALL NOT BE STORED IN DIRECT CONTACT WITH THE GROUND.

2.4 PLANTS

A. ALL PLANTS SHALL CONFORM TO OR SURPASS MINIMUM QUALITY STANDARDS AS DEFINED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN), CURRENT EDITION OF AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AAN, INC. AND IN ADDITION SHALL CONFORM TO SIZES AND DESCRIPTIONS IN THE PLANT LIST.

B. ALL NECESSARY INSPECTION CERTIFICATES SHALL BE SUPPLIED TO THE OWNER'S REPRESENTATIVE FOR EACH SHIPMENT OF PLANT MATERIAL, AS REQUIRED BY LAW.

C. ALL PLANT MATERIALS SHALL BE SUBJECT TO INSPECTION AND APPROVAL. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY AND ALL PLANTS WHICH FAIL TO MEET THIS SPECIFICATION AT ANY POINT DURING THE INSTALLATION OF THE JOB. ALL REJECTED MATERIALS SHALL BE PROMPTLY REMOVED FROM THE SITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

D. ALL PLANT MATERIALS FURNISHED SHALL BE WELL BRANCHED, PROPORTIONED WIDTH TO HEIGHT, OF NORMAL HABIT, SOUND HEALTHY AND VIGOROUS IN GROWTH. THE MINIMUM ACCEPTABLE SIZES OF PLANTS SHALL BE MEASURED BEFORE PRUNING WITH BRANCHES IN NORMAL POSITION AND SHALL CONFORM TO MEASUREMENTS SPECIFIED. PLANTS USED WHERE SYMMETRY IS REQUIRED SHALL BE MATCHED AS CLOSELY AS POSSIBLE. PLANTS SHALL MEET ALL REQUIREMENTS AS LISTED IN THE PLANT LIST.

E. PLANTS SHALL BE FIELD NURSERY, CONTAINER GROWN OR COLLECTED MATERIAL SUBJECT TO THE REQUIREMENTS OF THE SPECIFICATION.

F. ALL PLANTS SHALL BE OF HEALTHY STOCK, FREE FROM DISEASE, INSECTS, EGGS, LARVAE, AND PARASITES OF AN OBJECTIONABLE OR DAMAGING NATURE.

G. BALLED AND BURLAPPED PLANT MATERIALS ARE TO BE WRAPPED WITH ORGANIC WRAPPING BURLAP ONLY. SYNTHETIC MATERIAL WILL NOT BE ACCEPTED. REMOVE ALL NURSERY LOADING STRAPS ONCE PLANT MATERIAL IS PLACED IN THE PIT.

2.5 MATERIAL FOR GUYING AND STAKING

A. STAKES FOR SUPPORTING TREES SHALL BE SOUND TIMBER, STRAIGHT, SIZED AS SHOWN IN PLANTING DETAILS AND OF SUFFICIENT LENGTH TO ADEQUATELY SUPPORT THE PLANT. ALL VISIBLE SURFACES SHALL BE PAINTED DARK GREEN OR BROWN, BUT NOT BLACK.

B. DEADMEN OR STAKES FOR ANCHORING GUY WIRES IN THE GROUND SHALL BE OF SIZE, MATERIAL, AND STRENGTH ADEQUATE TO HOLD GUY TAUT AND MAINTAIN TREE FIRMLY IN AN UPRIGHT POSITION.

C. WIRE SHALL BE #12 GAUGE GALVANIZED WIRE IN DOUBLE TWISTED STRAND TO ADJUST TENSION.

D. HOSE FOR ENCASING GUY WIRES SHALL BE NEW OR SUITABLE USED 3/4 INCH DIAMETER RUBBER OR PLASTIC GARDEN HOSE, BLACK IN COLOR.

2.6 MULCH

A. PINE STRAW MULCH SHALL BE CLEAN, FRESH, FREE OF NOXIOUS WEEDS, SEED, FIRE ANTS, JAPANESE BEETLES AND/OR FRINGED BEETLES.

2.7 SEED

A. CERTIFIED, BLUE TAG, CLEAN, DELIVERED IN ORIGINAL, UNOPENED PACKAGES AND BEARING AN ANALYSIS OF THE CONTENTS, GUARANTEED 95 PERCENT PURE AND TO HAVE A MINIMUM GERMINATION RATE OF 85 PERCENT, WITHIN ONE YEAR OF TEST.

PART 3 – EXECUTION

3.1 TIME AND PLANTING

A. PLANTING OPERATIONS SHALL BE DURING FAVORABLE WEATHER IN WHICH CONDITIONS ARE NEITHER EXTREMELY COLD OR HOT, NOR TO THE POINT THAT THE RISK OF LOSS IS TOO GREAT. THE CONTRACTOR SHALL INFORM THE LANDSCAPE ARCHITECT OF HIGH RISKS DUE TO WEATHER.

3.2 EXCAVATION FOR PLANTING TREES AND SHRUBS

A. CIRCULAR PLANT PITS WITH VERTICAL SIDES SHALL BE DUG BY HAND OR MACHINE METHODS FOR PLANTING OF TREES AND SHRUBS.

B. TREE PIT DIAMETERS SHALL BE A MINIMUM OF TWO FEET GREATER THAN THE SPREAD OF THE ROOT MASS.

C. SHRUB PIT DIAMETER SHALL BE A MINIMUM OF ONE FOOT GREATER THAN THE SPREAD OF THE ROOT MASS.

D. CONTRACTOR SHALL TEST EXCAVATED PLANT PITS TO SATISFY HIMSELF THAT SUFFICIENT DRAINAGE IS PRESENT FOR PROPER PLANT SURVIVAL.

E. IF THE INDIVIDUAL PITS ARE ARRANGED IN A GROUP, THE AREA BETWEEN PITS SHALL BE FILLED TO THE REQUIRED GRADE WITH EXISTING SOIL AND MULCHED WITH PINE STRAW MULCH THREE INCHES DEEP. PLANT BEDS SHALL BE NEATLY EDGED AND KEPT FREE OF WEEDS UNTIL THE WORK IS ACCEPTED.

3.3 EXCAVATION FOR PLANTING GROUNDCOVERS

A. GROUNDCOVER BEDS SHALL BE SCARIFIED BY HAND OR MACHINE METHOD TO A MINIMUM DEPTH OF EIGHT INCHES. THREE INCHES OF PEAT HUMUS ADDITIVE AND 20 POUNDS PER 1000 SQUARE FEET OF STA-GREEN NURSERY SPECIAL FERTILIZER SHALL BE UNIFORMLY INCORPORATED INTO THE SOIL TO THE FULL EIGHT INCH MINIMUM DEPTH.

3.4 DRAINAGE TEST

A. REPRESENTATIVE TREE PITS FROM EACH PLANTING AREA SHALL BE FILLED WITH WATER. IF PERCOLATION IS LESS THAN % WITHIN A PERIOD OF 12 HOURS, DRILL A TWELVE-INCH AUGER TO A DEPTH OF FOUR FEET BELOW THE BOTTOM OF THE PIT. RETEST THE PIT. IN CASE DRAINAGE IS STILL UNSATISFACTORY NOTIFY LANDSCAPE ARCHITECT, IN WRITING OF THE CONDITION BEFORE PLANTING TREES IN THE QUESTIONABLE AREAS. CONTRACTOR IS FULLY RESPONSIBLE FOR WARRANTY OF THE TREES.

B. SHRUB AND GROUNDCOVER BEDS SHALL BE SPOT TESTED.

C. DISPOSE OF SUBSOIL REMOVED FROM LANDSCAPE EXCAVATIONS. DO NOT MIX WITH THE PLANTING SOIL. DO NOT USE AS BACKFILL OR USE TO CONSTRUCT SAUCERS AROUND PITS.

3.5 SETTING TREES, SHRUBS, GROUNDCOVERS

A. BALLED AND CONTAINER PLANTS SHALL BE PLACED FIRMLY UPON SCARIFIED SUB-GRADE AND BACKFILLED WITH PLANTING SOIL MIXTURE. REMOVE ALL WIRE, CORDS, AND BURLAP FROM TOP OF ROOT BALL. HAND TAMP CAREFULLY AROUND AND UNDER BALL TO FILL ALL VOIDS. WATER DURING BACKFILLING. FORM SAUCER FROM PLANTING SOIL MIXTURE IN ORDER TO RETAIN WATER.

B. GENTLY LOOSEN OUTER ROOTS OF CONTAINER GROWN PLANTS TO ENCOURAGE OUTWARD GROWTH.

C. FERTILIZER SHALL BE THOROUGHLY MIXED AND SOAKED INTO THE TOP TWO INCHES OF SOIL FOR ALL PLANT PITS.

3.6 TREE TRANSPORTATION

A. THE CONTRACTOR SHALL BE RESPONSIBLE NOT ONLY FOR THE SAFE TRANSPORTATION OF THE PLANTS TO THE SITE BUT ALSO THEIR CONDITION UPON ARRIVAL. TREES WITH ABRASIONS OF THE BARK, SUNSCALDS, FRESH CUTS, OR BREAKS OF LIMBS WHICH HAVE NOT COMPLETELY CALLOUSED WILL BE REJECTED. TREES WHICH HAVE BEEN DAMAGED DURING TRANSIT WILL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST. ALL PLANT UNIT COSTS WILL REFLECT ALL THE ABOVE LISTED SPECIFICATIONS.

3.7 TREE TAGS

A. ALL PLANTS ACCEPTED AT THE NURSERY BY THE LANDSCAPE ARCHITECT SHALL BE TAGGED WITH SERIALIZED SELF LOCKING TAGS. TREES DELIVERED TO THE SITE WITHOUT THESE TAGS OR WITH BROKEN TAGS WILL BE REJECTED. THE TAGS SHALL REMAIN ON THE TREES UNTIL THE CONTRACTOR HAS BEEN GIVEN INSTRUCTIONS BY THE LANDSCAPE ARCHITECT FOR THEIR REMOVAL.

3.8 PRUNING

A. DECIDUOUS TREES AND SHRUBS SHALL HAVE DEAD, BROKEN, AND CROWDED WOOD PRUNED TO COMPENSATE FOR THE LOSS OF ROOTS IN TRANSPLANTING. REQUESTED AND REQUIRED ADDITIONAL PRUNING MAY BE NECESSARY AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.

B. EVERGREEN TREES AND SHRUBS SHALL BE PRUNED ONLY TO THIN OUT HEAVY GROWTH.

C. CUTS OVER 3/4 INCH IN DIAMETER SHALL BE PAINTED WITH TREE DRESSING PAINT. NO PAINT CONTAINING LEAD SHALL BE PERMITTED.

3.9 GUYING, STAKING AND MULCHING

A. GUY TREES TWO-INCH CALIPER AND OVER. SPACE THREE GUYS EQUALLY ABOUT EACH TREE, ATTACHED AT APPROXIMATELY TWO-FIFTHS UP THE TRUNK. GUYS SHOULD BE AT A 45-DEGREE ANGLE AND ANCHORED IN THE GROUND WITH STAKES. GUY TO TRUNKS WITH WIRE LOOPS AND BLACK RUBBER HOSE DRAWN SNUG IN ALL DIRECTIONS. THESE GUYS SHALL BE EQUALLY TAUT.

B. STAKE TREES LESS THAN TWO INCHES CALIPER WITH TWO OR THREE WOOD STAKES DRIVEN TWO FEET INTO THE GROUND WITH THE PORTION EXTENDING ABOVE THE GROUND APPROXIMATELY ONE-HALF OF THE TRUNK HEIGHT. STAKE ONE FOOT FROM TRUNK, FASTENED AT APPROXIMATELY TWO-FIFTHS OF TRUNK HEIGHT WITH WIRE RUN THROUGH RUBBER HOSE.

C. MULCH ALL PLANTING BEDS AND OTHER AREAS DESIGNATED TO BE MULCHED, WITH THREE "SETTLED" INCHES OF PINE STRAW MULCH. INDIVIDUAL PLANTS ARE TO BE MULCHED AS DETAILED. MULCH IS TO BE MEASURED AFTER SETTLEMENT.

3.10 UNIT COST

A. ALL PLANT UNIT COSTS WILL REFLECT ALL THE ABOVE LISTED SPECIFICATIONS.

3.11 PREPARATION OF GRASS AREAS

A. FINE GRADE ALL GRASS AREAS TO FINISH GRADE. ALL AREAS SHALL HAVE SMOOTH AND CONTINUAL GRADE BETWEEN THE EXISTING AND FIXED CONTROLS SUCH AS WALKS AND CURBS. ROLL, SCARIFY, RAKE AND LEVEL AS NECESSARY TO OBTAIN TRUE, EVEN, AND FIRM LAWN SURFACES. ALL FINISHED GRADES SHALL MEET APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE BEFORE GRASSING OPERATIONS BEGIN.

B. AREAS TO RECEIVE GRASS

1. GRADE WILL BE BROUGHT TO THE LEVEL OF ± 1" OF THE FINISHED GRADE BY THE GENERAL CONTRACTOR. THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR THE TOP ± 1" OF SOIL WORK. THIS IS TO INCLUDE ALL TOPSOIL HAULING AND PLACEMENT; SPREADING; DEBRIS REMOVAL AND ANY GRADING REQUIRED TO BRING THE FINISHED TOPSOIL GRADE TO THE PROPER LEVEL FOR GRASS.

2. THOROUGHLY TILL EXISTING SOIL TO A MINIMUM DEPTH OF FOUR INCHES BY RUNNING TILLING DEVICE TWO DIRECTIONS AT RIGHT ANGLES OVER THE ENTIRE SURFACE TO BE GRASS. FINE GRADE TO ACHIEVE UNIFORMITY AND DRAINAGE.

3. SPREAD SPECIFIED FERTILIZER AS PER MANUFACTURER'S RECOMMENDATIONS.

4. APPLY LIME UNIFORMLY WITH A MECHANICAL SPREADER TO THE ENTIRE AREA TO BE HYDROSEEDED AT THE RATE OF 50 LBS/1000 SQUARE FEET.

5. WORK SOIL TO A UNIFORM GRADE SO THAT ALL AREAS HAVE POSITIVE DRAINAGE AWAY FROM DRIVES, BUILDINGS, AND LANDSCAPED AREAS.

6. REMOVE ALL TRASH AND STONES EXCEEDING TWO INCHES IN DIAMETER FROM AREA TO A DEPTH OF TWO INCHES PRIOR TO HYDROSEEDING.

C. HYDROSEEDING OPERATIONS

1. HYDRAULIC EQUIPMENT FOR THE APPLICATION OF HYDROSEED MULCH AND SEED SHALL BE EQUIPPED WITH A POWER DRIVEN AGITATOR WHICH WILL KEEP THE MIXTURE UNIFORM DURING APPLICATIONS. THE EQUIPMENT SHALL HAVE SUFFICIENT FORCE AND CAPACITY TO APPLY A UNIFORM APPLICATION OF THE MIXTURE TO THE LIMITS OF THE SLOPES. CAUTION SHALL BE EXERCISED ADJACENT TO NON-GRASSED AREAS TO PREVENT OVERSPRAY ONTO PLANT BEDS OR PAVED AREAS.

2. HYDROSEED MIXTURE SHALL CONSIST OF:

A. HYDROSEED MULCH TO BE: "CONWED 2000" AS MANUFACTURED BY CONWED CORP., OR "SILVA-FIBES PLUS" AS MANUFACTURED BY WEYERHAUSER AT A RATE OF 30 LBS/1000 SQUARE FEET.

B. SEED MIX: COMMON BERMUDA AT A RATE OF 2 LBS/1000 SQUARE FEET, REFERENCE PLANT AND MATERIALS LIST.

3. SEED SHALL NOT BE SOWN WHEN WINDS EXCEED 10 MILES PER HOUR OR AT ANY TIME THE GROUND IS NOT IN A SUITABLE CONDITION FOR SEEDING.

4. INOCULATED SEED SHALL BE ADDED TO THE HYDROSEED MIX ONLY IMMEDIATELY PRIOR TO HYDROSEEDING OPERATIONS.

D. SODDING OPERATIONS

1. DELIVERY OF SOD SHALL BE SCHEDULED SO AS TO ALLOW LAYING OF SOD WITHOUT DELAY. NO SOD SHALL REMAIN STACKED LONGER THAN 24 HOURS. IN THE EVENT THAT SOD CANNOT BE LAID IMMEDIATELY UPON DELIVERY, CONTRACTOR SAHLL LAY SOD ON A DESIGNATED SITE TO BE APPROVED BY THE LANDSCAPE ARCHITECT. NO SOD SHALL OVERLAP AND IT SHALL BE LIGHTLY WATERED AS NECESSARY TO KEEP MOIST.

2. LAY SOD SO THAT NO VOIDS OCCUR. SOD SHALL BE TAMPED AND ROLLED BY HAND METHODS. THE COMPLETED SURFACE SHALL BE TRUE TO FINISH GRADE AAND EVEN AND FIRM ALL POINTS.

PART 4 – CLEANUP & PROTECTION

4.1 GENERAL

A. DURING PLANTING OPERATIONS KEEP PROJECT SITE CLEAN AND ORDERLY.

B. UPON COMPLETION OF WORK, CLEAR GROUNDS OF DEBRIS, SUPERFLUOUS MATERIALS AND ALL EQUIPMENT. REMOVE FROM SITE TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT AND OWNER.

C. PROTECT ALL WORK AND MATERIALS FROM DAMAGE DUE TO IRRIGATION OPERATIONS, AND OPERATIONS BY OTHER CONTRACTORS, TRADES, AND TRESPASSERS. MAINTAIN PROTECTION UNTIL DATE OF SUBSTANTIAL COMPLETION.

D. CONTRACTOR IS RESPONSIBLE FOR THEFT OF EQUIPMENT AND MATERIAL AT THE JOB SITE BEFORE, DURING AND AFTER INSTALLATION, UNTIL DATE OF SUBSTANTIAL COMPLETION OF THE WORK IN TOTAL.

PART 5 – ACCEPTANCE AND GUARANTEE

5.1 SUBSTANTIAL COMPLETION

A. SUBMIT WRITTEN REQUESTS FOR INSPECTION FOR SUBSTANTIAL COMPLETION TO THE LANDSCAPE ARCHITECT AT LEAST SEVEN CALENDAR DAYS PRIOR TO ANTICIPATED DATE OF INSPECTION AND TESTING. AT THIS TIME A "PUNCH LIST" WILL BE WRITTEN BY THE LANDSCAPE ARCHITECT FOR THE CONTRACTOR TO RESPOND TO IN ORDER TO BE GRANTED SUBSTANTIAL COMPLETION.

B. SUBMIT RECORD DRAWINGS AND MAINTENANCE MANUALS TO THE OWNER'S REPRESENTATIVE.

C. REVIEW THE WORK JOINTLY WITH THE OWNER AND LANDSCAPE ARCHITECT FOR SUBSTANTIAL COMPLETION.

D. UPON COMPLETION OF REPAIRS AND REPLACEMENTS FOUND NECESSARY AT THE TIME OF REVIEW, THE OWNER AND LANDSCAPE ARCHITECT WILL CONFIRM THE DATE OF SUBSTANTIAL COMPLETION. IF ALL ITEMS ON THE PUNCH LIST HAVE BEEN TAKEN CARE OF. IF NECESSARY ANOTHER PUNCH LIST WILL BE WRITTEN TO ITEMIZE ANY DEFICIENCIES STILL EXISTING.

E. THE DATE OF SUBSTANTIAL COMPLETION WILL CONSTITUTE THE BEGINNING DATE OF THE ONE-YEAR GUARANTEE.

5.2 GUARANTEE

A. GUARANTEE ALL WORK, PRODUCTS, EQUIPMENT AND MATERIALS FOR ONE YEAR, BEGINNING AT THE DATE OF SUBSTANTIAL COMPLETION.

B. MAKE GOOD ANY DAMAGE, LOSS, DESTRUCTION, OR FAILURE. REPAIRS AND REPLACEMENTS SHALL BE DONE PROMPTLY AND AT NO ADDITIONAL COST TO THE OWNER.

C. REPAIR DAMAGE TO GRADE, PLANTS AND OTHER WORK AS NECESSARY.

D. IF THE REPLACEMENT IS NOT ACCEPTABLE DURING OR AT THE END OF THE GUARANTEE PERIOD, THE OWNER MAY ELECT EITHER SUBSEQUENT REPLACEMENT OR CREDIT. REPLACEMENT PRODUCTS SHALL HAVE A SIMILAR ONE-YEAR GUARANTEE FROM THE TIME OF REPLACEMENT.

E. GUARANTEE APPLIES TO ALL LOSSES WITH THE EXCEPTION OF THOSE DUE TO ACTS OF GOD, VANDALISM, OR OWNER NEGLECT, AS DETERMINED BY THE LANDSCAPE ARCHITECT.

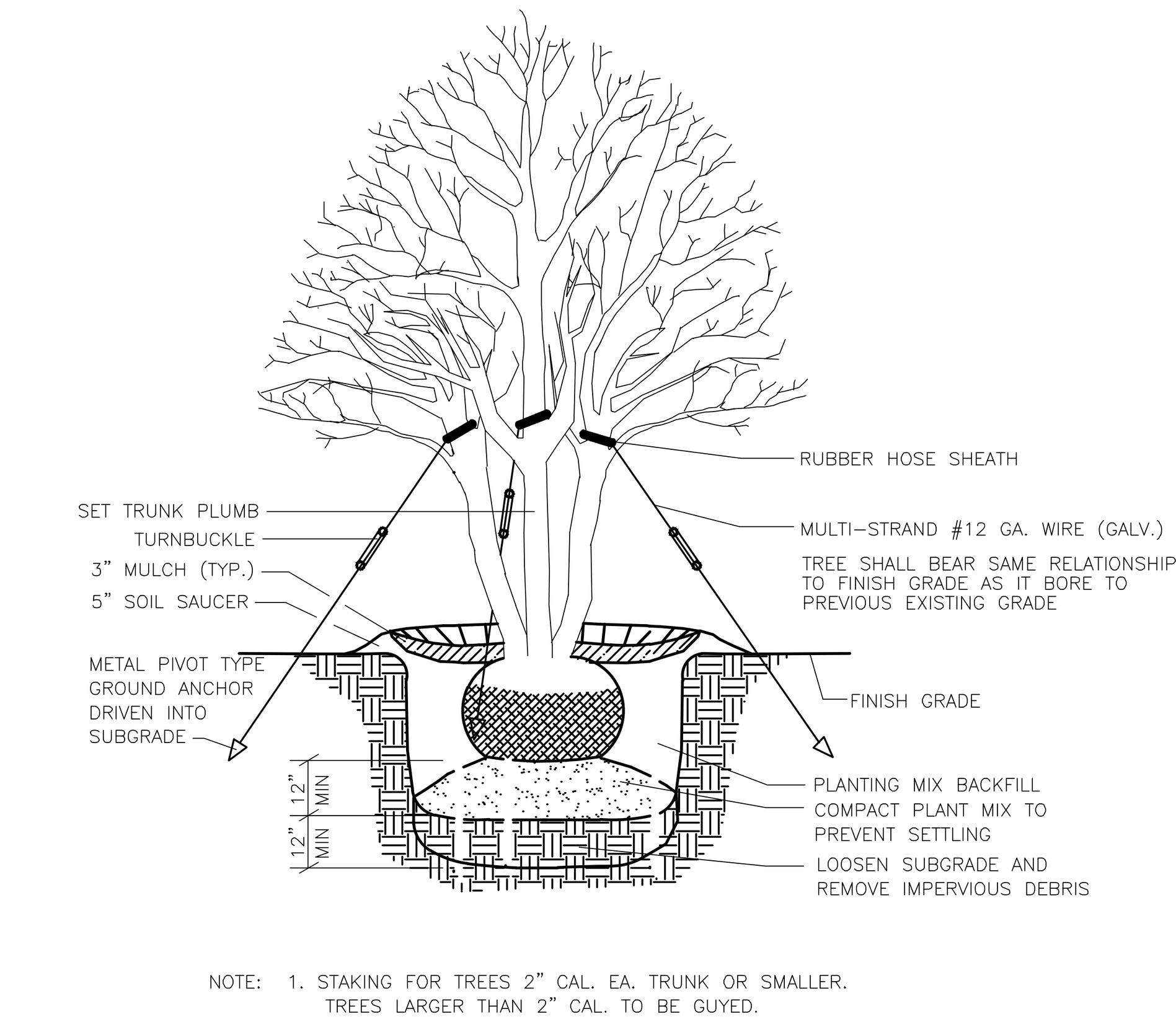
5.3 FINAL INSPECTION AND ACCEPTANCE

A. AT THE END OF THE GUARANTEE PERIOD AND UPON REQUEST FOR INSPECTION, JOINTLY REVIEW ALL GUARANTEED WORK FOR FINAL ACCEPTANCE.

B. SUBMIT WRITTEN REQUEST FOR INSPECTION FOR FINAL ACCEPTANCE TO THE LANDSCAPE ARCHITECT AT LEAST TWO WEEKS PRIOR TO ANTICIPATED DATE OF INSPECTION; INCLUDE LIST OF WORK SUBSTANTIALLY COMPLETE AND A LIST OF WORK REPLACED DURING GUARANTEE PERIOD.

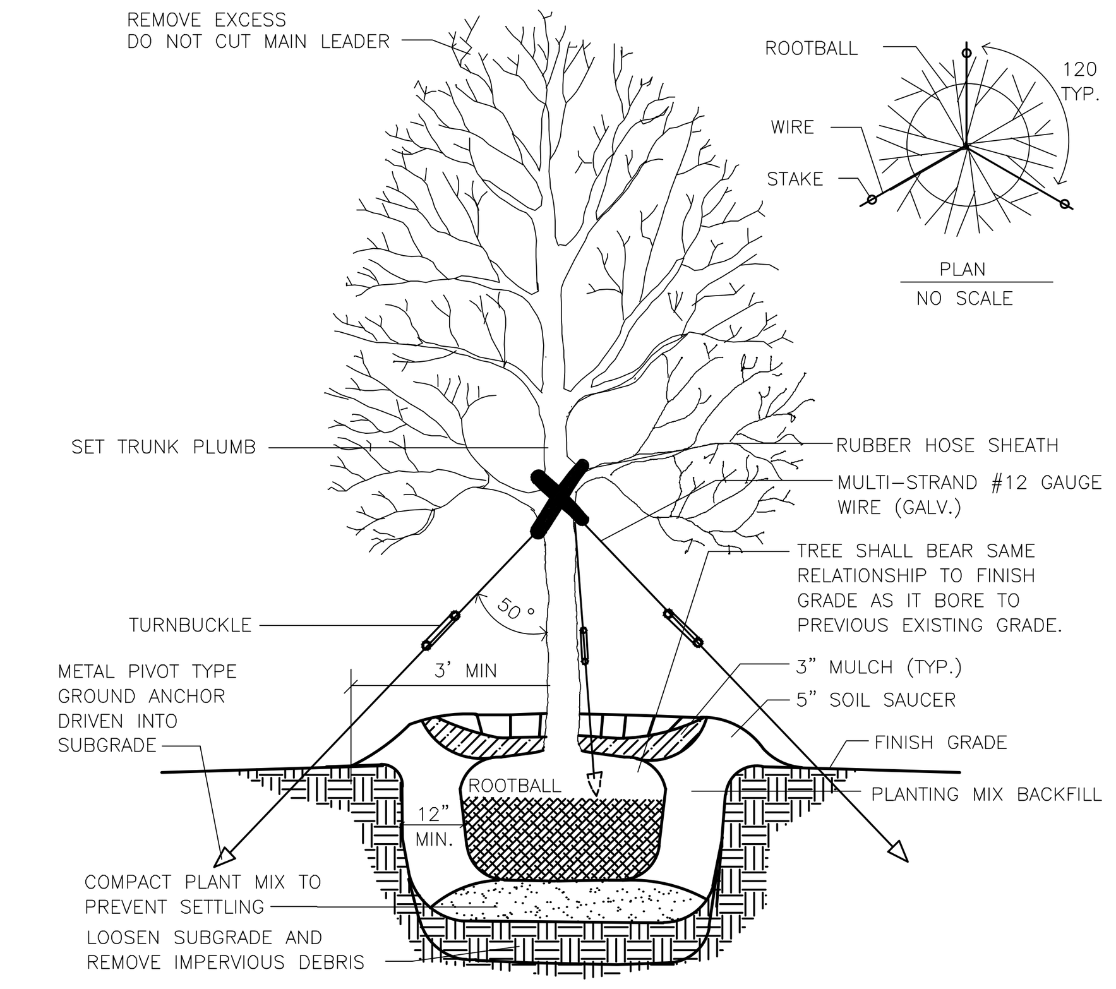
C. UPON COMPLETION BY THE CONTRACTOR OF ALL REQUIRED REPLACEMENTS, THE OWNER AND THE LANDSCAPE ARCHITECT WILL CONFIRM THE DATE OF FINAL ACCEPTANCE OF THE WORK.

END OF LANDSCAPE PLANTING SECTION

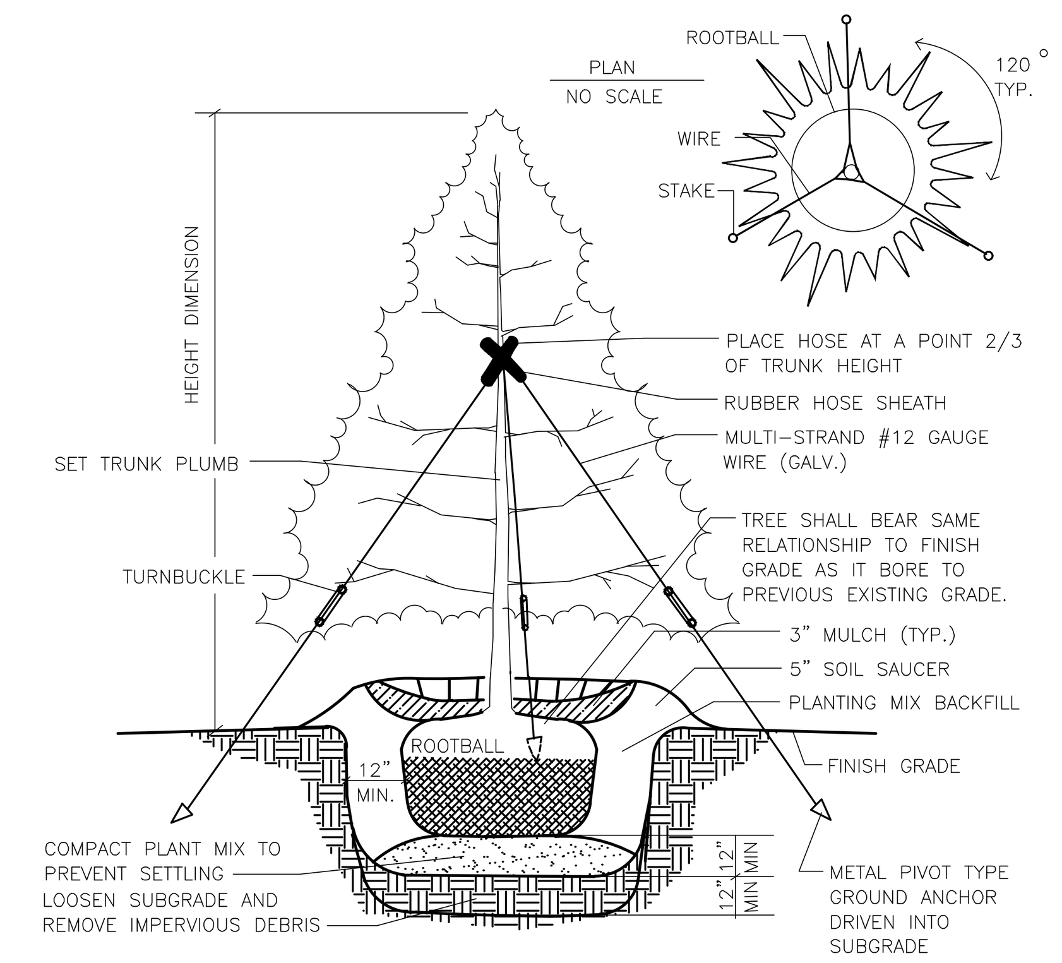


NOTE: 1. STAKING FOR TREES 2" CAL. EA. TRUNK OR SMALLER. TREES LARGER THAN 2" CAL. TO BE GUYED.

1 MULTI-TRUNK TREE PLANTING AND GUYING
SECTION SCALE: NTS

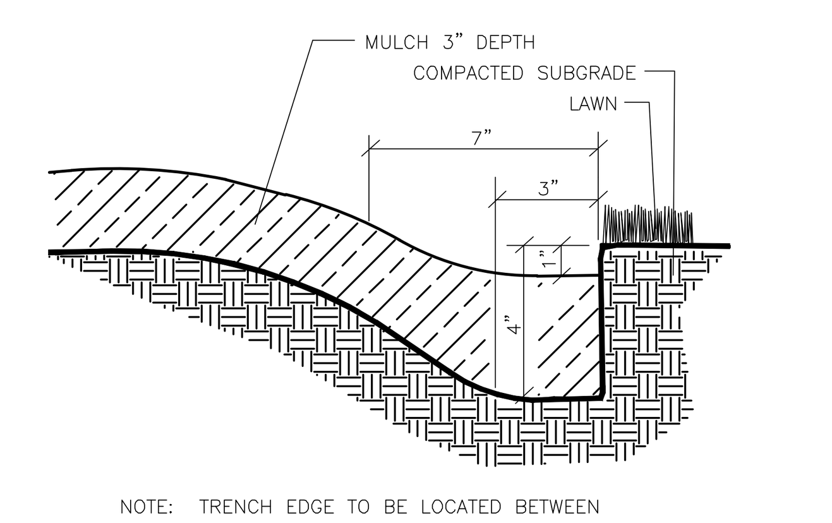


2 SHADE TREE PLANTING AND GUYING
SECTION SCALE: NTS



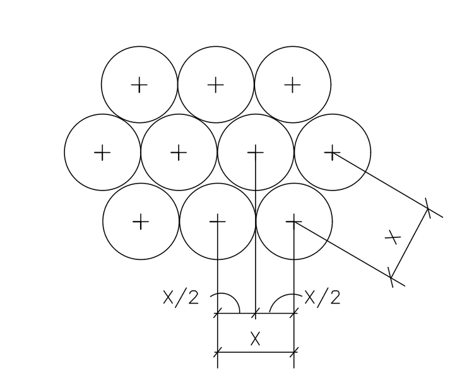
NOTES: 1. EVERGREEN TREES 2" CAL OR SMALLER TO BE STAKED.
2. PROVIDE WATER CRYSTALS PER MANUFACTURER'S RECOMMENDATIONS FOR PINE TREES.

3 EVERGREEN TREE PLANTING AND GUYING
SECTION SCALE: NTS



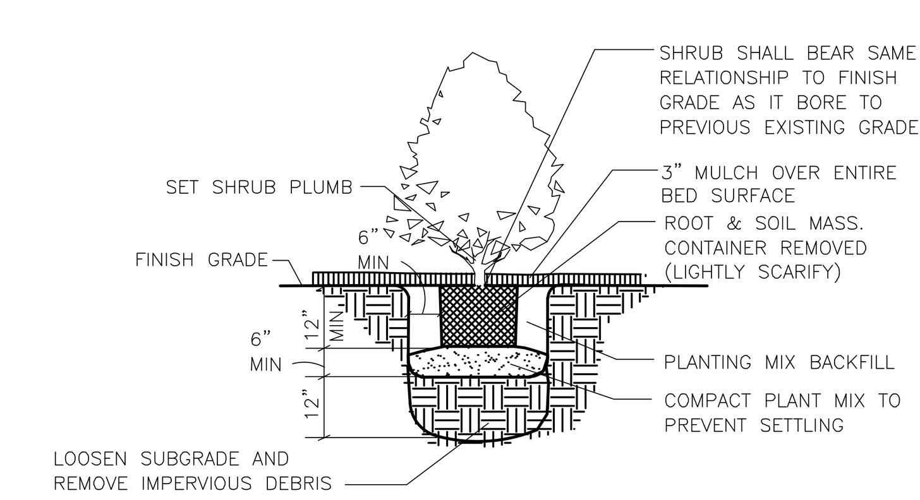
NOTE: TRENCH EDGE TO BE LOCATED BETWEEN PLANTING BEDS AND ALL LAWN AREAS.

4 TRENCH EDGER DETAIL FOR ALL BEDS
SECTION SCALE: NTS

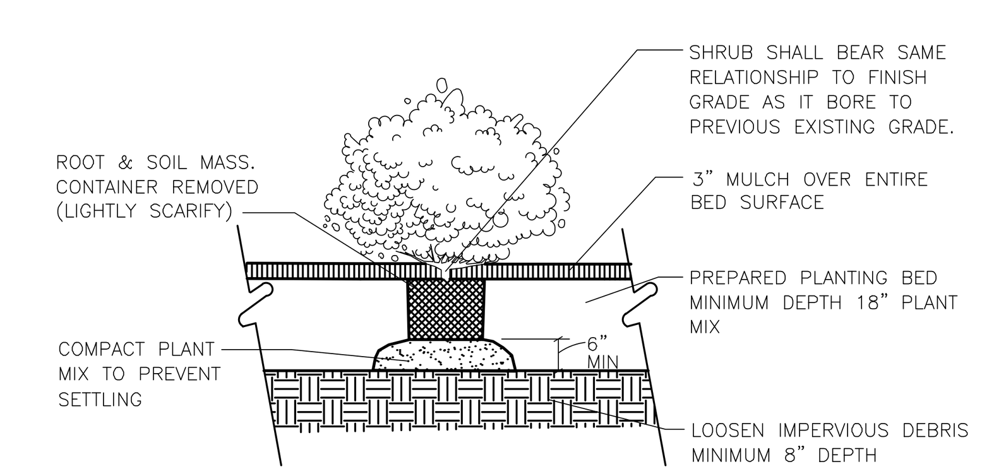


NOTES: 1. SEE PLANTING PLANS FOR SHRUB & GROUNDCOVER BED AREAS.
2. ROWS SHALL BE STRAIGHT & PARALLEL.
3. SPACING SHOWN ON PLANT SCHEDULE (X).

5 TYPICAL STAGGERED ROW SPACING
SECTION SCALE: NTS



6 TYPICAL CONTAINER SHRUB PLANTING
SECTION SCALE: NTS



7 TYPICAL BEDDING FOR PLANTS SPACED LESS THAN 36" O.C.
SECTION SCALE: NTS

SEVERE WEATHER CONDITIONS

AS PER THE SPECIFICATIONS LISTED ON THIS SHEET UNDER PART 5 – ACCEPTANCE AND GUARANTEE, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS AND LABOR UNTIL SUCH TIME AS THE PROJECT HAS BEEN ACCEPTED BY THE OWNER / LANDSCAPE ARCHITECT AND THE 1 YEAR WARRANTY TIME HAS STARTED. IT SHALL BE THE LANDSCAPE CONTRACTORS RESPONSIBILITY TO HAVE PROPER INSURANCE FOR ANY LOSSES THAT MAY OCCUR TO THE PROJECT AND HIS INSTALLED OR STORED PLANT MATERIAL DUE TO A HURRICANE OR SEVERE WEATHER CONDITIONS (OR OTHER ACTS OF GOD OR VANDALISM) THAT MAY OCCUR DURING THE CONSTRUCTION OF THE PROJECT. THE OWNER OF THE PROJECT WILL NOT BE RESPONSIBLE FOR ADDITIONAL FEES INCURRED DUE TO LOSSES, DAMAGES, OR LABOR TO REPAIR SITE TO THE PROPOSED PLANS IF THIS CIRCUMSTANCE OCCURS PRIOR TO THE START OF THE 1 YEAR GUARANTEE PERIOD.

PREPARED BY
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ATLANTA, GA 30342
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No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

PROJECT
BRIARCLIFF WEST
3080 BRIARCLIFF ROAD
ATLANTA, GA 30329
DEKALB COUNTY

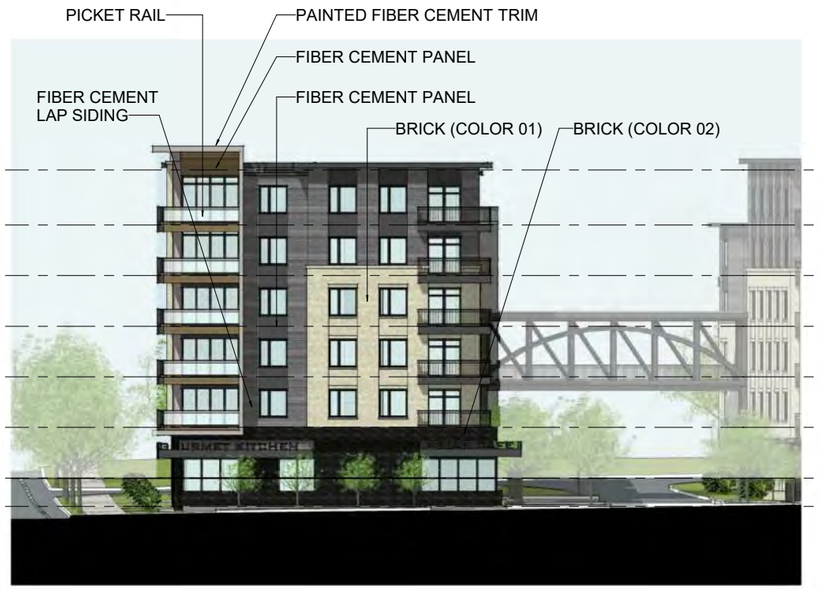
PRELIMINARY NOT FOR CONSTRUCTION 7/1/20

GSWCC NO. (LEVEL II)	22363
DRAWN BY	KCW
DESIGNED BY	KCW
REVIEWED BY	TML
DATE	7/1/2020
PROJECT NO.	017481003

TITLE
LANDSCAPE NOTES & DETAILS

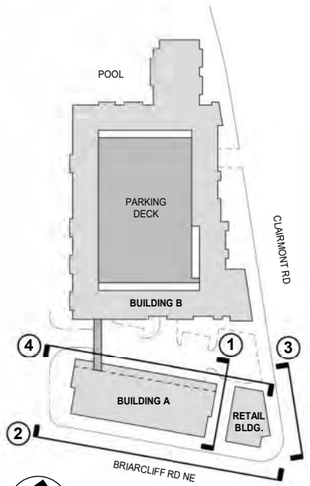
SHEET NUMBER
L2-01

Drawing name: C:\Users\Kate.Winn\KH\PTC Development Services - Documents\017481003_3086 Briarcliff Road\CAD\PlanSheets\L1-00 LANDSCAPE PLAN.dwg L2-01 LANDSCAPE NOTES & DETAILS Jun 30, 2020 2:01pm by: Kate.Winn



ELEVATION 1 - BUILDING A

ELEVATION 2 - BUILDING A (BRIARCLIFF RD)



KEY PLAN

ELEVATION 3 - RETAIL BUILDING

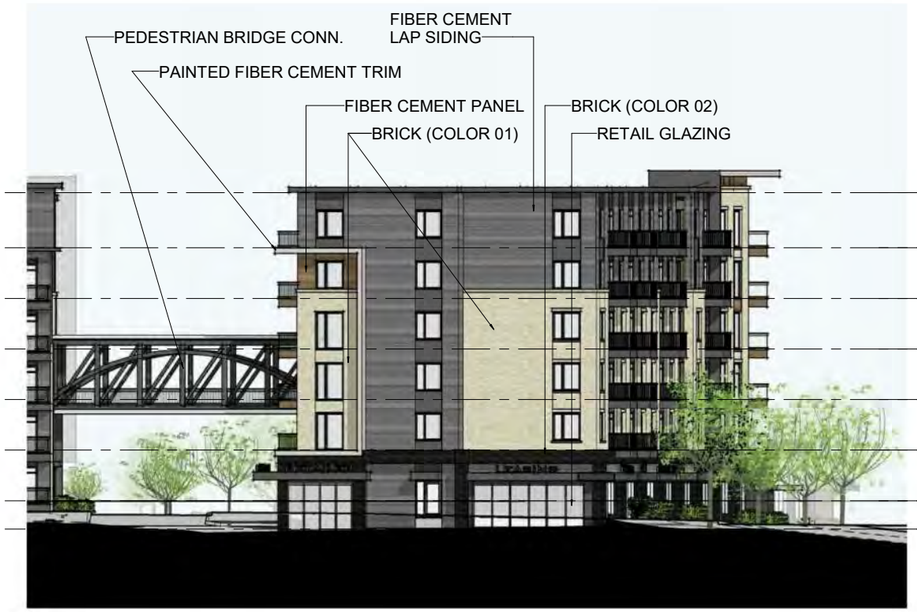
ELEVATION 4 - BUILDING A

ELEVATIONS
BRIARCLIFF & CLAIRMONT SITE

06/29/20
LAS # 11265-00

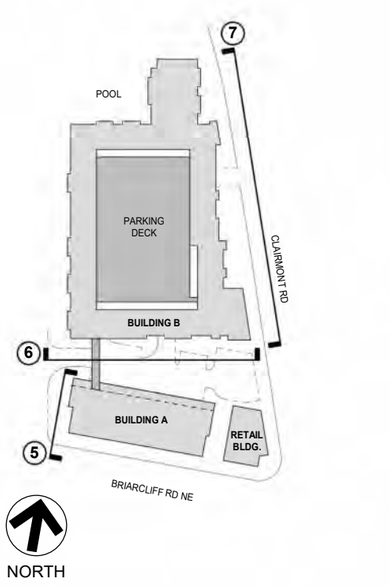
0 16 32 FT

LORD AECK SARGENT
A KATERRA COMPANY



ELEVATION 5 - BUILDING A

ELEVATION 6 - BUILDING B



KEY PLAN

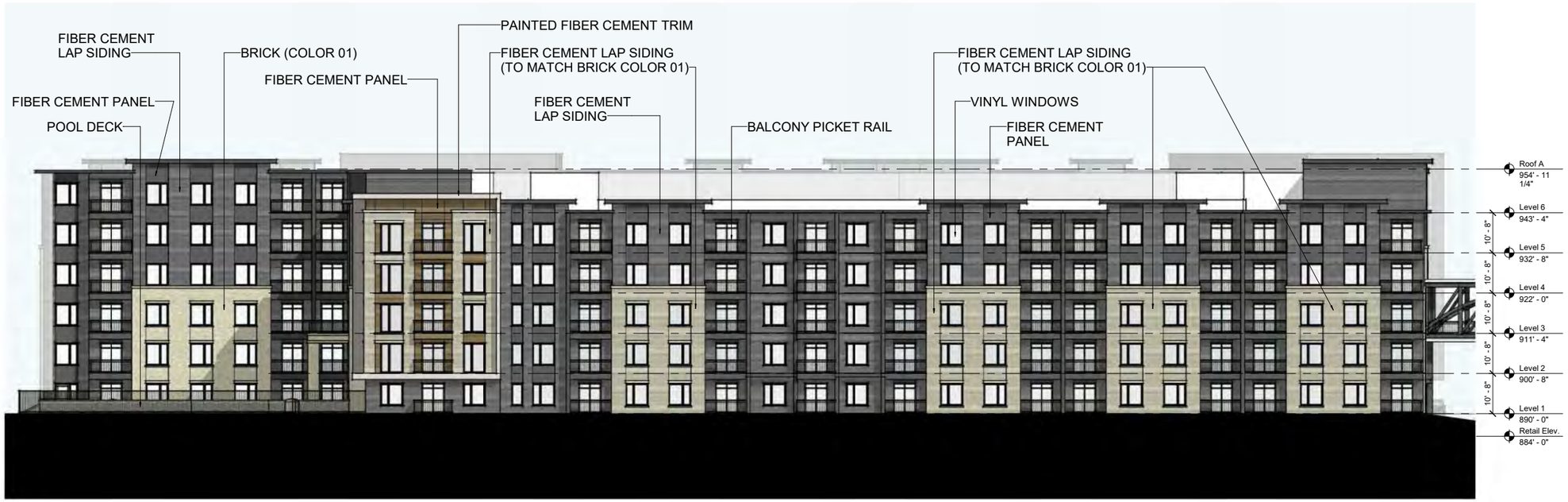
ELEVATION 7 - BUILDING B (CLAIRMONT RD)

ELEVATIONS
BRIARCLIFF & CLAIRMONT SITE

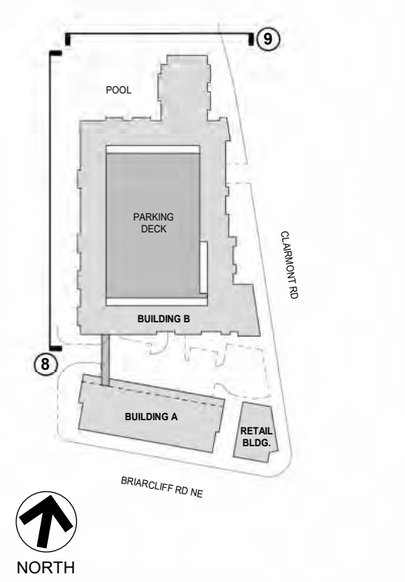
06/29/20
LAS # 11265-00

0 16 32 FT

LORD AECK SARGENT
A KATERRA COMPANY



ELEVATION 8 - BUILDING B



KEY PLAN

ELEVATION 9 - BUILDING B

ELEVATIONS
BRIARCLIFF & CLAIRMONT SITE

06/29/20
LAS # 11265-00

0 16 32 FT

LORD AECK SARGENT
A KATERRA COMPANY

STATEMENT OF INTENT

and

Other Material Required by
The DeKalb County Zoning Ordinance
for the
Rezoning Application

of

Stein Investment Co, LLC

for

± 3.845 Acres of Land
located in
Land Lot 196, 18th District, DeKalb County

From C-1/C-2 to HR-3

Submitted for Applicant by:

Dennis J. Webb, Jr.
Kathryn M. Zickert
J. Alexander Brock
Smith, Gambrell & Russell, LLP
Promenade, Suite 3100
1230 Peachtree Street, NE
Atlanta, Georgia 30309
404-815-3500

I. INTRODUCTION

This Application seeks the rezoning of an assemblage of ± 3.845 acres of land located in Land Lot 196, 18th District of DeKalb County ("Subject Property"), from C-1 (Local Commercial) and C-2 (General Commercial) to HR-3 (High Density Residential--3). The Subject Property consists of nine tax parcels and is positioned in the Southwest quadrant of the intersection of Interstate 85 and Clairmont Road. This node is characterized by high traffic volumes; I-85 experiences approximately 250,000 vehicle trips per weekday and Clairmont Road 43,000 vehicle trips per weekday.

The northern portion of the intersection contains intense, regional commercial, office and employment uses and correspondingly intense land use designations. For example, the northeast quadrant lies in the City of Chamblee. It includes Century Center and is zoned MU-BC (Mixed-Use-Business Center). The MU-BC district is designed to "facilitate a high-rise urban form of development with a mix of uses." (City of Chamblee Unified Development Ordinance, Section 210-12). Accordingly, it authorizes, among other things, multi-family, office, restaurant/retail and hotel uses with no restrictions on height or density. (Chamblee UDO at Section 210-12).

Similarly, the northwest quadrant of the node lies in the City of Brookhaven. It is zoned OI (Office-Institutional), a district intended to accommodate "institutional and office uses, as well as supporting retail and service uses." (City of Brookhaven Zoning Ordinance, Section 27-261(d)). The OI district has a base height restriction of five stories or 70 feet, but allows greater heights with a Special Use Permit. (Brookhaven Zoning Code at Section 27-294). [1]

The southern portion of the node lies in unincorporated DeKalb County. Although

[1] In addition to the more intense uses and entitlements on the north side of the node, the Applicant also notes that the $1.5 B Children's Healthcare of Atlanta campus and the $1 B Emory Executive Park healthy innovation district development are in proximity at the intersection of I-85 and North Druid Hills Road. In addition to allowing for a variety of uses, these developments are projected to create 7,500 new jobs.

exposed to the same intensity as the properties to the north, the DeKalb parcels do not have the zoning and land use designations necessary for the "urban form of development" that the area justifies. Instead, the properties are zoned C-1 and C-2, which restrict building heights to two stories or 35 feet, or MR-2 (Medium Density Residential), which restricts building heights to three stories or 45 feet. Equally limiting, the properties are designated as "Neighborhood Center" on DeKalb County's Comprehensive Plan, a classification that confines residential development to 24 units per acre or less. As a result, the parcels in the southern portion of the node have stagnated and are characterized by older, stand-alone, single-story commercial uses, strip centers with large parking fields, and garden-style apartments.

The Subject Property is no exception. At a gateway into unincorporated DeKalb County, the Subject Property is zoned C-1 and C-2 and contains five older, single-story buildings surrounded by asphalt. Two buildings are vacant. Of the remaining three, each houses an auto-related business, including auto repair, oil change, and auto salvage/outdoor auto storage. The Subject Property also has 15 full-access curb cuts, nine on Clairmont Road and six on Briarcliff Road.

The Applicant hopes to transform the Subject Property into vibrant, pedestrian-oriented, mixed-use development that is consistent with its location and the northern quadrants in this node. The development will include ± 10,000 square feet of restaurant/retail space and 264 multi-family units located in three buildings.[2] Building "C" is at the corner of Clairmont and Briarcliff Roads and will contain a two-story restaurant structure with a rooftop patio. Adjacent and to the west, Building "B" is envisioned as a six-story residential building with ground floor retail. To the north, Building "A" will consist of five/six-story residential building that wraps a

[2] The residential density proposed is 69 units per acre. The Applicant will be relying upon a density bonus to achieve this density.

parking deck and provides walk-out units on Clairmont Road. Buildings "C" and "B" will be separated from Building "A" by an inviting pedestrian plaza and vehicular drop off area.

In contrast to the existing condition, the Subject Property will have only one direct access point onto the right-of way, a right-in/right-out on Clairmont Road. Further, the Clairmont and Briarcliff frontages will include significant streetscape, providing for a four foot bike lane, an eight foot sidewalk (compared to Dekalb's six foot sidewalk requirement) and landscape strips, among other things. The development will provide 50% more open space than code requires and an outdoor amenity for residents. Finally, the development has been planned to allow for future right-of-way improvements on Clairmont Road. The Georgia Department of Transportation ("GDOT") has plans (GDOT PI 0015956) to improve Clairmont Road along the entire frontage of the Subject Property extending south toward Audubon Drive by, among other things, constructing a raised median and creating an additional southbound thru-lane. This development has been specifically designed to accommodate and further enhance[3] GDOT's proposed improvements.

This document is submitted as a Statement of Intent with regard to this Application, a preservation of the Applicant's constitutional rights, and the Impact Analysis as required by the DeKalb County Zoning Ordinance, § 27-7.3.5. A survey of the Subject Property as well as a site plan and conceptual renderings have been filed contemporaneously with the Application, along with other required materials.

[3] For example, the GDOT project contemplates a five foot sidewalk while the Applicant is proposing an eight foot sidewalk.

II. IMPACT ANALYSIS

A.

THE PROPOSED ZONING IS IN CONFORMITY WITH THE POLICY AND INTENT OF THE COUNTY'S COMPREHENSIVE LAND USE PLAN.

Concurrent with this request, the Applicant has filed an application to modify the Land Use Map designation for the Subject Property from the "Neighborhood Center (NC)" character area to "Regional Center (RC)" character area. As alluded to above, the node in which the Subject Property is located is already functioning as a regional center, from both a traffic standpoint and, on the north side, from a use and entitlement standpoint. Changing the designation on the Subject Property recognizes this fact and promotes a number of policies and goals of the County's Comprehensive Plan, including:

- Creating compact mixed-use districts and reducing automobile dependency and travel to obtain basic services.
- Creating pedestrian scale communities that focus on the relationship between the street, buildings, streetscaping and people.
- Improving street character with consistent signage, lighting, landscaping and other design features.
- Including a very high-density mix of retail, office, services, and employment opportunities to serve several neighborhoods.
- Providing setbacks and/or transitional buffers for developments when located adjacent to lower density residential uses.
- Adding traffic calming improvements, sidewalks, and increased street interconnections to increase safety and improve walkability.
- Identifying and encouraging new and innovative approaches to quality residential

development which expand housing opportunities and minimize public and private costs.

- Enhancing existing and developing new gateways throughout the County.

B.

THE PROPOSED ZONING WILL PERMIT A USE THAT IS SUITABLE IN VIEW OF THE USE AND DEVELOPMENT OF ADJACENT AND NEARBY PROPERTIES.

The Subject Property is in the southwest quadrant of a major node that, to the north, includes high-intensity office, commercial and residential uses and entitlements that will allow for more. On the south side and in immediate proximity to the Subject Property, the uses adjacent and nearby are comparable in both nature (i.e., multi-family at the Camden St. Clair (West) and commercial/restaurant at Williamsburg Village (East)) and height (i.e., Briarcliff Oaks Apartments (West) and Kingsbridge Retirement Community (Southwest). Finally, the Subject Property also abuts property currently zoned HR-2 (High Density Residential—2) (Camden St. Clair (West)), a complimentary zoning district.

C.

THE PROPERTY TO BE EFFECTED BY THE ZONING PROPOSAL HAS LIMITED ECONOMIC USE AS CURRENTLY ZONED.

The Subject Property's has limited economic use as currently zoned. The best evidence of this fact are the existing uses on-site. Despite its prime location at the intersection of a major interstate and a major arterial road and despite its proximity to major employment centers like Century Center, the Subject Property is only partially occupied and is used exclusively for auto repair, oil change and auto storage/salvage.

D.

THE PROPOSED ZONING WILL NOT ADVERSELY AFFECT THE EXISTING USE OR USABILITY OF ADJACENT OR NEARBY PROPERTIES.

See B above.

E.

THERE ARE OTHER EXISTING AND CHANGING CONDITIONS AFFECTING THE USE AND DEVELOPMENT OF THE PROPERTY WHICH SUPPORT THE APPROVAL OF THE PROPOSED ZONING.

Both the Subject Property's zoning and Land Use designation have lagged change and growth in the immediate area. The Applicant seeks to rectify that fact, proposing a development that will be an asset for the nearby community and, potentially, a catalyst for additional high-quality redevelopment for other parcels in area.

F.

THE PROPOSED ZONING WILL NOT ADVERSELY AFFECT HISTORIC BUILDINGS, SITES, DISTRICTS, OR ARCHAEOLOGICAL RESOURCES.

The Applicant knows of no historic buildings, sites, districts, or archaeological resources either on the Subject Property or located in the immediate vicinity that would suffer adverse impacts from the zoning requested.

G.

THE PROPOSED ZONING WILL NOT CAUSE AN EXCESSIVE OR BURDENSOME USE OF EXISTING STREETS, TRANSPORTATION FACILITIES, UTILITIES, OR SCHOOLS.

The development, if approved, will not adversely affect existing transportation facilities. The Applicant will be providing a Traffic Impact Study that directly responds to this issue and highlights two additional points relevant to traffic. First, through this development, the Applicant will be removing 15 full-access curb cuts and replacing them with only one direct

access point onto the right-of-way, a right-in and right-out on Clairmont Road. This change will improve traffic flow by controlling access to the right-of-way. Second, the Subject Property is zoned commercial now, meaning that the site is already entitled for a number of uses that could generate significantly more traffic than proposed (e.g., A health/fitness club and automated car wash are allowed on the site today as of right and would generate 31% more daily trips; a pharmacy without a drive-thru, a high-turnover sit-down restaurant and an automated car wash are allowed on the site today as of right and would generate 54% more daily trips).

Water and sewer exist at the Subject Property. Further, the Applicant is in the process of securing a sewer capacity letter from the County.

Finally, and as to schools, the Subject Property is served by Sagamore Hills Elementary School, Henderson Middle School and Lakeside High School. The Applicant notes that the majority of the multi-family units are studio and one-bedroom and, hence, not designed for families. Therefore, while the Subject Property may generate some additional school-aged children, the Applicant anticipates that the numbers will be low and should have, at best, a negligible impact on the County school system.

H.

THE PROPOSED ZONING WILL NOT ADVERSELY IMPACT THE ENVIRONMENT OR SURROUNDING NATURAL RESOURCES.

The Applicant will comply with all federal, state, and county regulations relating to environmental protection to ensure that the proposed development will not adversely affect the environment.

III. NOTICE OF CONSTITUTIONAL CHALLENGE AND PRESERVATION OF CONSTITUTIONAL RIGHTS

The Applicant respectfully submits that the existing zoning on the Subject Property is unconstitutional and that a refusal to approve the proposed rezoning, or any attempt to rezone the

Subject Property to an intervening classification, would be unlawful, arbitrary, capricious, irrational and a manifest abuse of discretion, all in violation of the Fifth Amendment and Fourteenth Amendment of the Constitution of the United States, and Article I, Section I, Paragraph I and Article I, Section III, Paragraph I of the Constitution of the State of Georgia.

A refusal to approve the proposed rezoning, or any attempt to rezone the Subject Property to an intervening classification, would discriminate unfairly between the owner of the Subject Property and other property owners similarly situated, in violation of the Fifth Amendment and Fourteenth Amendment of the Constitution of the United States, and Article I, Section I, Paragraph II of the Constitution of the State of Georgia.

A refusal to approve the proposed rezoning, or any attempt to rezone the Subject Property to an intervening classification, would amount to a taking of property, in violation of the Fifth Amendment and Fourteenth Amendment of the Constitution of the United States, and Article I, Section I, Paragraph I and Article I, Section III, Paragraph I of the Constitution of the State of Georgia.

A refusal to approve the proposed rezoning, or any attempt to rezone the Subject Property to an intervening classification, would be unjustified from a fact-based standpoint and instead would result only from constituent opposition, which would be an unlawful delegation of authority in violation of Article IX, Section II, Paragraph IV of the Constitution of the State of Georgia.

A refusal to approve the proposed rezoning, or any attempt to rezone the Subject Property to an intervening classification, would be invalid inasmuch as the Zoning Ordinance of DeKalb County is unlawful, null and void because its adoption and map adoption/maintenance did not

and does not comply with the requirements of its predecessor ordinance and/or the Zoning Procedures Law, O.C.G.A. § 36-66-1, *et seq*.

DeKalb County's Zoning Ordinance lacks adequate standards for the Board of Commissioners to exercise its power to review this Application. Specifically, the "standards and factors" set out in Section 27-7.3.5 are not sufficient to contain the discretion of the Board of Commissioners and to provide the Courts with a reasonable basis for judicial review. Because the stated standards (individually and collectively) are too vague and uncertain to provide reasonable guidance, the Zoning Ordinance is unlawful and violates, among other things, the Fifth Amendment and Fourteenth Amendment of the Constitution of the United States and Article I, Section I, Paragraphs I and II of the Constitution of the State of Georgia.

Any limitation on the time for presentation of the issues before the Board of Commissioners, which has the power to zone and rezone property, is a violation of the guarantees of free speech under the First Amendment of the Constitution of the United States and Article I, Section I, Paragraph V of the Constitution of the State of Georgia. Further, said limitations are in violation of the right to petition and assemble, in violation of the First Amendment of the Constitution of the United States and Article I, Section I, Paragraph IX of the Constitution of Georgia, as well as the due process clauses of the United States and Georgia Constitutions.

The Applicant raises the defenses of lack of standing and failure to exhaust administrative remedies.

IV. CONCLUSION

For the foregoing reasons, the Applicant respectfully requests that the proposed rezoning be approved. The Applicant also invites and welcomes any comments from Staff or other

officials of DeKalb County so that such recommendations or input might be incorporated as conditions of approval of this Application.

This 2nd day of July, 2020.

Respectfully submitted,

Dennis J. Webb, Jr.
Attorney for Applicant

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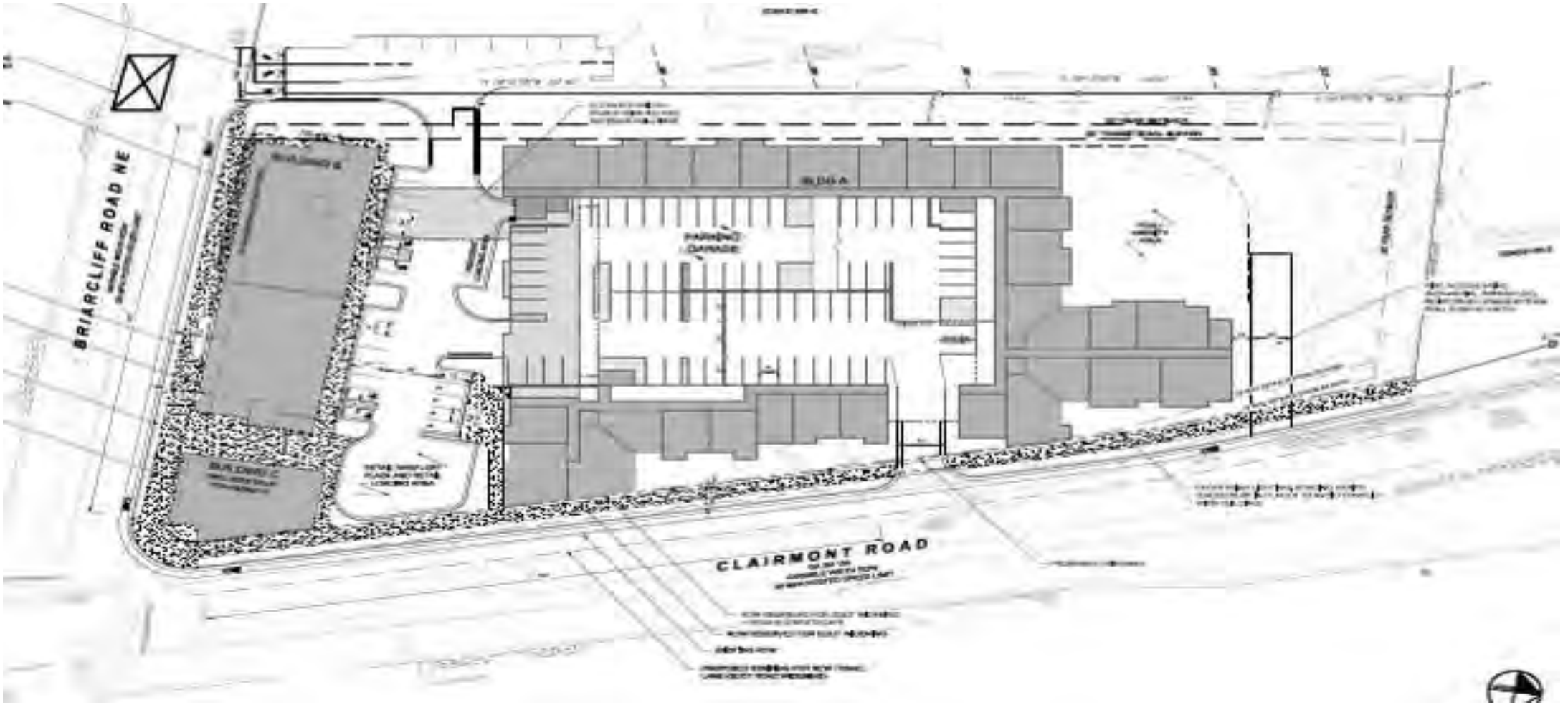
1230 Peachtree Street, NE
Atlanta, Georgia 30309
404-815-3500

D. 2 Z-20-1244108

Site Plan

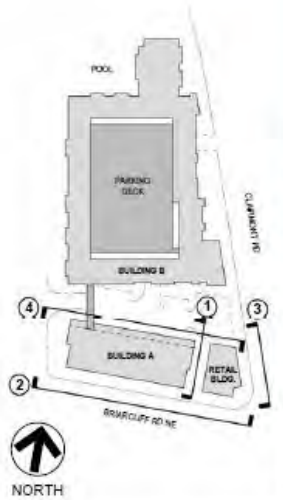


D. 2 Z-20-1244108

Elevations

ELEVATION 1 - BUILDING A

ELEVATION 2 - BUILDING A (BRIARCLIFF RD)



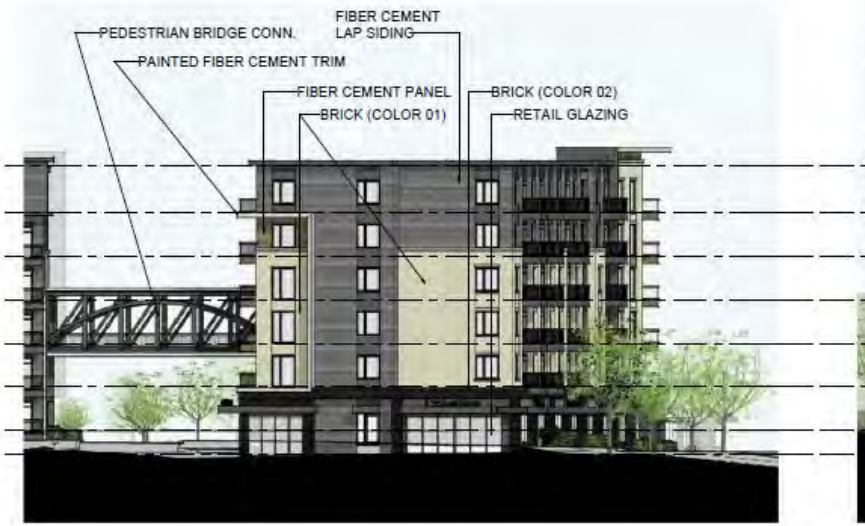
KEY PLAN

ELEVATION 3 - RETAIL BUILDING

ELEVATION 4 - BUILDING A

D. 2 Z-20-1244108

Elevations



ELEVATION 5 - BUILDING A

ELEVATION 6 - BUILDING B

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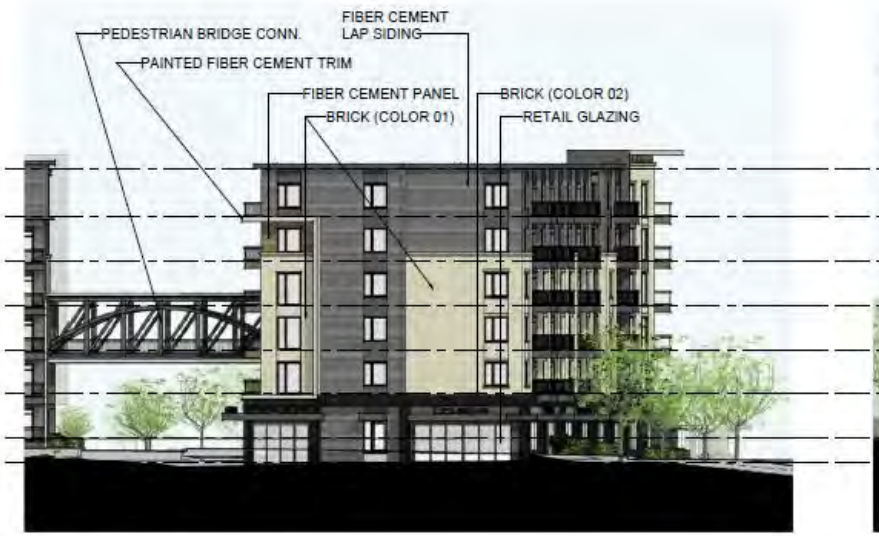
Elevations



ELEVATION 5 - BUILDING A

ELEVATION 6 - BUILDING B

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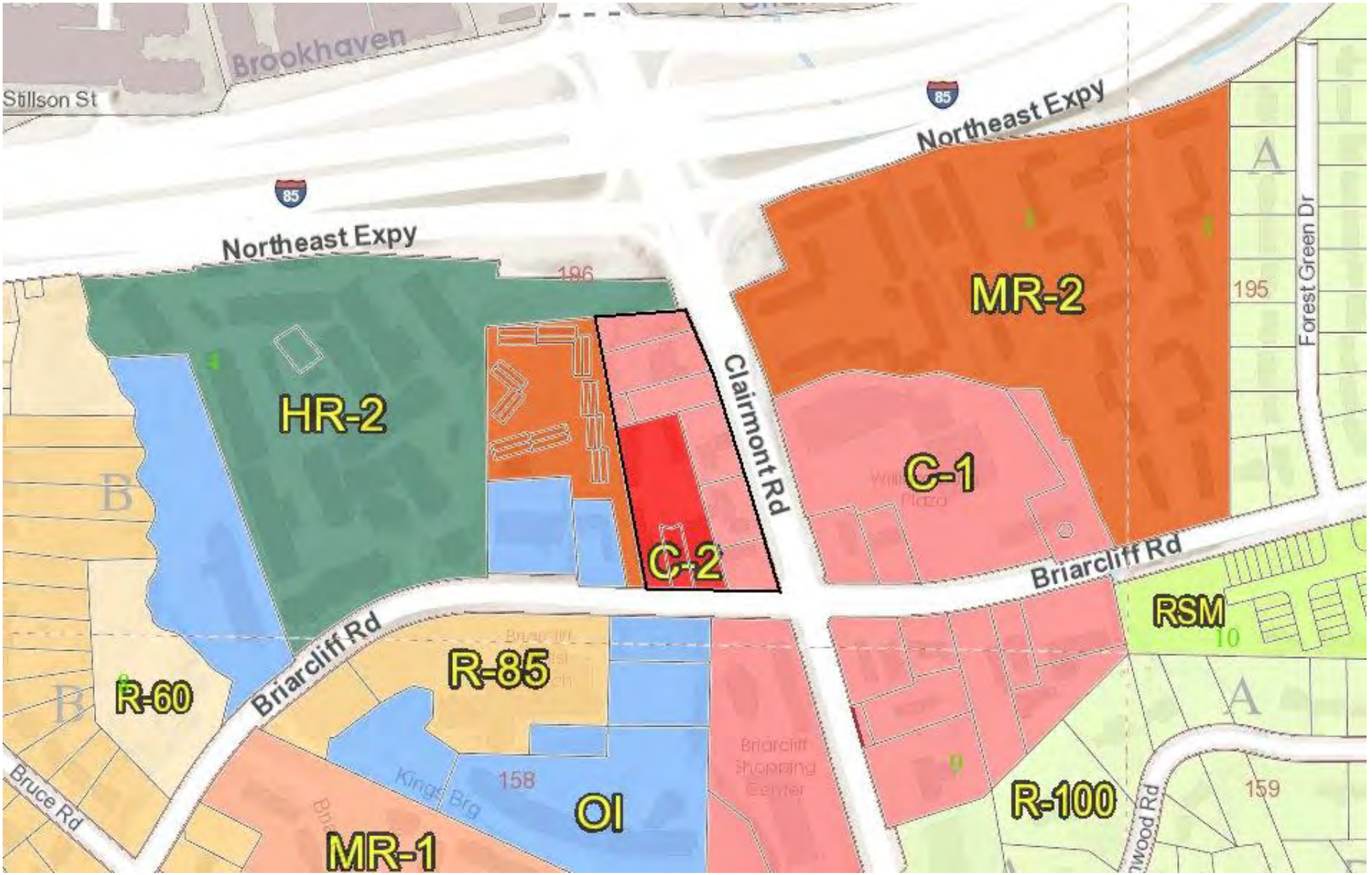
Zoning Map



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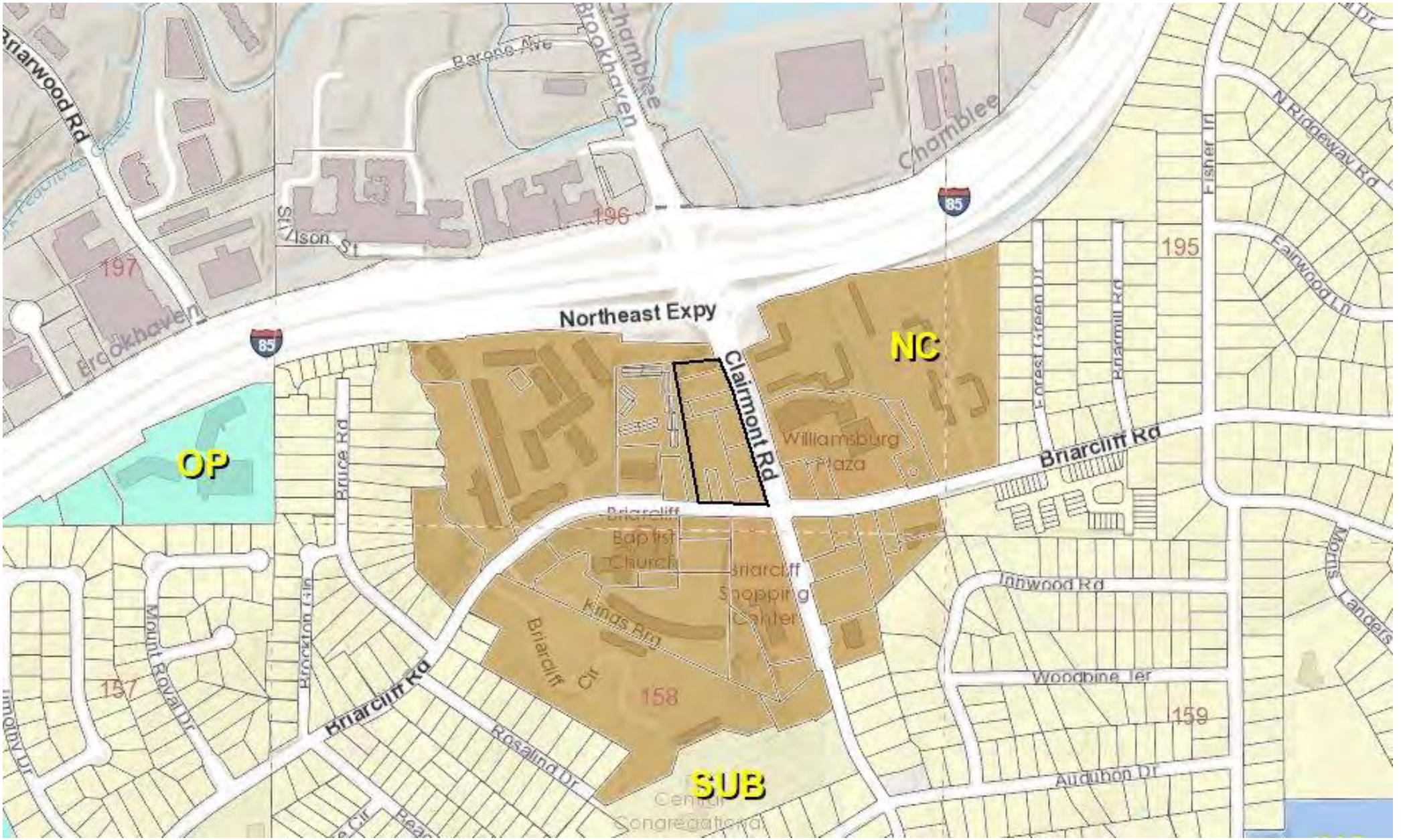
Land Use Map



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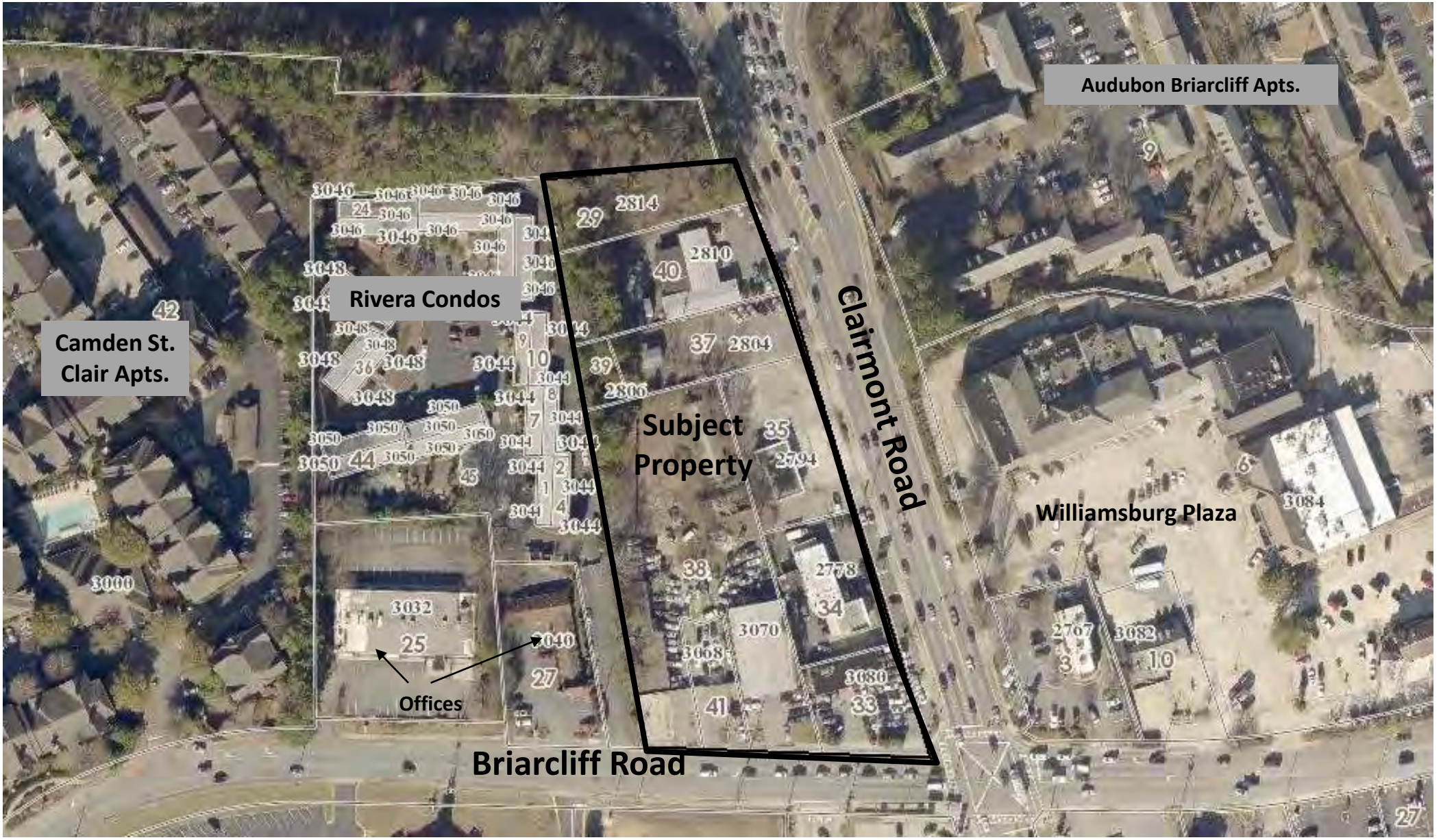
Briarcliff Road-Clairmont Road Draft SAP Future Land Use Map

Proposed Future Land Use Map

D. 2 Z-20-1244108

Aerial View



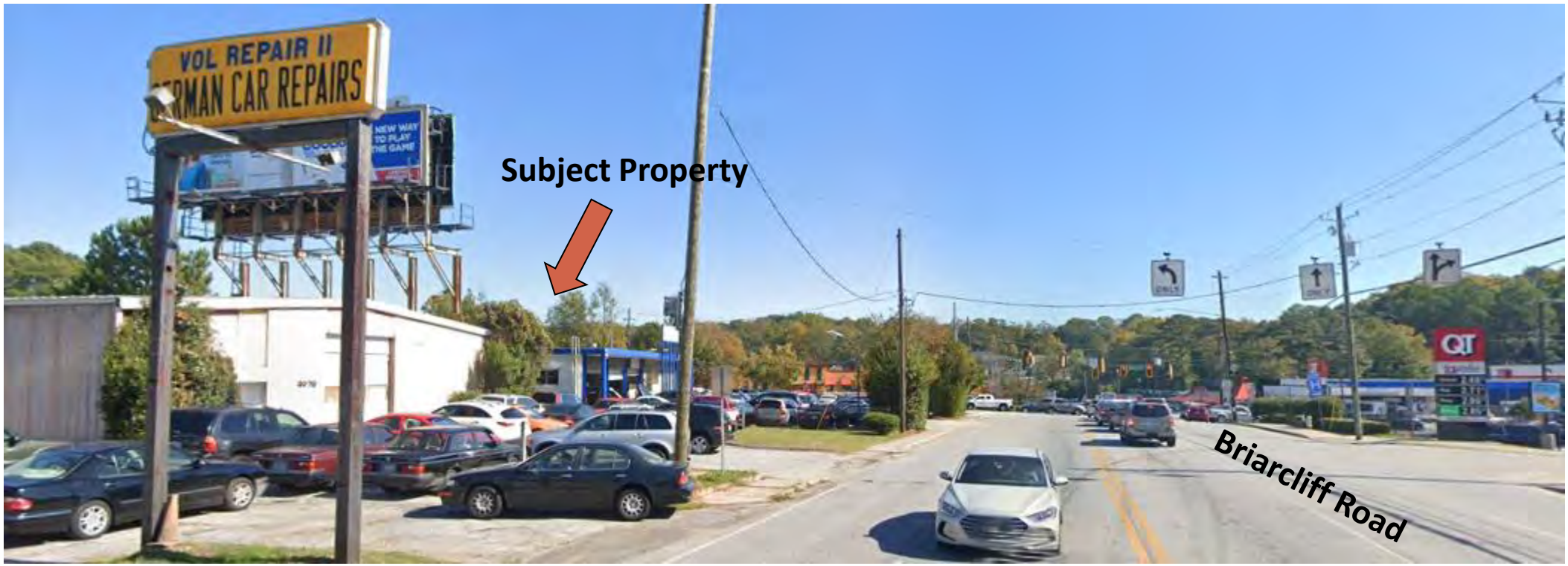
D. 2 Z-20-1244108 Site Photos

D. 2 Z-20-1244108

Site Photos

D. 2 Z-20-1244108

Site Photos



Traffic Impact Study

Lumen Briarcliff

DeKalb County, Georgia

Report Prepared:

July 2020

Prepared for:

Stein Investment Group

Prepared by:

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1.0 INTRODUCTION

This report presents the analysis of the anticipated traffic impacts associated with the *Lumen Briarcliff* development, which is expected to be completed in 2022 (referred to herein as "build-out year"). This study evaluates the impact of constructing 264 multi-family apartments, approximately 5,000 SF of retail, and approximately 5,000 SF of restaurant space. The approximate ±3.4-acre site is located in the northwest quadrant of the intersection of Clairmont Road (SR 155/US 23) at Briarcliff Road in DeKalb County, Georgia.

The site is currently comprised of approximately 5 buildings that are proposed to be demolished with the redevelopment of the site. Some of the buildings are currently in operation and generating traffic while other buildings are abandoned or generating minimal traffic.

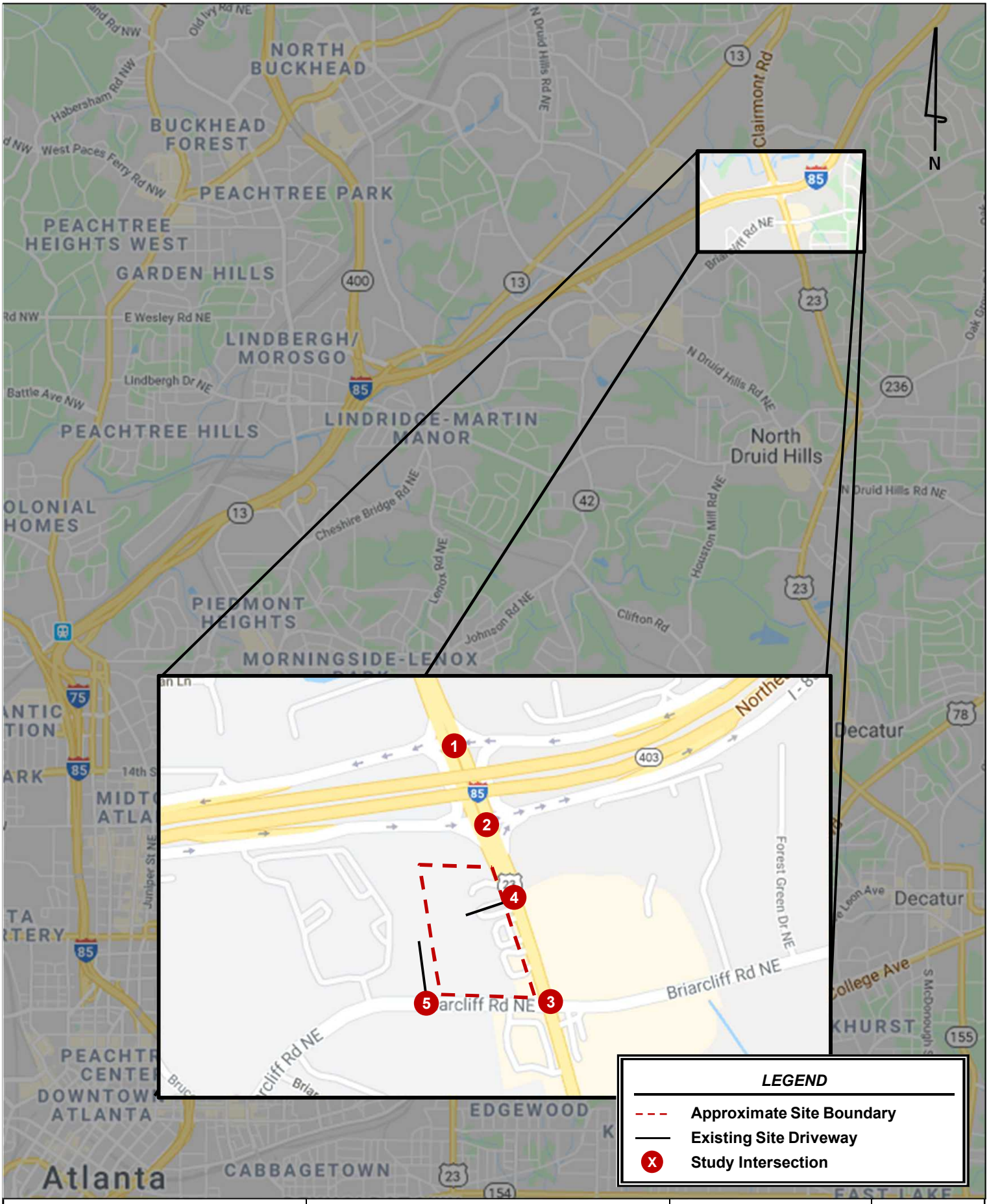
Figure 1 provides a location map of the project site. **Figure 2** provides an aerial image that captures the project site and the study roadway network. A site plan is also included in **Appendix A**.

2.0 STUDY AREA DETERMINATION

The study area consists of the following five (5) intersections:

1. Clairmont Road (SR 155/US 23) at I-85 SB Ramps (Signalized)
2. Clairmont Road (SR 155/US 23) at I-85 NB Ramps (Signalized)
3. Clairmont Road (SR 155/US 23) at Briarcliff Road (Signalized)
4. Clairmont Road (SR 155/US 23) at Site Driveway East (Unsignalized)
5. Briarcliff Road at Riviera Terrace Condominiums Driveway (Unsignalized)

For purposes of the traffic impact study, I-85, Briarcliff Road, and Site Driveway East are considered to have an east-west orientation. Clairmont Road (SR 155/US 23) and Riviera Terrace Condominiums Driveway are considered to have a north-south orientation.



Kimley»Horn	*Lumen Briarcliff Traffic Impact Study*	**Site Location Map**	**Figure 1**
			Page 2

Kimley»Horn	*Lumen Briarcliff Traffic Impact Study*	Site Aerial	Figure 2
			Page 3

3.0 EXISTING TRAFFIC CONDITIONS

The roadways within the study network have the following characteristics:

Clairmont Road (SR 155/US 23) is a four-lane, principal arterial with turn lanes and a posted speed limit of 40 MPH. GDOT counts taken north of Briarcliff Road indicate an AADT of 43,000 vehicles per day in 2018.

Briarcliff Road is a four-lane minor arterial with turn lanes and a posted speed limit of 35 MPH in the vicinity of the study network. GDOT counts taken west of Clairmont Road (SR 155/US 23) indicate an AADT of 11,900 vehicles per day in 2018.

I-85 is a twelve-lane, interstate with a posted speed limit of 65 MPH in the vicinity of the study network. GDOT counts taken west of the I-85/Clairmont Road interchange indicate an AADT of 216,000 vehicles per day in 2018.

Vehicle peak hour turning movement counts were performed at the following study intersections:

1. Clairmont Road (SR 155/US 23) at I-85 SB Ramps (Signalized)
2. Clairmont Road (SR 155/US 23) at I-85 NB Ramps (Signalized)
3. Clairmont Road (SR 155/US 23) at Briarcliff Road (Signalized)

The turning movement counts for intersections 1 and 2 were collected on Wednesday, November 8, 2017. The turning movement counts for intersection 3 were collected on Thursday, March 7, 2019. **Table 1** shows the AM and PM peak hours for each intersection.

Table 1: Peak Hour Summary

Intersection	AM Peak Hour	PM Peak Hour
1. Clairmont Road (SR 155/US 23) at I-85 SB Ramps	7:45 AM – 8:45 AM	4:00 PM – 5:00 PM
2. Clairmont Road (SR 155/US 23) at I-85 NB Ramps	7:30 AM – 8:30 AM	4:15 PM – 5:15 PM
3. Clairmont Road (SR 155/US 23) at Briarcliff Road	7:30 AM – 8:30 AM	5:00 PM – 6:00 PM

The peak hour traffic counts were increased at a 0.5% growth rate to the year 2020 (2 years for intersections 1 and 2; 1 year for intersection 3) which were considered to be estimated 2020 volumes to perform the analysis presented in this report. Growth rate calculations are provided in **Appendix C**.

Turning movement counts were not collected at intersections 4 or 5. The existing driveway associated with Intersection 4 appears to currently operate with minimal traffic. Additionally, the land uses served by this driveway are proposed to be demolished and will not generate traffic in the 2022 Build conditions. Therefore, the existing volumes entering and exiting the driveway were assumed to be zero. Other driveways along Clairmont Road (SR 155/US 23) and Briarcliff Road are proposed to be demolished.

Due to COVID-19, turning movement counts were not collected at the intersection of Briarcliff Road at Riviera Terrace Condominiums Driveway (Intersection 5). Instead, gross trips were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Tenth Edition, 2017,* using equations where available, for the 45 existing condominiums (ITE Code: 220 Multi-Family Housing (Low-Rise)).

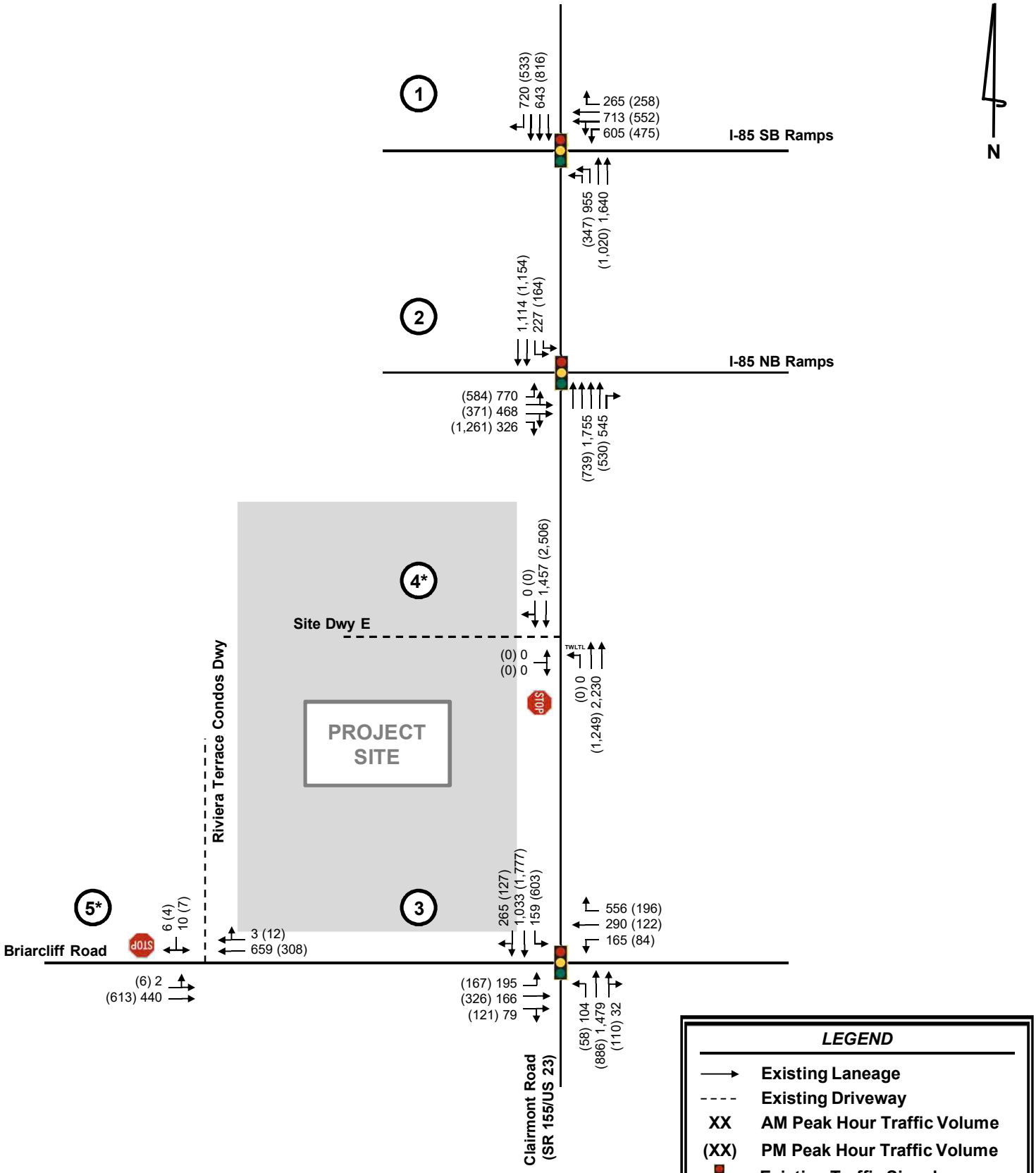
Table 2 summarizes the trip generation for the existing Riviera Terrace Condominiums.

Table 2: Riviera Terrace Condominiums Trip Generation Summary

ITE Code	Land Use	Density	Daily Traffic		AM Peak Hour		PM Peak Hour	
			Enter	Exit	Enter	Exit	Enter	Exit
220	Multi-Family Housing (Low-Rise)	45 Units	150	150	5	17	18	11

Trips associated with the existing Riviera Terrace Condominiums development were applied to the intersection of Briarcliff Road at Riviera Terrace Condominiums Driveway (Intersection 5) using the same trip distribution and assignment as the *Lumen Briarcliff* development residential trip distribution and assignment for Intersection 5 as shown in **Figure 5**. The trips associated with the existing Riviera Terrace Condominiums were only applied to Intersection 5. It was assumed that the project trips were already accounted for in the turning movement counts collected at the other study intersections. Trip distribution and assignment methodology is discussed in further detail in *Section 5.3*.

Figure 3 illustrates the estimated 2020 peak hour traffic volumes at the study intersections as well as the existing roadway geometry (intersection layout). The complete traffic count data is provided in **Appendix B**.



*Traffic counts were not collected at intersections 4 and 5. Volumes for these intersections were calculated using upstream/downstream intersection volumes and trip generation for the Riviera Terrace Condos. Volumes entering/exiting intersection 4 were assumed to be 0 to be more conservative.
Note: Turning movement counts collected at intersections 1-3 were increased assuming 0.5% per year to year 2020.

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Lumen Briarcliff
Traffic Impact Study

Estimated 2020 Conditions

Figure 3

4.0 PROJECTED BACKGROUND (NON-PROJECT) TRAFFIC

Projected background (non-project) traffic is defined as the expected traffic on the roadway network in the future year(s) absent the *Lumen Briarcliff* development. The existing 2020 peak hour traffic volumes were increased by 0.5% per year for two (2) years to account for the expected background growth in traffic through year 2022, build-out of the project. **Figure 4** illustrates the Projected 2022 No-Build traffic volumes.

4.1 FUTURE ROADWAY / INTERSECTION PROJECTS

The Atlanta Regional Commission's "Atlanta Region's Plan", the DeKalb County SPLOST project list, and GDOT's GeoPI system were researched to identify any currently programmed transportation projects that may impact the study network during the analysis period. Two (2) projects were identified in the vicinity of the site and are shown below in **Table 3**.

Table 3: Future Roadway Projects

PI#	Build Year	Description
0015956 (GDOT)*	2023	This project proposes to provide a raised median, additional through lane, and sidewalks (where none available) along Clairmont Road (SR 155/US 23) from I-85 NB Exit Ramp to Audubon Drive.
M006145 (GDOT)	N/A	This project proposes to resurface Clairmont Road (SR 155/US 23).

** Note: Please refer to the site plan in Appendix A that accounts for the additional widening to accommodate this future GDOT project.*

No improvements were considered in this analysis due to the build-out year of the improvements being beyond the build-out year of the proposed *Lumen Briarcliff* development.

Additional details about the projects listed above are provided in **Appendix E**.

5.0 PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the proposed development, and the distribution and assignment of that traffic through the study roadway network. This traffic impact study evaluated the impacts of adding the new trips generated by the proposed *Lumen Briarcliff* development.

5.1 PROJECT SITE ACCESS

Currently, there are approximately 15 full-movement driveways serving the site. However, access to the site will be provided via two (2) existing site driveways, which is shown on the proposed site plan in **Appendix A**, and all other driveways will be demolished. A brief description of the site driveways are as follows:

- Site Driveway East (Intersection 4) – an existing full-movement driveway along Clairmont Road (SR 155/US 23) located approximately 450 feet north of the intersection of Clairmont Road (SR 155/US 23) at Briarcliff Road (Intersection 3). The driveway is proposed to be converted to right-in/right-out only and maintain the existing one (1) ingress and one (1) egress lane on the site.

- Riviera Terrace Condominiums Driveway (Intersection 5) – an existing full-movement driveway along Briarcliff Road located approximately 400 feet west or the intersection of Clairmont Road (SR 155/US 23) at Briarcliff Road (Intersection 3). The intersection currently operates under side-street stop-control and is proposed to consist of two (2) egress lanes and one (1) ingress lane.

An additional fire access drive is proposed to be provided along Clairmont Road (SR 155/US 23) approximately 200 feet north of Site Driveway East (Intersection 4).

The proposed site driveways provide vehicular access to the entire development. Internal, private drives throughout the site provide access to all buildings and parking facilities. Refer to the site plan in **Appendix A** for a visual representation of vehicular access and circulation throughout the proposed development.

5.2 TRIP GENERATION

Gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Tenth Edition, 2017,* using equations where available. Trip generation for the proposed development was calculated based upon the following land uses:

- Land Use 221: Multi-Family Housing (Low-Rise)
- Land Use 820: Shopping Center
- Land Use 931: Quality Restaurant

Reductions to gross trips were considered in the analysis, including internal capture (mixed-use) reductions and pass-by reductions.

Mixed-Use reductions occur when a site has a combination of different land uses that interact with one another. For example, people living in a residential development may walk to the restaurants and retail instead of driving off-site or to the site. This reduces the number of vehicle trips that will be made on the roadway.

Pass-by reductions are taken for a site when traffic normally traveling along a roadway may choose to visit a retail or restaurant establishment that is along the vehicle's path. These trips were already on the road and would therefore only be new trips on the driveways. The retail and restaurant establishments proposed for the project are expected to generate pass-by trips.

Table 4 summarizes the gross and net trip generation for the proposed development upon full build-out (2022). **Appendix C** provides the detailed trip generation worksheet for the proposed development.

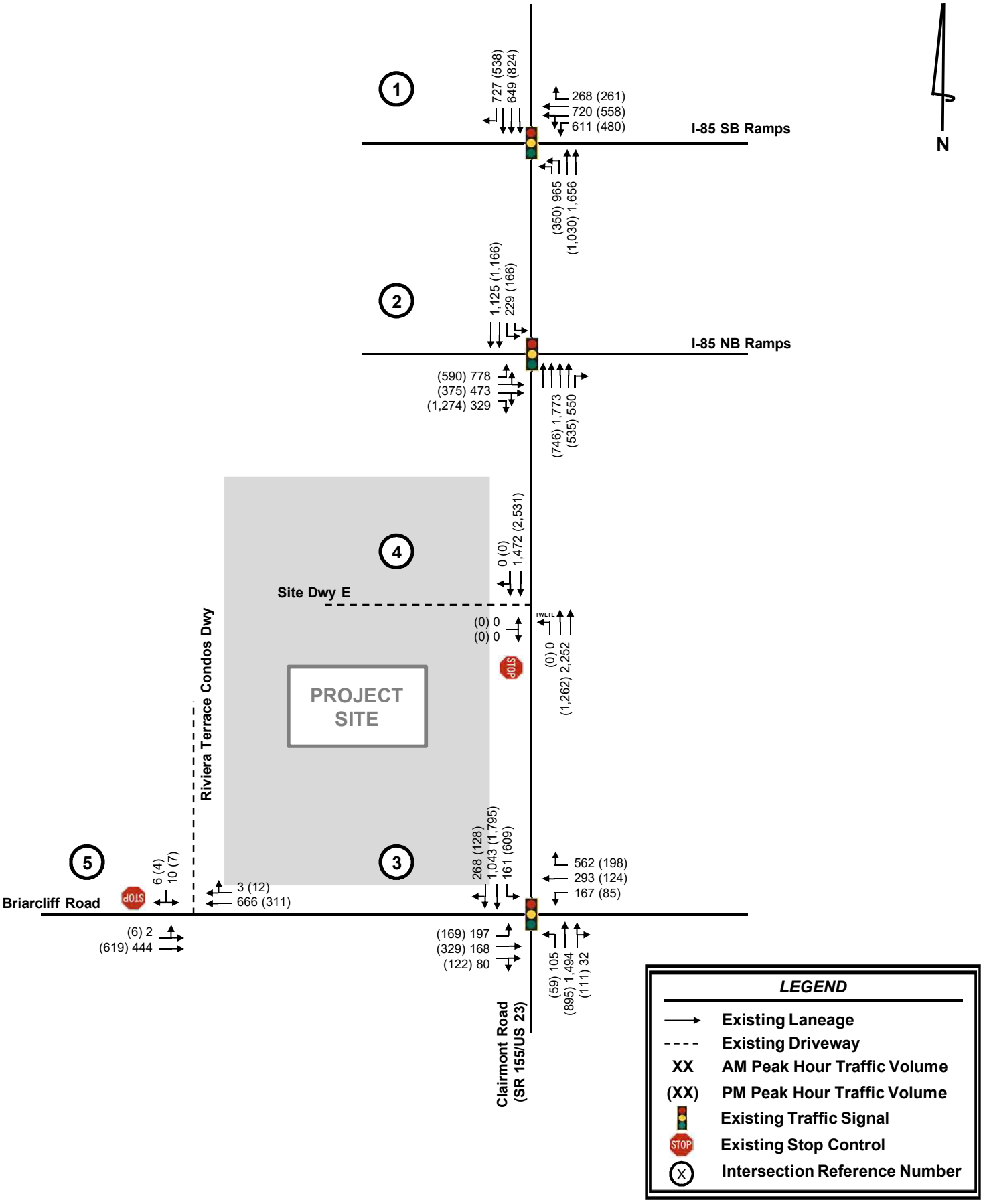
Table 4: Project Trip Generation Summary

ITE Code	Land Use	Density	Daily Traffic		AM Peak Hour		PM Peak Hour	
			Enter	Exit	Enter	Exit	Enter	Exit
221	Multi-Family Housing (Low-Rise)	264 units	719	719	23	66	68	44
820	Shopping Center	5,000 SF	89	89	3	2	9	10
931	Quality Restaurant	5,000 SF	210	210	2	2	26	13
Total Gross Trips			**1,023**	**1,023**	**28**	**70**	**103**	**67**
Mixed-Use Reductions			*-61*	*-61*	*-1*	*-1*	*-18*	*-18*
Pass-By Reductions			*-110*	*-110*	*-0*	*-0*	*-6*	*-6*
Total Net Trips			**852**	**852**	**27**	**69**	**79**	**43**

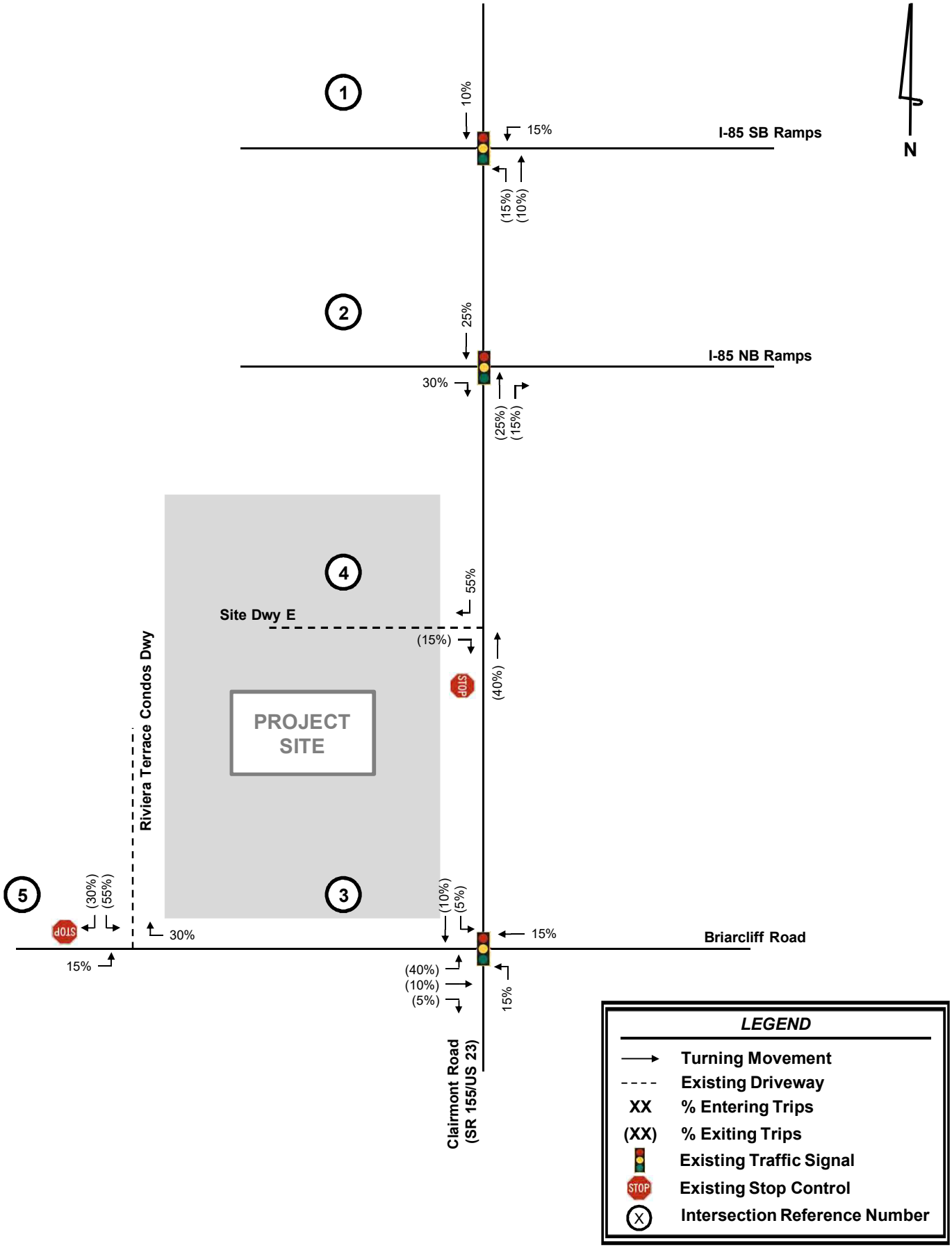
It should be noted that the existing land uses on the site currently generate traffic. All of the uses on the site are proposed to be demolished and will no longer generate traffic. However, existing traffic currently generated by the site was not reduced for a more conservative analysis.

5.3 TRIP DISTRIBUTION AND ASSIGNMENT

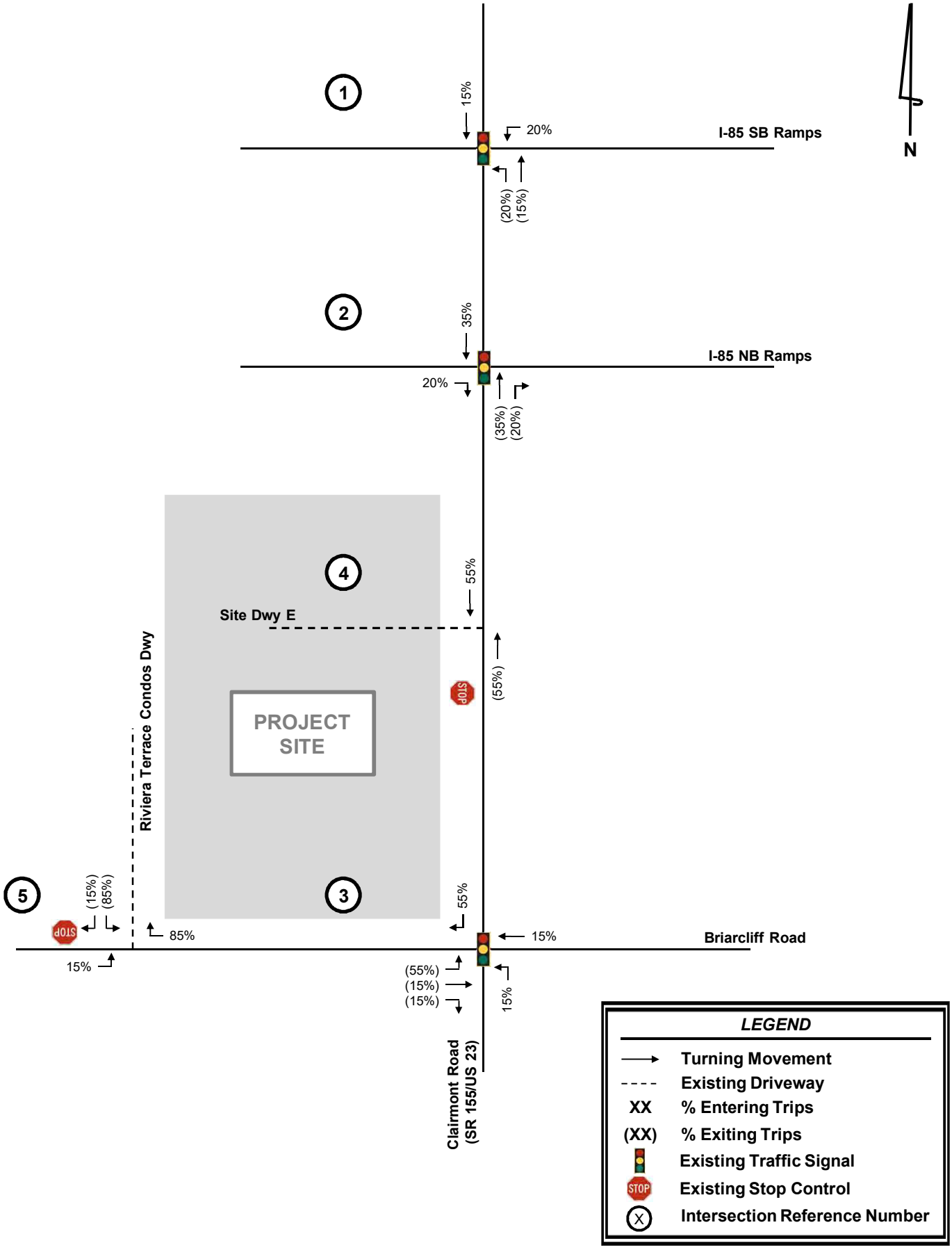
The directional distribution and assignment of adding new trips (project trips) related to the proposed development was based on a review of land uses and population densities in the area, and a review of the existing travel patterns in the area. Detailed trip distribution and assignment for both residential and non-residential land uses are shown in **Figure 5** and **Figure 6**, respectively. Based on trip generation from **Table 4** and the anticipated trip distribution, new project trips were assigned to the study roadway network. **Figure 7** illustrates the new project trips distributed throughout the study network for the Projected 2022 Build conditions. **Figure 8** illustrates the Projected 2022 Build traffic volumes for the AM and PM peak hours. **Appendix C** provides intersection volume worksheets for all study intersections.



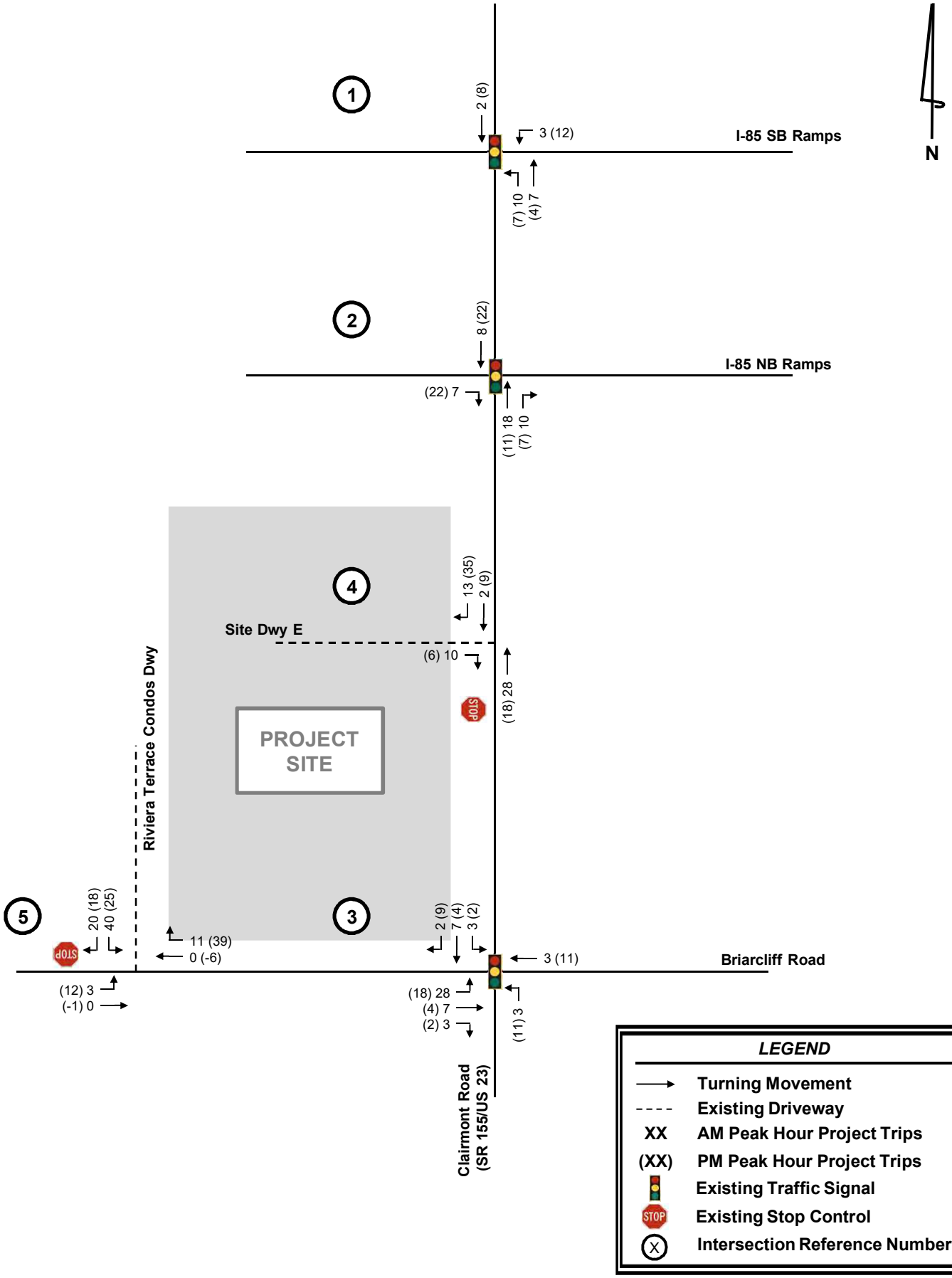
Kimley»Horn	*Lumen Briarcliff Traffic Impact Study*	**Projected 2022 No-Build Conditions**	**Figure 4**
			Page 10



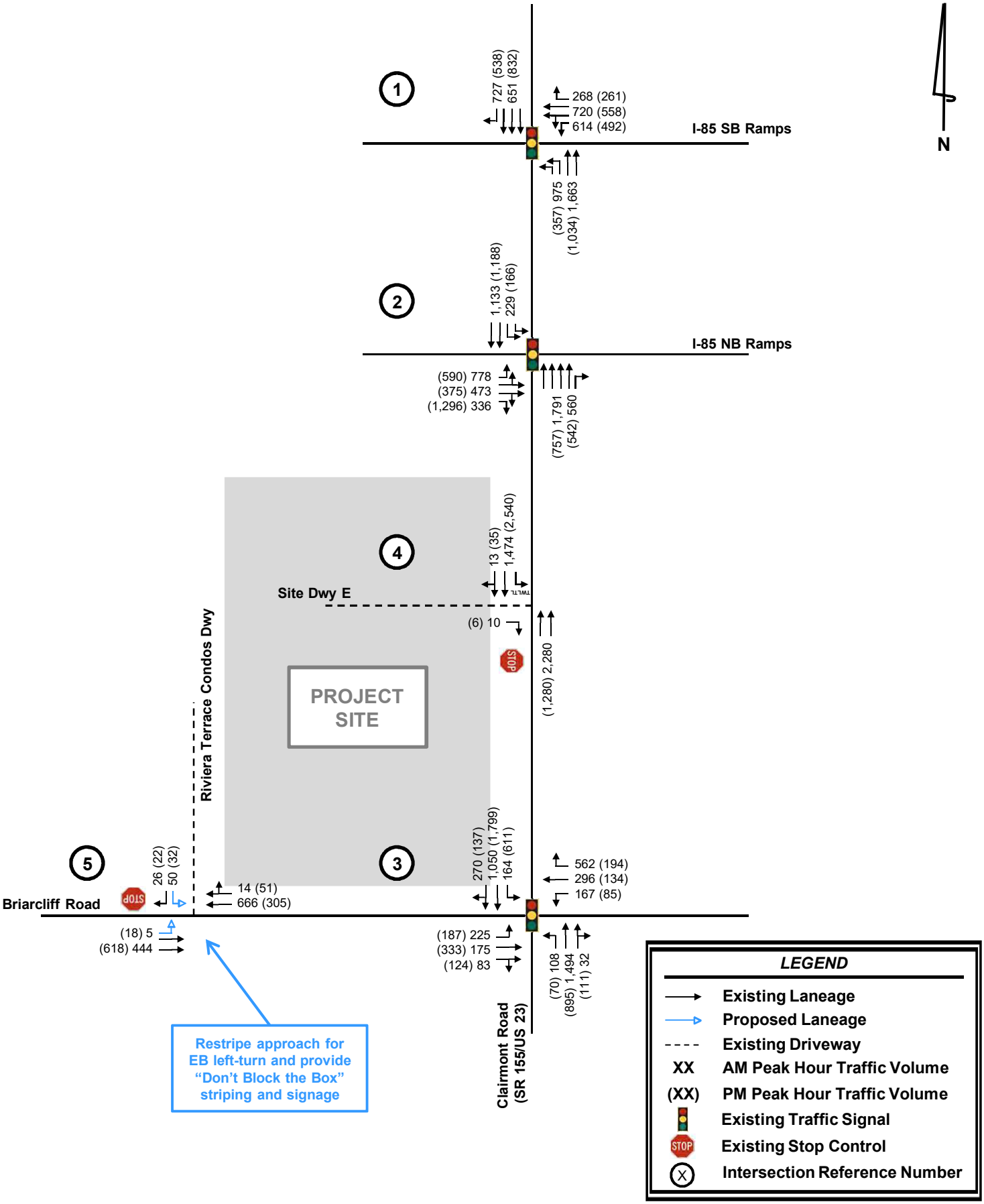
Kimley»Horn	*Lumen Briarcliff Traffic Impact Study*	**Residential Trip Distribution & Assignment**	**Figure 5**
			Page 11



Kimley»Horn	*Lumen Briarcliff Traffic Impact Study*	**Non-Residential Trip Distribution & Assignment**	**Figure 6**
			Page 12



Kimley»Horn	*Lumen Briarcliff Traffic Impact Study*	**Project Trips**	**Figure 7**
			Page 13



Kimley»Horn	*Lumen Briarcliff Traffic Impact Study*	**Projected 2022 Build Conditions**	**Figure 8**
			Page 14

6.0 LEVEL-OF-SERVICE ANALYSIS

Level-of-service determinations were made for the weekday AM and PM peak hours for the study network intersections using *Synchro, Version 10*. *Synchro* software uses methodologies contained in the *Highway Capacity Manual, 6th Edition* to determine the operating characteristics of an intersection. Capacity is defined as the maximum number of vehicles that can pass over a particular road segment or through a particular intersection within a specified period under prevailing roadway, traffic, and control conditions.

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions of a traffic stream. The *Highway Capacity Manual* defines six levels of service, LOS A through LOS F, with A being the best and F the worst.

LOS for signalized intersections are reported for the intersection as a whole. One or more movements at an intersection may experience a low LOS, while the intersection as a whole may operate acceptably.

Levels-of-service for unsignalized intersections, with stop control on the minor street only, are reported for the side-street approaches and major street left-turns. Low levels-of-service for side street approaches are not uncommon, as vehicles may experience significant delay turning onto a major roadway.

In addition to the Existing 2020 conditions, an analysis was performed for the AM and PM peak hours under Projected 2022 No-Build and Build traffic conditions. The results of the LOS analysis are summarized for the AM and PM peak hours in **Table 5**. The *Synchro* analysis reports are included in **Appendix D**.

Table 5: Level-of-Service Summary
LOS (Delay in Seconds)

Intersection	Control	Approach	Existing 2020		Projected 2022 No-Build		Projected 2022 Build	
			AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
1. Clairmont Road (SR 155/US 23) at I-85 SB Ramps	Signal	Overall	E (61.8)	C (23.8)	E (63.9)	C (24.0)	E (64.6)	C (24.2)
2. Clairmont Road (SR 155/US 23) at I-85 NB Ramps	Signal	Overall	C (30.6)	C (33.7)	D (38.6)	C (34.9)	D (38.7)	D (36.6)
3. Clairmont Road (SR 155/US 23) at Briarcliff Road	Signal	Overall	E (55.6)	D (51.7)	E (57.1)	D (53.5)	E (58.5)	D (55.0)
4. Clairmont Road (SR 155/US 23) at Site Driveway East	RIRO	EB	A (0.0)	A (0.0)	A (0.0)	A (0.0)	B (12.9)	F (124.7)
5. Briarcliff Road at Riviera Terrace Condominiums Driveway	TWSC	SB	B (10.7)	B (10.6)	B (10.8)	B (10.6)	B (11.3)	B (11.0)
		EBL	A (8.0)	A (7.5)	A (8.0)	A (7.5)	A (8.0)	A (7.6)

**As stated above, low levels-of-service for side-street approaches are not uncommon as vehicles may experience greater delay turning onto a major roadway*

As shown in **Table 5**, the analysis indicates that under Existing 2020 conditions, the intersection of Clairmont Road (SR 155/US 23) at I-85 SB Ramps (Intersection 1) and the intersection of Clairmont Road (SR 155/US 23) at Briarcliff Road (Intersection 3) both currently operate at LOS E during the AM peak hour. These intersections are expected to continue to operate at LOS E during the AM peak hour under Projected 2022 No-Build conditions and Projected 2022 Build conditions.

The eastbound approach for the intersection of Clairmont Road (SR 155/US 23) at Site Driveway East (Intersection 4) is expected to operate at LOS F during the PM peak hour under Projected 2022 Build conditions. It should be noted that low levels-of-service for side-street approaches are not uncommon as vehicles may experience greater delay turning onto a major roadway.

All other study intersections and movements are projected to operate at LOS D or better during all scenarios.

7.0 INTERSECTION CONTROL EVALUATION (ICE)

Per GDOT's Policy, Intersection Control Evaluation (ICE) was performed for the site driveway along Clairmont Road (SR 155/US 23). The intent of ICE is to determine the most effective intersection design/traffic control at a given intersection.

The intersection of Clairmont Road (SR 155/US 23) at Site Driveway East is proposed to be converted from a full-movement driveway to a right-in/right-out (RIRO) controlled driveway. The proposed intersection control is expected to reduce the number of turning movements at the intersection and is in agreement with the proposed median along Clairmont Road (SR 155/US 23); therefore, a waiver form has been prepared in place of ICE Stages 1 and 2 forms.

The ICE waiver form for the intersection of Clairmont Road (SR 155/US 23) at Site Driveway East is provided in **Appendix F**.

8.0 CONCLUSION

This traffic study evaluated the traffic impacts associated with the *Lumen Briarcliff* development located in the northwest quadrant of the intersection of Clairmont Road (SR 155/US 23) at Briarcliff Road in DeKalb County, Georgia. The development, which is approximately ±3.4 acres in size, will include 264 multi-family apartments, approximately 5,000 SF of retail, and approximately 5,000 SF of restaurant space.

The study network, which consists of five (5) intersections, was analyzed for the weekday AM and PM peak hours under Existing 2020 conditions, Projected 2022 No-Build conditions (three years of background traffic growth), Projected 2022 Build conditions (Projected 2022 No-Build conditions plus traffic generated by the proposed *Lumen Briarcliff* development).

The intersections of Clairmont Road (SR 155/US 23) at I-85 SB Ramps (Intersection 1) and Clairmont Road (SR 155/US 23) at Briarcliff Road (Intersection 3) currently operate at LOS E during the AM peak hour under Existing 2020 conditions. These intersections are expected to continue to operate at LOS E during the AM peak hour under Projected 2022 No-Build conditions and Projected 2022 Build conditions.

The eastbound approach for the intersection of Clairmont Road (SR 155/US 23) at Site Driveway East (Intersection 4) is expected to operate at LOS F during the PM peak hour under Projected 2022 Build conditions. It should be noted that low levels-of-service for side-street approaches are not uncommon as vehicles may experience greater delay turning onto a major roadway.

All other study intersections and movements are projected to operate at LOS D or better during all scenarios.

Kimley-Horn and Associates, Inc. recommends site access improvements based on the results of this study. Site access improvements, or “Build” recommendations, are needed to serve the background road network traffic plus the *Lumen Briarcliff* development traffic.

8.1 SITE-ACCESS IMPROVEMENT RECOMMENDATIONS

Based on the results of this study, Kimley-Horn and Associates, Inc. recommends the following site-access improvements to serve the Projected 2022 Build traffic conditions (note: this would be the improvements needed to serve the traffic associated with the *Lumen Briarcliff* development).

- Intersection 4 – Clairmont Road (SR 155/US 23) at Site Driveway East
    - Convert the existing, full-movement driveway to RIRO control
    - On the site, maintain one (1) ingress lane entering the site and one (1) egress lane exiting the site.
- Intersection 5 – Briarcliff Road at Riviera Terrace Condominiums Driveway
    - Provide one (1) southbound right-turn lane and one (1) southbound left-turn lane exiting the site, and one (1) lane entering the site.
    - Provide an eastbound left-turn lane along Briarcliff Road via restriping.
    - Provide “Don’t Block the Box” striping and signage.

Additionally, reserve right-of-way on site to accommodate GDOT project PI 0015956, which will construct an additional southbound lane and install a raised median along Clairmont Road (SR 155/US 23).

APPENDIX A

Site Plan

STREETSCAPE SUMMARY:

BRIARCLIFF ROAD NORTHEAST
(MINOR ARTERIAL - DEKALB CLASSIFICATION)
- EDGE OF EXISTING TRAVEL LANE
- 4' BIKE LANE
- 30" CURB AND GUTTER
- 4' LANDSCAPE STRIP
- 6' SIDEWALK (MINIMUM WIDTH)
- 6' LANDSCAPE STRIP (INTERMITTENT)

CLAIRMONT ROAD
STATE ROUTE 155 (MAJOR ARTERIAL - DEKALB CLASSIFICATION)
- EDGE OF PROPOSED TRAVEL LANE (ROAD WIDENING)
- 4' BIKE LANE
- 30" CURB AND GUTTER
- 6' LANDSCAPE STRIP
- 8' SIDEWALK
- 2' LANDSCAPE STRIP

DEVELOPMENT SUMMARY:

LAND USE

APARTMENTS	
ALLOWED (BASE+20% BONUS)	276 (72 UNITS/ACRE)
PROPOSED	264 (68.7 UNITS/ACRE)
COMMERCIAL	
PROPOSED	10,000 SF
BUILDING SUMMARY	
BUILDING A	204,865 SF
BUILDING B	77,854 SF
BUILDING C	5,020 SF

PARKING SUMMARY

APARTMENTS	
REQ'D	396 SPACES (1.5 PER UNIT)
PROVIDED	370 (1.4 PER UNIT)
COMMERCIAL	
REQ'D (RESTAURANT)	67 SPACES (1/150 SF)
PROVIDED	57 SPACES (1/167 SF)

LOADING SUMMARY

REQUIRED	4 SPACES (INCL. 1 x XL SPACE)
PROVIDED	2 SPACES (12' x 35' x 14' CLEAR)

BUILDING HEIGHT

BUILDING	MAX (BASE / BONUS)	PROPOSED
A	8 STORIES / NO LIMIT	6 STORIES
B	10 STORIES / NO LIMIT	6 STORIES
C	--	2 STORIES

FLOOD PLAIN
THIS PROJECT DOES NOT LIE WITHIN A 100 YEAR FLOOD HAZARD ZONE AS DEFINED BY THE F.E.M.A. "FLOOD HAZARD BOUNDARY MAP" COMMUNITY PANEL NUMBER 13089C0054K, DATED 8/15/2019.

ZONING SUMMARY:

SITE AREA

EXISTING	3.845 ACRES

ZONING

ZONING CLASSIFICATION	
EXISTING	C1 & C2
PROPOSED	HR-3
OVERLAY DISTRICT	
N/A	
FUTURE LAND USE (COMPREHENSIVE PLAN)	
EXISTING	NC (NEIGHBORHOOD CENTER)
PROPOSED	RC (REGIONAL CENTER)

OPEN SPACE

REQ'D	15%
PROVIDED	21%

OUTDOOR RECREATION AREA (5.7.7(G))

REQ'D	5%
PROVIDED	5%

LOT COVERAGE (PERCENT IMPERVIOUS)

MAX	85%
PROPOSED	84%

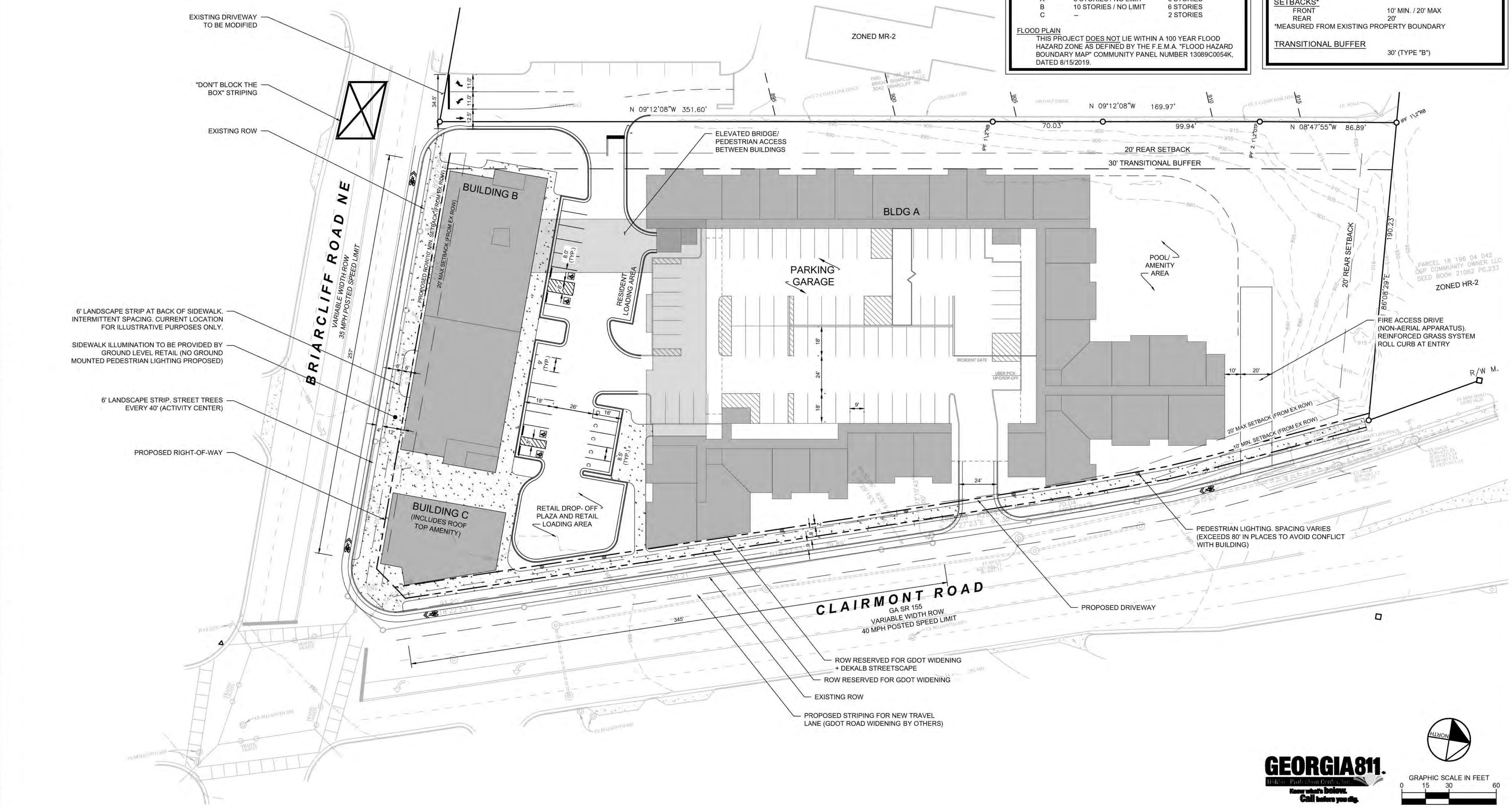
SETBACKS*

FRONT	10' MIN. / 20' MAX
REAR	20'

*MEASURED FROM EXISTING PROPERTY BOUNDARY

TRANSITIONAL BUFFER

	30' (TYPE "B")



GEORGIA811. Know what's below. Call before you dig.

PREPARED BY
Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
3930 EAST JONES BRIDGE ROAD, SUITE 350
PEACHTREE CORNERS, GEORGIA 30092
PHONE: 770-825-0744
WWW.KIMLEY-HORN.COM

PREPARED FOR
STEIN INVESTMENT GROUP
5607 GLENRIDGE DRIVE, SUITE 200
ATLANTA, GA 30342
PHONE: 770.580.2480

No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

PROJECT
BRIARCLIFF WEST
3086 BRIARCLIFF ROAD
ATLANTA, GA 30329
DEKALB COUNTY

GEORGIA REGISTERED PROFESSIONAL ENGINEER NO. 033065 BRADLEY L. HOWARD 7/1/20

GSWCC NO. (LEVEL II)	22363
DRAWN BY	RWB
DESIGNED BY	RWB
REVIEWED BY	BLH
DATE	7/1/20
PROJECT NO.	017481003

TITLE
REZONING SITE PLAN

SHEET NUMBER
C0.10

Drawing name: C:\Users\robert.barclift\KHPTC Development Services - Documents\017481003_3086 Briarcliff Road\CAD\PlanSheets\C2-00 - SITE PLAN.dwg C2-00 SITE PLAN Jul 01, 2020 5:35pm by: Robert.Barclift

APPENDIX B

Traffic Count Data

Prepared by National Data & Surveying Services

Clairmont Rd NE & I-85 SB Ramp

Peak Hour Turning Movement Count

ID: 17-09578-015
City: Atlanta

Day: Wednesday
Date: 11/08/2017

	PEAK HOURS	COUNT PERIODS
AM	07:45 AM - 08:45 AM	07:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:00 PM - 05:00 PM	04:00 PM - 06:00 PM

Clairmont Rd NE — SOUTHBOUND

	Right	Through	Left	U-Turn	Departing
AM	709	633	39	0	2147
NOON	0	0	0	0	0
PM	525	804	396	0	1518
Lanes	1	3	0	0	

I-85 SB Ramp — EASTBOUND

	AM	NOON	PM	Lanes
Departing	2352	0	1396	
U-Turn	0	0	0	0
Left	270	0	259	0
Through	0	0	0	0
Right	0	0	0	0

I-85 SB Ramp — WESTBOUND

	Lanes	PM	NOON	AM
Right	1	254	0	261
Through	1.5	544	0	702
Left	1.5	468	0	596
U-Turn	0	0	0	0
Departing		396	0	39

Clairmont Rd NE — NORTHBOUND

	Departing	U-Turn	Left	Through	Right
Lanes		0	2	2	0
PM	1287	15	327	1005	0
NOON	0	0	0	0	0
AM	1229	0	941	1616	0

CONTROL

Signalized

	AM	NOON	PM
TEV	5767	0	4597
PHF	0.98		0.95

Total Vehicles (AM)

- SB: 709, 633, 39
- EB: 270, 0, 0
- WB: 261, 702, 596
- NB: 941, 1616, 0

HT (AM)

- SB: 2, 5, 0
- EB: 0, 0, 0
- WB: 4, 1, 3
- NB: 0, 7, 0

Total Vehicles (Noon)

- SB: N/A, N/A, N/A
- EB: N/A, N/A, N/A
- WB: N/A, N/A, N/A
- NB: N/A, N/A, N/A

HT (NOON)

- SB: N/A, N/A, N/A
- EB: N/A, N/A, N/A
- WB: N/A, N/A, N/A
- NB: N/A, N/A, N/A

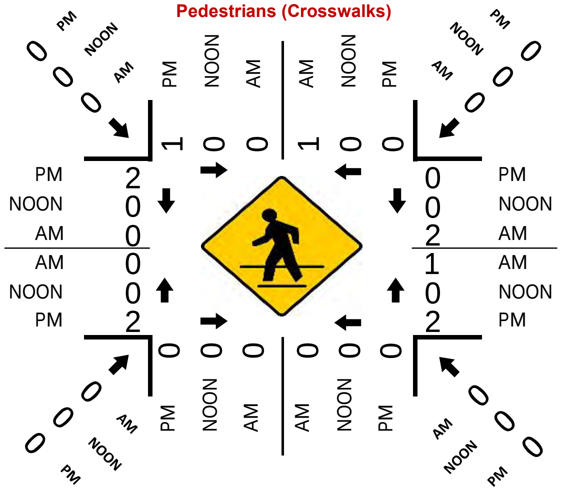
Total Vehicles (PM)

- SB: 525, 804, 396
- EB: 259, 0, 0
- WB: 254, 544, 468
- NB: 327, 100, 0

HT (PM)

- SB: 2, 1, 0
- EB: 0, 0, 0
- WB: 1, 0, 0
- NB: 0, 5, 0

Pedestrians (Crosswalks)



Project ID: 17-09578-015
Location: Clairmont Rd NE & I-85 SB Ramp
City: Atlanta

Day: Wednesday
Date: 11/08/2017

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Clairmont Rd NE Northbound						Clairmont Rd NE Southbound						I-85 SB Ramp Eastbound						I-85 SB Ramp Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
7:00 AM	234	310	0	0	0	544	8	131	169	0	0	308	45	0	0	0	0	45	169	132	62	0	4	363	1260
7:15 AM	244	317	0	0	0	561	6	148	170	0	0	324	59	0	0	0	0	59	189	103	75	0	1	367	1311
7:30 AM	243	344	0	0	0	587	6	185	215	0	0	406	73	0	0	0	1	73	173	132	50	0	0	355	1421
7:45 AM	241	392	0	0	0	633	6	175	177	0	1	358	70	0	0	0	0	70	165	152	69	0	0	386	1447
Total	962	1363	0	0	0	2325	26	639	731	0	1	1396	247	0	0	0	1	247	696	519	256	0	5	1471	5439
8:00 AM	225	412	0	0	0	637	14	167	199	0	0	380	62	0	0	0	0	62	154	178	53	0	0	385	1464
8:15 AM	221	413	0	0	0	634	12	149	170	0	0	331	79	0	0	0	0	79	150	169	71	0	0	390	1434
8:30 AM	254	399	0	0	0	653	7	142	163	0	0	312	59	0	0	0	0	59	127	203	68	0	3	398	1422
8:45 AM	246	404	0	0	0	650	14	151	136	0	0	301	55	0	0	0	0	55	128	191	56	0	2	375	1381
Total	946	1628	0	0	0	2574	47	609	668	0	0	1324	255	0	0	0	0	255	559	741	248	0	5	1548	5701
BREAK																									
4:00 PM	92	255	0	1	0	348	113	224	157	0	0	494	66	0	0	0	0	66	92	111	62	0	2	265	1173
4:15 PM	79	265	0	2	0	346	95	193	125	0	1	413	67	0	0	0	3	67	108	137	70	0	0	315	1141
4:30 PM	85	256	0	6	0	347	93	199	143	0	0	435	68	0	0	0	0	68	130	163	66	0	0	359	1209
4:45 PM	71	229	0	6	0	306	95	188	100	0	0	383	58	0	0	0	1	58	138	133	56	0	0	327	1074
Total	327	1005	0	15	0	1347	396	804	525	0	1	1725	259	0	0	0	4	259	468	544	254	0	2	1266	4597
5:00 PM	68	241	0	6	0	315	111	180	132	0	0	423	70	0	0	0	0	70	130	136	52	0	1	318	1126
5:15 PM	69	257	0	13	0	339	94	171	92	0	0	357	56	0	0	0	0	56	138	137	69	0	2	344	1096
5:30 PM	78	267	0	2	0	347	63	158	80	0	0	301	75	0	0	0	2	75	135	122	58	0	1	315	1038
5:45 PM	86	271	0	5	0	362	55	161	81	0	0	297	60	0	0	0	2	60	140	104	51	0	1	295	1014
Total	301	1036	0	26	0	1363	323	670	385	0	0	1378	261	0	0	0	4	261	543	499	230	0	5	1272	4274
Grand Total	2536	5032	0	41	0	7609	792	2722	2309	0	2	5823	1022	0	0	0	9	1022	2266	2303	988	0	17	5557	20011
Apprch %	33.3	66.1	0.0	0.5	0.0		13.6	46.7	39.7	0.0	0.0		100.0	0.0	0.0	0.0	0.9		40.8	41.4	17.8	0.0	0.3		
Total %	12.7	25.1	0.0	0.2	0.0	38.0	4.0	13.6	11.5	0.0	0.0	29.1	5.1	0.0	0.0	0.0	0.0	5.1	11.3	11.5	4.9	0.0	0.1	27.8	
Cars, PU, Vans	2534	5010	0	41	0	7585	792	2714	2302		2	5808	1022	0	0	0		1022	2258	2300	981		17	5539	19954
% Cars, PU, Vans	99.9	99.6	0.0	100.0	0.0	99.7	100.0	99.7	99.7	0.0	100.0	99.7	100.0	0.0	0.0	0.0	0.0	100.0	99.6	99.9	99.3	0.0	100.0	99.7	99.7
Heavy Trucks	2	22	0	0		24	0	8	7	0		15	0	0	0	0		0	8	3	7	0		18	57
%Heavy Trucks	0.1	0.4	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.7	0.0	0.0	0.3	0.3

Project ID: 17-09578-015
Location: Clairmont Rd NE & I-85 SB Ramp
City: Atlanta

PEAK HOURS

Day: Wednesday
Date: 11/08/2017

AM

	Clairmont Rd NE Northbound					Clairmont Rd NE Southbound					I-85 SB Ramp Eastbound					I-85 SB Ramp Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	nt. Total
Peak Hour Analysis from 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
7:45 AM	241	392	0	0	633	6	175	177	0	358	70	0	0	0	70	165	152	69	0	386	1447
8:00 AM	225	412	0	0	637	14	167	199	0	380	62	0	0	0	62	154	178	53	0	385	1464
8:15 AM	221	413	0	0	634	12	149	170	0	331	79	0	0	0	79	150	169	71	0	390	1434
8:30 AM	254	399	0	0	653	7	142	163	0	312	59	0	0	0	59	127	203	68	0	398	1422
Total Volume	941	1616	0	0	2557	39	633	709	0	1381	270	0	0	0	270	596	702	261	0	1559	5767
% App. Total	36.8	63.2	0.0	0.0	100	2.8	45.8	51.3	0.0	100	100.0	0.0	0.0	0.0	100	38.2	45.0	16.7	0.0	100	
PHF					0.979					0.909					0.854					0.979	0.985
Cars, PU, Vans	941	1609	0	0	2550	39	628	707	0	1374	270	0	0	0	270	593	701	257	0	1551	5745
% Cars, PU, Vans	100.0	99.6	0.0	0.0	99.7	100.0	99.2	99.7	0.0	99.5	100.0	0.0	0.0	0.0	100.0	99.5	99.9	98.5	0.0	99.5	99.6
Heavy Trucks	0	7	0	0	7	0	5	2	0	7	0	0	0	0	0	3	1	4	0	8	22
%Heavy Trucks	0.0	0.4	0.0	0.0	0.3	0.0	0.8	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5	0.1	1.5	0.0	0.5	0.4

PM

	Clairmont Rd NE Northbound					Clairmont Rd NE Southbound					I-85 SB Ramp Eastbound					I-85 SB Ramp Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	nt. Total
Peak Hour Analysis from 04:00 PM to 06:00 PM																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
4:00 PM	92	255	0	1	348	113	224	157	0	494	66	0	0	0	66	92	111	62	0	265	1173
4:15 PM	79	265	0	2	346	95	193	125	0	413	67	0	0	0	67	108	137	70	0	315	1141
4:30 PM	85	256	0	6	347	93	199	143	0	435	68	0	0	0	68	130	163	66	0	359	1209
4:45 PM	71	229	0	6	306	95	188	100	0	383	58	0	0	0	58	138	133	56	0	327	1074
Total Volume	327	1005	0	15	1347	396	804	525	0	1725	259	0	0	0	259	468	544	254	0	1266	4597
% App. Total	24.3	74.6	0.0	1.1	100	23.0	46.6	30.4	0.0	100	100.0	0.0	0.0	0.0	100	37.0	43.0	20.1	0.0	100	
PHF					0.968					0.873					0.952					0.882	0.951
Cars, PU, Vans	327	1000	0	15	1342	396	803	523	0	1722	259	0	0	0	259	468	544	253	0	1265	4588
% Cars, PU, Vans	100.0	99.5	0.0	100.0	99.6	100.0	99.9	99.6	0.0	99.8	100.0	0.0	0.0	0.0	100.0	100.0	100.0	99.6	0.0	99.9	99.8
Heavy Trucks	0	5	0	0	5	0	1	2	0	3	0	0	0	0	0	0	0	1	0	1	9
%Heavy Trucks	0.0	0.5	0.0	0.0	0.4	0.0	0.1	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	0.2

Prepared by National Data & Surveying Services

Clairmont Rd NE & I-85 NB Ramp

Peak Hour Turning Movement Count

ID: 17-09578-014
City: Atlanta

Day: Wednesday
Date: 11/08/2017

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:15 PM - 05:15 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	04:00 PM - 06:00 PM

Clairmont Rd NE — SOUTHBOUND

AM	0	1097	224	0	2488	AM
NOON	0	0	0	0	0	NOON
PM	0	1137	160	2	1305	PM

I-85 NB Ramp — EASTBOUND

AM	NOON	PM		
280	0	259	⇦	
0	0	0	↶	0
759	0	575	↱	1.5
461	0	365	→	1
321	0	1242	↱	1.5
AM	NOON	PM		

CONTROL

Signalized

TEV	5458	0	5359
	AM	NOON	PM
PHF	0.97		0.97

WESTBOUND — I-85 NB Ramp

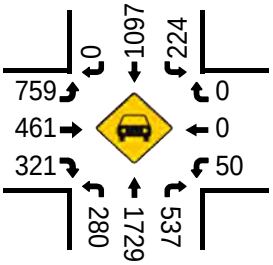
PM	NOON	AM		
0	0	0	↶	0
0	0	0	←	0
369	0	50	↰	0
0	0	0	↰	0
1047	0	1222	⇨	
PM	NOON	AM		

Clairmont Rd NE — NORTHBOUND

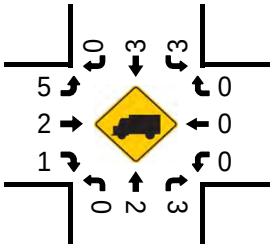
PM	2748	0	259	728	522	PM
NOON	0	0	0	0	0	NOON
AM	1468	0	280	1729	537	AM

0 0 4 1

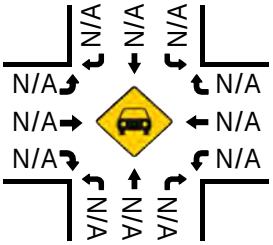
Total Vehicles (AM)



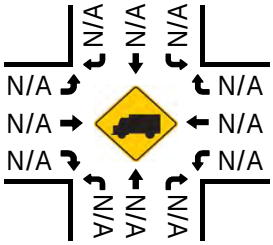
HT (AM)



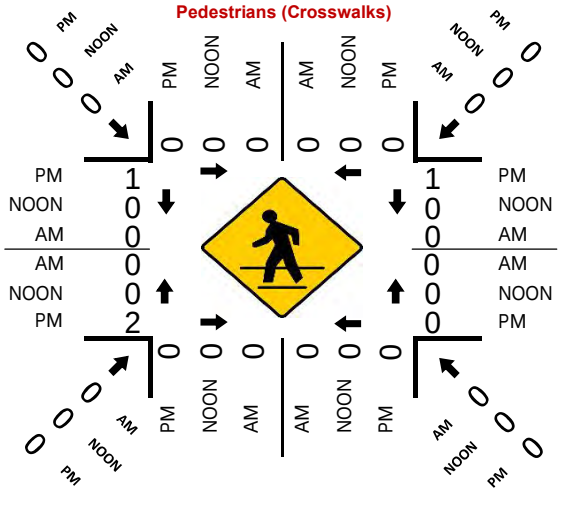
Total Vehicles (Noon)



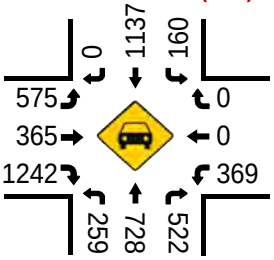
HT (NOON)



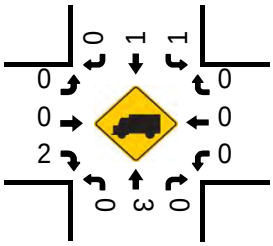
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



Project ID: 17-09578-014
Location: Clairmont Rd NE & I-85 NB Ramp
City: Atlanta

Day: Wednesday
Date: 11/08/2017

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Clairmont Rd NE Northbound						Clairmont Rd NE Southbound						I-85 NB Ramp Eastbound						I-85 NB Ramp Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
7:00 AM	41	419	113	0	0	573	48	250	0	0	0	298	127	56	57	0	0	240	4	0	0	0	4	4	1115
7:15 AM	59	389	87	0	0	535	55	277	0	0	0	332	160	81	83	0	0	324	10	0	0	0	1	10	1201
7:30 AM	72	425	120	0	0	617	62	295	0	0	0	357	168	103	87	0	0	358	19	0	0	0	0	19	1351
7:45 AM	70	435	148	0	0	653	69	271	0	0	0	340	201	109	86	0	0	396	12	0	0	0	0	12	1401
Total	242	1668	468	0	0	2378	234	1093	0	0	0	1327	656	349	313	0	0	1318	45	0	0	0	5	45	5068
8:00 AM	66	446	137	0	0	649	51	271	0	0	0	322	195	121	73	0	0	389	9	0	0	0	0	9	1369
8:15 AM	72	423	132	0	0	627	42	260	0	0	0	302	195	128	75	0	0	398	10	0	0	0	0	10	1337
8:30 AM	58	460	103	0	0	621	38	234	0	0	0	272	197	84	64	0	0	345	12	0	0	0	2	12	1250
8:45 AM	50	468	78	0	1	596	32	243	0	0	0	275	172	95	68	0	0	335	14	0	0	0	1	14	1220
Total	246	1797	450	0	1	2493	163	1008	0	0	0	1171	759	428	280	0	0	1467	45	0	0	0	3	45	5176
BREAK																									
4:00 PM	59	217	146	0	0	422	53	252	0	0	0	305	135	88	238	0	1	461	120	0	0	0	1	120	1308
4:15 PM	68	181	151	0	0	400	54	256	0	1	0	311	152	106	330	0	3	588	82	0	0	0	0	82	1381
4:30 PM	64	189	129	0	0	382	42	280	0	0	0	322	164	76	310	0	0	550	110	0	0	0	0	110	1364
4:45 PM	51	173	115	0	0	339	30	316	0	0	0	346	120	88	287	0	0	495	87	0	0	0	0	87	1267
Total	242	760	541	0	0	1543	179	1104	0	1	0	1284	571	358	1165	0	4	2094	399	0	0	0	1	399	5320
5:00 PM	76	185	127	0	0	388	34	285	0	1	0	320	139	95	315	0	0	549	90	0	0	0	1	90	1347
5:15 PM	56	184	122	0	0	362	34	280	0	0	0	314	145	96	314	0	0	555	109	0	0	0	2	109	1340
5:30 PM	71	204	137	0	0	412	36	255	0	0	0	291	151	102	307	0	0	560	73	0	0	0	1	73	1336
5:45 PM	62	203	134	0	0	399	33	270	0	0	0	303	151	87	290	0	0	528	62	0	0	0	1	62	1292
Total	265	776	520	0	0	1561	137	1090	0	1	0	1228	586	380	1226	0	0	2192	334	0	0	0	5	334	5315
Grand Total	995	5001	1979	0	1	7975	713	4295	0	2	0	5010	2572	1515	2984	0	4	7071	823	0	0	0	14	823	20879
Apprch %	12.5	62.7	24.8	0.0	0.0		14.2	85.7	0.0	0.0	0.0		36.4	21.4	42.2	0.0	0.1		100.0	0.0	0.0	0.0	1.7		
Total %	4.8	24.0	9.5	0.0	0.0	38.2	3.4	20.6	0.0	0.0	0.0	24.0	12.3	7.3	14.3	0.0	0.0	33.9	3.9	0.0	0.0	0.0	0.1	3.9	
Cars, PU, Vans	995	4991	1972	0	1	7958	705	4287	0		0	4994	2558	1510	2979	0		7047	823	0	0		14	823	20822
% Cars, PU, Vans	100.0	99.8	99.6	0.0	100.0	99.8	98.9	99.8	0.0	0.0	0.0	99.7	99.5	99.7	99.8	0.0	0.0	99.7	100.0	0.0	0.0	0.0	100.0	100.0	99.7
Heavy Trucks	0	10	7	0		17	8	8	0	0		16	14	5	5	0		24	0	0	0	0		0	57
%Heavy Trucks	0.0	0.2	0.4	0.0	0.0	0.2	1.1	0.2	0.0	0.0	0.0	0.3	0.5	0.3	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Project ID: 17-09578-014
Location: Clairmont Rd NE & I-85 NB Ramp
City: Atlanta

PEAK HOURS

Day: Wednesday
Date: 11/08/2017

AM

	Clairmont Rd NE Northbound					Clairmont Rd NE Southbound					I-85 NB Ramp Eastbound					I-85 NB Ramp Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	nt. Total
Peak Hour Analysis from 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	72	425	120	0	617	62	295	0	0	357	168	103	87	0	358	19	0	0	0	19	1351
7:45 AM	70	435	148	0	653	69	271	0	0	340	201	109	86	0	396	12	0	0	0	12	1401
8:00 AM	66	446	137	0	649	51	271	0	0	322	195	121	73	0	389	9	0	0	0	9	1369
8:15 AM	72	423	132	0	627	42	260	0	0	302	195	128	75	0	398	10	0	0	0	10	1337
Total Volume	280	1729	537	0	2546	224	1097	0	0	1321	759	461	321	0	1541	50	0	0	0	50	5458
% App. Total	11.0	67.9	21.1	0.0	100	17.0	83.0	0.0	0.0	100	49.3	29.9	20.8	0.0	100	100.0	0.0	0.0	0.0	100	
PHF					0.975					0.925					0.968					0.658	0.974
Cars, PU, Vans	280	1727	534	0	2541	221	1094	0	0	1315	754	459	320	0	1533	50	0	0	0	50	5439
% Cars, PU, Vans	100.0	99.9	99.4	0.0	99.8	98.7	99.7	0.0	0.0	99.5	99.3	99.6	99.7	0.0	99.5	100.0	0.0	0.0	0.0	100.0	99.7
Heavy Trucks	0	2	3	0	5	3	3	0	0	6	5	2	1	0	8	0	0	0	0	0	19
%Heavy Trucks	0.0	0.1	0.6	0.0	0.2	1.3	0.3	0.0	0.0	0.5	0.7	0.4	0.3	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.3

PM

	Clairmont Rd NE Northbound					Clairmont Rd NE Southbound					I-85 NB Ramp Eastbound					I-85 NB Ramp Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	nt. Total
Peak Hour Analysis from 04:00 PM to 06:00 PM																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
4:15 PM	68	181	151	0	400	54	256	0	1	311	152	106	330	0	588	82	0	0	0	82	1381
4:30 PM	64	189	129	0	382	42	280	0	0	322	164	76	310	0	550	110	0	0	0	110	1364
4:45 PM	51	173	115	0	339	30	316	0	0	346	120	88	287	0	495	87	0	0	0	87	1267
5:00 PM	76	185	127	0	388	34	285	0	1	320	139	95	315	0	549	90	0	0	0	90	1347
Total Volume	259	728	522	0	1509	160	1137	0	2	1299	575	365	1242	0	2182	369	0	0	0	369	5359
% App. Total	17.2	48.2	34.6	0.0	100	12.3	87.5	0.0	0.2	100	26.4	16.7	56.9	0.0	100	100.0	0.0	0.0	0.0	100	
PHF					0.943					0.939					0.928					0.839	0.970
Cars, PU, Vans	259	725	522	0	1506	159	1136	0	2	1297	575	365	1240	0	2180	369	0	0	0	369	5352
% Cars, PU, Vans	100.0	99.6	100.0	0.0	99.8	99.4	99.9	0.0	100.0	99.8	100.0	100.0	99.8	0.0	99.9	100.0	0.0	0.0	0.0	100.0	99.9
Heavy Trucks	0	3	0	0	3	1	1	0	0	2	0	0	2	0	2	0	0	0	0	0	7
%Heavy Trucks	0.0	0.4	0.0	0.0	0.2	0.6	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1

Clairmont Rd / US-23 & Briarcliff Rd

Peak Hour Turning Movement Count

ID: 19-09148-004
City: Atlanta

Day: Thursday
Date: 03/07/2019

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	07:00 AM - 09:00 AM
NOON	NONE
PM	03:30 PM - 06:00 PM

Clairmont Rd/US-23 — SOUTHBOUND

AM	264	1028	158	0	2219	AM
NOON	0	0	0	0	0	NOON
PM	126	1768	600	0	1243	PM
	0	2	1	0		

Briarcliff Rd — EASTBOUND

AM	NOON	PM	
656	0	306	
0	0	0	0
194	0	166	1
165	0	324	2
79	0	120	0
AM	NOON	PM	

CONTROL

Signalized

TEV	4501 AM	0 NOON	4554 PM
PHF	0.97		0.98

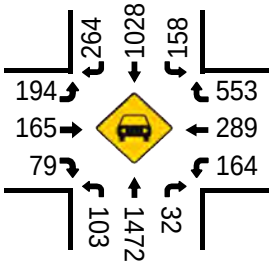
Briarcliff Rd — WESTBOUND

PM	NOON	AM	
195	0	553	1
122	0	289	1
84	0	164	1
0	0	0	0
1033	0	355	
PM	NOON	AM	

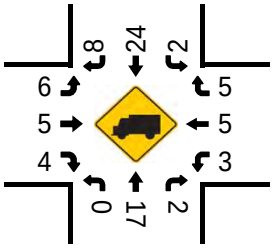
Clairmont Rd/US-23 — NORTHBOUND

PM	1972	0	58	882	109	PM
NOON	0	0	0	0	0	NOON
AM	1271	0	103	1472	32	AM
		0	1	2	0	

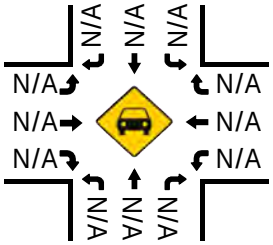
Total Vehicles (AM)



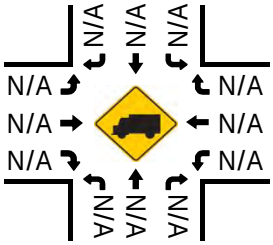
HT (AM)



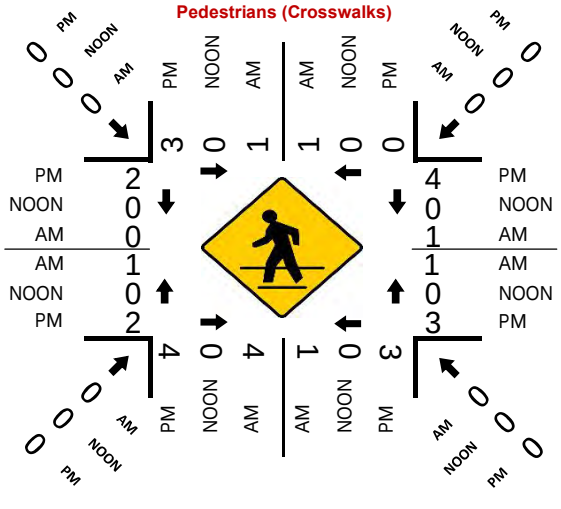
Total Vehicles (Noon)



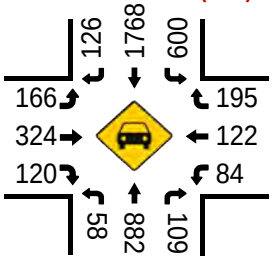
HT (NOON)



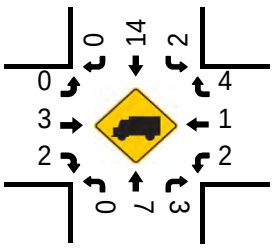
Pedestrians (Crosswalks)



Total Vehicles (PM)



HT (PM)



Project ID: 19-09148-004
Location: Clairmont Rd/US-23 & Briarcliff Rd
City: Atlanta

Day: Thursday
Date: 03/07/2019

Groups Printed - Cars, PU, Vans - Heavy Trucks

	Clairmont Rd/US-23 Northbound						Clairmont Rd/US-23 Southbound						Briarcliff Rd Eastbound						Briarcliff Rd Westbound						
Start Time	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Left	Thru	Rgt	Uturn	Peds	App. Total	Int. Total
7:00 AM	10	343	4	0	0	357	30	238	45	0	0	313	37	23	12	0	1	72	20	35	102	0	1	157	899
7:15 AM	14	359	3	0	0	376	32	252	60	0	1	344	48	34	11	0	1	93	25	53	136	0	0	214	1027
7:30 AM	24	356	7	0	1	387	48	257	81	0	0	386	49	55	27	0	1	131	39	78	134	0	1	251	1155
7:45 AM	31	362	11	0	0	404	40	266	76	0	0	382	48	61	21	0	0	130	41	63	143	0	1	247	1163
Total	79	1420	25	0	1	1524	150	1013	262	0	1	1425	182	173	71	0	3	426	125	229	515	0	3	869	4244
8:00 AM	25	388	7	0	2	420	38	280	54	0	1	372	51	20	19	0	0	90	51	61	142	0	0	254	1136
8:15 AM	23	366	7	0	2	396	32	225	53	0	1	310	46	29	12	0	0	87	33	87	134	0	0	254	1047
8:30 AM	17	361	10	0	1	388	23	225	61	0	1	309	44	31	14	0	0	89	23	65	129	0	0	217	1003
8:45 AM	18	291	3	0	0	312	36	210	48	0	1	294	53	27	16	0	1	96	29	48	126	0	0	203	905
Total	83	1406	27	0	5	1516	129	940	216	0	4	1285	194	107	61	0	1	362	136	261	531	0	0	928	4091
BREAK																									
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	13	231	15	0	5	259	109	357	47	0	1	513	58	84	46	0	2	188	27	27	84	0	2	138	1098
3:45 PM	13	263	22	0	1	298	91	400	37	0	1	528	53	93	22	0	0	168	31	29	49	0	2	109	1103
Total	26	494	37	0	6	557	200	757	84	0	2	1041	111	177	68	0	2	356	58	56	133	0	4	247	2201
4:00 PM	8	240	14	0	1	262	92	389	39	0	0	520	54	95	30	0	0	179	32	27	59	0	0	118	1079
4:15 PM	19	231	20	0	0	270	136	415	36	0	1	587	46	84	30	0	0	160	13	33	42	0	2	88	1105
4:30 PM	17	193	19	0	1	229	163	410	37	0	0	610	31	79	30	0	0	140	21	34	46	0	2	101	1080
4:45 PM	8	234	25	0	2	267	152	412	49	0	8	613	44	77	26	0	5	147	26	26	37	0	0	89	1116
Total	52	898	78	0	4	1028	543	1626	161	0	9	2330	175	335	116	0	5	626	92	120	184	0	4	396	4380
5:00 PM	13	213	30	0	3	256	134	459	36	0	1	629	39	95	32	0	3	166	13	38	47	0	4	98	1149
5:15 PM	18	220	29	0	0	267	151	475	25	0	1	651	49	69	29	0	0	147	25	24	47	0	2	96	1161
5:30 PM	11	232	29	0	4	272	150	415	38	0	0	603	34	85	35	0	1	154	20	29	48	0	1	97	1126
5:45 PM	16	217	21	0	0	254	165	419	27	0	1	611	44	75	24	0	0	143	26	31	53	0	0	110	1118
Total	58	882	109	0	7	1049	600	1768	126	0	3	2494	166	324	120	0	4	610	84	122	195	0	7	401	4554
Grand Total	298	5100	276	0	23	5674	1622	6104	849	0	19	8575	828	1116	436	0	15	2380	495	788	1558	0	18	2841	19470
Apprch %	5.3	89.9	4.9	0.0	0.4		18.9	71.2	9.9	0.0	0.2		34.8	46.9	18.3	0.0	0.6		17.4	27.7	54.8	0.0	0.6		
Total %	1.5	26.2	1.4	0.0	0.1	29.1	8.3	31.4	4.4	0.0	0.1	44.0	4.3	5.7	2.2	0.0	0.1	12.2	2.5	4.0	8.0	0.0	0.1	14.6	
Cars, PU, Vans	296	5040	271	0	23	5607	1605	6010	831		19	8446	814	1092	428	0		2334	484	774	1533		18	2791	19178
% Cars, PU, Vans	99.3	98.8	98.2	0.0	100.0	98.8	99.0	98.5	97.9	0.0	100.0	98.5	98.3	97.8	98.2	0.0	0.0	98.1	97.8	98.2	98.4	0.0	100.0	98.2	98.5
Heavy Trucks	2	60	5	0		67	17	94	18	0		129	14	24	8	0		46	11	14	25	0		50	292
%Heavy Trucks	0.7	1.2	1.8	0.0	0.0	1.2	1.0	1.5	2.1	0.0	0.0	1.5	1.7	2.2	1.8	0.0	0.0	1.9	2.2	1.8	1.6	0.0	0.0	1.8	1.5

Project ID: 19-09148-004
Location: Clairmont Rd/US-23 & Briarcliff Rd
City: Atlanta

PEAK HOURS

Day: Thursday
Date: 03/07/2019

AM

	Clairmont Rd/US-23 Northbound					Clairmont Rd/US-23 Southbound					Briarcliff Rd Eastbound					Briarcliff Rd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 07:00 AM to 09:00 AM																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
7:30 AM	24	356	7	0	387	48	257	81	0	386	49	55	27	0	131	39	78	134	0	251	1155
7:45 AM	31	362	11	0	404	40	266	76	0	382	48	61	21	0	130	41	63	143	0	247	1163
8:00 AM	25	388	7	0	420	38	280	54	0	372	51	20	19	0	90	51	61	142	0	254	1136
8:15 AM	23	366	7	0	396	32	225	53	0	310	46	29	12	0	87	33	87	134	0	254	1047
Total Volume	103	1472	32	0	1607	158	1028	264	0	1450	194	165	79	0	438	164	289	553	0	1006	4501
% App. Total	6.4	91.6	2.0	0.0	100	10.9	70.9	18.2	0.0	100	44.3	37.7	18.0	0.0	100	16.3	28.7	55.0	0.0	100	
PHF					0.957					0.939					0.836					0.990	0.968
Cars, PU, Vans	103	1457	31	0	1591	155	1003	259	0	1417	188	158	75	0	421	159	283	548	0	990	4419
% Cars, PU, Vans	100.0	99.0	96.9	0.0	99.0	98.1	97.6	98.1	0.0	97.7	96.9	95.8	94.9	0.0	96.1	97.0	97.9	99.1	0.0	98.4	98.2
Heavy Trucks	0	15	1	0	16	3	25	5	0	33	6	7	4	0	17	5	6	5	0	16	82
%Heavy Trucks	0.0	1.0	3.1	0.0	1.0	1.9	2.4	1.9	0.0	2.3	3.1	4.2	5.1	0.0	3.9	3.0	2.1	0.9	0.0	1.6	1.8

PM

	Clairmont Rd/US-23 Northbound					Clairmont Rd/US-23 Southbound					Briarcliff Rd Eastbound					Briarcliff Rd Westbound					
Start Time	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Left	Thru	Rgt	Uturn	App. Total	Int. Total
Peak Hour Analysis from 03:30 PM to 06:00 PM																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
5:00 PM	13	213	30	0	256	134	459	36	0	629	39	95	32	0	166	13	38	47	0	98	1149
5:15 PM	18	220	29	0	267	151	475	25	0	651	49	69	29	0	147	25	24	47	0	96	1161
5:30 PM	11	232	29	0	272	150	415	38	0	603	34	85	35	0	154	20	29	48	0	97	1126
5:45 PM	16	217	21	0	254	165	419	27	0	611	44	75	24	0	143	26	31	53	0	110	1118
Total Volume	58	882	109	0	1049	600	1768	126	0	2494	166	324	120	0	610	84	122	195	0	401	4554
% App. Total	5.5	84.1	10.4	0.0	100	24.1	70.9	5.1	0.0	100	27.2	53.1	19.7	0.0	100	20.9	30.4	48.6	0.0	100	
PHF					0.964					0.958					0.919					0.911	0.981
Cars, PU, Vans	58	875	106	0	1039	598	1754	126	0	2478	166	321	118	0	605	82	121	191	0	394	4516
% Cars, PU, Vans	100.0	99.2	97.2	0.0	99.0	99.7	99.2	100.0	0.0	99.4	100.0	99.1	98.3	0.0	99.2	97.6	99.2	97.9	0.0	98.3	99.2
Heavy Trucks	0	7	3	0	10	2	14	0	0	16	0	3	2	0	5	2	1	4	0	7	38
%Heavy Trucks	0.0	0.8	2.8	0.0	1.0	0.3	0.8	0.0	0.0	0.6	0.0	0.9	1.7	0.0	0.8	2.4	0.8	2.1	0.0	1.7	0.8

APPENDIX C

Volume Development

(Trip Generation, Growth Rate, & Intersection Volumes)

Proposed Trip Generation Analysis (10th Ed. with *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Lumen Briarcliff
DeKalb County, GA

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Proposed Site Traffic								
221 Multi-Family Housing (Mid-Rise)	264 d.u.	1,438	89	23	66	112	68	44
820 Shopping Center	5,000 s.f. gross leasable area	188	5	3	2	19	9	10
931 Quality Restaurant	5,000 s.f.	420	4	2	2	39	26	13
Gross Trips		**2,046**	**98**	**28**	**70**	**170**	**103**	**67**
Residential Trips		1,438	89	23	66	112	68	44
Mixed-Use Reductions		*-62*	*-1*	*0*	*-1*	*-10*	*-5*	*-5*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Residential Trips		1,376	88	23	65	102	63	39
Retail Trips		188	5	3	2	19	9	10
Mixed-Use Reductions		*-18*	*-1*	*-1*	*0*	*-12*	*-6*	*-6*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass By Reductions (Based on ITE Rates)		*-58*	*0*	*0*	*0*	*-2*	*-1*	*-1*
Adjusted Retail Trips		112	4	2	2	5	2	3
Restaurant Trips		420	4	2	2	39	26	13
Mixed-Use Reductions		*-42*	*0*	*0*	*0*	*-14*	*-7*	*-7*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass By Reductions (Based on ITE Rates)		*-162*	*0*	*0*	*0*	*-10*	*-5*	*-5*
Adjusted Restaurant Trips		216	4	2	2	15	14	1
Mixed-Use Reductions - TOTAL		*-122*	*-2*	*-1*	*-1*	*-36*	*-18*	*-18*
Alternative Mode Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL		*-220*	*0*	*0*	*0*	*-12*	*-6*	*-6*
New Trips		**1,704**	**96**	**27**	**69**	**122**	**79**	**43**
Driveway Volumes		**1,924**	**96**	**27**	**69**	**134**	**85**	**49**

Existing Trip Generation Analysis (10th Ed. with *2nd Edition Handbook* Daily IC & *3rd Edition* AM/PM IC)
Lumen Briarcliff
DeKalb County, GA

Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Proposed Site Traffic								
220 Multi-Family Housing (Low-Rise)	45 d.u.	300	22	5	17	29	18	11
Gross Trips		**300**	**22**	**5**	**17**	**29**	**18**	**11**
Residential Trips		300	22	5	17	29	18	11
Mixed-Use Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Adjusted Residential Trips		300	22	5	17	29	18	11
Mixed-Use Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Alternative Mode Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
Pass-By Reductions - TOTAL		*0*	*0*	*0*	*0*	*0*	*0*	*0*
New Trips		**300**	**22**	**5**	**17**	**29**	**18**	**11**
Driveway Volumes		**300**	**22**	**5**	**17**	**29**	**18**	**11**

Lumen Briarcliff
Growth Rate Table

Source:	GDOT
Location:	Clairmont Road
	n/o Briarcliff Road
Route #:	00015500
Route Type:	Principal Arterial
Station:	089-3241
Capacity:	

Count Year	Volume	Growth Rate
2013	39,400	
2014	44,400	12.69%
2015	45,900	3.38%
2016	47,400	3.27%
2017	50,200	5.91%
2018	**43,000**	-14.34%

Avg. 1 Year Rates 2013-2018	**1.76%**

Source:	GDOT
Location:	Briarcliff Road
	w/o Clairmont Road
Route #:	00515700
Route Type:	Minor Arterial
Station:	089-3667
Capacity:	

Count Year	Volume	Growth Rate
2013	11,700	
2014	11,700	0.00%
2015	12,600	7.69%
2016	13,000	3.17%
2017	**11,900**	-8.46%
2018	11,900	0.00%

Avg. 1 Year Rates 2013-2018	**0.34%**

	Annual Growth
DeKalb County Population Annual Growth (2000-2019):	1.04%
CHOA Master Plan DRI #2789	0.5%
Emory at Executive Park DRI #2962	0.5%

***Bolded data is from actual count years.**

CHOSEN GROWTH RATE: 0.5%

INTERSECTION VOLUME DEVELOPMENT

Intersection #1

Clairmont Rd NE at I-85 SB Ramp

AM PEAK HOUR

Description	Clairmont Rd NE Northbound			Clairmont Rd NE Southbound			I-85 SB Ramp Eastbound			I-85 SB Ramp Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	941	1,616	0	0	633	709	0	0	0	596	702	261
Pedestrians		3			0			0			1	
Conflicting Pedestrians	0		0	1		0	0		0	3		0
Heavy Vehicles	0	7	0	0	5	2	0	0	0	3	1	4
Heavy Vehicle %	2%	2%	0%	0%	2%	2%	0%	0%	0%	2%	2%	2%
Peak Hour Factor		0.98			0.98			0.98			0.98	
Adjustment (Growth from 2017 to 2020)	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508
Adjusted 2020 Volumes	955	1640	0	0	643	720	0	0	0	605	713	265
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	965	1,656	0	0	649	727	0	0	0	611	720	268
Project Trips												
Trip Distribution IN					10%					15%		
Trip Distribution OUT	15%	10%										
Residential Trips	10	7	0	0	2	0	0	0	0	3	0	0
Trip Distribution IN					15%					20%		
Trip Distribution OUT	20%	15%										
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN					15%					20%		
Trip Distribution OUT	20%	15%										
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	10	7	0	0	2	0	0	0	0	3	0	0
2022 Buildout Total	975	1,663	0	0	651	727	0	0	0	614	720	268
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

PM PEAK HOUR

Description	Clairmont Rd NE Northbound			Clairmont Rd NE Southbound			I-85 SB Ramp Eastbound			I-85 SB Ramp Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	342	1,005	0	0	804	525	0	0	0	468	544	254
Pedestrians		2			4			0			1	
Conflicting Pedestrians	0		0	1		0	4		0	2		0
Heavy Vehicles	0	5	0	0	1	2	0	0	0	0	0	1
Heavy Vehicle %	2%	2%	0%	0%	2%	2%	0%	0%	0%	2%	2%	2%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment (Growth from 2017 to 2020)	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508
Adjusted 2020 Volumes	347	1020	0	0	816	533	0	0	0	475	552	258
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	350	1,030	0	0	824	538	0	0	0	480	558	261
Project Trips												
Trip Distribution IN					10%					15%		
Trip Distribution OUT	15%	10%										
Residential Trips	6	4	0	0	6	0	0	0	0	9	0	0
Trip Distribution IN					15%					20%		
Trip Distribution OUT	20%	15%										
Retail Trips	1	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN					15%					20%		
Trip Distribution OUT	20%	15%										
Restaurant Trips	0	0	0	0	2	0	0	0	0	3	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	7	4	0	0	8	0	0	0	0	12	0	0
2022 Buildout Total	357	1,034	0	0	832	538	0	0	0	492	558	261
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

INTERSECTION VOLUME DEVELOPMENT

Intersection #2

Clairmont Rd NE at I-85 NB Ramp

AM PEAK HOUR

Description	Clairmont Rd NE Northbound			Clairmont Rd NE Southbound			I-85 NB Ramp Eastbound			I-85 NB Ramp Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	0	1,729	537	224	1,097	0	759	461	321	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	2	3	3	3	0	5	2	1	0	0	0
Heavy Vehicle %	0%	2%	2%	2%	2%	0%	2%	2%	2%	0%	0%	0%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment (Growth from 2017 to 2020)	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508
Adjusted 2020 Volumes	0	1755	545	227	1114	0	770	468	326	0	0	0
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	0	1,773	550	229	1,125	0	778	473	329	0	0	0
Project Trips												
Trip Distribution IN					25%				30%			
Trip Distribution OUT		25%	15%									
Residential Trips	0	16	10	0	6	0	0	0	7	0	0	0
Trip Distribution IN					35%				20%			
Trip Distribution OUT		35%	20%									
Retail Trips	0	1	0	0	1	0	0	0	0	0	0	0
Trip Distribution IN					35%				20%			
Trip Distribution OUT		35%	20%									
Restaurant Trips	0	1	0	0	1	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	18	10	0	8	0	0	0	7	0	0	0
2022 Buildout Total	0	1,791	560	229	1,133	0	778	473	336	0	0	0
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

PM PEAK HOUR

Description	Clairmont Rd NE Northbound			Clairmont Rd NE Southbound			I-85 NB Ramp Eastbound			I-85 NB Ramp Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	0	728	522	162	1,137	0	575	365	1,242	0	0	0
Pedestrians		1			3			0			0	
Conflicting Pedestrians	0		0	0		0	3		0	1		0
Heavy Vehicles	0	3	0	1	1	0	0	0	2	0	0	0
Heavy Vehicle %	0%	2%	2%	2%	2%	0%	2%	2%	2%	0%	0%	0%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment (Growth from 2017 to 2020)	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508	1.01508
Adjusted 2020 Volumes	0	739	530	164	1154	0	584	371	1261	0	0	0
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	0	746	535	166	1,166	0	590	375	1,274	0	0	0
Project Trips												
Trip Distribution IN					25%				30%			
Trip Distribution OUT		25%	15%									
Residential Trips	0	10	6	0	16	0	0	0	19	0	0	0
Trip Distribution IN					35%				20%			
Trip Distribution OUT		35%	20%									
Retail Trips	0	1	1	0	1	0	0	0	0	0	0	0
Trip Distribution IN					35%				20%			
Trip Distribution OUT		35%	20%									
Restaurant Trips	0	0	0	0	5	0	0	0	3	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	11	7	0	22	0	0	0	22	0	0	0
2022 Buildout Total	0	757	542	166	1,188	0	590	375	1,296	0	0	0
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

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INTERSECTION VOLUME DEVELOPMENT

Intersection #3

Clairmont Rd/US-23 at Briarcliff Rd

AM PEAK HOUR

Description	Clairmont Rd/US-23 Northbound			Clairmont Rd/US-23 Southbound			Briarcliff Rd Eastbound			Briarcliff Rd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2019 Traffic Volumes	103	1,472	32	158	1,028	264	194	165	79	164	289	553
Pedestrians		2			1			5			2	
Conflicting Pedestrians	5		0	2		0	1		0	2		0
Heavy Vehicles	0	15	1	3	25	5	6	7	4	5	6	5
Heavy Vehicle %	2%	2%	3%	2%	2%	2%	3%	4%	5%	3%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment (Growth from 2019 to 2020)	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
Adjusted 2020 Volumes	104	1479	32	159	1033	265	195	166	79	165	290	556
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	105	1,494	32	161	1,043	268	197	168	80	167	293	562
Project Trips												
Trip Distribution IN	15%										15%	
Trip Distribution OUT				5%	10%		40%	10%	5%			
Residential Trips	3	0	0	3	7	0	26	7	3	0	3	0
Trip Distribution IN	15%					55%					15%	
Trip Distribution OUT							55%	15%	15%			
Retail Trips	0	0	0	0	0	1	1	0	0	0	0	0
Trip Distribution IN	15%					55%					15%	
Trip Distribution OUT							55%	15%	15%			
Restaurant Trips	0	0	0	0	0	1	1	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	3	0	0	3	7	2	28	7	3	0	3	0
2022 Buildout Total	108	1,494	32	164	1,050	270	225	175	83	167	296	562
2022 Buildout Heavy Vehicle %	2%	2%	3%	2%	2%	2%	3%	4%	5%	3%	2%	2%

PM PEAK HOUR

Description	Clairmont Rd/US-23 Northbound			Clairmont Rd/US-23 Southbound			Briarcliff Rd Eastbound			Briarcliff Rd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2019 Traffic Volumes	58	882	109	600	1,768	126	166	324	120	84	122	195
Pedestrians		7			4			7			3	
Conflicting Pedestrians	7		0	3		0	4		0	7		0
Heavy Vehicles	0	7	3	2	14	0	0	3	2	2	1	4
Heavy Vehicle %	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Peak Hour Factor		0.98			0.98			0.98			0.98	
Adjustment (Growth from 2019 to 2020)	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
Adjusted 2020 Volumes	58	886	110	603	1777	127	167	326	121	84	123	196
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	59	895	111	609	1,795	128	169	329	122	85	124	198
Project Trips												
Trip Distribution IN	15%										15%	
Trip Distribution OUT				5%	10%		40%	10%	5%			
Residential Trips	9	0	0	2	4	0	16	4	2	0	9	0
Trip Distribution IN	15%					55%					15%	
Trip Distribution OUT							55%	15%	15%			
Retail Trips	0	0	0	0	0	1	2	0	0	0	0	0
Trip Distribution IN	15%					55%					15%	
Trip Distribution OUT							55%	15%	15%			
Restaurant Trips	2	0	0	0	0	8	0	0	0	0	2	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	11	0	0	2	4	9	18	4	2	0	11	0
2022 Buildout Total	70	895	111	611	1,799	137	187	333	124	85	135	198
2022 Buildout Heavy Vehicle %	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%

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INTERSECTION VOLUME DEVELOPMENT

Intersection #4

Clairmont Rd NE at /Site Dwy E

AM PEAK HOUR

	Clairmont Rd NE			Clairmont Rd NE						Site Dwy E		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2019 Traffic Volumes	0	2,219	0	0	1,450	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	26	0	0	33	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment (Growth from 2019 to 2020)	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
Adjusted 2020 Volumes	0	2230	0	0	1457	0	0	0	0	0	0	0
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	0	2,252	0	0	1,472	0	0	0	0	0	0	0
Project Trips												
Trip Distribution IN						55%						
Trip Distribution OUT		40%							15%			
Residential Trips	0	26	0	0	0	13	0	0	10	0	0	0
Trip Distribution IN					55%							
Trip Distribution OUT		55%										
Retail Trips	0	1	0	0	1	0	0	0	0	0	0	0
Trip Distribution IN					55%							
Trip Distribution OUT		55%										
Restaurant Trips	0	1	0	0	1	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	28	0	0	2	13	0	0	10	0	0	0
2022 Buildout Total	0	2,280	0	0	1,474	13	0	0	10	0	0	0
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

PM PEAK HOUR

	Clairmont Rd NE			Clairmont Rd NE						Site Dwy E		
	Northbound			**Southbound**			**Eastbound**			**Westbound**		
Description	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2019 Traffic Volumes	0	1,243	0	0	2,494	0	0	0	0	0	0	0
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	11	0	0	16	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment (Growth from 2019 to 2020)	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
Adjusted 2020 Volumes	0	1249	0	0	2506	0	0	0	0	0	0	0
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	0	1,262	0	0	2,531	0	0	0	0	0	0	0
Project Trips												
Trip Distribution IN						55%						
Trip Distribution OUT		40%							15%			
Residential Trips	0	16	0	0	0	35	0	0	6	0	0	0
Trip Distribution IN					55%							
Trip Distribution OUT		55%										
Retail Trips	0	2	0	0	1	0	0	0	0	0	0	0
Trip Distribution IN					55%							
Trip Distribution OUT		55%										
Restaurant Trips	0	0	0	0	8	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	18	0	0	9	35	0	0	6	0	0	0
2022 Buildout Total	0	1,280	0	0	2,540	35	0	0	6	0	0	0
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

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INTERSECTION VOLUME DEVELOPMENT

Intersection #5

Briarcliff Rd NE at Riviera Terrace Condos Dwy

AM PEAK HOUR

Description	Northbound			Riviera Terrace Condos Dwy Southbound			Briarcliff Rd Eastbound			Briarcliff Rd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2019 Traffic Volumes/Generated Condo Trips	0	0	0	10	0	6	2	438	0	0	656	3
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	0	0	0	0	17	0	0	11	0
Heavy Vehicle %	0%	0%	0%	2%	0%	2%	2%	4%	0%	0%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment (Growth from 2019 to 2020)	1.005	1.005	1.005		1.005			1.005	1.005	1.005	1.005	
Adjusted 2020 Volumes	0	0	0	10	0	6	2	440	0	0	659	3
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	0	0	0	10	0	6	2	444	0	0	666	3
Project Trips												
Trip Distribution IN							15%					30%
Trip Distribution OUT				55%		30%						
Residential Trips	0	0	0	36	0	20	3	0	0	0	0	7
Trip Distribution IN							15%					85%
Trip Distribution OUT				85%		15%						
Retail Trips	0	0	0	2	0	0	0	0	0	0	0	2
Trip Distribution IN							15%					85%
Trip Distribution OUT				85%		15%						
Restaurant Trips	0	0	0	2	0	0	0	0	0	0	0	2
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	40	0	20	3	0	0	0	0	11
2022 Buildout Total	0	0	0	50	0	26	5	444	0	0	666	14
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	4%	2%	2%	2%	2%

PM PEAK HOUR

Description	Northbound			Riviera Terrace Condos Dwy Southbound			Briarcliff Rd Eastbound			Briarcliff Rd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2019 Traffic Volumes/Generated Condo Trips	0	0	0	7	0	4	6	610	0	0	306	12
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	0	0	0	0	5	0	0	1	0
Heavy Vehicle %	0%	0%	0%	2%	0%	2%	2%	2%	0%	0%	2%	2%
Peak Hour Factor		0.97			0.97			0.97			0.97	
Adjustment (Growth from 2019 to 2020)	1.005	1.005	1.005		1.005			1.005	1.005	1.005	1.005	
Adjusted 2020 Volumes	0	0	0	7	0	4	6	613	0	0	308	12
Annual Growth Rate	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Growth Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
Other Development Trips												
2022 Background Traffic	0	0	0	7	0	4	6	619	0	0	311	12
Project Trips												
Trip Distribution IN							15%					30%
Trip Distribution OUT				55%		30%						
Residential Trips	0	0	0	21	0	12	9	0	0	0	0	19
Trip Distribution IN							15%					85%
Trip Distribution OUT				85%		15%						
Retail Trips	0	0	0	3	0	0	0	0	0	0	0	2
Trip Distribution IN							15%					85%
Trip Distribution OUT				85%		15%						
Restaurant Trips	0	0	0	0	0	0	2	0	0	0	0	12
Pass-By Trips	0	0	0	1	0	6	1	-1	0	0	-6	6
Total Project Trips	0	0	0	25	0	18	12	-1	0	0	-6	39
2022 Buildout Total	0	0	0	32	0	22	18	618	0	0	305	51
2022 Buildout Heavy Vehicle %	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%

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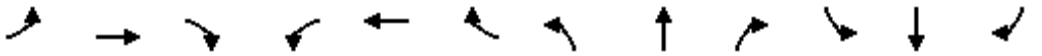
APPENDIX D

Synchro Analysis Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	605	713	265	955	1640	0	0	643	720
Future Volume (veh/h)	0	0	0	605	713	265	955	1640	0	0	643	720
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				448	964	221	974	1673	0	0	656	688
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				463	973	411	1028	2345	0	0	1647	511
Arrive On Green				0.26	0.26	0.26	0.59	1.00	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1781	3741	1580	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				448	964	221	974	1673	0	0	656	688
Grp Sat Flow(s),veh/h/ln				1781	1870	1580	1728	1777	0	0	1702	1585
Q Serve(g_s), s				37.3	38.5	18.1	39.2	0.0	0.0	0.0	15.0	48.4
Cycle Q Clear(g_c), s				37.3	38.5	18.1	39.2	0.0	0.0	0.0	15.0	48.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				463	973	411	1028	2345	0	0	1647	511
V/C Ratio(X)				0.97	0.99	0.54	0.95	0.71	0.00	0.00	0.40	1.35
Avail Cap(c_a), veh/h				463	973	411	1244	2345	0	0	1647	511
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.72	0.72	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				54.9	55.3	47.8	29.3	0.0	0.0	0.0	39.5	50.8
Incr Delay (d2), s/veh				33.4	26.6	1.4	10.4	1.4	0.0	0.0	0.7	168.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				28.5	29.4	11.8	19.1	0.8	0.0	0.0	10.6	63.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				88.2	81.9	49.2	39.7	1.4	0.0	0.0	40.2	219.1
LnGrp LOS				F	F	D	D	A	A	A	D	F
Approach Vol, veh/h					1633			2647			1344	
Approach Delay, s/veh					79.2			15.5			131.8	
Approach LOS					E			B			F	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	50.6	54.4		45.0		105.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	54.0	39.0		39.0		99.0						
Max Q Clear Time (g_c+I1), s	41.2	50.4		40.5		2.0						
Green Ext Time (p_c), s	3.4	0.0		0.0		25.9						

Intersection Summary		
HCM 6th Ctrl Delay		61.8
HCM 6th LOS		E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	770	468	326	0	0	0	0	1755	545	227	1114	0
Future Volume (veh/h)	770	468	326	0	0	0	0	1755	545	227	1114	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	872	373	239				0	1809	498	234	1148	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	808	424	359				0	3668	904	288	2464	0
Arrive On Green	0.23	0.23	0.23				0.00	1.00	1.00	0.17	1.00	0.00
Sat Flow, veh/h	3563	1870	1585				0	6696	1585	3456	3647	0
Grp Volume(v), veh/h	872	373	239				0	1809	498	234	1148	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585				0	1609	1585	1728	1777	0
Q Serve(g_s), s	34.0	28.9	20.6				0.0	0.0	0.0	9.8	0.0	0.0
Cycle Q Clear(g_c), s	34.0	28.9	20.6				0.0	0.0	0.0	9.8	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	808	424	359				0	3668	904	288	2464	0
V/C Ratio(X)	1.08	0.88	0.67				0.00	0.49	0.55	0.81	0.47	0.00
Avail Cap(c_a), veh/h	808	424	359				0	3668	904	668	2464	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.67	0.67	0.00
Uniform Delay (d), s/veh	58.0	56.0	52.8				0.0	0.0	0.0	61.4	0.0	0.0
Incr Delay (d2), s/veh	55.5	18.7	4.6				0.0	0.5	2.4	3.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	30.5	22.4	13.6				0.0	0.2	1.1	6.9	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	113.5	74.8	57.4				0.0	0.5	2.4	65.1	0.4	0.0
LnGrp LOS	F	E	E				A	A	A	E	A	A
Approach Vol, veh/h		1484						2307			1382	
Approach Delay, s/veh		94.7						0.9			11.4	
Approach LOS		F						A			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		110.0			18.5	91.5		40.0				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		104.0			29.0	69.0		34.0				
Max Q Clear Time (g_c+I1), s		2.0			11.8	2.0		36.0				
Green Ext Time (p_c), s		12.1			0.7	31.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			30.6
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	166	79	165	290	556	104	1479	32	159	1033	265
Future Volume (veh/h)	195	166	79	165	290	556	104	1479	32	159	1033	265
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1841	1841	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	201	171	43	170	299	524	107	1525	32	164	1065	259
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	4	4	3	2	2	2	2	2	2	2	2
Cap, veh/h	239	548	134	372	362	401	329	1756	37	192	1447	350
Arrive On Green	0.09	0.20	0.20	0.09	0.19	0.19	0.04	0.49	0.49	0.12	1.00	1.00
Sat Flow, veh/h	1767	2784	682	1767	1870	1580	1781	3559	75	1781	2837	686
Grp Volume(v), veh/h	201	106	108	170	299	524	107	760	797	164	665	659
Grp Sat Flow(s),veh/h/ln	1767	1749	1717	1767	1870	1580	1781	1777	1857	1781	1777	1746
Q Serve(g_s), s	13.7	7.8	8.1	11.4	23.0	29.0	4.4	56.9	57.1	7.1	0.0	0.0
Cycle Q Clear(g_c), s	13.7	7.8	8.1	11.4	23.0	29.0	4.4	56.9	57.1	7.1	0.0	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		0.04	1.00		0.39
Lane Grp Cap(c), veh/h	239	344	338	372	362	401	329	877	916	192	906	891
V/C Ratio(X)	0.84	0.31	0.32	0.46	0.83	1.31	0.32	0.87	0.87	0.85	0.73	0.74
Avail Cap(c_a), veh/h	239	344	338	378	362	401	419	877	916	192	906	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	51.5	51.6	42.9	58.1	56.0	17.1	33.7	33.7	30.7	0.0	0.0
Incr Delay (d2), s/veh	22.6	0.5	0.5	0.9	14.6	155.6	0.6	11.3	11.0	29.1	5.2	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.0	6.2	6.4	8.8	18.1	47.5	3.4	34.8	36.2	7.6	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.0	52.0	52.2	43.8	72.7	211.6	17.7	45.0	44.8	59.8	5.2	5.5
LnGrp LOS	E	D	D	D	E	F	B	D	D	E	A	A
Approach Vol, veh/h		415			993			1664			1488	
Approach Delay, s/veh		59.8			141.1			43.1			11.4	
Approach LOS		E			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	82.5	19.5	35.5	15.0	80.0	20.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	14.0	69.0	14.0	29.0	9.0	74.0	14.0	29.0
Max Q Clear Time (g_c+I1), s	15.4	2.0	13.4	10.1	9.1	59.1	15.7	31.0
Green Ext Time (p_c), s	0.1	12.4	0.0	1.0	0.0	8.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	55.6
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	2230	1457	0
Future Vol, veh/h	0	0	0	2230	1457	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	0	0	2299	1502	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	751	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*490	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*490	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

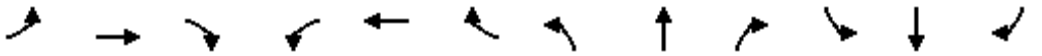
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	440	659	3	10	6
Future Vol, veh/h	2	440	659	3	10	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	4	2	2	2	2
Mvmt Flow	2	454	679	3	10	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	682	0	-	0	912	341
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	231	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	*1206	-	-	-	*578	*806
Stage 1	-	-	-	-	*761	-
Stage 2	-	-	-	-	*785	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	*1206	-	-	-	*576	*806
Mov Cap-2 Maneuver	-	-	-	-	*576	-
Stage 1	-	-	-	-	*759	-
Stage 2	-	-	-	-	*785	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	* 1206	-	-	-	645
HCM Lane V/C Ratio	0.002	-	-	-	0.026
HCM Control Delay (s)	8	0	-	-	10.7
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	475	552	258	347	1020	0	0	816	533
Future Volume (veh/h)	0	0	0	475	552	258	347	1020	0	0	816	533
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				360	777	197	365	1074	0	0	859	490
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				457	960	406	448	2215	0	0	2215	688
Arrive On Green				0.26	0.26	0.26	0.26	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				1781	3741	1581	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				360	777	197	365	1074	0	0	859	490
Grp Sat Flow(s),veh/h/ln				1781	1870	1581	1728	1777	0	0	1702	1585
Q Serve(g_s), s				18.8	19.5	10.6	9.9	0.0	0.0	0.0	11.5	25.3
Cycle Q Clear(g_c), s				18.8	19.5	10.6	9.9	0.0	0.0	0.0	11.5	25.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				457	960	406	448	2215	0	0	2215	688
V/C Ratio(X)				0.79	0.81	0.49	0.81	0.48	0.00	0.00	0.39	0.71
Avail Cap(c_a), veh/h				517	1085	459	829	2215	0	0	2215	688
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.80	0.80	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.6	34.9	31.6	35.9	0.0	0.0	0.0	19.3	23.2
Incr Delay (d2), s/veh				7.1	4.2	0.9	3.0	0.6	0.0	0.0	0.5	6.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				13.8	14.3	7.4	6.7	0.3	0.0	0.0	8.0	15.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				41.8	39.1	32.5	38.9	0.6	0.0	0.0	19.8	29.4
LnGrp LOS				D	D	C	D	A	A	A	B	C
Approach Vol, veh/h					1334			1439			1349	
Approach Delay, s/veh					38.8			10.3			23.3	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.0	49.4		31.7		68.3						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	24.0	29.0		29.0		59.0						
Max Q Clear Time (g_c+I1), s	11.9	27.3		21.5		2.0						
Green Ext Time (p_c), s	1.0	1.2		4.2		10.6						

Intersection Summary		
HCM 6th Ctrl Delay		23.8
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	584	371	1261	0	0	0	0	739	530	164	1154	0
Future Volume (veh/h)	584	371	1261	0	0	0	0	739	530	164	1154	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	401	578	1295				0	762	349	169	1190	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	695	729	1232				0	2323	572	238	1741	0
Arrive On Green	0.39	0.39	0.39				0.00	0.36	0.36	0.14	0.98	0.00
Sat Flow, veh/h	1781	1870	3158				0	6696	1585	3456	3647	0
Grp Volume(v), veh/h	401	578	1295				0	762	349	169	1190	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1579				0	1609	1585	1728	1777	0
Q Serve(g_s), s	17.7	27.3	39.0				0.0	8.6	18.0	4.7	2.0	0.0
Cycle Q Clear(g_c), s	17.7	27.3	39.0				0.0	8.6	18.0	4.7	2.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	695	729	1232				0	2323	572	238	1741	0
V/C Ratio(X)	0.58	0.79	1.05				0.00	0.33	0.61	0.71	0.68	0.00
Avail Cap(c_a), veh/h	695	729	1232				0	2323	572	484	1741	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	24.0	26.9	30.5				0.0	23.2	26.2	42.1	0.5	0.0
Incr Delay (d2), s/veh	1.2	6.0	40.3				0.0	0.4	4.8	3.2	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.0	18.9	29.6				0.0	5.9	11.9	3.6	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	32.9	70.8				0.0	23.5	31.0	45.3	2.3	0.0
LnGrp LOS	C	C	F				A	C	C	D	A	A
Approach Vol, veh/h		2274						1111			1359	
Approach Delay, s/veh		53.1						25.9			7.7	
Approach LOS		D						C			A	

Timer - Assigned Phs	2		5	6		8				
Phs Duration (G+Y+Rc), s	55.0		12.9	42.1		45.0				
Change Period (Y+Rc), s	6.0		6.0	6.0		6.0				
Max Green Setting (Gmax), s	49.0		14.0	29.0		39.0				
Max Q Clear Time (g_c+I1), s	4.0		6.7	20.0		41.0				
Green Ext Time (p_c), s	12.0		0.3	4.3		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	33.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	326	121	84	123	196	58	886	110	603	1777	127
Future Volume (veh/h)	167	326	121	84	123	196	58	886	110	603	1777	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	170	333	102	86	126	136	59	904	107	615	1813	128
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	389	117	149	237	388	207	1801	213	468	2221	155
Arrive On Green	0.07	0.14	0.14	0.05	0.13	0.13	0.02	0.56	0.56	0.24	1.00	1.00
Sat Flow, veh/h	1781	2685	809	1781	1870	1559	1781	3199	379	1781	3369	235
Grp Volume(v), veh/h	170	218	217	86	126	136	59	502	509	615	946	995
Grp Sat Flow(s),veh/h/ln	1781	1777	1717	1781	1870	1559	1781	1777	1801	1781	1777	1828
Q Serve(g_s), s	14.0	24.0	24.7	8.3	12.6	14.4	2.8	34.4	34.4	24.0	0.0	0.0
Cycle Q Clear(g_c), s	14.0	24.0	24.7	8.3	12.6	14.4	2.8	34.4	34.4	24.0	0.0	0.0
Prop In Lane	1.00		0.47	1.00		1.00	1.00		0.21	1.00		0.13
Lane Grp Cap(c), veh/h	232	258	249	149	237	388	207	1001	1014	468	1171	1205
V/C Ratio(X)	0.73	0.85	0.87	0.58	0.53	0.35	0.28	0.50	0.50	1.31	0.81	0.83
Avail Cap(c_a), veh/h	232	391	378	270	505	611	512	1001	1014	468	1171	1205
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.0	83.4	83.7	72.1	81.7	62.1	17.6	26.6	26.6	27.5	0.0	0.0
Incr Delay (d2), s/veh	11.4	10.4	13.1	3.5	1.8	0.5	0.7	1.8	1.8	156.2	6.0	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	17.4	17.6	7.2	10.4	9.8	2.2	21.5	21.8	47.7	3.5	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.4	93.8	96.8	75.6	83.6	62.7	18.4	28.4	28.4	183.8	6.0	6.6
LnGrp LOS	F	F	F	E	F	E	B	C	C	F	A	A
Approach Vol, veh/h		605			348			1070			2556	
Approach Delay, s/veh		92.5			73.4			27.8			49.0	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	137.8	16.4	35.0	30.0	118.6	20.0	31.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	39.0	69.0	24.0	44.0	24.0	84.0	14.0	54.0
Max Q Clear Time (g_c+I1), s	4.8	2.0	10.3	26.7	26.0	36.4	16.0	16.4
Green Ext Time (p_c), s	0.1	28.1	0.1	2.3	0.0	7.6	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	51.7
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	1249	2506	0
Future Vol, veh/h	0	0	0	1249	2506	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	0	0	1288	2584	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1292	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*36	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*36	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

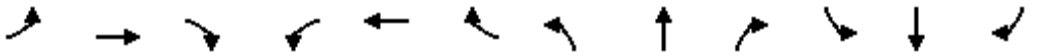
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	613	308	12	7	4
Future Vol, veh/h	6	613	308	12	7	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	632	318	12	7	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	330	0	-	0	652	165
Stage 1	-	-	-	-	324	-
Stage 2	-	-	-	-	328	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	*1426	-	-	-	*561	*953
Stage 1	-	-	-	-	*900	-
Stage 2	-	-	-	-	*702	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	*1426	-	-	-	*557	*953
Mov Cap-2 Maneuver	-	-	-	-	*557	-
Stage 1	-	-	-	-	*894	-
Stage 2	-	-	-	-	*702	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	* 1426	-	-	-	656
HCM Lane V/C Ratio	0.004	-	-	-	0.017
HCM Control Delay (s)	7.5	0	-	-	10.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	611	720	268	965	1656	0	0	649	727
Future Volume (veh/h)	0	0	0	611	720	268	965	1656	0	0	649	727
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				453	973	224	985	1690	0	0	662	695
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				463	973	411	1038	2345	0	0	1632	507
Arrive On Green				0.26	0.26	0.26	0.60	1.00	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1781	3741	1580	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				453	973	224	985	1690	0	0	662	695
Grp Sat Flow(s),veh/h/ln				1781	1870	1580	1728	1777	0	0	1702	1585
Q Serve(g_s), s				37.9	39.0	18.3	39.7	0.0	0.0	0.0	15.2	47.9
Cycle Q Clear(g_c), s				37.9	39.0	18.3	39.7	0.0	0.0	0.0	15.2	47.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				463	973	411	1038	2345	0	0	1632	507
V/C Ratio(X)				0.98	1.00	0.55	0.95	0.72	0.00	0.00	0.41	1.37
Avail Cap(c_a), veh/h				463	973	411	1244	2345	0	0	1632	507
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.72	0.72	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.1	55.5	47.9	28.9	0.0	0.0	0.0	39.9	51.0
Incr Delay (d2), s/veh				36.0	29.0	1.5	10.7	1.4	0.0	0.0	0.8	179.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				29.2	30.0	11.9	19.2	0.8	0.0	0.0	10.8	65.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				91.1	84.5	49.4	39.5	1.4	0.0	0.0	40.6	230.7
LnGrp LOS				F	F	D	D	A	A	A	D	F
Approach Vol, veh/h					1650			2675			1357	
Approach Delay, s/veh					81.5			15.4			138.0	
Approach LOS					F			B			F	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	51.1	53.9		45.0		105.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	54.0	39.0		39.0		99.0						
Max Q Clear Time (g_c+I1), s	41.7	49.9		41.0		2.0						
Green Ext Time (p_c), s	3.4	0.0		0.0		26.5						

Intersection Summary		
HCM 6th Ctrl Delay		63.9
HCM 6th LOS		E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	778	473	329	0	0	0	0	1773	550	229	1125	0
Future Volume (veh/h)	778	473	329	0	0	0	0	1773	550	229	1125	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	910	459	163				0	1828	504	236	1160	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	808	424	359				0	3664	903	290	2464	0
Arrive On Green	0.23	0.23	0.23				0.00	1.00	1.00	0.17	1.00	0.00
Sat Flow, veh/h	3563	1870	1585				0	6696	1585	3456	3647	0
Grp Volume(v), veh/h	910	459	163				0	1828	504	236	1160	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585				0	1609	1585	1728	1777	0
Q Serve(g_s), s	34.0	34.0	13.3				0.0	0.0	0.0	9.9	0.0	0.0
Cycle Q Clear(g_c), s	34.0	34.0	13.3				0.0	0.0	0.0	9.9	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	808	424	359				0	3664	903	290	2464	0
V/C Ratio(X)	1.13	1.08	0.45				0.00	0.50	0.56	0.81	0.47	0.00
Avail Cap(c_a), veh/h	808	424	359				0	3664	903	668	2464	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.66	0.66	0.00
Uniform Delay (d), s/veh	58.0	58.0	50.0				0.0	0.0	0.0	61.3	0.0	0.0
Incr Delay (d2), s/veh	72.7	67.7	0.9				0.0	0.5	2.5	3.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	33.6	33.6	9.2				0.0	0.2	1.1	6.9	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	130.7	125.7	50.9				0.0	0.5	2.5	65.0	0.4	0.0
LnGrp LOS	F	F	D				A	A	A	E	A	A
Approach Vol, veh/h		1532						2332			1396	
Approach Delay, s/veh		120.7						0.9			11.3	
Approach LOS		F						A			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		110.0			18.6	91.4		40.0				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		104.0			29.0	69.0		34.0				
Max Q Clear Time (g_c+I1), s		2.0			11.9	2.0		36.0				
Green Ext Time (p_c), s		12.3			0.7	32.5		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	38.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	168	80	167	293	562	105	1494	32	161	1043	268
Future Volume (veh/h)	197	168	80	167	293	562	105	1494	32	161	1043	268
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1841	1841	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	173	43	172	302	530	108	1540	32	166	1075	262
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	4	4	3	2	2	2	2	2	2	2	2
Cap, veh/h	238	547	133	372	362	401	327	1756	36	190	1445	350
Arrive On Green	0.09	0.20	0.20	0.09	0.19	0.19	0.04	0.49	0.49	0.12	1.00	1.00
Sat Flow, veh/h	1767	2790	676	1767	1870	1580	1781	3560	74	1781	2836	687
Grp Volume(v), veh/h	203	107	109	172	302	530	108	768	804	166	671	666
Grp Sat Flow(s),veh/h/ln	1767	1749	1718	1767	1870	1580	1781	1777	1857	1781	1777	1746
Q Serve(g_s), s	13.9	7.8	8.2	11.6	23.3	29.0	4.5	57.8	58.1	7.2	0.0	0.0
Cycle Q Clear(g_c), s	13.9	7.8	8.2	11.6	23.3	29.0	4.5	57.8	58.1	7.2	0.0	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		0.04	1.00		0.39
Lane Grp Cap(c), veh/h	238	343	337	372	362	401	327	877	916	190	906	890
V/C Ratio(X)	0.85	0.31	0.32	0.46	0.84	1.32	0.33	0.88	0.88	0.88	0.74	0.75
Avail Cap(c_a), veh/h	238	343	337	376	362	401	416	877	916	190	906	890
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	51.6	51.8	42.8	58.2	56.0	17.1	33.9	34.0	30.9	0.0	0.0
Incr Delay (d2), s/veh	24.7	0.5	0.6	0.9	15.5	161.9	0.6	11.9	11.7	33.7	5.4	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.3	6.3	6.5	8.9	18.3	48.6	3.4	35.4	36.9	7.9	2.5	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.3	52.1	52.3	43.7	73.7	217.9	17.7	45.8	45.6	64.6	5.4	5.7
LnGrp LOS	E	D	D	D	E	F	B	D	D	E	A	A
Approach Vol, veh/h		419			1004			1680			1503	
Approach Delay, s/veh		61.0			144.7			43.9			12.1	
Approach LOS		E			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	82.5	19.6	35.4	15.0	80.0	20.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	14.0	69.0	14.0	29.0	9.0	74.0	14.0	29.0
Max Q Clear Time (g_c+I1), s	6.5	2.0	13.6	10.2	9.2	60.1	15.9	31.0
Green Ext Time (p_c), s	0.1	12.6	0.0	1.0	0.0	8.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	57.1
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	2252	1472	0
Future Vol, veh/h	0	0	0	2252	1472	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	0	0	2322	1518	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	759	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*469	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*469	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

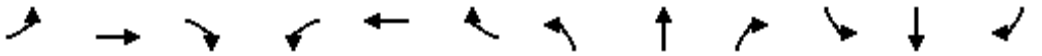
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	444	666	3	10	6
Future Vol, veh/h	2	444	666	3	10	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	4	2	2	2	2
Mvmt Flow	2	458	687	3	10	6

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	690	0	-	0	922	345
Stage 1	-	-	-	-	689	-
Stage 2	-	-	-	-	233	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	*1206	-	-	-	*566	*806
Stage 1	-	-	-	-	*761	-
Stage 2	-	-	-	-	*784	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	*1206	-	-	-	*565	*806
Mov Cap-2 Maneuver	-	-	-	-	*565	-
Stage 1	-	-	-	-	*759	-
Stage 2	-	-	-	-	*784	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	* 1206	-	-	-	636
HCM Lane V/C Ratio	0.002	-	-	-	0.026
HCM Control Delay (s)	8	0	-	-	10.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	480	558	261	350	1030	0	0	824	538
Future Volume (veh/h)	0	0	0	480	558	261	350	1030	0	0	824	538
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				364	784	200	368	1084	0	0	867	497
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				460	965	408	451	2210	0	0	2203	684
Arrive On Green				0.26	0.26	0.26	0.26	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				1781	3741	1581	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				364	784	200	368	1084	0	0	867	497
Grp Sat Flow(s),veh/h/ln				1781	1870	1581	1728	1777	0	0	1702	1585
Q Serve(g_s), s				19.1	19.7	10.7	10.0	0.0	0.0	0.0	11.6	26.0
Cycle Q Clear(g_c), s				19.1	19.7	10.7	10.0	0.0	0.0	0.0	11.6	26.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				460	965	408	451	2210	0	0	2203	684
V/C Ratio(X)				0.79	0.81	0.49	0.82	0.49	0.00	0.00	0.39	0.73
Avail Cap(c_a), veh/h				517	1085	459	829	2210	0	0	2203	684
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.79	0.79	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.6	34.8	31.5	35.8	0.0	0.0	0.0	19.5	23.5
Incr Delay (d2), s/veh				7.4	4.3	0.9	2.9	0.6	0.0	0.0	0.5	6.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				14.0	14.4	7.5	6.7	0.3	0.0	0.0	8.1	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				42.0	39.2	32.4	38.7	0.6	0.0	0.0	20.0	30.2
LnGrp LOS				D	D	C	D	A	A	A	B	C
Approach Vol, veh/h					1348			1452			1364	
Approach Delay, s/veh					38.9			10.3			23.7	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.0	49.2		31.8		68.2						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	24.0	29.0		29.0		59.0						
Max Q Clear Time (g_c+I1), s	12.0	28.0		21.7		2.0						
Green Ext Time (p_c), s	1.0	0.8		4.1		10.8						

Intersection Summary		
HCM 6th Ctrl Delay		24.0
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	590	375	1274	0	0	0	0	746	535	166	1166	0
Future Volume (veh/h)	590	375	1274	0	0	0	0	746	535	166	1166	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	405	584	1309				0	769	358	171	1202	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	695	729	1232				0	2319	571	240	1741	0
Arrive On Green	0.39	0.39	0.39				0.00	0.36	0.36	0.14	0.98	0.00
Sat Flow, veh/h	1781	1870	3158				0	6696	1585	3456	3647	0
Grp Volume(v), veh/h	405	584	1309				0	769	358	171	1202	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1579				0	1609	1585	1728	1777	0
Q Serve(g_s), s	18.0	27.7	39.0				0.0	8.7	18.7	4.7	2.1	0.0
Cycle Q Clear(g_c), s	18.0	27.7	39.0				0.0	8.7	18.7	4.7	2.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	695	729	1232				0	2319	571	240	1741	0
V/C Ratio(X)	0.58	0.80	1.06				0.00	0.33	0.63	0.71	0.69	0.00
Avail Cap(c_a), veh/h	695	729	1232				0	2319	571	484	1741	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	24.1	27.1	30.5				0.0	23.2	26.4	42.1	0.5	0.0
Incr Delay (d2), s/veh	1.2	6.4	44.1				0.0	0.4	5.1	3.2	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.1	19.2	30.6				0.0	6.0	12.2	3.6	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	33.4	74.6				0.0	23.6	31.6	45.3	2.4	0.0
LnGrp LOS	C	C	F				A	C	C	D	A	A
Approach Vol, veh/h		2298						1127			1373	
Approach Delay, s/veh		55.5						26.1			7.7	
Approach LOS		E						C			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		55.0			13.0	42.0		45.0				
Change Period (Y+Rc), s		6.0			6.0	6.0		6.0				
Max Green Setting (Gmax), s		49.0			14.0	29.0		39.0				
Max Q Clear Time (g_c+I1), s		4.1			6.7	20.7		41.0				
Green Ext Time (p_c), s		12.2			0.3	4.1		0.0				

Intersection Summary			
HCM 6th Ctrl Delay			34.9
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	329	122	85	124	198	59	895	111	609	1795	128
Future Volume (veh/h)	169	329	122	85	124	198	59	895	111	609	1795	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	172	336	104	87	127	139	60	913	108	621	1832	129
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	392	119	150	241	391	205	1795	212	463	2214	154
Arrive On Green	0.07	0.15	0.15	0.05	0.13	0.13	0.02	0.56	0.56	0.24	1.00	1.00
Sat Flow, veh/h	1781	2677	815	1781	1870	1559	1781	3199	378	1781	3370	234
Grp Volume(v), veh/h	172	221	219	87	127	139	60	507	514	621	955	1006
Grp Sat Flow(s),veh/h/ln	1781	1777	1716	1781	1870	1559	1781	1777	1801	1781	1777	1828
Q Serve(g_s), s	14.0	24.3	25.0	8.4	12.7	14.7	2.9	35.0	35.1	24.0	0.0	0.0
Cycle Q Clear(g_c), s	14.0	24.3	25.0	8.4	12.7	14.7	2.9	35.0	35.1	24.0	0.0	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		0.21	1.00		0.13
Lane Grp Cap(c), veh/h	233	260	251	150	241	391	205	997	1010	463	1167	1201
V/C Ratio(X)	0.74	0.85	0.87	0.58	0.53	0.36	0.29	0.51	0.51	1.34	0.82	0.84
Avail Cap(c_a), veh/h	233	391	377	270	505	611	509	997	1010	463	1167	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.9	83.2	83.5	71.8	81.4	62.0	17.8	26.9	26.9	27.5	0.0	0.0
Incr Delay (d2), s/veh	11.6	10.7	13.4	3.5	1.8	0.5	0.8	1.9	1.8	167.7	6.4	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.5	17.6	17.8	7.2	10.4	10.0	2.3	21.9	22.1	49.3	3.8	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.5	94.0	96.9	75.3	83.2	62.5	18.6	28.8	28.8	195.2	6.4	7.0
LnGrp LOS	F	F	F	E	F	E	B	C	C	F	A	A
Approach Vol, veh/h		612			353			1081			2582	
Approach Delay, s/veh		92.7			73.1			28.2			52.1	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	137.4	16.5	35.3	30.0	118.2	20.0	31.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	39.0	69.0	24.0	44.0	24.0	84.0	14.0	54.0
Max Q Clear Time (g_c+I1), s	4.9	2.0	10.4	27.0	26.0	37.1	16.0	16.7
Green Ext Time (p_c), s	0.1	28.8	0.1	2.3	0.0	7.7	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	53.5
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	1262	2531	0
Future Vol, veh/h	0	0	0	1262	2531	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	0	0	1301	2609	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1305	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	*36	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*36	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

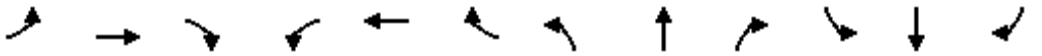
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	619	311	12	7	4
Future Vol, veh/h	6	619	311	12	7	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	638	321	12	7	4

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	333	0	-	0	658	167
Stage 1	-	-	-	-	327	-
Stage 2	-	-	-	-	331	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	*1426	-	-	-	*555	*953
Stage 1	-	-	-	-	*900	-
Stage 2	-	-	-	-	*700	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	*1426	-	-	-	*551	*953
Mov Cap-2 Maneuver	-	-	-	-	*551	-
Stage 1	-	-	-	-	*893	-
Stage 2	-	-	-	-	*700	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	* 1426	-	-	-	651
HCM Lane V/C Ratio	0.004	-	-	-	0.017
HCM Control Delay (s)	7.5	0	-	-	10.6
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	614	720	268	975	1663	0	0	651	727
Future Volume (veh/h)	0	0	0	614	720	268	975	1663	0	0	651	727
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				454	977	224	995	1697	0	0	664	695
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				463	973	411	1047	2345	0	0	1618	502
Arrive On Green				0.26	0.26	0.26	0.61	1.00	0.00	0.00	0.32	0.32
Sat Flow, veh/h				1781	3741	1580	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				454	977	224	995	1697	0	0	664	695
Grp Sat Flow(s),veh/h/ln				1781	1870	1580	1728	1777	0	0	1702	1585
Q Serve(g_s), s				38.0	39.0	18.3	40.1	0.0	0.0	0.0	15.3	47.5
Cycle Q Clear(g_c), s				38.0	39.0	18.3	40.1	0.0	0.0	0.0	15.3	47.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				463	973	411	1047	2345	0	0	1618	502
V/C Ratio(X)				0.98	1.00	0.55	0.95	0.72	0.00	0.00	0.41	1.38
Avail Cap(c_a), veh/h				463	973	411	1244	2345	0	0	1618	502
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.71	0.71	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.1	55.5	47.9	28.5	0.0	0.0	0.0	40.2	51.2
Incr Delay (d2), s/veh				36.6	30.0	1.5	10.8	1.4	0.0	0.0	0.8	184.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				29.4	30.3	11.9	19.2	0.8	0.0	0.0	10.8	66.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				91.7	85.5	49.4	39.2	1.4	0.0	0.0	41.0	235.9
LnGrp LOS				F	F	D	D	A	A	A	D	F
Approach Vol, veh/h					1655			2692			1359	
Approach Delay, s/veh					82.3			15.4			140.7	
Approach LOS					F			B			F	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	51.5	53.5		45.0		105.0						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	54.0	39.0		39.0		99.0						
Max Q Clear Time (g_c+I1), s	42.1	49.5		41.0		2.0						
Green Ext Time (p_c), s	3.4	0.0		0.0		26.8						

Intersection Summary		
HCM 6th Ctrl Delay		64.6
HCM 6th LOS		E

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	778	473	336	0	0	0	0	1791	560	229	1133	0
Future Volume (veh/h)	778	473	336	0	0	0	0	1791	560	229	1133	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	911	462	168				0	1846	514	236	1168	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	808	424	359				0	3664	903	290	2464	0
Arrive On Green	0.23	0.23	0.23				0.00	1.00	1.00	0.17	1.00	0.00
Sat Flow, veh/h	3563	1870	1585				0	6696	1585	3456	3647	0
Grp Volume(v), veh/h	911	462	168				0	1846	514	236	1168	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1585				0	1609	1585	1728	1777	0
Q Serve(g_s), s	34.0	34.0	13.8				0.0	0.0	0.0	9.9	0.0	0.0
Cycle Q Clear(g_c), s	34.0	34.0	13.8				0.0	0.0	0.0	9.9	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	808	424	359				0	3664	903	290	2464	0
V/C Ratio(X)	1.13	1.09	0.47				0.00	0.50	0.57	0.81	0.47	0.00
Avail Cap(c_a), veh/h	808	424	359				0	3664	903	668	2464	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	2.00	2.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.65	0.65	0.00
Uniform Delay (d), s/veh	58.0	58.0	50.2				0.0	0.0	0.0	61.3	0.0	0.0
Incr Delay (d2), s/veh	73.1	70.1	0.9				0.0	0.5	2.6	3.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	33.7	34.1	9.5				0.0	0.2	1.2	6.9	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	131.1	128.1	51.1				0.0	0.5	2.6	64.9	0.4	0.0
LnGrp LOS	F	F	D				A	A	A	E	A	A
Approach Vol, veh/h		1541						2360			1404	
Approach Delay, s/veh		121.5						1.0			11.3	
Approach LOS		F						A			B	

Timer - Assigned Phs	2		5	6		8				
Phs Duration (G+Y+Rc), s	110.0		18.6	91.4		40.0				
Change Period (Y+Rc), s	6.0		6.0	6.0		6.0				
Max Green Setting (Gmax), s	104.0		29.0	69.0		34.0				
Max Q Clear Time (g_c+I1), s	2.0		11.9	2.0		36.0				
Green Ext Time (p_c), s	12.5		0.7	33.2		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	38.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	175	83	167	296	562	108	1494	32	164	1050	270
Future Volume (veh/h)	225	175	83	167	296	562	108	1494	32	164	1050	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1841	1841	1856	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	232	180	47	172	305	528	111	1540	32	169	1082	264
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	4	4	3	2	2	2	2	2	2	2	2
Cap, veh/h	237	541	138	366	362	401	327	1756	36	190	1443	350
Arrive On Green	0.09	0.20	0.20	0.09	0.19	0.19	0.04	0.49	0.49	0.12	1.00	1.00
Sat Flow, veh/h	1767	2760	702	1767	1870	1580	1781	3560	74	1781	2835	687
Grp Volume(v), veh/h	232	112	115	172	305	528	111	768	804	169	676	670
Grp Sat Flow(s),veh/h/ln	1767	1749	1713	1767	1870	1580	1781	1777	1857	1781	1777	1746
Q Serve(g_s), s	14.0	8.3	8.7	11.6	23.6	29.0	4.6	57.8	58.1	7.3	0.0	0.0
Cycle Q Clear(g_c), s	14.0	8.3	8.7	11.6	23.6	29.0	4.6	57.8	58.1	7.3	0.0	0.0
Prop In Lane	1.00		0.41	1.00		1.00	1.00		0.04	1.00		0.39
Lane Grp Cap(c), veh/h	237	343	336	366	362	401	327	877	916	190	904	888
V/C Ratio(X)	0.98	0.33	0.34	0.47	0.84	1.32	0.34	0.88	0.88	0.89	0.75	0.75
Avail Cap(c_a), veh/h	237	343	336	371	362	401	414	877	916	190	904	888
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	51.8	52.0	42.9	58.3	56.0	17.1	33.9	34.0	31.0	0.0	0.0
Incr Delay (d2), s/veh	52.9	0.6	0.6	0.9	16.4	159.8	0.6	11.9	11.7	36.9	5.6	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.4	6.7	6.8	8.9	18.6	48.3	3.5	35.4	36.9	8.2	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	102.0	52.4	52.6	43.8	74.7	215.8	17.7	45.8	45.6	68.0	5.6	5.9
LnGrp LOS	F	D	D	D	E	F	B	D	D	E	A	A
Approach Vol, veh/h		459			1005			1683			1515	
Approach Delay, s/veh		77.5			143.6			43.9			12.7	
Approach LOS		E			F			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	82.3	19.6	35.4	15.0	80.0	20.0	35.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	14.0	69.0	14.0	29.0	9.0	74.0	14.0	29.0
Max Q Clear Time (g_c+I1), s	15.6	2.0	13.6	10.7	9.3	60.1	16.0	31.0
Green Ext Time (p_c), s	0.1	12.8	0.0	1.1	0.0	8.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.5
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	10	0	2280	1474	13
Future Vol, veh/h	0	10	0	2280	1474	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	10	0	2351	1520	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	767	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	*467	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*467	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	467	-	-
HCM Lane V/C Ratio	-	0.022	-	-
HCM Control Delay (s)	-	12.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

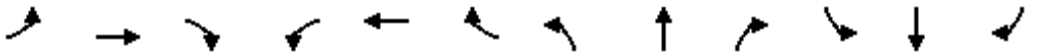
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	444	666	14	50	26
Future Vol, veh/h	5	444	666	14	50	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	4	2	2	2	2
Mvmt Flow	5	458	687	14	52	27

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	701	0	-	0	933	351
Stage 1	-	-	-	-	694	-
Stage 2	-	-	-	-	239	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	*1206	-	-	-	*554	*806
Stage 1	-	-	-	-	*761	-
Stage 2	-	-	-	-	*778	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	*1206	-	-	-	*552	*806
Mov Cap-2 Maneuver	-	-	-	-	*552	-
Stage 1	-	-	-	-	*758	-
Stage 2	-	-	-	-	*778	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	* 1206	-	-	-	552	806
HCM Lane V/C Ratio	0.004	-	-	-	0.093	0.033
HCM Control Delay (s)	8	-	-	-	12.2	9.6
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	492	558	261	357	1034	0	0	832	538
Future Volume (veh/h)	0	0	0	492	558	261	357	1034	0	0	832	538
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				368	797	201	376	1088	0	0	876	499
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				464	974	412	459	2202	0	0	2179	676
Arrive On Green				0.26	0.26	0.26	0.27	1.00	0.00	0.00	0.43	0.43
Sat Flow, veh/h				1781	3741	1581	3456	3647	0	0	5274	1585
Grp Volume(v), veh/h				368	797	201	376	1088	0	0	876	499
Grp Sat Flow(s),veh/h/ln				1781	1870	1581	1728	1777	0	0	1702	1585
Q Serve(g_s), s				19.3	20.0	10.8	10.2	0.0	0.0	0.0	11.9	26.3
Cycle Q Clear(g_c), s				19.3	20.0	10.8	10.2	0.0	0.0	0.0	11.9	26.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				464	974	412	459	2202	0	0	2179	676
V/C Ratio(X)				0.79	0.82	0.49	0.82	0.49	0.00	0.00	0.40	0.74
Avail Cap(c_a), veh/h				517	1085	459	829	2202	0	0	2179	676
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	0.79	0.79	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.5	34.7	31.3	35.6	0.0	0.0	0.0	19.8	24.0
Incr Delay (d2), s/veh				7.5	4.6	0.9	2.9	0.6	0.0	0.0	0.6	7.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				14.1	14.6	7.5	6.8	0.3	0.0	0.0	8.3	16.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				42.0	39.3	32.2	38.5	0.6	0.0	0.0	20.4	31.0
LnGrp LOS				D	D	C	D	A	A	A	C	C
Approach Vol, veh/h					1366			1464			1375	
Approach Delay, s/veh					39.0			10.4			24.3	
Approach LOS					D			B			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	19.3	48.7		32.1		67.9						
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0						
Max Green Setting (Gmax), s	24.0	29.0		29.0		59.0						
Max Q Clear Time (g_c+I1), s	12.2	28.3		22.0		2.0						
Green Ext Time (p_c), s	1.1	0.5		4.0		10.8						

Intersection Summary		
HCM 6th Ctrl Delay		24.2
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	590	375	1296	0	0	0	0	757	542	166	1188	0
Future Volume (veh/h)	590	375	1296	0	0	0	0	757	542	166	1188	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	405	588	1329				0	780	365	171	1225	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	695	729	1232				0	2319	571	240	1741	0
Arrive On Green	0.39	0.39	0.39				0.00	0.36	0.36	0.14	0.98	0.00
Sat Flow, veh/h	1781	1870	3158				0	6696	1585	3456	3647	0
Grp Volume(v), veh/h	405	588	1329				0	780	365	171	1225	0
Grp Sat Flow(s),veh/h/ln	1781	1870	1579				0	1609	1585	1728	1777	0
Q Serve(g_s), s	18.0	28.0	39.0				0.0	8.8	19.1	4.7	2.2	0.0
Cycle Q Clear(g_c), s	18.0	28.0	39.0				0.0	8.8	19.1	4.7	2.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	695	729	1232				0	2319	571	240	1741	0
V/C Ratio(X)	0.58	0.81	1.08				0.00	0.34	0.64	0.71	0.70	0.00
Avail Cap(c_a), veh/h	695	729	1232				0	2319	571	484	1741	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	0.81	0.81	0.00
Uniform Delay (d), s/veh	24.1	27.1	30.5				0.0	23.3	26.6	42.1	0.5	0.0
Incr Delay (d2), s/veh	1.2	6.6	49.8				0.0	0.4	5.4	3.1	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.1	19.4	32.2				0.0	6.1	12.5	3.6	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	33.8	80.3				0.0	23.7	32.0	45.2	2.5	0.0
LnGrp LOS	C	C	F				A	C	C	D	A	A
Approach Vol, veh/h		2322						1145			1396	
Approach Delay, s/veh		58.9						26.3			7.7	
Approach LOS		E						C			A	

Timer - Assigned Phs	2		5	6		8				
Phs Duration (G+Y+Rc), s	55.0		13.0	42.0		45.0				
Change Period (Y+Rc), s	6.0		6.0	6.0		6.0				
Max Green Setting (Gmax), s	49.0		14.0	29.0		39.0				
Max Q Clear Time (g_c+I1), s	4.2		6.7	21.1		41.0				
Green Ext Time (p_c), s	12.6		0.3	4.0		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	36.6
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	333	124	85	135	198	70	895	111	611	1799	137
Future Volume (veh/h)	187	333	124	85	135	198	70	895	111	611	1799	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	340	106	87	138	144	71	913	108	623	1836	138
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	396	122	150	244	394	208	1790	212	462	2186	162
Arrive On Green	0.07	0.15	0.15	0.05	0.13	0.13	0.03	0.56	0.56	0.24	1.00	1.00
Sat Flow, veh/h	1781	2672	820	1781	1870	1560	1781	3199	378	1781	3353	249
Grp Volume(v), veh/h	191	224	222	87	138	144	71	507	514	623	962	1012
Grp Sat Flow(s),veh/h/ln	1781	1777	1715	1781	1870	1560	1781	1777	1801	1781	1777	1825
Q Serve(g_s), s	14.0	24.6	25.3	8.4	13.9	15.2	3.4	35.2	35.2	24.0	0.0	0.0
Cycle Q Clear(g_c), s	14.0	24.6	25.3	8.4	13.9	15.2	3.4	35.2	35.2	24.0	0.0	0.0
Prop In Lane	1.00		0.48	1.00		1.00	1.00		0.21	1.00		0.14
Lane Grp Cap(c), veh/h	228	263	254	150	244	394	208	994	1007	462	1159	1190
V/C Ratio(X)	0.84	0.85	0.87	0.58	0.57	0.37	0.34	0.51	0.51	1.35	0.83	0.85
Avail Cap(c_a), veh/h	228	391	377	270	505	611	507	994	1007	462	1159	1190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	76.2	83.0	83.3	71.5	81.6	61.9	17.8	27.2	27.2	27.6	0.0	0.0
Incr Delay (d2), s/veh	23.3	11.1	13.8	3.5	2.1	0.6	1.0	1.9	1.8	171.2	7.0	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.9	17.9	18.0	7.2	11.2	10.2	2.7	22.0	22.2	49.8	4.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	99.5	94.1	97.1	75.1	83.7	62.5	18.7	29.0	29.0	198.8	7.0	7.7
LnGrp LOS	F	F	F	E	F	E	B	C	C	F	A	A
Approach Vol, veh/h		637			369			1092			2597	
Approach Delay, s/veh		96.8			73.4			28.3			53.3	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	136.4	16.5	35.6	30.0	117.9	20.0	32.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	39.0	69.0	24.0	44.0	24.0	84.0	14.0	54.0
Max Q Clear Time (g_c+I1), s	5.4	2.0	10.4	27.3	26.0	37.2	16.0	17.2
Green Ext Time (p_c), s	0.2	29.3	0.1	2.3	0.0	7.7	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	55.0
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	0	1280	2540	35
Future Vol, veh/h	0	6	0	1280	2540	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	6	0	1320	2619	36

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1328	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	*36	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*36	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	124.7	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	36	-	-
HCM Lane V/C Ratio	-	0.172	-	-
HCM Control Delay (s)	-	124.7	-	-
HCM Lane LOS	-	F	-	-
HCM 95th %tile Q(veh)	-	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	618	305	51	32	22
Future Vol, veh/h	18	618	305	51	32	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	637	314	53	33	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	367	0	-	0	698	184
Stage 1	-	-	-	-	341	-
Stage 2	-	-	-	-	357	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1417	-	-	-	*519	*953
Stage 1	-	-	-	-	*900	-
Stage 2	-	-	-	-	*679	-
Platoon blocked, %	1	-	-	-	1	1
Mov Cap-1 Maneuver	1417	-	-	-	*513	*953
Mov Cap-2 Maneuver	-	-	-	-	*513	-
Stage 1	-	-	-	-	*888	-
Stage 2	-	-	-	-	*679	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1417	-	-	-	513	953
HCM Lane V/C Ratio	0.013	-	-	-	0.064	0.024
HCM Control Delay (s)	7.6	-	-	-	12.5	8.9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX E

Programmed Projects

PROJECT ID	DESCRIPTION	PRELIMINARY ENGINEERING YEAR	PRELIMINARY ENGINEERING AMOUNT	RIGHT OF WAY YEAR	RIGHT OF WAY AMOUNT	CONSTRUCTION YEAR	CONSTRUCTION AMOUNT	FUNDING SOURCE	COUNTIES
0015956	The proposed project is 1.5 miles of the SR 155 / US 23 / Clairmont Road corridor between I-85 Northbound Exit Ramp and SR 236 / LaVista Road in DeKalb County. The proposed project modifications can be summarized as follows: PI No. 0015956 - Addition of a raised median between I-85 Northbound Exit Ramp and Audubon Drive - Addition of a through lane between I-85 NB Exit Ramp and Audubon Drive The project also proposes to install sidewalk at locations that are missing sidewalks along this section of the study corridor. Rumble strips are proposed along this corridor between Council Bluff Drive and SR 236 / LaVista Road in order to reduce ¿run off the road¿ crash types. The bridge at Interstate 85 will not be affected by the project. The I-85 northbound exit ramp terminal would have channelization, signing, marking, and traffic signal modifications.	2018	$350,000.00	2022	$1,100,000.00	2023	$1,700,000.00	Federal	DeKalb
M006145	This project, selected by the District Maintenance Office, is the resurfacing of SR 155 to improve the roadways current low PACES rating.	N/A	N/A	N/A	N/A	N/A	N/A	Federal	DeKalb

APPENDIX F

Intersection Control Evaluation (ICE) Worksheets

GDOT INTERSECTION CONTROL EVALUATION (ICE) WAIVER FORM

ICE Version 2.15 | Revised 07/01/2019

Waiver Request - Level 2 / 3

In certain circumstances where an ICE would otherwise be required, an ICE may be waived based on appropriate evidence presented with a written request. Scenarios in which an ICE waiver request may be considered include:

1. Proposed improvements do not substantially alter the character of the intersection, and are considered minor in nature, such as extending existing turn lane(s) or modifying signal phasing at an existing traffic signal
2. The intersection consists of a public roadway intersecting a divided, multilane roadway where the access will be limited to a closed median with only right-in/right-out access that will operate acceptably; or
3. The intersection is along an undivided, two-lane roadway that will not be widened and meets the following criteria:
   - Low risk in terms of exposure (total intersection entering volume less than 1,000 vehicles /day)
   - Latest 5 years of crash history is not indicative of a crash problem (no discernible crash patterns coupled with low crash frequency and severity)
   - Layout has no unusual or undesirable geometric features (such as restricted sight distance)
   - The proposed changes are not expected to adversely affect safety

If only one alternative is determined to be feasible from the ICE Stage 1, then a waiver may be submitted in lieu of completing ICE Stage 2. The waiver must clearly explain why there is no other feasible alternative. A Waiver Form should also be submitted to document an agreed upon decision to select a preferred alternative other than the highest scoring alternative in Stage 2.

ICE waiver forms with supporting documentation should be submitted for approval to the Office of Traffic Operations or District Engineer (depending on Waiver level). Questions regarding the waiver process should be routed to the State Traffic Engineer.

Project Information:

Location:	SR155 @ Site Dwy E
County:	DeKalb
GDOT District:	7 - Metro Atlanta
Area Type:	Suburb/Transition
Existing Intersection Control:	Conventional (Minor Stop)
GDOT PI # (or N/A):	N/A
Requested By:	GDOT
Prepared By:	Kimley-Horn
Analyst:	KBA
Date:	6/22/2020
Waiver Request Type:	Driveway Permit

Traffic and Operations Data:[1]

Intersection meets signal/AWS warrants?	None	
Traffic Analysis Type:	Intersection Delay	
Existing Avg Daily Traffic (Major Street):	0	
Existing Avg Daily Traffic (Minor Street):	0	
Analysis Period:	AM Peak	PM Peak
2022 Opening Yr Peak Hour Intersection Delay:	12.9 sec	124.7 sec
2022 Opening Yr Peak Hour Intersection V/C:	0.02	0.17
2022 Design Yr Peak Hour Intersection Delay:	12.9 sec	124.7 sec
2022 Design Yr Peak Hour Intersection V/C:	0.02	0.17

[1]Crash data required for all existing intersections. ADT's required if available (from data collected or nearest GDOT count station site). Capacity data is optional unless needed to justify basis of the waiver request.

Crash Data (Required):[1]

Crash Data: Enter most recent 5 years of crash data	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Crash Type Angle	0	0	0	<-
Head-On	0	0	0	
Rear End	3	0	0	
Sideswipe - same	2	0	0	
Sideswipe - opposite	0	0	0	
Not Collision w/Motor Veh	0	0	0	
TOTALS:	5	0	0	

* Number of crashes resulting in injuries / fatalities, not number of persons

Description of Work / Justification for Waiver (Required):	The existing, full-movement driveway is proposed to be operate under RIRO control which will reduce the number of turning movements at the driveway. SR 155 is programmed to have a center median constructed in 2023. This driveway design is in accordance with the future plans for this corridor.
Proposed Intersection Control:	RIRO w/down stream U-Turn

REQUESTED BY: Jin Seo Date: 6/22/2020

Title: Traffic Engineer

APPROVED BY: _____ Date: _____

Name: _____

District Engineer or (Approved Delegate)