



Municipal Planning & Design Review Commission
Regular Meeting Agenda
Thursday, April 21, 2022, 5:30 PM
City Hall, Lakeland, Tennessee 38002

- I. CALL TO ORDER:
- II. ROLL CALL:
- III. APPROVAL OF MINUTES OF PREVIOUS MEETING:
 1. March 17, 2022
- IV. PUBLIC DISCUSSION:
- V. REPORTS OF OFFICERS AND COMMITTEES:
- VI. OLD BUSINESS:
 1. Election of Officers for Calendar Year 2022.
 2. Consideration of an Outline Plan for Ashmont Planned Development.
 3. Consideration of a Sketch Plan for Taylor Farms Planned Development.
- VII. NEW BUSINESS:
 1. Consideration of a Special Exception for Fence Height at 3988 Blue Spruce Circle.
 2. Consideration of a Final Development Plan for Lakeland Commons Planned Development Areas B and D.
 3. Consideration of a Final Development Plan for Willows at the Lake Phases 1 and 2.
 4. Consideration of a Sign Plan Amendment for The Lake District Planned Development.
 5. Consideration of a Site Plan for Improvements to New Canada Road.

6. Consideration of an Amendment to the Lakeland Land Development Regulations Regarding Fence Materials.

VIII. ANNOUNCEMENTS:

IX. ADJOURNMENT:

LAKELAND MUNICIPAL PLANNING COMMISSION

MEETING MINUTES

THURSDAY, MARCH 17, 2022, 5:30 PM

CITY HALL, LAKELAND, TN.

DRAFT

- I. **CALL TO ORDER:** The meeting was called to order at 5:32 PM by Chairman Susan Mitchell.

II. **ROLL CALL BY ACTING RECORDER:**

Jeff Adams	Absent (<i>excused</i>)
Commissioner Jim Atkinson	Present
Scott Carmichael	Absent (<i>excused</i>)
Mayor Mike Cunningham	Present
Todd Laessig	Absent (<i>excused</i>)
Brian Sullivan	Present
(C) Susan Mitchell	Present

Others present:

Shane Horn, City Manager

Donald Anthony, Planning Director

Jordan McKenzie, City Planner

Will Patterson, City Attorney

For the record: Commissioner Richard Gonzales was present in the audience.

Election of Officers:

Mayor Cunningham moved to defer this item to the next meeting, seconded by Commissioner Atkinson. Motion carried unanimously, voice vote, (4-0).

III. **APPROVAL OF MEETING MINUTES:**

Mayor Cunningham moved to approve the regular meeting minutes of January 20, 2022, as written.

Commissioner Atkinson seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

IV. **PUBLIC DISCUSSION:**

For the record: Comments were deferred to be heard at the time of the agenda item.

V. **REPORTS OF OFFICERS AND COMMITTEES:**

VI. **OLD BUSINESS:** None

VII. **NEW BUSINESS:**

1. Consideration of Special Exception for Fence Height Exceeding 6 Feet at 6563 Stewart Road.

Mayor Cunningham moved to bring this item to the floor.

Mr. Sullivan seconded the motion.

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES
THURSDAY, MARCH 17, 2022, 5:30 PM
CITY HALL, LAKELAND, TN.**

DRAFT

Motion passed unanimously, voice vote, 4 in favor 0 against.

Discussion ensued.

For the record: Comments were heard from the following:
David Schweigler – 6563 Stewart Road (*The applicant*)

After discussion, Commissioner Atkinson moved to approve the special exception for the fence height exceeding 6 feet at 6563 Stewart Road.

Mr. Sullivan seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

2. Consideration of a Final Plat for Barry Nash Property, a 2-Lot Residential Subdivision at 4248 Seed Tick Road.

Mayor Cunningham moved to bring this item to the floor.

Commissioner Atkinson seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

Discussion ensued.

For the record: Comments were heard from the following:
Dale Hoskins – The applicant (*Present in the audience*)

After discussion, Commissioner Atkinson moved to approve the Final Plat for the Barry Nash Property as recommended by staff.

Mayor Cunningham seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

3. Consideration of a Preliminary Site Plan for Lakeland Commons Planned Development Phase 2.

Commissioner Atkinson moved to bring this item to the floor.

Mayor Cunningham seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

Discussion ensued.

For the record: Comments were heard from the following:
Cory Brady – Integrated Land Solutions (*Representing the applicant*)

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES
THURSDAY, MARCH 17, 2022, 5:30 PM
CITY HALL, LAKELAND, TN.**

DRAFT

After discussion, Mayor Cunningham moved to approve the Preliminary Site Plan for Lakeland Commons Planned Development based on staff comments. *(See Attachment A)*

Commissioner Atkinson seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

4. Consideration of a Final Development Plan for Kensington Manor Planned Development Phase 2.

Mayor Cunningham moved to bring this item to the floor.

Commissioner Atkinson seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

Discussion ensued.

For the record: Comments were heard from the following:
Donnie Culver – Renaissance Development Co. *(The applicant)*

After discussion, Commissioner Atkinson recommend approval of the Final Development Plan for Kensington Manor Planned Development Phase 2 including staff comments. *(See Attachment B)*

Commissioner Atkinson seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

5. Consideration of an Outline Plan for Ashmont (Form Final Development Plan for Kensington Manor Planned Development Phase 2.

Mayor Cunningham moved to bring this item to the floor.

Commissioner Atkinson seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

Discussion ensued.

For the record: Comments were heard from the following:
Keith Grant – Grant & Co.
John Hyneman – *(The applicant)*
Michelle Ye – DT Design Studio *(Representing the applicant)*
Bob Dalhoff – DT Design Studio *(Representing the applicant)*
Martin Lipinski – Traffic Study Consultant

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES
THURSDAY, MARCH 17, 2022, 5:30 PM
CITY HALL, LAKELAND, TN.**

DRAFT

Phil Altizer – 3000 block of Davies Manor Dr
Romulo Sosa – 9000 block of Windward Slope Dr
Tom Skrmetti – 3000 block of Lighthouse Cv
Nick King – 3000 block of Davies Manor Dr
Anis Kapania & Robert Lalani – Mobil Lakeland (3665 Canada Rd)
Marlena Vega – 3000 block of Clairice Cv
Frances Fabian – 3000 block of Davies Manor Dr

For the record: The discussion included the applicant addressing the following:

1. Show R-6 attached homes limited to 13 percent of total; this does not include senior living. (Exception 1)
2. Address the request for 10' driveway clearance on corner lot with City Engineer. (Exception 5)
3. Adjust landscape buffer exception for side and rear yard buffer: to remain 50' except where topography warrants reduced buffer. (Exception 6-B)
4. Remove Exception 7. This will be addressed at a later phase of the process.
5. Address the request for Davies Plantation Road ROW with City Engineer. (Exception 9)
6. Either remove or re-work the convenience store with fuel pumps. MPC does not support the store as depicted in the supplemental graphic. (Exception 10)
7. Provide the School Impact Study at resubmittal. (Exception 11)
8. Clearly define Area 8 as commercial.

After the discussion, Commissioner Atkinson moved to defer this item to the next meeting.

Mayor Cunningham seconded the motion.

When the question was called the motion to defer passed unanimously, 4 in favor 0 against.

6. Review and Discussion of a Sketch Plan for glide Xpress Car Wash Planned Development.

Mayor Cunningham moved to bring this item to the floor.

Mr. Sullivan seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

For the record: Comments were heard from the following:

Dylan Dempsey – Carson Consulting Engineers
Chuck Walker – Carson Consulting Engineers

For the record: Discussion only, no action was taken.

LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES
THURSDAY, MARCH 17, 2022, 5:30 PM
CITY HALL, LAKELAND, TN.

DRAFT

VIII. ANNOUNCEMENTS:

IX. ADJOURNMENT:

Mayor Cunningham moved to adjourn the meeting. Commissioner Atkinson seconded the motion.

Motion passed unanimously, voice vote, 4 in favor 0 against.

The meeting was adjourned at 9:51 p.m.

Jeff Adams, *Secretary*

ATTEST:

Debra Murrell, *City Recorder*

These minutes were approved on April 21, 2022.



Municipal Planning and Design Review Commission

Meeting Date: Thursday, March 17, 2022

Project: Lakeland Commons Planned Development, Phase 2
Preliminary Site Plan

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: Unaddressed property located along Village Market Lane, Shady Village Lane, and Seed Tick Road

Parcel ID: L0150 00554

Zoning District: AG (Agriculture) with PD (Planned Development) overlay

Site Area: 11.35 acres

Applicant: Vince Smith, Lakeland Towne Center LLC

Representative: Wesley Woodridge, Renaissance Group Inc.

STAFF RECOMMENDATION

Staff recommends approval subject to the following conditions:

1. Applicant shall satisfy all staff comments, except those waived by the Planning Commission.
2. Applicant shall satisfy all Planning Commission comments.
3. Applicant shall satisfy all Procedural Requirements listed in this Staff Report.

DISCUSSION

The applicant, Vince Smith of Lakeland Towne Center LLC, requests approval of a Preliminary Site Plan for Phase 2 of the Lakeland Commons Planned Development. Article I, Section 4.K.6. of the Land Development Regulations permits an applicant to submit a Preliminary Site Plan to *prepare for a full site plan submittal*. A Preliminary Site Plan is appropriate for projects where

grading and infrastructure preparation are necessary, but where no public infrastructure is planned.

Upon completion, Lakeland Commons Phase 2 will include: 2 buildings with 20 single-family attached dwelling units; 2 buildings with 47 multi-family dwelling units; and 3 mixed-use buildings with 29,929 square feet of commercial space and 56 multi-family dwelling units. A detailed Site Plan for each lot or structure will be submitted as the development advances.

Staff reviewed the approved Outline Plan for Lakeland Commons and found that the Preliminary Site Plan generally complies with the standards for Area B on the Outline Plan.

EXAMPLE MOTIONS

1. Motion to approve the Lakeland Commons Planned Development, Phase 2, Preliminary Site Plan subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve the Lakeland Commons Planned Development, Phase 2, Preliminary Site Plan without conditions.
3. Motion to deny the Lakeland Commons Planned Development, Phase 2, Preliminary Site Plan:
 - a. Reason for denial

PROCEDURAL REQUIREMENTS

1. The applicant shall submit a corrected electronic (PDF) version of the plan to the Planning Department. All revisions shall be clouded on the plan. The applicant shall submit an accompanying letter confirming that all conditions of approval have been satisfied.



Plan Review – Staff Comments

Date:	February 25, 2022
Project Title:	Lakeland Commons Planned Development, Phase 2, Preliminary Site Plan
Applicant:	Cory Brady, Integrated Land Solutions corybrady@gmail.com kakivs@gmail.com

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **March 17, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on March 8, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. Show separately light duty vs. heavy duty asphalt.
2. Remaining comments on construction plans will be provided separately.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

1. Setback chart shows private street minimum front setback as 10 feet. However, approved Outline Plan indicates this should be 8 feet. Verify and correct, if necessary, at resubmittal.
2. Verify that the distance between buildings C and G will meet the minimum 20-foot building separation requirement.
3. Verify that dwelling unit count is consistent with approved Outline Plan.

4. The EPSC plan shows construction staging area near the northwest corner of the site. Indicate whether a construction trailer or other temporary structure will be located there or anywhere else on the site.
5. Comments from previous Planning Director Richard Donovan:
- The portion of sidewalk along the shady village lane and Seed Tick Road needs to be shown and will need to be built with this portion of the development.
 - Please change name to Preliminary Site Plan. Site plans are required to have all items including those for the DRC review.
 - Preliminary Site Plans are required to have the following per the LDRs.
 - (a) Names, addresses, and telephone numbers of the Applicant and developer. (missing information on the developer)
 - (b) Existing buildings, structures, points of access, parking or loading areas, and public or private utilities. (missing existing conditions page with existing utilities)
 - (c) Dimensioned Lot and Property Lines, including those abutting the Parcel(s) in question, Right(s)-of-Way, and Easements, as well as names of the existing streets and the Zoning designation of the Lots. (can be handled by adding a survey page)
 - (d) Existing natural conditions, including existing vegetation, trees, drainageways, flood elevation and/or Area of Special Flood Hazard per Section III.11, slope, and other unique features.
 - (e) Proposed private and Public Improvements, including but not limited to Building Types, Accessory Structures, points of access, parking and loading areas, Easements, Right(s)-of-Way, utilities and open space. (Missing utilities)
 - (f) grading and drainage plan.
 - While landscaping plans are not required for a preliminary site plan, we are concerned about the how the 25 foot landscape buffer will fit in this area. Please provide dimensions from the walls to the property lines.
 - While landscaping plans are not required for a preliminary site plan, we are concerned about the how the 25 foot landscape buffer will fit in this area. Please provide dimensions from the walls to the property lines.
 - Please show this area (southeastern corner of site) as a non-disturb area per the PDP documents.
 - Show setbacks on the preliminary site plan as follows:
 - Village Market Lane: None/9 feet*
 - Shady Village Lane: 10 feet
 - Memphis-Arlington Road: 50 feet
 - Seed Tick Road: 40/50 feet**
 - Private Drive: 8 feet
 - Side Yard Setback: 20 feet
 - Rear Yard Setback: None***

- * None where balconies and/or other building appendages exist. Primary building facade shall be setback a minimum 9 feet from the right-of-way line.
 - ** 50 feet where regulated by the Scenic Corridor Regulations
 - *** Where regulated by Streamside Management Buffer
- This site is over the allotted number of apartment/multi-family units. The site is allowed 239 and the Area B and Area D total 241 with the proposed number of units.



Municipal Planning and Design Review Commission

Meeting Date: Thursday, March 17, 2022

Project: Kensington Manor Planned Development, Phase 2
Final Development Plan

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: Unaddressed property located along Saffron Spring Road, Lawrenceburg Lane East, and Kensington Oaks Drive

Parcel ID: L0151 00496

Zoning District: AG (Agriculture) with PD (Planned Development) overlay

Site Area: 12.16 acres

Applicant: Regency Homebuilders LLC

Representative: Donnie Culver, Renaissance Development Company

STAFF RECOMMENDATION

Staff recommends approval subject to the following conditions:

1. Applicant shall satisfy all staff comments, except those waived by the Planning Commission.
2. Applicant shall satisfy all Planning Commission comments.
3. Applicant shall satisfy all Procedural Requirements listed in this Staff Report.

DISCUSSION

The applicant, Regency Homebuilders LLC represented by Donnie Culver of Renaissance Development Company, requests approval of a Final Development Plan for Phase 2 of the Kensington Manor Planned Development. Kensington Manor Phase 2 includes 22 lots for single-family residential units on 12.16 acres.

Staff reviewed the approved Preliminary Development Plan for Kensington Manor and found that the Final Development Plan generally complies with the standards set forth in the Preliminary Development Plan. The approved Preliminary Development Plan requires a minimum lot area of 10,500 square feet for each residential lot; the 22 lots included in this Final Development Plan each meet that standard, ranging in area from 10,800 square feet to 19,751 square feet. The Final Development Plan also appears to be generally consistent with the subdivision regulations set forth in the Land Development Regulations.

EXAMPLE MOTIONS

1. Motion to approve the Kensington Manor Planned Development, Phase 2, Final Development Plan subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve the Kensington Manor Planned Development, Phase 2, Final Development Plan without conditions.
3. Motion to deny the Kensington Manor Planned Development, Phase 2, Final Development Plan:
 - a. Reason for denial

PROCEDURAL REQUIREMENTS

1. The applicant shall submit a corrected electronic (PDF) version of the plan to the Planning Department. All revisions shall be clouded on the plan. The applicant shall submit an accompanying letter confirming that all conditions of approval have been satisfied.
2. The applicant shall be responsible for having the plan recorded in the Shelby County Register of Deeds' office after receipt of any necessary security, fees, and contracts to provide improvements required in the City of Lakeland Subdivision Regulations. The applicant shall obtain all required signatures on the plan prior to recordation.



Plan Review – Staff Comments

Date:	February 25, 2022
Project Title:	Kensington Manor Planned Development, Phase 2, Final Development Plan
Applicant:	Donnie Culver, Renaissance Development Co. dculver@rendevco.net lela@rendevco.net

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **March 17, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on March 8, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. Dedicated ROW conflicts on Plat. Dimension on plat indicates 106ft and Note 10 states 86ft. The approved PD reflects 106ft.
2. Add dimensioning for all ROW and utility easements on layout.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

1. Change the description of the sidewalk on Phase 1 open space from 5" (inches) to 5' (feet).
2. Remove the note about the sidewalk in phase 1.
3. Note iron pin locations.
4. Per the Planning Commission's request, sign and seal the plat and have signatures on plat at time of resubmittal.

5. Add surveyor's name and contact information to title block.
6. Circle or add bold text to lot numbers to differentiate them from other text on the plat. The lot numbers are difficult to locate on some lots—particularly lots 30, 44, 43, 30, 32, 33, and 38.



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Election of Officers for Calendar Year 2022.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of an Outline Plan for Ashmont Planned Development.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Date: Thursday, April 21, 2022

Project: Ashmont Planned Development
Outline Plan

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: 9640 Davies Plantation Road

Parcel ID: L0159 00395

Zoning District: C-2 (Regional Commercial)

Site Area: 99.3 acres

Applicant: Blue Sky Communities

Representative: Michelle Ye, DT Design Studio

STAFF RECOMMENDATION

Staff makes no recommendation for this request. However, any approval should be subject to the following conditions:

1. Applicant shall satisfy all staff comments, except those waived by the Planning Commission.
2. Applicant shall satisfy all Planning Commission comments.
3. Applicant shall satisfy all Procedural Requirements listed in this Staff Report.

DISCUSSION

The Planning Commission held a public hearing for the Ashmont Planned Development Outline Plan on March 17, 2022. (The staff report and supplementary materials provided at the March

17, 2022, Planning Commission meeting are available on the City's agenda center site at <https://lakelandtn.civicclerk.com/Web/Player.aspx?id=224&key=-1&mod=-1&mk=-1&nov=0.>)

Follow-up on Items Discussed at March 17, 2022 Meeting

After conducting the public hearing, listening to the applicant's presentation, and discussing the item, the Planning Commission requested that the applicant address the following issues prior to the Commission making a recommendation to the Board:

1. Show R-6 attached homes limited to 13 percent of total; this does not include senior living. (Exception 1)

Staff: The applicant has clarified the justification for Exception 1 by noting that no additional townhouses beyond the 13 percent already designated are being proposed with this Outline Plan.

2. Address the request for ten-foot driveway clearance on corner lots with the City Engineer. (Exception 5)

Staff: The applicant has noted in the justification for Exception 5 that the City Engineer approves the ten-foot driveway clearance on corner lots.

3. Adjust landscape buffer exception for side and rear yard buffer: to remain 50' except where topography warrants reduced buffer. (Exception 6-B)

Staff: In the justification for Exception 6, the applicant notes the following:
Due to the more significant grade change (up to approximately 9 feet) between the Canada Road Commercial lots and the Area 4 Residential lots, we are requesting for the required buffer to be reduced to 30'. Imposing the 50' buffer in this location would cause a chain reaction, pushing the residential lots further into the valleys that we are prioritizing to preserve and reducing the amount of usable open space.

4. Remove Exception 7. This will be addressed at a later phase of the process.

Staff: Exception 7 has been stricken from the applicant's exceptions letter.

5. Address the request for Davies Plantation Road right-of-way with the City Engineer. (Exception 9)

Staff: In the justification for Exception 9, the applicant notes the following:
E. Davies Plantation Road is currently a 68' ROW with approximately 34' of existing pavement. Per discussions with the City Engineer, we are proposing to provide the necessary improvements for a 3-lane road (pavement, curb, and gutter) and the additional ROW dedication needed for an 86' ROW cross-section

(43' from centerline). This will address the City's potential future need to improve E. Davies Plantation Road to a Boulevard.

6. Either remove or re-work the convenience store with fuel pumps. MPC does not support the store as depicted in the supplemental graphic. (Exception 10)

Staff: The applicant has provided new images of the proposed convenience store on page 40 of the pattern book. The site layout continues to show the fuel pumps at the rear of the convenience store. The images for the front and rear of the convenience store structure show similar design, including building materials and glazing.

7. Provide the School Impact Study at resubmittal. (Exception 11)

Staff: The City anticipates receiving the School Impact Study prior to the Planning Commission meeting. The study will be provided to Commissioners upon receipt by the Planning Department.

8. Clearly define Area 8 as commercial.

Staff: The area previously labeled as Area 8 has been incorporated into Area 7 in the revised pattern book. With the change to exception 1 (removing additional townhouses as an option), the entirety of Area 7 is now designated for commercial development.

Standards and Criteria for Planned Developments

Article I, Section 4.T.3.a. of the Lakeland Land Use Regulations give the Board of Commissioners the authority to approve Planned Developments upon written findings from the Planning Commission that the Planned Development satisfies specific standards. The Planning Commission should consider each of these standards at both the Outline Plan and Preliminary Development Plan phases of the Planned Development process.

1. Effect on surrounding property. The proposed development will not injure or damage the use, value, and enjoyment of surrounding property nor hinder or prevent the development of surrounding property in accordance with the City of Lakeland Comprehensive Plan and current development regulations.
2. Availability of facilities. Water supply, wastewater treatment and disposal, and stormwater drainage facilities are available and adequate to serve the proposed development.
3. Compatibility with surrounding uses. The location and arrangement of the structures, parking areas, walks, lighting, and other service facilities shall be compatible with the surrounding land uses. Any part of the proposed development not used for structures, parking, loading areas, or access ways shall be landscaped or otherwise improved except where natural features are such as to justify preservation.

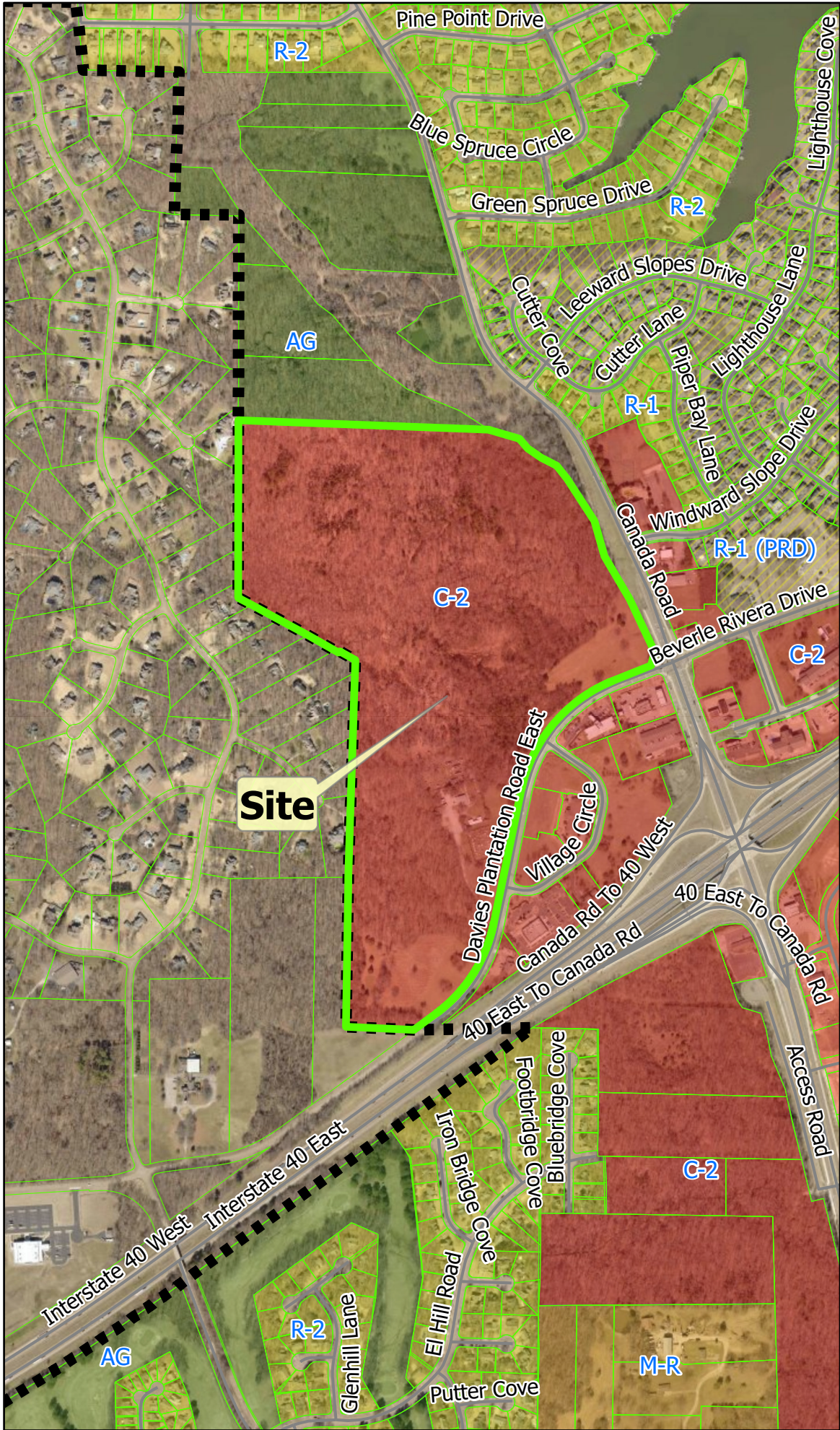
4. Consistency with public interest. Any modification of the zoning or other regulations that would otherwise be applicable to the site are warranted by the design of the PDP and the amenities incorporated therein, and are not inconsistent with the public interest.
5. Owners Association required. Homeowners' or property owners' associations or some other responsible party shall be required to maintain any and all common and open space and/or common elements, unless conveyed to a public body which agrees to maintain such areas.

EXAMPLE MOTIONS

1. Motion to recommend approval of the Ashmont Planned Development Outline Plan to the Board of Commissioners subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to recommend approval of the Ashmont Planned Development Outline Plan to the Board of Commissioners without conditions.
3. Motion to recommend denial of the Ashmont Planned Development Outline Plan to the Board of Commissioners:
 - a. Reason for denial

PROCEDURAL REQUIREMENTS

1. The applicant shall submit a corrected electronic (PDF) version of the plan to the Planning Department. All revisions shall be clouded on the plan. The applicant shall submit an accompanying letter confirming that all conditions of approval have been satisfied.
2. Prior to Board of Commissioners review of the Outline Plan, the applicant shall reimburse the City of Lakeland \$4,000 for the cost of the School Impact Study.



**9640 Davies
Plantation Rd.
East**

Lakeland, Tennessee

99.3 Acres
Zoned C-2

- 9640 Davies Plantation Rd East
- Lakeland City Boundary
- Street Centerline
- Parcel

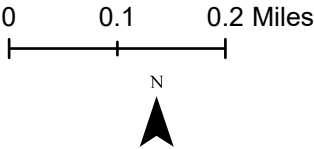
Zoning Classification

- AG
- C-1
- C-2
- E-R
- I-L
- M-R
- OS-2
- OS-5
- P
- R-1
- R-1 (PRD)
- R-2
- R-2 (PRD)
- R-2A
- R-3
- RE

Lakeland Planning
Department
March 7, 2022

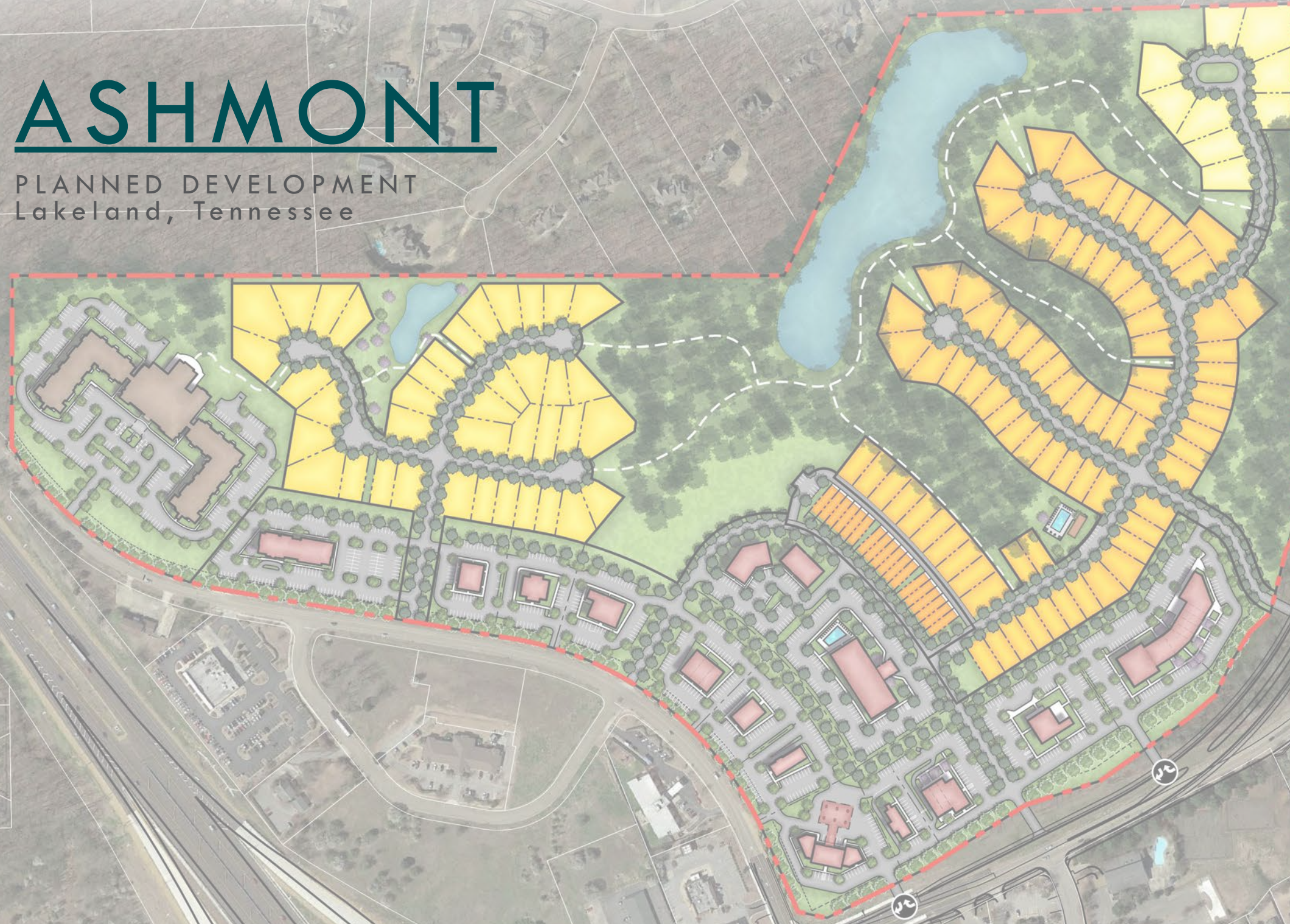
Sources:

Shelby Co. Assessor of
Property; ESRI;
Lakeland IT Dept.



ASHMONT

PLANNED DEVELOPMENT
Lakeland, Tennessee



DEVELOPER:

BLUE SKY COMMUNITIES, INC.
177 Crescent Drive
Collierville, TN 38017
901.870.1315

Contact: Mr. Keith Grant - kgrant@grantnewhomes.com

PLANNER / LANDSCAPE ARCHITECT:



DALHOFF THOMAS design | studio
6465 North Quail Hollow Rd | Suite 401
Memphis, TN 38120
901.646.5070
www.dt-designstudio.com

contacts: Bob Dalhoff - bob@dt-designstudio.com
Michelle Ye - michelle@dt-designstudio.com

ENGINEER:



McCarty Granberry
198 Progress Road
Collierville, TN 38017
901.221.0075
www.mccartygranberry.com

contact: Josh Burnette - jburnette@mccartygranberry.com

RESIDENTIAL ARCHITECT



Shapiro & Company Architects, Inc.
4646 Poplar Avenue | Suite 517
Memphis, TN 38117
901.685.9001
www.shapiroandco.com

contact: Brad Shapiro - bshapiro@shapiroandco.com

COVER LETTER 3

LOCATION MAPS 4

REGIONAL AERIAL..... 5

LAKELAND ZONING & FUTURE LAND USE PLAN 6

LAKELAND NEIGHBORHOOD TYPES & TRANSPORTATION PLAN..... 7

SITE ANALYSIS..... 8

OUTLINE PLAN GRAPHIC 9

OUTLINE PLAN TEXT..... 10-14

CONCEPTUAL DEVELOPMENT PLAN..... 15

CIRCULATION PLAN & LANDSCAPE PLATE LOCATIONS..... 16

STREET CROSS-SECTIONS & LANDSCAPE PLATES 17-21

EXISTING DRAINAGE CONDITIONS..... 22

POST - DEVELOPED DRAINAGE MAP..... 23

PRELIMINARY SEWER MAP 24

PRELIMINARY UTILITY EASEMENT MAP 25

GREENSPACE PLAN 26

PHASING PLAN..... 27

TYPICAL LOT DIAGRAMS 28

SINGLE-FAMILY HOME LAYOUT EXAMPLES..... 29

RESIDENTIAL ARCHITECTURAL PATTERN BOOK 30-36

COMMERCIAL ARCHITECTURE INSPIRATION..... 37

VISUAL EXAMPLES OF SIGNAGE..... 38

COMMERCIAL ARCHITECTURAL PATTERN BOOK 39

CONCEPTUAL C-STORE LAYOUT AND ARCHITECTURAL INSPIRATION 40

DISCLAIMER:
Graphics, images, and photographs included in this booklet are solely to convey form and character within Development Name Planned Development and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals. Some images used in this booklet are not property of DALHOFF THOMAS design studio. A full list of photo credits can be provided if needed.

April 12, 2022

Mayor Cunningham
City of Lakeland
10001 Highway 70
Lakeland, TN 38002

**RE: Ashmont Planned Development
Outline Plan Submittal**

Dear Mayor Cunningham,

We are pleased, on behalf of the Developer (Blue Sky Communities), to submit this Outline Plan application for the property located on the northwest corner of the I-40 and Canada Road interchange. The vision for this development has been refined through several rounds of Sketch Plan review and prioritizes the concentration of commercial uses around the interchange, the preservation of natural features, and the creation of high-quality living environments with a mix of four residential products.

Ashmont Planned Development encompasses approximately 99.29 acres, currently zoned as C-2 and the site of an existing paintball park. The property is bound on the south side by Davies Plantation Rd, with other commercial uses across the street. Along the east side is Canada Road, which will be rerouted per Lakeland’s Transportation Plan. The north side of the property is adjacent to a vacant residential parcel, and the west side is the Plantation Estates – Davieshire residential neighborhood which is in the Bartlett city limits.

The Ashmont conceptual development plan is organized around fitting the most appropriate uses to the site’s physical features and surrounding context. The vehicular traffic and surrounding commercial uses along Davies Plantation Road and Canada Road are fitting for the approved commercial uses to remain along these road frontages. Although conceptual uses are illustrated on the conceptual development plan, the exact use will be determined by the market. The southeast corner of the site is on relatively flat high ground, so it is a perfect place to provide a senior living community that may include uses such as Independent and Assisted Living. A mixed-product residential community is interwoven with the site’s natural topography at the interior and rear of the site. The majority of existing tree cover is in this area and care has been taken to preserve tree areas between groups of lots wherever possible.

In 2017, a Lakeland Small Area Plan was completed by LRK for the properties around the I-40 and Canada Road interchange. The plan concluded that the area, although designated C-2, should be allowed more residential uses in alignment with the Type V Neighborhood designation. This project expands on the groundwork of the Small Area Plan and includes a proposed plan based on a more in-depth analysis of the site, the feasibility and compatibility of different uses, and the demands of the residential market.

Through the City of Lakeland’s review process, we have come to an understanding of the City’s and the Neighbors’ concerns and have made significant changes to the initial concept presented to align more closely with the Land Development Regulations for Type V. A loop road through the interior of the site added a second layer of commercial uses. The number of different residential products was increased and now includes a Townhome product to transition in density. The access points for the commercial uses have been studied and defined to work with grading and flow of traffic. Also, architectural guidelines have been incorporated to ensure quality and consistency throughout the development. The Outline Plan Exceptions and Justifications letter has been revised to reflect the comments received during the March 17, 2022 Planning Commission meeting, with the requests that we are removing clearly indicated.

We feel that the Ashmont Planned Development will create a long-lasting, high-quality community that addresses the needs of the City, and represents the Developer and design team’s understanding of Lakeland’s unique assets and vision. If we can be of any help with regards to this application, please do not hesitate to contact us.

Sincerely,



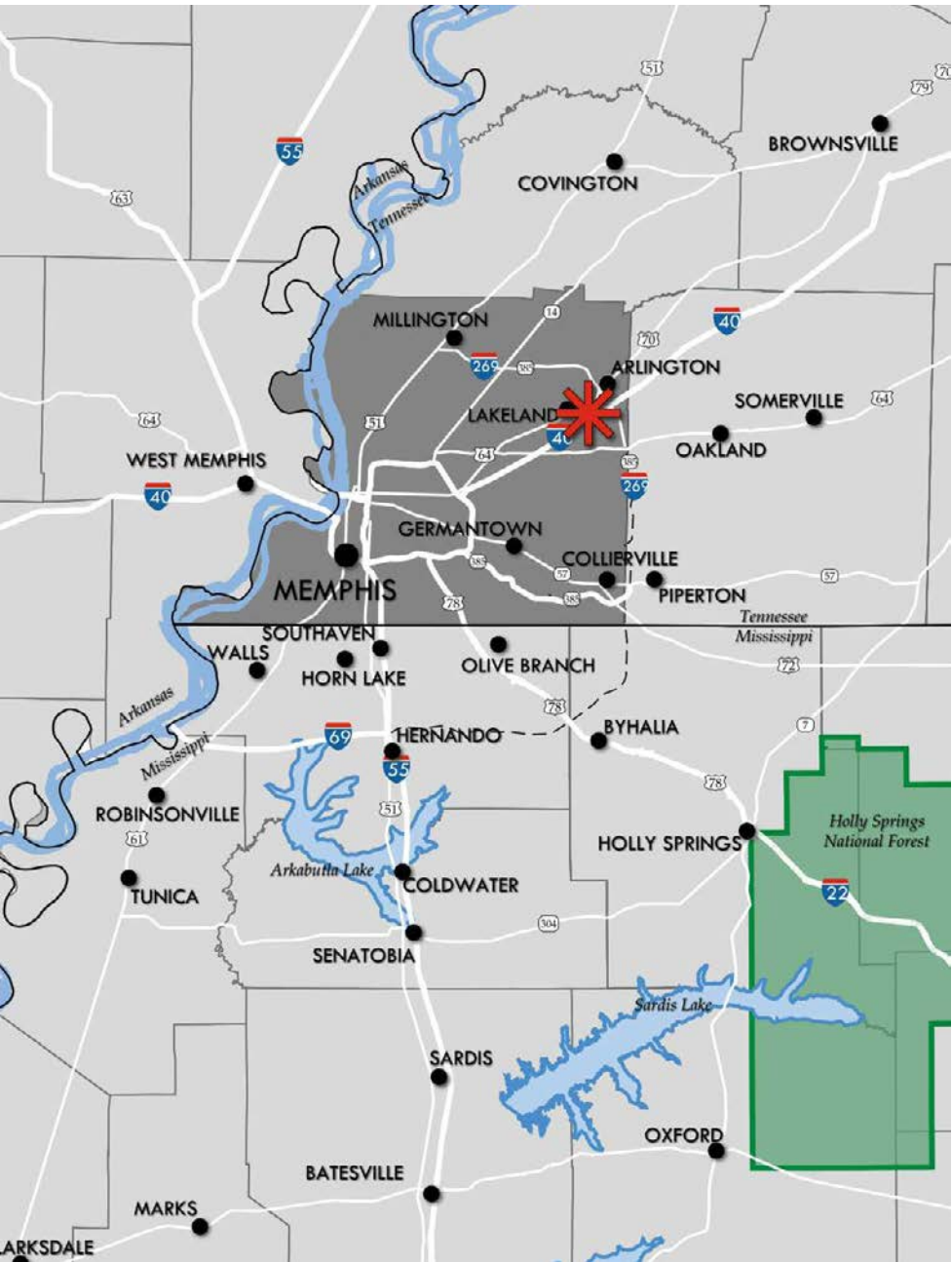
Michelle Ye, PLA
Senior Associate
DT design studio

CERTIFICATE OF OWNERSHIP AND DEDICATION

I, _____, AS THE DULY AUTHORIZED AND UNDERSIGNED OWNER OF THE PROPERTY SHOWN, HEREBY ADOPT THIS PLAN AS THE OWNER’S PLAN OF DEVELOPMENT, HOWEVER, IT IS EXPRESSLY STATED THAT THE STREET, RIGHTS-OF-WAY, AND ANY EASEMENTS SHOWN HEREIN SHALL NOT BE DEDICATED OR GRANTED TO PUBLIC USE BY THESE PLANS. FINAL DEVELOPMENT PLANS ARE REQUIRED IN SUBSEQUENT APPROVAL PROCESSES, WHEREUPON NECESSARY RIGHTS-OF-WAY AND EASEMENTS WILL BE DEDICATED AND GRANTED. I CERTIFY THAT SAID PROPERTY IS NOT ENCUMBERED BY ANY TAXES WHICH HAVE BECOME DUE AND PAYABLE.

REGIONAL LOCATION

Ashmont Planned Development is in the northeastern portion of Shelby County, Tennessee and is in the limits of the City of Lakeland. The property is inside the bounds of the Memphis Metropolitan Area boasting a population of over 1.34 million. Metropolitan Memphis is also known as the Mid-South. Ashmont PD contains 99.29 ± acres.

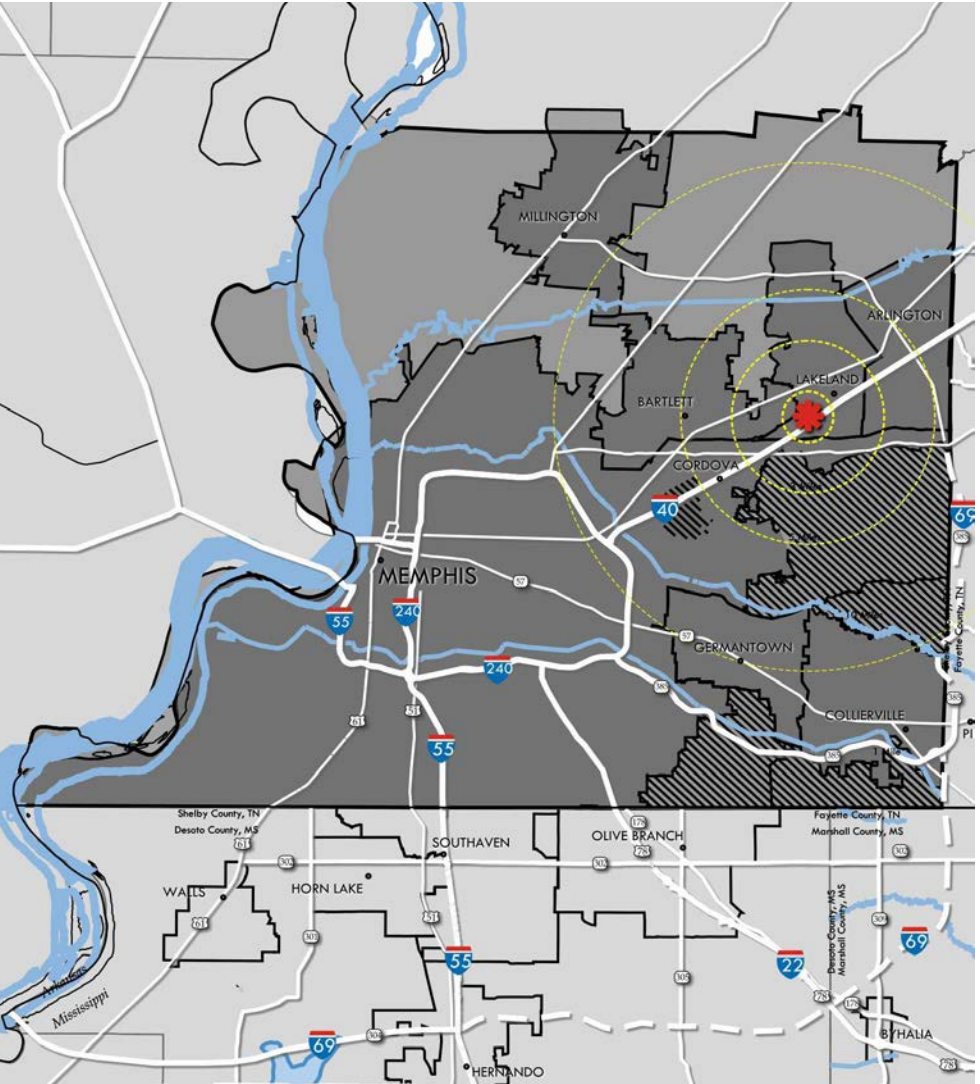


IMMEDIATE LOCATION

More specifically defined, Ashmont Planned Development is in the southwest portion of the City of Lakeland. Davies Plantation Road borders the southeast portion of the site and Canada Road extends along the northeast boundary.

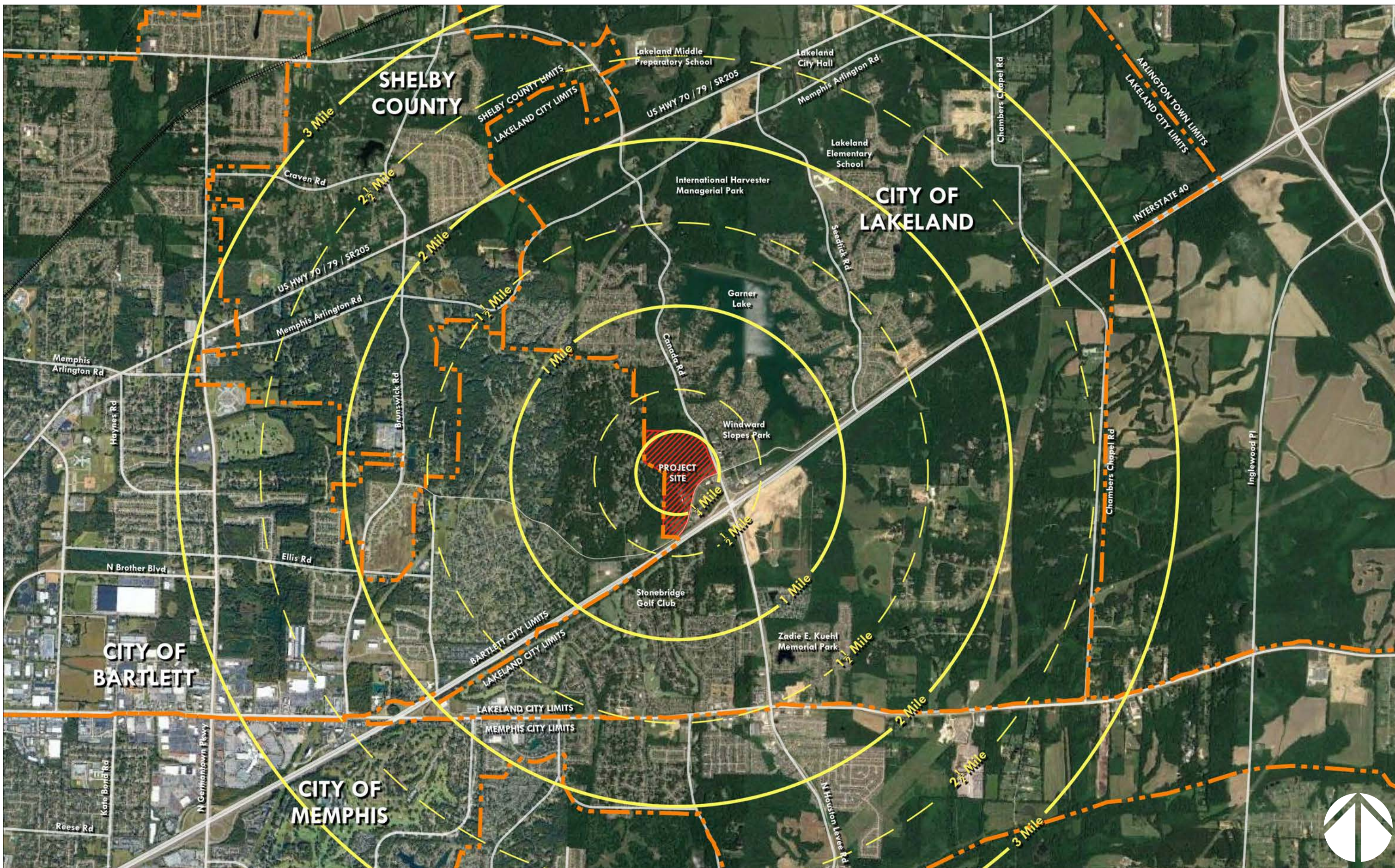
CURRENT MUNICIPALITIES

Ashmont Planned Development falls entirely within the Lakeland municipal boundary. The US Census Bureau estimates the current population within the City of Lakeland to be approximately 13,904. The City is in the northeast portion of Shelby County. The County itself has a population of over 929,744.

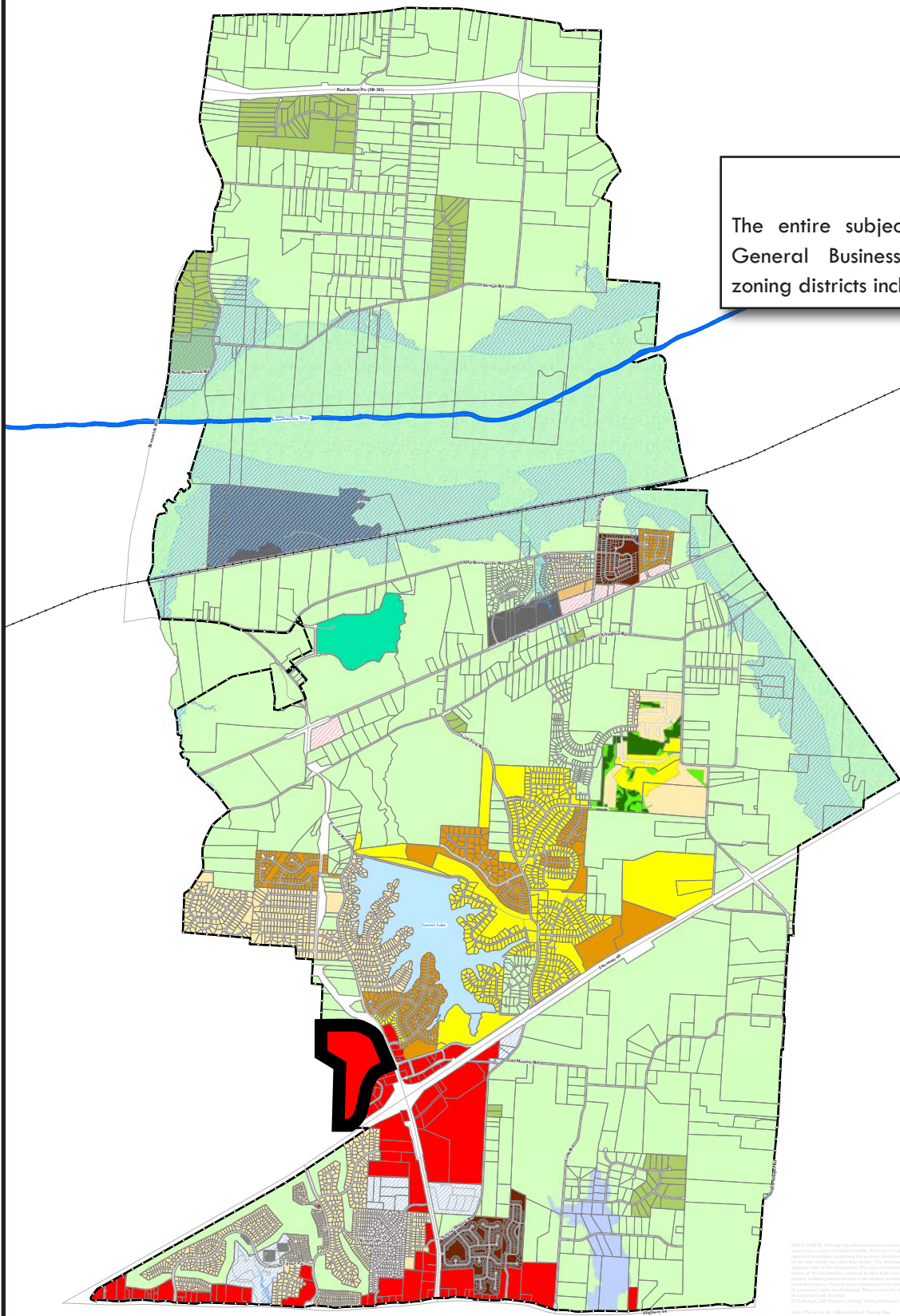


MILEAGE TO SURROUNDING MUNICIPALITIES (±)

Arlington	7
Bartlett	8
Germantown	12
Collierville	15
Memphis.....	21
Olive Branch	26
Southaven	30
Jackson, TN	64
Measured to City/Town Hall	



City of Lakeland Zoning Map



ZONING

The entire subject property falls within the C-2, General Business, zoning category. Surrounding zoning districts include: C-2, AG, R-1

AG: Agriculture

C-2: Neighborhood Business

C-2: General Business

R-1: Low Density Residential

R-1 (PRD): Planned Low Density Residential

R-2 (PRD): Planned Medium Density Residential

R-2A: Alternate Medium Density Residential

R-3: Suburban Cottage

R-3: Estate Residential

M-R: Multiple Family Dwelling

I: Institutional

L-1: Light Industrial

OS-2: General Open Space

OS-3: Conservation Area

Flood Zone

Floodway

No Base Elevation

City Limits

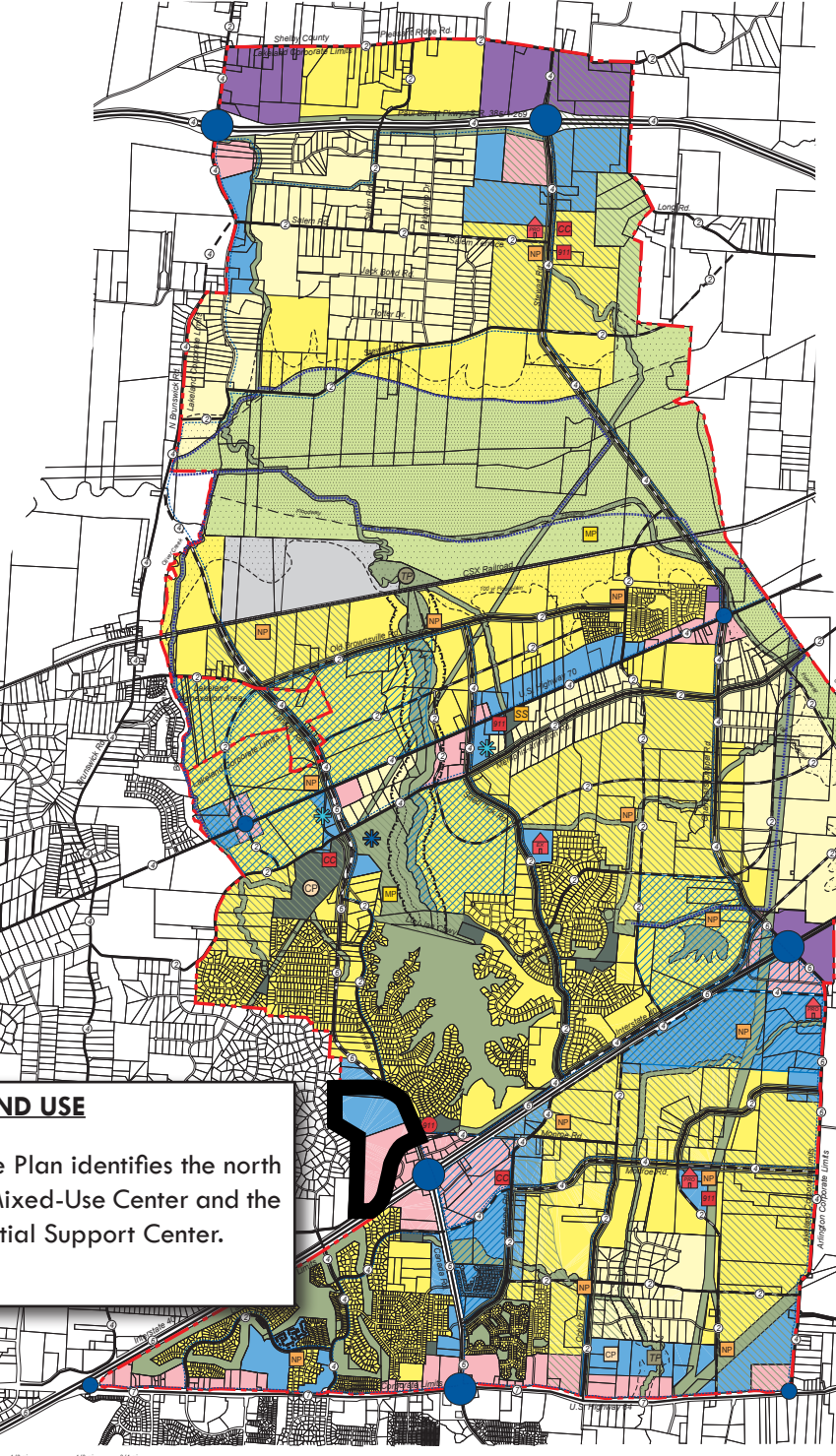
1 inch = 0.25 miles

0 0.125 0.25 0.5 0.75 Miles

CITY OF LAKELAND

PLANNING & ZONING DEPARTMENT

CITY OF LAKELAND, TENNESSEE
COMPREHENSIVE LAND USE PLAN UPDATE



OPEN SPACE
PUBLIC AND PRIVATE RECREATION FACILITIES AND GREENWAYS

EXISTING PUBLIC PARKS

RURAL
PRIMARILY AGRICULTURAL USES THAT MAY CONTAIN RESIDENTIAL LOTS GREATER THAN 1 ACRE. DEVELOPMENT DOES NOT REQUIRE PUBLIC WATER OR SANITARY SEWER SERVICE. STREETS ARE DESIGNED IN ACCORDANCE WITH A RURAL CROSS-SECTION.

EX-URBAN NEIGHBORHOOD
PRIMARILY LARGE LOTS RESIDENTIAL LOTS 1/2 TO 3 ACRE TRACTS BUT MAY CONTAIN AGRICULTURAL USES. DEVELOPMENT REQUIRES PUBLIC WATER BUT NOT SANITARY SEWER SERVICE. STREETS MAY BE DESIGNED WITH A RURAL CROSS-SECTION.

SUBURBAN NEIGHBORHOOD
PRIMARILY SINGLE-FAMILY RESIDENTIAL LOTS WITH A MINIMUM DENSITY OF 2.5 LOTS PER ACRE BUT MAY CONTAIN AGRICULTURAL USES. DEVELOPMENT REQUIRES PUBLIC WATER AND SANITARY SEWER SERVICE. STREETS SHALL BE DESIGNED WITH AN URBAN CROSS-SECTION.

MIXED USE CENTER
PRIMARILY PLANNED DEVELOPMENTS THAT MAY CONTAIN SINGLE-FAMILY DETACHED, SINGLE-FAMILY ATTACHED, MULTIFAMILY RESIDENTIAL, RECREATION FACILITIES, SCHOOLS, PUBLIC BUILDINGS, INSTITUTIONAL, USES, OFFICE USES, AND LIMITED COMMERCIAL USES TO SERVE THE PLANNED DEVELOPMENT. DEVELOPMENT REQUIRES PUBLIC WATER AND SANITARY SEWER SERVICE. STREETS ARE DESIGNED WITH AN URBAN CROSS-SECTION.

RESIDENTIAL SUPPORT CENTER
PRIMARILY PLANNED DEVELOPMENTS CONTAINING NEIGHBORHOOD COMMERCIAL USES WITH ONE USER HAVING GREATER THAN 1500 SQUARE FEET. LIMITED OFFICE, RECREATION FACILITIES, SCHOOLS, PUBLIC BUILDINGS, AND SANITARY SEWER SERVICE. STREETS SHALL BE DESIGNED WITH AN URBAN CROSS-SECTION.

EMPLOYMENT CENTER
OFFICE, WAREHOUSE, COMMERCIAL BUILDINGS AND MAY CONTAIN COMMERCIAL BUILDINGS GREATER THAN 75,000 SQUARE FEET.

LIGHT INDUSTRIAL
LESS THAN 75,000 S.F., BROWNS, KITCHENS, GREENHOUSES, LUMBERWORKS, MANUFACTURE AND FABRICATION OF SMALL ELECTRONIC EQUIPMENT AND CONTRACTING STORAGE FACILITIES.

TND OVERLAY
AREAS ACCEPTABLE FOR PLANNED DEVELOPMENTS SUBSCRIBING TO THE PRINCIPLES OF TRADITIONAL NEIGHBORHOOD DEVELOPMENT. AREAS MAY CONTAIN SINGLE-FAMILY DETACHED AND SINGLE-FAMILY ATTACHED RESIDENTIAL, AT A DENSITY OF LESS THAN 1.5 LOTS PER ACRE. AREAS MAY ALSO CONTAIN LIMITED COMMERCIAL, LIMITED OFFICE, PUBLIC USES, SCHOOLS, RECREATION FACILITIES, SCHOOLS AND INSTITUTIONAL USES. AREAS SHALL CONTAIN SUBSTANTIAL OPEN SPACE AND OPEN SPACE. DEVELOPMENT REQUIRES PUBLIC WATER AND SANITARY SEWER SERVICE. STREETS SHALL BE DESIGNED WITH AN URBAN CROSS-SECTION.

CONSERVATION OVERLAY
DEVELOPMENT PRACTICES IN THE DESIGN AND CONSTRUCTION OF NATURAL RESOURCES. AREAS SHALL CONTAIN SUBSTANTIAL OPEN SPACE AND OPEN SPACE. DEVELOPMENT REQUIRES PUBLIC WATER AND SANITARY SEWER SERVICE. STREETS SHALL BE DESIGNED WITH AN URBAN CROSS-SECTION.

MAJOR ROADS AND R.O.W.

PUBLISHED FLOODWAY

PUBLISHED FLOODPLAIN
100-YEAR FLOOD EVENT

MAJOR GATEWAY TO LAKELAND
AREAS DESIGNED TO PROVIDE A WELCOME ENTRY INTO THE CITY OF LAKELAND OR A SECTION OF THE CITY.

MINOR GATEWAY TO LAKELAND
AREAS DESIGNED TO PROVIDE A WELCOME ENTRY INTO THE CITY OF LAKELAND OR A SECTION OF THE CITY.

SCENIC CORRIDOR
PUBLIC RIGHT-OF-WAY REQUIRING SPECIALIZED DESIGN CONSIDERATIONS TO MAINTAIN THE EXISTING CHARACTER OF THE TRAIL. WAY FOR BOTH VEHICULAR AND PEDESTRIAN USES.

POTENTIAL GARNER LAKE DAM BREACH AREA
AN AREA 100 FEET WIDE ON EACH SIDE OF THE EXISTING GARNER LAKE DAM CENTERLINE THAT MAY OR MAY NOT BE SUBJECT TO BREACH FLOODING. ADDITIONAL STUDY REQUIRED.

ALL ACRES AND OTHER MEASUREMENTS ARE APPROXIMATE.

160 Acres

40 Acres

10 Acres

EXISTING SANITARY SEWER TREATMENT PLANT

PROPOSED SANITARY SEWER TREATMENT PLANT

EXISTING SCHOOL

PROPOSED SCHOOL

EXISTING FIRE STATION

PROPOSED FIRE STATION

PROPOSED SHERIFF SUBSTATION

MUNICIPAL PUBLIC FACILITIES
PRIMARY LOCATION

MUNICIPAL PUBLIC FACILITIES
SECONDARY LOCATION

EXISTING COMMUNITY PARK

PROPOSED MUNICIPAL PARK
A PARK SERVING MULTIPLE NEIGHBORHOODS WITHIN A TWO-MILE RADIUS. SIZE OF PARK VARIES WITH FACILITIES TO BE PROVIDED AS DETERMINED BY THE PARK AND RECREATION BOARD. SIZE SHALL BE AT LEAST 20 ACRES.

PROPOSED COMMUNITY PARK
A PARK SERVING MULTIPLE NEIGHBORHOODS WITHIN A TWO-MILE RADIUS. SIZE OF PARK VARIES WITH FACILITIES TO BE PROVIDED AS DETERMINED BY THE PARK AND RECREATION BOARD. SIZE SHALL BE AT LEAST 20 ACRES.

PROPOSED NEIGHBORHOOD PARK
A PUBLIC PARK SERVING AN AREA OF A 1/2-MILE RADIUS THAT CONTAINS A MINIMUM OF 2 ACRES. PARK SHALL INCLUDE OPEN SPACE, RECREATION FACILITIES, AND RECREATION EQUIPMENT. A SHOT-PUT, PAVED PATH, AN OPEN SPACE AND PARKING, NO LIGHTS/FACILITIES.

PROPOSED COMMUNITY CENTER
A PUBLIC BUILDING SERVING MULTIPLE NEIGHBORHOODS WITHIN A TWO-MILE RADIUS. PARK SHALL ALSO PROVIDE SPACE FOR OUTDOOR COURT GAMES, OPEN PLAY SPACE, PASSIVE RECREATION FACILITIES, AND RECREATION EQUIPMENT. SIZE OF THE PARK BY PROPOSED PROGRAM.

BICYCLE / PEDESTRIAN PATHS

EQUESTRIAN PATHS
CONSIDERED PATHS FOR EQUESTRIAN USE WITHIN TWO FEET WITH A VERTICAL CLEARANCE OF 12 FEET.

ALL PUBLIC FACILITIES ARE APPROXIMATELY LOCATED AND ARE NOT SITE OR PARCEL SPECIFIC.

FUTURE LAND USE

The Lakeland Future Land Use Plan identifies the north section of the property as a Mixed-Use Center and the southern portion as a Residential Support Center.

Brenda P. Solomito
Land Planner
10145 Mackwood Drive • Lakeland, TN 38002
brendasolomito@bellsouth.net

LAND USE PLAN

DUGAN DESIGN GROUP, LLC
planning, landscape architecture, design
5100 WHEELS DRIVE, SUITE 110 MEMPHIS, TN 38117
TEL: 901.680.3080 FAX: 901.680.9097
WWW.DUGANDESIGNGROUP.COM
March 20, 2006 E0247LandUsePlan.dwg

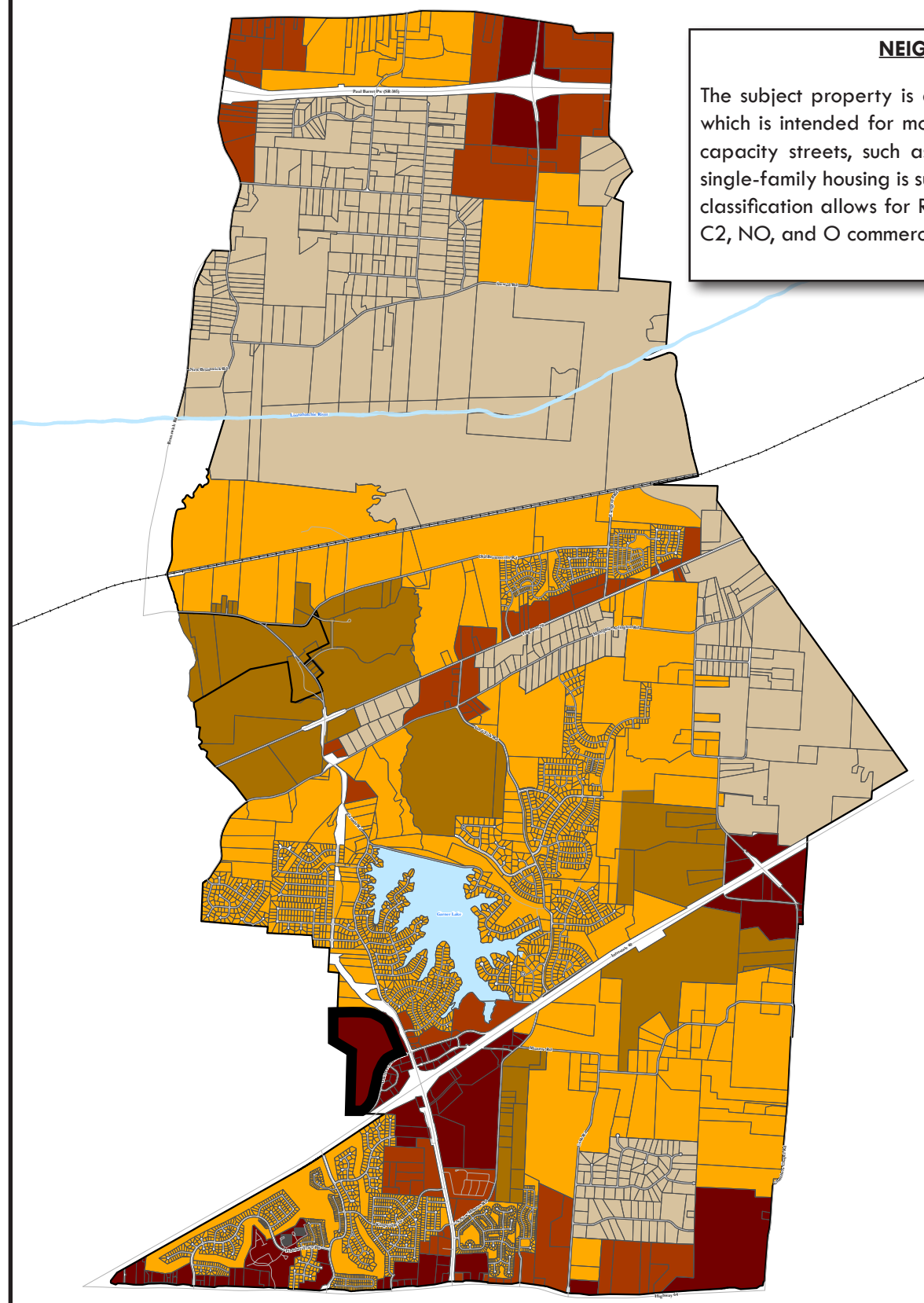
ASHMONT PLANNED DEVELOPMENT
Lakeland, Tennessee

LAKELAND ZONING & FUTURE LAND USE PLAN

6

Page 29 of 326

City of Lakeland Neighborhood Types



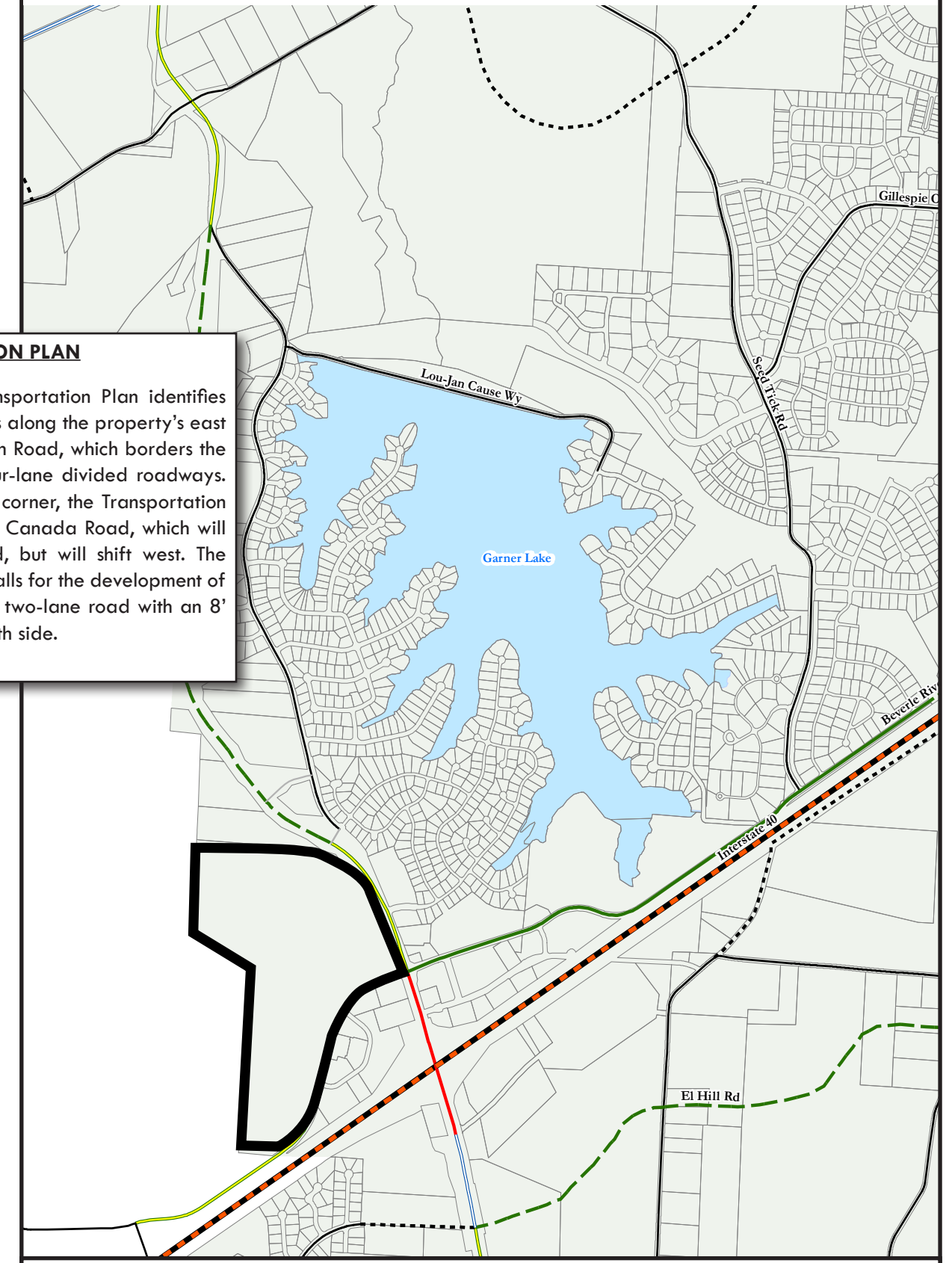
NEIGHBORHOOD TYPES

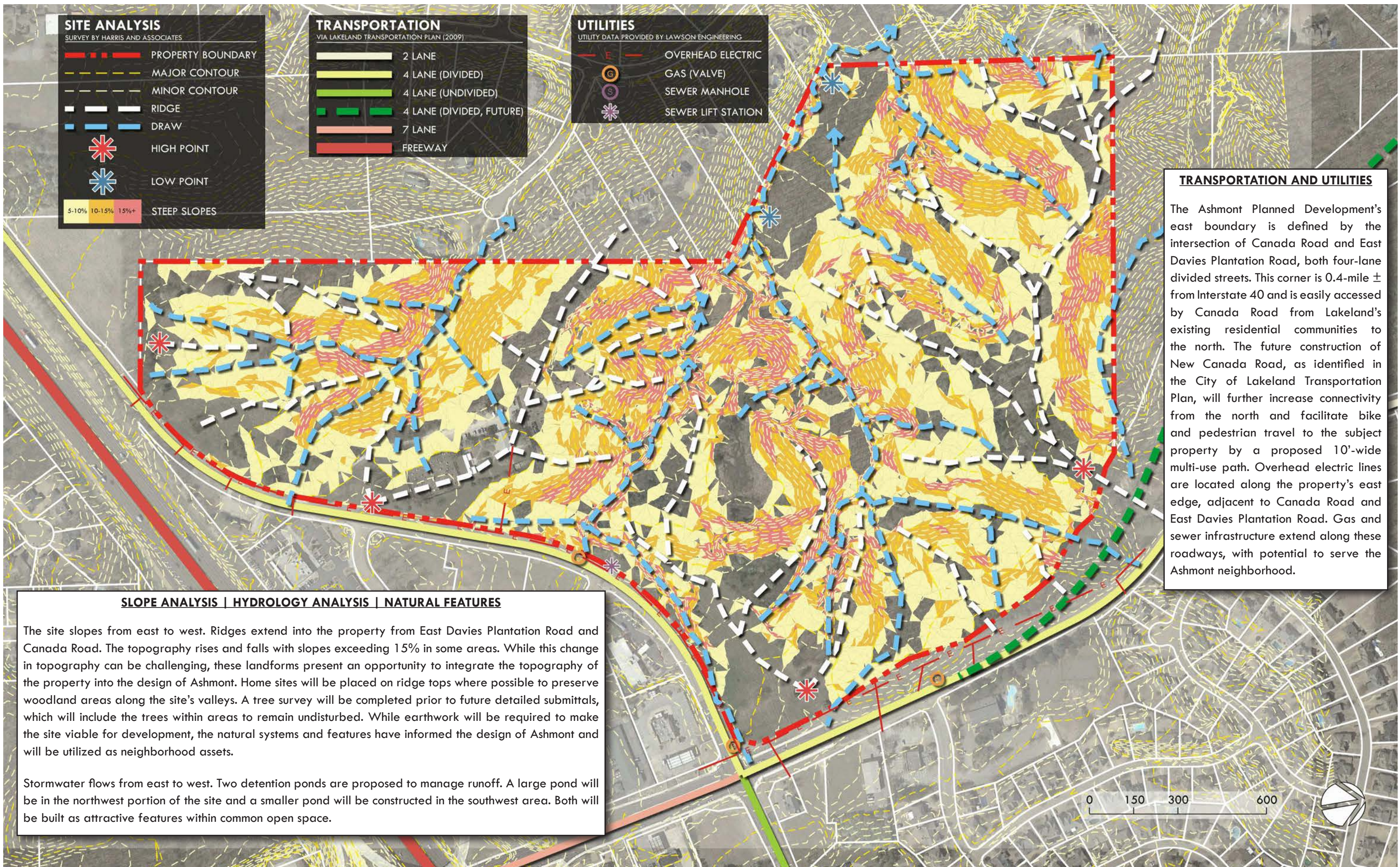
The subject property is designated as a Type V neighborhood, which is intended for more intense commercial use along higher capacity streets, such as Canada Road. In larger subdivisions, single-family housing is suitable beyond commercial uses. Type V classification allows for R1 – R7 residential districts and NC, C1, C2, NO, and O commercial districts.

TRANSPORTATION PLAN

The 2009 City of Lakeland Transportation Plan identifies both Canada Road, which extends along the property's east section, and East Davies Plantation Road, which borders the property's southeast edge, as four-lane divided roadways. Near the property's northeastern corner, the Transportation Plan illustrates the realignment of Canada Road, which will remain a four-lane divided road, but will shift west. The 2017 Lakeland Small Area Plan calls for the development of East Davies Plantation Road as a two-lane road with an 8' parking lane along the road's south side.

City of Lakeland Transportation Plan





SITE ANALYSIS
SURVEY BY HARRIS AND ASSOCIATES

- PROPERTY BOUNDARY
- MAJOR CONTOUR
- MINOR CONTOUR
- RIDGE
- DRAW
- HIGH POINT
- LOW POINT
- 5-10% 10-15% 15%+ STEEP SLOPES

TRANSPORTATION
VIA LAKELAND TRANSPORTATION PLAN (2009)

- 2 LANE
- 4 LANE (DIVIDED)
- 4 LANE (UNDIVIDED)
- 4 LANE (DIVIDED, FUTURE)
- 7 LANE
- FREEWAY

UTILITIES
UTILITY DATA PROVIDED BY LAWSON ENGINEERING

- OVERHEAD ELECTRIC
- GAS (VALVE)
- SEWER MANHOLE
- SEWER LIFT STATION

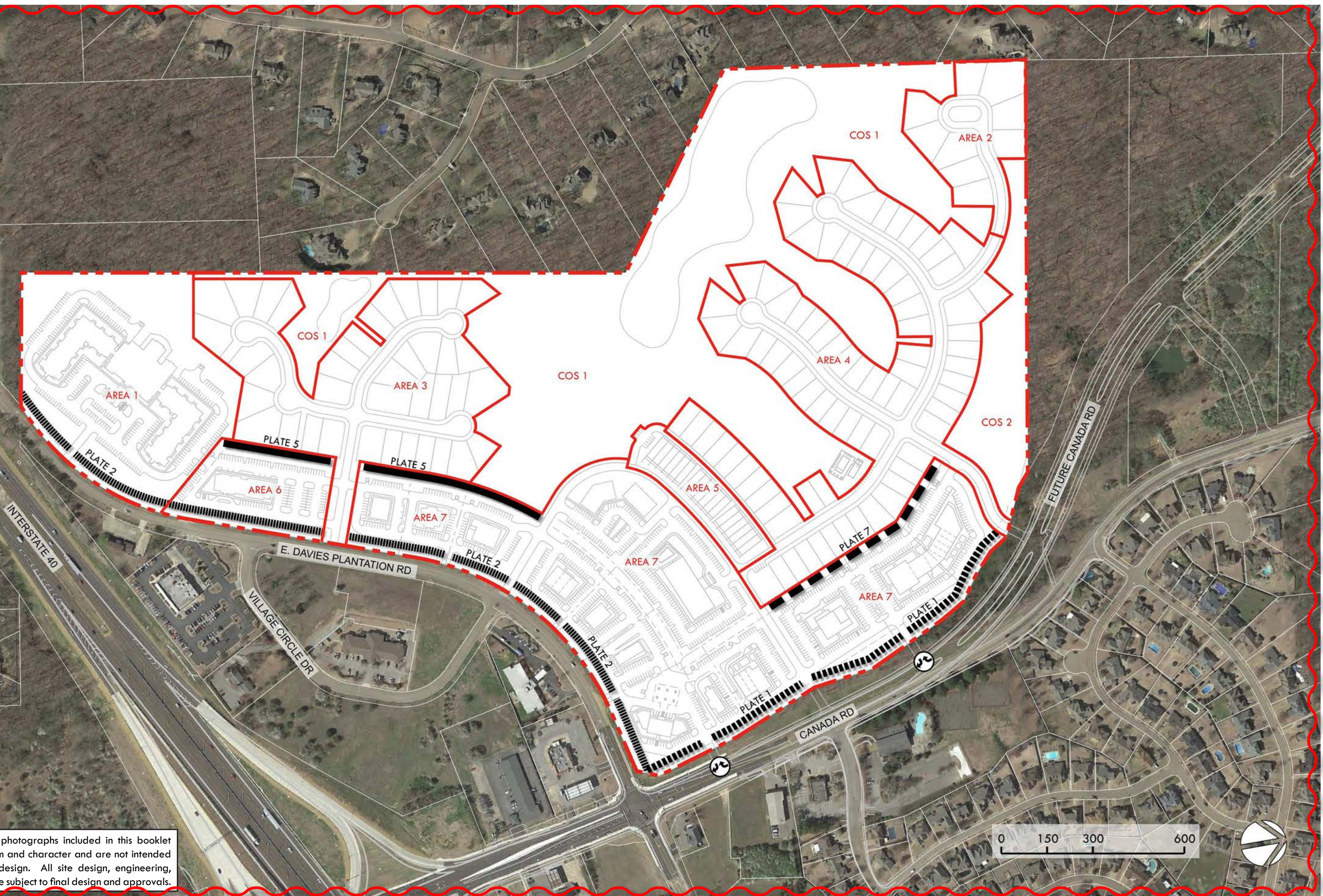
TRANSPORTATION AND UTILITIES

The Ashmont Planned Development's east boundary is defined by the intersection of Canada Road and East Davies Plantation Road, both four-lane divided streets. This corner is 0.4-mile ± from Interstate 40 and is easily accessed by Canada Road from Lakeland's existing residential communities to the north. The future construction of New Canada Road, as identified in the City of Lakeland Transportation Plan, will further increase connectivity from the north and facilitate bike and pedestrian travel to the subject property by a proposed 10'-wide multi-use path. Overhead electric lines are located along the property's east edge, adjacent to Canada Road and East Davies Plantation Road. Gas and sewer infrastructure extend along these roadways, with potential to serve the Ashmont neighborhood.

SLOPE ANALYSIS | HYDROLOGY ANALYSIS | NATURAL FEATURES

The site slopes from east to west. Ridges extend into the property from East Davies Plantation Road and Canada Road. The topography rises and falls with slopes exceeding 15% in some areas. While this change in topography can be challenging, these landforms present an opportunity to integrate the topography of the property into the design of Ashmont. Home sites will be placed on ridge tops where possible to preserve woodland areas along the site's valleys. A tree survey will be completed prior to future detailed submittals, which will include the trees within areas to remain undisturbed. While earthwork will be required to make the site viable for development, the natural systems and features have informed the design of Ashmont and will be utilized as neighborhood assets.

Stormwater flows from east to west. Two detention ponds are proposed to manage runoff. A large pond will be in the northwest portion of the site and a smaller pond will be constructed in the southwest area. Both will be built as attractive features within common open space.



Graphics, images, and photographs included in this booklet are solely to convey form and character and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals.

I. GENERAL STATEMENT

Ashmont Planned Development (PD), a 99.3 acre ± tract of land located in Lakeland, Tennessee, is a Planned Development that provides a compatible and complementary mixture of residential products and commercial uses. It is the intent of the Developer that Ashmont maintains an urban neighborhood setting through the use of unifying architectural guidelines and cohesive landscaping criteria. With a focus on enhancing the site’s varied topography through the planning of infrastructure and open space, Ashmont PD will establish itself as a unique and high-quality development with its own “Sense of Place.”

The Outline Plan shall serve as the land use and transportation plan for development of the site. It is understood that internal roadways and lot arrangements may be adjusted at the time of final design to take advantage of topography, utilities, storm drainage, detention, and market conditions along with other site considerations. The Conceptual Development Plan shall serve as the preliminary conceptual vision for the project and a statement of intent for the development.

Due to the size of this project and the necessarily general nature of the Conceptual Development Plan, final plans for each phase will be required. Prior to the development of a given phase, the Developer will submit to the City of Lakeland for approval a Final Plan which will illustrate not only the spatial relationship of areas and lots within the phase to be undertaken, but also how those areas and lots relate to adjacent phases. The plan will further provide a visual statement which outlines how the new phase contributes to the completion of the overall vision. It is the intent of this provision to help assure that the neighborhood will develop in such a way that aligns with overall development goals, but also allows some flexibility in final design and engineering.

The following general guidelines shape the overall intent of the development:

- A. Declaration of Covenants, Conditions and Restrictions, hereinafter the “Declaration” shall be applicable to all properties within the planned development. A Homeowners Association and Business Association shall be maintained to assure that development within the neighborhood is completed to the high standards anticipated by the residents and to assure that all features and amenities of the neighborhood which are considered to be common assets, are continuously maintained in a quality manner. Declarations may be separated between residential uses and the business uses including the mixed-use areas.
- B. The community should be developed so that it not only preserves and protects, but also enhances surrounding property. Ashmont PD will reflect sensitivity to the adjacent land uses.
- C. Final Plans for common open spaces may incorporate water, landscaping, walking trails, and other design features which will contribute to the development’s appeal and encourage walkable passive recreation within Ashmont PD. The Conceptual Development Plan, common areas, and walkways may be modified as final design and engineering documents are completed.
- D. Any internal Area boundary may shift up to 75’ in any direction without the need to revise the Outline Plan.
- E. The lot numbers shown in the plan data chart represents the conceptual lot layout shown in the Conceptual Development Plan. The number of units in each Area and the total number of units across the development cannot exceed the limits established by the Board of Commissioners’ approval of the project and any conditions attached to such approval.
- F. Any commercial uses shown on the Conceptual Development Plan is for illustrative purposes only. Final lot configuration, locations, and individual lot site plans may change from what is shown.

II. USES PERMITTED

- A. Area 1
Uses allowed within the C2 – Regional Commercial District as modified herein.
Senior Living uses are permitted in Area 1:
 - 1. Independent Living
 - 2. Assisted Living
 - 3. Nursing Home
 - 4. On-site services and amenities incidental to the uses above
- B. Area 2
Uses allowed within the R2 – Suburban Manor District as modified herein.
- C. Area 3
Uses allowed in the R3 – Suburban Cottage District as modified herein.
Lots within Area 3 will be Age-Restricted.
Area 3 may be developed, in all or in part, with the same uses as Area 1 (Senior Living) if these uses meet all bulk regulations of Area 1.
- D. Area 4
Uses allowed within the R4 – Urban Estate District as modified herein. Homes may be accessed from a street or alley.
- E. Area 5
Attached Townhomes shall be permitted as allowed in the R6 – Attached District, as modified herein. Townhomes may be fee-simple lots. All Townhomes may be accessed from an alley.
- F. Areas 6 and 7
Uses allowed within the C2 – Regional Commercial District as modified herein.
Allowed uses include:
 - 1. Neighborhood Assembly
 - 2. General Assembly
 - 3. Bed and Breakfast
 - 4. Hospice
 - 5. Hotel/Motel
 - 6. Independent/Assisted Living/Nursing Home
 - 7. Hospital
 - 8. Library/Museum
 - 9. Post Office

- 10. Neighborhood Retail
- 11. General Retail
- 12. Large Scale Retail
- 13. Neighborhood Personal Services
- 14. General Services
- 15. Regional Services
- 16. Child Day Care
- 17. Outdoor Entertainment
- 18. Neighborhood Office
- 19. General Office

- 20. Convenience Store with Fuel Pumps *
- 21. Taproom/Brewery

22. Other Office Uses, Retail Shops, Sales, and Services, which are typically permitted within C2 Commercial.

* Note: Only one Convenience Store with Fuel Pumps use is allowed within the development. The location is limited to the corner of the intersection of Canada Road and Davies Plantation Road.

G. Common Open Space Areas:

These areas are to be developed or preserved as open space and to create passive and active recreation opportunities. They may include amenities such as trails, park benches, open green space, or pools/amenities. Additionally, detention/retention basins and earthwork are allowed in these areas.

III. BULK REGULATIONS

Development of the neighborhood will be guided by the Outline Plan, and the area use descriptions provided above. Development of individual parcels must be in compliance with the provisions for dimensional regulations and access and circulation conditions provided below.

Other restrictions not specifically addressed here or elsewhere in the conditions (and its attachments) including, but not limited to, setbacks, side and rear yard requirements, minimum lot areas, accessory uses, and parking and loading areas shall be as defined in the City of Lakeland Land Development Regulations as applicable to the referenced District or Building Type for the particular parcel in question. Where provisions of this Outline Plan are in conflict with the above-referenced Ordinance, these provisions shall apply.

A. Plan Data

SITE DATA				
GENERAL SITE INFO				
TOTAL SITE ACREAGE		99.3 AC ±		
RESIDENTIAL				
AREA	LOTS	ACREAGE	DESCRIPTION	% OF LOTS
2	9 ±	3.7 AC ±	R2 - SUBURBAN MANOR	6%
3 *	39 ±	11.1 AC ±	R3 - SUBURBAN COTTAGE *	27%
4	81 ±	19.1 AC ±	R4 - URBAN ESTATE	55%
5	18 ±	1.9 AC ±	R6 - ATTACHED HOUSE	12%
TOTAL LOTS			147 ± LOTS **	
NET RES. ACREAGE			35.8 ± AC	
COMMON OPEN SPACE				
COS 1		24.8 AC ±		
COS 2		3.0 AC ±		
COS ACREAGE		27.8 ± AC		
GROSS RES. ACREAGE		63.6 ± AC		
PERCENT COS		43.7 ± %		
GROSS RES. DENSITY		2.3 ± DU/AC		
COMMERCIAL				
AREA	DESCRIPTION			ACREAGE
1	C2 SENIOR LIVING			9.7 AC ±
6	C2 COMMERCIAL			2.9 AC ±
7	C2 COMMERCIAL			23.1 AC ±
COMMERCIAL ACREAGE		35.8 ± AC		

* Note: Area 3 may be developed with the same uses and bulk regulations as Area 1. See Outline Plan text for more detail.

B. Building Setbacks and Standards

Height limitations as outlined below shall not apply to architectural features.

1. Standards applicable to residential lots in Areas 2-5.

- a. All residential lots may be accessed from the street with front-facing garages. However, all front-facing garages must be set back a minimum of 7' from the front façade of the home and a minimum of 20' from the back of sidewalk.
- b. Max. Front Setback Porch Encroachment 5'
- c. Max. Rear Setback Porch Encroachment
Front-Loaded Homes..... 10'
Rear-Loaded Homes None
- d. Max. Appurtenance Encroachment..... 3'

2. Area 1

- a. Minimum Lot Width.....N/A
- b. Minimum Lot SizeN/A
- c. Minimum Setbacks
(Davies Plantation Rd.)20'
(Adjacent Properties)20'
(Areas 3 and 6) 10'
- d. Maximum Height.....4 stories

3. Area 2

- a. Minimum Lot Width.....70'
- b. Minimum Lot Size 10,000 SF
- c. Minimum Front Setback..... 15'
- d. Minimum Side Setback (Each Side)..... 5'
- e. Minimum Rear Setback..... 15'
- f. Maximum Height.....2 stories

4. Area 3

- a. Minimum Lot Width.....55'
- b. Minimum Lot Size 5,500 SF
- c. Minimum Front Setback..... 15'
- d. Minimum Side Setback (Each Side)..... 5'
- e. Minimum Rear Setback..... 15'
- f. Maximum Height.....2 stories

5. Area 4

- a. Minimum Lot Width.....50'
- b. Minimum Lot Size 5,000 SF
- c. Front Setback 10' to 20' BTZ
- d. Minimum Side Setback (Each Side)..... 5'
- e. Minimum Rear Setback
(Front-Loaded)..... 15'
(Rear-Loaded) 5'
Maximum Height..... 2 stories

6. Area 5

- a. Minimum Lot Width.....20'
- b. Minimum Lot Size 1,500 SF
- c. Front Setback 10' to 20' BTZ
- d. Minimum Rear Setback..... 5'
- e. Minimum Separation between Buildings 10'
- f. Maximum Height.....2 stories

7. Areas 6 and 7

- a. Minimum Lot Width.....50'
- b. Minimum Front Setback
(Canada Rd. or Davies Plantation)20'
(Internal Streets).....20'
- c. Minimum Side Setback7.5'
- d. Minimum Rear Setback.....7.5'
- e. Minimum Separation between Buildings 10'
- f. Maximum Height
(Hotel)4 stories
(All other uses).....2 stories

- C. Design Standards for Areas 2, 3, and 4
 - 1. Design for Single-Family homes shall follow the Single-Family Architectural Pattern Book as described in the PD Booklet, in lieu of the residential architectural guidelines in the Land Development Regulations.
- D. Design Standards for Areas 6 and 7
 - 1. Design for commercial areas shall follow the Commercial Architectural Pattern Book as described in the PD Booklet, in lieu of the non-residential architectural guidelines in the Land Development Regulations.
 - 2. The following additional requirements apply to Convenience Store with Fuel Pumps:
 - a. Fuel pumps must be located behind the building along the primary street frontage.
 - b. The building and canopy shall be designed with complementary materials.
 - c. The canopy shall not be architecturally more prominent than the building.
 - d. Primary building and canopy colors shall be neutral or earth tones.
- E. The following requirements in the Land Development Regulations shall not apply to any Area within the PD:
 - 1. Maximum Building Coverage
 - 2. Maximum Impervious + Semi-Pervious Coverage
 - 3. Minimum Coverage of Front Property Line
 - 4. Minimum Principal Building Height
 - 5. Attached Garage Façade Proportion
 - 6. Façade Requirements, including Transparency, Cap & Base Types, Building Materials, and Building Variety

IV. ROADWAYS, ACCESS, AND PARKING

- A. Residential lots may be front-loaded from public streets or rear-loaded with access from alleys.
- B. There is no requirement to dedicate or improve Canada Road. E. Davies Plantation Road will be improved to provide two drive lanes and a turn lane (no median), curb, and gutter along the property frontage. Additional ROW dedication will be provided along the property frontage to match the 86'-ROW (43' from centerline) as indicated by the Transportation Plan.
- C. All dedicated public improvements required herein shall be made to the specifications of the City of Lakeland, unless otherwise approved.
- D. All public streets interior to the development shall be dedicated and improved according to the Street Types described within the Ashmont PD Booklet and Outline Plan and approved by the City Engineer.
- E. A maximum of 4 curb cuts are allowed on Canada Road. The curb cut locations shown on the Circulation Plan are conceptual and may be adjusted to work with final site plans of individual commercial lots. A maximum of 2 may be full-access and must be aligned with proposed Canada Road median openings. Any additional curb cuts may only be right-in/right-out.
- F. A maximum of 6 curb cuts are allowed on Davies Plantation Road. The curb cut locations shown on the Circulation Plan are conceptual and may be adjusted to work with final site plans of individual commercial lots. All curb cuts on Davies Plantation Road may be full access.

- G. Parking and loading spaces for all uses shall be in accordance with Lakeland's Land Development Regulations. The specific type of Senior Living uses in Area 1 shall follow the parking regulations that correspond to the use category:
 - 1. Independent Living: 1.25 spaces/studio unit, 1.5 spaces/1 bdrm unit, and 1.75 spaces/2 bdrm unit
 - 2. Hospice/Assisted Living/Nursing Home: 0.25 spaces/bed and 1 space/employeeThe Planning Commission may approve a lower parking requirement during Site Plan approval if justification based on industry standards is provided.
- H. All corner radii at intersections of public streets within the development may be a minimum of 15' at the face of curb.
- I. In Areas 2-5, driveways may be a maximum of 18' wide at the curb.
- J. In Areas 2-5, driveways shall not be closer than 10' from the end of radius of a public street intersection.
- K. In Areas 1, 6, and 7, driveways shall not be closer than 50' from the end of radius of a public street intersection.
- L. Alleys may be a minimum of 26 feet in width of pavement, with no curb and gutter. All alleys shall be owned and maintained by the Homeowners' Association.
- M. Head-in parking may be provided within any COS area directly off of the ROW of an interior public street in order to provide convenient resident access to common amenities.

V. LANDSCAPING, SCREENING, AND OPEN SPACE

- A. Common Open Space areas within Ashmont PD include a total of ± 28 acres, or ± 43.8% of the gross residential area. These spaces may vary from the areas shown on the Conceptual Development Plan with final design and engineering, but the Common Open Space will not go below 35%.
- B. All Common Open Space areas, medians, streetscape areas, and neighborhood greens are to be preserved and maintained by a Homeowners Association and/or Business Owners Association. At the time that the Phase 1 Final Plan is submitted, the articles of incorporation and bylaws of the Business and Homeowners Associations shall be submitted to staff for review.
- C. All common open space may have amenities such as hardscape plazas, pool areas, shade structures, walking trails, sidewalks, open lawn areas, shelter structures, bike racks, lighting, fencing, and benches where appropriate. These areas and amenities shall be submitted to the City with Final Plans.
- D. A tree survey shall be provided with the Preliminary Development Plan only for the portions of the site that are proposed to remain undisturbed. This shall satisfy the tree survey requirements of the Tree Management Ordinance.
- E. The minimum street tree size shall be 2 inches in caliper.
- F. Landscape Plates, including streetscapes and buffers, shall be as described within the Landscape Plates section of the Ashmont PD Booklet. All on-center tree spacing required by the Landscape Plates are approximate average spacing and may vary along any particular street frontage to work with building façade rhythm, lot layout, utilities, driveway locations, and pedestrian facilities.
- G. All required landscaping shall be located on the property such that it shall not interfere with any utility easements and may be altered according to MLGW requirements, including utilization of trees with a smaller mature size than required underneath power lines.
- H. Through the Development Agreement process, the Developer may work with City staff to make Landscape Plate modifications.
- I. Ashmont PD may utilize landscape features such as, but not limited to, masonry columns, icon markers, public art, rail fencing, and ornamental metal fencing as additional streetscape features or entrance treatments at any entrance into the development or into an Area. Such features shall be submitted to the City with Final Plans.

- J. The parkland dedication requirements for Area 1 shall be determined with the site plan submittal.
- K. This development is not subject to the Conservation Area Requirements (Article II., Section 1 1) of the LDR.
- L. All retention ponds are required to have a fountain.
- M. The Common Open Space walking trails within Ashmont PD will be a minimum of 5' wide and will be concrete.

VI. SIGNAGE

- A. The signage in Ashmont PD shall follow the City of Lakeland Sign Ordinance as modified herein.
- B. Ashmont PD may provide 1 overall development identity ground sign at each public street entrance into the development, to meet the requirements of the Subdivision Entry Sign. These overall development signs shall not count toward the signage allowed for any particular Area or parcel. The overall development identity ground signs shall be submitted to the City with Final Plans.

VII. DRAINAGE FACILITIES & SERVICES

- A. The stormwater drainage system shall be designed and constructed to the drainage design standards of the City of Lakeland stormwater management program and State of Tennessee Department of Environmental Quality.
- B. A Storm Water Pollution Prevention Plan (SWPPP) will be filed with the state authorities prior to commencement of construction.
- C. Grading, drainage, and engineering construction plans to be approved by the City Engineer.
- D. All public storm drainage shall require a public easement.
- E. The following note shall be placed on the final plat of any development requiring on-site drainage facilities: The areas denoted by “Reserved for Stormwater Retention” shall not be used as a building site or filled without first obtaining written permission from the City Engineer. Stormwater detention systems located in these areas, except for those parts located in a public drainage easement, shall be owned and maintained by the respective property owner. Such maintenance shall be performed so as to insure that the system operates in accordance with the approved plan on file in the City Engineer’s office. Such maintenance shall include, but is not limited to removal of sedimentation, fallen objects, debris, trash mowing, outlet cleaning and repair of drainage structures.
- F. All construction improvements within the development shall be in compliance with erosion and sediment control guidelines and ordinances of the City of Lakeland and the State of Tennessee.

VIII. SANITARY SEWER & SERVICES

- A. A Master Sanitary Sewer Concept Plan shall be submitted at the time Phase One Plan is submitted for review and approval. The City of Lakeland will provide sewer service.
- B. Sanitary sewer improvements shall be provided by the Developer under contract in accordance with the subdivision regulations and specifications of the City of Lakeland and the State of Tennessee.
- C. Sizes of sanitary sewer lines shall be determined at the time the final construction plans are submitted to the City Engineer.
- D. Sanitary Sewer Plans shall be submitted to the Tennessee Department of Environmental Quality (TDEQ) for written approval.
- E. All sanitary sewer located in a private drive or otherwise outside of a public right-of-way shall be within a public easement.

IX. WATER SERVICE / UTILITIES

- A. A Master Water Service Concept Plan shall be submitted at the time the Phase 1 Plan is submitted for review and approval. The City of Lakeland will provide public potable water service.
- B. Public water improvements shall be provided by the Developer under contract in accordance with MLGW standards.
- C. All water services located in a private drive or otherwise outside of public right-of-way shall be within a public easement.
- D. All utilities and services (telephone, cable, etc.) to be installed underground, except for any 3-phase electric service.
- E. Street light plans, if applicable, will be submitted for review and approval by City as part of final plans. Street lights are not required on roads internal to the development. Any street lights provided will be MLGW standard street lights.

X. DEVELOPMENT PHASING

- A. A Preliminary Phasing Plan for Ashmont PD is provided in the PD booklet. Phase boundaries are not required to follow Area boundaries.
- B. The Preliminary Phasing Plan is subject to change as plans are finalized and as market demands fluctuate. Construction of phases may be singular or a mix to meet current and future market demands.
- C. The synchronization of Phases may be modified by the Developer at any time to allow for current and future market demands.
- D. A final site plan/plat for each phase shall be made in accordance with the City of Lakeland Land Development Regulations.
- E. Minor changes may occur with the final plans that do not require Board of Commissioners’ approval. Minor changes are as defined below:
 - 1. Minor changes may include adjustments of lot lines and road or trail alignments within any phase or Area to work with final design and engineering. Lot lines may be added or deleted as a minor change, pursuant to the requirements below.
 - 2. Minor changes may not increase density within any Area, allow additional uses within any Area, or cause any Area line to shift by more than 75’.

SITE KEY



AREA 2
R-2 SUBURBAN MANOR



AREA 3
R-3 SUBURBAN COTTAGE



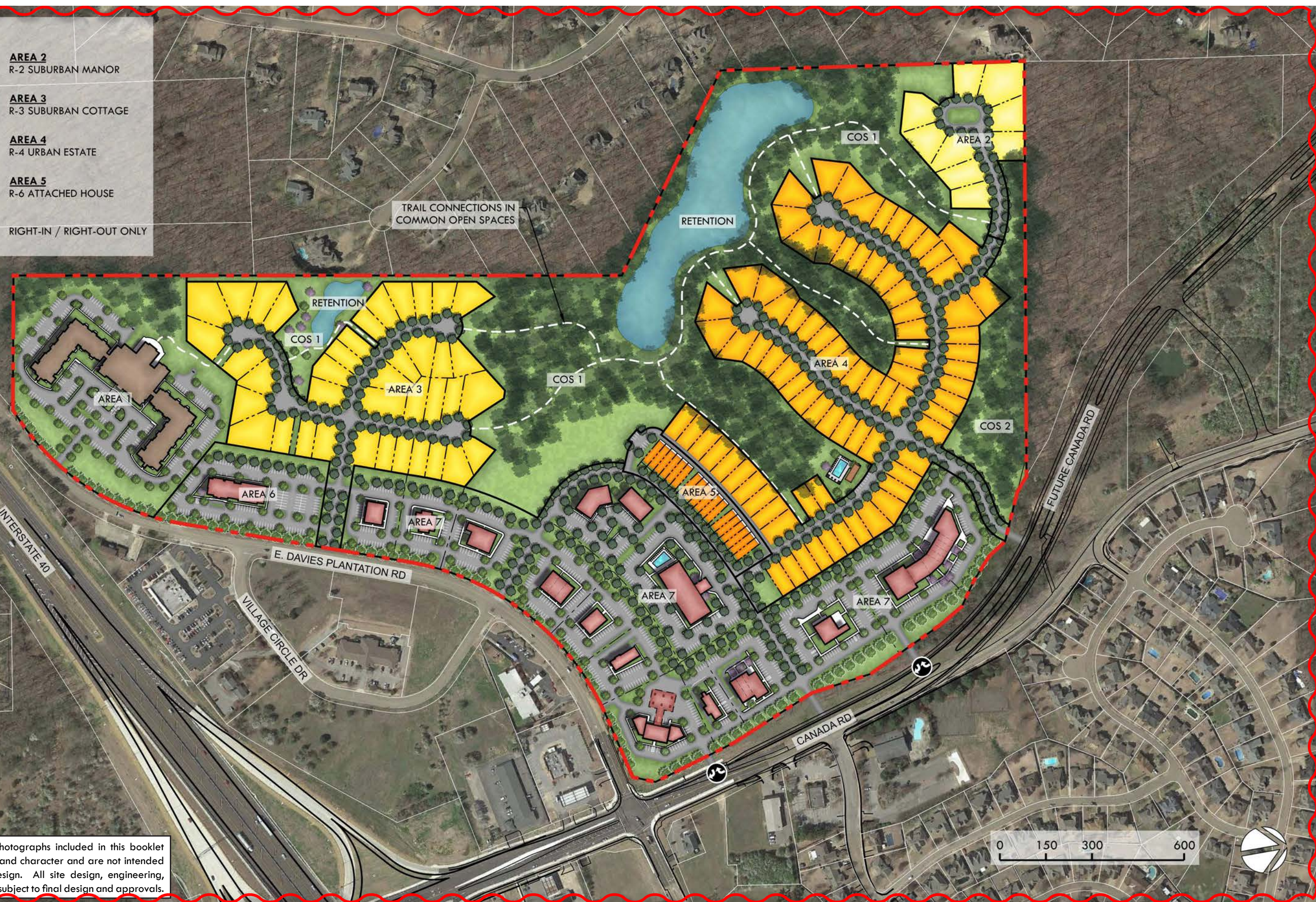
AREA 4
R-4 URBAN ESTATE



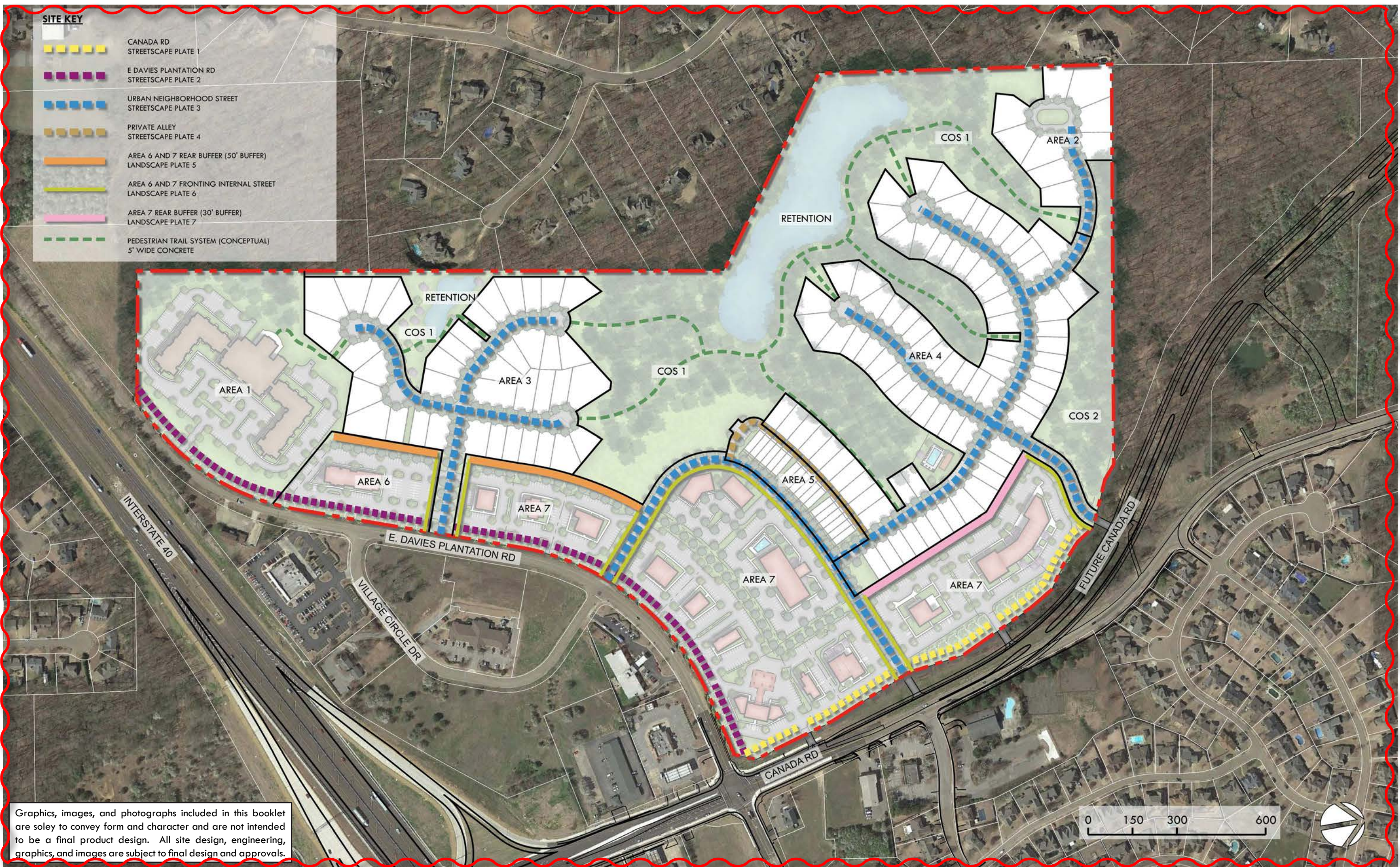
AREA 5
R-6 ATTACHED HOUSE



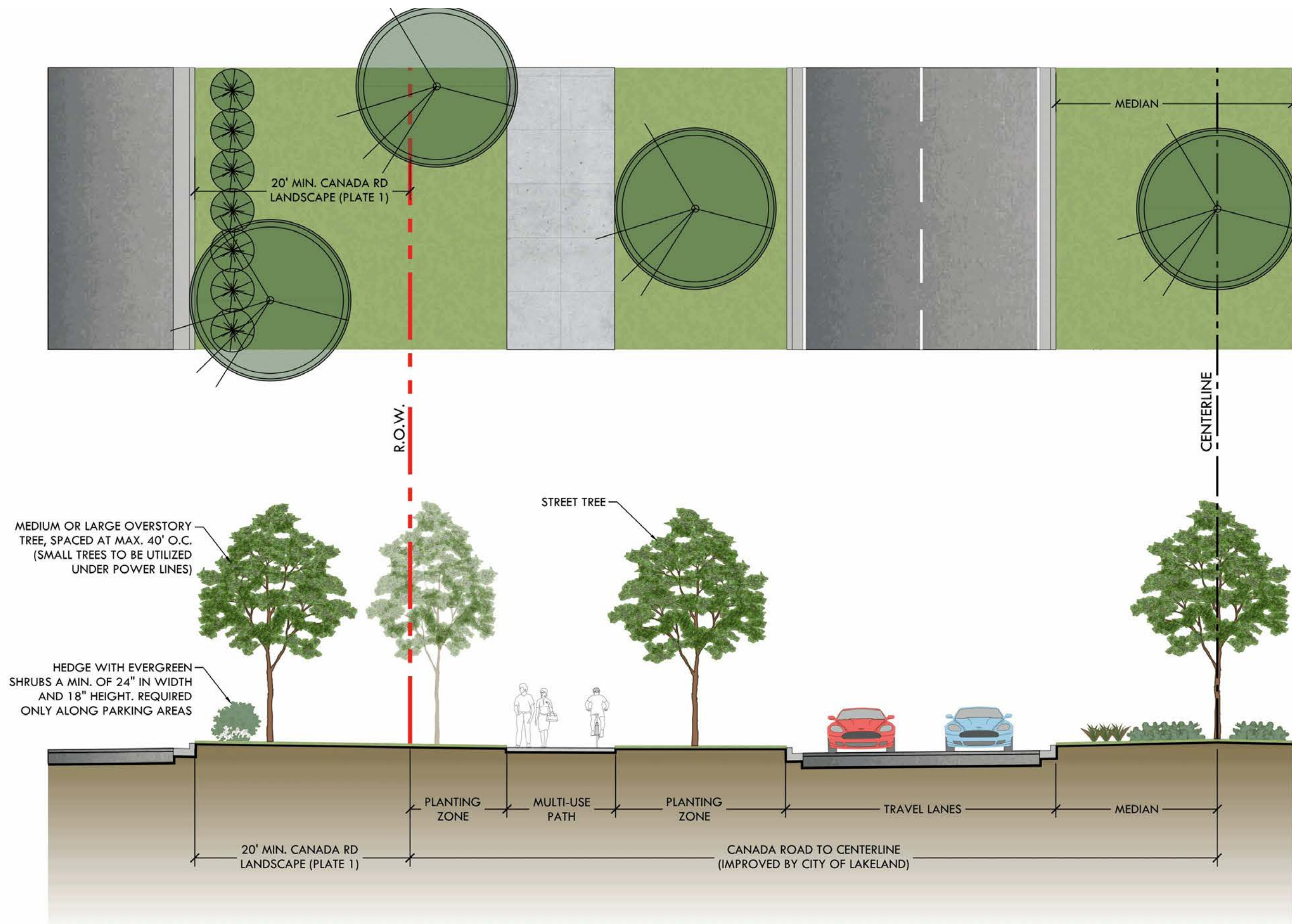
RIGHT-IN / RIGHT-OUT ONLY



Graphics, images, and photographs included in this booklet are solely to convey form and character and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals.

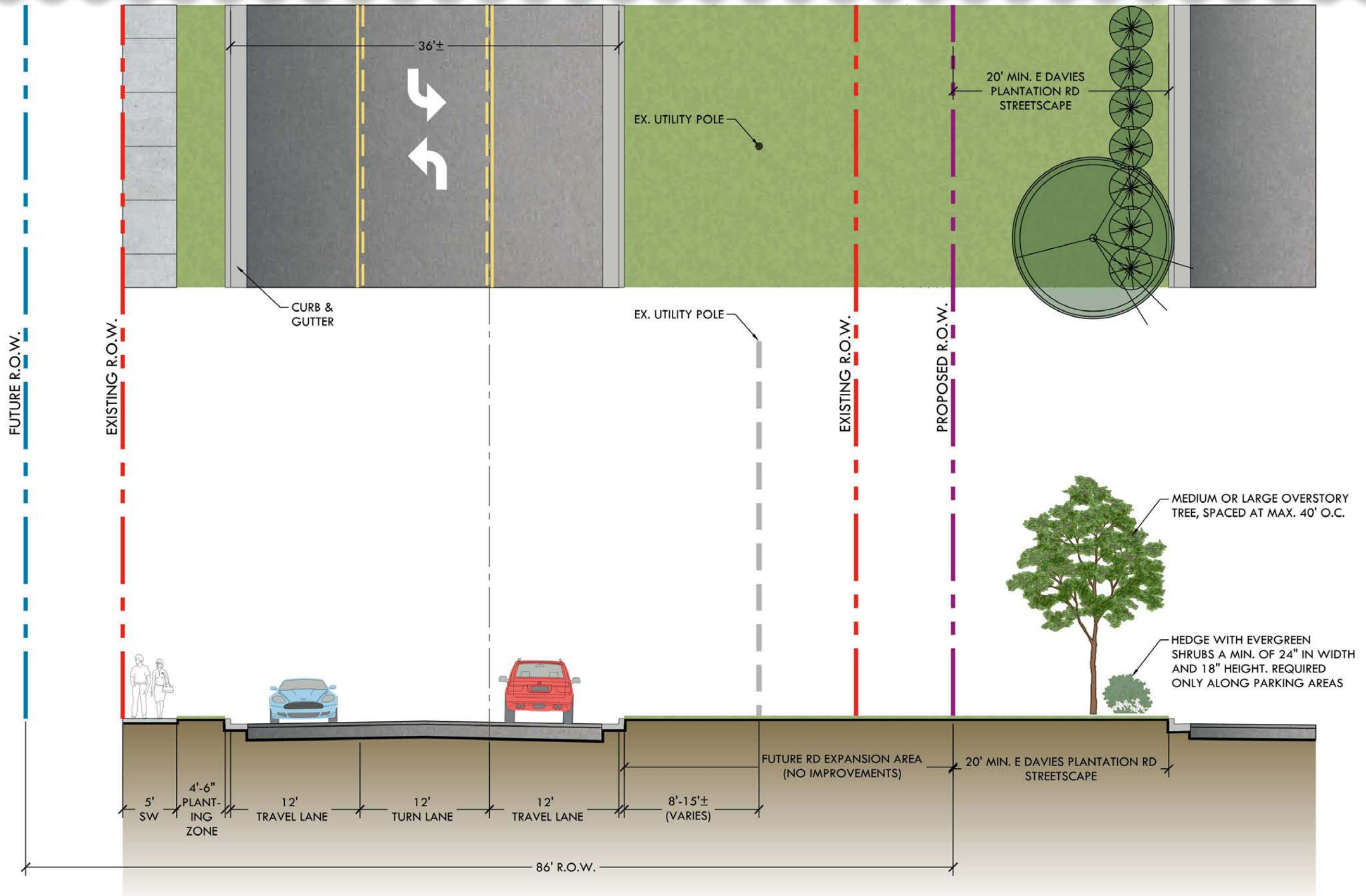


Graphics, images, and photographs included in this booklet are solely to convey form and character and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals.

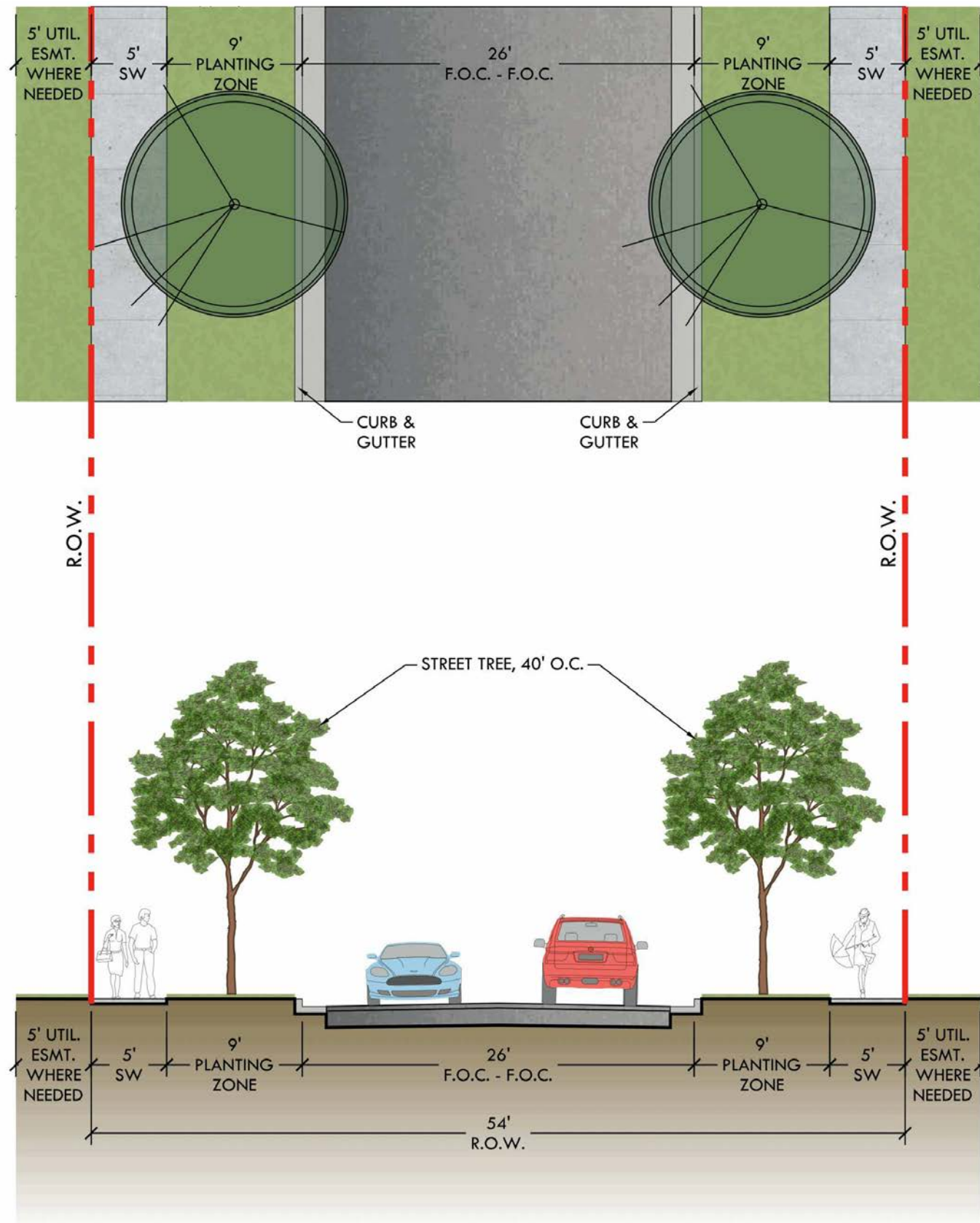


CANADA ROAD - STREETScape PLATE 1

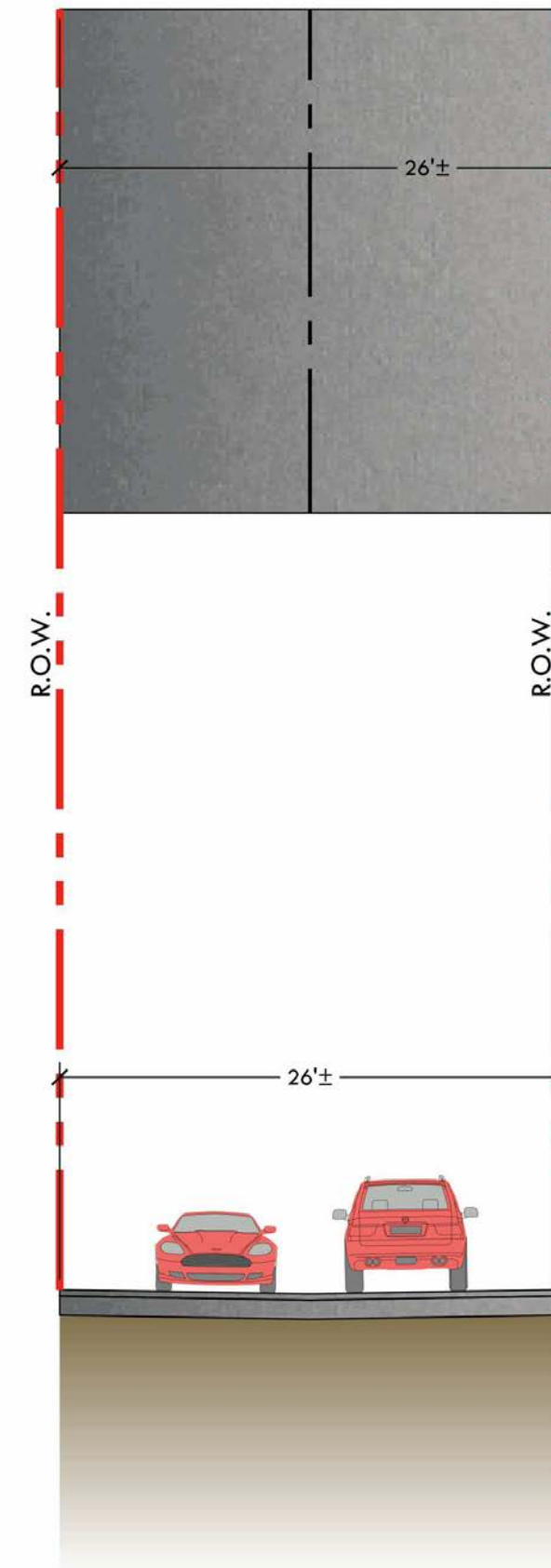
NOTE: R.O.W SECTION BASED ON 2017 LAKELAND SMALL AREA PLAN



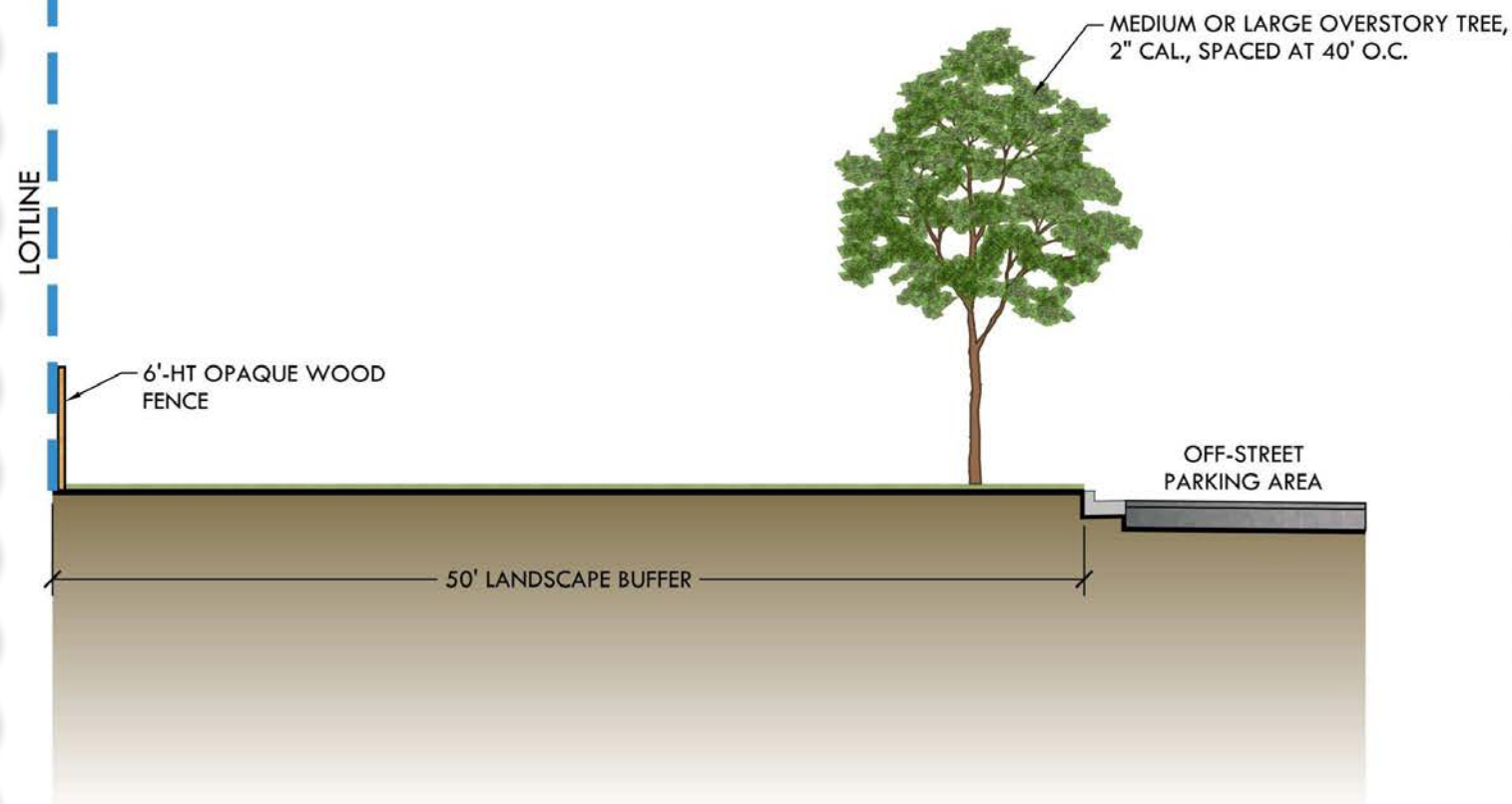
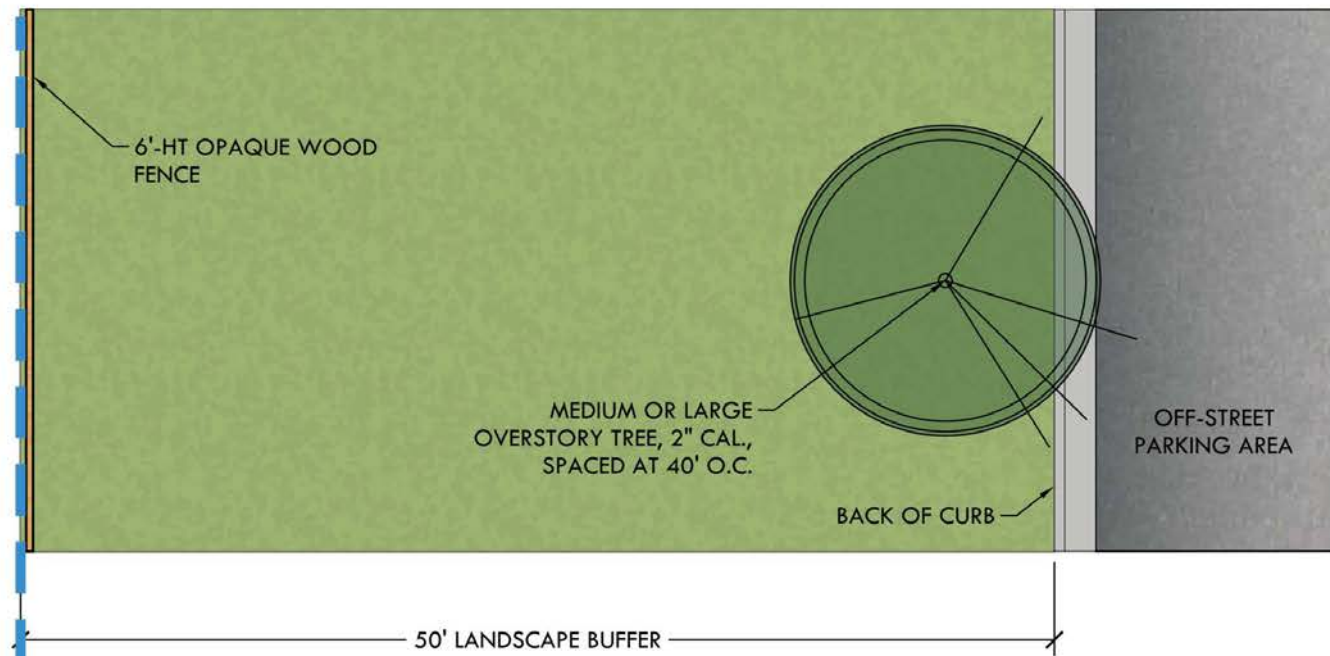
E DAVIES PLANTATION ROAD - STREETSCAPE PLATE 2



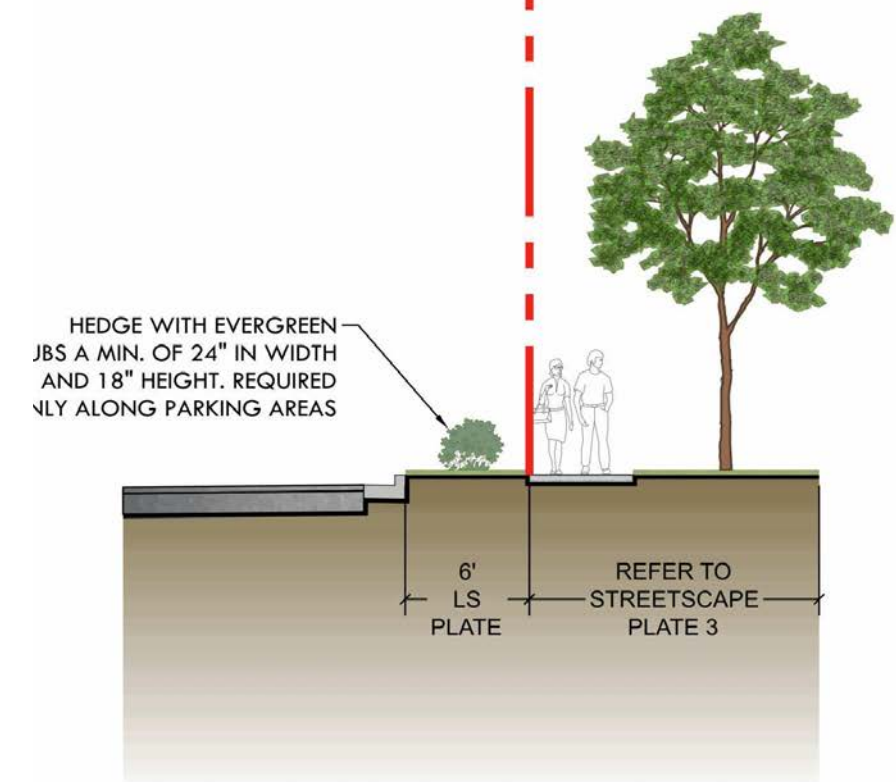
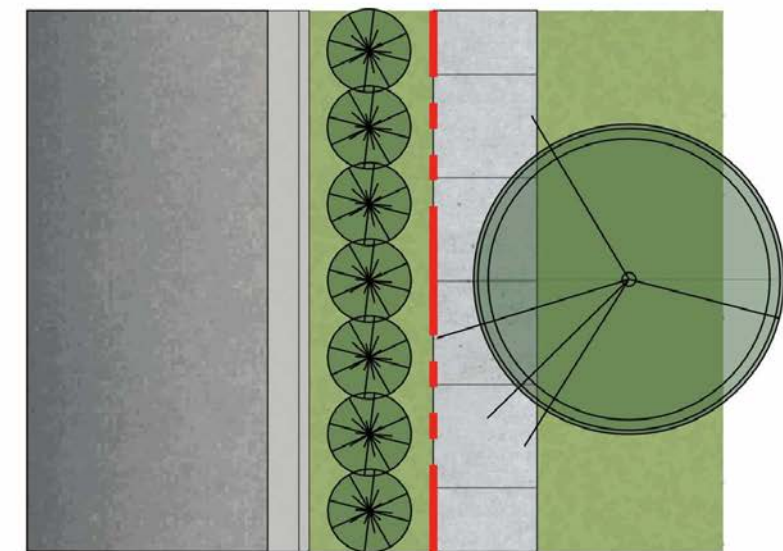
URBAN NEIGHBORHOOD STREET - STREETScape PLATE 3



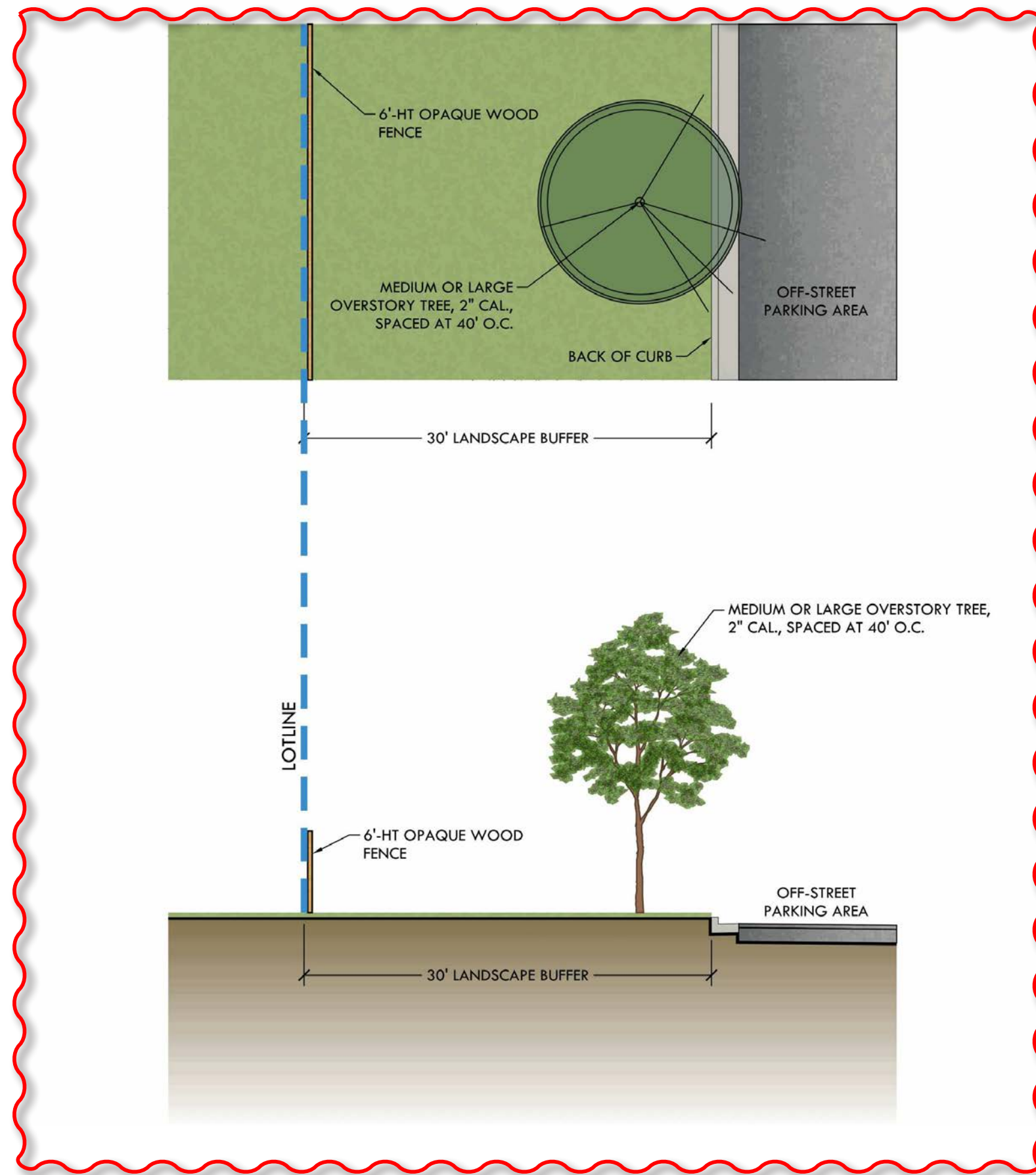
PRIVATE ALLEY - STREETScape PLATE 4



AREA 6 AND 7 REAR BUFFER - LANDSCAPE PLATE 5



AREA 6 AND 7 FRONTING INTERNAL STREET - LANDSCAPE PLATE 6

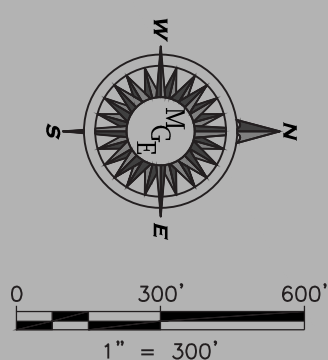


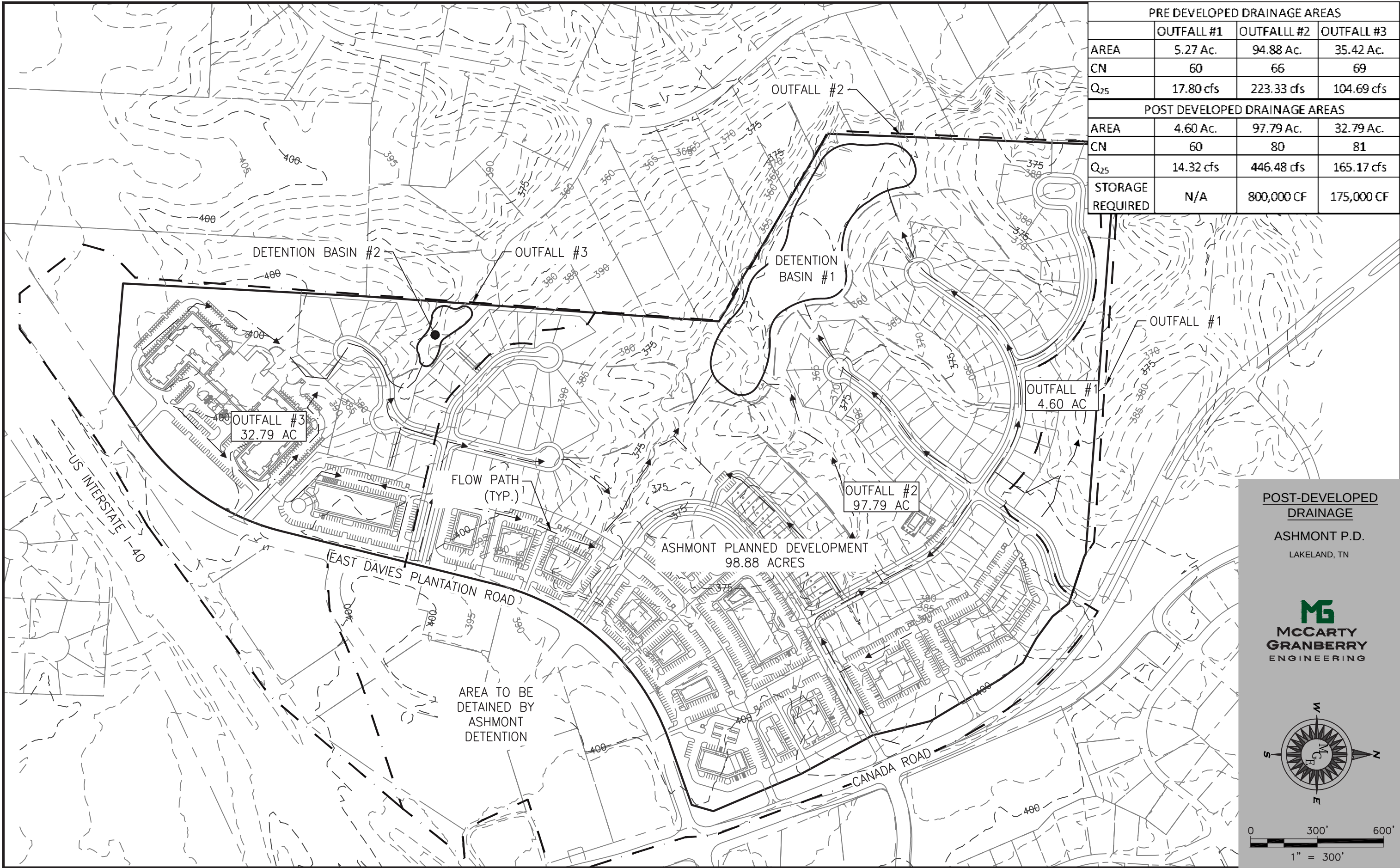
AREA 7 REAR BUFFER (30' BUFFER) - LANDSCAPE PLATE 7



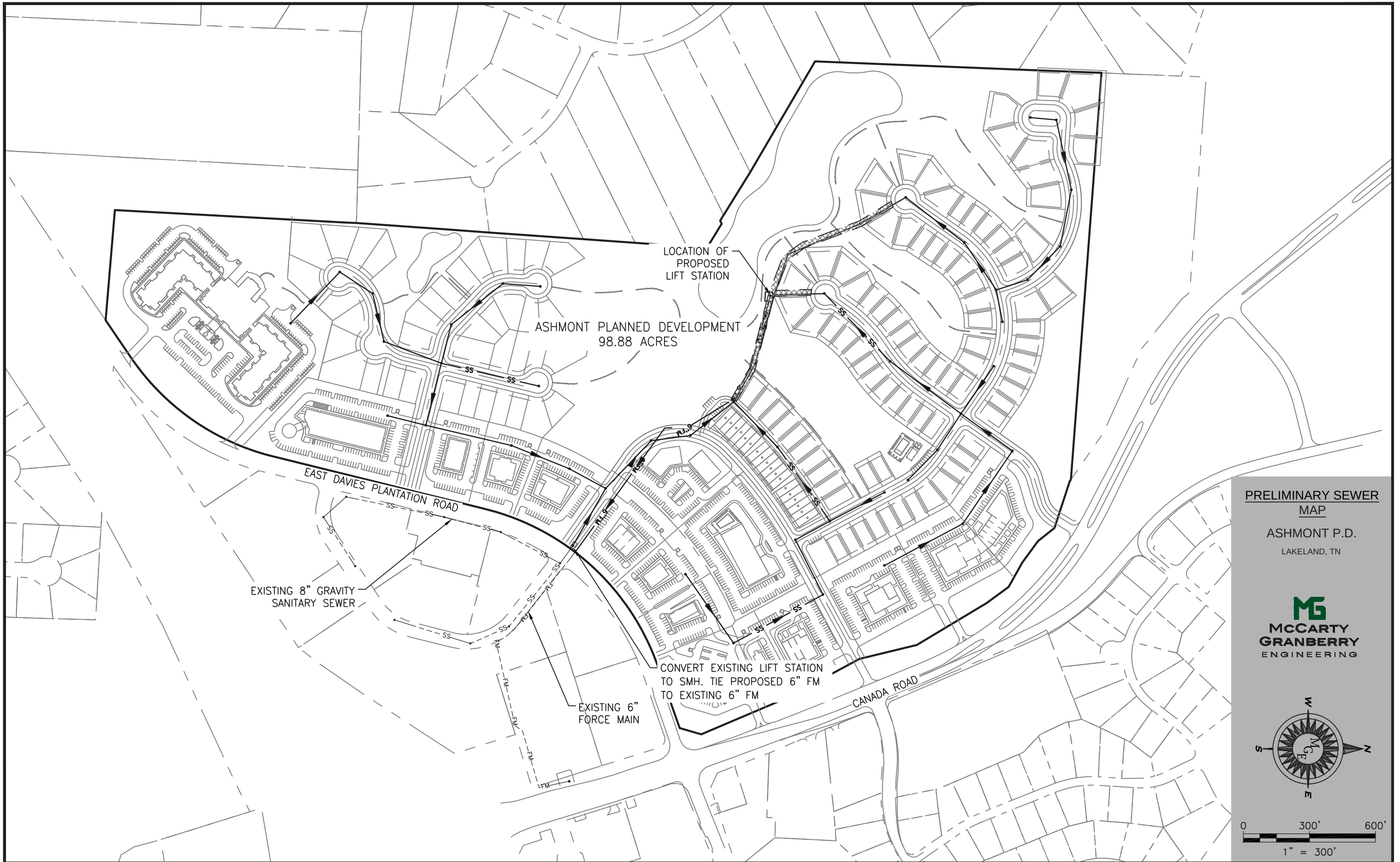
EXISTING CONDITIONS

ASHMONT P.D.
LAKELAND, TN

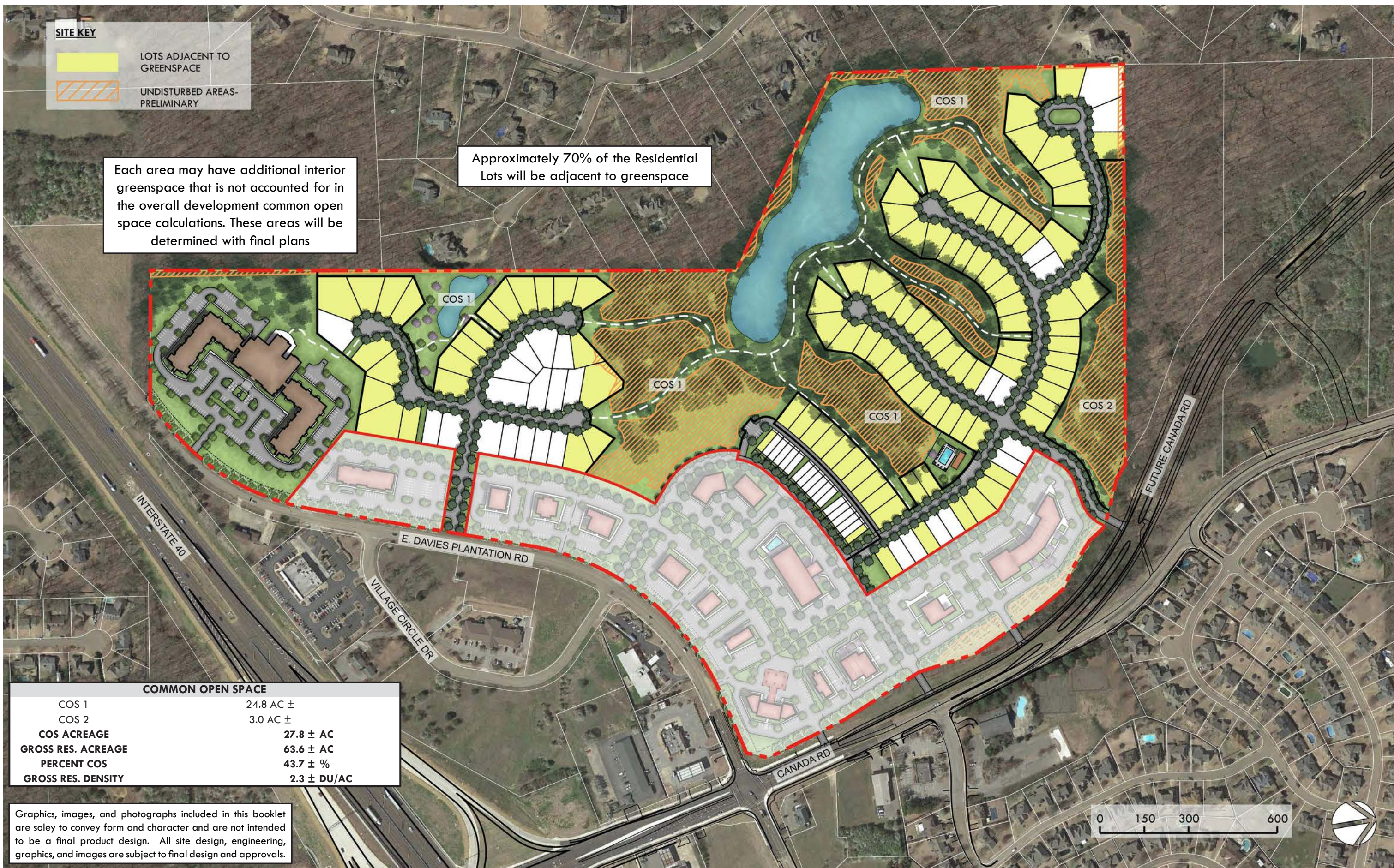




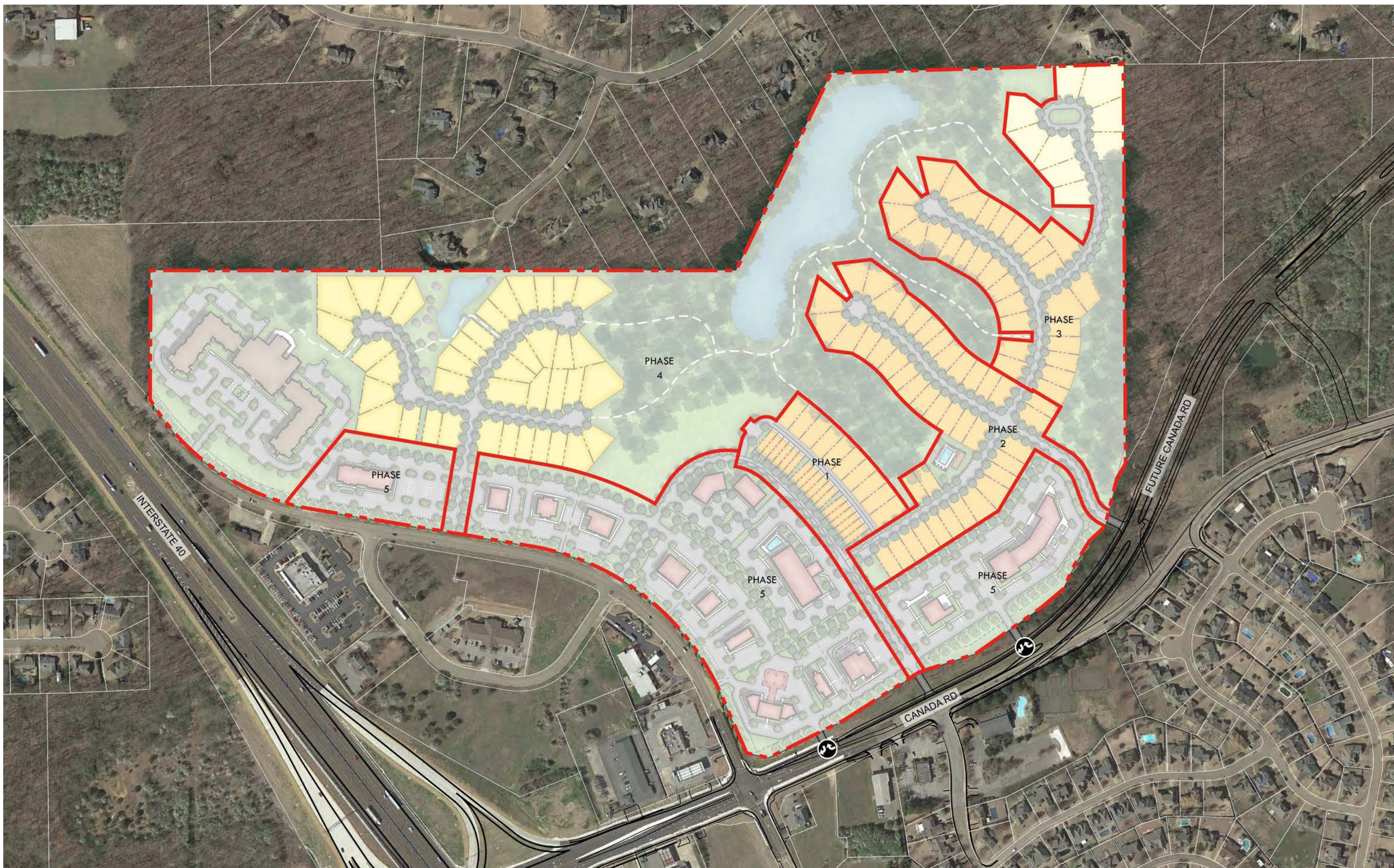
ASHMONT PLANNED DEVELOPMENT 23



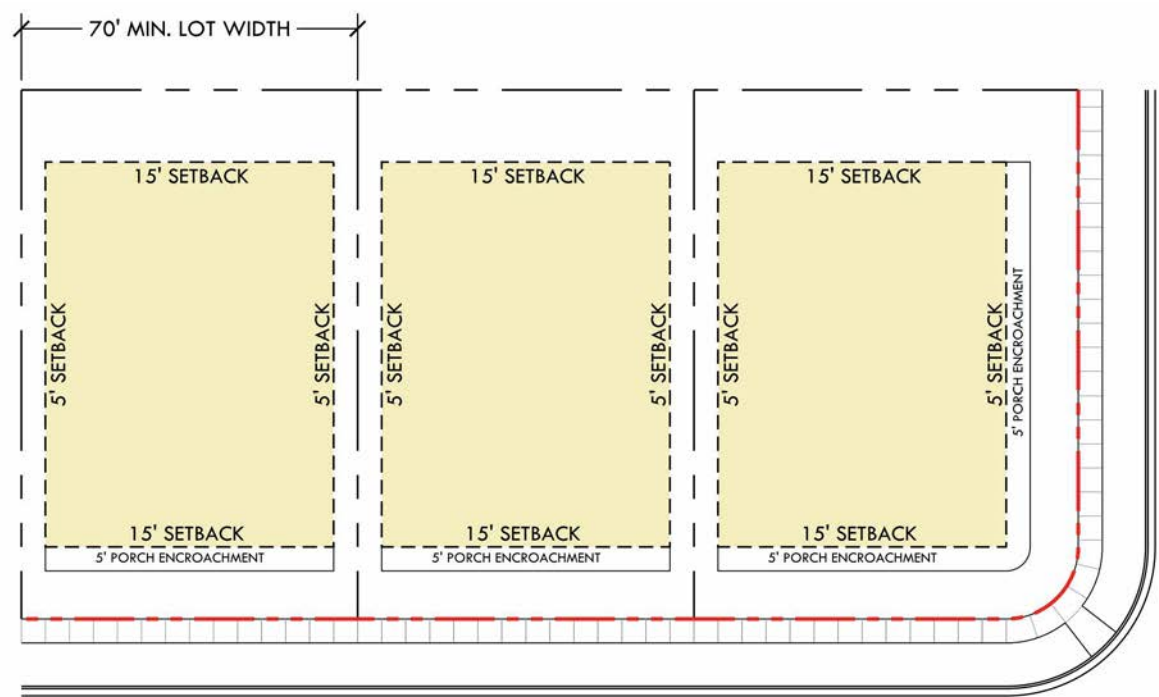




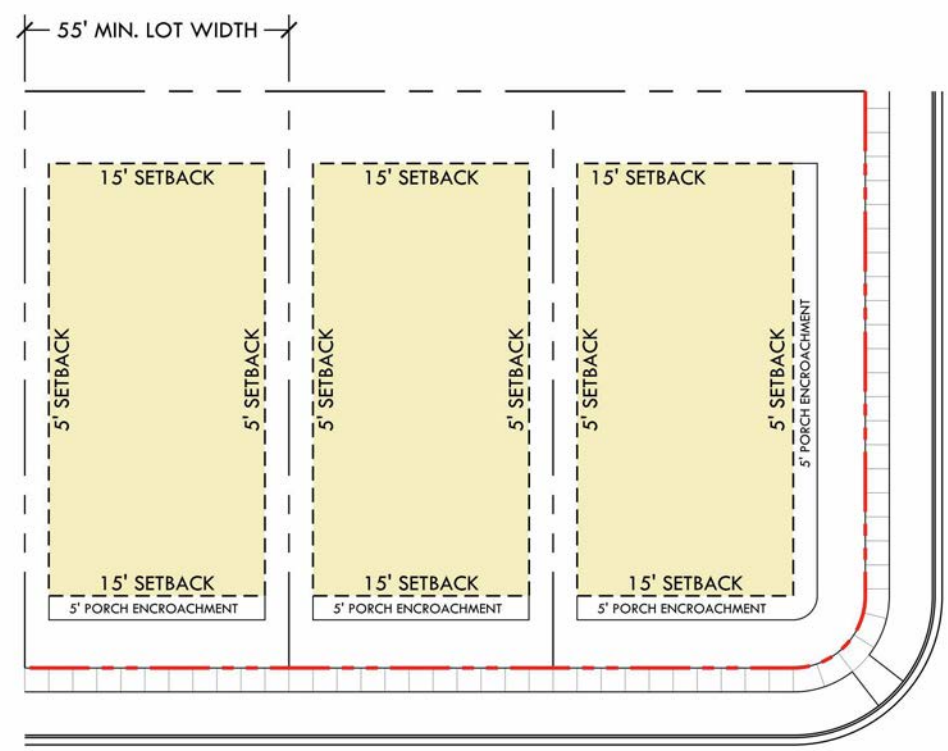
Graphics, images, and photographs included in this booklet are solely to convey form and character and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals.



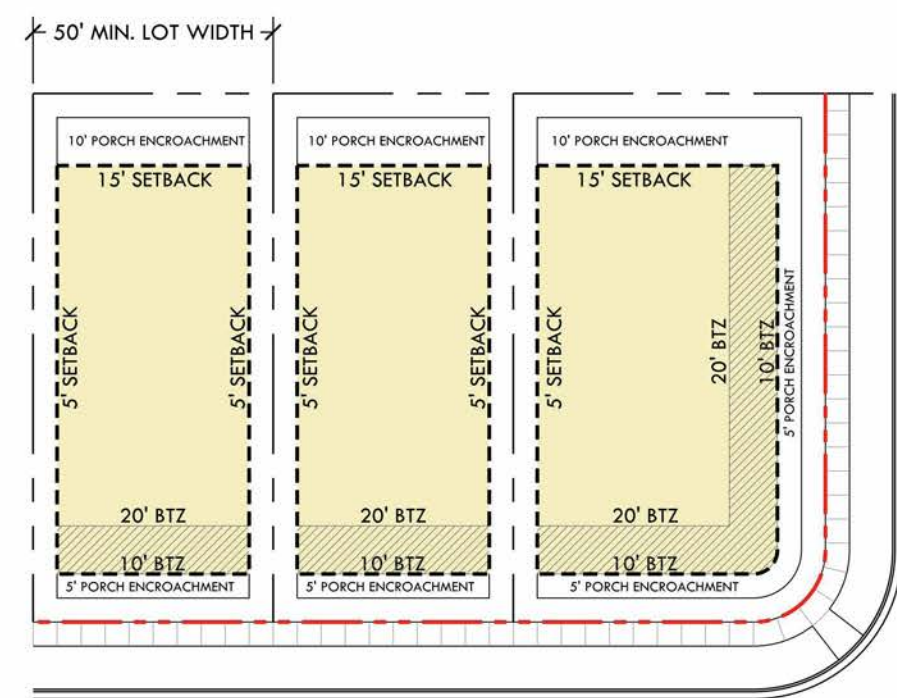
BTZ indicates a build-to-zone, where the front facade of home may be set anywhere within the minimum and maximum distance from the right-of-way listed.



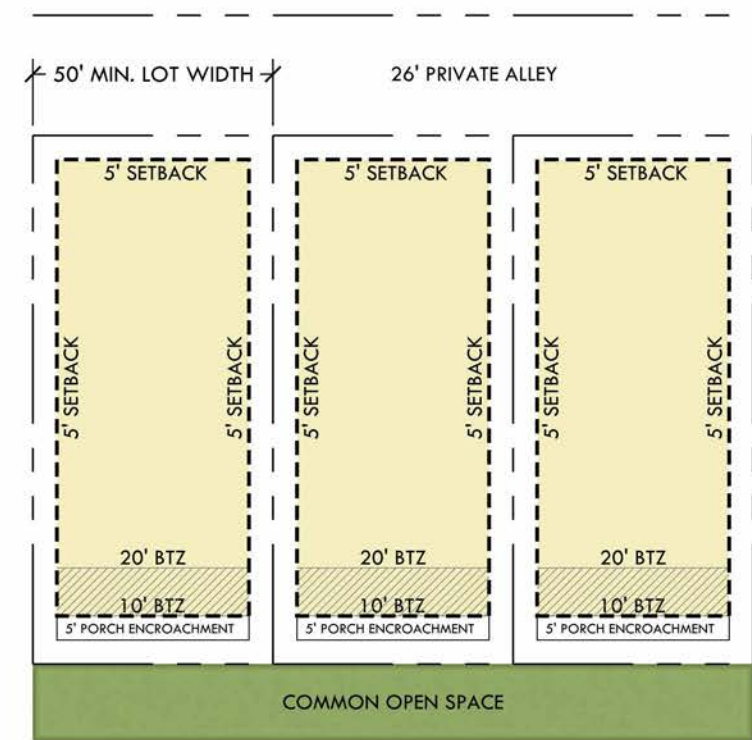
AREA 2 : SUBURBAN MANOR - FRONT LOADED



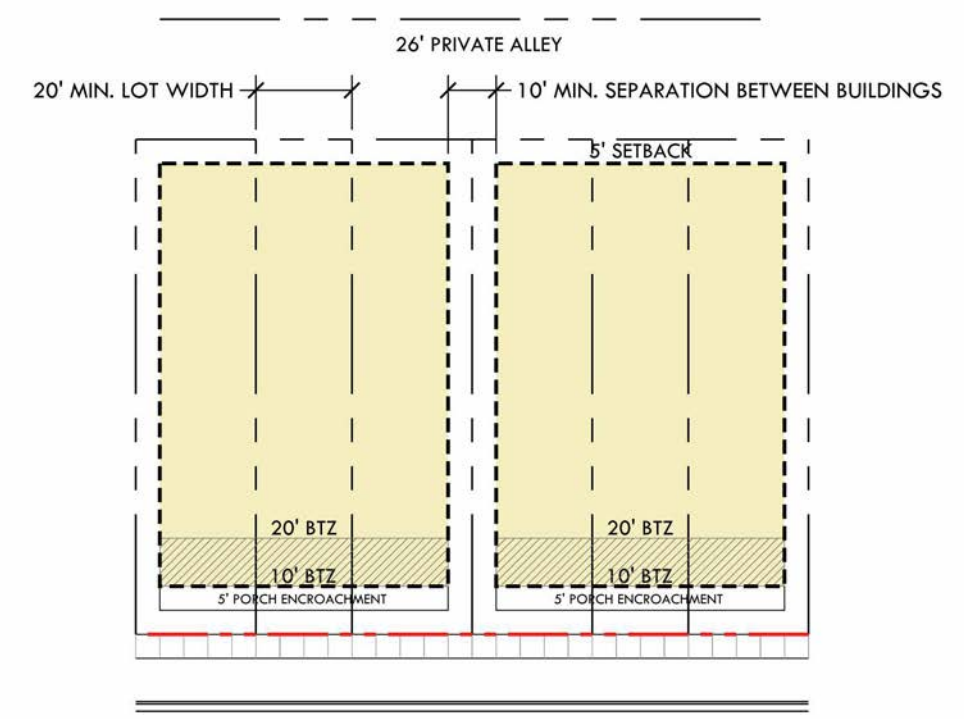
AREA 3 : SUBURBAN COTTAGE - FRONT LOADED



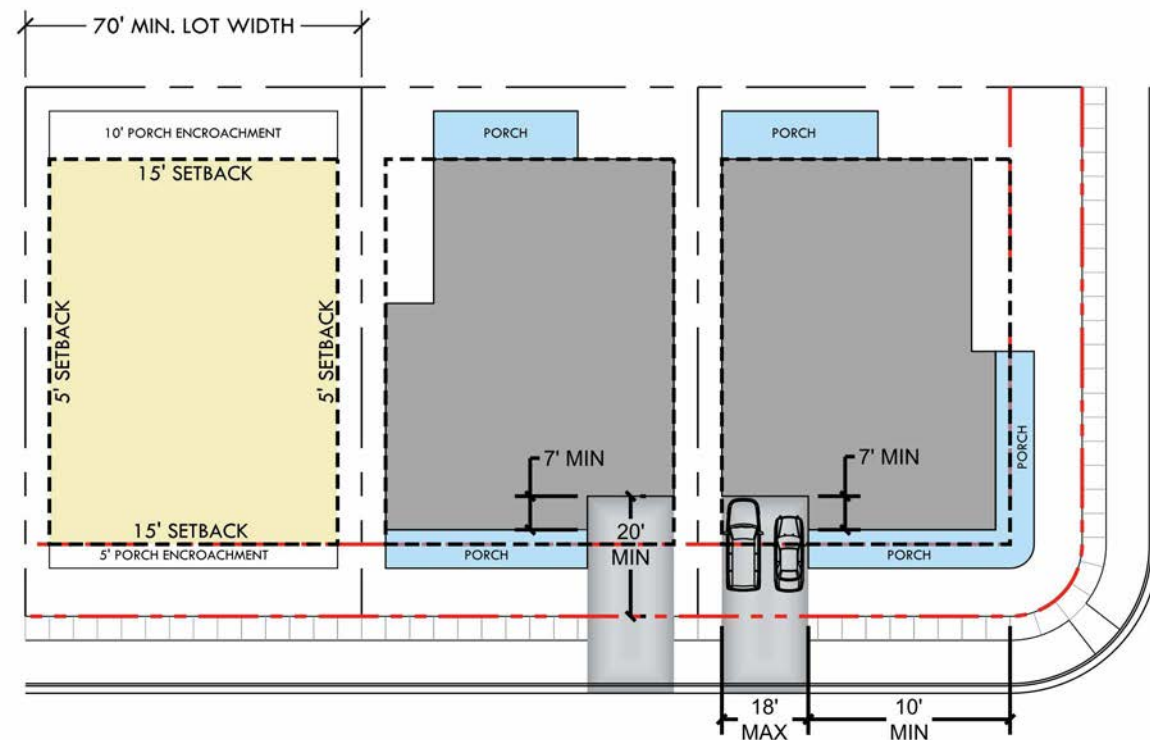
AREA 4 : URBAN ESTATE - FRONT LOADED



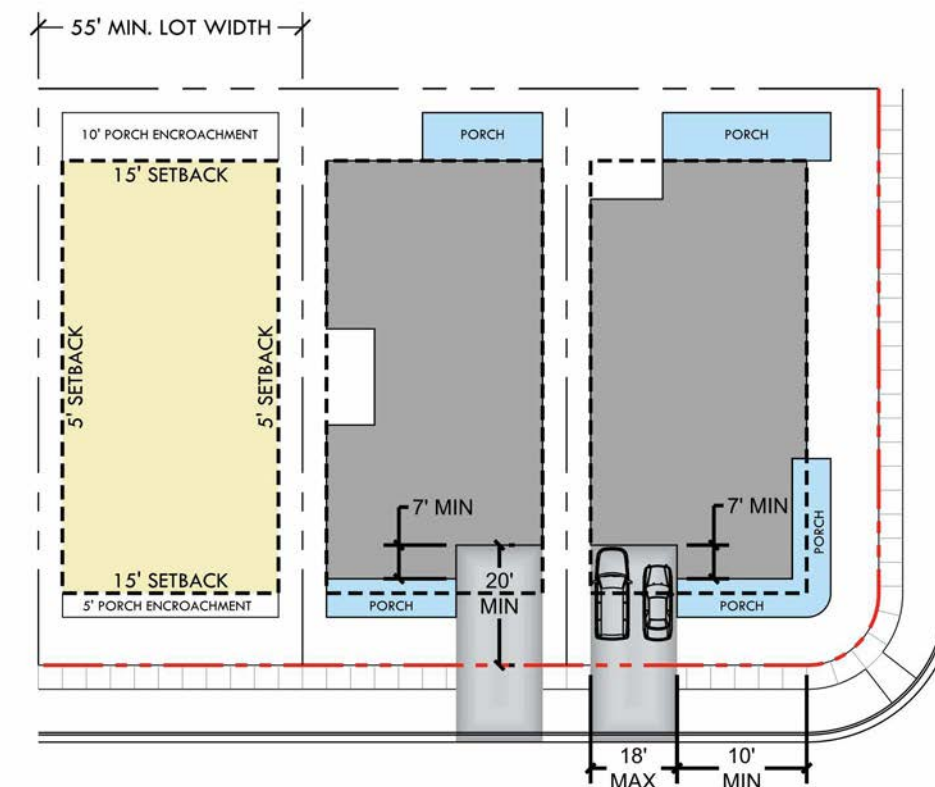
AREA 4 : URBAN ESTATE - REAR LOADED



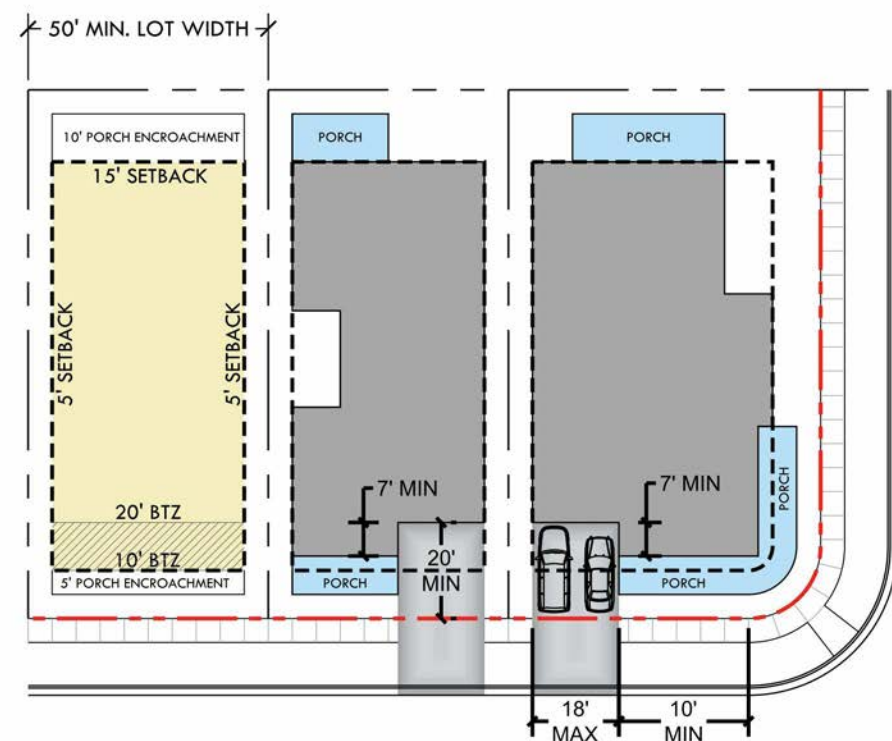
AREA 5 : ATTACHED HOMES - REAR LOADED



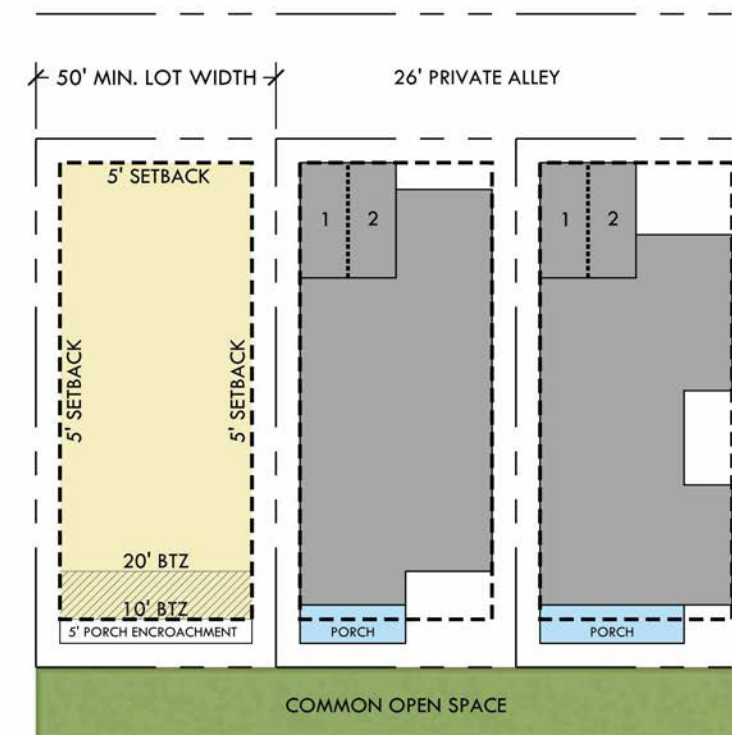
AREA 2 : SUBURBAN MANOR - FRONT LOADED



AREA 3 : SUBURBAN COTTAGE - FRONT LOADED



AREA 4 : URBAN ESTATE - FRONT LOADED



AREA 4 : URBAN ESTATE - REAR LOADED

1. Introduction

The purpose of these design guidelines is to provide a vision of what architectural styles are appropriate.

2. The History and Characteristics of Traditional Homes

The architectural vision is based on traditional homes built in the South. Traditional architecture is based on a set of guiding principles that create timeless and classic architecture that not only looks good today but will continue to look good years from now which, in essence, enhances the long-term value of the neighborhood. The following will discuss the essential elements that are used to design and build classic and timeless homes. It is important to maintain these design standards and avoid inappropriate use of materials and an inappropriate blending of styles on any one home.

The following home styles are traditional, classic, and appropriate. A blending of styles is one element of traditional neighborhoods that provide interest and character.

Craftsman

The Craftsman style is strongly influenced by the English Arts and Crafts movement. The style consists of lower mid-pitched, gable and hipped roofs with wide eave overhangs or exposed rafter tails, while decorative false beams or bracketing are commonly added under the gables. Porches are very common, whether they be full or partial width. Porch roofs are typically supported by columns resting on more massive piers.

The exterior veneers that are characteristic of a Craftsman style home include vertical board and batten siding, horizontal lap siding with possible accents of brick or stone. Historically, brick or siding is used as an accent only and not a prominent veneer material. For example, brick or stone may be used as a wainscot or a base for a column.



- Roof pitch – typically between 8 & 12 and 10 & 12



- Overhang and brackets – typically a minimum of 1 ft



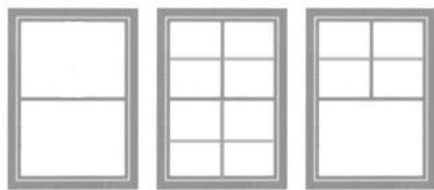
- Veneer – horizontal siding and brick



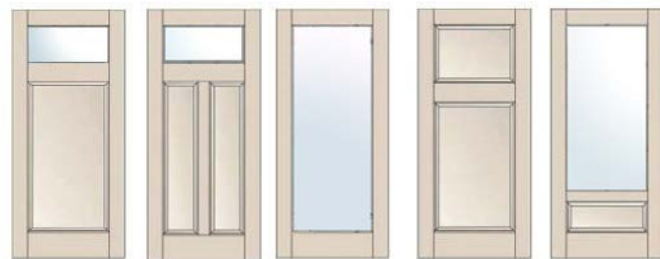
- Columns – either has brick or stone piers with battered columns or full height columns



- Window styles – typically has wide, double sash windows with a 1 over 1, 4 over 4, or 4 over 1 lite pattern.



- Front door – the following are appropriate front door styles for a Craftsman

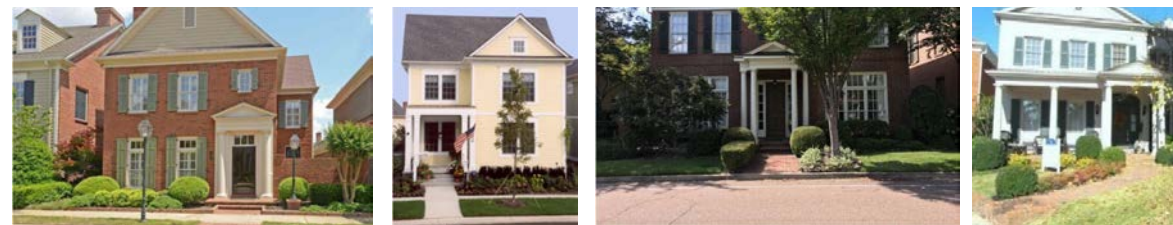


*These images illustrate architectural concepts only. Actual designs may vary in detail.

Colonial Revival

The term “Colonial Revival” refers to a wide range of styles with a rebirth of interest in the early English and Dutch houses of the Atlantic seaboard. This style features an accentuated front door, normally with a decorative cornice supported by pilasters. The cornice is occasionally extended forward and supported by columns to create an entry porch. This style may either display symmetrically balanced windows, with doors centered on the façade, or may have an asymmetrical arrangement with entries to one side. Windows with single hung sashes are frequently in adjacent pairs, most commonly with six, eight, nine, or twelve panes in each sash, or six over one.

Classic Colonial Revival veneer materials may include brick or horizontal siding. Typically brick may be painted or left natural. Brick may be used as a wainscot with siding above. Siding may be a prominent front façade material with brick used on the sides and rear of the house. Due to the more informal style of Colonial Revival, there is more flexibility with using a mixture of brick and siding.



The following reflect possible characteristics of a Colonial Revival style home that may be used:

- Roof pitch – typically 7 & 12 to 12 & 12



- Overhang – typically a minimum of 1 ft

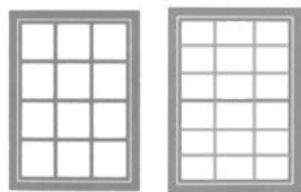




- Columns – typically square or round, non-fluted with a simple capital or base



- Window styles – typically has wide, double sash windows with a 6 over 6 or 9 over 9 lite pattern.



- Front door – the following are appropriate front door styles for a Colonial Revival



*These images illustrate architectural concepts only. Actual designs may vary in detail.

English

The English style is loosely based on a variety of early English building traditions. Most houses in this style emphasize high-pitched gabled roofs and prominent cross gables. Timbering is often used on the facades of this style with windows usually grouped in multiple arrangements.

Historically, with its variety of forms and detail, English style homes traditionally can incorporate a number of veneers used on a single home. For example, brick may be used in conjunction with siding or stone accents. The vast majority of English homes will mix exterior veneers.

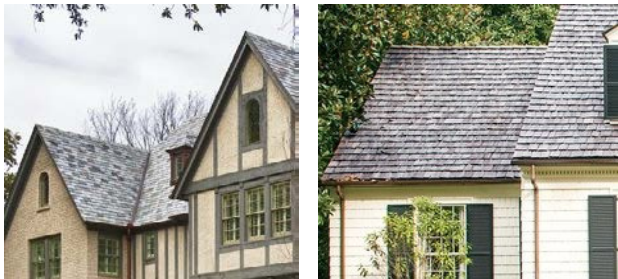


The following reflect possible characteristics of an English style home that may be used:

- Roof pitch – typically between 10 & 12 to 16 & 12



- Overhang – typically less than 1 ft



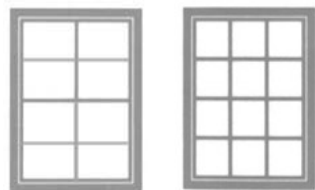
- Veneer – brick, stone, and horizontal siding



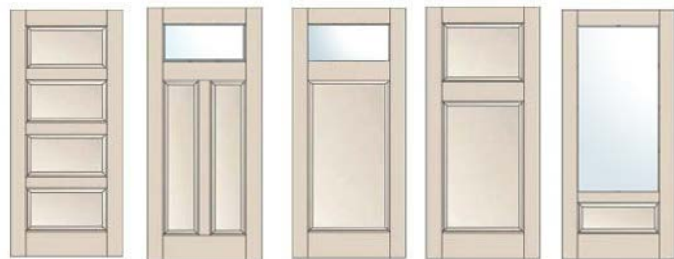
- Columns – typically square or round, non-fluted with a simple capital or base



- Window styles – typically has a 4 over 4 or 6 over 6 lite pattern.



- Front door – the following are appropriate front door styles for the English style



*These images illustrate architectural concepts only. Actual designs may vary in detail.

Farmhouse

Traditional Farmhouse design is based on a functional and simple aesthetic and were prominent styles in rural America. The style may be symmetrical or asymmetrical and typically have large covered porches that contribute to a significant part of the overall façade. Windows are typically oversized and may either be grouped together or single.

Based on the Farmhouse style being a more rural prototype, veneer materials were predominately siding. Siding was more readily available and therefore used for the majority of the entire façade. Brick wainscoting along the base of the house is also a traditional architectural feature.



The following reflect possible characteristics of a Farmhouse home that may be used:

- Roof pitch – typically between 10 & 12 to 14 & 12



- Overhang – typically a minimum of 1 ft



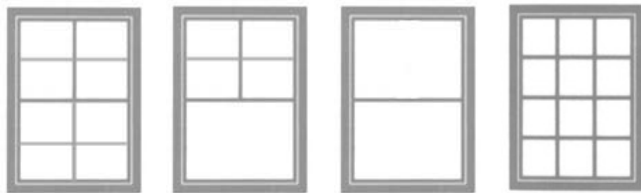
- Veneer – horizontal siding or board and batten



- Columns – plain shaft with no capital and base or a plain square shaft with minimal capital and base.



- Window styles – typically has a 4 over 4, 4 over 1, 1 over 1, or 6 over 6 lite pattern.



- Front door – the following are appropriate front door styles for a Farmhouse



*These images illustrate architectural concepts only. Actual designs may vary in detail.

3. Proportions & Massing

The proportion of the house and the building elements is important to maintain a classic order which is typically characterized by pleasant verticality. There is an emphasis on the vertical wall area while the roof area is deemphasized. The massing of these houses is vital in creating the emphasis on the front entry and less emphasis on subordinate elements like the garage. Simple massing, verses multiple façade changes, is a characteristic of classic traditional architecture.

4. Appropriate Veneer Materials

It is important to use the appropriate veneer for each specific style of house. While one veneer material may be appropriate for one style home, it may not be appropriate for another. By using the correct materials and colors, each house can have its own individual character while also complimenting each other to create a harmonious and pleasing streetscape.

Brick

Painted brick or natural color brick is an appropriate veneer for all of the architectural styles. Generally speaking, burgundy, rusty reds, browns, grays, white wash or painted brick are appropriate color ranges.

Siding

Siding is also an appropriate material for all of the above style homes. Classic traditional homes can include siding over the majority of the façade. While composite siding materials are appropriate, vinyl siding is not. Appropriate colors would be grays, tans, beiges, whites, off-whites, and other cool colors.

Stone

Stone accents are an appropriate material for the craftsman style. Stone could either be natural or a high-quality cultured stone. Acceptable colors range in the buff, white, grey, or earth tones.

Roofing

Architectural shingles are an appropriate material for the majority of the roof areas. No 3-TAB asphalt roofs shall be used. Accent metal roofs may be used to help accentuate a detail or elongate the porch. Roof pitches are typically 7:12 to 16:12 for the main roof that is visible. Secondary roofs or front to back roof pitches may be lower slope. Front to back roof pitches may vary in order to lower the ridgeline, reducing the overall roof mass. Roof masses shall not overwhelm the vertical wall surface of the house. Appropriate shingle colors would include weathered wood, charcoal, or a slate like color.

Cornice, Columns, and Railings

Material shall be a composite type or wood and not vinyl. Profiles and details shall be appropriate for the architectural style of the house. Cornice, columns, and railing colors shall be the same color. All casing, trim, and corner board colors are to match the color of the cornice, columns, and railings.

5. Appropriate Traditional Architectural Details

Porches

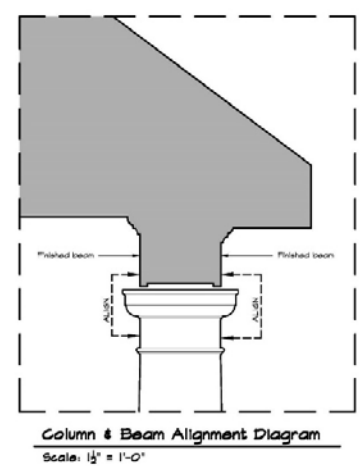
Front porches are required for all home styles. On English style homes, porches are typically smaller and are primarily used as an entry porch. However, wider porches can be appropriate as well. Other than small entry porches, usable porches shall be a minimum of six feet deep by eight feet wide.

Windows

Windows shall be located and sized according to the characteristics of the individual style of house. For example, on Craftsman style homes, windows are traditionally wider. Windows for English style homes are typically more vertical as long as egress requirements are met. Typical muntin patterns shall also follow standards for the specific style. Six over six grid, four over one, or four over four would be appropriate for Colonial style homes. One over one, two over two, four over four, four over one, or six over one would be appropriate muntin patterns for Craftsman style windows. Windows shall be a high-quality vinyl, wood, or metal clad. No aluminum windows are allowed. Appropriate colors include white, tan, or dark bronze. Majority of windows shall be white with the other colors being used less frequently.

Columns

Columns shall be wood or composite. They can be smooth painted or stained wood, timbers, or composite. Columns shall not be aluminum or vinyl. Whether round or square, columns must be appropriately proportioned. Top of the column shaft must align with the finished face of the beam or entablature.



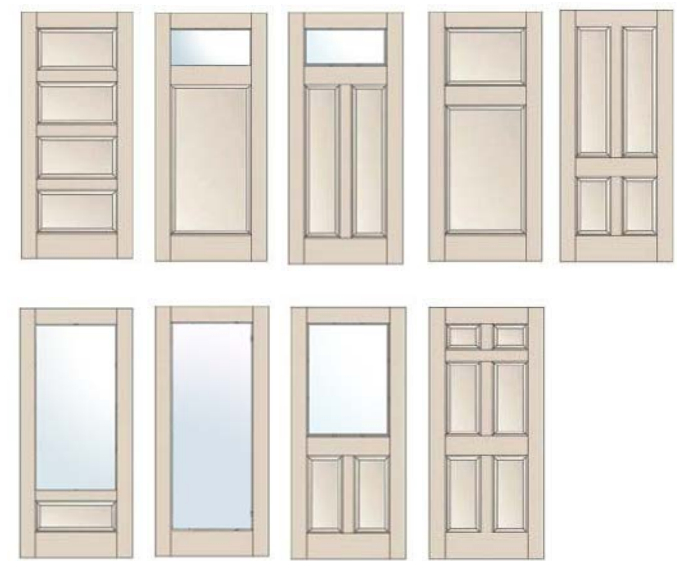
Shutters

Materials shall be a wood or composite type. Louvered panel type shutters are appropriate for the approved style of homes. Plastic or vinyl shutters that are screwed into the veneer are not acceptable. Shutter size must match window size to look as if it could close up the full window opening. Shutter color should be a darker tone than the wall veneer color. Generally, shutter colors shall be black, forest green, deep rusty red, or dark bronze.

Front Door

Style of the front door shall be appropriate to the style of the house. Material can be metal, natural wood, or high-quality composite. Appropriate front door styles include four panel, two panel, full glass, two-thirds glass, or six panel. Appropriate colors include wood stain, matching the shutter color, or matching the cornice color. Front door colors can also be a distinct accent color such as a rusty red as long as the total number of colors on the front façade does not exceed three colors, including front door color.

The following door styles are appropriate:



Garage Doors

Style of garage door shall be appropriate to the style of the house. Garage doors can be painted or prefinished and the color should match or closely match the wall veneer color, shutter color, or cornice color.

STREET-FACING GARAGES:



NON STREET-FACING GARAGES ONLY:



Finished Floor Height

Finished floor height of the façade should be a minimum of 18 inches above the finished grade at front façade.

Ceiling Height

Ceiling heights on the first floor shall be a minimum of 9 feet tall.

Dormers

Dormers shall have proportions that are appropriate to the style of house. Single window vertically scaled dormer is appropriate for a colonial style house while wider more horizontal dormers are appropriate for craftsman style homes.

REFERENCES

McAlester, Virginia and Lee. A Field Guide to American Houses, New York: Alfred A. Knopf. Inc., 1984.

Mouzon, Stephen A. Traditional Construction Patterns, McGraw-Hill, 2004.

Susanka, Sarah. The Not So Big House, Connecticut: The Taunton Press, 1998.



Graphics, images, and photographs included in this booklet are solely to convey form and character and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals.



OVERALL DEVELOPMENT IDENTITY SIGNS



SMALL DIRECTORY SIGNS



GROUND SIGNS



WALL SIGNS

I. GENERAL

Commercial building design that creates or adds to the visual interest of a streetscape and a pedestrian scale is an essential component of Ashmont PD.

The following general design standards shall apply to the commercial buildings within Ashmont PD:

- A. An Ashmont commercial design review committee will be established by the Developer or Business Association to approve proposed architectural designs prior to review by the City of Lakeland’s Design Review Commission. The Ashmont commercial design review committee will review all proposed commercial buildings based on compatibility with other Areas/sites within Ashmont, quality of architectural materials, and cohesiveness with the overall Ashmont PD vision.
- B. The design of the building shall provide a distinctive and consistent architectural character and style that avoids featureless building massing and design.
- C. Exceptions to the standards in this section may be approved by the DRC to allow for creativity in building design.

II. ARCHITECTURAL STANDARDS

- A. Doors, storefront windows, awnings, and architectural lighting are examples of building features that add to the character of the development and contribute to the pedestrian experience. Attention to these details is encouraged for all commercial buildings.
- B. Building Facades

Facades that face public streets exterior to the development shall be subdivided and proportioned using features such as windows, entrances, arcades, arbors, columns, and awnings along no less than 50% of the length of the façade. A minimum of 20% of the total façade area (all sides of a building) shall be composed of transparent materials, such that any one side may have less than 20% transparency as long as the overall meets this minimum.
- C. Customer Areas

Customer entrances and amenity spaces may be provided where appropriate for the use. These areas may include features such as:

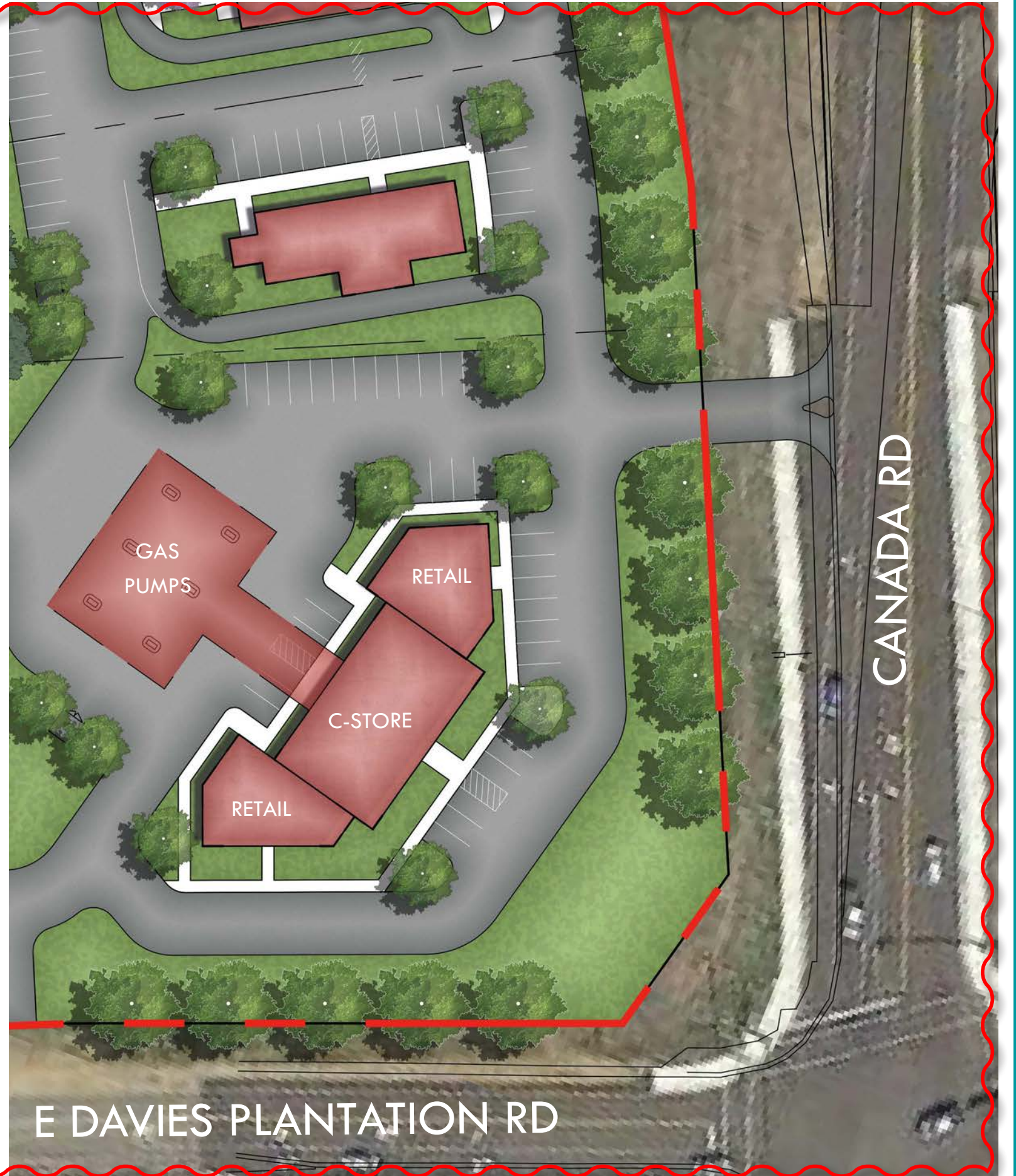
 - 1. Canopies or porticos
 - 2. Overhangs, building recesses/projections
 - 3. Visually distinctive entrances
 - 4. Visually distinctive roof forms
 - 5. Outdoor patios
 - 6. Outdoor seating and/or planters
 - 7. Pedestrian-scaled lighting
 - 8. Architectural feature lighting
- D. Roofs

Roof type shall be consistent with the architectural style of the building and may be pitched or flat. All rooftop mechanical units shall be screened from public streets by parapet walls, mechanical screens, or other architectural features.

- E. Awnings
 - 1. The size of the awning shall be proportional to the building massing and style of architecture
 - 2. Awnings may be fabric or metal. Awnings with high gloss finish are discouraged. Plastic awnings are prohibited.
 - 3. Awning colors shall be compatible with the overall color scheme of the façade from which it projects. Solid colors or subtle patterns are preferred.
- F. Building Materials and Colors

The exterior materials and colors used in a building’s design create impressions of not only the individual building, but of the overall development. High-quality and durable materials shall be used by all commercial buildings.

 - 1. A materials board shall be submitted to the Ashmont commercial design review committee and the City of Lakeland Design Review Commission
 - 2. Appropriate exterior building materials include, but are not limited to:
 - a. Brick
 - b. Natural or synthetic stone
 - c. Stucco
 - d. Integrally colored, textured, or glazed concrete masonry units
 - e. Glass
 - f. Aluminum panels
 - g. EIFS
 - 3. Inappropriate exterior building materials are:
 - a. Smooth-faced concrete block, painted concrete block
 - b. Field-painted or pre-finished standard corrugated metal siding
 - c. Standard single or double tee concrete systems
 - d. Barrier-type EIFS
 - 4. Natural wood or wood paneling should not be used as the principal exterior wall material. If a wood accent is desired, a durable synthetic material with the appearance of wood is encouraged.



April 12, 2022

Donald Anthony, AICP
Planning Director
City of Lakeland
10001 Highway 70
Lakeland, TN 38002

**RE: ASHMONT PLANNED DEVELOPMENT
REQUESTED EXCEPTIONS TO LAND DEVELOPMENT REGULATIONS**

The following lists the sections of the Lakeland Land Development Regulations (LDR) that Ashmont Planned Development is seeking exceptions from:

Section II. 6. 2. Neighborhood Type V. Requirements

1. Request to exceed the maximum of 10% of R6 Attached homes.

Section II. 11. Conservation Area Requirements

2. Request for relief of the Conservation Area Requirements

Section III. 3. Building Type Standards

3. Request to replace some of the residential and non-residential building type standards with those provided in the Outline Plan booklet. The following chart indicates the bulk standard deviations requested.

Table 1. Bulk Standard Comparison with Building Type Summary Table			
Area	Referenced District	Bulk Standard Deviation Requested	Bulk Standard from LDR (Summary Table)
2	R2	15' front setback 15' rear setback 5' front porch encroachment 10' rear porch encroachment	30' front setback 30' rear setback - No porch encroachment
3	R3	5' front porch encroachment 10' rear porch encroachment	No porch encroachment
4	R4	5' side setback - Street or alley access 10' rear porch encroachment (front-loaded only)	7.5' side setback - Alley access only - No rear porch encroachment
6-7	C-2	20' front setback 4-story height (Hotel use)	10'-20' front BTZ (Commercial Building) 3-story height (Corridor Building)
All		Residential and Commercial Architecture Pattern Book guidelines to replace the following portions of LDR that will be disregarded: - Maximum Building Coverage - Maximum Impervious + Semi-Pervious Coverage - Minimum Coverage of Front Property Line	

		• Minimum Principal Building Height • Attached Garage Façade Proportion • Façade Requirements, including Transparency, Cap & Base Types, Building Materials, and Building Variety
--	--	---

Section III. 6. G. Site Access

4. Request to increase the maximum residential driveway width to 18'.
5. Request of a 10' driveway clearance from end of radius on a corner lot.

Section III. 5. Landscape Standards

6. Request that the landscape plates presented in the Outline Plan booklet be used in lieu of those in the LDR. The following chart indicates the landscape plate deviations requested within the Commercial areas:

Table 2. Landscape Standard Comparison with LDR		
Requirement	Deviation Requested	Standard from LDR
Frontage Buffer (III.5.J.)	• No fence requirement • 6' min. width fronting internal streets (no exceptions requested fronting existing public ROWs)	• 3'-4' HT fence required • 9' min. width
Side and Rear Yard Buffer (III.5.K.)	• No exceptions requested along E. Davies Plantation Rd. • Along Canada Rd., 30' landscape buffer with 6' fence and trees 40' O.C. between Commercial (Area 7) and Residential (Area 4) • No buffer between Areas 1 and 3	• Heavy Landscape Screen: 50' buffer with 6' fence and trees 40' O.C. between C2 and R1-R5.

~~7. Request that Area 1 not be included in any calculations for parkland dedication.~~

Tree Management Ordinance

8. Request to provide a tree survey of only the areas that are intended to remain undisturbed to satisfy the tree survey requirements of the LDR.

Major Road Plan

~~9. Request to waive ROW dedication along E. Davies Plantation Road.~~

Other

10. Request to allow a Convenience Store with Fuel Pumps at the corner of Canada Road and E. Davies Plantation Road.
- ~~11. Request to submit the School Impact Study with the Preliminary Development Plan.~~
12. Request to utilize a 5' minimum width concrete trail in lieu of the 10' wide standard.

Below are justifications for each exception:

1. Request to exceed the maximum of 10% of R6 Attached Townhomes.
 - The conceptual development plan illustrates 13% Townhomes in Area 5, which is only slightly above this maximum allowed. If the plan was to clear and grade more of the open space to maximize the number of single-family lots, the percentage of Townhomes would meet the 10% maximum. However, it was important for us to keep more of the open space and natural topography of the land, which decreases the total number of lots on the site and increases the percentage of Townhomes. The Townhome area is appropriately scaled as a transition between the commercial and single-family uses.
 - No additional townhome options in other areas are proposed.
2. Request for relief of the Conservation Area Requirements
 - In general, the development is planned around the preservation of natural resources as much as is feasible while still allowing the site to develop. The 2017 Small Area Plan illustrated a smaller amount

of preserved areas on the site. The proposed Ashmont concept balances the City's desire for commercial and residential uses in this area (as reflected in the Small Area Plan) and the preservation of natural resources (as reflected in the Conservation Priority Map). Strict adherence to the Conservation Area Requirements will make the site unfeasible to develop.

3. Request to replace some of the residential and non-residential building type standards with those provided in the Outline Plan booklet.

- All Areas: We are providing detailed guidelines for both the residential and non-residential architecture within the development. To avoid misinterpretation or design conflicts, we are requesting that certain sections of the LDR that relate to building/garage façades, proportions, and architectural details be disregarded, so that proposed architecture can all be reviewed with the Ashmont PD guidelines.
- Areas 2-5, building materials: The City of Lakeland's design standards for Residential homes are not based on specific, traditional architectural styles and may not be appropriate for all the styles that will be used in Ashmont. In contrast, the Ashmont Residential Architectural Pattern Book organizes requirements by style and includes more details about which materials are appropriate for which styles.
- Areas 2-4, setbacks: We are asking for the minimum exceptions to some of the residential setbacks and encroachments to create a more cohesive streetscape and to allow a range of floorplan options. This includes:
 - Utilizing either a 15' front setback or a 10'-20' build-to-zone, a 5' side yard setback, and a 5' front porch encroachment across the residential Areas 2-5.
 - The rear setback in Area 2 is requested to be 15' to match the other front loaded homes in Areas 3 and 4.
 - All the front-loaded homes (Areas 2, 3, 4) are requested to have a 10' rear porch encroachment in order to provide more floorplan variety and usable outdoor space for those who do not want to maintain as large of a backyard.
- Areas 2-4, garage setbacks: We are asking for a minor variation in regulations for garages, to require all front-facing garages be located a minimum of 7' behind the front façade of the house rather than 15'. The developer plans to utilize a front porch on all of the single-family homes, which may be up to 8' deep. This pushes the garage to approximately 13'-15' behind the front of the porch, which is a similar distance to what is required by the LDR. We have specified that front-facing garages must be 20' behind the back of sidewalk to ensure that there is space to park cars in front of the garage without blocking the sidewalk.
- Area 4, front-loaded garages: To preserve existing topography and natural resources to the greatest reasonable extent, roads for Area 4 are concentrated atop existing ridges. The use of front-loaded lots allows home sites to be accessed from both sides of a single street. Rear-loaded lots placed in this area would require the construction of alleys. This additional grading would mean further encroachment into the existing valleys, triggering more tree removal and disturbance of natural drainage corridors. The proposed relationship of the roadway to the home sites aims to preserve both existing physical resources and views out to the valley. A portion of Area 4 has been designated as rear-load homes where an alley is appropriate.
- Area 6-7, 20' front setback: Parking is permitted in the front and side yards for the building type Commercial Building A, which generally applies to buildings in this development. Commercial buildings within the development cannot be set within a 10'-20' build-to-zone. Front-door parking is a requirement for the commercial tenants that are looking at this site because of its location and context. The ROW of Future Canada Road is also very irregular and a build-to-zone would create an incoherent streetscape. To maintain frontage consistency and to allow the minimum front-door parking needed, we are asking for a 20' minimum front setback, regardless of the building type.
- Area 6-7, 4-story height for Hotel use: Many modern hotel brands require 4 stories to make a development site viable for build-out. A height of 4 stories would allow the Developer to cast a broader

net in searching for the most appropriate hotel partner for the site and the best addition to the commercial offerings of the City. By including this height exception in the PD, the process for approval is streamlined and an additional Conditional Use Permit would not be needed.

- Area 6-7, 20% façade transparency: The storefront and shopfront base types are the closest comparable building types to those proposed for Areas 6-7. The shopfront base type calls for 50% transparency between 3' and 9' above the sidewalk. The proposed Architectural Pattern Book calls for a minimum of 20% of the "total façade area," which includes the area outside of the 3' to 9' zone described in the LDR. With this additional overall frontage area in mind, the 20% ratio is comparable to the intent of the shopfront transparency requirement of the ground floor noted in the LDR (as shown in the spirit imagery). Because of the site's relationship to Canada Road and I-40, most customers will be attracted to the site by overall building massing and highly visible wall signage, not by what may be visible through windows. Thus, the 20% minimum façade transparency requirement proposed by the Commercial Architectural Pattern Book is intended to provide attractive and comfortable views in and out of commercial buildings and to provide a balance between transparency and wall space needed for signage.
- Area 6-7, stucco, CMU, aluminum panels, and EIFS as appropriate building materials: The images provided on Page 34 illustrate a contemporary approach to the commercial corridor of the planned development. Many local and nationwide retail chains have established standards for building designs that can fit into the style of architecture illustrated, but may not be able to strictly meet the limited materials allowed by the LDR. The intent of this request is to allow for more contemporary commercial building designs that also reflects the quality standards established by the LDR. The proposed building materials will be thoughtfully considered to ensure that consistency and high quality are both upheld. This is reflected by requiring the submissions of a materials board to both the Ashmont commercial design review committee and the City of Lakeland Design Review Commission.

4. Request to increase the maximum residential driveway width to 18'.
 - A maximum residential driveway width of 11' will create issues for residents with two-car garages. In particular, backing out from a driveway without a straight access can be dangerous. A slight increase to a 18' maximum width allows cars to comfortably and safely park in the driveway and garage.
 - This was approved by the City Engineer 4/11.
5. Request of a 10' driveway clearance from end of radius on a corner lot.
 - A minimum driveway clearance of 25' is incompatible with the proposed lot types. For example, within Area 4, this would leave around 15' of space in which to locate the driveway. A two-car driveway as requested above would not be able to fit into this space at all. A 10' clearance is a more reasonable minimum in order to allow flexibility of placing the driveway in the best possible location based on other site constraints, such as grading.
 - This was approved by the City Engineer 4/11.
6. Request that the landscape plates presented in the Outline Plan booklet be used in lieu of those in the LDR.
 - The plates provided in the booklet are appropriate for this site context, taking into consideration the proposed Canada Road streetscape that will be improved by the City, the relationship of the uses within and around the development, and the proposed grading on the site. To avoid misinterpretation or design conflicts, we are requesting that the City use the plates provided for their review of the final plans.
 - The short fence required in front of parking areas and public streets creates an unnecessary hard boundary that does little to hide the parking areas due to the distance and the drop in grade from the public sidewalk to the parking areas within the site. A landscape hedge and overstory trees, as proposed in the PD, are a softer approach to providing this delineation.
 - Per Ordinance 14-124, B. 2. A., the regulations within a Planned Development should be applicable to the zoning districts as established in the PD. The required 50' Heavy Buffer between the commercial and residential Areas will be provided where shown on the Landscape Plate Locations exhibit, along Davies Plantation Road. Due to the more significant grade change (up to approximately 9 feet) between the Canada Road Commercial lots and the Area 4 Residential lots, we are requesting for the required buffer

to be reduced to 30'. Imposing the 50' buffer in this location would cause a chain reaction, pushing the residential lots further into the valleys that we are prioritizing to preserve and reducing the amount of usable open space. The 50' buffer would also be required by the LDR between Area 1 and Area 2. However, these Areas, which are both marketed toward senior residents, would benefit from the flexibility to connect and share amenities. A 50' buffer would not facilitate this interaction.

~~7. Request to provide a tree survey of only the areas that are intended to remain undisturbed to satisfy the tree survey requirements of the LDR.~~

- Per discussion with the MPC, this will be addressed in the site plan submittal for Area 1, once the user and the number/type of units are determined.

8. Request that Area 1 not be included in any calculations for parkland dedication.

- The exact number of Senior Living units within Area 1 cannot be accurately estimated until a final user is selected and a site plan completed. This is because each user will have a specific target percentage of the various allowed uses (Independent Living, Assisted Living, and Nursing Home). Thus, the Parkland Dedication requirement may be drastically off if the number of units differs.

~~9. Request to waive ROW dedication along E. Davies Plantation Road.~~

- E. Davies Plantation Road is currently a 68' ROW with approximately 34' of existing pavement. Per discussions with the City Engineer, we are proposing to provide the necessary improvements for a 3-lane road (pavement, curb, and gutter) and the additional ROW dedication needed for an 86' ROW cross-section (43' from centerline). This will address the City's potential future need to improve E. Davies Plantation Road to a Boulevard.

10. Request to allow a Convenience Store with Fuel Pumps at the corner of Canada Road and E. Davies Plantation Road:

- Fuel pumps in this location would serve both visitors and permanent residents of the City. The proposed location north of the I-40 interchange would be convenient for current and future residents living in the neighborhoods along Canada Road, and is conveniently accessed by east/west traffic along E. Davies Plantation Road and Beverle Rivera Drive. Additional requirements have been clarified that include locating the fuel pumps behind the proposed convenience store so they do not become the focal point of this highly visible corner. It is intended for the C-Store to complement other commercial buildings within Ashmont PD, not detract from them, which is why it is also required to be reviewed by the Ashmont design review committee.
- An enlargement of the proposed C-Store site plan has been provided in the PD booklet.

~~11. Request to submit the School Impact Study with the Preliminary Development Plan.~~

- The City is directing the preparation of the School Impact Study, per the LDR.

12. Request to utilize a 5' minimum width concrete trail in lieu of the 10'-wide standard.

- The proposed 5' trails take advantage of the views and varied topography of the valleys in between groups of lots. The grading required to make the trails 10' instead would eliminate much more of the existing trees and natural features within those areas that make the trails enjoyable. A 5' width is sufficient to support the low volume of pedestrian traffic, mainly from Ashmont residents, and allows more flexibility to weave the trail between existing trees and natural features.

Overview

The City of Lakeland has received a residential development application within the city and have asked Cropper GIS Consulting (**Cropper**) to assess the potential student impact as a result. The development is referred to as Ashmont PD and the proposed development is shown in the image to the right.

The development has a variety of planned types, including single-family detached, single-family attached, age restricted, and commercial.

The first three phases of construction are planned to build the units that will yield students, while phases 4 and later are either age restricted housing or not residential.

A total of 108 single-family units are planned in the development, of which 90 are standard single-family detached and 18 are single-family attached units.

The developer plans to develop between 28 to 41 units per year in the first three phases and anticipated build-out of each phase is shown in the table to the right.

Research and Findings

A pupil-yield study was performed in early 2022 to understand how local residential developments are yielding students. The pupil-yield study serves as the primary source for yield rates of comparable homes / subdivisions in the area and is used as a component when determining the impact of a new residential subdivision on the Lakeland School System. The pupil-yield study involved mapping of Lakeland School System students, collection of subdivision, housing unit, and other pertinent GIS information from Shelby County.

The result of the pupil-yield study was a detailed inventory of developments within the city and their number of units, students, and yields for elementary and middle school students. High School yields were not calculated as the Lakeland School System only serves grades PK through 8.

The City of Lakeland provided the details of the proposed development, including site subdivision plan sketches, unit types per phases, anticipated build out, target price ranges, and lot sizes.

The Ashmont PD was studied and other subdivisions within the City were analyzed to determine communities of similar size, price, and type. After research was performed, the anticipated yield of students from the Ashmont PD was established. The table to the right shows the anticipated yield of students for every planned phase in the development. The table depicts an expected 56 students from the first 3 phases of development once the residential units are fully developed and built-out by late 2027. The district can expect between 13 to 19 new students per year until the 3 phases of construction are completed. Phase 4 and later are planned for age restricted housing and commercial developments. It should also be noted that as time progresses beyond 2027 and the subdivision ages, elementary school yields will go down and high school yields will increase.



Ashmont PD				
Phase	Build-Out Year	Housing Type (number of units)		
		Single-Family Detached	Single-Family Attached	Total
1	2025	10	18	28
2	2026	41	0	41
3	2027	39	0	39
Total		90	18	108



Ashmont PD					
Phase	Build-Out Year	Expected Yield			
		K-4	5-8	9-12	Total
1	2025	7	6	1	15
2	2026	11	9	2	21
3	2027	10	8	2	20
Total		28	23	5	56

Note: Phase 4 is planned for age restricted housing and not anticipated to

ASHMONT PD LAKELAND, TN

TRAFFIC IMPACT STUDY

Prepared By:
Martin E. Lipinski, P.E., Ph.D.

March, 2022

Introduction

A large new mixed-use planned development, identified as Ashmont PD, is being proposed for a site in Lakeland, Tennessee. The site is bordered by Canada Road on the east, and Davies Plantation on the south. (see Figure 1).

The objective of this report is to determine the impacts of the traffic generated by the projected development on the surrounding roadway network and to recommend any mitigation measures, if needed.

The Site

The proposed site plan for the development is shown in Figure 2. Primary access will be provided to Canada Road with two full-service drives and two right-in and right-out drives. Six access points are proposed to be located along Davies Plantation.

Proposed land uses within the site include: 129 single family homes, 18 townhomes, a senior living facility with 165 units, 2 – 100 room hotels, 3 restaurants, 43,000 sq. ft. of general retail, 12,000 sq. ft. of general office, 12,000 sq. ft. of medical/professional office, and a gas station with convenience store.

Surrounding Roadway Network and Area Land Use

The frontage to the site is along two roads – Canada Road and Davies Plantation. Canada Road is scheduled for improvement to be upgraded to a five-lane cross-section. This analysis assumed that this improvement will be made prior to full build-out of the site. Currently it has a three-lane cross-section at the site with widening at the intersection of Canada Road and Davies Plantation. Davies Plantation is a three-lane facility which narrows to two lanes at the western edge of the site. The major road plan identifies Davies Plantation as being improved to a five-lane facility. For the purpose of this traffic analysis, it was assumed that this improvement would occur after the build out of the project and the cross-section assumed for this roadway was a three-lane facility with one lane in each direction and a center two-way left turn lane.

Primary abutting land use along Canada Road to the east is residential with some commercial near the intersection of Canada Road and Davies Plantation/Beverle Rivera. Land use along Davies Plantation to the south of the site includes a restaurant and office. To the north and west the site abuts existing residential developments.

Existing Traffic Data

A twelve hour full movement count at the intersection of Canada Road and Davies Plantation on Summer Avenue and Stage Road was taken on Wednesday, February 9, 2022. The results of this count are shown in the Appendix.

In addition, TDOT maintains annual AADT count stations in the vicinity the site. The locations are:

Canada Road north of Davies Plantation
Davies Plantation west of Canada Road

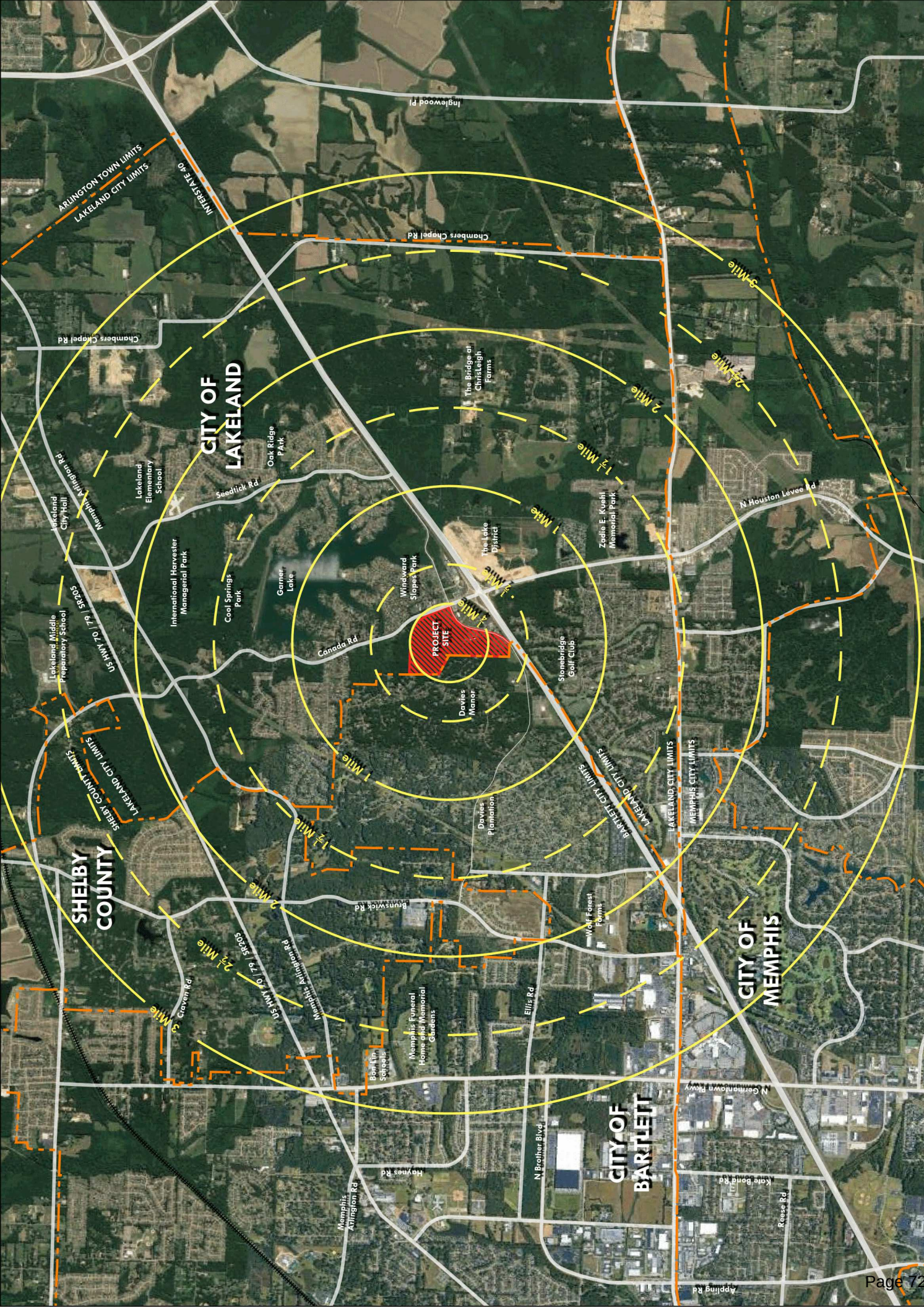


FIGURE 1 - VICINITY MAP

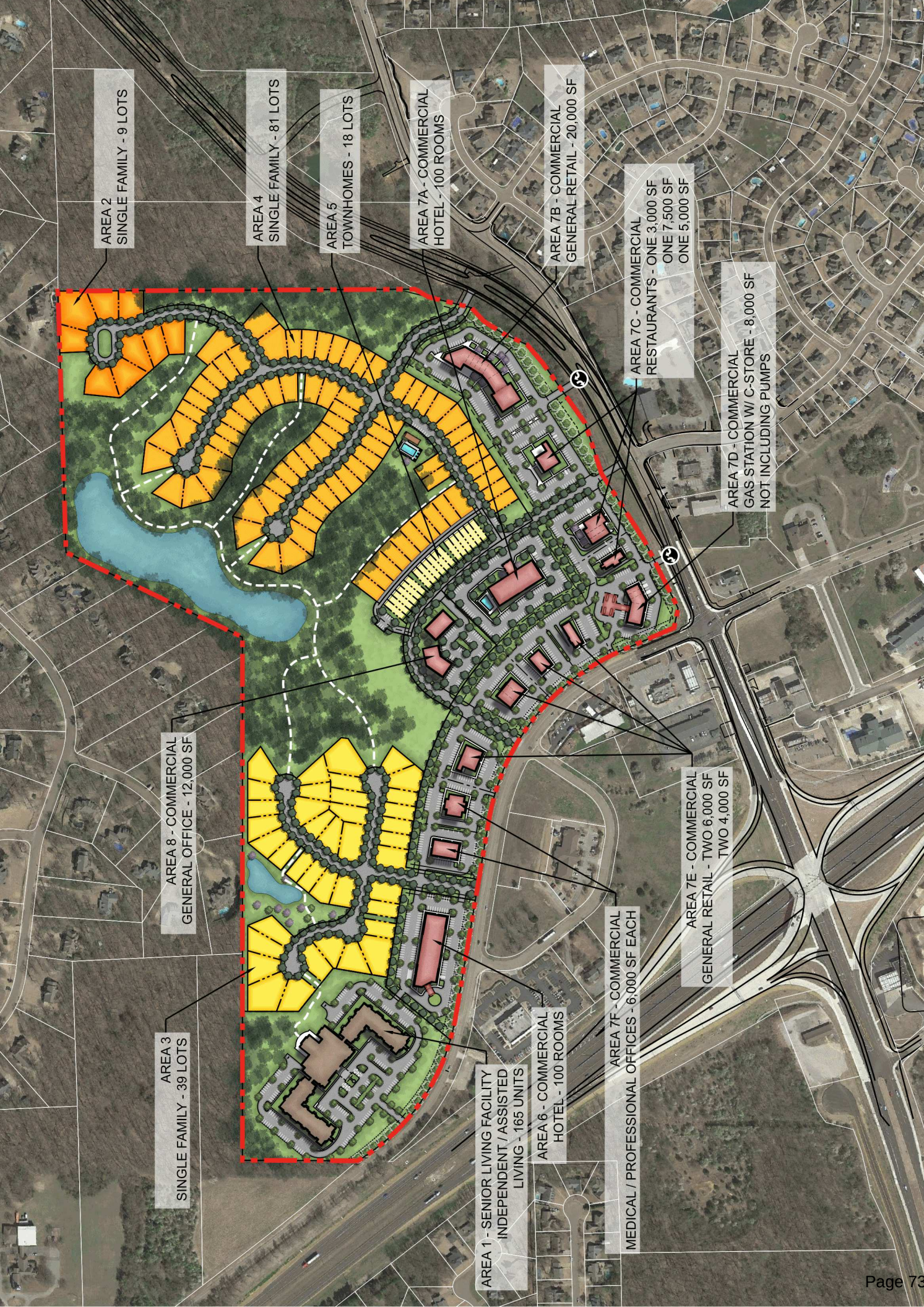


FIGURE 2 - SITE MAP

Summaries of the counts are in the Appendix.

Trip Generation

The initial step in determining the traffic impacts of a new development is to estimate the number of trips to be generated by the proposed land use. This is determined by using the equations and charts in the latest edition of the *ITE Trip Generation Manual*, the current version being the *ITE Trip Generation Manual, 10th Edition (2017)*. Table 1 contains the projected unadjusted number of trips to be generated by the development for the assumed land uses for the design year 2029.

Directional Distribution and Assumptions

The assumed cardinal direction directional distribution patterns to and from the site and assignments to the site access points were developed considering existing traffic patterns at the Canada Road/Davies Plantation intersection, land uses in the area surrounding the site, and the typical arrival departure patterns for the land uses within the site. The following assumptions were made in assigning traffic to the various access points by direction.

- Eighty percent of trips to and from all residential areas within the site will be oriented to the south. Ten percent will be oriented to the north and five percent will be oriented to east and five percent to the west.
- The directional distribution of trips to the south will initially be determined to the intersection of Canada Road and Davies Plantation.
- The distribution of hotel trips will be: 85% to and from the south; 15% to and from the north.
- The distribution of restaurant trips will be 50% from the north, 10% from the west, 10% from the east, and 30% from the south.
- The distribution of trips to and from the convenience store with gas pumps is 50% from the north, 10% from the west, 5% from the east, and 35% from the south.
- The distribution of trips to and from office uses is 30 % from the north, 60% from the south, 5% from the west and 5% from the east.
- The distribution of retail trips will be 50% from the north, 30% from the south, 10% from the west and 10% from the east.

Adjustments for Mixed Use Development

This is a large development with several difference land use types and there will be some internal capture, i.e., trips that do not enter or exit on the surrounding major roadway network. It was assumed that 2 percent of the trips generated by the retail will

TABLE 1

**Ashmont
Trip Generation
unadjusted**

	Land Use	ITE Code	Basis	Units	Daily		AM		PM	
					IN	OUT	IN	OUT	IN	OUT
AREA 1	Sr. Adult Housing Attached	252	Units	165	319	319	11	21	23	19
AREA 2	Single Family Residential - 1	210	Homes	90	472	472	17	52	58	34
AREA 3	Single Family Residential - 1	210	Homes	39	219	219	8	24	26	15
AREA 5	Townhouse	220	Units	18	48	48	2	7	8	5
AREA 6	Hotel	310	Rooms	100	351	351	26	18	24	23
AREA 7A	Hotel	310	Rooms	100	351	351	26	18	24	23
AREA 7B	Retail	820	Sq. ft.	20,000	1006	1006	6	4	79	86
AREA 7C	Restaurant	930	Sq. Ft.	5000	210	210	2	2	26	13
	Restaurant	930	Sq. Ft.	7500	314	314	3	3	40	20
	Restaurant	930	Sq. Ft.	3000	168	168	16	14	18	12
AREA 7D	Convenience with gas pumps	853	sq ft	4000	1248	1248	81	81	85	85
	Retail	820	Sq. ft.	3000	277	277	3	2	19	21
AREA 7E	Retail	820	Sq. ft.	20,000	1006	1006	8	5	79	86
AREA 7F	Medical Office	720	Sq. Ft.	12000	187	187	25	8	12	31
AREA 8	General Office	710	Sq. Ft.	12000	68	68	32	5	2	13
Total					6243	6243	268	266	524	484

be from land uses within the site. The adjusted trip generation table is shown in Table 2.

Pass-By Traffic Considerations

An important consideration when looking at land uses that are food service or retail oriented is that they are located on arterial streets in order to attract motorists who are already on the street going from an origin to a destination. Thus, not all site traffic is new traffic. The existing traffic that enters the site is considered Pass-By traffic. The *ITE Trip Generation Handbook, 3rd Edition (2017)* contains summaries of the amount of pass-by traffic observed in past studies for various land uses. Based on the information in this document, it was assumed that 30 percent of the restaurant trips were pass-by. The reduction will not be reflected in the number of trips in and out of access points, but it will reduce the number of 'new' trips added to the network.

Access Location Assignments

The assignment of site traffic to the access locations along Canada Road and Davies Plantation are shown in Figures 3 - 5 for the AM and PM peak periods. Figure 3 identifies the access locations. Figure 4 shows the assigned volumes at the access points for the AM Peak. Figure 5 shows the assigned volumes for the PM Peak.

Design Year

The design year selected for the analysis is 2029. It is anticipated that the site will be fully built out in seven years.

Background Traffic Growth

It was assumed that traffic on the surrounding roadway network would increase by 1 percent a year or seven percent from the present. The existing traffic at the Canada Road/Davies Plantation intersection for peak periods is shown in Figure 6. The design year (2029) background traffic at this location for the peak periods is shown in Figure 7.

Traffic Operations Analysis

The operational analysis included the intersection of Canada Road and Davies Plantation, the two full-service drives on Canada Road, and four major access locations on Davies Plantation. The two drives which were not assigned significant traffic were not included in the operational analysis.

The design year (2029) traffic volumes on the roadway and at the access locations are shown in Figures 8 and 9 for the AM and PM peak periods, and Figure 10 for the Canada Road/Davies Plantation intersection.

All intersections were analyzed using the Synchro 11 traffic software program. The detailed capacity calculations are contained in the Appendix. Included are results from the Synchro procedures and for HCM 2000 and 2010.

TABLE 2

**Ashmont
Trip Generation
Adjusted**

	Land Use	ITE Code	Basis	Units	Daily		AM		PM	
					IN	OUT	IN	OUT	IN	OUT
AREA 1	Sr. Adult Housing Attached	252	Units	165	309	309	11	21	22	18
AREA 2 & 4	Single Family Residential - 1	210	Homes	87	446	446	17	50	54	31
AREA 3	Single Family Residential - 1	210	Homes	39	213	213	8	24	25	14
AREA 5	Townhouse	220	Units	18	46	46	2	7	8	5
AREA 6	Hotel	310	Rooms	100	351	351	26	18	24	23
AREA 7A	Hotel	310	Rooms	100	351	351	26	18	24	23
AREA 7B	Retail	820	Sq. ft.	20,000	985	985	6	4	77	84
AREA 7C	Restaurant	932	Sq. Ft.	5000	280	280	27	23	25	24
	Restaurant	930	Sq. Ft.	7500	314	314	3	3	40	20
	Restaurant	930	Sq. Ft.	3000	168	168	16	14	18	12
AREA 7D	Convenience with gas pumps	853	Sq. Ft.	4000	1248	1248	81	81	85	85
	Retail	820	Sq. Ft.	3000	274	274	3	2	18	20
AREA 7E	Retail	820	Sq. ft.	20,000	786	786	7	4	78	85
AREA 7F	Medical Office	720	Sq. Ft.	12000	187	187	25	8	12	31
AREA 8	General Office	710	Sq. Ft.	12000	68	68	32	5	2	13

Total		6026	6026	292	284	511	486
-------	--	------	------	-----	-----	-----	-----

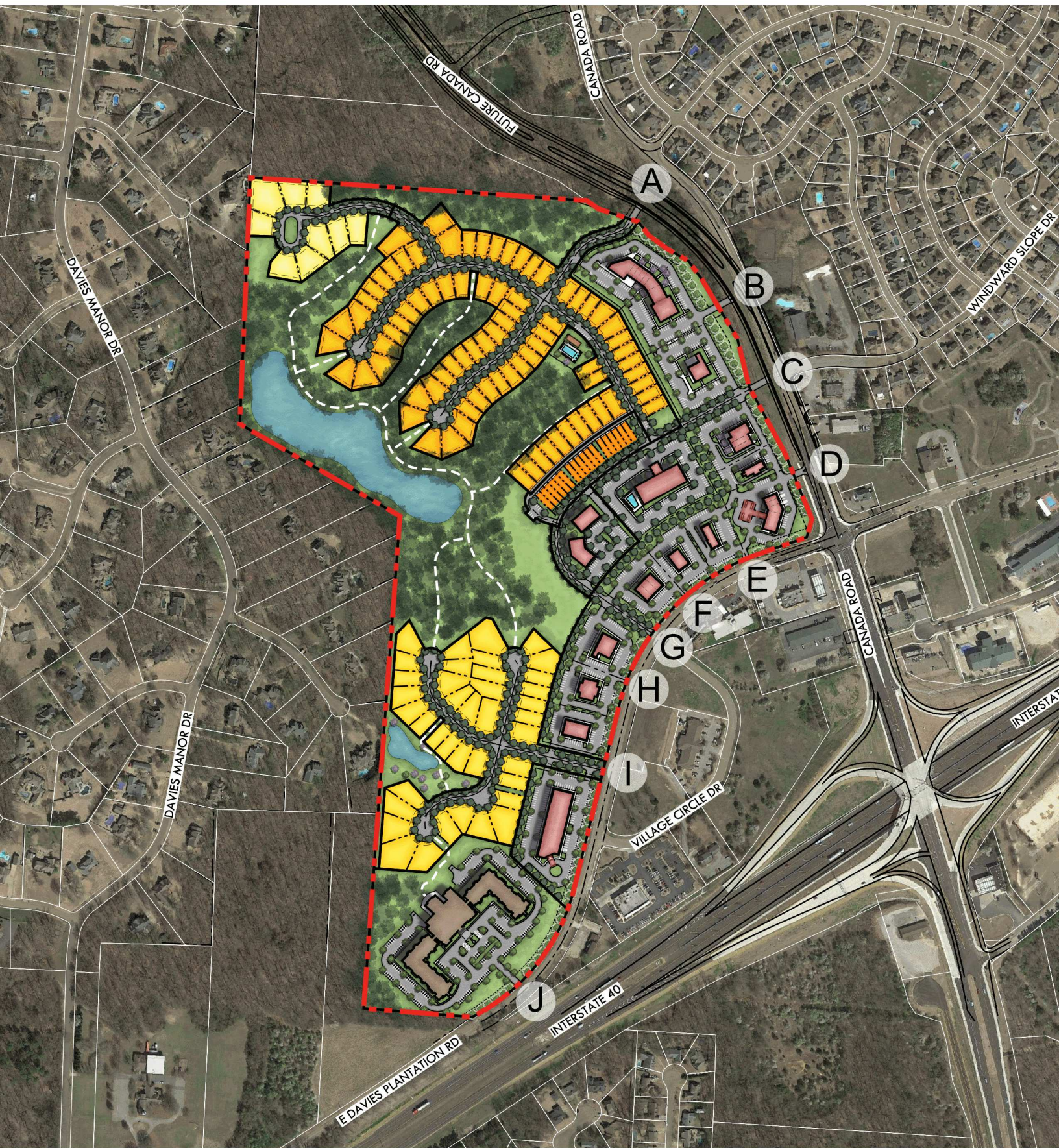


FIGURE 3
KEY MAP FOR
FIGURES 4-5, 8-9

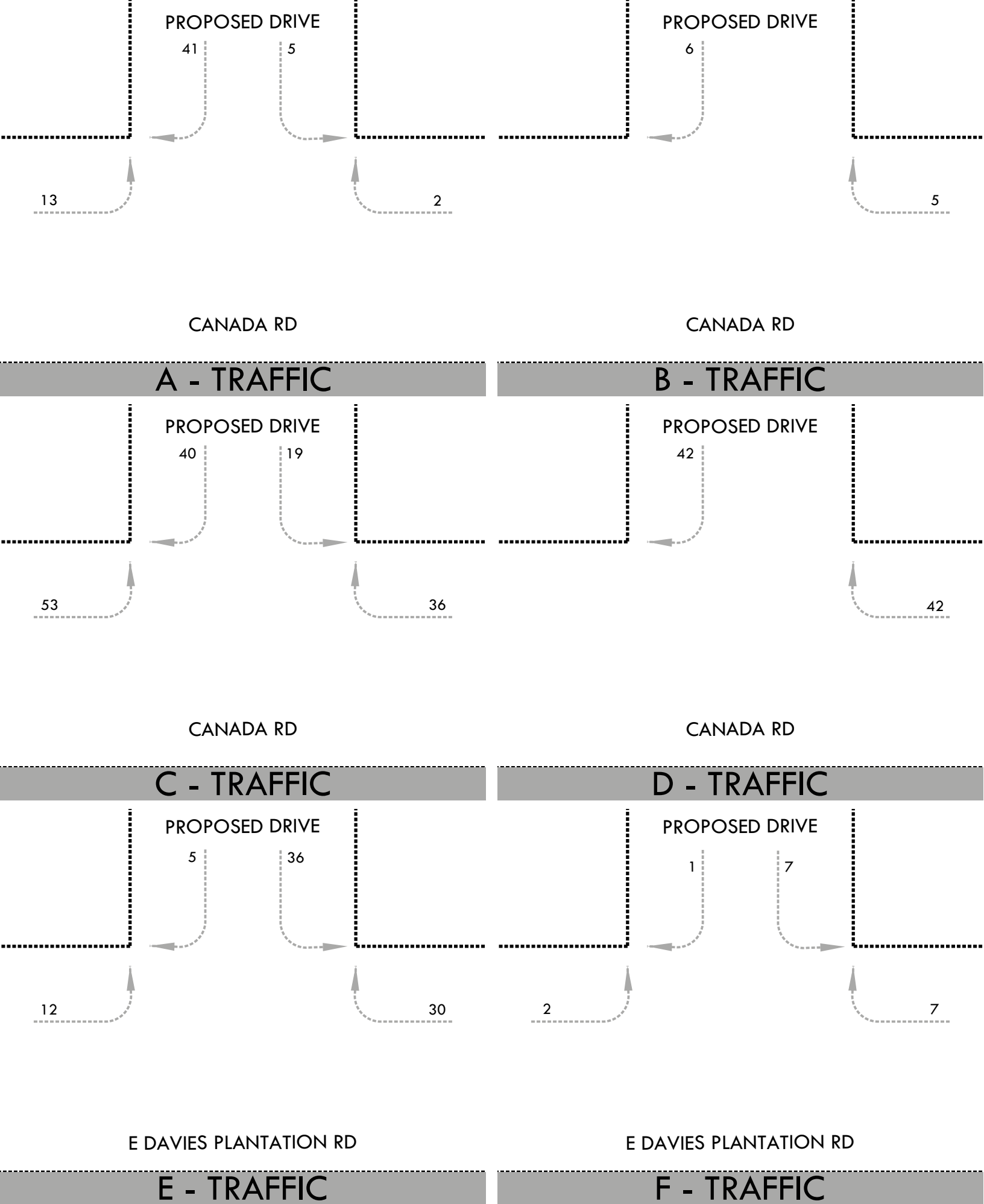


FIGURE 4 - AM PEAK SITE VOLUMES

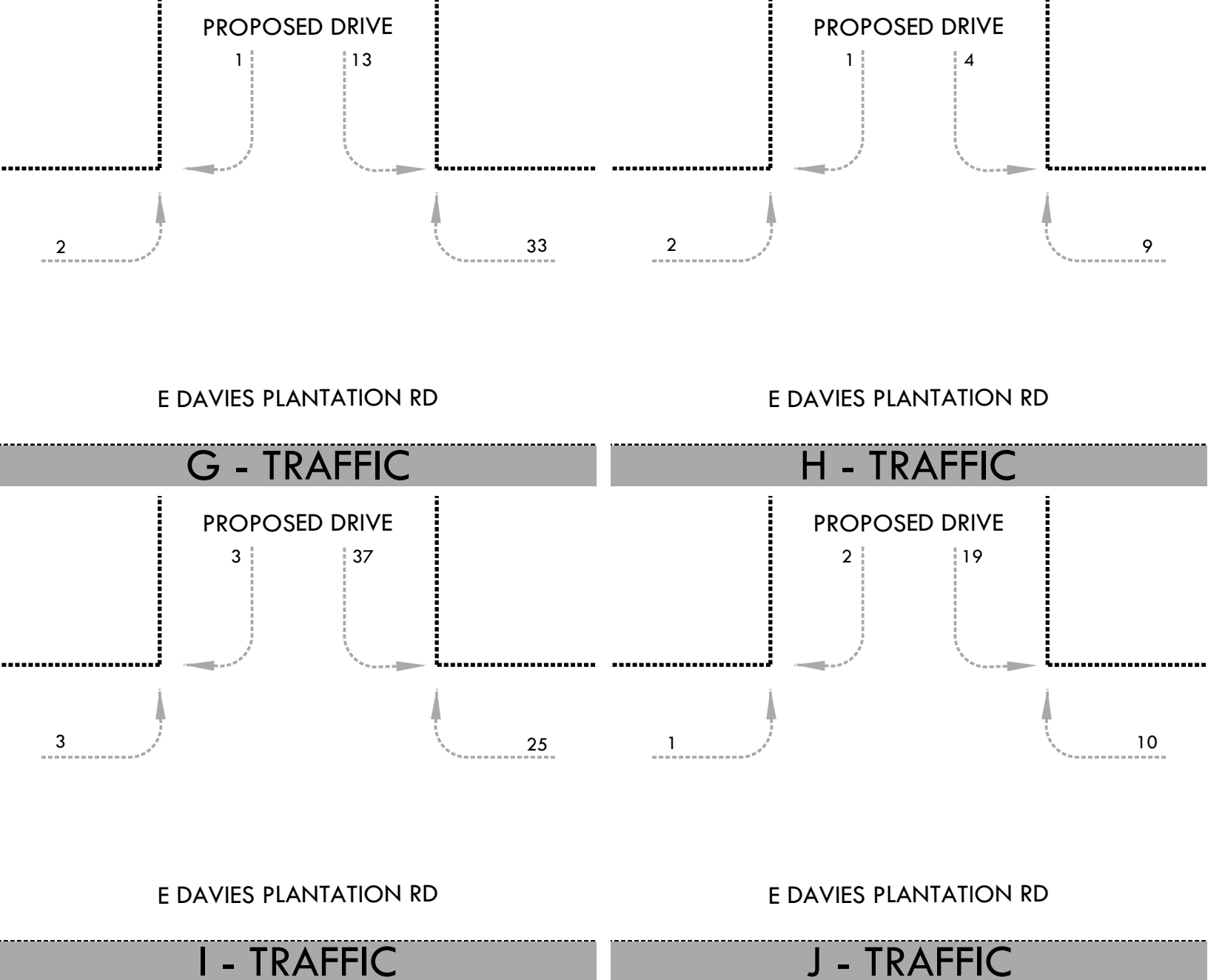


FIGURE 4 - AM PEAK SITE VOLUMES

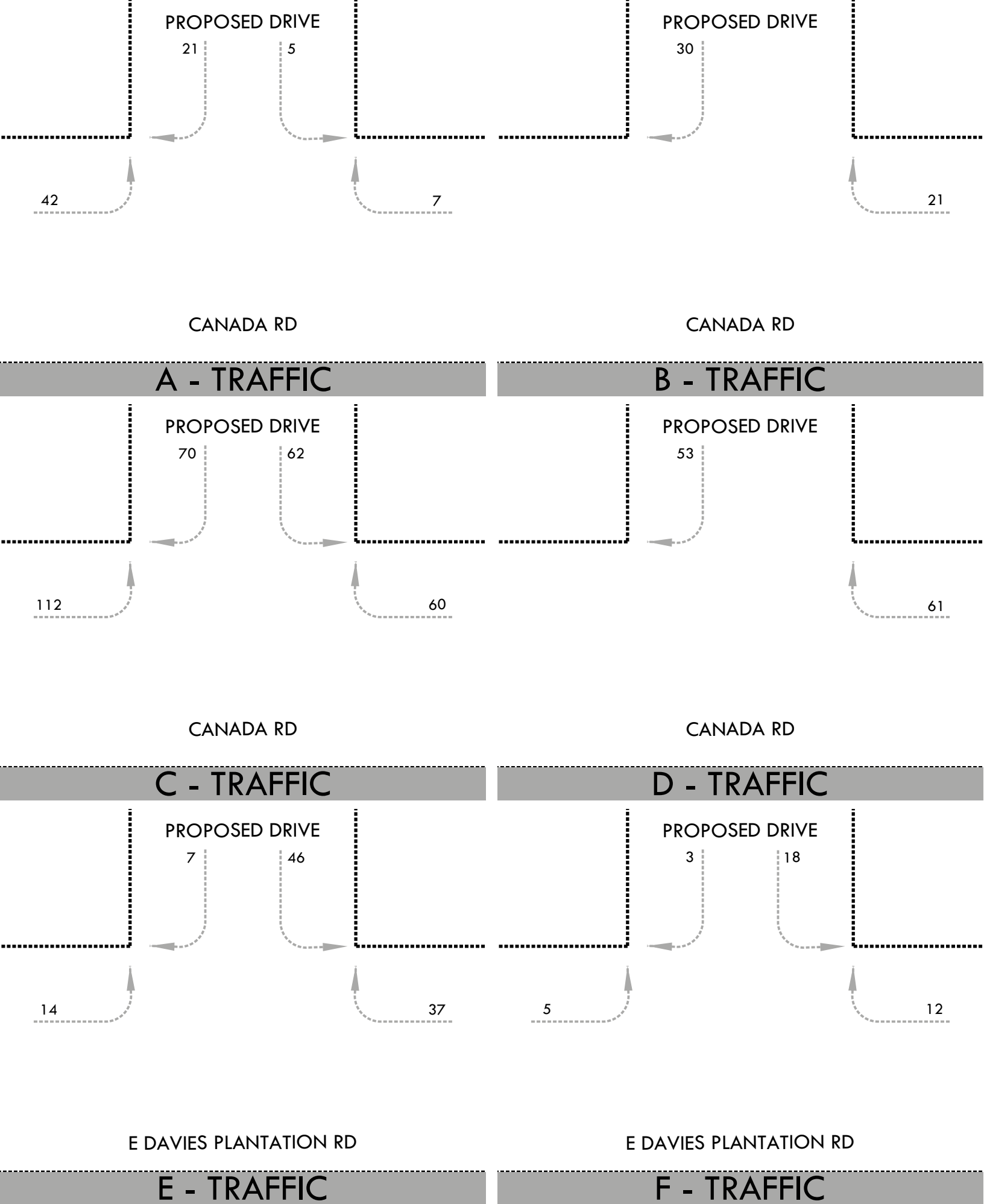


FIGURE 5 - PM PEAK SITE VOLUMES

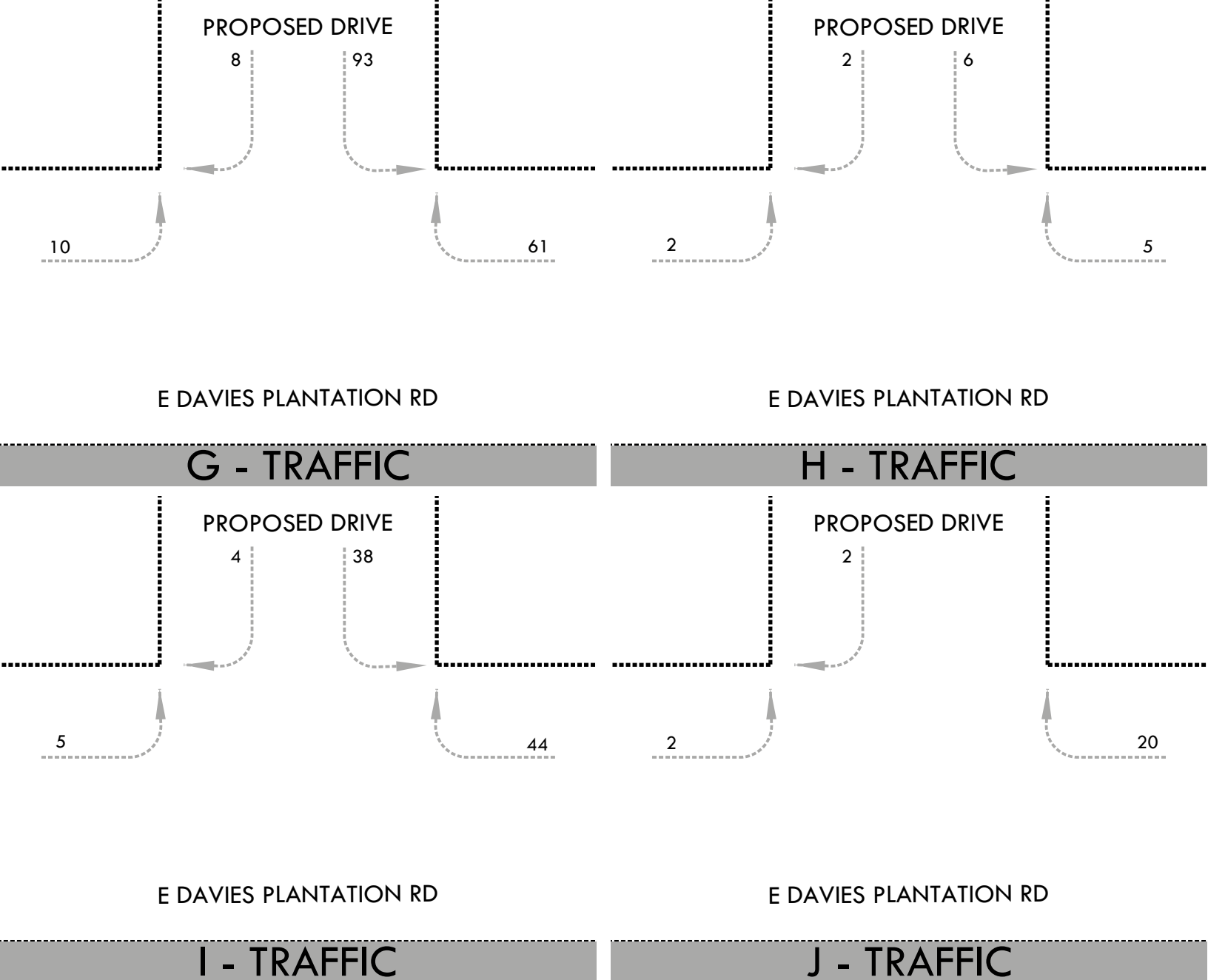


FIGURE 5 - PM PEAK SITE VOLUMES

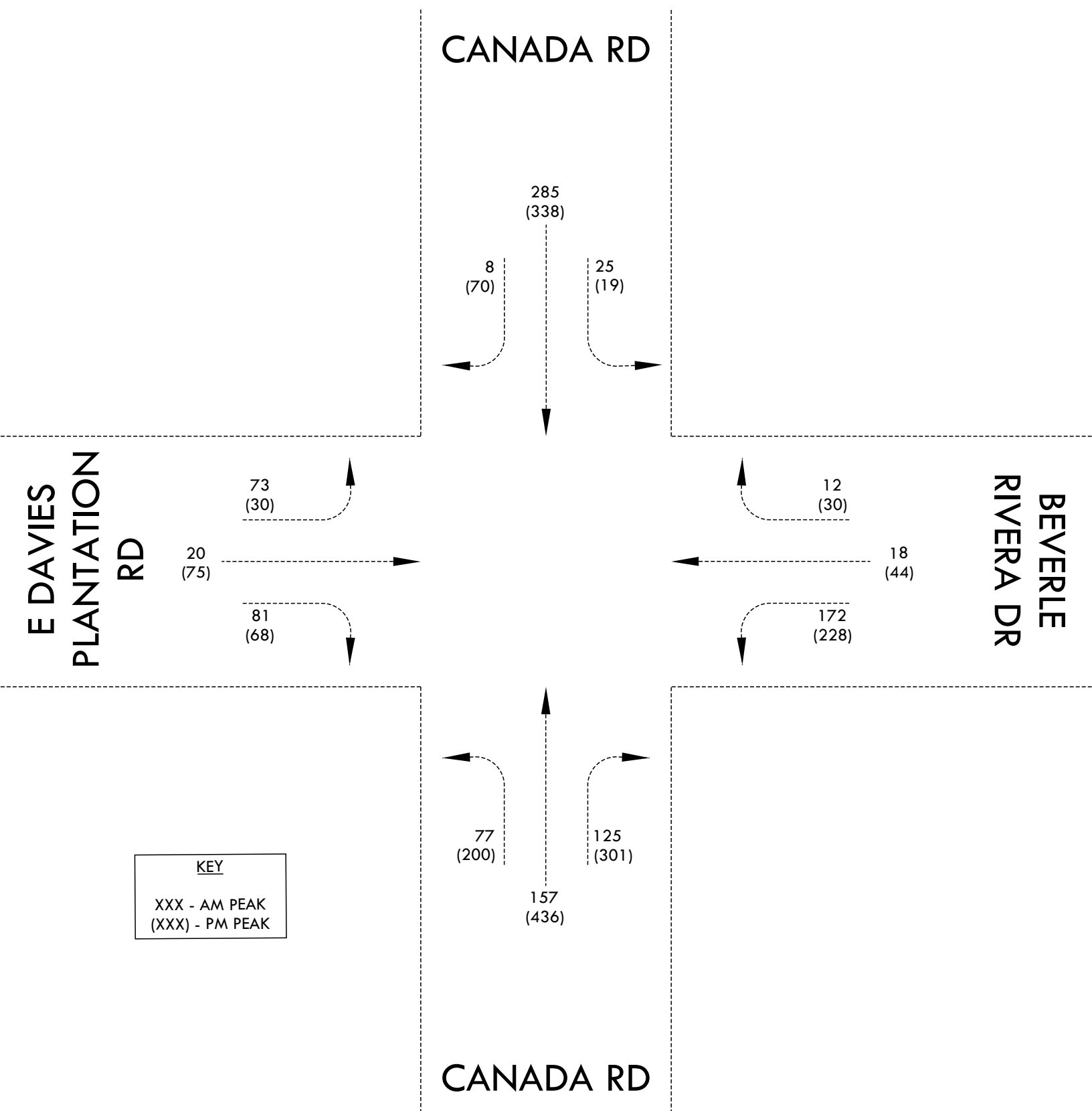


FIGURE 6
2022 TRAFFIC VOLUMES

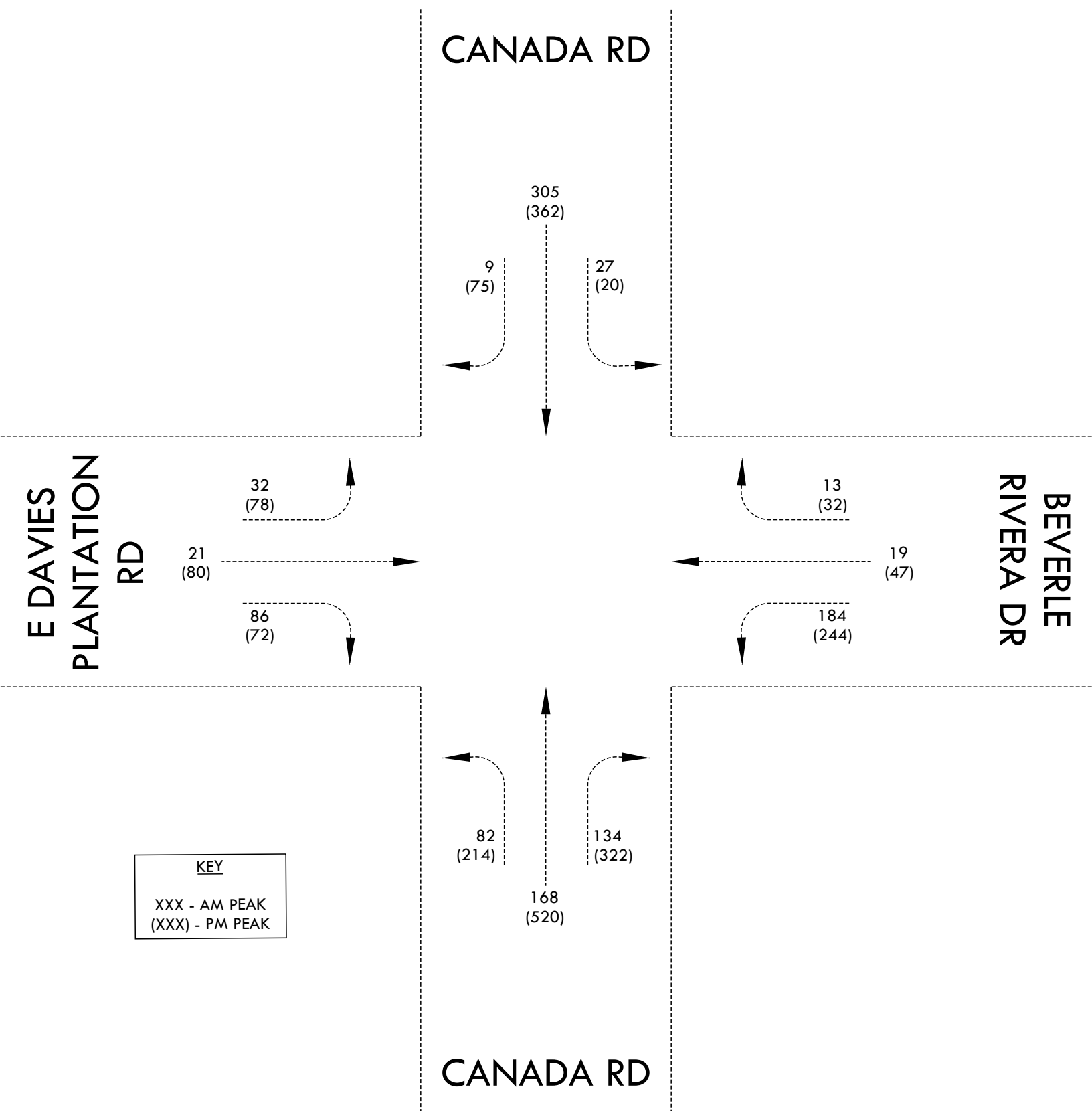


FIGURE 7
DESIGN YEAR (2029) TRAFFIC VOLUMES

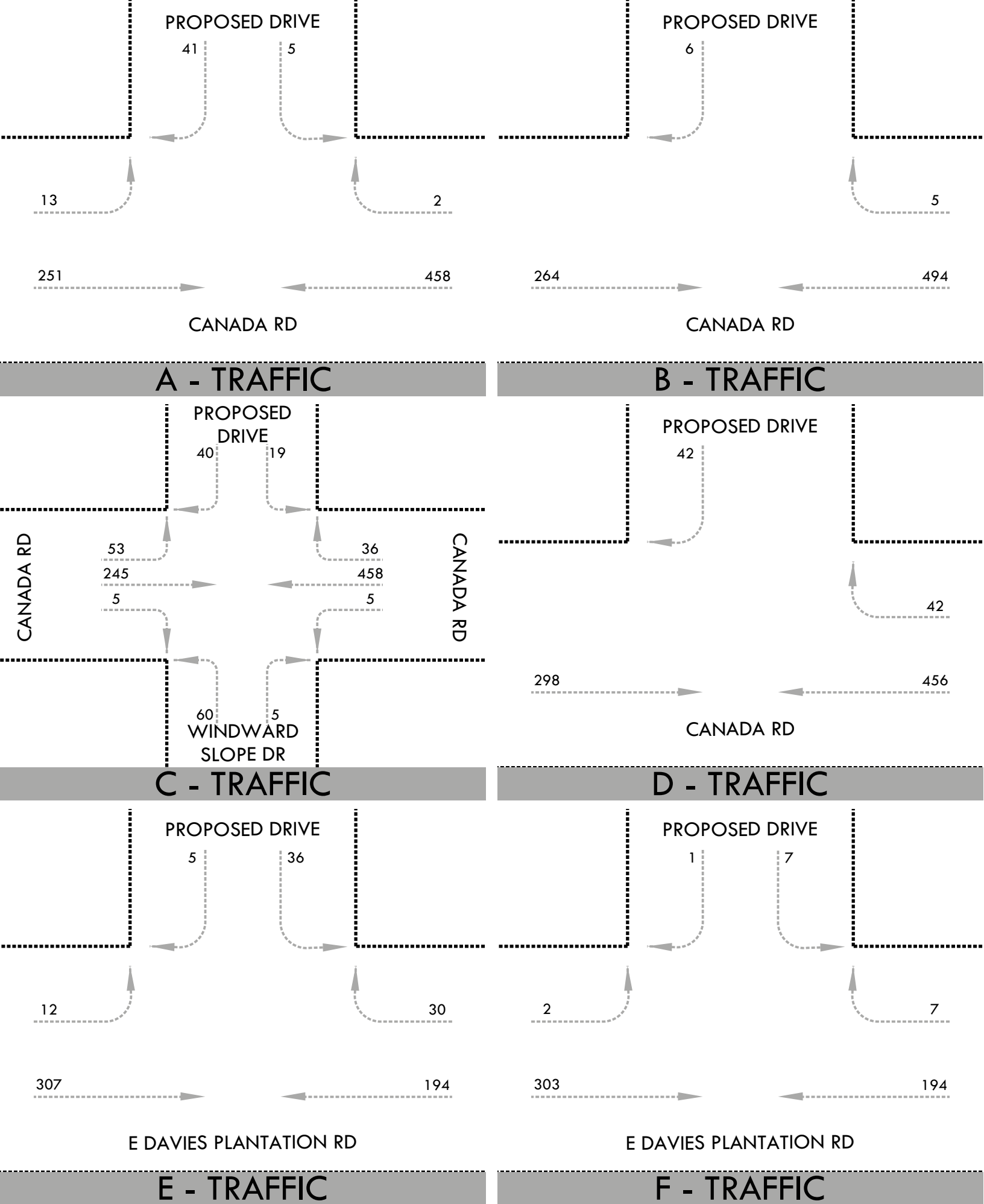


FIGURE 8 - AM PEAK 2029 ASSIGNMENTS

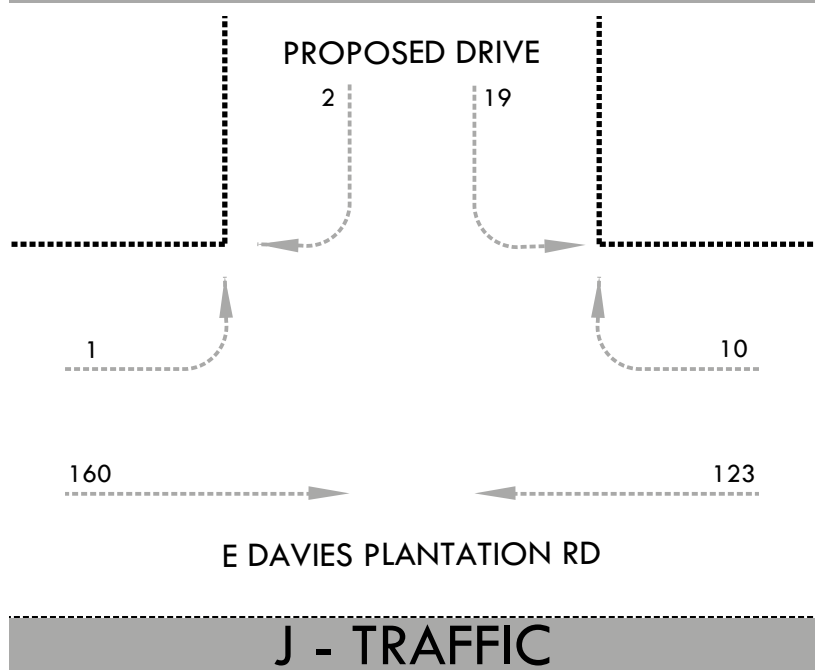
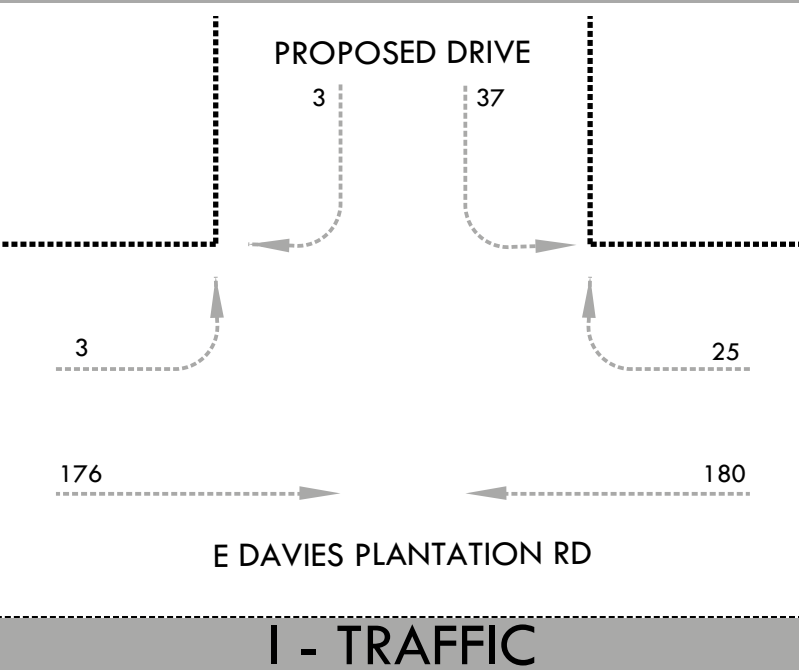
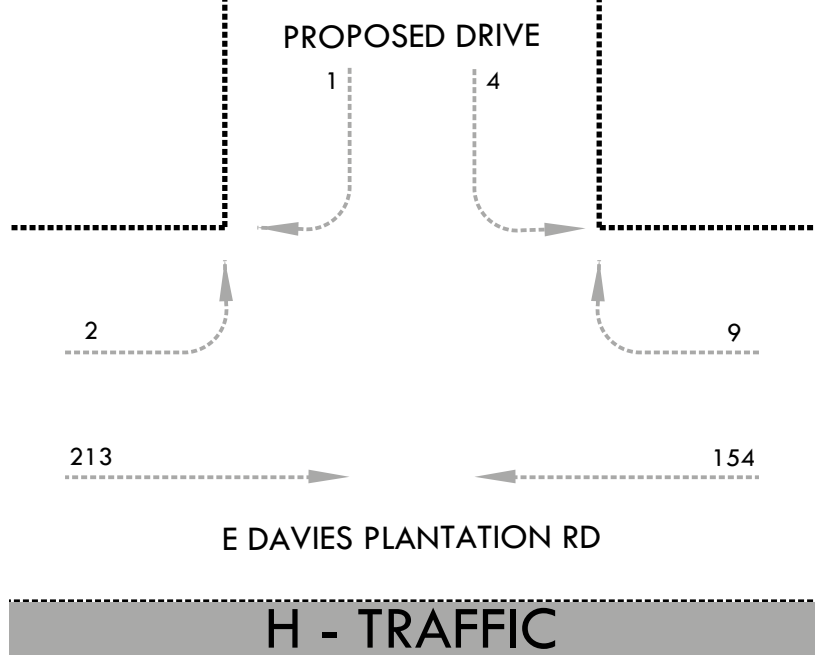
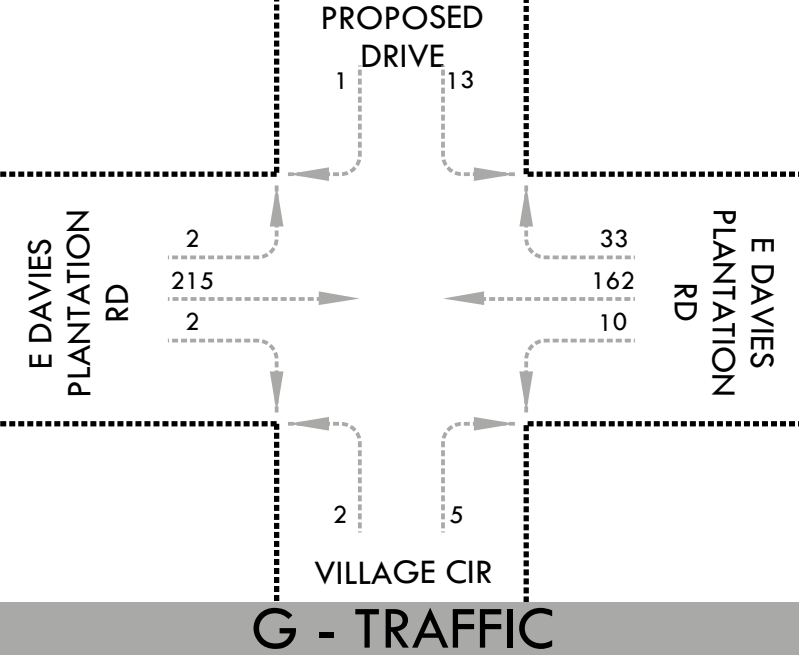


FIGURE 8 - AM PEAK 2029 ASSIGNMENTS

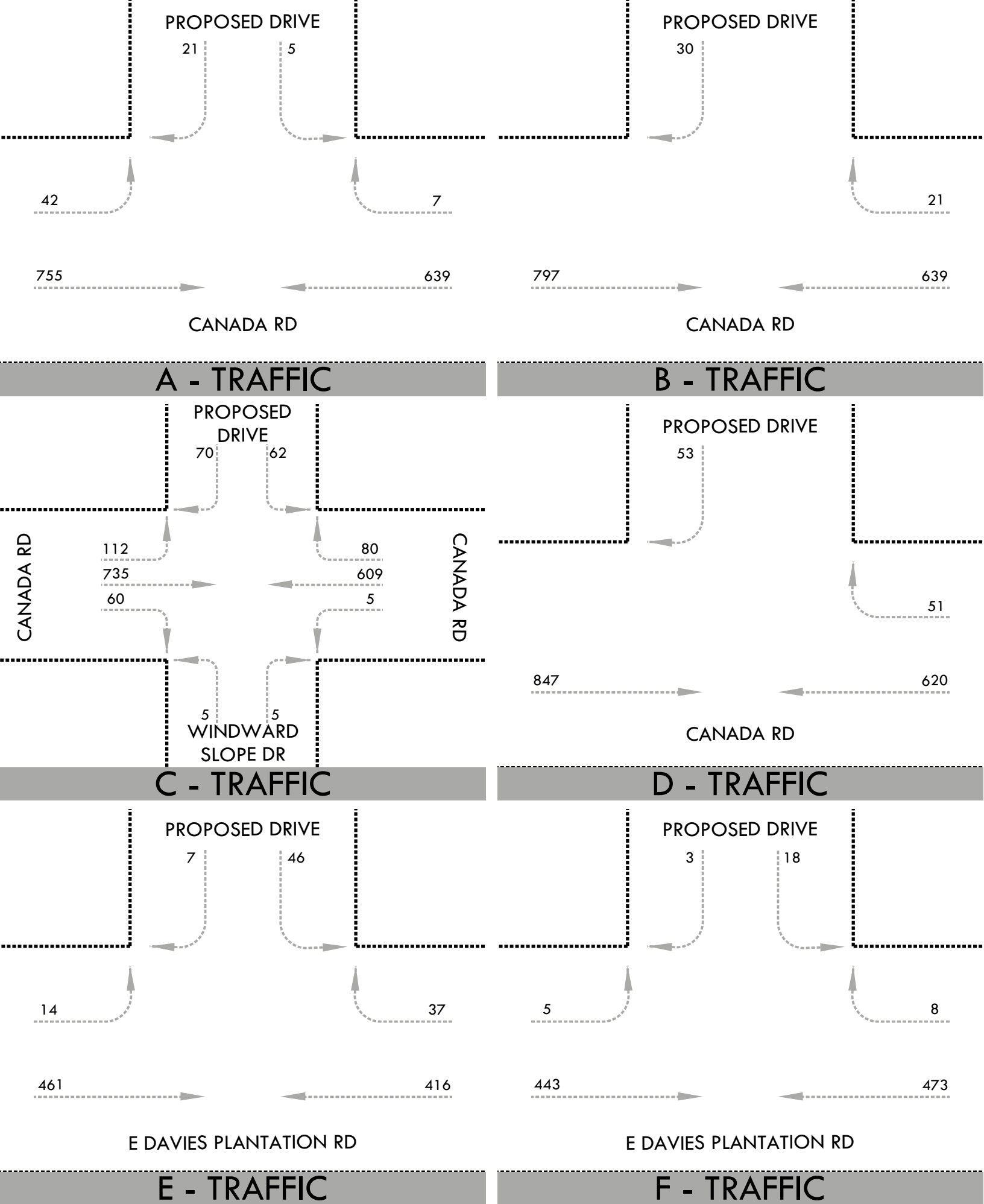


FIGURE 9 - PM PEAK 2029 ASSIGNMENTS

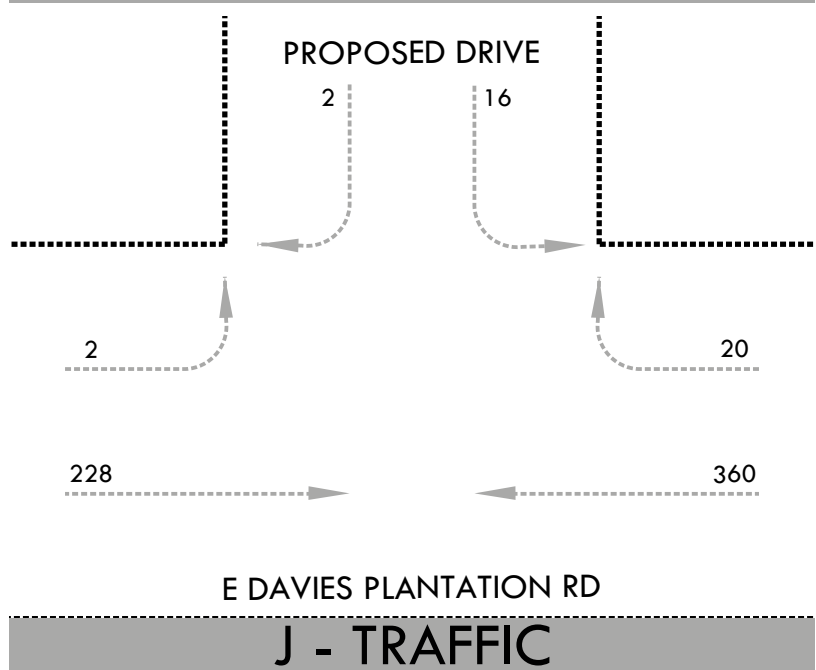
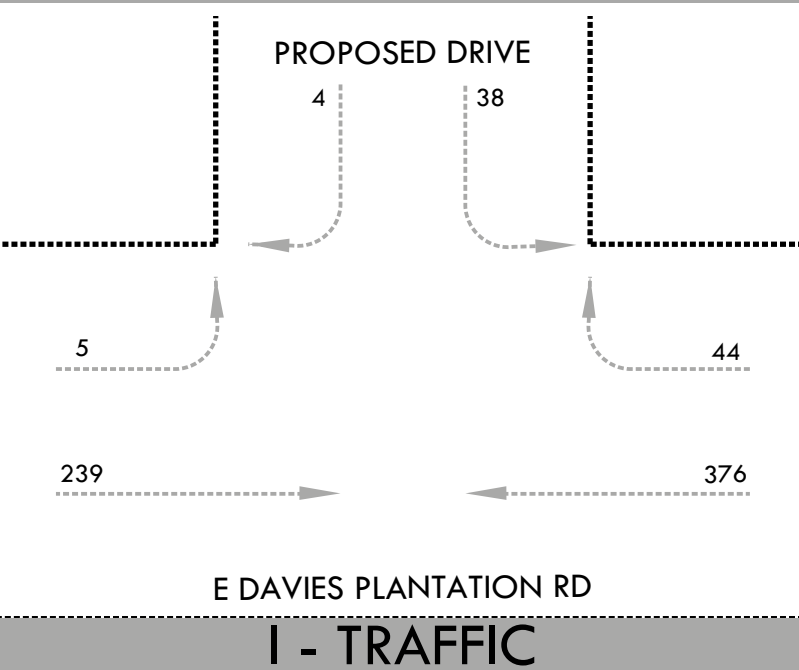
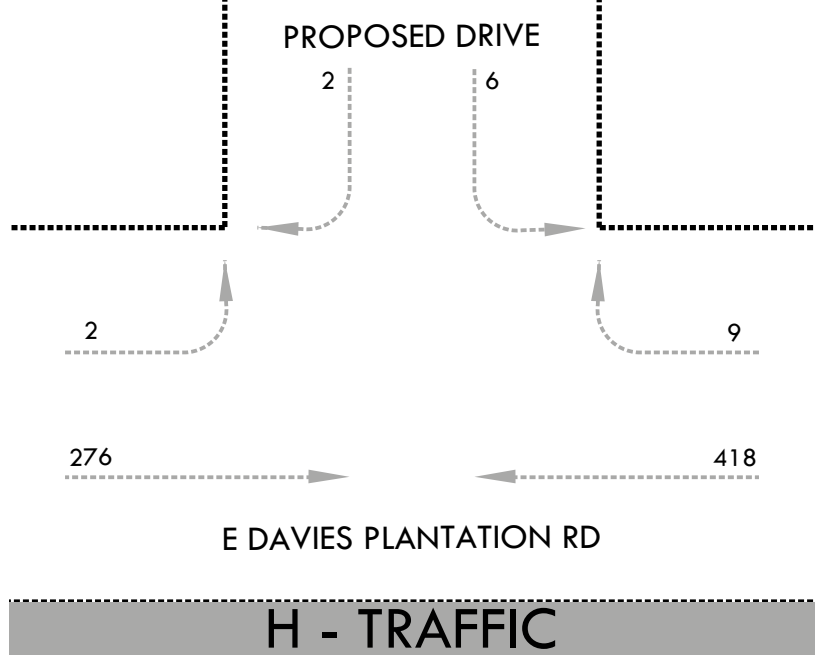
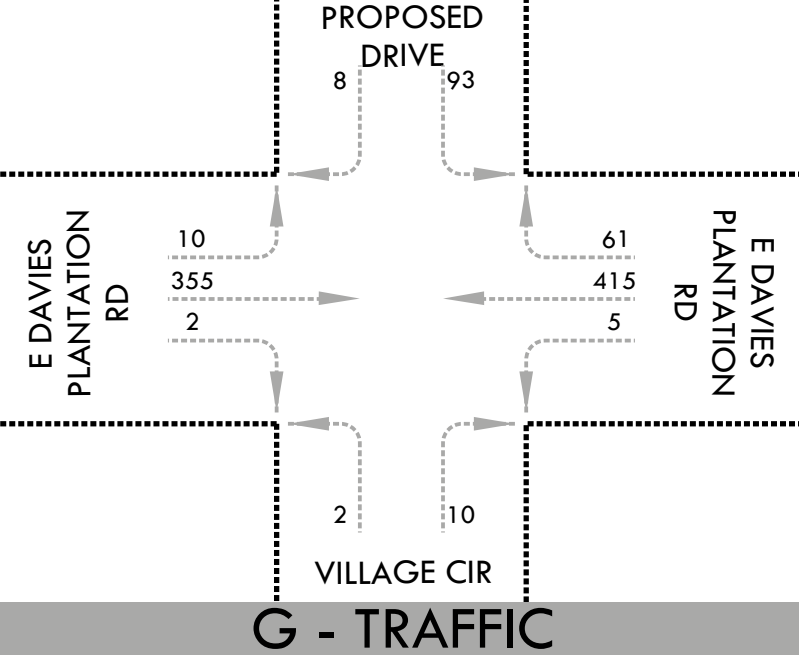


FIGURE 9 - PM PEAK 2029 ASSIGNMENTS

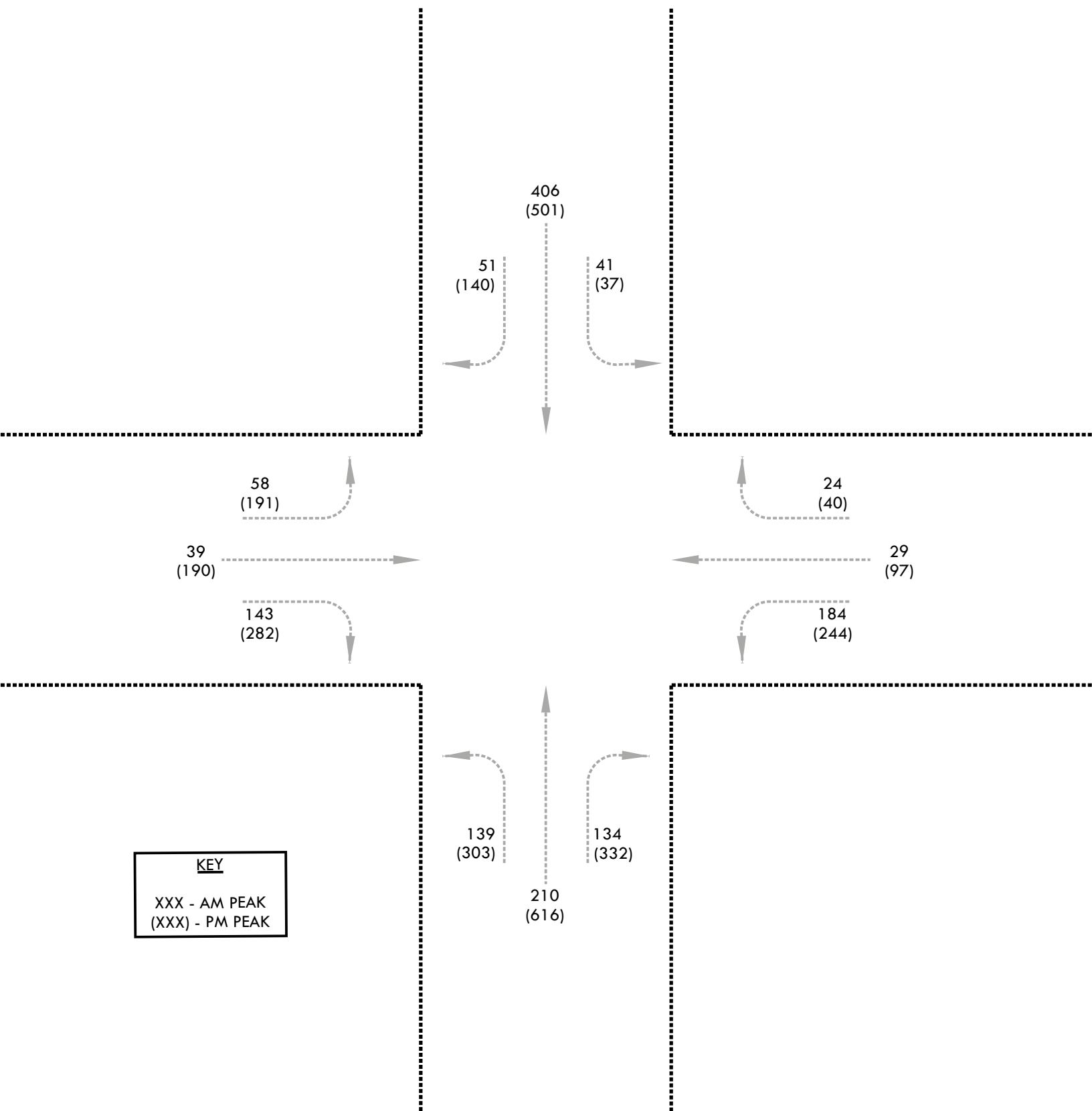


FIGURE 10
DESIGN YEAR (2029) TRAFFIC VOLUMES WITH SITE

Intersection operation is defined by “level of service”. Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS ‘A’, to very poor, represented by LOS ‘F’. For the purpose of this traffic study, LOS A-D was used to define acceptable peak hour operating conditions. Descriptions of the various levels of service are as follows:

LOS A is the highest level of service that can be achieved. Under this condition, intersection approaches appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. At signalized intersections, average delays are less than 10 seconds. At unsignalized intersections, average delays are less than 10 seconds.

LOS B represents stable operation. At signalized intersections, average vehicle delays are 10 to 20 seconds. At unsignalized intersections, average delays are 10 to 15 seconds.

LOS C still represents stable operation, but periodic backups of a few vehicles may develop behind turning vehicles. Most drivers begin to feel restricted, but not objectionably so. At signalized intersections, average vehicle delays are 20 to 35 seconds. At unsignalized intersections, average delays are 15 to 25 seconds.

LOS D represents increasing traffic restrictions as the intersection approaches instability. Delays to approaching vehicles may be substantial during short peaks within the peak period, but periodic clearance of long lines occurs, thus preventing excessive backups. At signalized intersections, average vehicle delays are 35 to 55 seconds. At unsignalized intersections, average delays are 25 to 35 seconds.

LOS E represents the capacity of the intersection. At signalized intersections, average vehicle delays are 55 to 80 seconds. At unsignalized intersections, average delays are 35 to 50 seconds.

LOS F represents jammed conditions where the intersection is over capacity and acceptable gaps for unsignalized intersections in the mainline traffic flow are minimal. At signalized intersections, average vehicle delays exceed 80 seconds. At unsignalized intersections, average delays exceed 50 seconds.

Operational Analysis – Canada Road/Davies Plantation Intersection

Table 3 contains a summary of the level of service (LOS) analyses for the intersection of Canada Road and Davies Plantation. Shown in this figure are analyses for existing volumes. Design year (2029) volumes without the site, 2029 volumes with the site, and 2029 volumes with the site and intersection improvements. The levels of service for all movements at this location are acceptable for existing traffic and for projected 2029 traffic without the site. With the additional of site traffic in the design year, the overall level of service during the PM peak is D with three individual movements at D and

TABLE 3
LEVEL OF SERVICE ANALYSIS
CANADA ROAD AND DAVIES PLANTATION

Intersection	Control	Peak Hour	Eastbound			Westbound			Northbound			Southbound			Overall
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH		
YEAR 2022	SIGNAL	AM	LOS Delay Queue(ft)	C 25.5 31	C 30.3 54		C 22 123	C 24.7 31		B 11.6 46	B 17.5 105	B 16.1 16	B 16.2 20	C 21.2 98	C 20.4
		PM	LOS Delay Queue(ft)	C 27 59	C 33.7 112		C 25.8 163	C 25.5 56		B 15.1 105	C 26.2 354	A 17.5 48	C 17.1 17	B 22.2 130	B 19.8
YEAR 2029 BACKGROUND	SIGNAL	AM	LOS Delay Queue(ft)	B 25.5 32	B 30.4 55		C 22.6 132	B 24.8 32		B 11.7 48	B 17.7 112	A 16.2 21	B 16.2 21	C 21.4 105	B 16.6
		PM	LOS Delay Queue(ft)	C 27.3 62	C 34.2 119		C 27.3 174	C 25.6 58		B 15.1 113	C 27.9 389	B 17.6 50	B 17.8 17	B 21.9 123	C 24
YEAR 2029 WITH SITE	SIGNAL	AM	LOS Delay Queue(ft)	C 26.4 49	C 31.7 79		C 24.5 133	C 25.1 43		B 13.7 75	B 18.4 138	B 16.2 21	B 16.5 28	C 22.8 149	C 22.1
		PM	LOS Delay Queue(ft)	B 19 108	E 62.3 #414		D 48.4 #215	C 24 95		D 47.9 #264	F 101.7 #592	C 20.9 57	C 23.9 28	D 39.5 #255	D 53.3
YEAR 2029 WITH SITE IMPROVED	SIGNAL	AM	LOS Delay Queue(ft)	C 26.4 49	C 31.7 79		C 24.4 132	C 25.1 43		B 13.7 75	B 16.6 65	B 16.2 21	B 16.5 28	C 22.8 149	B 21.8
		PM	LOS Delay Queue(ft)	B 19 108	E 62.3 #414		D 48.4 #215	C 24 95		D 47.9 3264	C 25 200	C 20.9 57	C 21.5 28	D 39.5 #255	D 24.6

eastbound thru and right at LOS E and northbound thru at LOS F. Level of Service D is considered acceptable for peak hour operation in urban areas. The LOS analysis with improvements is discussed under the section describing mitigation measures,

Operational Analysis – Canada Road Access Points

The site will have two access points on Canada Road. One is opposite Windward Slope to the east and the other is located further north. Both will have two-lane exits. As shown in Table 4, at both locations, for the AM and PM peak periods, the overall intersection level of service will be at LOS A. Left turns into the site will be at LOS A. At both locations, left turns from the site will be at LOS F during the PM peak. The projected queue lengths for left turning vehicles are 5 cars at Windward Slope and 2 cars at the north access point. This is not unusual for driveway access points onto arterial highways.

Operational Analysis – Davies Plantation Access Points

Table 5 contains a summary of the LOS analyses for the access points along Davies Plantation. There will be six access points, two of which are not projected to handle significant traffic volumes. Table 5 contains the LOS summary for 4 intersections – one near the convenience store, one aligning with Village Circle, a main access to the residential area, and an access to the senior living facility. All will have two lanes for exiting traffic. For all intersections the overall LOS for both the AM and PM peak periods will be at LOS A. All left turn movements at the four locations will be at LOS C or higher.

Mitigation Measures

The addition of site traffic did result in a decrease in the level of service to overall LOS D during the PM peak period at the intersection of Canada Road and Davies Plantation. It is recommended that the northbound approach on Canada Road be reconfigured to include two thru lanes. The improvement to the intersection LOS is shown in Table 3. The overall LOS will remain at LOS D for the PM Peak, but the average delay will decrease from 53.3 seconds to 24.6 seconds. Only one approach, the eastbound thru and right, is projected to operate at an LOS below D.

As mentioned previously, the traffic analysis assumed that improving Davies Plantation to a three-lane cross-section – one lane in each direction plus a center two-way left turn lane- would be adequate to support future traffic with the additional site traffic. The developer will provide an additional 9 feet of ROW dedication and will provide additional pavement width and stripping as needed to create the 3 lane roadway.

Summary

The purpose of this report was to determine the impacts of the traffic generated by the proposed Ashmont PD on the safety, capacity, and operations of the surrounding roadway network. The analysis consisted of

TABLE 4
LEVEL OF SERVICE ANALYSIS
CANADA ROAD ACCESS

Intersection	Control	Peak Hour	Eastbound			Northbound		
			LT	LT	Overall	LT	LT	Overall
CANADA ROAD & WINDWARD SLOPE	2 WAY STOP	AM	LOS Delay Queue(ft)	C 19.9 7	A 1.5 9	A 2.9		
		PM	LOS Delay Queue(ft)	F 115.6 96	A 9.8 12	A 5.7		
			Eastbound	Northbound	Overall			
			LT	LT				
CANADA ROAD & NORTH ACCESS	2 WAY STOP	AM	LOS Delay Queue(FT)	B 14.4 1	A 8.4 1	A 0.8		
		PM	LOS Delay Queue(ft)	D 27.1 2	A 9.3 4	A 0.5		
			Eastbound	Northbound	Overall			
			LT	LT				

TABLE 5
LEVEL OF SERVICE ANALYSIS
DAVIES PLANTATION ACCESS POINTS

Intersection	Control	Peak Hour	Eastbound		Southbound		Overall
			LT	LT	LT	LT	
DAVIES PLANTATION & CONVENINICE CENTER DRIVE	2 WAY STOP	AM	LOS Delay Queue(ft)	A 7.8 1	B 12 6	A 1	A 1
		PM	LOS Delay Queue(ft)	A 7.8 1	B 13.3 9	A 1	A 1
			Eastbound	Southbound	Overall		
			LT	LT	Overall		
DAVIES PLANTATION & VILLAGE DRIVE	2 WAY STOP	AM	LOS Delay Queue(FT)	A 7.7 0	B 11.9 0	A 0.8	A 0.8
		PM	LOS Delay Queue(ft)	A 8.2 1	C 19 1	A 3.2	A 3.2
			Eastbound	Southbound	Overall		
			LT	LT	Overall		
DAVIES PLANTATION & MAIN DRIVE	2 WAY STOP	AM	LOS Delay Queue(ft)	A 7.7 0	B \$12 6	A 1.2	A 1.2
		PM	LOS Delay Queue(ft)	A 8.3 0	C 16.6 10	A 1	A 1
			Eastbound	Southbound	Overall		
			LT	LT	Overall		
DAVIES PLANTATION & SENIOR DRIVE	2 WAY STOP	AM	LOS Delay Queue(ft)	A 7.5 0	B \$10 2	A 0.7	A 0.7
		PM	LOS Delay Queue(ft)	A 8.2 0	B 12.8 3	A 0.4	A 0.4
			Eastbound	Southbound	Overall		
			LT	LT	Overall		

estimating the number of trips to be generated by the proposed land uses in the site, assigning these trips to the network, determining the total traffic to be expected in the design year of 2029 by adding site traffic to existing traffic with a growth factor, and evaluating the operation at the intersection of Canada Road and Davies Plantation and at site access locations. It was assumed that improvements to Canada Road to create a five-lane cross section would be completed.

Also, it was assumed that Davies Plantation would be improved to a three-lane cross section. The developer will provide an additional 9 feet of ROW dedication and will provide additional pavement width and striping as needed to create the 3 lane roadway.

The analyses indicated that with the additional site traffic all site access intersections would operate at overall levels of service (LOS) A.

With site traffic the intersection of Canada Road and Davies Plantation would operate at LOS D with the eastbound approach at LOS E , the northbound thru movement at LOS F and four individual movements at LOS D.

To mitigate the impacts of site traffic it is recommended that the northbound approach be improved to include Two thru lanes.

APPENDIX

INTERSECTION TRAFFIC COUNT
CANADA ROAD AND DAVIES PLANTATION/BEVERLE RIVERA
9-Feb-22

Start Time	Canada Road From North			Beverle Rivera Drive From East			Canada Road From South			East Davies Plantation From West			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	2	55	2	4	4	32	27	29	20	20	5	7	
07:15 AM	4	57	4	3	6	35	29	37	19	21	4	7	
07:30 AM	7	63	3	3	3	41	31	38	21	24	4	6	
07:45 AM	5	59	2	1	5	47	26	40	22	22	4	6	
08:00 AM	5	68	2	1	5	42	28	38	20	21	5	5	
08:15 AM	9	69	3	2	6	43	32	41	21	20	5	8	
08:30 AM	3	75	1	4	4	48	34	42	19	19	6	8	
08:45 AM	8	73	2	5	3	39	31	36	17	21	4	9	
09:00 AM	7	61	2	3	5	41	27	37	22	22	4	7	
09:15 AM	2	57	3	2	3	36	28	29	20	21	5	7	
09:30 AM	6	67	2	2	2	35	21	37	19	23	4	8	
09:45 AM	2	65	2	3	3	37	19	38	22	21	5	6	
10:00 AM	10	73	2	5	6	44	45	28	18	14	5	10	
10:15 AM	5	56	3	8	1	50	19	31	20	13	1	7	
10:30 AM	6	59	4	1	3	42	26	49	22	11	4	4	
10:45 AM	3	59	4	6	4	33	27	44	18	11	1	6	
11:00 AM	7	61	6	6	3	40	28	48	22	17	3	5	
11:15 AM	9	77	6	3	9	49	37	40	23	25	1	3	
11:30 AM	7	63	7	8	5	48	32	48	16	20	8	10	
11:45 AM	8	55	2	6	4	46	37	65	21	15	9	6	
12:00 PM	5	71	3	4	1	52	42	57	22	20	7	8	
12:15 PM	5	43	5	6	5	47	36	62	20	18	9	9	
12:30 PM	10	44	5	2	6	31	37	52	18	9	12	7	
12:45 PM	8	52	4	1	5	29	35	49	20	7	10	5	
01:00 PM	9	57	5	2	3	36	40	58	17	13	7	3	
01:15 PM	5	61	7	5	1	40	39	69	18	18	3	9	
01:30 PM	3	61	9	10	9	21	31	49	22	9	9	6	
01:45 PM	2	48	2	1	4	48	26	58	18	9	4	9	
02:00 PM	5	48	1	3	3	44	43	73	29	21	5	12	
02:15 PM	5	74	4	4	4	39	52	72	29	11	6	12	
02:30 PM	8	86	4	5	3	50	56	90	30	18	8	11	
02:45 PM	7	66	2	7	5	36	59	83	26	9	11	14	
03:00 PM	17	100	8	0	5	41	51	95	34	18	12	13	
03:15 PM	14	112	12	7	6	42	85	93	32	11	14	11	
03:30 PM	6	89	11	3	9	45	84	103	30	10	21	8	
03:45 PM	9	82	9	7	15	51	75	117	30	14	18	9	
04:00 PM	15	78	4	20	30	114	56	124	28	16	15	14	
04:15 PM	19	115	3	5	16	76	62	130	41	14	13	13	
04:30 PM	23	71	6	10	29	77	69	104	30	36	12	13	
04:45 PM	10	54	6	8	21	50	70	103	43	16	24	11	
05:00 PM	16	72	3	3	8	58	78	130	46	15	27	24	
05:15 PM	23	106	3	11	8	68	68	119	47	14	11	22	
05:30 PM	21	106	7	8	7	52	85	134	64	23	13	16	
05:45 PM	12	65	7	5	11	56	60	107	34	18	17	16	
06:00 PM	14	104	2	1	9	55	82	124	36	36	11	12	
06:15 PM	13	67	5	0	8	56	53	113	27	27	12	17	
06:30 PM	13	65	1	5	3	42	47	69	29	18	11	14	
06:45 PM	12	55	1	1	2	41	55	95	22	11	9	15	

Start Time	Canada Road			Beverle Rivera Drive			Canada Road			East Davies Plantation			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
08:00 AM	5	68	2	1	5	42	28	38	20	21	5	5	
08:15 AM	9	69	3	2	6	43	32	41	21	20	5	8	
08:30 AM	3	75	1	4	4	48	34	42	19	19	6	8	
08:45 AM	8	73	2	5	3	39	31	36	17	21	4	9	
	25	285	8	12	18	172	125	157	77	81	20	30	

Start Time	Canada Road			Beverle Rivera Drive			Canada Road			East Davies Plantation			
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
04:45 PM	10	54	6	8	21	50	70	103	43	16	24	11	
05:00 PM	16	72	3	3	8	58	78	130	46	15	27	24	
05:15 PM	23	106	3	11	8	68	68	119	47	14	11	22	
05:30 PM	21	106	7	8	7	52	85	134	64	23	13	16	
	70	338	19	30	44	228	301	486	200	68	75	73	

On NHS		On HPMS	
LRS ID	7905683001	LRS Loc Pt.	0.724
SF Group	Urban	Route Type	
AF Group	17	Route	
GF Group	Shelby	Active	Yes
Class Dist Grp	17	Category	CC
Seas Class Grp			
WIM Group			
QC Group	Default		
Funct'l Class	Major Collector	Milepost	
Located On	DAVIES PLANTATION RD. E.		
Loc On Alias			
	Lakeland		
More Detail			
STATION DATA			

Directions: 2-WAY

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2020	3,879	451	12	65	3,735 (96%)	144 (4%)	
2019	3,403		11	65			
2018	3,485 ²						
2017	3,447 ²						
2016	3,426 ²						

1-5 of 10

Travel Demand Model

Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV
------------	------------	--------	--------	--------	--------	--------	--------	--------	--------

VOLUME COUNT

Date	Int	Total
Tue 12/1/2020	15	4,211
Wed 1/14/2015	15	3,587
Wed 1/22/2014	15	3,611
Tue 3/19/2013	15	3,537
Mon 2/6/2012	15	3,802
Mon 10/31/2011	15	4,013

VOLUME TREND

Annual Growth

Year	Annual Growth
2020	14%
2019	-2%
2018	1%
2017	1%
2016	-4%
2015	2%
2014	7%
2013	-11%
2012	-1%

SPEED

CLASSIFICATION

LRS ID	7900811001	LRS Loc Pt.	12.858
SF Group	Urban	Route Type	
AF Group	R4 Int/Art	Route	
GF Group	Shelby	Active	Yes
Class Dist Grp	R4 Int/Art	Category	CC
Seas Class Grp			
WIM Group			
QC Group	Default		
Fructl Class	Minor Arterial	Milepost	
Located On	CANADA RD.		
Loc On Alias			
More Detail	NEAR LAKELAND LAKE		
STATION DATA			

Directions: 2-WAY NB SB

AAADT

Year	AAADT	DHV-30	K %	D %	PA	BC	Src
2020	8,342	840	10	54	8,025 (96%)	317 (4%)	
2019	14,326		12	54			
2018	8,886 ²						
2017	8,100				7,823 (97%)	276 (3%)	
2016	9,243 ²						

1-5 of 36

Travel Demand Model

Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV
------------	------------	--------	--------	--------	--------	--------	--------	--------	--------

VOLUME TREND

Date	Int	Total	Year	Annual Growth
Wed 12/2/2020	15	9,035	2020	-42%
Wed 12/18/2019	60	14,326	2019	61%
Wed 1/14/2015	15	9,136	2018	10%
Wed 1/22/2014	15	9,206	2017	-12%
Wed 2/13/2013	15	9,430	2016	-1%
Wed 1/18/2012	15	8,974	2015	2%
Mon 1/24/2011	15	7,106	2014	2%
Tue 1/19/2010	15	6,697	2013	27%
Mon 1/12/2009	15	7,956	2012	0%
Mon 1/14/2008	15	6,989	2011	10%

Canada Road and Windward Slope
AM with Site

03/14/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	2	40	60	5	5	53	245	5	5	458	36
Future Volume (Veh/h)	19	2	40	60	5	5	53	245	5	5	458	36
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	21	2	43	65	5	5	58	266	5	5	498	39
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	784	914	268	688	932	136	537			271		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	784	914	268	688	932	136	537			271		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	92	99	94	78	98	99	94			100		
cM capacity (veh/h)	265	255	730	297	249	888	1027			1289		
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3		
Volume Total	23	43	65	10	58	177	94	5	332	205		
Volume Left	21	0	65	0	58	0	0	5	0	0		
Volume Right	0	43	0	5	0	0	5	0	0	39		
cSH	264	730	297	389	1027	1700	1700	1289	1700	1700		
Volume to Capacity	0.09	0.06	0.22	0.03	0.06	0.10	0.06	0.00	0.20	0.12		
Queue Length 95th (ft)	7	5	20	2	4	0	0	0	0	0		
Control Delay (s)	19.9	10.2	20.5	14.5	8.7	0.0	0.0	7.8	0.0	0.0		
Lane LOS	C	B	C	B	A			A				
Approach Delay (s)	13.6		19.7		1.5			0.1				
Approach LOS	B		C									
Intersection Summary												
Average Delay			2.9									
Intersection Capacity Utilization			37.1%		ICU Level of Service				A			
Analysis Period (min)			15									

Canada Road and Windward Slope
AM with Site

03/14/2022

Intersection

Int Delay, s/veh 2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕	↕	↕		↕	↕		↕	↕	
Traffic Vol, veh/h	19	2	40	60	5	5	53	245	5	5	458	36
Future Vol, veh/h	19	2	40	60	5	5	53	245	5	5	458	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	21	2	43	65	5	5	58	266	5	5	498	39

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	780	915	269	645	932	136	537	0	0	271	0	0
Stage 1	528	528	-	385	385	-	-	-	-	-	-	-
Stage 2	252	387	-	260	547	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	285	271	729	357	265	888	1027	-	-	1289	-	-
Stage 1	502	526	-	610	609	-	-	-	-	-	-	-
Stage 2	730	608	-	722	516	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	266	255	729	318	249	888	1027	-	-	1289	-	-
Mov Cap-2 Maneuver	266	255	-	318	249	-	-	-	-	-	-	-
Stage 1	474	524	-	576	575	-	-	-	-	-	-	-
Stage 2	678	574	-	673	514	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.6	18.5	1.5	0.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1027	-	-	265	729	318	389	1289	-	-
HCM Lane V/C Ratio	0.056	-	-	0.086	0.06	0.205	0.028	0.004	-	-
HCM Control Delay (s)	8.7	-	-	19.9	10.3	19.2	14.5	7.8	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.2	0.8	0.1	0	-	-

Canada Road and Windward Slope
PM with Site

03/14/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	2	70	5	2	5	112	735	60	5	609	60
Future Volume (Veh/h)	62	2	70	5	2	5	112	735	60	5	609	60
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	67	2	76	5	2	5	122	799	65	5	662	65
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1354	1812	364	1494	1812	432	727			864		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1354	1812	364	1494	1812	432	727			864		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	28	97	88	92	97	99	86			99		
cM capacity (veh/h)	93	66	633	65	66	572	872			774		
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3		
Volume Total	69	76	5	7	122	533	331	5	441	286		
Volume Left	67	0	5	0	122	0	0	5	0	0		
Volume Right	0	76	0	5	0	0	65	0	0	65		
cSH	92	633	65	180	872	1700	1700	774	1700	1700		
Volume to Capacity	0.75	0.12	0.08	0.04	0.14	0.31	0.19	0.01	0.26	0.17		
Queue Length 95th (ft)	96	10	6	3	12	0	0	0	0	0		
Control Delay (s)	115.6	11.5	64.8	25.8	9.8	0.0	0.0	9.7	0.0	0.0		
Lane LOS	F	B	F	D	A			A				
Approach Delay (s)	61.0		42.1		1.2			0.1				
Approach LOS	F		E									
Intersection Summary												
Average Delay			5.7									
Intersection Capacity Utilization			45.8%			ICU Level of Service				A		
Analysis Period (min)			15									

Intersection

Int Delay, s/veh 5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗	↖	↗		↖	↗		↖	↗	
Traffic Vol, veh/h	62	2	70	5	2	5	112	735	60	5	609	60
Future Vol, veh/h	62	2	70	5	2	5	112	735	60	5	609	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	67	2	76	5	2	5	122	799	65	5	662	65

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1350	1813	364	1418	1813	432	727	0	0	864	0	0
Stage 1	705	705	-	1076	1076	-	-	-	-	-	-	-
Stage 2	645	1108	-	342	737	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	109	78	633	97	78	572	872	-	-	774	-	-
Stage 1	393	437	-	234	294	-	-	-	-	-	-	-
Stage 2	427	284	-	646	423	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	94	67	633	74	67	572	872	-	-	774	-	-
Mov Cap-2 Maneuver	94	67	-	74	67	-	-	-	-	-	-	-
Stage 1	338	434	-	201	253	-	-	-	-	-	-	-
Stage 2	361	244	-	562	420	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	60.7	39	1.2	0.1
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	872	-	-	93	633	74	181	774	-	-
HCM Lane V/C Ratio	0.14	-	-	0.748	0.12	0.073	0.042	0.007	-	-
HCM Control Delay (s)	9.8	-	-	114.5	11.5	57.5	25.8	9.7	-	-
HCM Lane LOS	A	-	-	F	B	F	D	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	3.8	0.4	0.2	0.1	0	-	-

Canada Road and North Access
AM with Site

03/14/2022

							
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Traffic Volume (veh/h)	5	41	13	251	458	2	
Future Volume (Veh/h)	5	41	13	251	458	2	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	5	45	14	273	498	2	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	664	250	500				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	664	250	500				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	99	94	99				
cM capacity (veh/h)	389	750	1060				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	5	45	14	136	136	332	168
Volume Left	5	0	14	0	0	0	0
Volume Right	0	45	0	0	0	0	2
cSH	389	750	1060	1700	1700	1700	1700
Volume to Capacity	0.01	0.06	0.01	0.08	0.08	0.20	0.10
Queue Length 95th (ft)	1	5	1	0	0	0	0
Control Delay (s)	14.4	10.1	8.4	0.0	0.0	0.0	0.0
Lane LOS	B	B	A				
Approach Delay (s)	10.5		0.4			0.0	
Approach LOS	B						
Intersection Summary							
Average Delay			0.8				
Intersection Capacity Utilization			22.7%		ICU Level of Service		A
Analysis Period (min)			15				

Canada Road and North Access
AM with Site

03/14/2022

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	41	13	251	458	2
Future Vol, veh/h	5	41	13	251	458	2
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	0	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	45	14	273	498	2

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	664	250	500
Stage 1	499	-	-
Stage 2	165	-	-
Critical Hdwy	6.84	6.94	4.14
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	394	750	1060
Stage 1	575	-	-
Stage 2	847	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	389	750	1060
Mov Cap-2 Maneuver	389	-	-
Stage 1	568	-	-
Stage 2	847	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1060	-	389	750	-	-
HCM Lane V/C Ratio	0.013	-	0.014	0.059	-	-
HCM Control Delay (s)	8.4	-	14.4	10.1	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0	0.2	-	-

Canada Road and North Access
PM with Site

03/14/2022

							
Movement	EBL	EBR	NBL	NBT	SBT	SBR	
Lane Configurations							
Traffic Volume (veh/h)	5	21	42	755	639	7	
Future Volume (Veh/h)	5	21	42	755	639	7	
Sign Control	Stop			Free	Free		
Grade	0%			0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	5	23	46	821	695	8	
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type				None	None		
Median storage veh							
Upstream signal (ft)							
pX, platoon unblocked							
vC, conflicting volume	1202	352	703				
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	1202	352	703				
tC, single (s)	6.8	6.9	4.1				
tC, 2 stage (s)							
tF (s)	3.5	3.3	2.2				
p0 queue free %	97	96	95				
cM capacity (veh/h)	168	645	890				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	5	23	46	410	410	463	240
Volume Left	5	0	46	0	0	0	0
Volume Right	0	23	0	0	0	0	8
cSH	168	645	890	1700	1700	1700	1700
Volume to Capacity	0.03	0.04	0.05	0.24	0.24	0.27	0.14
Queue Length 95th (ft)	2	3	4	0	0	0	0
Control Delay (s)	27.1	10.8	9.3	0.0	0.0	0.0	0.0
Lane LOS	D	B	A				
Approach Delay (s)	13.7		0.5			0.0	
Approach LOS	B						
Intersection Summary							
Average Delay			0.5				
Intersection Capacity Utilization			34.6%		ICU Level of Service		A
Analysis Period (min)			15				

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	21	42	755	639	7
Future Vol, veh/h	5	21	42	755	639	7
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	0	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	23	46	821	695	8

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1202	352	703
Stage 1	699	-	-
Stage 2	503	-	-
Critical Hdwy	6.84	6.94	4.14
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	177	644	890
Stage 1	454	-	-
Stage 2	573	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	168	644	890
Mov Cap-2 Maneuver	168	-	-
Stage 1	430	-	-
Stage 2	573	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.9	0.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	890	-	168	644	-	-
HCM Lane V/C Ratio	0.051	-	0.032	0.035	-	-
HCM Control Delay (s)	9.3	-	27.1	10.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	0.1	-	-

Davies and Convenience Center
AM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	12	307	194	30	36	5
Future Vol, veh/h	12	307	194	30	36	5
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	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	334	211	33	39	5

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	244	0	0 421 228
Stage 1	-	-	- 228 -
Stage 2	-	-	- 193 -
Critical Hdwy	4.13	-	- 6.63 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.83 -
Follow-up Hdwy	2.219	-	- 3.519 3.319
Pot Cap-1 Maneuver	1321	-	- 575 811
Stage 1	-	-	- 809 -
Stage 2	-	-	- 821 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1321	-	- 569 811
Mov Cap-2 Maneuver	-	-	- 569 -
Stage 1	-	-	- 801 -
Stage 2	-	-	- 821 -

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1321	-	-	-	569	811
HCM Lane V/C Ratio	0.01	-	-	-	0.069	0.007
HCM Control Delay (s)	7.8	-	-	-	11.8	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Davies and Convenience Center
AM Peak with Site

03/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	12	307	194	30	36	5
Future Volume (Veh/h)	12	307	194	30	36	5
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	334	211	33	39	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	244				420	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	244				420	228
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				93	99
cM capacity (veh/h)	1319				556	775
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	SB 1	SB 2
Volume Total	13	167	167	244	39	5
Volume Left	13	0	0	0	39	0
Volume Right	0	0	0	33	0	5
cSH	1319	1700	1700	1700	556	775
Volume to Capacity	0.01	0.10	0.10	0.14	0.07	0.01
Queue Length 95th (ft)	1	0	0	0	6	0
Control Delay (s)	7.8	0.0	0.0	0.0	12.0	9.7
Lane LOS	A				B	A
Approach Delay (s)	0.3			0.0	11.7	
Approach LOS					B	
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			22.0%		ICU Level of Service	A
Analysis Period (min)			15			

Davies and Convenience Center
PM Peak with Site

03/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	14	461	194	37	46	7
Future Volume (Veh/h)	14	461	194	37	46	7
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	501	211	40	50	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	251				512	231
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	251				512	231
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				90	99
cM capacity (veh/h)	1311				486	771
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	SB 1	SB 2
Volume Total	15	250	250	251	50	8
Volume Left	15	0	0	0	50	0
Volume Right	0	0	0	40	0	8
cSH	1311	1700	1700	1700	486	771
Volume to Capacity	0.01	0.15	0.15	0.15	0.10	0.01
Queue Length 95th (ft)	1	0	0	0	9	1
Control Delay (s)	7.8	0.0	0.0	0.0	13.3	9.7
Lane LOS	A				B	A
Approach Delay (s)	0.2			0.0	12.8	
Approach LOS					B	
Intersection Summary						
Average Delay			1.0			
Intersection Capacity Utilization			22.7%		ICU Level of Service	A
Analysis Period (min)			15			

Davies and Convenience Center
PM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	14	461	194	37	46	7
Future Vol, veh/h	14	461	194	37	46	7
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	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	501	211	40	50	8

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	251	0	0 512 231
Stage 1	-	-	- 231 -
Stage 2	-	-	- 281 -
Critical Hdwy	4.13	-	- 6.63 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.83 -
Follow-up Hdwy	2.219	-	- 3.519 3.319
Pot Cap-1 Maneuver	1313	-	- 506 807
Stage 1	-	-	- 807 -
Stage 2	-	-	- 742 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1313	-	- 500 807
Mov Cap-2 Maneuver	-	-	- 500 -
Stage 1	-	-	- 798 -
Stage 2	-	-	- 742 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1313	-	-	-	500	807
HCM Lane V/C Ratio	0.012	-	-	-	0.1	0.009
HCM Control Delay (s)	7.8	-	-	-	13	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0

Davies and Village Drive
AM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Vol, veh/h	2	215	2	10	162	33	2	2	5	13	1	1
Future Vol, veh/h	2	215	2	10	162	33	2	2	5	13	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	234	2	11	176	36	2	2	5	14	1	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	212	0	0	236	0	0	456	473	235	459	456	194
Stage 1	-	-	-	-	-	-	239	239	-	216	216	-
Stage 2	-	-	-	-	-	-	217	234	-	243	240	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1358	-	-	1331	-	-	515	490	804	512	501	847
Stage 1	-	-	-	-	-	-	764	708	-	786	724	-
Stage 2	-	-	-	-	-	-	785	711	-	761	707	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1358	-	-	1331	-	-	510	486	804	503	496	847
Mov Cap-2 Maneuver	-	-	-	-	-	-	510	486	-	503	496	-
Stage 1	-	-	-	-	-	-	763	707	-	785	718	-
Stage 2	-	-	-	-	-	-	776	705	-	752	706	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	0.1	0.4	10.8	12.2
HCM LOS			B	B

Minor Lane/Major Mvmt	NELn1	NELn2	EBL	EBT	EBR	WBL	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	510	677	1358	-	-	1331	-	-	503	626
HCM Lane V/C Ratio	0.004	0.011	0.002	-	-	0.008	-	-	0.028	0.003
HCM Control Delay (s)	12.1	10.4	7.7	-	-	7.7	-	-	12.4	10.8
HCM Lane LOS	B	B	A	-	-	A	-	-	B	B
HCM 95th %tile Q(veh)	0	0	0	-	-	0	-	-	0.1	0

Davies and Village Drive
AM Peak with Site

03/14/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	2	215	2	10	162	33	2	2	5	13	1	1
Future Volume (Veh/h)	2	215	2	10	162	33	2	2	5	13	1	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	234	2	11	176	36	2	2	5	14	1	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	212			236			438	473	235	460	456	194
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	212			236			438	473	235	460	456	194
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	99	97	100	100
cM capacity (veh/h)	1358			1331			523	485	804	503	496	847
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NE 1	NE 2	SW 1	SW 2				
Volume Total	2	236	11	212	2	7	14	2				
Volume Left	2	0	11	0	2	0	14	0				
Volume Right	0	2	0	36	0	5	0	1				
cSH	1358	1700	1331	1700	523	677	503	626				
Volume to Capacity	0.00	0.14	0.01	0.12	0.00	0.01	0.03	0.00				
Queue Length 95th (ft)	0	0	1	0	0	1	2	0				
Control Delay (s)	7.7	0.0	7.7	0.0	11.9	10.4	12.4	10.8				
Lane LOS	A		A		B	B	B	B				
Approach Delay (s)	0.1		0.4		10.7		12.2					
Approach LOS					B		B					
Intersection Summary												
Average Delay			0.8									
Intersection Capacity Utilization			25.5%		ICU Level of Service				A			
Analysis Period (min)			15									

Davies and Village Drive
PM Peak with Site

03/14/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	355	2	5	415	61	2	2	5	93	1	8
Future Volume (Veh/h)	10	355	2	5	415	61	2	2	5	93	1	8
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	386	2	5	451	66	2	2	5	101	1	9
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	517			388			880	936	387	908	904	484
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	517			388			880	936	387	908	904	484
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			99	99	99	60	100	98
cM capacity (veh/h)	1049			1170			260	261	661	250	273	583
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NE 1	NE 2	SW 1	SW 2				
Volume Total	11	388	5	517	2	7	101	10				
Volume Left	11	0	5	0	2	0	101	0				
Volume Right	0	2	0	66	0	5	0	9				
cSH	1049	1700	1170	1700	260	460	250	523				
Volume to Capacity	0.01	0.23	0.00	0.30	0.01	0.02	0.40	0.02				
Queue Length 95th (ft)	1	0	0	0	1	1	46	1				
Control Delay (s)	8.5	0.0	8.1	0.0	19.0	12.9	28.8	12.0				
Lane LOS	A		A		C	B	D	B				
Approach Delay (s)	0.2		0.1		14.3		27.3					
Approach LOS					B		D					
Intersection Summary												
Average Delay			3.2									
Intersection Capacity Utilization			44.0%		ICU Level of Service				A			
Analysis Period (min)			15									

Davies and Village Drive
PM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↰	↱		↰	↱		↰	↱		↰	↱	
Traffic Vol, veh/h	10	355	2	5	415	61	2	2	5	93	1	8
Future Vol, veh/h	10	355	2	5	415	61	2	2	5	93	1	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	386	2	5	451	66	2	2	5	101	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	517	0	0	388	0	0	908	936	387	907	904	484
Stage 1	-	-	-	-	-	-	409	409	-	494	494	-
Stage 2	-	-	-	-	-	-	499	527	-	413	410	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1049	-	-	1170	-	-	256	265	661	257	277	583
Stage 1	-	-	-	-	-	-	619	596	-	557	546	-
Stage 2	-	-	-	-	-	-	554	528	-	616	595	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1049	-	-	1170	-	-	249	261	661	250	273	583
Mov Cap-2 Maneuver	-	-	-	-	-	-	249	261	-	250	273	-
Stage 1	-	-	-	-	-	-	613	590	-	551	544	-
Stage 2	-	-	-	-	-	-	542	526	-	602	589	-

Approach	EB	WB	NE	SW
HCM Control Delay, s	0.2	0.1	14.5	27.3
HCM LOS			B	D

Minor Lane/Major Mvmt	NELn1	NELn2	EBL	EBT	EBR	WBL	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	249	460	1049	-	-	1170	-	-	250	518
HCM Lane V/C Ratio	0.009	0.017	0.01	-	-	0.005	-	-	0.404	0.019
HCM Control Delay (s)	19.6	13	8.5	-	-	8.1	-	-	28.8	12.1
HCM Lane LOS	C	B	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	0	0.1	0	-	-	0	-	-	1.9	0.1

Davies and Main Drive
AM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↖	↑			↗					↖		↗
Traffic Vol, veh/h	3	176	0	0	180	25	0	0	0	37	0	3
Future Vol, veh/h	3	176	0	0	180	25	0	0	0	37	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	191	0	0	196	27	0	0	0	40	0	3

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	223	0	-	-	-	0	407	-	210
Stage 1	-	-	-	-	-	-	210	-	-
Stage 2	-	-	-	-	-	-	197	-	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	-	3.318
Pot Cap-1 Maneuver	1346	-	0	0	-	-	600	0	830
Stage 1	-	-	0	0	-	-	825	0	-
Stage 2	-	-	0	0	-	-	836	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1346	-	-	-	-	-	599	0	830
Mov Cap-2 Maneuver	-	-	-	-	-	-	599	0	-
Stage 1	-	-	-	-	-	-	823	0	-
Stage 2	-	-	-	-	-	-	836	0	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1346	-	-	-	599	830
HCM Lane V/C Ratio	0.002	-	-	-	0.067	0.004
HCM Control Delay (s)	7.7	-	-	-	11.4	9.4
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Davies and Main Drive
AM Peak with Site

03/14/2022

	→	→	↶	↶	←	←	↷	↷	↷	↷	↷	↷
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↶	↶			↶					↶		↶
Traffic Volume (veh/h)	3	176	0	0	180	25	0	0	0	37	0	3
Future Volume (Veh/h)	3	176	0	0	180	25	0	0	0	37	0	3
Sign Control		Free			Free							
Grade		0%			0%			Stop			Stop	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	191	0	0	196	27	0	0	0	40	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	223			191			410	420	191	406	406	210
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	223			191			410	420	191	406	406	210
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	93	100	100
cM capacity (veh/h)	1346			1383			549	523	851	554	533	831
Direction, Lane #	EB 1	EB 2	WB 1	SW 1	SW 2							
Volume Total	3	191	223	40	3							
Volume Left	3	0	0	40	0							
Volume Right	0	0	27	0	3							
cSH	1346	1700	1700	554	831							
Volume to Capacity	0.00	0.11	0.13	0.07	0.00							
Queue Length 95th (ft)	0	0	0	6	0							
Control Delay (s)	7.7	0.0	0.0	12.0	9.3							
Lane LOS	A			B	A							
Approach Delay (s)	0.1		0.0	11.8								
Approach LOS				B								
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			21.0%			ICU Level of Service				A		
Analysis Period (min)			15									

Davies and Main Drive
PM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↖	↑			↗					↖		↗
Traffic Vol, veh/h	5	239	0	0	376	44	0	0	0	38	0	4
Future Vol, veh/h	5	239	0	0	376	44	0	0	0	38	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	-	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	260	0	0	409	48	0	0	0	41	0	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	457	0	703
Stage 1	-	-	433
Stage 2	-	-	270
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1104	0	404
Stage 1	-	0	654
Stage 2	-	0	775
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1104	-	402
Mov Cap-2 Maneuver	-	-	402
Stage 1	-	-	651
Stage 2	-	-	775

Approach	EB	WB	SW
HCM Control Delay, s	0.2	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1104	-	-	-	402	623
HCM Lane V/C Ratio	0.005	-	-	-	0.103	0.007
HCM Control Delay (s)	8.3	-	-	-	15	10.8
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0

Davies and Main Drive
PM Peak with Site

03/14/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	239	0	0	376	44	0	0	0	38	0	4
Future Volume (Veh/h)	5	239	0	0	376	44	0	0	0	38	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	260	0	0	409	48	0	0	0	41	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX; platoon unblocked												
vC, conflicting volume	457			260			707	727	260	703	703	433
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	457			260			707	727	260	703	703	433
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	88	100	99
cM capacity (veh/h)	1104			1304			347	349	779	351	360	623
Direction, Lane #	EB 1	EB 2	WB 1	SW 1	SW 2							
Volume Total	5	260	457	41	4							
Volume Left	5	0	0	41	0							
Volume Right	0	0	48	0	4							
cSH	1104	1700	1700	351	623							
Volume to Capacity	0.00	0.15	0.27	0.12	0.01							
Queue Length 95th (ft)	0	0	0	10	0							
Control Delay (s)	8.3	0.0	0.0	16.6	10.8							
Lane LOS	A			C	B							
Approach Delay (s)	0.2		0.0	16.1								
Approach LOS				C								
Intersection Summary												
Average Delay			1.0									
Intersection Capacity Utilization			32.5%			ICU Level of Service				A		
Analysis Period (min)			15									

Davies and Senior Drive
AM Peak with Site

03/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	160	123	10	19	2
Future Volume (Veh/h)	2	160	123	10	19	2
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	174	134	11	21	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	145				230	140
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	145				230	140
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				97	100
cM capacity (veh/h)	1435				736	883
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	SB 1	SB 2
Volume Total	2	87	87	145	21	2
Volume Left	2	0	0	0	21	0
Volume Right	0	0	0	11	0	2
cSH	1435	1700	1700	1700	736	883
Volume to Capacity	0.00	0.05	0.05	0.09	0.03	0.00
Queue Length 95th (ft)	0	0	0	0	2	0
Control Delay (s)	7.5	0.0	0.0	0.0	10.0	9.1
Lane LOS	A				B	A
Approach Delay (s)	0.1			0.0	10.0	
Approach LOS					A	
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			17.1%		ICU Level of Service	A
Analysis Period (min)			15			

Davies and Senior Drive
AM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	2	160	123	10	19	2
Future Vol, veh/h	2	160	123	10	19	2
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	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	174	134	11	21	2

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	145	0	0 231 140
Stage 1	-	-	- 140 -
Stage 2	-	-	- 91 -
Critical Hdwy	4.13	-	- 6.63 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.83 -
Follow-up Hdwy	2.219	-	- 3.519 3.319
Pot Cap-1 Maneuver	1436	-	- 747 907
Stage 1	-	-	- 886 -
Stage 2	-	-	- 923 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1436	-	- 746 907
Mov Cap-2 Maneuver	-	-	- 746 -
Stage 1	-	-	- 885 -
Stage 2	-	-	- 923 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1436	-	-	-	746	907
HCM Lane V/C Ratio	0.002	-	-	-	0.028	0.002
HCM Control Delay (s)	7.5	-	-	-	10	9
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	40	0	265	0	329	0	208	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1774	0	1774	0
Q Serve Time (g_s), s	1.3	0.0	8.6	0.0	10.8	0.0	6.5	0.0
Cycle Q Clear Time (g_c), s	1.3	0.0	8.6	0.0	10.8	0.0	6.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	545	0	883	0	745	0	1235	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	18.6	0.0	21.9	0.0	20.6	0.0	21.9	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	3.3	0.0	16.7	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	3.3	0.0	1.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	201	0	298	0	389	0	554	0
V/C Ratio (X)	0.20	0.00	0.89	0.00	0.85	0.00	0.38	0.00
Avail Cap (c_a), veh/h	201	0	298	0	389	0	554	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	22.5	0.0	20.4	0.0	19.7	0.0	17.1	0.0
Incr Delay (d2), s/veh	2.2	0.0	30.0	0.0	19.8	0.0	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
Control Delay (d), s/veh	24.7	0.0	50.4	0.0	39.5	0.0	19.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	4.1	0.0	5.2	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	2.5	0.0	2.1	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.8	0.0	6.6	0.0	7.3	0.0	3.5	0.0
%ile Storage Ratio (RQ%)	0.18	0.00	1.24	0.00	1.51	0.00	0.72	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T			
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	670	0	0	0	352	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	25.7	0.0	0.0	0.0	15.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	25.7	0.0	0.0	0.0	15.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	598	0	0	0	411	0	0
V/C Ratio (X)	0.00	1.12	0.00	0.00	0.00	0.85	0.00	0.00
Avail Cap (c_a), veh/h	0	598	0	0	0	411	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	27.1	0.0	0.0	0.0	29.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	74.2	0.0	0.0	0.0	19.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	101.4	0.0	0.0	0.0	49.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	13.1	0.0	0.0	0.0	7.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	12.3	0.0	0.0	0.0	2.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	25.5	0.0	0.0	0.0	9.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	5.22	0.00	0.00	0.00	2.34	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	17.9	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	361	0	514	0	345	0	148
Grp Sat Flow (s), veh/h/ln	0	1583	0	1685	0	1729	0	1772
Q Serve Time (g_s), s	0.0	16.0	0.0	21.9	0.0	15.3	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	16.0	0.0	21.9	0.0	15.3	0.0	5.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.60	0.00	0.44	0.00	0.29
Lane Grp Cap (c), veh/h	0	509	0	461	0	402	0	487
V/C Ratio (X)	0.00	0.71	0.00	1.11	0.00	0.86	0.00	0.30
Avail Cap (c_a), veh/h	0	509	0	461	0	402	0	487
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.9	0.0	29.1	0.0	29.4	0.0	22.9
Incr Delay (d2), s/veh	0.0	8.1	0.0	76.9	0.0	20.7	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.0	0.0	105.9	0.0	50.1	0.0	24.5
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	10.1	0.0	7.3	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	9.8	0.0	2.3	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.1	0.0	20.0	0.0	9.6	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	1.66	0.00	4.12	0.00	2.32	0.00	0.53
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	62.9
HCM 2010 LOS	E

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	190	282	244	97	40	303	616	332	37	501	140
Future Volume (veh/h)	191	190	282	244	97	40	303	616	332	37	501	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	208	207	307	265	105	43	329	670	361	40	545	152
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	554	186	276	298	346	142	389	598	509	201	636	177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.27	0.27	0.12	0.28	0.28	0.15	0.32	0.32	0.06	0.23	0.23
Ln Grp Delay, s/veh	19.0	0.0	105.9	50.4	0.0	24.5	39.5	101.4	32.0	24.7	49.1	50.1
Ln Grp LOS	B		F	D		C	D	F	C	C	D	D
Approach Vol, veh/h		722			413			1360			737	
Approach Delay, s/veh		80.9			41.1			68.0			48.3	
Approach LOS		F			D			E			D	
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0				
Phs Duration (G+Y+Rc), s	9.5	30.2	13.9	26.4	16.6	23.1	13.8	26.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green (Gmax), s	5.0	25.7	9.4	21.9	12.1	18.6	9.3	22.0				
Max Allow Headway (MAH), s	3.8	4.8	3.8	5.4	3.8	5.3	3.8	5.3				
Max Q Clear (g_c+1), s	3.3	27.7	10.6	23.9	12.8	17.3	8.5	7.3				
Green Ext Time (g_e), s	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.6				
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	1774		1774		1774		1774					
Through Movement Data												
Assigned Mvmt		2		4		6		8				
Mvmt Sat Flow, veh/h		1863		679		2737		1257				
Right-Turn Movement Data												
Assigned Mvmt		12		14		16		18				
Mvmt Sat Flow, veh/h		1583		1006		761		515				
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				
Lane Assignment	(Pr/Pm)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)					

Canada Road and Davies Plantation
2029 with Site

PM Peak
03/22/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	E		D	C		D	F	A	B	D	
Approach Delay		46.3			38.5			64.2			37.4	
Approach LOS		D			D			E			D	
Queue Length 50th (ft)	62	214		83	48		110	~392	0	11	165	
Queue Length 95th (ft)	108	#414		#215	95		#264	#592	57	28	#255	
Internal Link Dist (ft)		89			101			79			60	
Turn Bay Length (ft)												
Base Capacity (vph)	534	530		301	507		360	598	753	203	827	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.39	0.97		0.88	0.29		0.91	1.12	0.48	0.20	0.84	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Pretimed

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 50.8

Intersection LOS: D

Intersection Capacity Utilization 92.4%

ICU Level of Service F

Analysis Period (min) 15

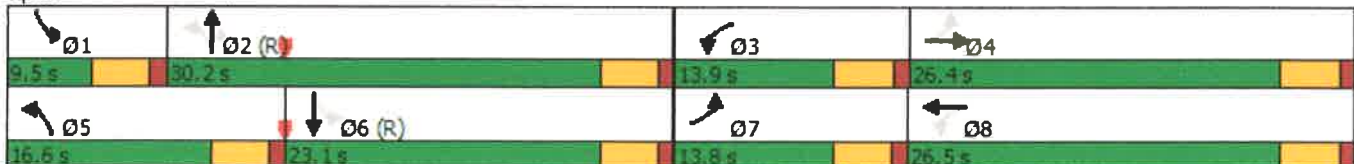
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1:



Canada Road and Davies Plantation
2029 with Site

PM Peak
03/22/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Future Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.91		1.00	0.96		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1696		1770	1782		1770	1863	1583	1770	3423	
Flt Permitted	0.64	1.00		0.18	1.00		0.17	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	1201	1696		339	1782		323	1863	1583	401	3423	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	208	207	307	265	105	43	329	670	361	40	545	152
RTOR Reduction (vph)	0	67	0	0	18	0	0	0	245	0	31	0
Lane Group Flow (vph)	208	447	0	265	130	0	329	670	116	40	666	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	31.2	21.9		31.4	22.0		35.2	25.7	25.7	23.6	18.6	
Effective Green, g (s)	31.2	21.9		31.4	22.0		35.2	25.7	25.7	23.6	18.6	
Actuated g/C Ratio	0.39	0.27		0.39	0.28		0.44	0.32	0.32	0.30	0.23	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Grp Cap (vph)	534	464		301	490		360	598	508	203	795	
v/s Ratio Prot	0.05	c0.26		c0.10	0.07		c0.14	c0.36		0.01	0.19	
v/s Ratio Perm	0.11			0.24			0.26		0.07	0.05		
v/c Ratio	0.39	0.96		0.88	0.27		0.91	1.12	0.23	0.20	0.84	
Uniform Delay, d1	16.9	28.7		19.7	22.7		18.0	27.1	19.9	21.7	29.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	33.7		28.7	1.3		29.9	74.5	1.0	2.2	10.2	
Delay (s)	19.0	62.3		48.4	24.0		47.9	101.7	20.9	23.9	39.5	
Level of Service	B	E		D	C		D	F	C	C	D	
Approach Delay (s)		49.8			39.7			67.3			38.6	
Approach LOS		D			D			E			D	
Intersection Summary												
HCM 2000 Control Delay			53.3				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			1.04									
Actuated Cycle Length (s)			80.0				Sum of lost time (s)		18.0			
Intersection Capacity Utilization			92.4%				ICU Level of Service		F			
Analysis Period (min)			15									
c Critical Lane Group												

Canada Road and Davies Plantation
2029 with Site

Northbound Improvements

AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	39	143	184	29	24	139	210	134	41	406	51
Future Volume (vph)	58	39	143	184	29	24	139	210	134	41	406	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Fr _t		0.882			0.933				0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1643	0	1770	1738	0	1770	3539	1583	1770	3479	0
Flt Permitted	0.719			0.385			0.343			0.610		
Satd. Flow (perm)	1339	1643	0	717	1738	0	639	3539	1583	1136	3479	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		155			26				182		17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			181			159			140	
Travel Time (s)		3.8			4.1			3.6			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	63	42	155	200	32	26	151	228	146	45	441	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	197	0	200	58	0	151	228	146	45	496	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	10.0	22.5		16.0	28.5		15.2	42.0	42.0	9.5	36.3	
Total Split (%)	11.1%	25.0%		17.8%	31.7%		16.9%	46.7%	46.7%	10.6%	40.3%	
Maximum Green (s)	5.5	18.0		11.5	24.0		10.7	37.5	37.5	5.0	31.8	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
v/c Ratio	0.17	0.44		0.49	0.12		0.32	0.15	0.19	0.09	0.40	
Control Delay	20.0	12.2		24.3	16.8		13.3	16.7	2.0	11.7	22.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	20.0	12.2		24.3	16.8		13.3	16.7	2.0	11.7	22.3	

Canada Road and Davies Plantation
2029 with Site

Northbound Improvements

AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B		C	B		B	B	A	B	C	
Approach Delay		14.1			22.6			11.6			21.4	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	23	20		78	14		42	41	0	12	106	
Queue Length 95th (ft)	49	79		132	43		75	65	21	28	149	
Internal Link Dist (ft)		89			101			79			60	
Turn Bay Length (ft)												
Base Capacity (vph)	375	452		405	482		468	1474	765	499	1240	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.17	0.44		0.49	0.12		0.32	0.15	0.19	0.09	0.40	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Pretimed

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 17.2

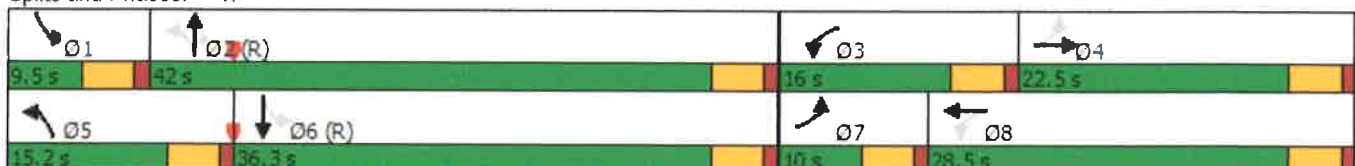
Intersection LOS: B

Intersection Capacity Utilization 56.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1:



Canada Road and Davies Plantation
2029 with Site

Northbound Improvements

AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	39	143	184	29	24	139	210	134	41	406	51
Future Volume (vph)	58	39	143	184	29	24	139	210	134	41	406	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.88		1.00	0.93		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1643		1770	1737		1770	3539	1583	1770	3480	
Flt Permitted	0.72	1.00		0.38	1.00		0.34	1.00	1.00	0.61	1.00	
Satd. Flow (perm)	1340	1643		716	1737		638	3539	1583	1135	3480	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	63	42	155	200	32	26	151	228	146	45	441	55
RTOR Reduction (vph)	0	124	0	0	19	0	0	0	85	0	11	0
Lane Group Flow (vph)	63	73	0	200	39	0	151	228	61	45	485	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Effective Green, g (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Grp Cap (vph)	376	328		405	463		467	1474	659	499	1229	
v/s Ratio Prot	0.01	0.04		c0.06	0.02		c0.04	0.06		0.01	c0.14	
v/s Ratio Perm	0.03			c0.12			0.13		0.04	0.03		
v/c Ratio	0.17	0.22		0.49	0.08		0.32	0.15	0.09	0.09	0.39	
Uniform Delay, d1	25.5	30.1		20.2	24.8		11.9	16.4	15.9	16.1	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	1.6		4.3	0.4		1.8	0.2	0.3	0.4	1.0	
Delay (s)	26.4	31.7		24.4	25.1		13.7	16.6	16.2	16.5	22.8	
Level of Service	C	C		C	C		B	B	B	B	C	
Approach Delay (s)		30.4			24.6			15.7			22.3	
Approach LOS		C			C			B			C	
Intersection Summary												
HCM 2000 Control Delay		21.8			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		90.0			Sum of lost time (s)			18.0				
Intersection Capacity Utilization		56.6%			ICU Level of Service			B				
Analysis Period (min)		15										
c Critical Lane Group												

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	39	143	184	29	24	139	210	134	41	406	51
Future Volume (veh/h)	58	39	143	184	29	24	139	210	134	41	406	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	63	42	155	200	32	26	151	228	146	45	441	55
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	456	70	257	413	254	206	514	1475	660	533	1120	139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.20	0.20	0.13	0.27	0.27	0.12	0.42	0.42	0.06	0.35	0.35
Ln Grp Delay, s/veh	26.1	0.0	40.7	26.4	0.0	25.6	14.9	16.6	17.6	16.4	23.7	23.7
Ln Grp LOS	C		D	C		C	B	B	B	B	C	C
Approach Vol, veh/h		260			258			525			541	
Approach Delay, s/veh		37.2			26.2			16.4			23.1	
Approach LOS		D			C			B			C	
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0				
Phs Duration (G+Y+Rc), s	9.5	42.0	16.0	22.5	15.2	36.3	10.0	28.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green (Gmax), s	5.0	37.5	11.5	18.0	10.7	31.8	5.5	24.0				
Max Allow Headway (MAH), s	3.8	4.8	3.8	5.5	3.8	5.3	3.8	5.4				
Max Q Clear (g _{c+I1}), s	3.4	7.3	9.4	11.9	6.2	11.5	4.4	4.3				
Green Ext Time (g _e), s	0.0	2.0	0.1	0.5	0.1	2.9	0.0	0.2				
Prob of Phs Call (p _c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Prob of Max Out (p _x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	1774		1774		1774		1774					
Through Movement Data												
Assigned Mvmt		2		4		6		8				
Mvmt Sat Flow, veh/h		3539		349		3170		952				
Right-Turn Movement Data												
Assigned Mvmt		12		14		16		18				
Mvmt Sat Flow, veh/h		1583		1287		393		774				
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				
Lane Assignment	(Pr/Pm)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)					

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	45	0	200	0	151	0	63	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1774	0	1774	0
Q Serve Time (g_s), s	1.4	0.0	7.4	0.0	4.2	0.0	2.4	0.0
Cycle Q Clear Time (g_c), s	1.4	0.0	7.4	0.0	4.2	0.0	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1004	0	1181	0	898	0	1340	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	31.8	0.0	20.0	0.0	33.8	0.0	18.0	0.0
Perm LT Serve Time (g_u), s	31.8	0.0	8.1	0.0	22.3	0.0	18.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.4	0.0	2.3	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	533	0	413	0	514	0	456	0
V/C Ratio (X)	0.08	0.00	0.48	0.00	0.29	0.00	0.14	0.00
Avail Cap (c_a), veh/h	533	0	413	0	514	0	456	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	16.1	0.0	22.4	0.0	13.4	0.0	25.5	0.0
Incr Delay (d2), s/veh	0.3	0.0	4.0	0.0	1.5	0.0	0.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.4	0.0	26.4	0.0	14.9	0.0	26.1	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	3.6	0.0	2.1	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.2	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.7	0.0	4.0	0.0	2.3	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.84	0.00	0.46	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T			
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	228	0	0	0	245	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	3.6	0.0	0.0	0.0	9.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.6	0.0	0.0	0.0	9.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1475	0	0	0	625	0	0
V/C Ratio (X)	0.00	0.15	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	1475	0	0	0	625	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.4	0.0	0.0	0.0	21.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	1.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	16.6	0.0	0.0	0.0	23.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.0	0.0	4.6	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.8	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.37	0.00	0.00	0.00	1.18	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	146	0	197	0	251	0	58
Grp Sat Flow (s), veh/h/ln	0	1583	0	1636	0	1793	0	1726
Q Serve Time (g_s), s	0.0	5.3	0.0	9.9	0.0	9.5	0.0	2.3
Cycle Q Clear Time (g_c), s	0.0	5.3	0.0	9.9	0.0	9.5	0.0	2.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.79	0.00	0.22	0.00	0.45
Lane Grp Cap (c), veh/h	0	660	0	327	0	634	0	460
V/C Ratio (X)	0.00	0.22	0.00	0.60	0.00	0.40	0.00	0.13
Avail Cap (c_a), veh/h	0	660	0	327	0	634	0	460
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	32.7	0.0	21.9	0.0	25.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	8.0	0.0	1.8	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.6	0.0	40.7	0.0	23.7	0.0	25.6
1st-Term Q (Q1), veh/ln	0.0	2.3	0.0	4.4	0.0	4.7	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.7	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	5.2	0.0	5.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	1.06	0.00	1.21	0.00	0.24
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay	23.7							
HCM 2010 LOS	C							

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	190	282	244	97	40	303	616	332	37	501	140
Future Volume (veh/h)	191	190	282	244	97	40	303	616	332	37	501	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	208	207	307	265	105	43	329	670	361	40	545	152
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	554	186	276	298	346	142	389	1137	509	290	636	177
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.12	0.27	0.27	0.12	0.28	0.28	0.15	0.32	0.32	0.06	0.23	0.23
Ln Grp Delay, s/veh	19.0	0.0	105.9	50.4	0.0	24.5	39.5	25.0	32.0	21.5	49.1	50.1
Ln Grp LOS	B		F	D		C	D	C	C	C	D	D
Approach Vol, veh/h		722			413			1360			737	
Approach Delay, s/veh		80.9			41.1			30.4			48.1	
Approach LOS		F			D			C			D	
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0				
Phs Duration (G+Y+Rc), s	9.5	30.2	13.9	26.4	16.6	23.1	13.8	26.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green (Gmax), s	5.0	25.7	9.4	21.9	12.1	18.6	9.3	22.0				
Max Allow Headway (MAH), s	3.8	4.8	3.8	5.4	3.8	5.3	3.8	5.3				
Max Q Clear (g_c+I1), s	3.3	18.0	10.6	23.9	12.8	17.3	8.5	7.3				
Green Ext Time (g_e), s	0.0	3.5	0.0	0.0	0.0	0.6	0.1	0.6				
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	1774		1774		1774		1774					
Through Movement Data												
Assigned Mvmt		2		4		6		8				
Mvmt Sat Flow, veh/h		3539		679		2737		1257				
Right-Turn Movement Data												
Assigned Mvmt		12		14		16		18				
Mvmt Sat Flow, veh/h		1583		1006		761		515				
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				
Lane Assignment	(Pr/Pm)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)					

Canada Road and Davies Plantation
2029 with Site PM peak

With Improvement

03/22/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	E		D	C		D	C	A	B	D	
Approach Delay		46.3			38.5			26.0			37.4	
Approach LOS		D			D			C			D	
Queue Length 50th (ft)	62	214		83	48		110	145	0	11	165	
Queue Length 95th (ft)	108	#414		#215	95		#264	200	57	28	#255	
Internal Link Dist (ft)		89			101			79			60	
Turn Bay Length (ft)												
Base Capacity (vph)	534	530		301	507		360	1136	753	267	827	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.39	0.97		0.88	0.29		0.91	0.59	0.48	0.15	0.84	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Pretimed

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 34.7

Intersection LOS: C

Intersection Capacity Utilization 90.9%

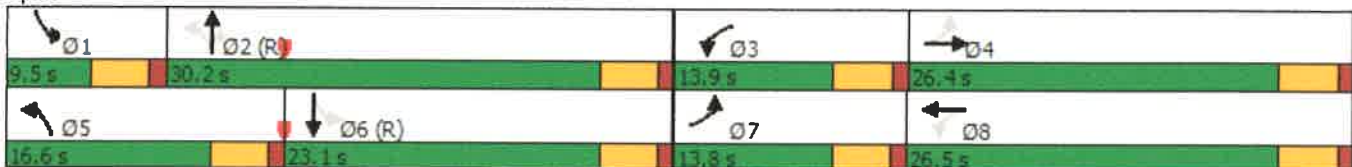
ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1:



Canada Road and Davies Plantation
2029 with Site PM peak

With Improvement

03/22/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Future Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt		0.910			0.956				0.850		0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1695	0	1770	1781	0	1770	3539	1583	1770	3422	0
Flt Permitted	0.645			0.182			0.173			0.362		
Satd. Flow (perm)	1201	1695	0	339	1781	0	322	3539	1583	674	3422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		92			25				361		41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			181			159			140	
Travel Time (s)		3.8			4.1			3.6			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	208	207	307	265	105	43	329	670	361	40	545	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	514	0	265	148	0	329	670	361	40	697	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	13.8	26.4		13.9	26.5		16.6	30.2	30.2	9.5	23.1	
Total Split (%)	17.3%	33.0%		17.4%	33.1%		20.8%	37.8%	37.8%	11.9%	28.9%	
Maximum Green (s)	9.3	21.9		9.4	22.0		12.1	25.7	25.7	5.0	18.6	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	31.2	21.9		31.4	22.0		35.2	25.7	25.7	23.6	18.6	
Actuated g/C Ratio	0.39	0.27		0.39	0.28		0.44	0.32	0.32	0.30	0.23	
v/c Ratio	0.39	0.97		0.88	0.29		0.91	0.59	0.48	0.15	0.84	
Control Delay	16.6	58.3		48.4	20.8		50.5	25.3	4.8	15.2	38.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	16.6	58.3		48.4	20.8		50.5	25.3	4.8	15.2	38.7	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	40	0	265	0	329	0	208	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1774	0	1774	0
Q Serve Time (g_s), s	1.3	0.0	8.6	0.0	10.8	0.0	6.5	0.0
Cycle Q Clear Time (g_c), s	1.3	0.0	8.6	0.0	10.8	0.0	6.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	545	0	883	0	745	0	1235	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	18.6	0.0	21.9	0.0	20.6	0.0	21.9	0.0
Perm LT Serve Time (g_u), s	13.0	0.0	0.0	0.0	3.3	0.0	16.7	0.0
Perm LT Q Serve Time (g_ps), s	0.4	0.0	0.0	0.0	3.3	0.0	1.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	290	0	298	0	389	0	554	0
V/C Ratio (X)	0.14	0.00	0.89	0.00	0.85	0.00	0.38	0.00
Avail Cap (c_a), veh/h	290	0	298	0	389	0	554	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	20.5	0.0	20.4	0.0	19.7	0.0	17.1	0.0
Incr Delay (d2), s/veh	1.0	0.0	30.0	0.0	19.8	0.0	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
Control Delay (d), s/veh	21.5	0.0	50.4	0.0	39.5	0.0	19.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	4.1	0.0	5.2	0.0	3.2	0.0
2nd-Term Q (Q2), veh/ln	0.1	0.0	2.5	0.0	2.1	0.0	0.3	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.7	0.0	6.6	0.0	7.3	0.0	3.5	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	1.38	0.00	1.51	0.00	0.72	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T			
Lanes in Grp	0	2	0	0	0	1	0	0
Grp Vol (v), veh/h	0	670	0	0	0	352	0	0
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	12.7	0.0	0.0	0.0	15.2	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.7	0.0	0.0	0.0	15.2	0.0	0.0
Lane Grp Cap (c), veh/h	0	1137	0	0	0	411	0	0
V/C Ratio (X)	0.00	0.59	0.00	0.00	0.00	0.85	0.00	0.00
Avail Cap (c_a), veh/h	0	1137	0	0	0	411	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	22.7	0.0	0.0	0.0	29.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.2	0.0	0.0	0.0	19.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	25.0	0.0	0.0	0.0	49.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.1	0.0	0.0	0.0	7.4	0.0	0.0

2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	2.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.5	0.0	0.0	0.0	9.7	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	1.33	0.00	0.00	0.00	2.34	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment	R		T+R		T+R		T+R	
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	361	0	514	0	345	0	148
Grp Sat Flow (s), veh/h/ln	0	1583	0	1685	0	1729	0	1772
Q Serve Time (g_s), s	0.0	16.0	0.0	21.9	0.0	15.3	0.0	5.3
Cycle Q Clear Time (g_c), s	0.0	16.0	0.0	21.9	0.0	15.3	0.0	5.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.60	0.00	0.44	0.00	0.29
Lane Grp Cap (c), veh/h	0	509	0	461	0	402	0	487
V/C Ratio (X)	0.00	0.71	0.00	1.11	0.00	0.86	0.00	0.30
Avail Cap (c_a), veh/h	0	509	0	461	0	402	0	487
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	23.9	0.0	29.1	0.0	29.4	0.0	22.9
Incr Delay (d2), s/veh	0.0	8.1	0.0	76.9	0.0	20.7	0.0	1.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	32.0	0.0	105.9	0.0	50.1	0.0	24.5
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	10.1	0.0	7.3	0.0	2.6
2nd-Term Q (Q2), veh/ln	0.0	1.2	0.0	9.8	0.0	2.3	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.1	0.0	20.0	0.0	9.6	0.0	2.8
%ile Storage Ratio (RQ%)	0.00	1.66	0.00	4.12	0.00	2.32	0.00	0.58
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	13.2	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	47.1
HCM 2010 LOS	D

Canada Road and Davies Plantation
2029 with Site PM peak

With Improvement

03/22/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Future Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.91		1.00	0.96		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1696		1770	1782		1770	3539	1583	1770	3423	
Flt Permitted	0.64	1.00		0.18	1.00		0.17	1.00	1.00	0.36	1.00	
Satd. Flow (perm)	1201	1696		339	1782		323	3539	1583	675	3423	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	208	207	307	265	105	43	329	670	361	40	545	152
RTOR Reduction (vph)	0	67	0	0	18	0	0	0	245	0	31	0
Lane Group Flow (vph)	208	447	0	265	130	0	329	670	116	40	666	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	31.2	21.9		31.4	22.0		35.2	25.7	25.7	23.6	18.6	
Effective Green, g (s)	31.2	21.9		31.4	22.0		35.2	25.7	25.7	23.6	18.6	
Actuated g/C Ratio	0.39	0.27		0.39	0.28		0.44	0.32	0.32	0.30	0.23	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Grp Cap (vph)	534	464		301	490		360	1136	508	267	795	
v/s Ratio Prot	0.05	c0.26		c0.10	0.07		c0.14	0.19		0.01	0.19	
v/s Ratio Perm	0.11			0.24			c0.26		0.07	0.03		
v/c Ratio	0.39	0.96		0.88	0.27		0.91	0.59	0.23	0.15	0.84	
Uniform Delay, d1	16.9	28.7		19.7	22.7		18.0	22.7	19.9	20.4	29.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	33.7		28.7	1.3		29.9	2.3	1.0	1.2	10.2	
Delay (s)	19.0	62.3		48.4	24.0		47.9	25.0	20.9	21.5	39.5	
Level of Service	B	E		D	C		D	C	C	C	D	
Approach Delay (s)		49.8			39.7			29.5			38.5	
Approach LOS		D			D			C			D	
Intersection Summary												
HCM 2000 Control Delay			37.4				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			80.0				Sum of lost time (s)			18.0		
Intersection Capacity Utilization			90.9%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

Davies and Senior Drive
PM Peak with Site

03/14/2022

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑		↰	↰
Traffic Vol, veh/h	2	228	360	20	16	2
Future Vol, veh/h	2	228	360	20	16	2
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	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	248	391	22	17	2

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	413	0	0 530 402
Stage 1	-	-	- 402 -
Stage 2	-	-	- 128 -
Critical Hdwy	4.13	-	- 6.63 6.23
Critical Hdwy Stg 1	-	-	- 5.43 -
Critical Hdwy Stg 2	-	-	- 5.83 -
Follow-up Hdwy	2.219	-	- 3.519 3.319
Pot Cap-1 Maneuver	1144	-	- 494 647
Stage 1	-	-	- 675 -
Stage 2	-	-	- 885 -
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1144	-	- 493 647
Mov Cap-2 Maneuver	-	-	- 493 -
Stage 1	-	-	- 674 -
Stage 2	-	-	- 885 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	12.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1144	-	-	-	493	647
HCM Lane V/C Ratio	0.002	-	-	-	0.035	0.003
HCM Control Delay (s)	8.2	-	-	-	12.6	10.6
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1	0

Davies and Senior Drive
PM Peak with Site

03/14/2022



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	←	↑↑	←		←	↑
Traffic Volume (veh/h)	2	228	360	20	16	2
Future Volume (Veh/h)	2	228	360	20	16	2
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	248	391	22	17	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	413				530	402
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	413				530	402
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				96	100
cM capacity (veh/h)	1142				478	598
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	SB 1	SB 2
Volume Total	2	124	124	413	17	2
Volume Left	2	0	0	0	17	0
Volume Right	0	0	0	22	0	2
cSH	1142	1700	1700	1700	478	598
Volume to Capacity	0.00	0.07	0.07	0.24	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	3	0
Control Delay (s)	8.2	0.0	0.0	0.0	12.8	11.0
Lane LOS	A				B	B
Approach Delay (s)	0.1			0.0	12.6	
Approach LOS					B	
Intersection Summary						
Average Delay			0.4			
Intersection Capacity Utilization			30.2%		ICU Level of Service	A
Analysis Period (min)			15			

Canada Road and Davies Plantation
AM Peak Existing

03/05/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	20	81	172	18	12	77	157	125	25	285	8
Future Volume (vph)	30	20	81	172	18	12	77	157	125	25	285	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.880			0.941				0.850		0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1639	0	1770	1753	0	1770	1863	1583	1770	3525	0
Flt Permitted	0.736			0.543			0.466			0.649		
Satd. Flow (perm)	1371	1639	0	1011	1753	0	868	1863	1583	1209	3525	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		88			13				182		4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			181			159			140	
Travel Time (s)		3.8			4.1			3.6			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	22	88	187	20	13	84	171	136	27	310	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	110	0	187	33	0	84	171	136	27	319	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	10.0	22.5		16.0	28.5		15.2	42.0	42.0	9.5	36.3	
Total Split (%)	11.1%	25.0%		17.8%	31.7%		16.9%	46.7%	46.7%	10.6%	40.3%	
Maximum Green (s)	5.5	18.0		11.5	24.0		10.7	37.5	37.5	5.0	31.8	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
v/c Ratio	0.09	0.28		0.39	0.07		0.15	0.22	0.18	0.05	0.26	
Control Delay	19.1	12.0		22.3	18.0		11.5	17.8	1.6	11.4	21.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	19.1	12.0		22.3	18.0		11.5	17.8	1.6	11.4	21.1	

canada road 12:13 pm 02/28/2022 Baseline

Synchro 11 Light Report
Page 1

Canada Road and Davies Plantation
AM Peak Existing

03/05/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B		C	B		B	B	A	B	C	
Approach Delay		13.6			21.6			10.9			20.3	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	12	10		73	8		23	61	0	7	65	
Queue Length 95th (ft)	31	54		123	31		46	105	16	20	98	
Internal Link Dist (ft)		89			101			79			60	
Turn Bay Length (ft)												
Base Capacity (vph)	382	398		478	477		560	776	765	525	1248	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.09	0.28		0.39	0.07		0.15	0.22	0.18	0.05	0.26	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Pretimed

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 16.4

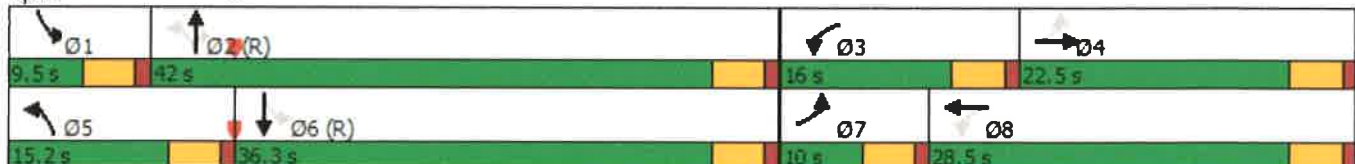
Intersection LOS: B

Intersection Capacity Utilization 39.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1:



Canada Road and Davies Plantation
AM Peak Existing

03/04/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	20	81	172	18	12	77	157	125	25	285	8
Future Volume (vph)	30	20	81	172	18	12	77	157	125	25	285	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.88		1.00	0.94		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1639		1770	1753		1770	1863	1583	1770	3524	
Flt Permitted	0.74	1.00		0.54	1.00		0.47	1.00	1.00	0.65	1.00	
Satd. Flow (perm)	1370	1639		1012	1753		869	1863	1583	1209	3524	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	22	88	187	20	13	84	171	136	27	310	9
RTOR Reduction (vph)	0	70	0	0	10	0	0	0	79	0	3	0
Lane Group Flow (vph)	33	40	0	187	23	0	84	171	57	27	316	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Effective Green, g (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Grp Cap (vph)	382	327		479	467		560	776	659	525	1245	
v/s Ratio Prot	0.01	0.02		c0.05	0.01		c0.02	c0.09		0.00	c0.09	
v/s Ratio Perm	0.02			c0.10			0.06		0.04	0.02		
v/c Ratio	0.09	0.12		0.39	0.05		0.15	0.22	0.09	0.05	0.25	
Uniform Delay, d1	25.0	29.5		19.6	24.5		11.0	16.9	15.9	16.0	20.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.8		2.4	0.2		0.6	0.7	0.3	0.2	0.5	
Delay (s)	25.5	30.3		22.0	24.7		11.6	17.5	16.1	16.2	21.2	
Level of Service	C	C		C	C		B	B	B	B	C	
Approach Delay (s)		29.2			22.4			15.8			20.8	
Approach LOS		C			C			B			C	
Intersection Summary												
HCM 2000 Control Delay		20.4			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.32										
Actuated Cycle Length (s)		90.0			Sum of lost time (s)			18.0				
Intersection Capacity Utilization		39.9%			ICU Level of Service			A				
Analysis Period (min)		15										
c Critical Lane Group												

Canada Road and Davies Plantation
AM Peak Existing

03/04/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	20	81	172	18	12	77	157	125	25	285	8
Future Volume (veh/h)	30	20	81	172	18	12	77	157	125	25	285	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	33	22	88	187	20	13	84	171	136	27	310	9
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	462	65	261	488	281	183	598	776	660	556	1241	36
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.20	0.20	0.13	0.27	0.27	0.12	0.42	0.42	0.06	0.35	0.35
Ln Grp Delay, s/veh	25.3	0.0	33.7	23.9	0.0	25.0	12.9	17.5	17.5	16.1	21.6	21.6
Ln Grp LOS	C		C	C		C	B	B	B	B	C	C
Approach Vol, veh/h		143			220			391			346	
Approach Delay, s/veh		31.7			24.0			16.5			21.2	
Approach LOS		C			C			B			C	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs		1	2	3	4	5	6	7	8			
Case No		1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0			
Phs Duration (G+Y+Rc), s		9.5	42.0	16.0	22.5	15.2	36.3	10.0	28.5			
Change Period (Y+Rc), s		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Max Green (Gmax), s		5.0	37.5	11.5	18.0	10.7	31.8	5.5	24.0			
Max Allow Headway (MAH), s		3.8	4.7	3.8	5.5	3.8	5.2	3.8	5.4			
Max Q Clear (g _{c+1}), s		2.8	7.3	8.9	7.2	4.3	7.6	3.3	3.3			
Green Ext Time (g _e), s		0.0	1.5	0.1	0.4	0.1	1.8	0.0	0.1			
Prob of Phs Call (p _c)		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Prob of Max Out (p _x)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Left-Turn Movement Data												
Assigned Mvmt		1		3		5		7				
Mvmt Sat Flow, veh/h		1774		1774		1774		1774				
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1863		326		3513		1056			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1583		1306		102		686			
Left Lane Group Data												
Assigned Mvmt		1	0	3	0	5	0	7	0			
Lane Assignment		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)				

Canada Road and Davies Plantation
AM Peak Existing

03/04/2022

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	27	0	187	0	84	0	33	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1774	0	1774	0
Q Serve Time (g_s), s	0.8	0.0	6.9	0.0	2.3	0.0	1.3	0.0
Cycle Q Clear Time (g_c), s	0.8	0.0	6.9	0.0	2.3	0.0	1.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1068	0	1278	0	1056	0	1370	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	31.8	0.0	20.0	0.0	33.8	0.0	18.0	0.0
Perm LT Serve Time (g_u), s	31.8	0.0	12.8	0.0	26.2	0.0	18.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.2	0.0	0.7	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	556	0	488	0	598	0	462	0
V/C Ratio (X)	0.05	0.00	0.38	0.00	0.14	0.00	0.07	0.00
Avail Cap (c_a), veh/h	556	0	488	0	598	0	462	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	16.0	0.0	21.6	0.0	12.4	0.0	25.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	2.3	0.0	0.5	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.1	0.0	23.9	0.0	12.9	0.0	25.3	0.0
1st-Term Q (Q1), veh/ln	0.4	0.0	3.3	0.0	1.1	0.0	0.6	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.4	0.0	3.6	0.0	1.2	0.0	0.6	0.0
%ile Storage Ratio (RQ%)	0.10	0.00	0.68	0.00	0.24	0.00	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T			
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	171	0	0	0	156	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	5.3	0.0	0.0	0.0	5.6	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.3	0.0	0.0	0.0	5.6	0.0	0.0
Lane Grp Cap (c), veh/h	0	776	0	0	0	625	0	0
V/C Ratio (X)	0.00	0.22	0.00	0.00	0.00	0.25	0.00	0.00
Avail Cap (c_a), veh/h	0	776	0	0	0	625	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	0.0	0.0	20.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	0.0	0.0	0.0	1.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.5	0.0	0.0	0.0	21.6	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.7	0.0	0.0	0.0	2.7	0.0	0.0

Canada Road and Davies Plantation
AM Peak Existing

03/04/2022

2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.8	0.0	0.0	0.0	2.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.58	0.00	0.00	0.00	0.70	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	136	0	110	0	163	0	33
Grp Sat Flow (s), veh/h/ln	0	1583	0	1632	0	1845	0	1742
Q Serve Time (g_s), s	0.0	4.9	0.0	5.2	0.0	5.6	0.0	1.3
Cycle Q Clear Time (g_c), s	0.0	4.9	0.0	5.2	0.0	5.6	0.0	1.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.80	0.00	0.06	0.00	0.39
Lane Grp Cap (c), veh/h	0	660	0	326	0	652	0	464
V/C Ratio (X)	0.00	0.21	0.00	0.34	0.00	0.25	0.00	0.07
Avail Cap (c_a), veh/h	0	660	0	326	0	652	0	464
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.8	0.0	30.9	0.0	20.6	0.0	24.7
Incr Delay (d2), s/veh	0.0	0.7	0.0	2.8	0.0	0.9	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.5	0.0	33.7	0.0	21.6	0.0	25.0
1st-Term Q (Q1), veh/ln	0.0	2.2	0.0	2.4	0.0	2.9	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.3	0.0	0.2	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.3	0.0	2.6	0.0	3.0	0.0	0.7
%ile Storage Ratio (RQ%)	0.00	0.47	0.00	0.54	0.00	0.73	0.00	0.12
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	21.5
HCM 2010 LOS	C

Canada Road and Davies Plantation
PM Peak Existing

03/04/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	75	68	228	44	30	200	486	301	19	338	70
Future Volume (vph)	73	75	68	228	44	30	200	486	301	19	338	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.93		1.00	0.94		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1730		1770	1749		1770	1863	1583	1770	3448	
Flt Permitted	0.70	1.00		0.46	1.00		0.38	1.00	1.00	0.30	1.00	
Satd. Flow (perm)	1312	1730		854	1749		703	1863	1583	554	3448	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	82	74	248	48	33	217	528	327	21	367	76
RTOR Reduction (vph)	0	36	0	0	24	0	0	0	191	0	19	0
Lane Group Flow (vph)	79	120	0	248	57	0	217	528	136	21	424	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Effective Green, g (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Grp Cap (vph)	370	346		439	466		493	776	659	294	1218	
v/s Ratio Prot	0.01	0.07		c0.07	0.03		c0.05	c0.28		0.00	0.12	
v/s Ratio Perm	0.04			c0.14			0.18		0.09	0.03		
v/c Ratio	0.21	0.35		0.56	0.12		0.44	0.68	0.21	0.07	0.35	
Uniform Delay, d1	25.7	30.9		20.6	25.0		12.3	21.4	16.8	16.7	21.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.3	2.7		5.2	0.5		2.8	4.8	0.7	0.5	0.8	
Delay (s)	27.0	33.7		25.8	25.5		15.1	26.2	17.5	17.1	22.2	
Level of Service	C	C		C	C		B	C	B	B	C	
Approach Delay (s)		31.4			25.7			21.3			22.0	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		23.3										
HCM 2000 Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		90.0										
Intersection Capacity Utilization		65.5%							18.0			
Analysis Period (min)		15										
c Critical Lane Group												

Canada Road and Davies Plantation
PM Peak Existing

03/04/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	75	68	228	44	30	200	486	301	19	338	70
Future Volume (vph)	73	75	68	228	44	30	200	486	301	19	338	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.929			0.939				0.850		0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1730	0	1770	1749	0	1770	1863	1583	1770	3447	0
Flt Permitted	0.704			0.458			0.377			0.297		
Satd. Flow (perm)	1311	1730	0	853	1749	0	702	1863	1583	553	3447	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			33				327		30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			181			159			140	
Travel Time (s)		3.8			4.1			3.6			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	82	74	248	48	33	217	528	327	21	367	76
Shared Lane Traffic (%)												
Lane Group Flow (vph)	79	156	0	248	81	0	217	528	327	21	443	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	10.0	22.5		16.0	28.5		15.2	42.0	42.0	9.5	36.3	
Total Split (%)	11.1%	25.0%		17.8%	31.7%		16.9%	46.7%	46.7%	10.6%	40.3%	
Maximum Green (s)	5.5	18.0		11.5	24.0		10.7	37.5	37.5	5.0	31.8	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
v/c Ratio	0.21	0.41		0.56	0.17		0.44	0.68	0.38	0.07	0.36	
Control Delay	20.5	25.8		26.1	17.4		14.8	26.8	3.5	11.6	21.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	20.5	25.8		26.1	17.4		14.8	26.8	3.5	11.6	21.0	

Canada Road and Davies Plantation
PM Peak Existing

03/04/2022

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	21	0	248	0	217	0	79	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1774	0	1774	0
Q Serve Time (g_s), s	0.6	0.0	9.5	0.0	6.3	0.0	3.1	0.0
Cycle Q Clear Time (g_c), s	0.6	0.0	9.5	0.0	6.3	0.0	3.1	0.0
Perm LT Sat Flow (s_l), veh/h/ln	643	0	1226	0	943	0	1312	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	31.8	0.0	20.0	0.0	33.8	0.0	18.0	0.0
Perm LT Serve Time (g_u), s	16.7	0.0	10.8	0.0	23.4	0.0	18.0	0.0
Perm LT Q Serve Time (g_ps), s	0.5	0.0	2.3	0.0	3.1	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	298	0	454	0	536	0	451	0
V/C Ratio (X)	0.07	0.00	0.55	0.00	0.41	0.00	0.18	0.00
Avail Cap (c_a), veh/h	298	0	454	0	536	0	451	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	17.2	0.0	22.7	0.0	13.9	0.0	25.7	0.0
Incr Delay (d2), s/veh	0.5	0.0	4.7	0.0	2.3	0.0	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	17.7	0.0	27.4	0.0	16.2	0.0	26.6	0.0
1st-Term Q (Q1), veh/ln	0.3	0.0	4.5	0.0	3.1	0.0	1.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.6	0.0	0.3	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.3	0.0	5.1	0.0	3.4	0.0	1.6	0.0
%ile Storage Ratio (RQ%)	0.08	0.00	0.97	0.00	0.70	0.00	0.33	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T			
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	528	0	0	0	220	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	20.8	0.0	0.0	0.0	8.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	20.8	0.0	0.0	0.0	8.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	776	0	0	0	625	0	0
V/C Ratio (X)	0.00	0.68	0.00	0.00	0.00	0.35	0.00	0.00
Avail Cap (c_a), veh/h	0	776	0	0	0	625	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	21.4	0.0	0.0	0.0	21.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.8	0.0	0.0	0.0	1.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	26.1	0.0	0.0	0.0	23.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	10.6	0.0	0.0	0.0	4.0	0.0	0.0

Canada Road and Davies Plantation
PM Peak Existing

03/04/2022

2nd-Term Q (Q2), veh/ln	0.0	1.0	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.6	0.0	0.0	0.0	4.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	2.37	0.00	0.00	0.00	1.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment	R		T+R		T+R		T+R	
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	327	0	156	0	223	0	81
Grp Sat Flow (s), veh/h/ln	0	1583	0	1719	0	1757	0	1738
Q Serve Time (g_s), s	0.0	13.7	0.0	7.2	0.0	8.4	0.0	3.2
Cycle Q Clear Time (g_c), s	0.0	13.7	0.0	7.2	0.0	8.4	0.0	3.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.47	0.00	0.34	0.00	0.41
Lane Grp Cap (c), veh/h	0	660	0	344	0	621	0	463
V/C Ratio (X)	0.00	0.50	0.00	0.45	0.00	0.36	0.00	0.17
Avail Cap (c_a), veh/h	0	660	0	344	0	621	0	463
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	19.3	0.0	31.7	0.0	21.5	0.0	25.4
Incr Delay (d2), s/veh	0.0	2.7	0.0	4.3	0.0	1.6	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	21.9	0.0	36.0	0.0	23.2	0.0	26.2
1st-Term Q (Q1), veh/ln	0.0	5.9	0.0	3.4	0.0	4.1	0.0	1.6
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.4	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	6.4	0.0	3.8	0.0	4.4	0.0	1.7
%ile Storage Ratio (RQ%)	0.00	1.32	0.00	0.79	0.00	1.05	0.00	0.31
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Canada Road and Davies Plantation
PM Peak Existing

03/04/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	75	68	228	44	30	200	486	301	19	338	70
Future Volume (veh/h)	73	75	68	228	44	30	200	486	301	19	338	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	79	82	74	248	48	33	217	528	327	21	367	76
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	451	181	163	454	275	189	536	776	660	298	1034	212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.20	0.20	0.13	0.27	0.27	0.12	0.42	0.42	0.06	0.35	0.35
Ln Grp Delay, s/veh	26.6	0.0	36.0	27.4	0.0	26.2	16.2	26.1	21.9	17.7	23.1	23.2
Ln Grp LOS	C		D	C		C	B	C	C	B	C	C
Approach Vol, veh/h		235			329			1072			464	
Approach Delay, s/veh		32.8			27.1			22.8			22.9	
Approach LOS		C			C			C			C	
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0				
Phs Duration (G+Y+Rc), s	9.5	42.0	16.0	22.5	15.2	36.3	10.0	28.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green (Gmax), s	5.0	37.5	11.5	18.0	10.7	31.8	5.5	24.0				
Max Allow Headway (MAH), s	3.8	4.8	3.8	5.4	3.8	5.3	3.8	5.4				
Max Q Clear (g _{c+I1}), s	2.6	22.8	11.5	9.2	8.3	10.4	5.1	5.2				
Green Ext Time (g _e), s	0.0	4.1	0.0	0.5	0.1	2.6	0.0	0.3				
Prob of Phs Call (p _c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Prob of Max Out (p _x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	1774		1774		1774		1774					
Through Movement Data												
Assigned Mvmt		2		4		6		8				
Mvmt Sat Flow, veh/h		1863		904		2927		1030				
Right-Turn Movement Data												
Assigned Mvmt		12		14		16		18				
Mvmt Sat Flow, veh/h		1583		815		600		708				
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				
Lane Assignment	(Pr/Pm)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)					

Canada Road and Davies Plantation
PM Peak Existing

03/04/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	C		C	B		B	C	A	B	C	
Approach Delay		24.0			23.9			17.3			20.6	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	29	54		100	21		64	238	0	6	89	
Queue Length 95th (ft)	59	112		163	56		105	354	48	17	130	
Internal Link Dist (ft)		89			101			79			60	
Turn Bay Length (ft)												
Base Capacity (vph)	370	382		439	490		493	776	850	293	1237	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.21	0.41		0.56	0.17		0.44	0.68	0.38	0.07	0.36	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Pretimed

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 19.8

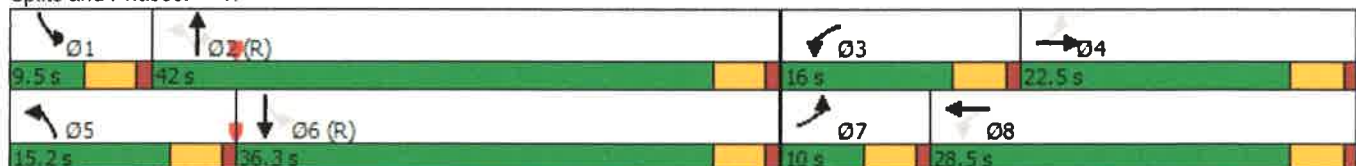
Intersection LOS: B

Intersection Capacity Utilization 65.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1:



Canada Road and Davies Plantation
AM Peak 2029 with site

03/14/2022

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	39	143	185	29	24	139	210	134	41	406	51
Future Volume (vph)	58	39	143	185	29	24	139	210	134	41	406	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.88		1.00	0.93		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1643		1770	1737		1770	1863	1583	1770	3480	
Flt Permitted	0.72	1.00		0.38	1.00		0.34	1.00	1.00	0.62	1.00	
Satd. Flow (perm)	1340	1643		716	1737		638	1863	1583	1148	3480	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	63	42	155	201	32	26	151	228	146	45	441	55
RTOR Reduction (vph)	0	124	0	0	19	0	0	0	85	0	11	0
Lane Group Flow (vph)	63	73	0	201	39	0	151	228	61	45	485	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Effective Green, g (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lane Grp Cap (vph)	376	328		405	463		467	776	659	503	1229	
v/s Ratio Prot	0.01	0.04		c0.06	0.02		c0.04	0.12		0.00	c0.14	
v/s Ratio Perm	0.03			c0.12			0.13		0.04	0.03		
v/c Ratio	0.17	0.22		0.50	0.08		0.32	0.29	0.09	0.09	0.39	
Uniform Delay, d1	25.5	30.1		20.2	24.8		11.9	17.4	15.9	16.1	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	1.6		4.3	0.4		1.8	1.0	0.3	0.4	1.0	
Delay (s)	26.4	31.7		24.5	25.1		13.7	18.4	16.2	16.5	22.8	
Level of Service	C	C		C	C		B	B	B	B	C	
Approach Delay (s)		30.4			24.6			16.4			22.3	
Approach LOS		C			C			B			C	
Intersection Summary												
HCM 2000 Control Delay		22.1					HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio		0.45										
Actuated Cycle Length (s)		90.0					Sum of lost time (s)		18.0			
Intersection Capacity Utilization		56.7%					ICU Level of Service		B			
Analysis Period (min)		15										
c Critical Lane Group												

Canada Road and Davies Plantation
AM Peak 2029 with site

03/14/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	58	39	143	185	29	24	139	210	134	41	406	51
Future Volume (vph)	58	39	143	185	29	24	139	210	134	41	406	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.882			0.933				0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1643	0	1770	1738	0	1770	1863	1583	1770	3479	0
Flt Permitted	0.719			0.385			0.343			0.616		
Satd. Flow (perm)	1339	1643	0	717	1738	0	639	1863	1583	1147	3479	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		155			26				182		17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			181			159			140	
Travel Time (s)		3.8			4.1			3.6			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	63	42	155	201	32	26	151	228	146	45	441	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	197	0	201	58	0	151	228	146	45	496	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	10.0	22.5		16.0	28.5		15.2	42.0	42.0	9.5	36.3	
Total Split (%)	11.1%	25.0%		17.8%	31.7%		16.9%	46.7%	46.7%	10.6%	40.3%	
Maximum Green (s)	5.5	18.0		11.5	24.0		10.7	37.5	37.5	5.0	31.8	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	23.5	18.0		34.0	24.0		47.0	37.5	37.5	36.8	31.8	
Actuated g/C Ratio	0.26	0.20		0.38	0.27		0.52	0.42	0.42	0.41	0.35	
v/c Ratio	0.17	0.44		0.50	0.12		0.32	0.29	0.19	0.09	0.40	
Control Delay	20.0	12.2		24.4	16.8		13.3	18.8	2.0	11.7	22.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	20.0	12.2		24.4	16.8		13.3	18.8	2.0	11.7	22.3	

canada road 12:13 pm 02/28/2022 Baseline

Synchro 11 Light Report
Page 1

Canada Road and Davies Plantation
AM Peak 2029 with site

03/14/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B		C	B		B	B	A	B	C	
Approach Delay		14.1			22.7			12.5			21.4	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)	23	20		79	14		42	84	0	12	106	
Queue Length 95th (ft)	49	79		133	43		75	138	21	28	149	
Internal Link Dist (ft)		89			101			79			60	
Turn Bay Length (ft)												
Base Capacity (vph)	375	452		405	482		468	776	765	503	1240	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.17	0.44		0.50	0.12		0.32	0.29	0.19	0.09	0.40	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Pretimed

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 17.5

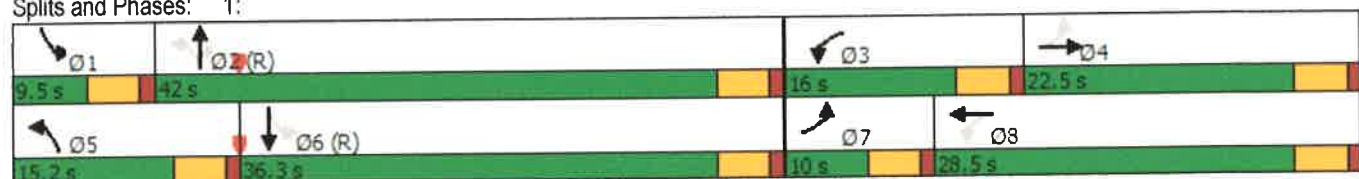
Intersection LOS: B

Intersection Capacity Utilization 56.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1:



												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	39	143	185	29	24	139	210	134	41	406	51
Future Volume (veh/h)	58	39	143	185	29	24	139	210	134	41	406	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	63	42	155	201	32	26	151	228	146	45	441	55
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	456	70	257	413	254	206	514	776	660	515	1120	139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.20	0.20	0.13	0.27	0.27	0.12	0.42	0.42	0.06	0.35	0.35
Ln Grp Delay, s/veh	26.1	0.0	40.7	26.4	0.0	25.6	14.9	18.4	17.6	16.5	23.7	23.7
Ln Grp LOS	C		D	C		C	B	B	B	B	C	C
Approach Vol, veh/h		260			259			525			541	
Approach Delay, s/veh		37.2			26.2			17.2			23.1	
Approach LOS		D			C			B			C	
Timer:	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Case No	1.1	3.0	1.1	4.0	1.1	4.0	1.1	4.0				
Phs Duration (G+Y+Rc), s	9.5	42.0	16.0	22.5	15.2	36.3	10.0	28.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green (Gmax), s	5.0	37.5	11.5	18.0	10.7	31.8	5.5	24.0				
Max Allow Headway (MAH), s	3.8	4.8	3.8	5.5	3.8	5.3	3.8	5.4				
Max Q Clear (g_c+I1), s	3.4	9.3	9.5	11.9	6.2	11.5	4.4	4.3				
Green Ext Time (g_e), s	0.0	1.9	0.1	0.5	0.1	2.9	0.0	0.2				
Prob of Phs Call (p_c)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
Prob of Max Out (p_x)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
Left-Turn Movement Data												
Assigned Mvmt	1		3		5		7					
Mvmt Sat Flow, veh/h	1774		1774		1774		1774					
Through Movement Data												
Assigned Mvmt		2		4		6		8				
Mvmt Sat Flow, veh/h		1863		349		3170		952				
Right-Turn Movement Data												
Assigned Mvmt		12		14		16		18				
Mvmt Sat Flow, veh/h		1583		1287		393		774				
Left Lane Group Data												
Assigned Mvmt	1	0	3	0	5	0	7	0				
Lane Assignment	(Pr/Pm)		(Pr/Pm)		(Pr/Pm)		(Pr/Pm)					

Canada Road and Davies Plantation
AM Peak 2029 with site

03/14/2022

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	45	0	201	0	151	0	63	0
Grp Sat Flow (s), veh/h/ln	1774	0	1774	0	1774	0	1774	0
Q Serve Time (g_s), s	1.4	0.0	7.5	0.0	4.2	0.0	2.4	0.0
Cycle Q Clear Time (g_c), s	1.4	0.0	7.5	0.0	4.2	0.0	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1004	0	1181	0	898	0	1340	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	31.8	0.0	20.0	0.0	33.8	0.0	18.0	0.0
Perm LT Serve Time (g_u), s	30.2	0.0	8.1	0.0	22.3	0.0	18.0	0.0
Perm LT Q Serve Time (g_ps), s	0.1	0.0	2.4	0.0	2.3	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	515	0	413	0	514	0	456	0
V/C Ratio (X)	0.09	0.00	0.49	0.00	0.29	0.00	0.14	0.00
Avail Cap (c_a), veh/h	515	0	413	0	514	0	456	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	16.1	0.0	22.4	0.0	13.4	0.0	25.5	0.0
Incr Delay (d2), s/veh	0.3	0.0	4.0	0.0	1.5	0.0	0.6	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.5	0.0	26.4	0.0	14.9	0.0	26.1	0.0
1st-Term Q (Q1), veh/ln	0.7	0.0	3.6	0.0	2.1	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.5	0.0	0.2	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.7	0.0	4.0	0.0	2.3	0.0	1.3	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.76	0.00	0.46	0.00	0.26	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment	T				T			
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	228	0	0	0	245	0	0
Grp Sat Flow (s), veh/h/ln	0	1863	0	0	0	1770	0	0
Q Serve Time (g_s), s	0.0	7.3	0.0	0.0	0.0	9.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	7.3	0.0	0.0	0.0	9.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	776	0	0	0	625	0	0
V/C Ratio (X)	0.00	0.29	0.00	0.00	0.00	0.39	0.00	0.00
Avail Cap (c_a), veh/h	0	776	0	0	0	625	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	17.4	0.0	0.0	0.0	21.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.0	0.0	1.8	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	18.4	0.0	0.0	0.0	23.7	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	3.7	0.0	0.0	0.0	4.6	0.0	0.0

Canada Road and Davies Plantation
AM Peak 2029 with site

03/14/2022

2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	3.9	0.0	0.0	0.0	4.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.81	0.00	0.00	0.00	1.18	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment	R		T+R		T+R		T+R	
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	146	0	197	0	251	0	58
Grp Sat Flow (s), veh/h/ln	0	1583	0	1636	0	1793	0	1726
Q Serve Time (g_s), s	0.0	5.3	0.0	9.9	0.0	9.5	0.0	2.3
Cycle Q Clear Time (g_c), s	0.0	5.3	0.0	9.9	0.0	9.5	0.0	2.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.79	0.00	0.22	0.00	0.45
Lane Grp Cap (c), veh/h	0	660	0	327	0	634	0	460
V/C Ratio (X)	0.00	0.22	0.00	0.60	0.00	0.40	0.00	0.13
Avail Cap (c_a), veh/h	0	660	0	327	0	634	0	460
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	16.9	0.0	32.7	0.0	21.9	0.0	25.0
Incr Delay (d2), s/veh	0.0	0.8	0.0	8.0	0.0	1.8	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	17.6	0.0	40.7	0.0	23.7	0.0	25.6
1st-Term Q (Q1), veh/ln	0.0	2.3	0.0	4.4	0.0	4.7	0.0	1.1
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.7	0.0	0.3	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.5	0.0	5.2	0.0	5.0	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.51	0.00	1.06	0.00	1.21	0.00	0.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay	24.0							
HCM 2010 LOS	C							

Canada Road and Davies Plantation
2029 with Site

PM Peak
03/22/2022

	↖	→	↘	↙	←	↖	↙	↑	↘	↙	↓	↘
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖		↖	↖		↖	↖	↖	↖	↖	↖
Traffic Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Future Volume (vph)	191	190	282	244	97	40	303	616	332	37	501	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Frt		0.910			0.956				0.850		0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1695	0	1770	1781	0	1770	1863	1583	1770	3422	0
Flt Permitted	0.645			0.182			0.173			0.215		
Satd. Flow (perm)	1201	1695	0	339	1781	0	322	1863	1583	400	3422	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		92			25				361		41	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		169			181			159			140	
Travel Time (s)		3.8			4.1			3.6			3.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	208	207	307	265	105	43	329	670	361	40	545	152
Shared Lane Traffic (%)												
Lane Group Flow (vph)	208	514	0	265	148	0	329	670	361	40	697	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	13.8	26.4		13.9	26.5		16.6	30.2	30.2	9.5	23.1	
Total Split (%)	17.3%	33.0%		17.4%	33.1%		20.8%	37.8%	37.8%	11.9%	28.9%	
Maximum Green (s)	9.3	21.9		9.4	22.0		12.1	25.7	25.7	5.0	18.6	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Walk Time (s)		7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)		11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effct Green (s)	31.2	21.9		31.4	22.0		35.2	25.7	25.7	23.6	18.6	
Actuated g/C Ratio	0.39	0.27		0.39	0.28		0.44	0.32	0.32	0.30	0.23	
v/c Ratio	0.39	0.97		0.88	0.29		0.91	1.12	0.48	0.20	0.84	
Control Delay	16.6	58.3		48.4	20.8		50.5	103.0	4.8	16.2	38.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	16.6	58.3		48.4	20.8		50.5	103.0	4.8	16.2	38.7	

canada road 12:13 pm 02/28/2022 Baseline

Synchro 11 Light Report
Page 1



Tree Inventory and Assessment

Custom Tree & Shrub Care Program

Insect and Disease Control

Deep Root Fertilization

Trunk Injection

Growth Regulation

Soil Analysis

Vertical Mulching

Lightning Protection

2/14/2022

Grant Homes

Prepared by
Chris Hudson
(901) 634-0875



To whom it may concern:

On Monday, February 14, 2022, I completed the tree inventory for the undisturbed areas of Lakeland Park at the request of Matt Prince with Grant Homes. The survey is complete and includes 3371 trees. There was some confusion of the property lines initially. There are additional trees included in the inventory that are out of bounds in and should be disregarded. The first tree on the inventory located inside the bounds is tree 211. The location, common name, diameter at breast height, and health grade were observed and recorded. Each tree within the inventory list was marked with a small numbered orange ribbon that corresponds with the inventory.

Trees with exceptional shape and diameter were recognized as high value trees. The diameters of multi trunk trees were determined by adding the sum of the largest diameter trunks and half of all subsequent trunks.

Chris Hudson
Director of Plant Health Care Services
ISA Certified Arborist #SO-6915A
Woodland Tree Service, LLC

1831 Titus Rd. • Memphis, TN 38111 • (901) 309-6779 O • (901) 309-3241 F
chris@woodlandtree.com • www.woodlandtree.com



TERMS AND CONDITIONS

The following terms and conditions apply to all oral and written reports and correspondence pertaining to consultations, inspections and activities of Woodland Tree Service.

1. The scope of any report or other correspondence is limited to the trees and conditions specifically mentioned in those reports and correspondence. Woodland Tree Service assumes no liability for the failure of trees or parts of trees, either inspected or otherwise. Woodland Tree Service assumes no responsibility to report on the condition of any tree or landscape feature not specifically requested by the named client.

2. No tree described in this report was climbed. Woodland Tree Service does not take responsibility for any defects, which could have only been discovered by climbing. A full roots collar inspection, consisting of excavating the soil around the tree to uncover the root collar and major buttress roots was not performed. Woodland Tree Service does not take responsibility for any root defects, which could only have been discovered by such an inspection.

3. Woodland Tree Service shall not be required to provide further documentation, give testimony, be deposed, or attend court by reason of this appraisal or report unless subsequent contractual arrangements are made, including payment of additional fees for such services as described by Woodland Tree Service or in the schedule of fees or contract.

4. Woodland Tree Service guarantees no warranty, either expressed or implied, as to the suitability of the information contained in the reports for any reason. It is the responsibility of the client to determine applicability to his/her case.

5. Any report and the values, observations and recommendations expressed therein represent the professional opinion of Woodland Tree Service, and the fee for services is in no manner contingent upon the reporting of a specified value or upon any particular finding to be reported.

6. Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

Sample of Tree Data Table provided for reference. The full 81-page document will be submitted digitally and can be provided in hard copy upon request.

ASHMONT PD
EXISTING TREE DATA

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1	35.220624	-89.743121	398.75	osage orange 9 poor no
2	35.220716	-89.743007	401.67	pignut hickory 6 fair yes
3	35.220629	-89.743078	400.33	Cherry bark red oak 53 fair yes
4	35.220603	-89.743187	401.51	Cherry bark Redoak 10 poor no
5	35.220712	-89.7431	400.52	black cherry 6 fair yes
6	35.220739	-89.743166	403.84	Winged elm 6 poor no
7	35.220706	-89.743189	402.13	6 winged elm fair yes
8	35.22064	-89.743222	402.92	Slippery elm 14 good yes
9	35.22064	-89.743278	402.62	Cherry bark red oak 33 fair yes
10	35.220719	-89.743189	397.54	6 slippery elm good yes
11	35.220758	-89.743246	399.74	winged elm 7 poor no
12	35.220753	-89.743247	401.21	6 slippery elm fair yes
13	35.220759	-89.743288	403.05	Cherry bark red oak 6 good yes
14	35.220718	-89.743267	403.54	Winged elm 6 good yes
15	35.220713	-89.743281	401.61	Black cherry 6 poor no
16	35.220642	-89.743344	403.35	Post Oak 20 good yes
17	35.220618	-89.743418	402.99	6 winged elm good yes
18	35.220617	-89.743401	408.33	Slippery elm 16 good yes
19	35.220611	-89.743418	407.74	Osage orange 6 good yes
20	35.220685	-89.743482	404.2	Mockernut Hickory 10 es fair yes
21	35.220679	-89.743466	400.36	Northern red oak 13 fair no
22	35.220685	-89.743425	405.25	Osage orange 6 fair yes
23	35.220713	-89.743352	405.09	winged elm 6 fair yes
24	35.220754	-89.743348	404.07	winged elm 10 good yes
25	35.220677	-89.743455	405.38	Northern red oak 24 poor no
26	35.220594	-89.743532	409.97	Slippery elm 38 multi fair no
27	35.220644	-89.743598	422.15	Cherry bark red oak 24 fair no
28	35.220623	-89.743576	411.88	Winged elm 14 fair yes
29	35.220698	-89.743677	406.07	post oak 15 fair yes
30	35.220729	-89.743488	407.12	pignut hickory 6 poor no
31	35.220675	-89.743416	406.66	slippery elm 6 fair yes
32	35.22074	-89.743556	406.69	osage orange 6 poor no
33	35.220702	-89.743577	407.51	osage orange 8 poor n
34	35.220744	-89.743653	401.84	osage orange 8 fair no
35	35.220694	-89.743687	403.31	Pignut hickory 17 good yes
36	35.22058	-89.743722	394.06	osage orange 8 poor no
37	35.220642	-89.743701	392.45	pignut hickory 8 good yes
38	35.220726	-89.743884	408.4	white ash 41 multi good yes
39	35.220682	-89.743727	393.5	mockernut hickory 8 good yes
40	35.220654	-89.743785	423.06	cherrybark red oak 28 fair no
41	35.220698	-89.743775	408.56	slippery elm 11 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1	35.220624	-89.743121	398.75	osage orange 9 poor no
2	35.220716	-89.743007	401.67	pignut hickory 6 fair yes
3	35.220629	-89.743078	400.33	Cherry bark red oak 53 fair yes
4	35.220603	-89.743187	401.51	Cherry bark Redoak 10 poor no
5	35.220712	-89.7431	400.52	black cherry 6 fair yes
6	35.220739	-89.743166	403.84	Winged elm 6 poor no
7	35.220706	-89.743189	402.13	6 winged elm fair yes
8	35.22064	-89.743222	402.92	Slippery elm 14 good yes
9	35.22064	-89.743278	402.62	Cherry bark red oak 33 fair yes
10	35.220719	-89.743189	397.54	6 slippery elm good yes
11	35.220758	-89.743246	399.74	winged elm 7 poor no
12	35.220753	-89.743247	401.21	6 slippery elm fair yes
13	35.220759	-89.743288	403.05	Cherry bark red oak 6 good yes
14	35.220718	-89.743267	403.54	Winged elm 6 good yes
15	35.220713	-89.743281	401.61	Black cherry 6 poor no
16	35.220642	-89.743344	403.35	Post Oak 20 good yes
17	35.220618	-89.743418	402.99	6 winged elm good yes
18	35.220617	-89.743401	408.33	Slippery elm 16 good yes
19	35.220611	-89.743418	407.74	Osage orange 6 good yes
20	35.220685	-89.743482	404.2	Mockernut Hickory 10 es fair yes
21	35.220679	-89.743466	400.36	Northern red oak 13 fair no
22	35.220685	-89.743425	405.25	Osage orange 6 fair yes
23	35.220713	-89.743352	405.09	winged elm 6 fair yes
24	35.220754	-89.743348	404.07	winged elm 10 good yes
25	35.220677	-89.743455	405.38	Northern red oak 24 poor no
26	35.220594	-89.743532	409.97	Slippery elm 38 multi fair no
27	35.220644	-89.743598	422.15	Cherry bark red oak 24 fair no
28	35.220623	-89.743576	411.88	Winged elm 14 fair yes
29	35.220698	-89.743677	406.07	post oak 15 fair yes
30	35.220729	-89.743488	407.12	pignut hickory 6 poor no
31	35.220675	-89.743416	406.66	slippery elm 6 fair yes
32	35.22074	-89.743556	406.69	osage orange 6 poor no
33	35.220702	-89.743577	407.51	osage orange 8 poor n
34	35.220744	-89.743653	401.84	osage orange 8 fair no
35	35.220694	-89.743687	403.31	Pignut hickory 17 good yes
36	35.22058	-89.743722	394.06	osage orange 8 poor no
37	35.220642	-89.743701	392.45	pignut hickory 8 good yes
38	35.220726	-89.743884	408.4	white ash 41 multi good yes
39	35.220682	-89.743727	393.5	mockernut hickory 8 good yes
40	35.220654	-89.743785	423.06	cherrybark red oak 28 fair no
41	35.220698	-89.743775	408.56	slippery elm 11 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
42	35.220639	-89.743835	400	Cherrybark Redoak 17 es poor no
43	35.220547	-89.74381	401.71	Cherry bark red Oak 40 es poor no
44	35.220651	-89.743845	406.63	winged elm 9 es fair yes
45	35.220626	-89.743929	410.14	cherrybark red oak 26 good yes
46	35.220698	-89.743895	402.17	Mockernut hickory 6 poor no
47	35.220668	-89.743928	407.55	mockernut hickory 7 es good yes
48	35.220648	-89.74391	405.91	post oak 12 es fair yes
49	35.22066	-89.743881	406.46	mockernut hickory 12 good yes
50	35.220692	-89.743866	406.89	Osage orange 11 es poor no
51	35.220683	-89.743872	405.31	Osage orange 6 es poor no
52	35.220737	-89.743907	406.66	Slippery elm 12 good yes
53	35.220676	-89.743958	404.23	Mockernut Hickory 7 good yes
54	35.220637	-89.743996	409.94	Mockernut Vickrey 24 es good yes
55	35.220674	-89.744054	413.42	Black cherry 14 poor no
56	35.220665	-89.74413	414.11	Osage orange 7 poor no
57	35.220633	-89.744108	408.07	slippery elm 11 good yes
58	35.220796	-89.744079	405.38	white ash 8 es fair yes
59	35.220785	-89.744253	411.25	Slippery elm 12 es fair yes
60	35.220787	-89.744197	410.56	Call Mockernut Hickory 6 es fair yes
61	35.220729	-89.744286	409.84	Black cherry 12 es fair yes
62	35.220761	-89.744279	408.04	Mockernut hickory 6 fair yes
63	35.22078	-89.744309	406.92	White ash 16 fair no
64	35.220844	-89.744328	409.74	Slippery elm 6 good yes
65	35.220897	-89.74422	409.65	slippery elm 7 es fair yes
66	35.220821	-89.744327	405.28	winged elm 12 poor n
67	35.2208	-89.744351	412.47	Hackberry 15 fair yes
68	35.2208	-89.744331	404.2	Osage orange 8 fair no
69	35.220715	-89.744342	405.74	Hackberry 15 good yes
70	35.220707	-89.744362	392.65	Osage orange 6 poor no
71	35.220765	-89.744383	400.95	hackberry 12 poor no
72	35.2208	-89.744447	406.96	White Ash 6 fair no
73	35.220835	-89.744369	406.73	Cherry bark Redoak 33 good yes
74	35.220885	-89.74437	415.32	Slippery elm 9 es fair no
75	35.220791	-89.744408	407.45	White ash 21 fair yes
76	35.220804	-89.744357	396.72	White ash 26 good yes
77	35.220765	-89.744516	406.5	Mockernut Hickory 12 fair yes
78	35.220743	-89.744511	411.15	Pignut hickory 25 good yes
79	35.220825	-89.74452	407.81	slippery elm 6 inches fair yes
80	35.220714	-89.74457	417.62	pignut hickory 22 es good yes
81	35.22064	-89.744638	409.19	mockernut hickory 28 es good yes
82	35.220732	-89.744545	402.36	red oak 20 es fair no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
83	35.220931	-89.744059	410.63	hackberry 9 es fair n
84	35.221138	-89.744148	407.71	slippery elm 9 es poor no
85	35.221166	-89.744169	416.63	Slippery elm 10 es fair no
86	35.221196	-89.744155	409.58	Maple 20 fair yes
87	35.221168	-89.744119	410.07	Maple 10 fair yes
88	35.221154	-89.744144	408.69	winged elm 6 poor no
89	35.221267	-89.744093	405.77	Cherry bark Redoak 10 poor no
90	35.221274	-89.744158	409.06	Slippery elm 10 good yes
91	35.221216	-89.744141	418.96	Cherry bark red Oak 21 multi poor no
92	35.221222	-89.744191	416.04	Slippery elm 7 good yes
93	35.221263	-89.744132	412.11	Slippery elm 10 fair yes
94	35.221329	-89.744135	411.09	Redoak 9 es fair yes
95	35.221298	-89.744203	425.69	Slippery elm 6 fair yes
96	35.221326	-89.744079	404.89	Sweetgum 12 good yes
97	35.22135	-89.744102	418.6	Red Oak 11 es good yes
98	35.221389	-89.74405	423.85	Slippery elm 7 poor no
99	35.221298	-89.744187	408.23	white ash 7 poor no
100	35.221328	-89.744195	432.84	Slippery elm 8 es good yes
101	35.22128	-89.7441	404.23	Pignut hickory 12 es fair yes
102	35.22126	-89.744266	424.8	Slippery elm 6 poor no
103	35.221248	-89.74424	410.89	Slippery elm 9 es fair yes
104	35.221321	-89.744246	416.77	big leaf hickory 12 es good yes
105	35.221475	-89.744109	407.35	Hickory 11 poor no
106	35.221325	-89.744288	409.81	Postoak 32 poor no
107	35.221441	-89.744305	413.55	Cherry bark red oak 14 es fair yes
108	35.22143	-89.744309	411.98	red oak 29 es good yes
109	35.221424	-89.744173	427.99	white ash 12 fair yes
110	35.221416	-89.74404	417.09	Sweetgum 10 es fair yes
111	35.221428	-89.744026	416.01	Sweetgum 7 good yes
112	35.221457	-89.744004	407.74	Sweetgum 7 poor no
113	35.221479	-89.744211	409.68	Slippery elm 7 fair no
114	35.221538	-89.744045	416.11	Winged elm 6 fair yes
115	35.221535	-89.744104	419.75	Slippery elm 7 poor no
116	35.221568	-89.744208	406.07	Mockernut Hickory 7 fair yes
117	35.221556	-89.744147	417.78	Cherry bark red Oak 17 es good yes
118	35.221621	-89.744108	414.27	Winged elm 6 es poor no
119	35.221602	-89.744208	416.54	Cherry bark red oak 14 es fair yes
120	35.221611	-89.744217	424.08	Redoak 6 es poor no
121	35.22156	-89.744213	414.04	Slippery elm 12 es good yes
122	35.221533	-89.744253	407.84	Winged elm 7 fair yes
123	35.2215	-89.744331	412.2	Mockernut Hickory 12 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
124	35.22152	-89.744352	404.86	Postoak 13 good yes
125	35.221577	-89.744316	406.27	Mockernut and Hickory 7 good yes
126	35.221568	-89.744262	410.79	Redoak 13 good yes
127	35.221572	-89.744278	408.2	Cherry bark Redoak 13 good yes
128	35.22163	-89.744233	406.33	Winged elm 7 good yes
129	35.221634	-89.744243	414.5	Mockernut Hickory 13 fair no
130	35.221727	-89.744233	415.85	Winged elm 7 poor no
131	35.221671	-89.744174	412.4	Cherry bark Redoak 6 poor no
132	35.221668	-89.744201	410.7	Cherry bark red Oak 10 poor no
133	35.221722	-89.744088	405.61	slippery elm 6 poor no
134	35.221665	-89.744035	408.86	Winged elm 7 good yes
135	35.221748	-89.744087	413.91	Winged elm 6 good yes
136	35.221732	-89.744034	409.02	Winged elm 7 good yes
137	35.221737	-89.74378	403.87	Winged elm 6 good yes
138	35.221764	-89.744042	417.59	Winged elm 7 good yes
139	35.221797	-89.744108	413.16	Winged elm 7 good yes
140	35.221728	-89.74412	410.63	pear 7 poor no
141	35.221782	-89.744122	416.5	pear 7 poor no
142	35.221667	-89.74426	411.02	9 Cherry bark red Oak poor no
143	35.22165	-89.744301	406.56	Winged elm 10 good yes
144	35.221593	-89.744345	412.43	White ash 13 poor no
145	35.221734	-89.744263	415.91	7 slippery elm poor no
146	35.221759	-89.744335	409.97	Sweetgum 20 good yes
147	35.221657	-89.744276	412.04	Post Oak 13 poor no
148	35.221777	-89.744284	407.78	slippery elm 6 good yes
149	35.221778	-89.744181	407.05	Winged elm 7 poor no
150	35.221851	-89.744088	420.14	winged elm 7 good yes
151	35.2218	-89.744204	405.97	White ash 6 poor no
152	35.221832	-89.744176	416.24	White ash 7 poor no
153	35.221819	-89.744202	409.55	Postoak 13 es good yes
154	35.221889	-89.74421	415.45	Slippery elm 7 es poor no cancel
155	35.221895	-89.744229	409.84	*Pignut hickory 10 good yes
156	35.221849	-89.744275	409.09	Pignut hickory 10 good yes
157	35.22178	-89.744279	392.22	Red maple 17 fair yes
158	35.221934	-89.744226	409.09	Pignut hickory 7 poor no
159	35.221941	-89.74432	428.54	Slippery elm 13 good yes
160	35.221949	-89.744245	423.75	Pignut hickory 6 fair yes
161	35.221933	-89.744183	417.81	White ash 6 poor no
162	35.221951	-89.744092	407.71	Sweetgum 9 multi poor no
163	35.221893	-89.744054	409.51	pear 8 poor no
164	35.221819	-89.744069	414.67	Sweetgum 6 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
165	35.221847	-89.743994	423.16	Sweetgum 9 poor no
166	35.221871	-89.74403	417.78	Sweetgum 10 multi fair no
167	35.221974	-89.744258	411.52	Shagbark hickory 9 good yes
168	35.222087	-89.744221	405.31	Maple 12 es good yes
169	35.222053	-89.744257	404.95	Persimmon 6 poor no
170	35.221968	-89.744165	413.22	Pignut hickory 9 fair yes
171	35.221962	-89.744224	412.17	Mockernut Hickory 8 es poor no
172	35.221983	-89.744177	415.75	Red Oak 6 es poor no
173	35.222009	-89.744138	406.56	Slippery elm 8 es fair no
174	35.222054	-89.744093	417.06	Sweetgum 13 es fair no
175	35.222153	-89.74417	403.51	Black cherry 6 poor no
176	35.222071	-89.744023	402.33	Pignut hickory 10 fair yes
177	35.22209	-89.74405	406.86	Pignut hickory 6 es fair no
178	35.222031	-89.743854	400.62	Pignut hickory 12 good yes
179	35.222149	-89.744058	405.94	Pignut hickory 20 good yes
180	35.222108	-89.744194	403.31	White oak 9 es fair yes
181	35.222115	-89.744123	408.27	Post oak 22 es good yes
182	35.222221	-89.744218	405.31	Mockernut and Hickory 7 fair yes
183	35.222315	-89.744278	408.89	Black cherry 8 es good yes
184	35.222072	-89.744236	406.96	White Oak 11 es good yes
185	35.221991	-89.744314	410.99	Sassafras 8 poor no
186	35.221946	-89.744262	408.37	black cherry 8 good yes
187	35.22194	-89.744373	416.8	Post Oak 23 es good yes
188	35.221897	-89.744385	415.03	Black cherry 8 es good yes
189	35.221947	-89.74431	408.37	Slippery elm 6 poor no
190	35.22195	-89.744345	406.36	Black cherry 8 poor no
191	35.221992	-89.744316	416.24	slippery elm 6 poor no
192	35.222018	-89.744356	420.7	Black cherry 6 poor no
193	35.222037	-89.744349	420.18	Black cherry 10 poor no
194	35.22203	-89.744407	410.27	Black cherry 16 good yes
195	35.222036	-89.744475	417.52	slippery elm 7 good yes
196	35.222277	-89.744449	402.33	Northern red oak 10 es fair no
197	35.222118	-89.744339	397.44	Post Oak 31 es good yes
198	35.22207	-89.744219	399.67	Pignut hickory 6 good yes
199	35.222289	-89.744205	405.12	Black cherry 6 poor no
200	35.222196	-89.744338	400.46	green ash 15 es fair no
201	35.22217	-89.744374	403.61	White Oak 7 es good yes
202	35.222212	-89.744274	399.87	Mockernut Hickory 6 es good yes
203	35.222325	-89.744308	407.94	White ash 8 es good yes
204	35.222251	-89.744318	403.97	White oak 6 es poor no
205	35.222243	-89.74418	404.95	Sassafras 8 es poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
206	35.222236	-89.74423	421.75	White ash 9 es poor no
207	35.222229	-89.744165	412.17	Post Oak 18 es good yes
208	35.222209	-89.744126	407.87	Black cherry 8 es good yes
209	35.222275	-89.744116	405.48	Black cherry 13 es multi poor no
210	35.222298	-89.744324	403.67	Pignut hickory 17 good yes
211	35.222238	-89.744271	416.17	White Oak 29 es good yes
212	35.222289	-89.74424	406.17	mockernut nut 8 good yes
213	35.222401	-89.744255	402.92	Black cherry 9 poor no
214	35.222323	-89.744255	403.22	Northern red oak 11 es poor no
215	35.222428	-89.744277	401.57	White oak 18 es good yes or no
216	35.222399	-89.744283	408.86	Mockernut Hickory 15 es fair yes
217	35.222457	-89.744108	403.25	Siri bark Redoak 40 es or no
218	35.222506	-89.744356	407.64	pignut hickory 10 good yes
219	35.222564	-89.744259	399.67	White ash 14 good yes
220	35.222536	-89.7442	414.34	White Oak 7 good yes
221	35.222509	-89.744268	411.12	Cherry bark Redoak 8 es fair no
222	35.222564	-89.744276	409.38	Northern red oak 9 good yes
223	35.22258	-89.744193	410.14	White ash 9 poor no
224	35.222513	-89.744171	415.26	Post Oak 7 es good yes
225	35.222503	-89.744239	403.25	White ash 16 es fair yes
226	35.22261	-89.744128	402	White oak 10 es good yes
227	35.222668	-89.744141	404	White ash 9 es poor no
228	35.222664	-89.74418	404.3	Black cherry 16 es good yes
229	35.222601	-89.744287	411.12	Mockernut Hickory 13 es fair yes
230	35.222548	-89.744329	404.27	White ash 15 es poor no
231	35.222591	-89.744298	409.48	Slippery elm 6 good yes
232	35.222653	-89.744305	403.77	Pignut hickory 11 fair no
233	35.222659	-89.744296	403.64	Pignut hickory 6 fair yes
234	35.22274	-89.744216	411.94	Post Oak 11 es good yes
235	35.222721	-89.744078	418.5	White ash 15 es poor no
236	35.222681	-89.744137	407.81	White Oak 17 es good yes
237	35.222672	-89.744157	405.51	White Oak 13 es good yes
238	35.222714	-89.744215	399.51	White Oak 10 es good yes
239	35.22277	-89.744223	403.15	winged elm 6 es good yes
240	35.222742	-89.744118	407.91	Cherry bark red oak 28 es good yes
241	35.222756	-89.744229	405.15	Dogwood 6 good yes
242	35.222727	-89.744345	395.34	Mockernut hickory 12 poor no
243	35.222856	-89.744379	410.63	southern red oak 33 es good yes
244	35.2229	-89.744272	398.69	Black cherry 7 es fair yes
245	35.222831	-89.744234	385.6	Post Oak 15 es good yes
246	35.222824	-89.744222	405.84	White Oak 12 es good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
247	35.222923	-89.744041	397.34	Green ash 9 es good yes
248	35.222888	-89.744187	395.34	White Oak 20 es good yes
249	35.222914	-89.744112	400.66	White oak 16 es good yes
250	35.222906	-89.744225	399.08	Post oak 26 es good yes
251	35.22291	-89.744254	399.51	White Oak 7 es good yes
252	35.222918	-89.744321	398.92	Mockernut and Hickory 14 es good yes
253	35.222937	-89.744242	399.05	Pignut hickory 6 good yes
254	35.222961	-89.744203	396.1	Cherrybark red oak 11 good yes
255	35.222966	-89.744132	394.95	Pignut hickory 6 poor no
256	35.222973	-89.744171	393.54	Post Oak 25 good yes
257	35.222977	-89.744332	393.08	Pignut hickory 13 good yes
258	35.223141	-89.744302	394.91	Mockernut and Hickory 12 poor no
259	35.223098	-89.744178	394.55	White oak 17 es fair yes
260	35.22321	-89.744119	392.45	White Oak 7 es fair no
261	35.223073	-89.744222	406.23	White Oak 14 es fair no
262	35.223132	-89.744158	404.95	Southern red oak 25 es good yes
263	35.223086	-89.74426	392.59	Post Oak 6 es good yes
264	35.223177	-89.744184	403.31	Hickory 8 es poor no
265	35.223166	-89.744175	399.21	Northern red oak 10 es good yes
266	35.22317	-89.74415	401.41	Pignut hickory 8 es good yes
267	35.223127	-89.744199	397.77	White oak 6 es fair yes
268	35.223142	-89.744184	395.37	White Oak 6 es fair no
269	35.223174	-89.74427	393.77	White Oak 17 es good yes
270	35.223169	-89.74422	395.47	White Oak 8 es fair yes
271	35.22321	-89.744217	392.42	pignut hickory 6 es multi poor no
272	35.2232	-89.744293	390.32	Post Oak 15 es good yes
273	35.223242	-89.74427	394.13	Northern red oak 25 es good yes
274	35.223361	-89.744274	378.9	White Oak 10 es good yes
275	35.223276	-89.744187	389.14	Post oak 23 es good yes
276	35.22328	-89.744183	389.73	White Oak 10 es good yes
277	35.223221	-89.744205	386.52	White oak 6 es fair yes
278	35.223133	-89.744316	393.31	White Oak 22 es good yes
279	35.223216	-89.744444	381.23	Post Oak 6 es good yes
280	35.223143	-89.744342	402.43	Mockernut and Hickory 17 fair no
281	35.223167	-89.744394	378.94	White Oak 6 fair yes
282	35.223186	-89.744425	384.74	Winged elm 6 fair yes
283	35.223146	-89.744403	407.78	Pignut hickory 13 fair yes
284	35.223141	-89.744304	390.72	post Oak 8 es poor no
285	35.223074	-89.744194	406.73	Take me to Hickory/Postoak 27 es multi fair yes
286	35.223131	-89.744321	396.42	Post Oak 10 es fair yes
287	35.223075	-89.744458	391.37	Green ash 15 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
288	35.223121	-89.744416	389.24	Pignut hickory 7 fair yes
289	35.223147	-89.744407	386.81	Pignut hickory 6 fair yes
290	35.223169	-89.744452	389.27	Southern red oak 18 es good yes
291	35.223133	-89.744507	389.53	Post Oak 14 es fair yes
292	35.223074	-89.744571	409.78	Take me to Hickory 6 poor no
293	35.223061	-89.7445	398.39	Mockernut and Hickory 10 good yes
294	35.223023	-89.744532	388.98	Mockernut and Hickory 6 good yes
295	35.22303	-89.744572	391.34	Mockernut and Hickory 10 good yes
296	35.223004	-89.744601	397.83	Mockernut and Hickory 14 good yes
297	35.223147	-89.74458	387.5	Sassafras 6 poor no
298	35.223162	-89.74455	391.5	Mockernut hickory 6 poor no
299	35.22314	-89.744654	385.17	White Oak 10 es fair no
300	35.223098	-89.744654	387.7	Postoak 19 es good yes
301	35.223121	-89.74467	388.09	Post Oak 13 es good yes
302	35.223039	-89.744701	400.69	Northern red oak 16 es good yes
303	35.223093	-89.744642	398.2	Slippery elm 8 es good yes
304	35.223116	-89.744634	381.82	Postoak 7 es fair yes
305	35.223084	-89.744692	385.7	White ash 18 es good yes
306	35.222951	-89.744688	385.99	White Oak 12 es good yes
307	35.222918	-89.744616	385.37	White ash 14 es good yes
308	35.222934	-89.744657	388.55	Winged elm 6 good yes
309	35.222816	-89.744551	378.87	Mockernut and Hickory 16 fair no
310	35.222807	-89.744706	370.7	Slippery elm 14 good yes
311	35.222924	-89.744718	388.94	Pignut hickory 7 should yes
312	35.222935	-89.744668	382.81	Postoak 17 good yes
313	35.22293	-89.744725	382.25	Winged elm 7 good yes
314	35.222997	-89.74475	381.07	Postoak 7 es good yes
315	35.22301	-89.744683	376.84	Pignut hickory 13 fair no
316	35.223012	-89.7447	365.39	Winged elm 7 es good yes
317	35.223008	-89.744795	372.87	White ash 16 es poor no
318	35.223023	-89.744739	385.6	White oak 17 es good yes
319	35.223026	-89.744713	377.82	White Oak 24 es good yes
320	35.223118	-89.744766	374.51	Pignut hickory 10 es good yes
321	35.223098	-89.744755	370.05	Pignut hickory 6 es poor no
322	35.223061	-89.744855	372.08	Pignut hickory 10 es good yes
323	35.223033	-89.744863	375.62	Winged elm 6 es good yes
324	35.222994	-89.744901	374.77	Mockernut Hickory 17 es good yes
325	35.223037	-89.744975	375.2	Post Oak 6 es good yes
326	35.223029	-89.744865	372.9	Post Oak 15 es fair no
327	35.222925	-89.74496	374.25	Winged elm 15 es good yes
328	35.222891	-89.744906	372.28	Post Oak 23 es good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
329	35.223305	-89.744268	382.84	White ash 17 es good yes
330	35.22331	-89.744193	383.53	White Oak 24 es good yes
331	35.223371	-89.744167	381.56	White Oak 7 es good yes
332	35.223421	-89.744198	382.78	winged elm 11 es good yes
333	35.223399	-89.744148	380.87	Pignut hickory 6 es good yes
334	35.223543	-89.744176	367.39	Pignut hickory 7 es good yes
335	35.223368	-89.744119	376.38	White Oak 14 es fair yes
336	35.22346	-89.744113	378.15	Slippery elm 8 es fair yes
337	35.223413	-89.744222	386.84	Post Oak 10 es fair yes
338	35.223565	-89.744117	376.8	northern Red oak 29 es fair yes
339	35.223406	-89.744142	376.64	pignut Hickory 10 es good yes
340	35.223567	-89.744213	372.21	White Oak 14 es good yes
341	35.223566	-89.744084	372.74	Pignut hickory 14 es fair yes
342	35.223568	-89.744176	387.2	Pignut hickory 8 es good yes
343	35.223594	-89.744088	375.03	Post Oak 27 es good yes
344	35.223626	-89.744123	370.87	Sweetgum 32 es fair yes
345	35.223741	-89.744224	371.85	sugar maple 8 es fair yes
346	35.223799	-89.744099	374.93	Black cherry 17 es fair no
347	35.223763	-89.744124	372.7	Red maple 7 es fair no
348	35.22374	-89.744065	366.24	sweetgum 11 es fair yes
349	35.223886	-89.744066	385.66	Sweetgum 16 es fair no
350	35.223871	-89.743961	378.48	Northern red oak 12 es good yes
351	35.223779	-89.743965	382.02	Sweetgum 13 es fair no
352	35.223885	-89.744104	377.26	Mockernut Hickory 11 es poor no
353	35.224022	-89.743998	394.39	Pignut hickory 8 fair yes
354	35.223925	-89.744066	375	Sweetgum 22 es good yes
355	35.223921	-89.744044	379.63	Sweetgum 12 es fair yes
356	35.223823	-89.744228	371	dogwood 6 es poor no
357	35.223965	-89.744237	359.91	Mockernut Hickory 10 es fair yes
358	35.223967	-89.744215	369	sassafras 6 es poor no
359	35.223946	-89.744237	393.64	Sassafras 16 es good yes
360	35.223901	-89.744264	376.97	Slippery elm 11 es good yes
361	35.224014	-89.744216	374.57	Northern red oak 11 es fair yes
362	35.223883	-89.744318	373.36	Winged elm 7 es fair yes
363	35.224016	-89.744254	380.54	Slippery elm 11 es fair yes
364	35.224066	-89.744243	391.93	Slippery elm 7 es poor no
365	35.223909	-89.744268	389.63	Cherry bark red oak 24 es good yes
366	35.223997	-89.744172	379.82	White open 15 es good yes stay
367	35.223992	-89.744235	376.21	Post Oak 25 es fair yes
368	35.224059	-89.744153	382.74	Black cherry 12 es good yes
369	35.224072	-89.744107	386.32	post Oak 13 es good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
370	35.22411	-89.744058	387.24	White Oak 10 es good yes
371	35.224104	-89.743965	393.21	White Oak 29 es good yes
372	35.22408	-89.744204	397.6	Winged elm 8 es good yes
373	35.224088	-89.744245	396.98	Northern red oak 12 es fair no
374	35.224177	-89.744201	398.95	Slippery elm 6 es good yes
375	35.224173	-89.744133	393.7	White Oak 18 es good yes
376	35.224249	-89.744144	392.49	Black cherry 6 es fair no
377	35.224279	-89.744069	396.03	Winged elm 6 es good yes
378	35.224286	-89.744102	391.4	Winged elm 12 es good yes
379	35.224207	-89.744042	402.07	Post Oak 19 es good yes
380	35.224233	-89.743983	397.83	White Oak 22 good yes
381	35.224258	-89.743971	391.73	White Oak 8 es good yes
382	35.22427	-89.743977	407.51	White Oak 23 poor no
383	35.224284	-89.743997	404.86	Red oaks 12 es poor no
384	35.224303	-89.744014	393.96	slippery elm 6 fair yes
385	35.224375	-89.743967	394.06	Northern red oak 14 es poor no
386	35.224373	-89.743922	401.61	Northern red oak 23 es fair yes
387	35.224285	-89.744106	392.88	Mockernut Hickory 12 es good yes
388	35.224327	-89.744154	392.68	Slippery elm 9 es good yes
389	35.224412	-89.744103	394.13	winged elm 8 es good yes
390	35.224398	-89.744064	399.15	Mockernut Hickory 11 es poor no
391	35.224404	-89.744008	391.44	post oak 16 good yes
392	35.224451	-89.744058	404.69	Pignut hickory 7 es fair yes
393	35.224342	-89.74419	403.54	pignut hickory 9 poor no
394	35.224383	-89.744182	399.93	winged elm 7 good yes
395	35.224499	-89.74421	390.29	slippery elm 12 poor no
396	35.224431	-89.744168	399.21	mockernut hickory 9 poor no
397	35.224477	-89.744082	397.38	post oak 12 good yes
398	35.22461	-89.744113	397.67	mockernut hickory 18 good yes
399	35.224604	-89.744076	415.49	slippery elm 6 good yes
400	35.224576	-89.744148	389.8	post oak 23 good yes
401	35.224749	-89.744106	398.92	sassafras 6 es poor no
402	35.224649	-89.744172	398.29	post oak 7 good yes
403	35.224673	-89.744177	398.59	white oak 13 good yes
404	35.224719	-89.744034	400.85	shagbark hickory 6 good yes
405	35.224783	-89.744069	405.31	Sweetgum 8 es poor no
406	35.224803	-89.744086	408.2	Sweetgum 14 es poor no
407	35.224687	-89.743995	398.06	sweet gum 12 poor no
408	35.224734	-89.743991	400.1	Sweetgum 10 poor no
409	35.224832	-89.744067	412.57	sweet gum 9 poor no
410	35.224815	-89.743945	410.17	Sweetgum 10 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
411	35.224797	-89.744011	402.95	Sweetgum 6 es poor no
412	35.224806	-89.744042	399.97	Sweetgum 8 poor no
413	35.224805	-89.744094	407.87	Sassafras 7 es good yes
414	35.224879	-89.743977	411.68	Sweetgum 6 es poor no
415	35.224828	-89.743986	403.28	Sweetgum 10 poor no
416	35.224848	-89.744088	403.22	sweetgum 8 poor no
417	35.224867	-89.744045	404.3	sweetgum 12 good yes
418	35.224863	-89.744011	409.22	sweetgum 9 poor no
419	35.224936	-89.744001	403.38	sweetgum 13 poor no
420	35.224947	-89.743942	401.71	persimmon 7 fair yes
421	35.224821	-89.743857	398.06	callery pear 20 multi poor no
422	35.225007	-89.744051	400.82	callery pear 22 multi poor no
423	35.225039	-89.743835	383.6	red maple 6 poor no
424	35.225064	-89.743979	398.62	red maple 12 poor no
425	35.225033	-89.744076	407.22	red maple 10 good yes
426	35.224981	-89.744057	402.53	sweetgum 13 poor no
427	35.224947	-89.744084	396.69	sweetgum 8 poor no
428	35.224997	-89.744052	399.8	sweetgum 7 poor no
429	35.224977	-89.744053	394.13	sweetgum 15 fair yes
430	35.22495	-89.744133	401.84	sweetgum 10 poor no
431	35.224999	-89.744141	392.06	sweetgum 9 poor no
432	35.225053	-89.744056	393.24	sweetgum 7 poor no
433	35.22508	-89.743985	395.28	sweetgum 8 poor no
434	35.225065	-89.744003	392.72	sweetgum 10 fair yes
435	35.22509	-89.74402	401.67	red maple 6 poor no
436	35.225121	-89.744035	397.08	sweetgum 6 poor no
437	35.225115	-89.744077	396.19	shagbark hickory 6 poor no
438	35.225145	-89.744058	386.71	sweetg 7 poor no
439	35.225137	-89.744168	396.88	white oak 6 poor no
440	35.225139	-89.744203	394.91	red oak 12 poor no
441	35.22524	-89.744117	406.5	cherrybark red oak 9 poor no
442	35.225206	-89.744186	407.19	mockernut hickory 16 good yes
443	35.22527	-89.744028	401.77	slippery elm 10 good yes
444	35.225232	-89.744032	401.31	winged elm 10 good yes
445	35.225253	-89.744176	398.29	red oak 17 fair no
446	35.225237	-89.74413	403.64	southern red oak 24 good yes
447	35.225249	-89.743889	406.5	white oak 12 poor no
448	35.2253	-89.744004	405.38	mockernut hicokry 9 poor no
449	35.225358	-89.744023	420.96	post oak 11 poor no
450	35.225344	-89.744019	417.49	white oak 16 good yes
451	35.225401	-89.743988	405.25	tulip tree 8 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
452	35.22532	-89.744051	398.72	northern red oak 15 good yes
453	35.225378	-89.744026	403.9	white oak 17 good yes
454	35.225454	-89.74418	391.86	post oak 20 fair yes
455	35.225493	-89.743984	419.29	american hophornbeam 8 good yes
456	35.225517	-89.744052	388.98	tulip poplar 17 good yes
457	35.225536	-89.743897	385.4	tulip poplar 9 good yes
458	35.225439	-89.74395	386.45	Tulip poplar 16 good yes
459	35.225568	-89.743825	410.7	american hophornbeam 6 poor no
460	35.225537	-89.743836	388.32	american hophornbeam 7 es Good yes
461	35.22553	-89.744029	389.83	american hophornbeam 7 poor no
462	35.225562	-89.744034	391.14	Sassafras 9 poor no
463	35.225595	-89.744005	389.14	Post Oak 27 good yes
464	35.225591	-89.744073	388.22	Post Oak 20 fair no
465	35.225689	-89.743986	395.24	Pignut hickory 8 good yes
466	35.225674	-89.744044	389.5	Post Oak 11 poor no
467	35.225752	-89.743988	388.29	Winged elm 6 poor no
468	35.225742	-89.743968	385.7	Post Oak 12 fair yes
469	35.225738	-89.743999	397.08	Winged elm 7 fair yes
470	35.225769	-89.744026	401.02	Pignut hickory 10 good yes
471	35.225799	-89.743984	387.01	White Oak 11 good yes
472	35.225752	-89.744168	386.94	Northern red oak 16 fair yes
473	35.225846	-89.744102	383.33	Shagbark hickory 15 good yes
474	35.225883	-89.743898	368.93	american hophornbeam 16 multi fair yes
475	35.225909	-89.743853	368.11	mockernut hickory 10 good yes
476	35.225953	-89.743876	385.4	hickory 12 fair yes
477	35.226036	-89.743909	390.52	White Oak 6 poor no
478	35.226015	-89.743861	364.96	Pignut hickory 7 good yes
479	35.226026	-89.74389	369.98	American hop hornbeam 10 good yes
480	35.226026	-89.743909	367.68	American hop hornbeam 7 fair yes
481	35.225978	-89.743993	378.08	Winged elm 16 good yes
482	35.225979	-89.744039	379.1	White Oak 12 good yes
483	35.226011	-89.74408	373.62	White oaks 12 fair yes
484	35.226138	-89.744116	374.54	pignut hickory 26 poor no
485	35.226081	-89.744129	367.55	cherrybark red oak 30 fair yes
486	35.226134	-89.74424	363.35	cheerybark red oak 26 fair yes
487	35.226182	-89.744207	363.91	post oak 12 fair yes
488	35.226226	-89.744222	372.83	cherrybark redoak 23 fair yes
489	35.226235	-89.74433	372.18	southern red oak 13 poor no
490	35.22623	-89.744283	362.17	sweetgum 8 fair yes
491	35.226234	-89.744277	360.96	red maple 10 poor no
492	35.226299	-89.744398	369.46	red maple 8 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
493	35.226384	-89.744486	363.91	red maple 10 fair yes
494	35.226277	-89.744591	372.11	sweetgum 30 good yes
495	35.226293	-89.74459	360.3	american hophornbeam 6 good yes
496	35.226332	-89.744676	359.74	american hophornbeam 7 fair yes
497	35.226418	-89.744686	355.25	sycamore 12 fair yes
498	35.226305	-89.744743	367.91	pignut hickory 19 good yes
499	35.22632	-89.74477	361.15	american hophornbeam 6 good yes
500	35.226451	-89.744814	358.33	pignut hickory 10 good yes
501	35.226364	-89.744879	370.73	cherrybark red oak 13 poor no
502	35.226389	-89.744337	361.09	white ash 10 fair good yes
503	35.226451	-89.744429	367.98	american hophornbeam 8 poor no
504	35.22653	-89.744364	354.3	pignut hickory 6 fair yes
505	35.226431	-89.744295	360.17	american hophornbeam 9 good yes
506	35.226408	-89.744454	358.53	pignut hickory 7 good yes
507	35.22649	-89.744499	359.15	pignut hickory 8 good yes
508	35.226434	-89.744526	369.23	tulip poplar 11 fair no
509	35.226457	-89.74435	349.8	tulip poplar 20 fair no
510	35.226337	-89.744609	359.09	cherrybark redoak 18 poor no
511	35.226481	-89.744372	355.61	x
512	35.226501	-89.744359	356.89	x
513	35.226517	-89.744402	360.24	x
514	35.226499	-89.744425	368.96	x
515	35.226431	-89.744254	365.55	tulip poplar 19 multi fair yes
516	35.22655	-89.744416	362.5	Tulip poplar 15 good yes
517	35.22657	-89.744464	363.98	tulip poplar 13 fair yes
518	35.226498	-89.744429	360.76	Pignut hickory 10 fair yes
519	35.226459	-89.744284	361.94	pignut hickory 8 poor no
520	35.226528	-89.744424	371.82	tulip poplar 17 good yes
521	35.226489	-89.744483	365.49	Tour poplar 17 fair yes
522	35.226572	-89.744521	357.94	sassafras 6 fair yes
523	35.2265	-89.744544	355.77	Red maple 8 Good yes
524	35.226338	-89.744511	360.86	American hophornbeam 8 fair yes
525	35.22642	-89.744529	358.63	Red maple 13 poor no
526	35.22645	-89.744695	355.31	Mockernut Hickory 6 good yes
527	35.226484	-89.744619	355.61	mockernut hickory 15 poor no
528	35.226406	-89.74466	358.83	tulip poplar 7 good yes
529	35.226543	-89.744606	358.3	sassafras 8 poor no
530	35.226654	-89.744595	357.38	Northern red oak 11 good yes
531	35.226645	-89.744651	357.19	Red maple 8 fair no
532	35.226538	-89.744585	349.97	Sweetgum 10 poor no
533	35.226578	-89.744648	348.62	tulip poplar 9 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
534	35.226564	-89.744672	353.44	American hophornbeam 6 good yes
535	35.226493	-89.744719	360.3	Tulip poplar 18 multi fair yes
536	35.226639	-89.744705	355.91	Siri bark red Oak 14 fair yes
537	35.226691	-89.744708	357.38	Sweetgum 11 poor no
538	35.226684	-89.744666	364.99	Red maple 11 good yes
539	35.22664	-89.744696	357.81	Sweetgum 15 good yes
540	35.226718	-89.744666	358.73	Red maple 8 fair yes
541	35.226632	-89.744789	352.43	Sweetgum 6 poor no
542	35.226638	-89.744787	355.74	Sweetgum 13 poor no
543	35.226553	-89.744783	353.74	Sweetgum 12 poor no
544	35.22664	-89.744769	355.28	tulip poplar 6 poor no
545	35.226548	-89.744749	352.69	American hophornbeam 6 good yes
546	35.226538	-89.744739	353.51	Sweetgum 11 poor no
547	35.226514	-89.744821	348.98	Tulip poplar 20 good yes
548	35.226578	-89.744837	368.44	American hophornbeam 9 fair yes
549	35.226659	-89.744741	347.93	Sweetgum 7 poor no
550	35.226594	-89.744932	345.28	Northern red oak 11 fair yes
551	35.226718	-89.744768	358.14	Sweetgum 6 poor no
552	35.226581	-89.744862	359.94	tulip poplar 8 poor no
553	35.226686	-89.744725	355.61	Sweetgum 12 fair no
554	35.226697	-89.744863	359.51	Tulip poplar 16 good yes
555	35.226686	-89.74485	366.34	Red maple 7 good yes
556	35.226598	-89.74482	361.98	Red maple 10 good yes
557	35.226702	-89.744823	352.03	tulip poplar 8 good yes
558	35.226639	-89.744986	350.98	Black cherry 6 fair yes
559	35.226568	-89.744975	354.69	Cherry bark red oak 12 poor no
560	35.22661	-89.744993	361.06	Cherrybark red Oak 17 good yes
561	35.226681	-89.744959	350.03	Sweetgum 9 good yes
562	35.226741	-89.744951	349.31	Sweetgum 11 good yes
563	35.226813	-89.744918	347.97	Red maple 7 good yes
564	35.226764	-89.744902	350.98	tulip poplar 7 poor no
565	35.226747	-89.744982	352.79	Red maple 7 poor no
566	35.226797	-89.744983	350.79	Red maple 6 poor no
567	35.226817	-89.744946	349.7	Red maple 6 fair yes
568	35.226808	-89.744983	355.09	Red maple 7 fair yes
569	35.226799	-89.745021	350.89	tulip poplar 11 good yes
570	35.226721	-89.744995	350.92	Sweetgum 10 good yes
571	35.226663	-89.744983	344.65	Sweetgum 10 four no
572	35.226646	-89.745013	344.36	Sweetgum 17 fair no
573	35.226559	-89.745053	350.72	Sweetgum 10 poor no
574	35.226667	-89.745073	350.89	Southern red oak 14 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
575	35.22676	-89.745065	348.06	Sweetgum 11 poor no
576	35.226745	-89.744969	344.91	shagbark hickory 6 fair yes
577	35.226851	-89.745052	345.28	Red maple 10 fair no
578	35.226857	-89.745014	341.83	Red maple 7 fair yes
579	35.226862	-89.745041	344.26	Sweetgum 6 poor no
580	35.226894	-89.745028	354.36	Red maple 7 fair yes
581	35.226887	-89.745034	352	Tulip poplar 12 good yes
582	35.226803	-89.744745	356.36	Red maple 8 good yes
583	35.226801	-89.744791	357.38	Red maple 7 poor no
584	35.226749	-89.744787	356.76	Red maple 6 fair yes
585	35.226741	-89.744838	355.02	Tulip poplar 17 good yes
586	35.226679	-89.744858	352.33	tool Poplar 9 fair no
587	35.226762	-89.744886	354.72	Tulip poplar 14 fair yes
588	35.2267	-89.744893	353.31	Tulip poplar 17 good yes
589	35.226785	-89.744855	356.23	slippery elm 6 fair no
590	35.226762	-89.744742	354.43	Tulip poplar 14 good yes
591	35.226827	-89.744841	357.61	Red maple 7 fair yes
592	35.226832	-89.744879	356.69	Tulip poplar 17 good yes
593	35.226824	-89.744889	354.43	Red maple 6 poor no
594	35.226846	-89.744896	355.38	Sweetgum 7 fair no
595	35.226897	-89.744914	363.35	Red maple 6 poor no
596	35.226844	-89.74494	358.96	Tulip poplar 8 good yes
597	35.226899	-89.744946	362.43	Sweetgum 6 poor no
598	35.226938	-89.745026	370.24	tulip Poplar 22 good yes
599	35.226899	-89.744938	362.83	tulip Poplar 8 good yes
600	35.226931	-89.744849	372.6	tulip Poplar 14 fair yes
601	35.226957	-89.744904	377.59	Tulip poplar 18 fair yes
602	35.226863	-89.744958	360.04	Red maple 10 fair yes
603	35.226971	-89.74498	357.78	Tulip poplar 7 poor no
604	35.226933	-89.744998	360.01	Red maple 6 fair yes
605	35.227001	-89.745068	367.72	sweetgum 7 poor no
606	35.226848	-89.745076	350.13	red maple 7 good yes
607	35.226846	-89.745105	353.64	sweetgum 17 good yes
608	35.226869	-89.745143	371.82	red maple 10 good yes
609	35.226785	-89.745128	360.83	red maple 7 poor no
610	35.226802	-89.745141	355.84	sweetgum 9 fair yes
611	35.226774	-89.745134	356.4	red maple 6 good yes
612	35.226761	-89.74517	355.31	red maple 15 fair yes
613	35.226768	-89.745183	359.78	tulip poplar 19 good yes
614	35.226821	-89.745155	357.91	red maple 6 good yes
615	35.226806	-89.745187	367.95	red maple 12 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
616	35.226952	-89.7452	351.35	tulip poplar 10 poor no
617	35.226847	-89.74503	352.99	Red maple 7 good yes
618	35.226859	-89.745186	352.59	Red maple 6 fair yes
619	35.226967	-89.74511	357.64	Red maple 11 good yes
620	35.226978	-89.745018	354.56	Red maple 8 fair yes
621	35.227005	-89.744969	355.61	Two Poplar 18 good yes
622	35.227002	-89.744987	360.37	Tulip poplar 14 good yes
623	35.227021	-89.744893	365.55	Call Poplar 15 good yes
624	35.226977	-89.744983	361.94	Sweetgum 11 fair yes
625	35.226977	-89.745065	362.07	Tulip poplar 11 good yes
626	35.226962	-89.745059	377.23	Sweetgum 10 poor no
627	35.226957	-89.745111	368.8	tool Poplar 12 poor no
628	35.22694	-89.745143	358.3	tulip poplar 8 poor no
629	35.226915	-89.745133	357.94	tulip poplar 6 poor no
630	35.227002	-89.745075	370.05	Sweetgum 12 poor no
631	35.226967	-89.745181	368.01	Red maple 9 fair yes
632	35.226905	-89.745193	375.69	Tulip poplar 16 good yes
633	35.226774	-89.745148	371.72	sweetgum 12 good yes
634	35.226853	-89.745368	365.94	red maple 8 multi poor no
635	35.226851	-89.745382	348.59	Sweetgum 13 fair no
636	35.226873	-89.745242	349.57	tulip poplar 7 poor no
637	35.226916	-89.745265	360.5	tulip Poplar 17 good yes
638	35.226954	-89.745182	357.15	Sweetgum 13 poor no
639	35.227051	-89.745171	356.79	Sweetgum 8 poor no
640	35.227074	-89.74516	359.78	Sweetgum 9 poor no
641	35.227036	-89.745199	356.76	tulip poplar 8 poor no
642	35.226965	-89.745297	355.25	Tulip poplar 27 good yes
643	35.226939	-89.745303	354.4	Sweetgum 8 good yes
644	35.226932	-89.745308	350.23	Sweetgum 7 poor no
645	35.226973	-89.745412	356.89	Sweetgum 6 poor no
646	35.226923	-89.745336	370.51	White Oak 27 poor no
647	35.227005	-89.745367	378.81	Sweetgum 21 poor no
648	35.227033	-89.745338	371.56	Sweetgum 10 poor no
649	35.227055	-89.745358	370.41	Sycamore 17 good yes
650	35.227079	-89.745233	360.17	Red maple 6 poor no
651	35.227022	-89.745192	363.29	Sweetgum 15 fair yes
652	35.227028	-89.745115	362.89	Sweetgum 12 poor no
653	35.22709	-89.745072	361.38	Sweetgum 6 Poor no
654	35.227116	-89.745054	367.75	Sweetgum 23 good yes
655	35.227102	-89.745072	361.45	tulip poplar 6 poor no
656	35.22714	-89.745097	362.24	Red maple 7 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
657	35.22711	-89.745105	359.28	Red maple 9 good yes
658	35.22717	-89.745162	365.49	Red maple 10 poor no
659	35.227229	-89.745121	362.86	Red maple 9 good yes
660	35.22711	-89.745134	361.22	Sweetgum 10 poor no
661	35.227217	-89.745143	364.9	Red maple 6 good yes
662	35.227126	-89.745264	352.26	sweetgum 10 poor no
663	35.227147	-89.745209	359.28	sycamore 11 poor no
664	35.22708	-89.745217	364.37	tulip poplar 9 good yes
665	35.227137	-89.745204	364.27	tulip poplar 11 poor no
666	35.227126	-89.745091	370.47	sweetgum 6 poor no
667	35.22712	-89.745215	347.34	sycamore 11 poor no
668	35.226961	-89.745242	359.22	tulip poplar 13 good yes
669	35.227137	-89.745208	365.65	Red maple 6 poor no
670	35.227185	-89.745238	366.63	Red maple 8 good yes
671	35.227139	-89.745275	363.48	Tulip poplar 12 poor no
672	35.227146	-89.74531	360.07	Sycamore 16 good yes
673	35.227062	-89.745356	361.81	Sweetgum 8 poor no
674	35.22714	-89.745364	356.1	tulip poplar 12 poor no
675	35.227187	-89.745352	362.5	Red maple 7 fair yes
676	35.227202	-89.745332	367.98	Red maple 6 poor no
677	35.227199	-89.745235	364.27	Red maple 6 poor no
678	35.227175	-89.745331	368.27	Sweetgum 12 poor no
679	35.22715	-89.7454	372.9	Red maple 6 fair yes
680	35.227136	-89.745368	370.47	Red maple 8 good yes
681	35.227113	-89.745423	357.91	Red maple 6 poor no
682	35.227157	-89.745373	360.47	tulip poplar 8 poor no
683	35.227181	-89.745452	364.07	red maple 8 poor no
684	35.227263	-89.745416	363.94	red maple 6 good yes
685	35.227099	-89.745413	360.37	red maple 7 poor no
686	35.226969	-89.745572	351.41	sycamore 6 poor no
687	35.227021	-89.745483	355.68	sycamore 19 good yes
688	35.227136	-89.745479	355.41	red maple 6 poor no
689	35.227081	-89.745499	361.25	red maple 6 poor no
690	35.22706	-89.745559	360.96	red maple 6 poor no
691	35.226936	-89.745468	352.23	sweetgum 6 poor no
692	35.226918	-89.745494	356.17	tulip poplar 15 poor no
693	35.227	-89.745561	361.48	tulip poplar 16 poor no
694	35.226931	-89.745493	355.61	sweetgum 7 poor no
695	35.226971	-89.745466	350.59	tulip poplar 25 good yes
696	35.226879	-89.745675	351.97	sweetgum 10 poor no
697	35.226952	-89.74564	363.02	sweetgum 10 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
698	35.226938	-89.74568	350.82	sweetgum 10 poor no
699	35.227005	-89.745533	350.3	sweetgum 9 poor no
700	35.227157	-89.745559	354.66	tulip poplar 15 poor no
701	35.227022	-89.745631	373.88	red oak 8 poor no
702	35.22704	-89.745644	353.15	tulip poplar 8 poor no
703	35.227064	-89.7457	350.46	sweetgum 20 poor no
704	35.226944	-89.745693	347.67	sycamore 13 fair yes
705	35.227032	-89.745778	356.46	tulip poplar 13 good yes
706	35.227027	-89.745778	345.6	sweetgum 6 poor no
707	35.227103	-89.745738	362.43	Tulip poplar 20 good yes
708	35.227098	-89.74577	355.77	Sweetgum 6 poor no
709	35.227122	-89.745787	356.76	Tulip poplar 13 good yes
710	35.227154	-89.74576	366.5	Sweetgum 6 poor no
711	35.227016	-89.745757	347.87	Sweetgum 7 poor no
712	35.227094	-89.745525	355.38	Sweetgum 6 poor no
713	35.227123	-89.745585	367.65	Red maple 6 good yes
714	35.22715	-89.745547	373.29	Red maple 7 good yes
715	35.227107	-89.745514	361.71	Red maple 8 poor no
716	35.227204	-89.745487	374.25	Red maple 6 poor no
717	35.227171	-89.745558	377.62	slippery elm 9 good yes
718	35.227264	-89.74543	384.38	Red maple 6 fair yes
719	35.227115	-89.74554	364.24	Sweetgum 15 fair yes
720	35.227296	-89.745431	358.33	sycamore 9 poor no
721	35.227168	-89.745523	352.2	sugar maple 7 es good yes
722	35.227221	-89.74556	349.64	Sugar maple 11 fair yes
723	35.227192	-89.745626	372.18	Sugarmaple 9 poor no
724	35.227212	-89.745535	367.36	Sweetgum 13 poor no
725	35.227213	-89.745636	369.23	Sycamore 14 good yes
726	35.227138	-89.745642	360.43	Sugarmaple 13 good yes
727	35.227171	-89.745709	355.45	Sugarmaple 8 es poor no
728	35.227265	-89.745548	383.56	sycamore 9 good yes
729	35.227207	-89.745685	362.3	Sweetgum 15 good yes
730	35.227159	-89.745663	362.93	Red maple 6 good yes
731	35.227195	-89.745728	352.33	Tulip poplar 9 es fair no
732	35.227203	-89.745702	358.86	Sugarmaple 12 es good yes
733	35.227224	-89.745724	345.14	Sweetgum 11 poor no
734	35.227337	-89.745632	354.82	Sweetgum 13 good yes
735	35.227297	-89.745728	354.43	Tulip poplar 10 good yes
736	35.227344	-89.745721	369.42	Tulip poplar 10 poor no
737	35.227351	-89.745654	372.47	tulip poplar 9 poor no
738	35.227325	-89.745598	365.29	tulip poplar 7 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
739	35.227371	-89.745562	361.52	Sweetgum 6 poor no
740	35.227366	-89.745518	368.21	sugar maple 7 good yes
741	35.227294	-89.745537	366.96	Sugarmaple 8 poor no
742	35.227311	-89.74552	362.96	Sugar maple 18 good yes
743	35.227292	-89.745428	365.22	Sweetgum 7 es poor no
744	35.227101	-89.74538	361.02	Sweetgum 11 poor no
745	35.227214	-89.745387	357.48	Sugar maple 15 good yes
746	35.227278	-89.745308	361.38	sycamore 9 poor no
747	35.22735	-89.74534	372.34	tulip poplar 6 fair yes
748	35.227342	-89.745422	366.83	Tulip poplar 11 fair yes
749	35.227408	-89.745237	366.24	Sweetgum 7 poor no
750	35.227247	-89.745224	364.63	Sugar maple 10 fair yes
751	35.227342	-89.745155	368.96	Sugar maple 10 fair no
752	35.227328	-89.745176	368.5	Sugar maple 6 poor no
753	35.227349	-89.745319	360.33	Sweetgum 9 poor no
754	35.227341	-89.745446	361.22	tulip poplar 6 poor no
755	35.227332	-89.745519	367.45	Tulip poplar 7 poor no
756	35.227412	-89.745584	369.03	Tulip poplar 12 good yes
757	35.227385	-89.745559	367.36	Tulip poplar 15 good yes
758	35.227336	-89.745576	360.86	Sugarmaple 11 good yes
759	35.227357	-89.745669	357.12	Tulip poplar 8 es poor no
760	35.227342	-89.745612	357.91	Sugar maple 15 fair yes
761	35.227393	-89.745617	364.4	Sugarmaple 6 fair yes
762	35.227414	-89.745712	361.48	Tulip poplar 17 good yes
763	35.227332	-89.745686	362.3	Tulip poplar 11 fair yes
764	35.227371	-89.745783	356.89	Tulip poplar 10 poor no
765	35.227391	-89.745775	363.22	Tulip poplar 11 fair no
766	35.227378	-89.745807	369.95	Tulip poplar 14 fair yes
767	35.227375	-89.745699	360.76	Sugar maple 10 fair yes
768	35.227353	-89.745803	357.51	Sugar maple 8 fair yes
769	35.22737	-89.74584	364.93	Tulip poplar 15 good yes
770	35.227347	-89.745886	361.88	Tulip poplar 17 good yes
771	35.227304	-89.745822	351.84	Sweetgum 7 fair no
772	35.227292	-89.745846	356.14	Tulip poplar 6 poor no
773	35.227259	-89.745805	348.29	Tulip poplar 13 fair yes
774	35.227279	-89.745714	353.28	Tulip poplar 10 fair yes
775	35.227206	-89.745908	358.6	Sweetgum 7 poor no
776	35.227234	-89.745774	354.4	Sweetgum 6 poor no
777	35.227181	-89.745847	351.74	Tulip poplar 13 poor no
778	35.227166	-89.745824	357.28	Sweetgum 6 poor no
779	35.227195	-89.745674	353.81	Sweetgum 13 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
780	35.227156	-89.745823	351.54	Tulip poplar 20 good yes
781	35.227141	-89.745901	346.82	Tulip poplar 13 good yes
782	35.227176	-89.745933	353.97	Tulip poplar 10 fair yes
783	35.227211	-89.745923	357.32	Tulip poplar 17 fair yes
784	35.227278	-89.745874	360.2	Tulip poplar 15 poor no
785	35.22726	-89.745958	362.5	Tulip poplar 18 good yes
786	35.227229	-89.746029	355.02	Tulip poplar 17 fair yes
787	35.227268	-89.746054	358.14	Tulip poplar 12 fair yes
788	35.227294	-89.745963	353.67	Sweetgum 11 fair yes
789	35.227283	-89.746034	360.47	Tulip poplar 19 poor no
790	35.227268	-89.746076	357.32	Sugarmaple 7 poor no
791	35.227263	-89.746058	362.04	Tulip poplar 25 multi poor no
792	35.22722	-89.746085	356.79	Tulip poplar 14 fair yes
793	35.227254	-89.7461	356.36	Tulip poplar 14 fair yes
794	35.227271	-89.746131	357.61	Tulip poplar 13 fair yes
795	35.227328	-89.746119	359.94	Tulip poplar 19 fair yes
796	35.227272	-89.745917	361.75	Sweetgum 17 poor no
797	35.227334	-89.745956	370.41	Tulip poplar 16 good yes
798	35.227312	-89.745922	362.17	Sweetgum 9 poor no
799	35.227318	-89.745964	368.93	Tulip poplar 6 poor no
800	35.227326	-89.746018	364.63	Tulip poplar 10 good yes
801	35.227349	-89.745999	364.24	Sweetgum 9 good yes
802	35.227404	-89.746008	360.66	Tulip poplar 18 good yes
803	35.227412	-89.745878	358.96	Sweetgum 9 fair no
804	35.227399	-89.745892	353.41	Two Poplar 19 good yes
805	35.227427	-89.745944	356.14	Sweetgum 10 good yes
806	35.227446	-89.745843	357.71	Sweetgum 6 poor no
807	35.227494	-89.745757	361.22	Sweetgum 6 poor no
808	35.227439	-89.745767	362.27	Tulip poplar 7 good yes
809	35.227486	-89.74581	362.27	Sugar maple 12 multi poor no
810	35.227489	-89.745707	365.94	Sugar maple 6 good yes
811	35.227475	-89.745765	361.48	Sweetgum 10 fair yes
812	35.22747	-89.745791	356.86	Sweetgum 14 fair no
813	35.227491	-89.745757	358.86	Sweetgum 7 poor no
814	35.227509	-89.74581	367.09	Sweetgum 13 fair no
815	35.227513	-89.745791	361.61	Tulip poplar 14 good yes
816	35.227555	-89.745833	364.6	Sweetgum 9 poor no
817	35.227526	-89.745749	362.14	Sweetgum 6 fair yes
818	35.227489	-89.745858	367.62	Sugar maple 6 good yes
819	35.22745	-89.745931	360.86	Tulip poplar 14 good yes
820	35.22743	-89.745968	356.69	Tulip poplar 15 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
821	35.227452	-89.745978	359.22	Sweetgum 8 poor no
822	35.227363	-89.746029	352.36	Tulip poplar 18 good yes
823	35.227338	-89.746064	347.05	Tulip poplar 10 fair yes
824	35.227388	-89.746177	348.2	Sugar maple 12 multi poor no
825	35.227409	-89.746161	346.82	Sweetgum 11 fair yes
826	35.227496	-89.746123	350.36	Sweetgum 7 poor no
827	35.227475	-89.746131	365.09	Tulip poplar 16 good yes
828	35.227433	-89.746064	353.31	Tulip poplar 11 fair no
829	35.22747	-89.746009	351.35	Tulip poplar 16 good yes
830	35.227467	-89.746064	350.46	Tulip poplar 14 good yes
831	35.227528	-89.745974	352.92	Tulip poplar 19 good yes
832	35.227547	-89.745895	358.3	Sugarmaple 6 good yes
833	35.227544	-89.74592	357.55	Sugar maple 6 poor no
834	35.227587	-89.745867	358.76	Sweetgum 7 poor no
835	35.227527	-89.745941	356.17	Sweetgum 8 poor no
836	35.22757	-89.745988	363.29	Sweetgum 7 poor no
837	35.22751	-89.746001	360.24	Sweetgum 29 multi poor no
838	35.227595	-89.746025	347.05	Black cherry 6 poor no
839	35.227523	-89.746014	353.44	Sweetgum 10 poor no
840	35.227566	-89.746022	350.82	Sugar maple 10 poor no
841	35.227603	-89.746025	357.38	Sweetgum 9 poor no
842	35.227651	-89.746039	367.75	Sweetgum 6 good yes
843	35.227624	-89.74603	365.58	Sweetgum 9 poor no
844	35.2276	-89.74606	356.43	Sweetgum 13 poor no
845	35.227525	-89.746024	346.85	Tulip poplar 6 good yes
846	35.227539	-89.746065	344.49	Tulip poplar 15 fair yes
847	35.227482	-89.746072	347.44	Tulip poplar 12 fair yes
848	35.227474	-89.746013	361.25	Sugarmaple 12 multi fair yes
849	35.227521	-89.746158	360.43	Tulip poplar 17 fair yes
850	35.227435	-89.746254	346.52	Sugarmaple 6 fair yes
851	35.227478	-89.746231	350.46	Sweetgum 13 poor no
852	35.227413	-89.746294	344.09	Tulip poplar 14 good yes
853	35.227494	-89.74626	343.54	Tulip poplar 18 multi poor no
854	35.227491	-89.746267	345.14	Sweetgum 10 fair yes
855	35.227539	-89.746214	346.26	Tulip poplar 16 fair yes
856	35.227505	-89.746197	345.44	Tulip poplar 15 fair yes
857	35.227519	-89.746214	346.88	Tulip poplar 13 good yes
858	35.227559	-89.746156	347.9	Tulip poplar 12 good yes
859	35.227563	-89.746199	347.44	Sugarmaple 8 fair no
860	35.227657	-89.746138	346.19	Sugarmaple 9 fair yes
861	35.227654	-89.746183	348.46	Sugarmaple 6 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
862	35.227602	-89.746139	351.8	Sweetgum 6 poor no
863	35.22762	-89.746067	355.02	Sweetgum 10 poor no
864	35.227639	-89.746049	354.72	Sweetgum 20 poor no
865	35.227674	-89.74609	349.61	Sweetgum 6 fair yes
866	35.227808	-89.746101	353.31	Sweetgum 6 poor no
867	35.227692	-89.746135	356.14	Northern red oak 21 poor no
868	35.227676	-89.746206	358.89	Tulip poplar 21 fair no
869	35.227659	-89.746242	359.48	White Oak 11 good yes
870	35.227723	-89.746284	352.69	Southern red oak 14 poor no
871	35.227701	-89.746245	352.07	Sweetgum 8 fair no
872	35.22763	-89.746246	352.89	Sweetgum 8 good yes
873	35.227712	-89.746319	365.78	Sweetgum 12 multi pore no
874	35.227779	-89.746191	353.58	White oak 7 good yes
875	35.227778	-89.746123	356.96	Sweetgum 21 good yes
876	35.227764	-89.746206	366.11	Southern red oak 16 poor no
877	35.227823	-89.746115	353.05	Sweetgum 10 fair no
878	35.227833	-89.746079	354.27	Sweetgum 7 fair yes
879	35.227823	-89.746094	359.02	Sweetgum 9 poor no
880	35.227787	-89.7461	360.01	Sweetgum 10 poor no
881	35.227652	-89.746058	344.62	Southern red oak 9 good yes
882	35.227753	-89.745986	377.62	slippery elm 8 good yes
883	35.2276	-89.745947	357.41	Southern red oak 21 good yes
884	35.22783	-89.746	353.9	Slippery call Ylm 7 es good yes
885	35.227722	-89.746131	352.46	Southern Redoak 20 good yes
886	35.227819	-89.746133	347.21	Southern Redoak 25 fair yes
887	35.227746	-89.746307	348.72	Southern red oak 8 poor no
888	35.227775	-89.746305	353.44	Southern red oak 14 poor no
889	35.227722	-89.746326	356.82	Sweetgum 14 sir yes
890	35.227779	-89.746256	343.64	Sweetgum 15 poor no
891	35.22783	-89.746117	350.1	Sweetgum 9 fair yes
892	35.227673	-89.746319	340.55	Sweetgum 13 fair no
893	35.227927	-89.74612	351.44	Winged elm 6 fair yes
894	35.227952	-89.746069	353.05	Sweetgum 6 fair yes
895	35.227861	-89.746283	348.46	white oak 6 good yes
896	35.227793	-89.74615	356.73	sweetgum 14 poor no
897	35.228041	-89.746216	357.51	Southern Redoak 19 fair yes
898	35.228046	-89.746225	362.6	Southern red oak 18 fair yes
899	35.228057	-89.746236	371.26	Pignut hickory 7 good yes
900	35.228006	-89.746121	359.32	White Oak 10 good yes
901	35.22804	-89.746163	367.68	Cherry bark red oak 11 good yes
902	35.228051	-89.746082	360.24	Sweetgum 22 multi poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
903	35.228079	-89.746076	361.75	Sweetgum 10 fair yes
904	35.228021	-89.746192	362.83	Cherry bark red oak 19 good yes
905	35.228046	-89.746202	363.52	Tulip poplar 9 fair no
906	35.22805	-89.746262	363.42	Sweetgum 19 fair yes
907	35.228148	-89.746252	355.74	White Oak 6 good yes
908	35.228189	-89.746285	359.94	Winged elm 6 poor no
909	35.228201	-89.746311	360.63	Southern red Oak 14 good yes
910	35.228235	-89.746239	368.8	Cherry bark red oak 22 good yes
911	35.228188	-89.746118	366.08	White Oak 12 good yes
912	35.228211	-89.746042	362.96	White ash 18 multi fair yes
913	35.228254	-89.746028	371.88	Winged elm 10 good yes
914	35.228275	-89.746	374.51	Southern red oak 15 fair no
915	35.228294	-89.746031	371.52	Northern red oak 10 good yes
916	35.22835	-89.746085	372.9	Southern red Oak 10 good yes
917	35.228285	-89.746148	365.06	White Oak 13 good yes
918	35.22834	-89.746129	364.44	Winged elm 10 good yes
919	35.228316	-89.746163	367.95	Pignut hickory 7 good yes
920	35.228281	-89.746113	366.08	Southern red Oak 18 good yes
921	35.22833	-89.746291	367.91	pignut hickory 6 good yes
922	35.228384	-89.746264	367.03	Mockernut Hickory 6 good yes
923	35.22443	-89.744256	407.87	Post Oak 14 good yes
924	35.224486	-89.744223	411.25	Pignut hickory 7 good yes
925	35.224593	-89.744106	408.5	American hophornbeam 7 good yes
926	35.224665	-89.744136	403.08	Watch cherry 7 es poor no
927	35.224764	-89.744173	409.09	Pignut hickory 9 es multi no
928	35.224709	-89.744185	413.35	White ash 14 poor no
929	35.224779	-89.744187	408.63	Mockernut and Hickory 8 good yes
930	35.224929	-89.744095	405.81	White ash 10 poor no
931	35.225068	-89.744176	409.42	White Oak 15 good yes
932	35.22504	-89.744209	402.43	Northern red oak 11 fair yes
933	35.224935	-89.743995	396.75	Callery pear 7 fair no
934	35.224964	-89.743848	394.26	Callery pear 7 poor no
935	35.225051	-89.743714	398.16	Sweetgum 12 multi poor no
936	35.224963	-89.743694	393.31	Sweetgum 7 multi poor no
937	35.224956	-89.743653	394.85	Sweetgum 8 poor no
938	35.224975	-89.743624	395.44	Sweetgum 7 poor no
939	35.224965	-89.743602	403.48	Sweetgum 12 multi poor no
940	35.224927	-89.74363	395.57	Sweetgum 8 good yes
941	35.224908	-89.743566	396.92	Callery pear 12 multi poor no
942	35.224929	-89.743569	391.99	Callery pear 6 poor no
943	35.224837	-89.743736	399.08	Sweetgum 6 multi poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
944	35.224746	-89.743685	400.13	Sweetgum 13 fair yes
945	35.224878	-89.743695	398.43	Sweetgum 6 Multi poor no
946	35.224728	-89.743637	397.08	Sweetgum 15 poor no
947	35.224727	-89.743663	399.7	Sweetgum 15 fair yes
948	35.22482	-89.743567	392.95	Cherrybark red Oak 6 good yes
949	35.224825	-89.743527	394.46	Winged elm 8 es good yes
950	35.22486	-89.743496	388.75	Callery pear 13 poor no
951	35.224999	-89.743551	390.29	Winged elm 10 good yes
952	35.225143	-89.743586	384.97	Shagbark hickory 12 good yes
953	35.225124	-89.743553	385.76	Southern red oak 25 fair yes
954	35.225079	-89.743489	387.24	Post Oak 10 fair no
955	35.225092	-89.743461	393.83	Mockernut Hickory 11 poor no
956	35.22513	-89.743402	391.4	Pignut hickory 9 good yes
957	35.225181	-89.74341	387.01	pignut hickory 9 poor no
958	35.225087	-89.74347	386.75	White Oak 21 good yes
959	35.225058	-89.743514	394.65	Slippery elm 18 multi fair yes
960	35.225098	-89.743379	386.65	pignut hickory 9 fair yes
961	35.225118	-89.743321	385.93	Shagbark hickory 12 good yes
962	35.225076	-89.743279	384.51	Slippery elm 10 good yes
963	35.225045	-89.743367	389.5	Slippery elm 9 good yes
964	35.225016	-89.74338	387.2	Pignut hickory 13 fair yes
965	35.224994	-89.743445	388.06	Shagbark hickory 18 good yes
966	35.22493	-89.743439	387.2	Cherry bark red oak 18 fair yes
967	35.224926	-89.74352	387.07	slippery elm 6 poor no
968	35.224923	-89.743351	389.34	winged elm 8 good yes
969	35.224943	-89.743277	387.8	Cherry bark red Oak 17 poor no
970	35.224803	-89.743387	394.75	Winged elm 15 fair yes
971	35.224971	-89.743258	387.66	pignut hickory 7 good yes
972	35.225028	-89.743283	385.43	Pignut hickory 9 good yes
973	35.225012	-89.743169	386.94	Winged elm 10 fair yes
974	35.225007	-89.743144	387.73	Take me to Hickory 8 fair yes
975	35.225104	-89.74306	384.45	Pignut hickory 7 good yes
976	35.225008	-89.743137	386.68	Pignut hickory 13 fair yes
977	35.225017	-89.743097	388.68	winged elm 7 good yes
978	35.224969	-89.743151	391.24	Pignut hickory 13 fair yes
979	35.225035	-89.743159	383.53	Cherrybark red oak 21 good yes
980	35.224927	-89.743077	390.32	Mockernut Hickory 8 good yes
981	35.224955	-89.743063	397.77	Cherry bark red oak 17 poor no
982	35.224947	-89.743016	385.47	Winged elm 14 fair yes
983	35.225061	-89.743154	383.14	Winged elm 10 good yes
984	35.225166	-89.743135	382.51	White Oak 16 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
985	35.225105	-89.743139	385.7	Winged elm 6 good yes
986	35.225279	-89.743149	381.1	Cherry bark red oak 24 poor no
987	35.225188	-89.743172	382.25	Shagbark hickory 9 good yes
988	35.225161	-89.743179	381.53	White Oak 15 good yes
989	35.225174	-89.743216	379.17	White Oak 8 fair yes
990	35.225181	-89.743245	379.33	Winged elm 13 fair yes
991	35.225137	-89.743404	382.12	Pignut hickory 13 poor no
992	35.225174	-89.743432	377.07	Post Oak 10 fair yes
993	35.225172	-89.743432	378.54	White ash 8 fair yes
994	35.225169	-89.743572	380.15	Winged elm 17 multi poor no
995	35.225153	-89.743615	380.28	Pignut hickory 17 fair yes
996	35.225145	-89.743669	388.16	Winged elm 12 fair yes
997	35.225139	-89.743612	386.81	Winged elm 8 good yes
998	35.225239	-89.743111	387.17	post Oak 7 good yes
999	35.22523	-89.743063	385.53	winged elm 6 good yes
1000	35.225214	-89.742986	383.01	Cherry bark red Oak 19 good yes
1001	35.225183	-89.743039	380.87	Cherry bark red Oak 30 good yes
1002	35.225337	-89.742962	386.06	Cherry bark red oak 10 poor no
1003	35.225244	-89.74285	377.56	Winged elm 14 good yes
1004	35.225239	-89.742847	381.07	Post Oak 35 multi fair yes
1005	35.225232	-89.742807	381.5	Winged elm 12 fair yes
1006	35.225212	-89.742728	383.83	Mockernut Hickory 11 poor no
1007	35.225142	-89.743243	380.84	Winged elm 7 poor no
1008	35.225096	-89.743027	389.57	Pignut hickory 9 fair yes
1009	35.225054	-89.743002	384.61	Cherry bark red oak 20 good yes
1010	35.225022	-89.742967	386.52	Cherry bark red oak 20 fair no
1011	35.224996	-89.743093	391.17	Postoak 23 multi fair yes
1012	35.225433	-89.743169	379.69	Cherrybark Redoak 21 poor no
1013	35.225337	-89.743044	383.43	Winged elm 9 good yes
1014	35.225359	-89.743066	389.53	Post Oak 12 good yes
1015	35.225336	-89.74307	379.99	Winged elm 10 poor no
1016	35.225391	-89.74306	383.07	Sweetgum 15 poor no
1017	35.225399	-89.742898	382.12	Winged elm 8 fair yes
1018	35.225387	-89.742953	379.95	Winged elm 14 fair no
1019	35.225517	-89.742857	378.51	Mockernut and Hickory 17 good yes
1020	35.225316	-89.742882	377.3	Pignut hickory 10 fair yes
1021	35.225325	-89.742872	379.72	Mockernut and Hickory 13 good yes
1022	35.225359	-89.742774	381.92	When Elm 12 good yes
1023	35.225298	-89.742715	378.12	Post Oak 24 poor no
1024	35.225277	-89.742684	375.69	Pignut hickory 8 good yes
1025	35.2253	-89.742554	394.29	Post Oak 14 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1026	35.225186	-89.742651	378.81	post Oak 23 good yes
1027	35.225151	-89.74267	398.52	pignut Hickory 12 fair yes
1028	35.225018	-89.742869	385.66	Winged elm 10 good yes
1029	35.225075	-89.742764	386.12	Winged elm 10 poor no
1030	35.225069	-89.742816	387.34	Winged elm 10 good yes
1031	35.22511	-89.742726	385.53	Pignut hickory 19 poor no
1032	35.225018	-89.742603	388.78	winged Elm 10 good yes
1033	35.224989	-89.742768	382.55	Winged elm 10 good yes
1034	35.22508	-89.742522	389.63	Sassafras 8 poor no
1035	35.225129	-89.742545	379.46	Sweetgum 21 fair yes
1036	35.225199	-89.742579	379.04	Cherry bark red oak 29 fair yes
1037	35.225193	-89.742604	377.85	Southern red oak 17 good yes
1038	35.225266	-89.742572	390.62	Winged elm 15 good yes
1039	35.225336	-89.742464	376.84	Honey locust 9 poor no
1040	35.225421	-89.742439	372.74	Shagbark hickory 9 es good yes
1041	35.225452	-89.742458	369.09	Post Oak 19 good yes
1042	35.225507	-89.742499	371.03	Eastern red cedar 16 poor no
1043	35.225502	-89.742514	371.03	White oaks 16 good yes
1044	35.225512	-89.74236	371.46	Pignut hickory 9 es fair yes
1045	35.225544	-89.742358	374.48	Winged elm 9 good yes
1046	35.225474	-89.742336	373.72	Post Oak 14 fair yes
1047	35.225467	-89.742264	373.33	Pignut hickory 7 good yes
1048	35.225432	-89.742292	372.05	Take me to Hickory 8 good yes
1049	35.225416	-89.742282	375.79	Winged elm 10 fair no
1050	35.225354	-89.742306	380.15	Pignut hickory 6 fair no
1051	35.22527	-89.742338	375.03	Pignut hickory 8 good yes
1052	35.225344	-89.742269	378.25	Pignut hickory 11 good yes
1053	35.225427	-89.742185	375.98	White Oak 21 good yes
1054	35.2253	-89.742095	379.82	Mockernut Hickory 9 good yes
1055	35.225277	-89.742203	373.33	Winged elm 6 good yes
1056	35.22528	-89.74226	375.62	Winged elm 8 poor no
1057	35.225258	-89.742354	377	Winged elm 7 good yes
1058	35.225179	-89.742306	382.48	Shagbark hickory 13 good yes
1059	35.225179	-89.742351	383.43	Winged elm 9 good yes
1060	35.225234	-89.742312	385.37	Post Oak 16 good yes
1061	35.225198	-89.742196	379.59	Winged elm 10 fair yes
1062	35.225216	-89.74218	378.05	Eastern red cedar 17 good yes
1063	35.225314	-89.742132	373.59	Winged elm 6 good yes
1064	35.225378	-89.74211	376.8	Shagbark hickory 7 good yes
1065	35.22533	-89.742064	380.81	Pignut hickory 7 good yes
1066	35.225298	-89.742054	379.13	Black cherry 11 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1067	35.225332	-89.742078	375.39	Black cherry 12 good yes
1068	35.225337	-89.742048	377.62	Post Oak 11 good yes
1069	35.225339	-89.74207	376.57	Winged elm 14 good yes
1070	35.225366	-89.741964	380.41	Cherry bark red oak 19 fair yes
1071	35.225336	-89.741896	379.89	White Ash 12 good yes
1072	35.225339	-89.741841	379.1	Callery pear 7 poor no
1073	35.225304	-89.741862	382.28	Pignut hickory 9 good yes
1074	35.225218	-89.741949	376.38	Pignut hickory 13 good yes
1075	35.225226	-89.741883	377.85	Pignut hickory 11 good yes
1076	35.225195	-89.74195	381.07	Post Oak 22 multi fair yes
1077	35.225228	-89.74183	379.59	Cherry bark Red oak 17 good yes
1078	35.22521	-89.741858	376.64	Black cherry 11 good yes
1079	35.225128	-89.741917	373.92	Pignut hickory 9 good yes
1080	35.22502	-89.742027	374.7	Green ash 33 multi fair yes
1081	35.225054	-89.742133	383.27	Mockernut Hickory 9 poor no
1082	35.224964	-89.742209	381.5	Pignut hickory 17 good yes
1083	35.22491	-89.74224	384.09	Hackberry 25 good yes
1084	35.225006	-89.742324	378.38	Cherry bark red oak 27 good yes
1085	35.225101	-89.742095	377.23	Green ash 7 poor no
1086	35.225128	-89.742076	383.4	Winged elm 8 poor no
1087	35.225096	-89.742278	378.38	Winged elm 10 fair yes
1088	35.225104	-89.742253	376.61	Eastern red cedar 10 fair yes
1089	35.225027	-89.74235	379.79	Cherry bark red oak 13 poor no
1090	35.225034	-89.742392	383.56	Sassafras 9 poor no
1091	35.224977	-89.742411	382.91	White Oak 12 poor no
1092	35.224891	-89.742439	383.79	Cherrybark red oak 34 good yes
1093	35.224906	-89.742565	389.5	Cherry bark red oak 22 good yes
1094	35.224907	-89.742584	386.88	Cherry bark red oak 12 good yes
1095	35.22488	-89.74254	388.32	Post Oak 19 good yes
1096	35.224795	-89.742558	388.88	Black locust 20 good yes
1097	35.22488	-89.742155	379.13	Winged elm 10 good yes
1098	35.224837	-89.742165	382.12	Winged elm 10 good yes
1099	35.224849	-89.742151	385.56	Winged elm 13 fair yes
1100	35.224756	-89.742105	381.46	Sassafras 10 poor no
1101	35.224885	-89.742086	377.1	Winged elm 11 fair yes
1102	35.224852	-89.742089	382.64	White Oak 23 poor no
1103	35.224921	-89.741989	377.2	Winged elm 10 fair yes
1104	35.224932	-89.741985	375.89	winged elm 9 good yes
1105	35.224974	-89.741923	367.19	Winged elm 10 poor no
1106	35.224908	-89.741884	368.8	winged elm 9 poor no
1107	35.224861	-89.741963	373.95	Post Oak 11 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1108	35.225055	-89.741865	374.57	winged elm 9 good yes
1109	35.225015	-89.741918	377.49	Cherry bark Red oak 29 fair yes
1110	35.225014	-89.741784	372.18	winged elm 6 fair yes
1111	35.224944	-89.741729	379.04	Winged elm 10 fair no
1112	35.224889	-89.741813	382.51	Winged elm 12 good yes
1113	35.224854	-89.741929	382.97	slippery elm 7 good yes
1114	35.224812	-89.741827	377.49	Winged elm 12 good yes
1115	35.224732	-89.741927	383.46	Cherry bark red oak 26 good yes
1116	35.224685	-89.741923	394.46	winged Elm 10 good yes
1117	35.224723	-89.741837	386.52	Winged elm 7 good yes
1118	35.224745	-89.741821	383.4	Winged elm 9 good yes
1119	35.224997	-89.741783	377.46	White Oak 9 good yes
1120	35.225097	-89.741774	373.29	Cherry bark red oak 25 good yes
1121	35.225132	-89.74173	374.48	White Oak 12 good yes
1122	35.225129	-89.74173	385.47	Shagbark hickory 13 poor no
1123	35.225114	-89.741757	377.76	Sweetgum 20 poor no
1124	35.225121	-89.741801	387.07	Winged elm 12 fair yes
1125	35.225154	-89.741799	384.97	Northern red oak 10 poor no
1126	35.225187	-89.741755	378.15	Winged elm 8 poor no
1127	35.225138	-89.741621	371.03	Post Oak 20 poor no
1128	35.225207	-89.741639	378.28	Winged elm 14 fair yes
1129	35.225217	-89.741637	379.99	White Oak 7 good yes
1130	35.225188	-89.741646	377.56	Eastern red cedar 15 poor no
1131	35.225244	-89.741652	387.3	Cherry bark red oak 22 good yes
1132	35.225233	-89.741585	385.89	Eastern red cedar 14 fair yes
1133	35.225241	-89.741584	381.66	Eastern red cedar 10 fair no
1134	35.225267	-89.741582	378.05	Winged elm 11 good yes
1135	35.225303	-89.741633	380.61	Eastern red cedar 14 fair yes
1136	35.225336	-89.74167	376.64	Callery pear 10 fair yes
1137	35.225272	-89.741746	375.62	Pignut hickory 18 poor no
1138	35.225302	-89.741752	365.52	Pignut hickory 10 poor no
1139	35.225369	-89.741761	388.32	Winged elm 10 good yes
1140	35.225368	-89.741794	389.37	Eastern red cedar 8 es fair yes
1141	35.225396	-89.741784	381.82	Winged elm 12 multi fair yes
1142	35.225359	-89.741861	380.58	Winged elm 7 poor no
1143	35.225502	-89.741793	376.51	Slippery elm 11 fair yes
1144	35.22551	-89.741803	376.61	Winged elm 11 poor no
1145	35.22549	-89.741972	376.54	Sweetgum 24 fair yes
1146	35.225574	-89.742025	386.32	Winged elm 13 good yes
1147	35.225669	-89.742015	377.79	Eastern red cedar 13 poor no
1148	35.225645	-89.742054	375.23	Winged elm 18 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1149	35.225594	-89.742161	379.56	Winged elm 10 fair yes
1150	35.225534	-89.742107	376.77	Sycamore 23 good yes
1151	35.2256	-89.742112	386.61	Sweetgum 8 fair yes
1152	35.225365	-89.741943	373.13	Winged elm 17 good yes
1153	35.225401	-89.742148	375.62	Post Oak 14 good yes
1154	35.225444	-89.742244	374.18	Pignut hickory 9 good yes
1155	35.225496	-89.742265	378.44	winged elm 6 good yes
1156	35.225538	-89.742272	379.76	winged elm 8 good yes
1157	35.225461	-89.742334	377	Shagbark hickory 11 good yes
1158	35.22542	-89.74231	372.8	winged elm 6 good yes
1159	35.225417	-89.742302	374.84	Sweetgum 18 good yes
1160	35.225557	-89.742347	376.87	Tulip poplar 11 fair yes
1161	35.2256	-89.742362	376.21	shagbark hickory 8 fair yes
1162	35.22565	-89.742322	377.76	Winged elm 13 good yes
1163	35.225592	-89.742232	375.03	winged elm 7 good yes
1164	35.225581	-89.742225	377.69	winged elm 7 good yes
1165	35.22564	-89.742229	375.52	Winged elm 10 good yes
1166	35.225644	-89.74222	373.65	Winged elm 12 good yes
1167	35.225718	-89.742267	374.15	winged elm 19 fair no
1168	35.225716	-89.742291	374.74	Sugarmaple 7 good yes
1169	35.225754	-89.742485	375.3	Winged elm 14 good yes
1170	35.225698	-89.742332	376.25	Sweetgum 22 poor no
1171	35.225799	-89.742292	373	Sweetgum 12 fair yes
1172	35.225825	-89.742235	376.12	Cottonwood 28 good yes
1173	35.225827	-89.742237	374.41	Winged elm 7 good yes
1174	35.225818	-89.742183	377.07	Eastern red cedar 9 fair yes
1175	35.225745	-89.742177	387.5	winged elm 7 good yes
1176	35.225716	-89.742078	382.71	Winged elm 10 fair no
1177	35.225779	-89.742062	383.69	winged elm 14 poor no
1178	35.225772	-89.742101	381.73	American hophornbeam 11 multi good yes
1179	35.225826	-89.742254	382.15	Winged elm 7 good yes
1180	35.225812	-89.742127	380.77	Winged elm 12 good yes
1181	35.225878	-89.742298	386.45	callwry pear 6 poor no
1182	35.225842	-89.742311	384.45	winged elm 8 poor no
1183	35.22589	-89.742339	384.15	winged elm 7 good yes
1184	35.225811	-89.742368	379.59	Winged elm 11 good yes
1185	35.225878	-89.742449	381.07	Slippery elm 16 good yes
1186	35.225936	-89.742362	381.14	Eastern red cedar 10 poor no
1187	35.225989	-89.742377	388.42	Slippery elm 10 good yes
1188	35.225959	-89.74236	383.37	winged elm 8 good yes
1189	35.225962	-89.74238	382.15	Winged elm 12 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1190	35.225971	-89.742301	382.58	Eastern red cedar 6 poor no
1191	35.225927	-89.742325	386.84	winged elm 8 good yes
1192	35.225908	-89.742253	382.38	Eastern red cedar 8 poor no
1193	35.22597	-89.742118	382.91	Winged elm 13 good yes
1194	35.226024	-89.742106	380.35	persimmon 10 good yes
1195	35.225968	-89.742186	381.17	Eastern red cedar 9 poor no
1196	35.225994	-89.742188	380.38	Winged elm 9 poor no
1197	35.226017	-89.742216	383.5	Eastern red cedar 10 poor no
1198	35.225993	-89.742215	385.86	Winged elm 11 poor no
1199	35.226019	-89.742216	378.28	Winged elm 12 good yes
1200	35.225988	-89.74223	379.36	Winged elm 10 poor no
1201	35.226018	-89.74226	383.14	Winged elm 7 good yes
1202	35.226038	-89.742248	384.97	winged elm 8 poor no
1203	35.226058	-89.742214	383.5	Slippery elm 10 fair yes
1204	35.226015	-89.742306	384.38	Callery pear 8 fair yes
1205	35.226005	-89.742426	388.78	Winged elm 10 good yes
1206	35.225991	-89.742393	388.78	Eastern red cedar 15 fair yes
1207	35.225901	-89.742489	377.99	green ash 9 good yes
1208	35.225908	-89.742496	387.6	red maple 6 fair yes
1209	35.225956	-89.742481	387.66	Eastern redbud 8 good yes
1210	35.226034	-89.742526	389.8	Eastern red cedar 11 fair yes
1211	35.225994	-89.742536	384.12	Winged elm 7 good yes
1212	35.225977	-89.742552	381.2	Sweetgum 6 good yes
1213	35.225903	-89.74269	381.07	Shagbark hickory 11 good yes
1214	35.22577	-89.742604	376.97	Pignut hickory 18 poor no
1215	35.225744	-89.74265	373.03	Sugarmaple 14 poor no
1216	35.22565	-89.742516	373.49	White Oak 18 good yes
1217	35.225616	-89.742513	372.24	Pignut hickory 10 good yes
1218	35.225526	-89.742359	372.51	Sweetgum 18 fair yes
1219	35.225513	-89.742392	374.08	Sweetgum 21 fair yes
1220	35.225534	-89.742655	369.06	American hophornbeam 10 fair yes
1221	35.225535	-89.742638	370.67	Sycamore 26 multi fair yes
1222	35.225695	-89.742788	375.49	Eastern red cedar 13 fair no
1223	35.225716	-89.74279	373.65	Eastern red cedar 12 poor no
1224	35.22574	-89.742737	371.26	Sugarmaple 14 fair yes
1225	35.225802	-89.742776	373.33	White Oak 13 fair yes
1226	35.225753	-89.742746	372.38	White Oak 11 fair yes
1227	35.225793	-89.742825	371.56	Eastern red cedar 16 good yes
1228	35.22589	-89.742804	374.8	Southern red Oak 13 good yes
1229	35.225937	-89.742766	378.61	Cherry bark red Oak 9 poor no
1230	35.225924	-89.742765	379.53	Cherry bark red Oak 24 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1231	35.225941	-89.742812	380.09	pignut hickory 6 good yes
1232	35.225812	-89.742985	367.72	Black cherry 6 good yes
1233	35.225812	-89.742939	368.83	Sweetgum 7 fair yes
1234	35.225797	-89.7428	372.34	Eastern red cedar 17 good yes
1235	35.225812	-89.742994	368.73	sycamore 6 multi poor no
1236	35.225822	-89.743007	370.34	Sweetgum 8 good yes
1237	35.225707	-89.743076	370.47	Sycamore 10 good yes
1238	35.225838	-89.743055	371	Sweetgum 7 poor no
1239	35.225856	-89.743064	379.66	Sweetgum 6 fair yes
1240	35.225846	-89.743135	378.94	Sweetgum 10 good yes
1241	35.225834	-89.743132	374.02	Sweetgum 8 multi poor no
1242	35.225882	-89.743156	377.49	Sweetgum 10 good yes
1243	35.225868	-89.743069	373.69	Sweetgum 7 fair yes
1244	35.225895	-89.743054	371.69	Sweetgum 7 fair no
1245	35.225913	-89.742996	370.96	Sweetgum 9 good yes
1246	35.225975	-89.743092	370.44	Post Oak 8 good yes
1247	35.225957	-89.743116	370.41	Winged elm 6 poor no
1248	35.225929	-89.743167	368.04	Sweet gum 6 good yes
1249	35.225937	-89.743168	367.39	take me to Hickory 7 good yes
1250	35.226027	-89.743201	368.34	Sweetgum 10 good yes
1251	35.226	-89.743251	379.76	Blah blah pine 13 good yes
1252	35.225892	-89.743349	365.26	River birch 12 fair yes
1253	35.22594	-89.743367	365.72	Shagbark hickory 6 fair yes
1254	35.226247	-89.743149	376.08	Shagbark hickory 10 good yes
1255	35.226086	-89.743102	374.48	loblolly pine 8 poor no
1256	35.226166	-89.743034	375.43	shagbark hickory 6 good yes
1257	35.226197	-89.743049	375.07	sweetgum 6 good no
1258	35.226173	-89.742927	376.74	White Oak 38 high-value specimen tree good yes
1259	35.226207	-89.742858	379.69	Eastern red cedar 10 good yes
1260	35.226179	-89.742842	379.95	Eastern red cedar 10 fair no
1261	35.226122	-89.742801	383.37	Eastern red cedar 6 poor no
1262	35.226079	-89.742839	381.33	winged elm 8 good yes
1263	35.226118	-89.742928	389.9	Post Oak 6 good yes
1264	35.22604	-89.742909	384.71	Cherry bark red oak 7 good yes
1265	35.226163	-89.742839	383.14	Cherry bark red Oak 15 good yes
1266	35.226202	-89.742808	381.53	Post Oak 11 fair no
1267	35.226137	-89.742796	381.82	Cherry bark red Oak 14 fair yes
1268	35.226196	-89.742751	388.78	Winged elm 10 good yes
1269	35.226284	-89.742873	378.54	Cherry bark red oak 26 multi fair yes
1270	35.226292	-89.742796	375.75	Eastern red cedar 14 fair no
1271	35.226416	-89.742863	383.04	Cherry bark red Oak 16 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1272	35.22645	-89.742783	375.69	Winged elm 7 good yes
1273	35.226417	-89.742757	371.98	Cherry bark red Oak 6 good yes
1274	35.226532	-89.742727	382.55	Southern red oak 13 good yes
1275	35.226544	-89.742723	379.86	Winged elm 6 good yes
1276	35.226585	-89.742665	390.16	winged elm 6 good yes
1277	35.226372	-89.742653	377.79	Winged elm 12 good yes
1278	35.226361	-89.742649	378.44	Sugar maple 11 good yes
1279	35.226351	-89.7426	378.51	Winged elm 6 good yes
1280	35.226402	-89.742677	378.41	Cherrybark red Oak 7 good yes
1281	35.226459	-89.742642	380.12	Persimmon 7 good yes
1282	35.226356	-89.742588	379.36	Winged elm 6 fair no
1283	35.226374	-89.742611	382.02	Sugarmaple 6 poor no
1284	35.22643	-89.742645	386.42	Cherry bark red oak 9 fair no
1285	35.226264	-89.742619	382.51	Eastern red cedar 8 fair yes
1286	35.226329	-89.742592	382.74	Eastern red cedar 7 fair no
1287	35.226311	-89.742569	381.43	Eastern red cedar 13 multi poor no
1288	35.226243	-89.742541	375.16	Eastern red cedar 8 poor no
1289	35.226226	-89.742526	376.05	Winged elm 6 good yes
1290	35.226206	-89.742532	380.35	winged elm 7 good yes
1291	35.22622	-89.742544	381	Winged elm 7 good yes
1292	35.226283	-89.742472	386.06	Winged elm 7 poor no
1293	35.226236	-89.742718	379.89	Cherry bark red oak 8 poor no
1294	35.226355	-89.742793	377.95	winged elm 6 good yes
1295	35.226306	-89.74276	379.82	Sweetgum 10 poor no
1296	35.226287	-89.742718	375	Winged elm 6 good yes
1297	35.226229	-89.742705	373.85	winged elm 6 good yes
1298	35.226147	-89.74266	374.8	Winged elm 6 good yes
1299	35.226214	-89.742678	371.56	Winged elm 8 good yes
1300	35.22618	-89.74267	376.74	Winged elm 6 fair yes
1301	35.22626	-89.742745	378.84	Sweetgum 10 fair no
1302	35.226274	-89.742704	371.1	Sweetgum 15 multi poor no
1303	35.226208	-89.742645	369.19	Winged elm 12 good yes
1304	35.226173	-89.742609	372.97	Winged elm 6 fair yes
1305	35.226144	-89.742686	379.17	White ash 7 poor no
1306	35.226106	-89.742675	378.54	Winged elm 7 good yes
1307	35.226161	-89.742617	377.49	winged elm 12 good yes
1308	35.226113	-89.742639	378.51	Winged elm 12 good yes
1309	35.226086	-89.742593	380.54	winged elm 7 good yes
1310	35.226196	-89.742572	379.63	winged elm 7 good yes
1311	35.2262	-89.742563	381.33	Winged elm 7 good yes
1312	35.226234	-89.742498	379.04	Winged elm 11 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1313	35.226187	-89.742432	385.66	Winged elm 6 good yes
1314	35.22617	-89.742445	382.81	Winged elm 10 good yes
1315	35.226139	-89.742391	380.77	Cherry bark red Oak 9 fair yes
1316	35.226143	-89.742419	373.23	Cherry bark red Oak 13 good yes
1317	35.226178	-89.742378	372.21	Eastern red cedar 10 poor no
1318	35.226142	-89.742335	379.33	sassafras 8 poor no
1319	35.226442	-89.742504	382.78	winged elm 9 fair yes
1320	35.226402	-89.742677	379.56	sugar maple 8 fair no
1321	35.226391	-89.742432	380.81	Cherry bark red oak 8 good yes
1322	35.226405	-89.742383	385.04	Winged elm 6 good yes
1323	35.226315	-89.74246	382.12	Eastern red cedar 6 poor no
1324	35.226341	-89.742393	383.07	Black locust 14 multi poor no
1325	35.226383	-89.742375	383.69	Eastern red cedar 7 poor no
1326	35.226489	-89.742436	380.51	Winged elm 10 poor no
1327	35.226487	-89.74243	381.53	Winged elm 11 good yes
1328	35.226485	-89.74252	381.76	Winged elm 8 poor no
1329	35.226494	-89.742409	383.01	Winged elm 12 good yes
1330	35.226499	-89.742501	381.5	winged elm 9 good yes
1331	35.226505	-89.742599	380.09	winged elm 9 good yes
1332	35.226501	-89.742684	379.46	Sugarmaple 6 poor no
1333	35.226658	-89.74273	391.08	Cherry bark red Oak 13 good yes
1334	35.226605	-89.742692	377.36	Cherry bark red oak 8 poor no
1335	35.226597	-89.742798	379.17	Eastern red cedar 12 poor no
1336	35.226628	-89.742816	377.53	winged elm 6 fair yes
1337	35.226661	-89.742908	373.82	Winged elm 10 fair yes
1338	35.226679	-89.742921	373.88	Eastern red cedar 11 poor no
1339	35.226668	-89.742862	375.16	Cherry bark red oak 47 multi fair yes
1340	35.226523	-89.742956	374.8	Eastern red cedar 15 fair yes
1341	35.226503	-89.742977	372.18	Cherry bark red oak 24 good yes
1342	35.226484	-89.742969	373.03	Eastern red cedar 21 good yes
1343	35.226492	-89.742995	372.01	Eastern red cedar 8 poor no
1344	35.226521	-89.742926	384.78	Eastern red cedar 27 good yes
1345	35.226435	-89.742919	373.75	Cherry bark red Oak 11 good yes
1346	35.2265	-89.742873	384.15	Eastern red cedar 15 multi poor no
1347	35.226423	-89.742796	388.22	Eastern red cedar 12 fair yes
1348	35.226454	-89.742901	383.69	Eastern red cedar 17 good yes
1349	35.226512	-89.74291	374.54	Eastern red cedar 13 fair yes
1350	35.226552	-89.742824	374.21	Cherry bark red oak 10 good yes
1351	35.226538	-89.742824	374.44	Post Oak 11 good yes
1352	35.226529	-89.742787	378.15	Eastern red cedar 15 fair yes
1353	35.226501	-89.74278	375.89	Eastern red cedar 14 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1354	35.226454	-89.742863	376.61	Eastern red cedar 21 multi fair yes
1355	35.226524	-89.74273	376.9	Cherrybark red Oak 11 good yes
1356	35.226364	-89.743009	372.21	Post Oak 15 good yes
1357	35.226348	-89.742969	374.87	Eastern red cedar 22 good yes
1358	35.226374	-89.743029	375.39	Cherry bark red Oak 9 good yes
1359	35.226403	-89.742814	374.02	Cherrybark red Oak 18 good yes
1360	35.226311	-89.743082	368.64	Post Oak 13 good yes
1361	35.226358	-89.743133	369.65	Eastern red cedar 13 fair yes
1362	35.226358	-89.743186	369.36	Eastern red cedar 15 fair yes
1363	35.226304	-89.743132	363.65	Cherry bark red Oak 15 good yes
1364	35.226294	-89.74315	365.58	Winged elm 6 good yes
1365	35.226303	-89.743086	370.41	Cherry bark red Oak 6 fair yes
1366	35.226138	-89.743315	370.01	Sweetgum 8 multi poor no
1367	35.226037	-89.743408	367.45	River birch 11 Multi fair yes
1368	35.22597	-89.743383	375.23	Black willow 6 fair yes
1369	35.22597	-89.743463	376.05	Black willow 7 fair yes
1370	35.226033	-89.74349	360.04	Willow 6 fair yes
1371	35.226039	-89.7435	379.72	Willow 6 fair yes
1372	35.225739	-89.743575	364.57	Black willow 7 fair no
1373	35.225824	-89.743622	364.8	Black willow 10 fair no
1374	35.225937	-89.743602	373.82	Black willow 10 fair yes
1375	35.225849	-89.743598	368.67	Black locust 6 poor no
1376	35.225914	-89.743588	364.3	Black willow 10 poor no
1377	35.225941	-89.743553	371	Sycamore 10 good yes
1378	35.225996	-89.743663	368.96	Sweetgum 7 good yes
1379	35.226083	-89.743673	365.58	Riverbirch 8 good yes
1380	35.226146	-89.743768	364.24	Riverbirch 10 good yes
1381	35.226107	-89.743803	374.9	sycamore 10 poor no
1382	35.226222	-89.743791	362.11	Sycamore 11 multi poor no
1383	35.226144	-89.743777	364.83	Black willow 6 poor no
1384	35.226173	-89.743748	364.34	Sweetgum 7 fair no
1385	35.22621	-89.743746	366.4	Riverbirch 6 good yes
1386	35.22663	-89.742715	376.05	Winged elm 6 good yes
1387	35.226749	-89.742609	376.31	Cherry bark red oak 11 good yes
1388	35.226711	-89.742485	382.55	Eastern red cedar 8 fair no
1389	35.226821	-89.742467	380.28	Eastern red cedar 6 poor no
1390	35.22683	-89.742442	386.09	Cherry bark red oak 10 good yes
1391	35.226901	-89.742354	382.15	Winged elm 7 good yes
1392	35.226899	-89.742427	385.86	Post Oak 12 good yes
1393	35.226972	-89.742412	379.56	sweetgum 10 poor no
1394	35.226943	-89.74241	389.3	I post oak 7 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1395	35.226971	-89.742484	383.89	Black cherry 10 fair yes
1396	35.22702	-89.742474	375.39	Winged elm 11 poor no
1397	35.226976	-89.742527	376.57	Shagbark hickory 13 good yes
1398	35.226985	-89.742584	375.3	Sugarmaple 6 good yes
1399	35.226908	-89.742585	373.46	Cherry bark red oak 13 poor no
1400	35.227037	-89.742594	373.36	Sweetgum 10 poor no
1401	35.22704	-89.742619	371.1	Sweetgum 12 poor no
1402	35.227041	-89.742689	369.13	Cherry bark red Oak 10 good yes
1403	35.227002	-89.742712	369.03	Cherry bark red Oak 20 good yes
1404	35.227052	-89.742703	379.07	Cherry bark red oak 9 fair yes
1405	35.227056	-89.742749	381.63	white oak 13 good yes
1406	35.227055	-89.742642	372.28	Sweetgum 8 fair yes
1407	35.227096	-89.742619	378.71	Sweetgum 10 poor no
1408	35.227069	-89.742479	382.87	Winged elm 6 poor no
1409	35.227059	-89.742548	370.54	american beech 8 poor no
1410	35.227097	-89.742384	375.36	Cherry bark red oak 21 good yes
1411	35.226978	-89.742564	373.75	Cherry bark red Oak 20 good yes
1412	35.227039	-89.742554	372.15	White Oak 19 good yes
1413	35.227084	-89.7426	370.31	Black cherry 6 poor no
1414	35.227071	-89.742692	373.29	Tulip poplar 11 poor no
1415	35.227111	-89.74268	380.71	Sweetgum 10 poor no
1416	35.227225	-89.742635	371.39	Sycamore 7 poor no
1417	35.22721	-89.74261	368.44	Cherry bark red Oak 17 good yes
1418	35.227212	-89.742613	369.88	cheerybark red oak 8 fair yes
1419	35.22724	-89.742608	371	Cherry bark red Oak 7 poor no
1420	35.227207	-89.742606	369.88	pignut hickory 8 good yes
1421	35.22728	-89.742557	371.62	tulip poplar 13 poor no
1422	35.227161	-89.742456	368.27	sweetgum 14 poor no
1423	35.22725	-89.742429	407.15	Tulip poplar 15 poor no
1424	35.227225	-89.74237	379.69	Winged elm 13 good yes
1425	35.227104	-89.742362	375.3	Sweetgum 8 poor no
1426	35.227154	-89.742341	374.74	Sweetgum 10 poor no
1427	35.227107	-89.742296	378.05	Sycamore 6 poor no
1428	35.227027	-89.742305	377.66	Winged elm 7 good yes
1429	35.227116	-89.7423	374.87	Winged elm 7 good yes
1430	35.227061	-89.742184	373.82	Shagbark hickory 9 good yes
1431	35.227102	-89.742239	377.56	Sweetgum 13 poor no
1432	35.227129	-89.742275	375.16	Sweetgum 12 good yes
1433	35.227144	-89.742322	376.31	Winged elm 6 good yes
1434	35.22716	-89.742234	377.53	Sweetgum 20 multi poor no
1435	35.227179	-89.742294	379.63	Winged elm 7 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1436	35.2272	-89.742401	380.31	Sweetgum 8 good yes
1437	35.227202	-89.742257	375.07	Cherrybark red Oak 16 fair yes
1438	35.22725	-89.742419	373	Pignut hickory 7 good yes
1439	35.227293	-89.742364	375.26	Cherry bark red oak 12 fair no
1440	35.227151	-89.742461	378.74	Black cherry 10 fair yes
1441	35.227285	-89.742348	388.39	Sweetgum 15 fair no
1442	35.227304	-89.742351	370.83	Cherry bark red Oak 20 good yes
1443	35.227344	-89.742294	397.67	Winged elm 12 fair yes
1444	35.227338	-89.742255	386.55	Post Oak 16 good yes
1445	35.227355	-89.742213	387.3	Cherry bark red Oak 15 poor no
1446	35.227309	-89.742192	385.17	Cherry bark red Oak 11 good yes
1447	35.227271	-89.742195	377.1	Cherry bark red Oak 19 good yes
1448	35.227264	-89.742181	374.97	Cherry bark red Oak 19 good yes
1449	35.227206	-89.742099	376.35	Cherry bark red Oak 14 fair yes
1450	35.227177	-89.742099	377.4	Cherry bark red Oak 14 poor no
1451	35.227213	-89.742018	379.95	Winged elm 7 fair yes
1452	35.227219	-89.742024	383.99	Sweetgum 13 fair yes
1453	35.227272	-89.742127	378.28	Cherrybark red Oak 25 poor no
1454	35.227321	-89.742055	376.02	Sweetgum 13 poor no
1455	35.227332	-89.74206	376.21	Sweetgum 14 poor no
1456	35.227359	-89.742077	375.49	Cherry bark red oak 11 poor no
1457	35.22737	-89.742031	374.87	Sweetgum 13 poor no
1458	35.227362	-89.741977	380.77	Cherry bark red oaks 7 poor no
1459	35.227324	-89.741967	377.79	Sweetgum 13 poor no
1460	35.227314	-89.741939	379.79	Sweetgum 11 poor no
1461	35.227324	-89.741925	393.31	Sweetgum 6 poor no
1462	35.227341	-89.741914	387.27	Sweetgum 10 poor no
1463	35.227336	-89.741886	384.35	Sweetgum 10 poor no
1464	35.22737	-89.741937	391.8	Sweetgum 13 poor no
1465	35.227403	-89.741962	385.07	Sweetgum 8 poor no
1466	35.227407	-89.741971	389.76	Winged elm 11 poor no
1467	35.227456	-89.74188	375.62	Sweetgum 13 poor no
1468	35.227442	-89.741799	379.95	Cherry bark red oak 14 fair yes
1469	35.227428	-89.741761	374.64	Shagbark hickory 13 fair yes
1470	35.227379	-89.741833	374.44	Cherrybark Redoak 10 poor no
1471	35.227412	-89.741809	372.51	Cherry bark red Oak 11 poor no
1472	35.227415	-89.741758	374.05	Sycamore 34 poor no
1473	35.22749	-89.74166	383.2	Sweetgum 9 poor no
1474	35.2275	-89.741798	404.17	Post Oak 20 good yes
1475	35.227393	-89.741791	388.48	cherry bark Redoak 9 poor no
1476	35.227397	-89.741751	410.63	Winged elm 14 multi good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1477	35.227541	-89.741666	381.66	Cherry bark red Oak 11 good yes
1478	35.2276	-89.741711	377.36	Cherry bark red Oak 12 good yes
1479	35.227563	-89.741684	379.86	Cherry bark red Oak 17 good yes
1480	35.22764	-89.741673	381.69	Winged elm 8 good yes
1481	35.227681	-89.741632	385.2	Winged 11 poor no
1482	35.227695	-89.741643	382.68	Cherrybark red Oak 12 fair yes
1483	35.227622	-89.741506	387.89	Shagbark hickory 25 good yes good specimen tree
1484	35.22756	-89.741558	384.42	Cherry bark red Oak 11 fair yes
1485	35.227551	-89.741514	380.02	Cherry bark red Oak 17 poor no
1486	35.227571	-89.741483	382.12	Post Oak 14 poor no
1487	35.227619	-89.741529	383.6	Cherry bark red Oak 28 poor no
1488	35.227692	-89.741498	389.04	Cherrybark red Oak 18 fair yes
1489	35.227721	-89.741358	390.39	Black cherry 11 good yes
1490	35.227709	-89.741317	390.78	Sweetgum 16 poor no
1491	35.227595	-89.741341	395.11	Cherry bark red oak 25 multi fair yes
1492	35.227822	-89.741586	381.69	Cherry bark red Oak 12 fair yes
1493	35.227785	-89.741595	382.28	Winged elm 8 poor no
1494	35.227849	-89.741608	382.78	Cherry bark red oak 19 good yes
1495	35.227814	-89.741538	380.54	Post Oak 12 fair yes
1496	35.227705	-89.741558	380.68	Winged elm multi 7 good yes
1497	35.227773	-89.741829	381.66	Northern red oak 12 fair no
1498	35.227777	-89.741772	382.94	Cherry bark red oak 13 good yes
1499	35.227726	-89.741799	388.06	Cherry bark red Oak 13 good yes
1500	35.227725	-89.74185	381.89	Cherry bark red Oak 17 good yes
1501	35.22751	-89.741758	374.21	Cherry bark red oak 18 good yes
1502	35.227495	-89.741965	376.57	Cherry bark Redoak 18 good yes
1503	35.227499	-89.741965	375.43	Post Oak 11 good yes
1504	35.227604	-89.741834	383.27	Winged elm 15 good yes
1505	35.227602	-89.741967	379.59	Cherry bark red oak 10 good yes
1506	35.227578	-89.741879	376.44	Cherry bark red oak 16 good yes
1507	35.227557	-89.741892	377.59	Winged elm 13 poor no
1508	35.227461	-89.74203	373.72	Sweetgum 13 poor no
1509	35.227626	-89.74226	379.66	Winged elm 16 fair yes
1510	35.227651	-89.741992	375.33	Cherrybark red Oak 25 good yes
1511	35.227666	-89.74213	379.3	Winged elm 10 good yes
1512	35.227638	-89.742104	375.39	Black cherry 10 good yes
1513	35.227653	-89.742033	375.46	Winged elm 10 good yes
1514	35.227609	-89.741963	368.08	Black cherry 18 fair yes
1515	35.227777	-89.741918	377.82	post oak 27 multi fair yes
1516	35.227851	-89.741781	380.58	Cherry bark red oak 16 good yes
1517	35.227826	-89.741754	380.31	Cherry bark red oak 10 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1518	35.227822	-89.741739	379.72	Cherry bark red Oak 11 good yes
1519	35.22786	-89.741787	387.47	Cherry bark red oak 12 fair yes
1520	35.227865	-89.741731	388.22	Cherrybark red Oak 19 good yes
1521	35.227909	-89.741738	391.63	Cherry bark red oak 17 fair no
1522	35.2279	-89.741646	385.99	Cherrybark red Oak 12 poor no
1523	35.227948	-89.741558	387.5	Cherry bark red oak 21 good yes
1524	35.227957	-89.741643	387.34	Cherry bark red Oak 21 good yes
1525	35.228015	-89.741784	389.6	Cherry bark red Oak 16 fair yes
1526	35.228119	-89.741731	391.01	Eastern red cedar 13 good yes
1527	35.22822	-89.741717	402.62	Cherry bark red oak 23 good yes
1528	35.228008	-89.741752	403.41	Cherrybark red Oak 11 good yes
1529	35.227924	-89.741723	407.78	Loblolly pine 7 fair yes
1530	35.227979	-89.741761	399.8	Loblolly pine 10 good yes
1531	35.228005	-89.741836	401.28	Loblolly pine 8 good yes
1532	35.228114	-89.741739	391.37	Loblolly pine 7 good yes
1533	35.228042	-89.7419	406.76	Loblolly pine 10 good yes
1534	35.228074	-89.741921	406.99	Loblolly pine 6 fair no
1535	35.228116	-89.741895	402.56	Loblolly pine 6 fair no
1536	35.228151	-89.741876	400.75	loblolly pine 7 poor no
1537	35.228155	-89.741852	393.01	loblolly pine 10 fair no
1538	35.227993	-89.741752	401.74	Loblolly pine 9 good yes
1539	35.228181	-89.742003	401.8	loblolly pine 8 poor no
1540	35.22816	-89.741972	401.41	Loblolly pine 9 fair yes
1541	35.228234	-89.741943	396.52	loblolly pine 6 poor no
1542	35.228216	-89.742009	393.41	Wow lolly pine 9 good yes
1543	35.228199	-89.741958	391.96	Loblolly pine 9 fair no
1544	35.228182	-89.741928	394.16	Loblolly pine 10 fair yes
1545	35.228212	-89.741832	394.82	loblolly pine 11 poor no
1546	35.228164	-89.741845	392.19	loblolly pine 8 poor no
1547	35.228163	-89.74181	392.49	Loblolly pine 13 good yes
1548	35.228055	-89.741992	390.03	Loblolly pine 6 poor no
1549	35.22806	-89.74189	391.14	Loblolly pine 10 good yes
1550	35.228089	-89.741818	389.4	Sweetgum 12 poor no
1551	35.227952	-89.741947	386.78	Sweetgum 10 poor no
1552	35.228061	-89.742	392.88	Sweetgum 13 poor no
1553	35.227981	-89.742146	392.59	Sweetgum 13 or no
1554	35.227992	-89.742198	393.86	Sweetgum 9 poor no
1555	35.22811	-89.742152	392.29	Sweetgum 16 good yes
1556	35.228024	-89.742171	391.21	Winged elm 7 fair yes
1557	35.228036	-89.742215	392.59	Sweetgum 10 poor no
1558	35.228022	-89.742124	389.53	Sweetgum 13 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1559	35.228013	-89.74211	390.65	Sweetgum 14 fair no
1560	35.227961	-89.742037	390.35	Sweetgum 18 fair yes
1561	35.228004	-89.742148	396.1	Sweetgum 13 good yes
1562	35.228018	-89.742046	398.43	Winged elm 9 good yes
1563	35.228013	-89.742044	401.84	Winged elm 13 good yes
1564	35.227981	-89.742009	393.24	Sweetgum 12 poor no
1565	35.227895	-89.741999	386.68	Sweetgum 14 poor no
1566	35.22792	-89.74201	387.83	Sweetgum 11 poor no
1567	35.227918	-89.742002	391.14	Sweetgum 13 poor no
1568	35.2279	-89.74221	382.48	Sweetgum 12 multi poor no
1569	35.227868	-89.74212	389.47	Loblolly pine 10 fair yes
1570	35.227797	-89.742429	390.78	Sweetgum 21 good yes
1571	35.227815	-89.742171	400.16	Sweetgum 24 multi poor no
1572	35.227755	-89.742324	395.96	Sweetgum 16 poor no
1573	35.227797	-89.742245	398.23	Sweetgum 10 poor no
1574	35.227694	-89.742122	374.31	Pignut hickory 19 good yes
1575	35.22773	-89.742385	379.72	Honey Locust 22 good yes
1576	35.227666	-89.742321	381.73	Sweetgum 17 good yes
1577	35.22754	-89.742216	376.31	Sweetgum 8 fair yes
1578	35.227535	-89.742144	375.43	wing elm 10 fair yes
1579	35.227476	-89.742009	371.88	shagbark hickory 10 fair yes
1580	35.227464	-89.742351	364.47	Winged elm 12 good yes
1581	35.227372	-89.742206	371.06	Pignut hickory 13 good yes
1582	35.227456	-89.74243	374.21	Sweetgum 18 poor no
1583	35.227503	-89.74244	376.21	Sweetgum 17 poor no
1584	35.22747	-89.742444	373.46	Pignut hickory 21 good yes
1585	35.227333	-89.74236	373.79	Cherry bark red oak 29 good yes
1586	35.227362	-89.742463	375.69	Black cherry 6 poor no
1587	35.227287	-89.74254	369.75	Winged elm 8 good yes
1588	35.227387	-89.742468	363.62	Eastern red cedar 34 fair yes
1589	35.227398	-89.742581	389.11	White Oak 15 good yes
1590	35.227606	-89.742526	383.66	Winged elm 18 good yes
1591	35.227562	-89.742385	380.64	sweetgum 11 poor no
1592	35.227592	-89.742322	378.97	Sweetgum 15 poor no
1593	35.227608	-89.742263	379.92	Eastern red cedar 11 fair yes
1594	35.227618	-89.742423	376.67	Winged elm 10 good yes
1595	35.227581	-89.742556	380.81	Winged elm 12 good yes
1596	35.227577	-89.742549	378.15	Winged elm 10 good yes
1597	35.227632	-89.742616	379.72	Eastern red cedar 19 fair yes
1598	35.227596	-89.742633	383.66	White Oak 21 good yes
1599	35.227578	-89.742607	382.25	Cherry bark red Oak 21 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1600	35.227481	-89.7426	378.22	Post Oak 12 good yes
1601	35.227472	-89.742744	377.95	Cherrybark red Oak 14 good yes
1602	35.227553	-89.742695	382.25	winged elm 10 good yes
1603	35.22753	-89.742791	384.84	Winged elm 11 multi good yes
1604	35.227501	-89.742758	383.89	Winged elm 10 good yes
1605	35.227452	-89.742704	375.98	Cherry bark red Oak 16 good yes
1606	35.22735	-89.742598	377.49	White Oak 21 good yes
1607	35.22726	-89.742601	373.88	Cherry bark red oak 10 good yes
1608	35.227355	-89.742564	375.36	Pignut hickory 14 poor no
1609	35.227284	-89.742502	380.18	White ash 13 good yes
1610	35.22725	-89.742634	375.75	Siri bark red Oak 20 good yes
1611	35.227347	-89.742846	377.49	Eastern red cedar 13 fair no
1612	35.227347	-89.74277	376.97	Winged elm 12 good yes
1613	35.227429	-89.7429	377.53	Sweet gum 13 fair yes
1614	35.227404	-89.742789	375.3	Winged elm 11 poor no
1615	35.227341	-89.742785	374.34	Sweetgum 13 fair yes
1616	35.227255	-89.742882	365.85	Sweetgum 13 poor no
1617	35.227289	-89.74292	372.64	Eastern red cedar 7 fair no
1618	35.227385	-89.742903	378.67	Sweetgum 10 poor no
1619	35.227325	-89.743004	378.87	Sweetgum 8 poor no
1620	35.227311	-89.74302	378.58	Persimmon 10 good yes
1621	35.227328	-89.742929	381.04	Cherrybark red Oak 16 good yes
1622	35.227316	-89.742951	383.92	Winged elm 8 good yes
1623	35.227178	-89.742955	375.26	Winged elm 8 good yes
1624	35.227266	-89.742829	370.51	Sweetgum 12 poor no
1625	35.227191	-89.742859	369.78	White Oak 10 good yes
1626	35.227187	-89.742721	375.98	Winged elm 6 good yes
1627	35.227186	-89.742887	370.21	tulip Poplar 16 good yes
1628	35.227185	-89.742976	371.16	tulip Poplar 11 good yes
1629	35.227175	-89.742966	372.31	White Oak 8 good yes
1630	35.227122	-89.742912	373.49	post Oak 8 good yes
1631	35.22714	-89.742991	369.19	White oak 10 fair yes
1632	35.227226	-89.743005	373.75	Tulip poplar 12 good yes
1633	35.227264	-89.74297	378.38	Post Oak 6 poor no
1634	35.22725	-89.742941	377.56	black cherry 7 fair yes
1635	35.227222	-89.742972	374.67	Post Oak 7 poor no
1636	35.22718	-89.743015	372.6	Cherry bark red Oak 16 poor no
1637	35.227147	-89.743062	372.31	Sweetgum 12 poor no
1638	35.227118	-89.742986	377.33	Cherry bark red Oak 19 good yes
1639	35.227136	-89.743023	374.87	Cherry bark red Oak 11 poor no
1640	35.227007	-89.742992	380.05	Cherry bark red oak 14 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1641	35.227073	-89.742993	369.88	Cherry bark red oak 8 poor no
1642	35.227099	-89.742992	375	Sweetgum 20 fair yes
1643	35.227097	-89.742932	370.05	Sweetgum 22 poor no
1644	35.226926	-89.742956	367.95	Post Oak 8hs fair yes
1645	35.226896	-89.742971	365.22	Post Oak 24 good yes
1646	35.226879	-89.742876	370.01	Sweetgum 9 poor no
1647	35.227049	-89.743028	370.87	Cherry bark red Oak 25 fair yes
1648	35.226946	-89.743024	371.36	Post Oak 10 good yes
1649	35.226903	-89.743049	370.51	Sweetgum 10 fair no
1650	35.226905	-89.742938	366.01	Sugarmaple 9 good yes
1651	35.226938	-89.742977	372.31	Cherry bark red Oak 17 fair yes
1652	35.226868	-89.742914	373.33	Sweetgum 13 fair yes
1653	35.226891	-89.742909	374.67	Sweetgum 15 fair yes
1654	35.226937	-89.742869	368.5	White Oak 8 fair yes
1655	35.226942	-89.742816	370.44	Eastern red cedar 6 poor no
1656	35.226896	-89.74294	369.52	Black cherry 7 good yes
1657	35.226859	-89.742749	374.87	Winged elm 8 good yes
1658	35.226868	-89.742831	370.41	Sweetgum 6 poor no
1659	35.226898	-89.742866	376.67	White Oak 19 good yes
1660	35.226889	-89.742857	378.28	Sweetgum 10 poor no
1661	35.22685	-89.742783	381.23	Shagbark hickory 15 fair yes
1662	35.226862	-89.742845	387.73	Sweetgum 9 poor no
1663	35.226883	-89.742826	381.46	Pignut hickory 10 good yes
1664	35.226904	-89.742766	376.25	Tulip poplar 13 poor no
1665	35.226938	-89.742833	373.75	Pignut hickory 7 poor no
1666	35.227014	-89.742785	373.49	Post Oak 9 poor no
1667	35.227067	-89.742807	369.46	White Oak 12 fair yes
1668	35.227073	-89.742862	377.13	Sycamore 11 fair yes
1669	35.227086	-89.742945	373.56	Sycamore 8 fair yes
1670	35.227146	-89.742801	367.65	winged elm 9 good yes
1671	35.227003	-89.742657	374.41	Cherry bark red oak 15 good yes
1672	35.22692	-89.742639	370.57	Cherrybark red Oak 10 good yes
1673	35.226822	-89.742594	373.2	Eastern red cedar 9 multi poor no
1674	35.226881	-89.742609	374.05	Sweetgum 9 poor no
1675	35.226776	-89.742587	374.97	Eastern red cedar 8 fair yes
1676	35.226766	-89.742676	375.23	Sweetgum 7 poor no
1677	35.226716	-89.742689	376.25	Cherry bark red oak 17 poor no
1678	35.226746	-89.742768	374.11	Winged elm 14 fair yes
1679	35.22677	-89.742929	370.41	Post Oak 10 good yes
1680	35.226785	-89.742891	376.31	White Oak 15 good yes
1681	35.226704	-89.742938	375.13	Cherry bark red oak 34 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1682	35.226885	-89.742991	376.61	Sweetgum 11 poor no
1683	35.226782	-89.742993	372.67	Sweetgum 10 poor no
1684	35.226844	-89.743008	372.47	Post Oak 12 good yes
1685	35.226877	-89.742984	375.1	Sweetgum 10 poor no
1686	35.226865	-89.74293	372.41	Post Oak 8 poor no
1687	35.226899	-89.74307	370.05	Black cherry 6 poor no
1688	35.226912	-89.743113	382.19	White Oak 11 good yes
1689	35.226856	-89.743092	373.85	Pignut hickory 6 poor no
1690	35.226785	-89.743158	379.66	Tulip poplar 11 good yes
1691	35.226729	-89.743162	384.19	Tulip poplar 7 good yes
1692	35.226999	-89.743109	371.52	Sweetgum 12 poor no
1693	35.226862	-89.743192	370.9	Shagbark hickory 16 good yes
1694	35.226793	-89.743246	363.22	Sweetgum 10 poor no
1695	35.226856	-89.743225	369.13	Sweetgum 10 poor no
1696	35.226747	-89.743087	367.19	White Oak 10 good yes
1697	35.226744	-89.743225	369.98	Cherry bark red Oak 12 good yes
1698	35.226716	-89.743098	369.65	Sweetgum 16 poor no
1699	35.226637	-89.743081	377	white oak 15 good yes
1700	35.226752	-89.743111	371.26	White Oak 7 good yes
1701	35.226732	-89.743126	369.65	Sweetgum 9 poor no
1702	35.22679	-89.743163	366.93	Tulip poplar 12 good yes
1703	35.226809	-89.74319	368.34	Tulip poplar 7 good yes
1704	35.226669	-89.743103	370.51	Sassafras 7 poor no
1705	35.226622	-89.743083	370.24	White Oak 7 good yes
1706	35.226627	-89.743106	371.52	White Oak 6 fair yes
1707	35.226565	-89.743164	389.96	White Oak 6 poor no
1708	35.226496	-89.743098	372.51	Eastern red cedar 9 fair yes
1709	35.226563	-89.743241	369.32	Cherry bark red Oak 16 fair yes
1710	35.226592	-89.743143	377.17	Cherry bark red Oak 16 fair yes
1711	35.226511	-89.74321	366.77	Cherry bark red oak 23 fair yes
1712	35.226497	-89.743261	368.83	Sweetgum 12 poor no
1713	35.226583	-89.743197	366.01	Cherry bark Redoak 17 poor no
1714	35.226517	-89.743228	369.52	Winged elm 6 good yes
1715	35.226424	-89.743099	369.75	Eastern red cedar 8 good yes
1716	35.226445	-89.743158	365.65	Cherry bark red Oak 20 good yes
1717	35.226468	-89.743086	368.34	Winged elm 9 good yes
1718	35.226616	-89.743314	367.62	Cherrybark red Oak 13 fair yes
1719	35.2266	-89.743239	364.83	Eastern red cedar 13 poor no
1720	35.226655	-89.743218	363.88	Pignut hickory 8 good yes
1721	35.226581	-89.743322	362.07	Cherry bark red Oak 10 poor no
1722	35.226564	-89.74332	363.25	Black cherry 8 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1723	35.226523	-89.743323	366.67	Pignut hickory 7 good yes
1724	35.226501	-89.743357	360.14	White Oak 12 good yes
1725	35.226507	-89.743411	363.45	Sweetgum 24 good yes
1726	35.226478	-89.7433	363.35	Sweetgum 15 fair yes
1727	35.22662	-89.743334	365.06	White Oak 14 fair yes
1728	35.226659	-89.743383	364.93	White Oak 11 good yes
1729	35.226661	-89.743308	370.96	White ash 6 fair yes
1730	35.226685	-89.74332	385.5	Cherry bark red oak 12 fair yes
1731	35.226665	-89.743368	372.38	Cherry bark red Oak 16 good yes
1732	35.22678	-89.743315	375.39	Cherry bark Redoak 10 good yes
1733	35.226817	-89.743285	373.1	Cherry bark Red oak 10 fair yes
1734	35.226771	-89.743359	365.98	White Oak 8 good yes
1735	35.226804	-89.743272	369.82	white 11 multi poor no
1736	35.226795	-89.743253	367.36	Cherry bark red oak 16 good yes
1737	35.226711	-89.743294	361.12	Winged elm 13 poor no
1738	35.226868	-89.743311	362.96	Sweetgum 10 poor no
1739	35.226844	-89.743329	358.96	Green ash 11 fair yes
1740	35.226878	-89.743328	373.06	Eastern red cedar 6 poor no
1741	35.226864	-89.743369	368.47	White Oak 8 poor no
1742	35.226859	-89.743242	362.07	Cherry bark red Oak 13 good yes
1743	35.226912	-89.743188	363.75	Black cherry 13 fair yes
1744	35.226853	-89.743267	366.21	Black cherry 9 fair yes
1745	35.226776	-89.743347	365.39	White Oak 11 fair yes
1746	35.226977	-89.743282	382.41	Pignut hickory 12 good yes
1747	35.226793	-89.743366	370.9	Pignut hickory 7 fair no
1748	35.226852	-89.743357	380.15	Pignut hickory 6 fair no
1749	35.226684	-89.743557	360.43	Cherry bark red Oak 12 poor no
1750	35.226719	-89.743502	386.68	Cherry bark red Oak 33 good yes
1751	35.226703	-89.743509	374.57	Winged elm 7 good yes
1752	35.226581	-89.743359	370.21	Sugarmaple 13 multi fair yes
1753	35.226581	-89.74348	371.16	Cherry bark red Oak 9 poor no
1754	35.226595	-89.743447	376.18	Cherry bark red Oak 11 poor no
1755	35.226596	-89.743541	363.32	Eastern red cedar 10 poor no
1756	35.226522	-89.74347	364.9	Shagbark hickory 14 fair yes
1757	35.226515	-89.743371	378.05	Eastern red cedar 8 good yes
1758	35.226329	-89.743582	364.44	Cherry bark red oak 15 good yes
1759	35.226355	-89.743371	376.54	Eastern red cedar 9 poor no
1760	35.226414	-89.743473	363.52	Cherry bark red Oak 28 good yes
1761	35.226462	-89.743452	366.54	Sugarmaple 7 fair yes
1762	35.226362	-89.743311	370.47	Winged elm 9 good yes
1763	35.226344	-89.743235	372.47	Cherry bark red Oak 11 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1764	35.226303	-89.743292	366.7	winged elm 14 multi poor no
1765	35.226265	-89.743326	361.32	Eastern red cedar 10 fair no
1766	35.226202	-89.743341	361.19	Callery pear 11 poor no
1767	35.226291	-89.743414	360.73	Cherry bark red Oak 10 fair yes
1768	35.226269	-89.743382	367.45	Black locust 10 poor no
1769	35.226273	-89.743363	367.19	Callery pear 7 poor no
1770	35.226437	-89.743492	378.05	Black locust 10 fair yes
1771	35.226328	-89.743538	362.7	Sycamore 11 good yes
1772	35.226305	-89.743588	365.68	Black locust 6 poor no
1773	35.226291	-89.743577	364.21	Callery pear 6 poor no
1774	35.226275	-89.743597	371.1	Sugar maple 6 fair no
1775	35.22623	-89.743542	362.34	Callery pear 11 multi poor no
1776	35.226219	-89.743491	366.08	Callery pear 9 multi poor no
1777	35.226217	-89.743569	366.4	Winged elm 6 fair yes
1778	35.226343	-89.743659	361.58	Sycamore 10 good yes
1779	35.226374	-89.743628	361.55	Sycamore 8 fair no
1780	35.226401	-89.743596	365.19	Sycamore 10 fair no
1781	35.226452	-89.743596	373.88	Sycamore 14 good yes
1782	35.226445	-89.743594	364.04	Sugarmaple 6 poor no
1783	35.226482	-89.743481	366.37	Sugarmaple 9 good yes
1784	35.226509	-89.743738	365.35	Sycamore 9 fair yes
1785	35.226466	-89.743721	369.26	Sugarmaple 14 poor no
1786	35.226479	-89.74365	358.4	Post Oak 8 good yes
1787	35.226502	-89.743643	366.47	Callery pear 10 poor no
1788	35.226408	-89.743665	366.63	Winged elm 13 fair yes
1789	35.226393	-89.743721	372.87	Sweetgum 22 poor no
1790	35.226398	-89.74376	381.46	Tulip poplar 17 good yes
1791	35.226431	-89.743799	377.46	White Oak 6 good yes
1792	35.226411	-89.74381	367.81	Cherry bark red oak 18 good yes
1793	35.226397	-89.743729	365.98	Cherry bark red oak 15 fair yes
1794	35.226354	-89.743756	371.56	Winged elm 12 fair yes
1795	35.226349	-89.743826	368.77	Callery pear 8 good no
1796	35.226291	-89.743866	365.06	White Oak 14 good yes
1797	35.226308	-89.743847	364.24	Pignut hickory 6 fair yes
1798	35.22629	-89.743846	379.69	Cherry bark red oak 42 high value specimen
1799	35.226279	-89.743976	371.13	Pignut hickory 10 good yes
1800	35.226288	-89.743988	364.24	Cherry bark white oak 7 poor no
1801	35.226314	-89.744028	375.3	Winged elm 11 good yes
1802	35.226359	-89.744046	366.93	Take me to Hickory 7 good yes
1803	35.226381	-89.744069	368.9	Winged elm 8 good yes
1804	35.226424	-89.744135	382.12	Pignut hickory 6 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1805	35.226488	-89.744227	371.78	Sugar maple 10 fair yes
1806	35.22648	-89.744285	385.07	Cherry bark red Oak 21 fair yes
1807	35.226434	-89.743983	365.62	Cherry bark red oak 39 good yes high value specimen tree
1808	35.226426	-89.7439	365.49	White Oak 10 fair yes
1809	35.226469	-89.743923	376.74	Winged elm 7 fair yes
1810	35.226456	-89.743969	375.3	Tulip poplar 7 fair yes
1811	35.226403	-89.743963	366.67	Sugarmaple 10 good yes
1812	35.226444	-89.744012	364.5	Sugarmaple 10 good yes
1813	35.226517	-89.743998	363.88	Sycamore 11 poor no
1814	35.226479	-89.744008	364.7	Red maple 6 fair yes
1815	35.226511	-89.743953	361.81	Sycamore 12 poor no
1816	35.226521	-89.743832	368.7	Pignut hickory 10 good yes
1817	35.226548	-89.743902	368.83	Tulip poplar 19 fair yes
1818	35.226415	-89.743862	371.69	Winged elm 14 good yes
1819	35.226399	-89.743985	368.18	Pignut hickory 6 fair yes
1820	35.226359	-89.744097	361.19	Post Oak 11 poor no
1821	35.226556	-89.743643	371.49	Tulip poplar 11 poor no
1822	35.226604	-89.74361	368.31	Tulip poplar 15 fair no
1823	35.226567	-89.743651	367.39	Pignut hickory 11 good yes
1824	35.22654	-89.743584	367.62	White Oak 10 poor no
1825	35.226558	-89.743695	364.14	White Oak 8 poor no
1826	35.226494	-89.743667	362.4	Sugarmaple 7 good yes
1827	35.226593	-89.743713	374.11	pignut hickory 7 poor no
1828	35.2266	-89.743658	375.92	Sweetgum 8 poor no
1829	35.226586	-89.74378	361.78	Winged elm 10 fair no
1830	35.22661	-89.743737	363.58	shagbark hickory 10 good yes
1831	35.226644	-89.743757	362.11	White Oak 11 fair yes or
1832	35.22663	-89.743722	364.83	White Oak 16 good yes
1833	35.226705	-89.743765	364.44	Post Oak 16 fair yes
1834	35.22673	-89.743802	364.93	Sweetgum 9 poor no
1835	35.22667	-89.743666	366.37	Sweetgum 7 poor no
1836	35.226672	-89.74365	364.24	Pignut hickory 9 fair no
1837	35.226655	-89.743708	367.75	pignut hickory 12 poor no
1838	35.226786	-89.743667	370.24	Sweetgum 14 poor no
1839	35.226763	-89.743598	366.34	cherry bark red Oak 11 poor no
1840	35.22683	-89.743538	374.8	American hop hornbeam 7 good yes
1841	35.226829	-89.74371	372.28	White Oak 13 poor no
1842	35.226772	-89.743679	370.73	White Oak 12 fair yes
1843	35.226859	-89.743774	378.28	Tulip poplar 7 poor no
1844	35.226753	-89.743804	374.74	Sweetgum 10 poor no
1845	35.226693	-89.743714	362.89	Sweetgum 8 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1846	35.226786	-89.743778	372.83	Sweetgum 10 poor no
1847	35.226783	-89.74378	371.03	sugar maple 6 poor no
1848	35.226737	-89.743834	366.9	Sweetgum 60 poor no
1849	35.226782	-89.743858	376.41	red maple 7 fair yes
1850	35.226784	-89.743814	380.48	Cherrybark red Oak 32 multi poor no
1851	35.226643	-89.743844	369.72	Cherrybark red Oak 15 fair yes
1852	35.226604	-89.743727	369.78	Sweetgum 18 poor no
1853	35.226531	-89.743835	366.01	Sweetgum 12 poor no
1854	35.226572	-89.74389	366.63	Sweetgum 8 poor no
1855	35.226633	-89.743862	371.59	White Oak 13 good yes
1856	35.226578	-89.744008	369.62	Northern red oak 20 poor no
1857	35.22658	-89.744067	364.96	Cherrybark red Oak 20 good yes
1858	35.226603	-89.744094	375.39	White Oak 7 poor no
1859	35.226656	-89.744024	375.72	White Oak 7 poor no
1860	35.226684	-89.744145	375.85	Northern red oak 20 poor no
1861	35.226708	-89.744181	376.35	Sweetgum 10 poor no
1862	35.22669	-89.744142	371.69	Sweetgum 8 poor no
1863	35.226716	-89.744166	373.82	winged elm 6 poor no
1864	35.226758	-89.744174	367.16	tulip poplar 24 fair yes
1865	35.226714	-89.744076	374.84	Tulip poplar 24 fair yes
1866	35.226712	-89.744047	370.21	Sweetgum 7 poor no
1867	35.226677	-89.744006	376.35	Cherrybark red Oak 15 poor no
1868	35.226713	-89.744076	372.64	Sugarmaple 11 good yes
1869	35.226747	-89.743966	369.03	Cherrybark red Oak 15 poor no
1870	35.226732	-89.744031	364.86	Whiteoak 12 poor no
1871	35.226726	-89.743804	386.22	winged elm 9 fair no
1872	35.226755	-89.743956	373.62	Sugarmaple 10 multi pore no
1873	35.226777	-89.743952	372.6	Red maple 7 poor no
1874	35.22682	-89.743946	367.98	Sweetgum 13 poor no
1875	35.226823	-89.743903	374.87	Sweetgum 6 poor no
1876	35.226834	-89.743833	368.9	Eastern red cedar 9 poor no
1877	35.226844	-89.743903	369.62	Winged elm 7 poor no
1878	35.226765	-89.743976	367.36	pignut hickory 8 poor no
1879	35.226825	-89.744043	364.17	tulip poplar 11 poor no
1880	35.226836	-89.744072	364.6	Sweetgum 19 poor no
1881	35.226763	-89.744008	366.93	Winged elm 13 fair no
1882	35.226851	-89.744045	362.53	Post Oak 15 good yes
1883	35.226896	-89.74401	366.9	Eastern red cedar 14 poor no
1884	35.226865	-89.744104	365.94	Winged elm 7 fair yes
1885	35.22689	-89.744148	363.32	winged elm 7 fair yes
1886	35.226853	-89.74414	369.98	sassafras 9 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1887	35.226874	-89.744179	372.31	Black cherry 7 poor no
1888	35.226818	-89.744063	365.78	Cherrybark red Oak 20 poor no
1889	35.226688	-89.74422	363.29	Cherrybark red Oak 15 poor no
1890	35.226777	-89.744247	367.42	Sweetgum 7 poor no
1891	35.226864	-89.744168	376.94	Sweetgum 6 poor no
1892	35.226843	-89.744205	367.39	Cherrybark Redoak 7 poor no
1893	35.226873	-89.744233	361.29	Sweetgum 6 poor no
1894	35.226866	-89.744272	363.09	Sweetgum 11 poor no
1895	35.226825	-89.744299	379.23	Winged elm 11 good yes
1896	35.226824	-89.744375	361.68	Cherry Fork red oak 26 multi poor no
1897	35.227	-89.744183	371.36	Cherrybark red Oak 17 fair yes
1898	35.227006	-89.744275	368.18	Winged elm 7 poor no
1899	35.227005	-89.744314	365.06	Black cherry 11 poor no
1900	35.22694	-89.744421	363.52	Cherrybark red Oak 15 good yes
1901	35.226926	-89.744279	362.93	Winged elm 6 poor no
1902	35.226893	-89.744294	363.29	Sweetgum 13 poor no
1903	35.22688	-89.744348	364.14	Eastern red cedar 9 poor no
1904	35.226955	-89.744396	352.76	Sweetgum 8 poor no
1905	35.226903	-89.744375	356.99	Sweetgum 13 poor no
1906	35.226852	-89.744429	363.32	Sugarmaple 6 poor no
1907	35.226857	-89.744332	359.78	Sugar maple 13 fair yes
1908	35.226837	-89.74427	362.57	Sweetgum 16 multi poor no
1909	35.226791	-89.744301	359.88	Sweetgum 6 poor no
1910	35.226824	-89.744296	362.11	Sweetgum 12 poor no
1911	35.226805	-89.744228	374.61	Osage orange 7 poor no
1912	35.226834	-89.744243	365.65	Sweet gum 8 poor no
1913	35.226734	-89.744239	368.44	Sweetgum 6 poor no
1914	35.226786	-89.744349	359.55	tulip Poplar 14 fair no
1915	35.226773	-89.744343	364.67	tulip poplar 17 multi poor no
1916	35.226687	-89.744354	361.48	Red maple 10 fair yes
1917	35.226651	-89.74436	350.69	Red maple 12 fair yes
1918	35.22669	-89.744294	357.71	Red maple 6 fair poor no
1919	35.226718	-89.74427	366.8	Red maple 7 poor no
1920	35.226718	-89.744465	350.85	Red maple 7 fair yes
1921	35.226671	-89.744471	352.1	Red maple 8 fair yes
1922	35.226656	-89.744512	357.87	tulip poplar 14 poor no
1923	35.226594	-89.744411	358.69	Red maple 10 fair yes
1924	35.226636	-89.744416	357.64	tulip Poplar 14 poor no
1925	35.226642	-89.744466	355.25	tulip poplar 14 fair yes
1926	35.226578	-89.744357	360.17	Sugarmaple 8 poor no
1927	35.22654	-89.744359	359.38	Sugar maple 7 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1928	35.226663	-89.74432	355.25	Sugarmaple 10 good yes
1929	35.226609	-89.744268	353.18	Sugarmaple 8 fair yes
1930	35.226606	-89.744192	357.74	tulip poplar 12 multi poor no
1931	35.225365	-89.745676	381.76	American hophornbeam 15 multi fair yes
1932	35.226496	-89.744272	354.43	Sugar maple 11 multi fair no
1933	35.226569	-89.744296	342.06	Tulip poplar 11 multi poor no
1934	35.226588	-89.744243	366.63	Sugarmaple 6 poor no
1935	35.226633	-89.744301	354.27	Sugarmaple 10 poor no
1936	35.226611	-89.744352	357.91	Sugarmaple 10 fair yes
1937	35.226621	-89.74429	360.76	tulip poplar 11 poor no
1938	35.226634	-89.744451	354.86	Sugarmaple 10 poor no
1939	35.226697	-89.744468	354.82	Sweetgum 13 poor no
1940	35.226649	-89.744501	355.48	Red maple 7 poor no
1941	35.226775	-89.74449	360.83	tulip Poplar 15 poor no
1942	35.226827	-89.744568	367.32	Tulip poplar 15 poor no
1943	35.226768	-89.744359	360.3	Sugar maple 10 fair yes
1944	35.226801	-89.744454	362.3	tulip poplar 20 poor no
1945	35.226751	-89.744446	357.87	Tulip poplar 12 poor no
1946	35.226773	-89.744347	368.57	Sugarmaple 10 poor no
1947	35.226841	-89.74445	367.62	Red maple 6 fair yes
1948	35.226774	-89.744483	356.66	Tulip poplar 15 fair yes
1949	35.226708	-89.744527	356.66	Red maple 8 poor no
1950	35.226765	-89.744515	351.54	Tulip poplar 17 fair yes
1951	35.226804	-89.744541	362.76	Sugarmaple 9 fair yes
1952	35.226847	-89.74467	356.53	Sugarmaple 7 poor no
1953	35.226763	-89.744504	363.06	Tulip poplar 17 fair yes
1954	35.226923	-89.744598	355.97	Tulip poplar 19 good yes
1955	35.2269	-89.744683	354.82	Sweetgum 6 poor no
1956	35.226891	-89.744661	351.31	Sugarmaple 6 poor no
1957	35.226874	-89.744663	352.82	Sweetgum 8 poor no
1958	35.226888	-89.744672	352.03	Tulip poplar 16 poor no
1959	35.226886	-89.744801	353.12	tulip poplar 18 poor no
1960	35.226911	-89.744823	354.2	Sugarmaple 7 poor no
1961	35.226912	-89.744723	350.36	Sugarmaple 6 poor no
1962	35.226947	-89.744621	355.31	Sugar maple 10 poor no
1963	35.226893	-89.744671	363.71	Tulip poplar 16 fair no
1964	35.226921	-89.744556	359.19	Sweetgum 6 poor no
1965	35.227002	-89.744701	360.7	Tulip poplar 10 poor no
1966	35.227094	-89.744877	355.22	tulip Poplar 17 fair yes
1967	35.227019	-89.744827	354.86	Tulip poplar 15 good yes
1968	35.22698	-89.744828	355.97	tulip poplar 9 multi poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
1969	35.226998	-89.744983	352	Cherrybark red Oak 11 poor no
1970	35.227072	-89.744948	361.32	Sweetgum 9 poor no
1971	35.227086	-89.744942	367.91	Sweetgum 11 poor no
1972	35.227165	-89.744841	360.5	Sweetgum 7 poor no
1973	35.227069	-89.744948	354.99	Sweetgum 11 poor no
1974	35.227132	-89.745084	359.68	Tulip poplar 23 good yes
1975	35.22714	-89.745061	363.65	Sweetgum 19 poor no
1976	35.227049	-89.744911	365.35	tulip Poplar 22 good yes
1977	35.227076	-89.744987	364.04	Sweetgum 10 poor no
1978	35.227128	-89.744872	362.14	Sweetgum 6 poor no
1979	35.227191	-89.744697	364.6	Sweetgum 12 poor no
1980	35.227179	-89.74478	366.37	Tulip poplar 10 poor no
1981	35.227134	-89.74474	361.45	Black cherry 12 fair yes
1982	35.227082	-89.744754	355.97	Winged elm 7 fair yes
1983	35.227151	-89.744717	373.79	white ash 15 good yes
1984	35.227165	-89.744781	368.18	Cherrybark red Oak 21 good yes
1985	35.226633	-89.744727	359.88	Sweetgum 10 poor no
1986	35.227064	-89.744598	359.65	Sweetgum 7 poor no
1987	35.226985	-89.744646	361.91	Sweetgum 11 poor no
1988	35.226968	-89.744561	353.97	Sweetgum 7 poor no
1989	35.226984	-89.744587	357.22	Sugar maple 6 poor no
1990	35.227001	-89.744544	363.52	Sweetgum 8 poor no
1991	35.226948	-89.744536	359.61	Sweetgum 10 poor no
1992	35.226892	-89.744592	360.2	Sweetgum 10 poor no
1993	35.227081	-89.744514	358.33	Sugarmaple 7 good yes
1994	35.226953	-89.744393	363.98	Sweetgum 10 poor no
1995	35.227016	-89.744513	364.01	Sweetgum multi 12 poor no
1996	35.227015	-89.744561	362.27	Sweetgum multi 18 poor no
1997	35.227062	-89.744509	364.4	Black cherry 10 fair yes
1998	35.227108	-89.744611	363.78	Cherrybark red Oak 15 poor no
1999	35.227138	-89.744628	364.01	Tulip poplar 15 fair yes
2000	35.227129	-89.744752	380.71	Cherrybark red Oak 33 fair yes
2001	35.227268	-89.744814	362.14	Sweetgum 7 poor no
2002	35.227133	-89.744666	364.04	Cherrybark red oak 8 poor no
2003	35.227285	-89.744585	365.75	Sweetgum 17 poor no
2004	35.227196	-89.744615	364.37	Tulip poplar 8 poor no
2005	35.227203	-89.744577	382.09	Tulip poplar 14 poor no
2006	35.227191	-89.744476	369.91	sweetgum 14 poor no
2007	35.227076	-89.744346	363.65	Cherrybark red Oak 15 poor no
2008	35.227069	-89.744304	366.93	Cherrybark red Oak 24 poor no
2009	35.227024	-89.744473	363.78	Sugarmaple 6 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2010	35.22714	-89.74428	367.85	Sweetgum 7 poor no
2011	35.227191	-89.744404	364.6	post Oak 6 fair yes
2012	35.227143	-89.744424	385.14	Cherrybark red Oak 13 good yes
2013	35.227208	-89.744327	366.4	Cherry bark red oak 14 good yes
2014	35.227263	-89.744326	369.29	Sweetgum 9 poor no
2015	35.227279	-89.744372	372.18	Sweetgum 10 fair no
2016	35.227193	-89.74447	368.86	Sweetgum 6 poor no
2017	35.227195	-89.744486	364.73	Tulip poplar 15 fair yes
2018	35.227208	-89.744519	364.21	Tulip poplar 14 fair yes
2019	35.227281	-89.744579	374.48	Tulip poplar 7 fair yes
2020	35.227161	-89.744524	360.63	Tulip poplar 20 fair yes
2021	35.227347	-89.744571	367.59	Sassafras 10 poor no
2022	35.227352	-89.744679	368.01	Sweetgum 10 poor no
2023	35.227318	-89.744672	377.79	Sweetgum 10 poor no
2024	35.227271	-89.744803	370.67	Cherrybark red oak 12 fair no
2025	35.22721	-89.744792	369.78	Sycamore 10 poor no
2026	35.22725	-89.74494	369.95	Sweetgum 28 multi poor no
2027	35.227306	-89.744895	366.11	Black cherry 7 pour no
2028	35.227264	-89.744909	370.08	Tulip poplar 22 good yes
2029	35.227345	-89.744854	368.54	Winged elm 9 good yes
2030	35.227399	-89.744872	370.9	Sweetgum 12 fair yes
2031	35.227364	-89.744808	370.08	Sweetgum 12 fair yes
2032	35.227322	-89.744977	380.64	green ash 12 good yes
2033	35.227392	-89.74492	384.71	Winged elm 8 fair yes
2034	35.227346	-89.744907	364.7	Black cherry 11 good yes
2035	35.227244	-89.744862	367.06	Sweetgum 13 poor no
2036	35.227245	-89.74482	367.55	Sweetgum 13 poor no
2037	35.227104	-89.744942	365.29	Tulip poplar 21 good yes
2038	35.227102	-89.744924	362.04	Tulip poplar 7 poor no
2039	35.227142	-89.744974	358.89	Sweetgum 8 poor no
2040	35.227172	-89.745059	361.94	Tulip poplar 14 good yes
2041	35.227281	-89.744978	362.3	Sweetgum 7 poor no
2042	35.227073	-89.744637	367.85	Sweetgum 7 fair no
2043	35.227261	-89.744995	363.32	Tulip poplar 24 good yes
2044	35.227228	-89.74499	371.39	Sugarmaple 10 good yes
2045	35.227216	-89.744957	388.55	Sweetgum 12 poor no
2046	35.227186	-89.744992	360.14	Sugarmaple 6 fair yes
2047	35.227169	-89.745157	358.76	Sugarmaple 11 good yes
2048	35.227268	-89.745047	367.98	Tulip poplar 8 poor no
2049	35.227253	-89.74505	360.1	Sweetgum 17 poor no
2050	35.227216	-89.745094	358.96	Tulip poplar 19 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2051	35.227263	-89.745093	362.34	Sugarmaple 6 fair yes
2052	35.227314	-89.745157	362.8	Sweetgum 7 poor no
2053	35.227303	-89.745198	362.57	Sweetgum 17 poor no
2054	35.22731	-89.745227	364.76	Sweetgum 6 poor no
2055	35.227382	-89.745223	366.08	Sweetgum 10 poor no
2056	35.227384	-89.745132	372.8	tulip poplar 21good yes
2057	35.227352	-89.745037	367.78	Sweetgum 8 poor no
2058	35.227307	-89.745063	365.68	Sweetgum 11 poor no
2059	35.227392	-89.745052	365.75	Tulip poplar 19 fair yes
2060	35.227329	-89.744997	364.4	Sweetgum 24 multi poor no
2061	35.225474	-89.74611	399.34	Sweetgum 13 poor no
2062	35.227334	-89.744965	360.93	Sweetgum 7 poor no
2063	35.227305	-89.744963	364.83	sweetgum 6 poor no
2064	35.227363	-89.745094	372.18	cherrybark red Oak 18 good yes
2065	35.227399	-89.745021	386.48	Sweetgum 6 poor no
2066	35.227538	-89.74497	374.7	Green ash 14 fair yes
2067	35.227479	-89.744889	377.2	Winged elm 11 good yes
2068	35.227564	-89.745143	389.73	Eastern red cedar 12 fair no
2069	35.227444	-89.745043	372.18	Eastern red cedar 15 fair yes
2070	35.227516	-89.745092	372.21	Sweetgum 8 poor no
2071	35.227546	-89.74511	372.64	Sweetgum 10 poor no
2072	35.227526	-89.745116	380.71	Sweetgum 14 fair no
2073	35.227577	-89.745113	367.95	sweetgum 7 poor no
2074	35.227561	-89.745212	372.54	cherrybark red pak 18 good yes
2075	35.227487	-89.7451	367.03	tulip poplar 21 good yes
2076	35.227525	-89.745058	376.15	cherrybark red 21 poor no
2077	35.227329	-89.745168	371.59	Sweetgum 7 poor no
2078	35.227415	-89.745143	371.98	sweetgum 14 poor no
2079	35.227362	-89.745176	361.78	Tulip poplar 7 poor no
2080	35.227406	-89.745243	367.78	tulip Poplar 18 good yes
2081	35.22737	-89.745261	359.02	tulip Poplar 12 poor no
2082	35.227345	-89.745121	363.39	tulip Poplar 6 poor no
2083	35.227305	-89.745156	364.14	Sugarmaple 6 fair yes
2084	35.227341	-89.745237	366.11	Sweetgum 13 poor no
2085	35.2274	-89.745295	361.81	Sweetgum 8 poor no
2086	35.22744	-89.745291	360.6	Sweetgum 10 poor no
2087	35.227446	-89.74529	366.11	Sugarmaple 10 fair yes
2088	35.227456	-89.745258	369.03	Sweetgum 14 fair yes
2089	35.227335	-89.745197	372.51	tulip Poplar 23 good yes
2090	35.227444	-89.745357	362.27	Sweetgum 17 oh fair yes
2091	35.227488	-89.745385	366.31	Sugarmaple 12 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2092	35.227505	-89.745352	373.26	Sugarmaple 8 poor no
2093	35.227469	-89.745391	363.45	Sweetgum 13 poor no
2094	35.227431	-89.745398	363.22	Sweetgum 8 poor no
2095	35.227504	-89.745501	360.2	Sweetgum 11 poor no
2096	35.22751	-89.745487	363.12	Sweetgum 11 poor no
2097	35.227515	-89.745493	364.7	Tulip poplar 17 good yes
2098	35.22744	-89.745396	368.86	tulip Poplar 19 good yes
2099	35.227447	-89.745372	366.14	Sweetgum 14 good yes
2100	35.227536	-89.745376	375.39	Black cherry 10 fair yes
2101	35.227529	-89.74537	366.21	Sweetgum 6 poor no
2102	35.227551	-89.745332	366.99	Sweetgum 10 poor no
2103	35.227495	-89.745348	367.91	Sweetgum 12 poor no
2104	35.227566	-89.745402	370.37	tulip poplar 13 poor no
2105	35.227572	-89.745375	362.96	Sweetgum 10 poor no
2106	35.22748	-89.745373	362.63	Sweetgum 9 poor no
2107	35.227562	-89.745373	365.75	Black cherry 10 fair yes
2108	35.227622	-89.745367	367.75	Sweetgum 10 poor no
2109	35.227702	-89.745293	371.95	Post Oak 10 good yes
2110	35.227645	-89.745197	368.7	Eastern red cedar 8 poor no
2111	35.227715	-89.745243	382.64	Cherrybark red oak 14 good yes
2112	35.227649	-89.745206	373.98	Cherrybark red Oak 14 good yes
2113	35.227689	-89.745312	368.18	Sweetgum 22 multi poor no
2114	35.227581	-89.745662	351.64	Cherrybark red Oak 17 poor no
2115	35.227629	-89.745377	364.44	Sweetgum 28 multi poor no
2116	35.227719	-89.745411	366.8	Cherrybark red Oak 16 good yes
2117	35.227624	-89.745341	367.39	Sweetgum 16 poor no
2118	35.227654	-89.745415	373.16	Sweetgum 10 poor no
2119	35.22758	-89.745366	369.03	sassafras 6 poor no
2120	35.227611	-89.745358	369.59	Tulip poplar 15 fair yes
2121	35.22759	-89.745383	364.73	Sweetgum 12 poor no
2122	35.22761	-89.745445	364.14	Tulip poplar 10 poor no
2123	35.227611	-89.745479	367.45	Winged elm 11 poor no
2124	35.227569	-89.745494	365.75	Sweetgum 19 poor no
2125	35.22751	-89.745482	367.72	Sweetgum 7 poor no
2126	35.227525	-89.745562	363.09	Sweetgum 13 poor no
2127	35.227505	-89.745582	362.24	Sweetgum 7 poor no
2128	35.227455	-89.745703	357.19	Sweetgum 10 poor no
2129	35.227504	-89.74566	359.78	Sweetgum 7 poor no
2130	35.227502	-89.745711	363.45	Tulip poplar 10 poor no
2131	35.227469	-89.745704	366.24	Sweetgum 9 poor no
2132	35.227577	-89.745798	363.48	Sweetgum 11 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2133	35.227581	-89.745754	362.5	Sweetgum 8 poor no
2134	35.2276	-89.745816	366.47	Cherrybark red Oak 9 poor no
2135	35.227562	-89.745786	349.38	Sweetgum 7 poor no
2136	35.227579	-89.745664	356.27	Sweetgum 8 poor no
2137	35.227576	-89.745702	366.04	Cherrybark red Oak 18 fair yes
2138	35.227644	-89.745649	363.58	Sweetgum 11 poor no
2139	35.227596	-89.745599	364.86	Tulip poplar 20 good yes
2140	35.227594	-89.745568	365.49	Sweetgum 12 poor no
2141	35.227601	-89.745624	369.32	Tulip poplar 22 fair no
2142	35.227627	-89.745665	369.13	Sweetgum 12 multi poor no
2143	35.227674	-89.745574	376.51	Sweetgum 9 poor no
2144	35.227721	-89.745538	375.03	Cherrybark red Oak 7 poor no
2145	35.227719	-89.745543	364.8	Cherrybark red Oak 18 good yes
2146	35.227731	-89.745563	367.45	Cherrybark red Oak 10 fair yes
2147	35.227749	-89.745517	366.6	Cherrybark red Oak 26 poor no
2148	35.227734	-89.745635	363.02	White Oak 14 fair yes
2149	35.227816	-89.745401	361.48	White Oak 12 good yes
2150	35.227749	-89.7454	368.41	Sweetgum 16 multi poor no
2151	35.227832	-89.745274	367.72	Cherrybark red Oak 9 poor no
2152	35.22788	-89.745421	386.55	Cherrybark red Oak 17 fair yes
2153	35.227857	-89.745419	373.59	White ash 18 fair yes
2154	35.227859	-89.745397	367.52	White Oak 25 poor no
2155	35.227845	-89.74539	367.42	post oak 7 fair yes
2156	35.227912	-89.745427	381.89	White Oak 6 fair yes
2157	35.227853	-89.745414	370.28	White Oak 14 fair yes
2158	35.227772	-89.745511	368.11	Cherrybark red Oak 19 multi poor no
2159	35.227798	-89.74553	364.6	Cherrybark red Oak 20 fair yes
2160	35.227827	-89.745626	362.86	Post Oak 7 good yes
2161	35.227743	-89.745734	360.73	Sweetgum 11 poor no
2162	35.227771	-89.745786	360.33	Sweetgum 16 multi poor no
2163	35.227686	-89.745714	360.37	Sweetgum 11 poor no
2164	35.227643	-89.745761	357.48	White Oak 8 fair yes
2165	35.227677	-89.745708	359.32	Sweetgum 22 poor no
2166	35.227676	-89.745777	363.98	Sweetgum 7 poor no
2167	35.227692	-89.745782	360.83	Winged elm 11 good yes
2168	35.227623	-89.745775	356.86	Sweetgum 16 poor no
2169	35.226422	-89.744874	358.89	American hophornbeam 7 poor no
2170	35.226461	-89.74485	353.94	Sweetgum 15 poor no
2171	35.226452	-89.744965	357.87	Tulip poplar 10 poor no
2172	35.22649	-89.744911	351.94	Tulip poplar 22 fair yes
2173	35.226545	-89.744997	354.56	Mockernut Hickory 13 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2174	35.226649	-89.745165	353.22	Pignut hickory 10 poor no
2175	35.226516	-89.745121	370.8	Sassafras 11 poor no
2176	35.226765	-89.745123	354.59	Winged elm 9 poor no
2177	35.226661	-89.745164	362.6	Sweetgum 11 poor no
2178	35.226692	-89.745186	379.95	Tulip poplar 24 fair yes
2179	35.226664	-89.745295	362.07	Sweetgum 11 poor no
2180	35.226721	-89.745328	362.96	Tulip poplar 24 fair no
2181	35.226763	-89.745219	352.95	Sweetgum 15 poor no
2182	35.226814	-89.745119	351.64	Sweetgum 17 poor no
2183	35.226763	-89.745113	349.67	Sweetgum 12 poor no
2184	35.226752	-89.745163	356.92	Sweetgum 16 poor no
2185	35.226695	-89.745263	373.2	Sweetgum 6 poor no
2186	35.22671	-89.745148	370.6	Sweetgum 10 poor no
2187	35.22688	-89.745249	369.03	Sweetgum 15 poor no
2188	35.226864	-89.745302	369.72	Sweetgum 14 poor no
2189	35.226795	-89.74526	362.96	Tulip poplar 12 multi poor no
2190	35.226913	-89.745313	378.74	Sweetgum 6 poor no
2191	35.226854	-89.745336	362.7	Tulip poplar 19 fair no
2192	35.226931	-89.745438	352.4	Green ash 9 fair yes
2193	35.226979	-89.745517	348.72	Sweetgum 9 poor no
2194	35.226914	-89.74542	345.44	Sweetgum 10 poor no
2195	35.226891	-89.745495	348.98	Call poplar 21 multi poor no
2196	35.226796	-89.745567	349.15	Sweetgum 10 poor no
2197	35.226848	-89.745463	353.71	American hophornbeam 8 fair yes
2198	35.226903	-89.745461	360.04	Sweetgum 6 poor no
2199	35.226828	-89.745569	346.1	Tulip poplar 14 fair no
2200	35.226783	-89.745682	360.1	Tulip poplar 10 poor no
2201	35.226921	-89.745662	364.57	Sycamore 8 poor no
2202	35.22694	-89.745497	359.61	American hophornbeam 7 fair yes
2203	35.226937	-89.745571	353.94	American hophornbeam 6 poor no
2204	35.226791	-89.745663	351.84	Tulip poplar 19 fair yes
2205	35.226989	-89.74578	340.55	Sweetgum 16 fair no
2206	35.227	-89.745787	343.44	American hophornbeam 8 fair yes
2207	35.226916	-89.74584	351.21	Sycamore 13 fair yes
2208	35.226978	-89.745827	343.47	Sycamore 16 fair no
2209	35.226959	-89.74586	355.84	Sweetgum 9 poor no
2210	35.22701	-89.745952	361.91	Sweetgum 12 poor no
2211	35.22697	-89.745957	360.79	Cherrybark red Oak 23 fair yes
2212	35.226985	-89.745924	356.86	Tulip poplar 19 multi poor no
2213	35.227026	-89.746032	343.93	Sweetgum 10 poor no
2214	35.227019	-89.746086	348.56	Sweetgum 6 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2215	35.227117	-89.746034	348.33	Sweetgum 11 poor no
2216	35.227021	-89.746029	344	Sweetgum 6 poor no
2217	35.227107	-89.746167	345.41	Sweetgum 23 multi poor no
2218	35.227068	-89.74621	343.04	Cherrybark red Oak 12 poor no
2219	35.227175	-89.746041	343.54	Sweetgum 10 poor no
2220	35.227159	-89.746046	344.98	Tulip poplar 20 fair yes
2221	35.227209	-89.746048	363.58	Sweetgum 8 poor no
2222	35.227204	-89.746083	356.56	Tulip poplar 14 good yes
2223	35.227182	-89.745974	349.84	Tulip poplar 6 poor no
2224	35.227178	-89.745826	354.79	Tulip poplar 24 good yes
2225	35.227089	-89.745691	348.79	White ash 10 fair no
2226	35.22709	-89.745634	349.9	Sassafras 13 good yes
2227	35.227205	-89.746131	349.8	Sweetgum 26 multi poor no
2228	35.227249	-89.746109	352.85	Tulip poplar 13 fair yes
2229	35.227228	-89.74607	351.87	Tulip poplar 7 fair yes
2230	35.227149	-89.746105	345.28	Pignut hickory 10 good yes
2231	35.227144	-89.746113	345.47	Sassafras 12 fair yes
2232	35.227294	-89.746263	346.52	Tulip poplar 18 fair no
2233	35.227332	-89.746271	341.9	Tulip poplar 20 fair no
2234	35.227272	-89.746171	341.54	Tulip poplar 7 poor no
2235	35.227275	-89.746137	350.72	tulip poplar 11 poor no
2236	35.227307	-89.746123	348.03	tulip poplar 6 poor no
2237	35.22737	-89.746207	349.38	Tulip poplar 43 multi fair yes
2238	35.227414	-89.746258	346.75	Tulip poplar 14 poor no
2239	35.22743	-89.746205	351.97	Tulip poplar 25 poor no
2240	35.227419	-89.746133	350.03	tulip poplar 13 poor no
2241	35.227442	-89.746208	350.39	Tulip poplar 8 poor no
2242	35.227447	-89.746257	354.82	Tulip poplar 13 fair no
2243	35.227463	-89.746258	358.66	Tulip poplar 12 good yes
2244	35.227535	-89.746289	357.68	Sweetgum 6 poor no
2245	35.228022	-89.745483	368.73	White Oak 7 fair no
2246	35.228006	-89.745563	372.21	sweetgum 10 poor no
2247	35.228	-89.745521	372.8	White Oak 10 fair yes
2248	35.228056	-89.745538	381.23	Sweetgum 18 poor no
2249	35.228009	-89.745455	376.74	White Oak 8 poor no
2250	35.228036	-89.745484	380.94	Post Oak 11 fair no
2251	35.227911	-89.745482	377.69	White Oak 13 fair yes
2252	35.22786	-89.745536	379.76	Cherrybark red Oak 13 fair no
2253	35.227848	-89.745731	365.78	Black cherry 11 poor no
2254	35.227929	-89.745703	360.93	Cherrybark red Oak 12 good yes
2255	35.227955	-89.745701	373	Sweetgum 31 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2256	35.22795	-89.745706	373.39	Sweetgum 17 poor no
2257	35.227843	-89.745705	367.52	Sweetgum 16 poor no
2258	35.227862	-89.74583	361.45	Cherrybark Redoak 14 poor no
2259	35.227717	-89.745839	365.78	Sweetgum 23 poor no
2260	35.227702	-89.745958	358.5	Sweetgum 26 multi poor no
2261	35.227762	-89.746155	360.3	Tulip poplar 13 fair yes
2262	35.227788	-89.746075	350.95	Tulip poplar 21 good yes
2263	35.227817	-89.74591	360.93	Tulip poplar 15 fair yes
2264	35.227915	-89.746179	347.64	Sweetgum 7 poor no
2265	35.228058	-89.745951	362.83	Sweetgum 15 multi poor no
2266	35.228065	-89.746019	378.18	Sweetgum 15 poor no
2267	35.227959	-89.746009	379.04	Sweetgum 13 poor no
2268	35.228071	-89.74587	380.77	Persimmon 6 fair yes
2269	35.228069	-89.745886	375.75	Sweetgum 10 poor no
2270	35.22803	-89.745909	367.29	Sweetgum 19 multi poor no
2271	35.22793	-89.745837	360.89	Sweetgum 9 poor no
2272	35.227941	-89.745847	361.55	Sweetgum 8 poor no
2273	35.228003	-89.745864	363.09	Sweetgum 10 poor no
2274	35.228034	-89.74584	364.01	Sweetgum 13 poor no
2275	35.227998	-89.7458	362.17	Sweetgum 8 poor no
2276	35.227959	-89.74581	360.01	Sweetgum 10 poor no
2277	35.227984	-89.745823	361.84	Sweetgum 12 poor no
2278	35.228073	-89.745796	379.92	Sweetgum 13 poor no
2279	35.228038	-89.745768	368.6	Sweetgum 8 poor no
2280	35.228076	-89.74578	380.77	Winged elm 7 fair yes
2281	35.228129	-89.745824	367.88	Sweetgum 21 multi poor no
2282	35.228121	-89.745856	370.21	Sweetgum 11 fair yes
2283	35.228137	-89.745707	377.07	Sweetgum 10 poor no
2284	35.22808	-89.745697	385.63	Sweetgum 10 poor no
2285	35.22802	-89.74567	387.8	Sweetgum 10 poor no
2286	35.228021	-89.745714	375.56	Sweetgum 6 poor no
2287	35.228005	-89.745698	381.86	Sweetgum 6 poor no
2288	35.228004	-89.745711	368.86	sweetgum 8 poor no
2289	35.228052	-89.745674	370.24	Sweetgum 10 fair yes
2290	35.228095	-89.745678	369	Sweetgum 13 poor no
2291	35.228096	-89.745668	377.1	Sweetgum 6 poor no
2292	35.228062	-89.745608	381.4	tulip poplar 6 poor no
2293	35.228049	-89.745563	380.58	Sweetgum 17 fair yes
2294	35.228003	-89.745635	377.26	Winged elm 11 fair yes
2295	35.228153	-89.745658	374.97	Sweetgum 17 good yes
2296	35.228147	-89.745631	364.44	sweetgum 6 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2297	35.228176	-89.745592	360.6	Winged elm 6 good yes
2298	35.2282	-89.745565	373.88	Cherrybark red Oak 24 good yes
2299	35.228218	-89.74552	378.05	Sweetgum 7 poor no
2300	35.228217	-89.745549	371.62	Sweetgum 8 fair yes
2301	35.227972	-89.745742	352.33	Sweetgum 11 poor no
2302	35.228224	-89.745635	376.21	Sweetgum 14 poor no
2303	35.228129	-89.745604	373.82	Sweetgum 13 poor no
2304	35.228117	-89.745645	367.59	green ash 6 fair yes
2305	35.228167	-89.745721	367.98	Eastern red cedar 11 fair yes
2306	35.228132	-89.745758	376.97	Winged elm 10 good yes
2307	35.228226	-89.745813	380.38	sweetgum 8 poor no
2308	35.22819	-89.745835	369.95	Sweetgum 12 poor no
2309	35.228116	-89.745843	367.19	Sweetgum 13 poor no
2310	35.22809	-89.745897	368.73	Cherrybark red Oak 11 poor no
2311	35.228097	-89.745911	364.7	Winged elm 7 poor no
2312	35.228194	-89.745976	367.62	Pignut hickory 11 poor no
2313	35.228114	-89.74592	364.63	Green ash 16 fair no
2314	35.228284	-89.746	374.67	Cherrybark red Oak 7 fair yes
2315	35.228323	-89.746002	372.15	Cherrybark red Oak 12 poor no
2316	35.228367	-89.745891	373.36	Cherrybark red Oak 8 poor no
2317	35.22834	-89.745843	374.02	Cherrybark red Oak 14 fair yes
2318	35.228321	-89.74595	376.9	Red maple 10 good yes
2319	35.228211	-89.745864	376.31	Black cherry 11 good yes
2320	35.228211	-89.745839	369.75	Eastern red cedar 7 poor no
2321	35.228249	-89.745795	380.87	Sweetgum 10 fair yes
2322	35.228135	-89.745784	362.93	Sweetgum 10 fair yes
2323	35.228383	-89.745802	368.34	Cherrybark red Oak 16 good yes
2324	35.228218	-89.745723	368.6	Tulip poplar 18 good yes
2325	35.228189	-89.745651	362.04	Black cherry 14 good yes
2326	35.228283	-89.745728	368.86	Sweetgum 8 poor no
2327	35.228281	-89.745712	371.36	Eastern red cedar 11 fair yes
2328	35.228304	-89.745645	374.7	Cherrybark red Oak 19 good yes
2329	35.228296	-89.745597	371.98	Eastern red cedar 8 poor no
2330	35.228218	-89.745555	368.11	Winged elm 6 fair yes
2331	35.22823	-89.745538	367.91	Sweetgum 8 poor no
2332	35.228164	-89.745501	364.3	Sweetgum 7 poor no
2333	35.228226	-89.745481	364.27	Sweetgum 16 poor no
2334	35.228292	-89.745542	370.64	Eastern red cedar 7 poor no
2335	35.228316	-89.745544	381.43	Sweetgum 7 poor no
2336	35.22832	-89.745563	382.05	Cherrybark red Oak 18 good yes
2337	35.228328	-89.745624	373.72	Cherrybark red Oak 11 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2338	35.228396	-89.745602	378.12	Cherrybark red Oak 7 good yes
2339	35.228361	-89.745603	367.52	Cherrybark red Oak 19 good yes
2340	35.228374	-89.745632	380.61	Cherrybark red Oak 10 fair yes
2341	35.228386	-89.745558	378.15	Cherrybark red Oak 11 fair yes
2342	35.228463	-89.745617	374.77	Cherrybark red Oak 8 poor no
2343	35.228419	-89.745609	388.09	Cherrybark red Oak 10 good yes
2344	35.228427	-89.745522	378.15	Cherrybark red Oak 8 fair yes
2345	35.228448	-89.745555	380.45	Cherrybark red Oak 12 fair yes
2346	35.228421	-89.745535	381.99	Eastern red cedar 10 poor no
2347	35.22842	-89.745504	374.44	White Oak 8 fair yes
2348	35.228435	-89.745525	381.23	Winged elm 9 poor no
2349	35.228333	-89.745473	371.42	Winged elm 13 good yes
2350	35.228395	-89.745455	371.69	Green ash 15 fair yes
2351	35.228276	-89.74539	381.86	Cherrybark red Oak 8 fair yes
2352	35.228334	-89.745381	377.89	Cherrybark red Oak 12 fair yes
2353	35.228368	-89.745375	383.07	Cherrybark red Oak 14 fair yes
2354	35.228343	-89.745312	375.2	Sweetgum 9 poor no
2355	35.228272	-89.745343	375.62	Pignut hickory 6 fair yes
2356	35.228258	-89.745369	373.39	Cherrybark red Oak 7 fair yes
2357	35.2283	-89.745485	369.62	Sweetgum 7 poor no
2358	35.228242	-89.745413	368.27	Pignut hickory 10 good yes
2359	35.228143	-89.74546	367.06	Sweetgum 8 poor no
2360	35.228159	-89.745482	368.93	Sweetgum 19 poor no
2361	35.228085	-89.745493	377.49	Post Oak 7 good yes
2362	35.22804	-89.745558	375.92	Sweetgum 13 poor no
2363	35.228058	-89.745551	372.54	Tulip poplar 7 fair yes
2364	35.228127	-89.745508	376.05	Black cherry 7 fair yes
2365	35.228138	-89.745507	373.79	tulip Poplar 12 good yes
2366	35.228156	-89.745453	379.1	Tulip poplar 6 poor no
2367	35.228157	-89.745452	368.86	tulip poplar 8 fair yes
2368	35.228091	-89.745413	365.75	Tulip poplar 7 poor no
2369	35.228105	-89.745406	376.15	White Oak 6 fair yes
2370	35.228123	-89.745404	376.48	Post Oak 6 fair yes
2371	35.22808	-89.745371	374.57	Cherrybark red Oak 12 good yes
2372	35.228028	-89.745354	373.69	Cherrybark red Oak 14 poor no
2373	35.227844	-89.745344	362.76	Post Oak 13 poor no
2374	35.227865	-89.745282	381.76	Winged elm 7 poor no
2375	35.22788	-89.74534	382.15	Cherrybark red Oak 10 poor no
2376	35.227973	-89.74533	374.74	Post Oak 17 fair yes
2377	35.227998	-89.745326	386.38	Post Oak 8 poor no
2378	35.22795	-89.745248	375.56	White Oak 7 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2379	35.227859	-89.74515	379.56	cherry bark red oak 8 fair yes
2380	35.227798	-89.74512	386.58	Cherrybark red Oak 16 poor no
2381	35.227818	-89.745186	386.38	Tree eastern red cedar 11 poor no
2382	35.227745	-89.745221	382.68	Post Oak 27 fair yes
2383	35.227767	-89.745126	375.26	Sweet gum 7 poor no
2384	35.22772	-89.745081	381.5	Eastern red cedar 7 poor no
2385	35.2278	-89.745101	371.65	Mamosa 8 poor no
2386	35.227915	-89.744944	392.98	Winged elm 6 fair yes
2387	35.227901	-89.745025	374.64	Cherrybark red Oak 15 poor no
2388	35.227875	-89.745015	374.05	Cherrybark red Oak 17 fair yes
2389	35.227772	-89.745213	358.5	Post Oak 14 fair yes
2390	35.227788	-89.745132	365.29	Winged elm 11 poor no
2391	35.227964	-89.745375	351.02	Post Oak 10 good yes
2392	35.22769	-89.745278	352.89	Cherrybark red Oak 8 fair yes
2393	35.227937	-89.744911	369.59	Post Oak 6 poor no
2394	35.22792	-89.744846	376.15	Winged elm 10 fair yes
2395	35.227957	-89.744812	376.51	Sweetgum 12 poor no
2396	35.227977	-89.744822	377.79	Red maple 7 good yes
2397	35.227891	-89.745074	378.41	Cherrybark red Oak 13 good yes
2398	35.228061	-89.745562	363.16	Winged elm 10 good yes
2399	35.228102	-89.745534	363.25	White Oak 16 good yes
2400	35.228204	-89.74555	366.31	Winged elm 7 poor no
2401	35.228256	-89.745408	360.53	Sweetgum 30 poor no
2402	35.228286	-89.745301	363.48	Cherrybark red Oak 6 fair yes
2403	35.228365	-89.745278	372.67	Post Oak 14 poor no
2404	35.228371	-89.745242	374.9	White Oak 6 poor no
2405	35.228408	-89.745348	383.53	Green ash 10 good yes
2406	35.228416	-89.74522	384.88	White Oak 24 poor no
2407	35.228397	-89.745186	386.48	Black cherry 8 fair yes
2408	35.228429	-89.745209	382.22	Sweetgum 10 poor no
2409	35.22842	-89.745094	391.86	Black cherry 10 poor no
2410	35.228445	-89.745023	386.61	Cherrybark red Oak 8 poor no
2411	35.22844	-89.745116	384.19	Cherrybark red Oak 11 fair yes
2412	35.22844	-89.745078	377.72	White Oak 9 good yes
2413	35.2284	-89.745125	378.25	Sweetgum 6 poor no
2414	35.228383	-89.745187	377.26	White Oak 14 fair yes
2415	35.228474	-89.745142	386.48	White Oak 9 fair yes
2416	35.228462	-89.745296	375.59	Black cherry 12 good yes
2417	35.228496	-89.745256	377.66	Winged elm 19 multi poor no
2418	35.228501	-89.74529	381.5	Sweetgum 12 poor no
2419	35.228512	-89.745276	379.72	White Oak 6 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2420	35.228528	-89.745301	377.13	Sweetgum 7 poor no
2421	35.228507	-89.745332	374.11	Cherrybark red Oak 10 poor no
2422	35.228417	-89.745297	374.21	White Oak 10 fair no
2423	35.228429	-89.745267	385.83	white oak 8 fair yes
2424	35.22839	-89.745296	382.94	Cherrybark red oak 10 fair yes
2425	35.228374	-89.745335	384.09	White Oak 8 poor no
2426	35.228394	-89.745363	377.79	White Oak 10 fair no
2427	35.228411	-89.745481	375.85	White Oak 11 fair yes
2428	35.228433	-89.745523	375.72	Winged elm 13 fair yes
2429	35.228471	-89.745454	373.56	Cherrybark red Oak 26 fair yes
2430	35.228521	-89.7454	371.72	Sweetgum 10 good yes
2431	35.228522	-89.745305	374.51	White Oak 15 good yes
2432	35.228554	-89.745291	374.34	Sweetgum 7 poor no
2433	35.228571	-89.745263	377.46	Sweetgum 7 poor no
2434	35.228552	-89.74529	379.4	winged Elm 7 fair no
2435	35.228603	-89.745254	375.59	Cherrybark red Oak 12 fair yes
2436	35.228514	-89.745145	374.38	Cherrybark red Oak 16 good yes
2437	35.228503	-89.745223	374.64	Winged Elm 16 good yes
2438	35.228518	-89.745134	376.31	Sweetgum 15 multi poor no
2439	35.228505	-89.745055	374.57	Winged elm 6 poor no
2440	35.228515	-89.745068	388.02	Post Oak 13 fair yes
2441	35.228503	-89.745053	381.63	Cherrybark red Oak 12 good yes
2442	35.228491	-89.74502	377.4	Cherrybark red Oak 11 fair yes
2443	35.228517	-89.745049	377.4	Sweetgum 9 poor no
2444	35.228531	-89.745012	377.92	Winged elm 7 good yes
2445	35.228549	-89.745026	375.07	Sweetgum 16 good yes
2446	35.228524	-89.744941	375.62	Winged elm 6 good yes
2447	35.228559	-89.745008	377.49	Eastern red cedar 6 fair no
2448	35.228612	-89.744989	380.15	Eastern red cedar 14 fair yes
2449	35.228638	-89.744826	386.98	Eastern red cedar 10 fair yes
2450	35.228641	-89.744798	388.94	Sweetgum 7 poor no
2451	35.228637	-89.744816	384.58	Eastern red cedar 6 poor no
2452	35.228588	-89.744928	379.04	Winged elm 6 good yes
2453	35.228516	-89.744914	376.25	Sweetgum 15 multi poor no
2454	35.22858	-89.744964	374.84	Eastern red cedar 6 poor no
2455	35.228614	-89.745041	373.49	Winged elm 6 poor no
2456	35.22859	-89.745088	373.98	Eastern red cedar 11 fair no
2457	35.228594	-89.74511	378.87	Sweetgum 22 poor no
2458	35.228603	-89.745059	384.78	Post Oak 10 fair no
2459	35.22863	-89.74504	384.51	Winged elm 7 fair yes
2460	35.228609	-89.745093	381.4	Sweetgum 6 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2461	35.228637	-89.745	375.56	winged elm 7 poor no
2462	35.228645	-89.745112	372.54	Cherrybark red oaks 11 multi poor no
2463	35.228559	-89.745122	372.28	Cherrybark red Oak 13 fair yes
2464	35.228556	-89.745181	372.15	Cherrybark red Oak 10 fair yes
2465	35.228608	-89.745174	373.56	Cherrybark red Oak 21 good yes
2466	35.228602	-89.745246	372.74	Cherry bark red oak 14 fair yes
2467	35.228621	-89.745255	373.95	When did Elm 13 good yes
2468	35.228668	-89.745193	375.52	White Oak 11 poor no
2469	35.228657	-89.745265	372.87	Post Oak 7 poor no
2470	35.228694	-89.745257	375.98	Sweetgum 10 poor no
2471	35.228703	-89.745118	374.38	Green ash 13 good yes
2472	35.228752	-89.745255	379.56	Cherrybark red Oak 15 poor no
2473	35.228687	-89.7452	393.83	Sweetgum 11 poor no
2474	35.228748	-89.745167	375.13	Cherrybark red Oak 19 fair yes
2475	35.228736	-89.745103	376.51	Cherrybark red Oak 15 fair no
2476	35.228706	-89.745134	375.13	Cherrybark red Oak 22 fair no
2477	35.228651	-89.745069	374.54	Sweetgum 10 poor no
2478	35.228736	-89.744912	376.67	Eastern red cedar 8 fair no
2479	35.228714	-89.744919	375.92	Eastern red cedar 7 poor no
2480	35.228707	-89.744876	373.16	Sweetgum 6 poor no
2481	35.228749	-89.744844	381.59	Sweetgum 8 poor no
2482	35.228697	-89.74487	377.99	Eastern red cedar 6 poor no
2483	35.228651	-89.744826	380.22	Black cherry 11 fair yes
2484	35.228617	-89.744872	385.43	Sweetgum 7 poor no
2485	35.228599	-89.744849	382.71	Sugar maple 11 good yes
2486	35.228653	-89.744824	387.76	Sweetgum 8 poor no
2487	35.228682	-89.744752	378.58	Eastern red cedar 9 fair yes
2488	35.228697	-89.744776	377.13	Sweetgum 7 poor no
2489	35.228724	-89.744847	376.28	Black cherry 10 fair yes
2490	35.228725	-89.744833	376.25	Cherrybark red Oak 23 multi fair yes
2491	35.228716	-89.744979	375.62	Eastern red cedar 7 poor no
2492	35.228723	-89.744999	375.95	winged elm 6 fair yes
2493	35.228762	-89.744935	373.56	Eastern red cedar 10 poor no
2494	35.228814	-89.744994	373.65	Eastern red cedar 10 poor no
2495	35.228782	-89.745006	375.39	Sweetgum 7 poor no
2496	35.228822	-89.745	376.61	Winged elm 7 fair yes
2497	35.228842	-89.74492	381.79	Sweetgum 8 fair no
2498	35.228846	-89.744858	383.99	Sweetgum 7 fair no
2499	35.228848	-89.744895	383.04	Sweetgum 12 good yes
2500	35.228802	-89.745035	378.18	Sweet gum 11 good yes
2501	35.228787	-89.745071	378.25	Eastern red cedar 7 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2502	35.228797	-89.745107	385.76	Green ash 30 multi fair yes
2503	35.228897	-89.744961	380.64	Sweetgum 8 poor no
2504	35.228955	-89.745041	389.07	Eastern red cedar 11 good yes
2505	35.228947	-89.745059	384.32	Winged elm 6 good yes
2506	35.228997	-89.744995	382.38	Winged elm 6 good yes
2507	35.228976	-89.744897	380.48	Winged elm 6 fair yes
2508	35.228942	-89.744875	371.42	persimmon 6 poor no
2509	35.228945	-89.744812	378.08	Eastern red cedar 10 fair yes
2510	35.228936	-89.744791	376.57	Cherrybark red Oak 8 good yes
2511	35.228874	-89.744796	378.05	Eastern red cedar 10 poor no
2512	35.228806	-89.744748	377.3	Cherrybark red Oak 21 good yes
2513	35.228827	-89.744712	381.79	Eastern red cedar 7 good yes
2514	35.228811	-89.744722	382.09	Eastern red cedar 10 fair yes
2515	35.228807	-89.744696	383.46	Eastern red cedar 7 poor no
2516	35.228731	-89.744722	379.59	Cherrybark red Oak 7 poor no
2517	35.228764	-89.744713	381.27	Sweetgum 7 poor no
2518	35.22884	-89.7447	377.79	Eastern red cedar 15 good yes
2519	35.22879	-89.744757	380.12	Eastern red cedar 9 fair yes
2520	35.22884	-89.744706	386.75	Sweetgum 12 good yes
2521	35.22888	-89.744653	383.56	Eastern red cedar 6 fair yes
2522	35.228861	-89.744703	380.61	Sugar maple 10 good yes
2523	35.22882	-89.744667	384.88	Sweetgum 11 poor no
2524	35.22886	-89.744662	379.46	Sweetgum 6 poor no
2525	35.228882	-89.744643	382.32	Sugarmaple 11 good yes
2526	35.228869	-89.744681	387.3	Eastern red cedar 10 fair yes
2527	35.228856	-89.744712	379.23	Eastern red cedar 7 poor no
2528	35.228855	-89.744765	379.07	Cherrybark red Oak 10 good yes
2529	35.22892	-89.744772	378.22	Sugarmaple 11 multi fair yes
2530	35.228943	-89.744722	379.92	Eastern red cedar 10 fair no
2531	35.229003	-89.744749	377	Cherrybark Redoak 15 poor no
2532	35.229026	-89.744795	377.13	Eastern red cedar 9 poor no
2533	35.229048	-89.74485	377.26	Winged elm 9 multi poor no
2534	35.229054	-89.744955	387.07	White ash 16 good yes
2535	35.229092	-89.744923	387.96	Cherrybark red Oak 18 good yes
2536	35.229132	-89.744874	383.46	White ash 6 poor no
2537	35.22913	-89.744921	383.37	Winged elm 6 fair yes
2538	35.229174	-89.744879	396.69	Cherrybark red Oak 15 poor no
2539	35.229129	-89.7449	387.73	Winged elm 12 multi poor no
2540	35.229247	-89.744744	384.22	Cherrybark red Oak 14 good yes
2541	35.22918	-89.744685	388.32	Winged elm 6 poor no
2542	35.229195	-89.744655	388.12	Cherrybark red Oak 17 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2543	35.22911	-89.744775	388.78	Cherrybark red Oak 13 good yes
2544	35.229091	-89.744753	384.35	White Oak 7 fair yes
2545	35.229109	-89.744806	381.36	Cherrybark red Oak 13 good yes
2546	35.229105	-89.744759	387.7	White Oak 6 poor no
2547	35.229127	-89.744709	387.83	Cherrybark red Oak 20 fair yes
2548	35.229038	-89.744691	385.99	Cherrybark red Oak 12 poor no
2549	35.229046	-89.744658	384.42	Cherrybark red Oak 6 good yes
2550	35.229014	-89.744636	388.52	White Oak 7 good yes
2551	35.229097	-89.744598	389.14	Burr Oak 10 good yes
2552	35.228988	-89.744549	392.49	Eastern red cedar 9 fair yes
2553	35.228959	-89.744592	388.52	Eastern red cedar 7 poor no
2554	35.228972	-89.744588	386.32	Eastern red cedar 6 good yes
2555	35.229011	-89.744599	391.93	Eastern red cedar 6 poor no
2556	35.228996	-89.744524	383.76	Eastern red cedar 11 fair yes
2557	35.229056	-89.744473	387.83	Sweetgum 10 poor no
2558	35.229043	-89.744568	386.12	Cherrybark red Oak 20 good yes
2559	35.229076	-89.74471	399.44	Winged elm 21 multi fair yes
2560	35.229073	-89.744669	391.54	Cherrybark red Oak 10 fair yes
2561	35.229114	-89.744542	390.12	Siri bark red Oak 13 poor no
2562	35.229144	-89.744546	385.99	Cherrybark red Oak 14 fair yes
2563	35.229136	-89.744553	386.71	Winged elm 8 fair yes
2564	35.229176	-89.744681	387.4	Cherrybark red Oak 11 fair yes
2565	35.229233	-89.744567	396.1	White Oak 7 poor no
2566	35.229261	-89.744534	390.29	Eastern red cedar 7 fair no
2567	35.229265	-89.744595	388.71	White Oak 9 fair yes
2568	35.229345	-89.744561	394.75	White Oak 10 good yes
2569	35.229325	-89.74446	394.19	Cherrybark red Oak 33 multi poor no
2570	35.229319	-89.744373	400.16	Cherrybark red Oak 12 good yes
2571	35.229253	-89.744495	390.62	Winged elm 6 poor no
2572	35.229337	-89.744458	387.83	Winged elm 11 fair yes
2573	35.229325	-89.744478	387.24	sweetgum 12 poor no
2574	35.229326	-89.744595	393.01	Sweetgum 18 fair yes
2575	35.229286	-89.744613	392.59	sweetgum 15 multi poor no
2576	35.229404	-89.74467	393.9	Sweetgum 15 fair no
2577	35.229433	-89.7446	397.83	sweetgum 14 fair no
2578	35.22935	-89.744642	389.53	Sweetgum 8 poor no
2579	35.229362	-89.744711	389.24	Sweetgum 10 fair yes
2580	35.229295	-89.744645	387.2	Winged elm 6 fair yes
2581	35.229379	-89.744681	389.24	Winged elm 6 good yes
2582	35.229269	-89.744787	388.62	Winged elm 7 fair yes
2583	35.228942	-89.744965	381.53	Cherrybark red Oak 10 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2584	35.228914	-89.745072	381.63	Cherrybark red Oak 15 fair yes
2585	35.228919	-89.745082	381.4	Pignut hickory 6 good yes
2586	35.228981	-89.745057	382.84	Pignut hickory 8 fair yes
2587	35.228945	-89.744989	378.25	White Oak 6 poor no
2588	35.228964	-89.745076	380.58	White Oak 6 fair yes
2589	35.22892	-89.745094	378.67	Cherrybark red Oak 18 poor no
2590	35.228849	-89.745104	377.17	Cherrybark red Oak 11 fair yes
2591	35.228899	-89.745058	376.8	Winged elm 10 fair yes
2592	35.228784	-89.745155	374.8	Eastern red cedar 8 fair yes
2593	35.228754	-89.74521	379.63	Eastern red cedar 7 fair yes
2594	35.228794	-89.745144	376.25	Eastern red cedar 7 fair yes
2595	35.228724	-89.745137	377.1	Sweetgum 6 poor no
2596	35.228847	-89.745191	381.56	Cherrybark red Oak 12 good yes
2597	35.22886	-89.745209	378.48	Post Oak 21 multi fair yes
2598	35.228785	-89.745221	374.9	winged elm 6 good yes
2599	35.228788	-89.745259	382.09	Winged elm 9 good yes
2600	35.228803	-89.745322	385.7	Cherrybark red Oak 6 good yes
2601	35.228757	-89.745324	384.55	Cherrybark red Oak 10 good yes
2602	35.22875	-89.745297	383.33	Winged elm 12 good yes
2603	35.22869	-89.745251	382.02	Eastern red cedar 11 fair yes
2604	35.228711	-89.745279	378.25	Green ash 11 good yes
2605	35.228643	-89.745254	373.69	Green ash 9 fair yes
2606	35.228672	-89.745235	382.02	Eastern red cedar 6 poor no
2607	35.22871	-89.745227	372.18	Eastern red cedar 11 fair yes
2608	35.228536	-89.745276	372.9	Winged elm 7 fair yes
2609	35.228599	-89.745369	370.44	Winged elm 9 poor no
2610	35.228583	-89.745528	378.44	Eastern red cedar 9 multi poor no
2611	35.228596	-89.745451	377.66	Eastern red cedar 10 fair yes
2612	35.228621	-89.745384	376.12	Eastern red cedar 8 multi poor no
2613	35.228682	-89.745425	376.15	Cherrybark red Oak 12 good yes
2614	35.228586	-89.745388	377.62	Eastern red cedar 10 good yes
2615	35.228591	-89.745359	370.51	Eastern red cedar 10 good yes
2616	35.228558	-89.745412	374.9	Siri bark red Oak 13 good yes
2617	35.228569	-89.74535	373.75	yeah cherry bark red oak 10 fair yes
2618	35.228495	-89.745369	372.01	Cherrybark red Oak 17 good yes
2619	35.228559	-89.745436	371.1	Winged elm 6 fair yes
2620	35.228509	-89.745449	373.03	Green ash 16 multi poor no
2621	35.228506	-89.745469	377.17	cherrybark red oak 12 good yes
2622	35.228456	-89.745454	380.15	Winged elm 8 fair yes
2623	35.228429	-89.745488	370.67	Cherrybark red Oak 13 good yes
2624	35.228479	-89.745509	376.9	Sweetgum 12 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2625	35.228485	-89.745563	372.08	Cherrybark red Oak 7 good yes
2626	35.22851	-89.745577	374.48	Cherrybark red Oak 6 fair no
2627	35.228513	-89.74567	373.46	Burr Oak 10 good yes Burr Oak 10 good yes
2628	35.228407	-89.745605	371.75	Loblolly pine 9 poor no
2629	35.228543	-89.745697	367.52	Loblolly pine 10 fair yes
2630	35.228662	-89.74571	375.85	Eastern red cedar 23 multi fair yes
2631	35.228653	-89.745735	376.31	Sugarmaple 6 fair yes
2632	35.228621	-89.745693	374.08	Eastern red cedar 7 fair yes
2633	35.228642	-89.745756	374.97	Loblolly pine 9 fair no
2634	35.228598	-89.745699	375.79	Loblolly pine 10 fair yes
2635	35.228617	-89.745834	382.91	Tulip poplar 6 good yes
2636	35.228577	-89.74581	374.25	Tulip poplar 11 good yes
2637	35.228604	-89.745876	373.92	Cherrybark red Oak 15 good yes
2638	35.228585	-89.745875	373.33	Eastern red cedar 6 poor no
2639	35.228579	-89.745885	371.59	post oak 10 poor no
2640	35.228538	-89.745907	371.92	Post Oak 11 good yes
2641	35.228784	-89.745835	372.8	White Oak 16 good yes
2642	35.228794	-89.745801	378.84	Post Oak 7 fair no
2643	35.228791	-89.745862	374.7	Sweetgum 7 poor no
2644	35.228804	-89.745825	372.41	Cherrybark red Oak 14 good yes
2645	35.228827	-89.745811	375.07	Cherrybark red Oak 8 good yes
2646	35.228813	-89.745836	375.69	Sweetgum 12 good yes
2647	35.228679	-89.745954	375.13	White Oak 13 poor no
2648	35.228629	-89.745938	376.84	Cherrybark red Oak 14 fair yes
2649	35.228584	-89.745943	377.03	Cherrybark red Oak 10 good yes
2650	35.228552	-89.745997	371.42	Cherrybark red Oak 10 poor no
2651	35.228528	-89.745998	374.74	Sweetgum 14 poor no
2652	35.228474	-89.746057	371.72	Cherrybark red oak 11 poor no
2653	35.228433	-89.746054	355.09	Sweetgum 10 poor no
2654	35.228443	-89.746046	385.14	White Oak 7 fair yes
2655	35.228488	-89.74605	372.54	Cherrybark red Oak 12 poor no
2656	35.228432	-89.746011	367.91	White Oak 10 good yes
2657	35.228458	-89.746037	371.16	White oaks 12 fair no
2658	35.228386	-89.746029	364.01	White Oak 25 fair yes
2659	35.2284	-89.74602	364.21	White Oak 10 good yes
2660	35.228381	-89.746054	356.46	Cherrybark red Oak 16 fair yes
2661	35.228392	-89.746133	371.42	white oak 8 poor no
2662	35.228459	-89.746297	365.35	Bur oak 16 fair no
2663	35.22849	-89.746222	366.01	Cherrybark red Oak 15 multi fair no
2664	35.228482	-89.74617	370.34	Cherrybark red Oak 16 good yes
2665	35.228509	-89.746062	368.77	White Oak 14 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2666	35.228551	-89.74614	367.55	White Oak 16 good yes
2667	35.228585	-89.746125	369.88	White Oak 13 good yes
2668	35.228551	-89.746209	368.86	Cherrybark red Oak 23 fair no
2669	35.228564	-89.746219	368.21	Post Oak 15 good yes
2670	35.228683	-89.746243	362.73	Post Oak 17 good yes
2671	35.228623	-89.746226	367.29	Post Oak 10 poor no
2672	35.228611	-89.746319	363.75	Post Oak 12 good yes
2673	35.228661	-89.746398	362.07	Mockernut Hickory 10 poor no
2674	35.228693	-89.746301	374.15	Post Oak 7 good yes
2675	35.228673	-89.746331	370.11	Mockernut Hickory 25 good yes
2676	35.228752	-89.746254	371.75	Cherrybark red Oak 7 good yes
2677	35.228721	-89.746176	371.56	Cherrybark red Oak 10 poor no
2678	35.228736	-89.746078	371.59	Cherrybark red Oak 20 good yes
2679	35.228728	-89.746102	370.44	White Oak 6 fair yes
2680	35.228636	-89.746146	369.78	Cherrybark red Oak 21 fair yes
2681	35.228735	-89.746141	371	Green ash 17 good yes
2682	35.228775	-89.746071	374.74	Northern red oak 14 fair no
2683	35.228816	-89.746107	374.64	White Oak 9 fair yes
2684	35.228814	-89.746083	371.26	White Oak 12 fair yes
2685	35.228829	-89.746107	370.11	post Oak 13 good yes
2686	35.228859	-89.746135	368.67	Mockernut Hickory 16 poor no
2687	35.228909	-89.746009	375.23	Pignut hickory 6 fair yes
2688	35.228915	-89.746019	381.63	Green ash 6 fair yes
2689	35.228989	-89.746088	372.38	Winged elm 10 fair yes
2690	35.229048	-89.746031	373.2	Mockernut Hickory 10 poor no
2691	35.229104	-89.745984	377.07	Post Oak 7 fair yes
2692	35.229002	-89.745978	364.4	Green ash 9 fair yes
2693	35.228963	-89.745986	381.14	White ash 10 fair yes
2694	35.229028	-89.745953	377.3	Pignut hickory 10 good yes
2695	35.229003	-89.745965	378.15	Mockernut Hickory 10 fair yes
2696	35.22897	-89.746013	378.48	Pignut hickory 10 fair yes
2697	35.22906	-89.745919	379.72	White ash 14 multi poor no
2698	35.229106	-89.745949	376.21	Winged elm 11 fair no
2699	35.229078	-89.746094	360.76	Tulip poplar 6 poor no
2700	35.22909	-89.746112	378.28	White Oak 11 poor no
2701	35.229056	-89.745982	378.94	Pignut hickory 10 fair yes
2702	35.229141	-89.746156	366.17	White Oak 7 fair no
2703	35.229065	-89.746165	368.93	post Oak 17 poor no
2704	35.229184	-89.746152	368.9	American hophornbeam 7 fair yes
2705	35.229051	-89.746101	371.69	Pignut hickory 18 good yes
2706	35.229011	-89.746153	367.65	Green ash 6 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2707	35.229009	-89.746088	370.31	Green ash 19 fair yes
2708	35.228901	-89.746142	368.7	Post Oak 18 poor no
2709	35.228953	-89.746117	369.16	pignut hickory 13 poor no
2710	35.228881	-89.746294	362.99	Mockernut Hickory 17 fair yes
2711	35.228879	-89.746279	361.91	Cherrybark red Oak 17 fair no
2712	35.228899	-89.746188	365.06	Mockernut Hickory 10 good yes
2713	35.228934	-89.746139	364.37	Mockernut and Hickory 21 good yes
2714	35.228825	-89.746214	368.14	white Oak 6 fair yes
2715	35.226866	-89.743854	372.34	Sweetgum 11 fair yes
2716	35.22692	-89.743817	372.47	Sweetgum 9 poor no
2717	35.226903	-89.743831	382.35	Sweetgum 9 poor no
2718	35.226949	-89.743824	381.14	Eastern red cedar 9 fair yes
2719	35.226947	-89.743748	384.88	Cherrybark red oaks 16 good yes
2720	35.227018	-89.743735	378.05	Sweetgum 7 poor no
2721	35.226999	-89.743826	379.07	Winged elm 11 poor no
2722	35.227054	-89.743872	389.01	Winged elm 12 poor no
2723	35.226939	-89.743896	377.79	Sweetgum 7 poor no
2724	35.226945	-89.743958	377.49	Sweetgum 12 fair yes
2725	35.226952	-89.744005	368.11	Sweetgum 16 good yes
2726	35.226938	-89.743963	376.41	Cherrybark red Oak 16 good yes
2727	35.227115	-89.743863	369.72	Post Oak 11 fair yes
2728	35.227173	-89.743764	374.08	Winged elm 17 good yes
2729	35.227223	-89.743773	377.3	Post Oak 10 fair yes
2730	35.227072	-89.743872	376.38	Winged elm 8 good yes
2731	35.227058	-89.74393	377.56	Winged elm 7 fair yes
2732	35.228769	-89.743229	402.53	White Oak 15 good yes
2733	35.228876	-89.743217	413.94	Winged elm 16 fair yes
2734	35.228729	-89.743222	401.12	Winged elm 13 good yes
2735	35.228697	-89.743249	399.38	Green ash 13 fair yes
2736	35.228677	-89.743282	398.49	Eastern red cedar 10 poor no
2737	35.228672	-89.743333	400.2	Pignut hickory 16 good yes
2738	35.228718	-89.743212	399.93	Post Oak 30 multi fair yes
2739	35.228843	-89.743187	407.15	Winged elm 10 good yes
2740	35.228604	-89.743204	400.2	Winged elm 12 good yes
2741	35.228628	-89.743163	398.65	Winged elm 8 good yes
2742	35.228538	-89.743196	395.41	Winged elm 12 poor no
2743	35.228536	-89.743305	394	White Oak 13 good yes
2744	35.228556	-89.743318	394.23	White Oak 13 good yes
2745	35.228506	-89.743342	397.31	Eastern red cedar 16 good yes
2746	35.22855	-89.743277	398.33	white Oak 7 good yes
2747	35.22855	-89.743269	395.01	Winged elm 10 multi fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2748	35.228493	-89.74334	392.26	Post Oak 36 multi good yes
2749	35.228525	-89.743222	394.52	Pignut hickory 15 good yes
2750	35.22855	-89.743242	393.9	Winged elm 10 fair yes
2751	35.228448	-89.743187	396.26	Cherrybark red Oak 28 good yes
2752	35.228341	-89.743223	392.72	Eastern red cedar 9 fair yes
2753	35.228462	-89.743145	394.39	Winged elm 8 good yes
2754	35.228402	-89.743161	395.7	Cherrybark red Oak 16 good yes
2755	35.228317	-89.743286	389.73	Winged elm 9 fair yes
2756	35.228326	-89.743299	390.35	Eastern red cedar 8 poor no
2757	35.228328	-89.74323	389.9	Eastern red cedar 6 poor no
2758	35.228364	-89.74331	390.26	Eastern red cedar 10 poor no
2759	35.228412	-89.743361	384.12	Eastern red cedar 8 poor no
2760	35.228429	-89.743318	386.75	Eastern red cedar 10 poor no
2761	35.22842	-89.743372	391.37	Winged elm 16 good yes
2762	35.22844	-89.743435	388.91	Cherrybark red Oak 16 good yes
2763	35.228416	-89.743397	384.32	Post Oak 10 poor no
2764	35.228421	-89.743396	390.06	Post Oak 10 poor no
2765	35.228489	-89.743542	387.73	post Oak 10 good yes
2766	35.228429	-89.743509	402.79	Winged elm 10 good yes
2767	35.228402	-89.743481	390.03	Eastern red cedar 7 poor no
2768	35.228348	-89.743497	392.36	Winged elm 9 poor no
2769	35.228406	-89.743452	388.81	persimmon 10 fair yes
2770	35.228365	-89.743398	389.37	Winged elm 9 poor no
2771	35.22835	-89.74334	389.76	Eastern red cedar 10 poor no
2772	35.228359	-89.743317	389.11	Eastern red cedar 12 fair yes
2773	35.228381	-89.743323	389.86	Eastern red cedar 10 fair yes
2774	35.228296	-89.743292	388.68	Eastern red cedar 10 poor no
2775	35.228302	-89.743366	388.12	Eastern red cedar 10 fair yes
2776	35.228216	-89.743367	390.03	White Oak 10 good yes
2777	35.228173	-89.743472	389.21	Post Oak 15 good yes
2778	35.228184	-89.743402	386.19	Winged elm 7 fair yes
2779	35.228196	-89.743355	393.04	Cherrybark red Oak 22 good yes
2780	35.228224	-89.743341	388.55	burr pak 12 good yes
2781	35.228109	-89.743491	410.56	Winged elm 10 good yes
2782	35.228173	-89.743455	395.41	White Oak 8 good yes
2783	35.228174	-89.743561	382.58	Cherrybark red Oak 19 good yes
2784	35.228176	-89.743556	382.58	White Oak 6 good yes
2785	35.228122	-89.74352	387.07	Burr Oak 11 fair yes
2786	35.228102	-89.743642	378.44	Post Oak 17 fair yes
2787	35.228177	-89.743657	379.72	White Oak 11 good yes
2788	35.228242	-89.743701	382.02	Cherrybark red Oak 16 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2789	35.228306	-89.743553	386.19	White Oak 16 good yes
2790	35.228291	-89.743489	386.09	White Oak 14 good yes
2791	35.228302	-89.743613	383.33	Cherrybark red oaks 18 good yes
2792	35.228397	-89.743596	381.4	Burr Oak 11 poor no
2793	35.228419	-89.743554	387.34	Eastern red cedar 13 poor no
2794	35.228316	-89.743562	389.07	Winged elm 6 fair no
2795	35.228318	-89.743559	392.68	winged elm 9 poor no
2796	35.228315	-89.743554	394.49	Eastern red cedar 10 fair yes
2797	35.228369	-89.743647	395.87	White Oak 10 fair yes
2798	35.228474	-89.743712	392.29	Cherrybark red Oak 15 poor no
2799	35.22853	-89.743674	389.17	Cherrybark red Oak 6 poor no
2800	35.228387	-89.743755	389.93	Cherrybark red Oak 13 good yes
2801	35.228386	-89.743796	388.29	Winged elm 13 good yes
2802	35.228363	-89.743759	382.94	Winged elm 7 good yes
2803	35.228436	-89.7437	393.14	Cherrybark red Oak 8 poor no
2804	35.228412	-89.743674	396.49	Winged elm 7 poor no
2805	35.228319	-89.743791	401.61	Cherrybark red Oak 8 fair yes
2806	35.228261	-89.743791	388.91	Cherrybark red Oak 7 poor no
2807	35.228221	-89.743792	390.65	White Oak 14 fair yes
2808	35.22819	-89.743819	399.8	White Oak 11 fair yes
2809	35.228241	-89.743838	398.62	Winged elm 12 fair yes
2810	35.228232	-89.743799	397.8	White Oak 14 fair yes
2811	35.22824	-89.743762	381.27	White Oak 20 fair yes
2812	35.228166	-89.7437	386.94	White Oak 15 fair yes
2813	35.228264	-89.743683	386.42	Cherrybark red Oak 21 fair yes
2814	35.22827	-89.743635	388.75	White Oak 7 fair yes
2815	35.228225	-89.743571	388.25	White Oak 11 fair yes
2816	35.228153	-89.743627	387.63	post Oak 8 poor no
2817	35.228124	-89.743627	383.63	White Oak 10 good yes
2818	35.228144	-89.743678	393.73	Winged elm 8 good yes
2819	35.228092	-89.743694	392.98	Cherrybark red Oak 6 good yes
2820	35.227965	-89.743651	382.71	Winged elm 6 poor no
2821	35.227925	-89.743725	385.2	Cherrybark red Oak 21 good yes
2822	35.228029	-89.743794	377.56	Winged elm 7 fair yes
2823	35.228117	-89.743786	383.86	Post Oak 18 multi fair yes
2824	35.228102	-89.743892	384.32	Cherrybark red Oak 22 good yes
2825	35.228108	-89.743948	380.38	Eastern red cedar 13 fair yes
2826	35.22817	-89.744002	382.15	Winged elm 6 fair yes
2827	35.228084	-89.743956	387.63	Eastern red cedar 7 fair yes
2828	35.228081	-89.743955	382.48	Burr Oak 13 good yes
2829	35.228125	-89.743938	383.53	cherry bark red Oak 10 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2830	35.228056	-89.743865	384.94	Sweetgum 7 poor no
2831	35.228008	-89.743845	385.6	Cherrybark red Oak 25 fair yes
2832	35.22794	-89.743809	379	Winged elm 8 good yes
2833	35.227972	-89.743866	377.17	Cherrybark Redoak 16 good yes
2834	35.227873	-89.743768	380.87	White Oak 11 good yes
2835	35.227862	-89.743825	371	Winged elm 8 good yes
2836	35.227856	-89.743876	377.03	American hophornbeam 6 good yes
2837	35.227929	-89.74394	374.18	White Oak 10 good yes
2838	35.227952	-89.743927	377.1	Cherrybark red Oak 10 fair yes
2839	35.227924	-89.743938	376.02	Sweetgum 16 poor no
2840	35.227958	-89.744079	380.87	Sweetgum 13 fair yes
2841	35.227932	-89.744057	381.36	Cherrybark red Oak 11 good yes
2842	35.228041	-89.744052	381	Cherrybark red Oak 7 good yes
2843	35.227948	-89.744031	379.27	White Oak 7 good yes
2844	35.227968	-89.744061	378.9	Sweetgum 17 multi poor no
2845	35.227972	-89.74402	378.71	Cherrybark red Oak 8 poor no
2846	35.227924	-89.74401	377.66	White Oak 8 fair yes
2847	35.227909	-89.743975	384.15	White Oak 14 good yes
2848	35.227902	-89.743964	387.07	White Oak 12 fair no
2849	35.227843	-89.74404	381.86	Sweetgum 17 fair yes
2850	35.227818	-89.744066	381.53	White Oak 7 fair no
2851	35.227814	-89.743951	377.46	White Oak 16 good yes
2852	35.227724	-89.744047	378.15	Winged elm 13 fair yes
2853	35.227748	-89.744016	374.44	Sweetgum 7 fair no
2854	35.227715	-89.744064	373.46	Sweetgum 10 poor no
2855	35.227724	-89.74404	372.64	White Oak 7 fair yes
2856	35.227706	-89.743999	376.48	Sweetgum 10 poor no
2857	35.22783	-89.744141	374.28	Cherrybark red Oak 28 poor no
2858	35.227865	-89.744122	378.08	Sweetgum 8 poor no
2859	35.227889	-89.744108	377.33	White Oak 11 good yes
2860	35.227757	-89.744131	386.81	White Oak 12 good yes
2861	35.227714	-89.744123	382.84	Sweetgum 7 poor no
2862	35.227688	-89.744076	392.68	Burr Oak 14 good yes
2863	35.227699	-89.744125	379.04	American hophornbeam 6 good yes
2864	35.227715	-89.744079	374.05	Black cherry 7 fair yes
2865	35.227688	-89.744025	375.36	White Oak 12 good yes
2866	35.227589	-89.744191	374.8	Bur oak 28 multi fair yes
2867	35.227576	-89.744156	376.35	White Oak 10 good yes
2868	35.227473	-89.744132	377.62	White Oak 16 good yes
2869	35.227467	-89.744161	372.93	White Oak 15 good yes
2870	35.227468	-89.744114	374.21	Sweetgum 15 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2871	35.227445	-89.744073	373.88	Cherrybark red Oak 10 fair yes
2872	35.227585	-89.744074	378.15	American hop hornbeam 6 good yes
2873	35.227456	-89.744322	369.82	Post Oak 13 fair no
2874	35.227592	-89.744227	374.61	Sweetgum 11 good yes
2875	35.227494	-89.744211	378.02	Mockernut and Hickory 17 multi fair yes
2876	35.227467	-89.744187	371.03	post Oak 11 poor no
2877	35.227476	-89.744258	366.96	White ash 22 multi fair yes
2878	35.227492	-89.744313	375.13	Sycamore 12 poor no
2879	35.227526	-89.744341	389.86	Cherrybark red Oak 27 fair yes
2880	35.227614	-89.744311	399.38	Sweetgum 13 fair yes
2881	35.227585	-89.744377	369.55	Sweetgum 12 fair yes
2882	35.227482	-89.744381	371.33	Sweetgum 10 good yes
2883	35.227473	-89.744394	372.64	Sweetgum 11 good yes
2884	35.227518	-89.744457	377.46	Sweet gum 10 fair yes
2885	35.227552	-89.744495	376.02	Sweetgum 10 fair no
2886	35.227508	-89.744465	370.87	white ash 8 fair yes
2887	35.227577	-89.744514	370.34	Sweetgum 13 fair yes
2888	35.22753	-89.744563	372.8	Eastern red cedar 14 good yes
2889	35.227497	-89.744617	376.51	Winged elm 7 good yes
2890	35.227512	-89.744738	368.96	Eastern red cedar 17 good yes
2891	35.227512	-89.744813	371.59	Eastern red cedar 10 poor no
2892	35.227453	-89.744963	379.69	Eastern red cedar 19 multi fair yes
2893	35.227584	-89.744995	374.9	Cherrybark red Oak 12 fair no
2894	35.227462	-89.74482	370.18	Winged elm 11 good yes
2895	35.227541	-89.744877	371.52	Winged elm 7 fair yes
2896	35.22751	-89.744808	371.92	Winged elm 7 poor no
2897	35.22751	-89.744728	372.11	Eastern red cedar 14 fair yes
2898	35.227437	-89.744762	371.85	Eastern red cedar 16 good yes
2899	35.227451	-89.744696	371.03	Eastern red cedar 15 poor no
2900	35.227371	-89.744624	368.11	Winged elm 15 fair yes
2901	35.227451	-89.744635	370.11	Eastern red cedar 16 good yes
2902	35.227358	-89.744574	377.69	Sweetgum 8 poor no
2903	35.227387	-89.74462	372.38	tulip poplar 22 good yes
2904	35.227452	-89.744457	365.29	Black cherry 10 good yes
2905	35.227472	-89.744465	366.08	Sweetgum 6 poor no
2906	35.227438	-89.744449	371.36	Black cherry 7 fair no
2907	35.227451	-89.744354	370.37	Post Oak 10 poor no
2908	35.227387	-89.74436	372.01	Green ash 11 fair yes
2909	35.22733	-89.744402	367.13	Tulip poplar 10 good yes
2910	35.227261	-89.744366	371.06	Sweetgum 16 poor no
2911	35.227244	-89.744325	369.82	Sweetgum 8 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2912	35.227268	-89.744378	364.73	Sweetgum 16 fair yes
2913	35.22732	-89.744445	367.78	Post Oak 15 fair yes
2914	35.227358	-89.744409	369	Tulip poplar 8 good yes
2915	35.227375	-89.744266	372.28	Tulip poplar 12 fair no
2916	35.2274	-89.744224	373.62	tulip poplar 8 poor no
2917	35.227351	-89.744203	372.8	Tulip poplar 13 good yes
2918	35.227329	-89.744193	368.86	Sweetgum 10 fair yes
2919	35.227394	-89.744087	371	Sweetgum 7 poor no
2920	35.227409	-89.744094	378.61	Sweetgum 8 poor no
2921	35.227583	-89.744055	371.56	Winged elm 10 good yes
2922	35.227759	-89.744038	383.46	Burr Oak 13 good yes
2923	35.227766	-89.744051	387.14	white oak 31 multi fair yes
2924	35.227846	-89.743915	385.53	Winged elm 6 fair yes
2925	35.227729	-89.743902	387.14	Cherrybark red Oak 13 good yes
2926	35.227758	-89.743879	381.56	Cherrybark red Oak 17 fair no
2927	35.227808	-89.743848	378.28	White Oak 9 good yes
2928	35.227805	-89.743835	375.92	White Oak 6 poor no
2929	35.227857	-89.743756	380.81	Winged elm 11 fair yes
2930	35.227841	-89.743789	381.82	Winged elm 6 poor no
2931	35.227865	-89.743836	378.02	White Oak 6 good yes
2932	35.22789	-89.743803	381.86	White Oak 9 poor no
2933	35.227918	-89.743762	381.53	White Oak 7 good yes
2934	35.227916	-89.743779	383.14	White Oak 10 good yes
2935	35.22787	-89.743753	382.22	White Oak 10 good yes
2936	35.22798	-89.743852	381.89	Winged elm 20 good yes
2937	35.228055	-89.743799	389.04	Cherrybark red Oak 8 fair no
2938	35.228059	-89.743712	388.32	Post Oak 6 fair yes
2939	35.228082	-89.743624	386.98	Cherrybark red Oak 13 fair yes
2940	35.228122	-89.743545	381.76	Post Oak 6 poor no
2941	35.228126	-89.743534	388.42	White Oak 13 good yes
2942	35.228068	-89.743567	385.1	Burr Oak 11 good yes
2943	35.227993	-89.743568	381.66	Cherrybark red Oak 6 good yes
2944	35.228133	-89.743516	381.92	White Oak 12 good yes
2945	35.228162	-89.743456	382.19	White Oak 10 poor no
2946	35.228129	-89.743406	387.27	Cherrybark red Oak 12 good yes
2947	35.228117	-89.743313	380.41	cherrybark red 13 good yes
2948	35.228181	-89.743255	386.91	cherrybark red oak 12 good yes
2949	35.228223	-89.743192	392.59	eastern red cedar 9 fair yes
2950	35.22822	-89.743188	387.07	cherrybark red oak 14 fair yes
2951	35.228409	-89.743233	395.14	post oak 12 good yes
2952	35.228352	-89.743329	387.43	cherrybark red oak 24 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2953	35.228408	-89.743225	402.99	winged elm 8 good yes
2954	35.228368	-89.743158	400.89	winged elm 10 poor no
2955	35.228339	-89.743161	392.19	Winged elm 7 poor no
2956	35.228293	-89.743137	392.88	Eastern red cedar 12 good yes
2957	35.228281	-89.743078	395.08	Eastern red cedar 12 good yes
2958	35.228378	-89.743096	395.11	Winged elm 10 poor no
2959	35.228402	-89.743119	392.22	Winged elm 9 poor no
2960	35.22844	-89.743192	400.46	Winged elm 10 fair yes
2961	35.22849	-89.743176	394.82	Winged elm 6 fair yes
2962	35.228446	-89.742987	396.49	Winged elm 45 multi good yes
2963	35.228423	-89.7431	389.44	Winged elm 7 poor no
2964	35.228461	-89.743051	387.8	winged elm 10 good yes
2965	35.228502	-89.742949	394.09	Eastern red cedar 15 good yes
2966	35.228462	-89.742986	401.38	Sweetgum 7 poor no
2967	35.228488	-89.743131	396.03	Eastern red cedar 11 multi fair yes
2968	35.227117	-89.743669	380.74	Winged elm 8 good yes
2969	35.227063	-89.743694	380.22	Winged elm 7 poor no
2970	35.227046	-89.743851	370.96	Winged elm 9 fair yes
2971	35.227043	-89.743823	372.01	Eastern red cedar 13 poor no
2972	35.226973	-89.743887	370.11	Eastern red cedar 10 poor no
2973	35.226972	-89.743929	374.31	I was nothing sweet gum 13 poor no
2974	35.226958	-89.743962	374.77	Sweetgum 11 poor no
2975	35.226971	-89.743881	369.91	Winged elm 6 fair yes
2976	35.227082	-89.744075	371	Winged elm 12 good yes
2977	35.226993	-89.744047	369.88	Eastern red cedar 8 poor no
2978	35.227005	-89.74404	370.14	Eastern red cedar 12 poor no
2979	35.225304	-89.743843	385.5	Sweetgum 13 multi poor no
2980	35.225283	-89.74377	390.32	Slippery elm 7 good yes
2981	35.225313	-89.743838	385.07	American hop hornbeam 7 fair yes
2982	35.225351	-89.743821	386.88	Pignut hickory 10 good yes
2983	35.225413	-89.743765	378.41	Winged elm 11 good yes
2984	35.225309	-89.74377	384.74	Shagbark hickory 22 good yes
2985	35.225388	-89.743681	380.54	Tulip poplar 20 good yes
2986	35.225546	-89.743803	373.49	Cherrybark red Oak 11 good yes
2987	35.225485	-89.743678	377.26	Cherrybark red Oak 15 poor no
2988	35.225551	-89.743696	376.64	Sweetgum 6 poor no
2989	35.22553	-89.743882	378.12	Post Oak 18 good yes
2990	35.225578	-89.743664	373.65	white Oak 14 fair no
2991	35.225545	-89.743785	373.92	American hop hornbeam 8 poor no
2992	35.225565	-89.743762	372.77	Cherrybark red Oak 19 poor no
2993	35.225627	-89.743762	371.95	White Oak 7 fair

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
2994	35.225654	-89.74382	376.64	Mockernut and Hickory 20 good yes
2995	35.225579	-89.743819	376.21	Sweetgum 6 poor no
2996	35.225719	-89.743835	375.69	Shagbark hickory 14 good yes
2997	35.22582	-89.743969	369.32	Post Oak 12 poor no
2998	35.225963	-89.743792	368.11	American hophornbeam 14 multi fair yes
2999	35.225927	-89.743771	366.37	Pignut hickory 6 good yes
3000	35.225896	-89.743859	364.14	White Oak 12 fair yes
3001	35.225882	-89.743729	364.99	American hophornbeam 10 fair yes
3002	35.225806	-89.743729	368.5	White Oak 6 poor no
3003	35.225782	-89.743815	371.92	sugar maple 17 good yes
3004	35.225812	-89.743807	367.16	Post Oak 21 fair yes
3005	35.225768	-89.743752	364.96	Black cherry 15 good yes
3006	35.225717	-89.74376	370.37	Pignut hickory 6 fair no
3007	35.22569	-89.743773	365.22	ignut Hickory 10 good yes
3008	35.22571	-89.743664	370.77	Post Oak 16 good yes
3009	35.225663	-89.743636	367.55	American hop hornbeam 6 fair no
3010	35.22561	-89.743528	371.65	Winged elm 10 good yes
3011	35.225584	-89.743531	364.96	Post Oak 13 poor no
3012	35.225443	-89.743601	377	Mockernut and Hickory 18 good yes
3013	35.225427	-89.743634	373.79	Southern red Oak 32 good yes
3014	35.225353	-89.743614	376.54	Shagbark hickory 10 good yes
3015	35.225254	-89.743603	383.56	Winged elm 10 good yes
3016	35.225291	-89.743469	384.22	Winged elm 15 fair no
3017	35.225242	-89.743436	379.07	Pignut hickory 6 fair yes
3018	35.22518	-89.743483	380.15	Winged elm 8 fair yes
3019	35.225286	-89.743458	374.57	Post Oak 19 good yes
3020	35.225311	-89.743388	382.84	Winged elm 7 good yes
3021	35.225221	-89.743347	384.51	Post Oak 18 poor no
3022	35.225374	-89.743314	384.88	American hop hornbeam 6 poor no
3023	35.22541	-89.743368	378.38	Winged Elm 7 good yes
3024	35.225359	-89.743414	377.66	Winged elm 10 fair yes
3025	35.225439	-89.743407	375.66	shagbark hickory 6 good yes
3026	35.225361	-89.743388	378.28	Shagbark hickory 8 good yes
3027	35.225345	-89.743484	378.9	Winged elm 10 good yes
3028	35.225321	-89.743567	386.38	Pignut hickory 11 fair yes
3029	35.225366	-89.743498	380.18	Cherrybark red Oak 19 good yes
3030	35.225443	-89.743553	374.57	White Oak 15 good yes
3031	35.225449	-89.743516	374.64	shagbark hickory 7 poor no
3032	35.225424	-89.743545	377	Pignut hickory 11 fair yes
3033	35.225552	-89.743522	373.46	Sugarmaple 9 good yes
3034	35.2256	-89.743476	376.31	Winged elm 6 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
3035	35.225589	-89.743631	375.59	Mockernut Hickory 15 good yes
3036	35.225648	-89.743649	374.18	Winged elm 11 poor no
3037	35.225658	-89.743629	374.48	Winged elm 12 good yes
3038	35.225815	-89.7436	369.26	Post Oak 13 fair yes
3039	35.225811	-89.743653	365.16	White Oak 18 good yes
3040	35.225886	-89.743622	363.45	Winged elm 13 fair no
3041	35.225799	-89.74349	368.18	Winged elm 12 poor no
3042	35.225686	-89.743526	376.21	Post Oak 18 good yes
3043	35.225674	-89.743401	377.59	Northern red oak 19 good yes
3044	35.225713	-89.743491	371.88	Bur oak 12 good yes 1/4
3045	35.225711	-89.743466	369.13	Southern red oak 15 fair yes
3046	35.22577	-89.743469	372.41	White Oak 23 good yes
3047	35.225762	-89.743377	367.26	Cherrybark red Oak 21 poor no
3048	35.225674	-89.743305	369.72	Northern red oak 10 fair no
3049	35.225618	-89.743368	372.74	White Oak 18 good yes
3050	35.225605	-89.743316	370.11	Bur oak 14 fair no
3051	35.225598	-89.743398	369.16	Northern red Oak 17 good yes
3052	35.22564	-89.743419	368.83	Winged elm 8 fair yes
3053	35.225521	-89.743398	372.05	Shagbark hickory 10 fair yes
3054	35.225525	-89.74345	373.29	Black cherry 10 good yes
3055	35.22551	-89.743351	376.05	Winged elm 14 fair yes
3056	35.225503	-89.743319	374.7	Northern red oak 10 fair yes
3057	35.22558	-89.74327	373.26	Bur oak 21 multi poor no
3058	35.225465	-89.743258	374.9	Mockernut Hickory 9 poor no
3059	35.225474	-89.74329	375.3	Shagbark hickory 14 fair yes
3060	35.225313	-89.74326	383.2	Post Oak 13 good yes
3061	35.225384	-89.743199	379.49	Pignut hickory 6 good yes
3062	35.225376	-89.743258	384.02	Cherrybark red Oak 17 fair yes
3063	35.225429	-89.74319	379.72	Post Oak 16 fair yes
3064	35.225479	-89.743241	378.94	Mockernut and Hickory 12 fair yes
3065	35.225526	-89.743169	378.25	Mockernut Hickory 15 fair yes
3066	35.225548	-89.743192	370.73	Post Oak 13 poor no
3067	35.225586	-89.74319	386.38	cherry bark red oak 19 poor no
3068	35.225574	-89.743125	368.96	Sycamore 10 good yes
3069	35.225611	-89.743071	368.44	Sycamore 6 poor no
3070	35.225624	-89.743092	369.19	Red maple 7 fair yes
3071	35.225518	-89.743023	378.18	Red maple 19 fair no
3072	35.22543	-89.743173	371.62	Pignut hickory 17 fair yes
3073	35.22548	-89.742996	372.01	Pignut hickory 9 poor no
3074	35.225526	-89.743128	372.24	Mockernut Hickory 19 good yes
3075	35.225431	-89.743104	385.2	Pignut hickory 7 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
3076	35.225509	-89.742986	374.61	Cherrybark red Oak 16 fair yes
3077	35.225632	-89.743075	373.1	White Oak 24 good yes
3078	35.225625	-89.742924	370.83	Sweetgum 17 poor no
3079	35.225629	-89.742971	366.44	White Oak 18 good yes
3080	35.225673	-89.743111	369.72	White Oak 30 good yes
3081	35.225731	-89.743032	374.34	burr Oak 30 poor no
3082	35.225686	-89.742877	372.6	White Oak 22 fair no
3083	35.225713	-89.742795	381.5	Winged elm 10 fair yes
3084	35.22567	-89.742837	374.61	Pignut hickory 13 good yes
3085	35.225698	-89.74274	371.88	White Oak 11 fair no
3086	35.225677	-89.742711	377.1	White Oak 7 fair no
3087	35.225549	-89.742728	372.15	Mockernut Hickory 19 good yes
3088	35.225525	-89.742596	371.52	Winged elm 10 fair yes
3089	35.225522	-89.742594	381.79	post Oak 36 good yes high value tree
3090	35.225559	-89.742561	369.95	Pignut hickory 7 fair yes
3091	35.225561	-89.742579	369.62	Sweetgum 12 poor no
3092	35.22556	-89.742501	372.11	Sycamore 12 poor no
3093	35.229498	-89.741263	405.09	Cherrybark red oak 39 good yes
3094	35.229461	-89.741285	406.53	Sassafras 6 poor no
3095	35.2295	-89.741302	402.56	Sassafras 10 poor no
3096	35.2295	-89.741293	402.26	Sassafras 12 poor no
3097	35.229476	-89.741383	402.53	Sassafras 11 fair yes
3098	35.229463	-89.74134	411.65	Sassafras 11 poor no
3099	35.229455	-89.741395	402	sassafras 21 multi pore no
3100	35.229441	-89.741379	403.58	Sassafras 11 poor no
3101	35.229464	-89.741455	405.84	Birch 7 fair yes
3102	35.229375	-89.741544	405.51	Chinese privet 10 poor no
3103	35.229339	-89.741582	408.76	Chinese privet 8 poor no
3104	35.229578	-89.741507	408.37	Chinese privet 7 poor no
3105	35.229609	-89.741632	405.97	Winged elm 26 good yes
3106	35.229595	-89.741801	401.18	Winged elm 18 fair yes
3107	35.229578	-89.741801	399.97	Black cherry 22 good yes
3108	35.229591	-89.741951	395.9	Winged elm 7 good yes
3109	35.229636	-89.741915	401.38	Winged elm 10 fair no
3110	35.229605	-89.741942	402.3	Cherrybark Redoak 26 good yes
3111	35.229571	-89.742067	390.68	Cherrybark Redoak 13 poor no
3112	35.229655	-89.741951	393.41	Siri bark red oak 13 fair yes
3113	35.229494	-89.741828	403.54	Cherrybark red Oak 42 fair yes
3114	35.229414	-89.741848	402.43	Winged elm 14 poor no
3115	35.229374	-89.741774	405.28	Silver maple 10 poor no
3116	35.229301	-89.741747	405.48	Winged elm 14 good yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
3117	35.229245	-89.741869	402.89	Black cherry 26 multi poor no
3118	35.229184	-89.74187	404.1	Winged elm 17 good yes
3119	35.229208	-89.741819	404.36	Hackberry 20 good yes
3120	35.229115	-89.741897	405.51	Callery pear 16 poor no
3121	35.229092	-89.741926	403.22	Sweetgum 20 good yes
3122	35.229038	-89.741963	404.59	Winged elm 13 good yes
3123	35.228981	-89.742096	402.17	Sweetgum 17 fair yes
3124	35.22897	-89.742044	403.25	Sweetgum 14 multi poor no
3125	35.228948	-89.742081	400.82	Sweetgum 8 fair yes
3126	35.228964	-89.742193	402.95	Sweetgum 11 fair yes
3127	35.22908	-89.742253	405.25	Loblolly pine 23 poor no
3128	35.229101	-89.742177	408.33	Sweetgum 10 fair yes
3129	35.22914	-89.74208	406.3	Sycamore 12 fair yes
3130	35.229116	-89.742147	399.51	Sweetgum 10 fair yes
3131	35.229158	-89.742064	402.72	Sweetgum 8 poor no
3132	35.229218	-89.742181	399.8	Callery pear 8 poor no
3133	35.229194	-89.742172	400.2	Winged elm 11 good yes
3134	35.229225	-89.742191	397.93	Winged elm 9 fair yes
3135	35.229281	-89.742186	388.75	Winged elm 11 good yes
3136	35.229307	-89.742121	391.44	Winged elm 9 fair yes
3137	35.22933	-89.742079	396.92	Winged elm 12 poor no
3138	35.229377	-89.74203	399.87	Winged elm 14 good yes
3139	35.22936	-89.742098	393.14	Winged elm 10 fair no
3140	35.229428	-89.742103	396.1	Cherrybark red Oak 37 multi poor no
3141	35.229443	-89.742146	390.88	Winged elm 14 fair yes
3142	35.229507	-89.742172	388.35	Winged elm 9 fair yes
3143	35.229591	-89.742114	389.01	winged elm 6 poor no
3144	35.229515	-89.742102	391.93	Winged elm 7 fair yes
3145	35.229519	-89.742139	391.31	Cherrybark red oak 10 poor no
3146	35.229596	-89.742155	383.99	White Oak 18 good yes
3147	35.229608	-89.742204	379.53	Cherrybark red Oak 17 fair yes
3148	35.229586	-89.742244	383.99	White Oak 10 fair yes
3149	35.229602	-89.742285	383.76	White Oak 15 good yes
3150	35.229671	-89.742325	384.22	Post Oak 7 fair yes
3151	35.22967	-89.741981	394.59	Weird Elm 17 multi fair yes
3152	35.229686	-89.74194	393.83	Winged elm 7 fair yes
3153	35.229705	-89.742289	387.99	Cherrybark red Oak 36 good yes
3154	35.229724	-89.742375	391.24	White Oak 10 fair no
3155	35.229668	-89.742333	389.3	White Oak 18 good yes
3156	35.229654	-89.742261	390.26	White Oak 12 good yes
3157	35.229658	-89.742289	387.93	White Oak 13 fair yes

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
3158	35.22961	-89.742323	390.22	Cherrybark red Oak 15 multi fair yes
3159	35.22958	-89.742346	391.63	Cherrybark red Oak 18 good yes
3160	35.229593	-89.742295	391.37	Cherry bark red Oak 13 poor no
3161	35.229575	-89.742182	391.83	Cherrybark red oaks 18 good yes
3162	35.229541	-89.742187	388.68	post Oak 7 poor no
3163	35.229502	-89.742327	393.41	eastern red cedar 11 good yes
3164	35.229457	-89.742219	396.59	Cherrybark red Oak 21 good yes
3165	35.229479	-89.742201	399.38	Post Oak 14 good yes
3166	35.229333	-89.742142	391.57	White ash 17 fair yes
3167	35.229213	-89.742234	393.44	Sweetgum 8 multi poor no
3168	35.229157	-89.742278	397.93	Tulip poplar 11 fair no
3169	35.229132	-89.742267	401.02	Sweetgum 8 multi poor no
3170	35.229118	-89.742248	400.23	Sweetgum 6 poor no
3171	35.229076	-89.742174	400.23	Sweetgum 10 poor no
3172	35.229069	-89.74217	399.51	Sweetgum 11 poor no
3173	35.22909	-89.742353	399.11	Winged elm 15 multi poor no
3174	35.22916	-89.742314	399.74	Black cherry 14 good yes
3175	35.22923	-89.742353	398.2	Sweetgum 18 poor no
3176	35.229251	-89.742322	392.78	Sweetgum 6 poor no
3177	35.229287	-89.74235	397.44	Sweetgum 6 poor no
3178	35.229281	-89.742368	394.91	Sweetgum 10 poor no
3179	35.229274	-89.742527	392.22	Black cherry 15 good yes
3180	35.22942	-89.742415	392.88	Sycamore 12 poor no
3181	35.229395	-89.742465	387.99	Tulip poplar 12 good yes
3182	35.229436	-89.74252	386.98	tulip Poplar 10 good yes
3183	35.229403	-89.742488	384.38	Sweetgum 13 poor no
3184	35.229518	-89.742458	386.42	Eastern red cedar 12 poor no
3185	35.22955	-89.742413	386.32	Eastern red cedar 13 fair yes
3186	35.229627	-89.742577	385.47	Winged elm 10 fair yes
3187	35.229638	-89.742541	385.83	Winged elm 17 fair yes
3188	35.229662	-89.742551	387.2	Winged elm 10 fair yes
3189	35.229572	-89.742559	389.99	Winged elm 16 multi poor no
3190	35.229666	-89.742654	404.46	Winged elm 11 fair yes
3191	35.229638	-89.742671	389.63	Sugarmaple 13 multi fair yes
3192	35.229603	-89.742724	390.03	Winged elm 19 good yes
3193	35.229573	-89.742577	389.63	Cherrybark red Oak 12 good yes
3194	35.229607	-89.742587	389.17	Black cherry 16 poor no
3195	35.229623	-89.74255	392.32	Black cherry 12 poor no
3196	35.229658	-89.742491	391.47	Winged elm 14 multi fair no
3197	35.229592	-89.742452	392.26	Black cherry 10 poor no
3198	35.229354	-89.742453	394.32	Sweetgum 11 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
3199	35.229213	-89.742539	394.42	Sweetgum 11 poor no
3200	35.229166	-89.742483	395.93	Sweetgum 19 fair yes
3201	35.22924	-89.742672	394.32	Cherrybark red Oak 32 poor no
3202	35.229273	-89.742693	395.08	White Oak 10 poor no
3203	35.229219	-89.742721	392.72	Eastern red cedar 10 fair yes
3204	35.229266	-89.74279	393.27	Winged elm 10 poor no
3205	35.229325	-89.742809	391.17	Winged elm 10 fair yes
3206	35.22933	-89.74283	391.54	Winged elm 12 poor no
3207	35.229346	-89.742744	389.47	Persimmon 7 poor no
3208	35.229385	-89.742687	389.7	Winged elm 7 poor no
3209	35.229368	-89.742711	389.27	Cherrybark red Oak 20 fair yes
3210	35.229337	-89.742777	387.86	Black cherry 12 good yes
3211	35.229391	-89.742794	385.27	Sweetgum 12 good yes
3212	35.229213	-89.742917	389.7	Cherrybark red Oak 39 good yes
3213	35.229391	-89.742968	385.04	Persimmon 14 good yes
3214	35.229368	-89.743155	391.8	Sweetgum 14 good yes
3215	35.229378	-89.743128	387.14	Sugarmaple 12 fair yes
3216	35.229506	-89.743036	385.01	Sweetgum 13 poor no
3217	35.229582	-89.74297	381.07	Sweetgum 8 poor no
3218	35.229607	-89.742867	385.1	Sweetgum 22 good yes
3219	35.229622	-89.74284	385.04	Sweetgum 16 good
3220	35.229609	-89.742891	385.14	Cherrybark red Oak 17 poor no
3221	35.22957	-89.742773	389.5	Cherrybark red Oak 21 good yes
3222	35.229608	-89.742789	385.5	Winged elm 7 multi fair yes
3223	35.229603	-89.742833	383.3	White Oak and 22 fair yes
3224	35.229569	-89.742878	381.86	White Oak 10 poor no
3225	35.229611	-89.742966	382.38	Sweetgum 16 poor no
3226	35.229632	-89.743109	383.63	Winged elm 10 poor no
3227	35.229667	-89.743104	384.94	Sweetgum 8 poor no
3228	35.229702	-89.74303	386.68	Sweetgum 16 poor no
3229	35.229648	-89.74297	382.25	Southern red oak 15 fair no
3230	35.229654	-89.742955	386.75	Siri bark red Oak 22 good yes
3231	35.229637	-89.742947	384.74	Sweetgum 16 fair no
3232	35.229701	-89.742954	387.01	Cherrybark red Oak 26 good yes
3233	35.229593	-89.742991	385.5	Winged elm 7 good yes
3234	35.229571	-89.743026	383.1	Sweetgum 15 poor no
3235	35.229509	-89.743106	382.74	sweetgum 12 poor no
3236	35.229492	-89.742965	382.35	Winged elm 15 good yes
3237	35.229461	-89.743008	383.04	Winged elm 10 poor no
3238	35.229397	-89.743036	383.3	White Oak 11 good yes
3239	35.229434	-89.743206	382.91	Sweetgum 10 poor no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
3240	35.229449	-89.743267	379.63	Cherrybark red Oak 17 fair yes
3241	35.229394	-89.74323	381.3	Cherrybark red Oak 36 poor no
3242	35.229412	-89.743144	383.04	Cherrybark red Oak 21 multi poor no
3243	35.229417	-89.743121	381.56	Post Oak 10 poor no
3244	35.22942	-89.743109	380.61	winged elm 9 poor no
3245	35.229448	-89.74317	383.6	winged elm 7 poor no
3246	35.229455	-89.743101	382.64	Burr Oak 15 fair yes
3247	35.229337	-89.743221	383.3	Winged elm 8 good yes
3248	35.229329	-89.743282	380.97	Cherrybark red Oak 15 fair yes
3249	35.229309	-89.743255	382.41	Winged elm 7 poor no
3250	35.229418	-89.743392	381.46	Cherrybark red Oak 18 poor no
3251	35.229428	-89.743361	379.27	Cherrybark red Oak 13 poor no
3252	35.22944	-89.743416	376.8	Winged 6 6 multi fair yes
3253	35.229409	-89.743463	379.66	Winged elm 22 fair yes
3254	35.229446	-89.743515	384.19	Black cherry 8 fair yes
3255	35.229502	-89.743486	383.33	Black cherry 12 good yes
3256	35.229552	-89.74341	380.05	Black cherry 12 fair yes
3257	35.229574	-89.743336	377.56	Sweetgum 14 fair yes
3258	35.229547	-89.743237	386.35	Sweetgum 15 for no
3259	35.229599	-89.743216	378.54	Winged elm 6 poor no
3260	35.229582	-89.743248	379.49	Winged elm 11 multi poor no
3261	35.229561	-89.743321	373.29	tulip Poplar 17 fair yes
3262	35.229615	-89.74322	377.26	Cherrybark red Oak 25 multi poor no
3263	35.229674	-89.74328	379.2	Winged elm 6 poor no
3264	35.229765	-89.743206	382.45	Sweetgum 25 multi poor no
3265	35.229632	-89.743142	384.19	Winged elm 10 fair yes
3266	35.229731	-89.743308	381.17	Sweetgum 6 poor no
3267	35.229749	-89.743199	382.74	Sugarmaple 11 poor no
3268	35.229689	-89.743203	388.55	Winged elm 7 poor no
3269	35.229688	-89.743317	380.18	Winged elm 9 poor no
3270	35.229685	-89.743364	378.71	Winged elm 10 fair yes
3271	35.229641	-89.743405	376.38	Sweetgum 20 poor no
3272	35.229701	-89.74341	380.51	Sweetgum 18 multi poor no
3273	35.229658	-89.743317	382.25	Sweetgum 12 poor no
3274	35.229662	-89.743232	380.25	Winged elm 7 fair yes
3275	35.229673	-89.743221	381.33	Sweetgum 15 poor no
3276	35.229657	-89.743237	384.32	post oak 7 poor no
3277	35.229642	-89.743377	382.38	Sweetgum 14 poor no
3278	35.229636	-89.743301	390.42	Sweetgum 11 poor no
3279	35.229579	-89.743364	385.24	Sweetgum 12 poor no
3280	35.22961	-89.743448	376.18	Winged elm 6 fair no

**ASHMONT PD
EXISTING TREE DATA**

Numbers	Latitude	Longitude	Altitude (ft)	Species, Diameter, Grade (Good / Fair / Poor), Worthy of Retention (Yes / No)
3281	35.229569	-89.743555	383.73	White ash 15 good yes
3282	35.22962	-89.743535	387.89	Winged elm 11 good yes
3283	35.229614	-89.743455	375.85	Winged elm 7 poor no
3284	35.22952	-89.743523	383.66	Winged elm 10 fair yes
3285	35.22959	-89.743549	378.31	Winged elm 8 multi poor no
3286	35.229647	-89.743616	376.97	Winged elm 11 multi fair yes
3287	35.229608	-89.743647	381.53	Sweetgum 7 poor no
3288	35.229694	-89.74365	381.3	Sweetgum 14 poor no
3289	35.229717	-89.743596	376.74	Sweetgum 9 poor no
3290	35.229689	-89.743572	378.41	eastern red cedar 10 poor no
3291	35.229733	-89.743688	376.67	Red maple 6 fair yes
3292	35.229669	-89.743718	378.31	Sweetgum 10 poor no
3293	35.229692	-89.743786	377.59	Sweetgum 12 poor no
3294	35.229734	-89.743628	378.74	White Oak 10 fair yes
3295	35.229701	-89.743667	376.61	Sweetgum 14 fair yes
3296	35.229741	-89.743597	379.82	Sweetgum 10 poor no
3297	35.229723	-89.74355	387.43	Sweetgum 10 fair yes
3298	35.229761	-89.743554	383.99	Sweetgum 10 poor no
3299	35.229667	-89.743552	381.46	Sweetgum 13 poor no
3300	35.229653	-89.743517	378.44	Sweetgum 10 good yes
3301	35.229721	-89.743524	377.49	Sweetgum 13 poor no
3302	35.229733	-89.743544	375.69	Sweetgum 7 poor no
3303	35.22974	-89.743507	380.94	Sweetgum 14 poor no
3304	35.229805	-89.743474	383.86	Sweetgum 20 multi poor no
3305	35.229785	-89.74369	384.19	Cherrybark red Oak 28 good yes
3306	35.229739	-89.743835	388.68	Sweetgum 10 poor no
3307	35.229801	-89.743856	381.3	Sweetgum 19 multi poor no
3308	35.22975	-89.743755	380.41	Sweetgum 10 poor no
3309	35.229711	-89.743698	379.13	Sweetgum 6 fair yes
3310	35.229758	-89.743779	381.73	Sweetgum 6 poor no
3311	35.229774	-89.743698	378.05	Sweetgum 7 poor no



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of a Sketch Plan for Taylor Farms Planned Development.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Date: Thursday, April 21, 2022

Project: Taylor Farms Planned Development
Sketch Plan

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: 10355 Memphis-Arlington Road

Parcel ID: L0151 00111

Zoning District: AG (Agriculture District)

Site Area: 76.93 acres

Applicant: TFB LLC

Representative: Louis Ricci, Bray Firm

STAFF RECOMMENDATION

The Sketch Plan phase of the Planned Development process gives Planning Commissioners an early opportunity to provide feedback and recommendations to the applicant. Staff will rely on the Commission's directions and the City's guiding and regulatory documents when reviewing the Outline Plan and subsequent plans for this project. Staff recommendations will be provided during future stages of the Planned Development process.

DISCUSSION

The applicant, Louis Ricci, seeks guidance from the Planning Commission on a Sketch Plan for Taylor Farms, a proposed residential Planned Development. The project would include 126 lots for single-family detached dwellings on 76.93 acres located along the north side of Maple Walk Drive, south of Memphis-Arlington Road, east of Maple Forest Drive, and west of Chambers

Chapel Road. The Planning Commission has previously reviewed multiple iterations of the Sketch Plan.

The proposed Planned Development would include 63 R-1 lots, 38 R-2 lots, and 25 R-3 lots. Approximately 25 acres—or 31 percent of the entire development—would be designated as common open space.

The following major changes have been made to the Sketch Plan since the Planning Commission last reviewed it.

- Lakeland Trace is shown as a continuous north/south collector through the development.
- The connection to Maple Walk Drive west of Lakeland Trace has been removed and is now shown as a cul-de-sac.
- An eyebrow street has been added along the west side of a portion of Lakeland Trace to reduce the number of driveways having direct access to a collector street.
- The preservation area labeled as COS E on the southwest portion of the site has been reduced from 17.1 acres to 14.66 acres to accommodate larger lots and a revised site layout.
- Four lots have been added, and the mix of residential lot types has been slightly adjusted. The previous submittal showed 65 R-1 lots, 34 R-2 lots, and 23 R-3 lots.

Staff is concerned about the number of proposed access points on Lakeland Trace, which is a collector; proposed driveways located along the curved portions of Lakeland Trace could pose safety hazards and make the road function more as a local/neighborhood road than a collector. Staff also notes that Lakeland Trace would require a minimum 66-foot right-of-way along with trees and pedestrian facilities. (If classified as an urban connector, 5-foot sidewalks would be required; if classified as a rural connector, a 10-foot trail would be required.)

Issues for the Commission to consider include: residential driveways directly connecting to the collector; the curvilinear layout of the collector street; and the lack of pedestrian infrastructure along the proposed connection to Memphis-Arlington Road. The Planning Commission may wish to discuss these items—as well as any others the Commission deems appropriate—with the applicant. If the project moves forward, the applicant will be required to submit an Outline Plan with more details about the project. Staff will review the Outline Plan upon submittal and offer additional feedback.

Taylor Farms Planned Development

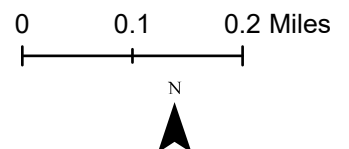
Lakeland, Tennessee

76.93 Acres
Zoned AG

-  Taylor Farms Planned Development
 -  Lakeland City Boundary
 -  Street Centerline
 -  Parcel
- ### Zoning Classification
-  AG
 -  C-1
 -  C-2
 -  E-R
 -  I-L
 -  M-R
 -  OS-2
 -  OS-5
 -  P
 -  R-1
 -  R-1 (PRD)
 -  R-2
 -  R-2 (PRD)
 -  R-2A
 -  R-3
 -  RE

Lakeland Planning
Department
March 28, 2022

Sources:
Shelby Co. Assessor of
Property; ESRI;
Lakeland IT Dept.



CONCEPTUAL PLAN

TAYLOR FARMS PLANNED DEVELOPMENT

LAKELAND, TENNESSEE

LOTS: 126

AREA: 76.93 ACRES

PREPARED FOR:
VALLEYBROOK DEVELOPMENT, LLC.
8620 TRINITY ROAD, SUITE 202
CORDOVA, TN 38018
901-870-0900

ENGINEER:
THE BRAY FIRM
2950 STAGE PLAZA NORTH
BARTLETT, TN 38134
(901) 383-8668

DATE: MARCH 29, 2022

SCALE: 1"=100'

SHEET 1 OF 1

PLAN DATA

ACREAGE76.93 ACRES

LOTS126 LOTS

R-1 (17500 S.F.)63 LOTS (50%)

R-2 (10000 S.F.)38 LOTS (30%)

R-3 (5000 S.F.)25 LOTS (20%)

DENSITY1.63 D.U./ACRE

PROPOSED USESFR

COS AREA24.05 AC. (31.2%)

0100200300400

SCALE IN FEET: 1"=100'





The Bray Firm

Engineering & Surveying

Telephone 901-383-8668

2950 Stage Plaza North
Bartlett, Tennessee 38134

April 12, 2022

Donald Anthony
Planning Director
City of Lakeland
danthony@lakelandtn.org

Re: Taylor Farms Planned Development – Sketch Plan for April PC meeting

Mr. Anthony,

Once again, we would like to thank you for working with us to get this revised plan in front of staff and the Planning Commission on short notice. Please find attached the public notice certification and copy of the notice sent along with 12 11X17" copies of the revised plan and three (3) full size copies of the revised plan. Changes made to the plan are clouded per your request.

The following are the building setbacks we would like to apply for this development. As we move forward in this process we will provide more detailing on house design elements and requirements.

R-1 lots (17500 s.f.)

Front setback: 30 feet (garages may not face the street except on corner lots where they may face the street that does not contain the front elevation of the house)
Rear setback: 25 feet
Side setback: minimum of 5 feet with a total of 25 required

R-2 lots (10000 s.f.)

Front setback: 20 feet for garage structure if hook garage is utilized. 25 feet for house
If forward facing garage is utilized, house may be 25 feet but garage setback shall be 30 feet.
Rear setback: 25 feet
Side setback: 5 feet minimum

R-3 lots (5000 s.f.)

Front setback: 15 feet
Rear setback: 10 feet for garage, 20 feet for house
Side setback: 5 feet minimum.

The following are the responses to staff comments provided:

Lakeland Trace is depicted as a 60 foot right-of-way with 40 feet from face of curb to face of curb. The rural section is depicted as a 30 foot right-of-way with 24 feet of pavement. Horizontal curves have a minimum centerline radius of 250 feet. Vertical curves will be designed at the criteria required by the City Engineer. Although it is noted that design speed

should be 40 mph for this road and the vertical geometry can be designed to accommodate that, we would prefer that it be signed at 30 mph and not 40. There has been much discussion at previous Planning Commission meetings that speed is an issue in this area and encouraging a 40 mph limit would contribute to this issue. Stop signs will be required at all streets and alleys intersecting with Lakeland Trace with no such signage required on Lakeland Trace. All corner lots on Lakeland Trace will be required to have driveway access from the minor street and not be permitted a drive apron on Lakeland Trace.

The cul-de-sac that was proposed to stop just north of Maple Walk has been changed to an intersecting street.

The right-of-way and curb section of Bridle Grove Drive has been changed to match the existing section to the east.

Thank you for considering this request. Please let me know if you have any additional questions.

Sincerely,

David Gean Bray, P.E.



Plan Review – Initial Submittal

Date:	April 1, 2022
Project Title:	Taylor Farms Planned Development Sketch Plan
Applicant:	Louis Ricci, Bray Firm louisriccijr@yahoo.com dgbray@comcast.net ronniefaulkner@live.com

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **April 21, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on April 12, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. See attached Engineering comments.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

1. Provide public notice in accordance with Land Development Regulations. Refer to email from Planning Director dated 3/24/2022 for list of addresses, example letter, and specific instructions.
2. Provide a list of exceptions from the Land Development Regulations being sought with this sketch plan. This list should include any requested changes to setback requirements.

3. Note that the Sketch Plan is conceptual in nature and is not required to include all site components. Staff will provide additional comments and conditions on this project as it advances through the Planned Development process.



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of a Special Exception for Fence Height at 3988 Blue Spruce Circle.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Cycle: Thursday, April 21, 2022

Subject: Approval of Fence Height Special Exception– 3988 Blue Spruce Circle

Staff Contact: Jordan McKenzie, City Planner

STAFF RECOMMENDATION

Staff recommends approval of Fence Height Special Exception.

DISCUSSION

SITE INFORMATION:

LOCATION: 3988 BLUE SPRUCE CIRCLE

PARCEL ID: L0150 D00016

SUBDIVISION: LAKE LAND ESTATES

ZONING: R2-SUBURBAN MANOR

LOT SIZE: .34 ACRES

APPLICANT/OWNER: TIA WILLIAMS

REPRESENTATIVE: TIA WILLIAMS

BACKGROUND:

The applicant, Tia Williams, located on 3988 Blue Spruce Circle, is seeking an exception to the fence height regulation. She has constructed a 4-foot-tall fence along the rear line of the property. Although fences are allowed to be 6 feet in the rear, when a property is within 25 feet of an open body of water, it can only be 2 1/2 feet tall. The property has a swimming pool on it and according to Section 421.10.1 of the BOCA (Building Official and Code Administrator) National Building Code, which is held as state law in TN, every private residential pool must have a barrier of at least 48 inches surrounding the pool. Because the applicant replaced the old fence that was there without a fencing permit, staff considered it judicious to mandate the applicant go through the special exception process with MPC along with submitting a regular fencing permit application.

For reference, the following is an excerpt from the LDR's Article III Section 5 Landscape Standards: Fences and Walls:

Solid fences and walls over two and a half (2 1/2) feet are not permitted within twenty-five (25) feet of an Open Water body.

Pictures have been provided for your convenience:



Figure 1 Front/Side View



Figure 2 Front Side View

ANALYSIS & DISCUSSION ITEMS:

The fence height exception application has been reviewed by staff with no comments. In terms of type and material, the fence meets the rest of the requirements provide by the LDR's. Pictures of the property have been provided for you as a point of physical reference as well (Please see below). As a result, with the applicant meeting all other requirements and with the height being mandated by TN State Law, staff recommends approval of the Fence Height Special Exception.

PROPOSED (EXAMPLE) MOTIONS:

1. To approve the Fence Height Special Exception with the following conditions:
 - a. Commission's discussion.
 - b. Staff comments and conditions in the staff report.
2. To approve the Fence Height Special Exception Application without conditions



3988 Blue Spruce Circle

Lakeland, Tennessee

0.31 Acres
Zoned R-2

- 3988 Blue Spruce Cr
- Lakeland City Boundary
- Street Centerline
- Parcel

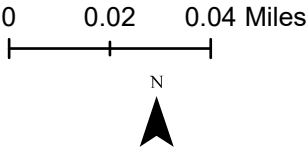
Zoning Classification

- AG
- C-1
- C-2
- E-R
- I-L
- M-R
- OS-2
- OS-5
- P
- R-1
- R-1 (PRD)
- R-2
- R-2 (PRD)
- R-2A
- R-3
- RE

Lakeland Planning
Department
March 28, 2022

Sources:

Shelby Co. Assessor of
Property; ESRI;
Lakeland IT Dept.





Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of a Final Development Plan for Lakeland Commons Planned Development Areas B and D.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Date: Thursday, April 21, 2022

Project: Lakeland Commons Planned Development, Areas B and D
Final Development Plan

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: Along the south side of U.S. Highway 70, west of Seed Tick Road

Parcel ID: L0150 00554

Zoning District: AG (Agriculture District)

Site Area: 34.68 acres

Applicant: Vince Smith, Lakeland Town Center LLC

Representative: Cory Brady, Integrated Land Solutions PLLC

STAFF RECOMMENDATION

Staff recommends approval subject to the following conditions:

1. Applicant shall satisfy all staff comments, except those waived by the Planning Commission.
2. Applicant shall satisfy all Planning Commission comments.
3. Applicant shall satisfy all Procedural Requirements listed in this Staff Report.

DISCUSSION

The applicant, Vince Smith of Lakeland Town Center LLC represented by Cory Brady of Integrated Land Solutions PLLC, requests approval of a Final Development Plan for Areas B and D of the Lakeland Commons Planned Development. The property lies south of U.S. Highway 70,

west of Seed Tick Road, and north of Memphis-Arlington Road. The property included in the plat has a total area of 34.68 acres. The plat would create the following lots:

- Lot 1 (Area D): 8.78 acres
- Lot 2 (Areas B and D): 10.25 acres
- Lot 8 (Area B): 0.81 acres
- Lot 9 (Area B): 0.28 acres
- Lot 10 (Area D): 7.54 acres

Additionally, lots 3 through 7, which were included in a plat recorded in 2020, are being consolidated into this plat. These lots constitute the remaining 7.02 acres of the 34.68-acre total area.

Consistent with the approved Outline Plan, lots 8 and 9 should be designated as reserved for municipal use. The Planning Commission should also note that Village Market Lane (76 foot right-of-way) and Shady Village Lane (65 foot right-of-way) have already been constructed and accepted by the City.

Staff has reviewed the plat, and it appears to be generally consistent with both the Lakeland Commons Preliminary Development Plan and the subdivision regulations as set forth in the Land Development Regulations.

EXAMPLE MOTIONS

1. Motion to approve the Lakeland Commons Planned Development Areas B and D Final Development Plan subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve the Lakeland Commons Planned Development Areas B and D Final Development Plan without conditions.
3. Motion to deny the Lakeland Commons Planned Development Areas B and D Final Development Plan:
 - a. Reason for denial

CONDITIONS OF APPROVAL

1. The applicant shall add a note indicating that lots 8 and 9 are designated for civic use.

PROCEDURAL REQUIREMENTS

1. The applicant shall submit a corrected electronic (PDF) version of the plan to the Planning Department. All revisions shall be clouded on the plan. The applicant shall submit an accompanying letter confirming that all conditions of approval have been satisfied.
2. The applicant shall be responsible for having the plan recorded in the Shelby County Register of Deeds' office after receipt of any necessary security, fees, and contracts to provide improvements required in the City of Lakeland Subdivision Regulations. The applicant shall obtain all required signatures on the plan prior to recordation.

Lakeland Commons Areas B and D

Lakeland, Tennessee

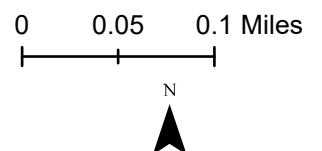
34.68 Acres
Zoned AG

-  Lakeland Commons Planned Development
 -  Lakeland City Boundary
 -  Street Centerline
 -  Parcel
- ### Zoning Classification
-  AG
 -  C-1
 -  C-2
 -  E-R
 -  I-L
 -  M-R
 -  OS-2
 -  OS-5
 -  P
 -  R-1
 -  R-1 (PRD)
 -  R-2
 -  R-2 (PRD)
 -  R-2A
 -  R-3
 -  RE

Lakeland Planning
Department
March 28, 2022

Sources:

Shelby Co. Assessor of
Property; ESRI;
Lakeland IT Dept.



HATCH LEGEND

	MEMPHIS ARLINGTON ROAD 47,890 S.F.		STREAMSIDE MANAGEMENT BUFFER 244,372 S.F.
	VILLAGE MARKET LANE 90,536 S.F.		15 FT. PR. DRAINAGE EASEMENT
	SHADY VILLAGE LANE 55,957 S.F.		

SYMBOL LEGEND:

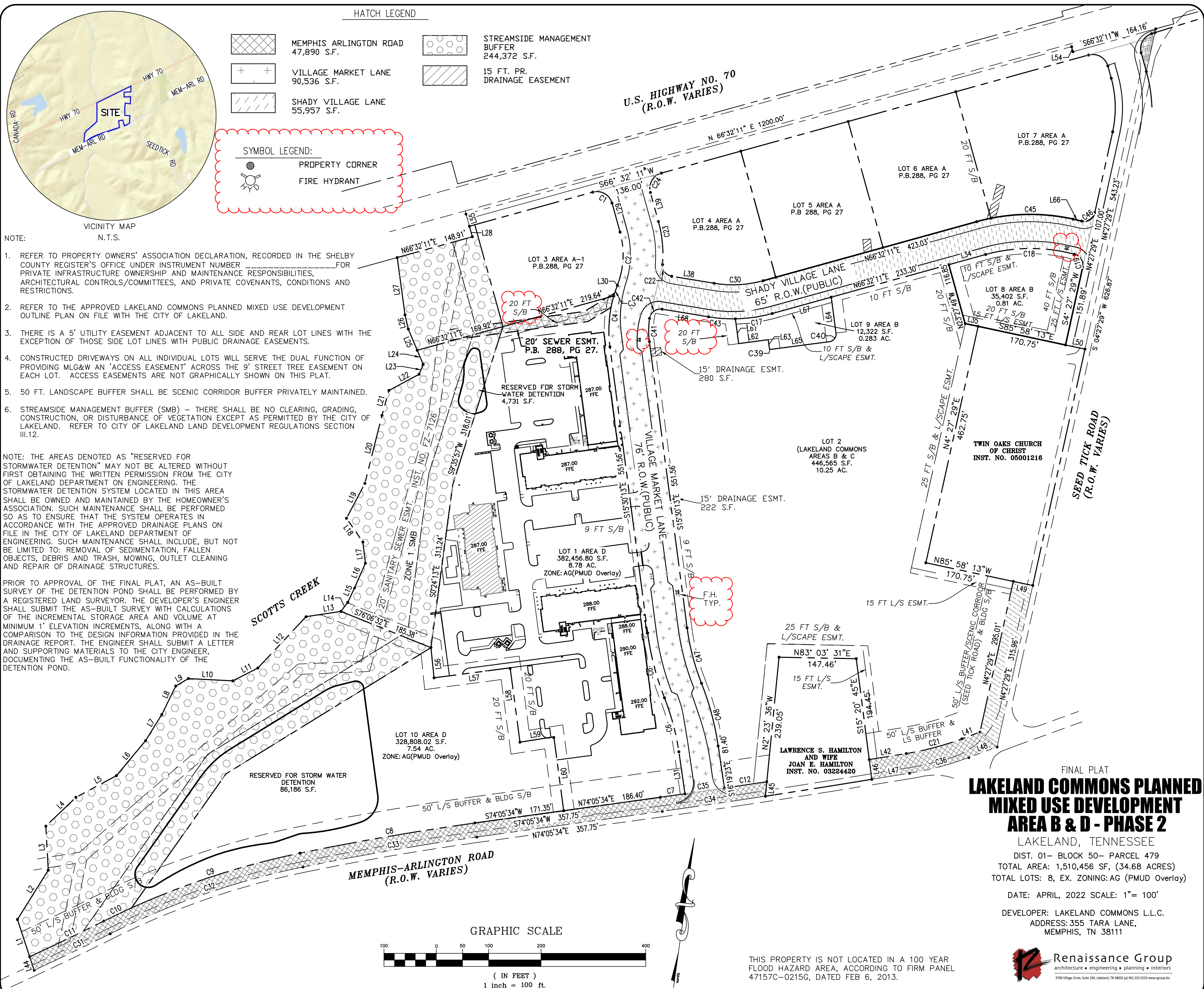
	PROPERTY CORNER
	FIRE HYDRANT

NOTE:

- REFER TO PROPERTY OWNERS' ASSOCIATION DECLARATION, RECORDED IN THE SHELBY COUNTY REGISTER'S OFFICE UNDER INSTRUMENT NUMBER _____ FOR PRIVATE INFRASTRUCTURE OWNERSHIP AND MAINTENANCE RESPONSIBILITIES, ARCHITECTURAL CONTROLS/COMMITTEES, AND PRIVATE COVENANTS, CONDITIONS AND RESTRICTIONS.
- REFER TO THE APPROVED LAKELAND COMMONS PLANNED MIXED USE DEVELOPMENT OUTLINE PLAN ON FILE WITH THE CITY OF LAKELAND.
- THERE IS A 5' UTILITY EASEMENT ADJACENT TO ALL SIDE AND REAR LOT LINES WITH THE EXCEPTION OF THOSE SIDE LOT LINES WITH PUBLIC DRAINAGE EASEMENTS.
- CONSTRUCTED DRIVEWAYS ON ALL INDIVIDUAL LOTS WILL SERVE THE DUAL FUNCTION OF PROVIDING MLG&W AN 'ACCESS EASEMENT' ACROSS THE 9' STREET TREE EASEMENT ON EACH LOT. ACCESS EASEMENTS ARE NOT GRAPHICALLY SHOWN ON THIS PLAT.
- 50 FT. LANDSCAPE BUFFER SHALL BE SCENIC CORRIDOR BUFFER PRIVATELY MAINTAINED.
- STREAMSIDE MANAGEMENT BUFFER (SMB) — THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, OR DISTURBANCE OF VEGETATION EXCEPT AS PERMITTED BY THE CITY OF LAKELAND. REFER TO CITY OF LAKELAND LAND DEVELOPMENT REGULATIONS SECTION III.12.

NOTE: THE AREAS DENOTED AS "RESERVED FOR STORMWATER DETENTION" MAY NOT BE ALTERED WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION FROM THE CITY OF LAKELAND DEPARTMENT ON ENGINEERING. THE STORMWATER DETENTION SYSTEM LOCATED IN THIS AREA SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION. SUCH MAINTENANCE SHALL BE PERFORMED SO AS TO ENSURE THAT THE SYSTEM OPERATES IN ACCORDANCE WITH THE APPROVED DRAINAGE PLANS ON FILE IN THE CITY OF LAKELAND DEPARTMENT OF ENGINEERING. SUCH MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO: REMOVAL OF SEDIMENTATION, FALLEN OBJECTS, DEBRIS AND TRASH, MOWING, OUTLET CLEANING AND REPAIR OF DRAINAGE STRUCTURES.

PRIOR TO APPROVAL OF THE FINAL PLAT, AN AS-BUILT SURVEY OF THE DETENTION POND SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR. THE DEVELOPER'S ENGINEER SHALL SUBMIT THE AS-BUILT SURVEY WITH CALCULATIONS OF THE INCREMENTAL STORAGE AREA AND VOLUME AT MINIMUM 1' ELEVATION INCREMENTS, ALONG WITH A COMPARISON TO THE DESIGN INFORMATION PROVIDED IN THE DRAINAGE REPORT. THE ENGINEER SHALL SUBMIT A LETTER AND SUPPORTING MATERIALS TO THE CITY ENGINEER, DOCUMENTING THE AS-BUILT FUNCTIONALITY OF THE DETENTION POND.



GRAPHIC SCALE



(IN FEET)
1 inch = 100 ft.

THIS PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD HAZARD AREA, ACCORDING TO FIRM PANEL 47157C-0215G, DATED FEB 6, 2013.

Renaissance Group
architecture • engineering • planning • interiors
9700 Village Circle, Suite 100, Lakeland, TN 38002 (p) 901.332.5533 www.rggroup.biz

LAKELAND COMMONS--PH. 2 LOT CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD LENGTH	CHORD DIRECTION
C1	47.12'	30.00'	90°00'05"	42.43'	S68°27'46"E
C2	103.54'	162.00'	36°37'11"	101.79'	S5°09'08"E
C3	20.70'	238.00'	4°58'58"	20.69'	S10°39'58"W
C4	98.36'	238.00'	23°40'42"	97.66'	S3°39'52"E
C5	128.35'	523.00'	14°03'39"	128.03'	S22°32'03"E
C6	106.77'	462.00'	13°14'30"	106.54'	S22°56'38"E
C7	47.50'	14416.60'	0°11'20"	47.50'	S73°59'54"W
C8	338.89'	5190.00'	3°44'28"	338.83'	S72°13'20"W
C9	339.13'	1527.00'	12°43'29"	338.43'	S63°59'21"W
C10	58.66'	1527.00'	2°12'03"	58.65'	S56°31'35"W
C11	157.18'	5100.00'	1°45'57"	157.18'	S56°18'32"W
C12	81.98'	14416.60'	0°19'33"	81.98'	N73°26'20"E
C17	71.27'	282.50'	14°27'15"	71.08'	S73°45'49"W
C18	171.39'	323.09'	30°23'38"	169.39'	S81°51'18"W
C19	32.99'	21.00'	90°00'01"	29.70'	N40°32'32"W
C21	109.95'	559.50'	11°15'35"	109.77'	N67°10'11"E
C22	31.20'	21.00'	85°06'48"	28.41'	S46°00'44"E
C23	83.10'	238.00'	20°00'23"	82.68'	S13°27'32"E
C24	47.12'	30.00'	89°59'55"	42.43'	S21°32'14"W
C30	94.50'	217.50'	24°53'41"	93.76'	N78°59'02"E
C31	161.14'	5127.00'	1°48'03"	161.14'	N56°19'35"E
C32	390.75'	1500.00'	14°55'32"	389.65'	N62°53'19"E
C33	337.13'	5163.00'	3°44'28"	337.07'	N72°13'20"E
C34	198.98'	14443.60'	0°47'22"	198.98'	N73°41'53"E
C35	76.00'	14416.60'	0°18'07"	76.00'	N73°45'10"E
C36	117.42'	597.50'	11°15'35"	117.23'	N67°10'11"E
C39	3.93'	2.50'	89°59'59"	3.54'	S60°30'29"E
C40	22.78'	14.50'	89°59'45"	20.51'	N29°29'39"E
C41	44.61'	162.00'	15°46'38"	44.47'	S7°36'54"E
C42	33.41'	21.00'	91°09'27"	30.00'	S45°51'09"W
C43	51.48'	282.50'	10°26'25"	51.41'	S86°12'39"W
C44	3.02'	14.50'	11°54'52"	3.01'	N21°27'39"W
C45	186.40'	382.50'	27°55'16"	184.56'	N80°29'50"E
C46	32.99'	21.00'	89°59'59"	29.70'	N49°27'28"E
C47	109.70'	447.00'	14°03'39"	109.42'	S22°32'03"E
C48	124.34'	538.00'	13°14'30"	124.06'	S22°56'38"E

LAKELAND COMMONS – PH. 2 LOT LINE TABLE			LAKELAND COMMONS – PH. 2 LOT LINE TABLE			LAKELAND COMMONS – PH. 2 LOT LINE TABLE		
LINE #	LENGTH	DIRECTION	LINE #	LENGTH	DIRECTION	LINE #	LENGTH	DIRECTION
L1	74.97'	N26°11'49"W	L21	49.80'	N7°36'28"E	L47	72.98'	N72°47'59"E
L2	111.04'	N24°00'16"E	L22	65.16'	N53°53'05"E	L48	57.52'	N61°32'24"E
L3	84.36'	N11°06'38"W	L23	20.53'	N14°45'00"E	L49	38.00'	N85°58'13"W
L4	79.45'	N38°15'18"E	L24	29.35'	N30°50'26"W	L50	38.00'	S85°58'13"E
L5	87.89'	N53°45'39"E	L25	44.14'	N30°50'26"W	L54	10.00'	S23°27'49"E
L6	86.80'	N31°45'37"E	L26	27.63'	N20°56'51"W	L55	24.00'	S23°27'49"E
L7	58.77'	N23°57'28"E	L27	110.59'	N15°44'48"W	L56	58.05'	S13°48'44"E
L8	60.92'	N18°02'28"E	L28	21.00'	N23°27'49"W	L57	146.70'	N74°31'10"E
L9	27.94'	N51°26'20"E	L29	57.55'	S23°27'43"E	L58	143.27'	S15°29'58"E
L10	84.96'	N84°57'08"E	L30	0.81'	S13°09'27"W	L59	65.47'	N73°04'24"E
L11	53.84'	N54°53'24"E	L31	81.30'	S16°19'23"E	L60	142.38'	S15°37'52"E
L12	134.45'	N35°11'40"E	L34	72.94'	N66°32'11"E	L61	47.75'	S15°30'03"E
L13	67.28'	N73°25'06"E	L35	25.30'	S85°58'13"E	L62	57.05'	N74°29'44"E
L14	21.73'	N29°09'20"E	L38	82.15'	S88°34'08"E	L63	16.50'	S15°30'29"E
L15	30.57'	N17°06'54"E	L39	57.55'	S23°27'43"E	L64	66.32'	N15°30'13"W
L16	51.57'	N15°40'26"E	L41	36.85'	N61°32'24"E	L65	113.00'	N74°29'32"E
L17	40.75'	N14°43'29"W	L42	71.75'	N72°47'59"E	L66	16.64'	S85°32'32"E
L18	55.17'	N42°39'21"W	L44	27.18'	N26°11'49"W	L67	116.79'	S66°32'11"W
L19	75.31'	N19°48'47"E	L45	27.87'	S2°23'36"E	L68	89.69'	N88°34'08"W
L20	133.84'	N6°06'02"E	L46	38.02'	S15°20'45"E			

LAKELAND COMMONS P.D. LOT AREA SETBACKS			
AREA	FRONT	SIDE	REAR
A	50–US 70 25–VML	20	25
A–1	50–US 70 25–VML	20	25
B	40–S.T. 10–SVL	20	20
C	50–M/A 9–VML	25	25
D	50–M/A 9–VML	20	ZONE 2 SMB

US 70 – U.S. HWY. 70
VML – VILLAGE MARKET LANE
SVL – SHADY VILLAGE LANE
M/A – MEMPHIS/ARLINGTON RD
ST – SEEDTICK RD.

LAKELAND COMMONS P.D. LOT AREAS		
LOT #	SIZE(ac.)	AREA
1	8.78	D
2	10.25	B & C
3	1.89	A1
4	1.02	A
5	1.22	A
6	1.22	A
7	1.67	A
8	0.81	B
9	0.28	B
10	7.54	D
TOTAL	34.68	

FINAL PLAT
**LAKELAND COMMONS PLANNED
MIXED USE DEVELOPMENT
AREA B & D - PHASE 2**

LAKELAND, TENNESSEE

DIST. 01– BLOCK 50– PARCEL 479

TOTAL AREA: 1,510,456 SF, (34.68 ACRES)

TOTAL LOTS: 8, EX. ZONING: AG (PMUD Overlay)

DATE: APRIL, 2022 SCALE: 1"= 100'

DEVELOPER: LAKELAND COMMONS L.L.C.

ADDRESS: 355 TARA LANE,
MEMPHIS, TN 38111



Renaissance Group

architecture • engineering • planning • interiors

9700 Village Circle, Suite 100, Lakeland, TN 38002 (p) 901.332.5533 www.rggroup.biz

CERTIFICATE OF ENGINEER
State of Tennessee
County of Shelby

I _____, a Professional Engineer, do hereby certify that the design of public and private improvements provided for in the Preliminary Plat / Construction Plans / Final Plat (whichever is applicable) are in accordance with acceptable engineering practices, the Tennessee Department of Environment and Conservation, City of Lakeland Manual for Public Works and Materials Specifications, and all City of Lakeland ordinances, including Subdivisions.

In witness whereof, I the said _____, a Professional Engineer, hereunto set out hand and affix my seal this _____day of _____20____.

Tennessee Registration No. _____

Professional Engineer



CERTIFICATE OF SURVEYOR
State of Tennessee
County of Shelby

I, _____ hereby certify that this plat was prepared from notes taken during an actual survey made by me during the month of _____, 20____, and that this Plat or Site Plan correctly represents said survey. All bearings are referenced to the 1983 Tennessee State Plane Coordinate System; all new property corners are marked in accordance with Lakeland Subdivision Standards; the precision of the unadjusted survey is 1:10,000 or greater and all special flood hazard areas are properly located as per the latest Flood Insurance Rate Map. All dimensions are expressed in feet and decimals. All bearings, distances, and field information are true and correct to the best of my knowledge.

In witness whereof, I the said _____, a Land Surveyor, hereunto set out hand and affix my seal this ____day of _____20____.

Tennessee Registration No. _____

CERTIFICATE OF MUNICIPAL PLANNING COMMISSION APPROVAL –
SUBDIVISION

I, _____ do hereby certify that the City of Lakeland Municipal Planning Commission has approved this Preliminary / Final Plat (whichever is applicable). The signing of this certificate shall in no way be deemed to constitute or effect an acceptance of the dedication of any street, improvement, or other ground shown upon the plat.

Date: _____

MPC Secretary

CERTIFICATE OF CITY ENGINEER

Construction Plans are Inspected and Approved by the City Engineer
This _____day of _____20____.

City Engineer

CERTIFICATE OF MORTGAGEE AND DEDICATION

The undersigned mortgagee, _____, hereby certify that they are the mortgagee of the foregoing property and that the plat is with the free consent and in accordance with the desires of the above named owners, proprietors, do hereby dedicate to the City of Lakeland all Public Improvements, Easements, or lands herein specifically identified for dedication, for the purposes of operation, construction and maintenance of these improvements, as needed for the proper development and maintenance of said Subdivision.

Date: _____

Signature of Mortgagee

Include Notary Seal and Signature

STATE OF TENNESSEE
COUNTY OF SHELBY

Before me, the undersigned a notary public in and for the State and County aforesaid, duly commissioned and qualified, personally appeared Renaissance Group Center, subdivisiion, and he as such representative executed the foregoing instrument for the purpose therein contained by signing his name as representative of the mortgagee.

In witness whereof, I hereunto set out hand and affix my seal this_____ day of _____, 20____.

Notary Public

My Commission expires: _____

CERTIFICATE OF OWNER(S) AND DEDICATION

The undersigned owner, Lakeland Town Center, LLC, hereby certify that they are the owners of the foregoing property and that the plat is with the free consent and in accordance with the desires of the above named owners, proprietors, do hereby dedicate to the City of Lakeland all Public Improvements, Easements, or lands herein specifically identified for dedication, for the purposes of operation, construction and maintenance of these improvements, as needed for the proper development and maintenance of said Subdivision.

Date: _____

Signature of Owner(s)

Include Notary Seal and Signature

STATE OF TENNESSEE
COUNTY OF SHELBY

Before me, the undersigned a notary public in and for the State and County aforesaid, duly commissioned and qualified, personally appeared Renaissance Group Center, subdivisiion, and he as such representative executed the foregoing instrument for the purpose therein contained by signing his name as representative of the mortgagee.

In witness whereof, I hereunto set out hand and affix my seal this_____ day of _____, 20____.

Notary Public

My Commission expires: _____

THE AREAS DENOTED AS "RESERVED FOR STORM WATER DETENTION" MAY NOT BE ALTERED WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION FROM THE CITY OF LAKELAND DEPARTMENT OF ENGINEERING. THE STORM WATER DETENTION SYSTEM LOCATED IN THIS AREA SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION. SUCH MAINTENANCE SHALL BE PERFORMED SO AS TO ENSURE THAT THE SYSTEM OPERATES IN ACCORDANCE WITH THE APPROVED DRAINAGE PLANS ON FILE IN THE CITY OF LAKELAND DEPARTMENT OF ENGINEERING. SUCH MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO: REMOVAL OF SEDIMENTATION, FALLEN OBJECTS, DEBRIS AND TRASH; MOWING; OUTLET CLEANING; AND REPAIR OF DRAINAGE STRUCTURES.

PRIOR TO APPROVAL OF THE FINAL PLAT, AN AS-BUILT SURVEY OF THE DETENTION POND SHALL BE PERFORMED BY A REGISTERED LAND SURVEYOR. THE DEVELOPER'S ENGINEER SHALL SUBMIT THE AS-BUILT SURVEY WITH CALCULATIONS OF THE INCREMENTAL STORAGE AREA AND VOLUME AT MINIMUM 1' ELEVATION INCREMENTS, ALONG WITH A COMPARISON TO DESIGN INFORMATION PROVIDED IN THE DRAINAGE REPORT. THE ENGINEER SHALL SUBMIT A LETTER AND SUPPORTING MATERIALS TO THE CITY ENGINEER, DOCUMENTING THE AS-BUILT FUNCTIONALITY OF THE DETENTION POND.

FINAL PLAT
**LAKELAND COMMONS PLANNED
MIXED USE DEVELOPMENT
AREA B & D - PHASE 2**

LAKELAND, TENNESSEE

DIST. 01– BLOCK 50– PARCEL 479

TOTAL AREA: 1,510,456 SF, (34.68 ACRES)

TOTAL LOTS: 8, EX. ZONING: AG (PMUD Overlay)

DATE: MARCH, 2022 SCALE: 1"= 100'

DEVELOPER: LAKELAND COMMONS L.L.C.
ADDRESS: 355 TARA LANE,
MEMPHIS, TN 38111



Renaissance Group

architecture • engineering • planning • interiors

9700 Village Circle, Suite 100, Lakeland, TN 38002 (p) 901.332.5533 www.rggroup.biz



Plan Review – Initial Submittal

Date:	April 1, 2022
Project Title:	Lakeland Commons Planned Development, Areas B and D Final Development Plan
Applicant:	Vince Smith, Lakeland Town Center LLC kakivs@gmail.com corybrady@gmail.com

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **April 21, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on April 12, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. No comments.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

1. Add setback chart to plat.
2. Make lot lines for the subject area more pronounced. It is difficult to see which lots are included in the plat.
3. Show side yard setbacks on lots 8 and 9.
4. Show monuments and fire hydrants. Add a legend for symbols.
5. The plat must be signed by the mortgagee, owner, engineer, and surveyor at resubmittal.

6. Add chart showing all lots and corresponding acreage. Acreage should equal that shown on the title block.



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of a Final Development Plan for Willows at the Lake Phases 1 and 2.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Date: Thursday, April 21, 2022

Project: The Willows at the Lake, Phases 1 and 2 (Lake District Planned Development)
Final Development Plan

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: Along Lake Geneva Street and Lake Lugano Circle

Parcel ID: L0159 00595

Zoning District: C-2 (Regional Commercial District)

Site Area: 20.55 acres

Applicant: Yehuda Netanel, Gilad Development Inc.

Representative: Deadrick Turner, A2H

STAFF RECOMMENDATION

Staff will make a recommendation on this project at the Planning Commission meeting. However, any approval should be subject to the following conditions:

1. Applicant shall satisfy all staff comments, except those waived by the Planning Commission.
2. Applicant shall satisfy all Planning Commission comments.
3. Applicant shall satisfy all Procedural Requirements listed in this Staff Report.

DISCUSSION

The applicant, Yehuda Netanel of Gilad Development Inc. represented by Deadrick Turner of A2H, requests approval of a Final Plat for a 35-lot subdivision located along Lake Geneva Street

and Lake Lugano Circle in The Lake District Planned Development. The property has a total area of 20.55 acres. The proposed subdivision would constitute Phases 1 and 2 of the townhouse portion of the Willows at the Lake. A 2019 amendment to The Lake District's Preliminary Development Plan permits 109 townhouses in the northeastern portion of the development.

The property is zoned C-2 with Planned Development overlay. The townhouse lots in the Willows at the Lake will be developed using modified R-6 zoning standards. Setbacks for this project are: 10 feet on the front, 5 feet on the side and rear, and 7 feet on sides on corner lots. Private alleys will be constructed throughout the development; the minimum width for an alley in The Lake District is 20 feet. The developer has indicated that street trees will be planted as lots are developed.

Staff has reviewed the plat, and it appears to be generally consistent with both the approved Preliminary Development Plan and the subdivision regulations as set forth in the Land Development Regulations.

EXAMPLE MOTIONS

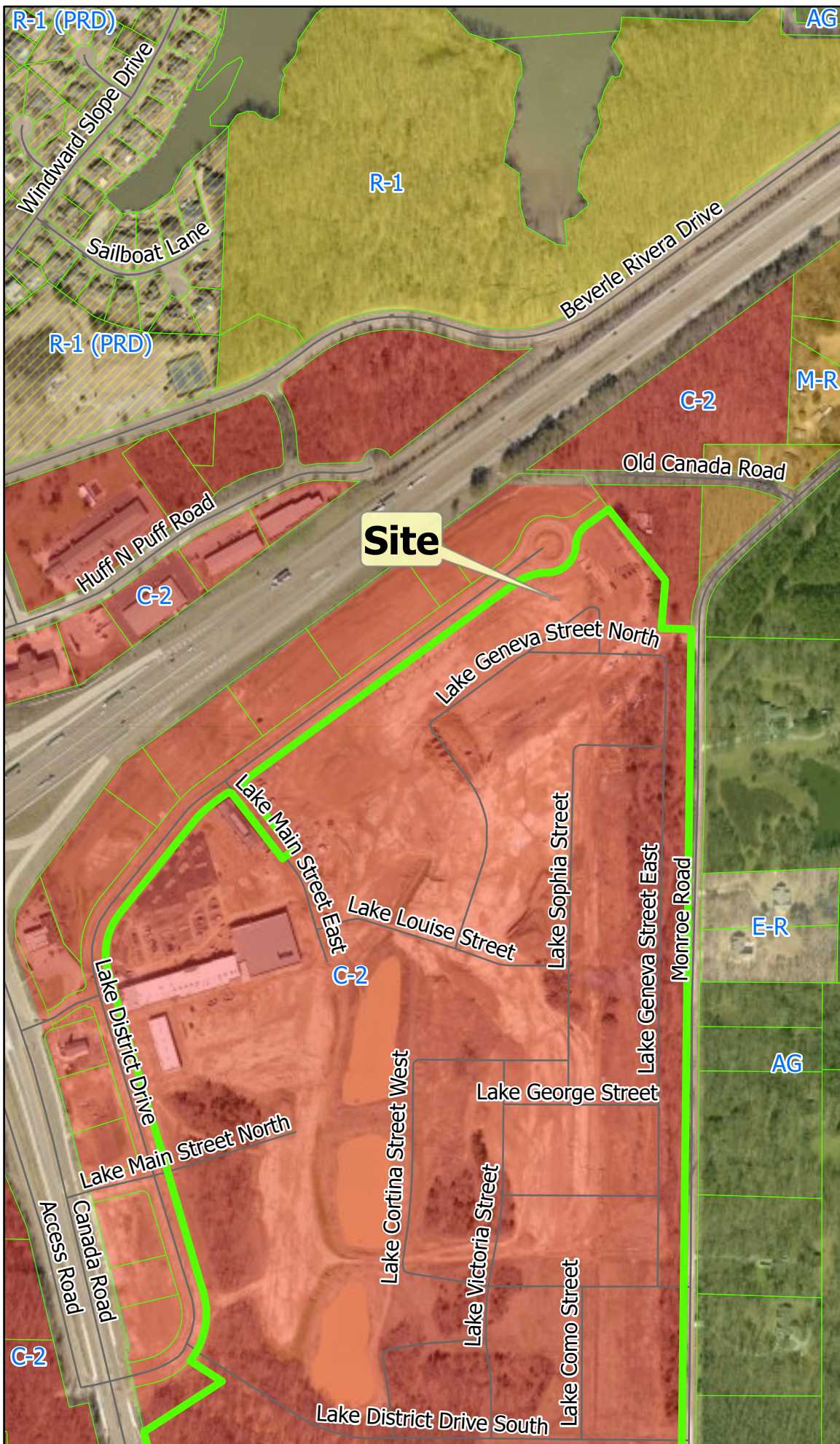
1. Motion to approve the Willows at the Lake Phase 1 Final Development Plan subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve the Willows at the Lake Phase 1 Final Development Plan without conditions.
3. Motion to deny the Willows at the Lake Final Development Plan:
 - a. Reason for denial

CONDITIONS OF APPROVAL

1. The applicant shall work with staff to address any unresolved staff comments from staff review letter dated April 1, 2022.
2. The applicant shall work with the City Engineer on outstanding infrastructure issues.
3. The applicant shall re-title the plat "Willows at the Lake Phases 1 and 2" to correspond to the separate development contracts.
4. The applicant shall label the sewer easements on sheet 1.
5. The applicant shall remove the proposed drainage easements on sheet 4, as pipe has not been placed yet.
6. The applicant shall label the FFE table on sheet 5 "Min. FFE".

PROCEDURAL REQUIREMENTS

1. The applicant shall submit a corrected electronic (PDF) version of the plan to the Planning Department. All revisions shall be clouded on the plan. The applicant shall submit an accompanying letter confirming that all conditions of approval have been satisfied.
2. The applicant shall be responsible for having the plan recorded in the Shelby County Register of Deeds' office after receipt of any necessary security, fees, and contracts to provide improvements required in the City of Lakeland Subdivision Regulations. The applicant shall obtain all required signatures on the plan prior to recordation.



Willows at the Lake Phase 1

Lakeland, Tennessee

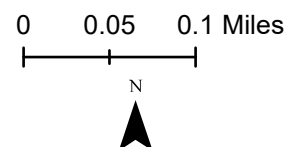
6.48 Acres
Zoned C-2

- Willows at the Lake Ph 1
 - Lakeland City Boundary
 - Street Centerline
 - Parcel
- Zoning Classification**
- AG
 - C-1
 - C-2
 - E-R
 - I-L
 - M-R
 - OS-2
 - OS-5
 - P
 - R-1
 - R-1 (PRD)
 - R-2
 - R-2 (PRD)
 - R-2A
 - R-3
 - RE

Lakeland Planning
Department
March 28, 2022

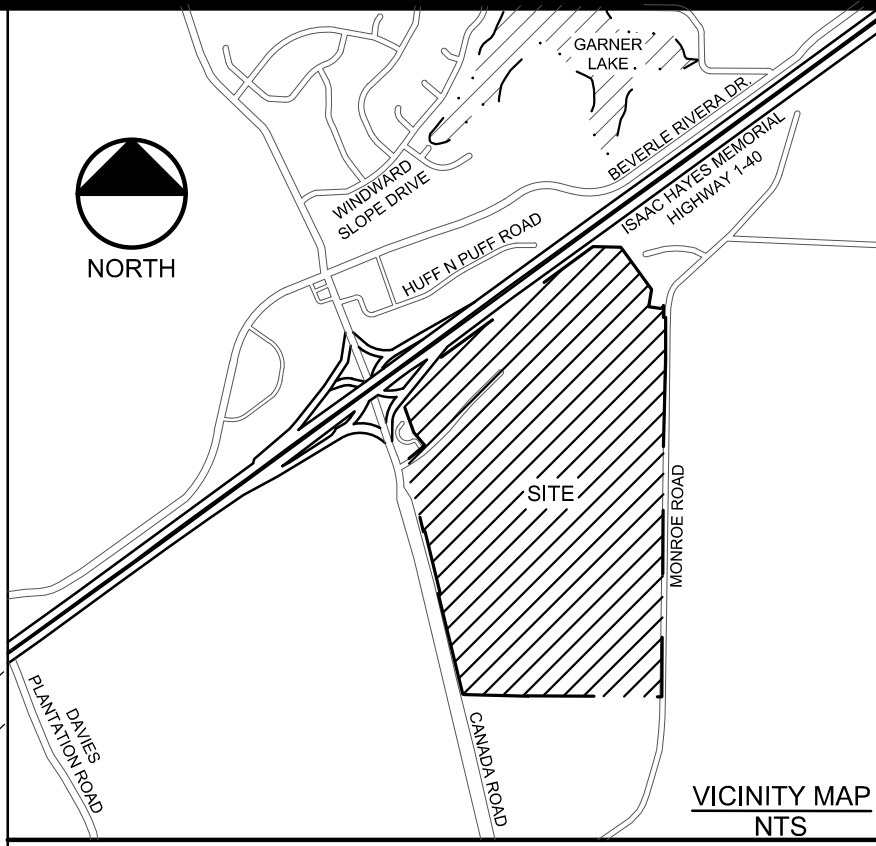
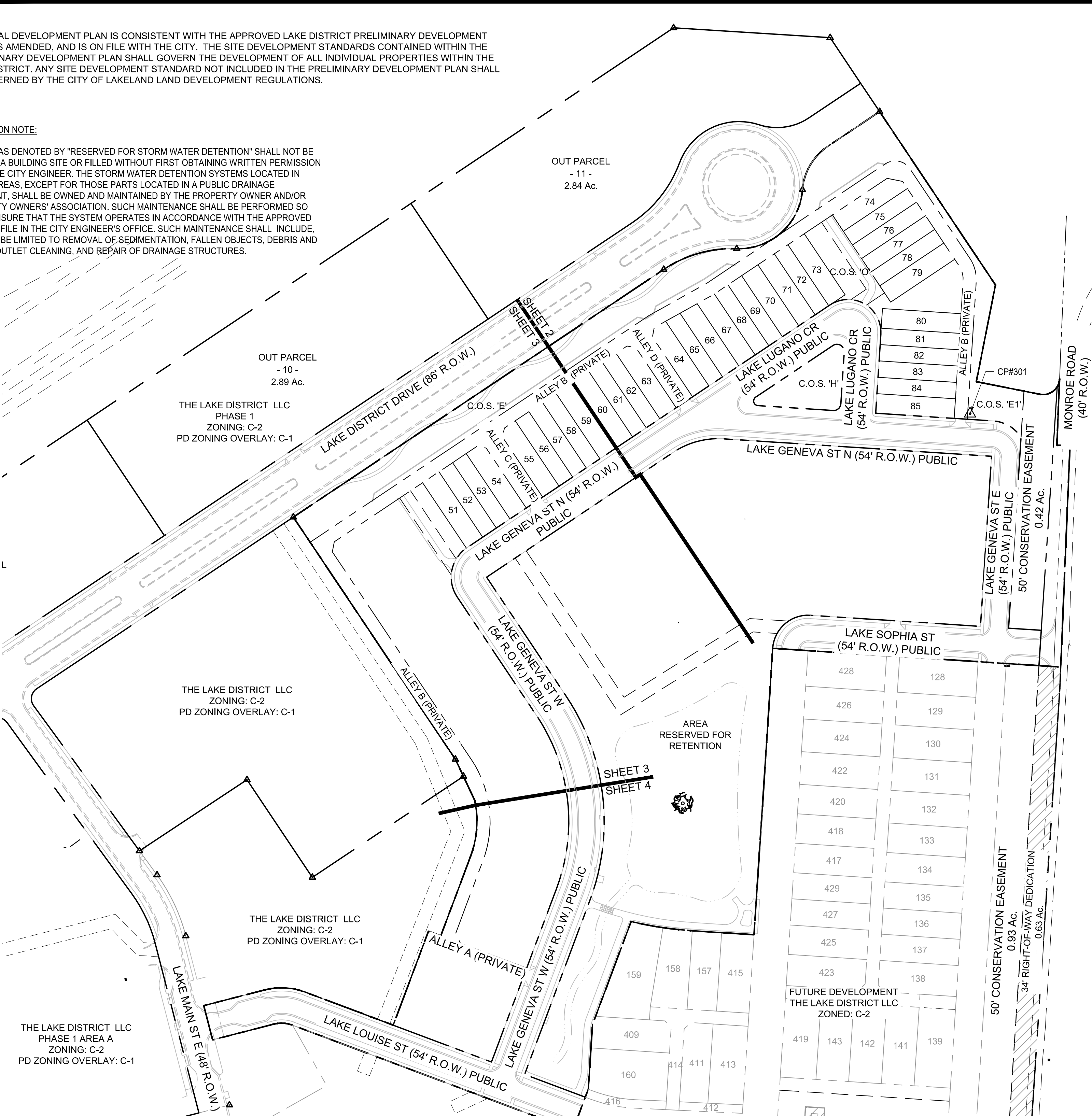
Sources:

Shelby Co. Assessor of
Property; ESRI;
Lakeland IT Dept.



NOTES:
THE FINAL DEVELOPMENT PLAN IS CONSISTENT WITH THE APPROVED LAKE DISTRICT PRELIMINARY DEVELOPMENT PLAN, AS AMENDED, AND IS ON FILE WITH THE CITY. THE SITE DEVELOPMENT STANDARDS CONTAINED WITHIN THE PRELIMINARY DEVELOPMENT PLAN SHALL GOVERN THE DEVELOPMENT OF ALL INDIVIDUAL PROPERTIES WITHIN THE LAKE DISTRICT. ANY SITE DEVELOPMENT STANDARD NOT INCLUDED IN THE PRELIMINARY DEVELOPMENT PLAN SHALL BE GOVERNED BY THE CITY OF LAKELAND LAND DEVELOPMENT REGULATIONS.

DETENTION NOTE:
THE AREAS DENOTED BY "RESERVED FOR STORM WATER DETENTION" SHALL NOT BE USED AS A BUILDING SITE OR FILLED WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM THE CITY ENGINEER. THE STORM WATER DETENTION SYSTEMS LOCATED IN THESE AREAS, EXCEPT FOR THOSE PARTS LOCATED IN A PUBLIC DRAINAGE EASEMENT, SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER AND/OR PROPERTY OWNERS' ASSOCIATION. SUCH MAINTENANCE SHALL BE PERFORMED SO AS TO ENSURE THAT THE SYSTEM OPERATES IN ACCORDANCE WITH THE APPROVED PLAN ON FILE IN THE CITY ENGINEER'S OFFICE. SUCH MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO REMOVAL OF SEDIMENTATION, FALLEN OBJECTS, DEBRIS AND TRASH, OUTLET CLEANING, AND REPAIR OF DRAINAGE STRUCTURES.



- NOTES:
- ALL BEARINGS BASED ON TENNESSEE STATE PLANE COORDINATE SYSTEM. NAD-83
 - ALL STREET LIGHTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
 - ALL PRIVATE FACILITIES, INCLUDING ALLEYS AND COMMON OPEN SPACES, ARE TO BE OWNED AND MAINTAINED BY PROPERTY OWNERS ASSOCIATION.
 - FENCES ARE NOTE PERMITTED WITHIN THE SCENIC CORRIDOR BUFFER. NO STRUCTURES SHALL BE PERMITTED IN THE SCENIC CORRIDOR BUFFER. THE SCENIC SHALL REMAIN UNDISTURBED; TREE REMOVAL SHALL ADHERE TO THE STANDARDS SET FORTH IN THE CITY OF LAKELAND'S LAND DEVELOPMENT REGULATIONS AND TREE MANAGEMENT ORDINANCE.
 - MAINTENANCE OF COMMON OPEN SPACE, PRIVATE ALLEYS, AND ALL OTHER COMMON PROPERTY IS THE RESPONSIBILITY OF THE PROPERTY OWNERS' ASSOCIATION.

CP#201
TOP OF IRON PIN W/F&A CAP
N:344435.04
E:852743.68

CP/TBM#202
TOP OF IRON PIN AT BACK OF CURB AT ENTRANCE TO EXXON
N:344774.49
E:853030.56
ELEV:400.85

CP/TBM#301
TOP OF IRON PIN AT PROPERTY CORNER
N:345833.92
E:855025.29
ELEV:389.42

FINAL DEVELOPMENT PLAT
THE WILLOWS AT THE LAKE
PHASE 1 (SECTION A)
35 LOTS 20.55 AC
LAKELAND, TENNESSEE
APRIL, 2022

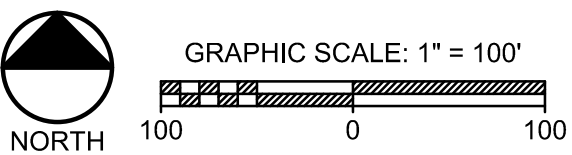


ENGINEERS • ARCHITECTS • PLANNERS

3009 Davies Plantation Road
Lakeland, TN 38002

901.372.0404
www.A2H.com

A2H, Inc.



FLOOD NOTE:
THIS AREA DOES NOT LIE WITHIN A DESIGNATED FLOOD ZONE AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP, PER FIRM PANEL 47157C0330G, EFFECTIVE DATE: 02/06/2013

COMMON OPEN SPACE	=	1.91 AC.
LOTS	=	2.57 AC.
RIGHT-OF-WAY	=	4.15 AC.
ALLEYS	=	1.17 AC.
REMAINING	=	10.75 AC.

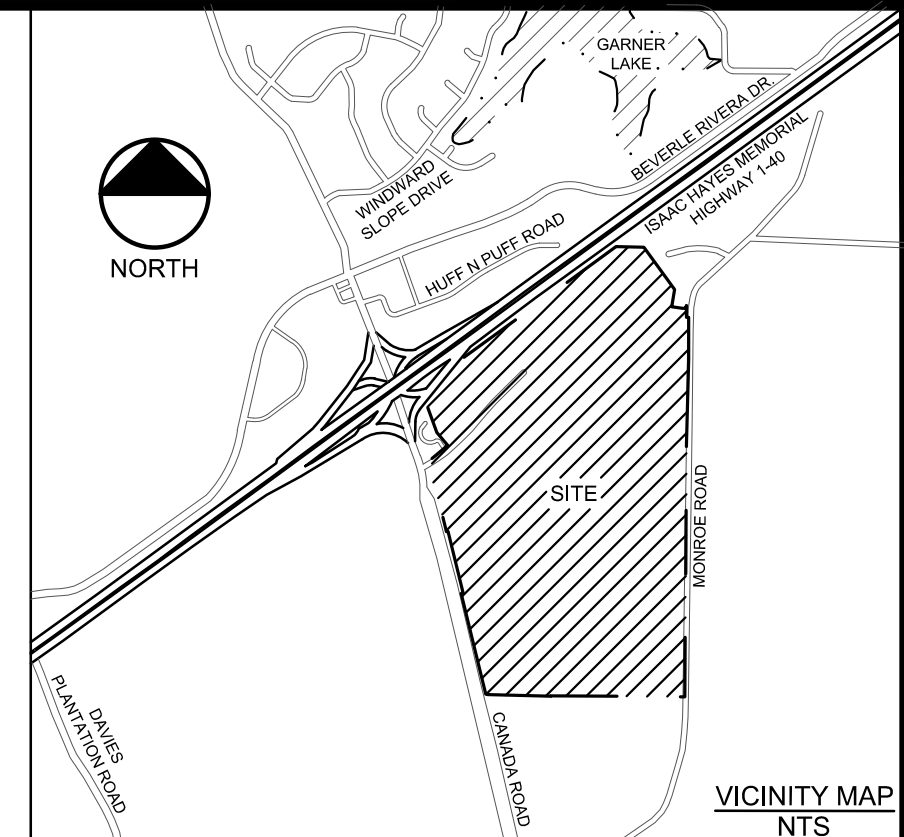
SETBACKS (IN FEET)	
FRONT	10
CORNER SIDE	7
SIDE	5
REAR	5

DEVELOPER:

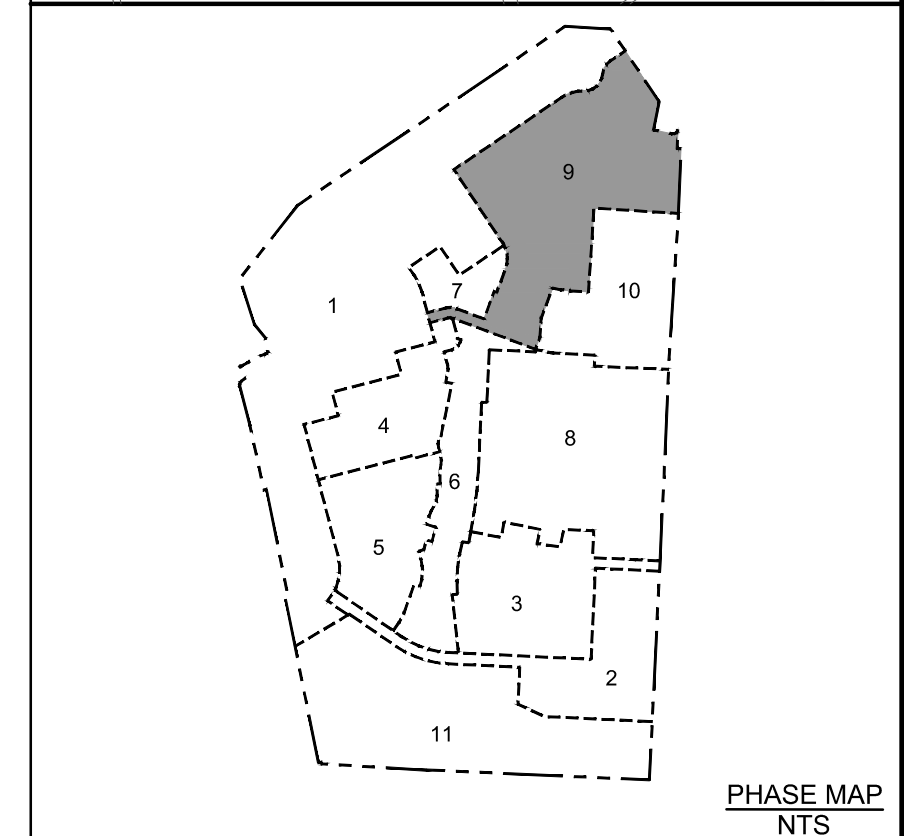
5959 Topanga Canyon Boulevard
Woodland Hills, CA 91367

OUT PARCEL
- 11 -
2.84 Ac.
THE LAKE DISTRICT LLC
PHASE 1
ZONING: C-2
PD ZONING OVERLAY: C-1

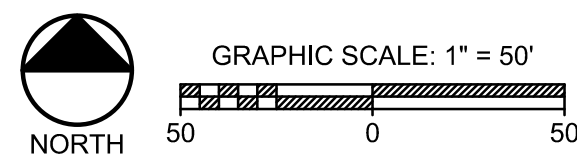
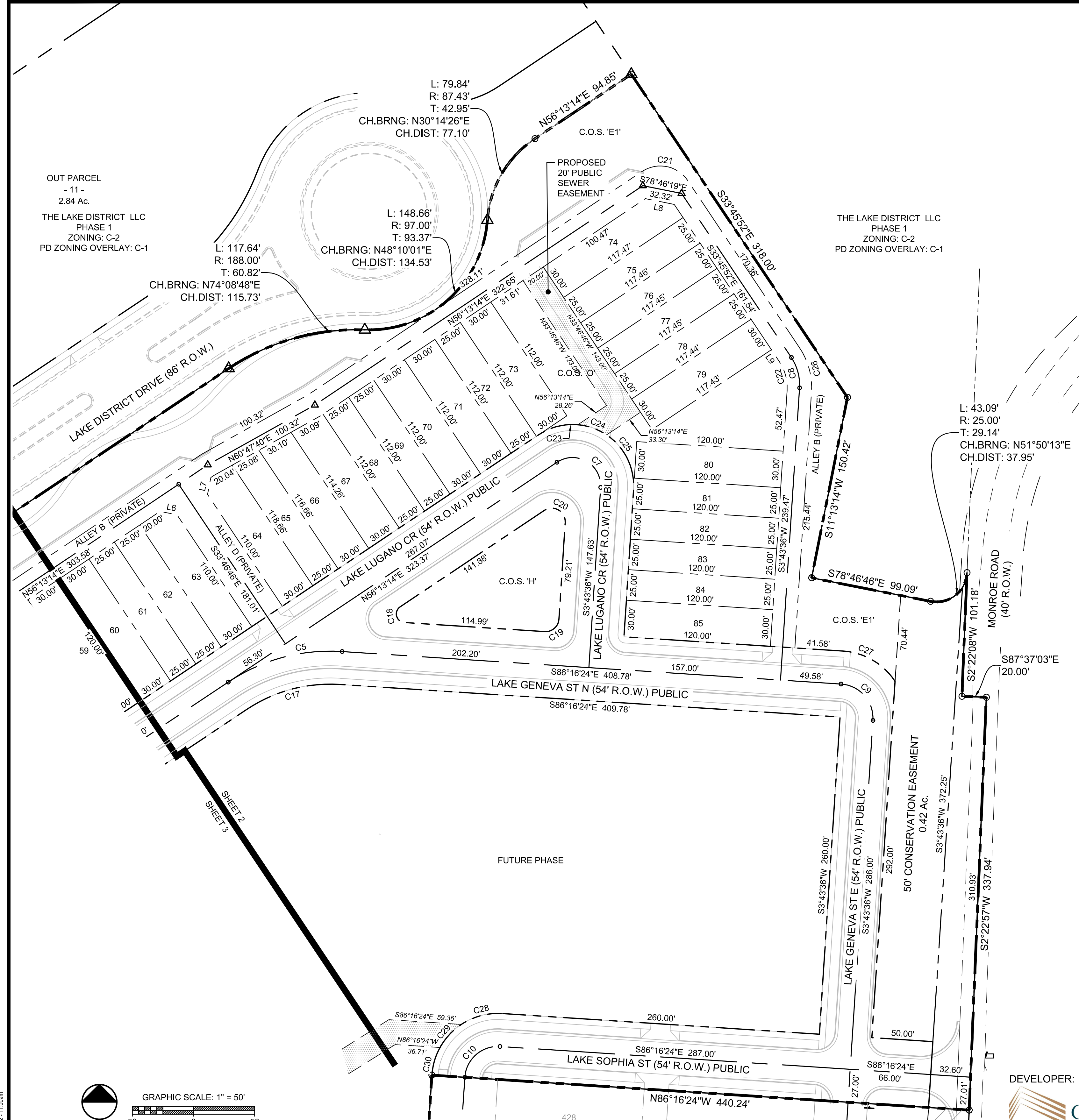
THE LAKE DISTRICT LLC
PHASE 1
ZONING: C-2
PD ZONING OVERLAY: C-1



VICINITY MAP
NTS



PHASE MAP
NTS



FINAL DEVELOPMENT PLAT
THE WILLOWS AT THE LAKE
PHASE 1 (SECTION A)
35 LOTS 20.55 AC
LAKELAND, TENNESSEE
APRIL, 2022

DEVELOPER:



5959 Topanga Canyon Boulevard
Woodland Hills, CA 91367



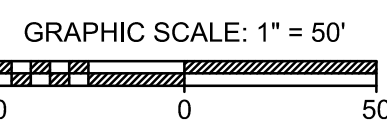
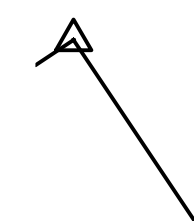
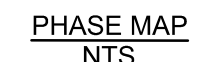
ENGINEERS - ARCHITECTS - PLANNERS

3009 Davies Plantation Road
Lakeland, TN 38002

901.372.0404
www.A2H.com

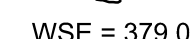
A2H, Inc.

THE LAKE DISTRICT LLC
PHASE 1
ZONING: C-2
PD ZONING OVERLAY: C-1

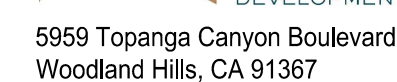


FUTURE PHASE

SHEET 3
SHEET 4



DEVELOPER:



FINAL DEVELOPMENT PLAT

THE WILLOWS AT THE LAKE
PHASE 1 (SECTION A)

35 LOTS 20.55 AC
LAKELAND, TENNESSEE
APRIL, 2022

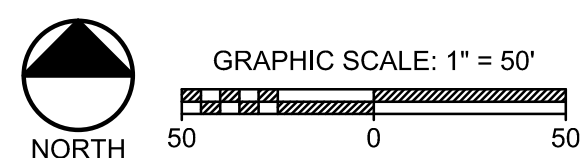
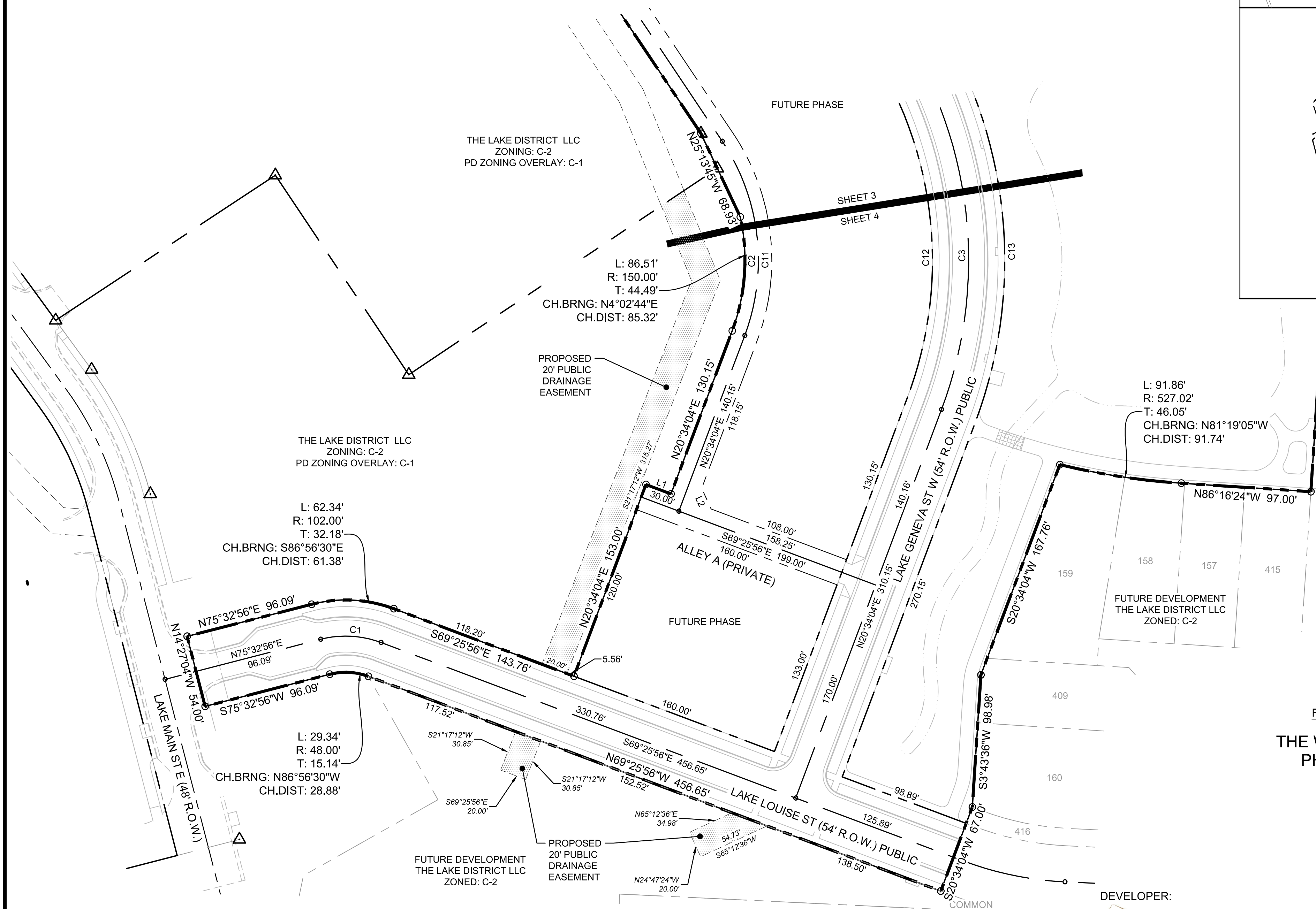
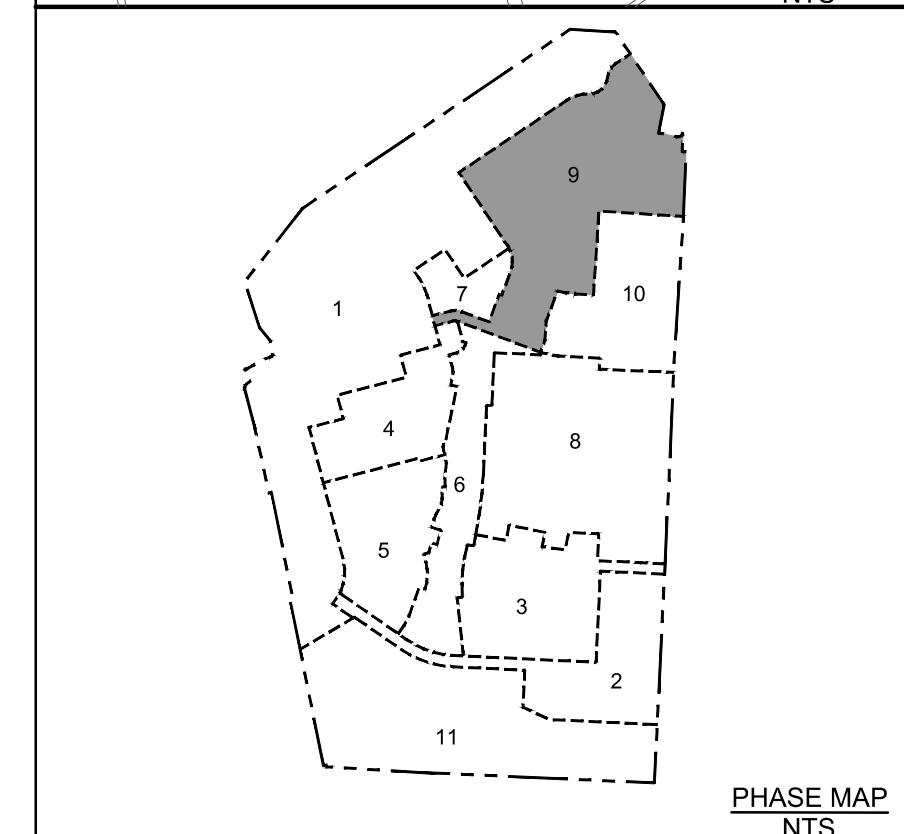
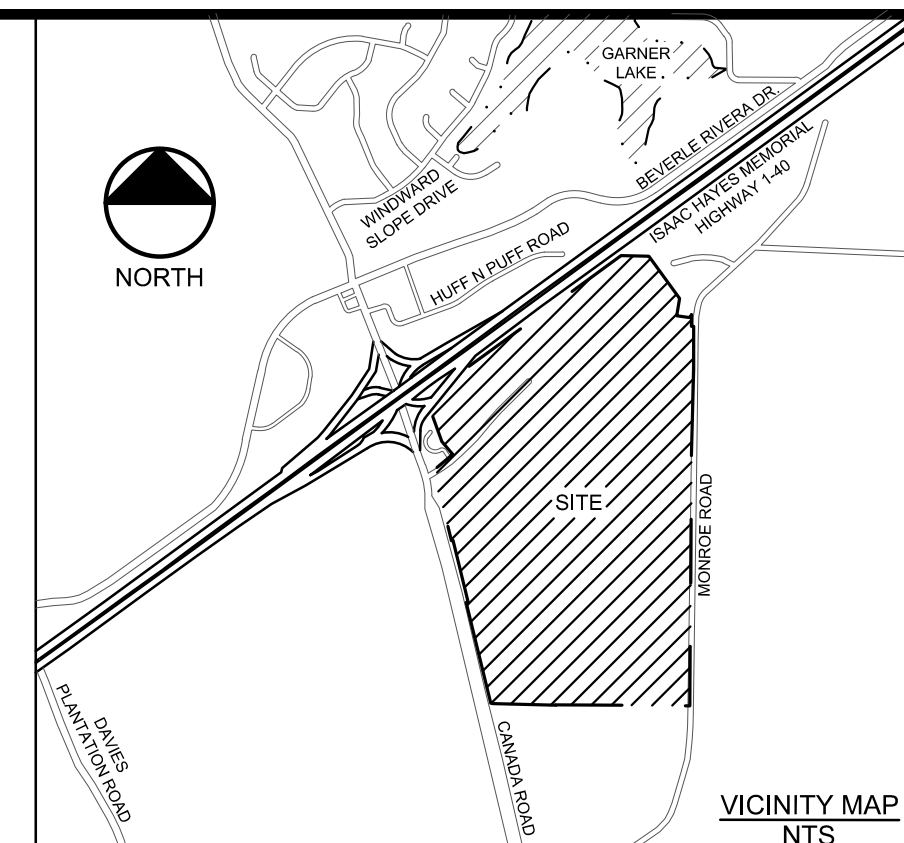
A2H

ENGINEERS • ARCHITECTS • PLANNERS

3009 Davies Plantation Road
Lakeland, TN 38002

901.372.0404
www.A2H.com

SHEET 3 OF 6



DEVELOPER:



5959 Topanga Canyon Boulevard
Woodland Hills, CA 91367

FINAL DEVELOPMENT PLAT

THE WILLOWS AT THE LAKE
PHASE 1 (SECTION A)

35 LOTS 20.55 AC
LAKELAND, TENNESSEE
APRIL, 2022

A2H

ENGINEERS • ARCHITECTS • PLANNERS

3009 Davies Plantation Road
Lakeland, TN 38002

901.372.0404
www.A2H.com

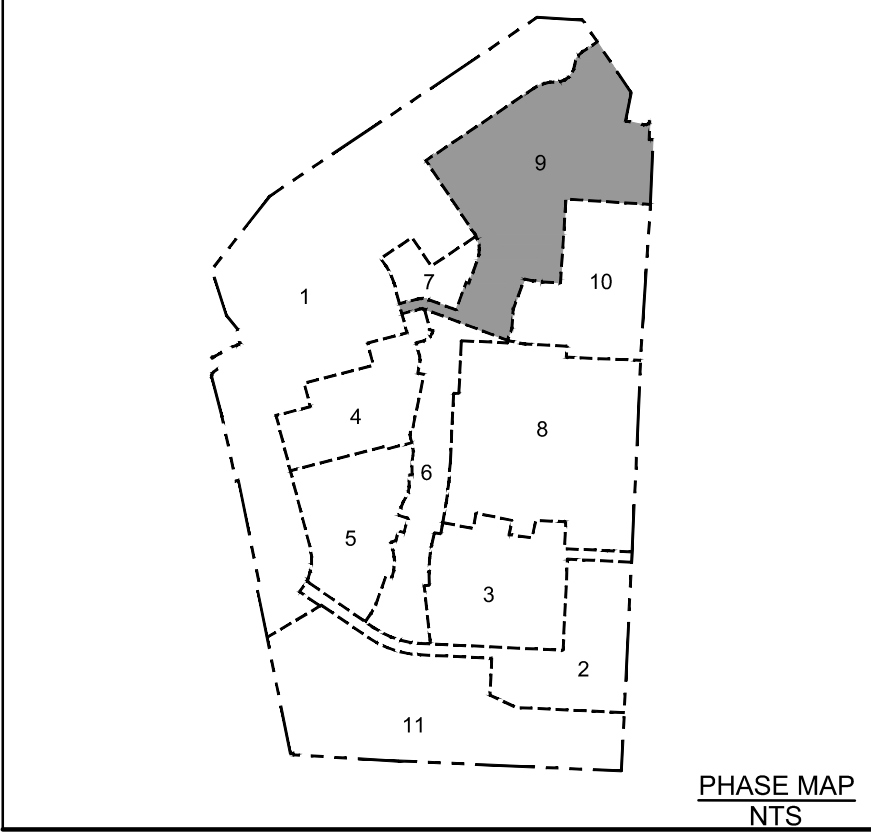
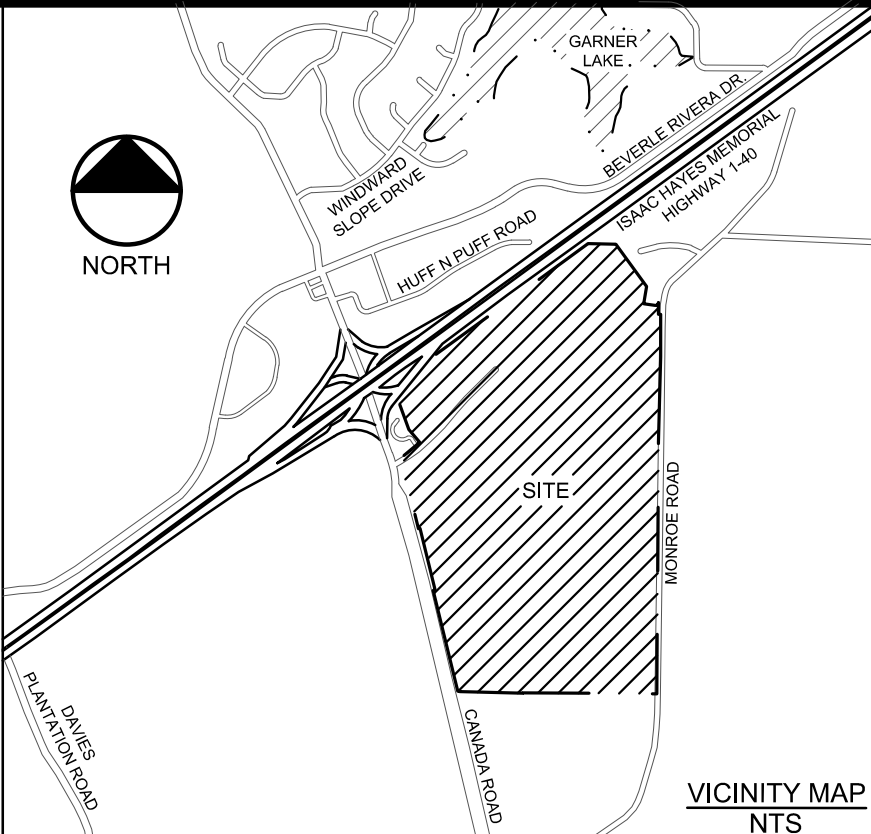
A2H Inc

SHEET 4 OF 6

Curve Table: Centerline					
Curve #	Radius	Length	Delta	Chord Direction	Chord Length
C1	75.00'	45.84'	35.02'	S86°56'30"E	45.13'
C2	160.00'	151.77'	54.35'	N06°36'21"W	146.14'
C3	317.00'	300.69'	54.35'	N06°36'21"W	289.54'
C4	27.00'	42.41'	90.00'	N11°13'14"E	38.18'
C5	150.00'	98.19'	37.51'	N74°58'25"E	96.45'
C7	23.00'	51.18'	127.51'	S60°01'35"E	41.26'
C8	40.00'	26.17'	37.49'	S15°01'08"E	25.71'
C9	28.00'	43.98'	90.00'	S41°16'24"E	39.60'
C10	27.00'	42.41'	90.00'	N48°43'36"E	38.18'

Parcel Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C11	25.04'	170.00'	8.44'	N0° 10' 19"W	25.02'
C12	25.01'	290.00'	4.94'	N0° 39' 31"E	25.01'
C13	326.30'	344.00'	54.35'	S6° 36' 21"E	314.20'
C14	35.08'	54.00'	37.22'	S15° 10' 07"E	34.47'
C15	25.98'	54.00'	27.57'	S17° 13' 37"W	25.73'
C16	23.76'	54.00'	25.21'	S43° 36' 57"W	23.57'
C17	43.90'	123.00'	20.45'	S83° 30' 06"W	43.67'
C18	17.41'	7.00'	142.49'	N15° 01' 35"W	13.26'
C19	17.28'	11.00'	90.00'	S48° 43' 36"W	15.56'
C20	24.48'	11.00'	127.51'	S60° 01' 35"E	19.73'
C21	42.42'	27.00'	90.02'	S78° 46' 19"E	38.19'
C22	24.87'	38.00'	37.49'	N15° 01' 08"W	24.42'
C23	33.81'	50.00'	38.74'	S75° 35' 24"W	33.17'
C24	25.24'	50.00'	28.93'	N70° 34' 36"W	24.98'
C25	52.22'	50.00'	59.84'	N26° 11' 36"W	49.88'
C26	37.95'	58.00'	37.49'	S15° 01' 08"E	37.28'
C27	51.00'	55.00'	53.13'	S59° 42' 30"E	49.19'
C28	35.08'	54.00'	37.22'	S75° 06' 56"W	34.47'
C29	25.98'	54.00'	27.57'	S42° 43' 13"W	25.73'
C30	23.76'	54.00'	25.21'	S16° 19' 53"W	23.57'

Parcel Line Table		
Line #	Length	Direction
L1	20.00'	N69°25'56"W
L2	16.97'	N24°25'56"W
L3	15.56'	N11°13'14"E
L4	14.14'	S78°46'46"E
L5	14.14'	S11°13'14"W
L6	14.14'	N78°46'46"W
L7	14.14'	S11°13'14"W
L8	24.04'	N78°46'19"W
L9	11.68'	N33°45'52"W



PARCEL DATA	
LOT	SQ. FT.
51	3,600
52	3,000
53	3,000
54	3,550
55	3,550
56	3,000
57	3,000
58	3,000
59	3,600
60	3,600
61	3,000
62	3,000
63	3,550
64	3,539
65	2,942
66	3,464
67	3,392
68	2,800

PARCEL DATA	
LOT	SQ. FT.
69	2,800
70	3,360
71	3,360
72	2,800
73	3,360
74	3,379
75	2,937
76	2,936
77	2,936
78	2,936
79	3,523
80	3,600
81	3,000
82	3,000
83	3,000
84	3,000
85	3,600

COMMON OPEN SPACE		
AREA NAME	SQ. FT.	ACRES
C.O.S. 'E'	36,355	0.83
C.O.S. 'E1'	22,371	0.51
C.O.S. 'H'	8,028	0.18
C.O.S. 'O'	13,365	0.31

FINISH FLOOR ELEVATIONS	
LOT #	FFE
51	387.0
52	387.0
53	387.0
54	387.0
55	387.5
56	387.5
57	387.5
58	387.5
59	387.5
60	388.5
61	389.5
62	389.5
63	389.5
64	390.0
65	390.0
66	390.0
67	390.5
68	390.5
69	390.5
70	390.5
71	391.0
72	391.0
73	391.0
74	390.5
75	390.5
76	391.0
77	391.0
78	391.5
79	391.5
80	392.5
81	392.5
82	392.5
83	393.5
84	393.5
85	393.5

FINAL DEVELOPMENT PLAT

THE WILLOWS AT THE LAKE
PHASE 1 (SECTION A)
35 LOTS 20.55 AC
LAKELAND, TENNESSEE
APRIL, 2022

A2H

ENGINEERS • ARCHITECTS • PLANNERS

3009 Davies Plantation Road
Lakeland, TN 38002

901.372.0404
www.A2H.com

A2H, Inc.

DEVELOPER:



5959 Topanga Canyon Boulevard
Woodland Hills, CA 91367

CERTIFICATE OF MORTGAGEE AND DEDICATION

We, the Mortgagee, _____, do hereby freely consent to the Subdivision of this property in accordance with the Final Plat; dedicate the Public Improvements, Easements, or lands herein specifically identified for dedication, to the appropriate agencies as outlined in this Plat and approved by the Municipal Planning Commission of Lakeland, Tennessee for the purposes of operation, construction and maintenance of these improvements, as needed for the proper development and maintenance of said Subdivision.

Date: 12/3/2021
Signature of Authorized Agent of Mortgagee _____

CERTIFICATE OF ENGINEER

I Michael Howell, a Professional Engineer, do hereby certify that the design of public and private improvements provided for in the Preliminary Plat / Construction Plans / Final Plat (whichever is applicable) are in accordance with acceptable engineering practices, the Tennessee Department of Environment and Conservation, City of Lakeland Manual for Public Works and Materials Specifications, and all City of Lakeland ordinances, including Subdivisions. In witness whereof, I the said Michael Howell, a Professional Engineer, hereunto set out hand and affix my seal this 12th day of April, 2022.



Tennessee Registration No. 119671
M. Howell Professional Engineer

CERTIFICATE OF SURVEYOR

State of Tennessee
County of Shelby
I, Michael W. McCulley, hereby certify that this plat was prepared from an actual survey made by me during the month of August, 2019, and that this plat or site plan correctly represents said survey. all bearings are referenced to the Tennessee State Plane Coordinate system, NAD 83; all required subdivision monuments are marked in accordance with Lakeland Subdivision Standards; the precision of the unadjusted survey is 1:10,000 or greater and all special flood hazard areas are located as per the latest flood insurance rate map. All dimensions are expressed in feet and decimals. all bearings, distances, and field information are true and correct to the best of my knowledge.

Michael W. McCulley, RLS

Tennessee Registration No. 1905



CERTIFICATE OF OWNER(S) AND DEDICATION

The undersigned, _____, (etc.) hereby certify that they are the owners of the foregoing property and that the plat is with the free consent and in accordance with the desires of the above named owners, proprietors, do hereby dedicate to the City of Lakeland all Public Improvements, Easements, or lands herein specifically identified for dedication, for the purposes of operation, construction and maintenance of these improvements, as needed for the proper development and maintenance of said Subdivision.

Date: NOVEMBER 9, 2021
Signature of Owner(s) Include Notary Seal and Signature _____



CERTIFICATE OF MUNICIPAL PLANNING COMMISSION APPROVAL - SUBDIVISION

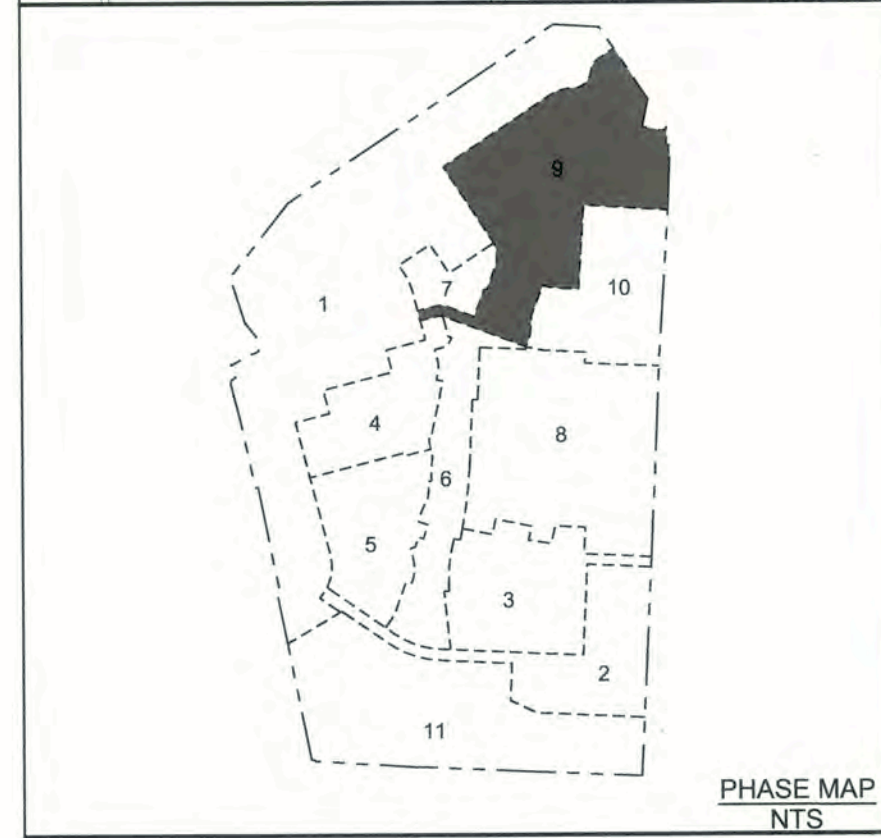
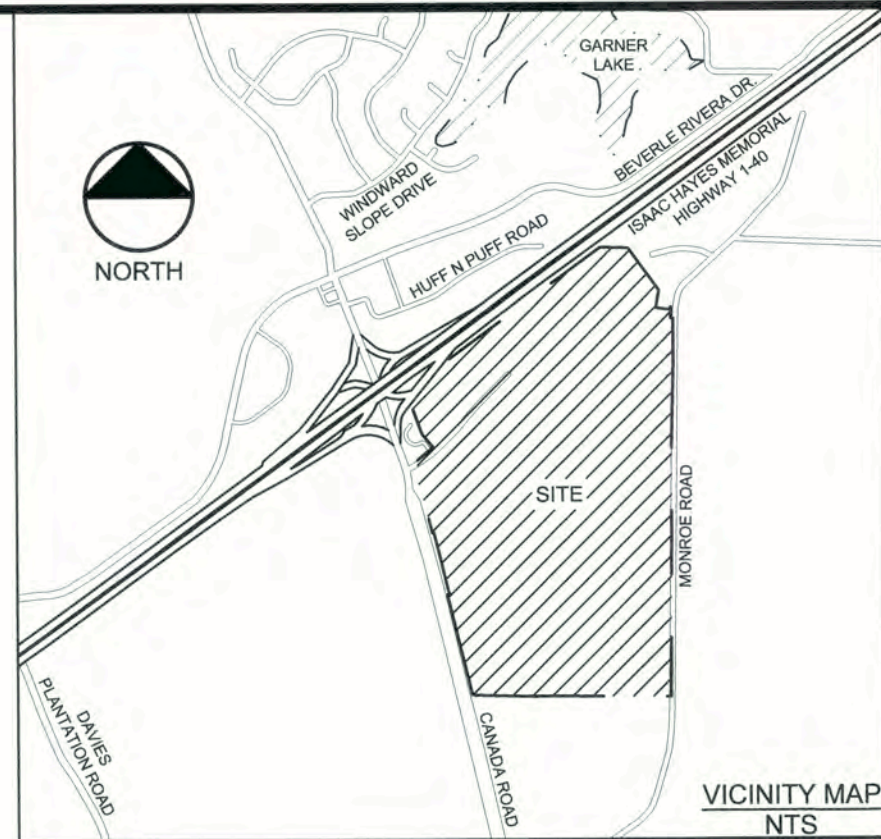
I, _____ do hereby certify that the City of Lakeland Municipal Planning Commission has approved this Final Plat. The signing of this certificate shall in no way be deemed to constitute or effect an acceptance of the dedication of any street, improvement, or other ground shown upon the plat.

Date: _____
MPC Secretary _____

CERTIFICATE OF CITY ENGINEER

The Final Plat is reviewed and deemed compliant with the Land Development Regulations, subject to any waivers, modifications, or variances thereof granted by the City of Lakeland.

Date: _____
City Engineer _____



FINAL DEVELOPMENT PLAT

THE WILLOWS AT THE LAKE
PHASE 1 (SECTION A)
35 LOTS 20.55 AC
LAKELAND, TENNESSEE
APRIL, 2022

A2H

ENGINEERS • ARCHITECTS • PLANNERS

3009 Davies Plantation Road
Lakeland, TN 38002

901.372.0404
www.A2H.com

A2H, Inc.

DEVELOPER:



5959 Topanga Canyon Boulevard
Woodland Hills, CA 91367



April 12, 2022

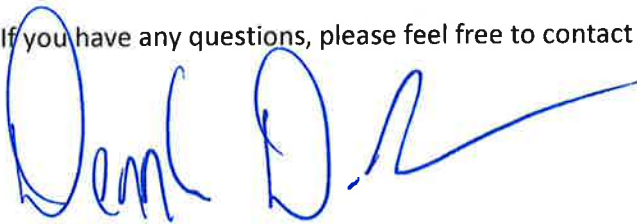
Donald Anthony, Planning Director
Cc: Emily Harrell, PE
City of Lakeland
10001 Highway 70
Lakeland, TN 38002

RE: The Willows at the Lake Phase 1 (Formerly Phase 9)
Final Development Review Response

- 1) Provide acreage breakdown by land use (lots, right-of-way, and open space). *See sheet 1 of 6 – DDT*
- 2) Indicate locations of all concrete/iron monuments, fire hydrants, sidewalks, curbs, and gutters. Add legend for symbols. *MLGW design final location of hydrants, therefore we do not show them on the final plat. Refer to Utility Plan of construction documents for general locations of fire hydrants. The location of sidewalks, curb and gutter are now shown and screened back. The iron monuments are located on page 1 of 6 – DDT*
- 3) Private alleys are marked “ROW” on the plat. The “ROW” designation is typically used for public facilities, not private alleys. Revise at resubmittal. *This has now been revised – DDT*
- 4) Private alleys are shown with 18-foot width on the plat. Exhibit R in the amended preliminary development plan shows alleys at 20 feet with 5-foot utility easements on each side. Revise at resubmittal to be consistent with approved preliminary development plan. Lots without public street frontage are to have a width sufficient for fire vehicles. *Revised – DDT*
- 5) The scope of the project is unclear based on the sheets included in the initial submittal. Is sheet 4 included because of the drainage easement? Remove this sheet if it is not necessary for this phase. *Sheet shall remain, we are platting all the R.O.W.s and easements in this phase. – DDT*
- 6) Combine plats for phases 1 and 2. If this is not possible, provide reasoning. *They have been combined now – DDT*
- 7) The plat must be signed by the mortgagee, owner, engineer, and surveyor at resubmittal. *Executed – DDT*
- 8) Add note: All private facilities, including alleys and common open spaces, are to be owned and maintained by property owners’ association. *Note has been added, see #3 sheet 1 of 6 – DDT*

- 9) Verify that all required street trees have been planted and are in healthy condition. *Client has been notified – DDT*
- 10) Add setback information: 10-feet front, 5-feet side and rear, 7-feet corner. *Shown on sheet 1 of 6 – DDT*
- 11) Add flood certification. FIRM Panel 47157C0330G, 2/6/2013. *Note has been added, see sheet 1 of 6 – DDT*
- 12) Add the following note to the plat: "Fences are not permitted within the Scenic Corridor Buffer. No structures shall be permitted in the Scenic Corridor Buffer. The Scenic Corridor Buffer shall remain undisturbed; tree removal shall adhere to the standards set forth in the City of Lakeland's Land Development Regulations and Tree Management Ordinance." *Note has been added, see #4 sheet 1 of 6 – DDT*
- 13) Add note indicating that maintenance of common open space, private alleys, and all other common property is the responsibility of the property owners' association. *Comment 8 & 13 are the same thing – DDT*
- 14) If required submittal fee has not already been paid, it must be paid at resubmittal. *Duly noted – DDT*

If you have any questions, please feel free to contact me.



Deadrick D. Turner



Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:29:45 PM
Status:
Color: ■
Layer:
Space:

Is this part of COS D or E? It was not included in the PDP amendment

IT'S PART OF E - DDT



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:55:47 PM
Status:
Color: ■
Layer:
Space:

Add notes for COS Maintenance, Scenic Corridor Restriction/Maintenance and Alley Maintenance

Add table of Finish Floor Elevations for each lot.

SEE SHEET 5 of 6 - DDT



Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:30:50 PM
Status:
Color: ■
Layer:
Space:

Label Lake Sofia St within hatched area. We will not be platting the road outside of the hatched area

I HAVE REMOVED HATCH; ALL R.O.V.S WILL BE PLATTED - DDT



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:42:02 PM
Status:
Color: ■
Layer:
Space:

Add - Property not located in 100 year SFHA and reference FIRM Panel

COMPLETED - DDT



Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:44:42 PM
Status:
Color: ■
Layer:
Space:

Label Sewer Easement

SEE 2 OF 6 - DDT



Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:47:30 PM
Status:
Color: ■
Layer:
Space:

Label Sewer Easement

SEE 3 OF 6 - DDT



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:49:32 PM
Status:
Color: ■
Layer:
Space:

Lake Louise ROW should remain consistent 54ft

CORRECTED - PDT

FUTURE PHASE



Subject: Line
Page Label: 2
Author: EHarrell
Date: 3/30/2022 1:42:47 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 2
Author: EHarrell
Date: 3/30/2022 1:42:53 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 2
Author: EHarrell
Date: 3/30/2022 1:42:59 PM
Status:
Color: ■
Layer:
Space:



Subject: Text Box
Page Label: 2
Author: EHarrell
Date: 3/30/2022 1:43:20 PM
Status:
Color: ■
Layer:
Space:

Remove

CORRECTED - DDI



Subject: Line
Page Label: 3
Author: EHarrell
Date: 3/30/2022 1:50:01 PM
Status:
Color: ■
Layer:
Space:

Remove

Subject: Text Box
Page Label: 3
Author: EHarrell
Date: 3/30/2022 1:50:21 PM
Status:
Color: ■
Layer:
Space:

Remove

? - DDT



Subject: Line
Page Label: 3
Author: EHarrell
Date: 3/30/2022 1:50:25 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 3
Author: EHarrell
Date: 3/30/2022 1:50:38 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 4
Author: EHarrell
Date: 3/30/2022 1:51:18 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 4
Author: EHarrell
Date: 3/30/2022 1:51:25 PM
Status:
Color: ■
Layer:
Space:

Remove Not part of this phase

PROPOSED 20' PUBLIC DRAINAGE

Subject: Callout
Page Label: 4
Author: EHarrell
Date: 3/30/2022 1:52:13 PM
Status:
Color: ■
Layer:
Space:

Remove Not part of this phase

NOT CLEAR OF THIS LOCATION - DDT
~~IT IS PART~~



Plan Review – Initial Submittal

Date:	April 1, 2022
Project Title:	The Willows at the Lake, Phase 1 (Lake District Planned Development) Final Development Plan
Applicant:	Deadrick Turner, A2H deadrickt@a2h.com yehuda@thelakedistrict.us

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **April 21, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on April 12, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. See attached Engineering comments.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

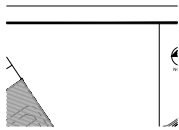
1. Provide acreage breakdown by land use (lots, right-of-way, and open space).
2. Indicate locations of all concrete/iron monuments, fire hydrants, sidewalks, curbs, and gutters. Add legend for symbols.
3. Private alleys are marked "ROW" on the plat. The "ROW" designation is typically used for public facilities, not private alleys. Revise at resubmittal.
4. Private alleys are shown with 18-foot width on the plat. Exhibit R in the amended preliminary development plan shows alleys at 20 feet with 5-foot utility easements on each

side. Revise at resubmittal to be consistent with approved preliminary development plan. Lots without public street frontage are to have a width sufficient for fire vehicles.

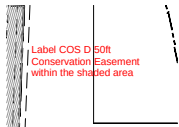
5. The scope of the project is unclear based on the sheets included in the initial submittal. Is sheet 4 included because of the drainage easement? Remove this sheet if it is not necessary for this phase.
6. Combine plats for phases 1 and 2. If this is not possible, provide reasoning.
7. The plat must be signed by the mortgagee, owner, engineer, and surveyor at resubmittal.
8. Add note: All private facilities, including alleys and common open spaces, are to be owned and maintained by property owners association.
9. Verify that all required street trees have been planted and are in healthy condition.
10. Add setback information: 10-feet front, 5-feet side and rear, 7-feet corner.
11. Add flood certification. FIRM Panel 47157C0330G, 2/6/2013.
12. Add the following note to the plat: "Fences are not permitted within the Scenic Corridor Buffer. No structures shall be permitted in the Scenic Corridor Buffer. The Scenic Corridor Buffer shall remain undisturbed; tree removal shall adhere to the standards set forth in the City of Lakeland's Land Development Regulations and Tree Management Ordinance."
13. Add note indicating that maintenance of common open space, private alleys, and all other common property is the responsibility of the property owners' association.
14. If required submittal fee has not already been paid, it must be paid at resubmittal.

Lakeland Commons PD Lot 4, Site Plan.pdf Markup Summary

EHarrell (24)



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:08:35 PM
Status:
Color: ■
Layer:
Space:



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:30:45 PM
Status:
Color: ■
Layer:
Space:

Label COS D 50ft Conservation Easement within the shaded area

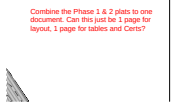


Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:13:52 PM
Status:
Color: ■
Layer:
Space:

Why are we platting alleys and roads that are not part of this phase and do not provide access to the phase?

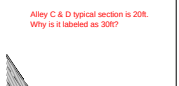


Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:12:57 PM
Status:
Color: ■
Layer:
Space:



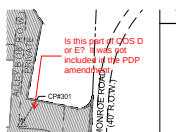
Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:44:21 PM
Status:
Color: ■
Layer:
Space:

Combine the Phase 1 & 2 plats to one document. Can this just be 1 page for layout, 1 page for tables and Certs?



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:20:08 PM
Status:
Color: ■
Layer:
Space:

Alley C & D typical section is 20ft. Why is it labeled as 30ft?



Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:29:45 PM
Status:
Color: ■
Layer:
Space:

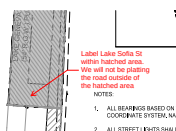
Is this part of COS D or E? It was not included in the PDP amendment



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:55:47 PM
Status:
Color: ■
Layer:
Space:

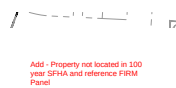
Add notes for COS Maintenance, Scenic Corridor Restriction/Maintenance and Alley Maintenance

Add table of Finish Floor Elevations for each lot.



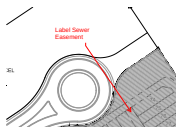
Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:30:50 PM
Status:
Color: ■
Layer:
Space:

Label Lake Sofia St within hatched area. We will not be platting the road outside of the hatched area



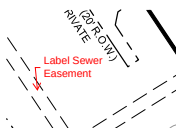
Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:42:02 PM
Status:
Color: ■
Layer:
Space:

Add - Property not located in 100 year SFHA and reference FIRM Panel



Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:44:42 PM
Status:
Color: ■
Layer:
Space:

Label Sewer Easement



Subject: Callout
Page Label: 1
Author: EHarrell
Date: 3/30/2022 1:47:30 PM
Status:
Color: ■
Layer:
Space:

Label Sewer Easement

Lake Louise ROW should remain consistent 54ft

Space:

Space:

Space:

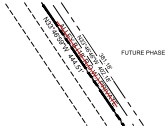
Remove

Space:

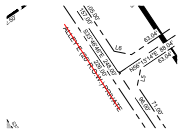
Remove

Subject: Text Box
Page Label: 3
Author: EHarrell
Date: 3/30/2022 1:50:21 PM
Status:
Color: ■
Layer:
Space:

Remove



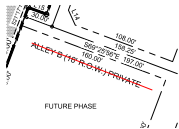
Subject: Line
Page Label: 3
Author: EHarrell
Date: 3/30/2022 1:50:25 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 3
Author: EHarrell
Date: 3/30/2022 1:50:38 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 4
Author: EHarrell
Date: 3/30/2022 1:51:18 PM
Status:
Color: ■
Layer:
Space:



Subject: Line
Page Label: 4
Author: EHarrell
Date: 3/30/2022 1:51:25 PM
Status:
Color: ■
Layer:
Space:

Remove Not part of this phase



Subject: Callout
Page Label: 4
Author: EHarrell
Date: 3/30/2022 1:52:13 PM
Status:
Color: ■
Layer:
Space:

Remove Not part of this phase



Plan Review – Initial Submittal

Date:	April 1, 2022
Project Title:	The Willows at the Lake, Phase 2 (Lake District Planned Development) Final Development Plan
Applicant:	Deadrick Turner, A2H deadrickt@a2h.com yehuda@thelakedistrict.us

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **April 21, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on April 12, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. See attached Engineering comments.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

1. Indicate locations of all concrete/iron monuments, fire hydrants, sidewalks, curbs, and gutters. Add legend for symbols.
2. Private alleys are marked "ROW" on the plat. The "ROW" designation is typically used for public facilities, not private alleys. Revise at resubmittal.
3. Private alleys are shown with 18-foot width on the plat. Exhibit R in the amended preliminary development plan shows alleys at 20 feet with 5-foot utility easements on each

side. Revise at resubmittal to be consistent with approved preliminary development plan. Lots without public street frontage are to have a width sufficient for fire vehicles.

4. Combine plats for phases 1 and 2. If this is not possible, provide reasoning.
5. The plat must be signed by the mortgagee, owner, engineer, and surveyor at resubmittal.
6. Add note: All private facilities, including alleys and common open spaces, are to be owned and maintained by property owners association.
7. Verify that all required street trees have been planted and are in healthy condition.
8. Add setback information: 10-feet front, 5-feet side and rear, 7-feet corner.
9. Add flood certification. FIRM Panel 47157C0330G, 2/6/2013.
10. Add the following note to the plat: "Fences are not permitted within the Scenic Corridor Buffer. No structures shall be permitted in the Scenic Corridor Buffer. The Scenic Corridor Buffer shall remain undisturbed; tree removal shall adhere to the standards set forth in the City of Lakeland's Land Development Regulations and Tree Management Ordinance."
11. Add note indicating that maintenance of common open space, private alleys, and all other common property is the responsibility of the property owners' association.
12. If required submittal fee has not already been paid, it must be paid at resubmittal.



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of a Sign Plan Amendment for The Lake District Planned Development.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Date: Thursday, April 21, 2022

Project: The Lake District Planned Development
Sign Plan Amendment

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: Right-of-way on the east side of Canada Road, south of Interstate 40

Parcel ID: Public right-of-way

Zoning District: C-2 (Regional Commercial District)

Site Area: N/A

Applicant: Yehuda Netanel, Gilad Development Inc.

Representative: Maureen Yarborough, Sign Matters Inc.

STAFF RECOMMENDATION

Staff makes no recommendation for this request. However, any approval should be subject to the following conditions:

1. Applicant shall satisfy all staff comments, except those waived by the Design Review Commission.
2. Applicant shall satisfy all Design Review Commission comments.
3. Applicant shall satisfy all Procedural Requirements listed in this Staff Report.

DISCUSSION

The applicant, Yehuda Netanel of Gilad Development Inc. represented by Maureen Yarborough of Sign Matters Inc., requests approval of an amendment to the Sign Plan for The Lake District, located along the east side of Canada Road, south of Interstate 40. At its meeting on July 16,

2020, the Design Review Commission disapproved the applicant's original Sign Plan. Upon appeal by the applicant, the Board of Commissioners approved the Sign Plan on August 13, 2020. The staff report, resolution, and approved Sign Plan are available for review on the City's agenda center website at <https://www.lakelandtn.gov/ArchiveCenter/ViewFile/Item/943>.

Though the original Sign Plan was ultimately approved by the Board of Commissioners, it was done so through an appeals process. Per Municipal Code § 14-409(4), the Design Review Commission retains the authority to review and approve Sign Plans, including amendments to Sign Plans. The amended Sign Plan would only need to go to the Board of Commissioners in case of the applicant appealing the Design Review Commission's decision.

Description of Proposed Amendment

The proposed amendment to the Sign Plan would include the placement of ground signs in public right-of-way. The following is a synopsis of the differences between the approved Sign Plan and the proposed amendment.

- The approved Sign Plan shows ground signs on The Lake District's private property at the corners of Canada Road and Lake District Drive. Each of these signs has an area of approximately 100 square feet with a base of approximately 35 square feet and a height of approximately 8.5 feet. The primary sign material is aluminum, and the primary base material is aggregate.

In the proposed amendment, these signs are replaced by ground signs in the public right-of-way. Each sign would have an area of approximately 47 square feet, an approximately 16.5 square foot base, and a height of approximately 9 feet. The primary sign material would be aluminum, and the primary base material would be split-face block. The signs would be internally illuminated. Each sign would include a logo with ring lighting and the capability to change color every 24 hours.

- The approved Sign Plan shows ground signs on The Lake District's private property at the corners of: Canada Road and Lake Main Street North; and Canada Road and Lake District Drive North. Each of these signs has an area of approximately 7.2 square feet with a base of approximately 8.5 square feet and a height of approximately 3 feet. The primary sign material is aluminum, and the primary base material is aggregate.

In the proposed amendment, these signs are replaced by ground signs in the public right-of-way. Each sign would have an area of approximately 7.2 square feet, an approximately 10.8 square foot base, and a height of approximately 3 ½ feet. The primary sign material would be aluminum, and the primary base material would be split-face block. The signs would be internally illuminated. Each sign would include a logo with ring lighting and the capability to change color every 24 hours.

Requested Exceptions to Regulations

As was the case with the previous Sign Plan submittal, the signs included in this submittal do not correspond perfectly to the sign types identified in the City's sign regulations. If the two larger proposed signs at the intersection of Canada Road and Lake District Drive are classified as shopping center signs, they would not meet certain standards. As set forth in Municipal Code § 14-404(23)(b), these standards include:

- (i) A maximum of one (1) shopping center sign shall be allowed per street frontage and shall be located only on an arterial road (Canada Road, Highway 64, or Highway 70).
- (ix) No shopping center sign shall be located within five hundred (500) feet of another shopping center sign.
- (x) The shopping center sign shall include the street address of the center, or the address range if more than one (1) address is included in the project.

If the proposed signs are classified as principal ground signs, they would not meet certain standards. As set forth in Municipal Code § 14-404(11), these standards include:

- (a) Such signs shall not exceed seventy-two (72) inches in height measured from the finished grade.
- (c) Such signs shall be set back a minimum of ten (10) feet from the edge of the public street right-of-way.

When the Planning Department reviewed the original Sign Plan in 2020, the Planning Director classified the larger ground signs as shopping center signs. The smaller signs at the intersections of Canada Road and Lake Main Street North and Lake District Drive North were not classified; the Planning Director determined that these directional-type signs had no clear corresponding sign type in the City's regulations.

In addition to the standards for specific sign types, the proposed signs would also fall under two categories of prohibited signs as set forth in Municipal Code § 14-405. These categories are:

- (27) Off-premise signs
- (37) Ground signs exceeding 32 square feet in copy area and/or signs and sign structures in excess of 72 inches in height unless otherwise provided for in this chapter.

An additional restriction that relates to this request is found in Municipal Code § 14-406:

- (7)(c) Lighting. No sign shall have blinking, flashing, or fluctuating lights or other illuminating devices that have a changing light identity, brightness, or color.

The proposed signs are located in public right-of-way; thus, they are off-premise signs. The two signs proposed at the intersection of Canada Road and Lake District Drive have heights of

approximately 110 ½ inches, exceeding the 72 inch limit. The same two signs would include lights that change colors.

Regulations for Signs in Public Right-of-Way

Municipal Code § 14-406(8) permits certain signage within the public right-of-way. Subsection c includes the following:

Subdivision and neighborhood identification signs. Ground-mounted signs integrated into entrance treatment with the name of the residential or non-residential subdivision or planned unit development may be located on one or both sides of each principal roadway entrance into the development provided that:

- (i) Roadside. One (1) sign located on one side of the entrance road or on both sides of the entrance road at each principal entrance to the subdivision or planned unit development, provided that:
 - (A) Such sign shall not exceed thirty-two (32) square feet in area; and,
 - (B) Such sign shall not exceed seventy-two (72) inches in height, unless such sign is integrated into a wall or column, in which case such sign shall not exceed the height of the wall or column; and,
 - (C) Such sign shall not contain a commercial message.

The applicant contends that the proposed signs to be placed in the public right-of-way should be considered subdivision signs and should be permitted as such. Two of the proposed signs exceed 72 inches in height. Additionally, all of the signs include The Lake District's logo, which may be perceived as a commercial message.

Design Review Commission Authority to Grant Exceptions

Municipal Code § 14-409(7)(b) permits the Design Review Commission to *approve sign plan elements that vary from the general requirements of the sign ordinance if the applicant can demonstrate how the varied standards are contextually appropriate and would enhance the overall project*. The applicant's representative will be in attendance at the Planning Commission meeting to discuss the request and the need for signage that does not fully comply with the City's regulations.

EXAMPLE MOTIONS

1. Motion to approve The Lake District Planned Development Sign Plan Amendment subject to the following conditions:
 - a. Conditions as determined by the Design Review Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve The Lake District Planned Development Sign Plan Amendment without conditions.
3. Motion to deny The Lake District Planned Development Sign Plan Amendment:
 - a. Reason for denial

CONDITIONS OF APPROVAL

1. If the amended sign plan is approved by MPC/DRC, the applicant shall work with City staff to prepare an indemnification/hold harmless agreement. In addition to City approval, this agreement may require the approval of other levels of government and utility providers.
2. If the amended sign plan is approved by MPC/DRC, Board of Commissioners acceptance of signs in the public right-of-way shall be required.
3. The applicant shall work with staff to address any unresolved staff comments from staff review letter dated April 1, 2022.

PROCEDURAL REQUIREMENTS

1. The applicant shall submit a corrected paper version and electronic (PDF) version of the plan to the Planning Department. All revisions shall be clouded on the plan. The applicant shall submit an accompanying letter confirming that all conditions of approval have been satisfied.



The Lake District Right-of-Way

Lakeland, Tennessee

Zoned C-2

- Lake District Right-of-Way
- Lakeland City Boundary
- Street Centerline
- Parcel

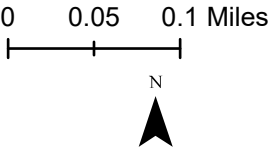
Zoning Classification

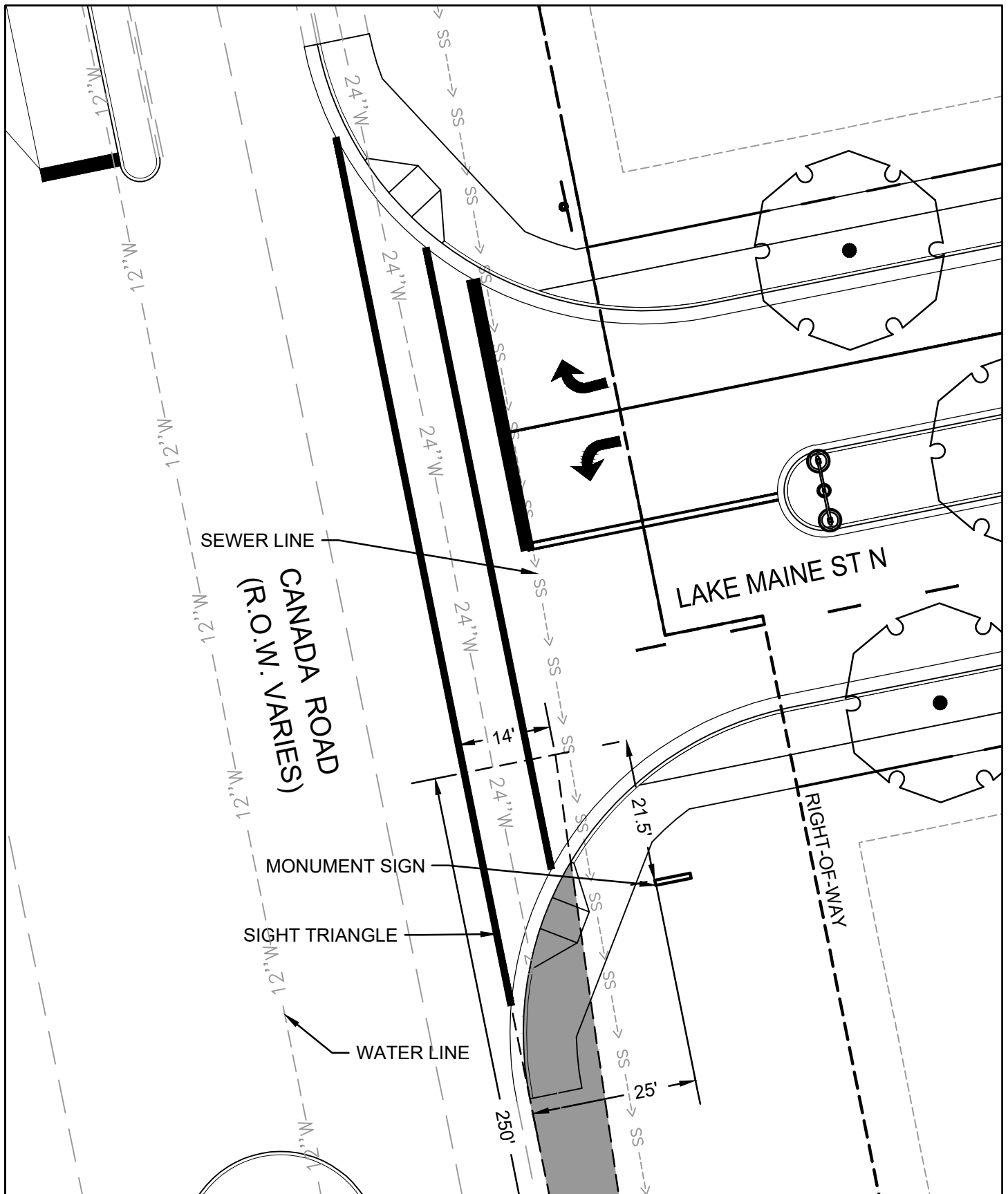
- AG
- C-1
- C-2
- E-R
- I-L
- M-R
- OS-2
- OS-5
- P
- R-1
- R-1 (PRD)
- R-2
- R-2 (PRD)
- R-2A
- R-3
- RE

Lakeland Planning
Department
March 28, 2022

Sources:

Shelby Co. Assessor of
Property; ESRI;
Lakeland IT Dept.





A2H ENGINEERS
ARCHITECTS
PLANNERS

A2H, INC.
3009 DAVIES PLANTATION ROAD
LAKELAND, TN 38002
P. 901.372.0404
WWW.A2H.COM

THE LAKE DISTRICT
SIGNAGE EXHIBIT

SCALE
1" = 20'

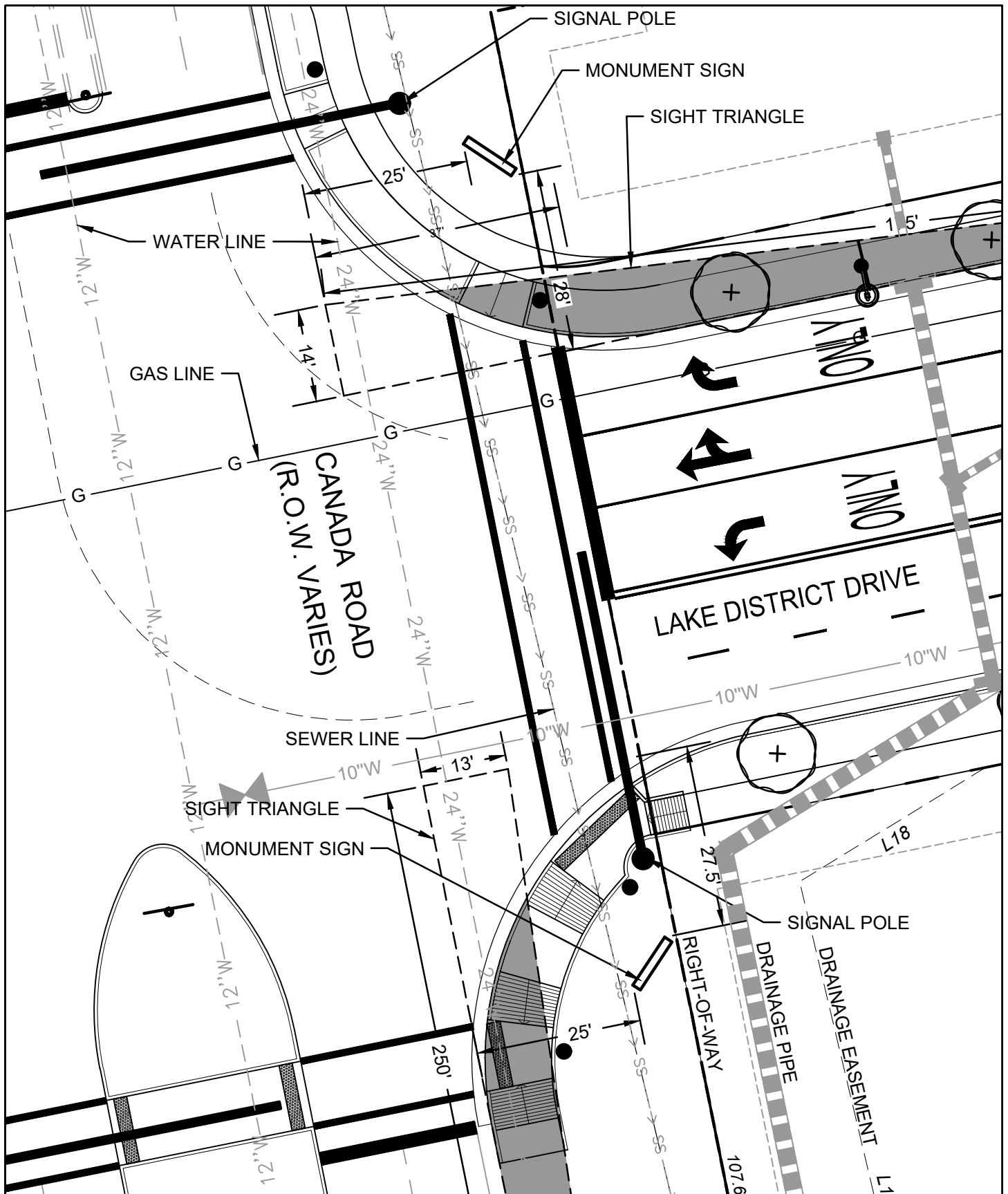
PROJECT NO.
15109.01

DATE
APRIL 11, 2022

MIDDLE
ENTRANCE
SIGN

LS.2

Page 301 of 326



A2H ENGINEERS
ARCHITECTS
PLANNERS

A2H, INC.
3009 DAVIES PLANTATION ROAD
LAKELAND, TN 38002
P. 901.372.0404
WWW.A2H.COM

THE LAKE DISTRICT
SIGNAGE EXHIBIT

SCALE
1" = 20'

PROJECT NO.
15109.01

DATE
APRIL 11, 2022

SOUTH
ENTRANCE
SIGN

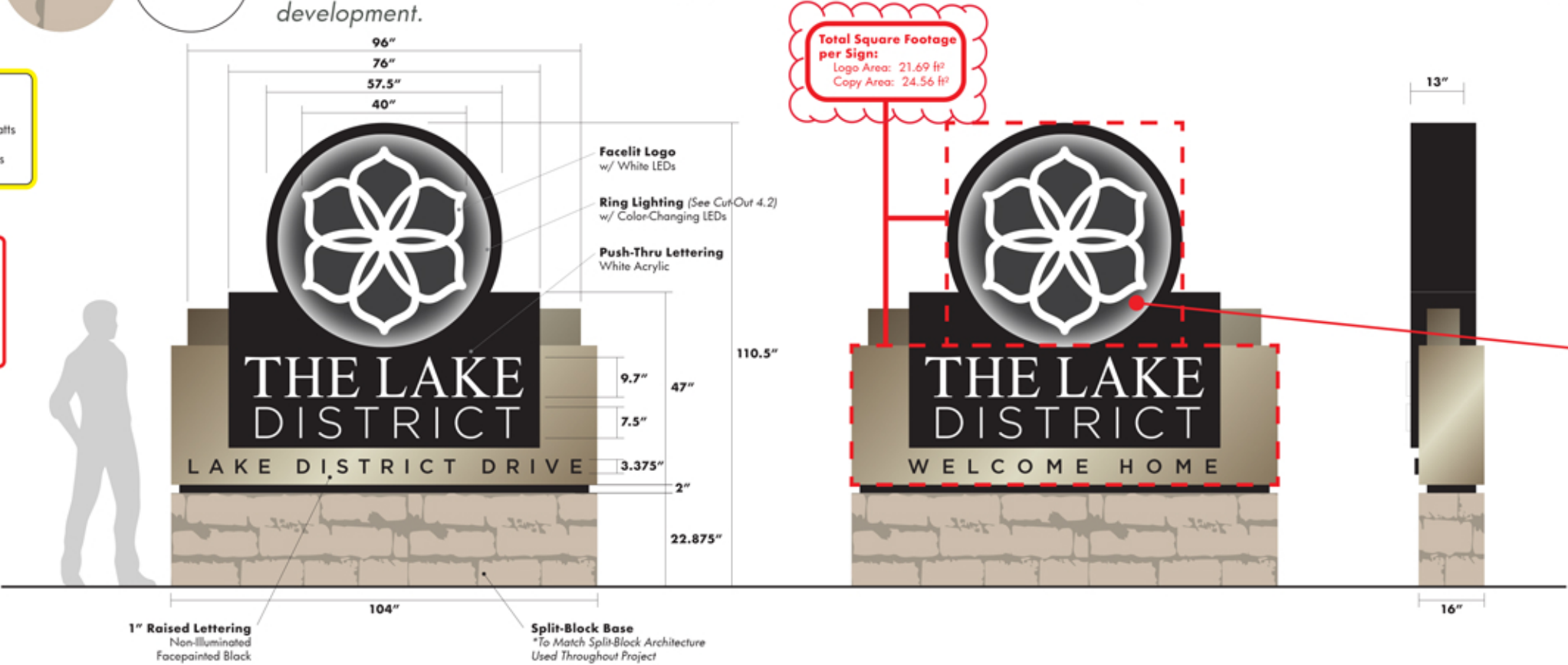
LS.3
Page 302 of 326



The property will have monuments at both corners of the Canada Rd. perimeter to give elegance and recognition to where the development begins and ends. The monuments at the traffic light, the primary entrance on Canada Rd., frame the entrance while announcing additional businesses within the development.

Electrical Requirements:
(Qty: 2) 120 Volt Circuits
Total Wattage At 120 Volts: 2,431 Watts
(Qty: 1) 277 Volt Circuits
Total Wattage At 277 Volts: 916 Watts

Color-Changeable
"Soft Glow" Feature
To Be Limited To (1)
Change In Color
Per (24) Hour Period



FACELIT CHANNEL
LETTERS WITH
ACRYLIC FACES

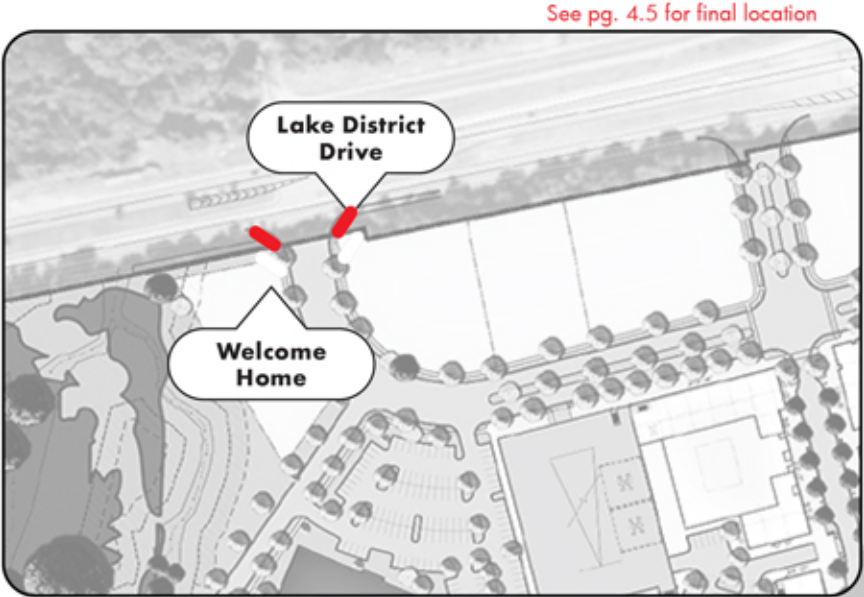
MANUFACTURE AND INSTALL
ONE SET OF INDIVIDUALLY
MOUNTED FACELIT (L.E.D.)
CHANNEL LETTERS.

LETTER THRU SECTION

A	LISTED DISCONNECT SWITCH
B	MOUNTING VARIOUS
C	PRIMARY ELECTRICAL SOURCE
D	MOUNTING PLATE
E	TRANSFORMER
F	INTERIOR OF LETTER PAINTED WHITE
G	ALUMINUM BACK

PLEASE SPECIFY COLOR FOR THE PARTS LISTED BELOW

H	IND ALUM. SECTION	TBO
I	ACRYLIC FACE	TBO
J	WHITE LED	TBO
K	WALL TYPE	TBO



See pg. 4.5 for final location



3D Render for Primary Entrance Monuments.

Electrical Requirements:
(Qty: 2) 120 Volt Circuits
Total Wattage At 120 Volts: 2,431 Watts
(Qty: 1) 277 Volt Circuits
Total Wattage At 277 Volts: 916 Watts

**Color-Changeable
"Soft Glow" Feature
To Be Limited To (1)
Change In Color
Per (24) Hour Period**

**Color-Changing LEDs
Example Colors**
*Limited To (1) Change In Color
Per (24) Hour Period



Facelit Logo
w/ White LEDs

Recessed Ring Lighting
w/ Color-Changing LEDs (Creates Silhouette Glow)

Push-Thru Lettering
White Acrylic



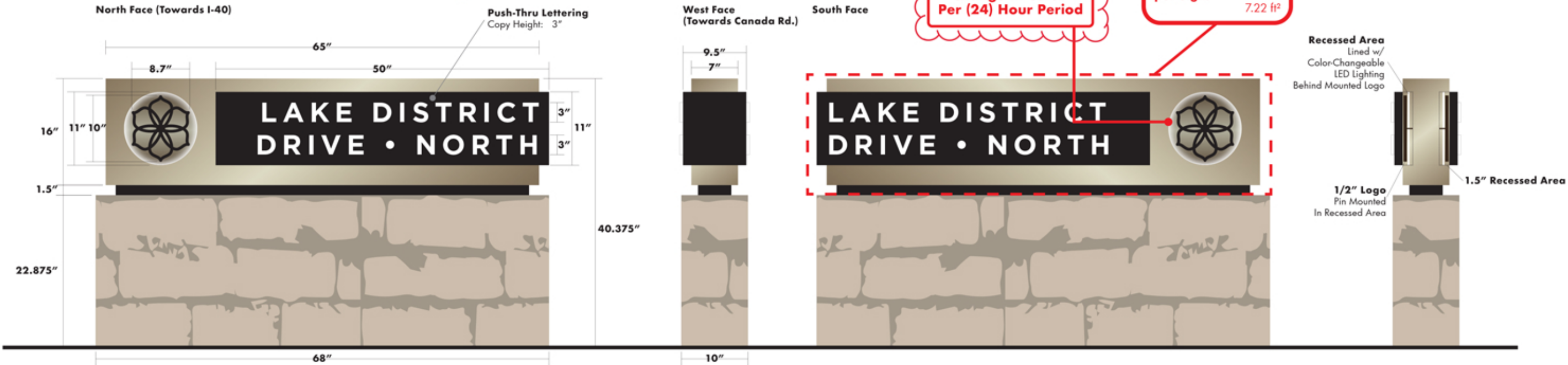


Beautiful and easy-to-read street signs serve as further branding at the property's secondary entrances while making it easy to identify the streets.

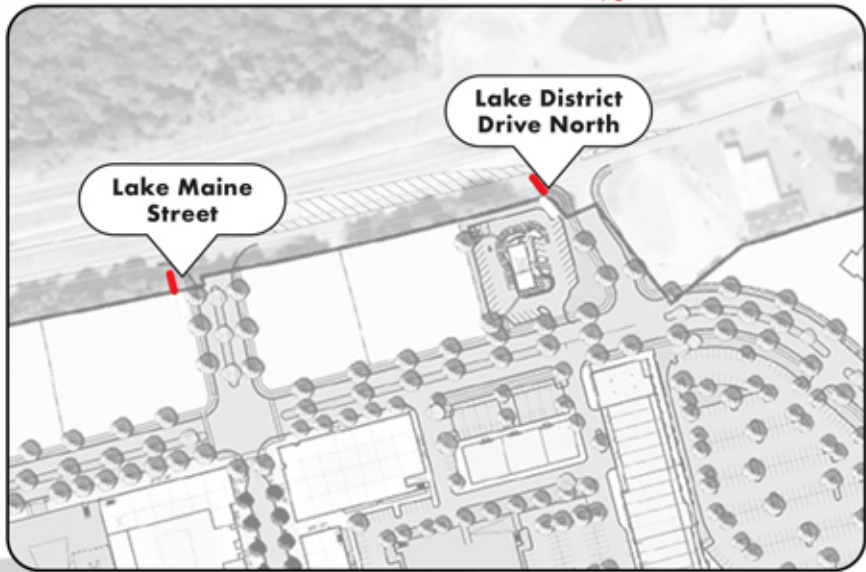
Electrical Requirements:
(Qty: 1) 120 Volt Circuit
Total Wattage At 120 Volts: 600 Watts
(Qty: 1) 277 Volt Circuit
Total Wattage At 277 Volts: 270 Watts

Recessed Area Only
**Color-Changeable
"Soft Glow" Feature
To Be Limited To (1)
Change In Color
Per (24) Hour Period**

**Total Square Footage
per Sign:**
7.22 ft²



See pg. 4.5 for final location



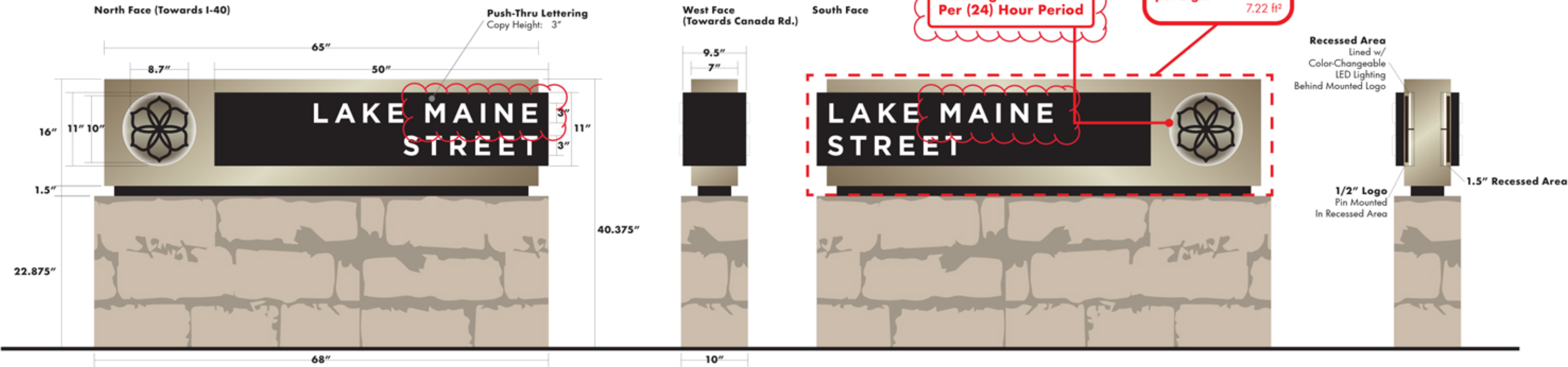


Beautiful and easy-to-read street signs serve as further branding at the property's secondary entrances while making it easy to identify the streets.

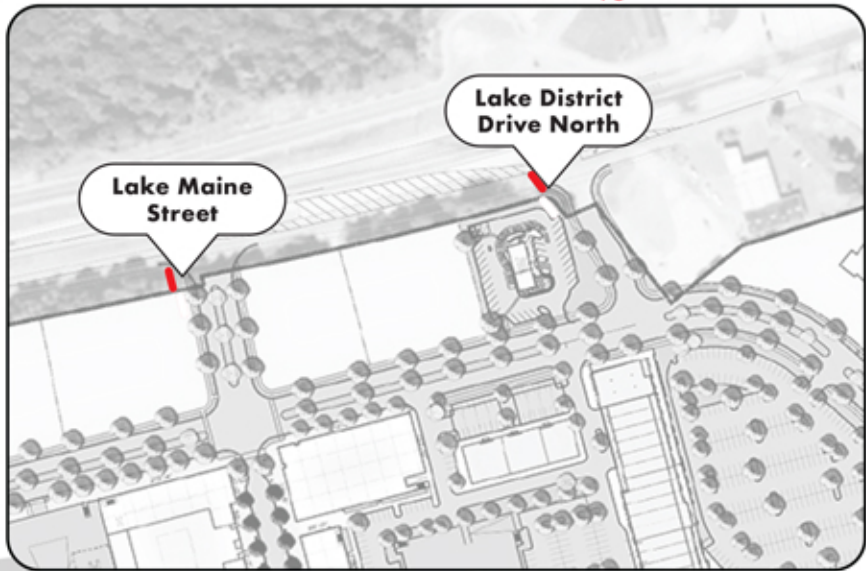
Electrical Requirements:
(Qty: 1) 120 Volt Circuit
Total Wattage At 120 Volts: 600 Watts
(Qty: 1) 277 Volt Circuit
Total Wattage At 277 Volts: 270 Watts

Recessed Area Only
**Color-Changeable
"Soft Glow" Feature
To Be Limited To (1)
Change In Color
Per (24) Hour Period**

**Total Square Footage
per Sign:**
7.22 ft²



See pg. 4.5 for final location





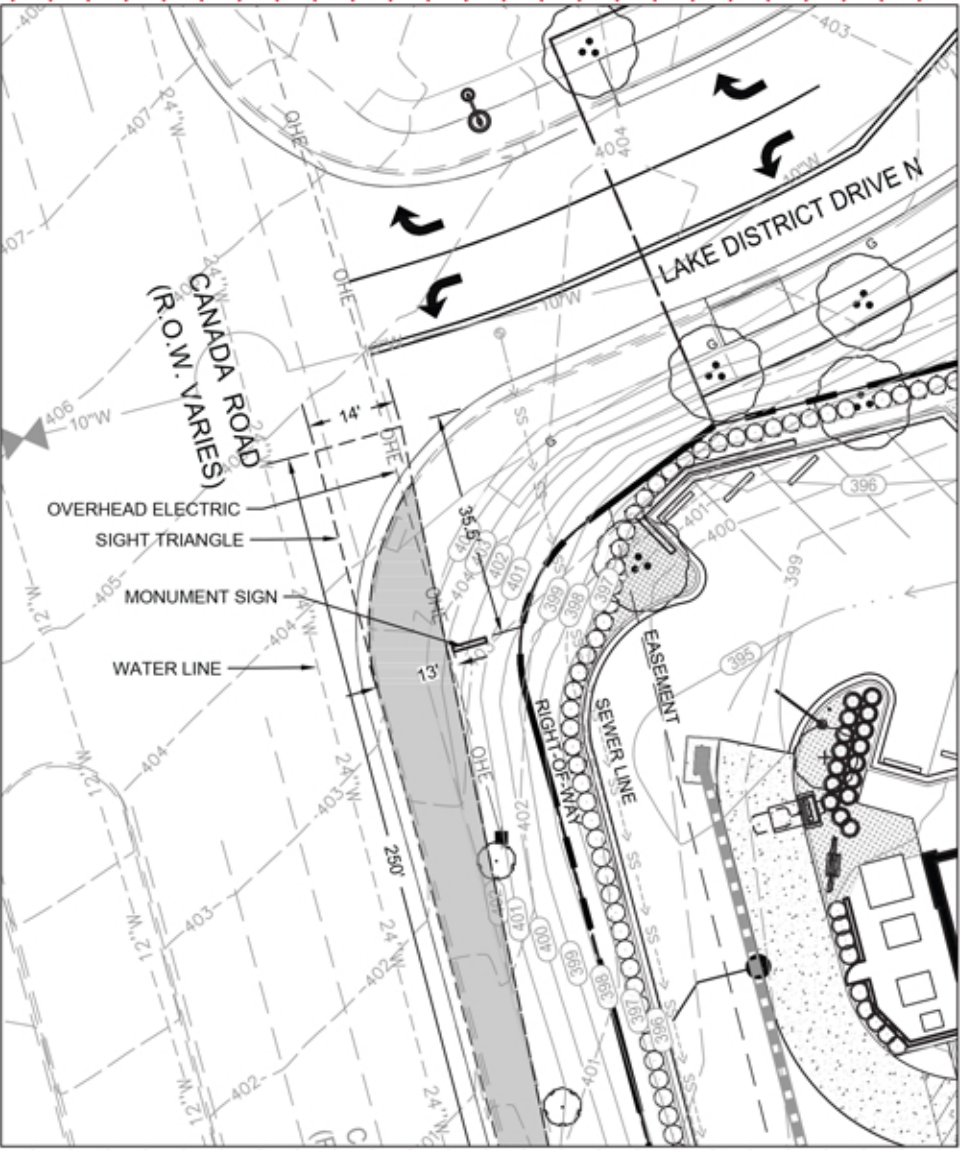
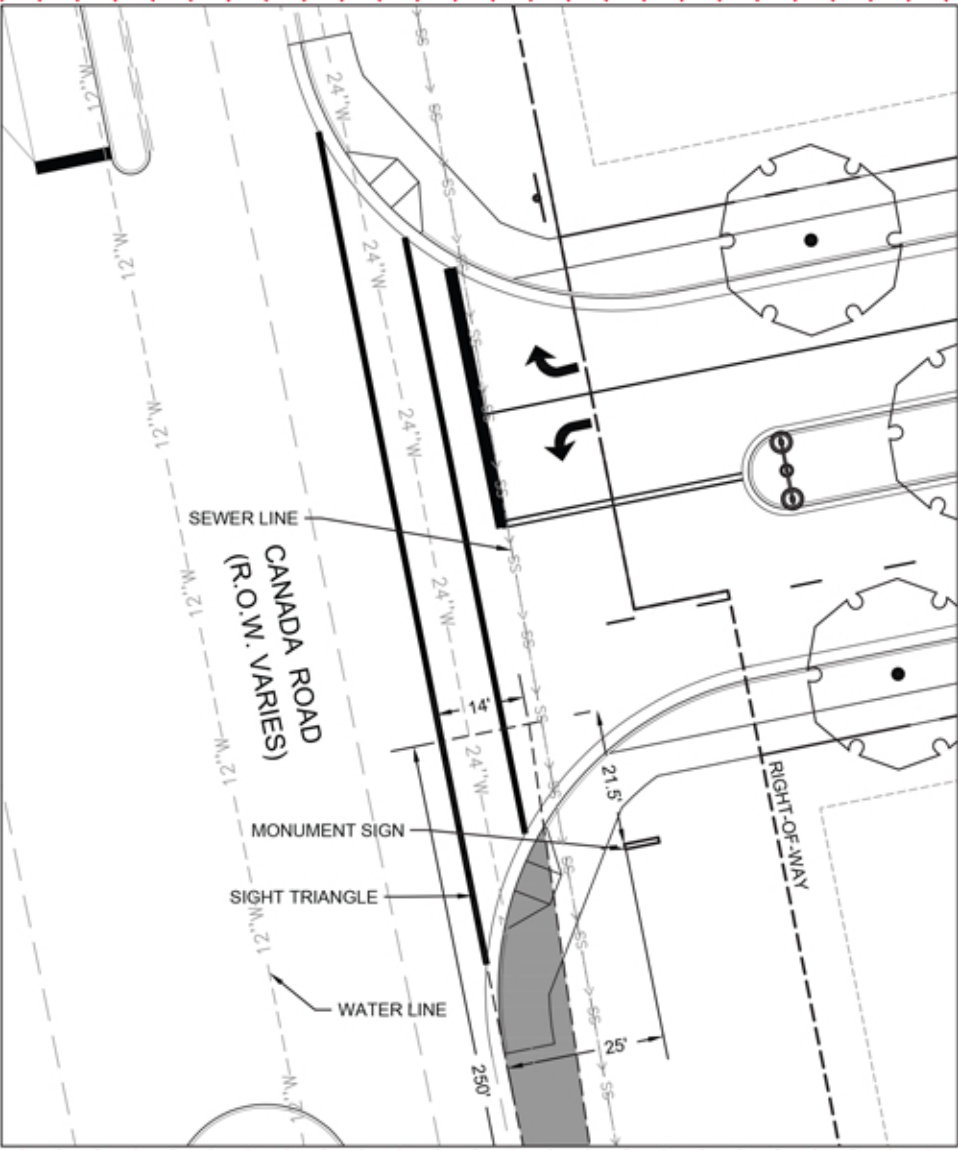
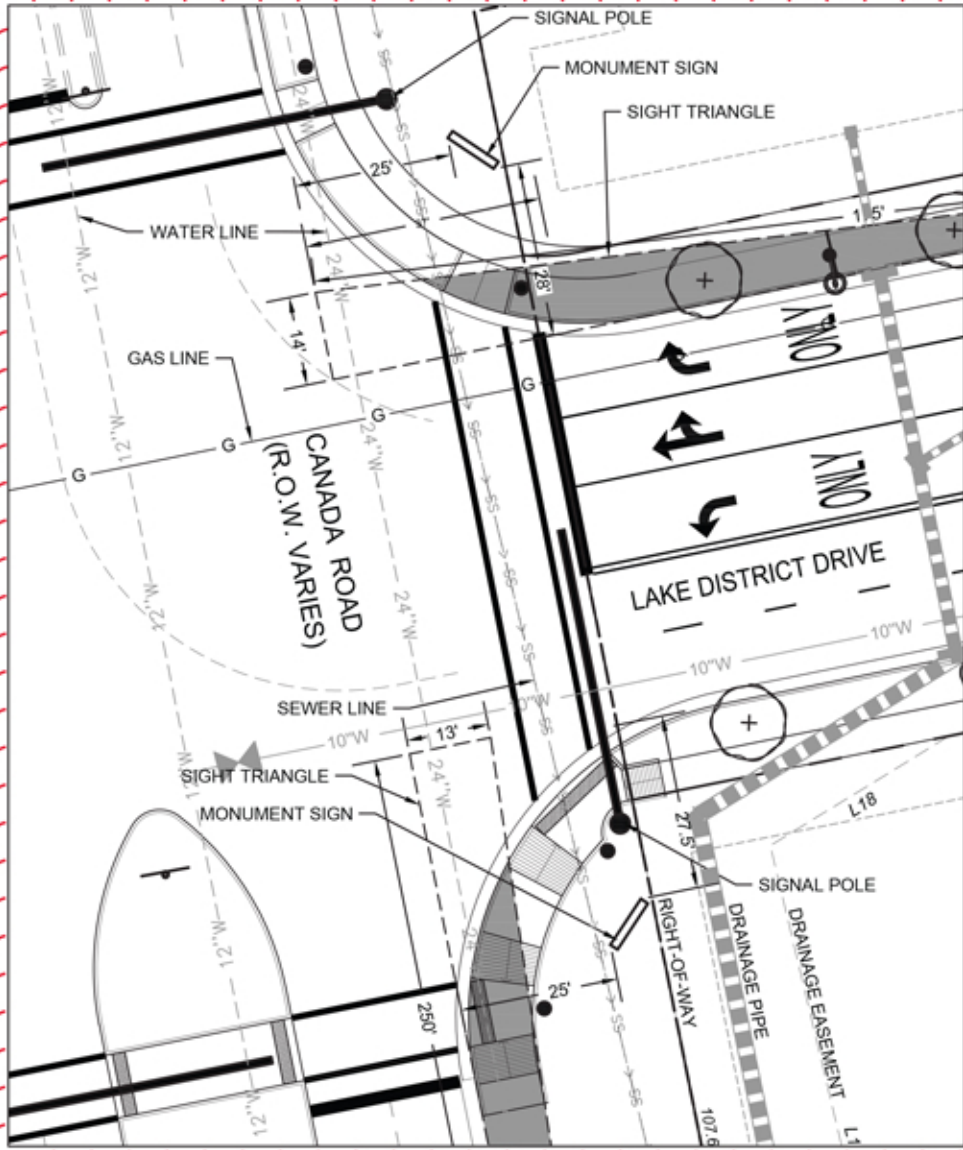
Electrical Requirements (each):
(2) 120v Circuits / Total Wattage at 120v = 2,431w
(1) 277v Circuit / Total Wattage at 277v = 916w



Electrical Requirements:
(1) 120v Circuits / Total Wattage at 120v = 600w
(1) 277v Circuit / Total Wattage at 277v = 270w



Electrical Requirements:
(1) 120v Circuits / Total Wattage at 120v = 600w
(1) 277v Circuit / Total Wattage at 277v = 270w





April 12, 2022

City of Lakeland TN

Planning Department

Donald Anthony, Planning Directory

901.867.2718 danthony@lakelandtn.org

Engineering Department

Emily Harrell, City Engineer

901.867.5418 eharrell@lakelandtn.org

RE: Response to Comments:

1. Show locations of all underground and overhead utilities in relation to proposed signs. See page 4.5.
2. Include the square footage of the logos shown atop the signs sheet 4.1 in the "total square footage per sign" text box. See page 4.1
3. The small "Lake Maine Street" sign on the left-hand side of sheet 4.2 appears misplaced. Remove at resubmittal. Sign has been removed on 4.2
4. The note regarding "color-changeable soft glow" appears on sheets 4.3 and 4.4, but it is unclear if that feature applies to the directional signs shown on those sheets. This feature applies to directional signs.
5. City GIS indicates the correct spelling of Main Street does not include the letter e. Verify correct spelling and remove the extra e. from images on sheets 4.4 onward. MAINE is correct and intended spelling.
6. Indicate whether the colors on the changing color logo signage are examples or the actual planned colors. The colors are examples of color options.
7. Informational comment: If the amended sign plan is approved by MPC/DRC, the applicant shall work with City staff to prepare an indemnification/hold harmless agreement. In addition to City approval, this agreement may require the approval of other levels of government and utility providers. Noted.

Please let me know if you need anything else.

Maureen Yarborough

Sign Matters, Inc.

Cc: Yehuda Netanel



Plan Review – Initial Submittal

Date:	April 1, 2022
Project Title:	The Lake District Planned Development Sign Plan Amendment
Applicant:	Maureen Yarborough, Sign Matters Inc. maureen@signmattersinc.com yehuda@thelakedistrict.us

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **April 21, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on April 12, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. No comments.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

1. Show locations of all underground and overhead utilities in relation to the proposed signs.
2. Include the square footage of the logos shown atop the signs on sheet 4.1 in the "total square footage per sign" text box.
3. The small "Lake Maine Street" sign on the left-hand side of sheet 4.2 appears misplaced. Remove at resubmittal.
4. The note regarding "color-changeable soft glow" appears on sheets 4.3 and 4.4, but it is unclear if that feature applies to the directional signs shown on those sheets.

5. City GIS indicates the correct spelling of Main Street does not include the letter e. Verify correct spelling and remove the extra e from the images on sheets 4.4 onward.
6. Indicate whether the colors on the changing-color logo signage are examples or the actual planned colors.
7. Informational comment: If the amended sign plan is approved by MPC/DRC, the applicant shall work with City staff to prepare an indemnification / hold harmless agreement. In addition to City approval, this agreement may require the approval of other levels of government and utility providers.



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of a Site Plan for Improvements to New Canada Road.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Date: Thursday, April 21, 2022

Project: New Canada Road Improvements
Site Plan

Staff Contact: Donald Anthony, Planning Director

PROJECT INFORMATION

Location: Along planned portion of Canada Road, north of Interstate 40

Parcel ID: N/A

Zoning District: N/A

Site Area: N/A

Applicant: City of Lakeland

Representative: Emily Harrell, City of Lakeland

STAFF RECOMMENDATION

Staff recommends approval subject to the following conditions:

1. Applicant shall satisfy all staff comments, except those waived by the Planning Commission.
2. Applicant shall satisfy all Planning Commission comments.
3. Applicant shall satisfy all Procedural Requirements listed in this Staff Report.

DISCUSSION

The applicant, City of Lakeland represented by City Engineer Emily Harrell, requests approval of a site plan for aesthetic and safety improvements along New Canada Road. The City Engineer worked with residents in the subdivisions that will be directly impacted by the construction and alignment of New Canada Road. Proposed improvements include:

- Crosswalks at newly-created intersections with New Canada Road:
 - Windward Slope Drive
 - South Connector Road
 - William Little Drive
 - Owl Hill Drive
 - Laurel Hill Drive
 - Lake Bridge Drive
 - Canabridge Drive
 - Lou-Jan Causeway
 - Memphis-Arlington Road
- New subdivision signage at newly-created intersections with New Canada Road:
 - William Little Drive – includes a 7-foot high stone wall with concrete Plantation Hills signage, a 6-foot high fence along New Canada Road frontage, and landscaping
 - Owl Hill Drive – includes a 7-foot high stone wall with concrete Plantation Hills signage, a 6-foot high fence along New Canada Road frontage, and landscaping
 - Canabridge Drive – includes a stone column with an identifying W, designed to match an existing column at Lake Bridge Drive

Additionally, the Site Plan submittal includes several images of light posts and bollards. The City Engineer requests that the Planning Commission—acting as the Design Review Commission—review these images and offer feedback on the compatibility and appropriateness of these posts and bollards.

EXAMPLE MOTIONS

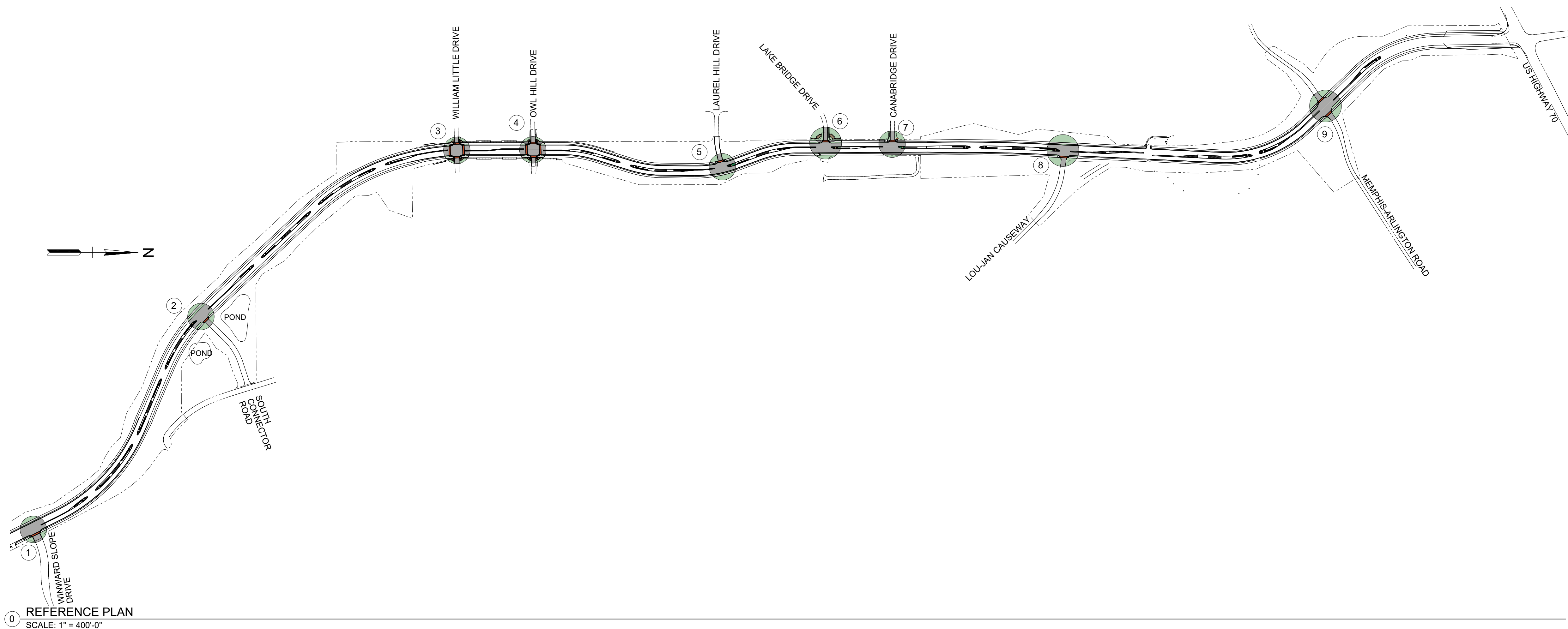
1. Motion to approve the New Canada Road Improvements Site Plan subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
 - b. Conditions listed in the Staff Report
2. Motion to approve the New Canada Road Improvements Site Plan without conditions.
3. Motion to deny the New Canada Road Improvements Site Plan:
 - a. Reason for denial

CONDITIONS OF APPROVAL

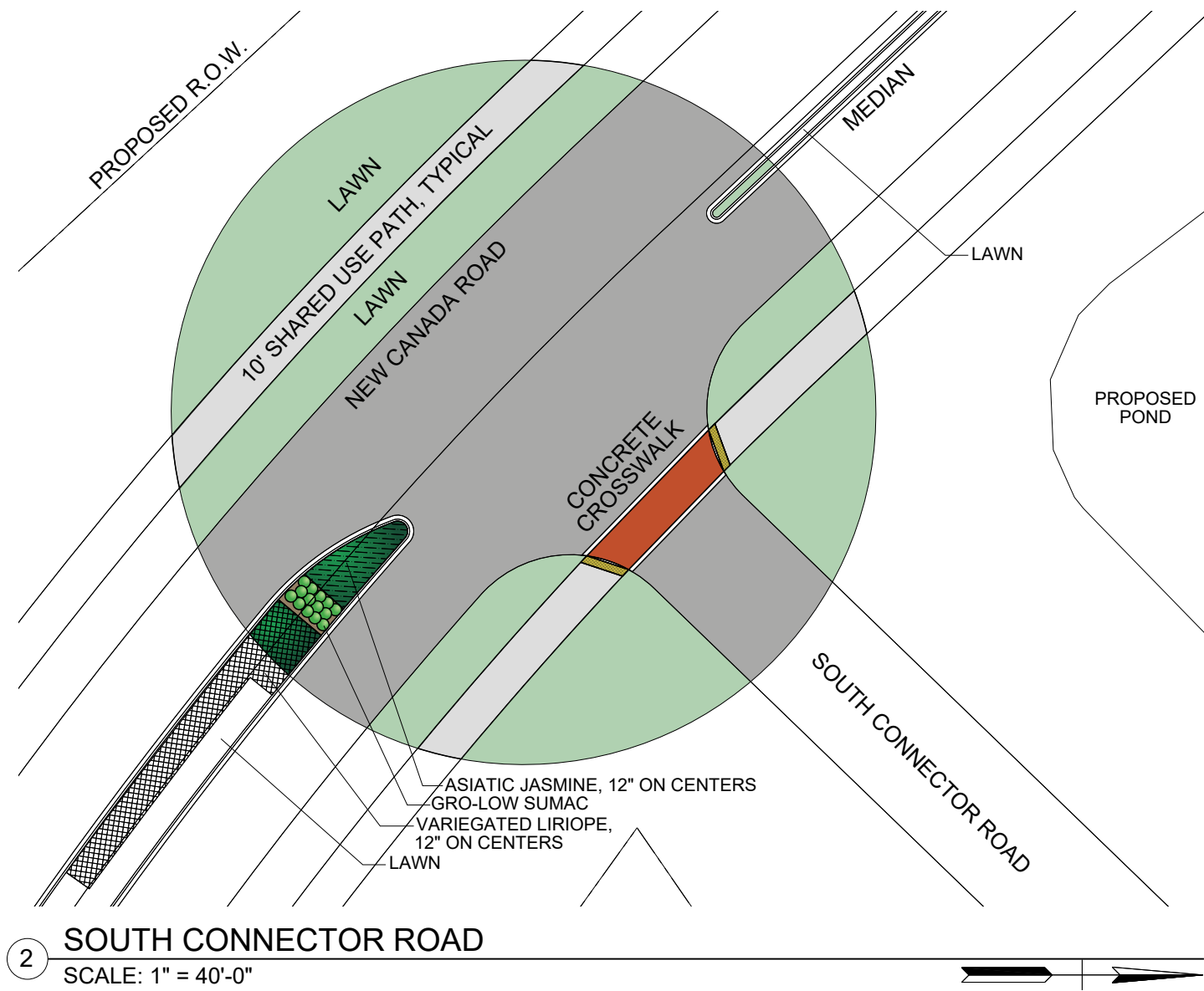
1. The applicant shall work with staff to address any unresolved staff comments from staff review letter dated April 1, 2022.

PROCEDURAL REQUIREMENTS

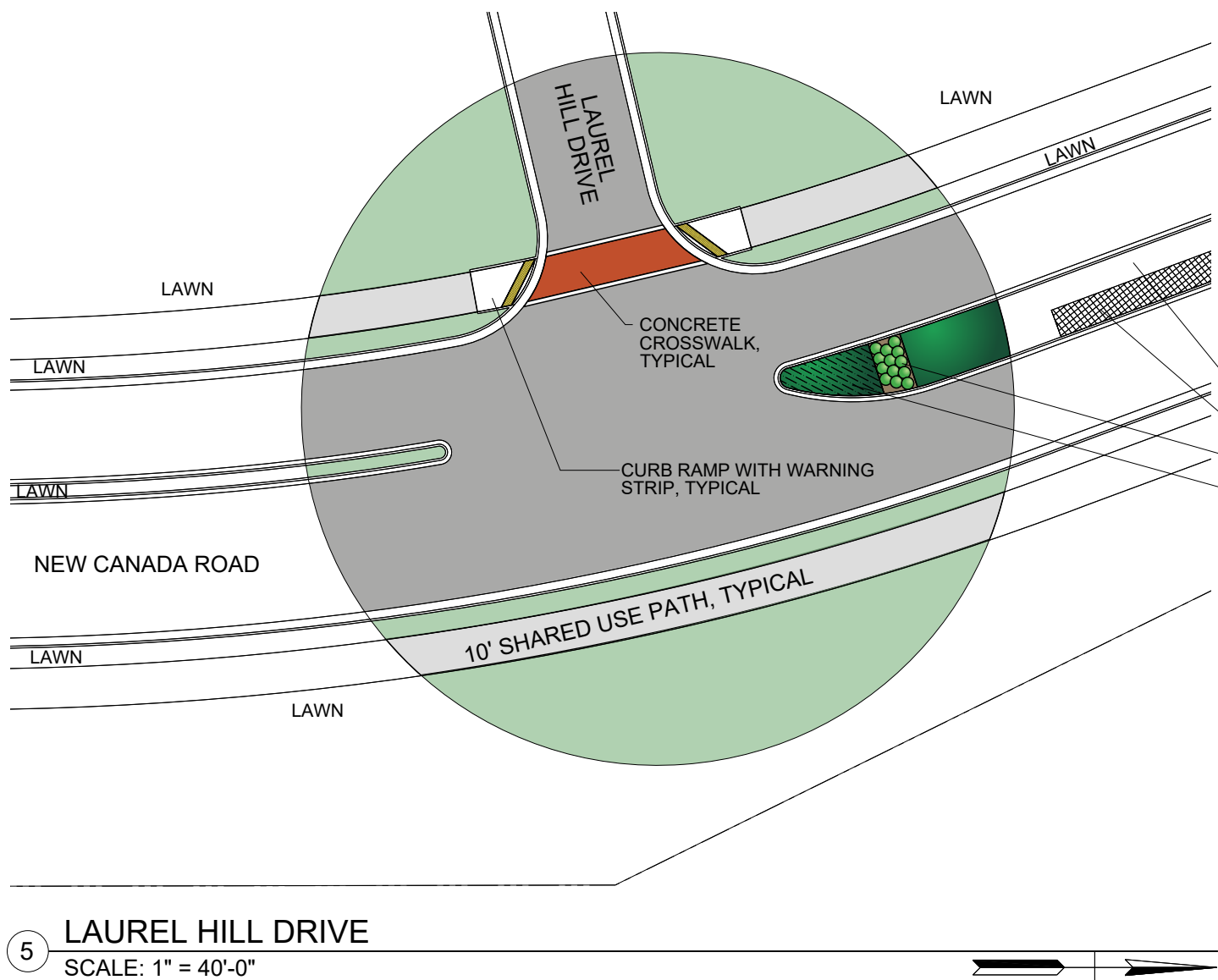
1. The applicant shall submit a corrected paper version and electronic (PDF) version of the plan to the Planning Department. All revisions shall be clouded on the plan. The applicant shall submit an accompanying letter confirming that all conditions of approval have been satisfied.



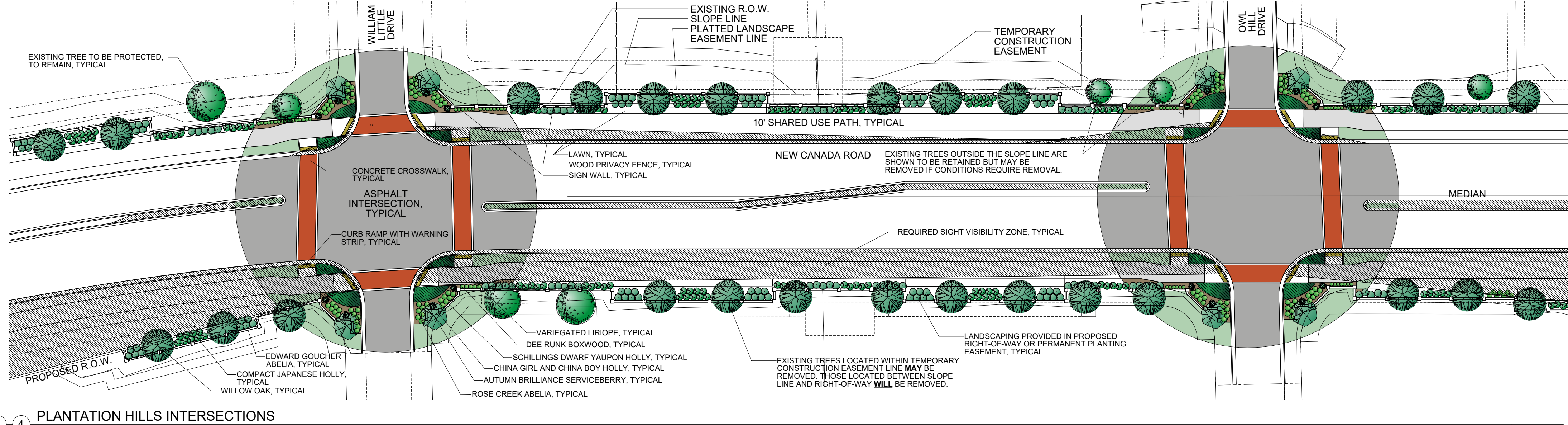
0 REFERENCE PLAN
SCALE: 1" = 400'-0"



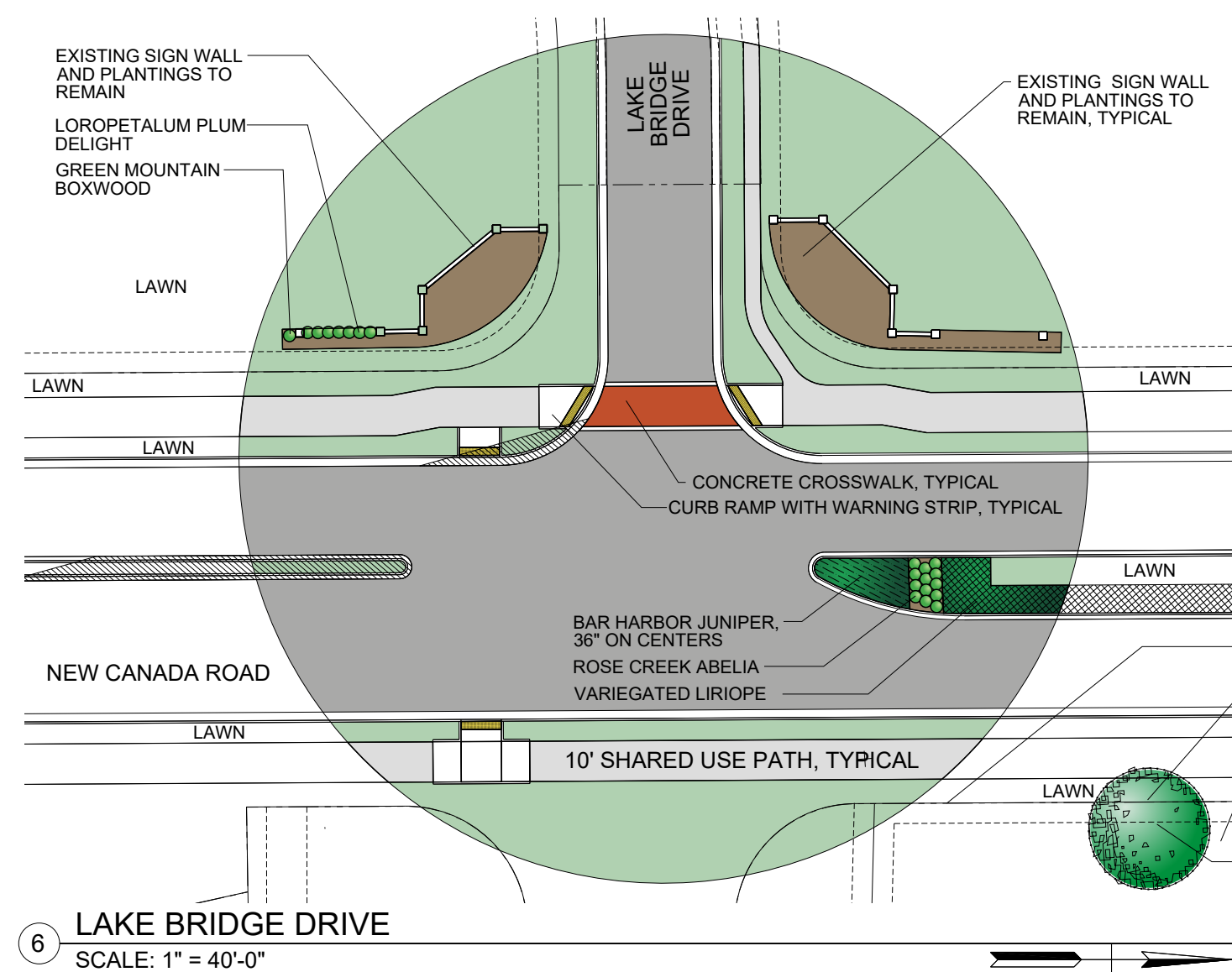
2 SOUTH CONNECTOR ROAD
SCALE: 1" = 40'-0"



5 LAUREL HILL DRIVE
SCALE: 1" = 40'-0"



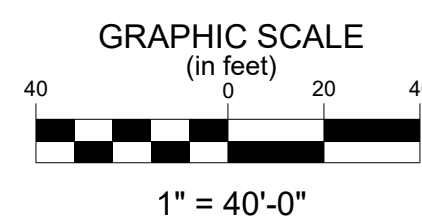
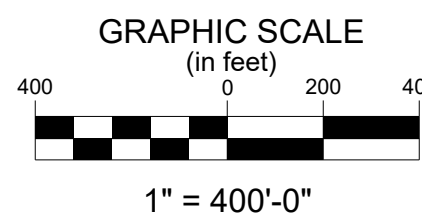
3-4 PLANTATION HILLS INTERSECTIONS
SCALE: 1" = 40'-0"



6 LAKE BRIDGE DRIVE
SCALE: 1" = 40'-0"



1 WINWARD SLOPE DRIVE
SCALE: 1" = 40'-0"



ITEM NO.	DESCRIPTION	APPROVAL DATE

CANADA ROAD WIDENING
CITY OF LAKELAND
ENGINEER: FISHER & ARNOLD, INC.

**FISHER ARNOLD**

SHEET 1 OF 3
DIVISION OF ENGINEERING
NEW CANADA ROAD
INTERSECTION IMPROVEMENTS

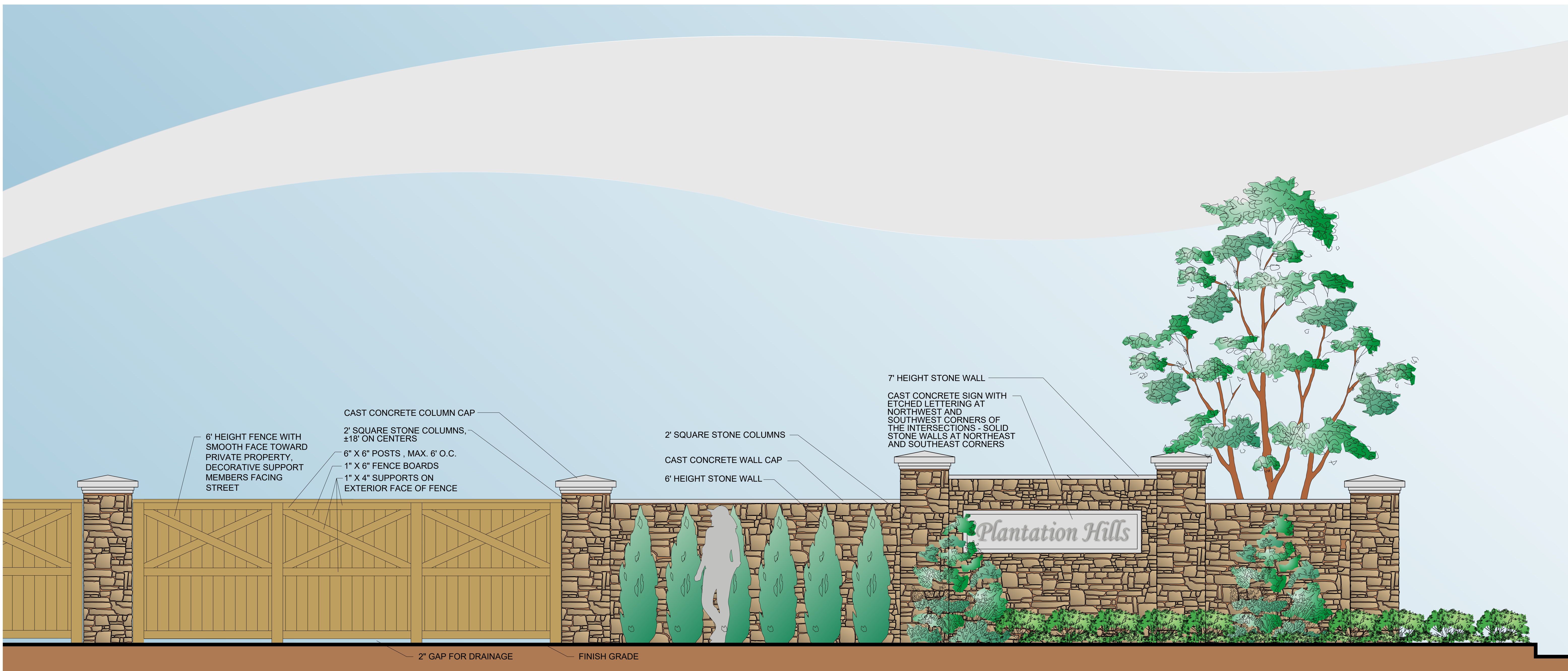
SURVEY: F & A, INC.
DESIGN BY: I.R.R.
DRAWN BY: I.R.R.

DATE: 03/2012
DATE: 08/2012
DATE: 08/2012

PROJECT NO.: D7008
BOOK:
SCALE: VARIES

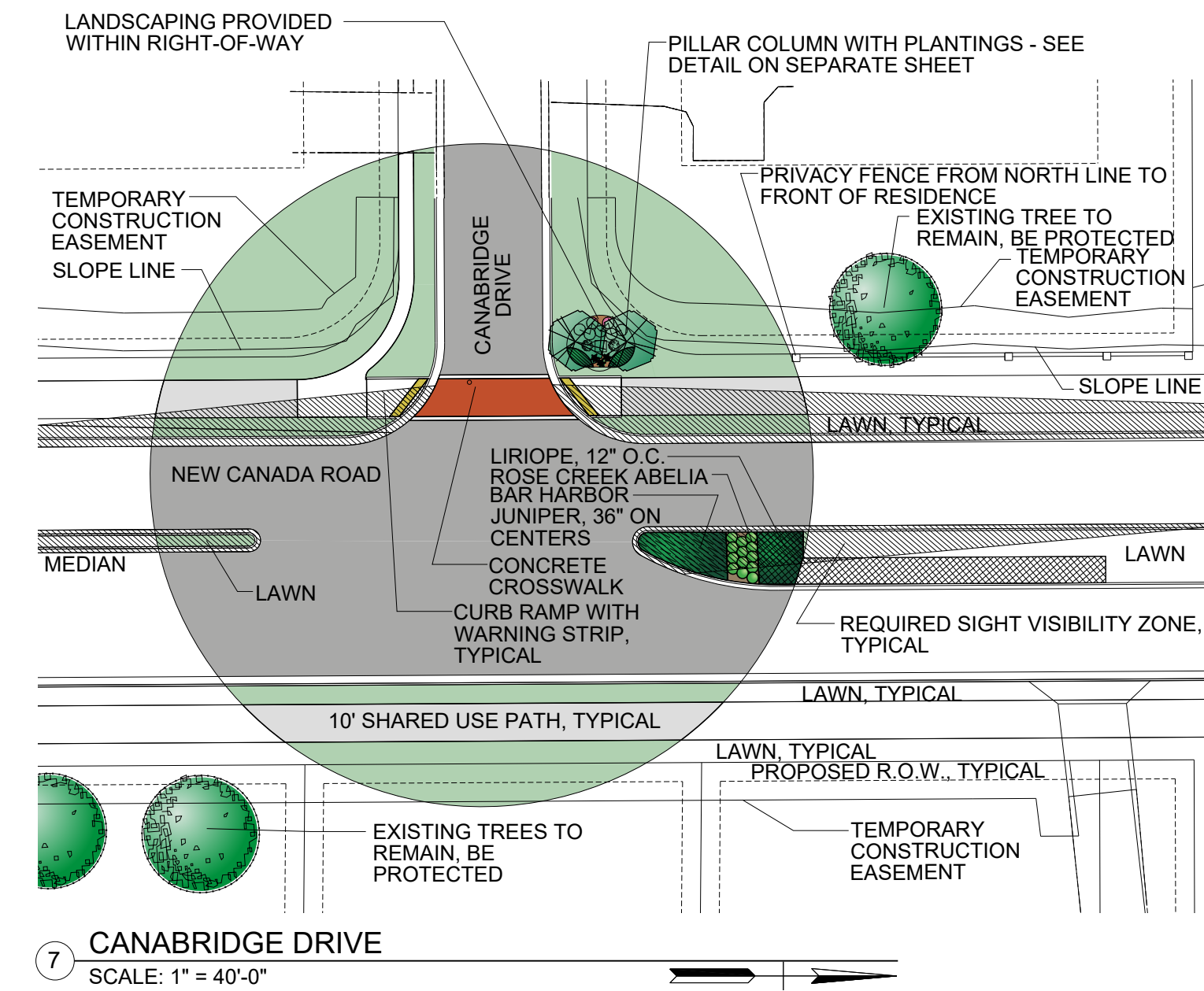
REVIEWED

CITY ENGINEER DATE

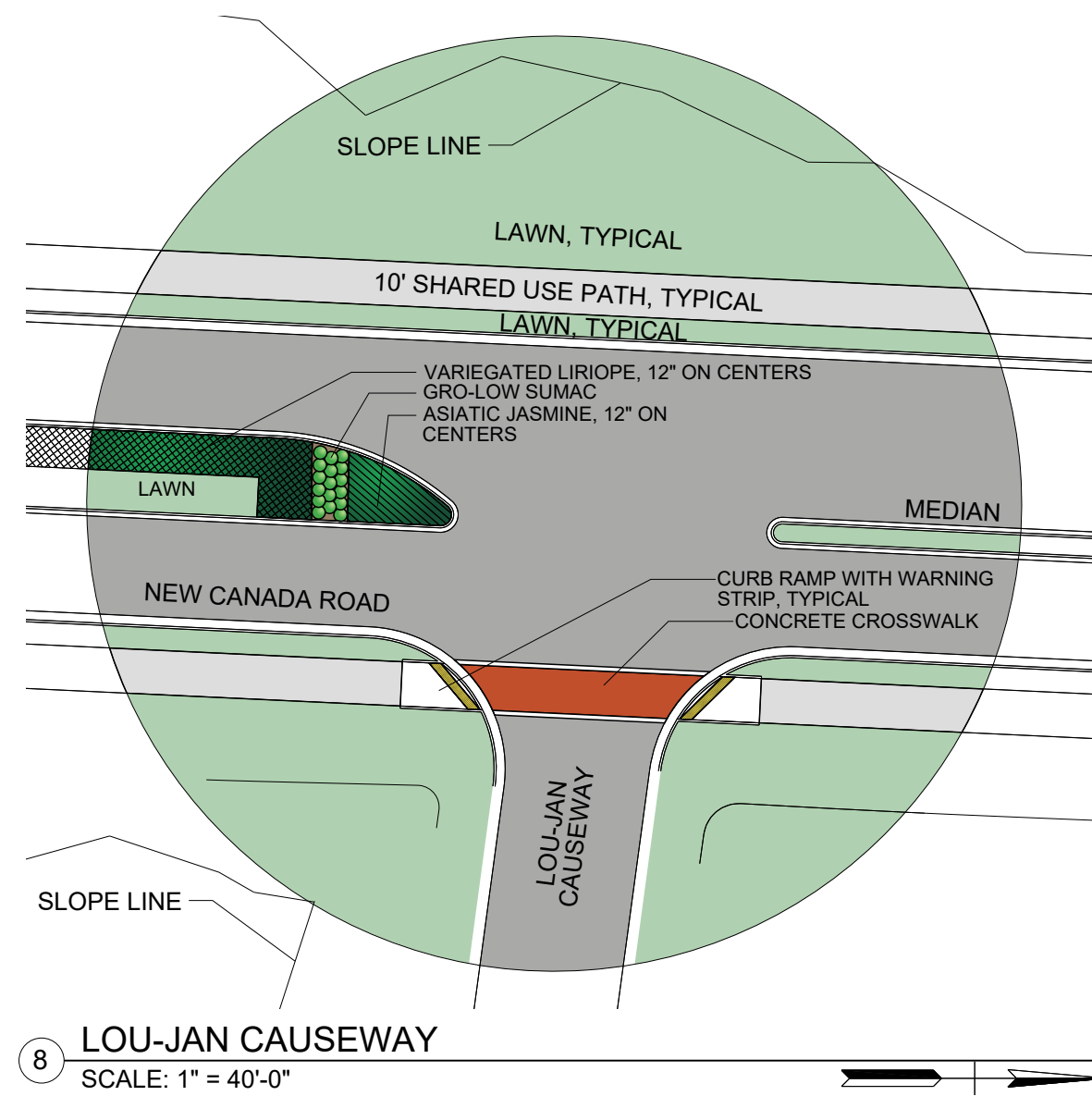


PLANTATION HILLS ENTRY SIGN ELEVATION

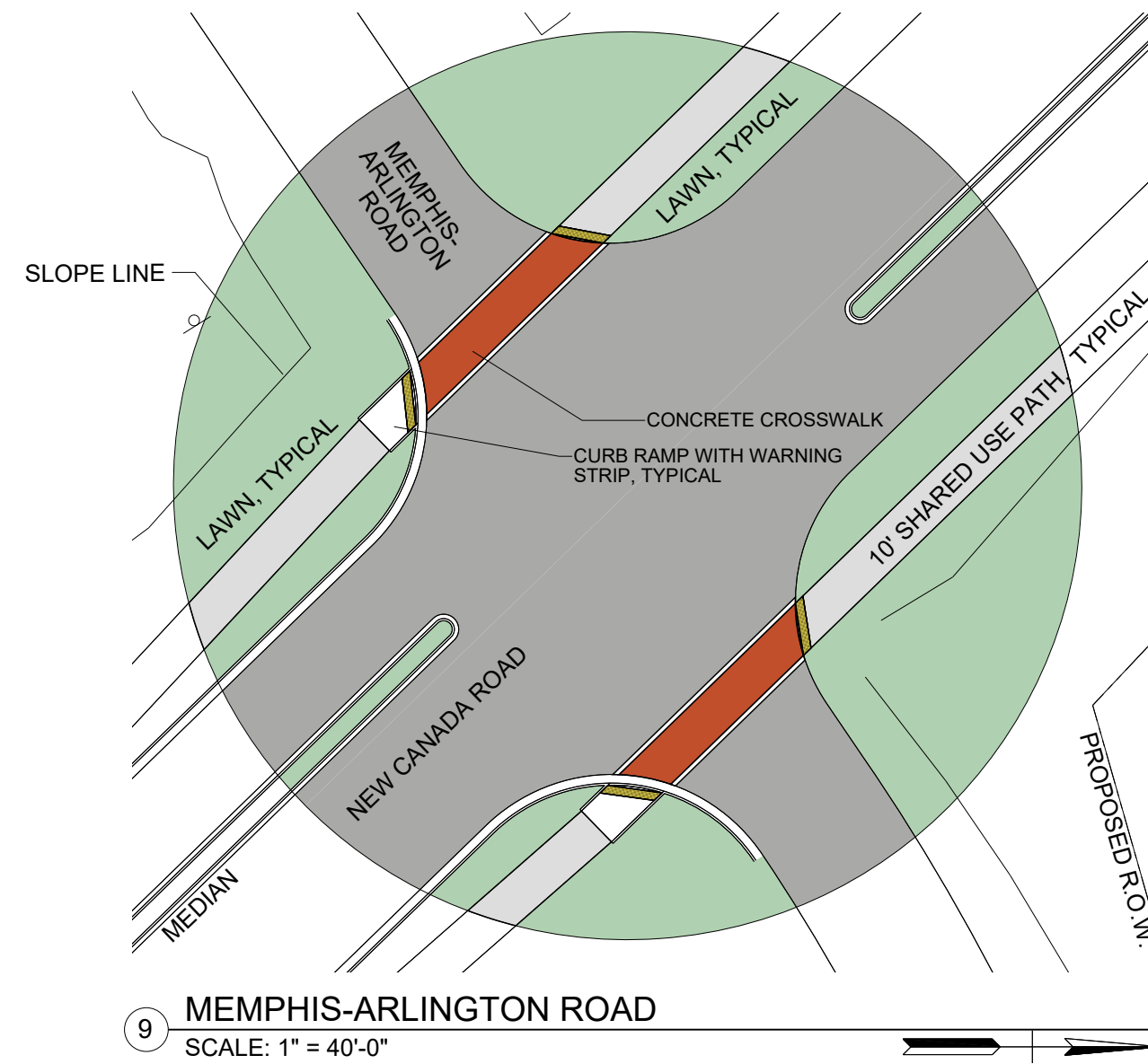
SCALE: 1/2" = 1'-0"



7 CANABRIDGE DRIVE
SCALE: 1" = 40'-0"



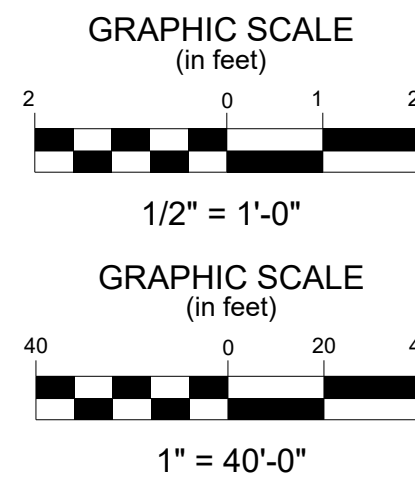
8 LOU-JAN CAUSEWAY
SCALE: 1" = 40'-0"



9 MEMPHIS-ARLINGTON ROAD
SCALE: 1" = 40'-0"

COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00001 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

CANADA ROAD WIDENING
CITY OF LAKELAND
ENGINEER: FISHER & ARNOLD, INC.



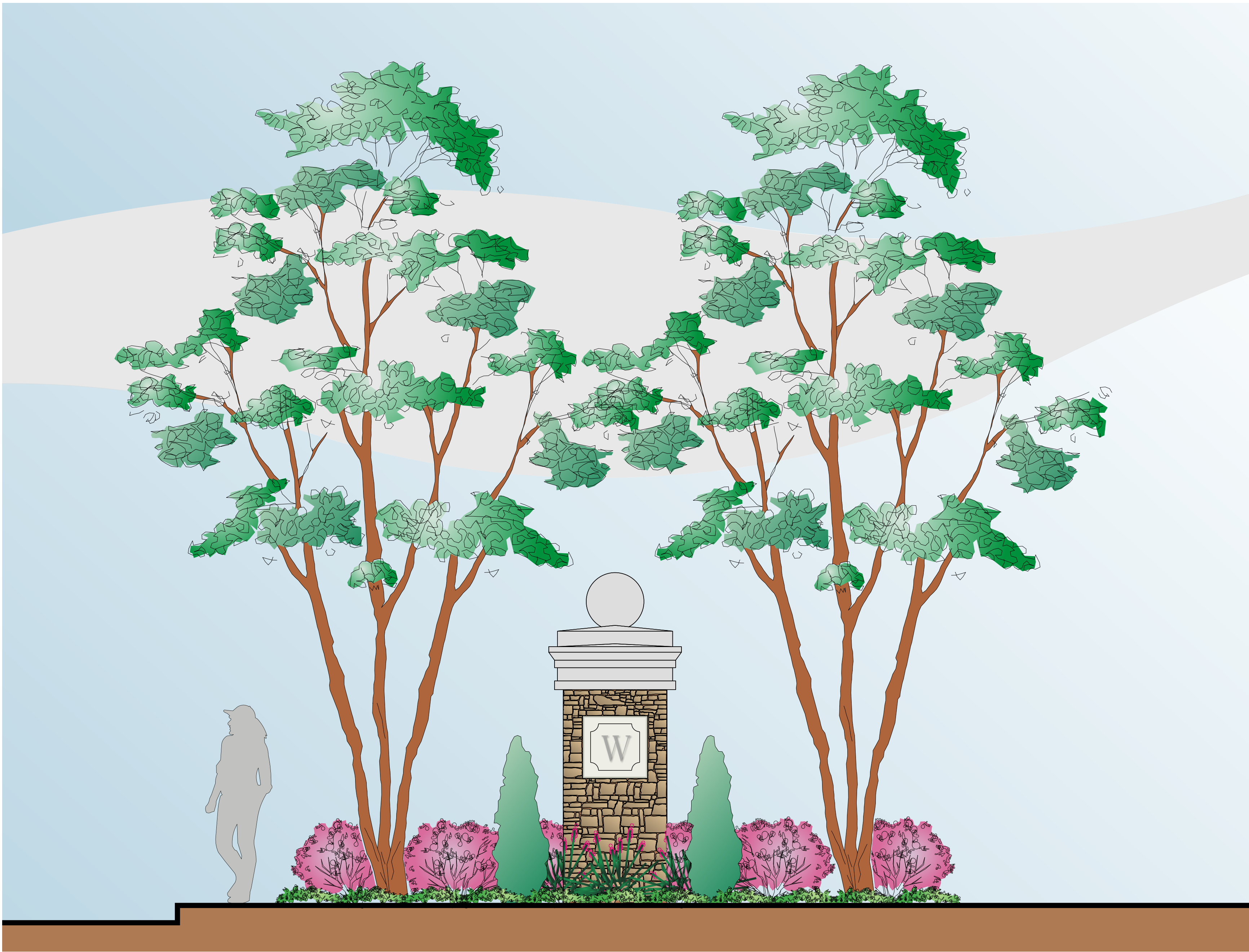
FISHER ARNOLD
SHEET 2 OF 3
DIVISION OF ENGINEERING

**NEW CANADA ROAD
INTERSECTION IMPROVEMENTS
AND PLANTATION HILLS
ENTRY SIGN ELEVATION**

SURVEY: F & A, INC. DATE: 03/2012 PROJECT NO.: D7008
DESIGN BY: I.R.R. DATE: 08/2012 BOOK: SCALE: VARIES
DRAWN BY: I.R.R. DATE: 08/2012

REVIEWED

CITY ENGINEER DATE



WOODBRIDGE ENTRY ELEVATION
SCALE: 1/2" = 1'-0"



EXISTING SIGN AT SOUTHWEST CORNER OF LAKE BRIDGE DRIVE



WILLOW OAK



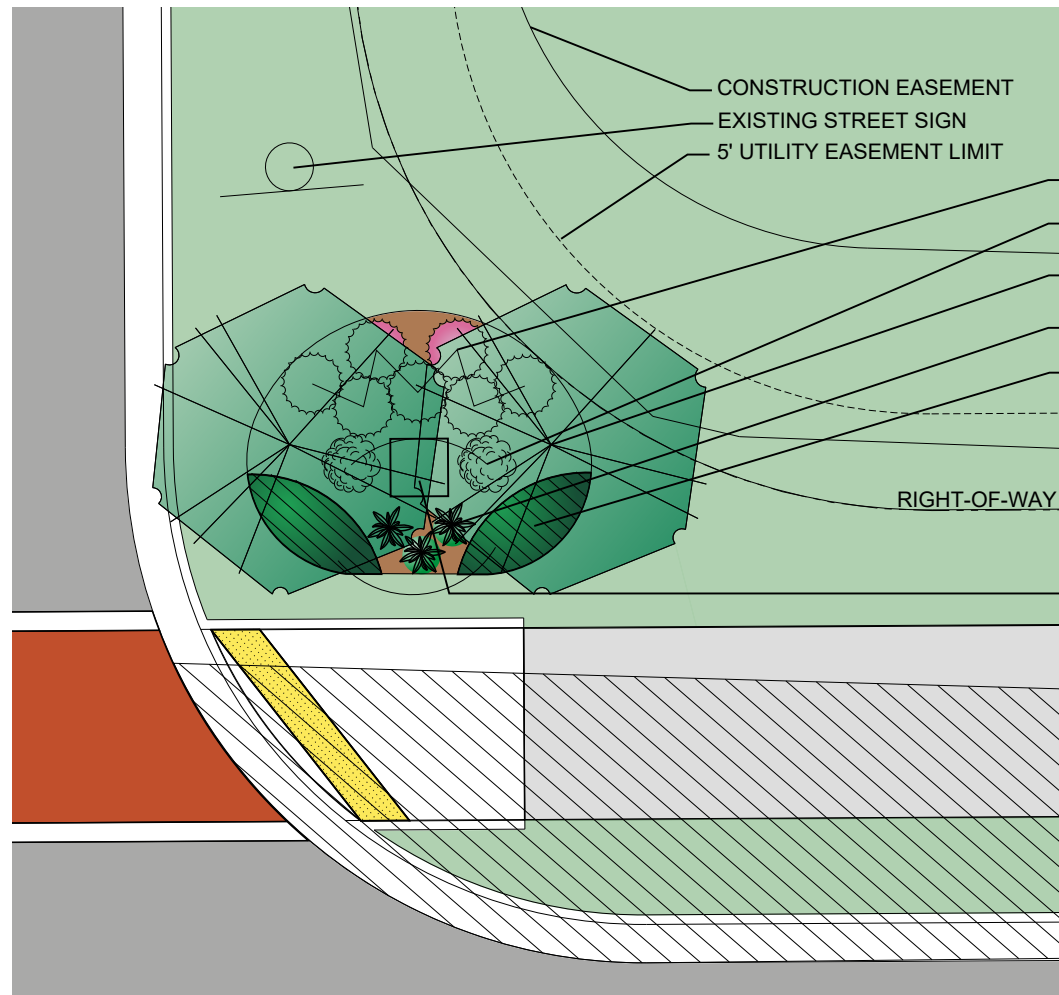
SPRING FLOWERS
AUTUMN BRILLIANCE SERVICEBERRY



FALL FOLIAGE COLOR
AUTUMN BRILLIANCE SERVICEBERRY



MIAMI CRAPE MYRTLE



WOODBRIDGE ANNOUNCEMENT PILLAR PLANTING PLAN
SCALE: 1" = 10'-0"

SHRUBS AT ENTRY SIGNS AND SUBDIVISION FENCES



CHINA GIRL HOLLY



DEE RUNK BOXWOOD



EDWARD GOUCHER ABELIA



GREEN MOUNTAIN BOXWOOD



LOROPETALUM PLUM DELIGHT



COMPACT JAPANESE HOLLY



SCHILLING'S DWARF YAUPOON HOLLY



CRIMSON FIRE LOROPETALUM



KARLEY ROSE FOUNTAIN GRASS

SHRUBS AND GROUND COVER IN MEDIANS



ROSE CREEK ABELIA



GRO-LOW FRAGRANT SUMAC



ANDORRA JUNIPER



ASIATIC JASMINE



BAR HARBOR JUNIPER



BIG BLUE LIRIOPE



VARIEGATED LIRIOPE



FIREPOWER NANDINA
COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.00001 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

ITEM NO.	DESCRIPTION	APPROVAL DATE

CANADA ROAD WIDENING
CITY OF LAKELAND
ENGINEER: FISHER & ARNOLD, INC.

FISHER ARNOLD
SHEET 3 OF 3
DIVISION OF ENGINEERING
NEW CANADA ROAD
WOODBRIDGE ENTRY SIGN ELEVATION
AND PROJECT PLANT SELECTIONS

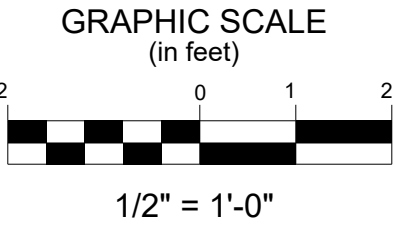
SURVEY: F & A, INC.
DESIGN BY: I.R.R.
DRAWN BY: I.R.R.

DATE: 03/2012
DATE: 08/2012
DATE: 08/2012

PROJECT NO.: D7008
BOOK:
SCALE: VARIES

REVIEWED

CITY ENGINEER DATE





Plan Review – Initial Submittal

Date:	April 1, 2022
Project Title:	New Canada Road Improvements Site Plan
Applicant:	Emily Harrell, City of Lakeland eharrell@lakelandtn.org

Please address each of the following comments provided by City of Lakeland staff. In order for your project to be placed on the **April 21, 2022**, Lakeland Municipal Planning Commission agenda, please submit the following to the Lakeland Planning Department by **4:30 PM on April 12, 2022**:

- Response letter addressing each staff comment
- Electronic version (PDF) of updated plans
- 3 full-size (24" x 36") sets of folded plans
- 12 reduced (11" x 17") sets of plans
- Cloud all changes

Engineering Department

Emily Harrell, City Engineer

901.867.5418, eharrell@lakelandtn.org

1. See attached Engineering comments.

Planning Department

Donald Anthony, Planning Director

901.867.2718, danthony@lakelandtn.org

1. The Planning Department recommends that plantings follow the standards for street trees: minimum 2 inch caliper at planting; medium and large overstory trees where possible; and average spacing interval of 40 feet.
2. If irrigation is needed, provide an irrigation plan.

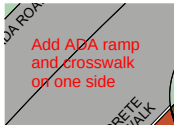
Plantation Hills Subd, Site Plan.pdf Markup Summary

EHarrell (8)



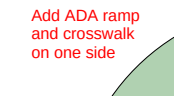
Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 3:20:56 PM
Status:
Color: ■
Layer:
Space:

Discuss irrigation, if needed



Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 3:22:14 PM
Status:
Color: ■
Layer:
Space:

Add ADA ramp and crosswalk on one side



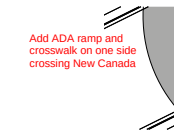
Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 3:22:29 PM
Status:
Color: ■
Layer:
Space:

Add ADA ramp and crosswalk on one side



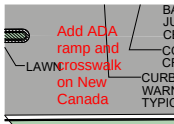
Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 3:22:58 PM
Status:
Color: ■
Layer:
Space:

Add crosswalk on New Canada



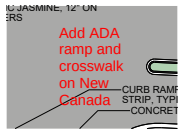
Subject: Text Box
Page Label: 1
Author: EHarrell
Date: 3/30/2022 3:24:38 PM
Status:
Color: ■
Layer:
Space:

Add ADA ramp and crosswalk on one side crossing New Canada



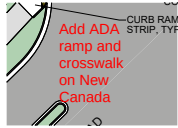
Subject: Text Box
Page Label: 2
Author: EHarrell
Date: 3/30/2022 3:29:50 PM
Status:
Color: ■
Layer:
Space:

Add ADA ramp and crosswalk on New Canada



Subject: Text Box
Page Label: 2
Author: EHarrell
Date: 3/30/2022 3:31:13 PM
Status:
Color: ■
Layer:
Space:

Add ADA ramp and crosswalk on New Canada



Subject: Text Box
Page Label: 2
Author: EHarrell
Date: 3/30/2022 3:31:21 PM
Status:
Color: ■
Layer:
Space:

Add ADA ramp and crosswalk on New Canada



Municipal Planning & Design Review Commission

Meeting Cycle: Thursday, April 21, 2022

Subject: Consideration of an Amendment to the Lakeland Land Development
Regulations Regarding Fence Materials.

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION

Meeting Date: Thursday, April 21, 2022

Project: Amendment to the Lakeland Land Development Regulations Regarding PVC Fencing in All Frontage Buffers and along All Property Lines in Commercial Zoning Districts

Staff Contact: Donald Anthony, Planning Director

STAFF RECOMMENDATION

Staff recommends that the Planning Commission forward this amendment to the Board of Commissioners with a favorable recommendation.

DISCUSSION

At the request of Commissioner Wright, Planning Department staff has crafted an amendment to the Land Development Regulations remove vinyl fencing as a *by-right* option in all frontage buffers and in all yards in districts with commercial zoning. At least two commercial developments along U.S. Highway 64 have used white PVC fencing to satisfy the frontage buffer requirement. PVC fencing—particularly white PVC—is prone to mildew and weathering that can make it become unsightly over time. Further, due to its lighter weight, PVC fencing can be easily bent and otherwise displaced by wind and other weather events.

Frontage Buffers

Article III, Section 5.J. of the Lakeland Land Development Regulations requires a frontage buffer nine feet in depth in all zoning districts where a parking lot or other vehicle area is located adjacent to a vehicular right-of-way. Single-family residential uses are exempt from this requirement. In addition to trees and hedges, a semi-opaque fence with a minimum height of three feet and maximum height of four feet is required within the frontage buffer. Subsection 3.e. limits frontage buffer fence materials to steel or PVC. Colors are limited to black, gray, and dark green. The proposed amendment to the Land Development Regulations would remove PVC fencing as a by-right option for satisfying the frontage buffer requirement. The color restrictions would remain in place. Any alternative materials, colors, height, opacity, and opening intervals would have to be approved by the Design Review Commission.

Commercial District Yards

Article III, Section 5.P. of the Lakeland Land Development Regulations permits brick, stone, wood, composite wood, and metal fences. Per subsection (a), PVC is permitted for all non-solid fencing. The proposed amendment would modify subsection (a) to limit PVC fencing as a by-right option for residential properties only. A new subsection (d) would give the Design Review Commission the authority to permit alternative fence materials upon request by an applicant.

Necessary Findings

Per Article I, Section 4.M.5. of the Land Development Regulations, the legislative body must make specific findings when adopting proposed amendments to the regulations. These findings include:

- a. The proposed amendment is in accordance with the intent and purposes of the Comprehensive Plan and other development policies of the City or, if not, additional attention is given to the reasons for deviating from these City policies.
- b. The application is consistent with the intent and standards of these Land Development Regulations.
- c. No one property owner or small group of property owners shall benefit materially from the change to the detriment of the public.
- d. The application is in the interest of the health, safety, and welfare.

Findings a, b, and d are addressed in the whereas clauses of the attached ordinance. With regard to finding c, staff is not aware of any material benefit that this proposed amendment would convey on any one property owner or small group of property owners.

Staff will be available at the Planning Commission meeting to answer any questions the Commission may have regarding the proposed amendment.

EXAMPLE MOTIONS

1. Motion to recommend that the Board of Commissioners approve the amendment to the Land Development Regulations as presented by staff.
2. Motion to recommend that the Board of Commissioners approve the amendment to the Land Development Regulations as modified by the Planning Commission.
 - a. List modifications
3. Motion to recommend that the Board of Commissioners disapprove the amendment to the Land Development Regulations.
 - a. Reason for denial

AN ORDINANCE TO AMEND THE LAND DEVELOPMENT REGULATIONS OF THE CITY OF LAKELAND, TENNESSEE, TO REQUIRE DESIGN REVIEW COMMISSION APPROVAL OF PVC FENCING IN ALL FRONTAGE BUFFERS AND ALONG ALL PROPERTY LINES IN COMMERCIAL ZONING DISTRICTS

WHEREAS, the City of Lakeland Board of Commissioners adopted zoning regulations as part of the City's Land Development Regulations in 2013; and

WHEREAS, the Land Development Regulations have been subsequently amended as necessary to promote the health, safety, and welfare of the citizens of Lakeland; and

WHEREAS, a stated purposed of the Land Development Regulations is *to guide development to minimize visual clutter and promote economic and social stability within the community*; and

WHEREAS, the enactment of land use regulations to enhance quality of life by preserving the City's character and desirable aesthetic features is a valid use of the City's zoning authority; and

WHEREAS, the City of Lakeland desires to enhance quality of life and preserve the City's character and desirable aesthetic features by limiting the use of certain fencing materials in frontage buffers in all zoning districts and along all property lines in commercial developments; and

WHEREAS, the Lakeland Municipal Planning and Design Review Commission voted in favor of recommending that the Lakeland Board of Commissioners amend the Land Development Regulations by limiting the use of certain fencing materials in frontage buffers in all zoning districts and along all property lines in commercial developments;

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE CITY OF LAKELAND, TENNESSEE as follows:

SECTION 1. Article III, Section 5 of the City of Lakeland Land Development Regulations is hereby amended by removing the text highlighted and stricken through and adding the text highlighted and bolded as follows:

III. Zoning Regulations

Section 5 – Landscape Standards

J. Frontage Buffer

3. Requirements. Typical frontage buffer requirements are illustrated in Figure 5.J-1.

...

- e. Fence. A minimum of three (3) and a maximum of four (4) feet in height steel or PVC picket

fence **is shall be** required, **and shall be** located two (2) feet from the back of the curb of the vehicular area.

~~(1) No other fence material is permitted.~~

~~(2) (1)~~ Fence colors **are shall be** limited to black, grey, or dark green.

~~(3) (2)~~ Fence opacity shall be no greater than sixty (60) percent, **and** no less than thirty (30) percent.

~~(4) (3)~~ A gate opening of six (6) feet **is shall be** permitted every one hundred (100) feet.

(4) The Design Review Commission shall have the authority to permit alternative fence materials, colors, height, opacity, and opening intervals when such alternative is deemed by the Design Review Commission to be integral to and consistent with the development of the site.

...

P. Fences and Walls

3. Requirements. Fences and walls shall adhere to the following standards.

...

d. Materials. All fences and walls shall meet the following requirements.

(1) Brick, stone, wood, composite wood, or metal are permitted fence and wall materials.

(a) PVC is permitted for all non-solid fencing **on lots in residential districts.**

(b) All materials shall be finished quality and durable, treated to prevent disease or decay.

(c) Through Lot fences and walls on the Rear Property Line shall be solid, consisting of stone or brick, or wood fences with masonry or stone columns a minimum of every fifty (50) feet on center.

(d) The Design Review Commission shall have the authority to permit alternative fence materials when such

alternative is deemed by the Design Review Commission to be integral to and consistent with the development of the site.

...

SECTION 2. That all Ordinances in conflict herewith are repealed to the extent of said conflict, and that this Ordinance shall take effect from and after its passage on final reading, the public welfare requiring it.

First Reading:
Public Hearing:
Second Reading:

Mike Cunningham, Mayor

ATTEST:

Debra Murrell, City Recorder