



City of Franklin

109 3rd Ave S
Franklin, TN 37064
(615)791-3217

Meeting Agenda

Work Session

Tuesday, July 11, 2017

4:30 PM

Board Room

Call to Order

Citizen Comments

WORKSESSION DISCUSSION ITEMS

1. [17-0577](#) Consideration of Liquor License Renewal for Berry Farm Wine & Spirits, (Satish Patel, Managing Agent) 4000 Hughes Crossing, Suite 160, Franklin, TN, 37064-1484. (07/11/17 WS)

Sponsors: Lanaii Benne
Attachments: [2017 Patel, Satish Berry Farms Certificate.pdf](#)
2. [17-0576](#) Consideration of Liquor License Renewal for Franklin Wine and Spirits, (James D. Clark, Managing Agent) 1400 Liberty Pike, Suite #300, Franklin, TN 37064. (07/11/17 WS)

Sponsors: Lanaii Benne
Attachments: [2017 CERT Clark, David .pdf](#)
3. [17-0607](#) Update on Downtown Parking Capacity and Management Study (COF Contract No. 2016-0230)

Sponsors: Engineering
Attachments: [Franklin Parking Study BOMA 7-11-17](#)
[Franklin Parking Study BOMA 7-11-17](#)
[Shared Parking Districts Handouts](#)
[Parking Study Public Meeting Summary](#)
4. [17-0609](#) Discussion Regarding Thermal Hydrolysis Alternatives Analysis

Sponsors: Mark Hilty and Michelle Hatcher
Attachments: [THP MEMO CDM 06-28-17.pdf](#)
[20170623 TAB Cambi vs Lystek Non-Cost Comparison - FINAL V1](#)

5. [16-0835](#) Consideration of Ordinance 2016-42, "An Ordinance To Amend Title 17 - Refuse And Trash Disposal Of The Franklin Municipal Code For The Purpose Of Providing for Various Clarifications And Other General Housekeeping, and Appendix A - Comprehensive Fees and Penalties to be Consistent With the Amendments to Title 17" (Referred from 10/20/16 Budget & Finance, and 6/27/17, 02/13/18, 02/27/18, and 3/27/18 Work Sessions; 04/10/18 1st Reading 7-0). SECOND AND FINAL READING

Sponsors: Mark Hilty and Jack Tucker

Attachments: [16-0835 FINAL 2016-42 ORD Title 17 and Appendix A BOMA 041018 Law Ap 20180323 PPT SES TITLE 17 V1](#)
[20180402 TITLE 17 and APP A V2](#)

Legislative History

10/20/16	Budget & Finance Committee	referred to the Work Session
6/27/17	Work Session	referred to the Work Session

6. [17-0569](#) *Consideration of an Interlocal Agreement With Williamson County Government to Redistribute the Half of the One-Half Percent Sales Tax Increase That Is Not Allocated For Schools. (COF Contract Number 2017-0145) (06/27/17 WS)

Sponsors: Eric Stuckey

Attachments: [wcs letter.pdf](#)
[2017-0145 Interlocal with The City of Franklin to Redistribute Sales Tax Increases rates.pdf](#)

Legislative History

6/27/17	Work Session	referred to the Work Session
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7. [17-0554](#) Consideration Of Resolution 2016-90, AS AMENDED, To Be Entitled: "A Resolution Adopting A Plan Of Services For The Annexation Of Three Properties Adjacent To and Including 4360 Long Lane, By The City Of Franklin, Tennessee." [Moss] (06/22/17 FMPC 9-0, 07/11/17 Work Session, Amended at 8/8/17 BOMA [7-0] and Public Hearing deferred to September 12, 2017.) (CONSENT AGENDA)

Sponsors: Emily Hunter, Amy Diaz-Barriga and Brad Baumgartner

Attachments: [Moss Proerty PUD Subd. Parcel Map \(Amend Motion\)](#)
[MAP RES 2016-90 MOSS Property Edit Edit](#)
[RES 2016-90 POS 4360 Long Lane with Map.Law Approved 2](#)

Legislative History

6/22/17	Franklin Municipal Planning Commission	recommended favorably to the Board of Alderman and to the Work Session
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8. [17-0556](#) Consideration Of Resolution 2017-48/Ordinance 2017-32, AS AMENDED, To Be Entitled: "A Resolution And Ordinance To Annex Three Properties Adjacent To and Including 4360 Long Lane, Consisting Of 17.59 Acres, Located South Of Carothers Parkway And North Of Long Lane."; (06/22/17 FMPC 9-0, 7/11/17 FIRST READING 8-0; Amended at 8/8/17 BOMA 7-0] and Public Hearing deferred to 9/12/17; 9/12/17 BOMA 2nd Reading 8-0) (CONSENT AGENDA)

Sponsors: Emily Hunter, Amy Diaz-Barriga and Brad Baumgartner

Attachments: [Moss Proerty PUD Subd. Parcel Map \(Amend Motion\)](#)
[Res 2017-48 Ord 2017-32 Moss Property Annexation Map Edit Edit](#)
[2017049-52 Moss Property Boundary-PRELIMINARY 4-27-17](#)
[Res 2017-48. Ord 2017-32 4360 Long Lane. with Map.Law Approved 2](#)
[Owner Affidavit-signed](#)

Legislative History

6/22/17	Franklin Municipal Planning Commission	recommended favorably to the Board of Alderman and to the Work Session
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9. [17-0552](#) Consideration of Ordinance 2017-27, AS AMENDED, To Be Entitled, "An Ordinance To Zone 17.59 Acres Specific Development- District, SD- 1.71, Conventional Development Standard Overlay, Goose Creek Character Area (GCCO-6) Overlay, For Three Properties Adjacent To and Including 4360 Long Lane, Moss Property PUD Subdivision." (06/22/17 FMPC 9-0, 7/11/17 FIRST BOMA Reading 8-0; Amended at 8/8/17 BOMA [7-0] and Second Reading / Public Hearing deferred to September 12, 2017; 9/12/17 BOMA 2nd Reading 8-0) (CONSENT AGENDA)

Sponsors: Emily Hunter, Amy Diaz-Barriga and Brad Baumgartner

Attachments: [Moss Proerty PUD Subd. Parcel Map \(Amend Motion\)](#)
[Ord 2017-27 Moss Proerty PUD Subd. Rezoning Map Edit](#)
[Ord 2017-27 Moss Property Rezoning. with Map.Law Approved 3](#)
[Moss Property Rezoning and Annexation Request Resubmittal 6.1.2017](#)

Legislative History

6/22/17	Franklin Municipal Planning Commission	recommended favorably to the Board of Alderman and to the Work Session
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10. [17-0553](#) PUBLIC HEARING: Consideration Of Resolution 2017-39, To Be Entitled: "A Resolution Approving A Development Plan For The Moss Property PUD Subdivision, For The Property Located East Of Carothers Parkway And North Of Long Lane At 4360 Long Lane."; (06/22/17 FMPC 9-0, 7/11/17 Work Session; 8/8/17 BOMA Deferred Public Hearing to September 12, 2017)

Sponsors: Emily Hunter, Amy Diaz-Barriga and Brad Baumgartner

Attachments: [Res 2017-39 Moss Property PUD Subd. Dev Plan Map](#)
[2017-39 RES Moss Property PUD Subdivision_with Map.Law Approved](#)
[Moss Property DP Conditions of Approval 01](#)
[MossElevations](#)
[MossLayout](#)

Legislative History

6/22/17	Franklin Municipal Planning Commission	recommended favorably to the Board of Alderman and to the Work Session
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11. [17-0550](#) Consideration of Ordinance 2017-24, To Be Entitled: "An Ordinance To Rezone .43 Acres From Residential-3 (R3) District To Office Residential (OR) District For The Property Located At The Southeast Corner Of Columbia Ave And Carolyn Avenue, 1475 Columbia Avenue."; (06/22/17 FMPC 8-1, 07/11/17 WS, 08/08/17 1st BOMA Reading 5-2; 9/12/17 BOMA 2nd READING 8-0) THIRD AND FINAL READING

Sponsors: Franklin Municipal Planning Commission, Emily Hunter, Amy Diaz-Barriga and Josh King

Attachments: [Revised2 2017-24 1474 ORD Columbia Ave. Rezoning Law Approved.06.20.17](#)
[MAP2_HighlandGardens](#)
[Highland Gardens Subdivision, Rezoning, Block A, po 2 &3, 1475 Columbia Ave](#)
[ORZone.pdf](#)
[ORZoneMap.pdf](#)
[ORZoneMapwithPics.pdf](#)
[OR Envision Franklin](#)
[columbia landscape.pdf](#)
[columbia adjacencies.pdf](#)

Legislative History

6/22/17	Franklin Municipal Planning Commission	recommended favorably to the Board of Alderman and to the Work Session
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12. [17-0523](#) Consideration Of Ordinance 2017-23, To Be Entitled: "An Ordinance To Amend Chapters 2 And 3 And 8 Of The Zoning Ordinance Of The City Of Franklin, Tennessee, To Allow Limited Development In The Floodway Fringe Overlay District (FFO) Within Certain Central Franklin Character Area Overlay Districts (CFCO-1 And CFCO-2)." (06/22/17 FMPC 8-1, Referred from 7/11/17 WS, 08/08/17 BOMA 1st Reading 6-1; 9/12/17 2nd BOMA Reading 6-2) THIRD AND FINAL READING

Sponsors:

Emily Hunter and Kelly Dannenfelser

Attachments:[CFCO-1 and 2 Amendment August 8 2017 BOMA Work Session](#)[Revised 2017-23 ORD Amend CFCO-2 and 3 standards 1.Law Approved \(2\)](#)[CFCO Map](#)[Envision Franklin Amendment Approved 062217](#)**Legislative History**

6/22/17	Franklin Municipal Planning Commission	recommended favorably to the Board of Alderman and to the Work Session
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13. [17-0436](#) Consideration Of REJECTING ALL BIDS Received For Municipal Solid Waste Transport Services And, Optionally, Municipal Solid Waste Transfer Station Operation Services, For The City's Municipal Solid Waste Stream That Is Processed At The City's Solid Waste Transfer Station, For The Sanitation And Environmental Services Department (Purchasing Office Procurement Solicitation No. 2017-008) (06/27/17 WS; 7/11/17 BOMA Deferred item to 10/10/17 BOMA; 10/10/17 BOMA Deferred to 12/12/17 BOMA)

Sponsors:

Mark Hilty and Jack Tucker

Attachments:[2017-008 Tabulation of bids 2017.06.21.1609](#)[2017-008 Tabulation of bids 2017.12.04.1727](#)

14. [17-0437](#) *Consider Recommendation To Reject All Bids For Municipal Solid Waste Sanitary Landfill Disposal Services, For The Sanitation And Environmental Services Department (Purchasing Office Procurement Solicitation No. 2017-009) (06/27/17 WS)

Sponsors:

Mark Hilty and Becky Caldwell

Attachments:[2017-009 Tabulation of bids 2017.06.21.1604](#)[2017-009 Tabulation of bids 2017.06.29.1503](#)

15. [17-0611](#) *Consideration of Resolution 2017-52 A Resolution Authorizing And Providing For The Financing Of The Construction Of A Wastewater Facilities Project, Including Authorizing The Execution Of Applications, Contractual Agreements, And Other Necessary Documents, And Making Certain Representations, Certifications, And Pledges Of Certain Revenue In Connection With Such Financing for the Water Reclamation Facility Upgrades and Expansion Project with the State Revolving Fund (COF Contract 2017-0174)

Attachments: [RES 2017-52 Franklin_SRF_2017-398_WRF_Authorizing Resolution for Loan.r](#)
[COF Con 2017-0174Franklin_SRF_2017-398_WRF_Agreement for Loan.pdf](#)

16. [17-0608](#) *Consideration of a Professional Services Agreement (COF Contract No. 2017-0171) with Volkert, Inc. for the Final Design of the Franklin ITS Extension Project (TDOT PIN 116144.00) in an Amount Not-to-Exceed \$71,500.00

Sponsors: Engineering

Attachments: [COF 2017-0171 Volkert ITS PSA_with Scope.Law Approved.pdf](#)

17. [17-0491](#) Continued Discussion Regarding Columbia Avenue Improvements Project Design Alternatives and Consideration of Resolution 2017-43 to Select the Corridor Design Concept for the Columbia Avenue Widening & Improvements Project (Referred from 06/13/17 and 6/27/17 WS)

Sponsors: Engineering

Attachments: [ColumbiaAveWidening_BOMA_170711](#)
[ColumbiaAveWidening_BOMA_170711](#)
[ColumbiaAveWidening_BOMA_170627](#)
[ColumbiaAveWidening_BOMA_170613](#)
[ColumbiaAveWidening_EstimatedPropertyImpacts_170627](#)
[ColumbiaAveWidening_ExampleRoundaboutCorridors](#)
[ColumbiaAveWidening_Timeline_170526](#)
[ColumbiaAveWidening_TPR_Final_101117](#)

Legislative History

6/13/17	Work Session	referred to the Work Session
6/27/17	Work Session	referred to the Work Session

Other Business

Adjournment

Anyone requesting accommodations due to disabilities should contact ADA coordinator at 791-3277.



HISTORIC
FRANKLIN
TENNESSEE

**RETAILER'S CERTIFICATE
(RENEWAL)**

Pursuant to T.C.A. §57-3-208, the City of Franklin hereby certifies the following facts concerning applicant Berry Farm Wine & Spirits, Inc. (Satish Patel, Managing Agent), who has made application for a retailer's license to handle alcoholic beverages at 4000 Hughes Crossing, Building A, which is within the corporate limits of the City of Franklin, Williamson County, Tennessee:

1. The owner who is to be in actual charge of the business has not been convicted of any violation of the laws against possession, sale, manufacture, or transportation of beer or other alcoholic beverages, or of any felony, or of any crime involving moral turpitude, within the past ten (10) years immediately preceding the date of application;
2. The applicant has secured a location for the business which complies with all restrictions of local law, ordinances, or resolutions, duly adopted by the local authorities as to location.
3. The applicant (by and through one or more of its owners) meets all residency requirements established by local authority under Franklin Municipal Code Section 2-108A.
4. The applicant has complied with local laws, ordinances, and resolutions duly adopted by the local authority regulating the number of retail licenses to be issued within the jurisdiction.

This the 8th Day of August, 2017.

Dr. Ken Moore
Mayor



HISTORIC
FRANKLIN
TENNESSEE

**RETAILER'S CERTIFICATE
(Renewal)**

Pursuant to T.C.A. §57-3-208, the City of Franklin hereby certifies the following facts concerning application in the name of JDC Wines and Spirits, LLC d/b/a Franklin Wine and Spirits, owned by the managing agent, James D. Clark, who has made application for a retailer's license to handle alcoholic beverages at 1400 Liberty Pike, Suite 300, Franklin, TN 37067 (Franklin Wine and Spirits), which is within the corporate limits of the City of Franklin, Williamson County, Tennessee:

1. The owner(s) who are to be in actual charge of the business have not been convicted of any violation of the laws against possession, sale, manufacture, or transportation of beer or other alcoholic beverages, or of any felony, or of any crime involving moral turpitude, within the past ten (10) years immediately preceding the date of application, and shall not violate any of the provisions of Tennessee Code Annotated, Title 57, Chapter 3;
2. The applicant(s) has secured a location for the business which complies with all restrictions of local law, ordinances, or resolutions, duly adopted by the local authorities as to location.
3. The applicant (by and through one or more of its owners) meets all residency requirements established by local authority under Franklin Municipal Code Section 2-108A.
4. The applicant has complied with local laws, ordinances, and resolutions duly adopted by the local authority regulating the number of retail licenses to be issued within the jurisdiction.

This the 8th Day of August, 2017

Dr. Ken Moore
Mayor

Downtown Parking Capacity Management Study: Future Conditions

, 2017

Worksession



VOLKERT



WALKER
PARKING CONSULTANTS

Today's Agenda

Project Overview & Status

Public Meeting Update

Future Land Use

Future Parking Scenario

Questions/Next Steps



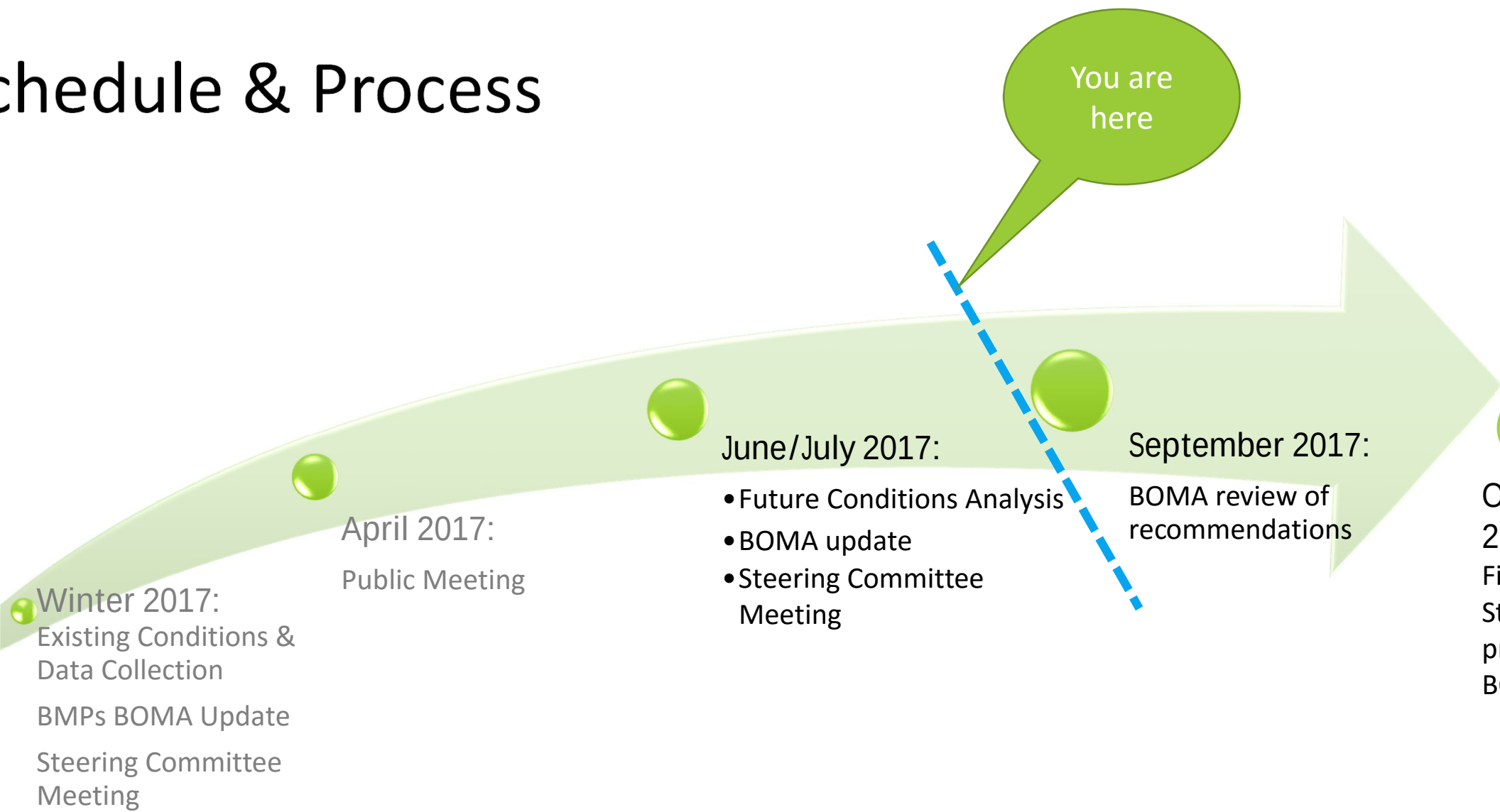
Purpose

Provide the City, Businesses, Shoppers, Diners, Workers, Churches, Tourists, and Citizens with:

- Clear understanding of the existing parking infrastructure.
- Projections of anticipated parking demand in the downtown area.
- Identification of parking infrastructure and operational needs.



Schedule & Process



Public Meeting Update

Open House format Public Meeting was held April 10 from 4:30 – 6:30 pm

Great feedback & comments on:

- Existing Challenges
- Future Programs & Practices

COMMENTS

NAME/ORGANIZATION: Marty Curley, Generations Church
marty@generationsstn.com

TELL US WHAT YOU THINK:

to see better signage for
se.
city for employee and non-employee
affordable and safe



COMMENTS

NAME/ORGANIZATION:

EMAIL/CONTACT:

TELL US WHAT YOU THINK:

I do not support Valet - a
Company should not make money
off my business they
are making money off
my spending dollars.



Future Parking Programs & Projects

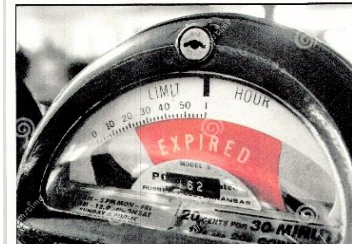


Enforcement (utilize warning citation fines, ambassador program)

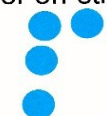


Yes to Ambassador Program
Yes to caution fines
Cautious about ambassador program

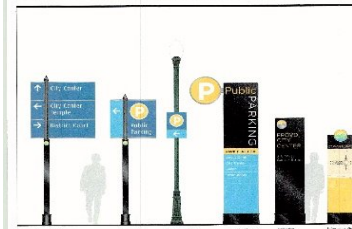
I love an Ambassador but please don't let them



Financial Sustainability (paid parking or on-street)



I think changing the parking system is needed
Also, making sure the amount of time the groups would be paid

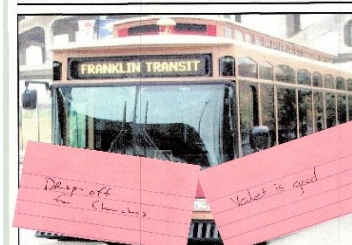


Wayfinding (improve signage for downtown attractors & parking availability)



Step 1: Finish the walkway
Plan by location, the sidewalks and take down the signs and make sure the new parking locations and options

Clear, with signs of what is going on and make sure the new experience is better



Alternative Solutions (increase in trolley/lift pick-up/drop-off areas, and)



Consider long-term leasing of street spots for business vendors

I think having public transportation around the downtown district would be a wonderful addition to the area



Shared Parking (city policies to encourage business parking lots/garages)



Downtown work force may not take up parking spaces for the good of the whole

Issue of property owners

Consider the parking lot in the downtown district and make sure the new experience is better

ting Parking Supply and Committed Parking Supply

Parking Classification	Parking Spaces		
	Supply	Demand (Peak Hr)	Need
Existing*	1378	1166	-212
Existing +Committed**	1824	1878	54

* This includes the two parking garages, on-street parking, & the 4th Avenue Church of Christ Lot.

** The committed projects include Harpeth Square, 231, 249, and Renasant Bank.



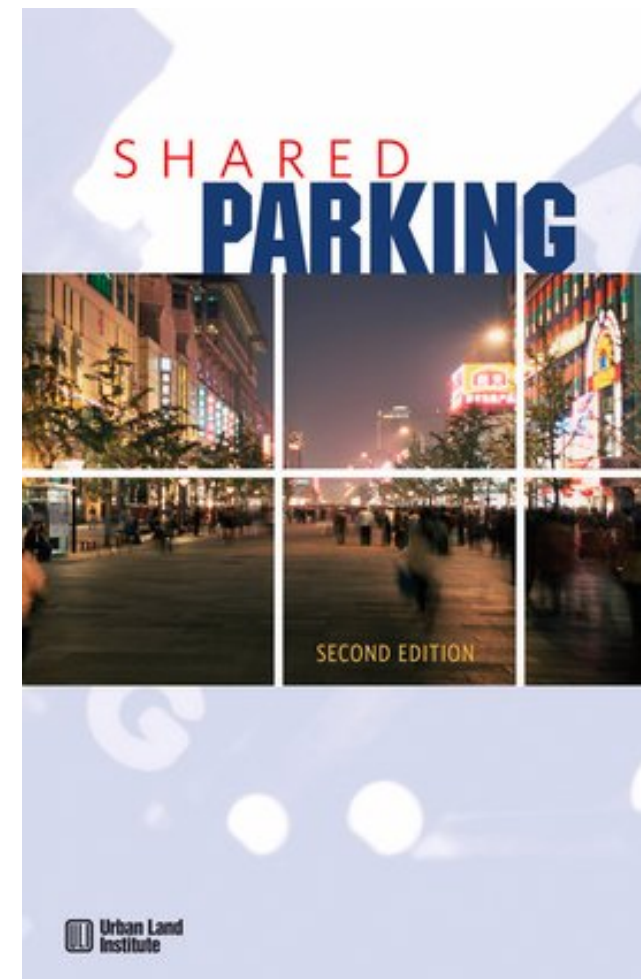
Shared Parking Purpose & Analysis

Peak Hours and Demands for Parking vary according to the Land Use

Land Uses with varying peak demands that are located within close proximity can share parking areas

Adjustments were taken for the time of day & month; however, reductions were not taken for different modes of travel (pedestrians, bicycles, transit)

Industry Standards established in the 2nd Edition of the *Shared Parking* book published by the *Urban Land Institute*



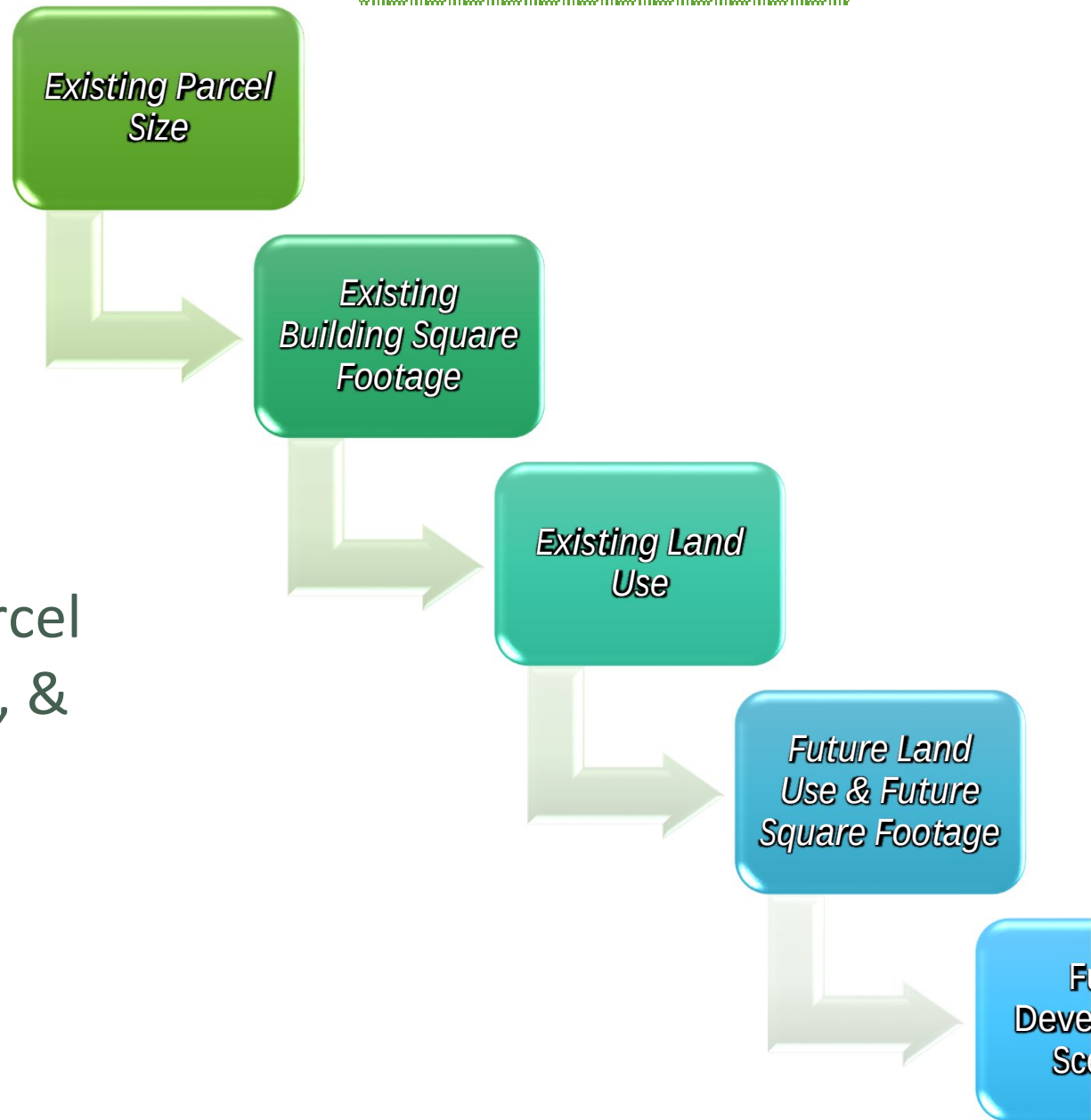
Future Land Use

Developed a Planning-level
Future Development Scenario

Multilayered Data Projection:

GIS data provided Current Parcel
Size, Building Square Footage, &
Land Use

Envision Franklin provided
guidance for future form &
land-use mix



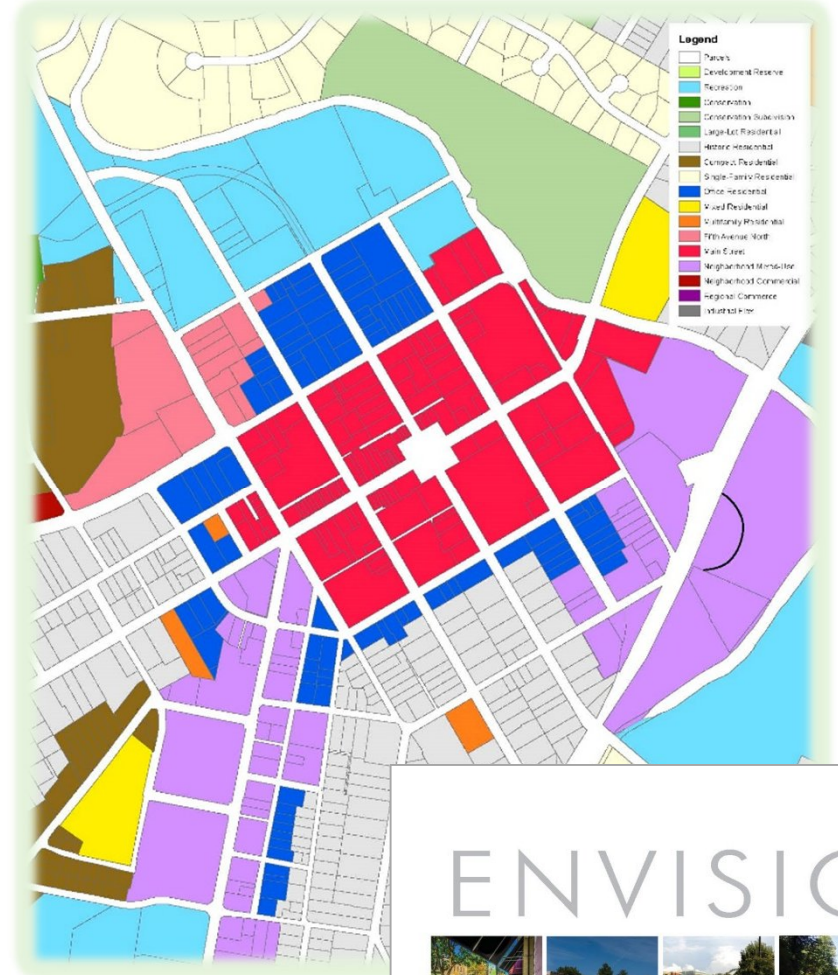
Future Land Use

Future Development Scenario attempts a *realistic* look at the downtown core of the Study Area

Land Use Mix & Development Scenario created & refined with guidance from Planning Staff

Reviewed and revised on a block-by-block basis for the downtown core

Incorporated approved developments (committed) but not yet constructed/occupied



ENVISION



FRANKLIN

PRESERVING THE PAST, PLANNING THE FUTURE

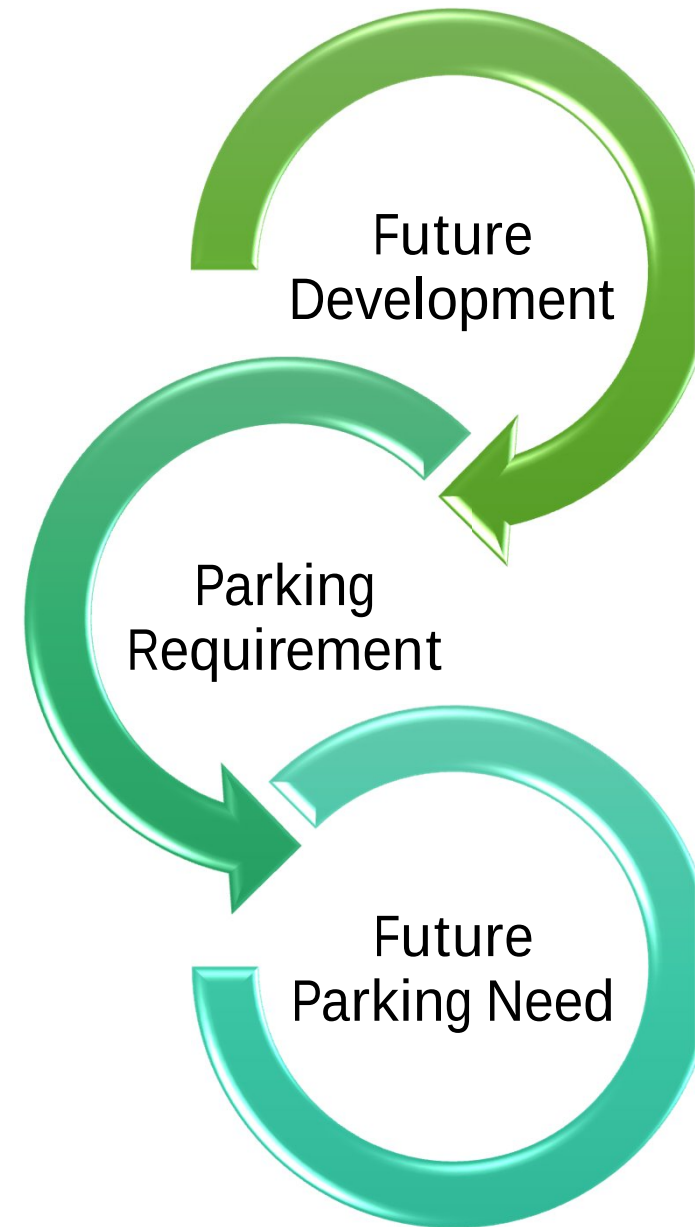
ADOPTED JANUARY 26, 2017

Future Parking Scenario

Projected Bldg. Sq. Ft. were applied to parking standards to produce a shared Future Parking Scenario
Shared Use Parking Analysis conducted on Shared Parking Districts
Shared Parking Districts = Geographic Analysis Zones

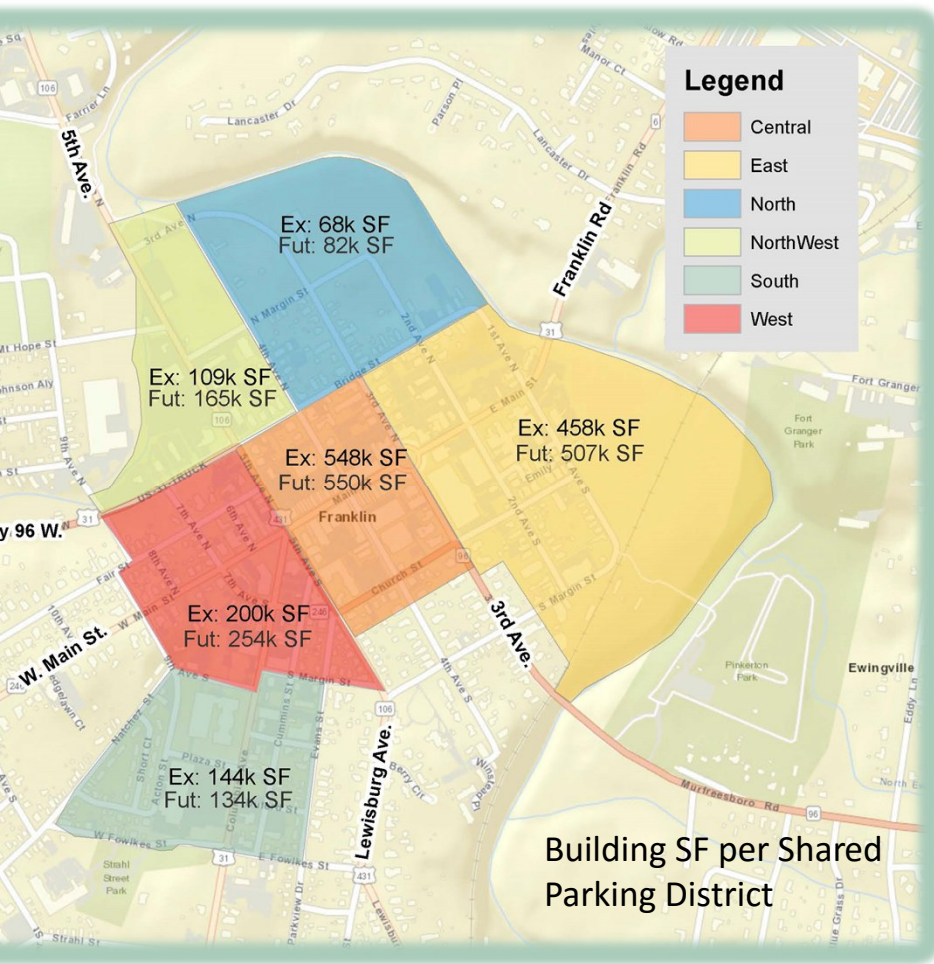
Important!

Shared Uses – included in Future parking analysis (Retail, Institutional, Office, Restaurant, & Finance)
Discrete Uses – not included in the Future parking analysis (Residential & Hotel)



Development Scenario

Existing vs. Future Square Footage of Shared Parking Land Uses



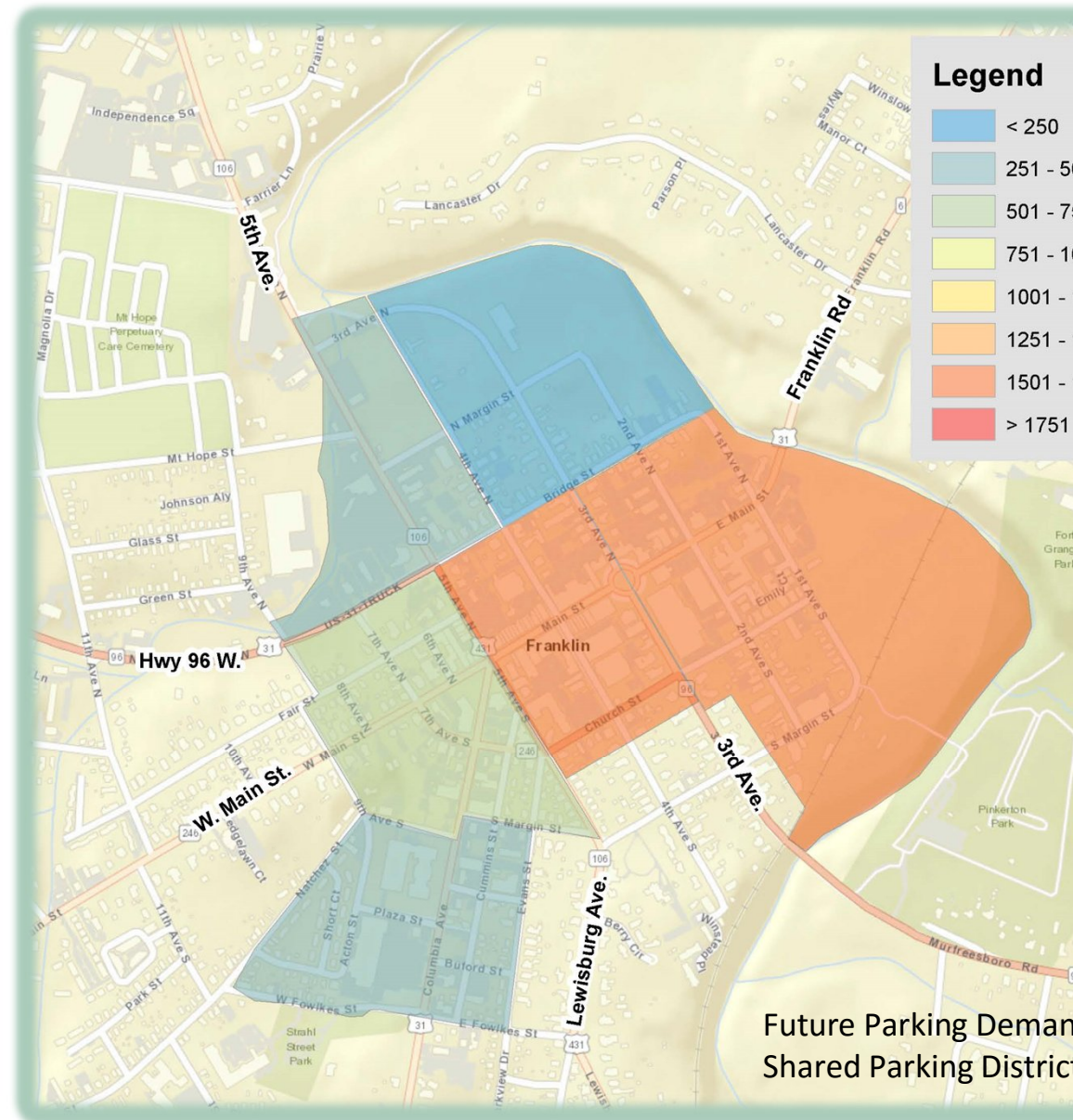
Land Use Shifts per Area



Future Shared Parking Demand per Shared Parking District

Shared Parking District	Shared Parking Demand*
North	250
Northwest	450
East	700
Central	1500
South	1600
Southwest	450

*Demand is based on the future development scenario and is approximate so they will need to be reevaluated as development progresses.



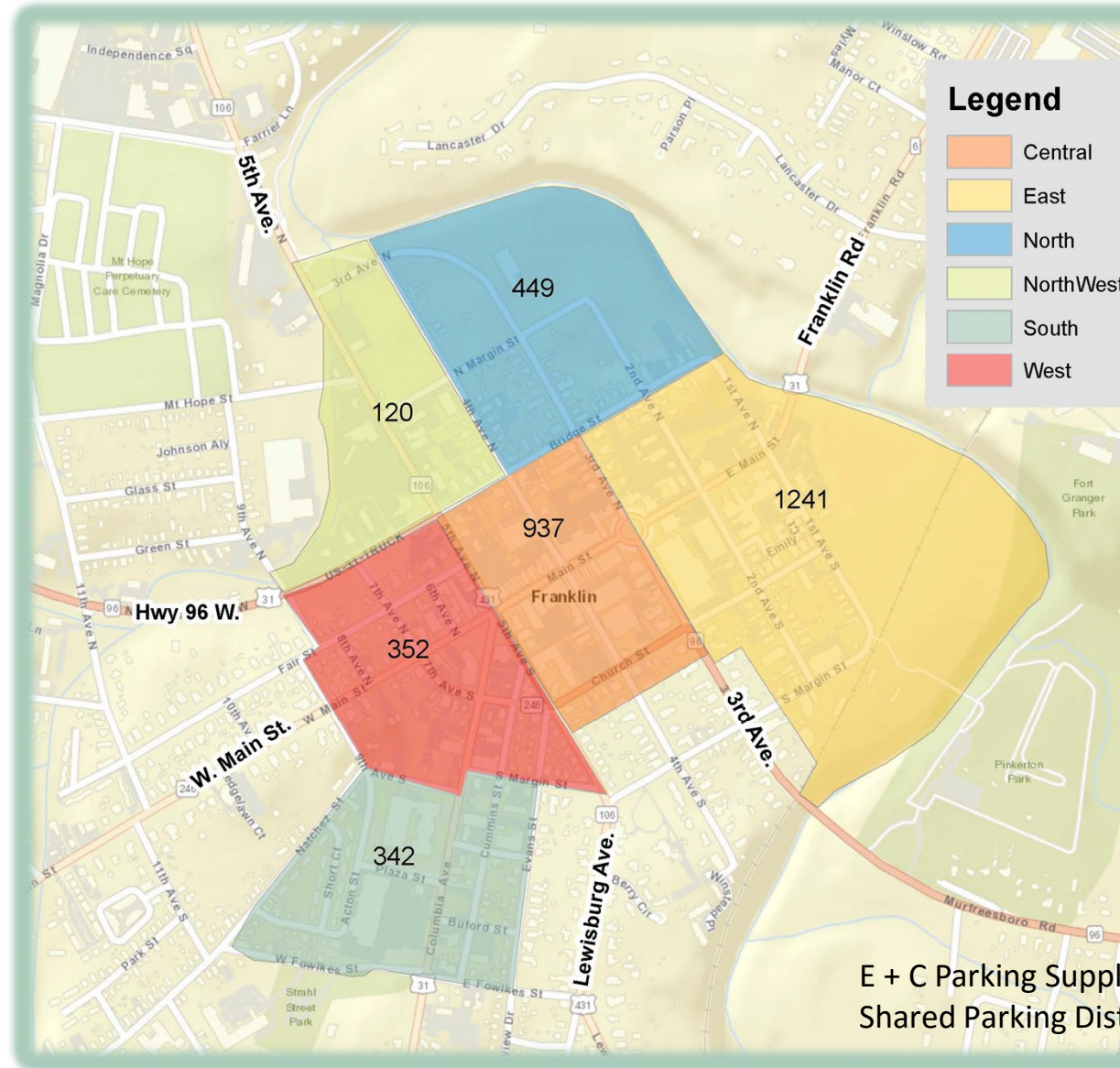
Existing Parking Supply in Private Lots per Shared Parking District

Shared Parking District	Existing Parking Supply
North	449
Northwest	72
Central	336
East	937
South	861
West	342



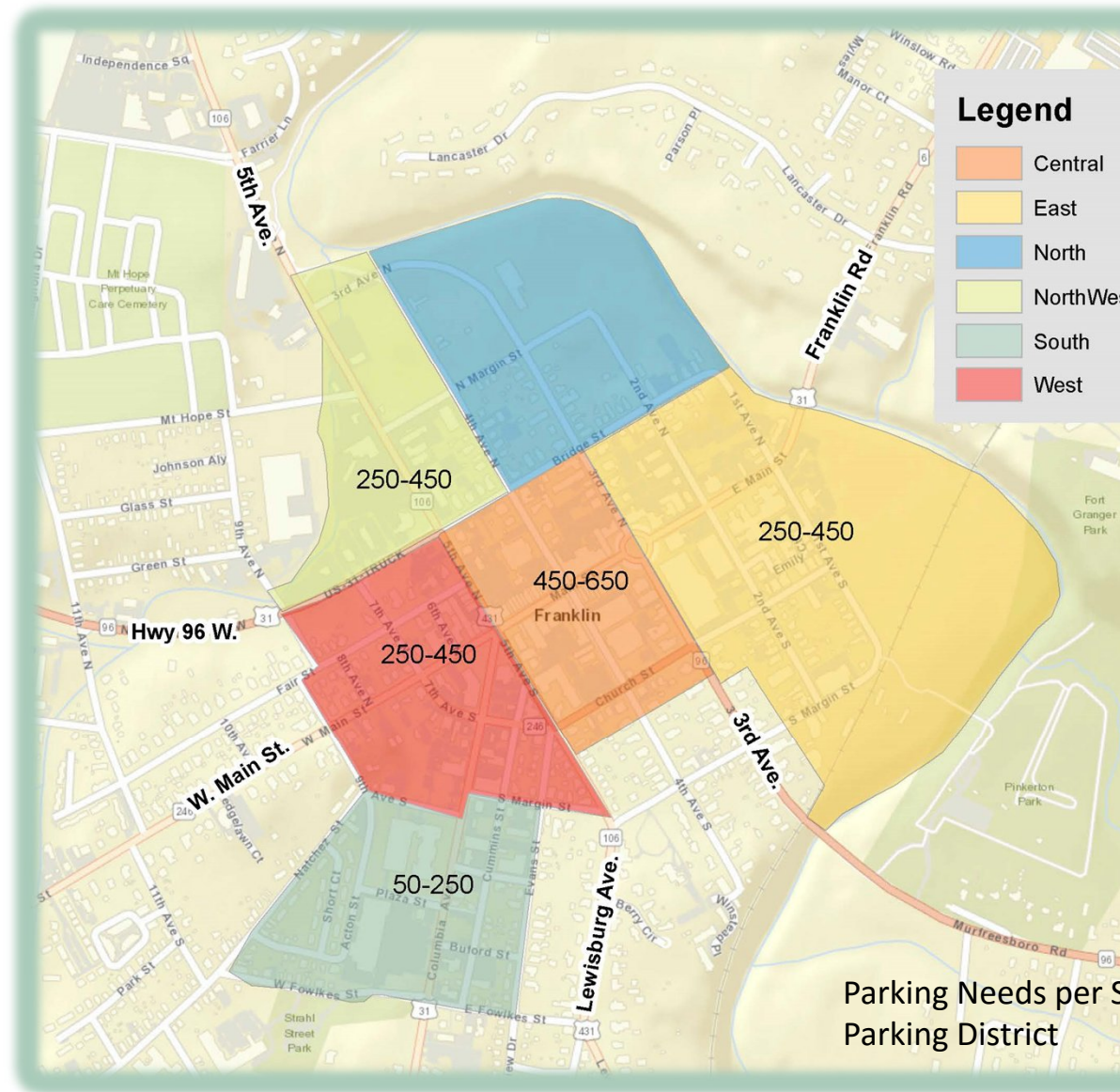
Parking + Committed Parking Supply Shared Parking District

Shared Parking District	E + C Parking Supply
	449
West	120
	352
I	937
	1241
	342

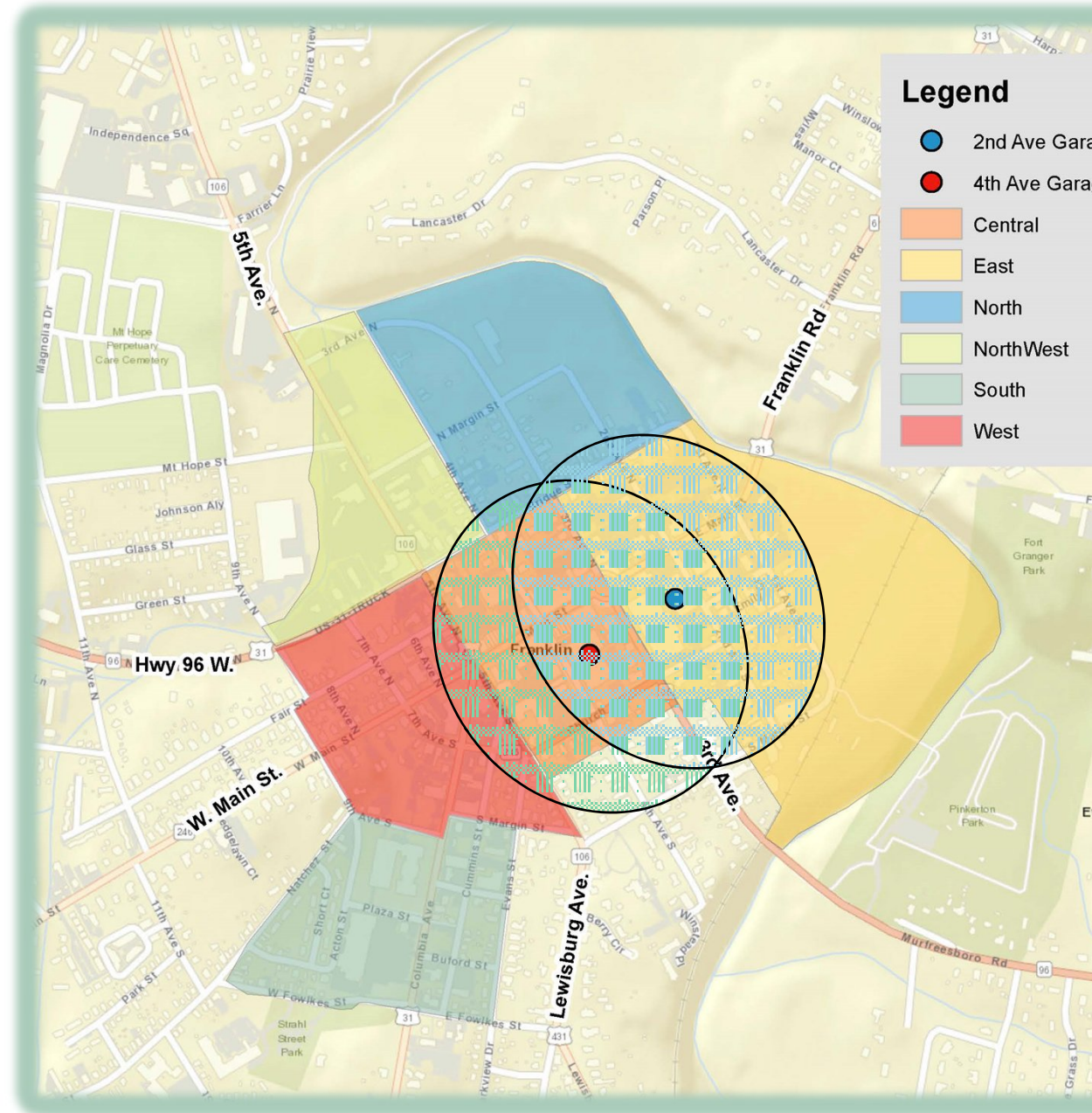


Parking Needs per Shared Parking District

Shared Parking District	Parking Needs
	0
West	250-450
	250-450
	450-650
	250-450
	50-250



A vibrant street scene in downtown Chicago. A woman in a pink shirt and white pants walks towards the camera on a sidewalk lined with shops and trees. The scene is bright and sunny, with shadows cast on the pavement. In the background, other pedestrians are visible, and a car is parked on the street. The architecture features brick buildings with large windows and awnings. A large planter with pink flowers is in the foreground on the right.



Questions?

Thank you for your time!

NEXT STEP:

RECOMMENDATIONS



Downtown Parking Capacity & Management Study: Future Conditions

July 11, 2017

BOMA Worksession



VOLKERT



WALKER
PARKING CONSULTANTS

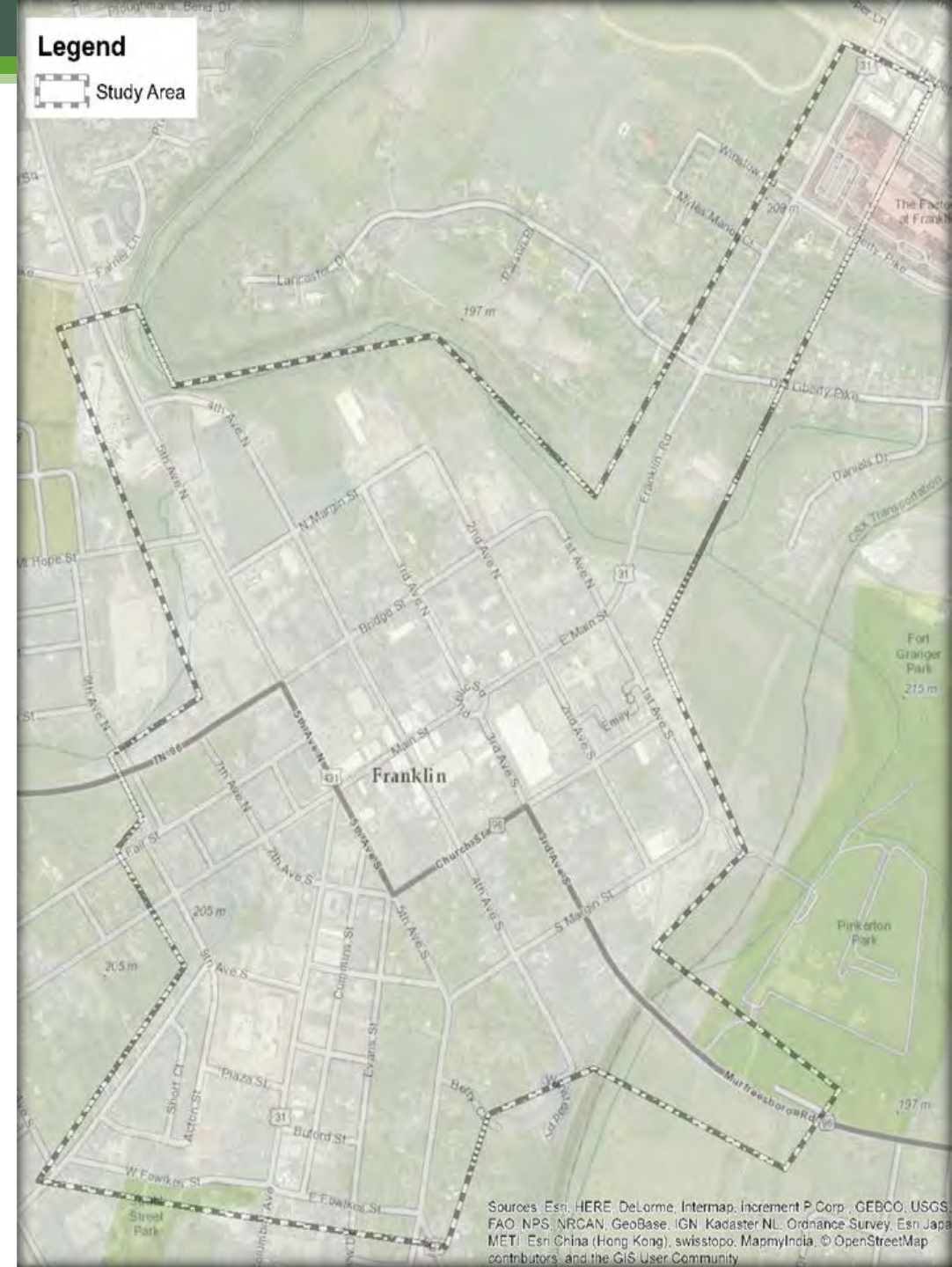
Today's Agenda

- Project Overview & Status
- Public Meeting Update
- Future Land Use
- Future Parking Scenario
- Questions/Next Steps

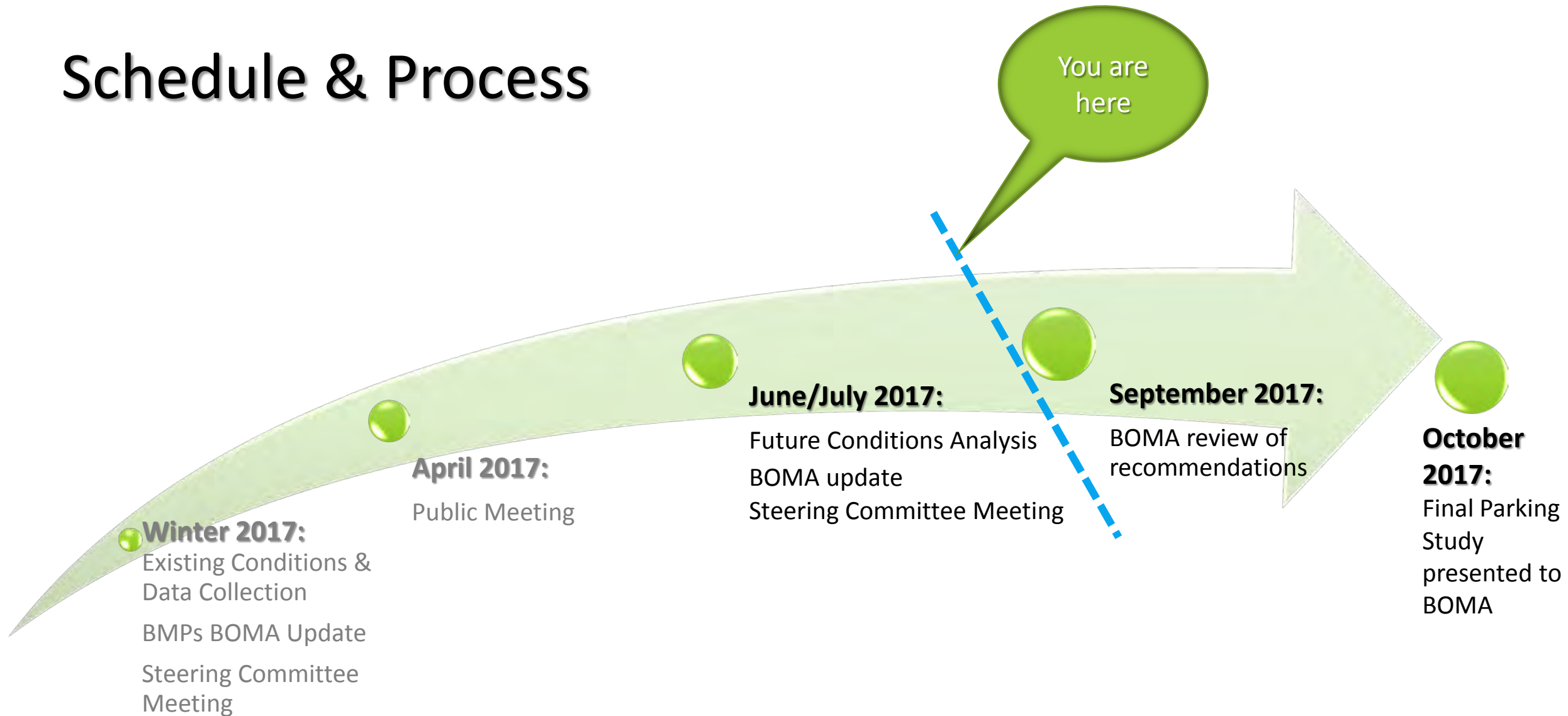


Purpose

- Provide the City, Businesses, Shoppers, Diners, Workers, Churches, Tourists, and Citizens with:
 - Clear understanding of the existing parking infrastructure.
 - Projections of anticipated parking demand in the downtown area.
 - Identification of parking infrastructure and operational needs.



Schedule & Process



Public Meeting Update

- Open House format Public Meeting was held April 10 from 4:30 – 6:30 pm
- Great feedback & comments on:
 - Existing Challenges
 - Future Programs & Practices

COMMENTS

NAME/ORGANIZATION: Marty Corley Generations Church
 EMAIL/CONTACT: marty@generationsstu.com
 TELL US WHAT YOU THINK:

would love to see better signage for courthouse
 - More parking for employee and non-employee that is affordable and safe



COMMENTS

NAME/ORGANIZATION:
 EMAIL/CONTACT:
 TELL US WHAT YOU THINK:

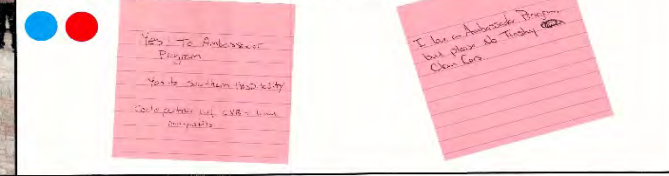
I do not support Valet - a company should not make money off my business they are making money off my spending dollars



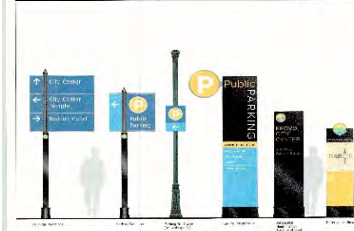
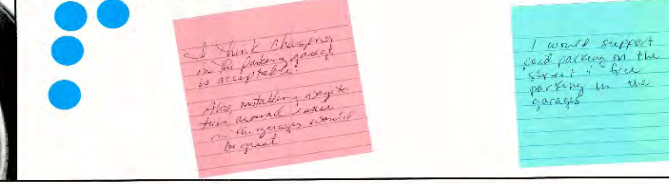
Future Parking Programs & Projects



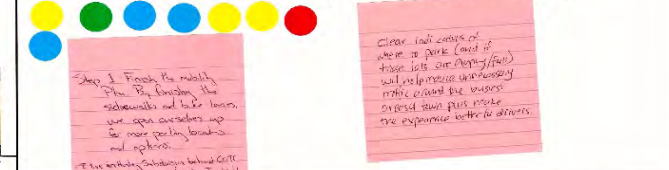
Enforcement (utilize warning citations, graduated fines, ambassador program)



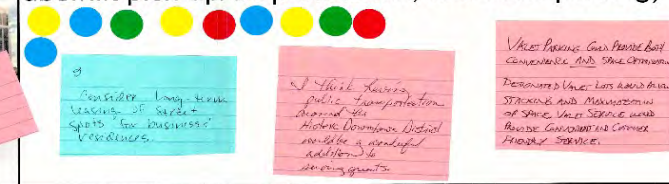
Financial Sustainability (paid parking in garage or on-street)



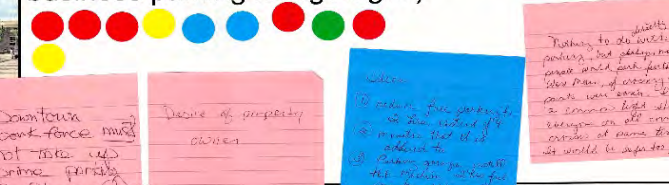
Wayfinding (improve signage for parking/downtown attractors & parking availability)



Alternative Solutions (increase in transit service, uber/lift pick-up/drop-off areas, and valet parking)



Shared Parking (city policies to encourage business parking lots/garages)



Existing Parking Supply and Committed Parking Supply

Parking Classification	Parking Spaces		
	Supply	Demand (Peak Hr)	Need
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Existing +Committed**	1824	1878	54

* This includes the two parking garages, on-street parking, & the 4th Avenue Church of Christ Lot.

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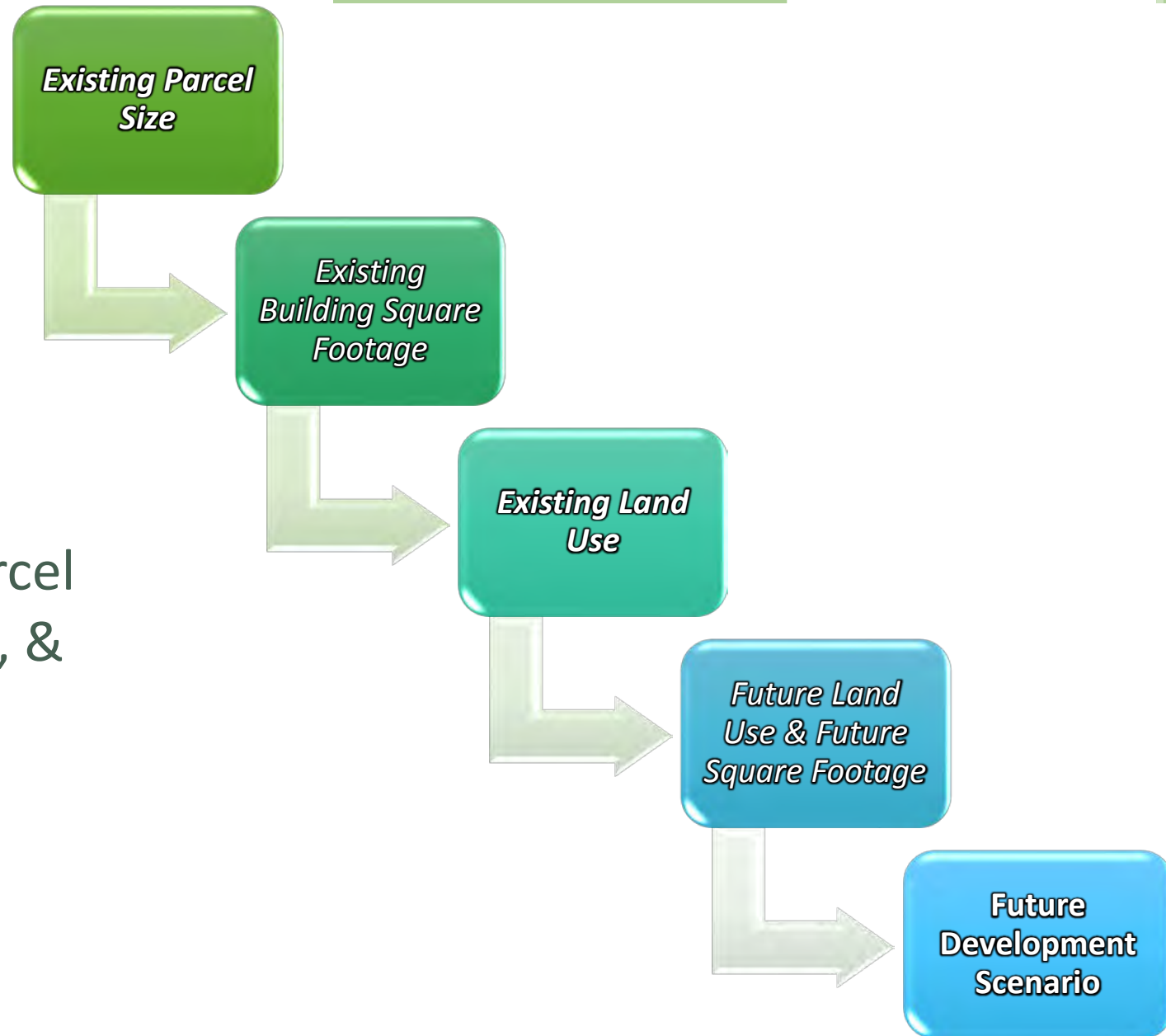
Shared Parking Purpose & Analysis

- Peak Hours and Demands for Parking vary according to the Land Use
- Land Uses with varying peak demands that are located within close proximity can share parking areas
- Reductions were taken for the time of day & month; However, reductions were not taken for different modes of travel (pedestrians, bicycles, transit)
- Industry Standards established in the 2nd Edition of the *Shared Parking* book published by the *Urban Land Institute*

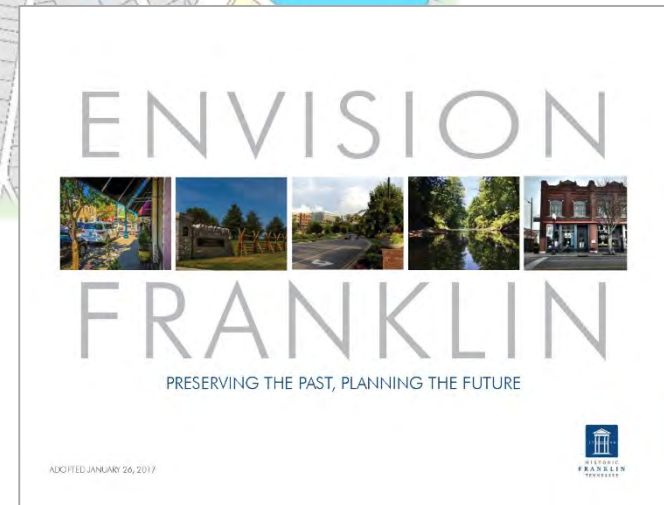


Future Land Use

- Developed a Planning-level Future Development Scenario
- Multilayered Data Projection:
 - GIS data provided Current Parcel Size, Building Square Footage, & Land Use
 - Envision Franklin provided guidance for future form & land-use mix



- Future Development Scenario attempts a *realistic* look at the downtown core of the Study Area
- Land Use Mix & Development Scenario vetted & refined with guidance from Planning Staff
 - Reviewed and revised on a block-by-block basis for the downtown core
 - Incorporated approved developments (committed) but not yet constructed/occupied

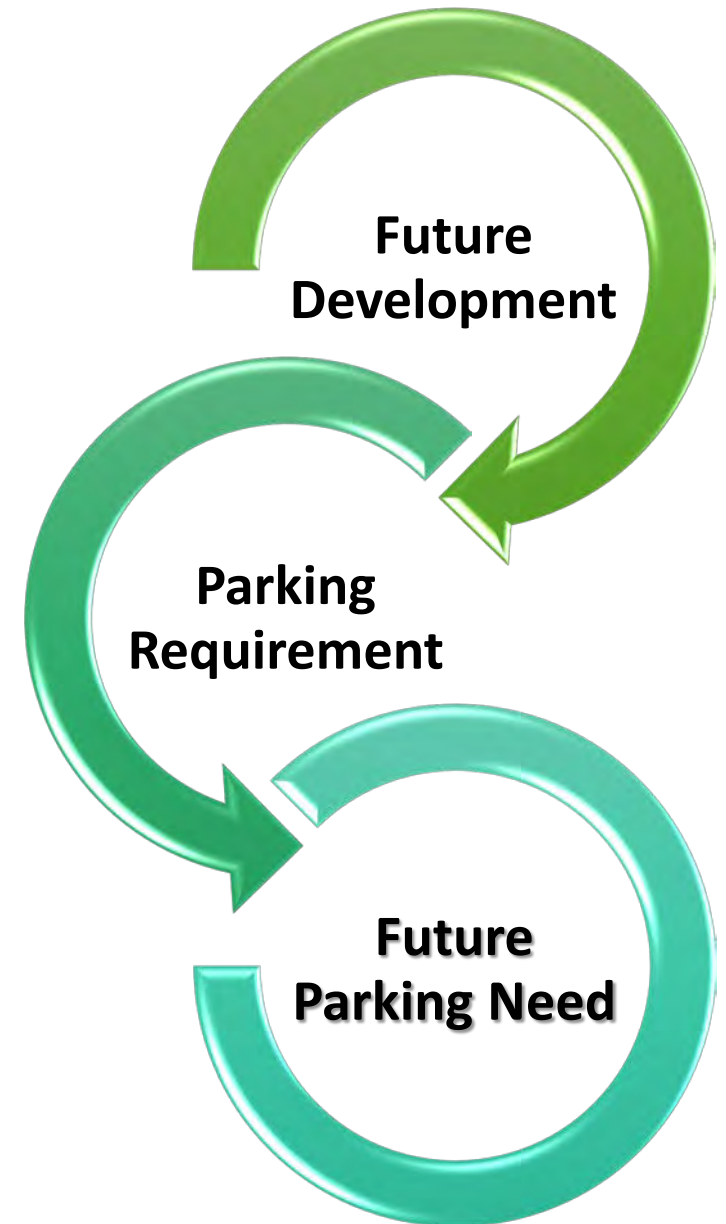


Future Parking Scenario

- Projected Bldg. Sq. Ft. were applied to parking standards to produce a **shared** Future Parking Scenario
- Shared Use Parking Analysis conducted on Shared Parking Districts
- Shared Parking Districts = Geographic Analysis Zones

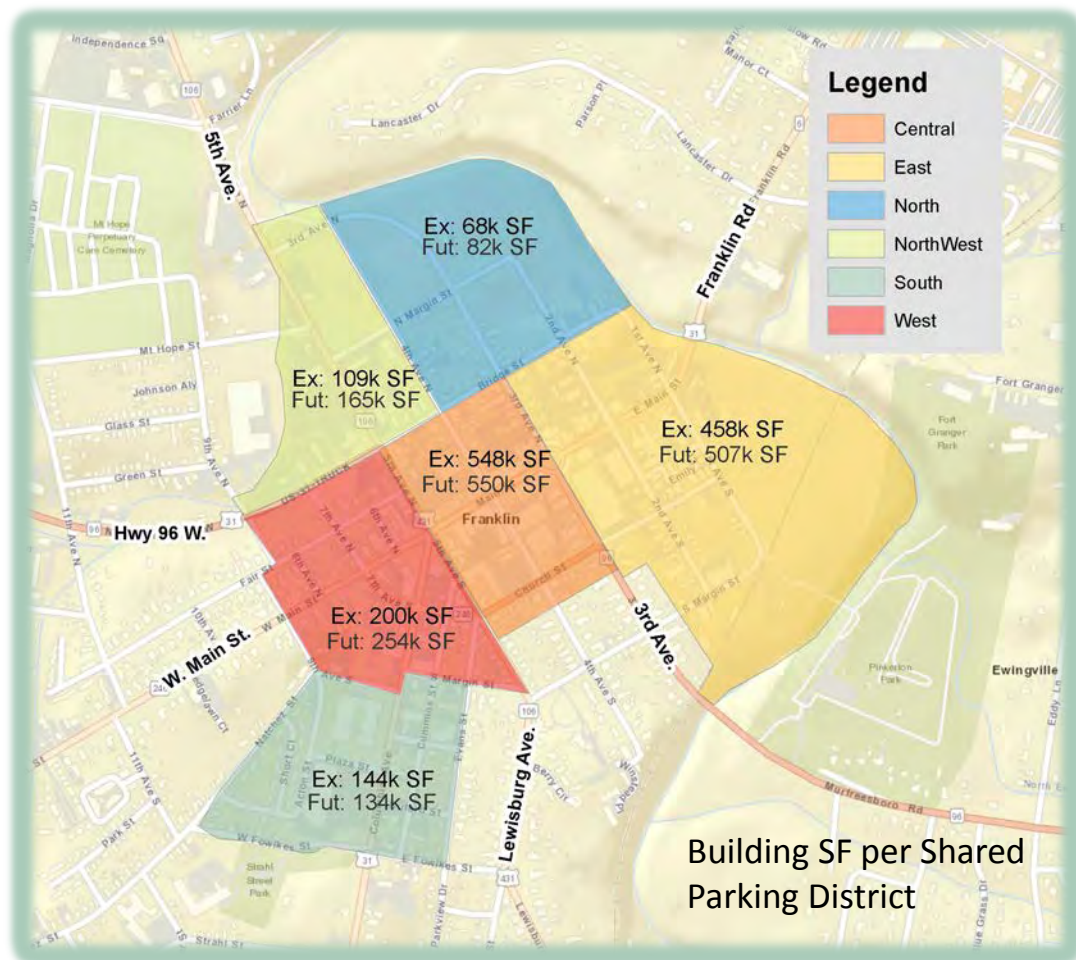
Important!

- Shared Uses – included in Future parking analysis (Retail, Institutional, Office, Restaurant, & Finance)
- Discrete Uses – not included in the Future parking analysis (Residential & Hotel)



Future Development Scenario

Existing vs. Future Square Footage of Shared Parking Land Uses



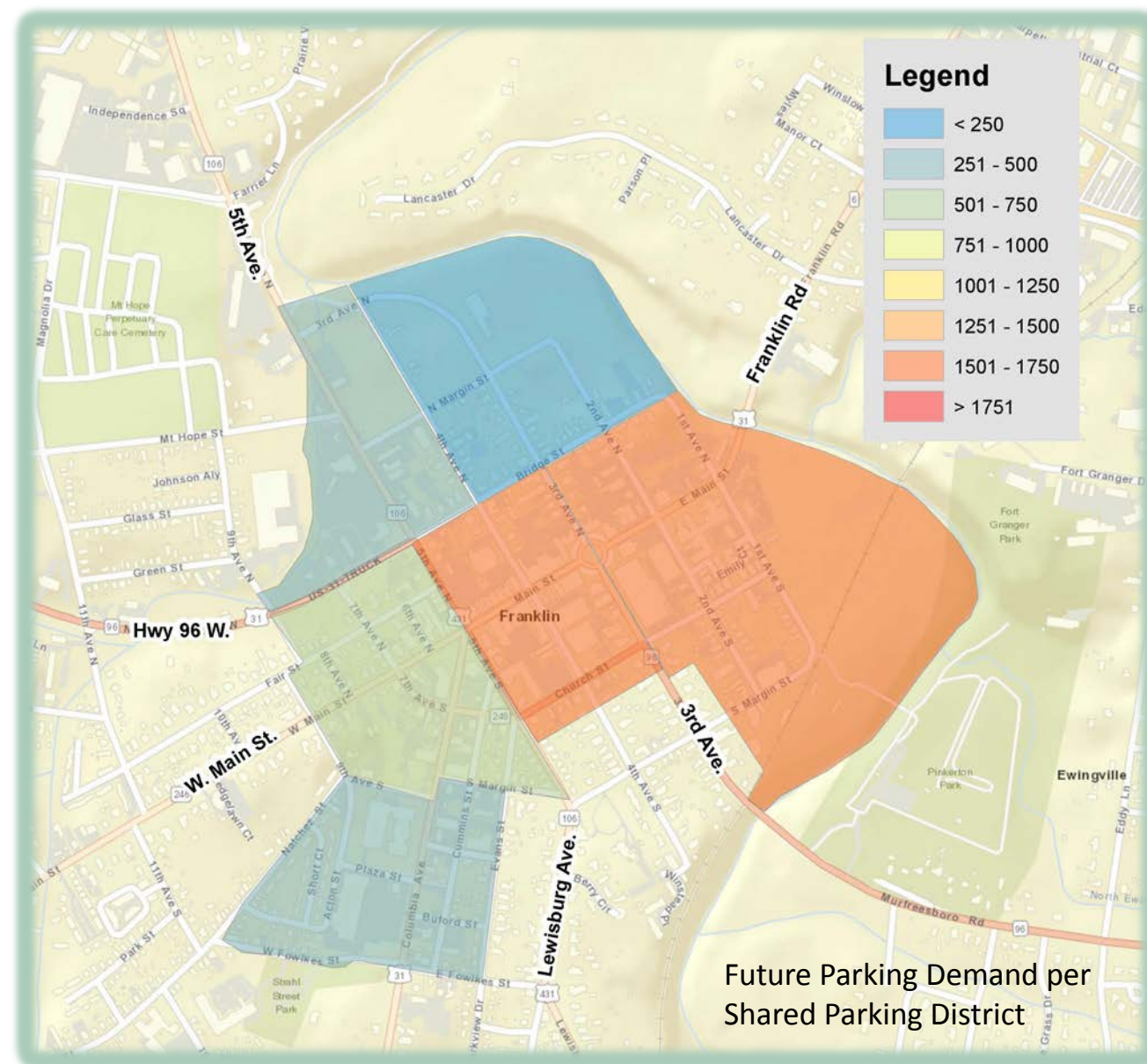
Land Use Shifts per Area

North	Northwest	West	Central	East	South
increase in office	increase in office & retail	increase in retail & office	increase in office	increase in retail	increase in office

Future Shared Parking Demand per Shared Parking District

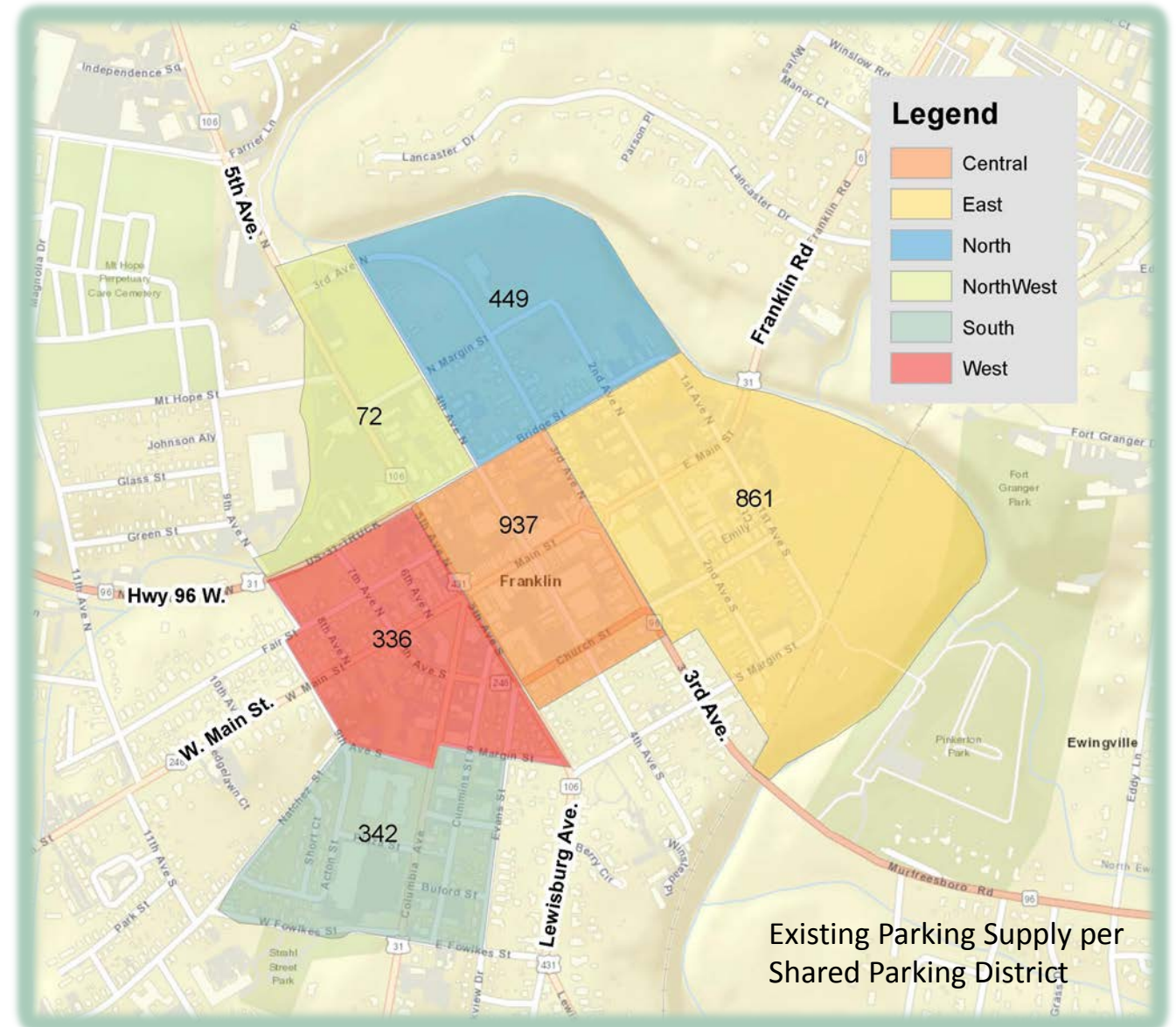
Shared Parking District	Shared Parking Demand*
North	250
Northwest	450
West	700
Central	1500
East	1600
South	450

* This demand is based on the future development scenario & are approximate so they will need to be reevaluated as development is proposed.



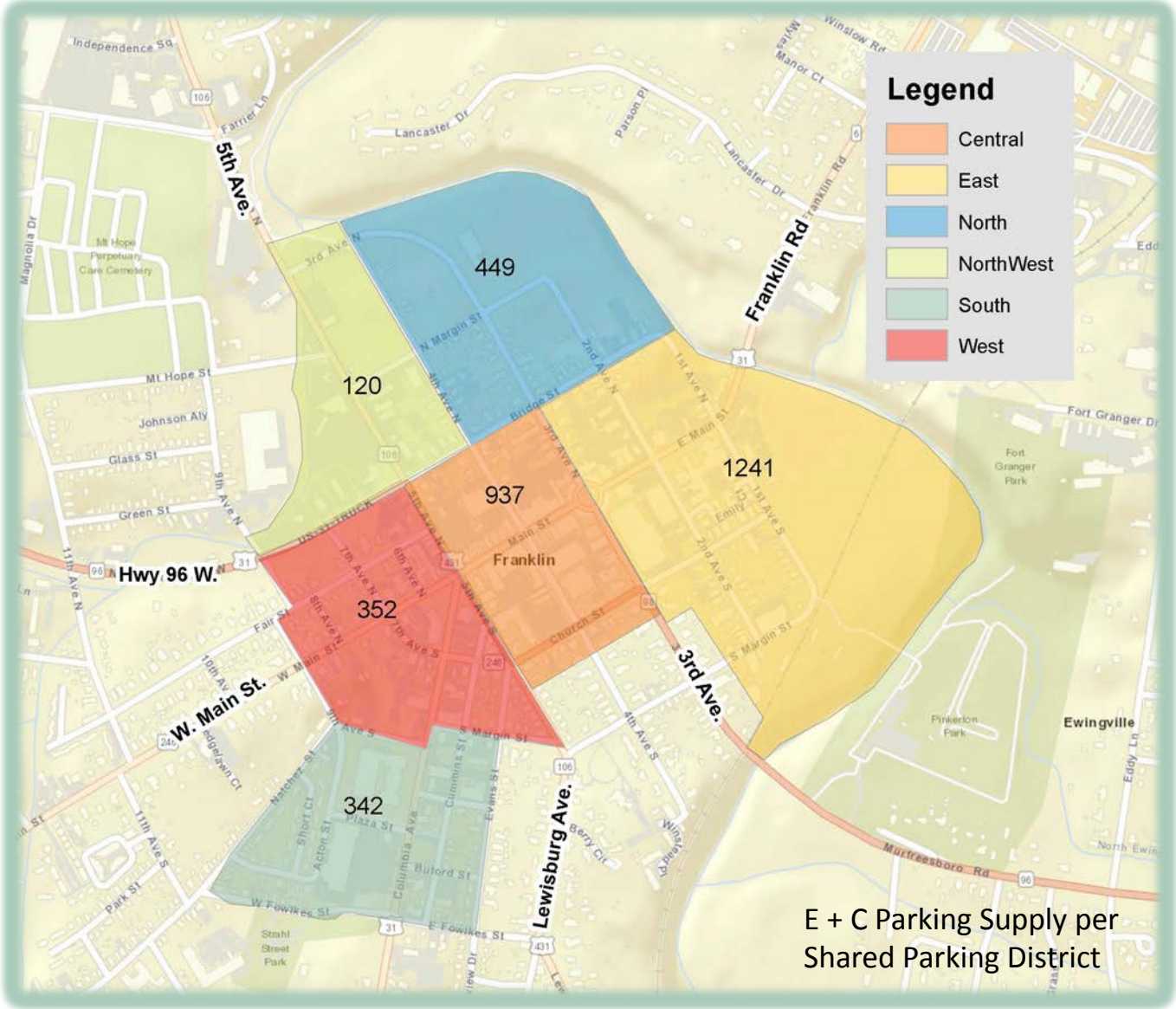
Existing Parking Supply with Private Lots per Shared Parking District

Shared Parking District	Existing Parking Supply
North	449
Northwest	72
West	336
Central	937
East	861
South	342



Existing + Committed Parking Supply per Shared Parking District

Shared Parking District	E + C Parking Supply
North	449
Northwest	120
West	352
Central	937
East	1241
South	342

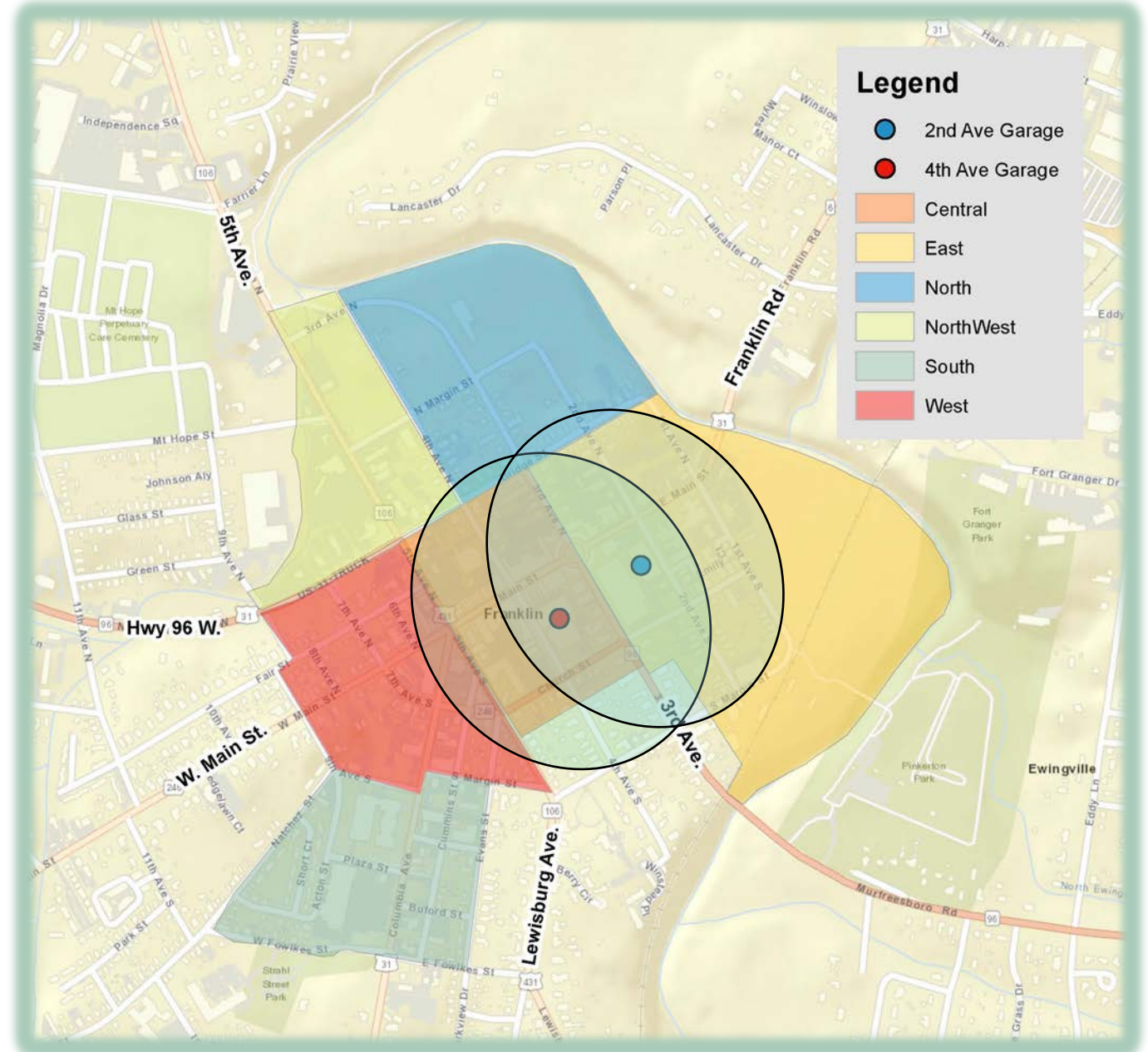


Parking Needs per Shared Parking District

Shared Parking District	Parking Needs
North	0
Northwest	250-450
West	250-450
Central	450-650
East	250-450
South	50-250



Walkable Areas versus Shared Parking Districts

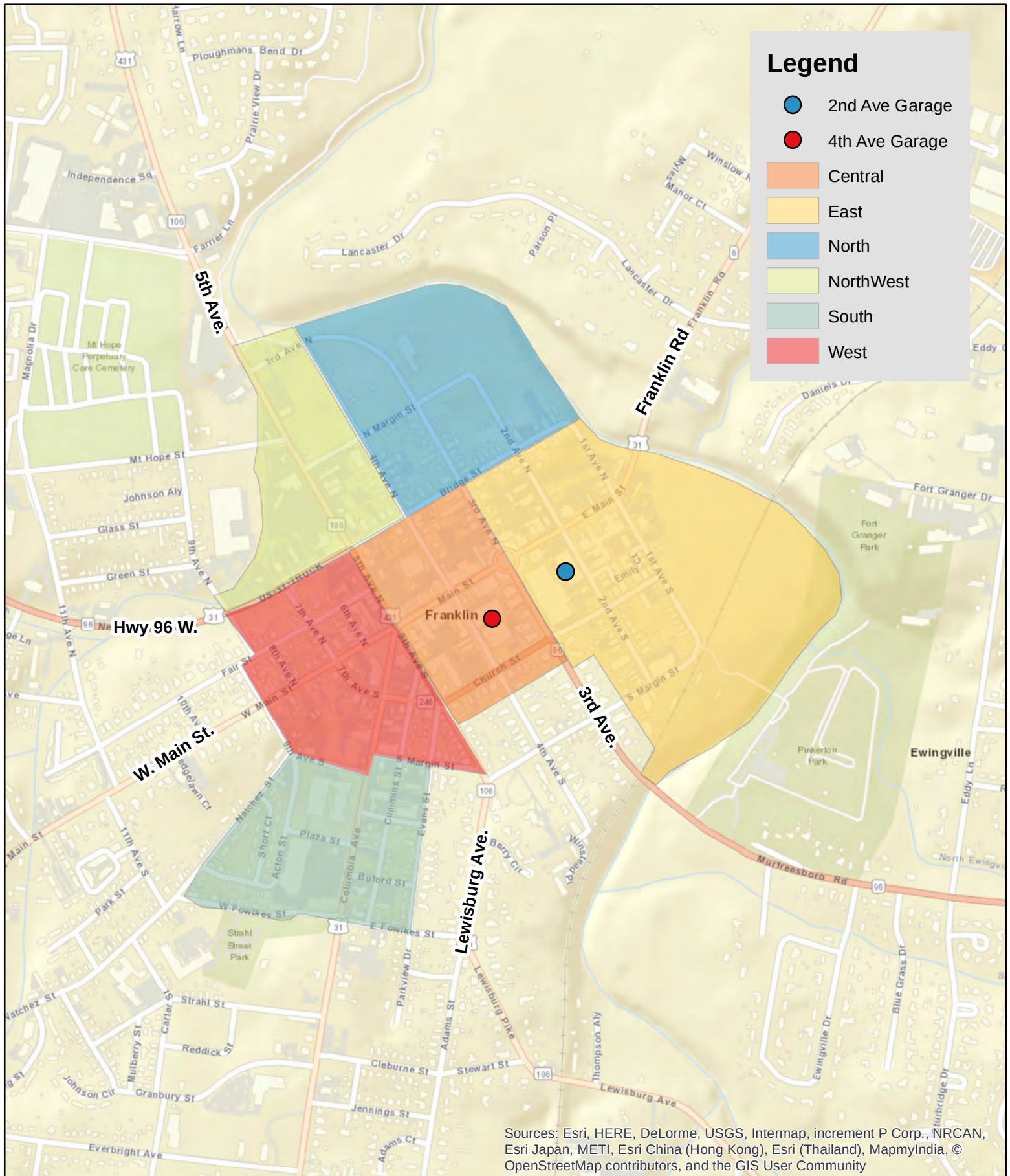


Questions?

Thank you for your time!

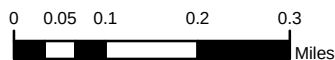
**NEXT STEP:
RECOMMENDATIONS**





HISTORIC
FRANKLIN
TENNESSEE

VOLKERT



*Franklin Downtown
Parking Study*

Shared Parking Districts

DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

GENERAL PUBLIC MEETING SUMMARY

The City of Franklin and the Volkert Consultant Team conducted an Open House Public Meeting on the Downtown Parking Study on April 10, 2017 from 4:30 – 6:30 pm in Franklin City Hall. The Open Meeting was framed around four focus areas to solicit public reaction, comments, feedback, and opinions on existing and future parking challenges and opportunities within the Study Area:

1. **Existing Conditions** for On-street, Garage, and Surface Lot parking within the Study Area.
2. Draft of a **Striping Plan for On-street Parking** spaces within the Historic Core subarea of the Study Area.
3. **Existing Parking Challenges** within the Study Area.
4. **Future Programs and Practices** for Parking within the Study Area.

The following written summary provides highlights provided from the Existing Parking Challenges Station and the Future Programs and Practice Station. These two stations were the two primary public input and comment stations, while the Striping Plan Station and the Existing Conditions stations were primarily informational. Additional public comments are presented directly in the Appendix. The Meeting Summary Appendix contains the Public Meeting Announcement/Flyer, comment cards from the meeting, images of the public input boards, and the sign-in sheets.

DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

EXISTING PARKING CHALLENGES STATION HIGHLIGHTS

- More parking is needed north of Main Street. Many people mentioned a potential good location for a garage might be where the surface lot is behind Starbucks.
- Church Street is very narrow and hard for cars to park on the street and allow for cars to drive through.
- Several people mentioned eliminating on-street parking on Main Street.
- One person mentioned only allowing short term parking on Main Street (30 minutes to an hour) for people going to the shops/stores on Main Street.
- Some people didn't like the 4 hour limit for parking spaces. They mentioned it was too long of a time period.
- Employee parking is an issue in terms of location, numbers, and time.
- Some people thought metered parking should be considered, but others disagreed.

FUTURE PROGRAMS AND PRACTICES HIGHLIGHTS

- The most noted focus area was Alternative Modes. Most feedback revolved around ride-sharing (Lyft/Uber) or increased transit opportunities.
- Multiple comments related to concerns over downtown becoming a "tourist only zone." Some expressed concerns that parking issues were contributing to Main Street transitioning away from locally owned businesses.
- The parking ambassador program generated interest from numerous public meeting participants. Consensus formed around making enforcement friendlier and less punitive.

DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

- The public meeting participants were evenly divided on the factors that are most important when parking, with the Free+Available Option tied with Convenient+Available Option as the most preferred.
- There is interest in integrating valet parking as part of the overall parking solution. However, there were some who disagreed.

DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

APPENDIX

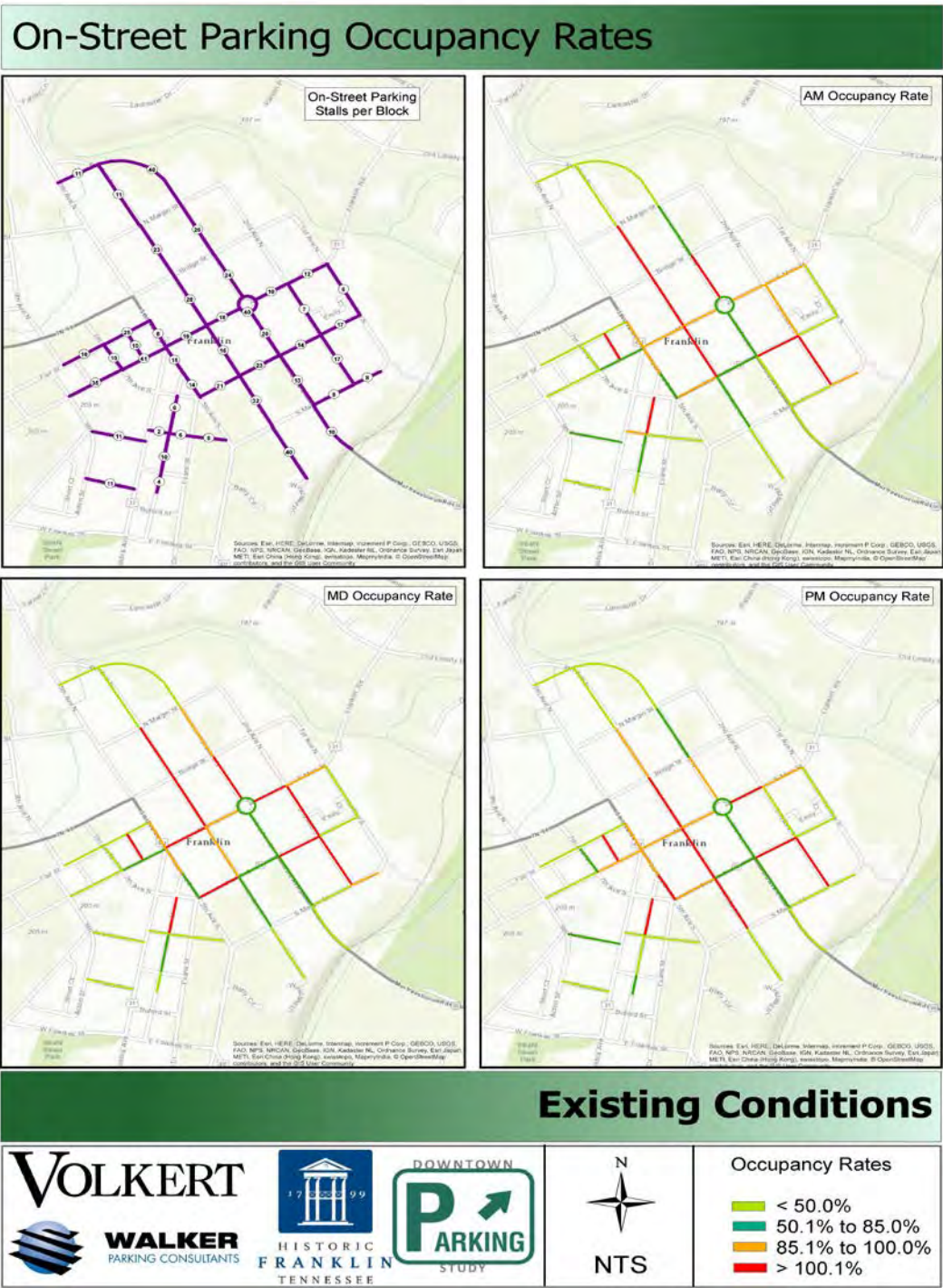
Public Meeting Announcement & Flyer



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

Public Meeting Boards



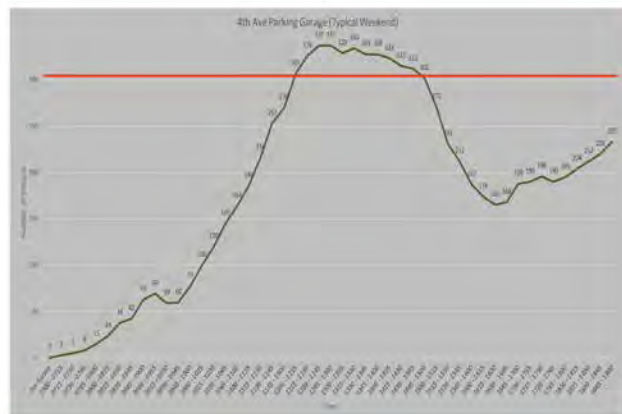
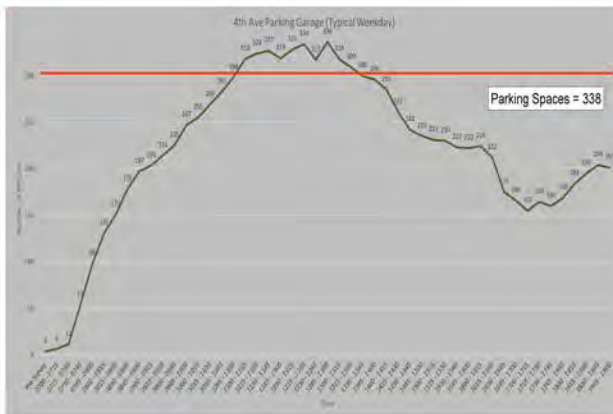
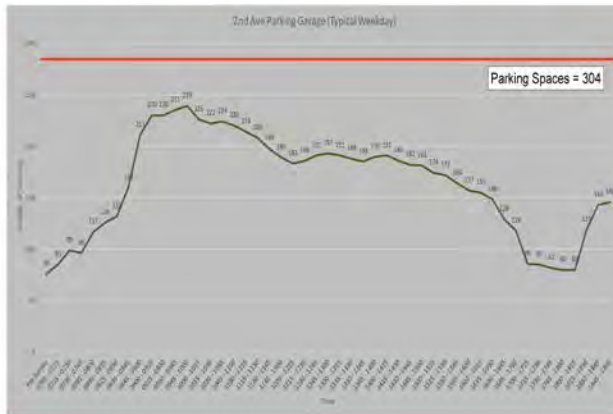
Hot Spot On-Street Parking Occupancy Rates



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

Parking Garage Occupancy Counts



Existing Conditions

DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

Tell us about Franklin's parking challenges



Capacity



Enrollment Employee
Parking Needs



Safety



Search is a PRIORITY to
res. some drives pass w/
little dispute between COS
for existing/entering parallel spots
② drives attempt to take/steal
up/down structures in search of spots
③ ratios of occupancy will keep
④ World of parallel spots on on
issue. Cons w/ Chris. Sept 7, 14



Convenience



The city may need to review the quantity of handicap spots

1 Doug Buttray
422 Avenue Church & Court
(571) 246-9764
dougbuttray@gmail.com

Need melt - had
garage behind Standard
on 5th. Burn out one
with explosive for that
on Sunday morning.

Finish Sidewalks
and Bike Lanes
on 9th to
allow for parking, foot
travel, walkability for
Homes and neighborhood



Cost/Duration (Time Limits)



Pln for one level parking on
Main St square = one block
on each direction
400 ft on all four sides of
= 2 full city parking garage
about 1/2 free

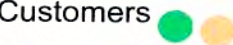
The 4 HK zone from
allows guests to
enjoy a meal and ship.
Exhibitors should park
in other places other than
the street side parking,
if parking for 4 hrs.

6 STARBUCK
LOT IS NOT
MONITORED
CURRENTLY

[illegible]

Parking User Issues: Employees

Customers



Touris

Would like see
travellers ~~transport~~
transport people
throughout the
Historic Downtown Jackson
District.

LOTS OF PARKING
IS TAKEN BY
EMPLOYEES

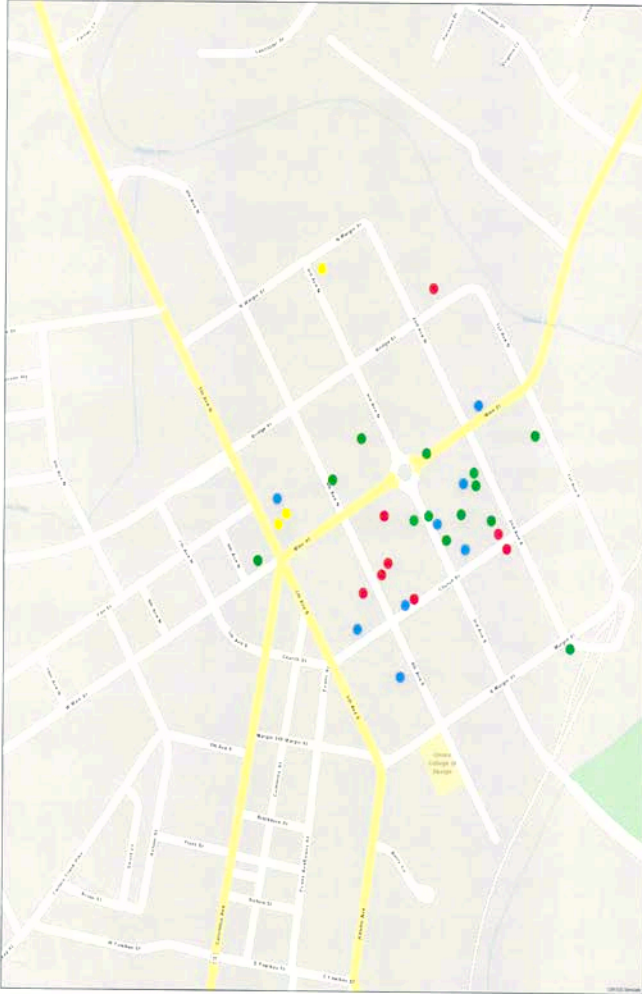
- Information for Court have individuals do it summer 4th has party providing being forced for passing in wrong areas

- Affordable parking for employees and visitors

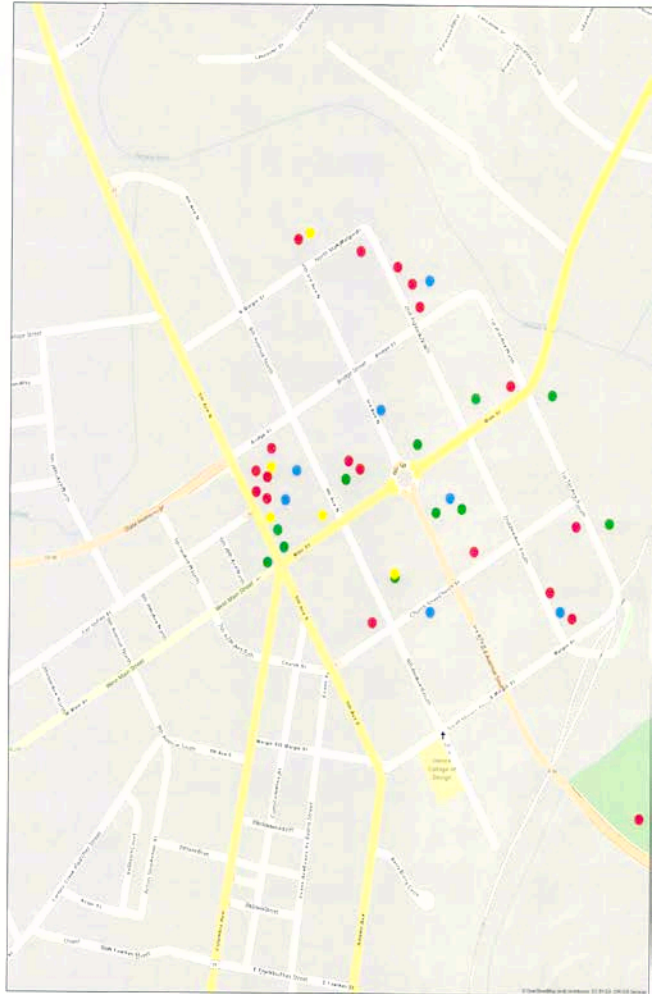
DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

Where do you currently park?



Tell us where additional parking is needed

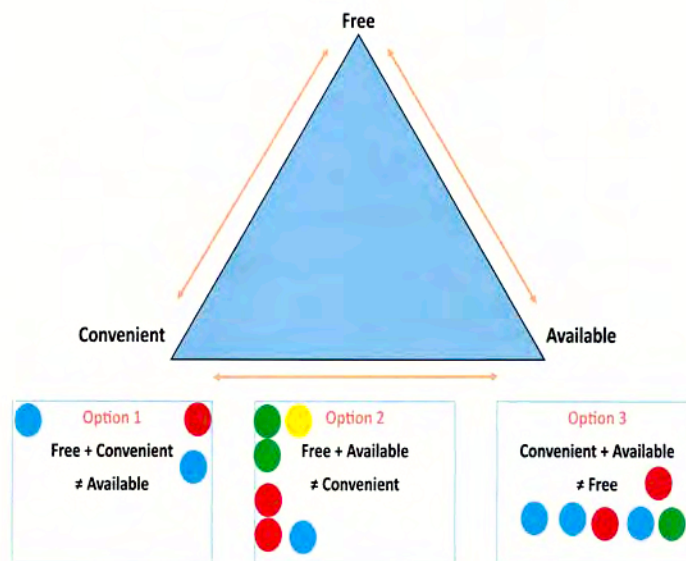


DOWNTOWN PARKING STUDY

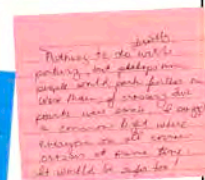
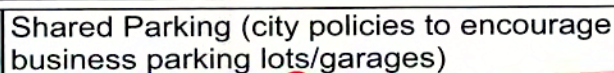
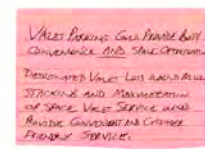
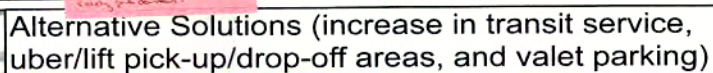
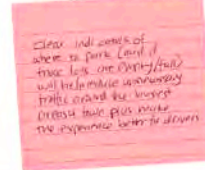
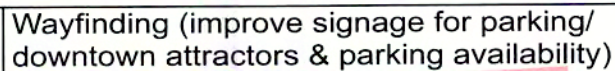
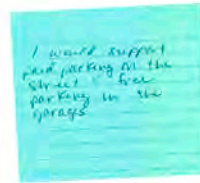
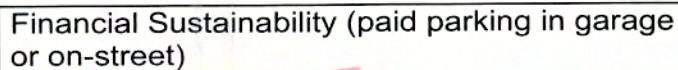
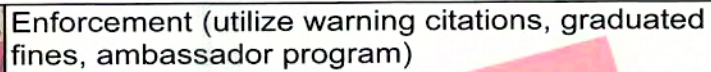
PUBLIC MEETING SUMMARY

The Parking Triangle:

Which option do you prefer when you park?



Future Parking Programs & Projects



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

RIDESIMPLY.COM
SAFE | PROFESSIONAL
ECONOMICAL


RIDESIMPLY

Ride Simply suggestion for valet
private parking lot, not for
restaurants, or business.
mobile app for valet request.
Please call: 615.604.0881
CEO - Virginia Walker



COMMENTS

NAME/ORGANIZATION: C.J. MCADAMS

EMAIL/CONTACT: cj-mcadams@hotmail.com

TELL US WHAT YOU THINK: THANK YOU FOR OPPORTUNITY TO SHARE OPINIONS.
ON STREET PARKING IS NECESSARY, BUT CURRENT LINED SPACES SEEM
TOO LONG. I'M CURIOUS ~~IF~~ ^{IF} THE SELF PARKING CARS (PARALLEL)
CAN PARK IN TIGHTER SPACES. ~~IT~~ ^{IT} SEEMS LIKE YOU COULD FIT MORE
SPACES BY REDUCING TO 12 FEET OR EVEN 20 FEET LENGTH.

VALET PARKING IN DESIGNATED LOTS WOULD
ALSO ALLOW MORE VEHICLES STACKED IN
LOTS TO MAXIMIZE SPACE WHILE PROVIDING
GREAT CUSTOMER SERVICE.

UBER/LYFT DESIGNATED DROP-OFF/PICK UP IS MORE EFFICIENT
THAN CURRENT STOP ANYWHERE... ESPECIALLY AT PEAK TIMES/DAYS.



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

COMMENTS

NAME/ORGANIZATION:

EMAIL/CONTACT:

TELL US WHAT YOU THINK:

City need to provide land near downtown for work force housing so that workers can either walk or ride a bike to work.

City needs to identify surface parking areas & partner with developers to provide retail on ground floor & parking garages above the ground floor.



COMMENTS

NAME/ORGANIZATION:

EMAIL/CONTACT:

TELL US WHAT YOU THINK:

I do not support Valet - a company should not make money off my business they are making money off my spending dollars.



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

COMMENTS

NAME/ORGANIZATION:

EMAIL/CONTACT:

TELL US WHAT YOU THINK:

- Have short term parking for courthouse across street from courthouse along street
- Parking garage behind presbyterian church.



COMMENTS

NAME/ORGANIZATION:

EMAIL/CONTACT:

TELL US WHAT YOU THINK:

- check 2nd Ave garage
- employee parking
- look @ city vehicles in garage



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

COMMENTS

NAME/ORGANIZATION:

EMAIL/CONTACT:

TELL US WHAT YOU THINK:

Kristy Williams / Downtown Franklin Association
kwilliams@downtownfranklin.com
I thank the City of Franklin,
for ALL they do for our community!



COMMENTS

NAME/ORGANIZATION:

EMAIL/CONTACT:

TELL US WHAT YOU THINK:

- consider looking @ weight/traffic or closing Main St. parking causing issues on facade
- look @ closing Main St. during festivals/parades

look @ Boulder, Co



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

COMMENTS

NAME/ORGANIZATION: Carl Baughman
EMAIL/CONTACT: carlb@franklintn.gov

TELL US WHAT YOU THINK:

Please recommend an improvement for proper travel and/or parking on Cummins Street between Fifth Ave. S. and Church Street. Current southbound width does not simultaneously accommodate both travel and parking. One-way treatment has been rejected by both the Downtown Franklin Association (business group) and the Downtown Neighborhood Association (homeowners group). Thank you!



DOWNTOWN PARKING STUDY

PUBLIC MEETING SUMMARY

DOWNTOWN PARKING STUDY PUBLIC MEETING

MEETING SIGN-IN		4/10/17
Name/Organization	Email	
Mindy Hise	Michael Hulf	mmdelsea@gmail.com
Mort Stein		treeorealty@gmail.com
Fernie Butler		mindspring.com
Teri Gordon		fernibutler@comcast.net
Brad Waldschmidt		tgordonlaw@bellsouth.net
Jen Porter Ross		brad.waldschmidt@kimley-horn.com
GARY SHARON		Jen@DrinkTo.Me
JAY SHERIDAN		Gary@fourthavenue.com
Mindy Tate		jay@shendamp.com
Vernon Gerth		mindef@franklinhistorical.org
BRANDON PRIDY		vernon.gerth@franklinhistorical.gov
TEFF & JALYN Ledbetter		brandon.pridy@9studios.com
Sasha Shuff		jaffledbetter@yahoo.com
J Edward Campbell		Sasha@shuffmusic.com
Kristy Williams		Jedward@CampbellX.com
Marianne DeMeyers		kwilliams@historicfranklin.com
Andrew ORR		marianne@thecottage.com
		andrew.orr@franklin.gov

DOWNTOWN PARKING STUDY PUBLIC MEETING

19



Memorandum

*To: Mark Hilty, City of Franklin Assistant City Administrator for Public Works
Michelle Hatcher, City of Franklin Interim Water Management Director*

From: Robert Huguenard, PE

Date: June 28, 2017

*Subject: City of Franklin WRF
Preliminary Input on Lystek Evaluation*

Bid documents for an expansion to the Franklin Wastewater Reclamation Facility (WRF) were completed in 2016 after a lengthy design process. The documents included an expansion of the liquids treatment process and construction of a completely new biosolids management system incorporating thermal hydrolysis pretreatment (THP) followed by anaerobic digestion. The THP system was competitively pre-selected prior to completing the design of the biosolids treatment system to ensure the final plans included the appropriate design elements for the biosolids treatment train. On February 24, 2015, the Board of Mayor and Aldermen approved Resolution 2015-04, approving the Letter of Intent with Cambi, Inc. (COF Contract 2015-0032) to provide the THP system. As a result of this bid process and approval, the biosolids treatment system was subsequently designed around the Cambi THP pretreatment process with the appropriate process systems, piping and appurtenances to support the pretreatment step.

Late in 2016, the City was approached by the Chestnut Bend Homeowners Association (CBHOA) with a request to consider an alternative biosolids treatment process by the manufacturer Lystek International Incorporated (Lystek). The proposed Lystek treatment process was presented at a public meeting in October 2016 and the Board of Mayor and Alderman (BOMA) agreed to consider the Lystek process as an alternative to the preselected Cambi process for a pretreatment step for anaerobic digestion. The current system is designed around a thermal hydrolysis process that is used as pretreatment step prior to anaerobic digestion (therefore, the name Thermal Hydrolysis Pretreatment, or THP). The Lystek system is a significantly different process than the currently selected THP process and is intended to be the end process in the biosolids treatment system rather than a pretreatment step. Since the Lystek system is not a true THP process, a more generic definition for thermal hydrolysis will be used when comparing the two systems. It is the intention and preference of the City staff to continue to utilize anaerobic digestion after the thermal hydrolysis process for further volatile solids reduction and the production of biogas for the use in a combined heat and power system for electricity and heat production.

One of the largest differences between the two systems is that the finished product of the standard Lystek system is a liquid fertilizer product rather than a dried solid. In addition, the standard Lystek

system may not meet Class A EQ requirements. Lystek has recently indicated they can produce a product that may meet Class A EQ requirements by raising the pH to 12 through chemical addition, thereby meeting the requirements via alternative 6 of the vector attraction reduction requirements outlined in EPA's Part 503 Biosolids Rule. Lystek has also indicated they can produce an approximately 30% dewatered biosolid using mechanical dewatering, while the Cambi centered system would produce approximately a 35 to 40% dewatered biosolid. Note that during CDM Smith's initial evaluation of biosolids treatment technologies during the Integrated Water Resources Plan (IWRP) development in 2011, alkaline stabilization processes similar to the Lystek proposal were discussed and eliminated from consideration as they did not meet all of the objectives of the IWRP. The Lystek system was not considered at the time of the IWRP biosolids evaluation due to the relative newness of the technology and Lystek's lack of experience in the industry.

At the October 2016 board meeting, BOMA decided to evaluate the Lystek process and the City's Water Management Department (WMD) and CDM Smith began development of a solicitation package for Lystek. The package would provide a submission comparable to the package responded to by the THP system providers during the 2015 preselection package. Since the Cambi system was competitively selected through this rigorous procurement and comparison process, it was decided to define and evaluate the Lystek process with a similar submission process with the same level of rigor.

The purpose of this memorandum is to seek guidance from the Board on the appropriate path forward. Research and work performed on the bid solicitation package by CDM Smith and the City's WMD staff has yielded some important insights into the technical, economic, and practical differences in the implementation of the Lystek and Cambi processes. As such, staff wishes to seek guidance from the Board prior to moving forward with further evaluation of the Lystek system. These considerations and initial analyses are presented below under the following headings:

- 1) Preliminary non-economic comparison,
- 2) Legal considerations with respect to completed pre-selection bid process,
- 3) Delays to the WRF expansion,
- 4) Increase in the cost of the WRF expansion with time,
- 5) Disruption of the SRF loan process and associated implications,
- 6) Added consulting cost to date, and
- 7) Additional consulting cost to change direction and redesign.

A high level comparison of capital costs is also presented comparing the two technologies.

Preliminary Non-Economic Comparison

During selection of the THP system supplier for the current design, an economic and non-economic comparison of the system options was performed. CDM Smith adapted the table that was used in the original selection process to perform the Lystek versus Cambi non-economic comparison. Since the

Lystek system is significantly different than the systems that were previously compared, the table had to be revised to eliminate criteria that do not apply and add criteria that does apply to the Lystek versus Cambi evaluation. The resulting non-economic comparison is presented in Table A1 and explained in Appendix A. A summary is provided below.

The Cambi System scores much better than Lystek on a non-economic basis with a score of 29 versus a Lystek score of 63. The scoring is on a scale of 25 to 100 with a lower score being more favorable. The comparison criterion and a summary of the evaluation results for each criterion is provided in the following bullets:

- Level of experience – Cambi is more favorable with regard to this criterion as they provide a longer history and experience. Cambi has been manufacturing systems for 22 years as compared to 9 years for Lystek. Cambi has a total of 50/1 (worldwide/US) operating installations versus 7/1 for Lystek. Cambi was given a raw score of 1 and a weighted score of 5 versus 4 and 20 for Lystek, respectively.
- Ability to provide responsive support after startup – The two suppliers were relatively equal for this category as neither have employees in Tennessee and both companies have a relatively small presence in the United States. Both were given raw scores of 3 and weighted scores of 9.
- Company revenue – Cambi scored better than Lystek in this category because their annual revenues are more than four times Lystek's annual revenues. Raw score of 2 and 4 and weighted scores of 6 and 12 were assigned for Cambi and Lystek, respectively. Although revenue is not the sole financial indicator of company stability, it provides an indication of the relative size and success of a company's product line.
- Ability to produce Class A EQ biosolids – This category is a very important discriminator as a critical goal of the Integrated Water Resource Plan (IWRP) is to implement a biosolids treatment process that can produce Class A EQ biosolids. The Tennessee Department of Environment and Conservation (TDEC) and the United States Environmental Protection Agency (EPA) have both concluded that the Cambi centered system proposed by the City of Franklin is capable of producing Class A EQ biosolids. On the other hand, the regulators did not feel that the originally proposed Lystek system was capable of producing Class A EQ biosolids because it does not properly address the vector attraction requirements of the rules.

Since the initial evaluation by the agencies, Lystek has proposed a modification to their system that would involve increasing the chemical addition to bring the pH of the system up to 12. Based on feedback from Lystek, this will enable them to meet the Class A EQ requirements under alternative 6 of the vector attraction reduction, which is applicable to lime treated biosolids. Since both regulators have formally agreed that the Cambi centered system will meet the Class A EQ requirements; and there is a lower level of certainty in regards to the Lystek centered system, Cambi received a raw score of 1 and Lystek received a raw score of 2. This results in weighted scores of 5 and 10, respectively.

- Diversity of available disposal and reuse options – Cambi also scored better in this category. The Lystek product will have more disposal restrictions due to the high pH (12) of the solids. One of the problems faced with the sludge that is currently produced at the Franklin WRF is that there is only one potential disposal option, which puts the City in a precarious position. Disposal availability was determined as part of the IWRP to be a critical success objective of a new biosolids process. Raw scores of 1 and 3 and weighted scores of 5 and 15 were assigned for Cambi and Lystek, respectively.

Legal Considerations with Respect to Completed Pre-Selection Bid Process

The supplier of the preselected thermal hydrolysis process for the previously designed biosolids treatment system, Cambi, was competitively selected through bidding and a rigorous life-cycle cost and non-cost comparison. Because of the interdependency of the thermal hydrolysis system with the surrounding processes, significant coordination with Cambi was required during CDM Smith's subsequent design of the downstream biosolids treatment system. The agreement with Cambi, however, does not make any guarantees that the designed system will ever be constructed, but there still may be some risk to the City should the decision be made to construct another supplier's system outside of the approved selection. It is recommended that the City's Law Department evaluate this level of risk to the City.

Delays to Wastewater Reclamation Facility Expansion

Now that the SRF funding approvals are in the final stages, CDM Smith anticipates the project could be bid in early August. Continuing to investigate the Lystek process could push the project implementation out by years. CDM Smith estimates that this potential change in direction would push the commencement of WRF construction off to March 2020, which would push completion of the WRF improvements out to March 2023 as detailed below:

- Decision to continue with Lystek evaluation – Assume decision is made in July 2017.
- Complete Lystek Evaluation (3.5 months/November 2017)
- Staff and BOMA approval of Lystek and redesign amendment for CDM Smith (1 month/December 2017)
- Redesign (10 to 12 months/November 2018) - A significant redesign effort will be required as modification to a Lystek centered system would have a rolling impact to the sizing and design of almost every other component of the biosolids treatment system design. For example, the digester sizing would increase, resulting in changes to the design of three different sets of digester pumps, digester gas processing equipment, the combined heat and power system, boiler systems, sizing of the digester building housing this equipment, sizing of HVAC system for the building, sizing of the electrical system, and other components. As a comparison, the design of the current biosolids system required about 18 months after completion of pre-selection of the THP supplier.

- Permitting processes (3 months/February 2019) – The permitting processes would actually take longer than the 3 months indicated; however, some of the process could occur concurrently with the redesign.
- SRF process (9 months/November 2019)
- Bidding and Award (4 months/March 2020)
- Completion of Construction (3 years/March 2023)

Increase in the Cost of the WRF Expansion with Time

While the construction of the WRF is delayed, the cost of construction will continue to escalate and the cost to the City will continue to increase. Consequently, even if the Lystek system was less expensive, a portion of the savings would be negated by increases in construction costs for the liquid and solids processes due to the later start of the construction of the new system. For example, if construction cost increase three percent per year on average, moving the construction start date out by two years would add about \$6 million dollars to the cost of a \$100-million-dollar project.

Disruption of the SRF Loan Process and Associated Implications

The SRF program has currently committed approximately \$100 million dollars of low interest rate funding to this project. The current SRF interest rate for a 30-year loan is approximately 1.75 percent as compared to an interest rate of 3.25 percent, which is approximately what the City could obtain with other funding sources. A delay in construction would put the SRF funding at risk. Assuming the interest rates cited above and a loan term of 30 years, the City would pay an additional \$28,655,910 for non-SRF funding.

Added Consulting Costs To Date

Following the decision to evaluate the Lystek system against the current Cambi centered biosolids design, the City began incurring consulting costs associated with performing the required evaluation. Associated activities to date include:

- Attendance at the public meeting where Lystek presented their process,
- Meetings with the City staff to establish the scope and direction for this evaluation,
- A December 2016 meeting with Lystek to gain a better understanding of their system and to begin defining the biosolids treatment system components that would have to surround the Lystek process,
- Conceptual design of the overall biosolids treatment system for a Lystek centered system,
- Preparation of a rough draft of the bid solicitation document,
- A May 2017 meeting with Lystek to coordinate after their meeting with TDEC, and
- Preparation of this comparative memorandum.

Currently, the cost for these activities is approximately \$60,000.

Additional Consulting Cost to Change Direction and Redesign

In addition to the above costs, if the decision is made to move forward with continuing the Lystek evaluation, the City would incur additional consulting costs. A summary of the anticipated costs is provided below:

1. Completion of the evaluation and selection process:	\$100,000
2. Permitting	\$50,000
3. Design (Approximately 325 drawings would have to be redesigned and revised)	\$1,100,000
4. TDEC acceptance process	\$50,000
5. SRF process assistance	\$200,000
Total	\$1,500,000

High Level Comparison of Capital Costs

Prior to receiving Board guidance in terms of moving forward, CDM Smith performed a high-level comparison of differences in the biosolids treatment systems that would surround the Cambi and Lystek systems to get an idea of the potential cost savings that might be available by modifying the biosolids process to a Lystek centered system.

Most of the required biosolids treatment system components would be the same for a Cambi centered system and a Lystek centered system. The attached table compares the sizing of the processes for Cambi and Lystek and provides overall thoughts on the potential cost differences. In some cases, it was clear that the process would not change significantly; and therefore, the costs would not likely change. In other cases, it was possible to deduce a rough cost difference based on estimates previously produced for the Cambi centered system and the anticipated difference in the size of the process for the two systems. And in some cases, it was clear the cost would be higher for Cambi or Lystek, but it was impossible to estimate the cost with the currently available information. Overall, this broad analysis indicates that it is unlikely that capital cost savings would be realized by changing to a Lystek based system. In fact, based on the initial investigations, CDM Smith anticipates that the Lystek system may require a larger initial capital cost investment and may also utilize significantly more chemicals, producing significantly less renewable energy and heat to use in the on-site processes.

This comparison assumes anaerobic digestion is included upstream of the Lystek process. Lystek has claimed that their process does not require digestion. If the Lystek process, with additional pH adjustment and without digestion is used to process raw sludge, a list of concerns related to the alkaline treatment of raw sludge applies. These include:

- Potential bacterial regrowth – alkaline treatment alone does not result in volatile solids reduction. Organic matter in the sludge is not removed. Microbial activities are prohibited or

slowed by the increase in pH. Once the pH conditions change, due to mixing with soil or other changes, bacterial activities may resume.

- Potential odor – odor associated with raw sludge and microbial activities are present as described above.
- Without digestion there will be a higher volume of biosolids to process and dispose. Anaerobic digestion significantly reduces the amount of solids to be processed and disposed of. The addition of alkaline materials to the biosolids also increases the amount of solids to be disposed.

Table A-2
High Level Comparison of Capital Cost

Cost Item	Notes	Approximate Cost Difference (Lystek – Cambi) in Millions
WAS Pumping	No difference	\$0
WAS Storage	No difference	\$0
Sludge Screening	No difference	\$0
Pre-Dewatering	The volume of sludge to be dewatered for Lystek will be smaller, but Lystek will be batch dewatering versus 24-hour dewatering for Cambi. The equipment sizing ends up comparable.	\$0
Pre Digestion Thickening	Needed for Lystek, but not for Cambi. Assuming gravity belt thickeners. Three 2-meter belts needed. Assume \$400 K per belt. Assuming building space allotted for Cambi pre dewatering would be adequate.	\$1.2
Cambi THP Skid Versus Lystek Skid	The Cambi skid would be more complicated, but the Lystek components would have to be larger due to the less concentrated sludge being delivered to Lystek (< 5% versus 11%). The Cambi skid was priced at about \$1.6 million.	Lystek Likely Less
FOG Receiving and Storage	No difference	\$0
Anaerobic Digesters	Lystek would have 3 added digesters for the same plant capacity. Cost for 2 digesters and pumps is about \$3.6 M.	\$5.4
Digester Building	Lystek system would have 3 added sets of pumps. The current pumps require about 1,000 square feet of building. Lystek would require about an additional 1,500 SF of building at about \$300 per SF.	\$0.45
Cambi Post Digestion Dewatering versus Lystek Post Hydrolysis Dewatering	The Lystek would produce about 7% more post digested sludge. Lystek dewatering would require additional building space. Assuming same equipment cost and about 2800 square feet of extra space for Lystek (the area needed for Cambi post dewatering) at about \$300 SF = \$840,000	\$0.84
Post Digestion Biosolids Storage	Lystek will generate about 7% more digested sludge so their storage cost would be more, but the cost wouldn't be linear. The cost for Cambi storage is about \$0.39 million. Assuming 5% increase Lystek additional cost would be about \$0.02 million	\$0.02

Preliminary Input on Lystek Evaluation

June 27, 2017

Page 9

Combined heat and power	Lystek would produce about 11% less digester gas than what Cambi would produce. So, the Lystek CHP engine would be smaller, however, the engine won't produce enough heat for the Lystek system, so the Lystek system will require additional boiler capacity. Overall, the cost may be similar.	\$0
Final Sludge Storage	Lystek system will produce more sludge for two reasons: higher post digestion sludge production and additional sludge production due to chemical addition. Potentially ten (10%) percent more sludge.	~10% increase
Chemical Storage for Dewatering	Lystek will have to dewater 7% more digested sludge, but assumed no difference in cost for system.	\$0
Chemical Storage for Odor Control	Lystek will be higher due to increased sludge storage, but assume no cost difference.	\$0
Chemical Storage for Hydrolysis	Cambi has no chemical costs for hydrolysis. Lystek will require a considerable amount of chemicals and storage.	Increase

APPENDIX A

NON-ECONOMIC COMPARISON OF LYTEK AND CAMBI PROCESSES

Table A1 Non-Cost Scoring of Thermal Hydrolysis Systems

Non-Cost Criterion		Raw Scoring Criteria			Weight	Cambi B-2 System			Lystek ??? System		
		1	3	5		Raw Score	Value/Comment	Weighted Score	Raw Score	Value/Comment	Weighted Score
1	Level of Experience	Extensive Experience	Moderate Experience	Limited Experience	5	1	Cambi has been manufacturing its systems for 22 years. They have 50 operating facilities worldwide, one in US, plus another seven facilities in bid and construction phase.	5	4	Lystek was started in 2000 and the first system was started up in 2008. There are a total of 8 operating facilities (one in the US). Another system is currently under negotiation.	20
2	Ability to Provide Support After Startup	Strong Support Capability	Same Support Capability	Limited Support Capability	3	3	About 120 worldwide employees and 7 employees in the US. None in TN, but 4 of the US employees have THP O&M experience	9	3	30 worldwide employees and seven employees in the US. Five in Fairfield California, two in the northeast.	9
3	Company Revenue	5 times more revenue than competitor	Same Amount of Revenue	5 times less revenue than competitor	3	2	\$36.9 million in revenues in 2013	6	4	\$8.4 million in 2015 and 7.9 million in 2016	12
4	Ability to produce Class A biosolids	Fully Compliant	Partially Compliant	Not Able to Comply	5	1	Based on discussions with TDEC and the EPA during design of the current system the Cambi system followed by anaerobic digestion can comply with Class A EQ requirements.	5	2	Based on input received from TDEC and the EPA, the originally proposed Lystek system cannot comply with Class A EQ requirements. However, the modified process recently suggested by Lystek is likely to meet Class A EQ.	10
5	Diversity of Available Disposal and Reuse Options	No Restrictions and Numerous Options	Some Restrictions and Multiple Options	Restrictions Apply and One Option	4	1	The sludge produced by the Cambi system followed by anaerobic digestion and dewatering is not restricted in any way and can be reused by residential, commercial and agricultural users and can be disposed of in multiple ways.	4	3	Disposal options for the biosolids produced by the modified process proposed by Lystek would have much more limited disposal/reuse options due to its high pH.	12
Non-Cost Evaluation Score (out of 100 points)						29			63		
Rank						1			2		



Appendix A

Non-Economic Comparison of Lystek and Cambi Processes

To perform a preliminary non-economic comparison of Lystek and Cambi, this appendix uses an amended version of the non-economic comparison table that was previously utilized in the selection of the thermal hydrolysis supplier (Cambi) in early 2015. Since the Lystek system is significantly different than the systems that were previously compared, the table had to be revised to eliminate criteria that do not apply and add criteria that are important to consider in comparing these two options. The table utilizes five non-economic criteria. Each non-economic criterion was given a raw score on a scale of 1 (most desirable) to 5 (least desirable) and weighted on a scale of 1 (low priority) to 5 (high priority). The raw score for each criterion was multiplied by its respective weighting, and the five weighted scores were added together to obtain the Raw Non-Economic Score on a scale of 25 to 100 points. In general, a low score indicated that the system is a more favorable choice.

Note that the originally proposed Lystek system produces a final liquid biosolid that the regulators felt could not meet Class A EQ requirements because it does not address vector attraction requirements. Lystek has since proposed a modification to their system that would include increased chemical addition to bring the pH up to 12 followed by dewatering. The revised process essentially produces an alkaline stabilized sludge. For this evaluation, we have assumed use of this modified version of the Lystek system.

The non-economic criteria and their definitions and weights are described below.

- **Level of Experience.** This criterion captures the overall experience of the system suppliers. It considers the number of years the proposed system has been manufactured and the number of worldwide and U.S., fully operational systems installed. The more installations a system has, the better the track record. More installations illustrate demand and satisfaction for a system, and similar to the number of years the system has been manufactured, it also implies that the system has had its “bugs” worked out in full scale applications. This criterion received a high weighting of 5, because it is critical that the system operate properly with only infrequent shutdowns for maintenance. The longer a system has been manufactured and the more full-scale installations, the lower the score the supplier received.
- **Relative ability to provide responsive support after startup.** This criterion addresses the strength of the supplier and its ability to support the installed system. A lower score is provided to the supplier who has a larger number of employees available to provide service. This criterion received a medium weighting of 3, illustrating the balance between the City’s desire to have on-site support and the expectation that the most appropriate form of support for Franklin would be through remote monitoring.

- **Company Revenue.** Company revenue is an attempt to quantify the financial stability of the company. Because it is not in the scope of this pre-selection to conduct a complete analysis of the financial stability of the two system suppliers, annual revenues were used as a rough gauge of the size and stability of the company. This criterion received a medium weighting of 3 and reflects the importance of the strength and longevity of the company, as it is in the City's best interest for the supplier to be present in the future to provide support for the system for decades to come. The supplier who earned higher annual revenues received a lower score.
- **Ability to produce Class A EQ biosolids.** This criterion is critical because it measures the ability of the processes to meet the goals of the Integrated Water Resources Plan (IWRP) that was developed by the City with a panel of stakeholders. Therefore, this criterion was given a weighting of 5. A process that is recognized by the regulators as capable of producing Class A EQ biosolids would receive a raw score of 1 while a process that is judged by the regulators as incapable of producing Class A EQ biosolids would receive a raw score of 5.
- **Diversity of available disposal and reuse options.** One of the concerns with the existing biosolids system at the Franklin WRF is that there is only one option available for disposal of the resulting sludge. If that disposal option became unavailable due to regulatory changes, the landfill decided to no longer accept biosolids, or for any other reason, the City could be in a position of either not being able to get rid of the sludge or paying a premium to dispose of the sludge. Therefore, having multiple options for disposal or reuse of the sludge is very important and this criterion was given a weighting of 4. An option with few or no disposal/reuse restrictions and numerous disposal/reuse options would receive a raw score of 1, while an option with disposal/reuse restrictions and a single potential disposal/reuse option would receive a raw score of 5.

Discussion of Non-Economic Analysis

The Cambi and Lystek system were compared using the evaluation criteria outlined above and were given weighted scores of 29 and 63 respectively. The following paragraphs explain the scoring of the two alternatives for each criterion.

Level of Experience

Cambi has been manufacturing its systems for 22 years as compared to 9 years for Lystek. Cambi has a total of 50/1 operating full-scale systems in the world/U.S., respectively compared to Lystek, which has a total of 7/1 operating full-scale systems in the world/U.S., respectively. Cambi has seven more facilities in bidding and construction while Lystek has one facility that is in contract negotiations. Because of the significant difference in the years of manufacturing systems and the number of systems in operation, Cambi was given a raw score of 1 and Lystek was given a raw score of 4.

Relative Ability to Provide Support After Startup

Neither supplier has any employees in Tennessee and both suppliers have only a modest number of employees in the United States. As such, both suppliers were scored neutrally on this criterion.

Company Revenue

Cambi annual revenues are more than 4 times Lystek annual revenues, so they were given raw scores of 2 and 4 respectively.

Ability to Produce Class A EQ Biosolids

TDEC and the USEPA both indicated that in their opinion the currently designed Cambi centered system is capable of producing Class A EQ biosolids. On the other hand, the regulators did not feel that the originally proposed Lystek system was capable of producing Class A EQ biosolids. However, Lystek has since proposed a modification to their system that would involve increasing chemical addition to bring the pH of the system up to 12. **They have also indicated that they believe they can provide a dewatered product as well, if desired. CDM Smith believes the addition of appropriate pH adjustment would allow Lystek to meet the Class A EQ requirements under alternative 6 of the vector attraction reduction requirements, which is applicable to lime treated biosolids.** Since both regulators have formally agreed that the Cambi centered system will meet the Class A EQ requirements and there is not as much certainty with regards to the Lystek centered system, Cambi received a score of 1 and Lystek received a score of 2.

Diversity of Available Disposal and Reuse Options

The Lystek product will have more disposal restrictions due to its high pH (12). This limitation is a concern and resulted in a score of 3 for the Lystek system and a 1 for the Cambi system.

The results of the non-economic scoring are presented in **Table A1**.

Table A1 Non-Cost Scoring of UV Systems

Non-Cost Criterion		Raw Scoring Criteria			Weight	Cambi B-2 System			Lystek ??? System		
		1	3	5		Raw Score	Value/Comment	Weighted Score	Raw Score	Value/Comment	Weighted Score
1	Level of Experience	Extensive Experience	Moderate Experience	Limited Experience	5	1	Cambi has been manufacturing its systems for 22 years. They have 50 operating facilities worldwide, one in US, plus another seven facilities in bid and construction phase.	5	4	Lystek was started in 2000 and the first system was started up in 2008. There are a total of 8 operating facilities (one in the US). Another system is currently under negotiation.	20
2	Ability to Provide Support After Startup	Strong Support Capability	Same Support Capability	Limited Support Capability	3	3	About 120 worldwide employees and 7 employees in the US. None in TN, but 4 of the US employees have THP O&M experience	9	3	30 worldwide employees and seven employees in the US. Five in Fairfield California, two in the northeast.	9
3	Company Revenue	5 times more revenue than competitor	Same Amount of Revenue	5 times less revenue than competitor	3	2	\$36.9 million in revenues in 2013	6	4	\$8.4 million in 2015 and 7.9 million in 2016	12
4	Ability to produce Class A biosolids	Fully Compliant	Partially Compliant	Not Able to Comply	5	1	Based on discussions with TDEC and the EPA during design of the current system the Cambi system followed by anaerobic digestion can comply with Class A EQ requirements.	5	2	Based on input received from TDEC and the EPA, the originally proposed Lystek system cannot comply with Class A EQ requirements. However, the modified process recently suggested by Lystek is likely to meet Class A EQ.	10
5	Diversity of Available Disposal and Reuse Options	No Restrictions and Numerous Options	Some Restrictions and Multiple Options	Restrictions Apply and One Option	4	1	The sludge produced by the Cambi system followed by anaerobic digestion and dewatering is not restricted in any way and can be reused by residential, commercial and agricultural users and can be disposed of in multiple ways.	4	3	Disposal options for the biosolids produced by the modified process proposed by Lystek would have much more limited disposal/reuse options due to its high pH.	12
Non-Cost Evaluation Score (out of 100 points)						29			63		
Rank						1			2		



ORDINANCE 2016-42

TO BE ENTITLED: "AN ORDINANCE TO AMEND TITLE 17 – REFUSE AND TRASH DISPOSAL OF THE FRANKLIN MUNICIPAL CODE FOR PROVIDING FOR VARIOUS CLARIFICATIONS AND OTHER GENERAL HOUSEKEEPING, AND APPENDIX A – COMPREHENSIVE FEES AND PENALTIES TO BE CONSISTENT WITH THE AMENDMENTS TO TITLE 17"

WHEREAS, for promoting the public health, safety, comfort, convenience, and general welfare of the people of Franklin, Tennessee the Board of Mayor and Aldermen is authorized to prescribe regulations and standards that encourage and advance the quality of life within the City; and

WHEREAS, in its legislative judgment, the Board of Mayor and Aldermen has found that ordinances and policies that regulate land use, guide the maintenance of the City's infrastructure, and delivery of essential services must be dynamic and modified from time to time to reflect changes in best practices, model codes, land and labor costs, and safety standards necessary to preserve and promote the private and public interest; and

WHEREAS, the Franklin Board of Mayor and Aldermen have, on behalf of the citizens of Franklin, invested in a solid waste management facility located at 411 Century Court; and

WHEREAS, the facility is used by the City of Franklin for solid waste transportation of waste collected by the City and private hauling companies; and

WHEREAS, the City of Franklin is endeavoring to equitably charge for services provided by the Sanitation and Environmental Services Department based on customer type, delivery method and type of container used for providing the service; and

WHEREAS, defining the required steps for establishing and remitting payment for City services are necessary and proper,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION 1: BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, Tennessee, that Title 17, of the Franklin Municipal Code is hereby amended by deleting Title 17 in its entirety and replaced as follows:

TITLE 17 - MUNICIPAL SOLID WASTE DISPOSAL

CHAPTER 1. – MUNICIPAL SOLID WASTE

Sec. 17-101. - Definitions.

1. **Municipal Solid Waste (MSW).** Garbage, rubbish, refuse, industrial lunchroom or office waste, household waste, yard waste, and any other material resulting from the operation of residential, municipal, commercial or institutional establishments and from community activities.
2. **Administrative Set-up Fee.** Fee paid to the Sanitation and Environmental Services department per rollout container, including assembly, delivery, and any future repairs and parts replacement.

3. **Brush.** Limbs, large sticks and other similar cuttings from trees and shrubs.
4. **Bulky Waste.** Large items of MSW such as white goods (household appliances), mattresses, furniture and other oversize wastes whose large size precludes safe or convenient loading in approved waste containers or complicates handling by normal collection, processing, or disposal methods or vehicles.
5. **City.** The City of Franklin, Tennessee
6. **Condominium.** Types of buildings that include two (2) or more single-family dwelling units whose exterior building entrance leads to a common, shared hallway which has individual entrances leading from this common hallway into each individual single-family unit. These dwellings are classified as nonresidential for purposes of City MSW collection services and City service is not mandatory.
7. **Department.** The Department of Sanitation and Environmental Services unless otherwise specified as provided in this title.
8. **Director.** The director of the Sanitation and Environmental Services department, or his authorized agent or representative unless otherwise specified.
9. **Dumpster.** Steel waste receptacles of not less than two cubic yards and not more than eight cubic yards designed for the storage of MSW. The containers shall meet City standards for service, as provided in this title.
10. **Nonresidential Service MSW service** provided to Nonresidential service locations which includes but is not limited to federal, state, county and municipal government locations, educational institutions, hospitals, lodges, clubs, multifamily dwelling complexes of three (3) or more units, as well as business, commercial, industrial and office establishments. The service by the Department may be provided for using a dumpster or rollout container, as determined by the Director.
11. **Residential Service.** MSW service available from the Department to include single- or two-family dwelling units, townhomes, and mobile homes, as determined by the Director, that do not maintain centralized locations for MSW dumpsters. A monthly service fee will be charged to each location for which this service is available.
12. **Hazardous waste.** Any chemical compound, mixture, substance or article which may constitute a hazard to health or may cause damage to property because of being explosive, flammable, poisonous, corrosive, unstable, irritating, radioactive, or otherwise harmful.
13. **Infectious wastes.** Waste which contains pathogens with sufficient virulence and quantity so that exposure to the waste by a susceptible host could result in an infectious disease. For purposes of this policy, the following waste shall be infectious waste:
 - a. **Isolation wastes.** Wastes contaminated by patients who are isolated due to communicable disease, as provided in the U.S. Centers for Disease Control Guidelines for Isolation Precautions, (2007, as it may be amended).

- b. **Cultures and stocks of infectious agents and associated biologicals.** Cultures and stocks of infectious agents, including specimen cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures.
 - c. **Human blood and blood products.** Waste human blood and blood products such as serum, plasma, and other blood components.
 - d. **Pathological wastes.** Tissues, organs, body parts, and body fluids.
 - e. **Contaminated sharps.** All discarded sharps (e.g. hypodermic needles, syringes, pasteur pipettes, broken glass, scalpel blades) used in patient care or which have meet infectious agents during use in medical, research, or industrial laboratories.
 - f. **Contaminated animal carcasses, body parts, and bedding.** Contaminated carcasses, body parts (including fluids), and bedding of animals that were intentionally exposed to pathogens in research, in the production of biologicals, or in the in vivo testing of pharmaceuticals.
 - g. **Facility-specified infectious wastes.** Other wastes determined to be infectious by a written facility policy.
14. **Industrial waste.** All such wastes peculiar to industrial, manufacturing or processing plants and shall include hazardous waste. Waste produced by industrial activity which includes any material that is rendered useless during a manufacturing process.
15. **Construction and demolition waste.** Nonhazardous materials from construction, demolition, remodeling, construction site preparation, including but not limited to concrete and other masonry materials, rocks, debris, dirt, bricks, fill, plaster, rebar, paving material and all types of scrap building materials.
16. **Yard waste.** Leaves, small trees, grass clippings and shrubbery trimmings.
17. **Ashes.** Residue from coal, wood, and other combustible materials from all public and private residences and establishments.
18. **Collector.** any person or entity that collects, transports, or disposes of any MSW within the corporate limits of the City of Franklin.
19. **Rollout container.** A standard City issued container designed for the storage of MSW or recyclables prior to collection.
20. **Tipping fees.** the fee(s) imposed at the City of Franklin Transfer Station on all waste brought to the facility for transfer to an appropriate disposal site.
21. **Recyclables.** Any item approved by the Director for collection as a commodity designated for reuse or delivery to an established recycling center, from all residences and establishments, public and private, but shall not include hazardous waste, infectious waste, nonresidential MSW,

industrial or residential MSW, sewage, body wastes, recognizable industrial or medical by-products.

22. **Scavenging.** Act of unauthorized persons going through solid waste or recyclables set out by customers for curbside collection.

23. **Service Fee.** The fee(s) imposed by the City for waste collection, processing and disposal services.

Sec. 17-102. - Responsibility

1. The Director, or his authorized representative, shall have the authority to make and modify operations as necessary concerning the days of collection, location of containers, and such other matters pertaining to the collection, transporting and disposal of MSW; provided that such regulations are not in violation of the provisions of this chapter.
2. The Director, or his authorized designee, shall be responsible for the enforcement of this chapter.
3. All MSW and recyclables as defined in this title shall be collected sufficiently and frequently to prevent the occurrence of nuisances and public health problems. The collection of MSW within the City shall be under the jurisdiction of the Sanitation and Environmental Services Department.
4. All site plans must be reviewed and approved by the Director or his designee before building permits may be issued.

Sec. 17-103. - Premises to be kept clean.

All persons, firms, and corporations within the corporate limits of the City are hereby required to keep their premises in a clean and sanitary condition, free from accumulations of MSW, offal, filth, and trash. All persons, firms, and corporations are hereby required to store such MSW in sanitary containers of the type described in this chapter between intervals of collection or to dispose of such material in a manner prescribed by the Director so as not to cause a nuisance or become injurious to the public health and welfare.

Sec. 17-104. - Prohibited practices.

1. It shall be unlawful for any person, firm, or corporation to dump MSW in any form into any stream, ditch, storm sewer, sanitary sewer, or other drain within the City.
2. The disposal of MSW in any quantity by an individual, householder, establishment, firm, or corporation in any place, public or private, other than at the site or sites designated and/or with properly approved permits from the Tennessee Department of Solid Waste Management is expressly prohibited. All disposal of MSW shall be by methods approved by the Department under Tennessee Department of Solid Waste Management guidelines. Such methods shall include the maximum practical rodent, insect, and nuisance control at the place of disposal.
3. It shall be unlawful for any person, firm, or corporation to burn or attempt to burn MSW on private or public property within the corporate limits of the City of Franklin.

Sec. 17-105. - Prohibited substances.

1. Substances prohibited from collection and, which shall not be deposited in a dumpsters or rollout containers include, but are not limited to:
 - a. Flammable liquids, solids or gases, such as gasoline, benzene, alcohol or other similar substances.
 - b. Any material that could be hazardous or injurious to City employees or which could cause damage to City equipment.
 - c. Hot materials such as ashes, cinders, etc.
 - d. Human or animal waste, which shall be prohibited unless it is placed and secured in a plastic bag.
 - e. Infectious wastes and hypodermic syringes. Used hypodermic syringes shall not be placed with other waste for collection by the City, but be disposed of by a licensed medical waste disposal firm.
 - f. Construction and demolition waste as defined by section 17-101. The removal and disposal of such materials shall be the responsibility of the construction contractor, developer or property owner. The Department may remove this non-containerized waste from curbside, with signed approval request from the property owner, for an added service fee as defined in Appendix A. Comprehensive Fees and Penalties.
 - g. Rocks, dirt, bricks, concrete, broken glass, and sharp metal are not permitted in rollout containers or dumpsters.

Sec. 17-106. - Refusal of service.

The City reserves the right to refuse service to any occupant, tenant, owner, or business guilty of severe or repeated violations of this chapter or for hampering or interfering with employees of the Department in the discharge of their duties hereunder, and shall have the authority to require proof of alternate arrangements should service be refused. Should service be refused, the occupant, tenant, owner, or business may, within five working days, submit a written appeal to the City Administrator. The City Administrator shall, within five working days of receipt of an appeal, issue a written response, upholding, vacating, or modifying the decision.

Sec. 17-107. - Accumulation of MSW.

Each owner, occupant, tenant, subtenant, lessee or others, using or occupying any building, house, structure, or grounds within the corporate limits of the City of Franklin where MSW materials or substances as defined in this chapter accumulate, or are likely to accumulate, shall provide an adequate number of suitable containers of a type approved by the Director for the storage of such MSW.

Sec. 17-108. - Yard waste and brush

1. *Leaves, lawn clippings, etc.*

- a. It shall not be the responsibility of the Department of the City to shovel or pick up from the ground any loose accumulation of MSW, including leaves, lawn clippings, brush, etc. All yard waste must be placed in biodegradable paper bags of not more than 33-gallon capacity.
- b. The City shall not be responsible to remove any brush or limbs of trees unless said brush and limbs have been cut into lengths of not more than ten feet or 18 inches in diameter. Limbs of trees measuring 15 inches or more in diameter shall be cut into lengths of not more than six feet and weigh less than 75 pounds. Such material shall be piled at curbside in an area at least three feet away from obstacles, including mailboxes and utility boxes. Brush and limbs placed under overhead lines will not be collected. There shall be no MSW mixed with yard waste, bulky waste or brush left at curbside for collection.

Sec. 17-109. - Nurserymen, lawn services; duty to remove yard waste.

Every nurseryman, lawn service, or other person who cuts trees or trims shrubs or grass as a contractor shall remove and dispose all such yard waste from the premises serviced by him.

Sec. 17-110. - Residential service.

1. A fee for Residential service shall be mandatory within the City as defined in Appendix A, Comprehensive Fees and Penalties. Residential service as defined shall be made available within the City limits however is not mandatory for use.
2. The City shall provide one rollout container to each residential service location when that service is first added to the collection system and applicable administrative set-up fees have been received. Container shall remain the property of the City and be used to properly store one week's accumulation of MSW.
3. The Director may require any residential service location regularly exceeding 90 gallons of MSW in a collection period to make other approved disposal arrangements or to request use of a second container from the City. Any additional container will require an additional administrative set-up fee and monthly payment for collection, as defined in Appendix A. Comprehensive Fees and Penalties.
4. The Department is authorized to confiscate or to remove unsatisfactory storage containers from the premises of residences and establishments, public and private, when in the discretion of the Director or his designated representative, such containers do not meet the requirements of this chapter. Such unsatisfactory containers shall be removed and disposed of at a place and in a manner designated by the Department only after the Department has diligently attempted to notify the owner or owners of such containers.
5. The Department shall not be obligated to provide service where adequate containers are not provided.
6. The owner or developer of all new residential construction and development within the City of Franklin, shall supply at their expense, a City-approved rollout container for that residence or housing unit, which shall become the property of the City of Franklin. As a condition of the

issuance of the City building permit, the owner or developer shall pay the sum as specified in Appendix A, Comprehensive Fees and Penalties, per City-approved rollout container that will remain at that address. This fee is payable to the City when the building permit is issued.

7. The containers shall remain the property of the City at the property address where delivered, and are provided and assigned to residences for the health, safety, convenience and general welfare of the occupants. Containers that are damaged, destroyed, or stolen through neglect, improper use or abuse by the occupant-users shall be replaced by the City at the expense of the occupants or the owner of the residence. Containers which are damaged during normal and reasonable usage or which are damaged or destroyed, through no abuse, neglect, or improper use of the occupant-users or residence owner shall be repaired or replaced by the City at no charge to the occupant-users or residence owners. The containers shall not be damaged, destroyed, defaced, or removed from the premises by any person; markings and identification devices on the containers except as placed or specifically permitted by the City are expressly prohibited and shall be regarded as damage to the containers.
8. It shall be the responsibility of each occupant, on the scheduled day of collection, to place their container on the property side of the curb or street, or at the edge of the alley where serviceable alleys are available, or in a City approved location for pick-up. Containers shall be placed in such a location as to be readily accessible for removal by the City. The container shall be placed in such a manner as not to interfere with other MSW containers, curbside mailboxes, overhead power lines or tree branches, parked cars, vehicular traffic, utility boxes or in any other way that would constitute a public hazard or nuisance. Generally, this shall be within two feet of the curb or edge of pavement, at least three feet from obstructions such as those listed, and at least five feet from any vehicle parked along the street. Rollout containers shall not be placed, without the express permission of the City, on a public sidewalk, in the street, or in a drainage ditch.
9. Where service alleys are available, container shall be placed in a designated area on collection day. The area shall provide for one-way access by collection vehicles.
10. Containers shall be placed for collection no earlier than 7:00 P.M. on the day before collection, and no later than 7:00 A.M. on the scheduled day of collection. Containers must be removed from the curb, street, or alleyway no later than 7:00 P.M. on the day of collection.
11. Construction and demolition waste and yard waste, as defined in this chapter, are hereby prohibited from being placed in the rollout or other City approved MSW collection containers.
12. City collectors shall not enter houses, stores, garages, or open gates for the collection of MSW, nor shall they accept any money or valuable gifts for their services from persons served.
13. All MSW must be drained of all liquids and wrapped in plastic or other equivalent material prior to placing it in any MSW storage container. To eliminate odor and insects, reduce spillage and litter and discourage animals from getting into MSW containers, all waste shall be placed in plastic or paper bags which must be tightly secured. No waste shall be placed loose in the MSW container. Collection crews will not pick up spills and litter resulting from loose waste placed in containers.

14. The containers shall be maintained in a clean and sanitary manner and shall be thoroughly cleaned by washing or other method as often as necessary to prevent the breeding of flies and the occurrences of offensive odors.
15. MSW shall not be stored near other personal effects which are not desired to be collected, but shall be reasonably separated in order that the collectors can clearly distinguish between what is to be collected and what is not.

Sec. 17-111. - Nonresidential service.

1. Every nonresidential service location shall place all MSW in a City approved container, and shall maintain the container and the surrounding area in a clean, neat and sanitary condition. All containers shall be cleaned and disinfected on a regular basis.
2. Any establishment that furnishes and maintains a dumpster, or containers suitable for handling by City equipment may be serviced by the City as required provided that such container shall be of sufficient size and number. Dumpsters shall always be kept in a place easily accessible to City equipment as approved by the Director. At no time shall objects, obstructions, or vehicles hinder in any way whatsoever the servicing of said containers.
3. All dumpsters to be serviced by City equipment shall be front-end loading enclosed, metal containers. Before any such container shall be serviced by the City, it shall be specifically approved by the Director as to capacity, size, type and location. No container shall exceed eight cubic yards capacity.
4. Dumpsters shall be placed on approved service pads to be constructed of six-inch thick concrete reinforced with steel and of a size of no less than 12 by 12 feet square. Screening shall be permitted on three sides only. A gate must be placed on the dumpster screening. Service of containers in gated enclosures may be provided by the Department if the gates meet all specifications set by the department.
5. Nonresidential customers using rollout containers for collection shall provide sufficient containers to properly store one week's accumulation of MSW. The administrative set-up fee for a City approved rollout container shall be as specified in Appendix A, Comprehensive Fees and Penalties. All nonresidential customers requiring any combination of six or more rollout containers for weekly service shall be required to acquire dumpsters for service. Any exceptions must be specifically approved by the Director.
6. Nothing in this section shall prohibit nonresidential establishments or private residents from removing their own MSW or from contracting with a private collector for such removal, provided said private collector shall have a valid permit or license to do business within the City.
7. Right-of-Way Obstruction Permit
 - a. In no event shall public or private dumpsters, roll out containers or other containers be placed on a public street, right-of-way or public property:

- i. Without express written consent of the City Street Department director upon application, approval and tender of a permit fee as specified in Appendix A, Comprehensive Fees and Penalties, for a Right-of-Way Obstruction permit;
 - ii. Without posting a cash bond or certified check deposit as specified in Appendix A, Comprehensive Fees and Penalties, to secure payment for any damage to the street, right-of-way or public property;
 - iii. For longer than 30 days unless the Right-of-Way Obstruction permit is renewed and approved by the City Street Department director; or
 - iv. Such that it poses a hazard to public safety or a health and sanitation nuisance under the provisions of Title 13, Chapter 1 of this Code.
- b. Failure to secure a Right-of-Way Obstruction permit or to abide by its conditions shall subject the violator the penalties in section 17-116 of this Code. In addition, the Department is authorized to remove any dumpster or container which is not in compliance with this section. Prior to any removal, the Street Department director shall give a notice of intent to remove a dumpster to the permittee or MSW collector by first class mail and by posting a copy of the notice on the dumpster or container. The notice shall set out the conditions that render the dumpster or container to be noncompliant. If such conditions are not corrected to the director's satisfaction within five days from the date of the notice, the director or his designee shall remove the dumpster at the expense of the permittee or MSW collector.

Sec. 17-112. - Special collection services.

1. *Non-containerized bulky waste collection.* Any non-containerized bulky waste shall be placed adjacent to and back of the curb, or adjacent to and back of the drainage ditch or catch basin, alley or street line if there is no curb, without blocking the roadway, any sidewalk, drainage ditch, or catch basin. Customers will be assessed a non-containerized bulky waste collection fee per 20 cubic yard truck load or any portion thereof as specified in Appendix A, Comprehensive Fees and Penalties for bulky waste collection services.
2. *Rollout container excess.* Any waste collected at service locations utilizing City issued roll out container that does not fit in the provided number of rollout containers will be assessed an extra pick-up fee as specified in Appendix A, Comprehensive Fees and Penalties. The nature of the MSW may be such that standard non-containerized bulky waste collection fees may be required, as specified in Appendix A, Comprehensive Fees and Penalties.
3. *Remodeling/clean-up dumpsters.* Dumpsters for the disposal of remodeling, light construction, or general clean up waste may be available from the Department. Each dumpster (2-8 cubic yards) shall be properly loaded and emptied at least once per week. A maximum usage of three consecutive calendar weeks will be allowed. For the safety of collectors, no dumpster with protruding items from the sides or top will be serviced. Fees for residential remodeling/clean-up dumpster services are specified in Appendix A. Comprehensive Fees and Penalties.

4. Backdoor Residential. Backdoor residential rollout container services may be provided at no additional charge for customers with a medical condition. Each customer desiring backdoor service shall complete an application for such service on an annual basis.

Sec. 17-113. Billing for Sanitation Collection Services.

1. Bills may be rendered weekly, semi-monthly, or monthly, at the option of the City. Bills will consist of fees for services obtained by the customer from the City in accordance with the Application and Agreement for Service and the City and the provisions of the Municipal Code.
2. Sanitation collection service bills must be paid on or before the due date shown thereon. Payments made after the due date shall incur a penalty of ten (10) percent of the amount billed for sanitation services. If the delinquent balance is not paid within 60 days of the bill due date, nonresidential collection service may be discontinued without further notice until the balance of the bill is paid in full. The City shall not be liable for any damages resulting from discontinued service under the provisions of this section, even though payment of the bill is made at any time on the day that service is discontinued. Failure to receive a bill will not release a customer from payment obligation nor extend the due date.
3. Customers will have consolidated bills presented for other services including, but not limited to, water, wastewater, MSW and stormwater in accordance with the provisions of this Code.
4. Should the final date of payment of bill fall on a weekend or a holiday, the business day next following the final date will be the last day to avoid a penalty. A remittance received by mail after the time limit for payment will be accepted by the City if the envelope is date stamped on or before the final date for payment.

Section 17-114. Billing for Transfer Station Tipping Fees.

1. Transfer station services are billed one month in arrears. The amount billed is due on the 15th of the month following the service month. Transfer station bills must be paid in full on or before the due date shown thereon to avoid an added penalty of ten percent.
2. If a balance is not paid in full within 30 days of the bill due date, the customer's account will be deemed delinquent and use of the transfer station services will be suspended until the entire account balance is paid in full.
3. Failure to receive a bill will not release a customer from payment obligation nor extend the due date. City shall not be liable for any damages resulting from discontinued service(s) under the provisions of this section, even though payment of the bill is made at any time on the day the service is discontinued.
4. Should the final date of payment of bill fall on a weekend or a holiday, the business day next following the final date will be the last day to avoid a penalty. A remittance received by mail after the time limit for payment will be accepted by the City if the envelope is date stamped on or before the final date for payment.

Sec. 17-115. - Schedule of fees for disposal of MSW and frequency of collection.

1. *Residential.* A fee as specified in Appendix A, Comprehensive Fees and Penalties, shall be paid to the City for the disposal of MSW for every household container (once per-week pickup).
2. *Nonresidential.*
 - a. *[Rollout and dumpster.]* A fee as specified in Appendix A, Comprehensive Fees and Penalties, shall be charged for every rollout and dumpster serviced by the City.
 - b. *Special event.* To be determined by the Director, depending on size, duration and nature of event.
 - c. *Nonresidential cardboard recycling service.* A fee as specified in Appendix A, Comprehensive Fees and Penalties, shall be charged for nonresidential cardboard recycling service.
3. *Transfer station tipping fee(s).* Tipping fee(s), as specified in Appendix A, Comprehensive Fees and Penalties, shall be charged for all MSW delivered to the City owned transfer station for hauling and disposal at landfill locations.

Sec. 17-116. - Penalties.

1. Any person violating any of the provisions of this chapter shall be served by the City with written notice stating the nature of the violation and providing up to 10 days for the satisfactory correction thereof. The offender shall, within the time stated in such notice, permanently cease all violations. Service will be discontinued until the violation is corrected.
2. Any person who shall continue any violation beyond the time provided for in subsection 17-116(1) shall be guilty of a misdemeanor and shall be punishable under the general penalty clause of this Code.
3. Any person violating any of the provisions of this chapter shall become liable to the City for any expense, loss or damage occasioned by City personnel or equipment because of such violation.

CHAPTER 2. - RECYCLING

Sec. 17-201. - Definitions.

1. *Recyclables.* any item approved by the Director for collection as a commodity designated for reuse or delivery to an established recycling center, from all residences and establishments, public and private, but shall not include hazardous waste, infectious waste, commercial, industrial or residential solid waste, sewage, body wastes, recognizable industrial or medical by-products.

Recyclables may include cardboard, aluminum, tin, steel, newspaper or any other item approved by the Director.

Sec. 17-202. - Responsibility for administration.

1. The Director, or his authorized representative, shall have the authority to make and modify regulations as necessary concerning the placement of recycling collection containers, hours of operation and or such other matters pertaining to the collection, transporting and disposal of

recyclable materials; provided that such regulations are not in violation of the provisions of this chapter.

2. The Director or his authorized representative, shall be responsible for the enforcement of this chapter.
3. All recyclables shall be collected sufficiently and frequently to prevent the occurrence of nuisance and public health problems. The collection of residential recyclables within the City of Franklin shall be under the jurisdiction of the Department.

Sec. 17-203. - Premises to be kept clean.

All areas where containers are placed are hereby required to be kept in a clean and sanitary condition, by the entity that operates and/or services the area.

Sec. 17-204. - Prohibited practices.

1. It shall be unlawful for any person, firm or corporation to dump recyclables in any form into any stream, ditch, storm sewer, sanitary sewer, or other drain within the City of Franklin.

Sec. 17-205. - Prohibited substances.

1. Substances prohibited from collection and shall not be deposited in recycling containers include, but are not limited to:
 - a. Flammable liquids, solids or gases, such as gasoline, benzene, alcohol or other similar substances.
 - b. Any material that could be hazardous or injurious to City employees or which could cause damage to City equipment.
 - c. Hot materials such as ashes, cinders, etc.
 - d. Human or animal waste shall be prohibited.
 - e. Infectious waste and hypodermic syringes. Used hypodermic syringes shall not be placed with recyclables for collection by the City of Franklin, but be disposed of by a licensed medical waste disposal firm.
 - f. Construction and Demolition waste as defined by section 17-101. The removal and disposal of such materials shall be the responsibility of the construction contractor, developer or property owner. The Department may remove this non-containerized waste from curbside, with signed approval request from the property owner, for an added service fee as defined in Appendix A, Comprehensive Fees and Penalties.
 - g. Rocks, dirt, bricks, concrete, broken glass, and sharp metal are not permitted with recyclables.

Sec. 17-206. - Penalties.

1. Any person violating any of the provisions of this chapter or the conditions of any permit issued hereunder shall be served by the City with written notice stating the nature of the violation and

providing up to ten days for the satisfactory correction thereof. The offender shall, within the time stated in such notice, permanently cease all violations. Service will be discontinued until the violation is corrected.

2. Any person who shall continue any violation beyond the time provided for in subsection 17-116(1) shall be guilty of a misdemeanor and shall be punishable under the general penalty clause of this Code.
3. Any person violating any of the provisions of this chapter shall become liable to the City for any expense, loss or damage occasioned by City personnel or equipment because of such violation.

SECTION II: BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, Tennessee, that Appendix A, Chapter 17, of the Franklin Municipal Code is hereby amended by deleting Appendix A, Chapter 17 in its entirety and replaced as follows:

APPENDIX A – COMPREHENSIVE FEES AND PENALTIES

CHAPTER 17. - MUNICIPAL SOLID WASTE DISPOSAL

<i>Containers—Administrative Setup Fee</i>	
Residential —City approved rollout container	\$75.00 per container
Nonresidential— City approved rollout container	\$75.00 per container
<i>Collection Service Fees</i>	
Residential	
First rollout container	\$17.50 per month (one pick-up/week)
Second and subsequent rollout containers	\$7.50 per month/per container
Nonresidential	
First rollout container	\$30.00 per month/per container (one pick-up service/week)
Rollout—Additional pick-up service	\$30.00 per pick-up service
<i>Residential and Nonresidential Dumpster Service</i>	
Dumpster service	\$110.00 per month/per container (one pick-up service/week)

	\$205.00 per month/per container (two pick-up services/week)
	\$300.00 per month/per container (three pick-up services/week)
	\$395.00 per month/per container (four pick-up services/week)
	\$490.00 per month/per container (five pick-up services/week)
Dumpster service—Customer provides city approved container	\$95.00 per month/per container (one pick-up service/week)
	\$180.00 per month/per container (two pick-up services/week)
	\$265.00 per month/per container (three pick-up services/week)
	\$350.00 per month/per container (four pick-up services/week)
	\$435.00 per month/per container (five pick-up services/week)
Dumpster—Additional pick-up service	\$95.00 per service
Container delivery truck service	\$50.00 per dumpster/service
<i>Special Collection Services</i>	
Pick-up service for noncontainerized bulky waste	\$125.00 per vehicle/per request
Residential remodeling/clean-up dumpster	\$110.00 per service
<i>Special Event</i>	
Collection service	As determined by the Sanitation and Environmental Services Director

<i>Non-Residential Cardboard Recycling Service</i>	\$65.00 per month (one pick-up service/week)
	\$115.00 per month (two pick-up services/week)
	\$165.00 per month/per container (three pick-up services/week)
	\$215.00 per month/per container (four pick-up services/week)
	\$265.00 per month/per container (five pick-up services/week)
<i>Tipping Fees at Transfer Station</i>	
Class I	\$55.00 per ton—\$25.00 minimum

SECTION III: BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee, that this Ordinance shall take effect on June 1, 2018, and after its passage on second and final reading for the health, safety and welfare of the citizens of Franklin, Tennessee requiring it.

(See next page for signatures)

ATTEST:

CITY OF FRANKLIN, TENNESSEE:

By: _____
Eric Stuckey
City Administrator/Recorder

By: _____
Dr. Ken Moore
Mayor

Approved as to form by:

Shauna R. Billingsley
City Attorney

PASSED FIRST READING _____
PASSED SECOND READING _____



Proposed Title 17 Modifications

Sanitation & Environmental Services
Jack Tucker, SES Director
Mark Hilty, ACA Public Works

Proposed Title 17 Modifications

- Customer Service Classifications,
- Rollout container ownership,
- Right of way obstruction permit
- Backdoor residential services, and
- Guidelines for billing practices associated with collection services and transfer station accounts.
- General Clarifications and cleanup

Proposed Title 17 Modifications – Customer Service Classifications

- Current Service Definitions
 - *Commercial solid waste.* The term "commercial solid waste" shall mean solid waste resulting from the operation of any commercial, industrial, institutional or agricultural establishment, and multiple housing facilities.
 - *Residential solid waste.* The term "residential solid waste" shall mean solid waste resulting from the maintenance and operation of dwelling units, excluding multiple housing facilities. This also excludes specific wastes defined and/or included in other parts of this chapter.
- Proposed Customer Definitions:
 - *Nonresidential Service* - MSW service provided to Nonresidential service locations which includes but is not limited to federal, state, county and municipal government locations, educational institutions, hospitals, lodges, clubs, multifamily dwelling complexes of three (3) or more units, as well as business, commercial, industrial and office establishments. The service by the Department may be provided for through the use of a dumpster or rollout container, as determined by the Director.
 - Provision of this service by COF SES is optional
 - *Residential Service* - MSW service available from the Department to include single- or two-family dwelling units, townhomes, and mobile homes, as determined by the Director, that do not maintain centralized locations for MSW dumpsters. A monthly service fee will be charged to each location for which this service is available.

Proposed Title 17 Modifications

- Section 17-101 – Definitions
 - Established Administrative Set-up Fee
- Section 17-110 – Residential MSW
 - Establishes how Administrative Set-up Fee works and clarifies container ownership
- Section 17-111 – Nonresidential MSW
 - Establishes how Administrative Set-up Fee works and clarifies container ownership
 - Right-of-Way Obstruction Permit – this section cleans up the language relative to the ROW Obstruction Permit (Ord 2017-44 amending Title 16, Chapter 2) approved on February 27, 2018. (this eliminates permit fee in Appendix A, Chapter 17)

Proposed Title 17 Modifications - Continued

- Section 17-112 Special Collection Services
 - 4. Backdoor Residential. Backdoor residential rollout container services may be provided at no additional charge for customers with a medical condition. Each customer desiring backdoor service shall complete an application for such service on an annual basis.
- Section 17-113 and 17-114 – Billing for Collection Services and Transfer Station Tipping Fees
 - Largely related to cleaning up language relative to the City's authorities and notifications to customers.
- Appendix A – Chapter 17, Refuse and Trash Disposal
 - General clarifications
 - Elimination of permit and surety (permitting accomplished in ROW obstruction permit now)
 - Elimination of construction and demolition waste fee (currently not accepted by COF)

Discussion of Proposed Changes and Implementation Schedule

ORDINANCE 2016-42

TO BE ENTITLED: "AN ORDINANCE TO AMEND TITLE 17 – REFUSE AND TRASH DISPOSAL OF THE FRANKLIN MUNICIPAL CODE FOR THE PURPOSE OF PROVIDING FOR VARIOUS CLARIFICATIONS AND OTHER GENERAL HOUSEKEEPING, AND APPENDIX A – COMPREHENSIVE FEES AND PENALTIES TO BE CONSISTENT WITH THE AMENDMENTS TO TITLE 17"

WHEREAS, for the purpose of promoting the public health, safety, comfort, convenience, and general welfare of the people of Franklin, Tennessee the Board of Mayor and Aldermen is authorized to prescribe regulations and standards that encourage and advance the quality of life within the City; and

WHEREAS, in its legislative judgment, the Board of Mayor and Aldermen has found that ordinances and policies that regulate land use, guide the maintenance of the City's infrastructure, and delivery of essential services must be dynamic and modified from time to time to reflect changes in best practices, model codes, land and labor costs, and safety standards necessary to preserve and promote the private and public interest; and

WHEREAS, the Franklin Board of Mayor and Aldermen have, on behalf of the citizens of Franklin, invested in a solid waste management facility located at 411 Century Court; and

WHEREAS, the facility is used by the City of Franklin for solid waste transportation of waste collected by the City and private hauling companies; and

WHEREAS, the City of Franklin is endeavoring to equitably charge for services provided by the Sanitation and Environmental Services Department based on customer type, delivery method and type of container used for providing the service; and

WHEREAS, defining the required steps for establishing and remitting payment for City services are necessary and proper,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I: BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, Tennessee, that Title 17, of the Franklin Municipal Code is hereby amended by deleting the text noted with a strikethrough and inserting the text noted are approved to read as follows:

SECTION II: BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee, that this Ordinance shall take effect on June 1, 2018 and after its passage on second and final reading for the health, safety and welfare of the citizens of Franklin, Tennessee requiring it.

ATTEST:

CITY OF FRANKLIN, TENNESSEE:

By: _____

Eric Stuckey

City Administrator/Recorder

By: _____

Dr. Ken Moore

Mayor

Approved as to form by:

Shauna R. Billingsley

City Attorney

PASSED FIRST READING

PASSED SECOND READING

TITLE 17 - ~~REFUSE AND TRASH~~ MUNICIPAL SOLID WASTE DISPOSAL

CHAPTER 1. ~~--~~ MUNICIPAL SOLID WASTE

Sec. 17-101. - Definitions.

1. Municipal Solid Waste (MSW). Garbage, rubbish, refuse, industrial lunchroom or office waste, household waste, yard waste, and any other material resulting from the operation of residential, municipal, commercial or institutional establishments and from community activities.
2. Administrative Set-up Fee. Fee paid to the Sanitation and Environmental Services department per rollout container, including assembly, delivery, and any future repairs and parts replacement.
3. Brush. Limbs, large sticks and other similar cuttings from trees and shrubs.
4. Bulky Waste. Large items of MSW such as white goods (household appliances), mattresses, furniture and other oversize wastes whose large size precludes safe or convenient loading in approved waste containers or complicates handling by normal collection, processing, or disposal methods or vehicles.
5. City. The City of Franklin, Tennessee
6. Condominium. Types of buildings that include two (2) or more single-family dwelling units whose exterior building entrance leads to a common, shared hallway which has individual entrances leading from this common hallway into each individual single-family unit. These dwellings are classified as nonresidential for purposes of City MSW collection services and City service is not mandatory.
7. Department. The Department of Sanitation and Environmental Services unless otherwise specified as provided in this title.
8. Director. The director of the Sanitation and Environmental Services department, or his authorized agent or representative unless otherwise specified.
9. Dumpster. Steel waste receptacles of not less than two cubic yards and not more than eight cubic yards designed for the storage of MSW. The containers shall meet City standards for service, as provided in this title.
10. ~~Nonresidential Service by the Department of Sanitation and Environmental Services all service locations within the city except those locations specified under residential service. MSW service provided to NN~~nonresidential service locations ~~shall~~which includes but ~~are~~is not limited to federal, state, county and municipal government locations, educational institutions, hospitals, lodges, clubs, multifamily dwelling complexes of three (3) or more units, as well as business, commercial, industrial and office establishments. The service by the Department may be provided for through the use of a dumpster or rollout container, as determined by the Director. Classification as a nonresidential service location shall normally preclude classification as a residential service location.limits of the City.
11. Residential Service. MSW service available from the Department ~~by the Department of Sanitation and Environmental Services to include~~ single- or two-family dwelling units,

townhomes, and mobile homes, as determined by the Director, that do not maintain centralized locations for MSW dumpsters. ~~a residential property. This service is mandatory for residentially occupied buildings, detached single-family dwellings, duplexes, mobile homes and townhomes.~~
A monthly service fee will be charged to each location for which this service is available.

~~1. Solid waste.~~ The term "solid waste," as hereinafter referred to in this chapter, shall include garbage, rubbish, and all other putrescible and nonputrescible, combustible and noncombustible materials originating from the preparation, cooking, and consumption of food, market refuse, waste from the handling and sale of produce, and other similar unwanted materials, from residences and establishments, public and private, but shall not include sewage, body waste, recognizable industrial or medical by-products.

~~2.12.~~ Hazardous ~~refuse~~waste. The term "hazardous refuse" shall mean ~~any~~Any chemical compound, mixture, substance or article which may constitute a hazard to health or may cause damage to property by reason of being explosive, flammable, poisonous, corrosive, unstable, irritating, radioactive, ~~infectious~~, or otherwise harmful.

~~3.13.~~ Infectious wastes. ~~The term "infectious waste" means waste~~Waste which contains pathogens with sufficient virulence and quantity so that exposure to the waste by a susceptible host could result in an infectious disease. For purposes of this policy, the following waste shall be considered to be infectious waste:

- a. *Isolation wastes.* Wastes contaminated by patients who are isolated due to communicable disease, as provided in the U.S. Centers for Disease Control Guidelines for Isolation Precautions, ~~in Hospitals, (February, 19972007), as it may be amended.~~
- b. *Cultures and stocks of infectious agents and associated biologicals.* Cultures and stocks of infectious agents, including specimen cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures.
- c. *Human blood and blood products.* Waste human blood and blood products such as serum, plasma, and other blood components.
- d. *Pathological wastes.* ~~Pathological wastes, such as t~~Issues, organs, body parts, and body fluids.
- e. *Contaminated sharps.* All discarded sharps (e.g. hypodermic needles, syringes, pasteur pipettes, broken glass, scalpel blades) used in patient care or which have come into contact with infectious agents during use in medical, research, or industrial laboratories.
- f. *Contaminated animal carcasses, body parts, and bedding.* Contaminated carcasses, body parts (including fluids), and bedding of animals that were intentionally exposed to pathogens in research, in the production of biologicals, or in the in vivo testing of pharmaceuticals.
- g. *Facility-specified infectious wastes.* Other wastes determined to be infectious by a written facility policy.

~~4-14.~~ Industrial waste. ~~The term "industrial waste" shall mean all~~ All such wastes peculiar to industrial, manufacturing or processing plants and shall include hazardous waste-refuse. Waste produced by industrial activity which includes any material that is rendered useless during a manufacturing process.

~~5-15.~~ Construction and demolition waste. ~~The term "construction waste" shall mean materials~~ Nonhazardous materials from construction, demolition, remodeling, construction site preparation, including but not limited to concrete and other masonry materials, rocks, ~~trees,~~ debris, dirt, bricks, fill, plaster, rebar, paving material and all types of scrap building materials.

~~6. Commercial solid waste.~~ The term "commercial solid waste" shall mean solid waste resulting from the operation of any commercial, industrial, institutional or agricultural establishment, and multiple housing facilities.

~~7. Residential solid waste.~~ The term "residential solid waste" shall mean solid waste resulting from the maintenance and operation of dwelling units, excluding multiple housing facilities. This also excludes specific wastes defined and/or included in other parts of this chapter.

~~8-16.~~ Yard waste. ~~The term "yard waste" shall mean,~~ Leaves, small trees, grass clippings and shrubby trimmings.

~~9. Grass clippings.~~ The term "grass clippings" shall mean any residue remaining from the cutting, clipping, or trimming of grass from any home, business, or agricultural endeavor.

~~10. Garbage.~~ The term "garbage" shall include all putrescible waste, except sewage and body waste, including vegetable and animal offal and carcasses of dead domesticated animals at the discretion of the sanitation and environment services department director, but excluding recognizable industrial by-products, from all public and private residences.

~~11. Rubbish.~~ The term "rubbish" shall include all nonputrescible waste materials except ashes from all public and private residences and establishments.

~~12-17.~~ Ashes. ~~The term "ashes" shall include the waste products~~ Residue from coal, wood, and other ~~fuels used for cooking and heating~~ combustible materials from all public and private residences and establishments.

~~13-18.~~ Collector. ~~The term "collector" shall mean any person or firm, corporation, or political subdivision that~~ entity that collects, transports, or disposes of any ~~refuse~~ MSW within the corporate limits of the City of Franklin.

~~14. Health officer.~~ The term "health officer" shall mean the Sanitation and Environment Services Department Director of the City of Franklin or his authorized representative.

~~15. Bulk container.~~ The term "bulk container" shall mean steel waste receptacles of not less than two cubic yards and not more than eight cubic yards designed for the storage of solid waste. The containers shall meet industry standards for service.

~~16-19.~~ Roll-out/rollout container. ~~The term "roll-out container" shall mean a~~ A standard ~~city~~ City issued ~~90-gallon~~ container designed for the storage of ~~solid waste~~ MSW or recyclables prior to collection.

~~17. The pronouns *he, him* and *his* shall refer to persons of the female as well as the male gender, as applicable.~~

20. *Tipping fees.* ~~The term "tipping fee(s)" shall mean~~ the fee(s) imposed at the City of Franklin Transfer Station on all waste brought to the facility for transfer to an appropriate disposal site.

21. *Recyclables.* Any item approved by the Director for collection as a commodity designated for reuse or delivery to an established recycling center, from all residences and establishments, public and private, but shall not include hazardous waste, infectious waste, nonresidential MSW, industrial or residential MSW, sewage, body wastes, recognizable industrial or medical by-products.

22. *Scavenging.* Act of unauthorized persons going through solid waste or recyclables set out by customers for curbside collection.

23. *Service Fee.* The fee(s) imposed by the City for waste collection, processing and disposal services.

~~18.~~

Sec. 17-102. - Responsibility ~~for administration.~~

1. The ~~sanitation and environment services department director~~ Director, or his authorized representative, shall have the authority to make and modify ~~regulations~~ operations as necessary concerning the days of collection, location of containers, and such other matters pertaining to the collection, transporting and disposal of ~~solid waste refuse~~ MSW; provided that such regulations are not in violation of the provisions of this chapter.
2. The ~~sanitation and environment services department director~~ Director, or his authorized ~~representative~~ designee, shall be responsible for the enforcement of this chapter.
3. All ~~refuse MSW (including garbage and rubbish) and recyclables~~ as ~~heretofore~~ defined in this title shall be collected sufficiently and frequently to prevent the occurrence of nuisances and public health problems. The collection of ~~refuse MSW~~ within the City ~~of Franklin~~ shall be under the jurisdiction of the ~~sanitation~~ Sanitation and ~~environmental~~ Environmental services ~~Services department~~ Department.
4. All site plans must be reviewed and approved by the ~~sanitation and environment services department director~~ Director or his designee before building permits may be issued.

Sec. 17-103. - Premises to be kept clean.

All persons, firms, and corporations within the corporate limits of the City ~~of Franklin~~ are hereby required to keep their premises in a clean and sanitary condition, free from accumulations of ~~refuse MSW~~, offal, filth, and trash. All persons, firms, and corporations are hereby required to store such ~~refuse MSW~~ in sanitary containers of the type described in this chapter between intervals of collection or to dispose of such material in a manner prescribed by the ~~sanitation and environment services department director~~ Director so as not to cause a nuisance or become injurious to the public health and welfare.

Sec. 17-104. - Prohibited practices.

1. It shall be unlawful for any person, firm, or corporation to dump ~~refuse~~MSW in any form into any stream, ditch, storm sewer, sanitary sewer, or other drain within the City of Franklin.
2. The disposal of ~~refuse~~MSW in any quantity by an individual, householder, establishment, firm, or corporation in any place, public or private, other than at the site or sites designated and/or with properly approved permits from the Tennessee Department of Solid Waste Management is expressly prohibited. All disposal of ~~refuse~~MSW and ~~garbage~~ shall be by methods approved by the ~~sanitation and environmental services d~~Department under Tennessee Department of Solid Waste Management guidelines. Such methods shall include the maximum practical rodent, insect, and nuisance control at the place of disposal.
3. It shall be unlawful for any person, firm, or corporation to burn or attempt to burn ~~refuse~~MSW on private or public property within the corporate limits of the City of Franklin ~~without first securing the approval of the appropriate city departments having jurisdiction.~~

Sec. 17-105. - Prohibited substances.

1. Substances prohibited from ~~pick-up~~collection and, which shall not be deposited in ~~garbage containers~~a dumpsters or rollout containers include, but are not limited to:
 - a. Flammable liquids, solids or gases, such as gasoline, benzene, alcohol or other similar substances.
 - b. Any material that could be hazardous or injurious to ~~city~~City employees or which could cause damage to ~~city~~City equipment.
 - c. Hot materials such as ashes, cinders, etc.
 - d. Human or animal waste, which shall be prohibited unless it is placed and secured in a plastic bag.
 - e. Infectious wastes and hypodermic syringes. Used hypodermic syringes shall not be placed with other waste for collection by the City of Franklin, but be disposed of by a licensed medical waste disposal firm.
 - f. "Construction ~~and demolition~~ waste" as defined by section 17-101. The removal and disposal of such materials shall be the responsibility of the construction contractor, developer or property owner. The Department may remove this non-containerized waste from curbside, with signed approval request from the property owner, for an added service fee as defined in Appendix A. Comprehensive Fees and Penalties.
 - g. Rocks, dirt, bricks, concrete, broken glass ~~unless in approved container~~, and sharp ~~metal~~ metal are not permitted in rollout containers or dumpstersglass.

Sec. 17-106. - Refusal of service.

The City of Franklin reserves the right to ~~refuse~~refuse service to any occupant, tenant, owner, or business guilty of severe or repeated violations of this chapter or for hampering or interfering with

employees of the ~~sanitation and environmental services~~ Department in the discharge of their duties hereunder, and shall have the authority to require proof of alternate arrangements should service be refused. Should service be refused, the occupant, tenant, owner, or business may, within five working days, submit a written appeal to the ~~city~~City administratorAdministrator. The ~~city~~City administratorAdministrator shall, within five working days of receipt of an appeal, issue a written response, upholding, vacating, or modifying the decision.

Sec. 17-107. - Accumulation of ~~refuse~~MSW.

Each owner, occupant, tenant, subtenant, lessee or others, using or occupying any building, house, structure, or grounds within the corporate limits of the City of Franklin where ~~refuse~~MSW materials or substances as defined in this chapter accumulate, or are likely to accumulate, shall provide an adequate number of suitable containers of a type approved by the ~~sanitation and environment services department director~~Director for the storage of such ~~refuse~~MSW.

Sec. 17-108. - Yard waste ~~and brush~~:-

1. *Leaves, lawn clippings, etc.*

- a. It shall not be the responsibility of the ~~sanitation and environmental services~~ Department of the ~~city~~City to shovel or pick up from the ground any loose accumulation of ~~refuse~~MSW, including leaves, lawn clippings, brush, etc. ~~Effective December 31, 2003, a~~All yard waste must be placed in biodegradable paper bags of not more than 33-gallon capacity.
- b. ~~The City shall not be responsible to remove any brush or limbs of trees unless said brush and limbs have been cut into lengths of not more than ten (10) feet or 18 inches in diameter. Limbs of trees measuring 15 inches or more in diameter shall be cut into lengths of not more than six (6) feet and weigh less than 75 pounds. All such~~ material shall be piled at curbside in an area at least three (3) feet away from obstacles, including mailboxes and utility boxes. Brush and limbs placed under overhead lines will not be collected. There shall be no MSW mixed with yard waste, bulky waste or brush left at curbside for collection. The collecting agency of the city shall not be responsible to remove any brush, trunks, or limbs of trees unless said brush shall have been cut into lengths of not more than ten feet. The trunks or limbs of trees measuring 15 inches or more in diameter shall be cut into lengths of not more than six feet and of a weight of no more than 75 pounds, and all of said material shall be piled at curbside.

Sec. 17-109. - Nurserymen, lawn services; duty to remove ~~trash~~yard waste.

Every nurseryman, lawn service, or other person who cuts trees or trims shrubs or grass as an ~~independent~~ contractor shall remove and dispose ~~or cause to be removed~~ all such ~~trash~~yard waste from the premises serviced by him.

Sec. 17-110. - Residential ~~solid waste~~MSWservice.

1. A fee for Residential service, as defined in this title, is shall be mandatory within the City as defined in Appendix A, Comprehensive Fees and Penalties. Residential service as defined shall be made available within the City limits however is not mandatory for use.

- ~~1-2.~~ The City shall provide one rollout container to each residential service location when that service is first added to the collection system and applicable administrative set-up fees have been received. Container shall remain the property of the City and be used to properly store one week's accumulation of MSW. ~~All residents shall provide sufficient city issued 90-gallon regulation containers to properly store one week's accumulation of refuse (including garbage and rubbish).~~
- ~~2-3.~~ The Director may require any residential ~~household~~ service location regularly exceeding 90 gallons of MSW in a collection period to make other approved disposal arrangements or to request use of a second container from the City. Any additional container will require an ~~second~~ additional administrative set-up fee and a ~~second~~ monthly payment for collection, as defined in Appendix A. Comprehensive Fees and Penalties. ~~The sanitation and environment services department director may require any residential household regularly exceeding 90 gallons or 200 pounds of garbage in a collection period, to make other approved disposal arrangements, or to purchase a second container from the city, which requires a second monthly payment for collection.~~
- ~~3-4.~~ The ~~official refuse collecting agency of the city~~ Department is ~~herein~~ authorized to confiscate or to remove unsatisfactory storage containers from the premises of residences and establishments, public and private, when in the discretion of the ~~sanitation and environment services department director~~ Director or his designated representative, such containers do not meet the requirements of this chapter. Such unsatisfactory containers shall be removed and disposed of at a place and in a manner designated by the ~~Department official collecting agency~~ only after the ~~agency~~ Department has diligently attempted to notify the owner or owners of such containers.
- ~~4-5.~~ The ~~sanitation and environmental services d~~ Department shall not be obligated to provide service where adequate containers are not provided.
- ~~5-6.~~ The owner or developer of all new, residential construction and development, within the City of Franklin, shall supply, at their expense, a ~~city~~ City-approved ~~garbage-rollout~~ container for that residence or housing unit, which shall become the property of the City of Franklin. As a condition of the issuance of the ~~city~~ City building permit, the owner or developer shall pay the sum as specified in ~~appendix~~ Appendix A, ~~comprehensive fees and penalties~~ Comprehensive Fees and Penalties, per ~~city~~ City-approved rollout container, that will remain at that address. This fee is payable to the ~~city~~ City when the building permit is issued.
- ~~6-7.~~ The containers shall remain the property of the ~~city~~ City at the property address where delivered, and are provided and assigned to residences for the health, safety, convenience and general welfare of the occupants. Containers that are damaged, destroyed, or stolen through neglect, improper use or abuse by the occupant-users shall be replaced by the ~~city~~ City at the expense of the occupants or the owner of the residence. Containers which are damaged ~~in the course of~~ during normal and reasonable usage or which are damaged or destroyed, through no abuse, neglect, or improper use of the occupant-users or residence owner shall be repaired or replaced by the ~~city~~ City at no charge to the occupant-users or residence owners. The containers shall not be damaged, destroyed, defaced, or removed from the premises by any person;

markings and identification devices on the containers except as placed or specifically permitted by the cityCity are expressly prohibited and shall be regarded as damage to the containers.

- ~~7. It shall be unlawful for any person, other than the occupant-user, to move, remove, upset, scatter, tamper, use, carry, away deface, mutilate, destroy, damage or interfere with the garbage container, or any refuse left for collection.~~
8. It shall be the responsibility of each occupant, on the scheduled day of collection, to place their container on the property side of the curb or street, or at the edge of the alley where serviceable alleys are available, or in a cityCity approved location for pick-up. Containers shall be placed in such a location as to be readily accessible for removal by the cityCity. The container shall be placed in such a manner as not to interfere with other MSW containers, curbside mailboxes, overhead power lines or tree branches, parked cars, vehicular traffic, utility boxes or in any other way that would constitute a public hazard or nuisance. Generally, this shall be within two (2) feet of the curb or edge of pavement, at least three (3) feet from obstructions such as those listed, and at least five (5) feet from any vehicle parked along the street. ~~Rollout Garbage~~ containers shall not be placed, without the express permission of the cityCity, on a public sidewalk, in the street, or in a drainage ditch.
9. Where service alleys are available, container shall be placed in a designated area on collection day. The area shall provide for one-way access by collection vehicles. ~~and shall be constructed of a 24" x 24" concrete pad for each container.~~
10. Containers shall be placed for collection no earlier than 7:00 P.M. on the day before collection, and no later than 7:00 A.M. on the scheduled day of collection. Containers must be removed from the curb, street, or alleyway no later than 7:00 P.M. on the day of collection.
11. Construction and demolition waste and yard waste, as defined in this chapter, are hereby prohibited from being placed in the 90-gallon rollout or other cityCity approved ~~residential garbage~~MSW collection containers.
12. City ~~garbage~~ collectors shall not enter houses, stores, garages, or open gates for the collection of ~~garbage or rubbish~~MSW, nor shall they accept any money or valuable gifts for their services from persons served.
- ~~13.~~ All ~~garbage or refuse~~MSW must be drained of all liquids and wrapped in plastic or other equivalent material prior to placing it in any MSW storage ~~receptacle~~container. To eliminate odor and insects, reduce spillage and litter and discourage animals from getting into MSW containers, all waste shall be placed in plastic or paper bags which must be tightly secured. No waste shall be placed loose in the MSW container. Collection crews will not pick up spills and litter resulting from loose waste placed in containers.
- ~~13.~~14. The containers shall be maintained in a clean and sanitary manner and shall be thoroughly cleaned by washing or other method as often as necessary to prevent the breeding of flies and the occurrences of offensive odors.

~~14.15.~~ ~~Garbage and refuse~~MSW shall not be stored in close proximity to other personal effects which are not desired to be collected, but shall be reasonably separated in order that the collectors can clearly distinguish between what is to be collected and what is not.

~~15. Collection of white goods stoves, refrigerators, freezers, window type air conditioners, shall be collected by the collection agency. Refrigerators and freezers, shall have doors removed or secured in accordance with Tennessee Code Annotated, § 39-6-104, and have all contents removed. White goods shall be stored out of public view until collection. The city shall not be responsible for the removal of water heaters, central heat and air systems or other commercially installed appliances.~~

Sec. 17-111. - ~~Commercial Nonresidential solid waste~~MSW service.

1. Every ~~commercial nonresidential establishment service location~~ shall place all ~~garbage~~ MSW in a ~~city~~City approved container, and shall maintain the container and the surrounding area in a clean, neat and sanitary condition. All ~~bulk containers~~containers shall be cleaned and disinfected on a regular basis.
2. Any establishment that furnishes and maintains a ~~bulk container~~dumpster, or containers suitable for handling by ~~city~~City equipment may be serviced by the ~~city~~City as required provided that such container shall be of sufficient size and number. ~~Bulk container~~Dumpsters shall at all times be kept in a place easily accessible to ~~city~~City equipment as approved by the ~~sanitation and environment services department director~~Director. At no time shall objects, obstructions, or vehicles hinder in any way whatsoever the servicing of said containers.
3. All ~~bulk container~~dumpsters to be serviced by ~~city~~City equipment shall be front-end loading enclosed, metal containers. Before any such container shall be serviced by the ~~city~~City, it shall be specifically approved by the ~~sanitation and environment services department director~~Director as to capacity, size, type and location. No container shall exceed eight cubic yards capacity.
4. ~~Bulk container~~Dumpsters shall be placed on approved service pads to be constructed of six-inch thick concrete reinforced with steel and of a size of no less than 12 by 12 feet square. Screening shall be permitted on three sides only. A gate must be placed on the dumpster screening. Service of containers in gated enclosures may be provided by the ~~City of Franklin Department of Sanitation and Environment Services~~Department if the gates meet all specifications set by the department.
5. ~~Businesses using regulation 90-gallon cans~~Nonresidential customers using rollout containers for collection shall provide sufficient containers to properly store one week's accumulation of ~~refuse~~MSW. The ~~cost of a city approved 90-gallon~~administrative set-up fee for a City approved rollout container ~~can~~ shall be as specified in ~~appendix~~ Appendix A, comprehensive fees and penaltiesComprehensive Fees and Penalties. All ~~businesses nonresidential customers~~ requiring any combination of six or more ~~regulation 90-gallon~~rollout containers, for weekly service shall be required to acquire ~~regulation bulk container~~dumpsters for service. Any exceptions must be specifically approved by the Director.

6. Nothing in this section shall prohibit ~~commercial-nonresidential~~ establishments or private residents from removing their own ~~solid-waste~~MSW or from contracting with a private collector for such removal, provided said private collector shall have a valid permit or license to do business within the ~~city~~City. ~~However, private citizens who contract with a private collector for removal will still be subject to the monthly refuse collection service fee from the city.~~

(7) Right-of-Way Obstruction Permit

- a. In no event shall public or private ~~commercial~~ dumpsters, roll ~~off-out~~ containers or other ~~bulk-container~~containers be placed on a public street, right-of-way or public property:
- i. Without express written consent of the ~~sanitation and environment services department~~City Street Department director upon application, approval and tender of a permit fee as specified in ~~appendix~~Appendix A, ~~comprehensive fees and penalties~~Comprehensive Fees and Penalties, for a ~~commercial dumpster permit~~Right-of-Way Obstruction permit;
 - ii. Without posting a cash bond or certified check deposit as specified in ~~appendix~~Appendix A, ~~comprehensive fees and penalties~~Comprehensive Fees and Penalties, to secure payment for any damage to the street, right-of-way or public property;
 - iii. For longer than 30 days unless the ~~commercial dumpster permit~~Right-of-Way Obstruction permit is renewed and approved by ~~the sanitation and environment services department~~the City Street Department director; ~~and or~~
 - iv. Such that it poses a hazard to public safety or a health and sanitation nuisance under the provisions of ~~title~~Title 13, ~~chapter~~Chapter 1 of this Code.
- b. Failure to secure a ~~commercial dumpster~~Right-of-Way Obstruction permit or to abide by its conditions shall subject the violator the penalties in section 17-~~114~~116 of this Code. In addition, the ~~sanitation and environmental services d~~Department is authorized to remove any dumpster or container which is not in compliance with this section. Prior to any removal, the ~~sanitation and environment services~~Street department Department director shall give a notice of intent to remove a dumpster to the permittee or ~~refuse~~MSW collector by first class mail and by posting a copy of the notice on the dumpster or container. The notice shall set out the conditions that render the dumpster or container to be noncompliant. If such conditions are not corrected to the director's satisfaction within five days from the date of the notice, the director or his designees shall remove the dumpster at the expense of the permittee or ~~refuse~~MSW collector.

Sec. 17-112. - Special collection services.

1. ~~Commercial-Non-containerized bulky waste~~ collection. Any non-containerized bulky waste collected ~~at shall be placed adjacent to and back of the curb, or adjacent to and back of the drainage ditch or catch basin, alley or street line if there is no curb, without blocking the roadway, any sidewalk, drainage ditch, or catch basin. Customers will be assessed a non-containerized bulky waste collection fee per 20 cubic yard truck load or any portion thereof as~~

specified in Appendix A, Comprehensive Fees and Penalties for bulky waste collection services~~commercial establishments utilizing bulk (2-8 cubic yard) containers shall be assessed a noncontainerized fee per 20 cubic yard truck load or any portion thereof.~~

2. ~~Roll-out commercial container excess.~~ Any waste collected at ~~commercial establishments service locations~~ utilizing ~~a city~~ City issued 90-gallon-roll-out ~~cart~~s container that does not fit in the provided number of 90-gallon-roll-out ~~cart~~s containers, will be assessed an extra pick-up fee as specified in Appendix A, Comprehensive Fees and Penalties. ~~Volumes~~ The nature of the waste ~~MSW may, at the discretion of the sanitation and environment services department director or his designee, be such that standard commercial non-containerized bulky waste collection fees may be required, as specified in Appendix A, Comprehensive Fees and Penalties.~~
3. ~~Residential excess.~~ Any excess waste collected at residences may, based on volume and at the discretion of the sanitation and environment services department director or his designee, be assessed a fee commiserate with the standard commercial bulk collection fees.
3. Remodeling/clean-up dumpsters. Dumpsters for the disposal of remodeling, light construction, or general clean up waste may be available from the Department. Each dumpster (2-8 cubic yards) shall be properly loaded and emptied at least once per week. A maximum usage of three ~~(3)~~ consecutive calendar weeks will be allowed. For the safety of collectors, no dumpster with protruding items from the sides or top will be serviced ~~until the customer removes said items.~~ Fees for residential remodeling/clean-up dumpster services are specified in Appendix A, Comprehensive Fees and Penalties. ~~Remodeling/clean-up containers.~~ Bulk containers for the disposal of remodeling, light construction, or general clean up may be available from the sanitation and environmental services department. Each eight cubic yard container shall be properly loaded and emptied at least once per week. A maximum usage of three consecutive weeks will be allowed.
4. Backdoor Residential. Backdoor residential rollout container services may be provided at no additional charge for customers with a medical condition. Each customer desiring backdoor service shall complete an application for such service on an annual basis.

Sec. 17-113. Billing for Sanitation Collection Services.

1. Bills may be rendered weekly, semi-monthly, or monthly, at the option of the City. Bills will consist of fees for services obtained by the customer from the City in accordance with the Application and Agreement for Service and the City and the provisions of the Municipal Code.
2. Sanitation collection service bills must be paid on or before the due date shown thereon. Payments made after the due date shall incur a penalty of ten (10) percent of the amount billed for sanitation services. If the delinquent balance is not paid within 60 days of the bill due date, nonresidential collection service may be discontinued without further notice until the balance of the bill is paid in full. The City shall not be liable for any damages resulting from discontinued service under the provisions of this section, even though payment of the bill is made at any time on the day that service is discontinued. Failure to receive a bill will not release a customer from payment obligation nor extend the due date.

3. Customers will have consolidated bills presented for other services including, but not limited to, water, wastewater, MSW and stormwater in accordance with the provisions of this Code.
4. Should the final date of payment of bill fall on a weekend or a holiday, the business day next following the final date will be the last day to avoid a penalty. A remittance received by mail after the time limit for payment will be accepted by the City if the envelope is date stamped on or before the final date for payment.

Section 17-114. Billing for Transfer Station Tipping Fees.

1. Transfer station services are billed one ~~(4)~~ month in arrears. The amount billed is due on the 15th of the month following the service month. Transfer station bills must be paid in full on or before the due date shown thereon to avoid an added penalty of ten ~~(10)~~ percent.
2. If a balance is not paid in full within 30 days of the bill due date, the customer's account will be deemed delinquent and use of the transfer station services will be suspended until the entire account balance is paid in full.
3. Failure to receive a bill will not release a customer from payment obligation nor extend the due date. City shall not be liable for any damages resulting from discontinued service(s) under the provisions of this section, even though payment of the bill is made at any time on the day the service is discontinued.
4. Should the final date of payment of bill fall on a weekend or a holiday, the business day next following the final date will be the last day to avoid a penalty. A remittance received by mail after the time limit for payment will be accepted by the City if the envelope is date stamped on or before the final date for payment.

Sec. 17-1135. - Schedule of fees for disposal of ~~garbage and refuse~~MSW and frequency of collection.

1. *Residential.* A fee as specified in ~~appendix~~Appendix A, ~~comprehensive~~Comprehensive fees-Fees and ~~penalties~~Penalties, shall be paid to the ~~city~~City for the disposal of ~~solid waste~~MSW for every household container (once per-week pickup).
2. ~~Commercial~~*Nonresidential.*
 - a. *[Roll-out and dumpster.]* A fee as specified in ~~appendix~~Appendix A, ~~comprehensive fees and penalties~~Comprehensive Fees and Penalties, shall be charged for every ~~rollout~~rollout and dumpster served by the City.
 - b. *Special event.* To be determined by the ~~sanitation and environment services department director~~Director, depending on size, duration and nature of event.
 - c. ~~Commercial~~*Nonresidential* cardboard recycling service. A fee as specified in ~~appendix~~Appendix A, ~~comprehensive fees and penalties~~Comprehensive Fees and Penalties, shall be charged for ~~commercial nonresidential~~ cardboard recycling service.
3. *Transfer station tipping fee(s).* Tipping fee(s), as specified in ~~appendix~~Appendix A, ~~comprehensive fees and penalties~~Comprehensive Fees and Penalties, shall be charged for all

~~solid waste~~MSW delivered to the ~~Century Court~~City owned transfer station for hauling and disposal at landfill locations.

Sec. 17-1146. - Penalties.

1. Any person violating any of the provisions of this chapter ~~or the conditions of any permit issued hereunder~~ shall be served by the ~~city~~City with written notice stating the nature of the violation and providing up to 10 days ~~time limit~~ for the satisfactory correction thereof. The offender shall, within the time period stated in such notice, permanently cease all violations. Service will be discontinued until such time as the violation is corrected.
2. Any person who shall continue any violation beyond the time provided for in subsection 17-1146(1) shall be guilty of a misdemeanor and shall be punishable under the general penalty clause of this Code.
3. Any person violating any of the provisions of this chapter shall become liable to the ~~city~~City for any expense, loss or damage occasioned by ~~city~~City personnel or equipment by reason of such violation.

~~Secs. 17-115—17-117. [Deleted.]~~

~~These sections were deleted by Ord. No. 2002-31, Dec. 2002.~~

CHAPTER 2. - RECYCLING

Sec. 17-201. - Definitions.

1. *Recyclables.* ~~The term "recyclables," as hereinafter referred to in this chapter, shall include~~ any item approved by the ~~sanitation and environment services department director~~Director for collection as a commodity designated for reuse or delivery to an established recycling center, from all residences and establishments, public and private, but shall not include hazardous waste, infectious waste, commercial, industrial or residential solid waste, sewage, body wastes, recognizable industrial or medical by-products.

Recyclables may include cardboard, aluminum, tin, steel, newspaper or any other item approved by the ~~sanitation and environment services department d~~Director and Williamson Recycles.

- ~~2. *Hazardous refuse.* The term "hazardous refuse" shall mean any chemical compound, mixture, substance or article which may constitute a hazard to health or may cause damage to property by reason of being explosive, flammable, poisonous, corrosive, unstable, irritating, radioactive, infectious, or otherwise harmful.~~

Sec. 17-202. - Responsibility for administration.

1. The ~~sanitation and environment services department director~~Director, or his authorized representative, ~~in conjunction with Williamson Recycles,~~ shall have the authority to make and modify regulations as necessary concerning the placement of recycling collection containers, hours of operation and or such other matters pertaining to the collection, transporting and disposal of recyclable materials; provided that such regulations are not in violation of the provisions of this chapter.

2. The ~~sanitation and environment services department director~~ Director or his authorized representative, shall be responsible for the enforcement of this chapter.
- ~~3.~~ All recyclables shall be collected sufficiently and frequently to prevent the occurrence of nuisance and public health problems. The collection of residential recyclables within the City of Franklin shall be under the jurisdiction of the ~~sanitation and environmental services department~~ Department in conjunction with Williamson Recycles.
- ~~4.3.~~ ~~Williamson Recycles or the City of Franklin Sanitation and Environmental Services Department shall be the only provider of bulk containers for recycling commodities in excess of eight cubic yards within the City of Franklin. All proposed container locations must be reviewed and approved by the sanitation and environment services department director or his designee before containers are placed.~~

Sec. 17-203. - Premises to be kept clean.

All areas where containers are placed are hereby required to be kept in a clean and sanitary condition, ~~free from accumulations of refuse, offal, filth, and trash~~ by the entity that operates and/or services the area.

Sec. 17-204. - Prohibited practices.

1. It shall be unlawful for any person, firm or corporation to dump recyclables in any form into any stream, ditch, storm sewer, sanitary sewer, or other drain within the City of Franklin.
- ~~2. The disposal of recyclables in any quantity by an individual, householder, establishment, firm, or corporation in any place, public or private, other than at the site or sites designated and/or properly approved by the Sanitation and Environmental Services Department of the City of Franklin and Williamson Recycles is expressly prohibited.~~

Sec. 17-205. - Prohibited substances.

1. Substances prohibited from collection and shall not be deposited in recycling containers include, but are not limited to:
 - a. Flammable liquids, solids or gases, such as gasoline, benzene, alcohol or other similar substances.
 - b. Any material that could be hazardous or injurious to ~~city~~ City employees or which could cause damage to ~~city~~ City equipment.
 - c. Hot materials such as ashes, cinders, etc.
 - d. Human or animal waste shall be prohibited.
 - e. Infectious waste and hypodermic syringes. Used hypodermic syringes shall not be placed with recyclables for collection by the City of Franklin, but be disposed of by a licensed medical waste disposal firm.
 - f. Construction and Demolition waste as defined by section 17-101. The removal and disposal of such materials shall be the responsibility of the construction contractor,

developer or property owner. The Department may remove this non-containerized waste from curbside, with signed approval request from the property owner, for an added service fee as defined in Appendix A, Comprehensive Fees and Penalties.

e.g. Rocks, dirt, bricks, concrete, broken glass, and sharp metal are not permitted with recyclables.

Sec. 17-206. - Penalties.

1. Any person violating any of the provisions of this chapter or the conditions of any permit issued hereunder shall be served by the ~~city~~City with written notice stating the nature of the violation and providing up to ten days ~~time limit~~ for the satisfactory correction thereof. The offender shall, within the time period stated in such notice, permanently cease all violations. Service will be discontinued until such time as the violation is corrected.
2. Any person who shall continue any violation beyond the time provided for in subsection 17-11~~76~~(1) shall be guilty of a misdemeanor and shall be punishable under the general penalty clause of this Code.
3. Any person violating any of the provisions of this chapter shall become liable to the ~~city~~City for any expense, loss or damage occasioned by ~~city~~City personnel or equipment by reason of such violation.

APPENDIX A – COMPREHENSIVE FEES AND PENALTIES

CHAPTER 17. - ~~REFUSE AND TRASH~~ MUNICIPAL SOLID WASTE DISPOSAL

<i>Containers—Initial Cost <u>Administrative Setup Fee</u></i>	
Residential— City- approved <u>rollout</u> container	\$75.00 per container
Non-residential— <u>City approved rollout container</u> 90-gallon container	\$75.00 per container
<i>Collection Service Fees</i>	
Residential	
—1st <u>First rollout</u> container	\$17.50 per month (one pick-up/week)
2nd <u>Second</u> and subsequent <u>rollout</u> containers	\$7.50 per month/per container
Non-residential	
<u>First rollout container</u>	\$30.00 per month/per container (one pick-up service/week)
Rollout—Additional pick-up service	\$30.00 per pick-up service
<i><u>Residential and Nonresidential Dumpster Service</u></i>	
Dumpster service	\$110.00 per month/per container (one pick-up service/week)
	\$205.00 per month/per container (two pick-up services/week)

	\$300.00 per month/per container (three pick-up services/week)
	\$395.00 per month/per container (four pick-up services/week)
	\$490.00 per month/per container (five pick-up services/week)
Dumpster service—Customer provides city-approved container	\$95.00 per month/per container (one pick-up service/week)
	\$180.00 per month/per container (two pick-up services/week)
	\$265.00 per month/per container (three pick-up services/week)
	\$350.00 per month/per container (four pick-up services/week)
	\$435.00 per month/per container (five pick-up services/week)
Dumpster—Additional pick-up service	\$95.00 per service
Container delivery truck service	\$50.00 per dumpster/service
<i><u>Special Collection Services</u></i>	
Pick-up service for noncontainerized <u>bulky waste</u> refuse	\$125.00 per vehicle/per request
Residential remodeling/clean-up dumpster	\$110.00 per service
<i>Special Event</i>	

Collection service	As determined by the sanitation Sanitation and environment Environmental services Services department dDirector
<i>Non-Residential Cardboard Recycling Service</i>	\$65.00 per month (one pick-up service/week)
	\$115.00 per month (two pick-up services/week)
	\$165.00 per month/per container (three pick-up services/week)
	\$215.00 per month/per container (four pick-up services/week)
	\$265.00 per month/per container (five pick-up services/week)
<i>Tipping Fees at Transfer Station</i>	
Class I	\$ 45 55.00 per ton—\$ 20 25.00 minimum
—Class III and IV (construction and demolition)	\$50.00 per ton—\$25.00 minimum
Public Right of Way Permits/Trash Containers	
—Permit	\$100.00
—Damage surety (cash bond or certified check)	\$1,000.00



WILLIAMSON COUNTY GOVERNMENT

MEMORANDUM

TO: Mayor Jimmy Alexander, Town of Nolensville
Mayor Jill Burgin, City of Brentwood
Mayor Patti Carroll, City of Fairview
Mayor Rick Graham, City of Spring Hill
Mayor Ken Moore, City of Franklin
Mayor Cory Napier, Town of Thompson's Station

FROM: Rogers Anderson, Mayor *RCA*
Williamson County

DATE: June 6, 2017

As you may be aware, the Williamson County Board of Commissioners has been studying numerous capital improvement project needs, a large portion of which involves over one-half billion in school facilities. As a part of this study, all revenue sources permissible by law and available to counties has been reviewed. Aside from the real property tax assessments, the second largest revenue source is the local option sales tax.

As a result of numerous meetings with County Commissioners, our financial planners, bond counsel and staff, I have been asked to study the additional revenue which would be available for school funding should the current local option sales tax be increased, by a county-wide referendum to the maximum allowable rate of two and three-quarters percent (2.75%). With the exception of the City of Fairview, the remainder of the municipalities and the county could be increased by an additional one-half percent (.50%) from the current two and one-quarter percent (2.25%).

Additionally, I have been asked to approach all of our municipal leaders to determine their willingness to contribute their amount of increased revenues back to Williamson County for the payment of school debt for a period of three (3) years. Such an agreement would be solidified by execution of a contractual agreement (draft copy enclosed).

Enclosed for your review are two charts - one showing the full 2015-16 local option sales tax collections and the second a chart illustrating (in blue) the additional amount which would have been collected if the rate increase were in place for 2016-17; the red numbers illustrate what would have been collected if the rate was at two and one-half percent (2.50%). The numbers in black are collections to-date at the current rate of two and one-quarter percent (2.25%).

After your review, I am respectfully requesting to be on the Agenda for the meeting of the Board of Mayor Alderman/Commissioners at your next earliest convenience and let me know what that date would be.

RCA/dg

xc: City Managers/Administrators
Enclosures



**INTERLOCAL AGREEMENT WITH
THE CITY OF FRANKLIN TO REDISTRIBUTE THE HALF OF THE ONE-HALF PERCENT
SALES TAX INCREASE THAT IS NOT ALLOCATED FOR SCHOOLS**

THIS INTERLOCAL AGREEMENT ("Agreement") is made by and between WILLIAMSON COUNTY, TENNESSEE ("County"), a county governmental entity of the State of Tennessee located at 1320 West Main Street, Franklin, Tennessee 37064, and the CITY OF FRANKLIN ("City"), a municipal government, located at 109 Third Avenue, Franklin, Tennessee 37064.

WHEREAS, the City of Franklin is located within Williamson County, Tennessee; and

WHEREAS, Williamson County and the City have determined that the influx of residential development within the jurisdiction of the City has resulted in the need for additional educational capital projects that will put a strain on the County's current revenue stream resulting in the County to consider raising property taxes on all real property owners in the County; and

WHEREAS, pursuant to *Tennessee Code Annotated*, Section 67-6-701, et. seq., Williamson County currently has a local sales and use tax at a rate of two and one-quarter percent (2.25%) which may be raised an additional one-half percent (0.5%) if approved by referendum; and

WHEREAS, the Williamson County Board of Commissioners has initiated the process to raise the sales tax One-half Percent (0.5%) from Two and One-Quarter Percent (2.25%) to Two and Three-Quarters Percent (2.75%); and

WHEREAS, the revenue from the current sales tax is distributed with half of the proceeds going to schools and half of the proceeds returned to the jurisdiction in which the proceeds were collected; and

WHEREAS, *Tennessee Code Annotated*, Section 67-6-712 provides that a county, city, or town may, by interlocal agreement, provide for an alternative method of distribution of the one-half percent (0.5%) not allocated for school purposes; and

WHEREAS, it is the desire of the County and the City to enter into an interlocal agreement for a term of three (3) years from the date the increase in the sales tax takes effect, to redistribute the half of the One-Half Percent (0.5%) sales tax increase received by the City back to the County to be used strictly for the purposes set forth herein.

In consideration of the premises and the mutual covenants contained herein, the parties hereby agree to the following:

I. Purpose of Agreement. The purpose of this Agreement is to provide for an alternative distribution concerning the City's portion of the sales tax collected from the one-half percent (0.5%) sales tax increase.

II. Authority. This Agreement is made and entered into pursuant to the authority granted by the parties under the *Interlocal Cooperation Act, Tennessee Code Annotated*, Sections 12-9-101, et seq., and the 1963 Local Option Revenue Act *Tennessee Code Annotated*, Section 67-6-712 and the parties agree that all approvals and filings required by the terms of said Act shall be achieved as reasonably possible prior to the execution of this Agreement.

III. Term: The term of this Agreement shall be for three (3) years unless extended by agreement of the parties. This Agreement shall commence on the 1st day of the month that the tax becomes effective and shall terminate on the third anniversary of the effective date unless otherwise terminated or extended by agreement of the parties.

IV. Redistribution of Revenue: The City agrees to redistribute and forgo its share of the proceeds it would otherwise receive from the one-half percent (0.5%) sales tax increase collected within the City's boundaries. The proceeds from the increased sales tax redistributed from the municipality and received by the County shall be used exclusively for payment of rural and general school debt purposes. This agreement shall not affect the current proceeds collected and distributed to the City from the current assessed two and one quarter percent (2.25%) sales tax revenue.

V. Distribution from the State: The County and City agree to cooperate in good faith to any provide notice to the Department of Revenue concerning the increased sales tax and this agreement between the parties required for the redistribution of the one-half percent (0.5%) sales tax increase. Should the City receive the revenue from the one-half percent (0.5%) increased sales tax portion from the Department of Revenue, the City, shall upon receipt of the proceeds, forward the full amount to the County to be used in accordance with the terms of this Agreement.

VI. Cost: Each party shall be responsible for the costs of fulfilling their obligations under this Agreement.

VII. Compliance with Laws: The parties agree to comply with any applicable federal, state and local laws and regulations.

VIII. Notices:

Notices to County shall be sent to:

Dep't: Williamson County
Att'n: County Mayor
Addr: 1320 West Main Street,
Franklin, Tennessee 37064

Notices to City shall be sent to:

Dep't: Franklin City Manager
Att'n: City Manager
Addr: 109 Third Avenue
Franklin, Tennessee 37064

IX. Modification of Agreement: This Agreement may be modified only by written amendment executed by all parties and their signatories hereto.

X. Partnership/Joint Venture: Nothing herein shall in any way be construed or intended to create a partnership or joint venture between the parties or to create the relationship of principal and agent between or among any of the parties. None of the parties hereto shall hold itself out in a manner contrary to the terms of this paragraph. No party shall become liable for any representation, act or omission of any other party contrary to the terms of this paragraph.

XI. Entire Agreement: This Agreement sets forth the entire agreement between the parties with respect to the subject matter hereof and shall govern the respective duties and obligations of the parties.

XII. Law/Venue: This Agreement shall be exclusively governed by the laws of the State of Tennessee. In the event that any section and/or term of this Agreement, or any exhibits hereto, become subject to litigation, the venue for such action will be exclusively maintained in a court of competent jurisdiction sitting in Williamson County, Tennessee

XIII. Cooperation: The parties agree to cooperate fully in order to successfully execute the terms and conditions of this Agreement, including obtaining all regulatory and governmental approvals required to carry out the terms of this Agreement, recognizing that the intent of each party to the other is to serve the individual interests of each party while respecting the conditions and obligations of this Agreement.

XIV. Binding: This Agreement shall be binding upon the parties and shall take effect from and after its ratification and signing by all parties after obtaining appropriate approval pursuant to the

requirements of applicable law.

XV. Severability: The parties agree that if any part, term, or provision of this Agreement is determined to be illegal or in conflict with any law of the State of Tennessee by any court with jurisdiction, the validity of the remaining portions or provisions shall not be affected. The rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, or provision held to be invalid.

XVI. Headings: The headings in this Agreement are for convenience and reference and are not intended to define or limit the scope of any provision of this Agreement.

XVII. Effective Date: This Agreement shall not be binding upon the parties until it has been properly approved by the legislative bodies of the respective parties, it has then been signed first by the City and then by the authorized representatives of the Williamson County and has been filed in the office of the County Mayor. When it has been so signed and filed, this Agreement shall be effective as of the date first written above.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the dates recorded below.

ATTEST:

CITY OF FRANKLIN:

BY:

BY: Ken Moore, City Mayor

APPROVED AS TO FORM AND LEGALITY:

DATE: _____

City of Franklin Attorney

ATTEST:

WILLIAMSON COUNTY, TENNESSEE:

BY:

BY: Rogers Anderson, County Mayor

APPROVED AS TO FORM AND LEGALITY:

DATE: _____

Williamson County Attorney

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2015-16
LOCAL OPTION SALES TAX
and Projections for
Alternate Local Option Rates

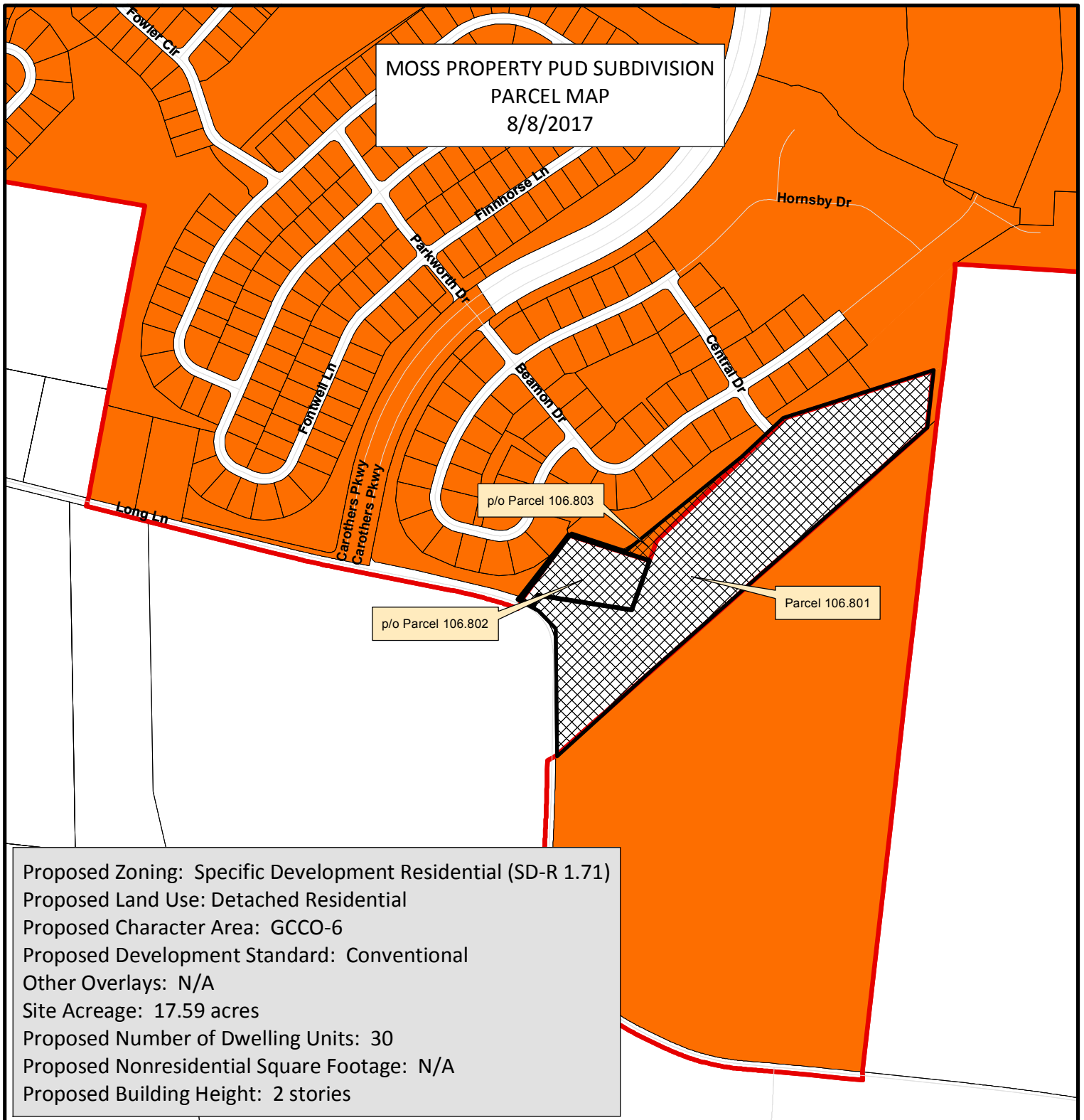
2015-16 LOCAL OPTION SALES TAX (2.25%)	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ADA% Adjustment YTD	Total YTD
Williamson County	\$ 149,133.72	\$ 175,603.57	\$ 147,876.59	\$ 150,762.84	\$ 173,500.43	\$ 154,689.74	\$ 138,499.92	\$ 183,369.71	\$ 106,767.27	\$ 120,888.32	\$ 147,923.61	\$ 138,036.06		\$ 1,787,051.78
Projected Sales Tax @ 2.50%	\$ 165,704.13	\$ 195,115.08	\$ 164,307.32	\$ 167,514.26	\$ 192,778.25	\$ 171,877.49	\$ 153,888.80	\$ 203,744.12	\$ 118,630.30	\$ 134,320.35	\$ 164,359.57	\$ 153,373.40		\$ 1,985,613.07
Projected Sales Tax @2.75%	\$ 182,274.54	\$ 214,626.58	\$ 180,738.05	\$ 184,265.69	\$ 212,056.08	\$ 189,065.23	\$ 169,277.68	\$ 224,118.53	\$ 130,493.33	\$ 147,752.39	\$ 180,795.52	\$ 168,710.74		\$ 2,184,174.36
Williamson County Schools*	\$ 3,898,246.02	\$ 3,985,493.74	\$ 3,792,811.88	\$ 3,921,722.42	\$ 3,991,547.68	\$ 3,905,307.16	\$ 3,986,047.17	\$ 5,898,844.43	\$ 3,468,610.42	\$ 3,466,609.03	\$ 4,226,136.70	\$ 4,049,688.20	\$ 235,471.06	\$ 48,826,535.91
Projected Sales Tax @ 2.50%	\$ 4,331,384.42	\$ 4,428,326.33	\$ 4,214,235.38	\$ 4,357,469.31	\$ 4,435,052.93	\$ 4,339,230.13	\$ 4,428,941.26	\$ 6,554,271.52	\$ 3,854,011.54	\$ 3,851,787.77	\$ 4,695,707.40	\$ 4,499,653.51	\$ 261,634.51	\$ 54,251,706.02
Projected Sales Tax @2.75%	\$ 4,764,522.83	\$ 4,871,158.93	\$ 4,635,658.88	\$ 4,793,216.20	\$ 4,878,558.19	\$ 4,773,153.11	\$ 4,871,835.34	\$ 7,209,698.62	\$ 4,239,412.66	\$ 4,236,966.52	\$ 5,165,278.09	\$ 4,949,618.82	\$ 287,797.96	\$ 59,676,876.14
Franklin Special Schools Dist.*	\$ 379,292.32	\$ 387,781.36	\$ 369,033.77	\$ 381,576.53	\$ 388,370.40	\$ 379,979.35	\$ 387,835.21	\$ 573,946.94	\$ 337,489.55	\$ 313,141.36	\$ 381,750.05	\$ 365,811.33	\$ (235,471.06)	\$ 4,410,537.11
Projected Sales Tax @ 2.50%	\$ 421,435.91	\$ 430,868.17	\$ 410,037.52	\$ 423,973.92	\$ 431,522.66	\$ 422,199.27	\$ 430,928.01	\$ 637,718.82	\$ 374,988.39	\$ 347,934.84	\$ 424,166.72	\$ 406,457.03	\$ (261,634.51)	\$ 4,900,596.74
Projected Sales Tax @2.75%	\$ 463,579.49	\$ 473,954.99	\$ 451,041.27	\$ 466,371.31	\$ 474,674.92	\$ 464,419.20	\$ 474,020.80	\$ 701,490.69	\$ 412,487.22	\$ 382,728.32	\$ 466,583.39	\$ 447,102.73	\$ (287,797.96)	\$ 5,390,656.37
City of Brentwood	\$ 1,233,820.95	\$ 1,236,840.88	\$ 1,135,577.35	\$ 1,346,160.18	\$ 1,228,584.72	\$ 1,230,090.55	\$ 1,245,330.04	\$ 1,944,438.01	\$ 1,147,558.41	\$ 1,098,696.39	\$ 1,312,587.21	\$ 1,212,564.05		\$ 15,372,248.74
Projected Sales Tax @ 2.50%	\$ 1,370,912.15	\$ 1,374,267.63	\$ 1,261,752.60	\$ 1,495,733.52	\$ 1,365,094.12	\$ 1,366,767.26	\$ 1,383,700.03	\$ 2,160,486.66	\$ 1,275,064.89	\$ 1,220,773.75	\$ 1,458,430.22	\$ 1,347,293.38		\$ 17,080,276.21
Projected Sales Tax @2.75%	\$ 1,508,003.36	\$ 1,511,694.38	\$ 1,387,927.85	\$ 1,645,306.86	\$ 1,501,603.52	\$ 1,503,443.98	\$ 1,522,070.02	\$ 2,376,535.30	\$ 1,402,571.36	\$ 1,342,851.12	\$ 1,604,273.23	\$ 1,482,022.70		\$ 18,788,303.67
City of Franklin	\$ 2,514,872.39	\$ 2,578,016.47	\$ 2,502,673.76	\$ 2,444,556.25	\$ 2,597,525.45	\$ 2,510,568.23	\$ 2,605,844.43	\$ 3,790,892.07	\$ 2,173,109.30	\$ 2,203,260.05	\$ 2,716,637.42	\$ 2,637,387.89		\$ 31,275,343.71
Projected Sales Tax @ 2.50%	\$ 2,794,302.63	\$ 2,864,462.72	\$ 2,780,748.59	\$ 2,716,173.58	\$ 2,886,139.36	\$ 2,789,520.23	\$ 2,895,382.67	\$ 4,212,102.26	\$ 2,414,565.86	\$ 2,448,066.70	\$ 3,018,485.99	\$ 2,930,430.96		\$ 34,750,381.55
Projected Sales Tax @2.75%	\$ 3,073,732.87	\$ 3,150,908.96	\$ 3,058,823.43	\$ 2,987,790.92	\$ 3,174,753.27	\$ 3,068,472.23	\$ 3,184,920.91	\$ 4,633,312.45	\$ 2,656,022.43	\$ 2,692,873.35	\$ 3,320,334.56	\$ 3,223,474.03		\$ 38,225,419.39
City of Spring Hill	\$ 178,729.75	\$ 178,051.50	\$ 170,323.67	\$ 162,976.82	\$ 170,974.97	\$ 183,405.26	\$ 189,545.26	\$ 234,418.46	\$ 173,855.98	\$ 163,268.71	\$ 197,685.70	\$ 195,423.90		\$ 2,198,659.98
Projected Sales Tax @ 2.50%	\$ 198,588.61	\$ 197,835.00	\$ 189,248.52	\$ 181,085.35	\$ 189,972.19	\$ 203,783.62	\$ 210,605.84	\$ 260,464.95	\$ 193,173.31	\$ 181,409.68	\$ 219,650.78	\$ 217,137.66		\$ 2,442,955.51
Projected Sales Tax @2.75%	\$ 218,447.47	\$ 217,618.50	\$ 208,173.37	\$ 199,193.89	\$ 208,969.40	\$ 224,161.98	\$ 231,666.42	\$ 286,511.45	\$ 212,490.64	\$ 199,550.64	\$ 241,615.85	\$ 238,851.43		\$ 2,687,251.04
Town of Thompson's Station	\$ 60,904.30	\$ 59,613.89	\$ 60,295.39	\$ 62,970.13	\$ 66,086.85	\$ 58,543.22	\$ 57,866.68	\$ 125,771.78	\$ 61,531.94	\$ 64,162.03	\$ 81,160.88	\$ 80,816.14		\$ 839,723.23
Projected Sales Tax @ 2.50%	\$ 67,671.44	\$ 66,237.65	\$ 66,994.88	\$ 69,966.81	\$ 73,429.83	\$ 65,048.02	\$ 64,296.31	\$ 139,746.42	\$ 68,368.82	\$ 71,291.14	\$ 90,178.75	\$ 89,795.71		\$ 933,025.80
Projected Sales Tax @2.75%	\$ 74,438.59	\$ 72,861.42	\$ 73,694.36	\$ 76,963.49	\$ 80,772.82	\$ 71,552.82	\$ 70,725.94	\$ 153,721.06	\$ 75,205.70	\$ 78,420.26	\$ 99,196.63	\$ 98,775.28		\$ 1,026,328.37
Town of Nolensville	\$ 35,114.85	\$ 39,230.08	\$ 35,814.21	\$ 32,578.43	\$ 40,998.71	\$ 36,311.78	\$ 30,726.83	\$ 61,953.86	\$ 40,787.93	\$ 31,493.87	\$ 38,759.08	\$ 37,874.04		\$ 461,643.67
Projected Sales Tax @ 2.50%	\$ 39,016.50	\$ 43,588.98	\$ 39,793.57	\$ 36,198.26	\$ 45,554.12	\$ 40,346.42	\$ 34,140.92	\$ 68,837.62	\$ 45,319.92	\$ 34,993.19	\$ 43,065.64	\$ 42,082.27		\$ 512,937.41
Projected Sales Tax @2.75%	\$ 42,918.15	\$ 47,947.87	\$ 43,772.92	\$ 39,818.08	\$ 50,109.53	\$ 44,381.06	\$ 37,555.01	\$ 75,721.38	\$ 49,851.91	\$ 38,492.51	\$ 47,372.21	\$ 46,290.49		\$ 564,231.14
City of Fairview (Already @ 2.75%)	\$ 104,962.37	\$ 105,918.70	\$ 109,284.64	\$ 103,294.26	\$ 102,246.93	\$ 111,677.69	\$ 106,069.19	\$ 131,947.43	\$ 102,489.08	\$ 97,981.00	\$ 113,132.80	\$ 113,397.42		\$ 1,302,401.51
2015-16 Total to County and Municipalities	\$ 4,277,538.33	\$ 4,373,275.09	\$ 4,161,845.61	\$ 4,303,298.91	\$ 4,379,918.06	\$ 4,285,286.47	\$ 4,373,882.35	\$ 6,472,791.32	\$ 3,806,099.91	\$ 3,779,750.37	\$ 4,607,886.70	\$ 4,415,499.50		\$ 53,237,072.62
2015-16 Total to Schools (WCS & FSSD)	\$ 4,277,538.34	\$ 4,373,275.10	\$ 4,161,845.65	\$ 4,303,298.95	\$ 4,379,918.08	\$ 4,285,286.51	\$ 4,373,882.38	\$ 6,472,791.37	\$ 3,806,099.97	\$ 3,779,750.39	\$ 4,607,886.75	\$ 4,415,499.53		\$ 53,237,073.02
2015-16 Total Sales Tax Dollars (After State Cost)	\$ 8,555,076.67	\$ 8,746,550.19	\$ 8,323,691.26	\$ 8,606,597.86	\$ 8,759,836.14	\$ 8,570,572.98	\$ 8,747,764.73	\$ 12,945,582.69	\$ 7,612,199.88	\$ 7,559,500.76	\$ 9,215,773.45	\$ 8,830,999.03		\$ 106,474,145.64

*Net to schools after ADA% apportionment (to be adjusted when ADA% for 2016 is revised)

2016-17 LOCAL OPTION SALES TAX (2.25%)	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	ADA% Adjustment YTD	Total YTD
Williamson County	\$ 174,092.92	\$ 186,480.12	\$ 159,600.84	\$ 174,511.93	\$ 195,756.96	\$ 175,496.64	\$ 165,761.82	\$ 225,640.54	\$ 139,027.32	\$ 123,053.82	\$ 152,419.93	\$ -		\$ 1,871,842.84
Projected Sales Tax @ 2.50%	\$ 193,436.58	\$ 207,200.13	\$ 177,334.26	\$ 193,902.14	\$ 217,507.73	\$ 194,996.26	\$ 184,179.80	\$ 250,711.71	\$ 154,474.80	\$ 136,726.47	\$ 169,355.48	\$ -		\$ 2,079,825.36
Projected Sales Tax @2.75%	\$ 212,780.23	\$ 227,920.14	\$ 195,067.69	\$ 213,292.36	\$ 239,258.50	\$ 214,495.89	\$ 202,597.78	\$ 275,782.88	\$ 169,922.28	\$ 150,399.11	\$ 186,291.02	\$ -		\$ 2,287,807.87
Williamson County Schools*	\$ 4,032,793.50	\$ 4,468,163.83	\$ 3,986,966.86	\$ 4,133,405.64	\$ 4,461,255.25	\$ 4,108,447.20	\$ 4,177,872.67	\$ 6,301,112.40	\$ 3,751,544.32	\$ 3,450,310.45	\$ 4,304,817.70	\$ -	\$ 35,056.55	\$ 47,211,746.37
Projected Sales Tax @ 2.50%	\$ 4,480,881.62	\$ 4,964,626.43	\$ 4,429,963.13	\$ 4,592,672.89	\$ 4,956,950.23	\$ 4,564,941.29	\$ 4,642,080.70	\$ 7,001,235.93	\$ 4,168,382.54	\$ 3,833,678.24	\$ 4,783,130.73	\$ -	\$ 38,951.72	\$ 52,457,495.44
Projected Sales Tax @2.75%	\$ 4,928,969.74	\$ 5,461,089.03	\$ 4,872,959.41	\$ 5,051,940.13	\$ 5,452,645.21	\$ 5,021,435.38	\$ 5,106,288.73	\$ 7,701,359.46	\$ 4,585,220.75	\$ 4,217,046.03	\$ 5,261,443.76	\$ -	\$ 42,846.89	\$ 57,703,244.51
Franklin Special Schools Dist.*	\$ 364,285.22	\$ 403,612.54	\$ 360,145.67	\$ 373,373.59	\$ 402,988.49	\$ 371,119.07	\$ 377,390.33	\$ 569,184.14	\$ 338,879.77	\$ 308,326.64	\$ 384,687.11	\$ -	\$ (35,056.55)	\$ 4,218,936.02
Projected Sales Tax @ 2.50%	\$ 404,761.35	\$ 448,458.37	\$ 400,161.85	\$ 414,859.54	\$ 447,764.98	\$ 412,354.52	\$ 419,322.58	\$ 632,426.82	\$ 376,533.07	\$ 342,585.15	\$ 427,430.12	\$ -	\$ (38,951.72)	\$ 4,687,706.64
Projected Sales Tax @2.75%	\$ 445,237.48	\$ 493,304.21	\$ 440,178.03	\$ 456,345.49	\$ 492,541.48	\$ 453,589.97	\$ 461,254.84	\$ 695,669.49	\$ 414,186.38	\$ 376,843.66	\$ 470,173.13	\$ -	\$ (42,846.89)	\$ 5,156,477.26
City of Brentwood	\$ 1,219,040.19	\$ 1,386,224.33	\$ 1,199,511.70	\$ 1,349,869.50	\$ 1,388,552.10	\$ 1,239,034.78	\$ 1,267,188.63	\$ 2,118,793.44	\$ 1,189,374.51	\$ 1,065,053.44	\$ 1,239,804.15	\$ -		\$ 14,662,446.77
Projected Sales Tax @ 2.50%	\$ 1,354,489.09	\$ 1,540,249.24	\$ 1,332,790.76	\$ 1,499,854.99	\$ 1,542,835.65	\$ 1,376,705.30	\$ 1,407,987.35	\$ 2,354,214.91	\$ 1,321,527.22	\$ 1,183,392.70	\$ 1,377,560.15	\$ -		\$ 16,291,607.36
Projected Sales Tax @2.75%	\$ 1,489,937.98	\$ 1,694,274.15	\$ 1,466,069.83	\$ 1,649,840.47	\$ 1,697,119.20	\$ 1,514,375.81	\$ 1,548,786.08	\$ 2,589,636.38	\$ 1,453,679.93	\$ 1,301,731.96	\$ 1,515,316.16	\$ -		\$ 17,920,767.95
City of Franklin	\$ 2,584,966.15	\$ 2,858,201.72	\$ 2,571,804.91	\$ 2,573,510.84	\$ 2,845,888.33	\$ 2,643,216.41	\$ 2,693,888.26	\$ 3,909,587.72	\$ 2,362,549.83	\$ 2,208,769.75	\$ 2,841,059.21	\$ -		\$ 30,093,443.13
Projected Sales Tax @ 2.50%	\$ 2,872,184.58	\$ 3,175,779.66	\$ 2,857,560.98	\$ 2,859,456.46	\$ 3,162,098.11	\$ 2,936,907.09	\$ 2,993,209.15	\$ 4,343,986.31	\$ 2,625,055.34	\$ 2,454,188.59	\$ 3,156,732.42	\$ -		\$ 33,437,158.70
Projected Sales Tax @2.75%	\$ 3,159,403.01	\$ 3,493,357.59	\$ 3,143,317.06	\$ 3,145,402.08	\$ 3,478,307.90	\$ 3,230,597.78	\$ 3,292,530.04	\$ 4,778,384.90	\$ 2,887,560.85	\$ 2,699,607.42	\$ 3,472,405.64	\$ -		\$ 36,780,874.27
City of Spring Hill	\$ 196,173.49	\$ 210,835.07	\$ 200,656.35	\$ 186,984.63	\$ 201,571.96	\$ 196,577.29	\$ 203,863.14	\$ 264,185.54	\$ 187,983.87	\$ 166,391.51	\$ 205,270.38	\$ -		\$ 2,220,493.23
Projected Sales Tax @ 2.50%	\$ 217,970.54	\$ 234,261.19	\$ 222,951.50	\$ 207,760.70	\$ 223,968.84	\$ 218,419.21	\$ 226,514.60	\$ 293,539.49	\$ 208,870.96	\$ 184,879.45	\$ 228,078.20	\$ -		\$ 2,467,214.68
Projected Sales Tax @2.75%	\$ 239,767.59	\$ 257,687.30	\$ 245,246.65	\$ 228,536.77	\$ 246,365.72	\$ 240,261.13	\$ 249,166.06	\$ 322,893.43	\$ 229,758.06	\$ 203,367.40	\$ 250,886.02	\$ -		\$ 2,713,936.12
Town of Thompson's Station	\$ 69,604.45	\$ 70,791.81	\$ 65,400.75	\$ 73,011.89	\$ 74,319.07	\$ 67,475.34	\$ 67,908.06	\$ 145,098.12	\$ 66,570.92	\$ 65,291.07	\$ 89,261.50	\$ -		\$ 854,732.98
Projected Sales Tax @ 2.50%	\$ 77,338.28	\$ 78,657.57	\$ 72,667.50	\$ 81,124.32	\$ 82,576.74	\$ 74,972.60	\$ 75,453.40	\$ 161,220.13	\$ 73,967.69	\$ 72,545.63	\$ 99,179.44	\$ -		\$ 949,703.30
Projected Sales Tax @2.75%	\$ 85,072.10	\$ 86,523.32	\$ 79,934.25	\$ 89,236.75	\$ 90,834.42	\$ 82,469.86	\$ 82,998.74	\$ 177,342.14	\$ 81,364.46	\$ 79,800.20	\$ 109,097.39	\$ -		\$ 1,044,673.62
Town of Nolensville	\$ 39,329.89	\$ 45,142.98	\$ 37,769.29	\$ 39,886.42	\$ 47,697.66	\$ 43,436.66	\$ 40,614.16	\$ 57,428.70	\$ 36,440.21	\$ 34,008.67	\$ 37,316.67	\$ -		\$ 459,071.31
Projected Sales Tax @ 2.50%	\$ 43,699.88	\$ 50,158.87	\$ 41,965.88	\$ 44,318.24	\$ 52,997.40	\$ 48,262.96	\$ 45,126.84	\$ 63,809.67	\$ 40,489.12	\$ 37,787.41	\$ 41,462.97	\$ -		\$ 510,079.23
Projected Sales Tax @2.75%	\$ 48,069.86	\$ 55,174.75	\$ 46,162.46	\$ 48,750.07	\$ 58,297.14	\$ 53,089.25	\$ 49,639.53	\$ 70,190.63	\$ 44,538.03	\$ 41,566.15	\$ 45,609.26	\$ -		\$ 561,087.15
City of Fairview (Already @ 2.75%)	\$ 113,871.61	\$ 114,100.29	\$ 112,368.66	\$ 109,004.00	\$ 110,457.61	\$ 114,329.12	\$ 116,038.90	\$ 149,562.47	\$ 108,477.39	\$ 96,058.80	\$ 124,372.94	\$ -		\$ 1,268,641.79
2016-17 Total to County and Municipalities	\$ 4,397,078.70	\$ 4,871,776.32	\$ 4,347,112.50	\$ 4,506,779.21	\$ 4,864,243.69	\$ 4,479,566.24	\$ 4,555,262.97	\$ 6,870,296.53	\$ 4,090,424.05	\$ 3,758,627.06	\$ 4,689,504.78	\$ -		\$ 51,430,672.05
2016-17 Total to Schools (WCS & FSSD)	\$ 4,397,078.72	\$ 4,871,776.37	\$ 4,347,112.53	\$ 4,506,779.23	\$ 4,864,243.74	\$ 4,479,566.27	\$ 4,555,263.00	\$ 6,870,296.54	\$ 4,090,424.09	\$ 3,758,637.09	\$ 4,689,504.81	\$ -		\$ 51,430,682.39
2016-17 Total Sales Tax Dollars (After State Cost)	\$ 8,794,157.42	\$ 9,743,552.69	\$ 8,694,225.03	\$ 9,013,558.44	\$ 9,728,487.43	\$ 8,959,132.51	\$ 9,110,525.97	\$ 13,740,593.07	\$ 8,180,848.14	\$ 7,517,264.15	\$ 9,379,009.59	\$ -		\$ 102,861,354.44

*Net to schools after ADA% apportionment (to be adjusted when ADA% for 2016 is revised)

MOSS PROPERTY PUD SUBDIVISION
PARCEL MAP
8/8/2017



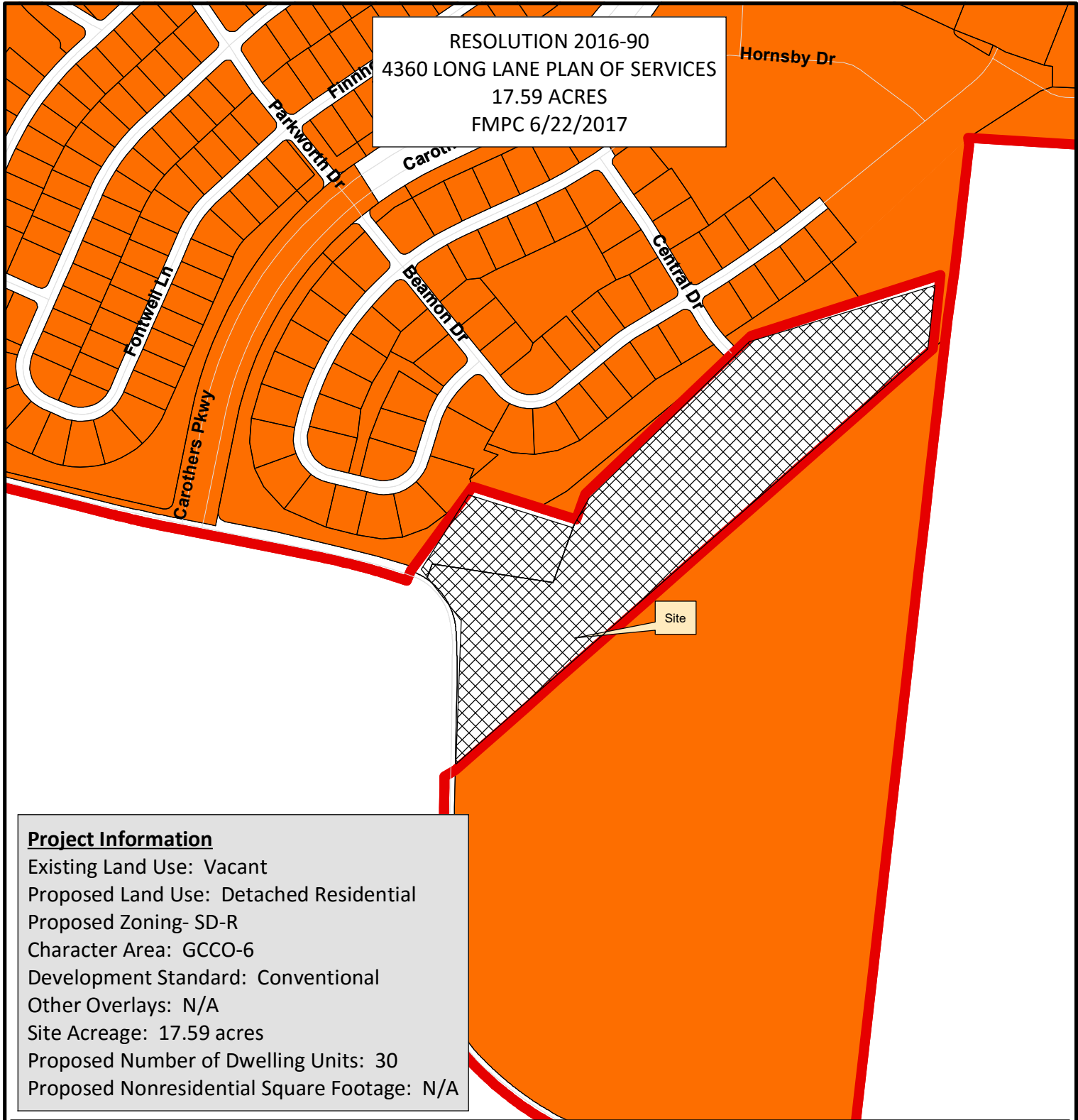
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|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
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| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



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Feet

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RESOLUTION 2016-90
4360 LONG LANE PLAN OF SERVICES
17.59 ACRES
FMPC 6/22/2017



Project Information

Existing Land Use: Vacant
Proposed Land Use: Detached Residential
Proposed Zoning- SD-R
Character Area: GCCO-6
Development Standard: Conventional
Other Overlays: N/A
Site Acreage: 17.59 acres
Proposed Number of Dwelling Units: 30
Proposed Nonresidential Square Footage: N/A

- | | |
|--|---------------------------------------|
| Corporate Boundaries | SD-R Specific Development-Residential |
| AG Agricultural District | SD-X Specific Development-Variety |
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RESOLUTION 2016-90

TO BE ENTITLED: "A RESOLUTION ADOPTING A PLAN OF SERVICES FOR THE ANNEXATION OF THREE PROPERTIES ADJACENT TO AND INCLUDING 4360 LONG LANE, BY THE CITY OF FRANKLIN, TENNESSEE."

WHEREAS, *Tennessee Code Annotated* (T.C.A.) § 6-51-102, as amended, requires that a Plan of Services be adopted by a municipal governing body prior to the passage of an annexation resolution; and

WHEREAS, Barry Moss ("Owner") of the Properties located at 4360 Long Lane Parcel 180.01, 180.02, 180.03 ("Properties") petitioned the Board of Mayor and Aldermen (BOMA) of the City of Franklin, Tennessee ("City"), to annex 17.59 acres adjoining the City limits and located within the Franklin Urban Growth Boundary (UGB); and

WHEREAS, the Property are located north of Long Lane and southeast of Carothers Parkway as described herein and as depicted on the Map attached hereto as Exhibit A:

Map-Parcel	Acres
106---18002	1.83
106---18003	0.36
106---18001	15.39
Total	17.59

The Property adjoins the City limits within the Franklin Urban Growth Boundary (UGB) and comprises a total of 17.59 acres. The Property is used as a single family residential use.

WHEREAS, this resolution shall bind the Owner and subsequent Owners of the Property; and

WHEREAS, the Franklin Municipal Planning Commission has reviewed and recommended approval of the Plan of Services for the annexation area; and

WHEREAS, a public hearing was held following public notice as required by T.C.A. § 6-51-102, as amended; and

WHEREAS, it is believed it is in the best interest of the City to adopt a Plan of Services for the area petitioned to be annexed in order to provide for future development in accordance with City standards; and

WHEREAS, this Resolution shall not bind the City to later annex the Property.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. Pursuant to the provisions of T.C.A. § 6-51-102, as amended, there is hereby adopted, for the area bounded as described above, the following Plan of Services:

A. Water

1. The Property is located within the Milcroft service area.
2. Water availability shall be approved and provided through Milcroft prior to annexation.
3. The Owner shall be required to provide adequate fire flow and pressure to the Property.

B. Reclaimed Water

1. According to the City of Franklin's Municipal Code, reclaimed water systems shall be extended to a development if the development is located within 1,000 feet of an existing reclaimed water line.
2. In the case of this Property, an extension well over 1,000 feet would be required to serve the Property. For this reason, reclaimed water will not be required to be extended to the Property.

C. Wastewater

1. The Property lies within the Goose Creek Basin as defined in the City of Franklin Sanitary Sewer Basin Study.
2. The proposed development of the Property is anticipated to construct several hundred feet of sanitary sewer main that will tie onto the sewer main being constructed through an easement on the 4360 Long Lane Parcel by the Ladd Park Subdivision.
3. The Owner shall be required to extend the sanitary sewer main approximately 1500 linear feet to provide service to the Property.
4. The City of Franklin Sanitary Sewer System Basin Plans show this as an 8 inch sanitary sewer main.
5. The Owner shall be required to submit engineering calculations to determine final sizing requirements.
6. The Owner shall be required to provide Engineering design, construction, easements, rights-of-way and the costs associated with the on-site sanitary sewer infrastructure required to serve the development of this Property.
7. The Owner shall be responsible for the payment of fees per the policies and procedures outlined in Franklin Municipal Code.

D. Stormwater

1. The Owner shall be responsible for the engineering, design and construction of the necessary stormwater infrastructure for the development of the Property and shall comply with the requirements as outlined in the Franklin Municipal Code.
2. As the Property develops, the City will charge prevailing stormwater user fees per policies and procedures as outlined in the Franklin Municipal Code.

E. Streets

1. Emergency maintenance of streets will begin on the effective date of annexation.
2. Reconstruction and resurfacing of streets, routine maintenance, and installation of storm drainage will be accomplished under existing City policies.
3. Access to the Property shall be provided from Long Lane.
4. Unless waived by the Franklin Engineering Department, the Owner of the Property shall be required to submit a traffic impact study prior to submitting a development plan for review and approval. The exact scope associated with this traffic impact study shall be determined prior to submittal of the development plan. Required street improvements shall be

determined as part of the plan. The roadways constructed as part of this development shall comply with City Street Standards.

F. Traffic Control

1. Traffic signals, traffic signs, street markings, and other traffic control devices shall be installed as the need is established by appropriate study and traffic standards. No needs have been identified for the area at this time.
2. New development after the effective date of annexation shall comply with City regulations governing traffic control devices and markings.

G. Street Lighting

1. No off-site street lighting is proposed at this time.
2. Street lighting within new developments shall be funded and installed by the Owner per City policy, which includes the installation of electric meters to allow for future ownership and maintenance by the City or homeowners association. The installation and operation of street lights shall coincide with the phasing of development and issuance of Certificates of Occupancy.

H. Street Name Signs

1. No additional street name signs in the area have been deemed necessary.
2. New development shall install street name signs per City policy.

I. Fire Protection

1. Fire protection by the present personnel and equipment of the Franklin Fire Department will be provided on and after the effective date of annexation.
2. No additional manpower or equipment will be necessary to serve the annexation area at this time.

J. Planning and Zoning

1. The planning and zoning jurisdiction of the City will extend to the annexed area on and after the effective date of annexation.
2. The Property is located in the Goose Creek Character Area – 6 (GCCO-6). 1. Appropriate uses include Detached Residential and/or Attached Residential near I-65. Streams, trees, and hillsides and hilltops shall be preserved and enhanced. This area is recommended to have a major park system. The South Carothers Road extension to Peytonsville Road is critical for adequate interconnectivity. The potential I-65 crossing design should be integrated into a street network for optimum coordination and connectivity. The Baskin property should have safe and efficient access.
3. Smaller lots should not be located on the exterior of a proposed development adjacent to, or across the street from, larger lots of an existing platted development of ten lots or more. However, if the applicant proposes an alternative, and if potential conflicts will be created, the applicant shall give justification as to how they will be mitigated or avoided. Upon annexation, the Property will be zoned by the Board of Mayor and Aldermen, pursuant to the requirements of the Franklin Zoning Ordinance with a base zone district, Overlay District, Character Area Overlay District, and designated as a Conventional or Traditional Area.

K. Parks and Recreation

1. The benefit and use of the recreational facilities and programs provided by the Parks Department will be available on and after the effective date of the annexation. Recreational facilities and programs will be provided with existing personnel, facilities and resources.
2. New development in the annexed area shall comply with the City of Franklin Parkland Dedication Ordinance.

L. Police Protection

1. Police patrol and response to calls by the Franklin Police Department will be provided on and after the effective date of annexation.
2. Police services will be provided with existing personnel and equipment.

M. Building and Code Inspection Services

1. Building and code inspection services will begin in the annexed area on and after the effective date of the annexation.
2. New development in the annexed area shall comply with adopted City Building Codes, pay the applicable fees, and obtain the required permits for inspection services.

N. Garbage and Recycling Pickup and Environmental

1. The Sanitation and Environmental Services Department will begin providing services in the annexed area on and after the effective date of the annexation in accordance with adopted City requirements.
2. No additional manpower or equipment will be necessary to serve the annexation area at this time.

SECTION II. This Resolution shall take effect from and after its adoption.

ADOPTED THIS _____.

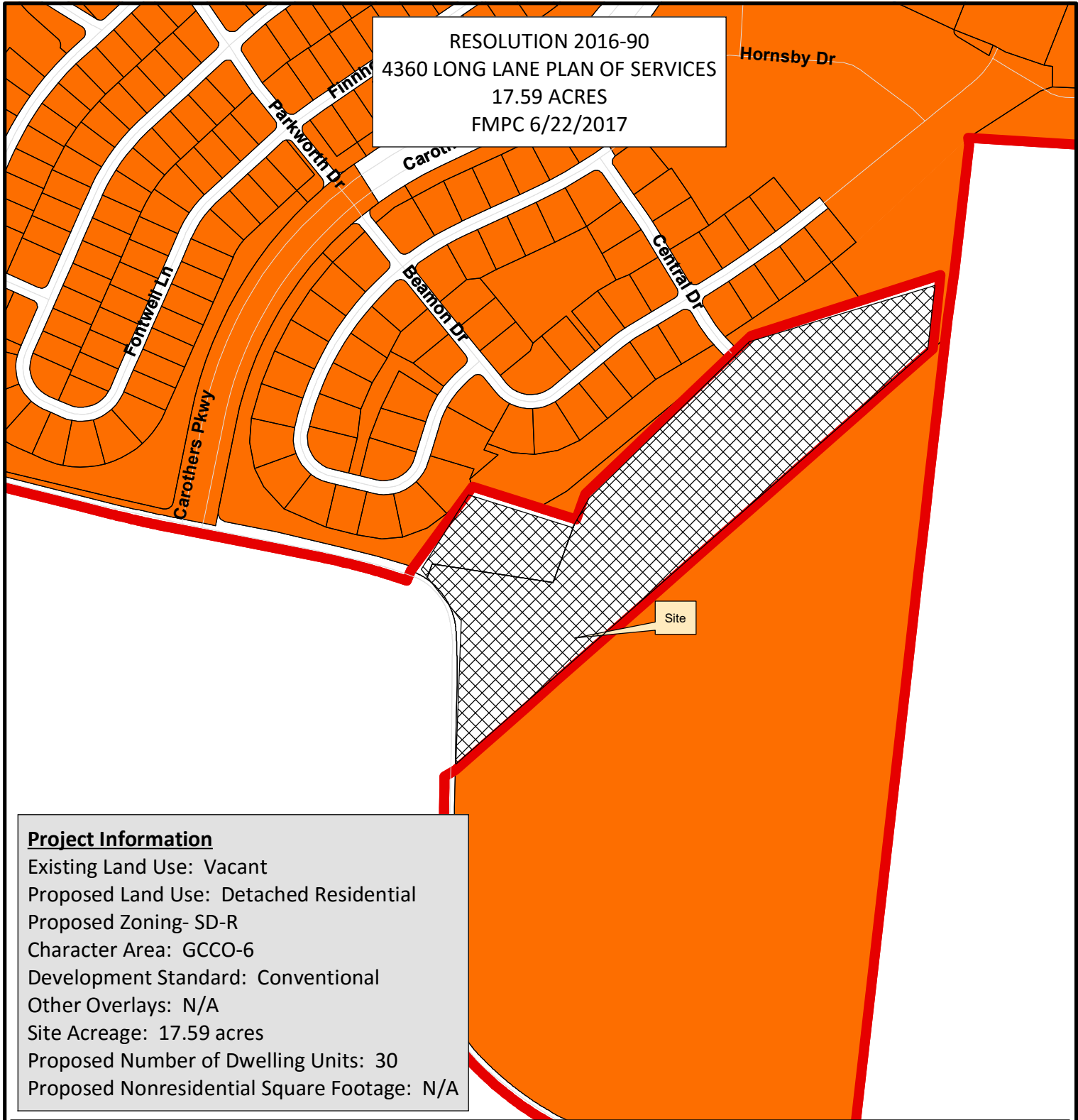
ERIC S. STUCKEY
City Administrator

DR. KEN MOORE
Mayor

Approved as to form by:

Shauna R. Billingsley
City Attorney

RESOLUTION 2016-90
 4360 LONG LANE PLAN OF SERVICES
 17.59 ACRES
 FMPC 6/22/2017



Project Information

Existing Land Use: Vacant
 Proposed Land Use: Detached Residential
 Proposed Zoning- SD-R
 Character Area: GCCO-6
 Development Standard: Conventional
 Other Overlays: N/A
 Site Acreage: 17.59 acres
 Proposed Number of Dwelling Units: 30
 Proposed Nonresidential Square Footage: N/A

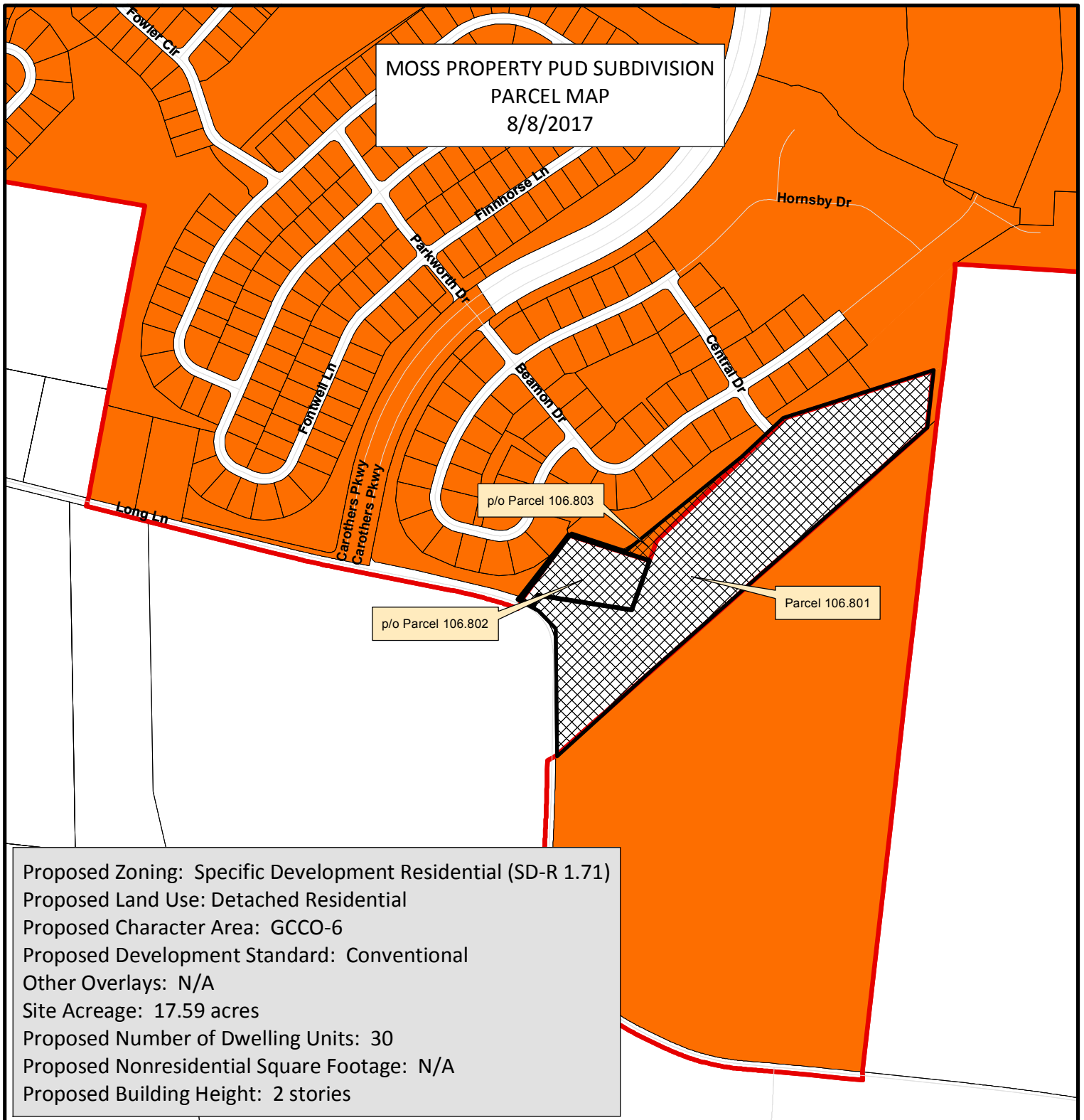
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|--|---------------------------------------|
| Corporate Boundaries | SD-R Specific Development-Residential |
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
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MOSS PROPERTY PUD SUBDIVISION
PARCEL MAP
8/8/2017



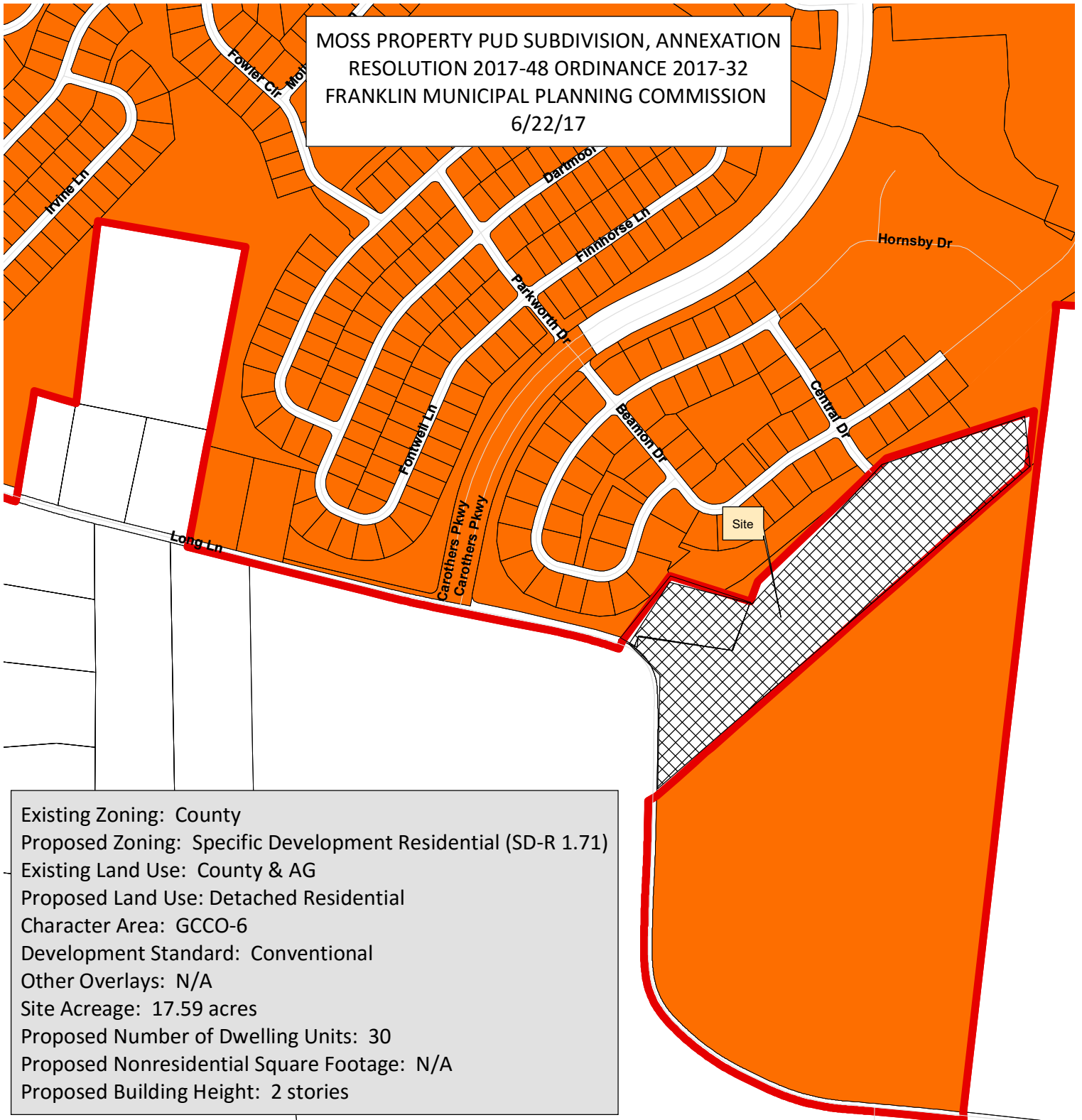
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| SD-R Specific Development-Residential | |



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MOSS PROPERTY PUD SUBDIVISION, ANNEXATION
 RESOLUTION 2017-48 ORDINANCE 2017-32
 FRANKLIN MUNICIPAL PLANNING COMMISSION
 6/22/17



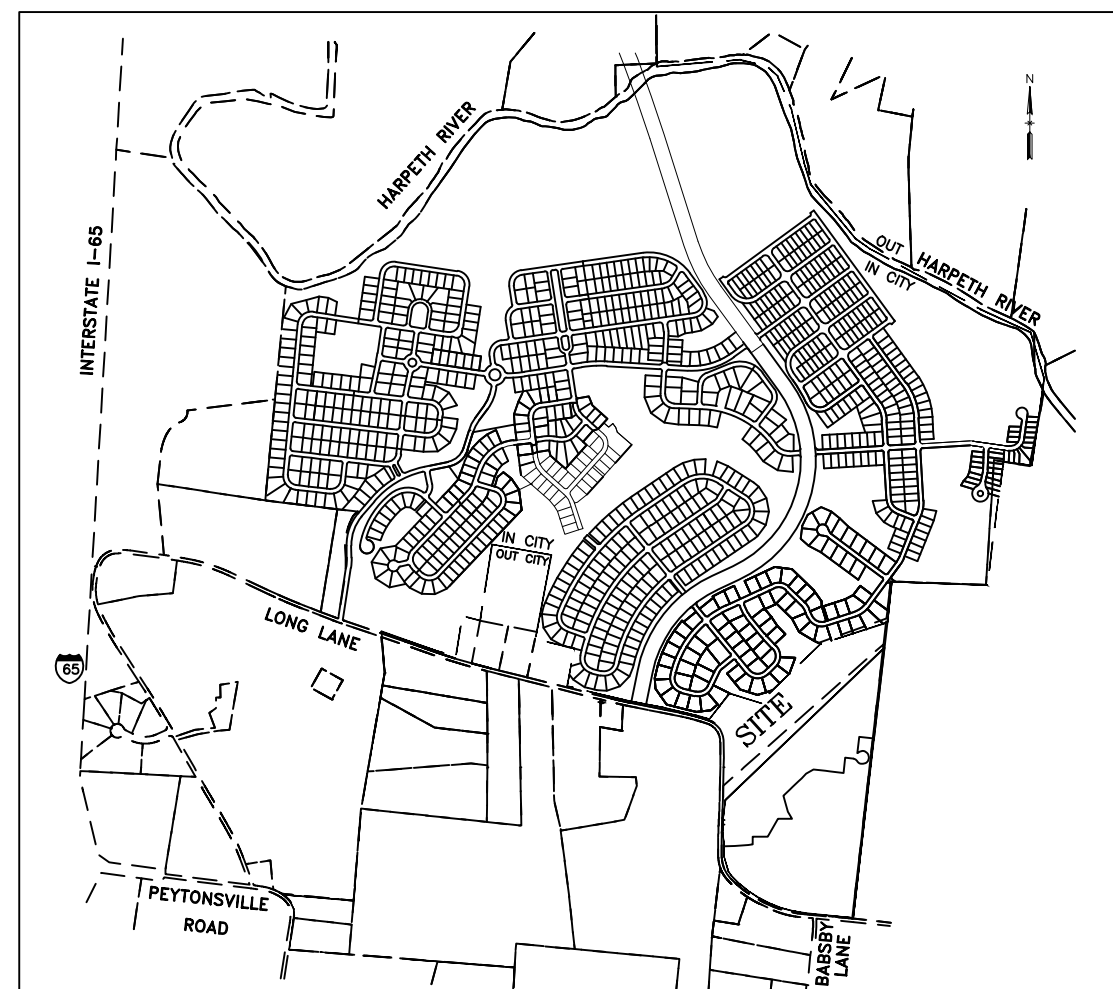
Existing Zoning: County
 Proposed Zoning: Specific Development Residential (SD-R 1.71)
 Existing Land Use: County & AG
 Proposed Land Use: Detached Residential
 Character Area: GCCO-6
 Development Standard: Conventional
 Other Overlays: N/A
 Site Acreage: 17.59 acres
 Proposed Number of Dwelling Units: 30
 Proposed Nonresidential Square Footage: N/A
 Proposed Building Height: 2 stories

- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
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LEGEND							
IRON PIN OLD	-	-	-	-	-	● IP(O)	
IRON PIN NEW	-	-	-	-	-	●	
SEWER MANHOLE	-	-	-	-	-	○	
SEWER SERVICE TAP-	-	-	-	-	-	○ SS	
PROPERTY/R.O.W. LINE	-	-	-	-	-	_____	

LINE TABLE

NO.	BEARING	DIST.
1	N06-24-59W	53.10'
2	N18-30-59W	54.91'
3	N31-34-59W	52.76'
4	N47-30-05W	47.36'
5	N63-33-31W	66.51'

VICINITY MAP
(NOT TO SCALE)

CAROTHERS PARKWAY
(130' ROW)

LONG LANE
(50' PUBLIC ROW)

SITE ADDRESS:
4360 LONG LANE
FRANKLIN, TN 37064

PREPARED FOR:
LANDD INVESTMENTS, LLC
ATT. DICKIE SULLIVAN
2000 MIDWOOD STREET APT. # 2309
FRANKLIN, TN 37067

PREPARED BY:

HFR DESIGN

 214 Centerview Drive Suite 300
 Brentwood, TN 37027

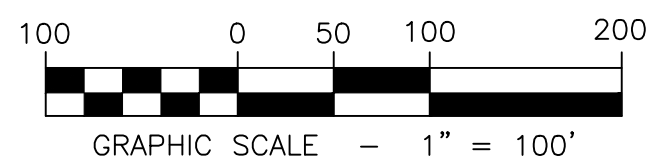
 615.370.8500

 615.370.8530

 hfrdesign.com

SURVEY DIVISION mwilliams@hfrdesign.com

TOTAL AREA: 766,303 SQ. FT. OR (17.592± ACRES)



S.P.C.S. NAD 83
PLAT BOOK P65. PG. 51

NOTES:

- 1) ALL DISTANCES WERE MEASURED WITH E.D.M. EQUIPMENT AND HAVE BEEN ADJUSTED FOR TEMPERATURE.
- 2) SURVEYOR'S LIABILITY FOR THIS DOCUMENT SHALL BE LIMITED TO PARTIES NAMED HEREON AND THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY THE SURVEYOR WHOSE SIGNATURE APPEARS UPON THIS SURVEY.
- 3) UTILITIES HAVE BEEN PLOTTED FROM SURFACE FEATURES FOUND AT THE TIME OF SURVEY AND AVAILABLE MAPS AND RECORDS. THERE MAY BE OTHER UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN TO THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES MUST BE VERIFIED BY THE APPROPRIATE UTILITY COMPANY OR BY EXCAVATION PRIOR TO ANY CONSTRUCTION.
- 4) REPRODUCTION OR USE OF THIS DRAWING OR ANY PART THEREOF IS NOT ALLOWED WITHOUT WRITTEN APPROVAL FROM THE SURVEYOR WHOSE SEAL APPEARS ON THIS SURVEY. COPYRIGHT 2017.
- 5) THIS SURVEY PREPARED FROM CURRENT DEED OF RECORD AND DOES NOT REPRESENT A TITLE SEARCH OR A GUARANTEE OF TITLE, AND IS SUBJECT TO ANY STATE OF FACTS A CURRENT AND ACCURATE TITLE SEARCH WILL REVEAL.
- 6) BY SCALING, GRAPHIC INTERPOLATION AND PLOTTING THE SUBJECT PROPERTY IS LOCATED IN ZONES "X" AREAS DETERMINED NOT TO BE AFFECTED BY SPECIAL HAZARD AREAS AS SHOWN ON F.E.M.A. "FLOOD RISK INSURANCE MAP", MAP NOS. 47187C0355F & 47187C0360F, BOTH DATED: 9-29-06.
- 7) 5/8" IRON RODS WITH CAPS (●) SET AT ALL CORNERS UNLESS OTHERWISE SHOWN.
- 8) SUBJECT PROPERTY BEING SHOWN ON TAX MAP 106 FOR WILLIAMSON COUNTY, TENNESSEE.
- 9) SURVEYOR'S LIABILITY FOR THIS DOCUMENT SHALL BE LIMITED TO THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY THE SURVEYOR WHOSE SIGNATURE APPEARS ON THIS SURVEY.

MAP 117, PARCEL 36.00
BRAXTON R. RICHARDSON, III
BOOK 1295, PG. 879

THIS SURVEY WAS DONE IN COMPLIANCE WITH CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE. I HEREBY CERTIFY THAT THIS IS A CATEGORY I SURVEY AND THE RATIO OF PRECISION OF THE UNADJUSTED SURVEY IS AT LEAST 1:10,000.



MICHAEL K. STORY R.L.S., TN. # 1989

PRELIMINARY BOUNDARY SURVEY

MAP 106, PARCELS 180.01 & 180.02
MOSS PROPERTY

10TH CIVIL DISTRICT
FRANKLIN - WILLIAMSON COUNTY - TENNESSEE

HFR PROJECT NO. 2017049-52

**RESOLUTION 2017-48
ORDINANCE 2017-32**

TO BE ENTITLED: "A RESOLUTION AND ORDINANCE TO ANNEX THREE PROPERTIES ADJACENT TO AND INCLUDING 4360 LONG LANE, CONSISTING OF 17.59 ACRES, PROPERTY LOCATED SOUTH OF CAROTHERS PARKWAY AND NORTH OF LONG LANE AND ADJOINING THE CITY LIMITS WITHIN THE SOUTHEAST PART OF THE FRANKLIN URBAN GROWTH BOUNDARY (UGB)."

WHEREAS, Barry Moss ("Owner") of property located at 4360 Long Lane, Parcel 180.01, 180.02, 180.03 ("Properties") petitioned the Board of Mayor and Aldermen (BOMA) of the City of Franklin, Tennessee ("City"), to annex 17.59 acres adjoining the City limits and located within the Franklin Urban Growth Boundary (UGB); and

WHEREAS, the Franklin Municipal Planning Commission (FMPC) has reviewed and recommended Approval of the proposed annexation and Plan of Services for the annexation area; and

WHEREAS, a public hearing was held following public notice as required by *Tennessee Code Annotated* Title 6, Chapter 51, as amended; and

WHEREAS, the BOMA has adopted a Plan of Services for the annexation area as described in Resolution 2017-48; and

WHEREAS, the BOMA has determined that it is in the best interest of its existing residents to annex the Property described herein and that failure to annex said property will inhibit the prosperity of the City and endanger the health, safety and welfare of its inhabitants.

NOW THEREFORE, BE IT RESOLVED AND ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That the following described Property shall be, and is hereby, annexed in and to the corporate limits of the City of Franklin, Tennessee:

PREMISES CONSIDERED

Map-Parcel	Acres
106---18001	15.39
106---18002	1.83
106---18003	0.36
Total	17.59

Parcel 180.01
05-08-17

Map 106, Parcel No. 180.01
William B. Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #1 on the attached exhibit, and proceeding as follows:

Thence, continuing N00°44'01"E, a distance of 487.57 feet to a point;
thence, N06°24'59"W, a distance of 53.10 feet to a point;
thence, N18°30'59"W, a distance of 54.91 feet to a point;
thence, N31°34'59"W, a distance of 52.76 feet to a point;
thence, N47°30'05"W, a distance of 47.36 feet to a point;
thence, N54°14'14"E, a distance of 41.07 feet to a point;
thence, S82°08'44"E, a distance of 301.11 feet to a point;
thence, N77°53'16"E, a distance of 12.98 feet to a point;
thence, N38°52'16"E, a distance of 14.25 feet to a point;
thence, N19°32'36"E, a distance of 251.97 feet to a point;
thence, N46°19'26"E, a distance of 649.66 feet to a point;
thence, N72°13'16"E, a distance of 606.76 feet to a point;
thence, S06°40'15"W, a distance of 219.78 feet to a point;
thence, S46°17'35"W, a distance of 1,908.98 feet to the POINT OF BEGINNING.

Containing 670,540.05 square feet or 15.3935 acres, more or less.

The aforementioned property is on a parcel of land owned by William B. Moss, as shown on Tax Map No. 106, Parcel No. 180.01 and recorded in Deed Book 5465, Page 77 with the Williamson County Register of Deeds.

Parcel 180.02
05-08-17

Map 106, Parcel No. 180.02
Barry and Dawn Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #2 on the attached exhibit, and proceeding as follows;

Thence, continuing, N63°33'31"W, a distance of 66.51 feet to a point;
thence, N38°09'46"E, a distance of 285.99 feet to a point;
thence, S72°27'33"E, a distance of 198.22 feet to a point;
thence continue easterly along said line, a distance of 110.67 feet;
thence, S19°32'16"W, a distance of 174.77 feet to a point;
thence, S38°52'16"W, a distance of 14.25 feet to a point;
thence, S77°53'16"W, a distance of 12.98 feet to a point;
thence, N82°08'44"W, a distance of 301.11 feet to a point;
thence, S54°14'14"W, a distance of 41.07 feet to the POINT OF BEGINNING.

Containing 79,697.38 square feet or 1.8296 acres, more or less.

The aforementioned property is on a parcel of land owned by Barry and Dawn Moss, as shown on Tax Map No. 106, Parcel No. 180.02 and recorded in Deed Book 6924, Page 295 with the Williamson County Register of Deeds.

Parcel 180.03
05-08-17

Map 106, Parcel No. 180.03
Barry Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as
POB #3 on the attached exhibit, and proceeding as follows;

Thence, continuing N72°27'33"W, a distance of 110.67 feet to a point;
thence, N59°54'52"E, a distance of 92.53 feet to a point;
thence, N50°38'40"E, a distance of 485.00 feet to a point;
thence, N48°21'33"E, a distance of 104.77 feet to a point;
thence, N46°27'58"E, a distance of 40.00 feet to a point;
thence continue northeasterly along said line, a distance of 53.60 feet;
thence, S46°19'26"W, a distance of 649.66 feet to a point;
thence, S19°33'22"W, a distance of 77.21 feet to the POINT OF BEGINNING.

Containing 16,063.05 square feet or 0.3688 acres, more or less.

The aforementioned property is on a parcel of land owned by Barry Moss, as shown on Tax Map No.
106, Parcel No. 180.03 and recorded in Deed Book 6599, Page 425 with the Williamson County Register
of Deeds

SECTION II: That the attached Location Map shall serve the purpose of further delimiting the
geographical boundaries as described by this Resolution and Ordinance.

SECTION III: That the annexed Property shall become part of Aldermanic Ward 3.

SECTION IV. BE IT FINALLY RESOLVED AND ORDAINED by the Board of Mayor and Aldermen of the
City of Franklin, Tennessee, that this Resolution and Ordinance shall take effect from and after its passage
on third and final reading, the health, safety, and welfare of the citizens requiring it.

ATTEST:

CITY OF FRANKLIN, TENNESSEE:

By: _____
Eric Stuckey
City Administrator/Recorder

By: _____
Dr. Ken Moore
Mayor

Approved as to form by:

Shauna R. Billingsley
City Attorney

PLANNING COMMISSION RECOMMENDED:

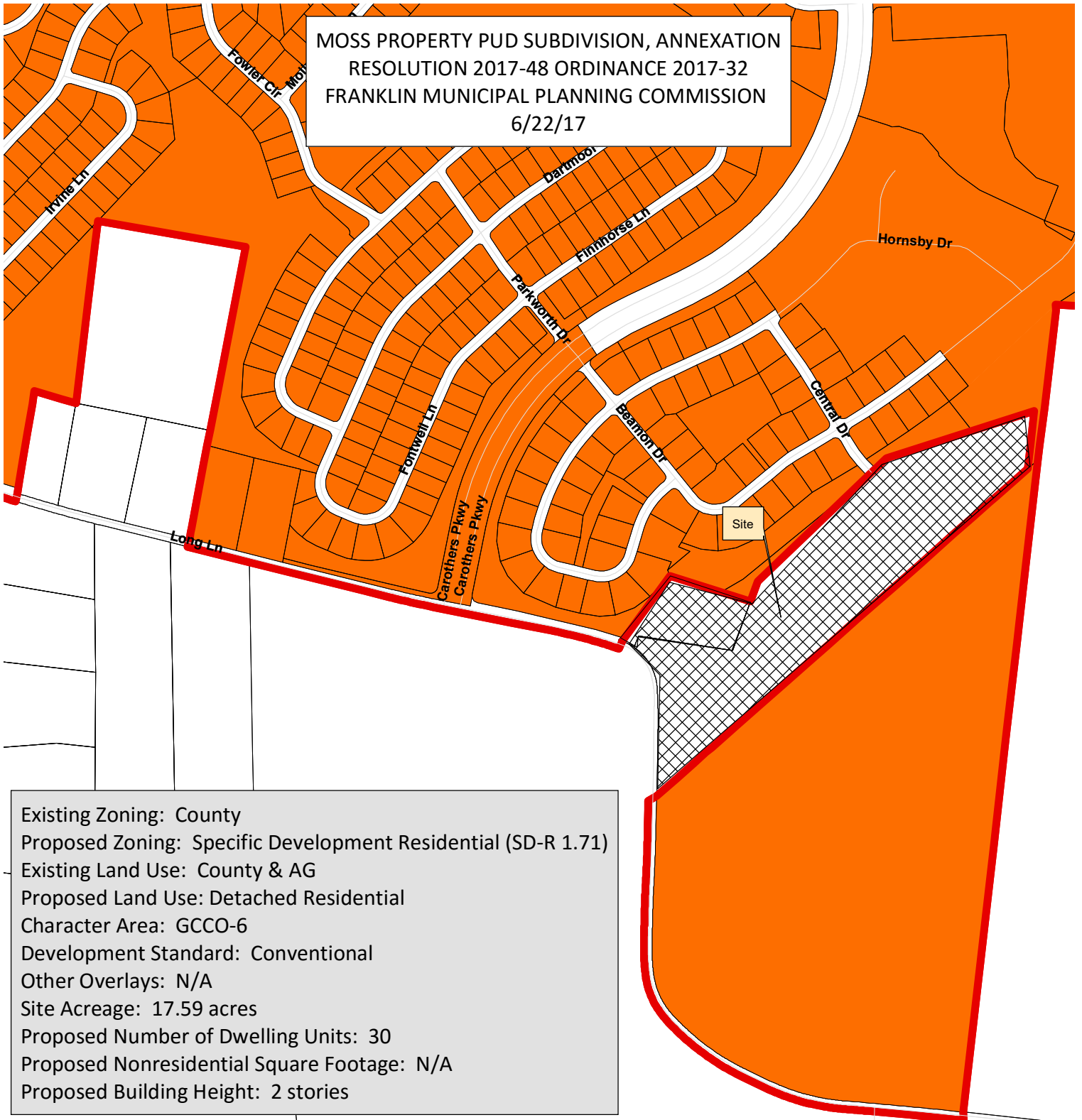
PASSED FIRST READING:

PUBLIC HEARING HELD:

PASSED SECOND READING:

PASSED THIRD READING:

MOSS PROPERTY PUD SUBDIVISION, ANNEXATION
 RESOLUTION 2017-48 ORDINANCE 2017-32
 FRANKLIN MUNICIPAL PLANNING COMMISSION
 6/22/17



Existing Zoning: County
 Proposed Zoning: Specific Development Residential (SD-R 1.71)
 Existing Land Use: County & AG
 Proposed Land Use: Detached Residential
 Character Area: GCCO-6
 Development Standard: Conventional
 Other Overlays: N/A
 Site Acreage: 17.59 acres
 Proposed Number of Dwelling Units: 30
 Proposed Nonresidential Square Footage: N/A
 Proposed Building Height: 2 stories

- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
| R-3 Residential District | NC Neighborhood Commercial District |
| R-6 Residential District | GC General Commercial District |
| RM-10 Attached 10 Residential District | LI Light Industrial District |
| RM-15 Attached 15 Residential District | HI Heavy Industrial District |
| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



0 200 400 800
 Feet

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 It was compiled from the most authentic information available.
 The City is not responsible for any errors or omissions contained hereon.
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OWNER AFFIDAVIT

City of Franklin, Tennessee

We/I William Barry Moss
(Please print Name/Names in Full)

being duly sworn, depose and say(s) that (I am)/(we are) the owner(s) of the property described as:

MAP 106, PARCELS 180.01 & 180.02
(Property Parcel/Tax ID Number)

and located at:

4360 LONG LANE
(Street Address)

am fully aware of the request for development approval in the City of Franklin, Tennessee. Furthermore, (I)/ (we) hereby appoint

GAMBLE DESIGN COLLABORATIVE & SULLIVAN ENGINEERING INC.
(Please print Name/Names in Full)

to act as my/our authorized agent on my/our behalf on all matters pertaining to the processing and obtaining the application with the exception of legal documents for recording purposes.

William Barry Moss
Signature

4360 Long Lane
Property Owner Mailing Address

Franklin TN 37064
City, State & Zip

Subscribed and sworn to before me this

7 day of NOV, 2016

Paul V. Collins Jr.
Notary Public

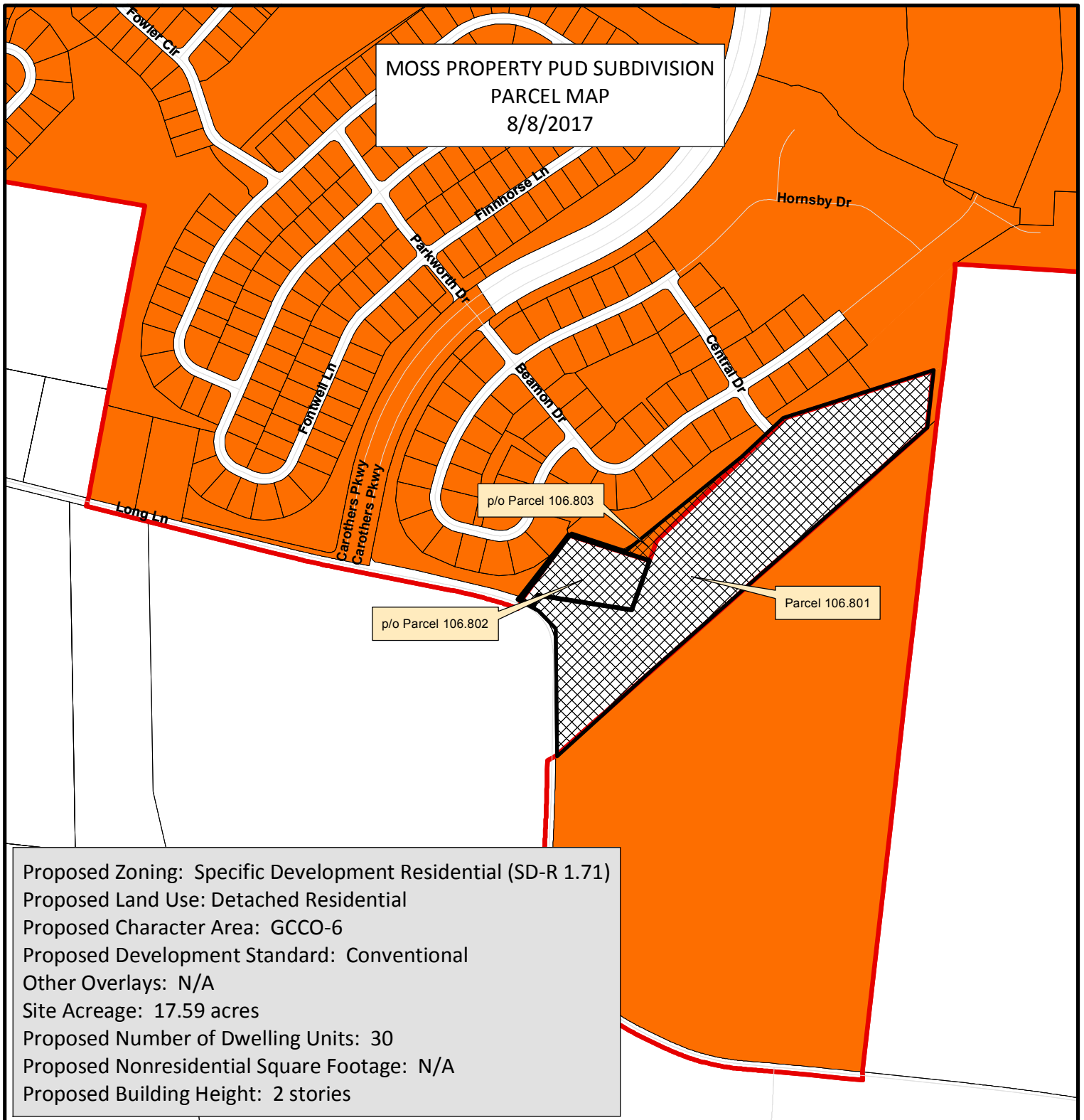
My Commission Expires: 4/20/19



ANNEXATION REQUEST APPLICATION FRANKLIN, TENNESSEE					
LOT ADDRESS: 4360 LONG LANE,					
PROPOSED ZONING: SD-R		PROPOSED LAND USE: RESIDENTIAL		LOT ACREAGE: +/- 17.52	
CHARACTER AREA: GCCO-6			PHYSICAL DESCRIPTION OF SITE: RESIDENTIAL/AGRICULTURAL TRACT Adjacent to stream		
LAND USE PLAN LANGUAGE FOR CHARACTER AREA: 1. APPROPRIATE USES INCLUDE DETACHED RESIDENTIAL 2. STREAMS, TREES, AND HILLSIDES AND HILLTOPS SHALL BE PRESERVED AND ENHANCED.					
REQUEST LETTER:	Check if included	OWNER AFFIDAVIT:	Check if included	DRAWINGS/ ILLUSTRATIONS:	Check if included
OTHER INFORMATION: MAP 106, Parcel 180.01, +/- 15.77 AC MAP 106, Parcel 180.02, +/- 1.75 AC					

APPLICANT NAME, ADDRESS, PHONE	AGENT NAME, ADDRESS, PHONE
	GAMBLE DESIGN COLLABORATIVE
	144 SE PARKWAY, SUITE 200
	FRANKLIN TN 37064
	615.975.5765
Signature:	Date:

MOSS PROPERTY PUD SUBDIVISION
PARCEL MAP
8/8/2017



Proposed Zoning: Specific Development Residential (SD-R 1.71)
 Proposed Land Use: Detached Residential
 Proposed Character Area: GCCO-6
 Proposed Development Standard: Conventional
 Other Overlays: N/A
 Site Acreage: 17.59 acres
 Proposed Number of Dwelling Units: 30
 Proposed Nonresidential Square Footage: N/A
 Proposed Building Height: 2 stories

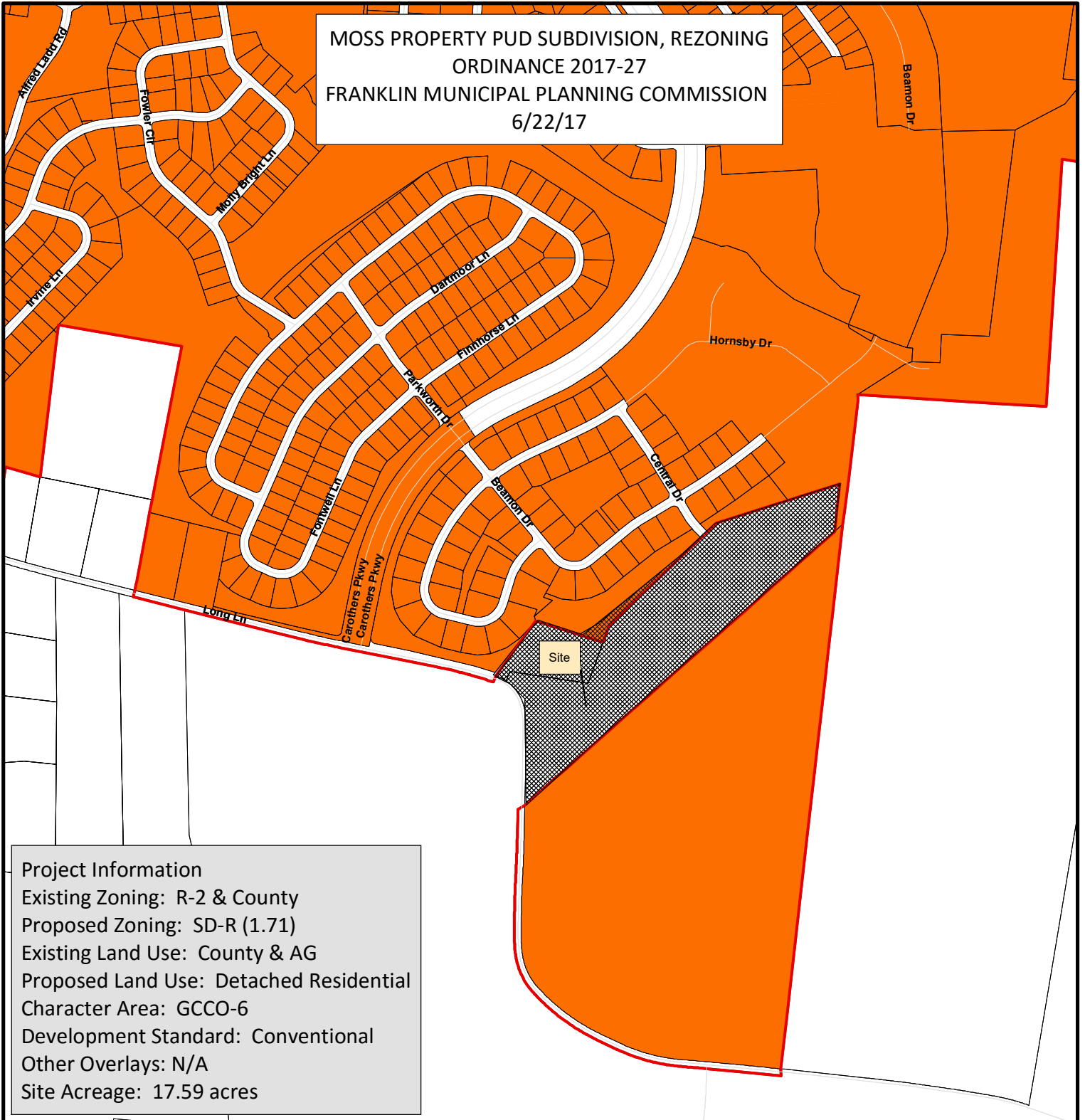
- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
| R-3 Residential District | NC Neighborhood Commercial District |
| R-6 Residential District | GC General Commercial District |
| RM-10 Attached 10 Residential District | LI Light Industrial District |
| RM-15 Attached 15 Residential District | HI Heavy Industrial District |
| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



0 200 400 800
Feet

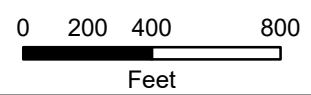
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MOSS PROPERTY PUD SUBDIVISION, REZONING
ORDINANCE 2017-27
FRANKLIN MUNICIPAL PLANNING COMMISSION
6/22/17



Project Information
 Existing Zoning: R-2 & County
 Proposed Zoning: SD-R (1.71)
 Existing Land Use: County & AG
 Proposed Land Use: Detached Residential
 Character Area: GCCO-6
 Development Standard: Conventional
 Other Overlays: N/A
 Site Acreage: 17.59 acres

- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
| R-3 Residential District | NC Neighborhood Commercial District |
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| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



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ORDINANCE 2017-27

TO BE ENTITLED: "AN ORDINANCE TO ZONE 17.59 ACRES SPECIFIC DEVELOPMENT DISTRICT- SD-R 1.71 DISTRICT, CONVENTIONAL DEVELOPMENT STANDARD OVERLAY, GOOSE CREEK CHARACTER AREA (GCCO-6) OVERLAY, FOR THREE PROPERTIES ADJACENT TO AND INCLUDING 4360 LONG LANE, MOSS PROPERTY PUD SUBDIVISION."

WHEREAS, the City of Franklin, Tennessee, encourages responsible growth and the sensible transition of land uses and densities; and

WHEREAS, the Specific Development District SD-R 1.71 district provides zoning for land uses compatible with both the Franklin Land Use Plan and surrounding development; and

WHEREAS, the Board of Mayor and Aldermen (BOMA) of the City of Franklin, Tennessee, adopted Resolution 2017-39 approving a Planned Unit Development (PUD) Development Plan as required by the Franklin Zoning Ordinance; and

WHEREAS, the zoning has been reviewed and approved by BOMA after a public hearing and a recommendation by the Franklin Municipal Planning Commission.

NOW THEREFORE BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That the following described property shall be, and is hereby, rezoned from its present zoning classification to Specific Development District SD-R 1.71 District:

PREMISES CONSIDERED	
Map-Parcel	Acres
106---18002	1.83
106---18003	0.36
106---18001	15.39
Total	17.59

Map 106, Parcel No. 180.01
William B. Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #1 on the attached exhibit, and proceeding as follows;

Thence, continuing N00°44'01"E, a distance of 487.57 feet to a point;
thence, N06°24'59"W, a distance of 53.10 feet to a point;
thence, N18°30'59"W, a distance of 54.91 feet to a point;
thence, N31°34'59"W, a distance of 52.76 feet to a point;
thence, N47°30'05"W, a distance of 47.36 feet to a point;

thence, N54°14'14"E, a distance of 41.07 feet to a point;
thence, S82°08'44"E, a distance of 301.11 feet to a point;
thence, N77°53'16"E, a distance of 12.98 feet to a point;
thence, N38°52'16"E, a distance of 14.25 feet to a point;
thence, N19°32'36"E, a distance of 251.97 feet to a point;
thence, N46°19'26"E, a distance of 649.66 feet to a point;
thence, N72°13'16"E, a distance of 606.76 feet to a point;
thence, S06°40'15"W, a distance of 219.78 feet to a point;
thence, S46°17'35"W, a distance of 1,908.98 feet to the POINT OF BEGINNING.

Containing 670,540.05 square feet or 15.3935 acres, more or less.

The aforementioned property is on a parcel of land owned by William B. Moss, as shown on Tax Map No. 106, Parcel No. 180.01 and recorded in Deed Book 5465, Page 77 with the Williamson County Register of Deeds.

Parcel 180.02
05-08-17

Map 106, Parcel No. 180.02
Barry and Dawn Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #2 on the attached exhibit, and proceeding as follows;

Thence, continuing, N63°33'31"W, a distance of 66.51 feet to a point;
thence, N38°09'46"E, a distance of 285.99 feet to a point;
thence, S72°27'33"E, a distance of 198.22 feet to a point;
thence continue easterly along said line, a distance of 110.67 feet;
thence, S19°32'16"W, a distance of 174.77 feet to a point;
thence, S38°52'16"W, a distance of 14.25 feet to a point;
thence, S77°53'16"W, a distance of 12.98 feet to a point;
thence, N82°08'44"W, a distance of 301.11 feet to a point;
thence, S54°14'14"W, a distance of 41.07 feet to the POINT OF BEGINNING.

Containing 79,697.38 square feet or 1.8296 acres, more or less.

The aforementioned property is on a parcel of land owned by Barry and Dawn Moss, as shown on Tax Map No. 106, Parcel No. 180.02 and recorded in Deed Book 6924, Page 295 with the Williamson County Register of Deeds.

Parcel 180.03
05-08-17

Map 106, Parcel No. 180.03
Barry Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #3 on the attached exhibit, and proceeding as follows;

Thence, continuing N72°27'33"W, a distance of 110.67 feet to a point;
thence, N59°54'52"E, a distance of 92.53 feet to a point;
thence, N50°38'40"E, a distance of 485.00 feet to a point;
thence, N48°21'33"E, a distance of 104.77 feet to a point;
thence, N46°27'58"E, a distance of 40.00 feet to a point;
thence continue northeasterly along said line, a distance of 53.60 feet;
thence, S46°19'26"W, a distance of 649.66 feet to a point;
thence, S19°33'22"W, a distance of 77.21 feet to the POINT OF BEGINNING.

Containing 16,063.05 square feet or 0.3688 acres, more or less.

The aforementioned property is on a parcel of land owned by Barry Moss, as shown on Tax Map No. 106, Parcel No. 180.03 and recorded in Deed Book 6599, Page 425 with the Williamson County Register of Deeds.

SECTION II. That the attached Location Map shall serve the purpose of further delimiting the geographical boundaries as described by this Ordinance.

SECTION III. BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee, that this Ordinance shall take effect from and after its passage on third and final reading, the health, safety, and welfare of the citizens requiring it.

ATTEST:

CITY OF FRANKLIN, TENNESSEE:

By: _____
Eric Stuckey
City Administrator/Recorder

By: _____
Dr. Ken Moore
Mayor

Approved as to form by:

Shauna R. Billingsley
City Attorney

PLANNING COMMISSION RECOMMENDED:

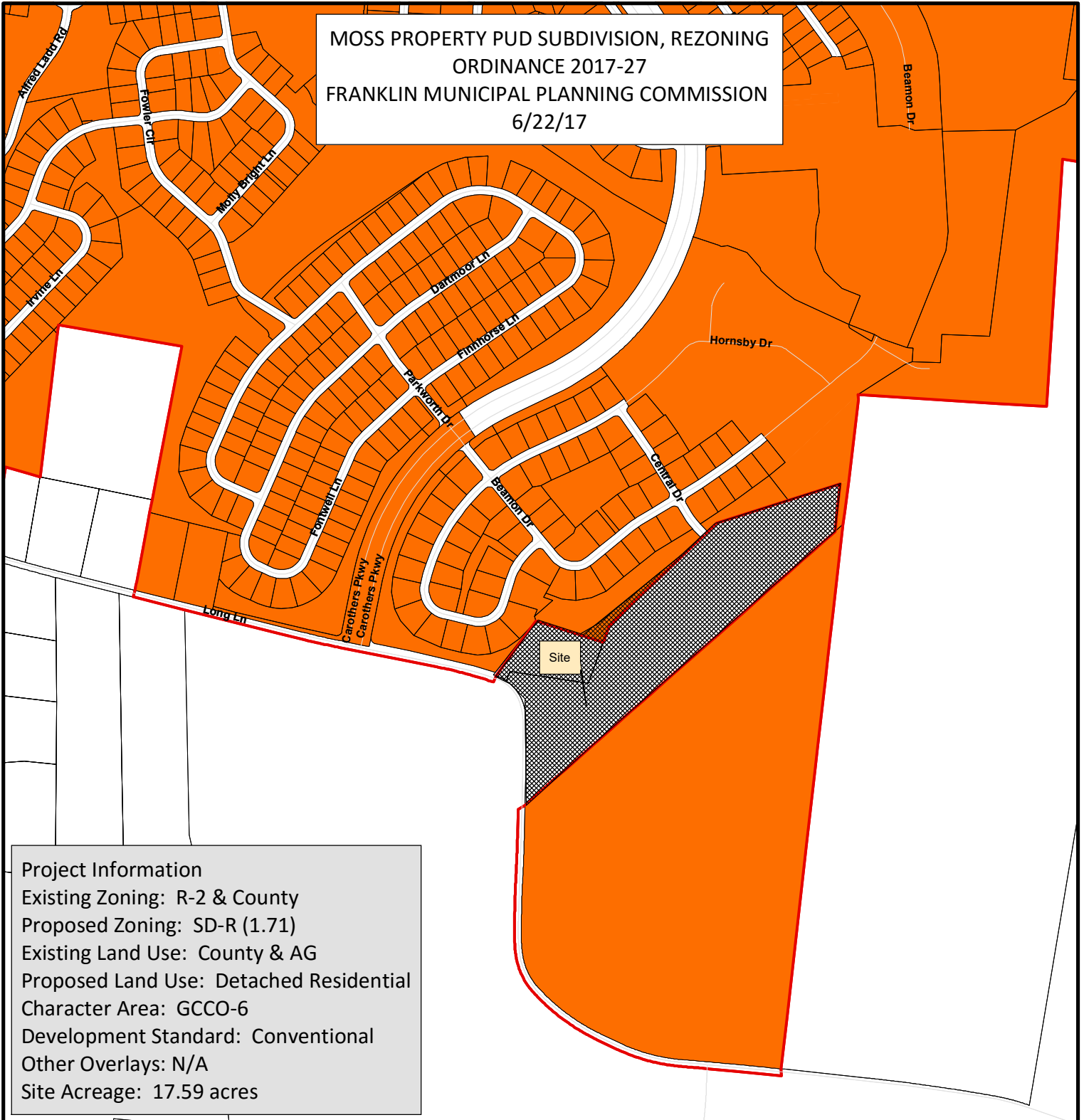
PASSED FIRST READING:

PUBLIC HEARING HELD:

PASSED SECOND READING:

PASSED THIRD READING:

MOSS PROPERTY PUD SUBDIVISION, REZONING
ORDINANCE 2017-27
FRANKLIN MUNICIPAL PLANNING COMMISSION
6/22/17



Project Information

Existing Zoning: R-2 & County
Proposed Zoning: SD-R (1.71)
Existing Land Use: County & AG
Proposed Land Use: Detached Residential
Character Area: GCCO-6
Development Standard: Conventional
Other Overlays: N/A
Site Acreage: 17.59 acres

- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
| R-3 Residential District | NC Neighborhood Commercial District |
| R-6 Residential District | GC General Commercial District |
| RM-10 Attached 10 Residential District | LI Light Industrial District |
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| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



0 200 400 800
Feet

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MOSS PROPERTY PUD REZONING AND ANNEXATION REQUEST

MAP 106, PARCELS 180.01 & 180.02
FRANKLIN, TENNESSEE

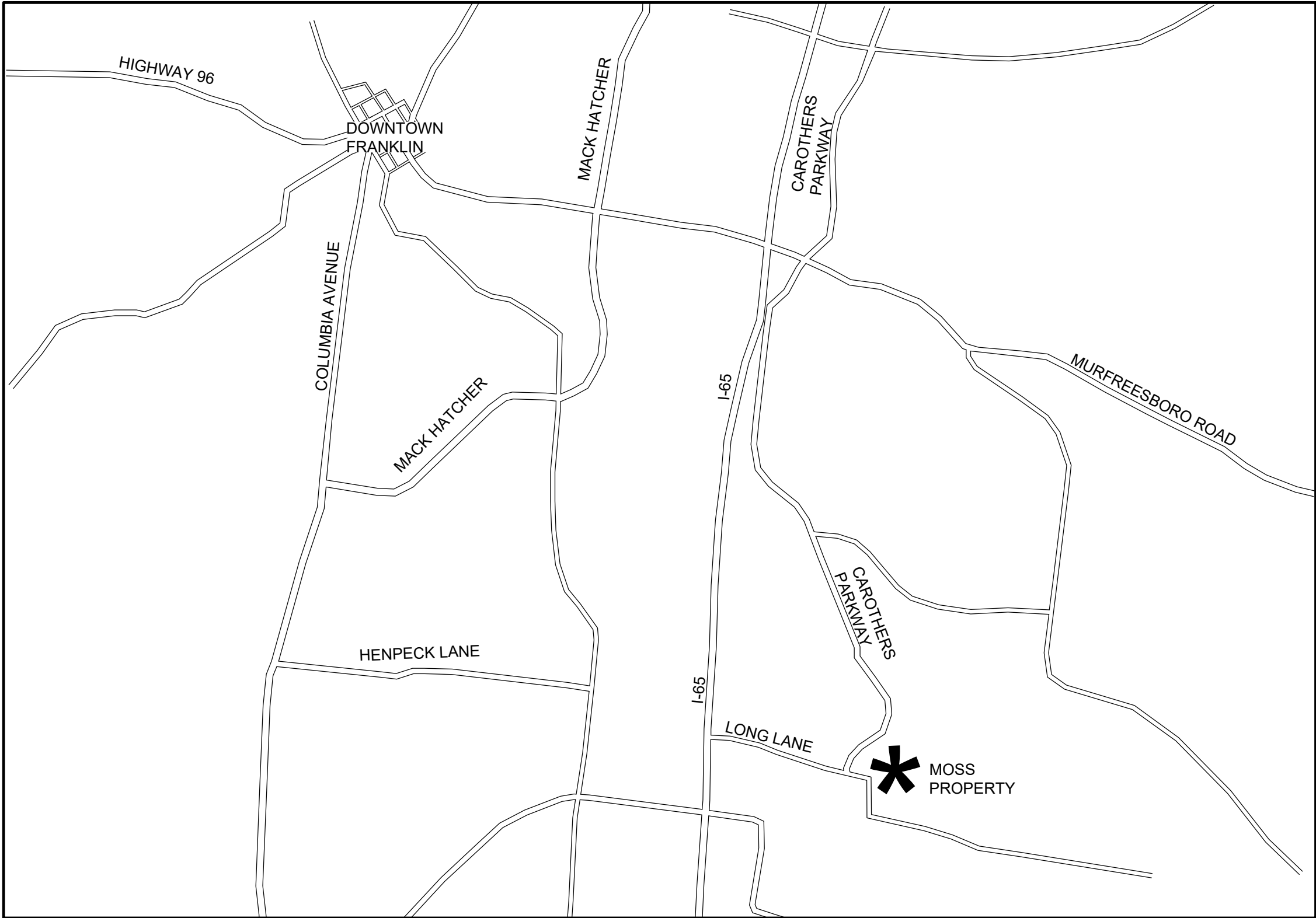
OWNER:
WILLIAM BARRY MOSS
4360 LONG LANE
FRANKLIN, TN 37064

DEVELOPER:
THE JONES COMPANY
DAVE PITTA
1221 LIBERTY PIKE
FRANKLIN, TN 37067
(615) 804-4724
davepitta@livejones.com

APPLICANT/LAND PLANNER:
GAMBLE DESIGN COLLABORATIVE
GREG GAMBLE, RLA
144 SOUTHEAST PARKWAY, SUITE 200
FRANKLIN, TN 37064
(615) 975-5765
greggamble209@gmail.com

CIVIL ENGINEER:
SULLIVAN ENGINEERING
DICKIE SULLIVAN
317 MAIN STREET, SUITE 201
FRANKLIN, TN 37064
(615) 645-3858
dickie@sullivanengineering.com

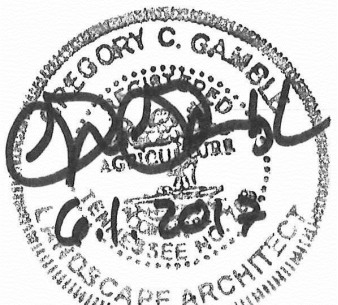
SURVEY DATA PROVIDED BY:
HFR SURVEY
MICHAEL STORY, RLS
214 CENTERVIEW DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615) 370-8500



INDEX OF SHEETS

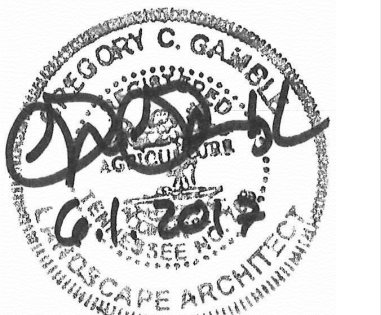
SHEET	DESCRIPTION
C 0.0	COVER SHEET AND LOCATION MAP
C 1.0	OVERALL EXISTING CONDITIONS
C 1.1	ENLARGED EXISTING CONDITIONS

10TH CIVIL DISTRICT OF WILLIAMSON COUNTY
CITY OF FRANKLIN, WILLIAMSON COUNTY, TENNESSEE



MAY 8, 2017
COF # 6441

Revisions
1. JUNE 1, 2017



ISSUED: APRIL 10, 2017

Revision Date	
1/ June 1, 2017	
2/	
3/	
4/	

OVERALL
EXISTING
CONDITIONS

CI.0
COF # 6440

SITE DATA

PROJECT NAME:	MOSS PROPERTY PUD REZONING AND ANNEXATION REQUEST
PROJECT #:	6440
SUBDIVISION:	N/A
LOT NUMBER:	N/A
ADDRESS:	4360 LONG LANE
CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH OF WILLIAMSON COUNTY
EXISTING ZONING :	MGA-1
PROPOSED ZONING:	SD-R (1.71)
CHARACTER AREA OVERLAY:	GCCO-6
OTHER APPLICABLE OVERLAYS:	N/A
APPLICABLE DEVELOPMENT STANDARD:	CONVENTIONAL
ACREAGE OF SITE:	17.59 AC (TOTAL SITE) 15.39 AC (106---18001) 1.83 AC (106---18002) 0.37 AC(106---18003)
MINIMUM REQUIRED SETBACK LINES:	15'
YARD FRONTING ANY STREET:	5'
SIDE YARD:	5'
CORNER SIDE YARD:	15'
REAR YARD:	10'
OWNER:	WILLIAM BARRY MOSS 4360 LONG LANE FRANKLIN, TN 37064
APPLICANT:	GAMBLE DESIGN COLLABORATIVE 144 S.E. PARKWAY, SUITE 200 FRANKLIN, TN 37064 GREG GAMBLE (615) 975-5765 greggambledesign@gmail.com
BUILDING SQUARE FOOTAGE:	N/A
BUILDING HEIGHT:	2 STORY
LANDSCAPE SURFACE RATIO:	20 (153,244 SF REQUIRED) 56 (428,047 SF PROVIDED)
MINIMUM PARKING REQUIREMENT:	2 SPACES PER HOME
EXISTING PARKING:	N/A
PARKING PROVIDED:	1.71 DLJA 149,338 SF (19% OF TOTAL SITE)
RESIDENTIAL DENSITY:	30 X 1200SF = 36,000SF
PARKLAND:	FEES IN LIEU 15% REQUIRED (2.64 AC) 56% PROVIDED (9.83 AC) 1.18 AC 8.65 AC PROVIDED
OPEN SPACE:	
FORMAL:	
INFORMAL:	

500' ADJACENT PROPERTY OWNERS

PARCEL NUMBER	PROPERTY ADDRESS	OWNER	OWNER STREET	CITY	STATE	ZIP	ZONING	CHARACTER AREA	DEVELOPMENT STANDARD
106---17900	4341 LONG LN	MOSS BLANCHE C FAMILY PTNRS L	9226 BRUSHBORO DR	BRENTWOOD	TN	37027	R-1 (Williamson Co.)	Williamson County	Williamson County
106---18000	CAROTHERS PKWY	TEDEAN LP	317 MAIN ST 201	FRANKLIN	TN	37064	R-2	GCCO-6	Conventional
106---18001	4360 LONG LN	MOSS WILLIAM BARRY	4360 LONG LN	FRANKLIN	TN	37064	MGA-1 (Williamson Co.)	GCCO-6	Conventional
106---18002	CAROTHERS PKWY	LADD ALFRED	1116 SNEED GLEN DR	FRANKLIN	TN	37069	MGA-1 (Williamson Co.)	GCCO-6	Conventional
106---18003	CAROTHERS PKWY	PROPST REALTY NASHVILLE LLC	305 CHURCH ST #715	HUNTSVILLE	AL	35801	R-2	GCCO-6	Conventional
106---18134	CAROTHERS PKWY	PROPST REALTY NASHVILLE LLC	305 CHURCH ST #715	HUNTSVILLE	AL	35801	R-2	GCCO-6	Conventional
106---18139	CAROTHERS PKWY	TEDEAN LP	317 MAIN ST 201	FRANKLIN	TN	37064	R-2	GCCO-6	Conventional
106---18141	CAROTHERS PKWY	PROPST REALTY NASHVILLE LLC	305 CHURCH ST #715	HUNTSVILLE	AL	35801	R-2	GCCO-6	Conventional
106M-800100	901 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-800200	923 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-800300	929 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-800400	935 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-800500	941 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-800600	947 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-800700	953 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-800800	959 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-801800	225 BEAMON DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-801900	303 BEAMON DR	PROPST REALTY NASHVILLE LLC	305 CHURCH ST #715	HUNTSVILLE	AL	35801	R-2	GCCO-6	Conventional
106M-802000	224 BEAMON DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-802100	912 HORNSBY DR	DOUGLASS STEPHEN K	912 HORNSBY DR	FRANKLIN	TN	37064	R-2	GCCO-6	Conventional
106M-802200	918 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-802300	924 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-802400	930 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-802500	936 HORNSBY DR	BRENLEY CROSSING PARTNERS LLC	3545 MARKET ST	HOOVER	AL	35226	R-2	GCCO-6	Conventional
106M-802600	942 HORNSBY DR	GOOCH RYAN M	942 HORNSBY DR	FRANKLIN	TN	37064	R-2	GCCO-6	Conventional
106M-803300	HORNSBY DR	PROPST REALTY NASHVILLE LLC	305 CHURCH ST #715	HUNTSVILLE	AL	35801	R-2	GCCO-6	Conventional
106M-803400	HORNSBY DR	PROPST REALTY NASHVILLE LLC	305 CHURCH ST #715	HUNTSVILLE	AL	35801	R-2	GCCO-6	Conventional
106M-803500	HORNSBY DR	PROPST REALTY NASHVILLE LLC	305 CHURCH ST #715	HUNTSVILLE	AL	35801	R-2	GCCO-6	Conventional
117---03600	LONG LN	RICHARDSON BRAXTON R III	716 EDELBLUT DR	SILVER SPRINGS	MD	20901	MGA-1 (Williamson Co.)	Williamson County	Williamson County

LEGAL DESCRIPTIONS

PARCEL 180.01

Map 106, Parcel No. 180.01
William B. Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #1 on the attached exhibit, and proceeding as follows:
Thence, continuing N00°40'1"E, a distance of 487.57 feet to a point;
thence, N06°24'59"W, a distance of 53.10 feet to a point;
thence, N18°30'59"W, a distance of 54.91 feet to a point;
thence, N31°24'59"W, a distance of 52.76 feet to a point;
thence, N47°30'05"W, a distance of 47.36 feet to a point;
thence, N54°14'14"E, a distance of 41.07 feet to a point;
thence, S82°08'44"E, a distance of 301.11 feet to a point;
thence, N77°33'16"E, a distance of 12.98 feet to a point;
thence, N38°52'16"E, a distance of 14.25 feet to a point;
thence, N19°32'36"E, a distance of 251.97 feet to a point;
thence, N46°19'26"E, a distance of 649.66 feet to a point;
thence, N72°13'16"E, a distance of 606.76 feet to a point;
thence, S06°40'15"W, a distance of 219.78 feet to a point;
thence, S46°17'35"W, a distance of 1,908.98 feet to the POINT OF BEGINNING.
Containing 670,540.05 square feet or 15.3935 acres, more or less.
The aforementioned property is on a parcel of land owned by William B. Moss, as shown on Tax Map No. 106, Parcel No. 180.01 and recorded in Deed Book 5465, Page 77 with the Williamson County Register of Deeds.

- NOTE:
1. ALL PARCELS ARE INCLUDED IN PUD DEVELOPMENT PLAN AND REZONING REQUEST.
2. ONLY PARCEL 180.01 IS INCLUDED IN ANNEXATION

PARCEL 180.02

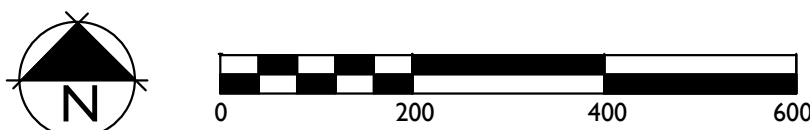
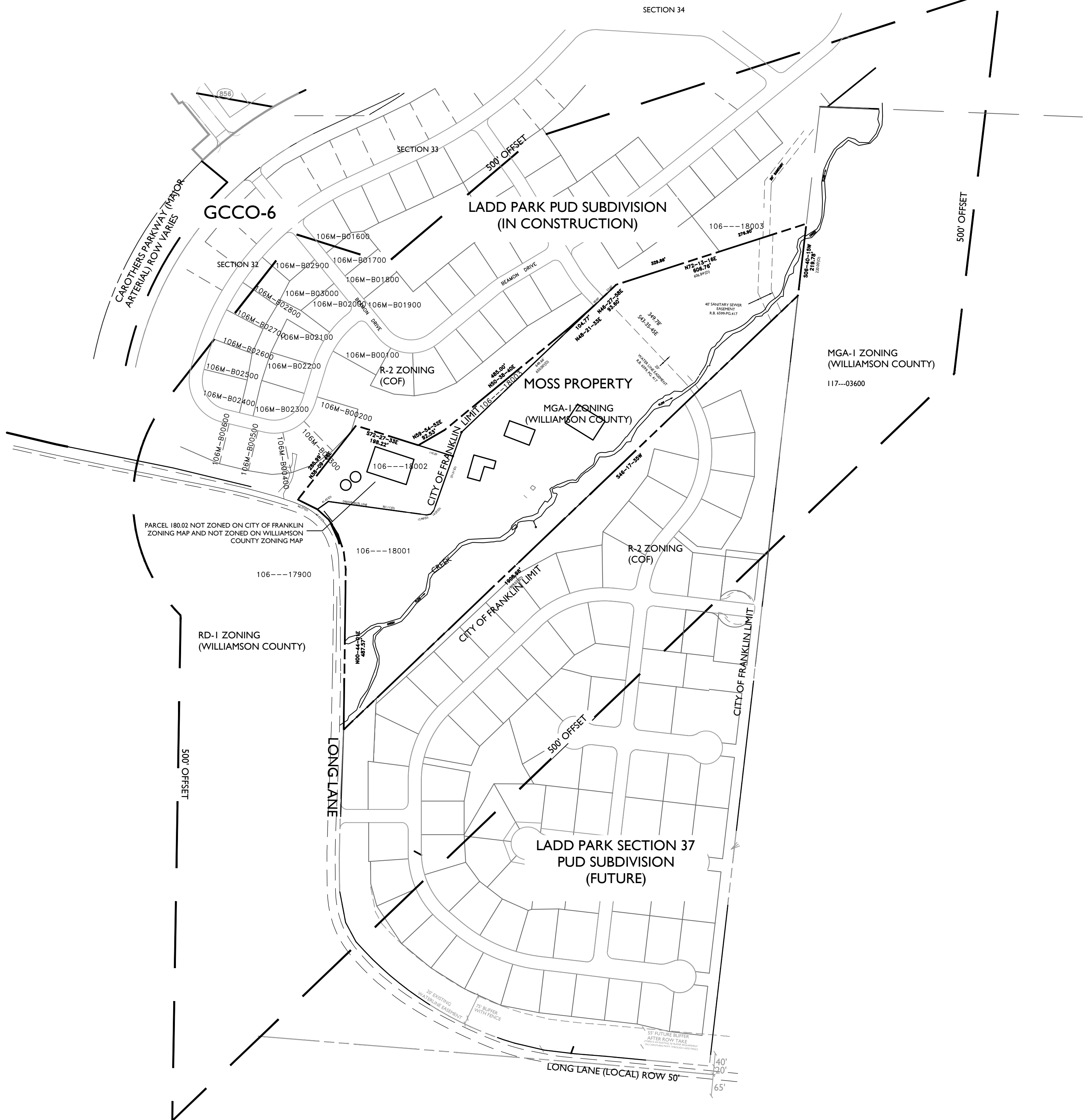
Map 106, Parcel No. 180.02
Barry and Dawn Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #2 on the attached exhibit, and proceeding as follows:
Thence, continuing N63°33'31"W, a distance of 66.51 feet to a point;
thence, N38°09'46"E, a distance of 285.99 feet to a point;
thence, S72°27'33"E, a distance of 198.22 feet to a point;
thence continue easterly along said line, a distance of 110.67 feet;
thence, S19°32'14"W, a distance of 174.77 feet to a point;
thence, S38°52'16"W, a distance of 14.25 feet to a point;
thence, S77°53'16"W, a distance of 12.98 feet to a point;
thence, S54°14'14"E, a distance of 41.07 feet to the POINT OF BEGINNING.
Containing 79,697.38 square feet or 1.8296 acres, more or less.
The aforementioned property is on a parcel of land owned by Barry and Dawn Moss, as shown on Tax Map No. 106, Parcel No. 180.02 and recorded in Deed Book 6924, Page 295 with the Williamson County Register of Deeds.

PARCEL 180.03

Map 106, Parcel No. 180.03
Barry Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #3 on the attached exhibit, and proceeding as follows:
Thence, continuing N72°27'33"W, a distance of 110.67 feet to a point;
thence, N59°54'52"E, a distance of 92.53 feet to a point;
thence, N50°38'40"E, a distance of 485.00 feet to a point;
thence, N48°21'33"E, a distance of 104.77 feet to a point;
thence, N46°27'58"E, a distance of 40.00 feet to a point;
thence continue northeasterly along said line, a distance of 53.60 feet;
thence, S46°17'26"W, a distance of 649.66 feet to a point;
thence, S19°32'22"W, a distance of 77.21 feet to the POINT OF BEGINNING.
Containing 16,063.05 square feet or 0.3688 acres, more or less.
The aforementioned property is on a parcel of land owned by Barry Moss, as shown on Tax Map No. 106, Parcel No. 180.03 and recorded in Deed Book 6599, Page 425 with the Williamson County Register of Deeds.

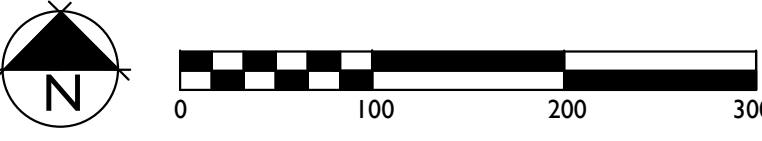
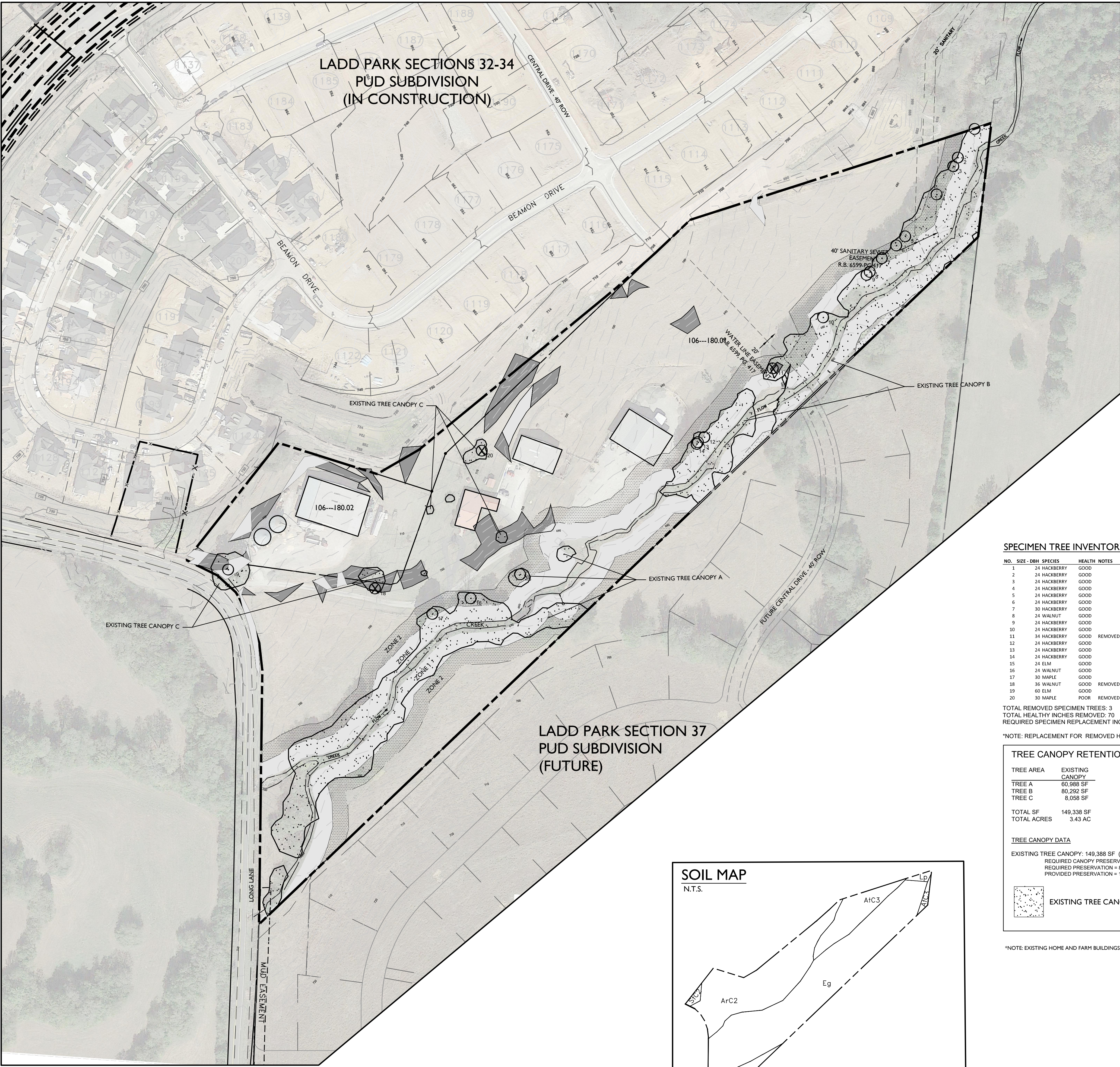


BOUNDARY AND TOPOGRAPHY SURVEY PROVIDED BY:

HFR DESIGN
MICHAEL STORY RLS, TN # 1989
214 CENTERVIEW DRIVE, SUITE 300
BRENTWOOD, TN 37027
(615) 370-8500

NOTE:
HFR PROVIDED THE BOUNDARY SURVEY, TREE SURVEY AND FIELD TOPOGRAPHIC SURVEY INSIDE THE STREAM BUFFER, ON ADJOINING PROPERTIES AND ALONG LONG LANE. OLDER FIELD SURVEY BY HFR AND PROPOSED DEVELOPMENT PLANS BY SEI WERE USED TO GENERATE THIS INFORMATION. THE REMAINING INFORMATION ON THE MOSS PROPERTY WAS TAKEN FROM THE FRANKLIN GIS BUT TIED VERY CLOSE TO THE FIELD SURVEY DATA.

AT SITE PLAN THE ENTIRE MOSS PROPERTY WILL HAVE A NEW FIELD RUN TOPO.



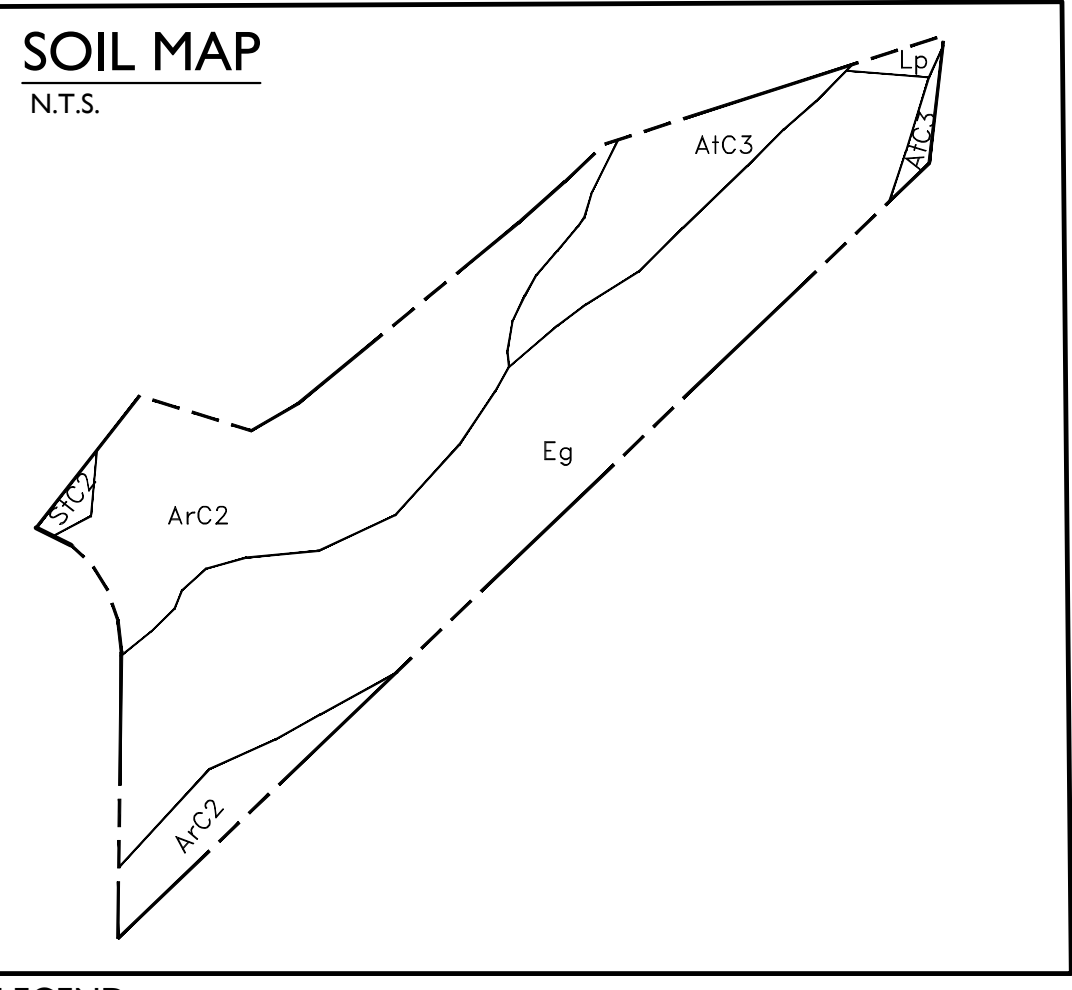
BOUNDARY AND TOPOGRAPHY SURVEY PROVIDED BY:
HFR DESIGN
MICHAEL STORY RLS, TN# 1989
214 CENTERVIEW DRIVE, SUITE 300
BENTWOOD, TN 37027
(615) 370-8500

MINERAL RIGHTS:
NO MINERAL RIGHTS ARE HELD BY PARTIES OUTSIDE OF THE OWNER.

NOTE:
HFR PROVIDED THE BOUNDARY SURVEY, TREE SURVEY AND
FIELD TOPOGRAPHIC SURVEY INSIDE THE STREAM BUFFER.
ON ADJOINING PROPERTIES AND ALONG LONG LANE, OLDER
FIELD SURVEY BY HFR AND PROPOSED DEVELOPMENT PLANS
BY SEI WERE USED TO GENERATE THIS INFORMATION. THE
REMAINING INFORMATION ON THE MOSS PROPERTY WAS
TAKEN FROM THE FRANKLIN GIS BUT TIED VERY CLOSE TO
THE FIELD SURVEY DATA.

AT SITE PLAN THE ENTIRE MOSS PROPERTY WILL HAVE A NEW
FIELD RUN TOPO.

AERIAL IMAGE: C 2017 GOOGLE,
MAP DATA: C 2017 GOOGLE



LEGEND

ArC2 ARMOUR SILT LOAM; 5% TO 12% SLOPES, ERODED
ArC3 ARMOUR SILTY CLAY LOAM; 5% TO 12% SLOPES, SEVERELY ERODED
Eg EGAN SILT LOAM, PHOSPHATIC
Lp LINDELL SILT LOAM; 0% TO 2% SLOPES, OCCASIONALLY FLOODED
ScC2 STIVERSVILLE SILT LOAM, 5% TO 12% SLOPES, ERODED

SPECIMEN TREE INVENTORY

NO.	SIZE - DBH	SPECIES	HEALTH	NOTES
1	24	HACKBERRY	GOOD	
2	24	HACKBERRY	GOOD	
3	24	HACKBERRY	GOOD	
4	24	HACKBERRY	GOOD	
5	24	HACKBERRY	GOOD	
6	24	HACKBERRY	GOOD	
7	30	HACKBERRY	GOOD	
8	24	WALNUT	GOOD	
9	24	HACKBERRY	GOOD	
10	24	HACKBERRY	GOOD	
11	34	HACKBERRY	GOOD	REMOVED
12	24	HACKBERRY	GOOD	
13	24	HACKBERRY	GOOD	
14	24	HACKBERRY	GOOD	
15	24	ELM	GOOD	
16	24	WALNUT	GOOD	
17	30	MAPLE	GOOD	
18	36	WALNUT	GOOD	REMOVED
19	60	ELM	GOOD	
20	30	MAPLE	POOR	REMOVED

TOTAL REMOVED SPECIMEN TREES: 3
TOTAL HEALTHY INCHES REMOVED: 70
REQUIRED SPECIMEN REPLACEMENT INCHES: 140

*NOTE: REPLACEMENT FOR REMOVED HEALTHY INCHES IS 2:1

TREE CANOPY RETENTION

TREE AREA	EXISTING CANOPY
TREE A	60,988 SF
TREE B	80,292 SF
TREE C	8,058 SF
TOTAL SF	149,338 SF
TOTAL ACRES	3.43 AC

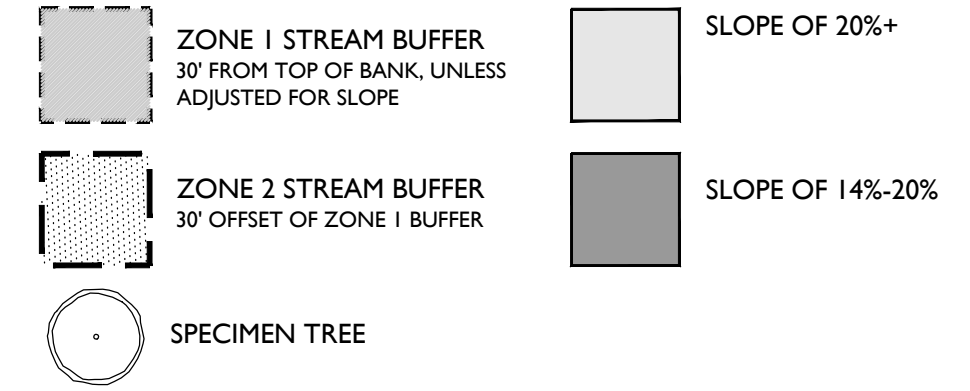
TREE CANOPY DATA

EXISTING TREE CANOPY: 149,338 SF (19% OF TOTAL SITE)
REQUIRED CANOPY PRESERVATION = 54%
REQUIRED PRESERVATION = 80,843 SF (1.85 AC)
PROVIDED PRESERVATION = 135,270 SF (91% OF CANOPY)



*NOTE: EXISTING HOME AND FARM BUILDINGS TO BE REMOVED.

KEY



SITE DATA

PROJECT NAME:	MOSS PROPERTY PUD REZONING AND ANNEXATION REQUEST
PROJECT #:	6440
SUBDIVISION:	N/A
LOT NUMBER:	N/A
ADDRESS:	4360 LONG LANE
CITY:	FRANKLIN
COUNTY:	WILLIAMSON
STATE:	TENNESSEE
CIVIL DISTRICT:	10TH OF WILLIAMSON COUNTY
EXISTING ZONING:	MGA-1
PROPOSED ZONING:	SD-R (1.71)
CHARACTER AREA OVERLAY:	GCCO-6
OTHER APPLICABLE OVERLAYS:	N/A
APPLICABLE DEVELOPMENT STANDARD:	CONVENTIONAL
ACREAGE OF SITE:	17.59 AC (TOTAL SITE) 15.39 AC (106---18001) 1.83 AC (106---18002) 0.37 AC (106---18003)
MINIMUM REQUIRED SETBACK LINES:	15'
YARD FRONTING ANY STREET:	5'
SIDE YARD:	15'
CORNER SIDE YARD:	10'
REAR YARD:	
OWNER:	WILLIAM BARRY MOSS 4360 LONG LANE FRANKLIN, TN 37064
APPLICANT:	GAMBLE DESIGN COLLABORATIVE 144 S.E. PARKWAY, SUITE 200 FRANKLIN, TN 37064 GREG GAMBLE (615) 975-5765 greggamble209@gmail.com
BUILDING SQUARE FOOTAGE:	N/A
BUILDING HEIGHT:	2 STORY
LANDSCAPE SURFACE RATIO:	.20 (153,244 SF REQUIRED) .56 (428,047 SF PROVIDED)
MINIMUM PARKING REQUIREMENT:	2 SPACES PER HOME
EXISTING PARKING:	N/A
PARKING PROVIDED:	1.71 DUA
RESIDENTIAL DENSITY:	149,338 SF (19% OF TOTAL SITE)
TREE CANOPY:	30 X 1200SF = 36,000SF
PARKLAND:	FEES IN LIEU
OPEN SPACE:	15% REQUIRED (2.64 AC) 56% PROVIDED (9.83 AC)
FORMAL:	1.18 AC
INFORMAL:	8.65 AC PROVIDED

STATEMENT OF IMPACTS:

WATER:
WATER SERVICE WILL BE PROVIDED BY MILGROFTON UTILITY DISTRICT. WATER MAINS ARE LOCATED IN LONG LANE AND IN CENTRAL DRIVE.
30SFU * 350 GPD = 10,500 GPD

SEWER:
SEWER SERVICE WILL BE PROVIDED BY THE CITY OF FRANKLIN. SEWER MAIN WILL CONNECT TO MAIN LINE RUNNING FROM LADD PARK SECTION 34 TO LADD PARK SECTION 37. THIS LINE RUNS DOWN CENTRAL DRIVE THROUGH THIS SECTION.

REPURIFIED (REUSE) WATER FACILITIES:
NOT AVAILABLE

STREET NETWORK:
LONG LANE IS A LOCAL ROAD IN FRONT OF THIS PROPERTY. TO THE EAST OF THIS PROPERTY LONG LANE IS A MINOR COLLECTOR. CENTRAL DRIVE, A LOCAL ROAD, CONTINUES ACROSS THIS PROPERTY AND CONNECTS TWO SECTIONS OF LADD PARK. LOCAL ROAD 'A' PROVIDES A CONNECTION TO LONG LANE, AND THROUGH THIS NETWORK PROVIDES ANOTHER MEANS OF INGRESS/EGRESS TO THE LADD PARK COMMUNITY.

DRAINAGE FACILITIES:
THE STORM DRAINAGE IS HANDLED BY A DETENTION POND AND THEN TREATED WITH BIO-RETENTION.

POLICE, FIRE AND RECREATIONAL FACILITIES:
POLICE - 900 COLUMBIA AVE., 7.4 MILES
FIRE - STATION #2, 907 MURFREESBORO RD., 5.5 MILES
RECREATIONAL - WINSTEAD HILL PARK, 4023 COLUMBIA AVE., 6.8 MILES

PROJECTED STUDENT POPULATION:
30 X 0.64 STUDENTS = 20 PROJECTED STUDENTS

REFUSE COLLECTION:
REFUSE COLLECTION SERVICE WILL BE PROVIDED BY THE CITY OF FRANKLIN SOLID WASTE DEPARTMENT.

RESTRICTIVE COVENANTS:
THIS PUD WILL HAVE A HOMEOWNERS ASSOCIATION.

LAND USE PLAN COMPLIANCE:

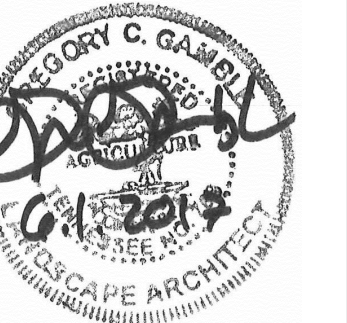
CHARACTER AREA: GCCO-6
APPLICABLE DEVELOPMENT STANDARD: CONVENTIONAL
ENVISION FRANKLIN: SINGLE FAMILY RESIDENTIAL

IN COMPLIANCE WITH BOTH THE GOCO AND ENVISION FRANKLIN, THE MOSS PROPERTY PUD HAS BEEN DESIGNED WITH SINGLE-FAMILY HOMES. THIS NEW DEVELOPMENT WAS DESIGNED TO BE CONSISTENT WITH THE HIGHLANDS AT LADD PARK COMMUNITY, WHICH FLANKS THIS NARROW PROPERTY ON TWO SIDES. SINGLE-FAMILY HOME LOTS ARE COMPARABLE IN SIZE TO THE ADJACENT LADD PARK. MOST OF THE OPEN SPACE IS ON THE SOUTH SIDE OF THE PROPERTY WHICH PRESERVES A STREAM AND STREAM BUFFER FEATURE.

LOCAL COMPATIBILITY AND DESIGN CONCEPT:

THE MOSS PROPERTY WAS CONSIDERED AS A POTENTIAL ADDITION TO THE HIGHLANDS AT LADD PARK DEVELOPMENT IN EARLIER STAGES OF ITS DESIGN. WORKING WITH THE PROPERTY OWNER, THE DEVELOPMENT TEAM AT LADD PARK CREATED A MASTER PLAN THAT WOULD ALLOW FUTURE INTEGRATION OF THE MOSS PROPERTY INTO THE COMMUNITY. THIS WAS ACHIEVED BY DESIGNING CENTRAL DRIVE TO CROSS THE MOSS PROPERTY AND PROVIDE CONNECTION BETWEEN TWO NEIGHBORHOODS IN THE LADD PARK COMMUNITY. THE MOSS PROPERTY ALSO PROPOSES A CONNECTION BACK TO LONG LANE. THE SEGMENT OF CENTRAL DRIVE THAT CROSSES THIS PROPERTY, AS WELL AS LOCAL ROAD 'A', ARE BEING DESIGNED WITH A 40' ROW TO BE CONSISTENT WITH THE REST OF LADD PARK.

LOT SIZES ARE CONSISTENT WITH THE ADJACENT LADD PARK. THE DENSITY (1.71 DUA) OF THE MOSS PROPERTY IS ALSO CONSISTENT WITH THE ALMOST 2 DUA OF LADD PARK.

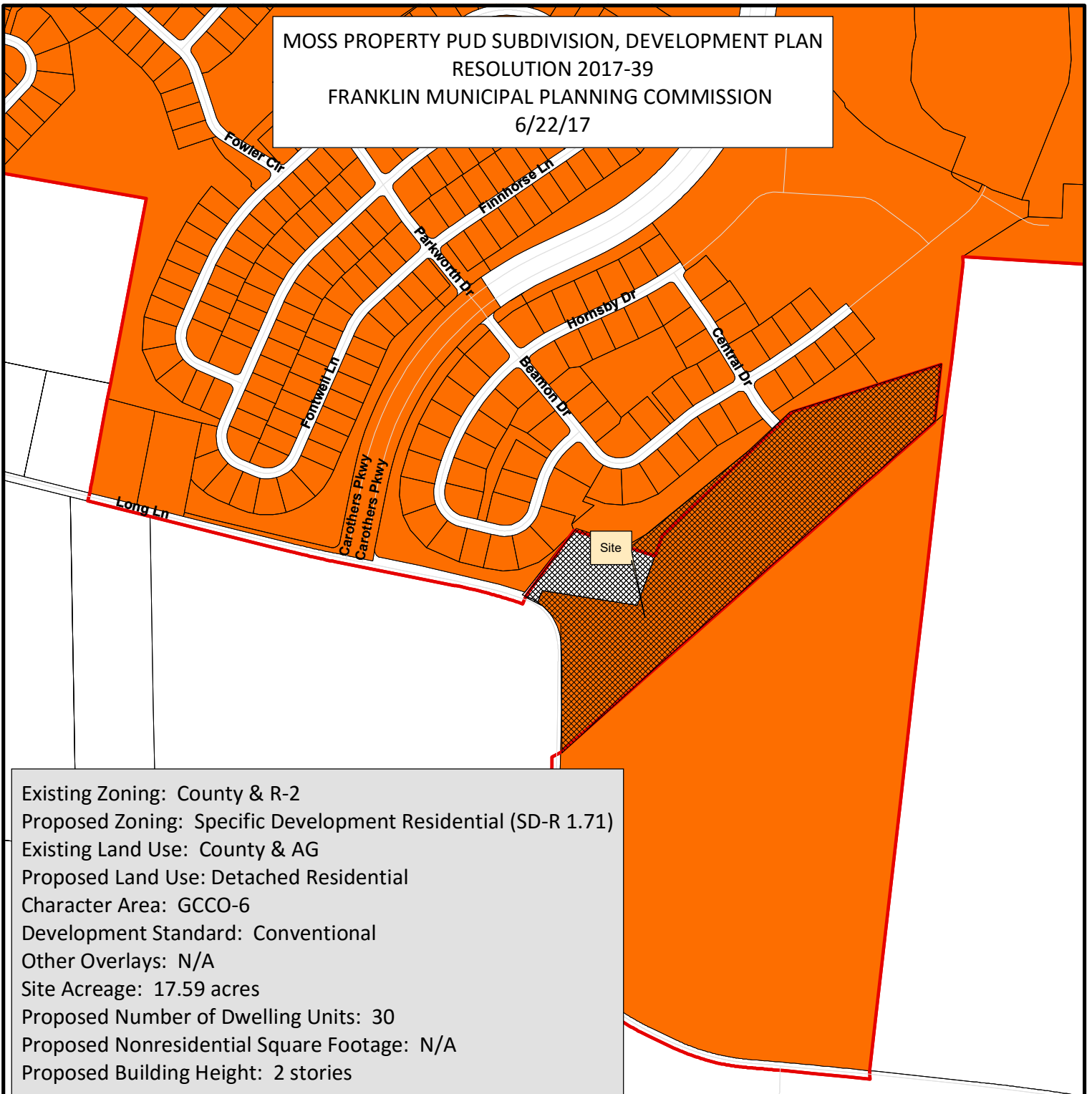


ISSUED: MAY 8, 2017

Revision Date	
1/1	June 1, 2017
2/1	
3/1	
4/1	

**ENLARGED
EXISTING
CONDITIONS**

MOSS PROPERTY PUD SUBDIVISION, DEVELOPMENT PLAN
 RESOLUTION 2017-39
 FRANKLIN MUNICIPAL PLANNING COMMISSION
 6/22/17



Existing Zoning: County & R-2
 Proposed Zoning: Specific Development Residential (SD-R 1.71)
 Existing Land Use: County & AG
 Proposed Land Use: Detached Residential
 Character Area: GCCO-6
 Development Standard: Conventional
 Other Overlays: N/A
 Site Acreage: 17.59 acres
 Proposed Number of Dwelling Units: 30
 Proposed Nonresidential Square Footage: N/A
 Proposed Building Height: 2 stories

- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
| R-3 Residential District | NC Neighborhood Commercial District |
| R-6 Residential District | GC General Commercial District |
| RM-10 Attached 10 Residential District | LI Light Industrial District |
| RM-15 Attached 15 Residential District | HI Heavy Industrial District |
| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



0 200 400 800
 Feet

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 It was compiled from the most authentic information available.
 The City is not responsible for any errors or omissions contained hereon.
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RESOLUTION 2017-39

TO BE ENTITLED: "A RESOLUTION APPROVING A DEVELOPMENT PLAN FOR THE MOSS PROPERTY PUD SUBDIVISION, FOR THE PROPERTY LOCATED EAST OF CAROTHERS PARKWAY AND NORTH OF LONG LANE 4360 LONG LANE."

WHEREAS, the Board of Mayor and Aldermen (BOMA) of the City of Franklin, Tennessee, has, or will, approve the zoning for the property as part of Ordinance 2017-27; and

WHEREAS, the Planned Unit Development (PUD) process is a review procedure that is intended to encourage innovative land planning and design and avoid the monotony sometimes associated with large developments by:

- (a) Reducing or eliminating the inflexibility that sometimes results from strict application of zoning standards that were designed primarily for individual lots;
- (b) Allowing greater freedom in selecting the means to provide access, light, open space, and design amenities;
- (c) Encouraging a sensitive design that respects the surrounding established land use character and natural or man-made features of the site including, but not limited to, trees, historic features, streams, hillsides, and floodplains;
- (d) Promoting quality design and environmentally sensitive development by allowing development to take advantage of special site characteristics, locations, and land uses; and
- (e) Allowing deviations from certain zoning standards that would otherwise apply if not contrary to the general spirit and intent of this ordinance; and

WHEREAS, the PUD process requires the approval of a Development Plan that is reviewed and approved by BOMA, after a public hearing and a recommendation by the Franklin Municipal Planning Commission; and

WHEREAS, in accordance with the provisions of the City of Franklin, Tennessee, Zoning Ordinance, and as required by *Tennessee Code Annotated* § 13-4-310, as amended, the approval of the Development Plan by the BOMA will initiate a vesting period during which the development standards adopted by the City and in effect on the date of approval shall remain the standards applicable to the approved Development Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That the legal description of the property included in the Development Plan is as follows:

PREMISES CONSIDERED	
Map-Parcel	Acres
106---18001	15.39
106---18002	1.83
106---18003	0.36
Total	17.59

Parcel 180.01
05-08-17

Map 106, Parcel No. 180.01
William B. Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #1 on the attached exhibit, and proceeding as follows;

Thence, continuing N00°44'01"E, a distance of 487.57 feet to a point;
thence, N06°24'59"W, a distance of 53.10 feet to a point;
thence, N18°30'59"W, a distance of 54.91 feet to a point;
thence, N31°34'59"W, a distance of 52.76 feet to a point;
thence, N47°30'05"W, a distance of 47.36 feet to a point;
thence, N54°14'14"E, a distance of 41.07 feet to a point;
thence, S82°08'44"E, a distance of 301.11 feet to a point;
thence, N77°53'16"E, a distance of 12.98 feet to a point;
thence, N38°52'16"E, a distance of 14.25 feet to a point;
thence, N19°32'36"E, a distance of 251.97 feet to a point;
thence, N46°19'26"E, a distance of 649.66 feet to a point;
thence, N72°13'16"E, a distance of 606.76 feet to a point;
thence, S06°40'15"W, a distance of 219.78 feet to a point;
thence, S46°17'35"W, a distance of 1,908.98 feet to the POINT OF BEGINNING.

Containing 670,540.05 square feet or 15.3935 acres, more or less.

The aforementioned property is on a parcel of land owned by William B. Moss, as shown on Tax Map No. 106, Parcel No. 180.01 and recorded in Deed Book 5465, Page 77 with the Williamson County Register of Deeds.

Parcel 180.02
05-08-17

Map 106, Parcel No. 180.02
Barry and Dawn Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #2 on the attached exhibit, and proceeding as follows;

Thence, continuing, N63°33'31"W, a distance of 66.51 feet to a point;
thence, N38°09'46"E, a distance of 285.99 feet to a point;
thence, S72°27'33"E, a distance of 198.22 feet to a point;
thence continue easterly along said line, a distance of 110.67 feet;
thence, S19°32'16"W, a distance of 174.77 feet to a point;
thence, S38°52'16"W, a distance of 14.25 feet to a point;
thence, S77°53'16"W, a distance of 12.98 feet to a point;
thence, N82°08'44"W, a distance of 301.11 feet to a point;
thence, S54°14'14"W, a distance of 41.07 feet to the POINT OF BEGINNING.

Containing 79,697.38 square feet or 1.8296 acres, more or less.

The aforementioned property is on a parcel of land owned by Barry and Dawn Moss, as shown on Tax Map No. 106, Parcel No. 180.02 and recorded in Deed Book 6924, Page 295 with the Williamson County Register of Deeds.

Parcel 180.03
05-08-17

Map 106, Parcel No. 180.03
Barry Moss

Beginning at a point, said point being located at the southernmost point of this tract, and indicated as POB #3 on the attached exhibit, and proceeding as follows;

Thence, continuing N72°27'33"W, a distance of 110.67 feet to a point;
thence, N59°54'52"E, a distance of 92.53 feet to a point;
thence, N50°38'40"E, a distance of 485.00 feet to a point;
thence, N48°21'33"E, a distance of 104.77 feet to a point;
thence, N46°27'58"E, a distance of 40.00 feet to a point;
thence continue northeasterly along said line, a distance of 53.60 feet;
thence, S46°19'26"W, a distance of 649.66 feet to a point;
thence, S19°33'22"W, a distance of 77.21 feet to the POINT OF BEGINNING.

Containing 16,063.05 square feet or 0.3688 acres, more or less.

The aforementioned property is on a parcel of land owned by Barry Moss, as shown on Tax Map No. 106, Parcel No. 180.03 and recorded in Deed Book 6599, Page 425 with the Williamson County Register of Deeds.

SECTION II. That the attached Location Map shall serve the purpose of further delineating the geographical boundaries as described by this Resolution.

SECTION III. That the overall entitlements for the Moss Property are as follows:

Entitlements	Moss Property
Base Zone District	County
Character Area Overlay	GCCO-6
Other Zoning Overlays	N/A
Development Standard	Conventional
Number of Dwelling Units	30
Number of Nonresidential Square Footage	N/A
Number of Hotel Rooms	N/A

Connectivity Index	
Open Space Requirements	Formal - 1.18 acres Informal – 8.65 acres
Number of Phases in Development	1

SECTION IV. That the exhibits accompanying the Development Plan, and all conditions and restrictions placed upon the Development Plan by the Franklin Municipal Planning Commission and this Board shall be made a part of this Resolution as though copied verbatim herein, and that a permanent record of the Development Plan, the exhibits accompanying the Development Plan, and all such conditions and restrictions shall be kept in the Franklin Planning and Sustainability Department.

SECTION V. That this Resolution shall take effect from and after the passage of Ordinance 2017-27, on third and final reading, the health, safety, and welfare of the citizens requiring it.

ATTEST:

CITY OF FRANKLIN:

Eric S. Stuckey
City Administrator

Dr. Ken Moore
Mayor

Approved as to form by:

Shauna R. Billingsley
City Attorney

PREAPPLICATION CONFERENCE: _____ 4/18/2017 _____

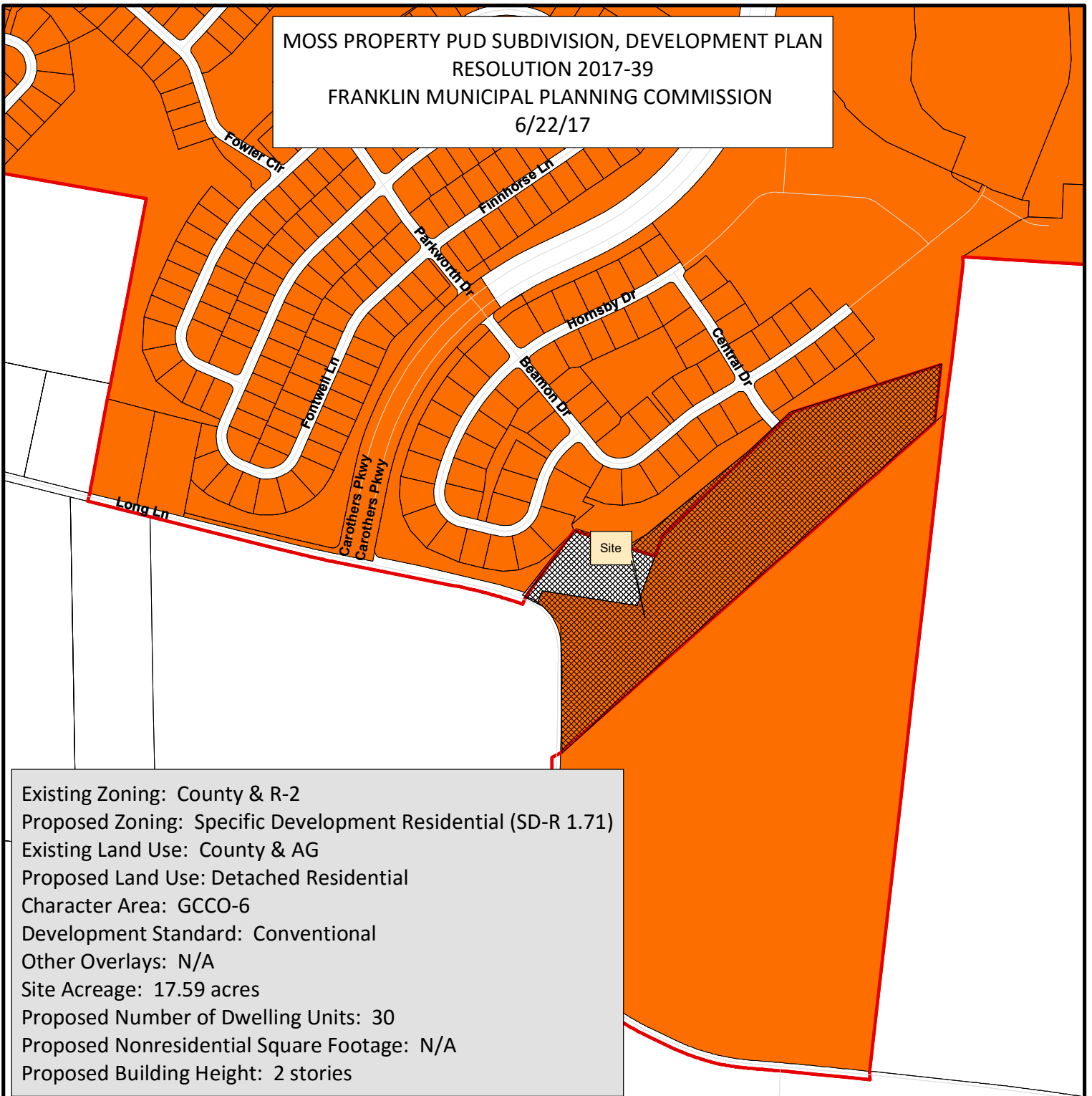
BOMA/FMPC JOINT CONCEPTUAL WORKSHOP: _____ 4/27/2017 _____

NEIGHBORHOOD MEETING: _____ 5/2/2017 _____

PLANNING COMMISSION RECOMMENDED APPROVAL: _____

PUBLIC HEARING AND BOMA APPROVAL: _____

MOSS PROPERTY PUD SUBDIVISION, DEVELOPMENT PLAN
 RESOLUTION 2017-39
 FRANKLIN MUNICIPAL PLANNING COMMISSION
 6/22/17



Existing Zoning: County & R-2
 Proposed Zoning: Specific Development Residential (SD-R 1.71)
 Existing Land Use: County & AG
 Proposed Land Use: Detached Residential
 Character Area: GCCO-6
 Development Standard: Conventional
 Other Overlays: N/A
 Site Acreage: 17.59 acres
 Proposed Number of Dwelling Units: 30
 Proposed Nonresidential Square Footage: N/A
 Proposed Building Height: 2 stories

- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
| R-3 Residential District | NC Neighborhood Commercial District |
| R-6 Residential District | GC General Commercial District |
| RM-10 Attached 10 Residential District | LI Light Industrial District |
| RM-15 Attached 15 Residential District | HI Heavy Industrial District |
| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



0 200 400 800
 Feet

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 It was compiled from the most authentic information available.
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CONDITIONS OF APPROVAL:

Open Issues: 5 These issues are currently being filtered

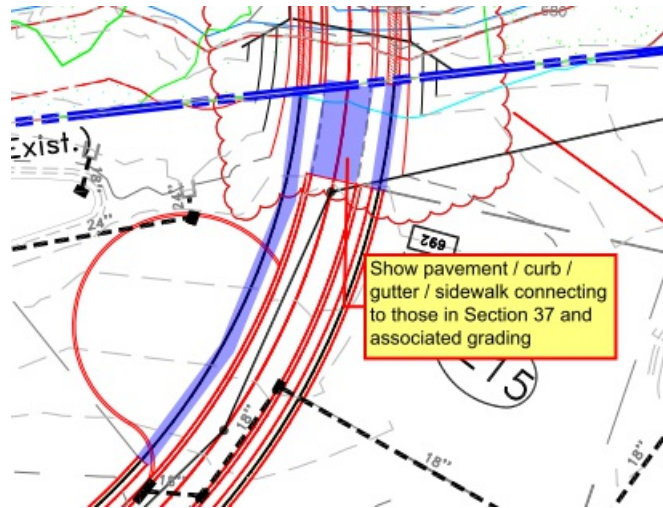
Engineering - PUD Plan Checklist

General Issues

1. Central Drive Connection to Section 37

joe.marlo@franklin.tn.gov Applicant has not adequately addressed the comment. Contour labels have been modified, which was not the intent of the comment. A gap in the drive to Section 37 is still shown.

Applicant to show that Central Drive is intended to be physically connected to that in Section 37 (pavement, curb/gutter, sidewalk, etc.) and show the associated grading required for this connection, similar that that shown on the opposite side of Central Drive to Section 33. The intent is to show a continuous drive with this PUD.

**2. Sidewalk Along Long Lane**

joe.marlo@franklin.tn.gov Comment not adequately addressed.

Applicant to provide a sidewalk along Long Lane, or indicate that in-lieu fees will be requested at Site Plan stage, or a combination of both.

3. Existing Grading

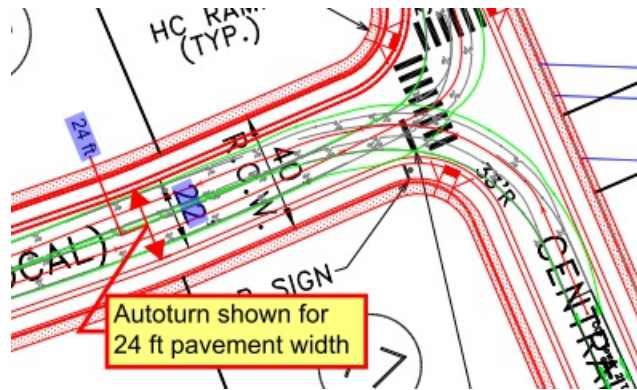
joe.marlo@franklin.tn.gov This is a new comment based on new information on the drawings.

The existing grading shown on Sheet C1.1 does not match that shown on the previous review cycle and appears errant. Applicant to correct the existing grading.

4. Road A Width

joe.marlo@franklinton.gov This is a new comment based on new information shown on the plans.

The pavement dimension call-out for Road A has changed from 24 feet to 22 feet, however the line work was not modified accordingly. Applicant to revise drawings to show Road A drawn to scale on all sheets. Applicant to show successful vehicle maneuvering on Autoturn sheets C4.2 and C4.3 with the reduced pavement width.

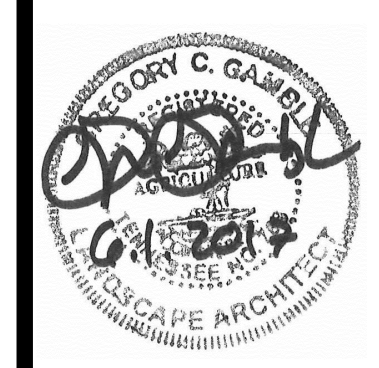


Planning (Landscape)

General Issues

5. Site Plan

larry.mizell@franklinton.gov The Tree Preservation Plan and calculations shall be provided with the site plan. The tree inventory trees shall be labeled on the site plan.

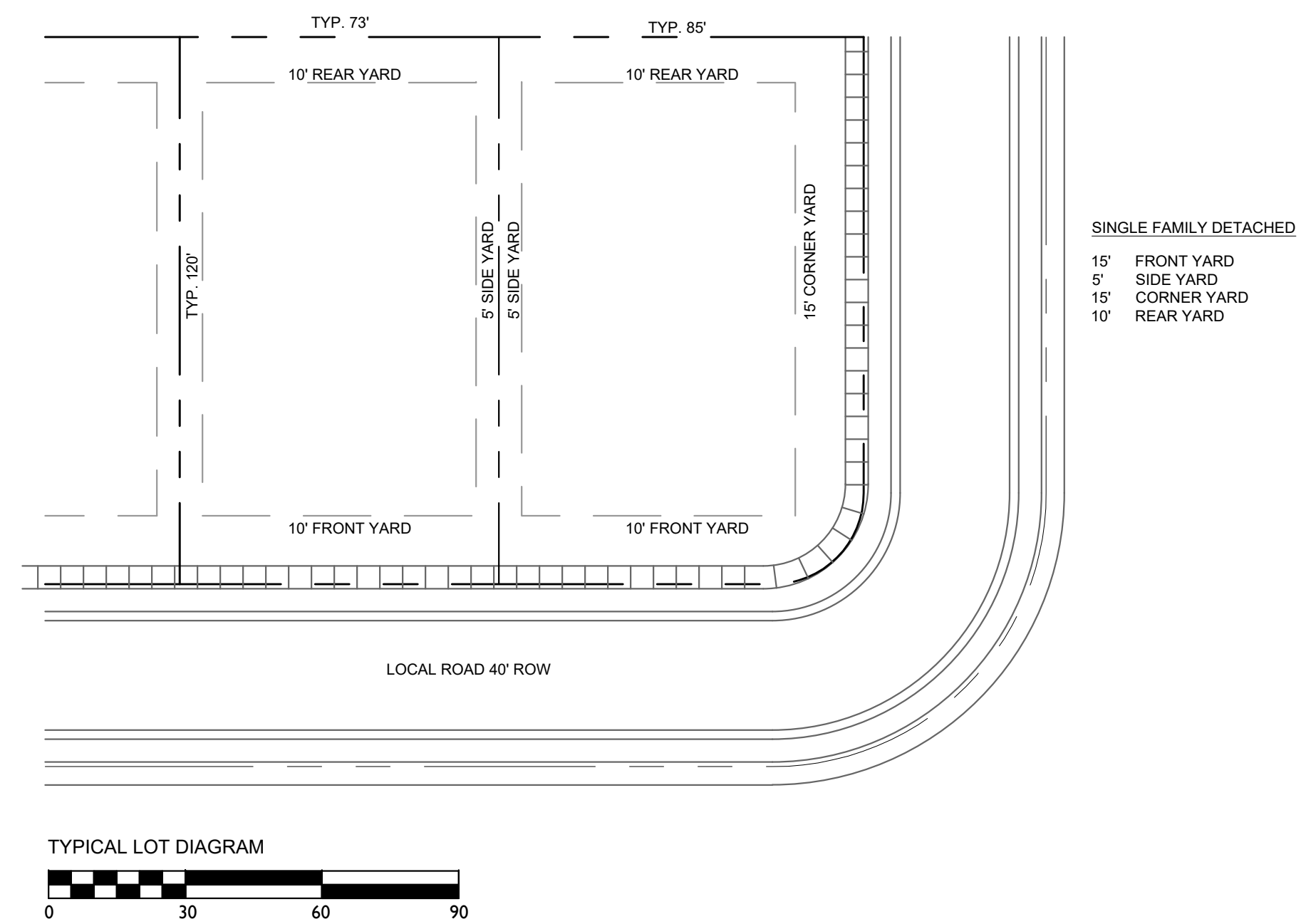


ISSUED: MAY 8, 2017

Revision	Date
1	June 1, 2017
2	
3	
4	



EXAMPLES OF SINGLE-FAMILY ARCHITECTURE
 IMAGES PROVIDED BY THE JONES COMPANY



ORDINANCE 2017-24

TO BE ENTITLED, "AN ORDINANCE TO REZONE .43 ACRES FROM RESIDENTIAL-3 DISTRICT TO OFFICE RESIDENTIAL DISTRICT FOR THE PROPERTY LOCATED AT THE SOUTHEAST CORNER OF COLUMBIA AVE AND CAROLYN AVENUE, 1475 COLUMBIA AVENUE."

WHEREAS, the City of Franklin, Tennessee, encourages responsible growth and the sensible transition of land uses and densities; and

WHEREAS, the Office-Residential district provides zoning for land uses compatible with both the Franklin Land Use Plan and surrounding development; and

WHEREAS, the zoning has been reviewed and approved by BOMA after a public hearing and a recommendation by the Franklin Municipal Planning Commission.

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That the following described property shall be, and is hereby, rezoned from its present zoning classification of Residential -3 District to Office-Residential District:

PREMISES CONSIDERED

Map-Parcel	Acres
078N---00100	.43
Total	.43

Lot No. One:

Being Lot No. 3, Block A, of Highland Gardens Subdivision, a plat of which is of record in Plat Book 1, page 57, Register's Office, Williamson County, Tennessee, to which reference is made for dimension of the lot.

Lot No. Two:

Being the northern two-thirds of Lot No. 2, Block A, of Highland Gardens Subdivision, a plat of which is of record in Plat Book 1, page 57, Register's Office, Williamson County, Tennessee, said property fronts fifty feet on Columbia Pike and runs back between parallel lines one hundred fifty feet with a width at the rear of fifty feet.

Beginning at an iron pin found at the southwest corner of Lot No. Two, said point being 125.0', along bearing of **South 2° 45' 00" West**, from the intersection of rights of way of the southerly right of way line of Carolyn Street (40' wide right of way) and the easterly right of way line of Columbia Highway (Avenue), thence **South 87° 30' 00" East** along the southerly line of Lot No. Two, 150.0 feet to a point, thence **North 2° 45' 00" East** along the easterly lines of Lot No. One and Lot No. Two, 125.0 feet to a point at the southerly right of way line of Carolyn Street, thence **North 87° 30' 00" West** along the northerly line of Lot No. One, 150.0 feet to a point at the intersection of rights of way with Carolyn Street and Columbia Highway (Avenue), thence **South 2° 45' 00" West**, 125.0 feet to an iron pin found and the point of beginning and containing approximately 18,750 square feet of land, more or less.

Being the same property conveyed to Michael C. Gentry and wife, Anita G. Gentry, by deed from Thomas Morgan Hood and wife, Deborah J. Hood, by deed of record in Book 279, page 452, Register's Office, Williamson County, Tennessee, and previously by deed of property conveyed to Thomas Morgan Hood and wife, Deborah J. Hood, by deed from Vesta Early & Erskine H. Early of record in Book 186, page 455, Register's Office, Williamson County, Tennessee. Subject to all easements of record.

SECTION II. That the attached Location Map shall serve the purpose of further delimiting the geographical boundaries as described by this Ordinance.

SECTION III. BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee, that this Ordinance shall take effect from and after its passage on third and final reading, the health, safety, and welfare of the citizens requiring it.

ATTEST:

CITY OF FRANKLIN, TENNESSEE:

By: _____
Eric Stuckey
City Administrator/Recorder

By: _____
Dr. Ken Moore
Mayor

Approved as to form by:

Shauna R. Billingsley
City Attorney

PLANNING COMMISSION RECOMMENDED:

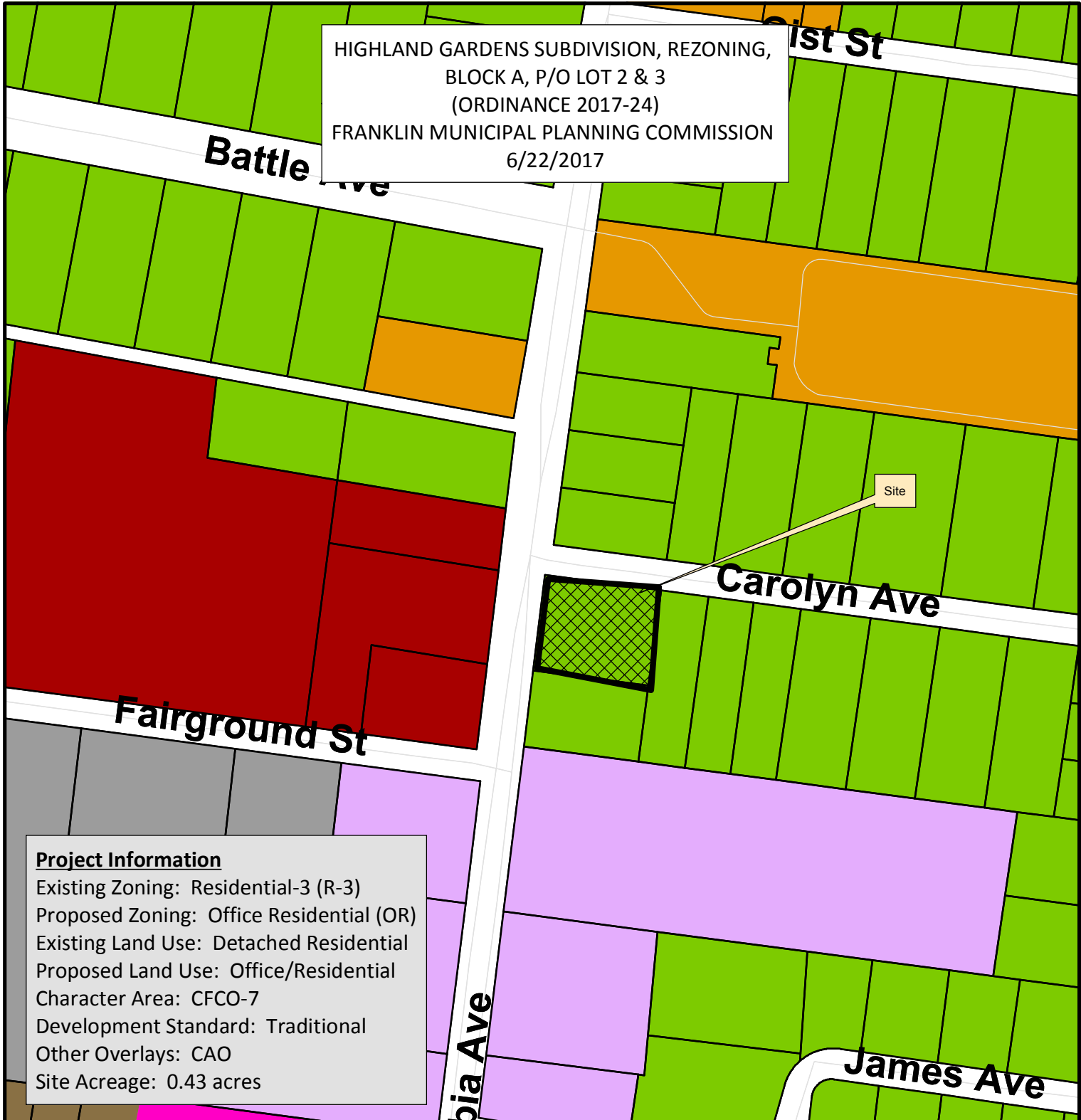
PASSED FIRST READING:

PUBLIC HEARING HELD:

PASSED SECOND READING:

PASSED THIRD READING:

HIGHLAND GARDENS SUBDIVISION, REZONING,
 BLOCK A, P/O LOT 2 & 3
 (ORDINANCE 2017-24)
 FRANKLIN MUNICIPAL PLANNING COMMISSION
 6/22/2017



Project Information

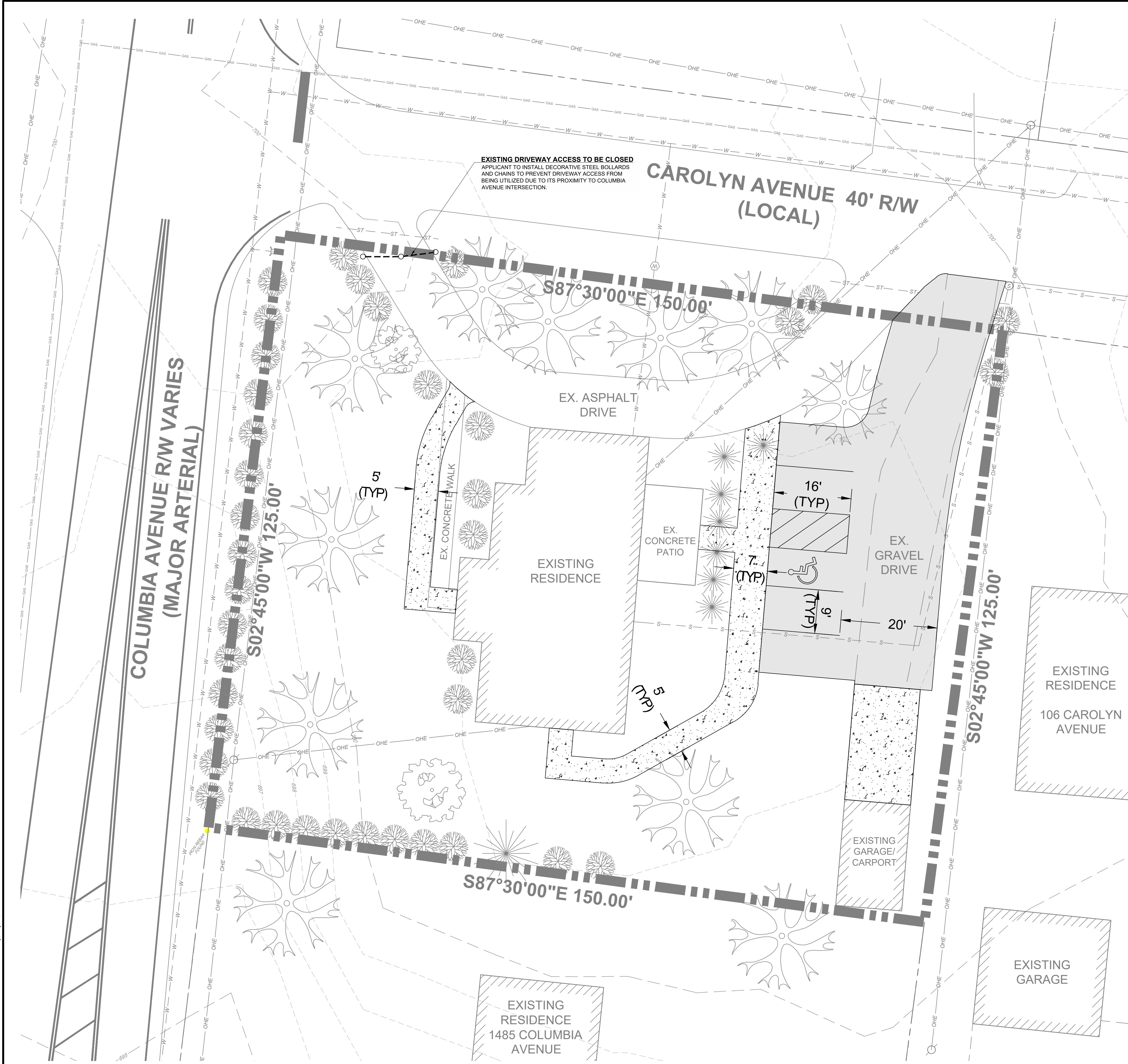
Existing Zoning: Residential-3 (R-3)
 Proposed Zoning: Office Residential (OR)
 Existing Land Use: Detached Residential
 Proposed Land Use: Office/Residential
 Character Area: CFCO-7
 Development Standard: Traditional
 Other Overlays: CAO
 Site Acreage: 0.43 acres

- | | |
|--|-------------------------------------|
| AG Agricultural District | SD-X Specific Development-Variety |
| ER Estate Residential | OR Office Residential District |
| R-1 Residential District | GO General Office District |
| R-2 Residential District | CC Central Commercial District |
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| R-6 Residential District | GC General Commercial District |
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| RM-20 Attached 20 Residential District | CI Civic and Institutional District |
| SD-R Specific Development-Residential | |



0 100 200 400
 Feet

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UTILITY CONTACTS:

SANITARY SEWER
CITY OF FRANKLIN (COF)
109 3RD AVE S
FRANKLIN, TN 37064
CONTACT: BRAD FURLINE
BRAD.FURLINE@FRANKLINTN.GOV
615-202-2288

COF WATER MANAGEMENT INSPECTIONS
124 LUMBER DRIVE
FRANKLIN, TN 37064
CONTACT: BEN MCNEIL
BEN.MCNEIL@FRANKLINTN.GOV
615-794-4554

ELECTRIC SERVICE
MIDDLE TN ELECTRIC MEMBERSHIP CORP.
2156 EDWARD CURD LANE
FRANKLIN, TN 37067
CONTACT: BOBBY O'NEAL
BOBBY.O'NEAL@MTMTC.COM
615-595-4683

GAS SERVICE
ATMOS ENERGY
220 NOAH DRIVE
FRANKLIN, TN 37064
CONTACT: RON MYATT
RON.MYATT@ATMOSENERGY.COM
615-566-3073

COMMUNICATION SERVICE
AT&T
500 LIBERTY PIKE
FRANKLIN, TN 37064
CONTACT: DAVID TUTTEROW
DT8243@ATT.COM
615-595-7816

COMCAST CABLE
660 MAINSTREAM DRIVE
NASHVILLE, TN 37228
CONTACT: MARLON FRIZZELL
MARLON.FRIZZELL@CABLE.COMCAST.COM
615-244-7462X1115647



VICINITY MAP
N.T.S.

SITE DATA

SUBDIVISION DEVELOPMENT:	HIGHLAND GARDENS PB 1, PG 57
LOT NUMBER:	MAP 78N GROUP A, PARCEL 1.00
ADDRESS:	1475 COLUMBIA AVENUE (MAJOR ARTERIAL)
CITY:	FRANKLIN
COUNTY:	WILLIAMSON COUNTY
STATE:	TENNESSEE
CIVIL DISTRICT:	8TH
EXISTING ZONING AND AREA DESIGNATION:	DETACHED RESIDENTIAL (R-3)
PROPOSED ZONING AND AREA DESIGNATION:	OFFICE RESIDENTIAL (OR)
ACREAGE OF SITE:	0.43± AC
SQUARE FOOTAGE OF SITE:	+/- 18,750 SF
MINIMUM REQUIRED SETBACK LINES:	
Yard fronting on Columbia (arterial):	60'
Yard fronting on Carolyn (local):	25'
Side yard:	5'
Rear yard:	30'

OWNER: Michael C Gentry & Anita G. Gentry
Address: 1475 Columbia Avenue, Franklin, TN 37064
Phone No.: 615-568-4204
patriciahood800@gmail.com
Contact Name: Michael C. Gentry

APPLICANT: Consortium, G.P.
c/o M2 Group, LLC
Address: P.O. Box 848 Franklin Tn 37065
Phone No.: 615-406-3415
matt@m2groupllc.com
Contact Name: Matt Bryant, PE

BUILDING SQUARE FOOTAGE:

Building A	1,410± SF
Building B	299± SF
Total SF	1,709± SF

BUILDING HEIGHT:

Building A	20± FT
Building B	16± FT

MAXIMUM FLOOR AREA RATIO: N/A

FLOOR AREA RATIO OF SITE: N/A

MINIMUM PARKING REQUIREMENT:

Office use - +/-1,410 SF (1 space per 300 sf)	4.7 spaces
Total Minimum Parking Required	5 spaces

PARKING PROVIDED: 7 spaces (including 1-carport & 1-existing in existing loop driveway)

PROPOSED IMPERVIOUS SURFACE: 3,835± S.F. (CONCRETE & ASPHALT)

THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE CITY OF FRANKLIN STANDARDS AND THE APPROVAL OF THE FMPC & BOMA. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY EITHER THE RELEVANT DEPARTMENT SUPERINTENDENT OR THE FMPC/BOMA.

NO PORTION OF THIS PROPERTY IS LOCATED IN AN AREA DESIGNATED AS A SPECIAL FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY PANEL 47187C0211G EFFECTIVE DATE DECEMBER 21, 2016.

NO TITLE REPORT WAS PROVIDED OR REVIEWED FOR THIS SITE PLAN.

THE LOCATIONS OF THE UNDERGROUND UTILITIES ARE BASED ON ABOVE GROUND STRUCTURES AND LOCATION BY THE RESPECTIVE UTILITY COMPANIES. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM THE LOCATION SHOWN, AND THERE MAY BE ADDITIONAL UNDERGROUND UTILITIES NOT SHOWN ON THIS SURVEY. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THE ORIGINAL SURVEY TO LOCATE UNDERGROUND UTILITIES/STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR INDIVIDUAL DIGGING IN THIS AREA TO FIELD VERIFY THE LOCATIONS OF THE UTILITIES SHOWN HEREON WITH THE RESPECTIVE UTILITY OWNERS.

REFUSE STORAGE AND SANITATION COLLECTION FACILITIES WILL BE ACCOMMODATED BY AN EXISTING ROLLING GARBAGE CAN PROVIDED BY THE CITY OF FRANKLIN TO BE LOCATED AT THE REAR OF THE EXISTING BUILDING. USERS WILL WHEEL GARBAGE CAN OUT TO CURB FOR CITY PICKUP WEEKLY. NO DUMPSTER ENCLOSURE IS PROPOSED AT THIS TIME.

THERE ARE NO RESTRICTIVE COVENANTS, ARCHITECTURAL CONTROLS, EASEMENTS FOR UTILITIES OR OTHERWISE AT THIS TIME, OTHER THAN THE REQUIREMENT TO COMPLY WITH CITY OF FRANKLIN REGULATIONS.

THERE IS NO ANTICIPATED IMPACT ON WILLIAMSON COUNTY AND/OR FRANKLIN SPECIAL SCHOOL DISTRICT AS THE PROPOSED USE WILL BE OFFICE RESIDENTIAL AND NO CHILDREN ARE ANTICIPATED TO BE PRESENT AND/OR ADDED TO THE SCHOOL SYSTEM.

THE CITY OF FRANKLIN POLICE HEADQUARTERS IS LOCATED APPROX. 0.7± MILES TO THE NORTH OF THE SITE ON COLUMBIA AVENUE. THE PROPERTY IS LOCATED IN FIRE RESPONSE ZONE 1. THE NEAREST FIRE STATION IS LOCATED ON S.R. 96 APPROX. 1.2± MILES FROM THE SUBJECT PARCEL. FIRE STATION 5 IS LOCATED APPROX. 1.2± MILES TO THE SOUTH ON NOAH DRIVE.

THERE ARE NUMEROUS CITY PARKS/RECREATIONAL FACILITIES ALL WITHIN 1.0± MILES OF THE SUBJECT PARCEL.

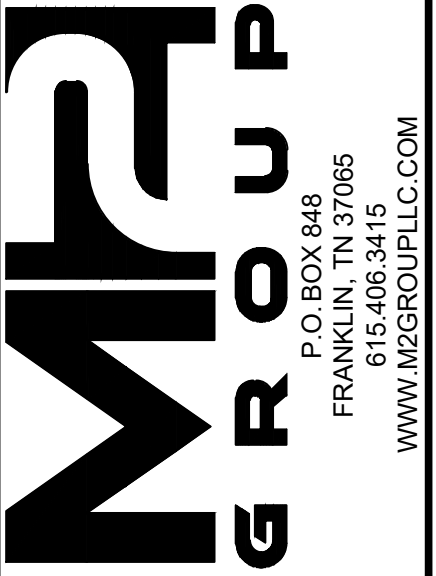


NOTE
DRAWING BASED ON AERIAL PHOTOGRAPHY AND FIELD MEASUREMENTS BY ENGINEER. NO FIELD SURVEY WORK WAS PERFORMED TO VERIFY EXISTING CONDITIONS.

REVISION #	DATE	DESCRIPTION



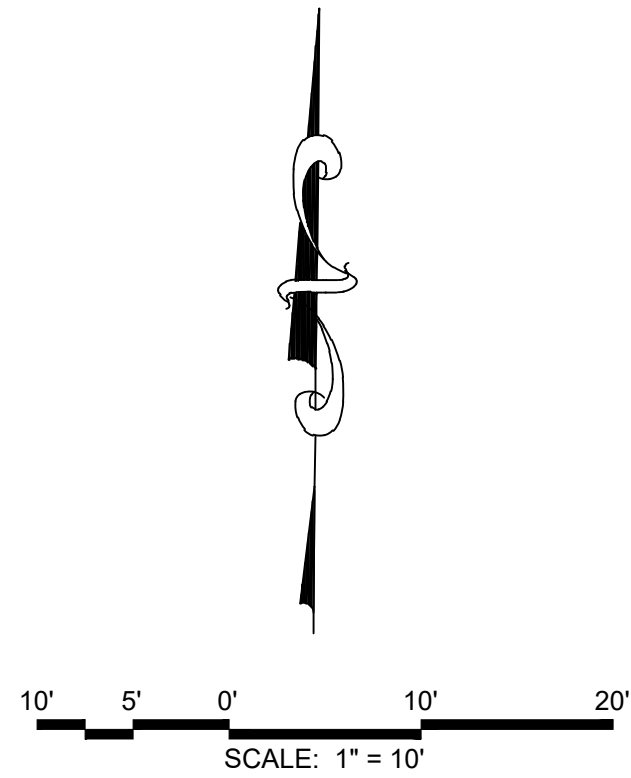
HIGHLAND GARDENS SUBDIVISION
REZONING, BLOCK A, P/O 2&3
1475 COLUMBIA AVENUE
CITY OF FRANKLIN
WILLIAMSON COUNTY, TENNESSEE



DATE:	APRIL, 2017	DRAWN BY:	CCS	M2
PROJECT NO.:		CHECKED BY:		

SHEET NUMBER:
1 of 3

1475 COLUMBIA AVE - ZONING EXHIBIT 04-17-17.DWG (Wednesday, May 24, 2017 8:51:16 AM)



NOTE
DRAWING BASED ON AERIAL PHOTOGRAPHY AND FIELD MEASUREMENTS BY ENGINEER. NO FIELD SURVEY WORK WAS PERFORMED TO VERIFY EXISTING CONDITIONS.

C.O.F. PROJECT No. 6429

REVISION #		DATE	DESCRIPTION



**HIGHLAND GARDENS SUBDIVISION
REZONING, BLOCK A, P/O 2&3
1475 COLUMBIA AVENUE
CITY OF FRANKLIN
WILLIAMSON COUNTY, TENNESSEE**



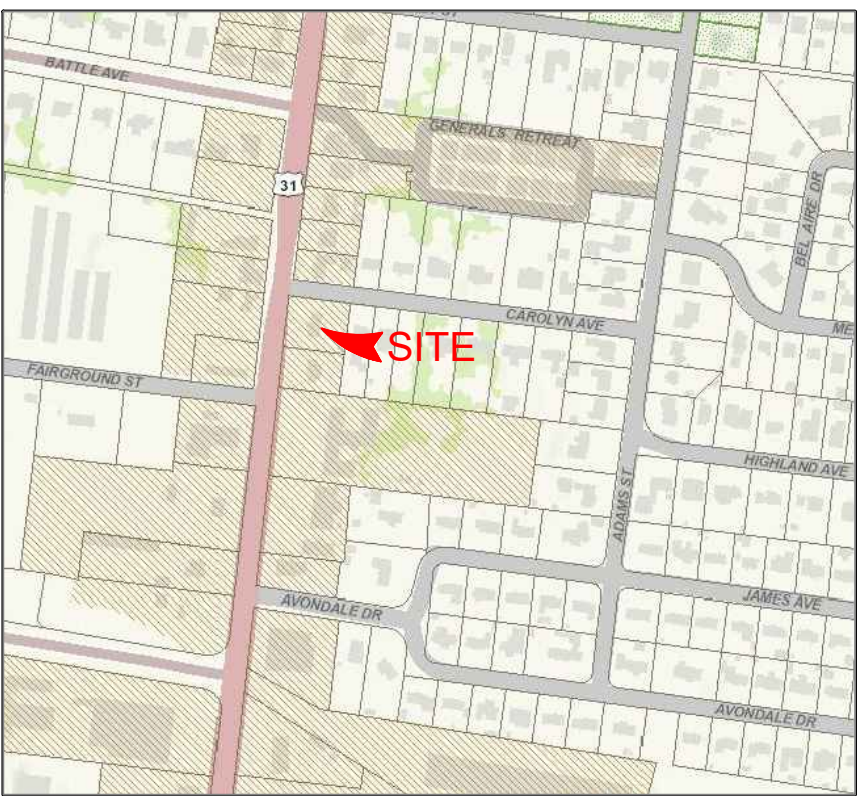
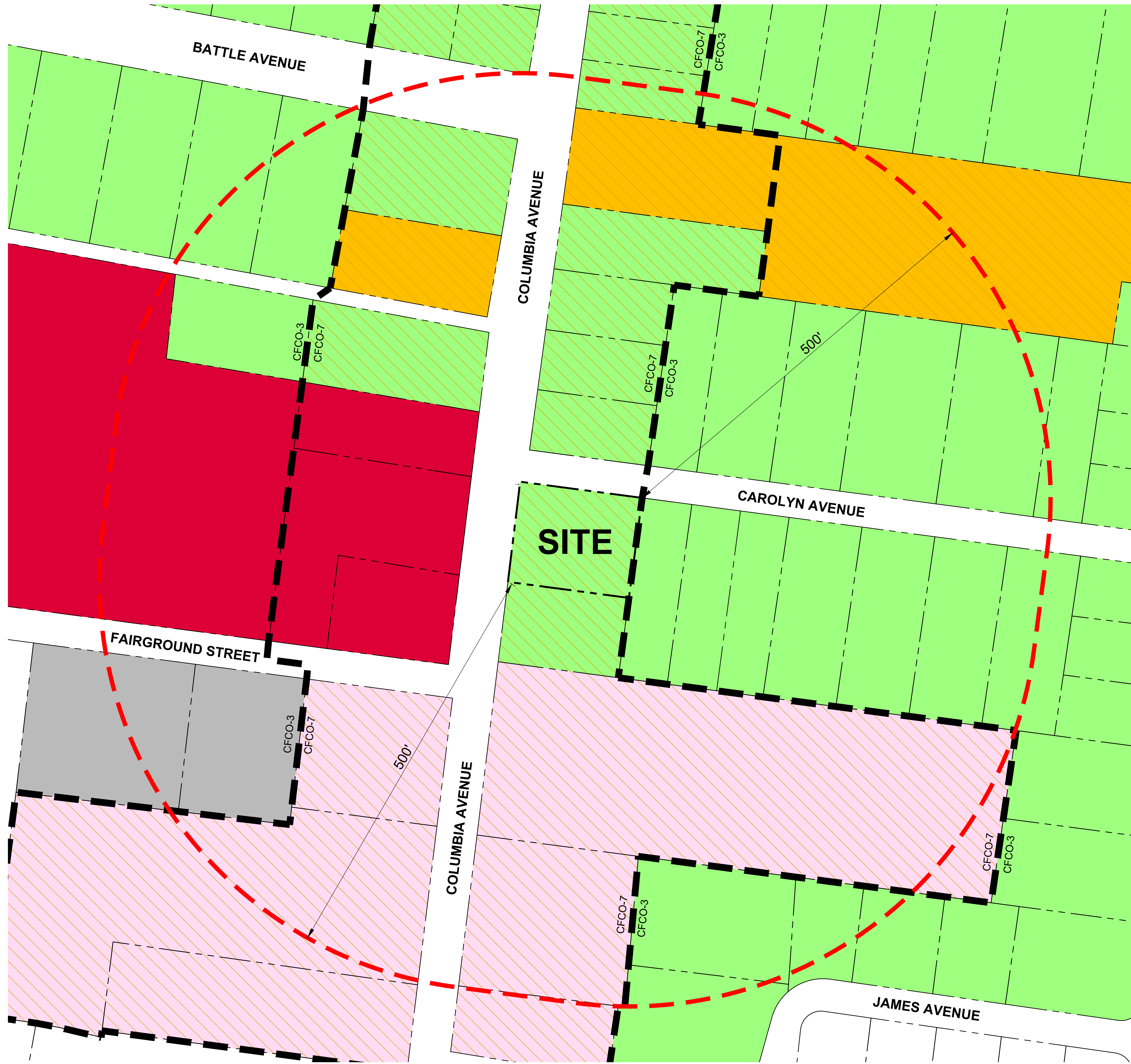
M2 GROUP
P.O. BOX 848
FRANKLIN, TN 37065
615.406.3415
WWW.M2GROUP.LLC.COM

SITE PLAN EXHIBIT WITH AERIAL	DATE:	APRIL, 2017	DRAWN BY:	CCS
	PROJECT NO.:	----	CHECKED BY:	M2

SHEET NUMBER:

2 of 3

1475 COLUMBIA AVE - ZONING EXHIBIT 04-17-17.DWG / Wednesday, May 24, 2017 8:54:17 AM



VICINITY MAP
N.T.S.

ZONING & ZONING OVERLAY DISTRICTS

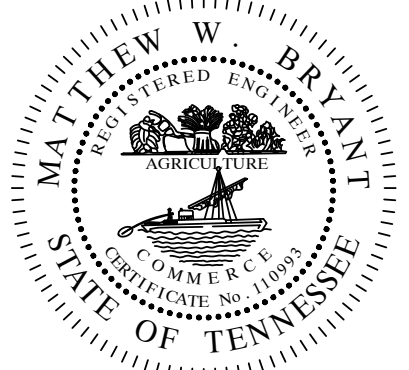
- ER - ESTATE RESIDENTIAL
- R-3 - RESIDENTIAL DISTRICT
- CC - CENTRAL COMMERCIAL DISTRICT
- NC - NEIGHBORHOOD COMMERCIAL
- HI - HEAVY INDUSTRIAL
- CAO - COLUMBIA AVENUE OVERLAY DISTRICT

CHARACTER AREAS

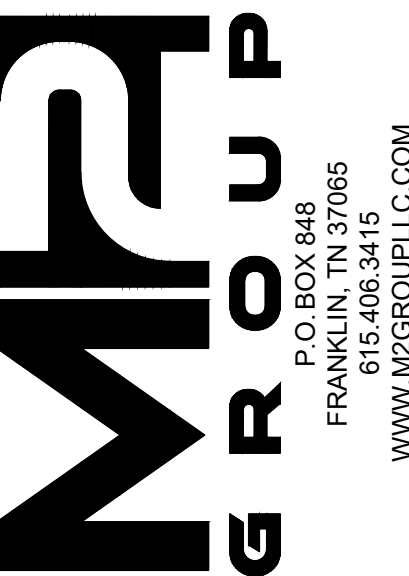
- CFCO-3
- CFCO-7
- CHARACTER AREA BOUNDARY



NOTE
DRAWING BASED ON AERIAL PHOTOGRAPHY AND FIELD MEASUREMENTS BY ENGINEER. NO FIELD SURVEY WORK WAS PERFORMED TO VERIFY EXISTING CONDITIONS.



HIGHLAND GARDENS SUBDIVISION
REZONING, BLOCK A, P/O 2&3
1475 COLUMBIA AVENUE
CITY OF FRANKLIN
WILLIAMSON COUNTY, TENNESSEE



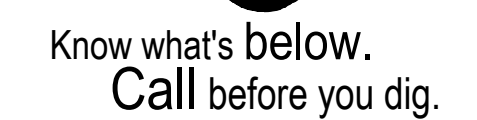
AREA ZONING EXHIBIT

DATE:	APRIL, 2017	DRAWN BY:	CCS
PROJECT NO.:	----	CHECKED BY:	M2

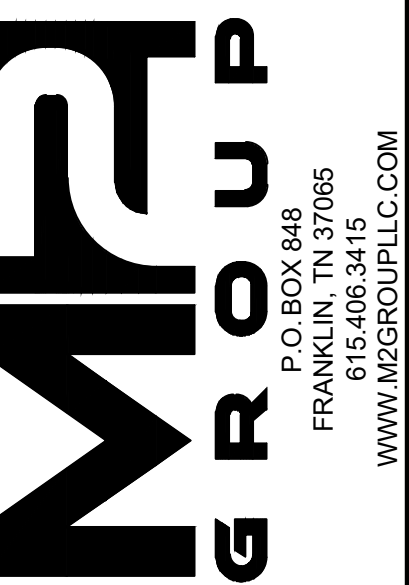
COMCAST CABLE
660 MAINSTREAM DRIVE
NASHVILLE, TN 37228
CONTACT: MARLON FRIZZELL
MARLON_FRIZZELL@
CABLE.COMCAST.COM
615-244-7462X1115647



THERE ARE NUMEROUS CITY PARKS/RECREATIONAL FACILITIES ALL WITHIN 1.0± MILES OF THE SUBJECT PARCEL.

[illegible]

**HIGHLAND GARDENS SUBDIVISION
REZONING, BLOCK A, P/O 2&3
1475 COLUMBIA AVENUE
CITY OF FRANKLIN
WILLIAMSON COUNTY, TENNESSEE**



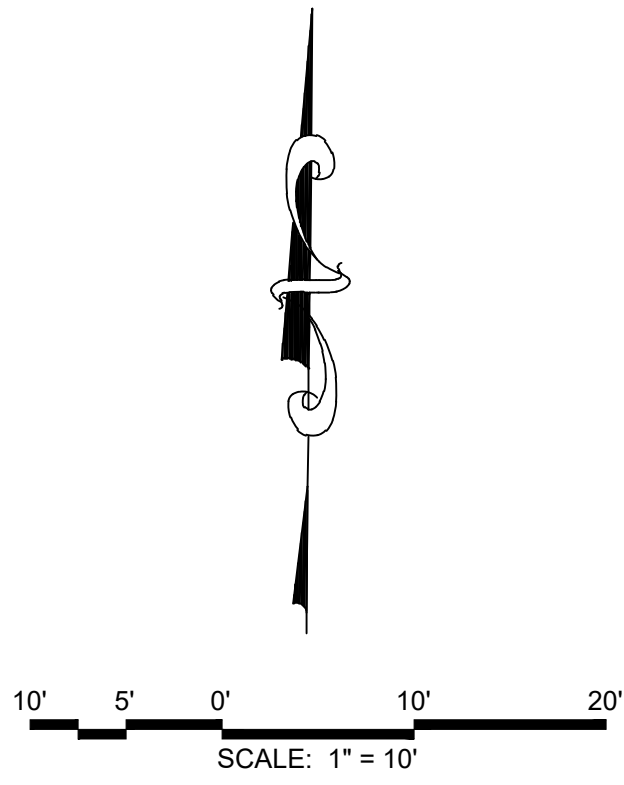
SITE PLAN EXHIBIT

DATE :	APRIL, 2017	DRAWN BY :	CCS
PROJECT NO. :	-----	CHECKED BY :	M2

SHEET NUMBER:

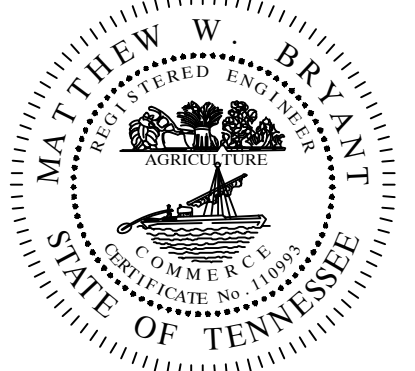
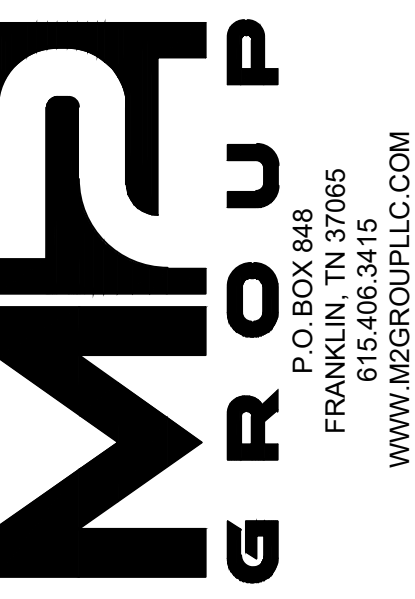
1 of 3

1475 COLUMBIA AVE - ZONING EXHIBIT 04-17-17.DWG (Wednesday, May 24, 2017 8:51:16 AM)

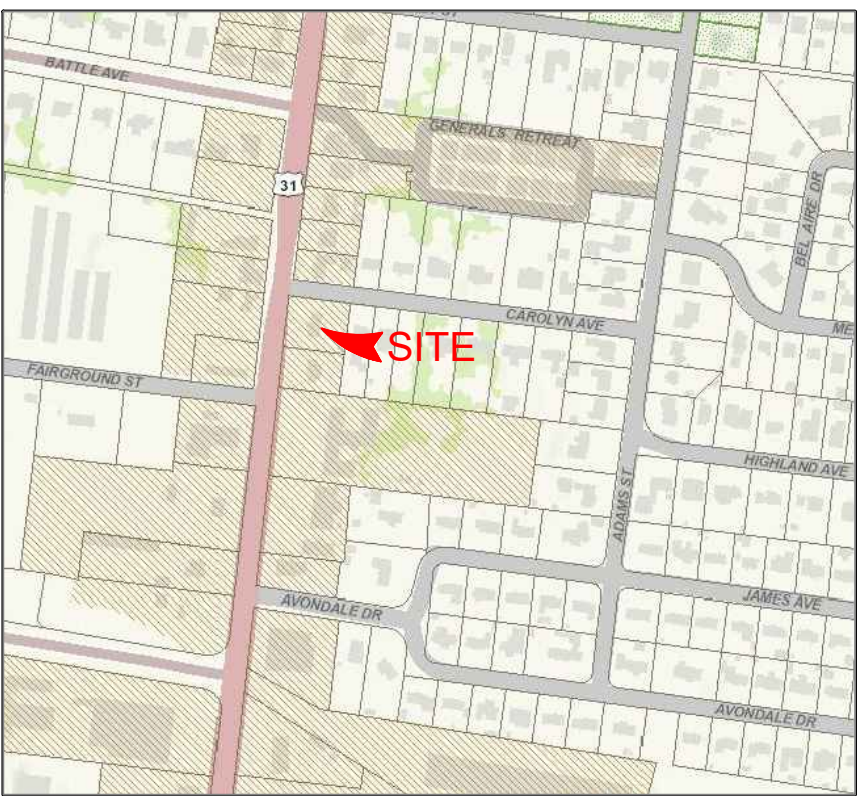
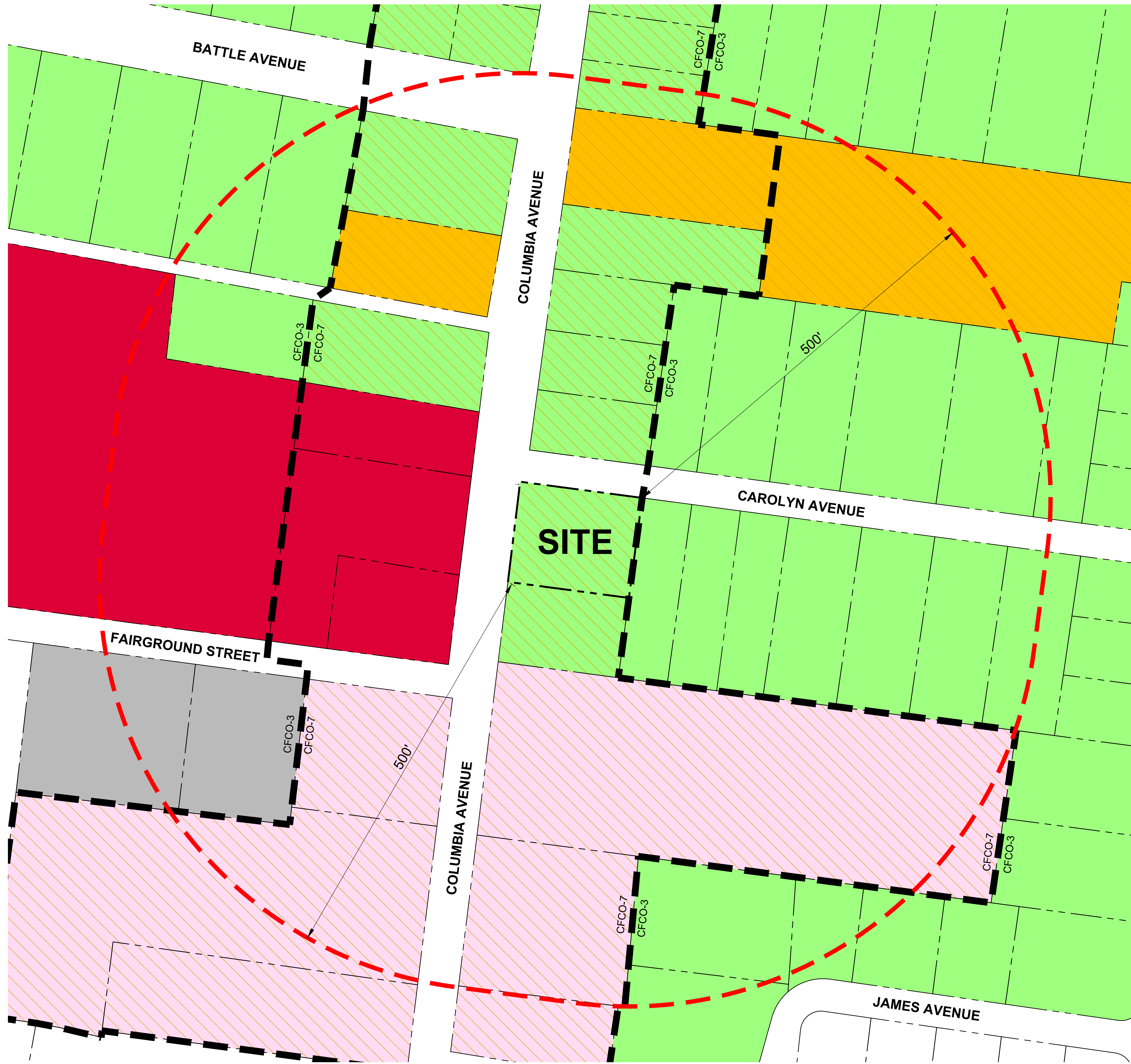


NOTE
DRAWING BASED ON AERIAL PHOTOGRAPHY AND FIELD MEASUREMENTS BY ENGINEER. NO FIELD SURVEY WORK WAS PERFORMED TO VERIFY EXISTING CONDITIONS.

C.O.F. PROJECT No. 6429

REVISION #		DATE		DESCRIPTION
				
HIGHLAND GARDENS SUBDIVISION REZONING, BLOCK A, P/O 2&3 1475 COLUMBIA AVENUE CITY OF FRANKLIN WILLIAMSON COUNTY, TENNESSEE				
 P.O. BOX 848 FRANKLIN, TN 37065 615.406.3415 WWW.M2GROUP.LLC.COM				
SITE PLAN EXHIBIT WITH AERIAL		DATE:	APRIL, 2017	DRAWN BY : -----
		PROJECT NO. :	-----	
SHEET NUMBER:		CCS	M2	
2 of 3				

1475 COLUMBIA AVE - ZONING EXHIBIT 04-17-17.DWG / Wednesday, May 24, 2017 8:54:17 AM



VICINITY MAP
N.T.S.

ZONING & ZONING OVERLAY DISTRICTS

- ER - ESTATE RESIDENTIAL
- R-3 - RESIDENTIAL DISTRICT
- CC - CENTRAL COMMERCIAL DISTRICT
- NC - NEIGHBORHOOD COMMERCIAL
- HI - HEAVY INDUSTRIAL
- CAO - COLUMBIA AVENUE OVERLAY DISTRICT

CHARACTER AREAS

- CFCO-3
- CFCO-7
- CHARACTER AREA BOUNDARY



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REVISION #		DATE	DESCRIPTION
HIGHLAND GARDENS SUBDIVISION REZONING, BLOCK A, P/O 2&3 1475 COLUMBIA AVENUE CITY OF FRANKLIN WILLIAMSON COUNTY, TENNESSEE			
 P.O. BOX 648 FRANKLIN, TN 37065 WWW.M2GROUP.LLC.COM			
AREA ZONING EXHIBIT		DATE: APRIL, 2017	CCS
		DRAWN BY: ---	M2
		CHECKED BY: ---	
PROJECT NO.:		SHEET NUMBER:	
		3 of 3	

**Properties Zoned
Office Residential (OR)
In The
City of Franklin**

6/27/2017

Office Residential zoning and design concept are intended as a transition between established single family residential and intensive commercial development. Envision Franklin supports these nodes of development in a select few locations based on existing land uses, historic development patterns and adjoining uses. Office Residential is a way to allow selected, lower impact commercial uses in a unique residential setting.

The Office Residential zoning district and design concept mandate a single family residential form building. As the two maps illustrate there are a limited number of places in the City that are zoned OR currently. These areas were selected very specifically based on stringent criteria. The properties located downtown are based on their historical blend of mixed commercial/residential uses. The properties along West Main Street were selected based on the history of commercial activity in that area and the traditional residential development patterns in the surrounding streets. The identified area along Columbia Ave keep the intensive commercial uses south of the intersection of Downs Blvd and Columbia Ave and preserves the historic residential form along Columbia Ave. The London Lane and Royal Oaks intersection limits the intensive commercial uses to the area below Lakeview Drive and preserves the single family residential form on Royal Oaks. While not deemed historic, the Royal Oaks subdivision was constructed in a traditional residential pattern before Royal Oaks became an arterial roadway. The Office Residential zoning district provides selected commercial uses in a residential building form thereby providing a feasible use to an otherwise less desirable single family residence.

While it hasn't happened yet, OR zoned properties outside of the historic protection overlay could have a new building constructed. This building would have to maintain a single family residential form as dictated by the existing neighborhood it is adjacent to. Section 5.3.4 Transition Features would further regulate the building scale, massing, height, proportion, form, and general architectural style. A minimum of 40% of the lot would be required to be landscaped area (3.3.2). Other commercial zones (Neighborhood Commercial, Central Commercial, General Commercial, and General Office) require a minimum of 15%, 10%, 30%, 30% respectively. Residential zones (R-6, R-3, R-2) require a minimum of 30% and 40% respectively. Setbacks would be determined by the existing built environment and would be

allowed no closer than the closest primary building. Any parking would have to be screened under Section 5.4.5 Vehicular Use. Landscape islands would be required. Any parking would have to be behind the main façade of the building. In addition, a 10-100-foot landscape buffer would be required on the developing parcel with the lot size being the determining factor. Commercial lighting standards (which do not apply to single family residential) would limit the intensity to 10 footcandles or less and 1.0 footcandles at all the property lines.

“The proposed rezoning at 1475 Columbia has an additional layer placed on it through the Columbia Avenue Overlay (CAO). The Columbia Ave Overlay District-2 further regulates front setbacks, façade length of new buildings, roof pitch, front porches, and foundation height. Recent revisions to the CAO have included an additional restriction against internally illuminated signage, prohibiting parking between the main structure and Columbia Ave, and mandating no more than 25% of parking spaces can be allowed on the side of a building.”

1102 West Main Street

Zoned Office Residential (OR)



1341 West Main Street- Across from Pueblo Real

Zoned Office Residential



1339 West Main Street (across from Pueblo Real)

Zoned Office Residential (OR)



1337 – 1341 West Main Street (Across from Pueblo Real)



Concept Imagery Envision Franklin



Office Residential Zones

Four distinct neighborhoods in the City of Franklin are in the Office Residential Zoning district.

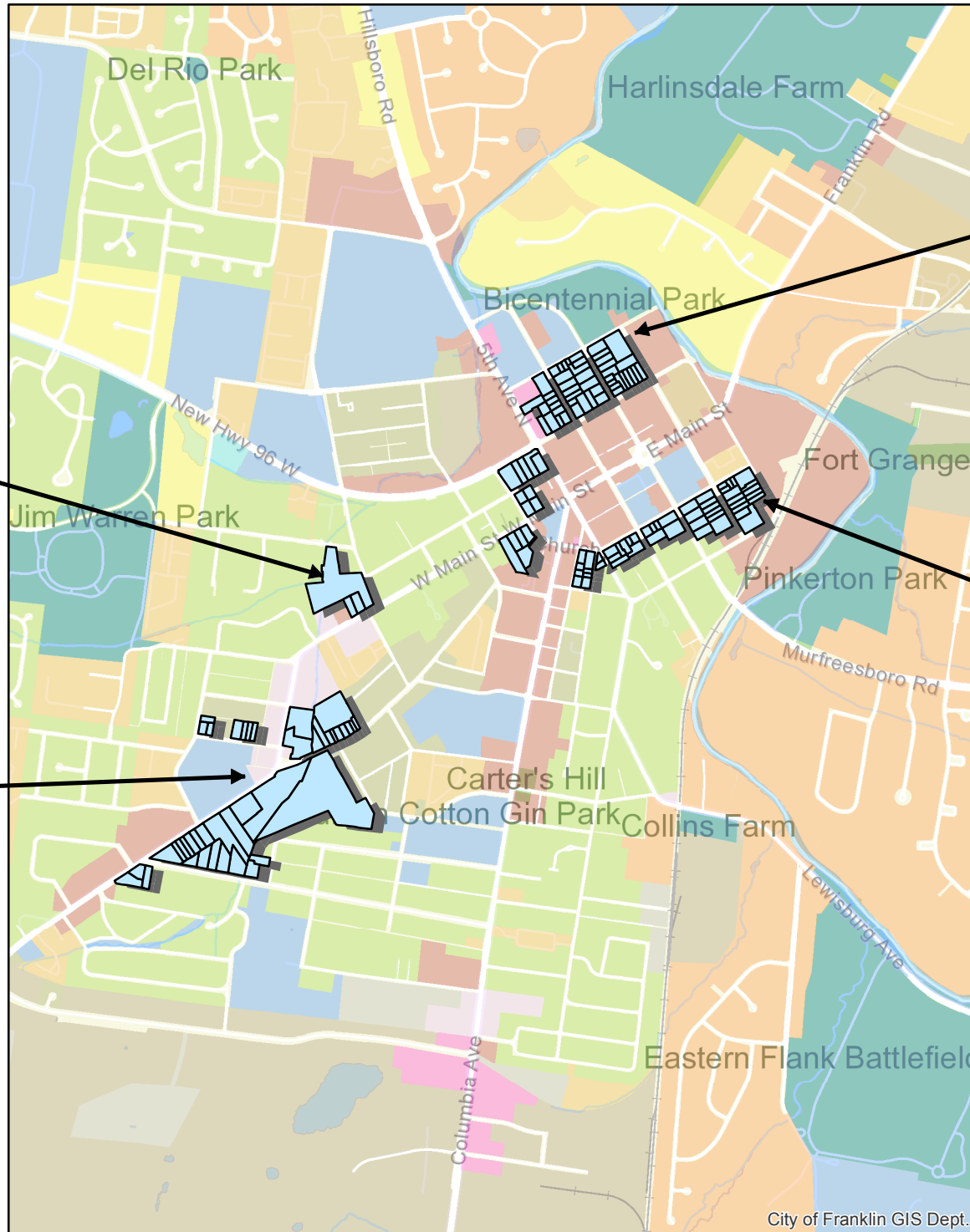
1102 West Main St

Historic Downtown

Petway/West Main

Church/S. Margin Street

This zoning district is intended as a transition from more intensive commercial uses (Central Commercial, Neighborhood Commercial, etc.)



Office Residential Zones

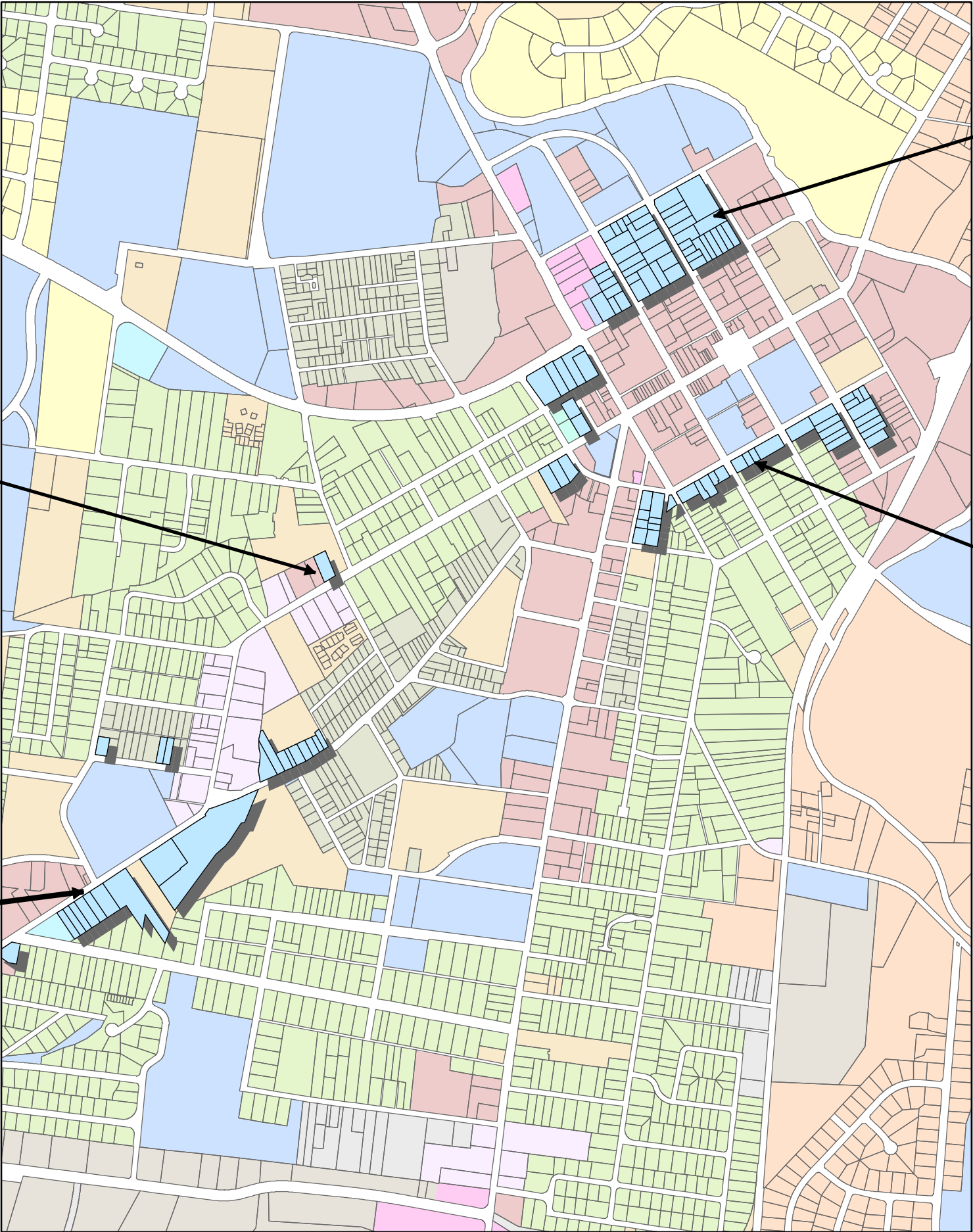
Four distinct neighborhoods
in the City of Franklin
are in the Office Residential
Zoning district.



1102 West Main St



Petway/West Main



Historic Downtown

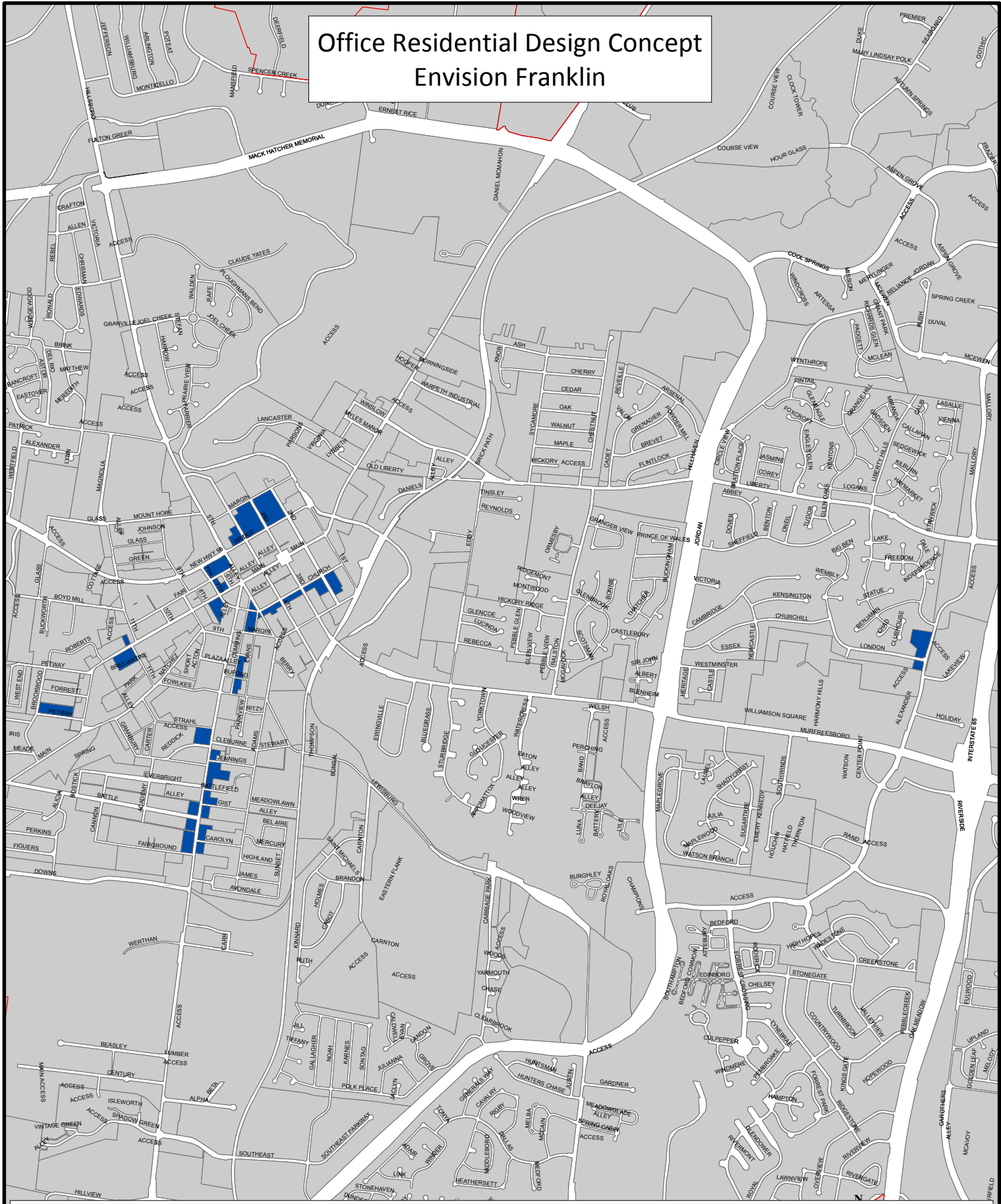


Church/S. Margin Street

This zoning district is intended
as a transition from more
intensive commercial uses
(Central Commercial,
Neighborhood Commercial, etc.)



Office Residential Design Concept Envision Franklin



Design Concept

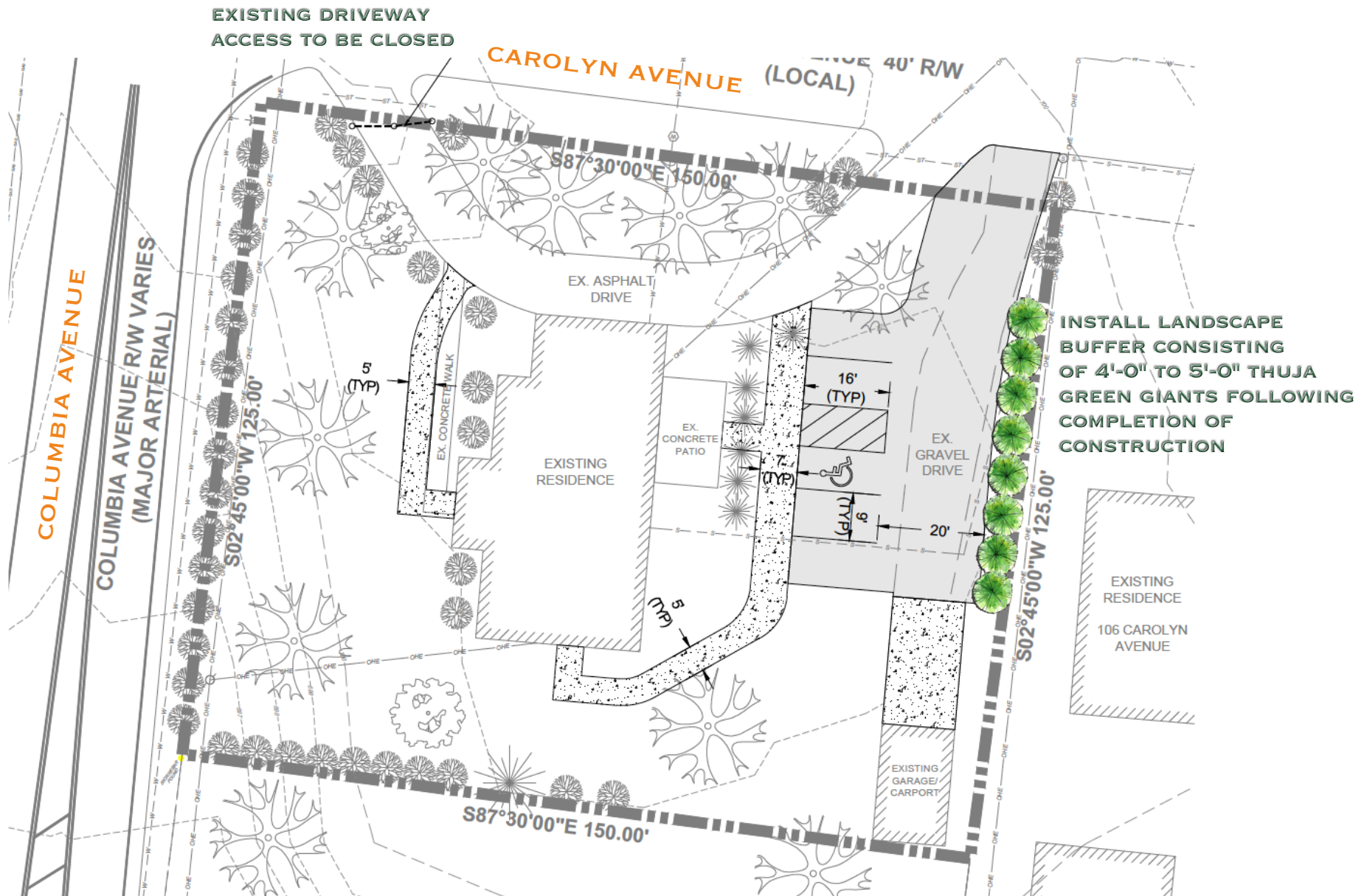


Office Residential

0 750 1,500 3,000
Feet



This map was created by the Franklin Planning Department. It was compiled from the most authentic information available. The City is not responsible for any errors or omissions contained herein. All data and materials (c) copyright 2017. All rights reserved.



SITE PLAN EXHIBIT



VIEW FROM SOUTHWEST CORNER



VIEW LOOKING WEST FROM FRONT YARD



PROPERTIES ADJACENT TO SUBJECT PROPERTY



VIEW LOOKING SOUTH



MAP

1475 COLUMBIA AVENUE || HIGHLAND GARDENS

CFCO-1 AND CFCO-2 TEXT AMENDMENT

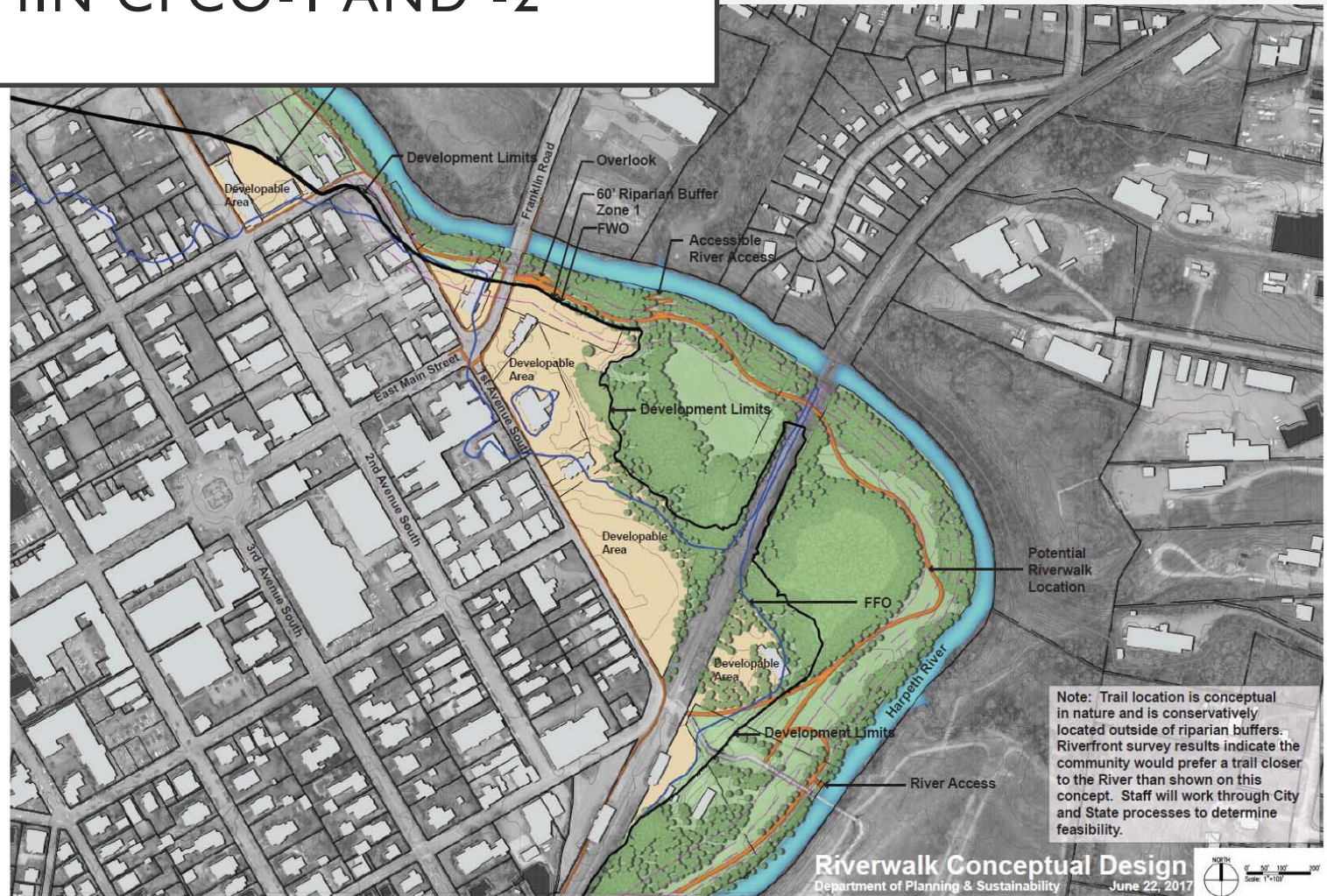
August 8, 2017
BOMA Work Session

HISTORY

- Few properties had lost nonconforming use rights in floodplain
- City and BWSC conducted Riverfront Planning Study
- Discussed the downtown riverfront area at 2 JCWs
- Held a neighborhood meeting with property owners for Envision Franklin
- Envision Franklin plan amendment adopted by FMPC in June 2017
- Corresponding text amendment given favorable recommendation by FMPC
- Text amendment deferred at BOMA from July to August Work Session

AREA WITHIN CFCO-1 AND -2

- Development Limits
- Construction Standards
- FFO/FWO uses
- Grading requirements
- Multi-use path along River

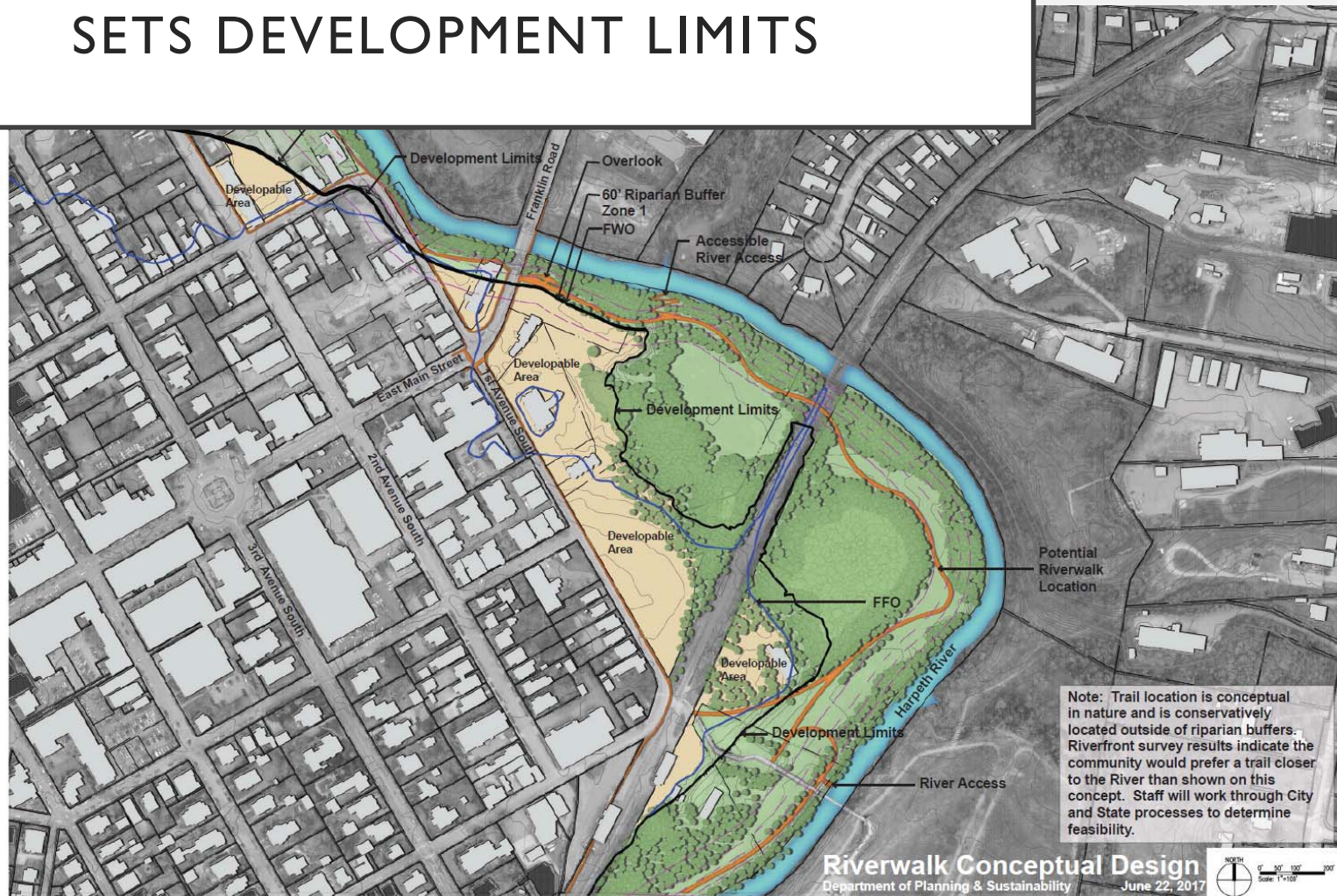


PROPOSED TEXT AMENDMENT ZONING ORDINANCE

- Creates a developable area within the FFO along its edges to allow redevelopment and nonresidential uses along E Main St and 1st Avenue S
- Establishes limits for developable area using elevation contour of 630, the riparian buffer, or the FWO, whichever is most restrictive
- Requires development to meet all construction standards for floodplain protection
- Allows only FFO/FWO uses beyond the “development limits”
- Requires any grading within the developable area to be reviewed by the FMPC with development proposal and limits grading beyond the development limits
- Requires a multi-use path along the Harpeth River with connections to E Main St and 1st Avenue

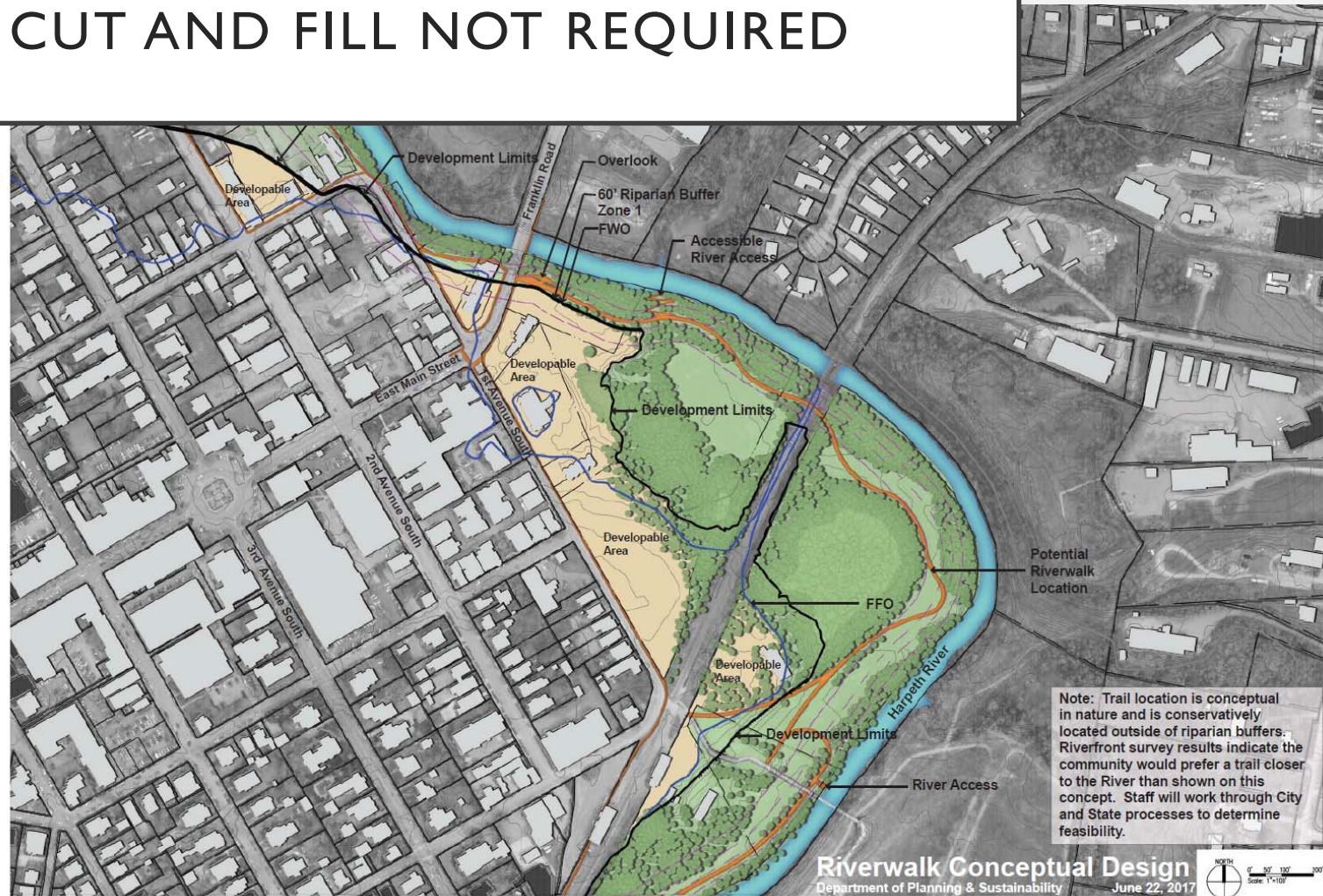
SETS DEVELOPMENT LIMITS

- Text sets a development limits line at 630 feet above sea level, or the riparian buffer, or the FWO, whichever is most restrictive
- 630 is part of steep slope dropping into deeper floodplain
- Most of developable area is at 636 or higher



CUT AND FILL NOT REQUIRED

- Grading requires FMPC review in developable area
- Text does not require cut-and-fill
- Relies upon construction standards in Section 5.8.5, Floodplain Protection
- This is the same approach used in CFCO-9 (5th Ave N)
- Restricts cut-and-fill beyond development limits to preserve the natural floodplain



10-YEAR FLOOD ZONE

WHEREAS, this area provides a unique opportunity to enhance the role of the Harpeth River in Downtown Franklin; and

WHEREAS, the City's general plan, *Envision Franklin*, states that open space along the Harpeth River should be integrated into the downtown core, while also defining an on-site edge of the downtown core; and

WHEREAS, *Envision Franklin* states that development should be designed around conservation areas to highlight them as community amenities with pedestrian and bike systems that will connect the entire conservation design concept throughout the city; and

WHEREAS, some properties in this area had developed prior to Federal or local floodplain regulations but have lost their legally nonconforming use rights in the FFO; and

WHEREAS, this Zoning Ordinance text amendment provides additional development rights along the edges of the FFO within certain development limits without requiring compensatory cut-and-fill, while preserving the remainder of the natural floodplain and native vegetation that define an on-site edge of the downtown core and while preserving most of the ten-year flood zone; and

WHEREAS, these development limits take into account the Riverfront Planning Study preliminary engineering findings for where compensatory cut-and-fill could potentially occur; and

WHEREAS, this Zoning Ordinance text amendment to amend the CFCO-1 and CFCO-2 Standards is in the best interest of the citizens of Franklin.

Ten-year was not used in analysis, but conveys that deeper, higher-risk floodplain should be preserved



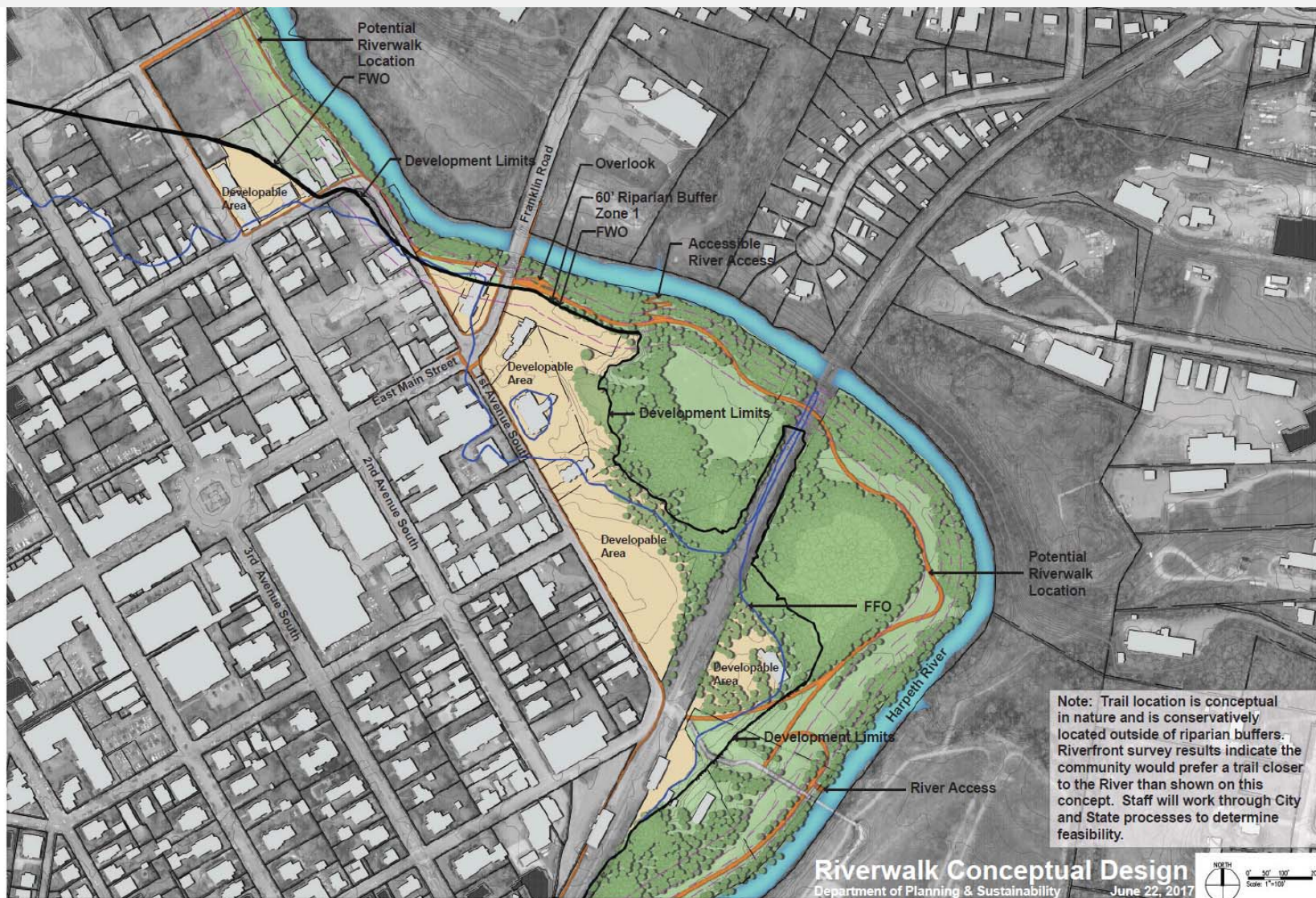
REQUIRES PATH ALONG THE HARPETH

- Zoning Ordinance can require connectivity and pedestrian facilities
- Riverfront Study results show community is:
 - Very supportive of a path by the River in a natural setting
 - Want connectivity to neighborhoods and the community



CONFLICTS BETWEEN OVERLAY AND CH. 5

- When there is conflict between an Overlay District and Development Standards, the Overlay District supercedes.
- Text written so CFCO-1 and -2 supercede FFO (uses)
- Construction would need to meet all standards
- Staff sees no problematic conflicts



ORDINANCE 2017-23

TO BE ENTITLED: “AN ORDINANCE TO AMEND CHAPTERS 2 AND 3 AND 8 OF THE ZONING ORDINANCE OF THE CITY OF FRANKLIN, TENNESSEE, TO ALLOW LIMITED DEVELOPMENT IN THE FLOODWAY FRINGE OVERLAY DISTRICT (FFO) WITHIN CERTAIN CENTRAL FRANKLIN CHARACTER AREA OVERLAY DISTRICTS (CFCO-1 and CFCO-2).”

WHEREAS, the City and the City’s consultant, Barge Waggoner Sumner & Cannon, completed a Riverfront Planning Study along the Harpeth River in Downtown Franklin to identify the community’s vision for a Riverwalk and opinions about development within the 100-year floodplain; and

WHEREAS, the study results found broad support for a Riverwalk along the River in a natural setting and the majority did not support additional development within the 100-year floodplain; and

WHEREAS, the Franklin Zoning Ordinance does not allow new development within the 100-year floodplain except in very limited geographic locations, but it does allow floodplain alteration with compensatory cut-and-fill to remove land from the floodplain; and

WHEREAS, this area provides a unique opportunity to enhance the role of the Harpeth River in Downtown Franklin; and

WHEREAS, the City’s general plan, *Envision Franklin*, states that open space along the Harpeth River should be integrated into the downtown core, while also defining an on-site edge of the downtown core; and

WHEREAS, *Envision Franklin* states that development should be designed around conservation areas to highlight them as community amenities with pedestrian and bike systems that will connect the entire conservation design concept throughout the city; and

WHEREAS, some properties in this area had developed prior to Federal or local floodplain regulations but have lost their legally nonconforming use rights in the FFO; and

WHEREAS, this Zoning Ordinance text amendment provides additional development rights along the edges of the FFO within certain development limits without requiring compensatory cut-and-fill, while preserving the remainder of the natural floodplain and native vegetation that define an on-site edge of the downtown core and while preserving most of the ten-year flood zone; and

WHEREAS, these development limits take into account the Riverfront Planning Study preliminary engineering findings for where compensatory cut-and-fill could potentially occur; and

WHEREAS, this Zoning Ordinance text amendment to amend the CFCO-1 and CFCO-2 Standards is in the best interest of the citizens of Franklin.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF FRANKLIN, TENNESSEE, AS FOLLOWS:

SECTION I. That Chapter 3, Section 3.5.6, of the Franklin Zoning Ordinance is hereby amended to add the following text noted in **bold**, and is approved to read as follows:

(b) CFCO-1 Standards

(i) Applicability ...

In cases of conflict between this Subsection and Section 3.4.5, Floodway Fringe Overlay District, the regulations of this subsection shall apply.

...

(xv) Development within the FFO

A.) Development Limits

1. Development and/or redevelopment shall be permitted along the edges of the FFO within these defined Development Limits: In no case, shall the maximum encroachment into the FFO be closer to the Harpeth River than the existing elevation contour of 630 feet above sea level prior to any modification of floodplain, or the riparian buffer as required by the Stormwater Management Ordinance, or the outer boundary of the FWO, whichever is most restrictive.

2. Within the Development Limits, development and/or redevelopment shall be permitted in accordance with this Subsection, Traditional Development standards, and Floodplain Protection standards. Associated grading shall be approved only as part of a Site Plan for development. All Site Plans, including mass grading, shall be submitted to the FMPC for review.

B.) Uses and Standards

1. Within the Development Limits, use types in the applicable base zoning district shall be permitted, except for the following uses which shall be prohibited: assisted living facilities, correctional facilities, hospitals, nursing/convalescent homes, bed and breakfast establishments, hotels, boutique hotels, and residential uses.

2. Buildings shall face both the street and multi-use path, with pedestrian gathering spaces located along the multi-use path.

3. Beyond the Development Limits, new uses/encroachments shall be in accordance with Section 3.4.4, FWO District, or 3.4.5, FFO District, whichever is applicable, except for the following use which shall be prohibited: floodplain alteration not associated with public or private infrastructure.

4. CFCO-1 within the FWO or FFO shall meet the Open Space Standards, LSR, and Tree Canopy Retention standards in Chapter 5, Development Standards per the applicable Base Zoning District, and shall not be otherwise exempted by any other referenced CFCO-1 exemption.

C.) Multi-Use Path

- 1. A public multi-use path shall be located along the Harpeth River with pedestrian access points to E. Main Street and 1st Avenue South and North.**
- 2. Paths shall have a minimum width of 12 feet. The width may be reduced to 8 feet in portions of the path to minimize disturbance to native vegetation or environmental constraints.**

SECTION II. That Chapter 3, Section 3.5.6, of the Franklin Zoning Ordinance is hereby amended to add the following text noted in **bold**, and is approved to read as follows:

(c) CFCO-2 Standards

(i) Applicability

...

In cases of conflict between this Subsection and Section 3.4.5, Floodway Fringe Overlay District, the regulations of this subsection shall apply.

...

(xv) Development within the FFO

A.) Development Limits

- 1. Development and/or redevelopment shall be permitted along the edges of the FFO within these defined Development Limits: In no case, shall the maximum encroachment into the FFO be closer to the Harpeth River than the existing elevation contour of 630 feet above sea level prior to any modification of floodplain, or the riparian buffer as required by the Stormwater Management Ordinance, or the outer boundary of the FWO, whichever is most restrictive.**
- 2. Within the Development Limits, development and/or redevelopment shall be permitted in accordance with this Subsection, Traditional Development standards, and Floodplain Protection standards. Associated grading shall be approved only as part of a Site Plan for development. All Site Plans, including mass grading, shall be submitted to the FMPC for review.**

B.) Uses and Standards

- 1. Within the Development Limits, use types in the applicable base zoning district shall be permitted, except for the following uses which shall be prohibited: assisted living facilities, correctional facilities, hospitals, nursing/convalescent homes, bed and breakfast establishments, hotels, boutique hotels, and residential uses.**
- 2. Buildings shall face both the street and multi-use path, with pedestrian gathering spaces located along the multi-use path.**

3. Beyond the Development Limits, new uses/encroachments shall be in accordance with Section 3.4.4, FWO District, or 3.4.5, FFO District, whichever is applicable, except for the following use which shall be prohibited: floodplain alteration not associated with public or private infrastructure.

4. CFCO-2 within the FWO or FFO shall meet the Open Space Standards, LSR, and Tree Canopy Retention standards in Chapter 5, Development Standards per the applicable Base Zoning District, and shall not be otherwise exempted by any other referenced CFCO-2 exemption.

C.) Multi-Use Path

1. A public multi-use path shall be located along the Harpeth River with pedestrian access points to E. Main Street and 1st Avenue South and North.

2. Paths shall have a minimum width of 12 feet. The width may be reduced to 8 feet in portions of the path to minimize disturbance to native vegetation or environmental constraints.

SECTION III. That Chapter 2, Section 2.4, Subsection 2.4.3 of the Franklin Zoning Ordinance is hereby amended to add the following text noted in **bold**, and is approved to read as follows:

(2) Applicability

c.) Site Plans shall be submitted to the FMPC approval instead of administrative review by staff, if the development application:

...

(vi) is for property located within the CFCO-1 or CFCO-2 Overlay Districts and within the FFO or FWO Overlay Districts. Mass grading shall only be approved as part of a site plan for development.

SECTION IV. That Chapter 8, Section 8.3, of the Franklin Zoning Ordinance is hereby amended to remove the following text with a ~~strike through~~ and add the following text noted in **bold**, and is approved to read as follows:

8.3 Definitions and Use Classifications

...

Infrastructure, Public or Private

~~Public improvements for~~ **Facilities and services needed to sustain development and land-use activities including but not limited to** water, sewer, drainage, **stormwater management improvements**, streets, sidewalks, and similar facilities.

...

SECTION V. BE IT FINALLY ORDAINED by the Board of Mayor and Aldermen of the City of Franklin, Tennessee that this Ordinance shall take effect from and after its passage on third and final reading, the health, safety, and welfare of the citizens requiring it.

ATTEST:

CITY OF FRANKLIN, TENNESSEE:

BY: _____
Eric S. Stuckey
City Administrator

BY: _____
Dr. Ken Moore
Mayor

Approved as to Form:

Shauna R. Billingsley, City Attorney

PLANNING COMMISSION RECOMMENDED:

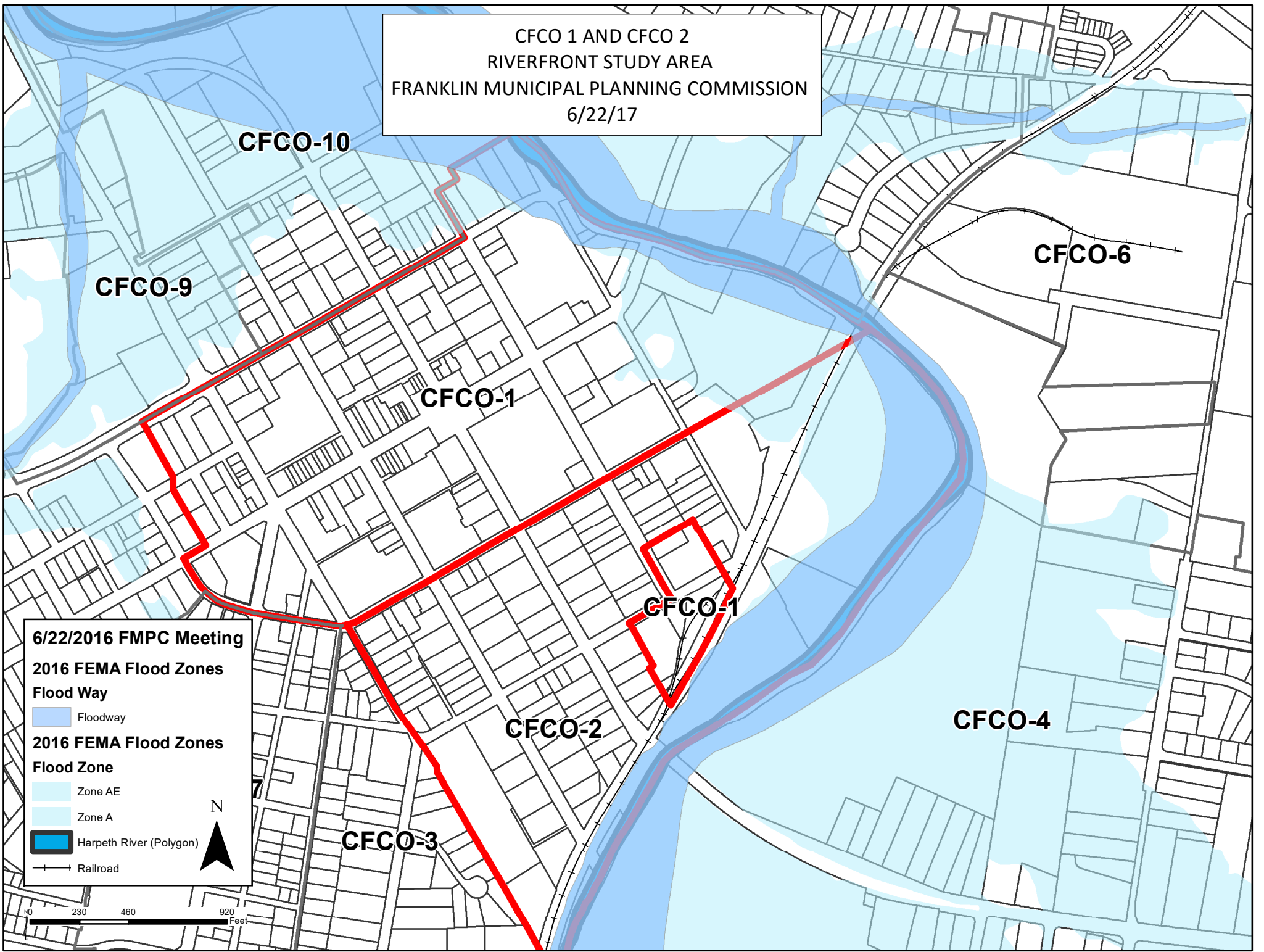
PASSED FIRST READING:

PUBLIC HEARING HELD:

PASSED SECOND READING:

PASSED THIRD READING:

CFCO 1 AND CFCO 2
RIVERFRONT STUDY AREA
FRANKLIN MUNICIPAL PLANNING COMMISSION
6/22/17



6/22/2016 FMPC Meeting
2016 FEMA Flood Zones
Flood Way
Floodway
2016 FEMA Flood Zones
Flood Zone
Zone AE
Zone A
Harpeth River (Polygon)
Railroad

RESOLUTION 2017-35

A RESOLUTION BY THE FRANKLIN MUNICIPAL PLANNING COMMISSION TO ADOPT A PLAN AMENDMENT TO ENVISION FRANKLIN FOR PROPERTIES LOCATED IN DOWNTOWN FRANKLIN ALONG THE HARPETH RIVERFRONT.

WHEREAS, pursuant to *Tennessee Code Annotated* (T.C.A.) § 13-4-201, it is the function and duty of the Franklin Municipal Planning Commission (FMPC) to adopt an official general plan for the physical development of the City of Franklin; and

WHEREAS, the City adopted *Envision Franklin* on January 26, 2017, and it provides a framework for the City to make land-use decisions, manage the quality of development, determine the timing and location of future growth, and direct investment and development activity; and

WHEREAS, the FMPC may from time to time amend, extend or add to the plan, or carry any part of subject matter into greater detail; and

WHEREAS, these amendments generally result from special studies or because of changes within the market, infrastructure, a specific issue/policy change, changes in State law, or a substantial change in situation or public sentiment; and

WHEREAS, the City and consultant, Barge Waggoner Sumner & Cannon, completed a Riverfront Planning Study along the Harpeth River in Downtown Franklin that gathered community perspectives on Riverwalk opportunities and development in the 100-year floodplain; and

WHEREAS, the study results found broad support for a Riverwalk along the River in a natural setting and the majority did not support additional development within the 100-year floodplain; and

WHEREAS, this area provides a unique opportunity to enhance the role of the Harpeth River in Downtown Franklin; and

WHEREAS, *Envision Franklin* states that open space along the Harpeth River should be integrated into the downtown core, while also defining an on-site edge of the downtown core; and

WHEREAS, *Envision Franklin* states that development should be designed around conservation areas to highlight them as community amenities with pedestrian and bike systems that will connect the entire conservation design concept throughout the city; and

WHEREAS, this plan amendment provides additional development flexibility along the edges of the 100-year floodplain within certain development limits without requiring compensatory cut-and-fill, while preserving the natural floodplain and native vegetation that define an on-site edge of the downtown core and while preserving most of the ten-year flood zone; and

WHEREAS, these development limits take into account the Riverfront Planning Study preliminary engineering findings for where compensatory cut-and-fill could potentially occur; and

WHEREAS, this amendment, as depicted in the attachment(s), revises the Neighborhood Mixed Use Special Considerations for First Avenue, East Main Street, South Margin Street, and Bridge Street, and replaces Figure 4.4 Conceptual Plan with a new Conceptual Plan; and

WHEREAS, the FMPC held a public hearing and the Plan amendment to *Envision Franklin* is found to be in the best interest of the citizens of the City of Franklin.

NOW, THEREFORE, BE IT RESOLVED, by the Franklin Municipal Planning Commission of the City of Franklin, Tennessee, as follows:

SECTION I. That Envision Franklin shall be amended to include the Conceptual Plan and Neighborhood Mixed Use Special Considerations as described in the attachments.

SECTION II. A copy of the adopted amendment to Envision Franklin shall be certified to the Board of Mayor and Aldermen, as required by T.C.A. § 13-4-202.

SECTION III. That this Resolution shall take effect upon approval by the FMPC on June 22, 2017, the health, safety, and welfare of the citizens requiring it.

ATTEST:

**CITY OF FRANKLIN, TENNESSEE:
PLANNING COMMISSION**

By: _____
Emily Hunter
Planning Director

By: _____
Mike Hathaway
Chair

Approved as to Form:

By: _____
Shauna Billingsley
City Attorney

NEIGHBORHOOD MEETING:

6/6/2017

PUBLIC HEARING:

6/22/2017

NEIGHBORHOOD MIXED-USE

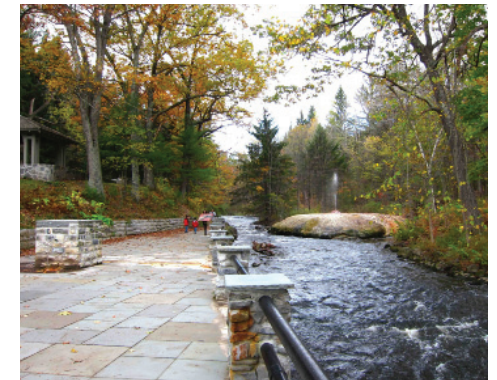
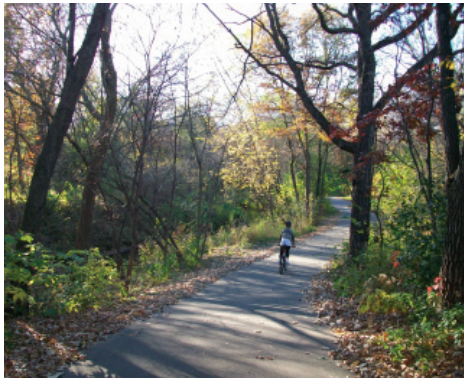
SPECIAL CONSIDERATIONS

First Avenue, East Main Street, Bridge Street Area along the Harpeth River

In 2017, the City and its consultant, Barge Waggoner Sumner & Cannon, Inc., conducted a Riverfront Planning Study to identify the community's vision for a Riverwalk and opinions about development. The results found broad support for a Riverwalk in a natural setting along the River and the majority did not support additional development within the floodplain.

This **area** provides a unique opportunity to enhance the role of the Harpeth River in **downtown** Franklin. Open space along the River **should be** integrated into the downtown core, while also defining an on-site edge of the downtown core. **Open space areas** within the floodplain should be preserved and enhanced with a system of **multi-use paths along the Harpeth River**. These paths **should provide connections to downtown uses and public parks, with periodic overlooks and access points to the River**.

The images below represent the community's desired amenities along the Riverwalk. These types of amenities are encouraged along the Riverwalk.



NEIGHBORHOOD MIXED-USE

SPECIAL CONSIDERATIONS (CONT.)	First Avenue, East Main Street, Bridge Street Area along the Harpeth River	This area contains a significant amount of Harpeth River 100-year floodplain. The City generally requires locating new development outside of floodplain limits. Floodplain alteration can remove land from the floodplain to create buildable area, but doing so can result in unnatural landscape and removal of existing vegetation. In this historic downtown location, the City should allow additional use and development along the existing street network without compensatory cut-and-fill. Beyond that, the natural floodplain contours and native vegetation should be preserved to define an on-site edge of the downtown core. See Figure 4.4 for appropriate development limits. Redevelopment along existing streets provides flexibility to properties that originally developed prior to Federal and local floodplain regulations. For public safety purposes, uses within the 100-year floodplain should be limited to nonresidential uses that avoid potential for overnight stay. Additionally, all construction is expected to be raised above the Base Flood Elevation in accordance with City standards. This area has infill potential that can complete the block face on the east side of First Avenue South and the east side of East Main Street. Site design considerations should adhere to the following: • Buildings should face both the street and the River with pedestrian gathering spaces on the path side. • The historic buildings on the west side of First Avenue South should be preserved. New buildings fronting the east side of First Avenue South, between Church Street and South Margin Street, should maintain the established single-family building character and rhythm of the opposing historic block face. Height should be sensitive to these historic buildings; therefore, a mix of predominantly one and one-half story and scattered two-story buildings is appropriate with approximately 15-foot front-yard setbacks. New buildings internal to the site may be up to three stories with transitional features. • New buildings up to three stories are appropriate north of Church Street and along East Main Street.
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NEIGHBORHOOD MIXED-USE

SPECIAL CONSIDERATIONS (CONT.)	First Avenue, East Main Street, Bridge Street Area along the Harpeth River	• A distinctive and unique feature of the skyline is the grain silos of the historic Lillie Belle Flour Company. Efforts should be made to repurpose this structure instead of removing it. These structures offer potential for truly scenic views of Central Franklin from what could become multifamily residential, offices, or even a specialty hotel, such as Quaker Square in Akron, Ohio. New-building architecture between Church and East Main Streets should pay homage to the industrial/agricultural history of the area. • Church Street should extend east into this area, connecting to an internal street/driveway network providing a system of north-south access parallel to First Avenue South. • Open spaces in the developable area will be limited to small greens or outdoor plaza spaces, highly accessible and visible and in a prominent location that encourages continued active use.
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NEIGHBORHOOD MIXED-USE

FIGURE 4.4: CONCEPTUAL PLAN - FIRST AVENUE, EAST MAIN STREET, BRIDGE STREET AREA ALONG HARPETH RIVER



Tabulation of Bids*

Purchasing Office Solicitation No.:		2017-008 (municipal solid waste Transport Services and, optionally, municipal solid waste Transfer Station Operation Services for the City’s municipal solid waste stream that is processed at the City’s Solid Waste Transfer Station)							
Notice to Bidders published in the Williamson Herald on:		4/27/17							
Number of vendors that were notified of / that responded to this solicitation for bids:		7 / 1							
Date and time bids due and publicly opened:		5/23/17 2:00 PM							
Present at opening of bids:		Gerry Burke and Wade Boeckmann of Republic Services; Dawn C. Cole of Waste Management; Pete Reckard of Waste Connections / HCRL; Becky Caldwell of the City of Franklin SES Department; and Natalie Keene and Brian Wilcox of the City of Franklin Purchasing Office							
Target meeting of BOMA at which recommendation is scheduled to be considered:		7/11/17							
Bids received from:	Does the bid include all required documents and information ?	Does the bid MOES ¹ ? / If not, how many exceptions do not MOES ¹ ?	Sanitary landfills for which bidder quoted pricing for Transport Services:	Quoted bid pricing, per ton, for Transport Services NOT in conjunction with Transfer Station Operation Services:	Quoted bid pricing, per ton, for Transport Services in conjunction WITH (but priced separately from) Transfer Station Operation Services:	Quoted bid pricing, per ton, for Transfer Station Operation Services:	Calculated bid pricing, per ton, for BOTH Transfer Station Operation Services AND Transport Services:	Payment terms:	Bid and bid pricing is valid through:
Mr. Bult's, Inc. (MBI) 2627 E. 139th St. Burnham, IL 60633 Tony Schmidt, President 708/585-3302; 708/243-9820 Tony.Schmidt@MrBults.com	Yes	No / 5 (13.6.9 financial responsibility for excluded waste; 13.6.22 impact on cost of operation resulting from any amended policies and procedures of TDEC or CoF; 13.6.35 invoice frequency; 13.7.2.5 and 13.7.2.12 responsibility for security of facility)	Bi-County Landfill 3212 Dover Road Woodlawn, TN 37191	\$20.79	\$18.20	\$4.85	\$23.05	net 30 days	12/31/17
			Cedar Ridge Landfill 2340 Mooresville Highway Lewisburg, TN 37091	\$10.42	\$8.67		\$13.52		
			Decatur Landfill 324 Landfill Lane Bath Springs, TN 38311	\$25.11	\$22.18		\$27.03		
			Hopkins County Regional Landfill 380 Grays Branch Road White Plains, KY 42464	\$26.50	\$23.46		\$28.31		
			Middlepoint Landfill 850 E. Jefferson Pike Murfreesboro, TN 37130	\$11.03	\$9.23		\$14.08		
			West Camden Landfill 2410 US 70 Camden, TN 38320	\$21.62	\$18.97		\$23.82		

¹MOES indicates "meet(s) or exceed(s) specifications"

*Shaded bid is apparent lowest best bid; however, whether to accept or reject bid is pending consideration of other options

Tabulation of Bids*

Purchasing Office Solicitation No.:	2017-008 (municipal solid waste Transport Services and, optionally, municipal solid waste Transfer Station Operation Services for the City's municipal solid waste stream that is processed at the City's Solid Waste Transfer Station)								
Notice to Bidders published in the Williamson Herald on:	4/27/17								
Number of vendors that were notified of / that responded to this solicitation for bids:	7 / 1								
Date and time bids due and publicly opened:	5/23/17 2:00 PM								
Present at opening of bids:	Gerry Burke and Wade Boeckmann of Republic Services; Dawn C. Cole of Waste Management; Pete Reckard of Waste Connections / HCRL; Becky Caldwell of the City of Franklin SES Department; and Natalie Keene and Brian Wilcox of the City of Franklin Purchasing Office								
Target meeting of BOMA at which recommendation is scheduled to be considered:	12/12/17								
Bids received from:	Does the bid include all required documents and information ?	Does the bid MOES¹? / If not, how many exceptions do not MOES¹?	Sanitary landfills for which bidder quoted pricing for Transport Services:	Quoted bid pricing, per ton, for Transport Services NOT in conjunction with Transfer Station Operation Services:	Quoted bid pricing, per ton, for Transport Services in conjunction WITH (but priced separately from) Transfer Station Operation Services:	Quoted bid pricing, per ton, for Transfer Station Operation Services:	Calculated bid pricing, per ton, for BOTH Transfer Station Operation Services AND Transport Services:	Payment terms:	Bid and bid pricing is valid through:
Mr. Bult's, Inc. (MBI) 2627 E. 139th St. Burnham, IL 60633 Tony Schmidt, President 708/585-3302; 708/243-9820 Tony.Schmidt@MrBults.com	Yes	No / 5 (13.6.9 financial responsibility for excluded waste; 13.6.22 impact on cost of operation resulting from any amended policies and procedures of TDEC or CoF; 13.6.35 invoice frequency; 13.7.2.5 and 13.7.2.12 responsibility for security of facility)	Bi-County Landfill 3212 Dover Road Woodlawn, TN 37191	\$20.79	\$18.20	\$4.85	\$23.05	net 30 days	12/31/17
			Cedar Ridge Landfill 2340 Mooresville Highway Lewisburg, TN 37091	\$10.42	\$8.67		\$13.52		
			Deatur Landfill 324 Landfill Lane Bath Springs, TN 38311	\$25.11	\$22.18		\$27.03		
			Hopkins County Regional Landfill 380 Grays Branch Road White Plains, KY 42464	\$26.50	\$23.46		\$28.31		
			Middlepoint Landfill 850 E. Jefferson Pike Murfreesboro, TN 37130	\$11.03	\$9.23		\$14.08		
			West Camden Landfill 2410 US 70 Camden, TN 38320	\$21.62	\$18.97		\$23.82		

¹MOES indicates "meet(s) or exceed(s) specifications"

*Shaded bid is apparent lowest best bid; however, City staff recommends the City reject all bids

Tabulation of Bids*

Purchasing Office Solicitation No.:	2017-009 (municipal solid waste sanitary landfill disposal services)							
Notice to Bidders published in the Williamson Herald on:	4/27/17							
Number of vendors that were notified of / that responded to this solicitation for bids:	5 / 3							
Date and time bids due and publicly opened:	5/23/17 2:00 PM							
Present at opening of bids:	Dawn C. Cole of Waste Management; Gerry Burke and Wade Boeckmann of Republic Services; Pete Reckard of Waste Connections / HCRL; Becky Caldwell of the City of Franklin SES Department; and Natalie Keene and Brian Wilcox of the City of Franklin Purchasing Office							
Target meeting of BOMA at which recommendation is scheduled to be considered:	7/11/17							
Bids received from:	Landfill:	Does the bid include all required documents?	Does the bid MOES¹?	Quoted bid pricing, per ton, for Sanitary Landfill Disposal Services:	Calculated total delivered pricing, per ton, excluding Transfer Station Operation Services but including Transport Services per 2017-008:	Calculated total delivered pricing, per ton, including both Transfer Station Operation Services and Transport Services per 2017-008:	Payment terms:	Bid and bid pricing is valid through:
BFI Waste Systems of TN, LLC DBA Middle Point Landfill 750 East Jefferson Pike Murfreesboro, TN 37130 John Sakmar, General Manager 615-782-5551 jsakmar@republicservices.com	Middle Point Landfill, Murfreesboro, TN	Yes	No, bidder takes exceptions to City's procurement solicitation	\$25.00	\$36.03	\$39.08	net 30 days	11/01/17
Waste Connections of TN 50 Reynolds Street Clarksville, TN 37040 Pete Reckard, District Manager 270-348-4082 peter@wcnx.org	Hopkins County Regional Landfill, White Plains, KY	Yes	Bidder takes no exceptions	\$20.00	\$46.50	\$48.31	net 30 days	12/31/17
Waste Management, Inc. of TN 2555 Meridian Blvd., Suite 200 Franklin, TN 37067 Dawn C. Cole, Public Sector Rep II 615-717-8185 dcole3@wm.com	Cedar Ridge Landfill, Lewisburg, TN	Yes	No, bidder takes exceptions to City's procurement solicitation	\$22.25	\$32.67	\$35.77	net 30 days	07/31/17

¹MOES indicates "meet(s) or exceed(s) specifications"

*Evaluation of bids is ongoing; whether to accept any bid or to reject all bids is pending consideration of other options

Tabulation of Bids*

Purchasing Office Solicitation No.:	2017-009 (municipal solid waste sanitary landfill disposal services)							
Notice to Bidders published in the Williamson Herald on:	4/27/17							
Number of vendors that were notified of / that responded to this solicitation for bids:	5 / 3							
Date and time bids due and publicly opened:	5/23/17 2:00 PM							
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Target meeting of BOMA at which recommendation is scheduled to be considered:	7/11/17							
Bids received from:	Landfill:	Does the bid include all required documents?	Does the bid MOES¹?	Quoted bid pricing, per ton, for Sanitary Landfill Disposal Services:	Calculated total delivered pricing, per ton, excluding Transfer Station Operation Services but including Transport Services per 2017-008:	Calculated total delivered pricing, per ton, including both Transfer Station Operation Services and Transport Services per 2017-008:	Payment terms:	Bid and bid pricing is valid through:
BFI Waste Systems of TN, LLC DBA Middle Point Landfill 750 East Jefferson Pike Murfreesboro, TN 37130 John Sakmar, General Manager 615-782-5551 jsakmar@republicservices.com	Middle Point Landfill, Murfreesboro, TN	Yes	No, bidder takes exceptions to City's procurement solicitation	\$25.00	\$36.03	\$39.08	net 30 days	11/01/17
Waste Connections of TN 50 Reynolds Street Clarksville, TN 37040 Pete Reckard, District Manager 270-348-4082 peter@wcnx.org	Hopkins County Regional Landfill, White Plains, KY	Yes	Bidder takes no exceptions	\$20.00	\$46.50	\$48.31	net 30 days	12/31/17
Waste Management, Inc. of TN 2555 Meridian Blvd., Suite 200 Franklin, TN 37067 Dawn C. Cole, Public Sector Rep II 615-717-8185 dcole3@wm.com	Cedar Ridge Landfill, Lewisburg, TN	Yes	No, bidder takes exceptions to City's procurement solicitation	\$22.25	\$32.67	\$35.77	net 30 days	07/31/17

¹MOES indicates "meet(s) or exceed(s) specifications"

*Staff recommendation is to reject all bids

AUTHORIZING RESOLUTION 2017-52

RESOLUTION AUTHORIZING AND PROVIDING FOR THE FINANCING OF THE CONSTRUCTION OF A WASTEWATER FACILITIES PROJECT, INCLUDING AUTHORIZING THE EXECUTION OF APPLICATIONS, CONTRACTUAL AGREEMENTS, AND OTHER NECESSARY DOCUMENTS, AND MAKING CERTAIN REPRESENTATIONS, CERTIFICATIONS, AND PLEDGES OF CERTAIN REVENUE IN CONNECTION WITH SUCH FINANCING.

WHEREAS, the City of Franklin is a public and governmental body in the Franklin, Tennessee (the "Local Government"); and

WHEREAS, the Local Government has determined that it is necessary and desirable to undertake certain activities or tasks in connection with a wastewater facilities project, Department of Environment and Conservation Number **SRF 2017-398** (the "Project"), in and for the Local Government; and

WHEREAS, Tennessee Code Annotated, Section 68-221-1001 et. seq., provide for the lending of moneys in the wastewater facilities Revolving Loan Fund to Local Governments for the purpose of providing funds for Project Loans; and

WHEREAS, the local Government has determined that it is necessary and advisable to borrow funds for the Project pursuant to these sections.

NOW, THEREFORE, be it resolved as follows:

Section 1. Local Government hereby approves the creation of indebtedness on behalf of the Local Government in the principal amount of TWENTY MILLION Dollars (\$20,000,000) by the obtaining of a Project Loan.

Section 2. The execution and delivery of the Application for a Project Loan in the principal amount of TWENTY MILLION Dollars (\$20,000,000) for the purpose of funding all or a portion of the total estimated cost of the Project ONE HUNDRED TWELVE MILLION EIGHT HUNDRED SEVENTY FIVE THOUSAND Dollars (\$112,875,000), by Dr. Ken Moore, Mayor of the Local Government, is hereby ratified and approved in all respects.

Section 3. The form, terms, and provisions of the agreement for the Project Loan among the Local Government, the Tennessee Department of Environment and Conservation and the Tennessee Local Development Authority (the "Loan Agreement"), as presented at this meeting, are hereby approved.

Section 4. The Local Government hereby agrees to honor and accept the method of financing as may be determined by the Authority pursuant to the Loan Agreement.

Section 5. The Local Government hereby agrees to make the monthly payments on the Project Loan in accordance with the Payment Schedule to be attached to the Loan Agreement.

Section 6. The Local Government hereby agrees to levy fees, rates or charges for services provided by the Project and/or to levy ad valorem taxes sufficient to pay the interest on and principal of the Project Loan in accordance with the Loan Agreement. The Local Government also agrees to levy fees, rates, or charges and/or ad valorem taxes sufficient to pay the cost of operation and maintenance of the wastewater system of which the Project is a part, which cost shall include depreciation and all other debt service expense of the system.

Section 7. The Local Government assigns and pledges its State-Shared Taxes to the State and consents to the withholding and application of State-Shared Taxes in the event of failure by the Local Government to remit monthly payments in accordance with the terms of the Loan Agreement, as the Loan Agreement may be supplemented or amended from time to time.

Section 8. The Local Government hereby agrees that there are no local pledges of State-Shared Taxes other than those disclosed.

Section 9. The Local Government hereby agrees to obtain alternative methods of financing for all costs necessary for the completion of the Project which are in excess of the combined financing provided by any agency of the United States Government and by the Tennessee Local Development Authority.

Section 10. The Mayor of the Local Government is authorized and directed to execute the Loan Agreement, and any amendments or supplements to the Loan Agreement, in the name and behalf of the Local Government; to deliver such documents to the other parties to such documents, such execution and delivery to be conclusive proof of the approval of the Local Government of such documents; and to take such further action and to execute and deliver such further instruments or documents as such officer may consider necessary or advisable in connection with the Loan Agreement. Provided, however, this resolution shall not be deemed to grant authority to the named officer to approve any increase in the amount of the Project Loan.

Section 11. All orders, resolutions, or ordinances in conflict with this resolution be and the same are repealed insofar as such conflict exists. This resolution shall become effective immediately upon its passage.

Duly passed and approved this 11th day of July, 2017.

Dr. Ken Moore, Mayor

WITNESS:

(Affix Seal As Appropriate)

(Name and Title)

**REVOLVING FUND LOAN AGREEMENT
FOR TAX REVENUE ENTITIES
(i.e. TOWNS/CITIES/COUNTIES)**

This Agreement is among the Tennessee Department of Environment and Conservation (the "Department"), the Tennessee Local Development Authority (the "Authority") and the City of Franklin (the "Local Government"), which is a Tennessee governmental entity authorized to own, operate, and manage wastewater facilities. The purpose of this Agreement is to provide for the financing of all or a portion of a wastewater facility by the Local Government. The Local Government submitted an application for the financing dated _____, which is hereby incorporated into this Agreement.

1. **DEFINITIONS.** Unless the context in this Agreement indicates another meaning, the following terms shall have the following meaning:
 - (a) "Administrative fee" means the fee to be collected by the Authority for administration of the loan in accordance with Tenn. Code Ann. Sections 68-221-1004(a) and 68-221-1204(a), both as amended;
 - (b) "Agreement" means this agreement providing financing for the Project from the Fund;
 - (c) "Facility" means either a wastewater facility or a water system;
 - (d) "Fund" means:
 - (1) For wastewater projects, the wastewater revolving loan fund created by the Tennessee Wastewater Facilities Act of 1987, Tenn. Code Ann. Sections 68-221-1001, et seq., as amended, and rules and regulations promulgated thereunder; or
 - (2) For water projects, the drinking water revolving loan fund created by the Drinking Water Revolving Loan Fund Act of 1997, Tenn. Code Ann. Sections 68-221-1201, et seq., as amended, and rules and regulations promulgated thereunder;
 - (e) "Initiation of Operation" means the date when all but minor components of the Project have been built, all treatment equipment is operational and the Project is capable of functioning as designed and constructed;
 - (f) "Local Government" means the governmental entity borrowing under this Agreement described in (1) Tenn. Code Ann. Section 68-221-1003(7), as amended, if a wastewater facility and (2) Tenn. Code Ann. Section 68-221-1203(6), as amended, if a water system;
 - (g) "Obligations" means bonds, notes and any other evidence of indebtedness lawfully issued or assumed by the Local Government;
 - (h) "Project" means the activities or tasks concerning a facility described in the application submitted by the Local Government to be financed pursuant to this Agreement;
 - (i) "Project Cost" means the total amount of funds necessary to complete the Project;
 - (j) "Project Loan" means the moneys loaned from the Fund to finance the Project and, except for principal forgiven, if any, required to be repaid pursuant to this Agreement;

(k) "Revenues" means all fees, rents, tolls, rates, rentals, interest earnings, or other charges received or receivable by the Local Government from the water or wastewater system which is the Project, or of which the Project is or will be a component, including any revenues derived or to be derived by the Local Government from a lease, agreement or contract with any other local government, local government instrumentality, the state, or a state or federal agency for the use of or in connection with the system, or all other charges to be levied and collected in connection with and all other income and receipts of whatever kind or character derived by the Local Government from the operation of the system or arising from the system;

(l) "State" means the state of Tennessee acting through the Department and the Authority, jointly or separately, as the context requires;

(m) "State-Shared Taxes" has the meaning established by Tenn. Code Ann. Section 4-31-102, as amended; and

(n) "Unobligated State-Shared Taxes" means State-Shared Taxes which have not been pledged or applied to any other prior indebtedness.

2. PROJECT

(a) Description. The description of the Project is as described in the application submitted by the Local Government.

(b) Funding Sources. The Local Government estimates the Project Cost to be \$112,875,000 which is expected to be funded as follows:

(1) Project Loan	\$ 20,000,000
(2) Principal Forgiveness	\$ -0-
(3) Local Funds	\$ 12,875,000
(4) Other Funds (CG5 2017-375)	\$ 1,500,000
(5) Other Funds (SRF 2017-376)	\$ 78,500,000
TOTAL	\$ 112,875,000

3. LOAN

(a) Loan and use of proceeds. The State shall lend to the Local Government from moneys available in the Fund an aggregate principal amount not to exceed \$20,000,000 to bear interest as described in (b) below. The Project Loan shall be used by the Local Government for completion of the Project and in accordance with engineering plans and specifications and special conditions, approved and required by the Department and hereby incorporated into this Agreement. Interest on the Project Loan will begin to accrue upon the first disbursement of the Project Loan pursuant to Section 5 of this Agreement.

(b) Interest rate. The rate of interest for this Project Loan is that rate established by the Authority at the meeting at which this Project Loan is approved and stated on the payment schedule which is incorporated into and attached to this Agreement.

- (c) Administrative fee. The Authority shall collect a fee equal to 8 basis points of the total Project Loan, where one basis point is equal to one-hundredth of one percent (0.01%). This fee shall be payable in monthly installments equal to one-twelfth (1/12) of the annual fee amount as stated on the payment schedule.
- (d) Payment schedule. The Local Government expressly agrees to make all payments of principal and interest in accordance with the payment schedule, including the form of payment (currently electronic funds transfer), as it is from time to time revised by the State. A revision of the payment schedule shall not be deemed to be an amendment of this Agreement.

4. REPAYMENT OF PROJECT LOAN.

(a) Payments.

- (1) The Local Government promises to repay to the order of the State the Project Loan plus interest, payable in installments on the 20th day of each month in accordance with the payment schedule established by the Authority and attached to this Agreement. The payment schedule will require payments of interest to begin after the first disbursement pursuant to Section 5 of this Agreement. The payment schedule will require repayments of principal to begin the earlier of:

(A) Within ninety (90) days after Initiation of Operation of the Project for construction loans or within two (2) years of loan approval for planning and design loans; or

(B) Within one hundred twenty (120) days after ninety percent (90%) of the Project Loan has been disbursed.

- (2) Notwithstanding Section 4(a)(1), the Authority may agree in the instance of a newly created water system to defer the commencement of principal repayment for no more than one year after Initiation of Operation of the Project.

(b) Reduction. The Project Loan, and the required payments made pursuant to the payment schedule, shall be reduced to reflect:

(1) Funding not listed in Section 2(b) which subsequently becomes available; or

(2) The amount actually disbursed by the State to the Local Government pursuant to the Agreement as the Project Loan.

If any of the conditions set out in Section 4(b)(1) or (b)(2) occur, a new payment schedule reflecting such changes shall be submitted to the Local Government to be attached to this Agreement, superseding any previous schedules.

(c) Prepayment. The Local Government, at its option, may prepay all or any portion of the Project Loan.

- (d) Principal Forgiven. A portion of the original principal amount of the Project Loan may be forgiven by the State. The principal forgiven shall be Zero per cent (0%) of the original principal amount of the Project Loan, or if the full original amount of the Project Loan is not used, then Zero per cent (0%) of the amount of the Project Loan actually disbursed. Notwithstanding Section 3, no interest shall accrue on the amount of principal forgiven pursuant to this Section 4(d).

5. DISBURSEMENT OF PROJECT LOAN. Each request by the Local Government for disbursement of the Project Loan shall constitute a certification by the Local Government that all representations made in this Agreement remain true as of the date of the request and that no adverse developments affecting the financial condition of the Local Government or its ability to complete the Project or to repay the Project Loan plus interest have occurred since the date of this Agreement unless specifically disclosed in writing by the Local Government in the request for disbursement. Submitted requests for disbursement must be supported by proper invoices and other documentation required by and acceptable to the Department and the Authority.

After the Department has certified and the Authority has approved a request for disbursement, the Authority will disburse the Project Loan during the progress of the Project. Each disbursement shall be by electronic funds transfer or such other form of payment as specified in the payment schedule and shall be equal to that portion of the unpaid principal amount incurred to the date of the Local Government's request for disbursement. The amount of any principal forgiven shall be allocated on a pro-rata basis to each disbursement made.

No more than 90% of the Project Loan shall be paid to the Local Government prior to the time: 1) the construction of the Project has been completed, 2) the facilities constituting the Project are in the opinion of the Department in proper operation, and 3) the Project has been approved by the Department. Following approval of the Project by the Department, the remaining 10% of the Project Loan may be paid to the Local Government. Provided, however, that if this Project Loan is for planning or replanning and design, payments may be made prior to the completion of construction of the Project for the full amount of costs associated with the planning or replanning and design.

6. AMENDMENT.

- (a) Increase in Project Loan. If the final Project Cost is greater than is estimated in Section 2(b), then the Project Loan may be increased by a subsequent agreement executed by the parties to this Agreement (the amount of such increase may be subject to a different interest rate) if the following conditions are fulfilled:

- (1) Amounts in the Fund are authorized and available for such increase;
- (2) The increased Project Loan otherwise meets the applicable statutory requirements and the rules adopted thereunder; and
- (3) Such increase in this Project Loan does not result in any violation or breach of any contract, resolution, or ordinance of the Local Government.

- (b) Other Amendments and Modifications. Any other amendment or modification of this Agreement must first be approved by the Authority and must be in writing executed by the parties to this Agreement.

7. REPRESENTATIONS AND COVENANTS OF LOCAL GOVERNMENT. The Local Government hereby represents, agrees, and covenants with the State as follows:

- (a) To construct, operate, and maintain the Project in accordance, and to comply, with all applicable federal and state statutes, rules, regulations, procedural guidelines, and grant conditions;
- (b) To comply with:
 - (i) The Project schedule, engineering plans and specifications, and any and all special conditions established and/or revised by the Department; and

- (ii) Any special conditions established and/or revised by the Authority including, but not limited to, the Authority's "State Revolving Fund Policy and Guidance for Borrowers" adopted on September 21, 2016, and as may be amended or revised from time to time, the terms and conditions of which are adopted by reference as if fully set forth herein;
- (c) To commence operation of the Project on its completion and not to contract with others for the operation and management of, or to discontinue operation or dispose of, the Project without the prior written approval of the Department and the Authority;
- (d) To provide for the Local Government's share of the cost of the Project;
- (e) To comply with applicable federal requirements including the laws and executive orders listed on Exhibit A to this Agreement;
- (f) To advise the Department before applying for federal or other state assistance for the Project;
- (g) To establish and maintain adequate financial records for the Project in accordance with generally accepted government accounting principles; to cause to be made an annual audit acceptable to the Comptroller of the Treasury of the financial records and transactions covering each fiscal year; and to furnish a copy of such audit to the Authority. In the event of the failure or refusal of the Local Government to have the annual audit prepared, then the Comptroller of the Treasury may appoint an accountant or direct the Department of Audit to prepare the audit at the expense of the Local Government;
- (h) To provide and maintain competent and adequate engineering supervision and inspection of the Project to insure that the construction conforms with the engineering plans and specifications approved by the Department;
- (i) To abide by and honor any further guarantees or granting of security interests as may be required by the State which are not in conflict with state or federal law;
- (j) To do, file, or cause to be done or filed, any action or statement required to perfect or continue the lien(s) or pledge(s) granted or created hereunder;
- (k) To establish and collect, and to increase, user fees and charges and/or increase or levy, as the case may be, ad valorem taxes as needed to pay the monthly installments due under this Agreement, as well as the other costs of operation and maintenance including depreciation and debt service of the system of which the Project is a part;
- (l) To receive the approval of the Authority prior to issuing any Obligations that are payable all or in part from any part of the Revenues if such Obligations are intended to be on parity or superior to the lien position created under this Agreement;
- (m) To notify the Assistant Secretary to the Authority in writing prior to issuing any Obligations that are payable all or in part from any part of the Revenues if such Obligations are intended to be subordinate to the lien position created under this Agreement;
- (n) To receive the approval of the Authority prior to pledging or encumbering the Local Government's State-Shared Taxes; and

- (o) The Local Government is subject to the jurisdiction of the Water and Wastewater Financing Board (“WWFB”) established in Tenn. Code Ann. Section 68-221-1008 or of the Utility Management Review Board (“UMRB”) created in Tenn. Code Ann. Section 7-82-701 as provided by law. If the Authority, in its sole discretion, determines that the Local Government’s obligations under this Agreement have been or may be impaired, the Authority may refer the Local Government to the WWFB or UMRB (each a “Board”) as appropriate. In the event of default under this Agreement, the Authority shall refer the Local Government to the Board having jurisdiction over the entity. In such event, the Local Government covenants, to the extent permitted by law, to request advisory technical assistance from the Board and to request that the Board propose any and all management, fiscal and/or rate changes necessary to enable the Local Government to fulfill its obligations to the Authority under this Agreement. The Local Government agrees to supply the Board with any information that the Board may request in connection with its analysis of the Local Government’s system. The Local Government agrees that it will implement any and all technical, management, fiscal and/or rate changes recommended by the Board and determined by the Authority to be required for the Local Government to fulfill its obligations to the Authority under this Agreement.

8. SECURITY AND DEFAULT.

- (a) As security for payments due under this Agreement, the Local Government pledges users fees and charges and/or ad valorem taxes, and covenants and agrees that it shall increase such fees or increase or levy, as the case may be, ad valorem taxes as needed to pay the monthly installments due under this Agreement, as well as the other costs of operation and maintenance of the system, including depreciation. The Local Government covenants to establish and collect such fees and taxes and to make such adjustments to raise funds sufficient to pay such monthly payments and costs but to create only a minimum excess. The Local Government further pledges such other additional available sources of Revenues as are necessary to meet the obligations of the Local Government under this Agreement.

As further security for payments due under this Agreement, the Local Government pledges and assigns subject to the provisions herein its Unobligated State-Shared Taxes in an amount equal to the maximum annual debt service requirements under this Agreement. If the Local Government fails to remit the monthly payments as established in the payment schedule, the Authority shall deliver by certified mail a written notice of such failure to the Local Government within 5 days of such failure and the Authority shall suspend making disbursements as provided in Section 5 until such delinquency is cured. If the Local Government fails to cure payment delinquency within 60 days of the receipt of such notice, such failure shall constitute an event of default under this Agreement and, in addition, the Authority shall notify the Commissioner of Finance and Administration of the State of Tennessee of the default of the Local Government and the assignment of Unobligated State-Shared Taxes under this Agreement. Upon receipt of such notice, the Commissioner shall withhold such sum or part of such sum from any State-Shared Taxes which are otherwise apportioned to the Local Government and pay only such sums necessary to liquidate the delinquency of the Local Government to the Authority for deposit into the fund. The Local Government acknowledges that it has no claim on State-Shared Taxes withheld as permitted under this Agreement.

If the Local Government breaches any other provision of this Agreement, the Authority shall deliver by certified mail a written notice of such breach to the Local Government within 30 days of the Authority learning of such breach. The Local Government’s failure to cure the breach within 60 days from receipt of notice of such breach shall constitute an event of default under this Agreement.

- (b) Upon an event of default, the Authority may declare all unpaid principal and interest to be immediately due and payable as well as pursue all available legal and equitable remedies. The Local

Government shall be responsible for all costs that the Authority incurs in enforcing the provisions of this Agreement after an event of default, including, but not limited to, reasonable attorneys' fees.

9. CONDITIONS PRECEDENT. This Agreement is further conditioned on the receipt of the following documents, in form and substance acceptable to the Authority, if applicable, on or before the date of the first disbursement of the Project Loan; each document is to be dated or certified, as the case may be, on or before the date of the first disbursement of the Project Loan:
- (a) A general certificate of the Local Government certifying the resolution or ordinance authorizing the Local Government to enter into this Agreement, the resolution or ordinance authorizing the rate and fee structure for the users of the system, and other matters;
 - (b) An opinion of the attorney or special counsel to the Local Government to the effect that:
 - (1) The Local Government has been duly created and is validly existing and has full power and authority (under its charter and by-laws or general law, if applicable, and other applicable statutes) to enter into and carry out the terms of this Agreement;
 - (2) This Agreement is duly executed and constitutes a valid and binding contract of the Local Government, enforceable in accordance with its terms except as the enforceability thereof may be limited by bankruptcy, reorganization, insolvency, moratorium or similar laws affecting the enforcement of creditors rights generally;
 - (3) This Agreement is not in conflict in any material way with any contracts, resolutions or ordinances of the Local Government; and
 - (4) There is no litigation materially adversely affecting this Agreement or the financial condition of the Local Government;
 - (c) An opinion of a licensed engineer or certified public accountant as to the sufficiency of the rates, fees and charges and any other fees and charges to meet costs of operation and maintenance, including depreciation and all debt service of the Local Government, as set forth in Paragraph 7(k) above;
 - (d) An opinion of a licensed engineer as to the reasonableness of the project costs and as to the estimated completion date of the Project; and
 - (e) A representation of the Local Government as to loans and State-Shared Taxes.
10. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the state of Tennessee. The Tennessee Claims Commission or the state or federal courts in Tennessee shall be the venue for all claims, disputes, or disagreements arising under this Agreement. The Local Government acknowledges and agrees that any rights, claims, or remedies against the State of Tennessee or its employees, including but not limited to, the Department, the Authority, and the employees thereof, arising under this Agreement shall be subject to and limited to those rights and remedies available under Tenn. Code Ann. Title 9, Chapter 8.
11. SEVERABILITY. In the event any covenant, condition or provision of this Agreement is held to be invalid or unenforceable by a final judgment of a court of competent jurisdiction, the invalidity thereof shall in no way affect any of the other covenants, conditions or provisions hereof.

12. NOTICES. Any notice shall be delivered to the parties at the addresses below (or such other addresses as the parties shall specify to each other in writing):

To Department: Tennessee Department of Environment and Conservation
312 Rosa L. Parks Ave, 12th Floor
Nashville, TN 37243
ATTN: State Revolving Fund Loan Program

To Authority: Tennessee Local Development Authority
Suite 1600, James K. Polk Building
Nashville, TN 37243-0273
ATTN: Assistant Secretary

To Local Government: City of Franklin
Attn: The Honorable Dr. Ken Moore, Mayor
405 Hillsboro Road,
Franklin, TN 37064

12. SECTION HEADINGS. Section headings are provided for convenience of reference only and shall not be considered in construing the intent of the parties to this Agreement.

13. EFFECTIVE DATE. The effective date of this Agreement shall be the date on which the Authority approves this Agreement as indicated below.

IN WITNESS WHEREOF, the parties to this Agreement have caused the Agreement to be executed by their respective duly authorized representatives.

LOCAL GOVERNMENT

NAME: City of Franklin
(City)

BY: _____
(Dr. Ken Moore, Mayor)

TITLE: Mayor

DATE: _____

**TENNESSEE LOCAL DEVELOPMENT
AUTHORITY**

BY: _____

TITLE: _____

MEETING APPROVAL DATE: _____

INTEREST RATE: _____

APPROVED AS TO FUNDING:

**COMMISSIONER, DEPARTMENT OF
ENVIRONMENT AND CONSERVATION**

BY: _____

DATE: _____

**COMMISSIONER OF FINANCE AND
ADMINISTRATION**

BY: _____

DATE: _____

LIST OF CLOSING DOCUMENTS RELATED TO LOAN AGREEMENT

Copy of the Local Government's Application for Project Loan

Loan Conditions

General Certificate with copies of ordinances/resolution approving Loan Agreement and Rate Structure

Opinion as to Sufficiency of Rates, Fees and Charges and Cost and Completion

Representation as to Loans and State-Shared Taxes

Legal Opinion of Attorney or Special Counsel to Local Government

EXHIBIT A***FEDERAL LAWS AND EXECUTIVE ORDERS*****ENVIRONMENTAL:**

Clean Air Act (Pub. L. 101-549, 42 U.S.C. § 7401, et seq.), as amended.

Endangered Species Act (Pub. L. 93-205, 16 U.S.C. § 1531, et seq.), as amended.

Environmental Justice, Executive Order 12898, 59 Fed. Reg. 7629 (1994), as amended.

Floodplain Management, Executive Order 11988 42 Fed Reg. 26951 (1977), as amended by Executive Order 12148, 44 FR 43239 (1979) (pertaining to Federal Emergency Management) and as further amended by Executive Order 13690, 80 FR 6425 (2015), as amended.

Protection of Wetlands, Executive Order 11990, 42 Fed Reg. 26961 (1977), as amended.

Farmland Protection Policy Act, (Pub. L. 97-98, 7 U.S.C. § 4201, et seq.), as amended.

Fish and Wildlife Coordination Act, (Pub. L. 85-624, 16 U.S.C. § 661 et seq.), as amended.

National Historic Preservation Act of 1966, (Pub. L. 113-287, 54 U.S.C. § 300101 et seq.), as amended.

Water Pollution Control Act of 1972, (Pub. L. 114-181, 33 U.S.C. § 1251 et seq.), as amended.

Safe Drinking Water Act (Title XIV of the Public Health Service Act, Pub. L. 93-523, 42 U.S.C. § 300f et seq.), as amended.

Wild and Scenic Rivers Act, (Pub. L. 90-542, 28 U.S.C. § 1271, et seq.), as amended.

ECONOMIC AND MISCELLANEOUS AUTHORITIES:

Demonstration Cities and Metropolitan Development Act of 1966, (Pub. L. 89-754, 42 U.S.C. § 3331, et seq.), as amended.

Intergovernmental Review of Federal Programs, Executive Order 12372, 47 Fed. Reg. 30959 (1982), as amended.

Procurement Prohibitions under Section 306 of Clean Air Act, 42 U.S.C. § 7606, and Section 508 of Clean Water Act, 33 U.S.C. § 1368, including Executive Order 11738, 38 Fed. Reg. 25161(1973) (Administration of Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants and Loans), as amended.

Uniform Relocation and Real Property Acquisition Policies Act (Pub. L. 91-646, 42 U.S.C § 4601, et seq.), as amended.

Debarment and Suspension, Executive Order 12549, 51 Fed. Reg. 6370 (1986), as amended.

Kickbacks from Public Works Employees Prohibited, 18 U.S.C. § 874.

Requirements for Public Work Contractors to Comply with U.S. Dept. of Labor Regulations (Pub. L. 103-322, Title XXXIII, § 330016(1)(K), 40 U.S.C. § 3145), as amended.

Contract Work Hours and Safety Standards Act (Pub. L. 111-350, 40 U.S.C. § 3701, et seq.), as amended.

SOCIAL POLICY AUTHORITIES:

Age Discrimination in Employment Act (Pub. L. 114-181, 29 U.S.C. § 621, et seq.), as amended.

Title VI of Civil Rights Act of 1964 (Pub. L. 88-352, 42 U.S.C. § 2000d, et seq.), as amended, and related anti-discrimination statutes.

Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112, 29 U.S.C. § 701), as amended, and Executive Order 12250 (45 Fed. Reg. 72995 (1980)).

Equal Employment Opportunity, Executive Order 11246 (30 Fed. Reg. 12319, 12935 (1965)), Executive Order 11375 (32 Fed. Reg. 14303 (1967)), and Executive Order 13672 (79 Fed. Reg. 42971 (2014)).

Women's and Minority Business Enterprise Executive Orders 11625 (36 Fed. Reg. 19967 ((1971)), 12138 (44 Fed. Reg. 29637 (1979)), and 12432 (48 Fed. Reg. 32551 (1983)).

Section 129 of Small Business Administration Reauthorization and Amendment Act (Pub. L. 100-590, 15 USC § 637), as amended.

**CITY OF FRANKLIN, TENNESSEE
PROFESSIONAL SERVICES AGREEMENT
COF Contract No. 2017-0171**

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is by and between the City of Franklin, Tennessee, hereinafter referenced as City, and **VOLKERT, INC.** hereinafter referenced as Consultant, who mutually agree as follows:

DECLARATIONS. City desires to retain Consultant to provide engineering, related technical, and other services in connection with City's project hereinafter referenced as Project. The Project is described as follows:

FINAL DESIGN OF FRANKLIN ITS EXTENSION PROJECT

1. **SCOPE OF SERVICES.** Consultant shall provide engineering and related technical services for the Project in accordance with the Scope of Services (Services) as found in Attachment A which shall be considered as an integral part hereof.
2. Consultant shall submit as a part of Attachment A an individual Fee Schedule and a Completion Schedule for the Project based on the detailed Scope of Services.
3. In event of a conflict between this Agreement and the attached document(s), this Agreement shall supersede conflicting terms and conditions.
4. Consultant shall be paid on a monthly basis for work performed based on the Fee Schedule as contained in Attachment A in the Not-to-Exceed Amount of **SEVENTY-ONE THOUSAND FIVE HUNDRED AND NO/100 DOLLARS (\$71,500.00)**.

The Board of Mayor and Aldermen Approved this Agreement on the _____ Day of _____ 201__.

TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

ARTICLE 1. SERVICES. Consultant will:

- 1.1 Act for City in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with standards of competent consultants using the standards in the industry:
- 1.2 Consider all reports to be confidential and distribute copies of the same only to those persons specifically designated by the City.
- 1.3 Perform all services under the general direction of a senior professional employee, licensed and/or registered in the State of Tennessee, when appropriate.
- 1.4 Designate, in writing, the sole Project representative to coordinate with City the Services to be provided, including all contact information.
- 1.5 Unless provided for in the Project Scope of Services (Attachment A), Consultant shall perform all Services with his own forces (employees). Should sub-consultants be proposed to be used in the Project, a listing of said sub-consultants with Services to be performed shall be provided. After approval of this Agreement, no substitute for sub-consultants shall be allowed unless approved by City.
- 1.6 Retain pertinent records relating to the services performed for a period of seven (7) years following the completion of the work; during this period the records shall be available for review by City at all reasonable times.

ARTICLE 2. CITY'S RESPONSIBILITIES. City, or its authorized representative, will:

- 2.1 Provide Consultant with all information regarding the Project, which is available to, or reasonably obtainable by, the City.
- 2.2 Furnish right-of-entry onto the Project site for Consultant's necessary field studies and surveys. Consultant will endeavor to restore the site to its original condition and shall remain solely liable for all damages, costs and expenses, including reasonable attorneys' fees, for failure to make such restoration.
- 2.3 Designate, in writing, the sole Project representative to coordinate with and direct the Consultant, including all contact information.
- 2.4 Guarantee to Consultant that it has the legal capacity to enter into this contract and that sufficient monies are available to fund Consultant's compensation.

ARTICLE 3. GENERAL CONDITIONS.

- 3.1 Consultant, by the performance of services covered hereunder, does not in any way assume, abridge or abrogate any of those duties, responsibilities or authorities customarily vested in other professionals or agencies participating in the Project.

- 3.2 Consultant shall be responsible for the acts or omissions of any party involved in concurrent or subsequent phases of the Project acting upon written instruction issued by the Consultant.
- 3.3 Neither City nor Consultant may assign or transfer its duties or interest in this Agreement without written consent of the other party.
- 3.4 **ALLOCATION OF RISK AND LIABILITY; GENERAL.** Considering the potential liabilities that may exist during the performance of the services of this Agreement, the relative benefits and risks of the Project, and the Consultant's fee for the services rendered, and in consideration of the promises contained in this Agreement, the City and the Consultant agree to allocate and limit such liabilities in accordance with this Article.
- 3.5 **INDEMNIFICATION.** Consultant agrees to indemnify and hold City harmless from and against legal liability for all judgments, losses, damages, and expenses to the extent such judgments, losses, damages, or expenses are caused by Consultant's negligent act, error or omission in the performance of the services of this Agreement. In the event judgments, losses, damages, or expenses are caused by the joint or concurrent negligence of Consultant and City, they shall be borne by each party in proportion to its own negligence.
- 3.5.1 **SURVIVAL.** The terms and conditions of this paragraph shall survive completion of this services agreement.
- 3.6 **LIMITATIONS OF RESPONSIBILITY.** Consultant shall not be responsible for (a) construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project unless specifically undertaken in Attachment A, Scope of Services ; (b) the failure of any contractor, subcontractor, Consultant, or other Project participant, not under contract to Consultant, to fulfill contractual responsibilities to City or to comply with federal, state, or local laws, regulations, and codes; or (c) procuring permits, certificates, and licenses required for any construction unless such procurement responsibilities are specifically assigned to Consultant in Attachment A, Scope of Services.

ARTICLE 4. TERMINATION BY THE CITY. The City may terminate this Agreement in accordance with the following terms and conditions:

- 4.1 **Termination for Convenience.** The City may, when in the interests of the City, terminate performance under this Agreement with the Consultant, in whole or in part, for the convenience of the City. The City shall give written notice of such termination to the Consultant specifying when termination becomes effective. The Consultant shall incur no further obligations in connection with the work so terminated, other than warranties and guarantees for completed work and installed equipment, and the Consultant shall stop work when such termination becomes

effective. The Consultant shall also terminate outstanding orders and subcontracts for the affected work. The Consultant shall settle the liabilities and claims arising out of the termination of subcontracts and orders. The City may direct the Consultant to assign the Consultant's right, title and interest under termination orders or subcontracts to the City or its designee. The Consultant shall transfer title and deliver to the City such completed or partially completed work and materials, equipment, parts, fixtures, information and Contract rights as the Consultant has in its possession or control. When terminated for convenience, the Consultant shall be compensated as follows:

- (1) The Consultant shall submit a termination claim to the City specifying the amounts due because of the termination for convenience together with costs, pricing or other data required by the City. If the Consultant fails to file a termination claim within one (1) year from the effective date of termination, the City shall pay the Consultant the amount the City deems the Consultant is due.
- (2) The City and the Consultant may agree to the compensation, if any, due to the Consultant hereunder.
- (3) Absent agreement to the amount due to the Consultant, the City shall pay the Consultant the following amounts:
 - (a) Contract costs for labor, materials, equipment and other services accepted under this Agreement;
 - (b) Reasonable costs incurred in preparing to perform and in performing the terminated portion of the work, and in terminating the Consultant's performance, plus a fair and reasonable allowance for direct job site overhead and earned profit thereon (such profit shall not include anticipated profit or consequential damages); provided however, that if it reasonably appears that the Consultant would have not profited or would have sustained a loss if the entire Agreement would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss, if any;

The total sum to be paid the Consultant under this Section shall not exceed the total Agreement Price, as properly adjusted, reduced by the amount of payments otherwise made, and shall in no event include duplication of payment.

- 4.2 Termination for Cause. If the Consultant does not perform the work, or any part thereof, in a timely manner, supply adequate labor, supervisory personnel or proper equipment or materials, or if it fails to timely discharge its obligations for labor, equipment and materials, or proceeds to disobey applicable law, or otherwise commits a violation of a material provision of this Agreement, then the City, in addition to any other rights it may have against the Consultant or others, may terminate the performance of the Consultant, in whole or in part at the City's sole option, and assume possession of the Project Plans and materials and may complete the work.

In such case, the Consultant shall not be paid further until the work is complete. After Completion has been achieved, if any portion of the Contract Price, as it may be modified hereunder, remains after the cost to the City of completing the work, including all costs and expenses of every nature incurred, has been deducted by the City, such remainder shall belong to the Consultant. Otherwise, the Consultant shall pay and make whole the City for such cost. This obligation for payment shall survive the termination of the Agreement.

In the event the employment of the Consultant is terminated by the City for cause pursuant to this Section and it is subsequently determined by a Court of competent jurisdiction that such termination was without cause, such termination shall thereupon be deemed a Termination for Convenience under this Section and the provisions of Section 4.1 shall apply.

- 4.3 Termination for Non-Appropriation. The City may also terminate this Agreement, in whole or in part, for non-appropriation of sufficient funds to complete or partially complete the Project, regardless of the source of such funds, and such termination shall be on the terms of Section 4.1.
- 4.4 The City's rights under this Section shall be in addition to those contained elsewhere herein or provided by law.

ARTICLE 5. SCOPE OF SERVICES. Consultant shall provide the Services as described in Attachment A, Scope of Services.

- 5.1 By mutual agreement, this Agreement and scope can be amended by the parties. The scope and fee for any additional tasks or services under such amendment shall be mutually negotiated and agreed to in writing prior to beginning such additional tasks or services.

5.2 ENVIRONMENTAL RESPONSIBILITY.

Where drilling/sampling services are involved, the samples obtained from the Project site are the property of the City. Should any of these samples be recognized by the Consultant to be contaminated, the City shall remove them from the Consultant's custody and transport them to a disposal site, all in accordance with applicable government statutes, ordinances, and regulations. For all other samples, the Consultant shall retain them for a sixty (60)-day period following the submission of the drilling/sampling report unless the City directs otherwise; thereafter, the Consultant shall discard the samples in accordance with all federal, state and local laws.

ARTICLE 6. SCHEDULE.

- 6.1 TIME OF THE ESSENCE. The parties agree that time is of the essence with respect to the parties' performance of all provisions of the Agreement.
- 6.2 Before executing this Agreement, the Consultant shall have prepared and submitted for approval to the City a Completion Schedule for the Project with milestones for the various stages (tasks) of the Services as outlined in the Scope of Services. The Consultant shall submit and obtain the City's approval for any proposed changes to the logic, durations, sequences, or timing of tasks as approved in the Completion Schedule.
- 6.3 FORCE MAJEURE. Neither party will be liable to the other for any delay or failure to perform any of the services or obligations set forth in this Agreement due to causes beyond its reasonable control, and performance times will be considered extended for a period of time equivalent to the time lost because of such delay plus a reasonable period of time to allow the parties to recommence performance of their respective obligations hereunder. Should a circumstance of force majeure last more than ninety (90) days, either party may by written notice to the other terminate this Agreement. The term "force majeure" as used herein shall mean the following: acts of God; strikes, lockouts or other industrial disturbances; acts of public enemies; orders or restraints of any kind of the government of the United States or of the State or any of their departments, agencies or officials, or any civil or military authority; insurrections, riots, landslides, earthquakes, fires, storms, tornadoes, droughts, floods, explosions, breakage or accident to machinery, transmission pipes or canals; or any other cause or event not reasonably within the control of either party.
- 6.4 Should City request changes in the scope, extent, or character of the Project, the fee and the time of performance of Consultant's Services as indicated in Attachment A shall be adjusted equitably.

ARTICLE 7. USE OF DOCUMENTS, DATA.

7.1 All Documents, including, but not limited to, reports, drawings, specifications, and computer software prepared by Consultant pursuant to this Agreement are instruments of service in respect to the Project. Consultant shall retain an ownership and property interest therein (including the right of reuse at the discretion of the Consultant) whether or not the Project is completed.

7.1.1 **USE OF DATA SYSTEMS:** Ownership, property interests and proprietary rights in data systems used by Consultant do not extend to the data created by or supplied to Consultant by the City; all rights to that data (including derivative or hidden data such as metadata) shall vest solely in City at the moment of creation.

7.1.2 **DISCLOSURE OF DOCUMENTS/DATA.** City may be required to disclose documents or data under state or federal law. City shall notify Consultant if a request for data or documents has been made and shall give Consultant a reasonable opportunity under the circumstances to respond to the request by redacting proprietary or other confidential information. Consultant waives any right to confidentiality of any document, e-mail or file it fails to clearly mark on each page as confidential or proprietary. In exchange, Consultant agrees to indemnify, defend, and hold harmless City for any claims by third parties relating thereto or arising out of (i) the City's failure to disclose such documents or information required to be disclosed by law, or (ii) the City's release of documents as a result of City's reliance upon Consultant representation that materials supplied by Consultant (in full or redacted form) do not contain trade secrets or proprietary information, provided that the City impleads Consultant and Consultant assumes control over that claim.

7.2 By execution of this Agreement, Consultant and his sub-consultant(s) grant the City a royalty-free, perpetual, irrevocable, and assignable license to use any and all intellectual property interest Consultant or his sub-consultant(s) possess to any drawings, details, specifications, documents, and other information created before each of their first involvement with the Project and subsequently incorporated into the Project's documents. City-furnished data that may be relied upon by Consultant is limited to the printed copies that are delivered to the Consultant pursuant to Article 2 of this Agreement. Any copyrighted electronic files furnished by City shall be used by Consultant only for the Project as described herein. City's posting or publication of such documents created by Consultant for City shall constitute fair use and shall not constitute an infringement of Consultant's copyright, if any.

- 7.3 Documents that may be relied upon by City are limited to the printed copies (also known as hard copies) that are signed or sealed by the Consultant. Files in electronic media format of text, data, graphics, or of other types that are furnished by Consultant to City are only for convenience of City, unless the delivery of the Project in electronic media format has been dictated in Attachment A, Scope of Services. Any conclusion or information obtained or derived from electronic files provided for convenience will be at the user's sole risk.
- 7.4 Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within sixty (60) days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. Unless stated otherwise herein, Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by City.
- 7.5 When transferring documents in electronic media format, Consultant makes no representations as to long term compatibility, usability, or readability, of documents resulting from the use of software application packages, operating systems, or computer hardware differing from that as required of, and used by, Consultant at the beginning of this Project.
- 7.6 City may make and retain copies of Documents for information and reference in connection with use on the Project by the City, or his authorized representative. Such Documents are not intended or represented to be suitable for reuse by City or others on extensions of the Project or on any other project. Any such reuse or modifications without written verification or adaptation by Consultant, as appropriate for the specific purpose intended, will be at City's sole risk and without liability or legal exposure to the Consultant or to Consultant's sub-consultants.
- 7.7 If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- 7.8 Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle Consultant to further compensation at rates to be agreed upon by City and Consultant.

ARTICLE 8. INSURANCE.

- 8.1 During the performance of the Services under this Agreement, Consultant shall maintain the following minimum insurance:
- a) General Liability Insurance with a combined single limit of \$1,000,000 per occurrence and \$2,000,000 annual aggregate.

- b) Automobile Liability Insurance with a combined single limit of \$1,000,000 for each person and \$1,000,000 for each accident.
 - c) Workers' Compensation Insurance Coverage A in accordance with statutory requirements and Coverage B, Employer's Liability Insurance, with a limit of \$500,000 for each occurrence.
 - d) Professional Liability Insurance with a limit of \$1,000,000 annual aggregate.
- 8.2 Consultant shall add the City an additional insured on all policies unless otherwise prohibited.
- 8.3 Consultant shall, upon execution of this Agreement, furnish City certificates of insurance, which shall include a provision that such insurance shall not be canceled without at least thirty (30) days' written notice to City.
- 8.4 No insurance, of whatever kind or type is to be considered as in any way limiting other parties' responsibility for damages resulting from their activities in the execution of the Project. City agrees to include, or cause to be included, in the Project's construction contract, such requirements for insurance coverage and performance bonds by the Project's construction contractor as City deems adequate to indemnify City, Consultant, and other concerned parties against claims for damages and to insure compliance of work performance and materials with Project requirements.

ARTICLE 9. PAYMENT.

- 9.1 City will pay Consultant for services and expenses in accordance with the Fee Schedule proposal submitted for the Project as part of the Scope of Services. Consultant's invoices will be presented at the completion of the work or monthly and will be payable upon receipt. Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. City shall give prompt written notice of any disputed amount and shall pay the remaining amount.
- 9.2 Consultant shall be paid in full for all services under this Agreement, including City authorized overruns of the Project budget or unforeseen need for Consultant's services exceeding the original Scope of Services.
- 9.3 **TRAVEL; EXPENSES**
City shall reimburse reasonable expenses, including travel and meals, when specified in the Scope of Services, but only in accordance with the City's Travel and Expense Policy and Procedures Manual. The maximum amount will be applied as of the date of travel and as listed in the per diem reimbursement rates on the "CONUS" website developed by the United States General Services Administration, located at www.gsa.gov [click on 'per diem rates' under the 'etools' category].

ARTICLE 10. MISCELLANEOUS PROVISIONS

- 10.1 **EQUAL EMPLOYMENT OPPORTUNITY.** In connection with this Agreement and the Project, City and Consultant shall not discriminate against any employee or applicant for employment because of race, color, sex, national origin, disability or marital status. City and Consultant will take affirmative action to ensure that the contractor used for the Project does not discriminate against any employee and employees are treated during employment without regard to their race, age, religion, color, gender, national origin, disability or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- 10.1.1 Consultant shall insert the foregoing provision in all contracts relating to this Project.
- 10.2 **TITLE VI – CIVIL RIGHTS ACT OF 1964.** City and Consultant shall comply with all the requirements imposed by Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), 49 C.F.R., Part 21, and related statutes and regulations.
- 10.2.1 Consultant shall insert the foregoing provision in all contracts relating to this Project.
- 10.3 **NO THIRD PARTY RIGHTS CREATED.** City and Consultant each binds itself and its successors, executors, administrators, permitted assigns, legal representatives and, in the case of a partnership, its partners, to the other party to this Agreement and to their successors, executors, administrators, permitted assigns, legal representatives and partners of such other party in respect to all provisions of this Agreement. The Services provided for in this Agreement are for the sole use and benefit of City and Consultant. Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than City and Consultant.
- 10.4 **WARRANTIES/LIMITATION OF LIABILITY/WAIVER.** City reserves all rights afforded to local governments under law for all general and implied warranties. City does not waive any rights it may have to all remedies provided by law and therefore any attempt by Consultant to limit its liability shall be void and unenforceable.

ARTICLE 11. EXTENT OF AGREEMENT:

- 11.1 **APPLICABLE LAW/CHOICE OF FORUM AND VENUE.** This Agreement is made under and will be construed in accordance with the laws of the State of Tennessee without giving effect to that state's choice of law rules. The parties' choice of forum and venue shall be exclusively in the courts of Williamson County, Tennessee. Any provision of this

Agreement held to violate a law or regulation shall be deemed void, and all remaining provisions shall continue in force.

- 11.2 **ENTIRE AGREEMENT.** This Agreement, including these terms and conditions, represent the entire Agreement between City and Consultant for this Project and supersedes all prior negotiations, representations or agreements, written or oral. This Agreement may be amended only by written instrument signed by City and Consultant.

ARTICLE 12. DISPUTE RESOLUTION, BREACH.

- 12.1 If a dispute should arise relating to the performance of or payment for the Services under this Agreement, the aggrieved party shall notify the other party of the dispute within a reasonable time after such dispute arises. During the pendency of any dispute, the parties shall continue diligently to fulfill their respective obligations hereunder. No arbitration or mediation shall be required as a condition precedent to filing any legal claim arising out of or relating to this Agreement. No arbitration or mediation shall be binding.
- 12.2 **BREACH.** Upon deliberate breach of the Agreement by either party, the non-breaching party shall be entitled to terminate the Agreement with notice, with all of the remedies it would have in the event of termination, and may also have such other remedies as it may be entitled to in law or in equity.

ARTICLE 13. SURVIVAL.

The provisions contained in this Professional Services Agreement shall survive the completion of or any termination of the Agreement, contract or other document to which it may accompany or incorporate by reference or which subsequently may be modified, unless expressly excepted from this Article upon consent of both parties.

CONSULTANT

CITY OF FRANKLIN, TENNESSEE

BY: _____

Consultant's Signature

TITLE: _____

Date: _____

BY: _____

Dr. Ken Moore

Mayor

Date: _____

Approved as to Form:

Kristen L. Corn, Assistant City Attorney



Volkert, Inc.

302 Innovation Drive
Suite 100
Franklin, TN 37067

Office 615.656.1845
Fax 615.656.1870

www.volkert.com

June 23, 2017

Mr. Jonathan Marston, P.E.
Assistant Director of Engineering
City of Franklin – Engineering Department
109 3rd Avenue South
Franklin, TN 37064

**SUBJECT: Franklin ITS Extension (TDOT PIN 116144.00)
Systems Engineering Analysis (SEA) and Final Design**

Dear Mr. Marston:

This will serve as our proposal to provide professional engineering services related to Franklin ITS Extension project for systems engineering analysis (SEA) and final design in Franklin, Tennessee.

The scope of work shall include project management, TDOT Local Programs coordination, preparation of the SEA, and development of design plans. A detailed scope of work and proposed fee are attached hereto.

Thank you for the opportunity to provide these services. If you have any questions or comments or require additional information, please contact us at 615.656.1845.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gerald Bolden".

Gerald Bolden, PE, PTOE
Traffic and ITS Manager

Enclosure

Office Locations:

Birmingham, Foley, Mobile, Alabama • Gainesville, Orlando, Pensacola, Tampa, Florida • Atlanta, Georgia
Collinsville, Illinois • Baton Rouge, New Orleans, Slidell, Louisiana • Biloxi, Mississippi • Jefferson City, Missouri
Raleigh, North Carolina • Columbia, South Carolina • Chattanooga, Nashville, Tennessee • Alexandria, Virginia • Washington, D.C.





Scope of Services for Franklin ITS Extension (Design)

SCOPE OF SERVICES

The purpose of this Exhibit is to define as clearly as possible the duties of Volkert with regard to the City of Franklin (City) ITS Extension Design contract. The administration of this ITS project will be conducted by Volkert in full cooperation with the City's Project Manager and/or his representative(s) assigned to the project.

Task 1 – Project Management & Meetings

Project management is a continuous task that will be performed for the duration of this contract. Monitoring, coordination, scheduling, and reporting requirements of this task will be used to facilitate periodic review by the City to ascertain conformance with the requirements of this task.

After receipt of the notice-to-proceed, Volkert will conduct a project kick-off meeting with City staff. This meeting will include the following topics:

- Key project staff
- Communications protocol
- Design goals and requirements
- Project schedule
- Invoicing
- Monthly progress meetings and reports
- Data and information needs

Once the project is underway, Volkert will conduct monthly progress meetings with City staff. These meetings will include a current status update, anticipated next phases of work to be completed, and discussion on any critical items/issues and/or potential issues identified during project development.

Each month during the contract, Volkert will prepare and submit a monthly invoice and status report covering work progress and contract fulfillment.

Volkert will prepare the agenda for all meetings and provide all necessary materials and handouts for discussion. At the conclusion of each meeting, Volkert will prepare meeting minutes and a cumulative list of "action items" developed for assignment to the appropriate party. These items will be distributed to the attendees and other appropriate stakeholders within five (5) working days following the meeting. All deliverables included within this task will be provided in .pdf format.

DELIVERABLES:

- Project Management Plan
- Meeting Agendas and Minutes
- Monthly Invoices and Status Reports
- Data Needs



Scope of Services for Franklin ITS Extension (Design)

Task 2 – TDOT Local Programs Coordination

TDOT Local Programs Coordination is a continuous task that will be performed for the duration of this contract. Volkert will coordinate with the City's Project Manager (PM) on the current project status in regards to the steps and approvals required as part of the TDOT Locally Managed project.

As the project progresses, Volkert will maintain coordination with TDOT Local Programs staff. At the various submittal stages of the project, Volkert will prepare the necessary documentation and submit to TDOT Local Programs for review and approval to move forward according to the TDOT Local Program Guidelines.

As outlined in the TDOT Local Program Guidelines, a design public meeting may be required. Volkert will coordinate with the City's PM and TDOT Local Program staff to determine the need for a public meeting. If determined to be required, Volkert will prepare the necessary presentation and graphics, present the information at the meeting and prepare post-meeting documentation.

DELIVERABLES:

- TDOT Local Program Forms
- Submittal Packages to TDOT Local Programs
- Review/Approval Letters
- Design Public Meeting Documentation

Task 3 – Systems Engineering Analysis (SEA)

Volkert will conduct all necessary data gathering, stakeholder meetings, and technology reviews to prepare the SEA according to TDOT and FHWA's requirements, as outlined in the USDOT–FHWA publication, *Systems Engineering for Intelligent Transportation Systems*. Volkert will compile all of the necessary information needed for the completion of the draft SEA. Some of the information is detailed in the ITS Master Plan Technical Memorandums. Once the draft SEA is completed, Volkert will submit to the City for review. Volkert will address any comments provided by the City and prepare and submit the revised draft SEA to TDOT and FHWA.

Once all comments are received from TDOT and FHWA, Volkert will address the comments, prepare the final SEA and submit to the City, TDOT and FHWA for final approvals.

DELIVERABLES:

- Key Stakeholder List/Coordination
- Draft and Final SEA
- Meeting Agenda and Minutes



Scope of Services for Franklin ITS Extension (Design)

Task 4 – Design Plan Development

All of the project designs will adhere to all applicable City of Franklin, TDOT and FHWA requirements and guidelines. This includes the City's Transportation & Street Technical Standards, TDOT's Local Government Guidelines, TDOT's ITS Project Development Guidelines, and FHWA's System Engineering Guideline.

The projects to be completed as part of this overall project include:

- ITS camera at SR-96 W and 11th Avenue
- ITS camera at Carothers Parkway and Liberty Pike
- ITS camera relocation on S. Royal Oaks Boulevard
- ITS camera at East McEwen Drive roundabout
- ITS camera replacement at SR 96 and Center Pointe Place
- ITS camera replacement at SR 96 and I-65 NB ramps
- Cool Springs Boulevard communications extension
- Downtown Franklin communications upgrade (coordination with MIT only)

As a method to obtain the best possible construction bid and move all of the individual projects forward in a timely manner, all of the individual projects (listed above, except the Downtown Franklin communications upgrade) will be bundled into one design/construction bid package.

Survey/Base Mapping

To provide a timely design and minimize design associated cost, Volkert will use the City's GIS database and aerial imagery to complete the design packages. Also, Volkert will request previously completed traffic signal and/or roadway design plans (electronic files) in the vicinity of proposed ITS devices. These files will be used to help create the design base for this project.

Once received, Volkert will review the GIS data and any design plans to determine the need for additional field information. If needed, Volkert will supplement the GIS data with general field collected data (NOTE: this will not be an actual field run survey) by contacting Tennessee One-Call to mark utilities in the potential location for the ITS devices.

Preliminary/Utility/Right-of-Way Plans

These plans will include layout and orientation for the CCTV cameras, routing for new conduit with fiber optic cable and pull boxes, pole and cabinet locations and routing for electrical service connections. Once the plans are completed, Volkert will submit preliminary plans to the City of Franklin for review and comment. After receiving the City's comments, Volkert will revise the plans and submit to TDOT Local Programs for review and approval to move forward.

A primary goal of the design is to have no acquisition of public right-of-way or easements. However, should right-of-way acquisition or easements be required, necessary plans will be prepared based on City of Franklin and TDOT requirements and submitted to TDOT for review and approval to move forward to the next step of the project development process. Should right-of-way acquisition or easements NOT be



Scope of Services for Franklin ITS Extension (Design)

required, Volkert will assist the City in the preparation of right-of-way certification letter and coordination to facilitate review and approval by TDOT Local Programs office.

Final Construction Documents

Final construction plans will include layout and orientation for the CCTV cameras, routing for new conduit with fiber optic cable and pull boxes, pole and cabinet locations and routing for electrical service connections. Final construction plans will also include standard notes and details, special notes and details, fiber optic splicing and routing details, provisions for steel camera poles and foundation notes, camera cabinet wiring and installation notes and details, erosion control plans and details, traffic control plans and details, and estimated quantities. Final construction plans will also address any preliminary plan review comments by TDOT.

Once the construction plans are completed, Volkert will submit to the City of Franklin for review and comment. After receiving the City's comments, Volkert will revise the plans and submit to TDOT Local Programs for review and approval to move forward to construction.

Task 5 – Bidding Assistance

Upon release from TDOT to bid the project, Volkert will assist the City with the pre-bid meeting and provide any necessary assistance with questions during the bidding phase. The construction bid book will be the standard TDOT bid book and construction specifications.

PROJECT FEE

Volkert will complete this scope of services outlined herein as an hourly not-to-exceed fee of \$71,500, based on Volkert's Hourly Rate Schedule attached hereto. The breakdown of fee by task is as follows:

TASK	FEE BY TASK
Task 1: Project Management	\$4,700.00
Task 2: TDOT Local Programs Coordination	\$4,200.00
Task 3: Systems Engineering Analysis (SEA)	\$13,200.00
Task 4: Design Plan Development	\$47,450.00
Task 5: Bidding Assistance	\$1,950.00
TOTAL	\$71,500.00



Volkert, Inc.

302 Innovation Drive
Suite 100
Franklin, TN 37067

Office 615.656.1845
Fax 615.656.1870

www.volkert.com

June 23, 2017

Mr. Jonathan Marston, P.E.
Assistant Director of Engineering
City of Franklin – Engineering Department
109 3rd Avenue South
Franklin, TN 37064

**RE: Franklin ITS Extension Design
Rate Schedule**

Dear Mr. Marston:

Per the City's request, we are providing our Rate Schedule for the above referenced project.

RATE SCHEDULE

Principal	\$255.00
Project Manager	\$188.00
ITS Engineer	\$195.00
Staff Engineer.....	\$120.00
Engineer Intern.....	\$88.00
Technician.....	\$105.00
Administrative.....	\$82.00

Thank you for the opportunity to provide these services. If you have any questions or comments or require additional information, please contact us at 615.656.1845.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gerald Bolden".

Gerald Bolden, PE, PTOE
Transportation Design Manager

Office Locations:

Birmingham, Foley, Mobile, Alabama • Gainesville, Orlando, Pensacola, Tampa, Florida • Atlanta, Georgia
Collinsville, Illinois • Baton Rouge, New Orleans, Slidell, Louisiana • Biloxi, Mississippi • Jefferson City, Missouri
Raleigh, North Carolina • Columbia, South Carolina • Chattanooga, Nashville, Tennessee • Alexandria, Virginia • Washington, D.C.



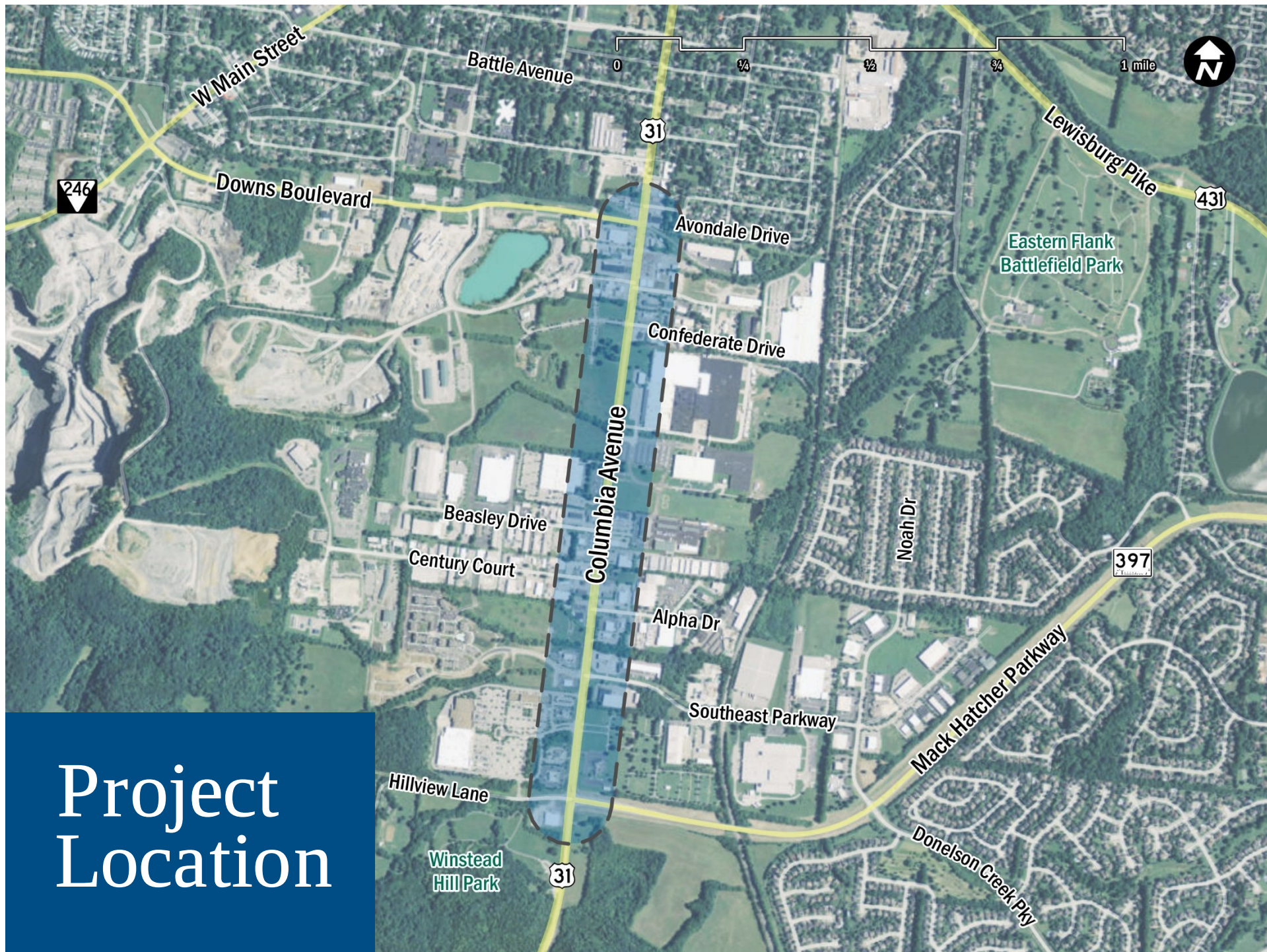
CITY OF FRANKLIN, TENNESSEE

Columbia Avenue

Widening & Improvements Project

BOMA Work Session | July 11, 2017





Project Location

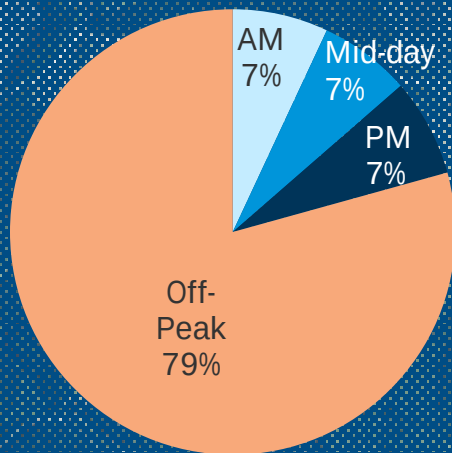


May 2016

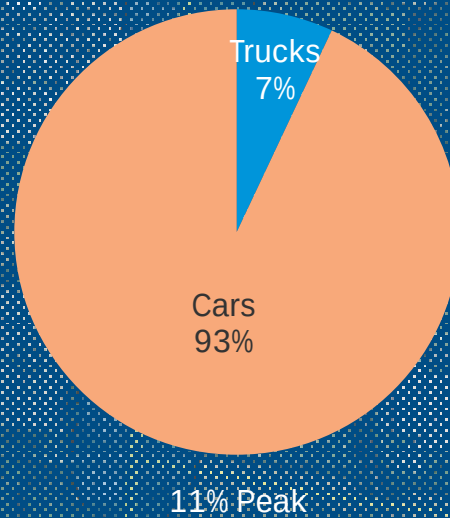
18,900

vehicles/day

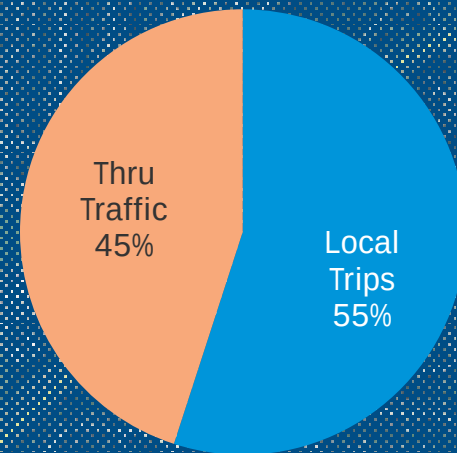
DAILY
TRAFFIC



TRAFFIC
COMPOSITION



TRAFFIC
TYPE



April 2016 travel time

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3:10
with no traffic

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average day

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longest recorded

Future Growth

2016

EXISTING
CONDITIONS

based on data from City and
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BUILD
YEAR

forecast conditions at
project completion

19,800
vehicles/day

2041

DESIGN
YEAR

improvements are designed to
accommodate 20 years of growth

25,400
vehicles/day

3

components of
comparison

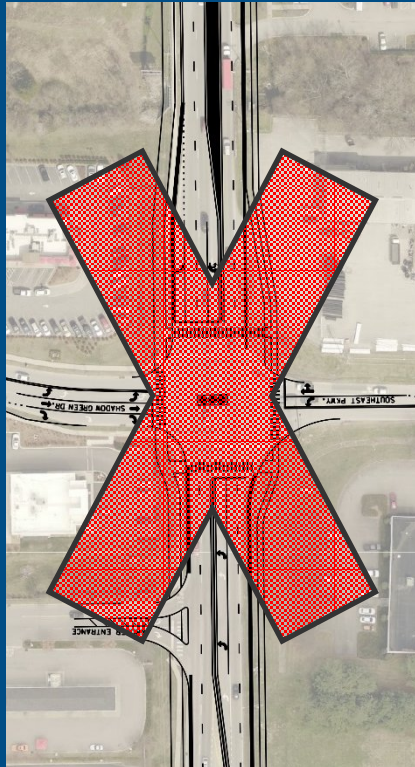
Operations

Safety

Physical
Impact

Corridor Concepts

Example: Columbia Avenue at Southeast Parkway



Four-Lane Median Divided Concept

with center median and left-turn lanes



Five-Lane Signalized Concept

with continuous two-way, left-turn lane

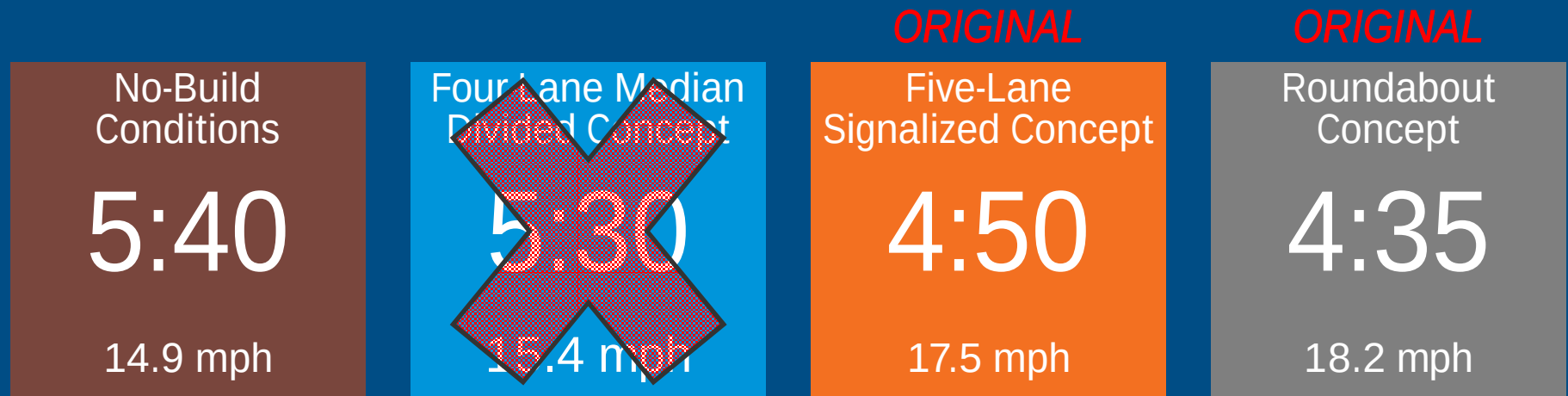


Roundabout Concept

with 4-foot center median

Operations

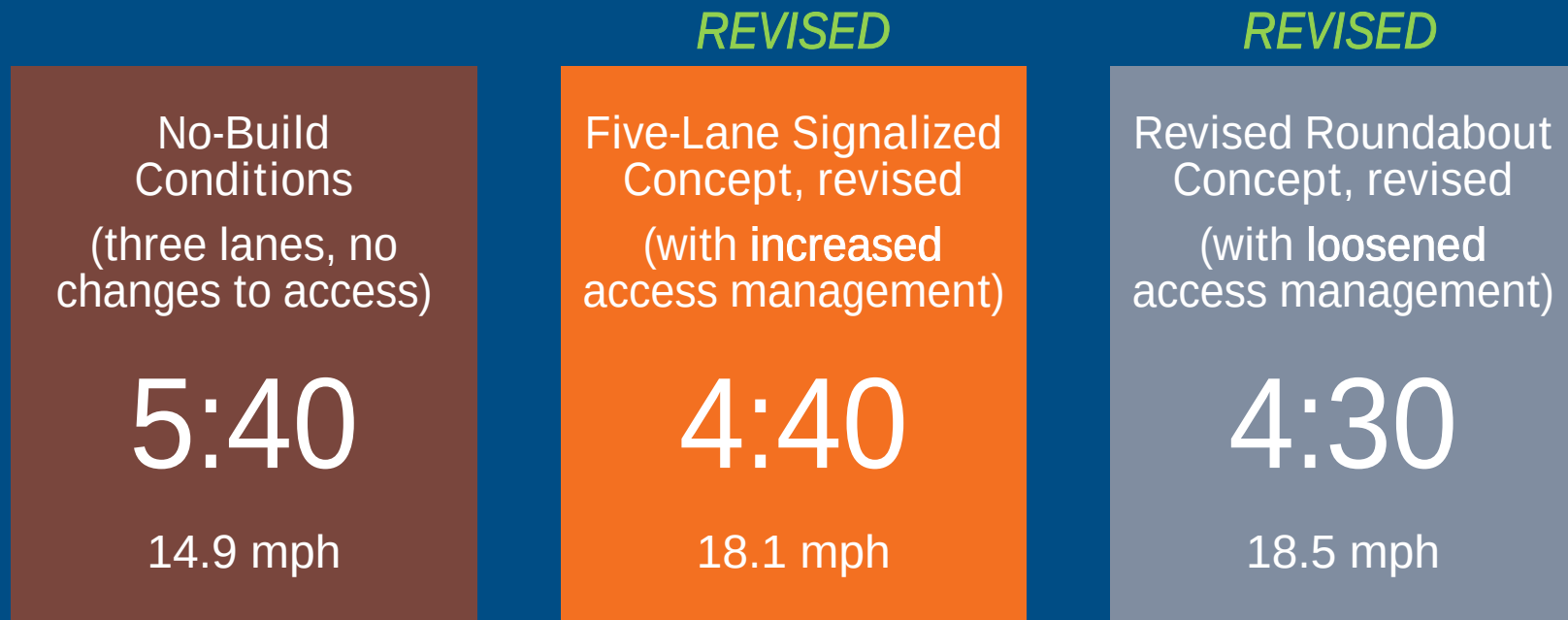
Anticipated Travel Time and Average Speed, 2041 Volumes (Columbia Avenue)



NOTE: Average travel time of Northbound and Southbound traffic for the four (4) study peak hours (i.e. AM + Midday + PM + busiest hour on Saturday)

Operations

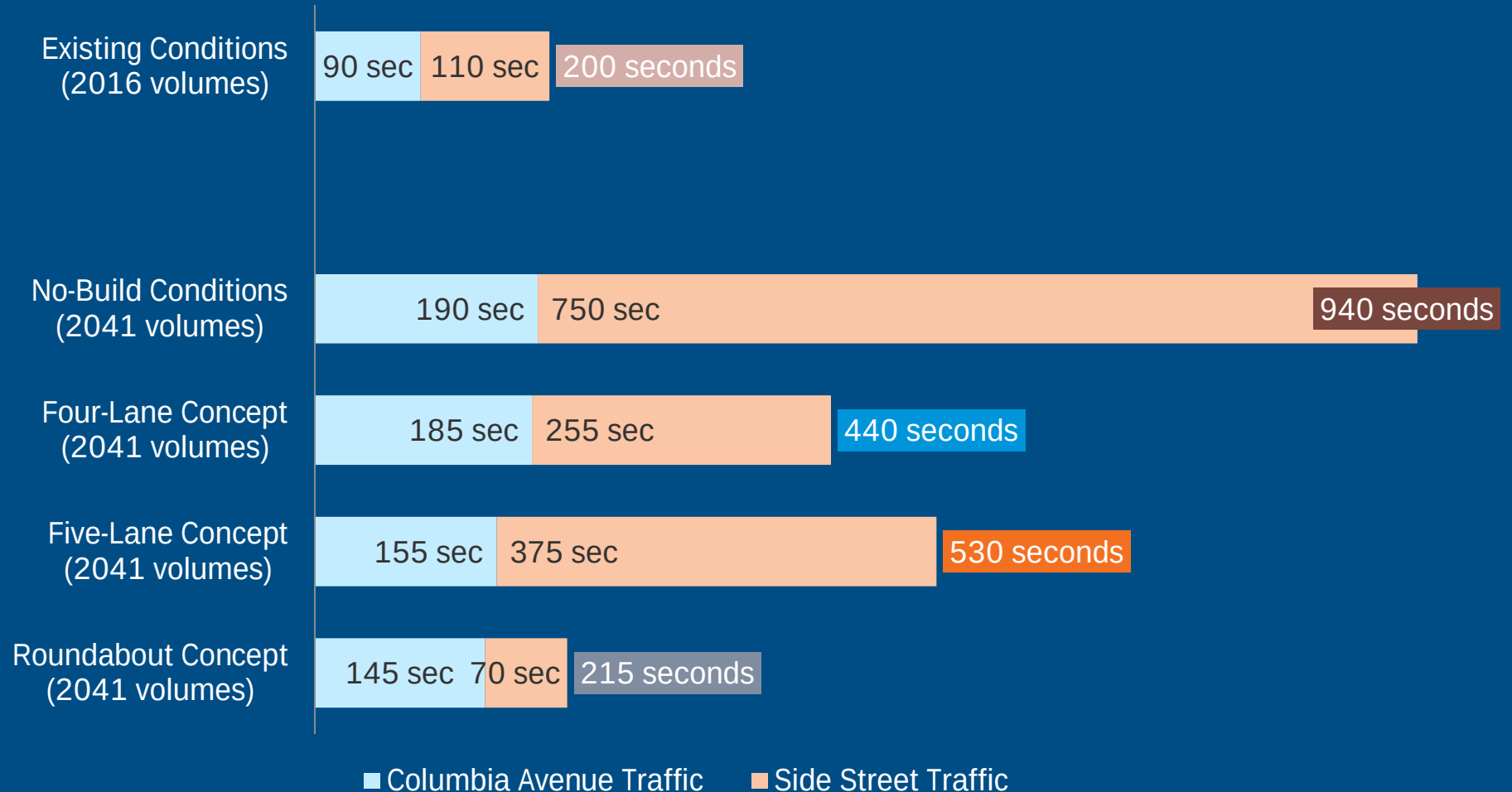
Anticipated Travel Time and Average Speed, 2041 Volumes (Columbia Avenue)



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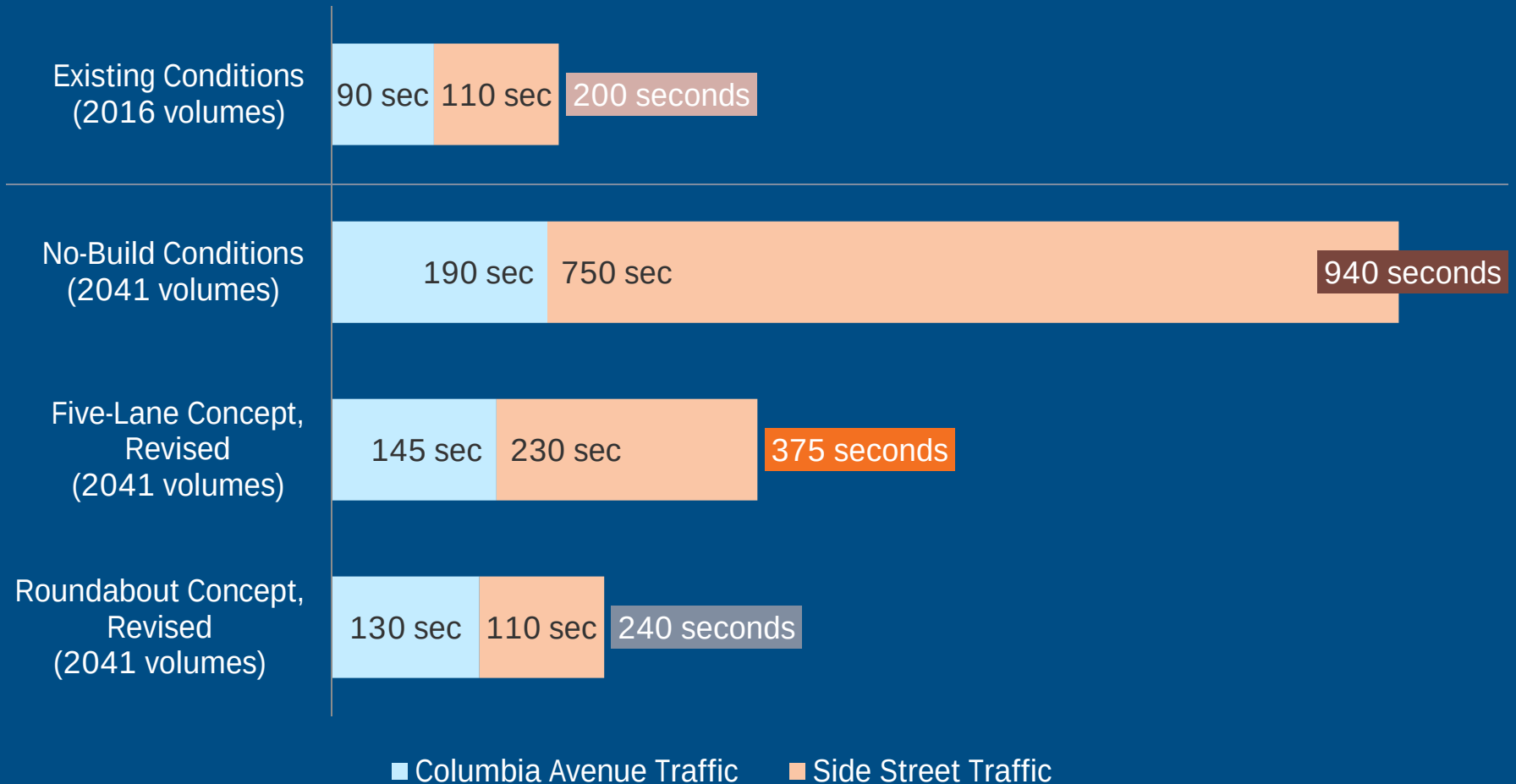
Operations

Corridor Delay for *Original* Concepts



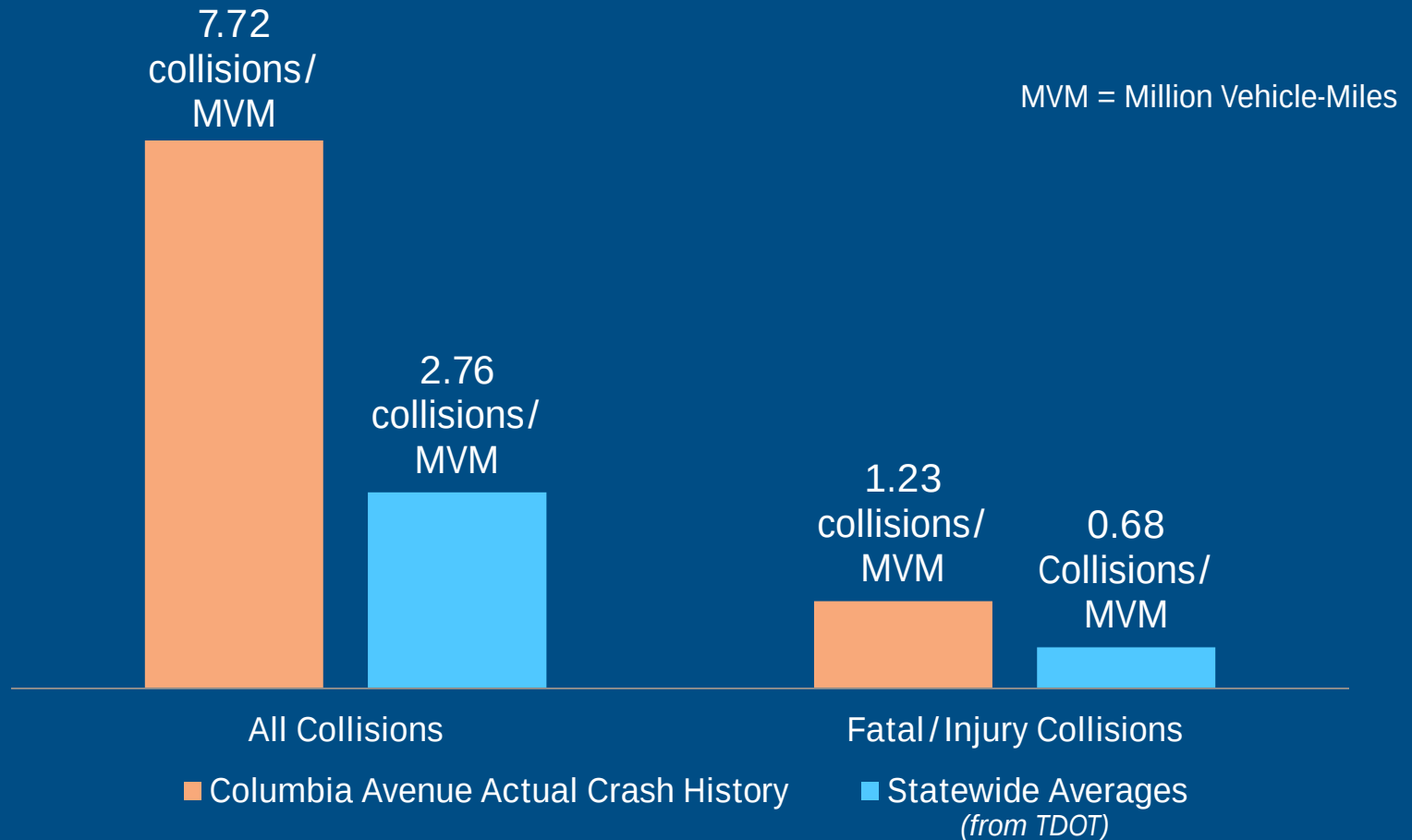
Operations

Corridor Delay for Revised Concepts



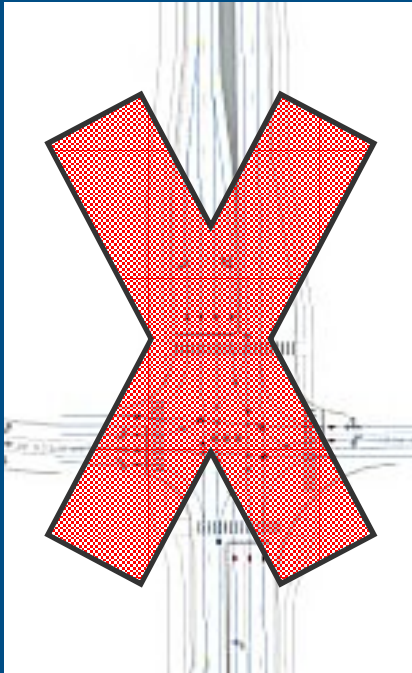
Safety

Collision Data (2013–2016)



Safety

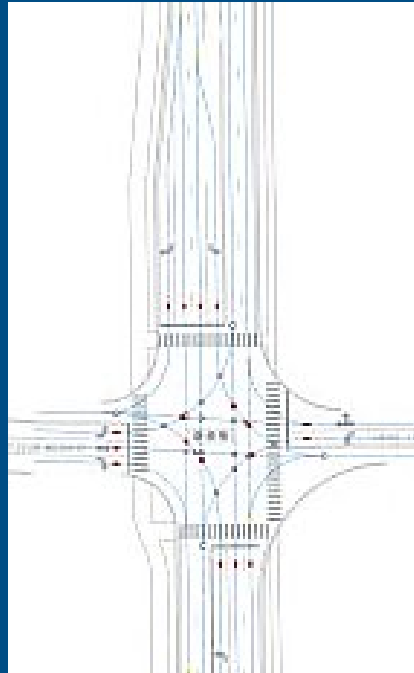
Conflict Points for *Original* Concepts



Four-Lane Median
Divided Concept

340

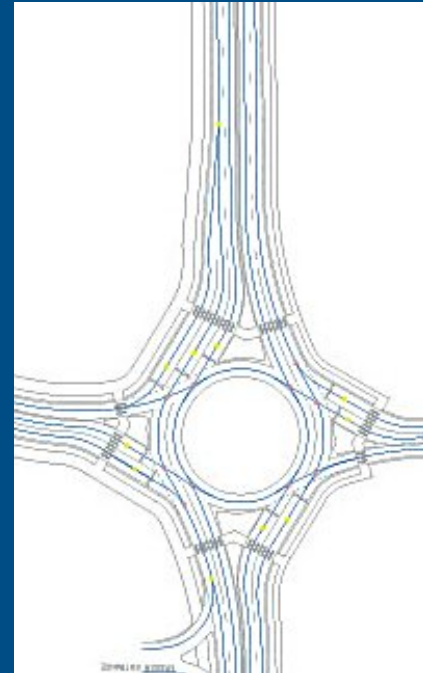
conflict points



Five-Lane
Signalized Concept

583

conflict points
(377 with access mgmt)



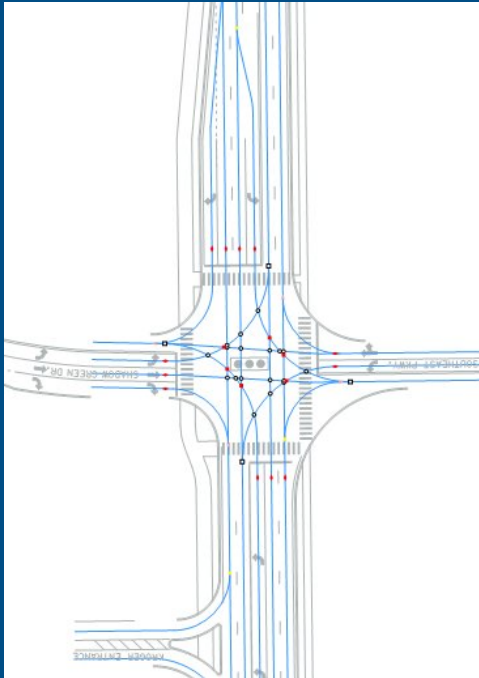
Roundabout
Concept

243

conflict points

Safety

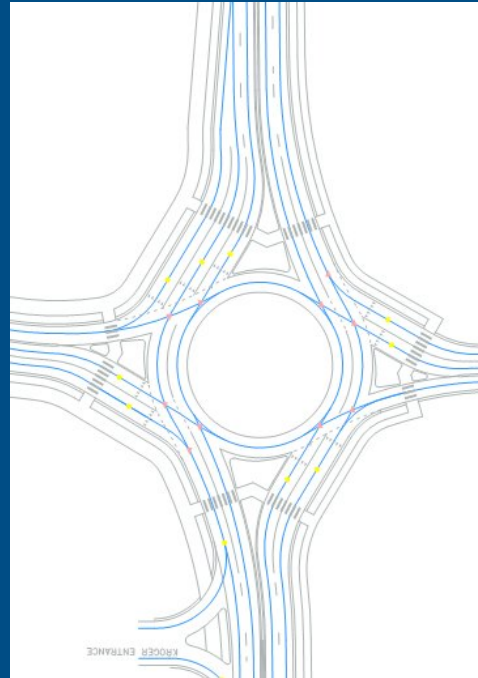
Conflict Points for Revised Concepts



Five-Lane Signalized
Concept, revised

385

conflict points



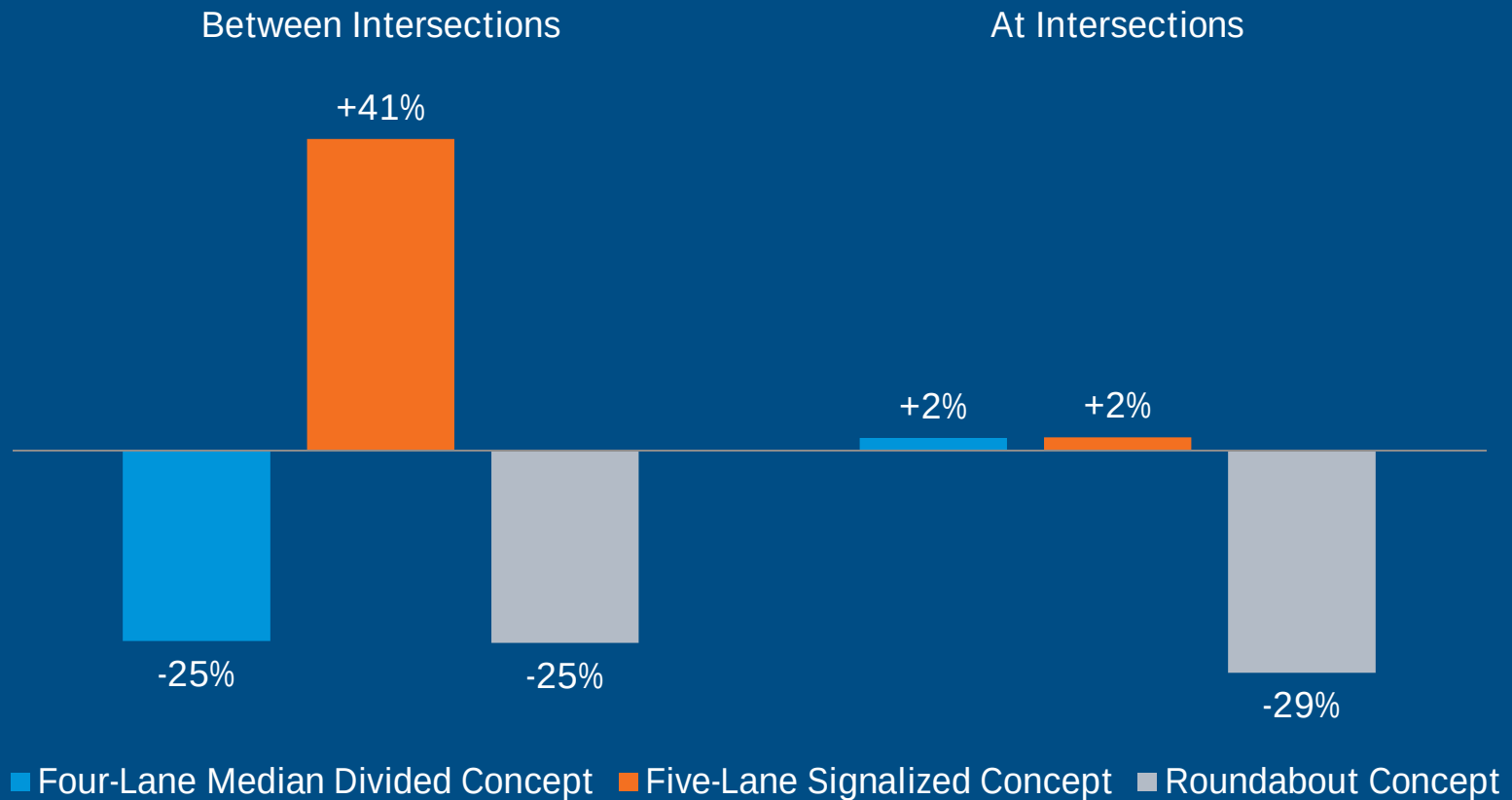
Roundabout
Concept, revised

258

conflict points

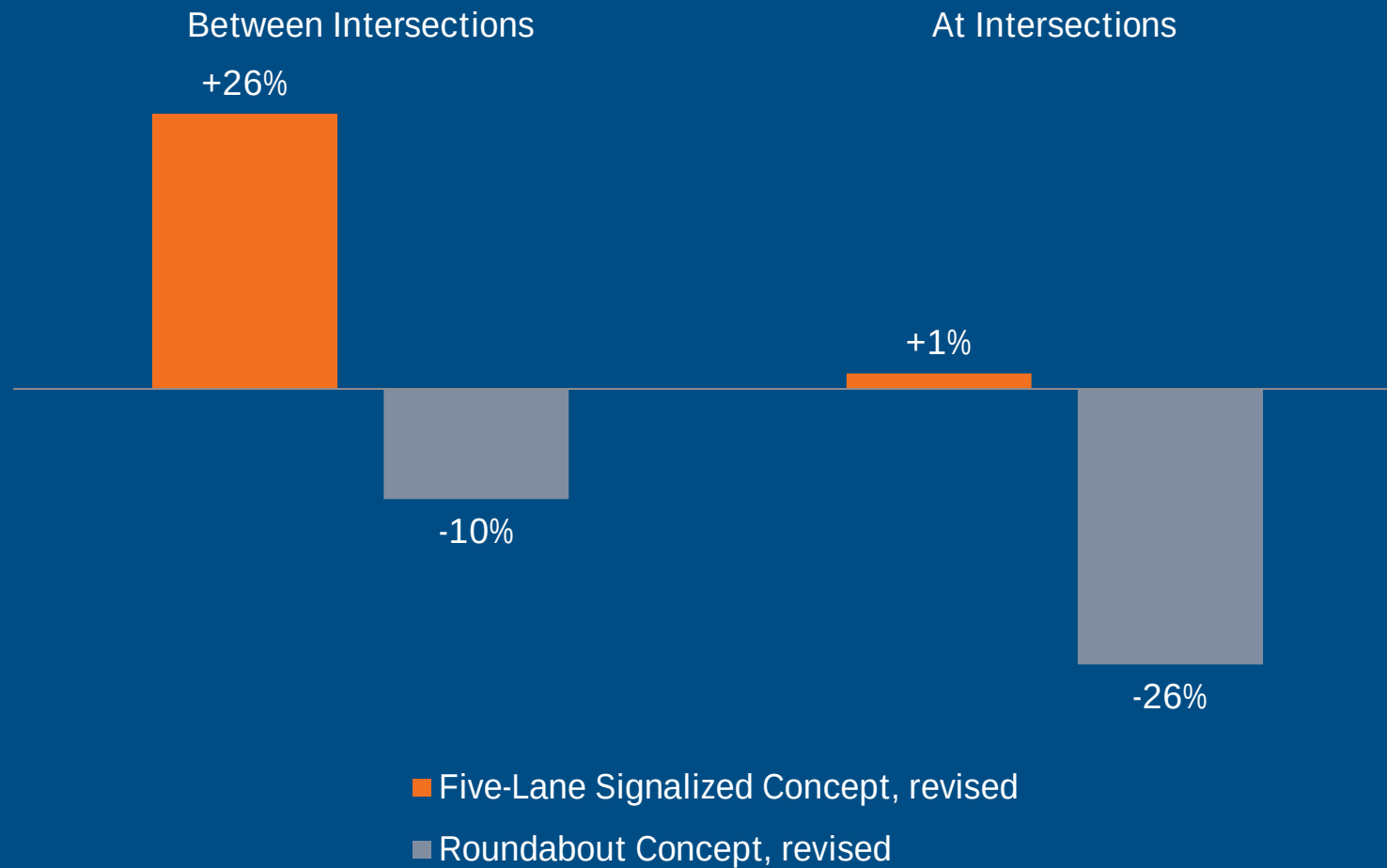
Safety

2041 Anticipated Change in Traffic Collisions for Original Concepts



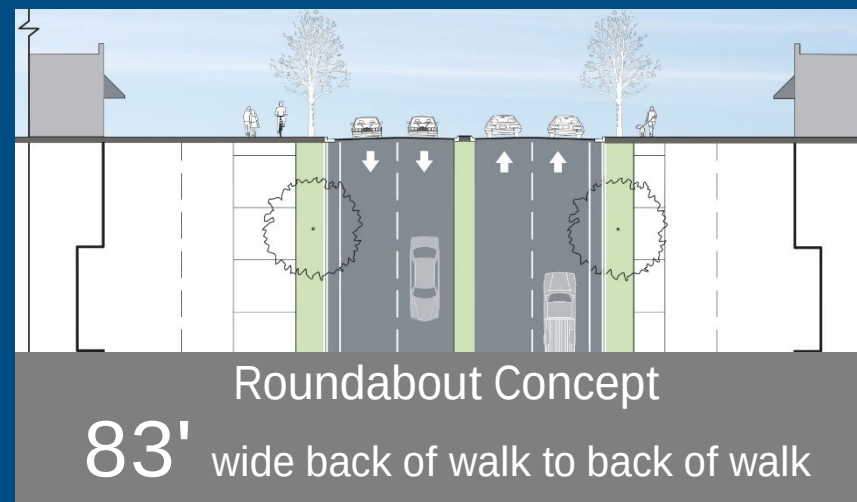
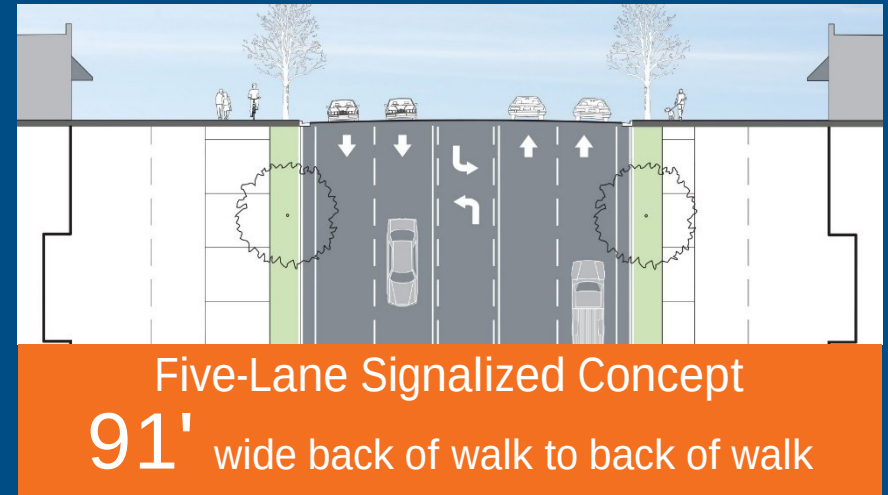
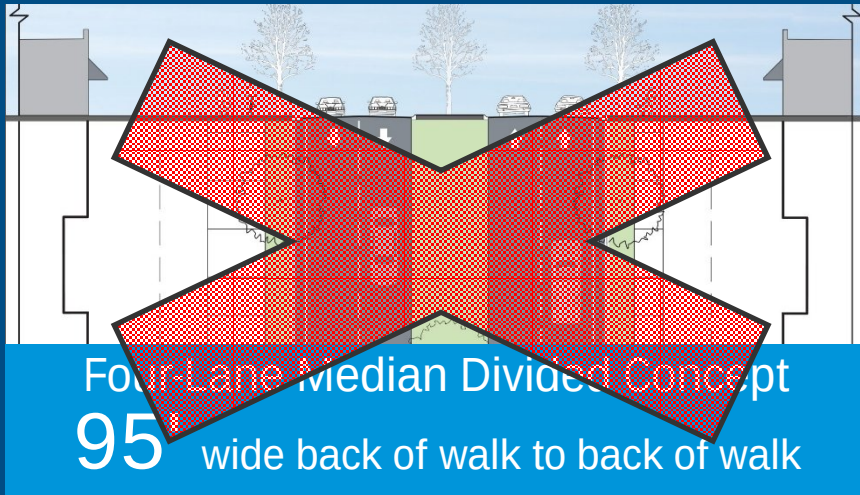
Safety

2041 Anticipated Change in Traffic Collisions for Revised Concepts

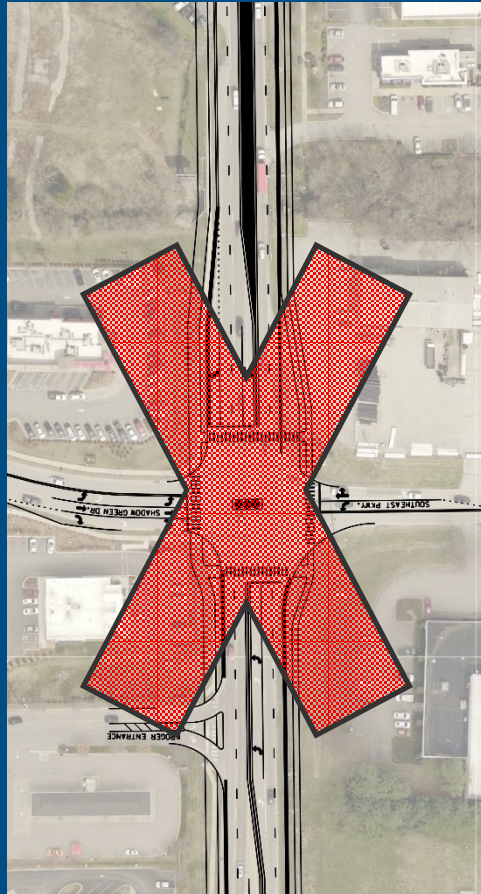


Physical Impact

Typical Sections



Physical Impact



Four-Lane Median
Divided Concept



Five-Lane Signalized
Concept



Roundabout
Concept

Data Summary

<i>ORIGINAL CONCEPTS</i>		Four-Lane Median Divided Concept	Five-Lane Signalized Concept	Roundabout Concept
Operational Performance	Thru Traffic Delay	185 sec/veh	155 sec/veh	145 sec/veh
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Safety Performance	Between Intersections	-25% fewer collisions	+41% more collisions	-25% fewer collisions
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Physical Impact	Between Intersections	95' total width	91' total width	83' total width
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Data Summary

<i>REVISED CONCEPTS</i>		Five-Lane Signalized Concept, revised (with increased access management)	Roundabout Concept, revised (with loosened access management)
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next step

BOMA selects
preferred concept
to bring forward to
detailed design.

CITY OF FRANKLIN, TENNESSEE

Columbia Avenue

Widening & Improvements Project

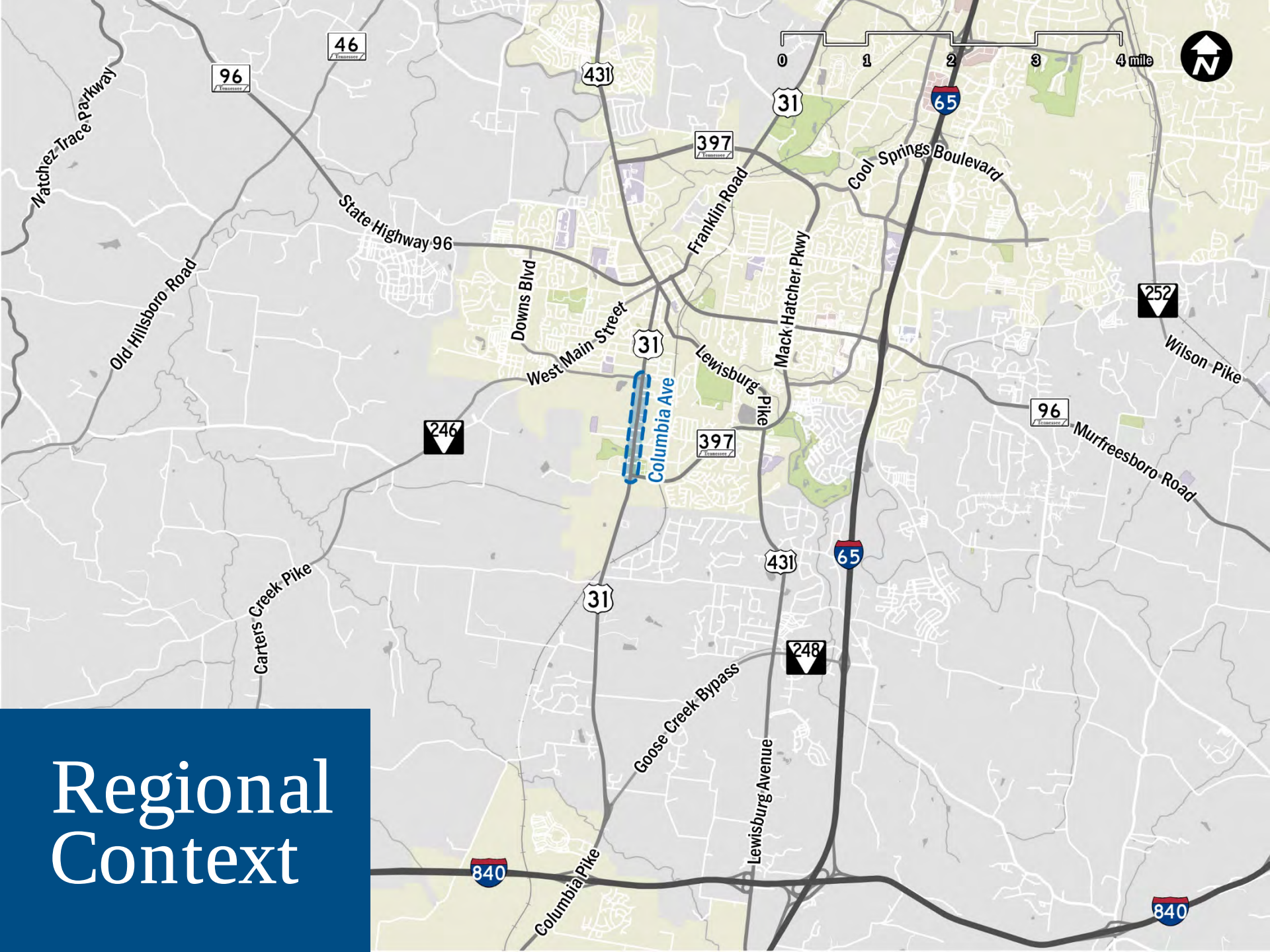
BOMA Work Session | July 11, 2017





Project Location

Regional Context

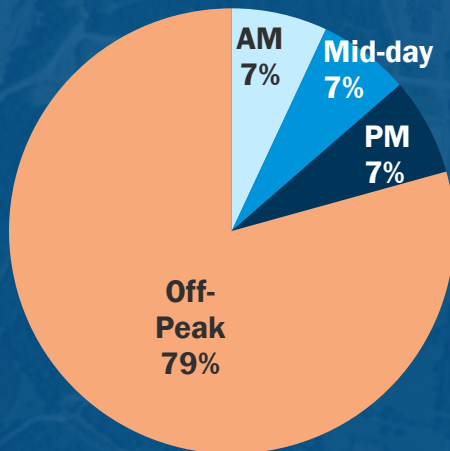


May 2016

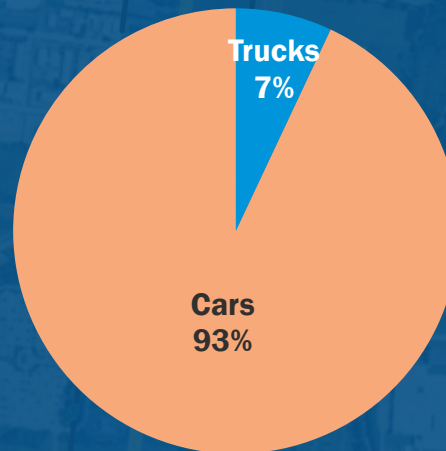
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vehicles/day

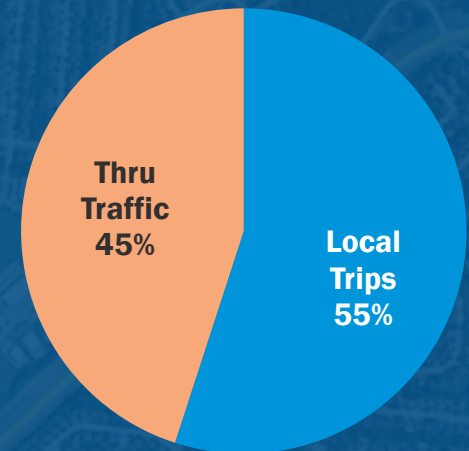
DAILY
TRAFFIC



TRAFFIC
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vehicles/day

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comparison

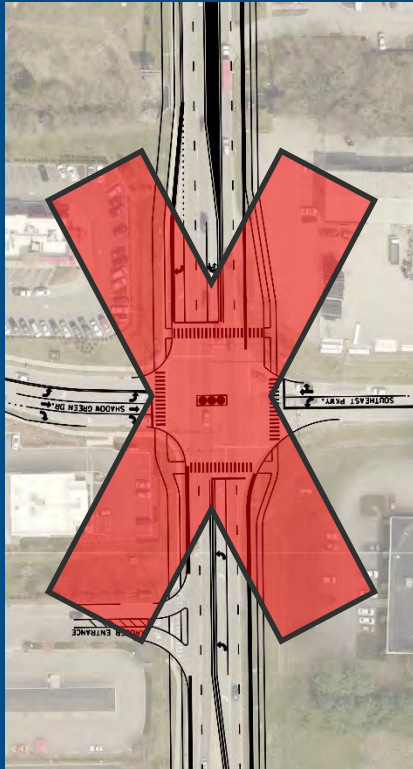
Operations

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Example: Columbia Avenue at Southeast Parkway



Four-Lane Median Divided Concept

with center median
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Five-Lane Signalized Concept

with continuous
two-way, left-turn lane

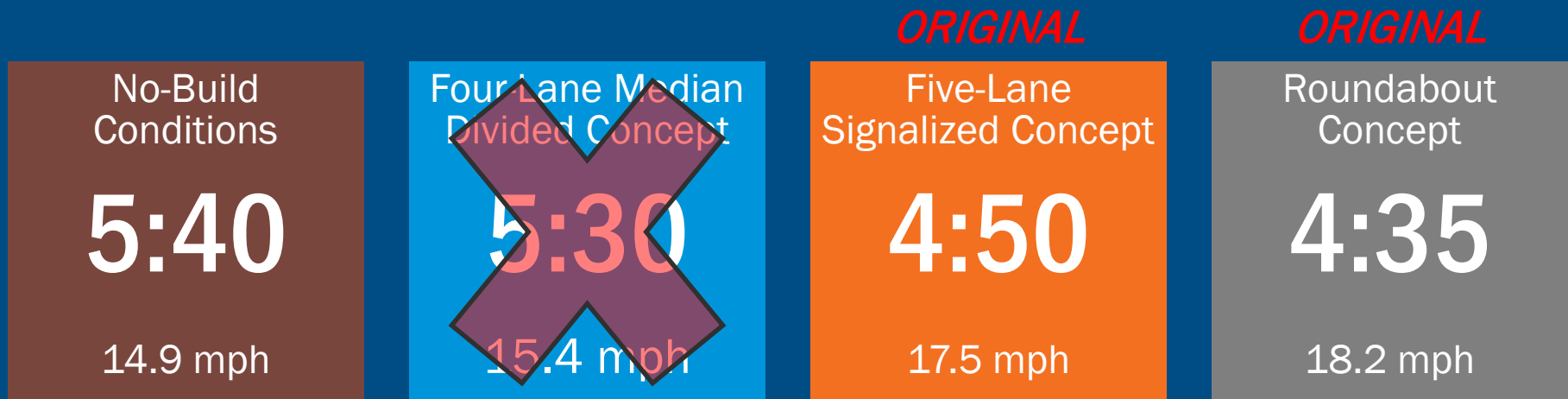


Roundabout Concept

with 4-foot
center median

Operations

Anticipated Travel Time and Average Speed, 2041 Volumes (Columbia Avenue)



NOTE: Average travel time of Northbound and Southbound traffic for the four (4) study peak hours (i.e. AM + Midday + PM + busiest hour on Saturday)

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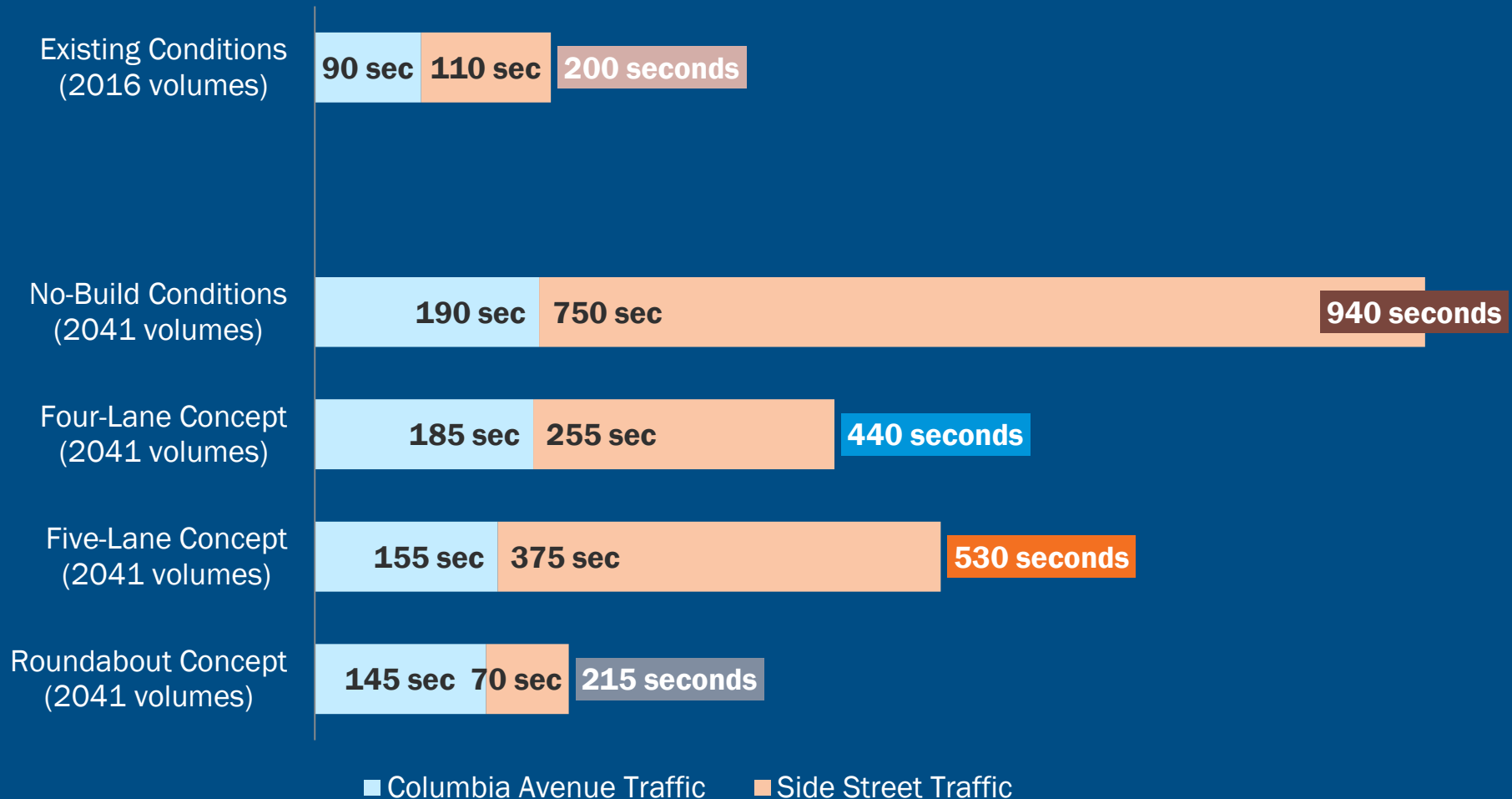
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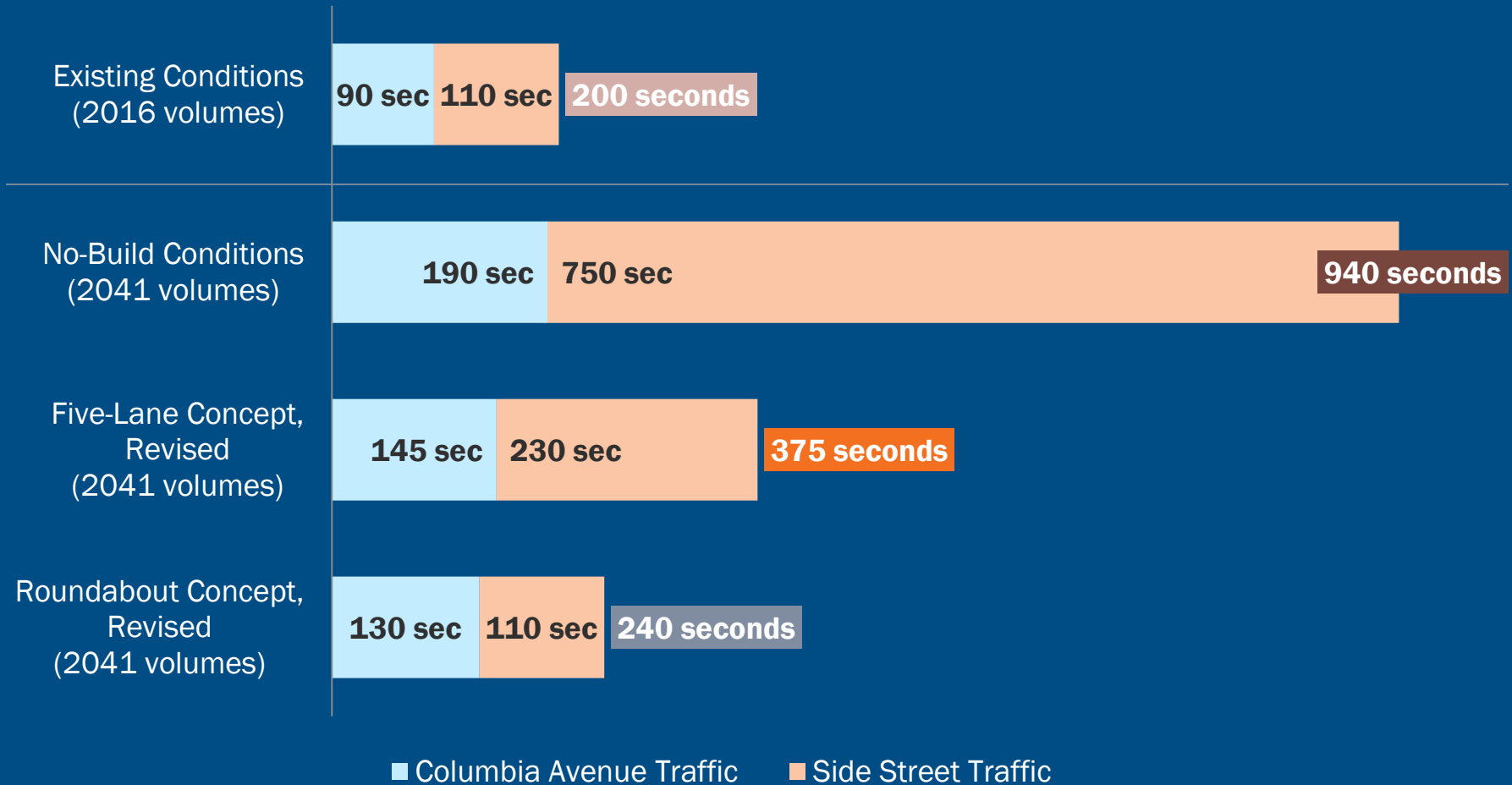
Operations

Corridor Delay for Original Concepts



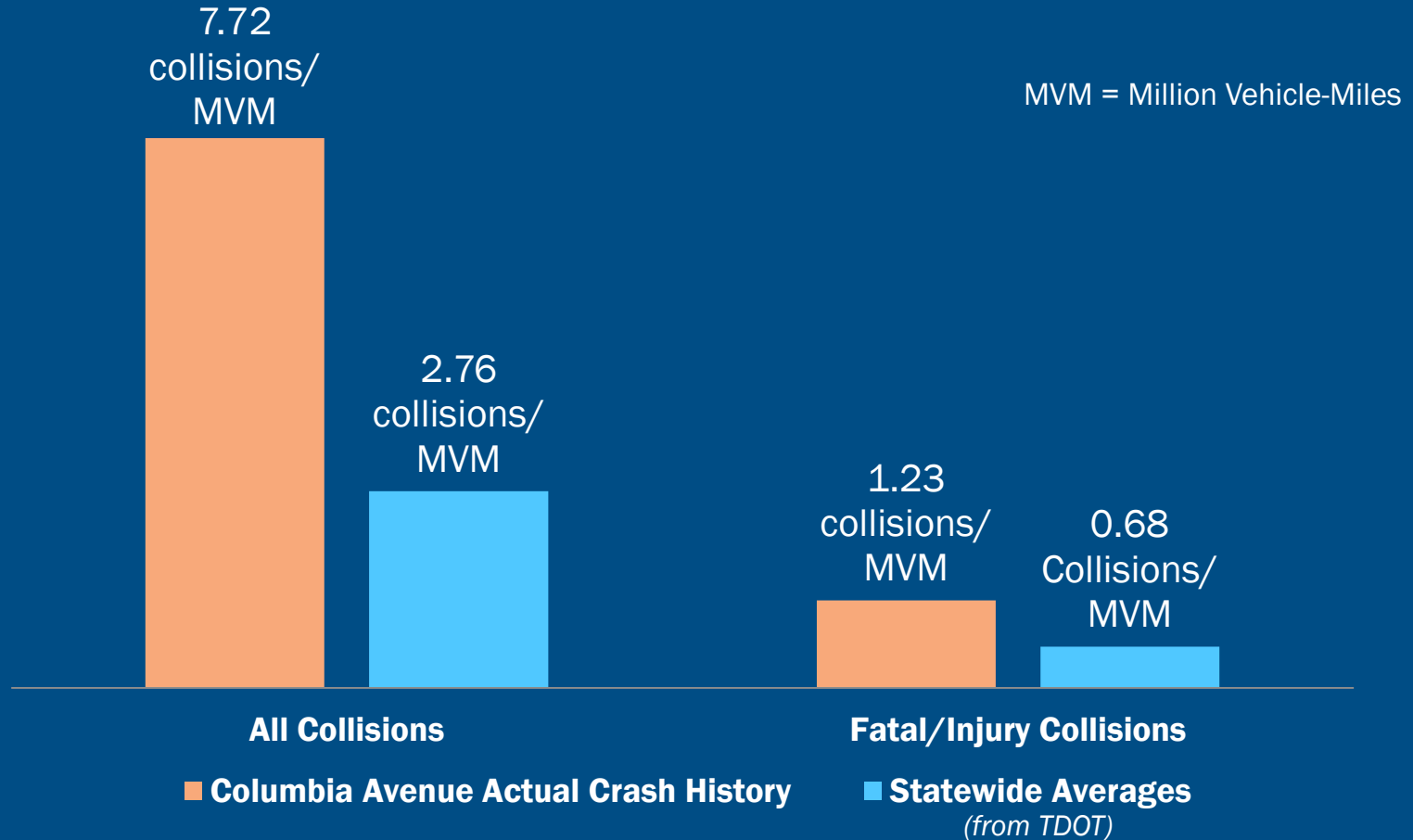
Operations

Corridor Delay for Revised Concepts



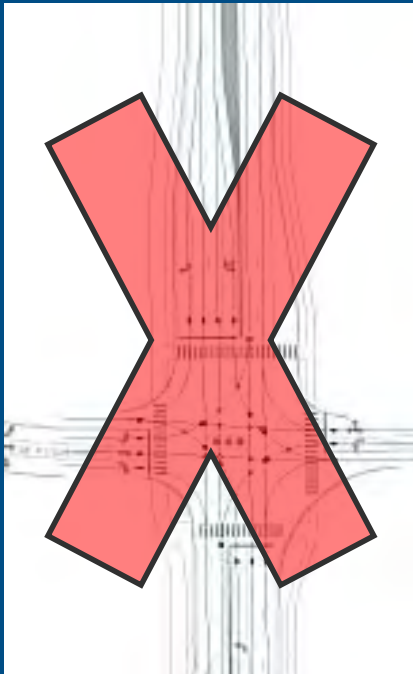
Safety

Collision Data (2013–2016)



Safety

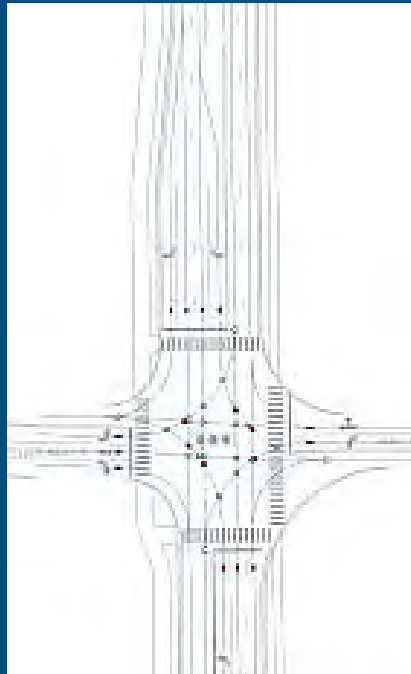
Conflict Points for *Original* Concepts



Four-Lane Median
Divided Concept

340

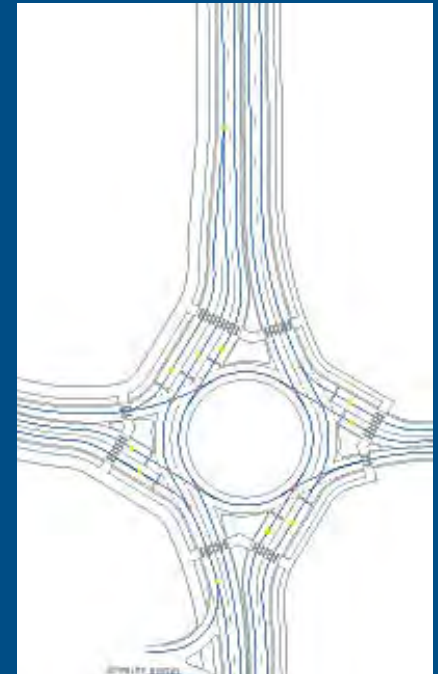
conflict points



Five-Lane
Signalized Concept

583

conflict points
(377 with access mgmt)



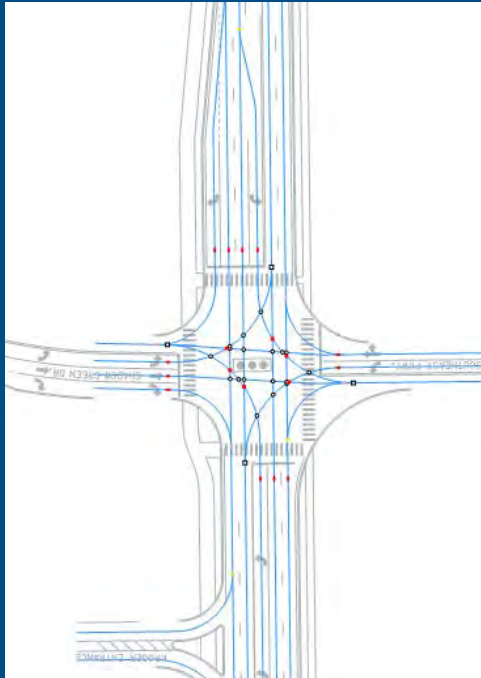
Roundabout
Concept

243

conflict points

Safety

Conflict Points for Revised Concepts



Five-Lane Signalized
Concept, revised

385

conflict points



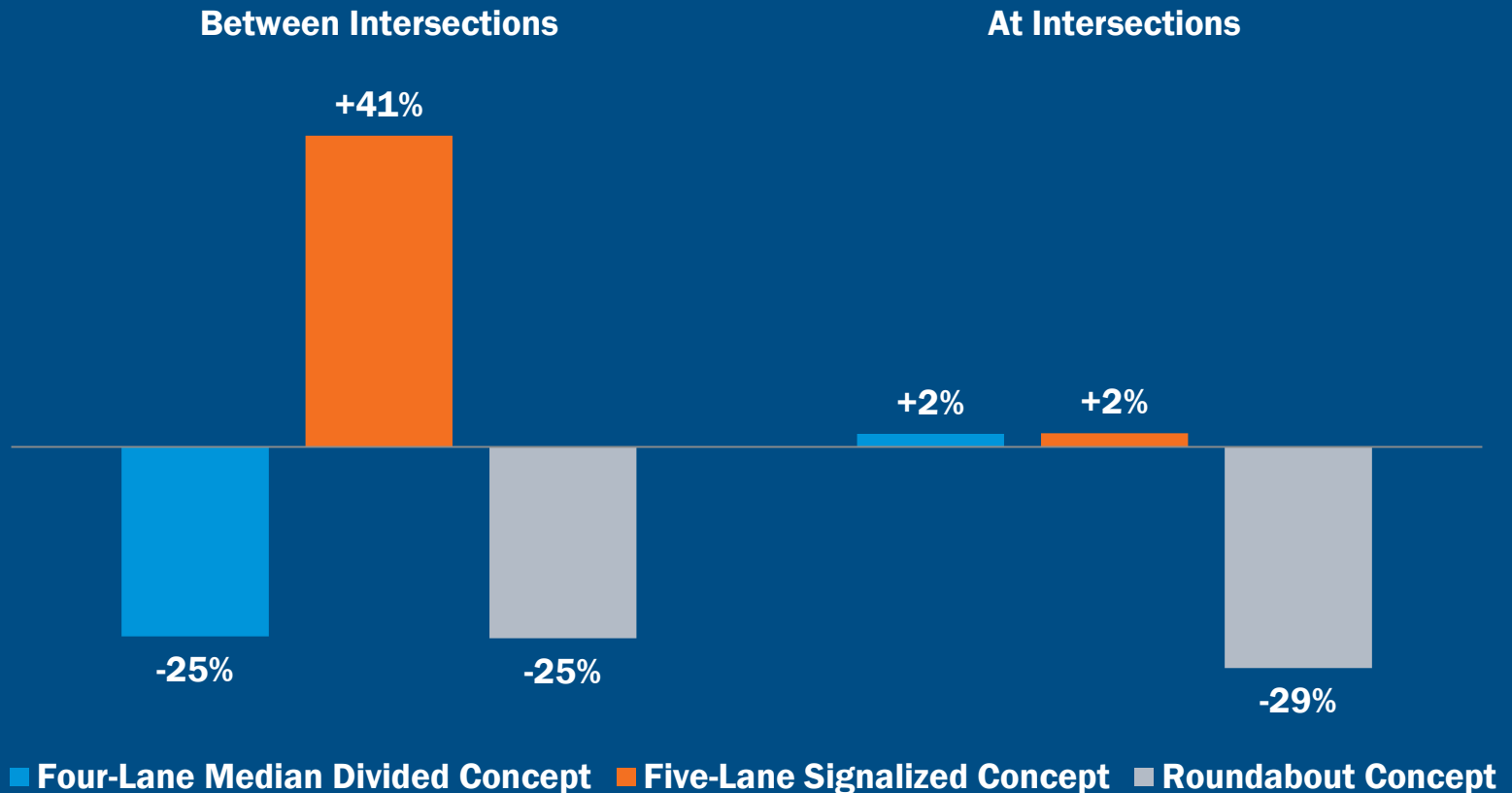
Roundabout
Concept, revised

258

conflict points

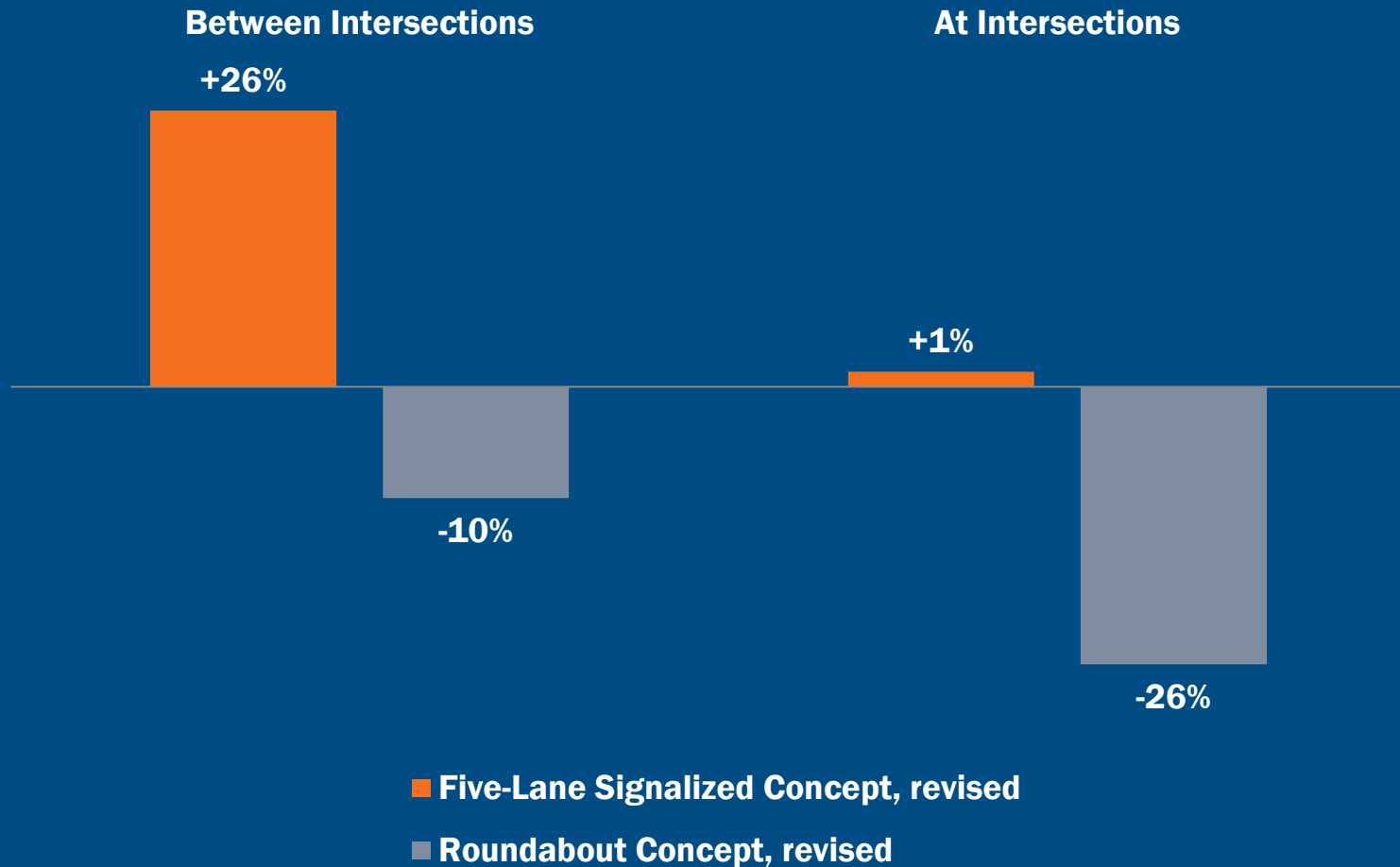
Safety

2041 Anticipated Change in Traffic Collisions for Original Concepts



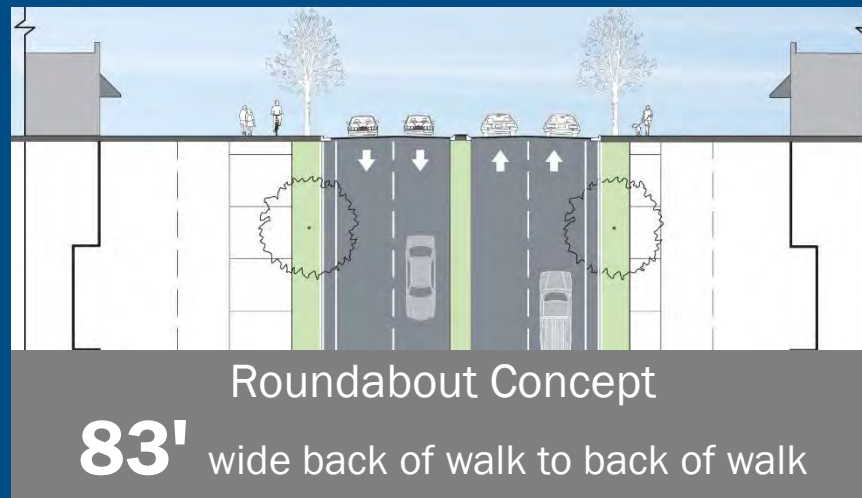
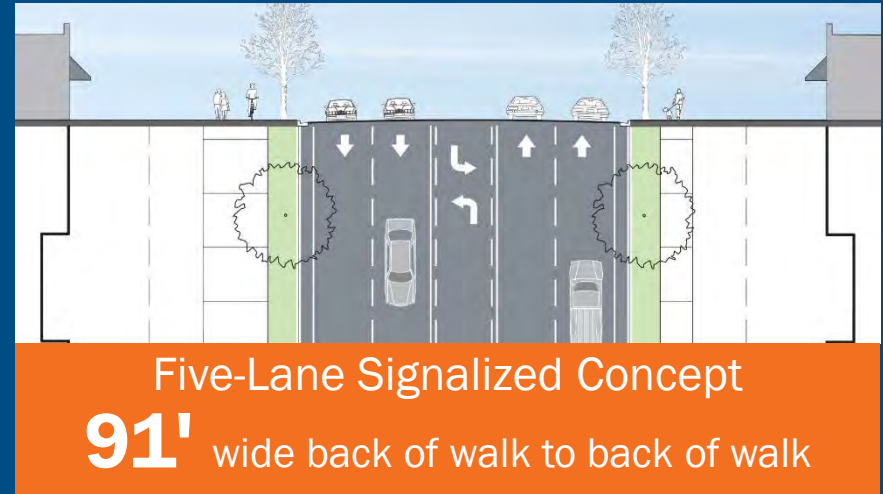
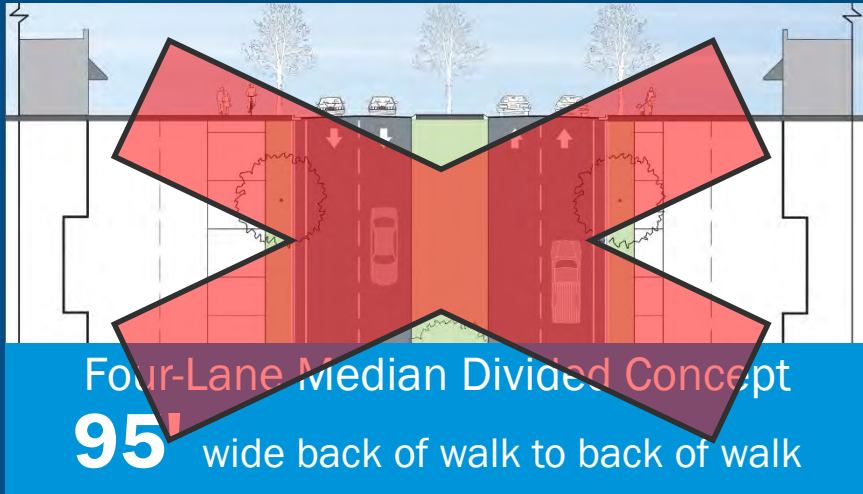
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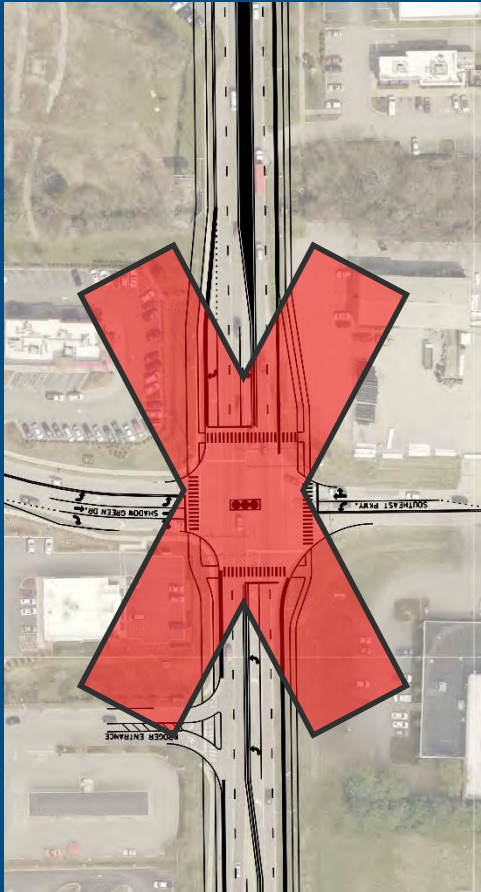


Physical Impact

Typical Sections



Physical Impact



Four-Lane Median
Divided Concept



Five-Lane Signalized
Concept



Roundabout
Concept

Data Summary

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next step

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CITY OF FRANKLIN, TENNESSEE

Columbia Avenue

Widening & Improvements Project

Work Session | June 26, 2017



Corridor Concepts

Example: Columbia Avenue at Southeast Parkway



Four-Lane Median
Divided Concept

with center median
and left-turn lanes



Five-Lane
Signalized Concept

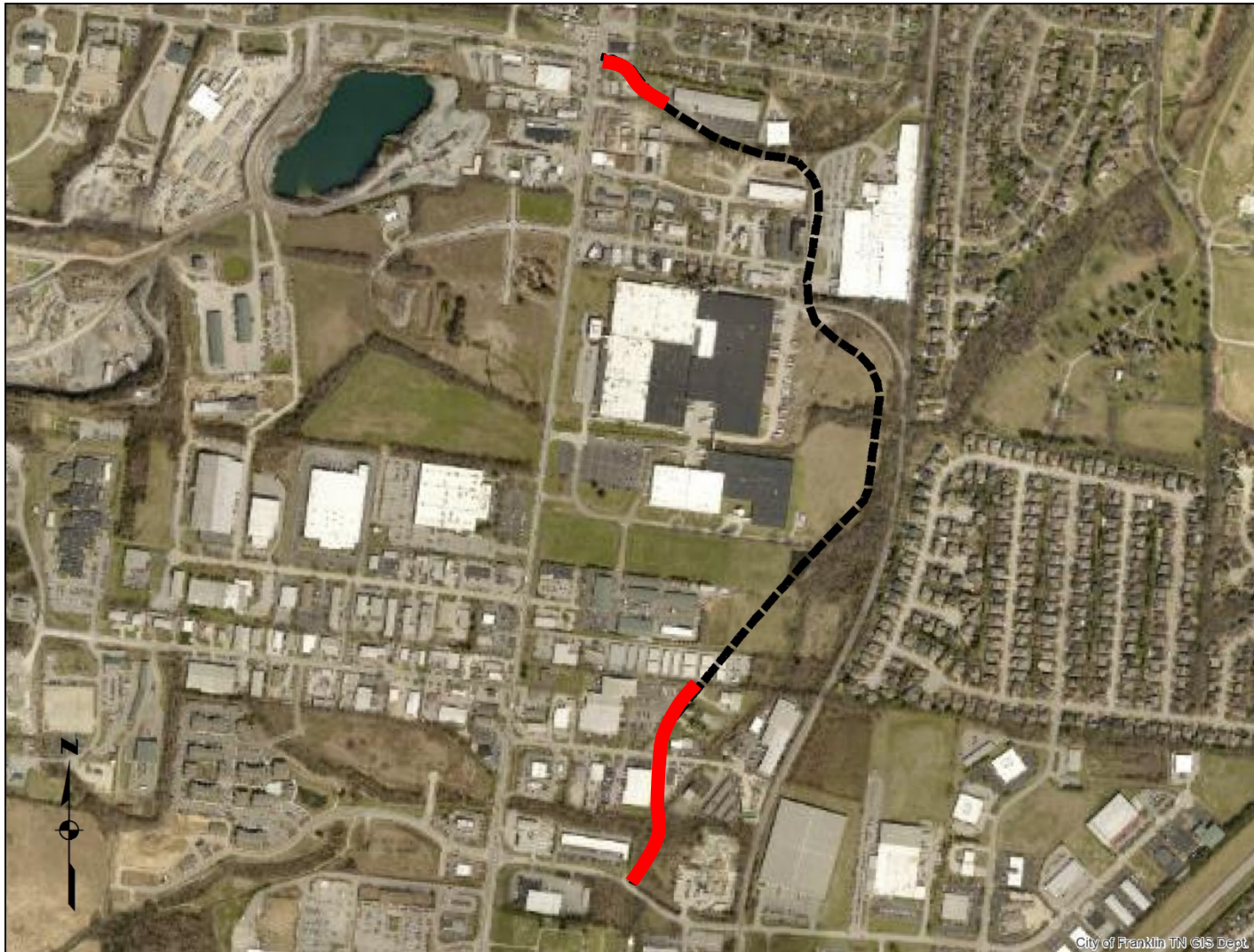
with continuous
two-way, left-turn lane



Roundabout
Concept

with 4-foot
center median

Columbia Ave Local Network Plan



Columbia Ave Local Network Plan



Estimated Project Cost: \$4,306,00

BOMA Ranking: 0 of 9 Votes

Staff Ranking: 1 Star Project

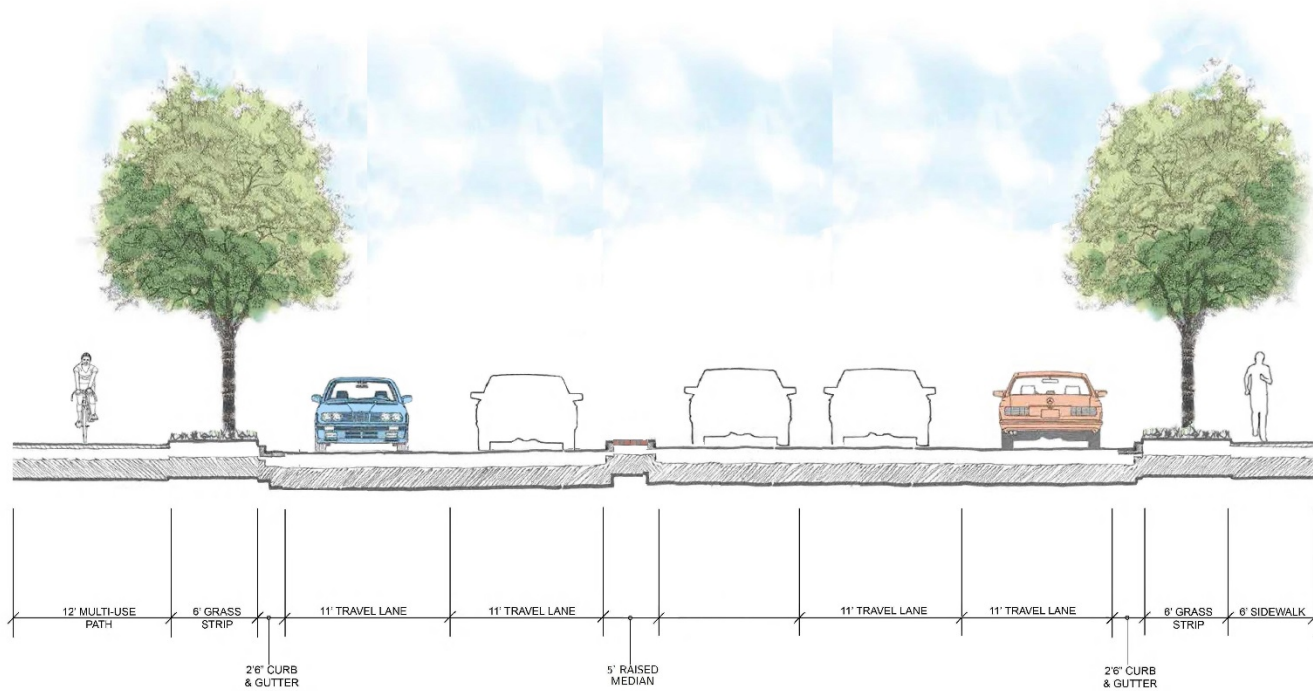
FIVE-LANE ROADWAY CONCEPT TYPICAL SECTION 1



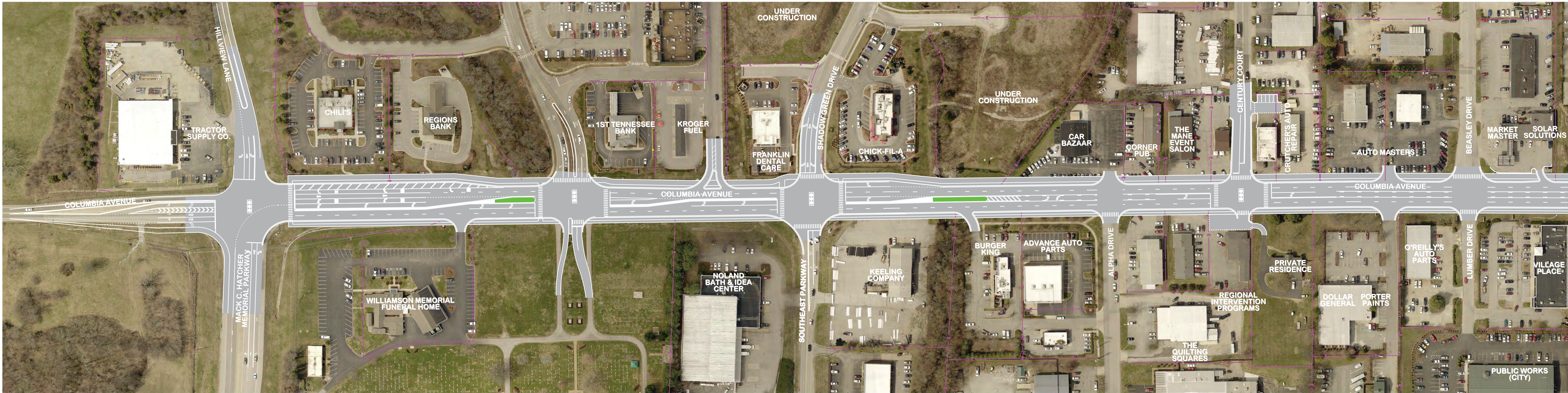
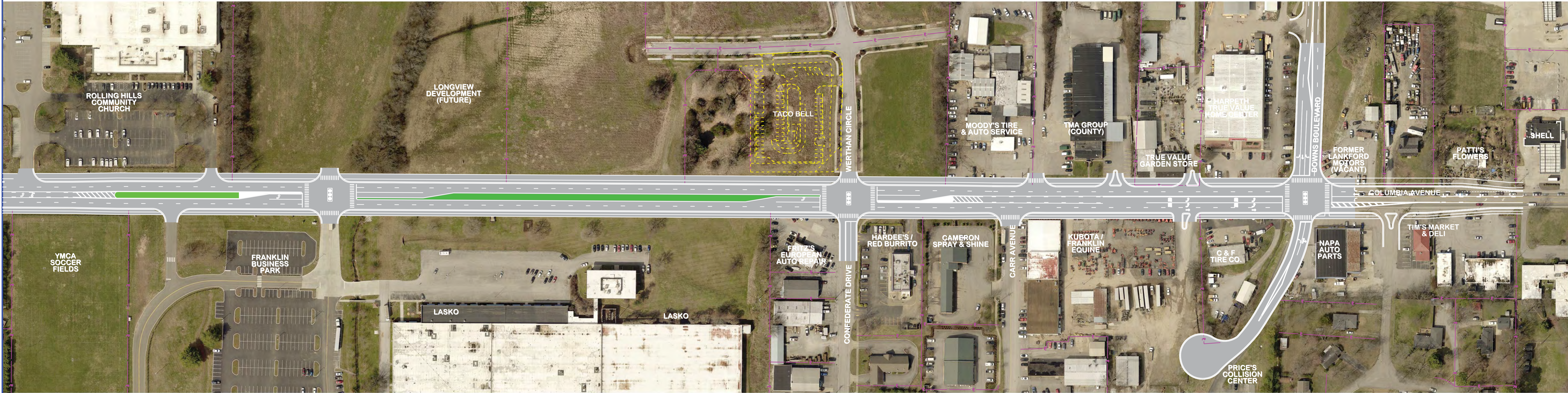
FIVE-LANE ROADWAY CONCEPT TYPICAL SECTION 2



FIVE-LANE ROADWAY CONCEPT TYPICAL SECTION 3



MATCH LINE - SEE THIS SHEET



MATCH LINE - SEE THIS SHEET

REV.	DATE	DESCRIPTION
1	09-12-2017	ISSUED FOR REVIEW

FILE NO. 36291-00

FIVE-LANE SIGNALIZED CONCEPT WITH ACCESS MANAGEMENT

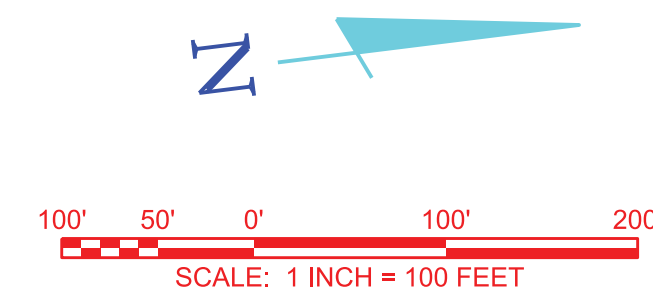
COLUMBIA AVENUE
CITY OF FRANKLIN
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

PRELIMINARY
NOT FOR
CONSTRUCTION

DATE



BARGE
WAGGONER
SUMNER &
CANNON, INC.
HISTORIC
FRANKLIN
TENNESSEE



What is a roundabout?

A roundabout is a one-way, circular intersection without traffic signal equipment in which traffic flows around a center island.

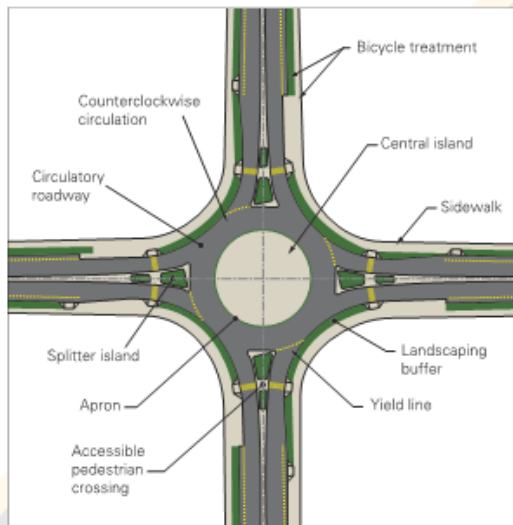
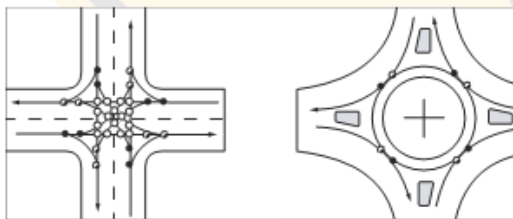


Illustration of potential conflict points in traffic intersections.

Through proper design, roundabouts can easily accommodate emergency and large sized vehicles. Drivers should behave in the same manner as they would on any other road if an emergency vehicle approaches: carefully move your vehicle as far right as possible and, if necessary, stop until the emergency vehicle passes.



Signaled intersection:
32 conflict points

Roundabout:
8 conflict points

All roundabouts have these features:

Yield-at-entry

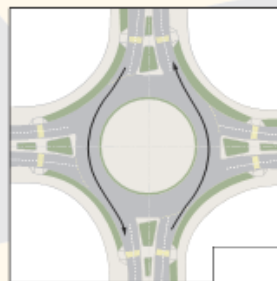
- Traffic entering the circle yields to traffic already in the circle.

Traffic deflection

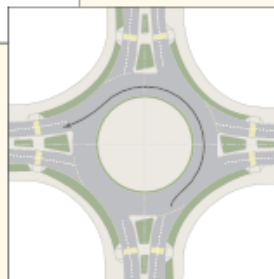
- Pavement markings and raised islands direct traffic into a one-way counterclockwise flow.

Geometric curvature

- The radius of the circular road and the angles of entry can be designed to slow the speed of vehicles.



Driving straight
through a roundabout



Left-hand turn

Because the only movement allowed upon entry or exit from a roundabout is a right turn, the occurrence of crashes that result in injury is substantially reduced. Small-angle collisions, the type of collisions that can occur as a result of a right-hand turn, are typically less severe than other types of collisions.

Benefits of a roundabout:

Lives saved

- Up to a 90% reduction in fatalities
- 76% reduction in injury crashes
- 30-40% reduction in pedestrian crashes
- 75% fewer conflict points than four way intersections

Slower vehicle speeds (under 30 mph)

- Drivers have more time to judge and react to other cars or pedestrians
- Advantageous to older and novice drivers
- Reduces the severity of crashes
- Keeps pedestrians safer

Efficient traffic flow

- 30-50% increase in traffic capacity

Reduction in pollution and fuel use

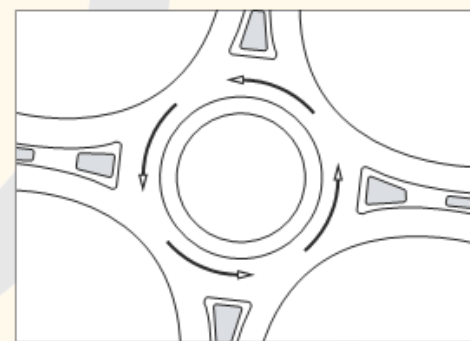
- Improved traffic flow for intersections that handle a high number of left turns
- Reduced need for storage lanes

Money saved

- No signal equipment to install and repair
- Savings estimated at an average of \$5,000 per year in electricity and maintenance costs
- Service life of a roundabout is 25 years (vs. the 10-year service life of signal equipment)

Community benefits

- Traffic calming
- Aesthetic landscaping



Continuous counterclockwise traffic flow

Roundabouts save lives...

ROUNDAABOUT CONCEPT



MATCH LINE - SEE THIS SHEET



MATCH LINE - SEE THIS SHEET

REV.	DATE	DESCRIPTION
1	09-12-2017	ISSUED FOR REVIEW

FILE NO. 36291-00

ROUNDABOUT CONCEPT
COLUMBIA AVENUE
CITY OF FRANKLIN
FRANKLIN, WILLIAMSON COUNTY, TENNESSEE

PRELIMINARY
NOT FOR
CONSTRUCTION
DATE

Next steps

- 1) Review and Present Operations, Safety and Physical Impact associated with the two preferred concepts.
- 2) BOMA selects preferred roadway concept
- 3) Evaluate pedestrian facilities, transit facilities and utility impacts/relocations
- 4) Finalize the NEPA Phase of the Project.

CITY OF FRANKLIN, TENNESSEE

Columbia Avenue

Widening & Improvements Project

Public Meeting | May 16, 2017



BWSC | BARGE
WAGGONER
SUMNER &
CANNON, INC.

Agenda

6:00 – 6:30

Formal Presentation

6:30 – 8:00

Town Hall Forum



Project Location

Project Timeline

Planning



Project Timeline

Planning, continued

Preliminary Design

**September
2015**

TDOT Notice to
Proceed for
Preliminary
Engineering
(Environmental)
Phase

**May
2016**

Public Meeting
#1: Corridor
Visioning

**January
2017**

Public Meeting
#2: Concept
Layout

**May
2017**

Public Meeting
#3: Concept
Analysis (today!)
Plus meetings
with BOMA and
property owners

**Next
Step:**

BOMA selects
preferred concept
to bring forward to
detailed design

Regional Context

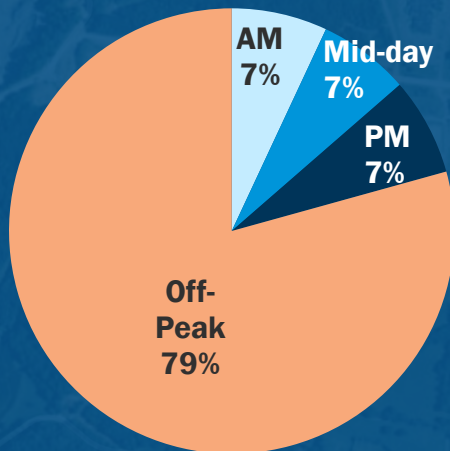


May 2016

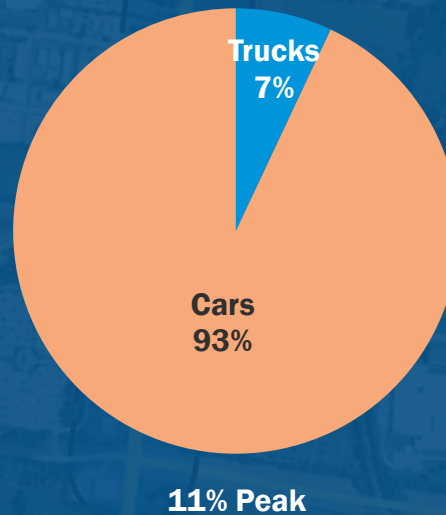
18,900

vehicles/day

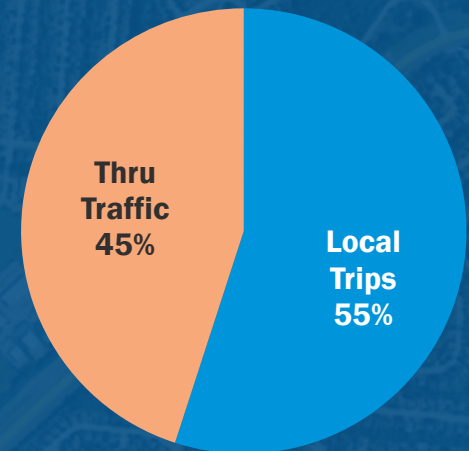
DAILY
TRAFFIC



TRAFFIC
COMPOSITION



TRAFFIC
TYPE



April 2016 travel time

from Battle Avenue to
Winstead Elementary School,
in minutes.

3:10

with no traffic

5:10

average day

10:20

longest recorded

Future Growth

2016

EXISTING
CONDITIONS

based on data from City and
TDOT count stations

18,900

vehicles/day

2021

BUILD
YEAR

forecast conditions at
project completion

19,800

vehicles/day

2041

DESIGN
YEAR

improvements are designed to
accommodate 20 years of growth

25,400

vehicles/day

3

components of
comparison

Operations

Safety

Physical
Impact

Corridor Concepts

Example: Columbia Avenue at Southeast Parkway



Four-Lane Median Divided Concept

with center median
and left-turn lanes



Five-Lane Signalized Concept

with continuous
two-way, left-turn lane

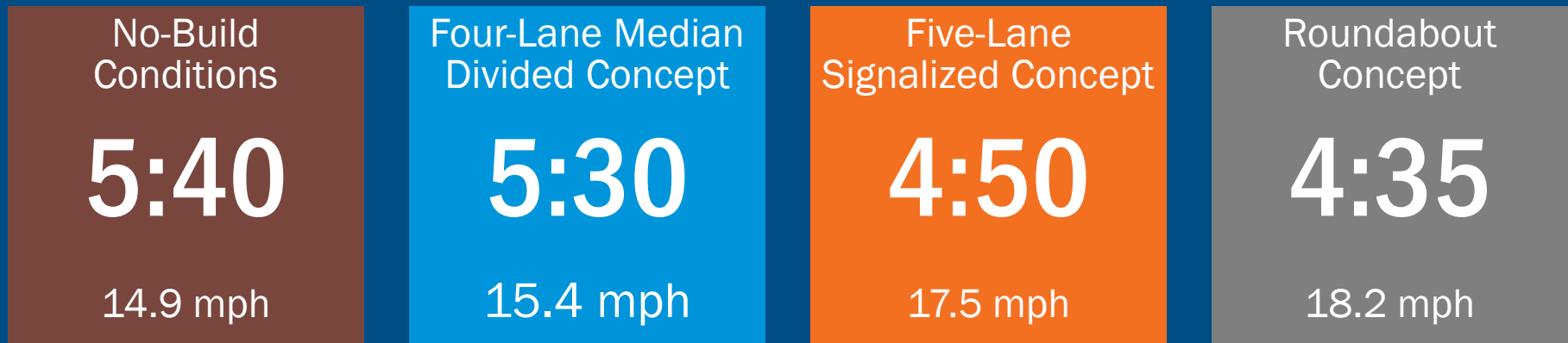


Roundabout Concept

with 4-foot
center median

Operations

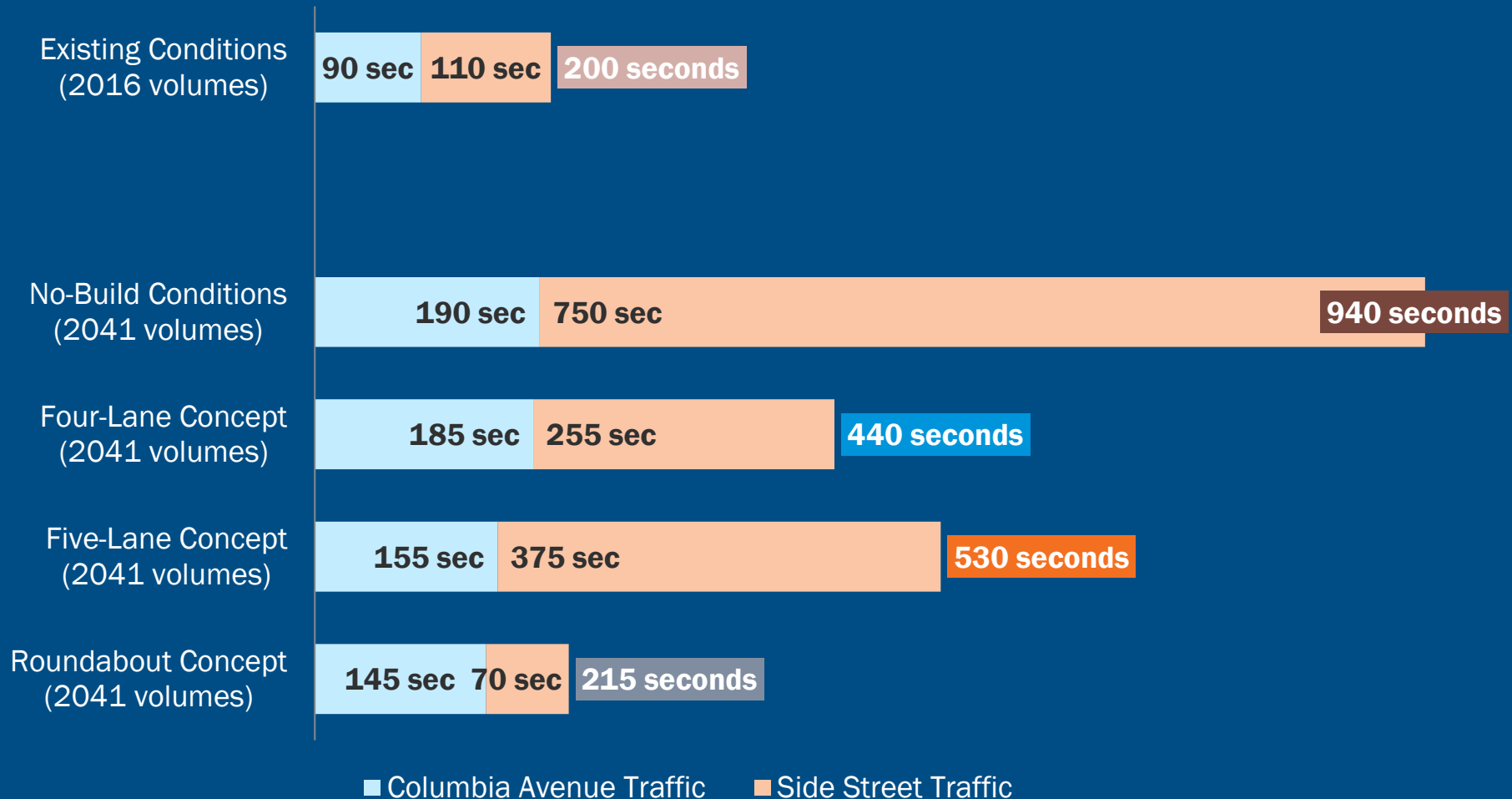
Anticipated Travel Time and Average Speed, 2041 Volumes (Columbia Avenue)



Average of 35,000+ simulated vehicles between
Fairground Street and Winstead Hill Park

Operations

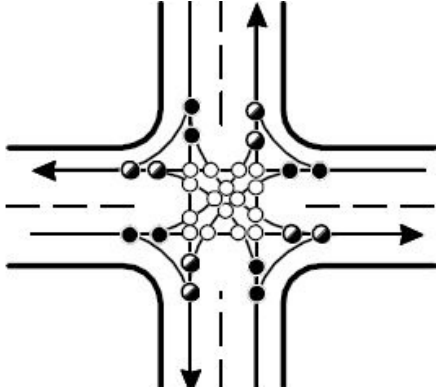
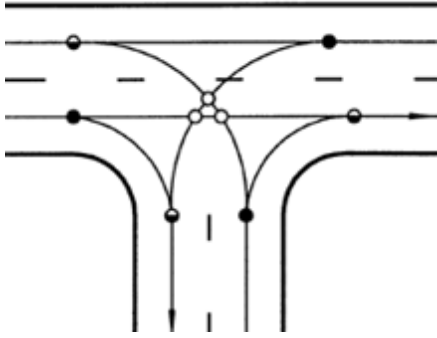
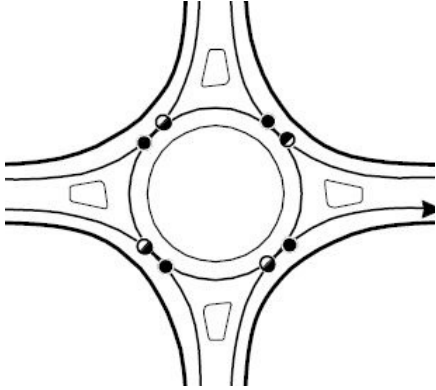
Corridor Delay



Safety

Vehicle Conflict Points (Potential for Collision)

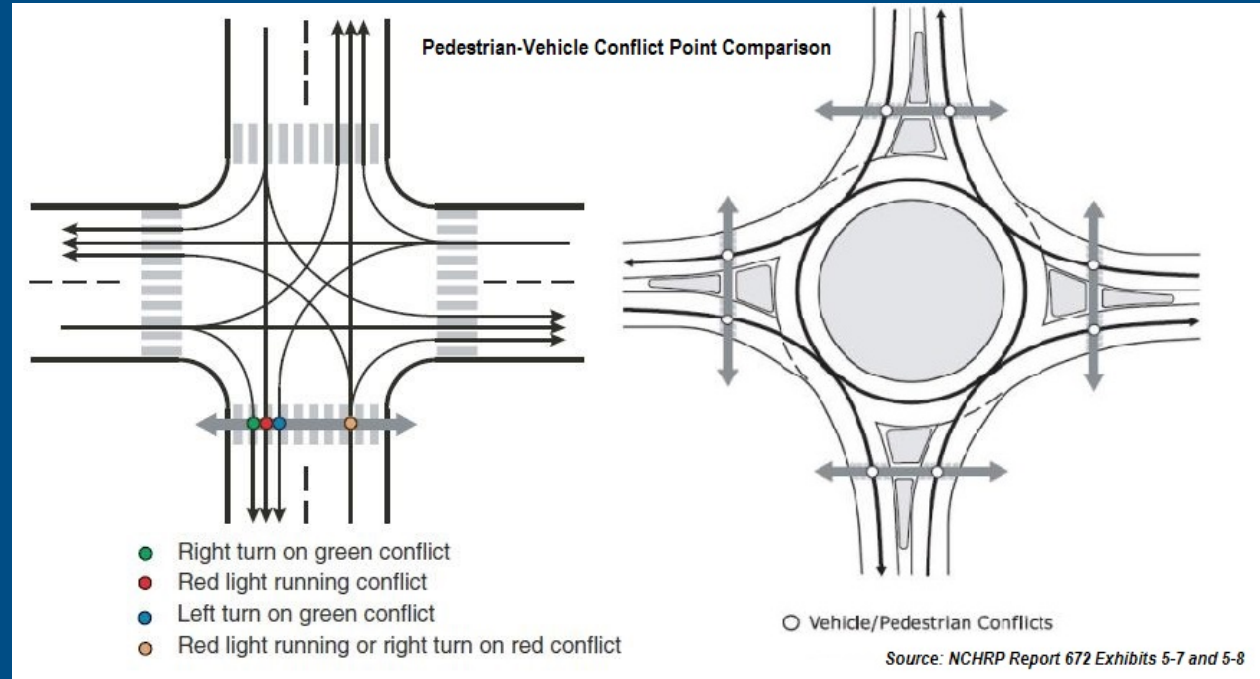
Source: FHWA

● Diverging ◐ Merging ○ Crossing			
Conflict Type	Signal	Driveway (full access)	Roundabout
Diverging	8	3	4
Merging	8	3	4
Crossing	16	3	0
Total Vehicle Conflicts	32	9	8

Safety

Pedestrian-Vehicle Conflict Points (Potential for Collision)

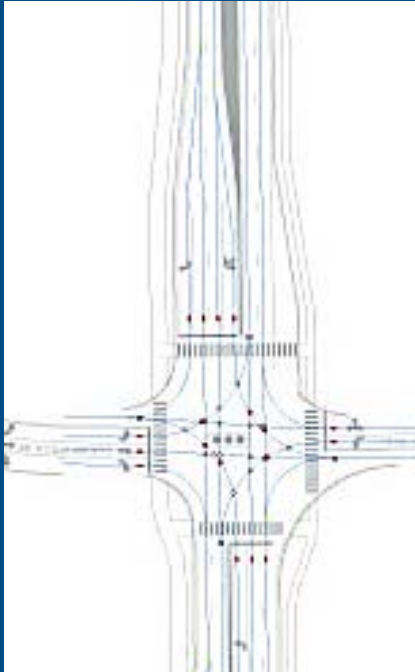
Source: FHWA



	Signal	Roundabout
Total Ped/Bike Conflicts	16	8

Safety

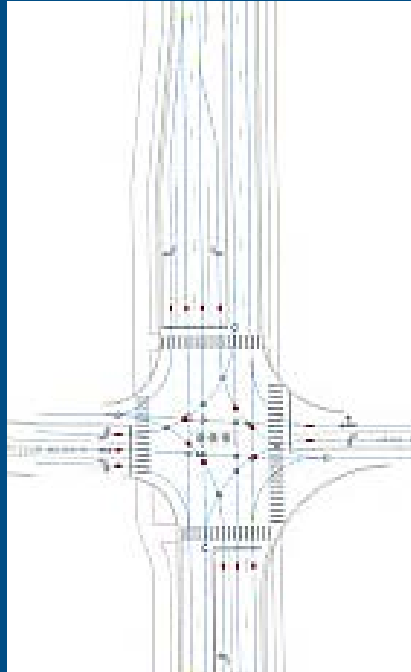
Columbia Avenue Conflict Points



Four-Lane Median
Divided Concept

340

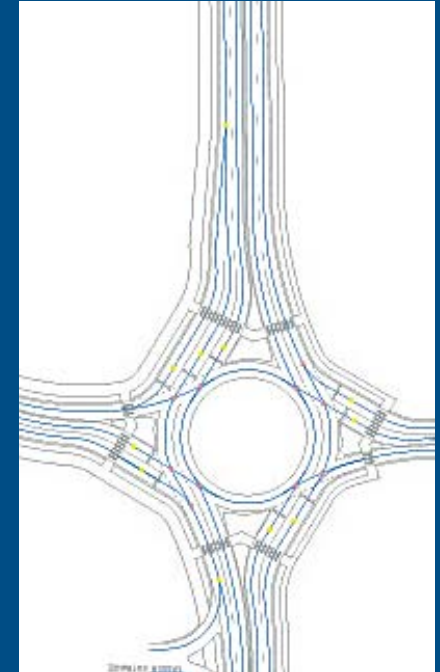
conflict points



Five-Lane
Signalized Concept

583

conflict points
(377 with access mgmt)



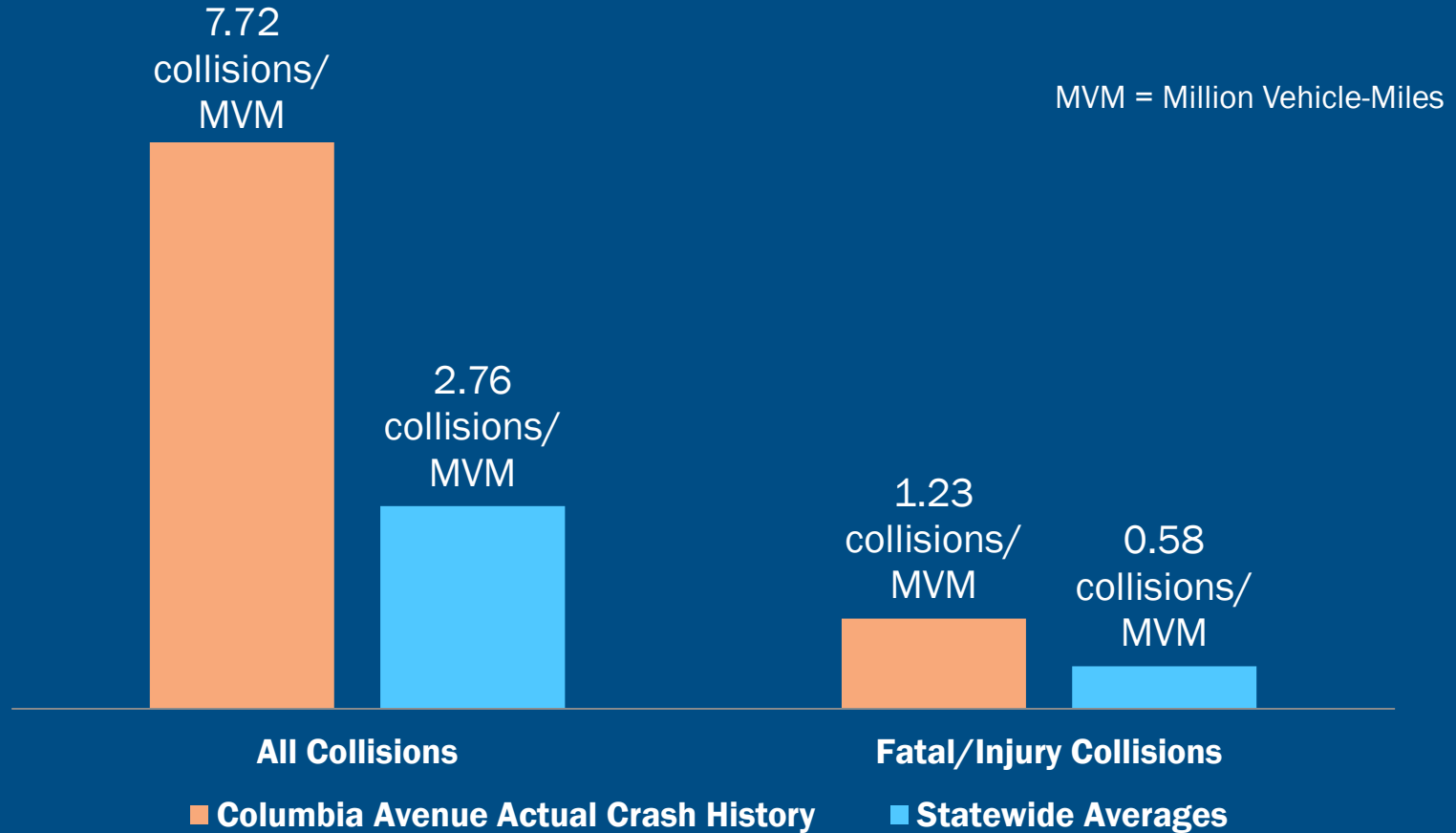
Roundabout
Concept

243

conflict points

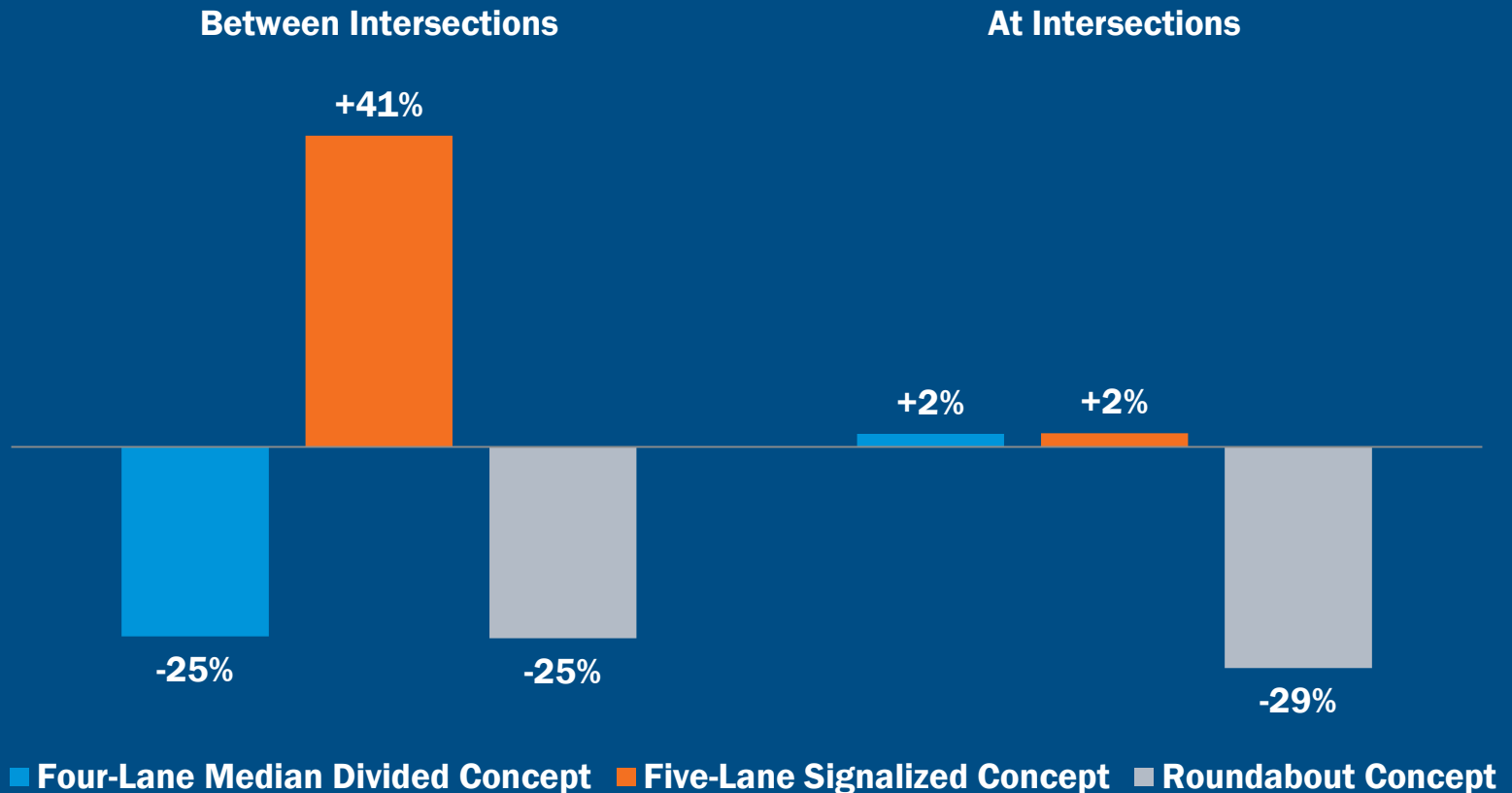
Safety

Collision Data (2013–2016)



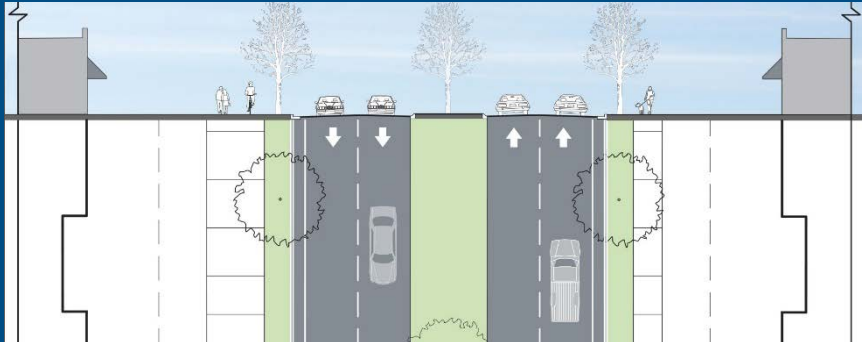
Safety

2041 Anticipated Change in Traffic Collisions

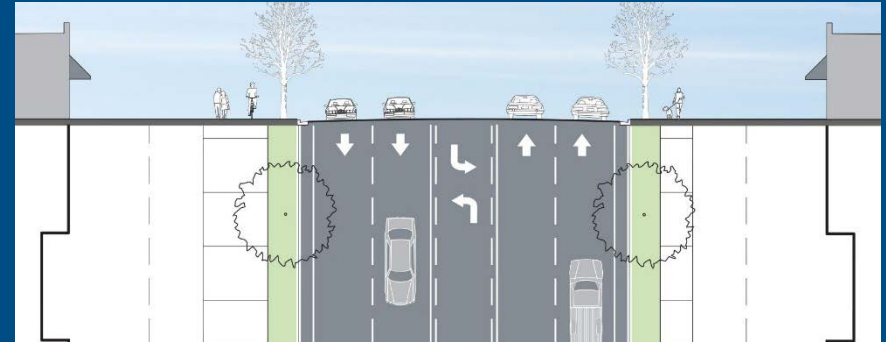


Physical Impact

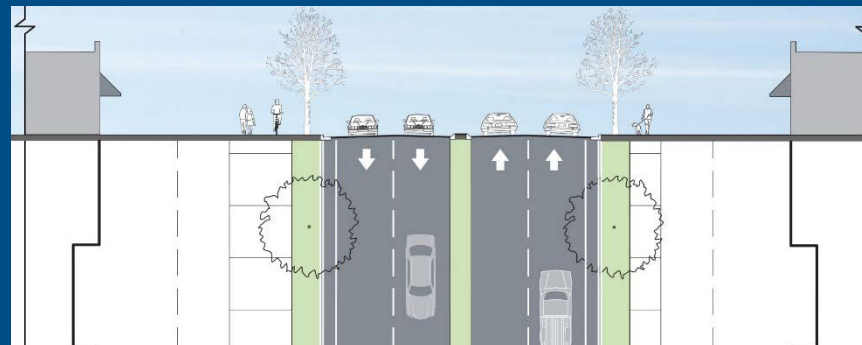
Typical Sections



Four-Lane Median Divided Concept
95' wide back of walk to back of walk



Five-Lane Signalized Concept
91' wide back of walk to back of walk



Roundabout Concept
83' wide back of walk to back of walk

Physical Impact



Four-Lane Median
Divided Concept



Five-Lane Signalized
Concept



Roundabout
Concept

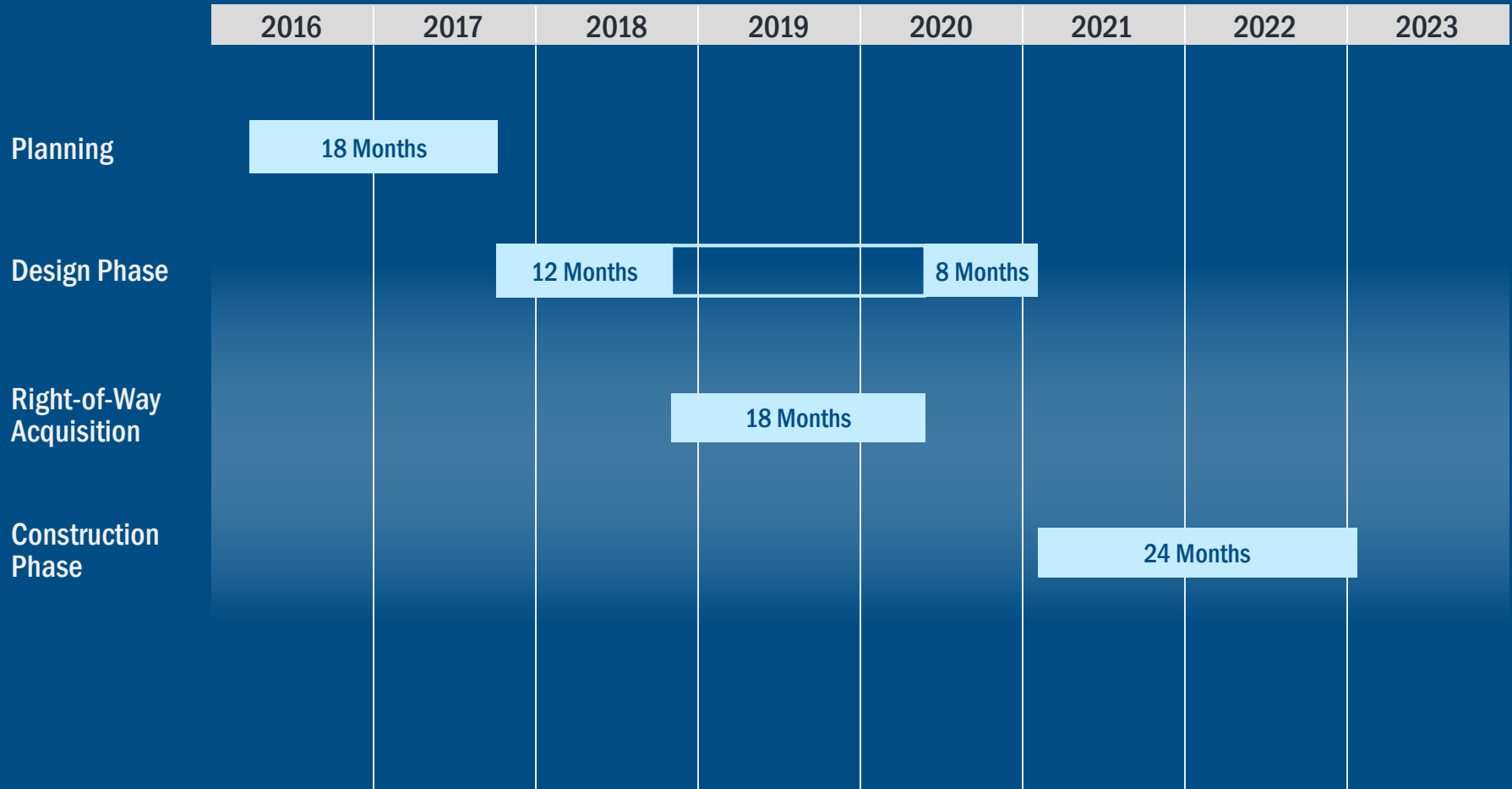
Data Summary

		Four-Lane Median Divided Concept	Five-Lane Signalized Concept	Roundabout Concept
Operational Performance	Thru Traffic Delay	185 sec/veh	155 sec/veh	145 sec/veh
	Side Street Delay	255 sec/veh	375 sec/veh	70 sec/veh
	Average Travel Time	5:30	4:50	4:35
Safety Performance	Between Intersections	-25% fewer collisions	+41% more collisions	-25% fewer collisions
	At Intersections	+2% more collisions	+2% more collisions	-29% fewer collisions
Physical Impact	Between Intersections	95' total width	91' total width	83' total width
	At Intersections	AVERAGE footprint	AVERAGE footprint	INCREASED footprint

next step

BOMA selects
preferred concept
to bring forward to
detailed design.

Schedule



Thank you for coming!

Please visit
the website

franklintn.gov/columbiaavenue

Questions?

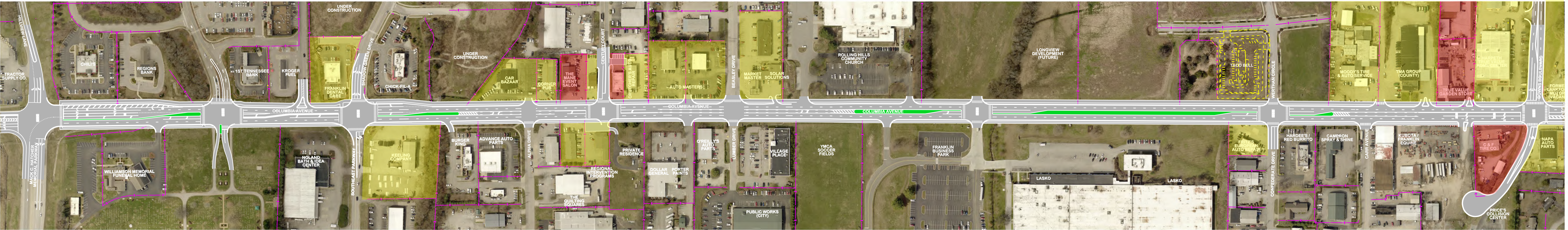
Construction Concerns

What can be done to mitigate disruption to local businesses during construction?

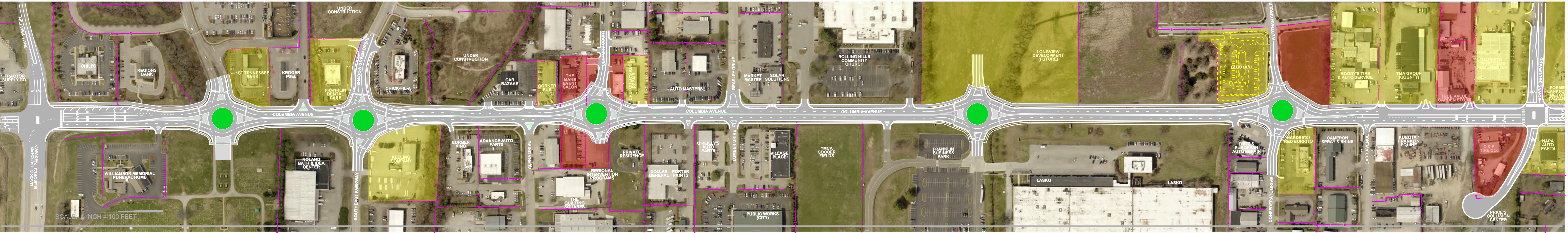
- **INCENTIVE** – Offer incentive to contractor to complete construction early.
- **NIGHT WORK** – Perform as much work as possible at night (e.g. during off-peak traffic) to minimize disturbance to surrounding properties.
- **HOUSEKEEPING** – Include items such as frequent street sweeping in the construction contract to minimize dust and debris in the roadway during construction.
- **INFORMATION** – Develop and maintain dedicated website to provide *up-to-date* project information to the public and business owners (Example: www.cumberlandconnect.com)
- **PARTNERSHIP** – Partner with willing local businesses to reach-out to customers and promote area business (i.e. City-sponsored giveaways, etc.)

How can we focus on making this project a “win-win” for all involved?

5-Lane Access Management Concept



Roundabout Concept



Columbia Avenue Roadway Concept
Franklin, Tennessee



Roundabout Corridors

City	State	Corridor Information							Traffic Count	
		Street Name	From	To	Length (miles)	Number of Roundabouts	Average Spacing (feet)	Year Completed	AADT (Veh. Per Day)	Year
Avon	CO	Avon Road	US-6	I-70	0.5	5	660	1997	25,170	2016
Avon	CO	Post Boulevard	US-6	Swift Gulch Rd.	1.0	6	1056	1999-2004	8,035	2016
Golden	CO	South Golden Road	Ford St./ Jackson St.	Ulysses St.	1.0	5	1320	1998 (2009)	19,211	2016
The Villages	FL	Morse Boulevard	Odell Cir.	E. County Rd. 466	3.3	6	3485	2003-2007	7,600	2016
Lenexa	KS	Renner Boulevard	The Shops & Apartments of Prairie Creek	City Center Dr.	0.8	5	1056	2007	Current Data Unavailable	
Lenexa	KS	Prairie Star Parkway	Canyon Creek Blvd.	Dunraven St.	1.2	7	1056	2009	Current Data Unavailable	
Fulton/Scaggsville	MD	Scaggsville Road	Old Columba Rd./ Westside Blvd.	Ice Crystal Dr./ Columbia Pk. NB Ramp	0.7	4	1232	2002 & 2009	17,320	2016
Jackson	MS	John R. Lynch Street/ Banks Street	John R. Lynch St.	University Blvd./ W. Pascagoula St./ Pearl St.	1.3	5	1716	2004	8,100	2016
Billings	MT	Shiloh Road	Zoo Dr.	Grand Ave.	3.3	8	2489	2009-2010	10,932	2015
Malta	NY	SR-67/Dunning Street	State Farm Blvd./ Medical Park Dr.	Hermes Rd./ Plains Rd.	1.6	7	1408	2006	14,235	2015



MEMORANDUM

May 26, 2017

TO: Board of Mayor and Aldermen (BOMA)

FROM: Eric Stuckey, City Administrator
Paul Holzen, City Engineer/Director of Engineering
Jonathan Marston, Assistant Director of Engineering
William banks

SUBJECT: History of Columbia Avenue Widening & Improvements Project

Timeline

2001

City contracted with Fischbach Transportation Group, Inc. (FTG) and Sullivan Engineering, Inc. (SEI) to complete and Advance Planning Report (APR) for Columbia Avenue (SR-6/US-31) from Mack Hatcher Parkway (SR-397) to Cleburne Street.

October 5, 2001

A field review was conducted and attended by representatives of FTG, SEI, City of Franklin, and TDOT.

March 13, 2002

FTG submitted a draft APR to the City for review and approval

March 20, 2002

City of Franklin held a public meeting to present APR. Subsequently, the BOMA voted to withhold the study from consideration by TDOT, primarily because of concerns about the project's impact to historic properties between Downs Boulevard and Cleburne Street.

July 27, 2004

State Senator Jim Bryson and State Representative submitted a letter to TDOT requesting re-examination of the need to improve Columbia Avenue, between Mack Hatcher Parkway and Fairground Street, to a 5-lane facility.

August 10, 2004

TDOT agreed to conduct a feasibility study to evaluate the request for an improved Columbia Avenue.

August 17, 2004

City submitted copies of the discontinued 2002 draft APR and public meeting transcript to TDOT.

December 2004

The BOMA approved contract with FTG to update and complete the APR for Columbia Avenue

January 2005 – April 2006

FTG worked with the City to develop cross-sections and access management strategies that would complement the City's goals for vehicle capacity, traffic flow, and aesthetics on the Columbia Avenue corridor.

October 19, 2005

The Executive Board of the Nashville Area Metropolitan Planning Organization (MPO) adopted the 2030 Long Range Transportation Plan (LRTP), which included, in Appendix B: 2030 LRTP Project List, the Columbia Avenue project, from Mack Hatcher Parkway to Downs Boulevard.

September 26, 2006

The BOMA approved a contract with FTG to develop a Transportation Planning Report (TPR).

March 28, 2007

TDOT initiated a contract with Long Engineering for the preparation of a TIER 2 Study for Columbia Avenue, from Mack Hatcher Parkway to Downs Boulevard.

June 21, 2007

Draft TIER 2 Study submitted to TDOT.

June 25, 2007

Draft TIER 2 Study submitted to Nashville Area MPO for approval.

August 10, 2007

A field review was conducted and attended by the City, FTG, SEI, TDOT, and the Federal Highway Administration (FHWA).

January 23, 2008

As a part of the development of the TPR, a public meeting was held to discuss the "Build" conditions and solicit comments.

November 17, 2010

TDOT approved the final TPR for Columbia Avenue.

December 15, 2010

The Nashville Area MPO adopted the 2035 Regional Transportation Plan (RTP), which included, in Appendix A: 2035 RTP Project List, the Columbia Avenue project. The MPO also adopted the fiscal years (FY) 2011-2015 Transportation Improvement Program (TIP), which included the Columbia Avenue project. However, the Columbia Avenue project was only shown as locally funded through design and right-of-way.

December 11, 2013

The MPO adopted TIP for FYs 2017-2017, which included Columbia Avenue as a funded project. A funding breakdown of 80% federal funds and 20% local funds was programmed for Columbia Avenue.

March 13, 2014

The BOMA approved Resolution 2014-13, adopting a funding plan for the FY 2014-2018 Capital Investment Program (CIP). Included in this CIP was \$821,500 for the design of Columbia Avenue Improvements, from Mack Hatcher Parkway to Downs Boulevard.

May 6, 2014

Because Columbia Avenue is both a federal and a state route, the City asked TDOT to participate in the project by providing the 20% local match with state funds.

June 4, 2014

TDOT agreed to participate in the Columbia Avenue project by using state funds as the 20% match to the 80% federal funds.

September 9, 2014

The BOMA approved Resolution 2014-63, which authorized the Mayor and City staff to submit the Project Initiation Form and Checklist to TDOT for the Columbia Avenue project.

June 7, 2015

Public advertisement for Letters of Interest (LOIs) and Statements of Qualification (SOQs) for design services on the Columbia Avenue project was issued.

July 8, 2015

City receives LOIs and SOQs from 16 engineering firms interested in the Columbia Avenue project.

July 14, 2015

The BOMA approved the Local Agency Project Agreement (COF Contract No. 2014-0289) with TDOT to begin the Columbia Avenue project.

September 14-15, 2015

City staff interviews top 5 scoring engineering firms.

October 13, 2015

The BOMA approved Resolution 2015-82 to authorize staff to enter contract negotiations with Barge Waggoner Sumner and Cannon, Inc. (BWSC) for the Preliminary Engineering Phase (Environmental Only) for the Columbia Avenue project.

February 9, 2016

The BOMA approved a contract with BWSC for the Preliminary Engineering – National Environmental Policy Act (PE-NEPA) phase of the Columbia Avenue project.

February 17, 2016

The MPO adopted “Middle Tennessee Connected 2016-2040 Regional Transportation Plan,” which included, in Appendix A: Cost-Feasible and Illustrative Project Lists, Columbia Avenue Widening in the 2020 Horizon Year.

February 22, 2016

City held kick-off meeting with BWSC for the Columbia Avenue Widening & Improvements Project.

May 17, 2016

First (1ST) public meeting, as a part of the PE-NEPA phase, was held at Rolling Hills Community Church. This was an open-house style meeting to gather input from the public.

September 27, 2016

City staff presented summary of 1ST public meeting to BOMA.

October 25, 2016

City staff and project team gave presentation on access management strategies and techniques to the BOMA.

November 16, 2016

The MPO adopted the TIP for FYs 2017-2020. This TIP correctly shows the Columbia Avenue project funding distribution as 80% federal and 20% state.

January 24, 2017

City staff and project team presented 3 preliminary design options for Columbia Avenue to the BOMA.

January 31, 2017

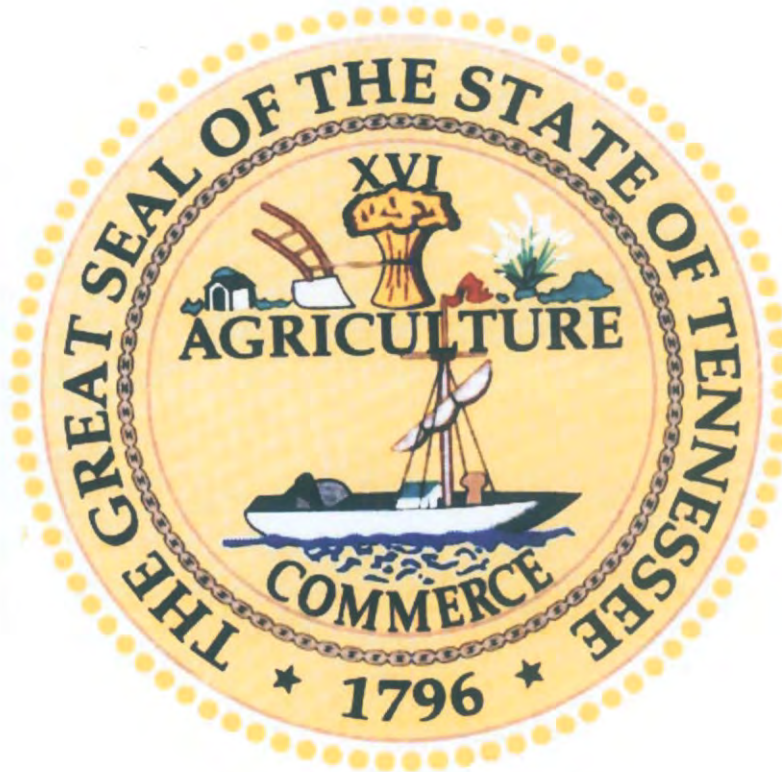
Second (2ND) public meeting, as a part of the PE-NEPA phase, was held at City Hall. City staff and the project team presented the 3 preliminary design options to attendees. The remaining time was utilized as an open-house to answer questions about the presented options.

May 16, 2017

Third (3RD) public meeting, as a part of the PE-NEPA phase, was held at City Hall. City staff presented the 3 design options with a summary of the reasons each option was developed. The remaining time was utilized as a town hall forum to allow attendees to publicly state their concerns and questions.

TRANSPORTATION PLANNING REPORT

State Route 6 (Columbia Avenue)
From Mack Hatcher Parkway To Downs Boulevard
CITY OF FRANKLIN, WILLIAMSON COUNTY
PIN 113474.00



PREPARED BY
FISCHBACH TRANSPORTATION GROUP, INC.
AND SULLIVAN ENGINEERING, INC

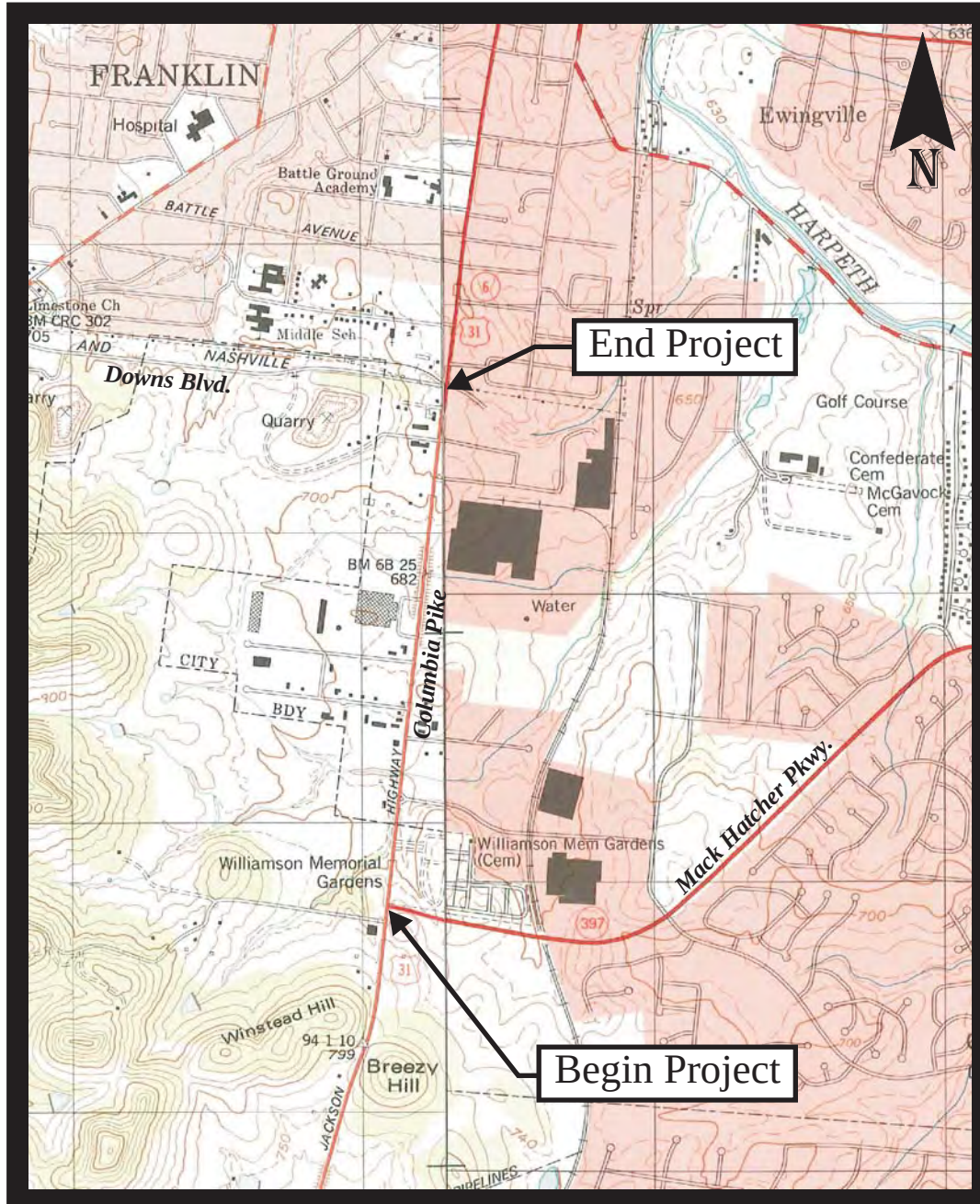
FOR THE CITY OF FRANKLIN
IN COOPERATION WITH THE TENNESSEE DEPARTMENT OF
TRANSPORTATION AND THE NASHVILLE METROPOLITAN
PLANNING ORGANIZATION

Recommended by:	Signature	DATE
CHIEF OF ENVIRONMENT AND PLANNING	<i>[Signature]</i>	11/17/10
TRANSPORTATION DIRECTOR PROJECT PLANNING DIVISION	<i>[Signature]</i>	11-15-10
TRANSPORTATION MANAGER 2 PROJECT PLANNING DIVISION	<i>[Signature]</i>	11/9/10

This document is covered by 23 USC § 409 and its production pursuant to fulfilling public planning requirements does not waive the provisions of § 409.

Table of Contents

PROJECT LOCATION MAP.....	2
1. INTRODUCTION AND BACKGROUND INFORMATION.....	3
1.1 Introduction.....	3
1.2 Project Study Area	4
1.3 Existing Transportation Conditions	5
2. PURPOSE AND NEED.....	8
2.1 Purpose.....	8
2.2 Need	8
2.3 Goals	8
3. PROJECTED TRAFFIC VOLUMES.....	9
TDOT APPROVAL OF TRAFFIC PROJECTIONS	11
4. OPTIONS ANALYZED	12
4.1 No Build.....	12
4.2 Build.....	28
4.3 Columbia Avenue Local Street Plan.....	43
4.4 Signal System Improvements	43
COLUMBIA AVENUE LOCAL STREET PLAN	44
4.5 Reversible Lane	45
5. TDOT’S SEVEN GUIDING PRINCIPLES	46
6. COST ESTIMATE FOR BUILD CONDITIONS	48
7. SUMMARY	49
CHECKLIST OF DETERMINANTS	50
SUMMARY DATA TABLE	51
DESIGN CRITERIA	52
COST ESTIMATES	53
APPENDIX – TRAFFIC PROJECTIONS	54
APPENDIX –TYPICAL CROSS-SECTIONS AND FUNCTIONAL PLANS	81



LOCATION MAP

SCALE: 1"=2000'

1. INTRODUCTION AND BACKGROUND INFORMATION

1.1 Introduction

The purpose of this study is to determine the need for and feasibility of improving the safety and operational capacity of State Route 6 (U.S. Highway 31, Columbia Avenue) from Mack Hatcher Parkway to Downs Boulevard in the City of Franklin, Tennessee.

This report examines a No-Build option that maintains the three-lane cross-section on Columbia Avenue, as well as a Build option that includes widening Columbia Avenue to include two through lanes in each direction with a median-divided section on some roadway segments and dedicated turn lanes at key locations. In addition, the potential effectiveness of several alternative improvements to the Columbia Avenue corridor are discussed.

For the purposes of this study, Year 2012 and Year 2032 traffic projections were developed for the following two scenarios:

1. With the existing roadway network
2. With the planned extension of Mack Hatcher Parkway west of Columbia Avenue

Then, the traffic volumes for each of these network scenarios were applied to both No-Build conditions (Columbia Avenue remains a three-lane facility) and Build conditions (Columbia Avenue is widened to include two travel lanes in each direction, plus dedicated turn lanes at key locations). Capacity analyses were conducted for each of the infrastructure scenarios, and the results of these analyses were used to identify necessary improvements.

The projected traffic volumes, capacity analyses, and potential improvements were discussed during a meeting on August 10, 2007, with representatives from the City of Franklin, the Tennessee Department of Transportation (TDOT), and Fischbach Transportation Group, Inc. Minutes from the meeting are included in the supplemental materials. Also, a public meeting was held at Franklin City Hall on January 23, 2008, in order to discuss the Build conditions and solicit comments. Comment sheets from the meeting are included in the supplemental materials.

In June 2007, a *Tier 2 – Detailed Analysis* was prepared by TDOT and Long Engineering for the Nashville Metropolitan Planning Organization (MPO) for the segment of Columbia Avenue from Mack Hatcher Parkway to Downs Boulevard. Specifically, the summary of the *Tier 2 – Detailed Analysis* states that congestion management strategies, “...may significantly reduce future congestion levels. However, there remains a need for additional capacity based on existing and future traffic volumes. Franklin’s [Major Thoroughfare Plan Update] proposes a multi-lane section with provisions for pedestrians and bicycles. These enhancements, when combined with various CMS toolbox strategies, will increase corridor traffic capacity and reduce congestion, travel time, and delay.”

It is important to note that the widening and improvement of State Route 6 (U.S. Highway 31, Columbia Avenue) is included in the MPO’s Long Range Transportation Plan. Specifically, the

improvement of this facility to three-to-five lanes from Mack Hatcher Parkway to Downs Boulevard is included in the MPO's Long Range Transportation Plan as Project 6027

No environmental survey has been conducted as part of this study. However, a detailed environmental study will need to be performed in conjunction with further advanced planning and design efforts for this improvement.

1.2 Project Study Area

The City of Franklin is located in the center of Williamson County, approximately 20 miles south of Nashville, Tennessee. Columbia Avenue, between Mack Hatcher Parkway and Downs Boulevard, is located immediately south of downtown Franklin.

Williamson County, which is part of the five-county Nashville Metropolitan Planning Organization (MPO), includes approximately 584 square miles and has a population of approximately 164,000 people. The City of Franklin is the county seat, as well as its most populous city with a population of approximately 59,000 persons.

According to the Williamson County Economic Development Office, the population of Williamson County grew 56.3% from 1990 to 2000 and is expected to increase 13.6% between 2007 and 2012. The labor force of Williamson County is approximately 93,500 persons, and the unemployment rate is less than 3%. According to the Nashville Area Metropolitan Planning Organization (MPO), 38% of employees from Williamson County commute to Nashville.

Columbia Avenue is one of the City of Franklin's oldest and most-established arterial corridors. The segment between Mack Hatcher Parkway and Downs Boulevard provides access to downtown Franklin but also provides access to significant commercial and industrial development, as well as the Williamson County Jail, Williamson County Juvenile Court, and Williamson County Rock Quarry. With the future construction of several recently-proposed developments on Columbia Avenue, the land along both sides of the corridor will be substantially built-out.

Several utilities are located within the study area. The utility service providers include:

- City of Franklin Water, Sewer, and Communication Fiber
- AT&T (Telephone)
- Comcast (Television and Internet)
- Atmos Energy (Gas)
- Middle Tennessee Electric Membership Corporation (Electric)

In order to accomplish the improvements identified under Build conditions, these utilities will likely have to be moved or placed underground. However, it is not anticipated that any new utilities will need to be provided.

1.3 Existing Transportation Conditions

In general, the Columbia Avenue corridor travels in a north-south direction between the Cities of Columbia, Spring Hill, and Franklin. The Major Thoroughfare Plan that has been prepared for the City of Franklin classifies this facility as an arterial roadway with a future five-lane cross-section. Currently, the Columbia Avenue corridor includes a three-lane cross-section from Mack Hatcher Parkway to Downs Boulevard. Posted speed limits of 30 mph and 40 mph are found on this portion of Columbia Avenue.

It is important to note that TDOT and the City of Franklin are currently planning an extension of Mack Hatcher Parkway from its existing terminus at Columbia Avenue westward to State Route 96 and Hillsboro Road (State Route 6). This extension, which is included in the City of Franklin's Major Thoroughfare Plan, will improve the vehicular mobility within the City of Franklin. The planned extension of Mack Hatcher Parkway will be constructed with two travel lanes in each direction, separated by a raised grass median.

Currently, the existing eastern half of Mack Hatcher Parkway, including the portion that intersects Columbia Avenue, includes one travel lane in each direction, as well as a depressed grass median. However, TDOT and the City of Franklin are plan to improve this existing facility to include two travel lanes in each direction, separated by a raised grass median.

Recent steady residential and commercial growth has occurred in the City of Franklin, and this growth has placed increasing traffic demands on the roadway infrastructure along the Columbia Avenue corridor. Since 2001, the efforts to address these issues are as follows:

2001

In 2001, the City of Franklin contracted with Fischbach Transportation Group, Inc. and Sullivan Engineering, Inc. to complete an Advance Planning Report for State Route 6 (U.S. Highway 31, Columbia Avenue) from Mack Hatcher Parkway (State Route 397) to Cleburne Street. On October 5, 2001, a field review was conducted and attended by representatives of Fischbach Transportation Group, Inc., Sullivan Engineering, Inc., the City of Franklin, and TDOT.

March 13, 2002

Fischbach Transportation Group, Inc. submitted a draft Advance Planning Report to the City of Franklin Engineering Department for review and approval.

March 20, 2002

A public meeting was held by the City of Franklin Engineering Department. Subsequently, the City of Franklin Board of Mayor and Aldermen voted to withhold the study from consideration by the TDOT, primarily because of concerns about the project's impact on historic properties between Downs Boulevard and Cleburne Street.

July 27, 2004

A letter from State Senator Jim Bryson and State Representative Glen Casada was submitted to Mr. Paul Degges at TDOT, requesting a re-examination of the need to improve State Route 6 (U.S. Highway 31, Columbia Avenue) to a five-lane facility between Mack Hatcher Parkway and Fairground Street.

August 10, 2004

Mr. Degges issued a responding letter to State Senator Bryson and State Representative Casada, indicating that a Feasibility Study would be initiated in order to evaluate their request.

August 17, 2004

Mr. David Parker, Director of the Franklin Engineering Department, submitted copies of the discontinued 2002 Draft Advance Planning Report and the public meeting transcript to Mr. Bill Hart at TDOT.

December 2004

The Franklin Board of Mayor and Alderman approved an agreement with Fischbach Transportation Group, Inc. to update and complete the Advance Planning Report for State Route 6 (U.S. Highway 31, Columbia Avenue).

December 2004

The Franklin Board of Mayor and Alderman approved an agreement with Fischbach Transportation Group, Inc. to update and complete the Advance Planning Report for State Route 6 (U.S. Highway 31, Columbia Avenue).

January 2005 – April 2006

Fischbach Transportation Group, Inc. worked with the City of Franklin in the development of cross-sections and access management strategies that would complement the City's goals for vehicle capacity, traffic flow, and aesthetics on the Columbia Avenue corridor.

May 10, 2006

A partially-updated copy of the Advance Planning Report for State Route 6 (U.S. Highway 31, Columbia Avenue) from Mack Hatcher Parkway to Downs Boulevard was submitted to TDOT's Project Planning Division by Fischbach Transportation Group, Inc.

August 23, 2006

A meeting was held by representatives from TDOT and Fischbach Transportation Group, Inc. in order to discuss TDOT's new requirements for Transportation Planning Reports (TPRs) and updated traffic data coordination with the Nashville MPO.

March 28, 2007

TDOT's Project Planning Division initiated a contract with Long Engineering for the preparation of a TIER 2 Study for State Route 6 (U.S. Highway 31, Columbia Avenue) from Mack Hatcher Parkway to Downs Boulevard.

June 21, 2007

The draft TIER 2 Study was submitted to TDOT.

June 25, 2007

The draft TIER 2 Study was submitted to the Nashville Area MPO for approval.

August 10, 2007

A field review was conducted and attended by representatives of Fischbach Transportation Group, Inc., Sullivan Engineering, Inc., the City of Franklin, TDOT, and the Federal Highway Administration (FHWA).

2. PURPOSE AND NEED

2.1 Purpose

The purpose of widening Columbia Avenue is to provide the capacity necessary to accommodate the projected traffic volumes on this facility. In particular, as residential development continues to increase south and west of Columbia Avenue, this roadway segment will become an increasingly-important link to commercial developments, as well as employment centers on Columbia Avenue and in downtown Franklin.

2.2 Need

Currently, only Columbia Avenue, Lewisburg Pike, and Interstate 65 provide north-south access between southern Williamson County and downtown Franklin. Columbia Avenue and Lewisburg Pike each include only one through lane in each direction, even though both of these facilities provide direct access to the core of Franklin. Because of the existing and future development on Columbia Avenue, between Mack Hatcher Parkway and Downs Boulevard, this facility in particular will require additional capacity in order to accommodate the travel demand.

2.3 Goals

The goals of an improvement to Columbia Avenue are to:

- Relieve traffic congestion on Columbia Avenue
- Improve access to downtown Franklin from areas south of the core
- Increase accessibility to existing and future development on Columbia Avenue

3. PROJECTED TRAFFIC VOLUMES

The following projected traffic Design Hourly Volumes (DHVs) and Average Annual Daily Traffic Volumes (AADTs) are included in the [Appendix](#):

- 2012 DHVs for the Existing Network (no extension of Mack Hatcher Parkway)
- 2032 DHVs for the Existing Network (no extension of Mack Hatcher Parkway)
- 2012 DHVs for the Future Network (with extension of Mack Hatcher Parkway)
- 2032 DHVs for the Future Network (with extension of Mack Hatcher Parkway)
- 2012 and 2032 AADTs for the Existing Network (no extension of Mack Hatcher Parkway)
- 2012 and 2032 AADTs for the Future Network (with extension of Mack Hatcher Parkway)

Specifically, projected traffic volumes were developed for the following intersections:

1. Columbia Avenue and Downs Boulevard
2. Columbia Avenue and Confederate Drive (existing) / Longview Circle (future)
3. Columbia Avenue and Beasley Drive
4. Columbia Avenue and Century Court
5. Columbia Avenue and Southeast Parkway (existing) / Through the Green access (future)
6. Columbia Avenue and Mack Hatcher Parkway

For the existing roadway network (no extension of Mack Hatcher Parkway), the Year 2012 DHVs were developed by collecting Year 2007 ground counts and then adding the traffic that will be generated by the following three projects that have been approved or proposed for construction on Columbia Avenue:

1. Construction of the Longview Office Park with retail and office land uses (on the west side of Columbia Avenue, opposite Confederate Drive)
2. Redevelopment of the Lasko industrial complex as the Franklin Business Park, with office and warehouse land uses (on the east side of Columbia Avenue, south of Confederate Drive)
3. Redevelopment of the Through the Green property with residential, retail, and office land uses (on the west side of Columbia Avenue, opposite Southeast Parkway).

Then, the Year 2032 DHVs for the existing roadway network (no extension of Mack Hatcher Parkway) were developed by increasing the Year 2012 DHVs by 30% in order to account for an average annual growth rate of approximately 1.5%.

For the future roadway network (with extension of Mack Hatcher Parkway), the Year 2012 DHVs were developed by reassigning the Year 2012 DHVs for the existing network in order to account for the change in travel patterns that will occur with the extension of Mack Hatcher Parkway. Specifically, this reassignment was completed with guidance from the transportation model that was developed by the Tennessee Department of Transportation (TDOT) and the Metropolitan Planning Organization (MPO).

Then, the Year 2032 DHVs for the future roadway network (with extension of Mack Hatcher Parkway) were developed by increasing the Year 2012 DHVs by 30% in order to account for an average annual growth rate of approximately 1.5%.

Average Annual Daily Traffic Volumes (AADTs) were established by averaging the AM and PM peak hour volumes and multiplying by 10, based on the assumption that peak hour volumes account for approximately 10% of daily traffic volumes.

The traffic volumes for each of these network scenarios were applied to both No-Build conditions (Columbia Avenue remains a three-lane facility) and Build conditions (Columbia Avenue is widened to include two travel lanes in each direction, plus dedicated turn lanes at key locations).

It is important to note that the projected traffic volumes were reviewed and approved by TDOT's Project Planning Division. The following page includes the letter of approval from TDOT.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
PROJECT PLANNING DIVISION
SUITE 1000, JAMES K. POLK BUILDING
505 Deaderick Street
NASHVILLE, TENNESSEE 37243-0344

Gerald F. Nicely
Commissioner

Phil Bredesen
Governor

July 26, 2007

Mrs. Gillian Parton
Fischbach Transportation Group, Inc.
3326 Aspen Grove Dr., Suite 130
Franklin Tn. 37067

Subject : Columbia Pike Transportation Planning Report (TPR)
Franklin, Williamson County

Dear Gillian,

We have reviewed the traffic projections and after our discussion with Steve Allen yesterday the traffic figures have our approval for your use in the study for the city of Franklin. If I can be of further assistance, please contact me.

Sincerely,

Tony Armstrong
Transportation Manager 1

cc: file

4. OPTIONS ANALYZED

4.1 No Build

Using the peak hour traffic volumes projected for No Build conditions, capacity analyses were conducted for the intersections within the study area. Specifically, in order to identify peak hour levels of operation within the study area, the capacity calculations were performed according to the methods outlined in the Highway Capacity Manual 2000 (HCM 2000). These analyses result in the determination of a Level of Service (LOS), which is a measure of evaluation used to describe how well an intersection operates. LOS A represents free flow traffic operations, and LOS F suggests that the traffic demand exceeds the available capacity. Typically, LOS D is considered to be the minimum acceptable LOS. However, the City of Franklin considers LOS C to be the minimum acceptable LOS. The following tables present the descriptions of LOS for signalized intersections, unsignalized intersections, and arterial corridors.

The analyses conducted for the existing roadway network are based on the assumption that all existing laneage and traffic control within the study area will be maintained and no improvements will be provided. The analyses conducted for the future roadway network are based on the assumption that a second eastbound through lane and a second westbound through lane will be provided on Mack Hatcher Parkway at the intersection with Columbia Avenue. For all other intersections, it was assumed that the existing laneage and traffic control within the study area will be maintained and no improvements will be provided. The results of the capacity analyses for the peak hour traffic volumes are shown in the following tables, and the supplemental materials include the capacity analyses worksheets.

The capacity analyses indicate, with the existing roadway network (no extension of Mack Hatcher Parkway), all of the signalized intersections studied will operate poorly during both peak hours in Years 2012 and 2032. Also, the eastbound and westbound turning movements at the intersection of Columbia Avenue and Beasley Drive will operate poorly during both peak hours in Years 2012 and 2032. Finally, as a whole, the corridor will operate poorly in both directions in both peak hours in Years 2012 and 2032.

With the planned extension of Mack Hatcher Parkway, the through volumes on Columbia Avenue will be reduced, and so the capacity analyses indicate that vehicle delays and queues will be reduced in Years 2012 and 2032, compared to the existing roadway network. However, these reductions are not significant enough to provide adequate operations at all of the intersections studied through the Year 2032.

DESCRIPTIONS OF LOS FOR SIGNALIZED INTERSECTIONS

Level of Service	Description	Average Control Delay per Vehicle (sec)
A	Operations with very low control delay. Progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	≤ 10
B	Operations with stable flows. This generally occurs with good progression, short cycle lengths, or both. More vehicles stop than for LOS A, causing higher levels of average delay.	> 10 and ≤ 20
C	Operations with stable flow. Occurs with fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	> 20 and ≤ 35
D	Approaching unstable flow. The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop.	> 35 and ≤ 55
E	Unstable flow. In many cases, this is considered to be the limit for acceptable delay. These high delays generally indicate poor progression, long cycle lengths, and high v/c ratios.	> 55 and ≤ 80
F	Unacceptable delay. This condition often occurs with oversaturation or with high v/c ratios. Poor progression and long cycle lengths may also cause such delay levels.	> 80

Source: Highway Capacity Manual 2000 (HCM2000)

DESCRIPTIONS OF LOS FOR UNSIGNALIZED INTERSECTIONS

Level of Service	Description	Average Control Delay (sec/veh)
A	Minimal delay	≤ 10
B	Brief delay	> 10 and ≤ 15
C	Average delay	> 15 and ≤ 25
D	Significant delay	> 25 and ≤ 35
E	Long delay	> 35 and ≤ 50
F	Extreme delay	> 50

Source: Highway Capacity Manual 2000 (HCM 2000)

DESCRIPTIONS OF LOS FOR ARTERIAL CORRIDORS

Level of Service	Description	Average Travel Speed * (mph)
A	Minimal delay	> 35
B	Brief delay	> 28 and < 2355
C	Average delay	> 22 and < 28
D	Significant delay	> 17 and < 22
E	Long delay	> 13 and < 17
F	Extreme delay	≤ 13

Source: Highway Capacity Manual 2000 (HCM 2000)

* For Class II urban streets with a free-flow speed of 35-45 mph.

YEAR 2012 PEAK HOUR LEVELS OF SERVICE**NO-BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (existing laneage and traffic control)	Northbound Left Turns	LOS F 456 sec/veh	75 veh	LOS F 264 sec/veh	125 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		10 veh		12 veh
	Eastbound Right Turns		163 veh		79 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (existing laneage plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS F 131 sec/veh	6 veh	LOS F 127 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		15 veh
	Westbound Left Turns		1 veh		5 veh
Columbia Avenue and Beasley Drive (existing laneage and traffic control)	Northbound Left Turns	LOS B	1 veh	LOS B	1 veh
	Southbound Left Turns	LOS B	1 veh	LOS B	1 veh
	Eastbound Left Turns	LOS F	4 veh	LOS F	12 veh
	Eastbound Thru/Right Turns	LOS D	1 veh	LOS F	3 veh
	Westbound Left/Thru/Right Turns	LOS F	8 veh	LOS F	12 veh

YEAR 2012 PEAK HOUR LEVELS OF SERVICE, CONT.**NO-BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Century Court (existing laneage and traffic control)	Northbound Left Turns	LOS F 82 sec/veh	3 veh	LOS F 183 sec/veh	2 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		30 veh
	Eastbound Right Turns		18 veh		13 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Southeast Parkway/ Through the Green (existing laneage plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS F 630 sec/veh	2 veh	LOS F 456 sec/veh	6 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		8 veh
	Westbound Left Turns		3 veh		6 veh
Columbia Avenue and Mack Hatcher Parkway (existing laneage and traffic control)	Northbound Left Turns	LOS F 414 sec/veh	2 veh	LOS F 373 sec/veh	3 veh
	Southbound Left Turns		18 veh		63 veh
	Eastbound Left Turns		2 veh		4 veh
	Eastbound Thru/Right Turns		10 veh		43 veh
	Westbound Left Turns		11 veh		75 veh
	Westbound Throughs		9 veh		19 veh
	Westbound Right Turns		248 veh		43 veh

YEAR 2012 ARTERIAL LEVELS OF SERVICE**NO-BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS F	LOS C
	Between Century Court and Confederate Drive	LOS B	LOS F
	Between Confederate Drive and Downs Boulevard	LOS B	LOS B
	OVERALL	LOS D	LOS F
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS F	LOS B
	Between Confederate Drive and Century Court	LOS A	LOS E
	Between Century Court and Southeast Parkway	LOS D	LOS F
	OVERALL	LOS F	LOS F

YEAR 2032 PEAK HOUR LEVELS OF SERVICE

NO-BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (existing laneage and traffic control)	Northbound Left Turns	LOS F 984 sec/veh	138 veh	LOS F 724 sec/veh	270 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		14 veh		24 veh
	Eastbound Right Turns		335 veh		177 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (existing laneage plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS F 265 sec/veh	6 veh	LOS F 259 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		15 veh
	Westbound Left Turns		1 veh		5 veh
Columbia Avenue and Beasley Drive (existing laneage and traffic control)	Northbound Left Turns	LOS B	1 veh	LOS C	1 veh
	Southbound Left Turns	LOS C	1 veh	LOS C	1 veh
	Eastbound Left Turns	LOS F	6 veh	LOS F	15 veh
	Eastbound Thru/Right Turns	LOS F	3 veh	LOS F	8 veh
	Westbound Left/Thru/Right Turns	LOS F	14 veh	LOS F	undefined

YEAR 2032 PEAK HOUR LEVELS OF SERVICE, CONT.**NO-BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Century Court (existing laneage and traffic control)	Northbound Left Turns	LOS F 330 sec/veh	22 veh	LOS F 424 sec/veh	2 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		47 veh
	Eastbound Right Turns		18 veh		29 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Southeast Parkway/ Through the Green (existing laneage plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS F 964 sec/veh	2 veh	LOS F 881 sec/veh	6 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		8 veh
	Westbound Left Turns		3 veh		6 veh
Columbia Avenue and Mack Hatcher Parkway (existing laneage and traffic control)	Northbound Left Turns	LOS F 847 sec/veh	3 veh	LOS F 999+ sec/veh	9 veh
	Southbound Left Turns		37 veh		479 veh
	Eastbound Left Turns		2 veh		3 veh
	Eastbound Thru/Right Turns		10 veh		15 veh
	Westbound Left Turns		153 veh		300 veh
	Westbound Throughs		9 veh		12 veh
	Westbound Right Turns		481 veh		331 veh

YEAR 2032 ARTERIAL LEVELS OF SERVICE**NO-BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS F	LOS F
	Between Century Court and Confederate Drive	LOS F	LOS F
	Between Confederate Drive and Downs Boulevard	LOS C	LOS F
	OVERALL	LOS D	LOS F
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS F	LOS F
	Between Confederate Drive and Century Court	LOS D	LOS F
	Between Century Court and Southeast Parkway	LOS F	LOS F
	OVERALL	LOS F	LOS F

YEAR 2012 PEAK HOUR LEVELS OF SERVICE**NO-BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (existing laneage and traffic control)	Northbound Left Turns	LOS F 175 sec/veh	4 veh	LOS D 36 sec/veh	20 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		11 veh		15 veh
	Eastbound Right Turns		80 veh		9 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (existing laneage plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS F 83 sec/veh	6 veh	LOS E 74 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		11 veh
	Westbound Left Turns		1 veh		4 veh
Columbia Avenue and Beasley Drive (existing laneage and traffic control)	Northbound Left Turns	LOS A	1 veh	LOS B	1 veh
	Southbound Left Turns	LOS B	1 veh	LOS A	1 veh
	Eastbound Left Turns	LOS F	1 veh	LOS F	5 veh
	Eastbound Thru/Right Turns	LOS C	1 veh	LOS D	1 veh
	Westbound Left/Thru/Right Turns	LOS F	2 veh	LOS F	4 veh

YEAR 2012 PEAK HOUR LEVELS OF SERVICE, CONT.**NO-BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Century Court (existing laneage and traffic control)	Northbound Left Turns	LOS B 11 sec/veh	3 veh	LOS C 24 sec/veh	2 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		9 veh
	Eastbound Right Turns		7 veh		8 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Southeast Parkway/ Through the Green (existing laneage plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS F 289 sec/veh	2 veh	LOS F 162 sec/veh	6 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		8 veh
	Westbound Left Turns		3 veh		6 veh
Columbia Avenue and Mack Hatcher Parkway (with second eastbound and westbound through lanes)	Northbound Left Turns	LOS E 61 sec/veh	17 veh	LOS F 168 sec/veh	12 veh
	Southbound Left Turns		13 veh		35 veh
	Eastbound Left Turns		20 veh		7 veh
	Eastbound Thru/Right Turns		15 veh		26 veh
	Westbound Left Turns		8 veh		35 veh
	Westbound Throughs		8 veh		8 veh
	Westbound Right Turns		41 veh		18 veh

YEAR 2012 ARTERIAL LEVELS OF SERVICE**NO-BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS C	LOS A
	Between Century Court and Confederate Drive	LOS B	LOS F
	Between Confederate Drive and Downs Boulevard	LOS B	LOS A
	OVERALL	LOS B	LOS F
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS F	LOS B
	Between Confederate Drive and Century Court	LOS A	LOS C
	Between Century Court and Southeast Parkway	LOS D	LOS F
	OVERALL	LOS D	LOS D

YEAR 2032 PEAK HOUR LEVELS OF SERVICE**NO-BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (existing laneage and traffic control)	Northbound Left Turns	LOS F 588 sec/veh	5 veh	LOS F 232 sec/veh	106 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		14 veh		51 veh
	Eastbound Right Turns		197 veh		17 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (existing laneage plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS F 183 sec/veh	6 veh	LOS F 168 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		15 veh
	Westbound Left Turns		1 veh		5 veh
Columbia Avenue and Beasley Drive (existing laneage and traffic control)	Northbound Left Turns	LOS B	1 veh	LOS B	1 veh
	Southbound Left Turns	LOS B	1 veh	LOS B	1 veh
	Eastbound Left Turns	LOS F	3 veh	LOS F	12 veh
	Eastbound Thru/Right Turns	LOS D	1 veh	LOS E	2 veh
	Westbound Left/Thru/Right Turns	LOS F	8 veh	LOS F	12 veh

YEAR 2032 PEAK HOUR LEVELS OF SERVICE, CONT.**NO-BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Century Court (existing laneage and traffic control)	Northbound Left Turns	LOS C 23 sec/veh	5 veh	LOS E 72 sec/veh	2 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		31 veh
	Eastbound Right Turns		8 veh		13 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Southeast Parkway/ Through the Green (existing laneage plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS F 405 sec/veh	2 veh	LOS F 310 sec/veh	6 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		8 veh
	Westbound Left Turns		3 veh		6 veh
Columbia Avenue and Mack Hatcher Parkway (with second eastbound and westbound through lanes)	Northbound Left Turns	LOS F 503 sec/veh	173 veh	LOS F 671 sec/veh	15 veh
	Southbound Left Turns		21 veh		43 veh
	Eastbound Left Turns		14 veh		8 veh
	Eastbound Thru/Right Turns		131 veh		140 veh
	Westbound Left Turns		167 veh		245 veh
	Westbound Throughs		13 veh		22 veh
	Westbound Right Turns		40 veh		28 veh

YEAR 2032 ARTERIAL LEVELS OF SERVICE**NO-BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS C	LOS C
	Between Century Court and Confederate Drive	LOS B	LOS F
	Between Confederate Drive and Downs Boulevard	LOS B	LOS B
	OVERALL	LOS B	LOS F
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS F	LOS B
	Between Confederate Drive and Century Court	LOS B	LOS C
	Between Century Court and Southeast Parkway	LOS E	LOS F
	OVERALL	LOS F	LOS E

4.2 Build

Based on the projected operations of the Columbia Avenue corridor between Mack Hatcher Parkway and Downs Boulevard and the existing land uses within the study area, consideration was given to widening this facility to include two travel lanes in each direction. Also, the cross-sections developed include a raised, grassy median from Confederate Drive to Southeast Parkway, with median cuts to allow full operations at the future intersection with Longview Circle (south) and Franklin Business Park and the existing intersection with Century Court. With this improvement, no median would be provided north of Confederate Drive or south of Southeast Parkway.

Also, it is important to note that two options were developed for terminating the second northbound through lane at the northern terminus of the study area:

Option 1

The new northbound through lane would terminate as a dedicated right turn lane onto James Avenue.

Option 2

The new northbound through lane would terminate as a second left turn lane onto Downs Boulevard. In conjunction with this improvement, Downs Boulevard would be widened for approximately 250 feet to accommodate the second northbound left turn lane.

Based on the projected traffic volumes, the City of Franklin Engineering Department has identified Option 2 as the preferred alternative.

At the southern end of the study area, the new southbound through lane would transition into a dedicated southbound right turn lane. The additional width would be maintained and striped out in order to accommodate any future widening of Columbia Avenue south of Mack Hatcher Parkway.

Typical cross-sections and a functional layout of the Build conditions are included in the [Appendix](#).

In conjunction with the proposed improvement, the existing and planned traffic signal installations at the following locations will need to be rebuilt:

1. Downs Boulevard (existing)
2. Confederate Drive and Longview Circle North (future)
3. Franklin Business Park and Longview Circle South (future)
4. Century Court (existing)
5. Southeast Parkway and Through the Green (future)
6. Parkway Commons Shopping Center (existing)
7. Mack Hatcher Parkway / Hillview Lane (existing)

Each traffic signal installation should include steel poles and mast arms in accordance with City of Franklin standards.

Because of the nature of the land uses and high traffic volumes on Columbia Avenue, an urban cross-section with curb-and-gutter drainage was identified. Also, the curbed cross-section and the median section from Confederate Drive to Southeast Parkway will facilitate the City of Franklin's access management initiatives and limit the driveway cuts to the extent possible. These efforts will reduce the potential for vehicle conflicts and facilitate safe and efficient traffic operations.

Because of right-of-way constraints from Downs Boulevard to Confederate Drive, sidewalks will be provided on the west side from Downs Boulevard to Confederate Drive and, on the east side, from Carr Avenue to Confederate Drive. However, sidewalks will be provided on both sides of the roadway from Confederate Drive to Mack Hatcher Parkway. Because of right-of-way constraints, bicycle lanes will only be provided from Alpha Drive to Mack Hatcher Parkway. However, at Alpha Drive, the bicycle lanes will be able to tie in to the future bicycle facilities included on the City of Franklin's Columbia Avenue Local Street Plan, as described in Section 4.3. It is important to note that the provision of sidewalks and bicycle lanes on both sides of the roadway throughout the entire corridor would require the displacement of existing businesses and right-of-way costs that would make the project fiscally infeasible.

The analyses conducted for the existing roadway network (no extension of Mack Hatcher Parkway) are based on the assumption that, at the intersection with Downs Boulevard, a second northbound left turn lane will be provided and the permissive left turn signal phase will be eliminated. For the intersections with 1.) Confederate Drive and Longview Circle North, 2.) Century Court, and 3.) Southeast Parkway, it was assumed that a second northbound through lane and a second southbound through lane will be provided at each location. The Build conditions include a second northbound through lane north of Mack Hatcher, and so the existing laneage at the intersection with Mack Hatcher Parkway will not change with the proposed improvements. Also, the Build conditions include the construction of a median across Beasley Drive, creating a right-in, right-out intersection. Therefore, capacity analyses for the Build conditions were not conducted for the intersection with Beasley Drive.

The analyses conducted for the future roadway network (with the extension of Mack Hatcher Parkway) are based on the assumption that a second eastbound through lane and a second westbound through lane will be provided on Mack Hatcher Parkway at the intersection with Columbia Avenue. For all other intersections within the future roadway network, it was assumed that no additional improvements will be provided. The results of the capacity analyses for the peak hour traffic volumes are shown in the following tables, and the supplemental materials include the capacity analyses worksheets.

The capacity analyses indicate, with the existing roadway network (no extension of Mack Hatcher Parkway), most of the signalized intersections studied will operate well during both peak hours in Years 2012 and 2032. Also, as a whole, the corridor will generally operate acceptably in both directions in both peak hours in Years 2012 and 2032. Although the intersection with Downs Boulevard and the intersection with Mack Hatcher Parkway will

operate poorly, these results are expected because they mark the termini of the widening project. In each direction, the additional laneage on Columbia Avenue will transition into narrower cross-sections.

With the planned extension of Mack Hatcher Parkway, the through volumes on Columbia Avenue will be reduced, and so the capacity analyses indicate that vehicle delays and queues will be reduced in Years 2012 and 2032, compared to the existing roadway network. Specifically, most of the signalized intersections studied will operate well during both peak hours in Years 2012 and 2032. Also, as a whole, the corridor will operate acceptably in both directions in both peak hours in Years 2012 and 2032. Although the intersection with Downs Boulevard and the intersection with Mack Hatcher Parkway will operate poorly, these results are expected because they mark the termini of the widening project. In each direction, the additional laneage on Columbia Avenue will transition into narrower cross-sections.

YEAR 2012 PEAK HOUR LEVELS OF SERVICE

BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (with second northbound left turn lane and removal of northbound permissive left turn signal phase)	Northbound Left Turns	LOS F 387 sec/veh	23 veh	LOS F 121 sec/veh	38 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		10 veh		10 veh
	Eastbound Right Turns		163 veh		25 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (with second northbound and southbound through lanes, plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS B 14 sec/veh	4 veh	LOS C 23 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		10 veh
	Westbound Left Turns		1 veh		4 veh
Columbia Avenue and Century Court (with second northbound and southbound through lanes)	Northbound Left Turns	LOS A 7 sec/veh	3 veh	LOS B 17 sec/veh	2 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		8 veh
	Eastbound Right Turns		7 veh		7 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh

* The intersection of Columbia Avenue and Beasley Drive will be a T-intersection under Build conditions, and so this intersection is not included in this table.

YEAR 2012 PEAK HOUR LEVELS OF SERVICE, CONT.**BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Southeast Parkway/ Through the Green (with second northbound and southbound through lanes plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS B 17 sec/veh	2 veh	LOS C 27 sec/veh	6 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		7 veh
	Westbound Left Turns		3 veh		5 veh
Columbia Avenue and Mack Hatcher Parkway (existing laneage and traffic control)	Northbound Left Turns	LOS F 414 sec/veh	2 veh	LOS F 373 sec/veh	3 veh
	Southbound Left Turns		18 veh		63 veh
	Eastbound Left Turns		2 veh		4 veh
	Eastbound Thru/Right Turns		10 veh		43 veh
	Westbound Left Turns		11 veh		75 veh
	Westbound Throughs		9 veh		19 veh
	Westbound Right Turns		248 veh		43 veh

* At the intersection of Columbia Avenue and Mack Hatcher Parkway, the Build conditions include the provision of a second northbound through lane, north of Mack Hatcher Parkway. Therefore, the approach laneage at this intersection will not change, and the results shown are the same as those shown for No-Build conditions.

YEAR 2012 ARTERIAL LEVELS OF SERVICE**BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS C	LOS C
	Between Century Court and Confederate Drive	LOS B	LOS C
	Between Confederate Drive and Downs Boulevard	LOS B	LOS C
	OVERALL	LOS B	LOS C
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS B	LOS B
	Between Confederate Drive and Century Court	LOS A	LOS B
	Between Century Court and Southeast Parkway	LOS C	LOS E
	OVERALL	LOS B	LOS C

YEAR 2032 PEAK HOUR LEVELS OF SERVICE**BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (with second northbound left turn lane and removal of northbound permissive left turn signal phase)	Northbound Left Turns	LOS F 885 sec/veh	48 veh	LOS F 458 sec/veh	57 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		14 veh		24 veh
	Eastbound Right Turns		335 veh		177 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (with second northbound and southbound through lanes, plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS C 26 sec/veh	6 veh	LOS C 33 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		11 veh
	Westbound Left Turns		1 veh		4 veh
Columbia Avenue and Century Court (with second northbound and southbound through lanes)	Northbound Left Turns	LOS A 9 sec/veh	5 veh	LOS B 13 sec/veh	2 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		9 veh
	Eastbound Right Turns		7 veh		8 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh

* The intersection of Columbia Avenue and Beasley Drive will be a T-intersection under Build conditions, and so this intersection is not included in this table.

YEAR 2032 PEAK HOUR LEVELS OF SERVICE, CONT.**BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Southeast Parkway/ Through the Green (with second northbound and southbound through lanes plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS C 26 sec/veh	2 veh	LOS C 35 sec/veh	7 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		7 veh
	Westbound Left Turns		3 veh		5 veh
Columbia Avenue and Mack Hatcher Parkway (existing laneage and traffic control)	Northbound Left Turns	LOS F 414 sec/veh	2 veh	LOS F 373 sec/veh	3 veh
	Southbound Left Turns		18 veh		63 veh
	Eastbound Left Turns		2 veh		4 veh
	Eastbound Thru/Right Turns		10 veh		43 veh
	Westbound Left Turns		11 veh		75 veh
	Westbound Throughs		9 veh		19 veh
	Westbound Right Turns		248 veh		43 veh

* At the intersection of Columbia Avenue and Mack Hatcher Parkway, the Build conditions include the provision of a second northbound through lane, north of Mack Hatcher Parkway. Therefore, the approach laneage at this intersection will not change, and the results shown are the same as those shown for No-Build conditions.

YEAR 2032 ARTERIAL LEVELS OF SERVICE**BUILD CONDITIONS WITH THE EXISTING ROADWAY NETWORK
(WITHOUT MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS C	LOS C
	Between Century Court and Confederate Drive	LOS B	LOS D
	Between Confederate Drive and Downs Boulevard	LOS C	LOS F
	OVERALL	LOS B	LOS E
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS C	LOS B
	Between Confederate Drive and Century Court	LOS B	LOS B
	Between Century Court and Southeast Parkway	LOS D	LOS E
	OVERALL	LOS B	LOS C

YEAR 2012 PEAK HOUR LEVELS OF SERVICE**BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (with second northbound left turn lane and removal of northbound permissive left turn signal phase)	Northbound Left Turns	LOS F 176 sec/veh	4 veh	LOS C 29 sec/veh	19 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		11 veh		13 veh
	Eastbound Right Turns		80 veh		8 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (with second northbound and southbound through lanes, plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS B 12 sec/veh	3 veh	LOS C 21 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		10 veh
	Westbound Left Turns		1 veh		4 veh
Columbia Avenue and Century Court (with second northbound and southbound through lanes)	Northbound Left Turns	LOS A 7 sec/veh	3 veh	LOS B 11 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		9 veh
	Eastbound Right Turns		7 veh		8 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh

* The intersection of Columbia Avenue and Beasley Drive will be a T-intersection under Build conditions, and so this intersection is not included in this table.

YEAR 2012 PEAK HOUR LEVELS OF SERVICE, CONT.**BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Southeast Parkway/ Through the Green (with second northbound and southbound through lanes plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS B 14 sec/veh	2 veh	LOS C 25 sec/veh	5 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		6 veh
	Westbound Left Turns		3 veh		4 veh
Columbia Avenue and Mack Hatcher Parkway (with second eastbound and westbound through lanes)	Northbound Left Turns	LOS F 414 sec/veh	2 veh	LOS F 373 sec/veh	3 veh
	Southbound Left Turns		18 veh		63 veh
	Eastbound Left Turns		2 veh		4 veh
	Eastbound Thru/Right Turns		10 veh		43 veh
	Westbound Left Turns		11 veh		75 veh
	Westbound Throughs		9 veh		19 veh
	Westbound Right Turns		248 veh		43 veh

* At the intersection of Columbia Avenue and Mack Hatcher Parkway, the Build conditions include the provision of a second northbound through lane, north of Mack Hatcher Parkway. Therefore, the approach laneage at this intersection will not change, and the results shown are the same as those shown for No-Build conditions.

YEAR 2012 ARTERIAL LEVELS OF SERVICE**BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS C	LOS C
	Between Century Court and Confederate Drive	LOS B	LOS B
	Between Confederate Drive and Downs Boulevard	LOS B	LOS B
	OVERALL	LOS B	LOS B
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS B	LOS B
	Between Confederate Drive and Century Court	LOS A	LOS B
	Between Century Court and Southeast Parkway	LOS C	LOS E
	OVERALL	LOS B	LOS C

YEAR 2032 PEAK HOUR LEVELS OF SERVICE**BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Downs Boulevard (with second northbound left turn lane and removal of northbound permissive left turn signal phase)	Northbound Left Turns	LOS F 586 sec/veh	6 veh	LOS F 91 sec/veh	27 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		15 veh		51 veh
	Eastbound Right Turns		216 veh		17 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh
Columbia Avenue and Confederate Drive/ Longview Circle (with second northbound and southbound through lanes, plus new Longview Circle and new traffic signal installation)	Northbound Left Turns	LOS B 19 sec/veh	6 veh	LOS C 24 sec/veh	1 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		2 veh		10 veh
	Westbound Left Turns		1 veh		4 veh
Columbia Avenue and Century Court (with second northbound and southbound through lanes)	Northbound Left Turns	LOS A 7 sec/veh	3 veh	LOS B 15 sec/veh	2 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns / Thrus		4 veh		8 veh
	Eastbound Right Turns		7 veh		7 veh
	Westbound Left/Thru/Right Turns		1 veh		1 veh

* The intersection of Columbia Avenue and Beasley Drive will be a T-intersection under Build conditions, and so this intersection is not included in this table.

YEAR 2032 PEAK HOUR LEVELS OF SERVICE, CONT.**BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

INTERSECTION	TURNING MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
		LEVEL OF SERVICE	95 TH %-ILE QUEUE	LEVEL OF SERVICE	95 TH %-ILE QUEUE
Columbia Avenue and Southeast Parkway/ Through the Green (with second northbound and southbound through lanes plus new Through the Green access and new traffic signal installation)	Northbound Left Turns	LOS B 15 sec/veh	2 veh	LOS C 31 sec/veh	5 veh
	Southbound Left Turns		1 veh		1 veh
	Eastbound Left Turns		3 veh		6 veh
	Westbound Left Turns		3 veh		4 veh
Columbia Avenue and Mack Hatcher Parkway (with second eastbound and westbound through lanes)	Northbound Left Turns	LOS F 414 sec/veh	2 veh	LOS F 373 sec/veh	3 veh
	Southbound Left Turns		18 veh		63 veh
	Eastbound Left Turns		2 veh		4 veh
	Eastbound Thru/Right Turns		10 veh		43 veh
	Westbound Left Turns		11 veh		75 veh
	Westbound Throughs		9 veh		19 veh
	Westbound Right Turns		248 veh		43 veh

* At the intersection of Columbia Avenue and Mack Hatcher Parkway, the Build conditions include the provision of a second northbound through lane, north of Mack Hatcher Parkway. Therefore, the approach laneage at this intersection will not change, and the results shown are the same as those shown for No-Build conditions.

YEAR 2032 ARTERIAL LEVELS OF SERVICE**BUILD CONDITIONS WITH THE FUTURE ROADWAY NETWORK
(WITH MACK HATCHER PARKWAY EXTENSION)**

DIRECTION	CORRIDOR SEGMENT	LEVEL OF SERVICE	
		AM PEAK HOUR	PM PEAK HOUR
Northbound Columbia Avenue	Between Southeast Parkway and Century Court	LOS C	LOS D
	Between Century Court and Confederate Drive	LOS B	LOS C
	Between Confederate Drive and Downs Boulevard	LOS B	LOS B
	OVERALL	LOS B	LOS C
Southbound Columbia Avenue	Between Downs Boulevard and Confederate Drive	LOS B	LOS B
	Between Confederate Drive and Century Court	LOS B	LOS B
	Between Century Court and Southeast Parkway	LOS D	LOS E
	OVERALL	LOS B	LOS C

4.3 Columbia Avenue Local Street Plan

In an effort to help address the existing and projected capacity constraints on Columbia Avenue, as well as to improve access and mobility for the land uses along this corridor, the City of Franklin has developed a Local Street Plan, shown on the following page. This plan identifies several alignments for new local streets that would be parallel to Columbia Avenue, and the City of Franklin has required the incorporation of these new rights-of-way into proposed developments. For example, the north-south roadway identified from Beasley Drive to the Parkway Commons is being implemented in part by the City and in part by the developers of the mixed-use project that has been approved for the former Through the Green property. In addition, this project will provide the east-west corridor directly opposite Southeast Parkway and facilitate the future extension of this new corridor to the future extension of Mack Hatcher Parkway.

As previously noted, the Build conditions include the provision of new bicycle lanes from Alpha Drive to Mack Hatcher Parkway. However, at Alpha Drive, the bicycle lanes will be able to tie in to future bicycle facilities on Alpha Drive, Beta Drive, and the future north-south local street identified on the plan.

If implemented, the roadway network identified on the City's Columbia Avenue Local Street Plan will extend the service life of the existing facility, as well as any future widening of Columbia Avenue. However, even with these improvements, the existing three-lane cross-section will not provide adequate capacity for the projected traffic volumes, either with or without the future extension of Mack Hatcher Parkway.

4.4 Signal System Improvements

In an effort to help address the existing and projected capacity constraints on Columbia Avenue, as well as to improve access and mobility for the land uses along this corridor, the City of Franklin has developed a time-based signal coordination system for the existing traffic signals on Columbia Avenue. As new traffic signals are installed and as a fiber communications network is installed on Columbia Avenue, a communications-based signal system should be implemented. Also, video surveillance cameras should be provided so that the existing and future traffic signals on Columbia Avenue can be incorporated into the monitoring procedures that occur at the City of Franklin's Traffic Operations Center (TOC).

If implemented, a thorough communications-based signal system on Columbia Avenue will extend the service life of the existing facility, as well as any future widening of Columbia Avenue. However, even with these improvements, the existing three-lane cross-section will not provide adequate capacity for the projected traffic volumes, either with or without the future extension of Mack Hatcher Parkway.

Columbia Avenue Local Street Plan



1 inch equals 500 feet



This map was created by the city of Franklin's Engineering Department and was compiled from the most authentic information available. The City is not responsible for any errors or omissions contained hereon. All data and material © Copyright 2007, City of Franklin, TN. All rights reserved.

Legend

- Proposed Centerline
- Existing Streets
- Proposed Mack Hatcher Pkwy.
- Existing Property Lines & Right-of-Way

4.5 Reversible Lane

Additional consideration was given to modifying the existing cross-section on Columbia Avenue to provide a reversible through lane within the existing the center turn lane. Reversible lanes are most appropriate where the peak hour traffic is markedly directional in nature. However, with the approval and construction of several large mixed-use projects on this segment of Columbia Avenue, the directional nature of peak hour traffic on this facility will decrease. Also, such a modification would negatively affect all of the existing left turns into the land uses on each side of Columbia Avenue. Specifically, the provision of a reversible through lane within the existing center turn lane would require that all of the existing traffic signals be modified to eliminate the left turn signal phases.

Because a reversible through lane within the existing center turn lane on Columbia Avenue would only facilitate directional peak hour traffic and would be at the expense of protected left turn movements throughout the corridor, the City of Franklin Engineering Department has eliminated this option from consideration for either short-term or long-term implementation.

5. **TDOT'S SEVEN GUIDING PRINCIPLES**

The Tennessee Department of Transportation (TDOT) has adopted seven guiding principles against which all transportation projects are to be evaluated: system management, mobility, economic growth, safety, community, environmental stewardship, and fiscal responsibility. The options identified for Columbia Avenue, Mack Hatcher Parkway to Downs Boulevard, are evaluated against these guiding principles as follows:

Guiding Principle 1: Preserve and Manage the Existing Transportation System

The existing three-lane cross-section on Columbia Avenue is expected to fail by the Year 2012, whether or not Mack Hatcher Parkway is extended to the west. Also, the implementation of the City of Franklin's Columbia Avenue Local Street Plan and/or signal system improvements will improve mobility and reduce travel times but will not significantly extend the service life of the Columbia Avenue corridor. Finally, the provision of a reversible lane within the existing center turn lane would marginally facilitate through traffic but compromise left turn movements along the corridor. Only the Build conditions, which include widening Columbia Avenue to include two travel lanes in each direction, as well as dedicated turn lanes, will provide adequate capacity, reduce traffic density, and increase flow rate.

Guiding Principle 2: Move a Growing, Diverse, and Active Population

As previously discussed, Williamson County in general and the City of Franklin in particular are growing at dramatic rates. Also, there is limited public transportation available to the existing population. Based on the projected traffic volumes on Columbia Avenue, from Mack Hatcher Parkway to Downs Boulevard, the existing three-lane cross-section will not be adequate to provide safe and efficient traffic operations, whether or not Mack Hatcher Parkway is extended to the west. Only the Build conditions, which include widening Columbia Avenue to include two travel lanes in each direction, as well as dedicated turn lanes, will provide adequate capacity, reduce traffic density, and improve flow rate.

Guiding Principle 3: Support the State's Economy

The City of Franklin is Williamson County's most-populous and fastest-growing jurisdiction. Within the City, Columbia Avenue provides direct access to the vibrant downtown core and serves a variety of commercial and industrial land uses that are owned and operated by both public and private entities. In particular, three large mixed-use projects have been proposed for construction on this portion of Columbia Avenue, and two of these projects have been approved by the City of Franklin. Combined, these two projects will bring nearly 1,000,000 square feet of new commercial and office space, as well as 200 residential units, to the Columbia Avenue corridor. The improvements identified in the Build conditions will improve access to these projects, as well as improve access to downtown Franklin's ample shopping and workforce opportunities. All efforts to support the City's economy and the County's economy will also support the State's economy.

Guiding Principle 4: Maximize Safety and Security

TDOT's June 2007, *Tier 2 – Detailed Analysis* identifies recent crash data and calculates crash rates for the segment of Columbia Avenue from Mack Hatcher Parkway to Downs Boulevard. As stated, the actual crash rate for this segment of Columbia Avenue is more than the statewide average for similar roadways. Also, the actual crash rates is more than the critical crash rate, which defines statistically how the actual rates differs from the statewide average. The ratio of the actual crash rate to the critical crash rate indicates that a safety problem may exist.

The No Build option would likely result in additional vehicle conflicts because of extensive vehicle queues and delays. With a widening of Columbia Avenue and the provision of a median, turning movements will be completed with less vehicle conflict. Also, with the additional travel lanes on Columbia Avenue, fire and police response times will be reduced.

Guiding Principle 5: Build Partnerships for Livable Communities

For the first time in recent history, a residential project has been proposed and approved for construction on Columbia Avenue. Specifically, the residential component of the Through the Green redevelopment project will be integrated with existing and proposed residential and commercial developments in an effort to create a sustainable community. Also, throughout future planning and design efforts for the improvement of Columbia Avenue, from Mack Hatcher Parkway to Downs Boulevard, the City of Franklin and the Tennessee Department of Transportation (TDOT) will continue the public involvement process as mandated by the provisions of the National Environmental Policy Act (NEPA).

Guiding Principle 6: Promote Stewardship of the Environment

The improvements identified with the Build conditions follow the existing alignment of Columbia Avenue. Also, every attempt was made to limit the amount of right-of-way acquisition that would be necessary to accomplish the improvements. Therefore, the environmental impact of the proposed improvements is expected to be minimal. A future environmental assessment will identify specific impacts to an existing waterway and cemetery.

Guiding Principle 7: Promote Financial Responsibility

The cost estimates, as depicted in this report, are offered for comparison purposes and will fluctuate with inflation and any unexpected conditions. It is TDOT's goal to follow a comprehensive transportation planning process, promote coordination among public and private operators of transportation systems, and support efforts to provide stable funding for the public component of the transportation system. This entails exercising financial responsibility in the development and implementation of roadway projects and minimizing costs to the taxpayers. Also, it is important to note that the results of the capacity analyses indicate that the existing and projected congestion on Columbia Avenue will be untenable, and the costs of not improving Columbia Avenue – as levied on motorists, taxpayers, and the City of Franklin – will likely outpace the cost of improving this roadway segment.

6. COST ESTIMATE FOR BUILD CONDITIONS

Cost estimates were prepared for the Build conditions identified. The costs are summarized in the Summary Data Tables and Itemized Cost Estimates provided in this report, and the cost estimate calculations are located in the supplemental materials.

7. SUMMARY

The analyses conducted for the purposes of this study indicate that the No Build option does not address the purpose, needs, or goals discussed in this report. Specifically, a widening of Columbia Avenue is needed to accommodate the projected traffic volumes, whether or not Mack Hatcher Parkway is extended west of Columbia Avenue. Also, the Build option will increase mobility to and from downtown Franklin, as well as address the need for improved access along the Columbia Avenue corridor. These results are consistent with TDOT's June 2007, *Tier 2 – Detailed Analysis* for this corridor.

The Build option is compatible with the City of Franklin's Major Thoroughfare Plan and is estimated to cost \$18,439,000.

CHECKLIST OF DETERMINANTS

If preliminary field reviews indicate the presence of any of the following facilities or ESE categories, place an "X" in the blank opposite the item. Where more than one alternate is to be considered, place its letter designation in the blank.

Agricultural land usage	
Airport (existing or proposed)	
Commercial area, shopping center.....	X
Floodplains.....	X
Forested land.....	
Historical, archaeological, cultural, or natural landmark, or	
Cemeteries.....	X
Industrial park, factory.....	X
Institutional usages:	
1. School or other educational institution	
2. Church or other religious institution.....	
3. Hospital or other medical facility	X
4. Public building, e.g., fire station.....	X
5. Defense installation.....	
Recreational usages	
1. Park or recreational area, State Natural Area	
2. Wildlife refuge or Wildlife Management Area.....	
Residential establishment	X
Urban area, town, city, or community	X
Waterway, lake, pond, river, stream, spring, wetland	X
Permits required:	
Coast Guard	
Section 404	X
Section 10	
TVA Section 26a Review	
NPDES.....	X
Aquatic Resource Alteration Permit	X
Class V Injection Wells Permit.....	
Location coordinated with local officials	X
Railroad Crossings.....	
Hazardous Material Site.....	
Other	

SUMMARY DATA TABLE

ITEM	EXISTING	PROPOSED
Functional Class	Urban Minor Arterial	Urban Minor Arterial
System	STP	STP
Length (Miles)	1.17	1.17
Cross Section (Feet)	See Appendix	See Appendix
Columbia Ave. (US 31, SR 6) Year 2012 AADT	See Appendix	See Appendix
Columbia Ave. (US 31, SR 6) Year 2032 AADT	See Appendix	See Appendix
Columbia Ave. (US 31, SR 6) DHVs		10%
% Trucks on Columbia Avenue		4%
Estimated Right-of-Way Acquisition (Acres)		8.23
Estimated Right-of-Way Tracts Effected		44
Estimated Family Displacements		0
Estimated Business Displacements		0
Estimated Non-Profit Displacements		0
Estimated Right-of-Way Cost		\$3,639,000
Estimated Utility Cost Reimbursable		\$0
Estimated Utility Cost Non-Reimbursable		\$4,090,000
Estimated Construction Cost		\$9,917,000
Estimated Preliminary Engineering Cost (8%)		\$793,000
Total Estimated Project Cost		\$18,439,000

DESIGN CRITERIA**ROUTE** Columbia Avenue (US 31, SR 6) **ALTERNATE** N/A **SECTION** N/A**REGION** 3 **COUNTY** Williamson **PROJECT NO.** N/A**LOCATION: FROM:** Mack Hatcher Parkway**TO:** Downs BoulevardColumbia Avenue (US 31, SR 6), 2012 AADT..... See AppendixColumbia Avenue (US 31, SR 6), 2032 AADT..... See AppendixColumbia Avenue (US 31, SR 6), Percent Trucks..... 4%DHV 10%FUNCTIONAL CLASSIFICATION..... Urban Minor ArterialMINIMUM DESIGN SPEED..... 40 mphACCESS CONTROL..... N/AMINIMUM CURVE 10 Deg 00' (S.E. 0.04%)MAXIMUM GRADE 8.0%MINIMUM STOPPING SIGHT DISTANCE..... 275' - 325'SURFACE WIDTH 5@12'NUMBER OF LANES 5USABLE SHOULDER WIDTH 6 – 30 C&GMEDIAN WIDTH 12' Turn LaneMINIMUM RIGHT-OF-WAY 84'*SIGNALIZATION..... ****REMARKS:**

* Easement will be required outside Right-of-Way.

** Modify existing signal installations and install new traffic signals with mast arm poles per City standards.

COST ESTIMATES**PROJECT:** Columbia Avenue (U.S. Highway 31, State Route 6)**LOCATION: FROM:** Mack Hatcher Parkway**TO:** Downs Boulevard**LENGTH:** 1.17 linear miles**CROSS SECTION:** various (See Appendix)**Right-of-Way**

Land, Improvements, and Damages (8.23 ac)	\$3,487,000
Incidentals (44 Tracts)	\$152,000
Relocation Payments (0 Residences, 0 Businesses, 0 Non-Profits)	\$0
Total Right-of-Way Cost.....	\$3,639,000

Utility Relocation

Reimbursable	\$3,990,000
Non-Reimbursable	\$100,000
Total Adjustment Cost	\$4,090,000

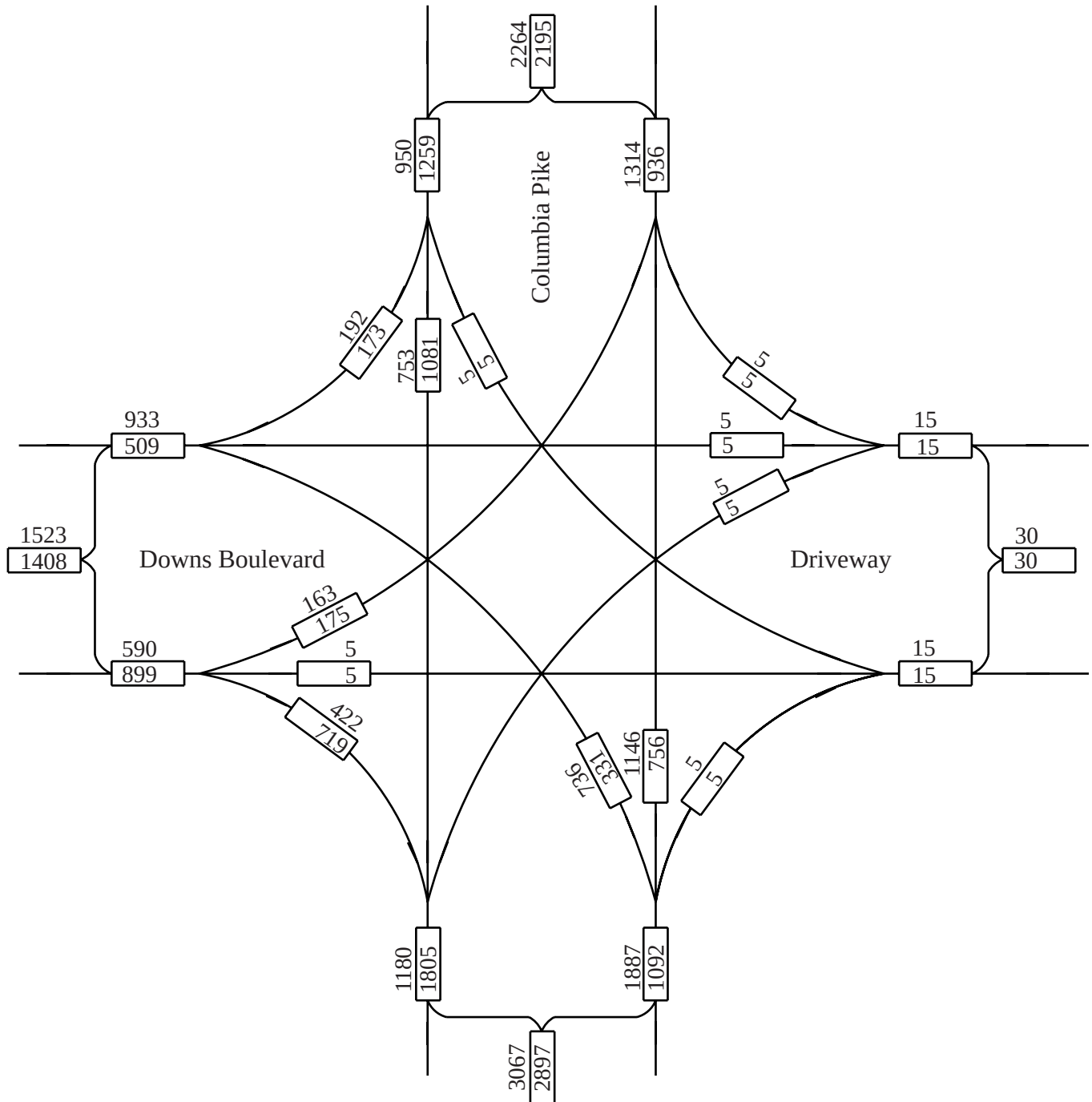
Construction

Clear and Grubbing.....	\$64,000
Earthwork.....	\$468,000
Pavement Removal	\$98,000
Drainage (Includes Erosion Control).....	\$3,018,000
Structures	\$133,000
Railroad Crossing	\$0
Paving	\$2,833,000
Retaining Walls.....	\$167,000
Maintenance of Traffic	\$409,000
Topsoil	\$106,000
Seeding and Sodding	\$183,000
Landscaping.....	\$0
Signing/Pavement Marking	\$55,000
Signalization and Lighting.....	\$977,000
Fence	\$31,000
Guardrail	\$0
Rip Rap or Slope Protection	\$38,000
Walking/Bike Trail	\$0
Mobilization.....	\$351,000
Miscellaneous and Contingency Allowance.....	\$986,000
Total Construction Cost	\$9,917,000
Preliminary Engineering (8% of Construction)	\$793,000

TOTAL SECTION COST \$18,439,000

APPENDIX – TRAFFIC PROJECTIONS

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

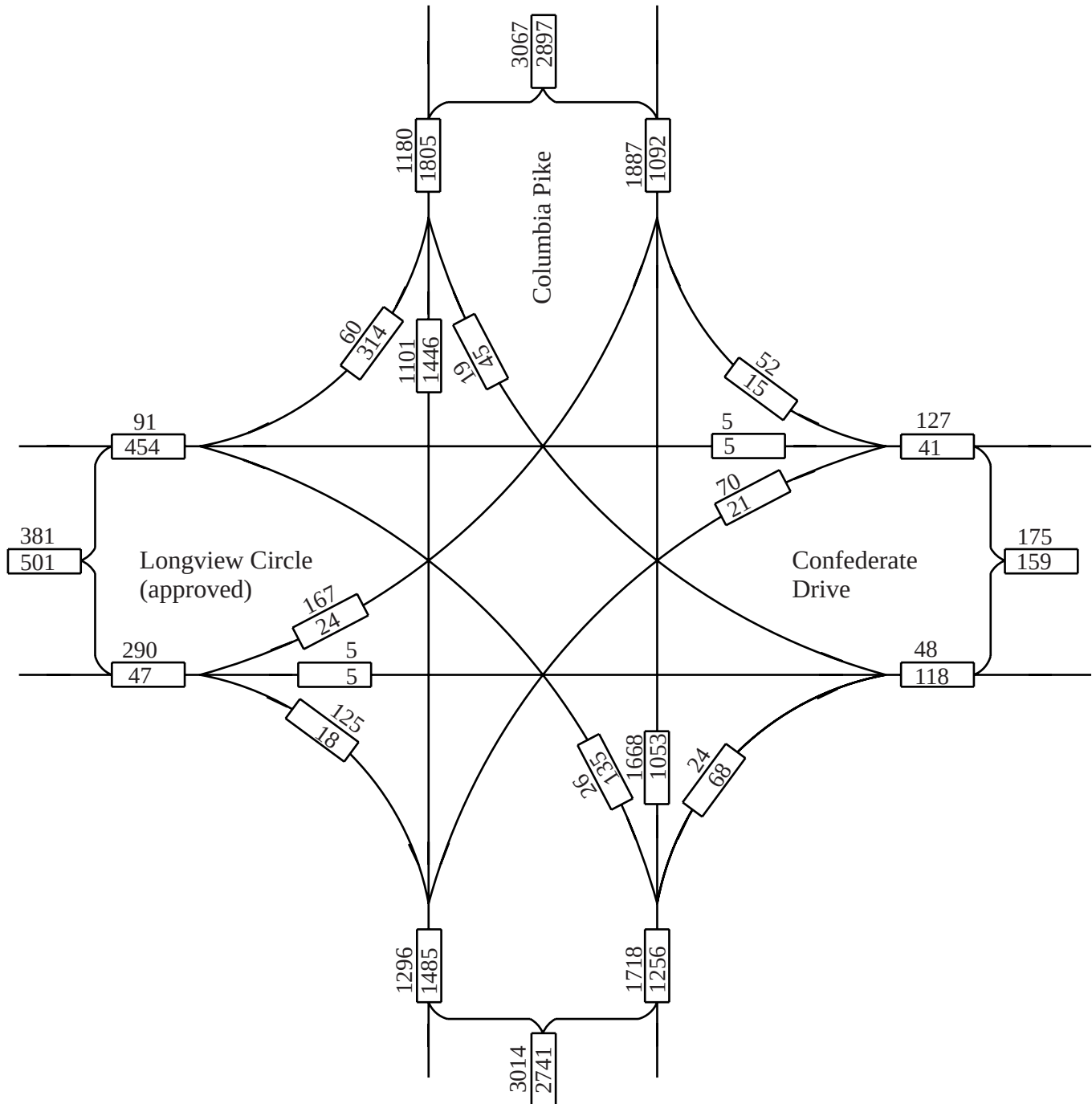


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Downs Boulevard
 Year Year 2012 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

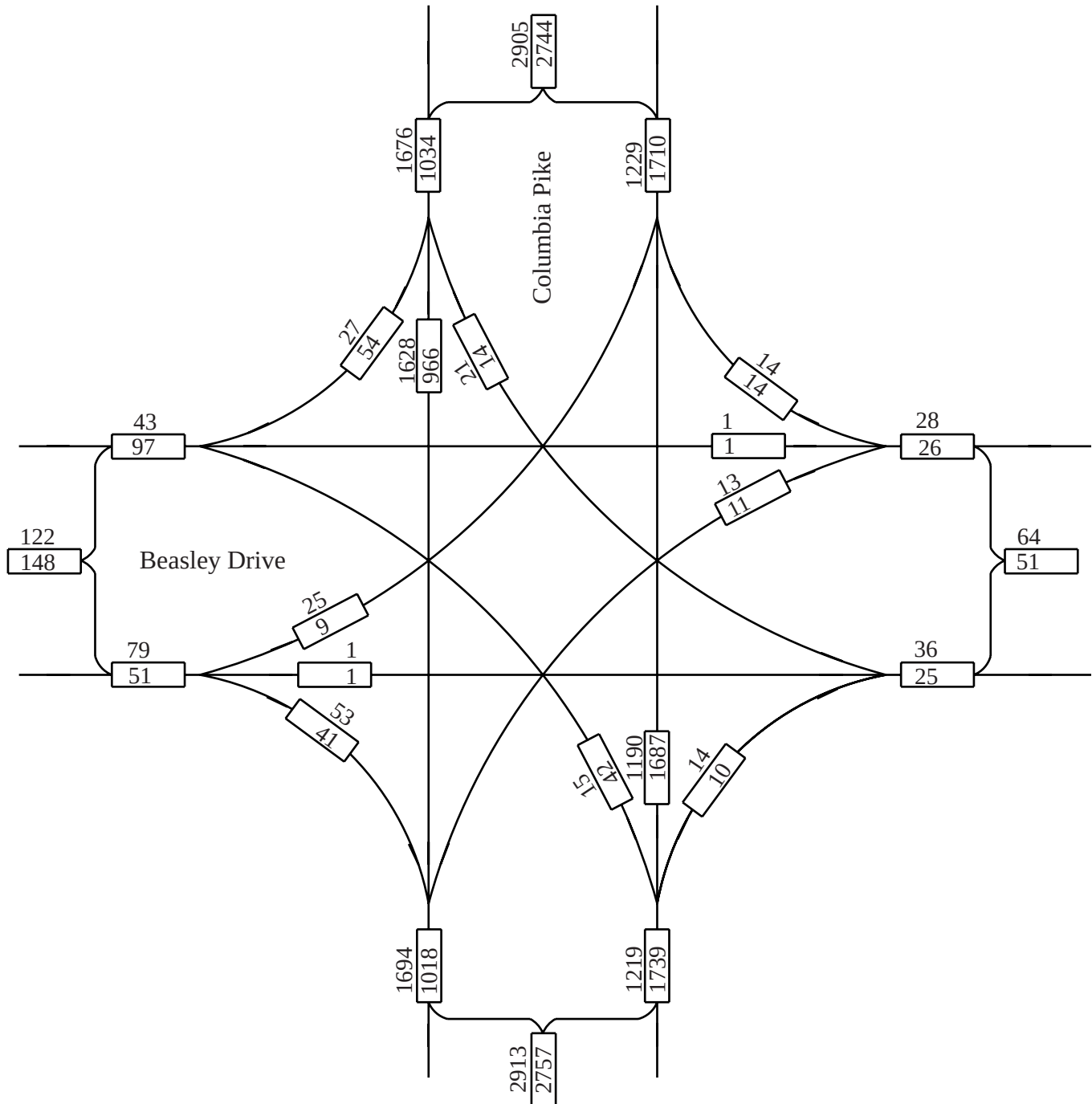


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Confederate Drive
 Year Year 2012 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

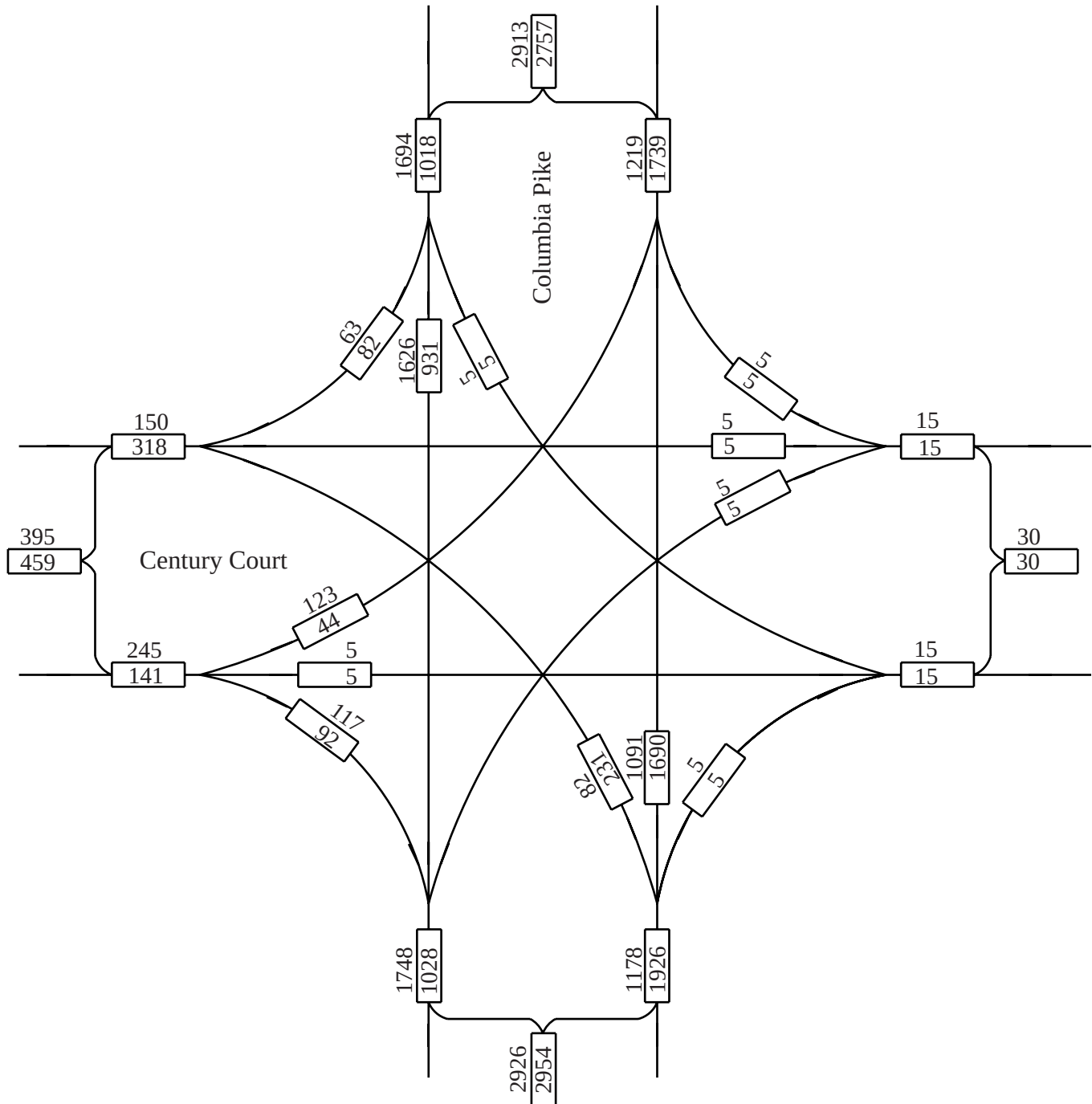


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Beasley Drive
 Year Year 2012 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

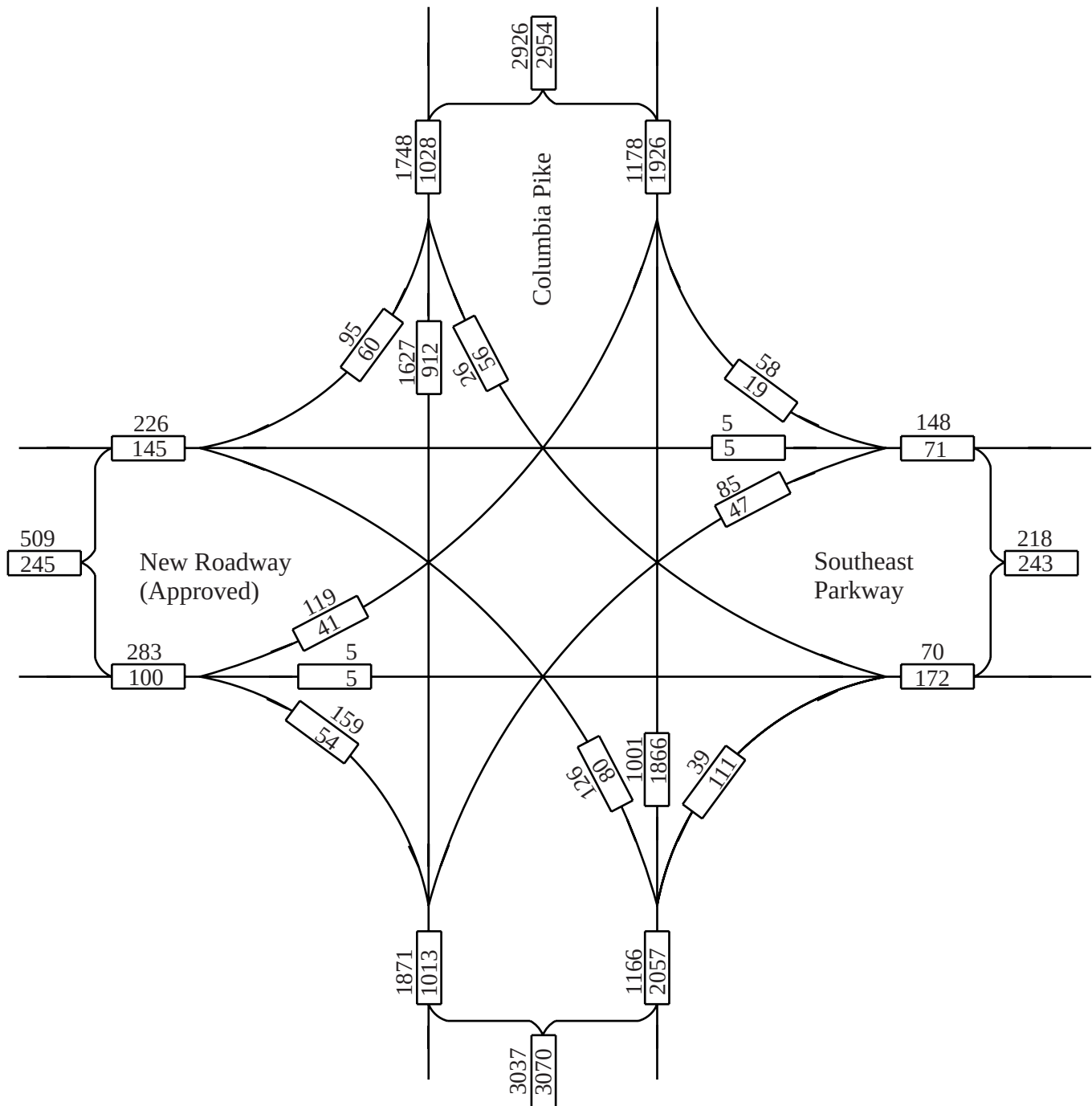


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Century Court
 Year Year 2012 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

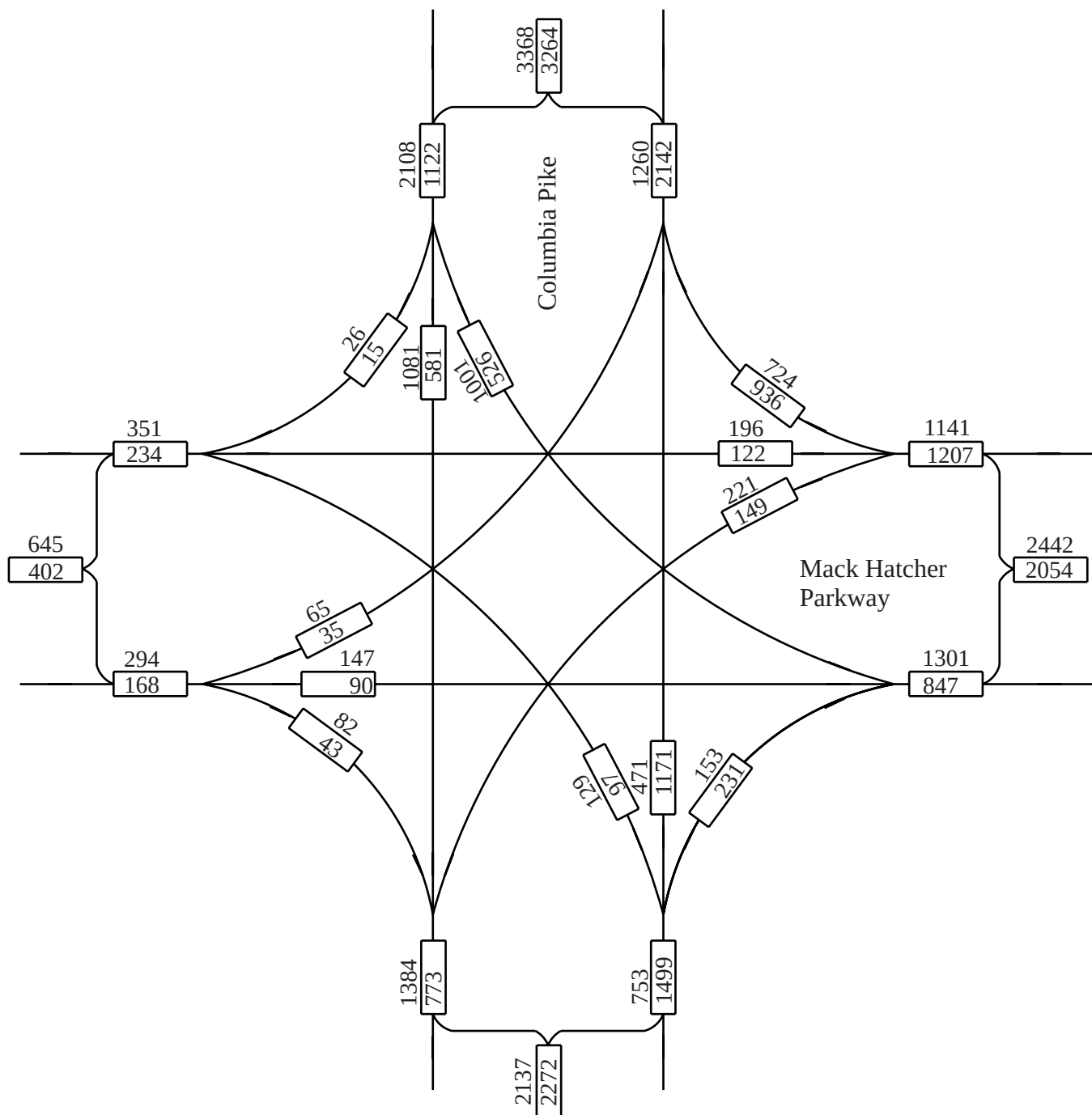


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Southeast Parkway
 Year Year 2012 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning



No Scale

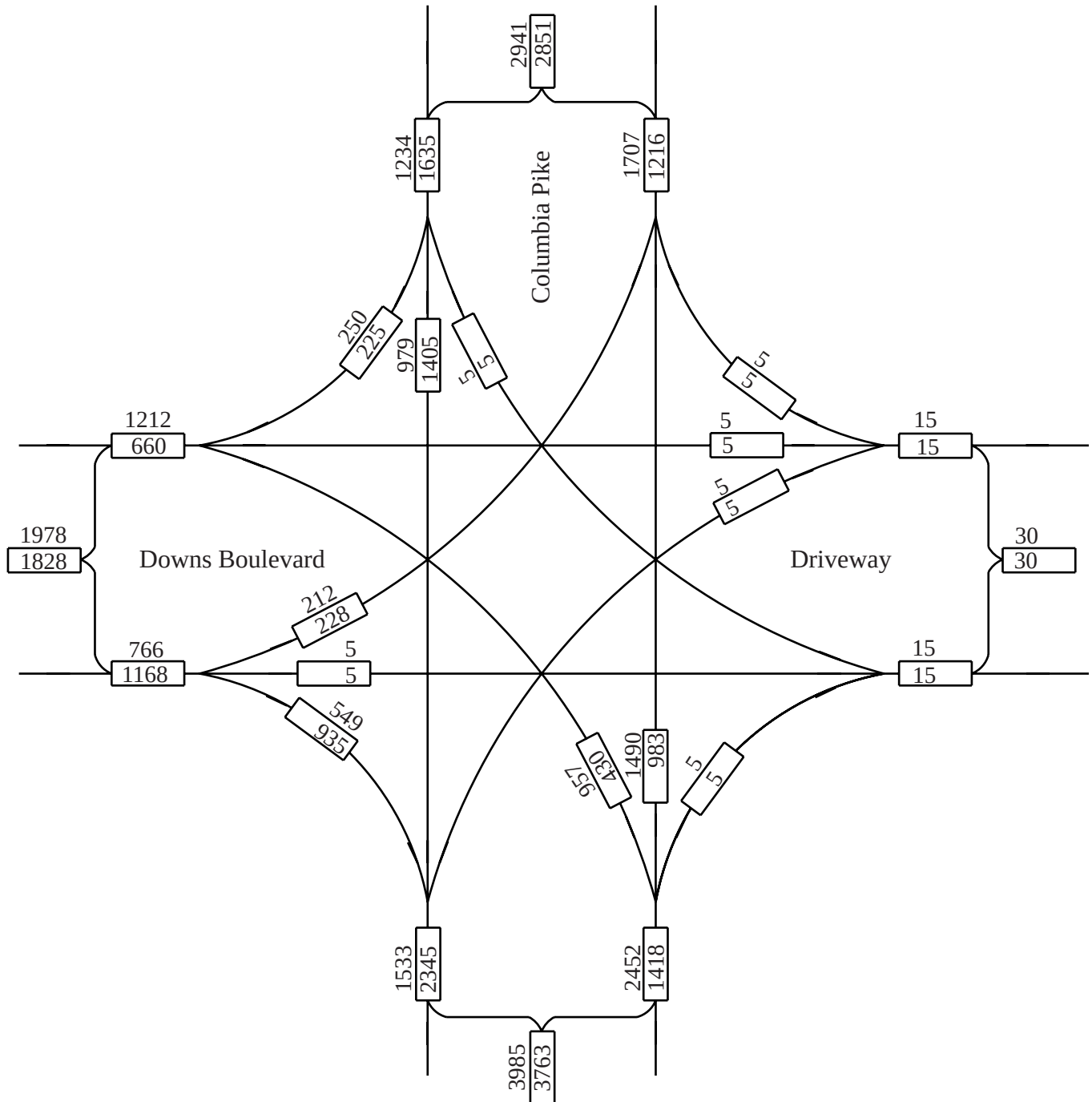
XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Mack Hatcher Parkway

Year Year 2012 DHVs

Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

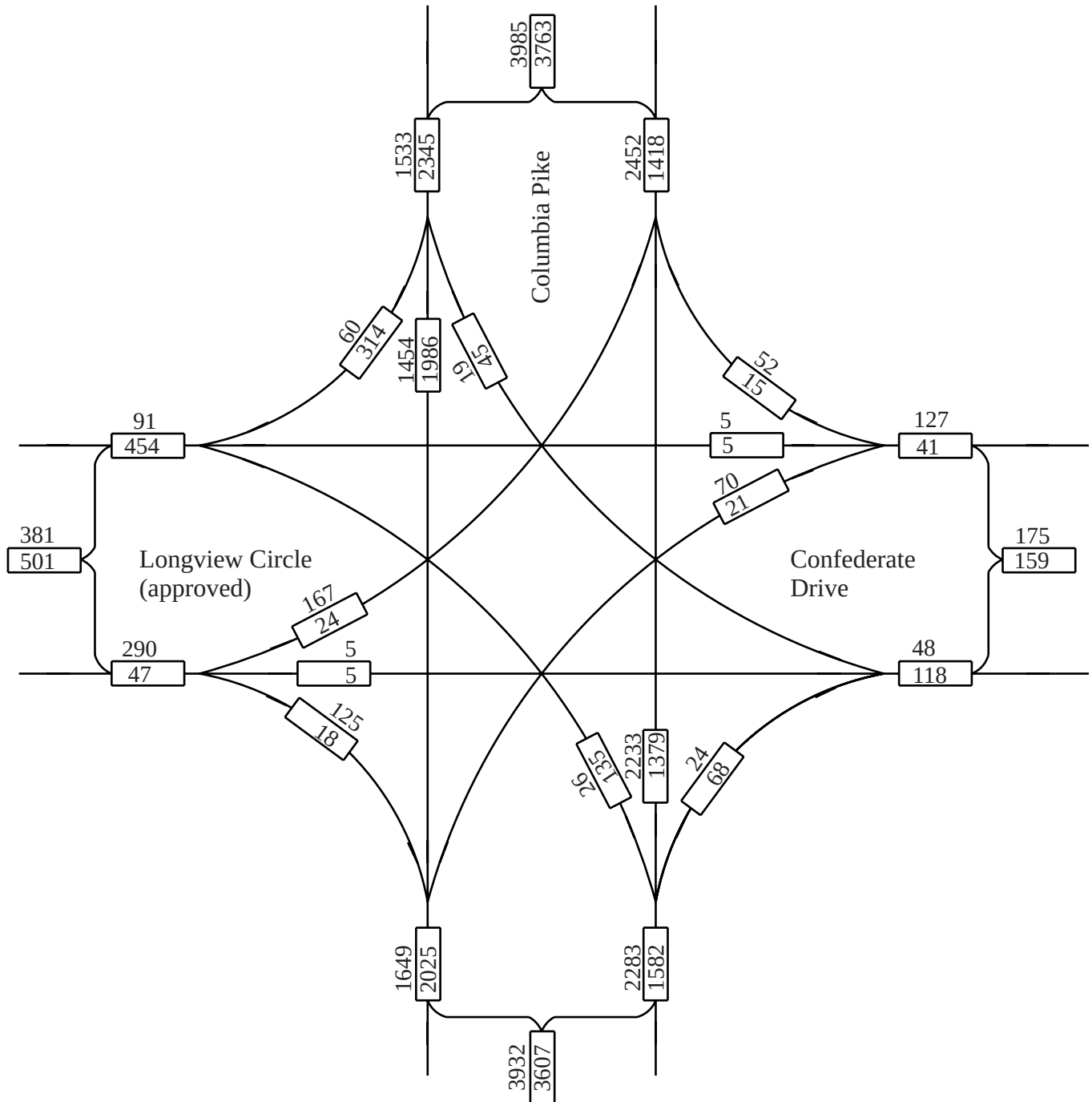


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Downs Boulevard
 Year Year 2032 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

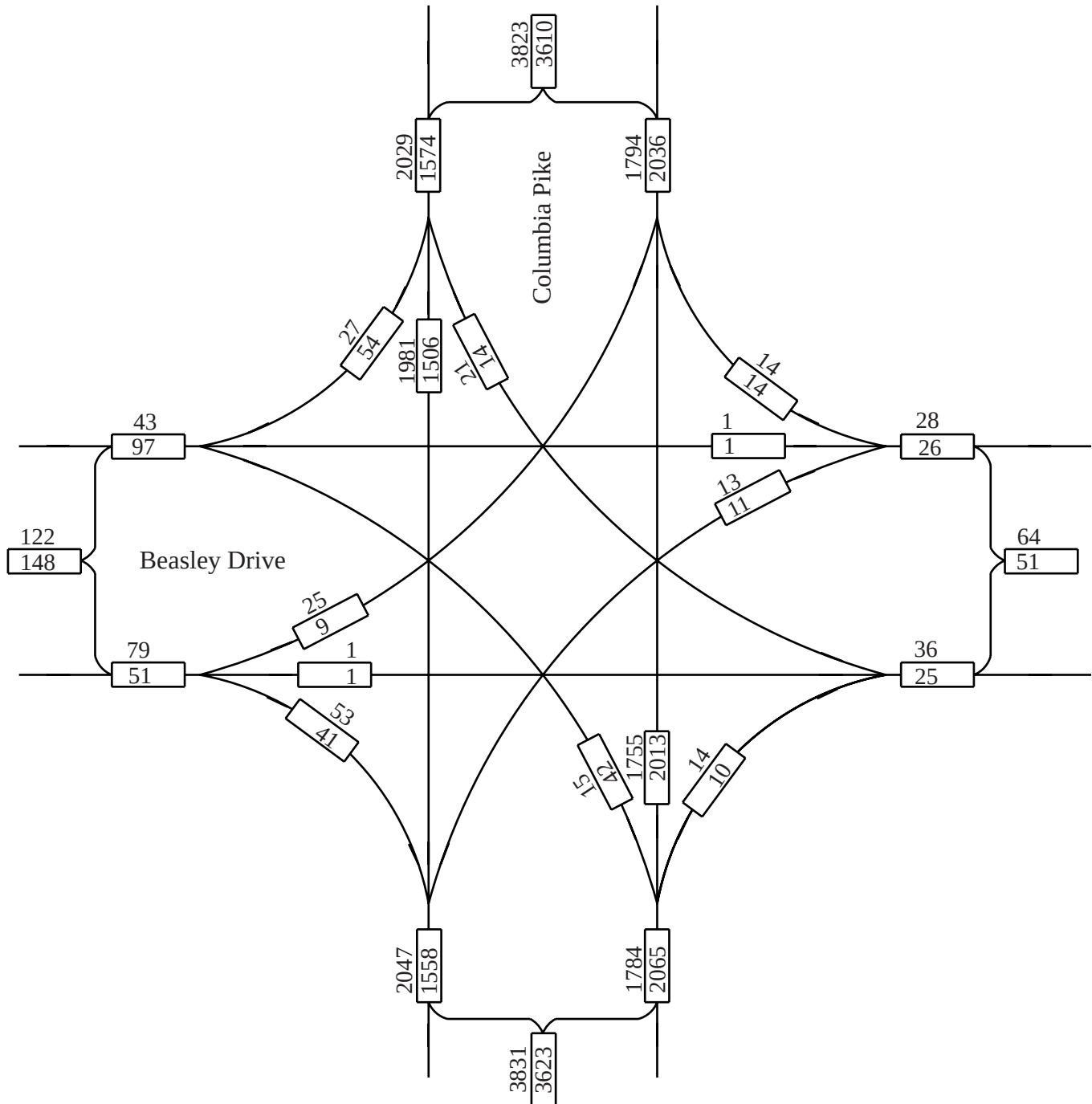


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Confederate Drive
 Year Year 2032 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

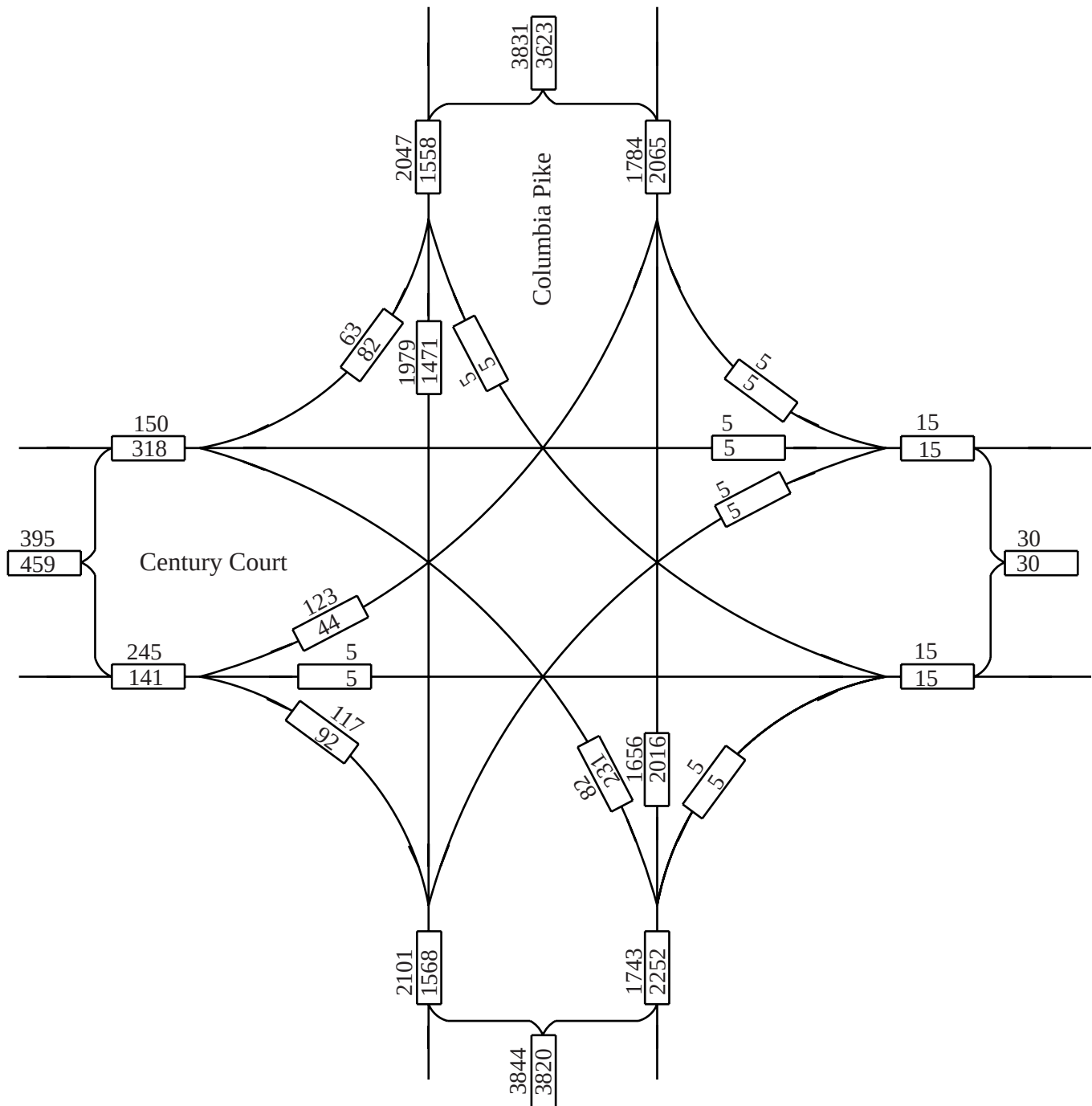


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Beasley Drive
 Year Year 2032 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
Traffic Engineering and Planning



No Scale

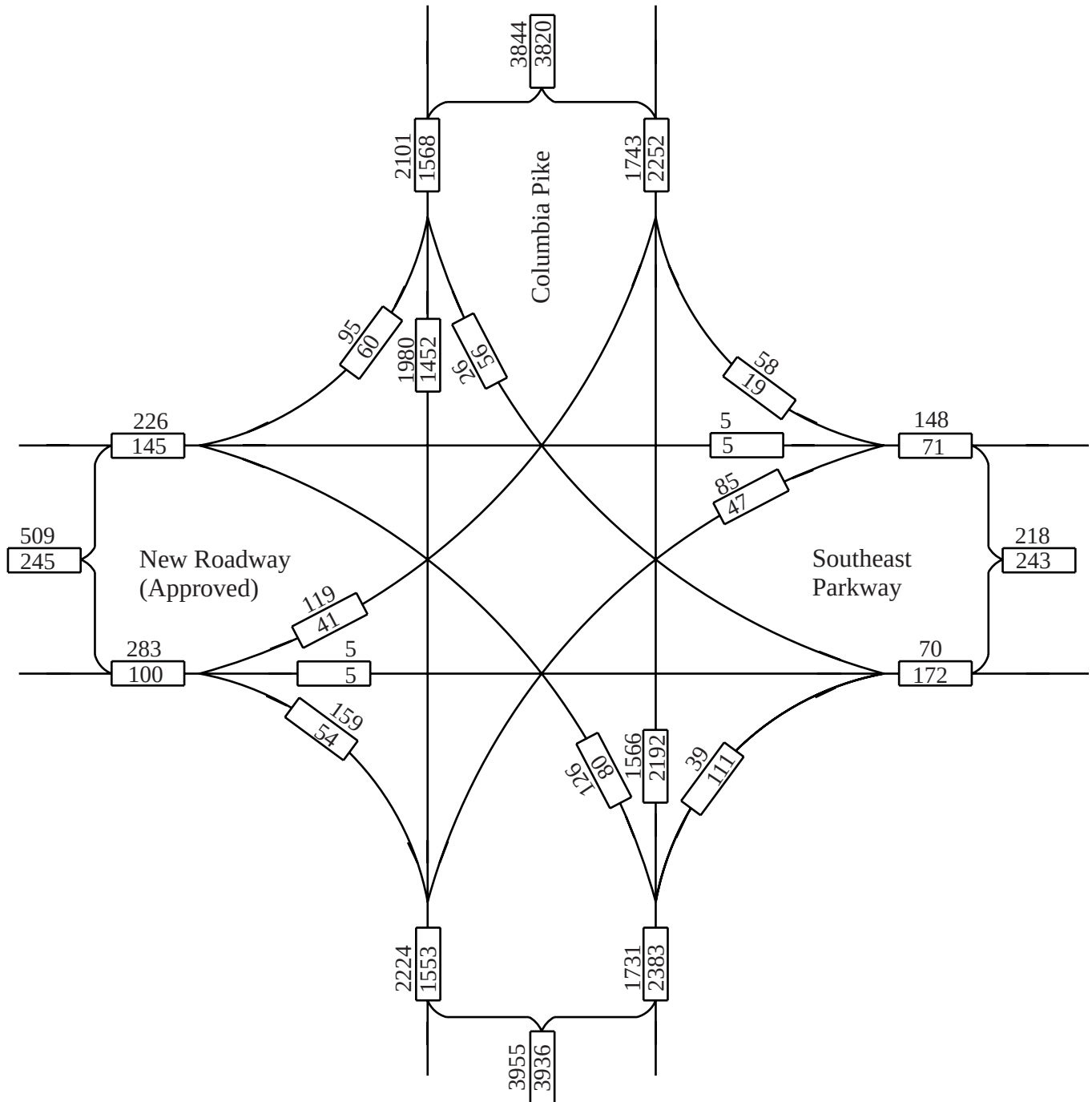
XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location	Columbia Pike and Century Court
----------	---------------------------------

Year	Year 2032 DHVs
------	----------------

Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

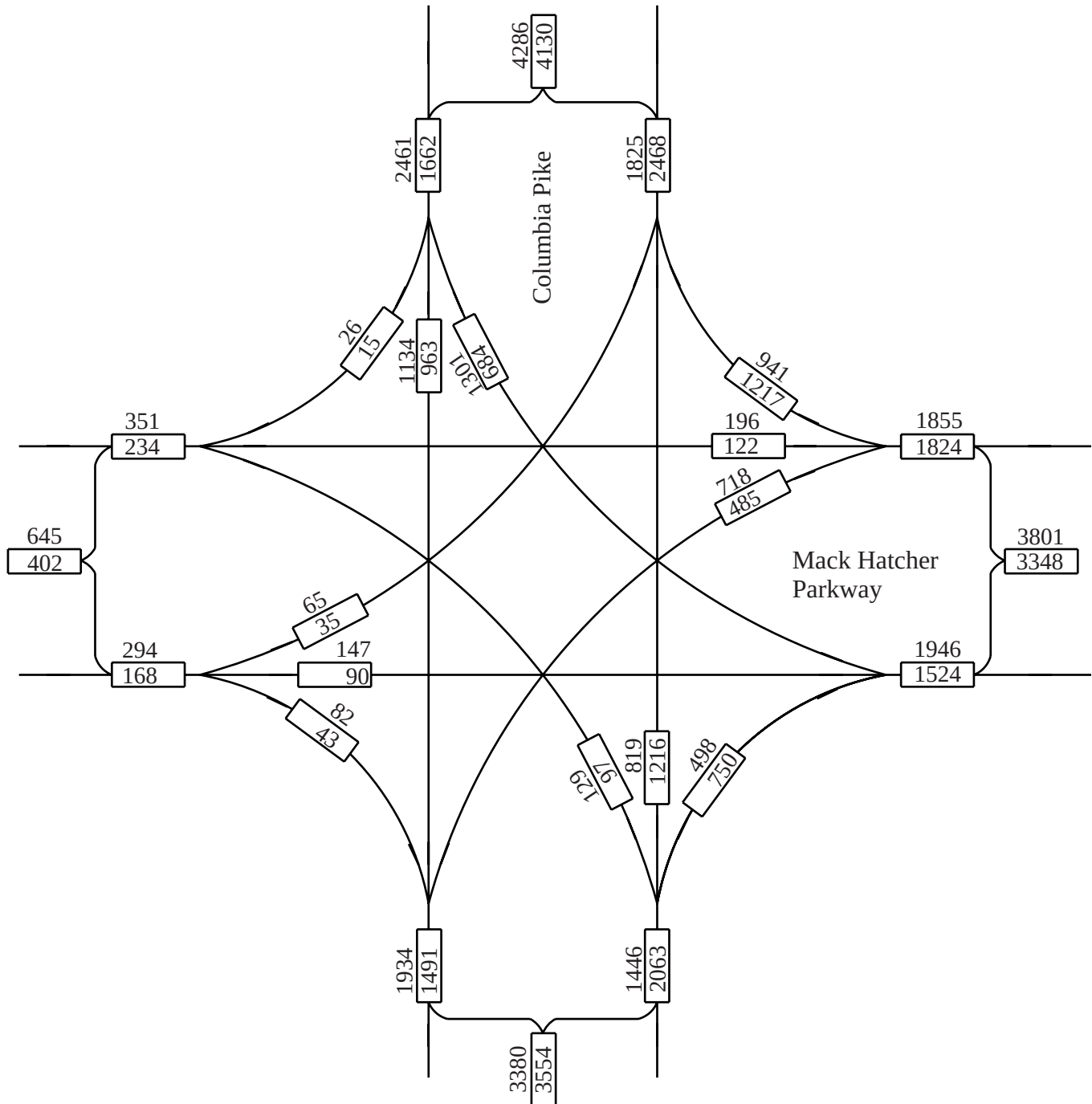


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Southeast Parkway
 Year Year 2032 DHVs
 Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

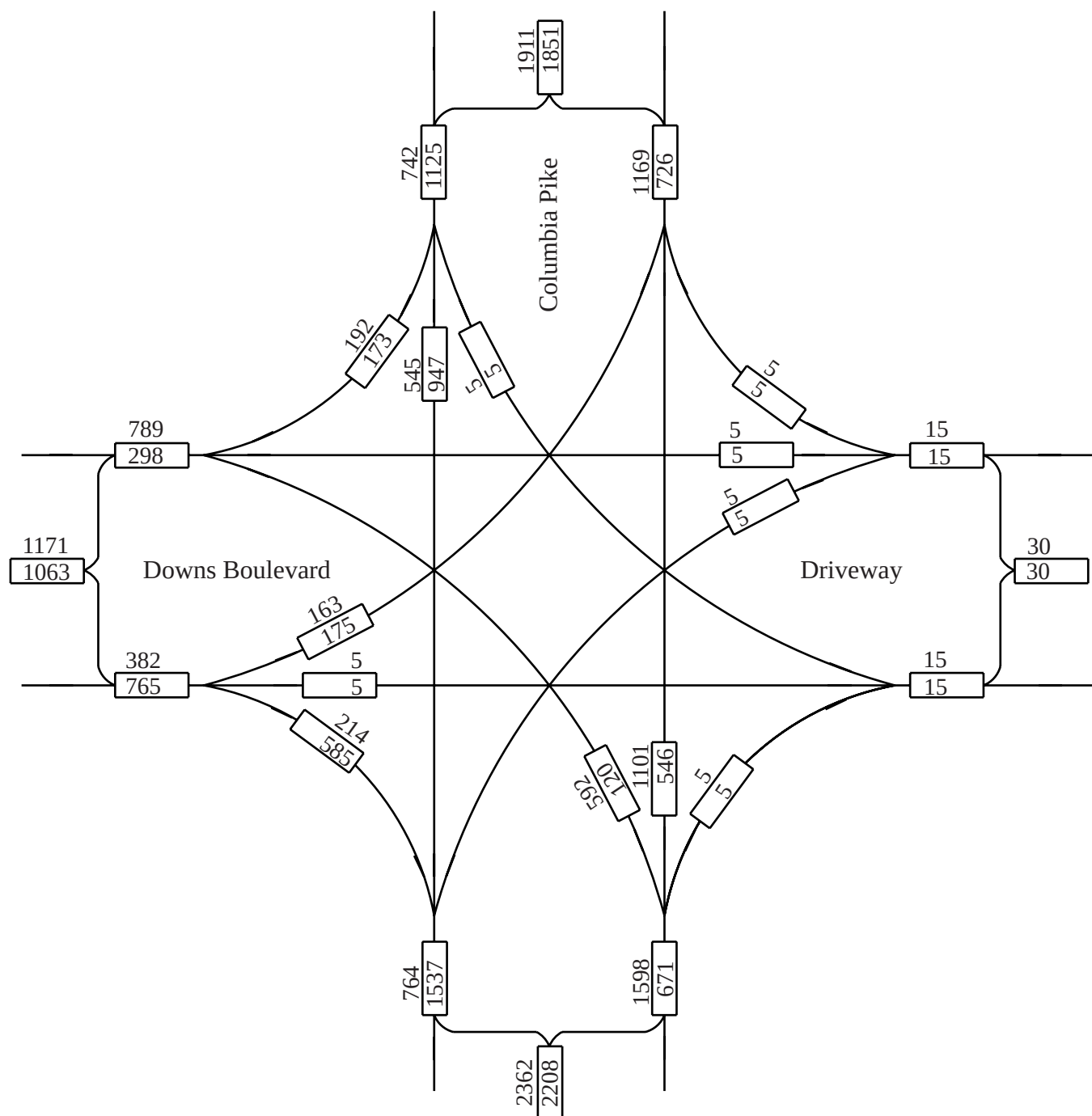


Location Columbia Pike and Mack Hatcher Parkway

Year Year 2032 DHVs

Description Existing Roadway Network

F i s c h b a c h
Transportation Group, Inc.
Traffic Engineering and Planning



No Scale

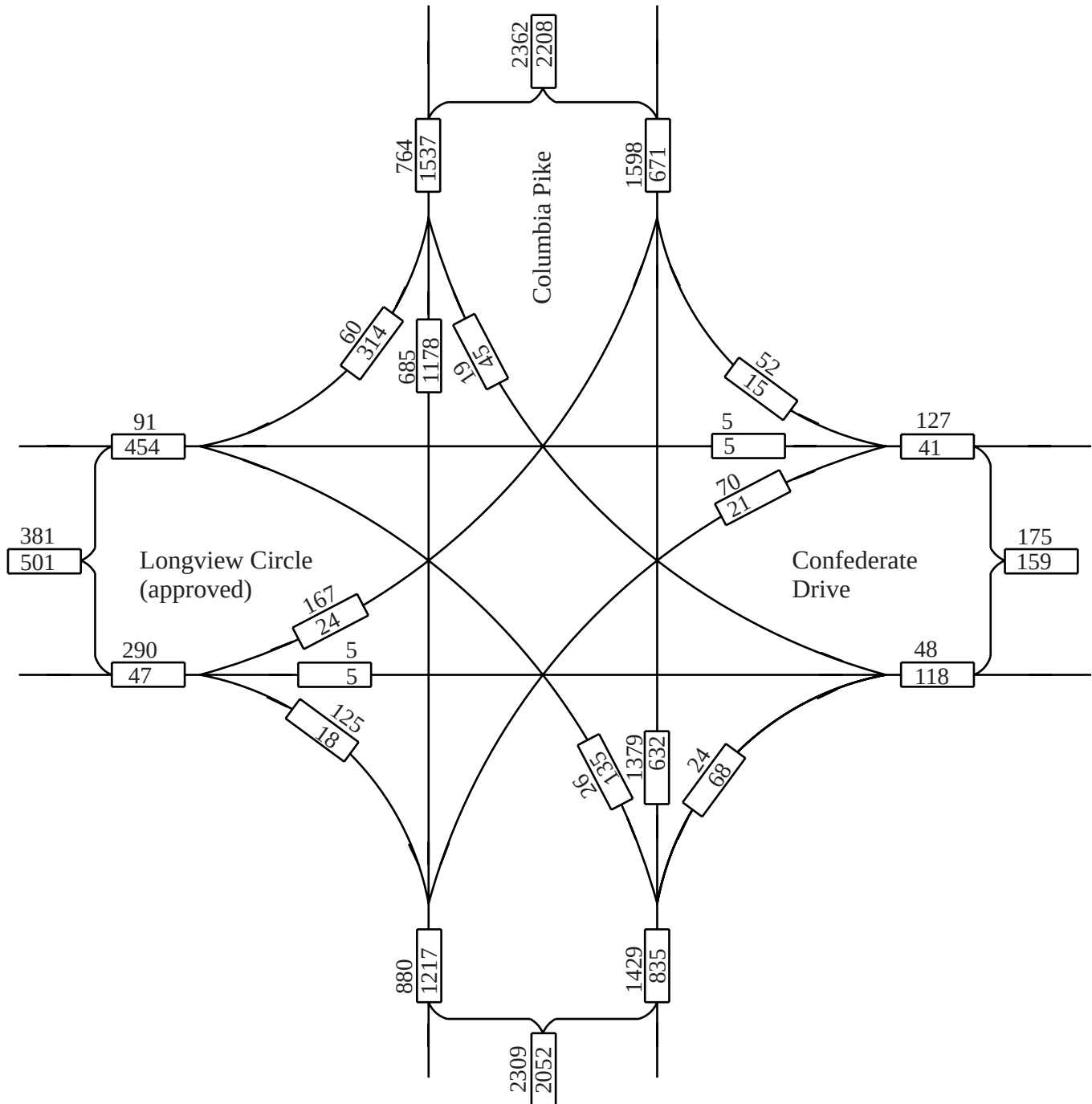
XX - AM Peak Hour Volumes
XX - PM Peak Hour Volumes

Location	Columbia Pike and Downs Boulevard
----------	-----------------------------------

Year	Year 2012 DHVs
------	----------------

Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

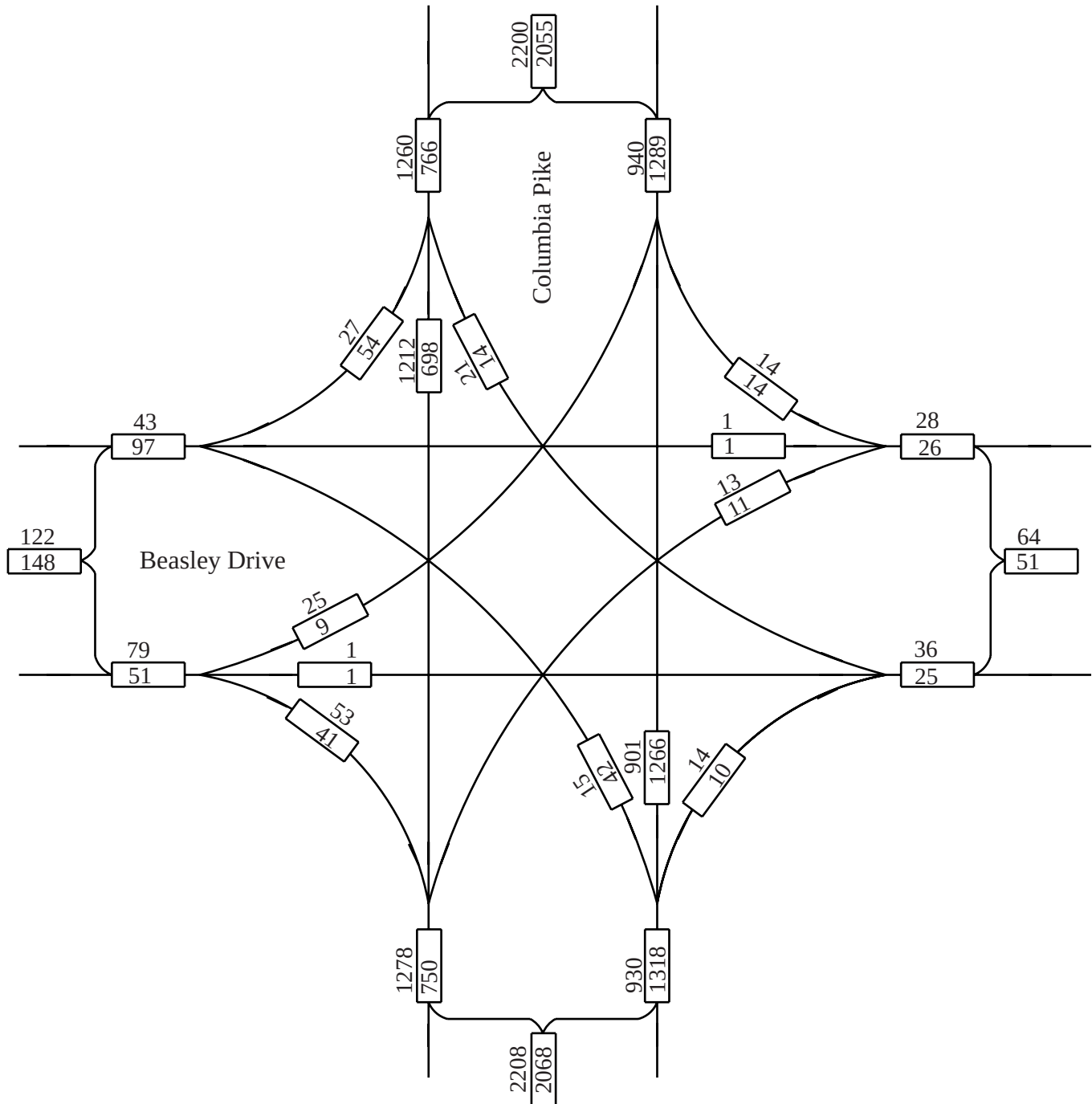


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Confederate Drive
 Year Year 2012 DHVs
 Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

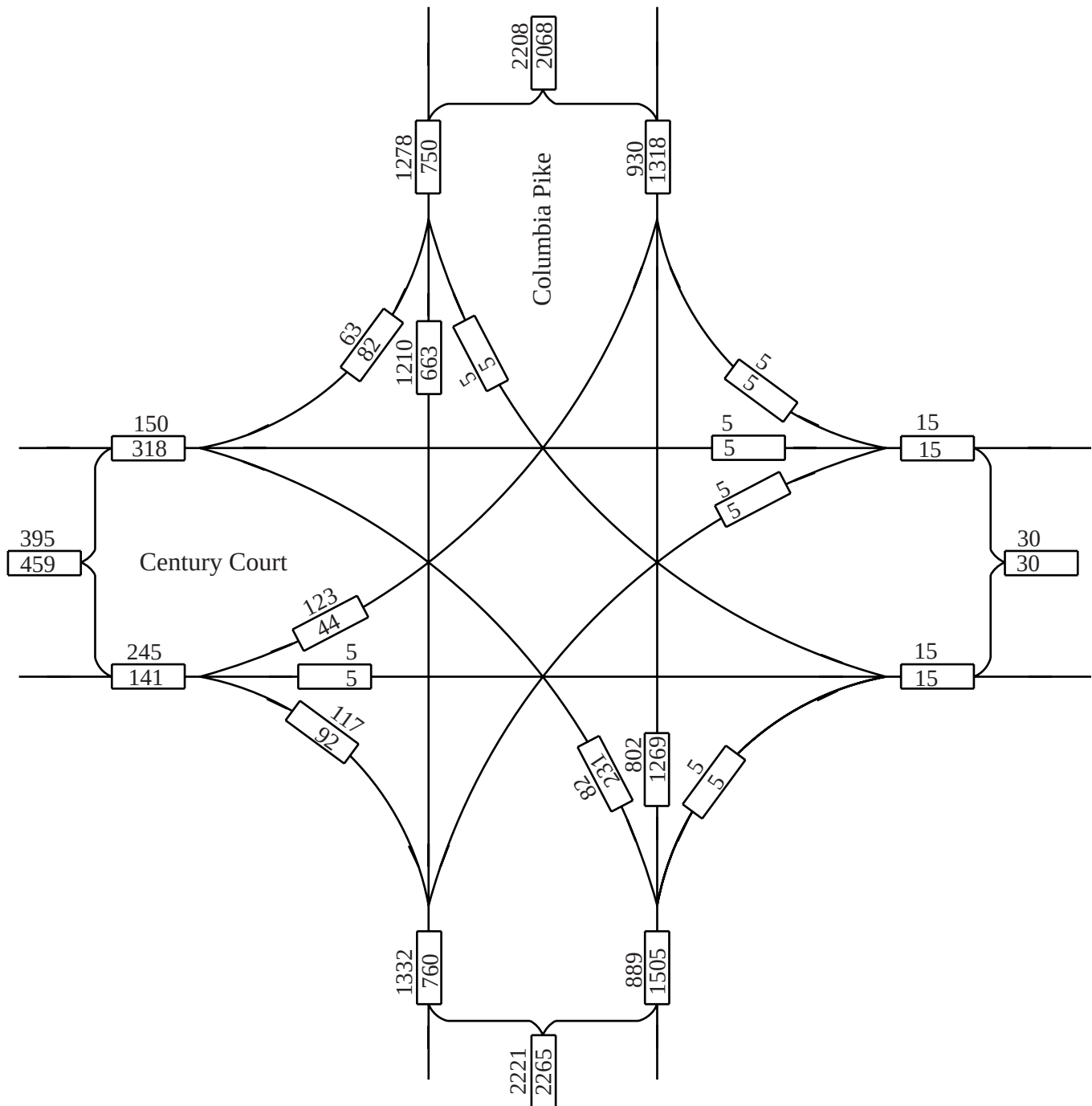


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Beasley Drive
 Year Year 2012 DHVs
 Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
Traffic Engineering and Planning



No Scale

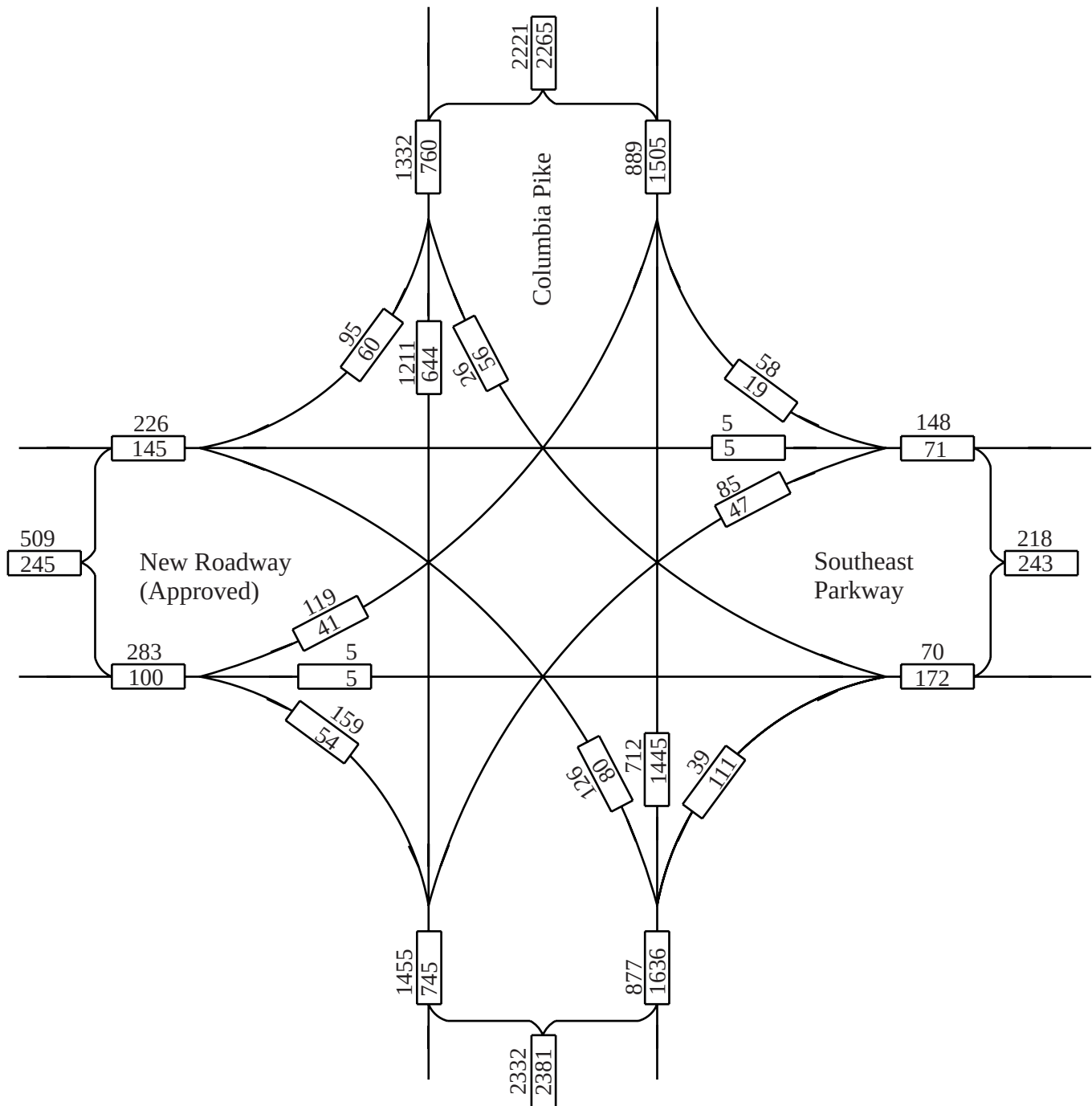
XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location	Columbia Pike and Century Court
----------	---------------------------------

Year	Year 2012 DHVs
------	----------------

Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
Traffic Engineering and Planning



No Scale

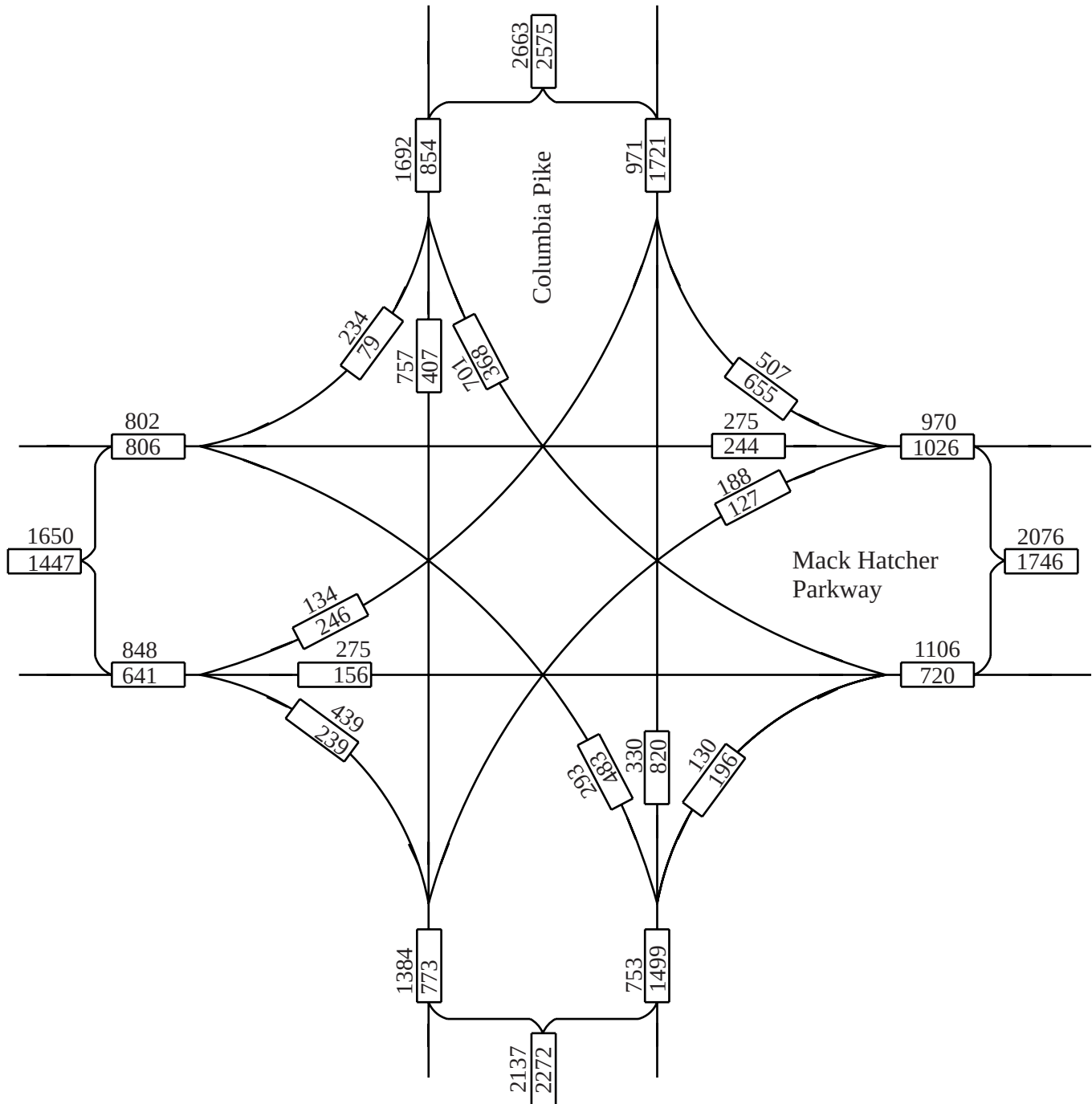
XX - AM Peak Hour Volumes
XX - PM Peak Hour Volumes

Location	Columbia Pike and Southeast Parkway
----------	-------------------------------------

Year	Year 2012 DHVs
------	----------------

Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning



No Scale

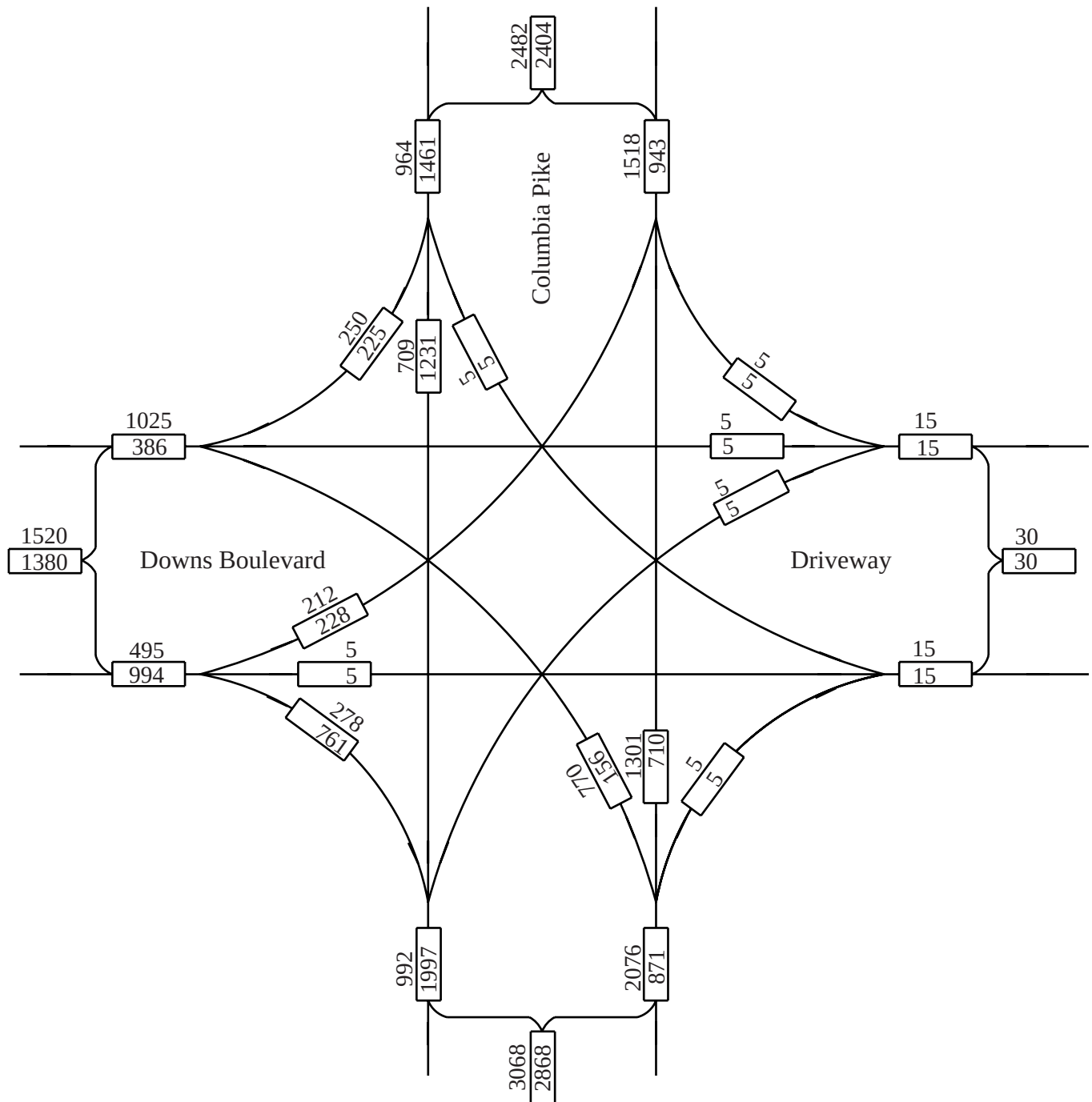
XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Mack Hatcher Parkway

Year Year 2012 DHVs

Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

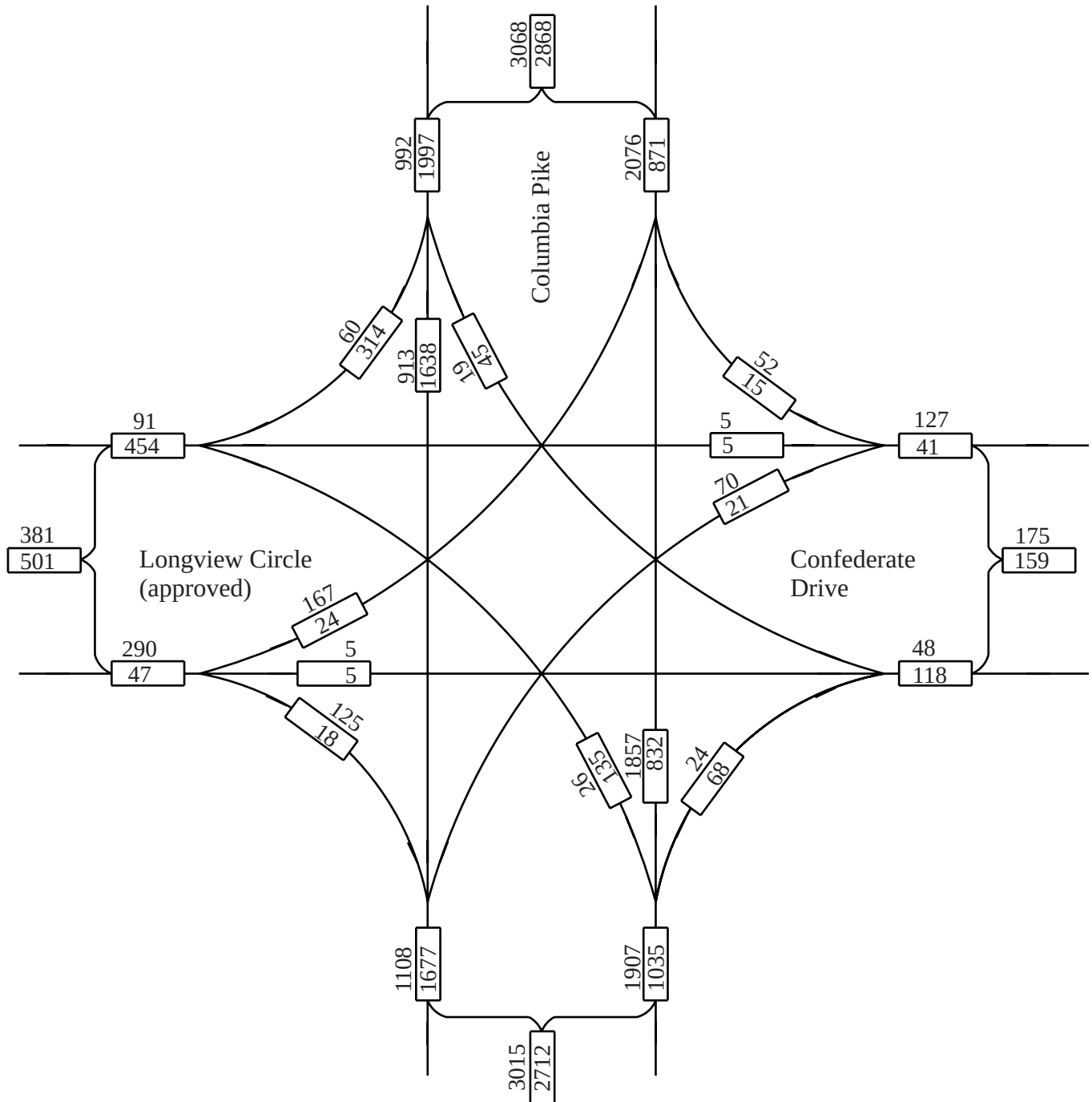


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Downs Boulevard
 Year Year 2032 DHVs
 Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

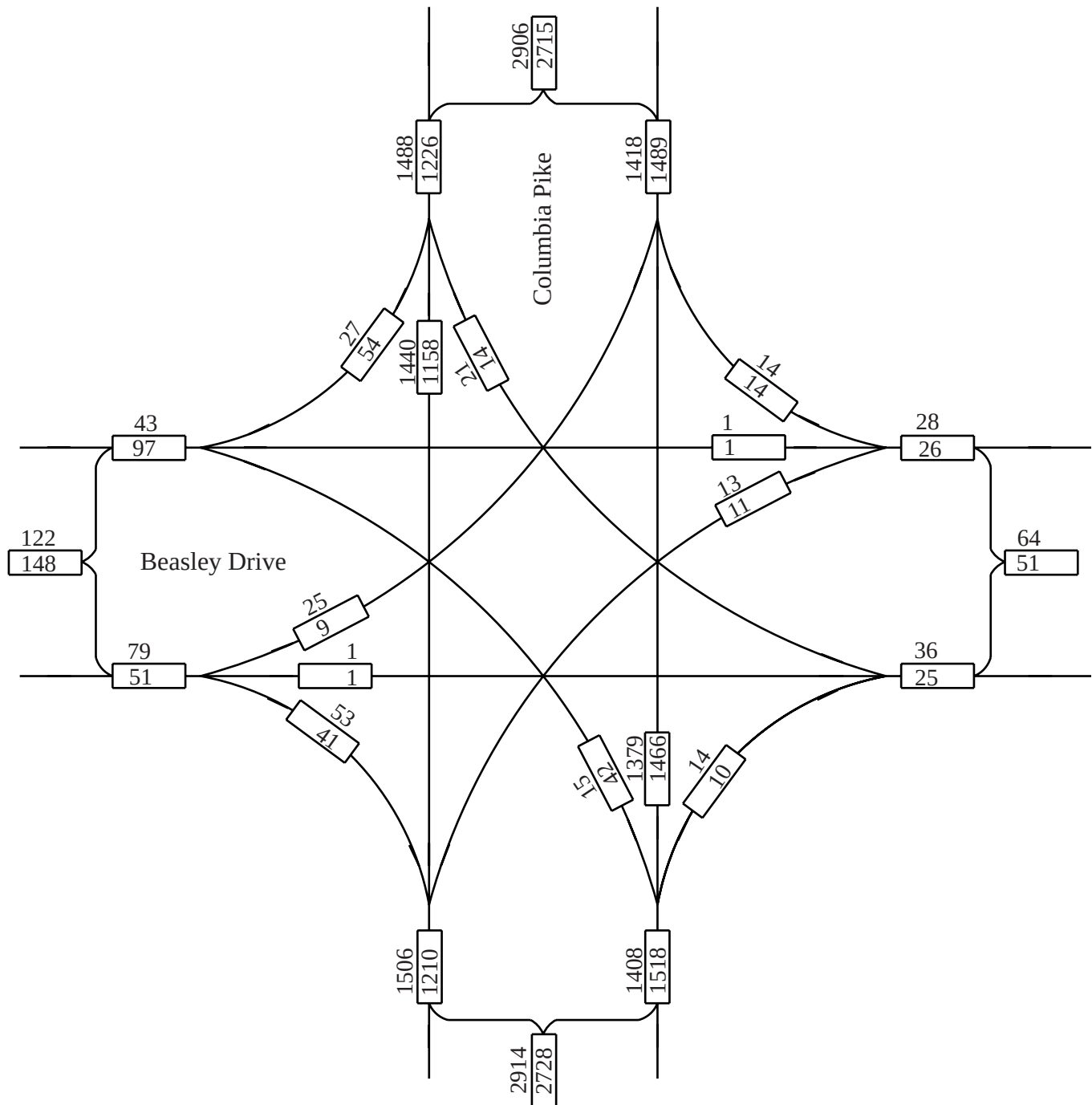


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Confederate Drive
 Year Year 2032 DHVs
 Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

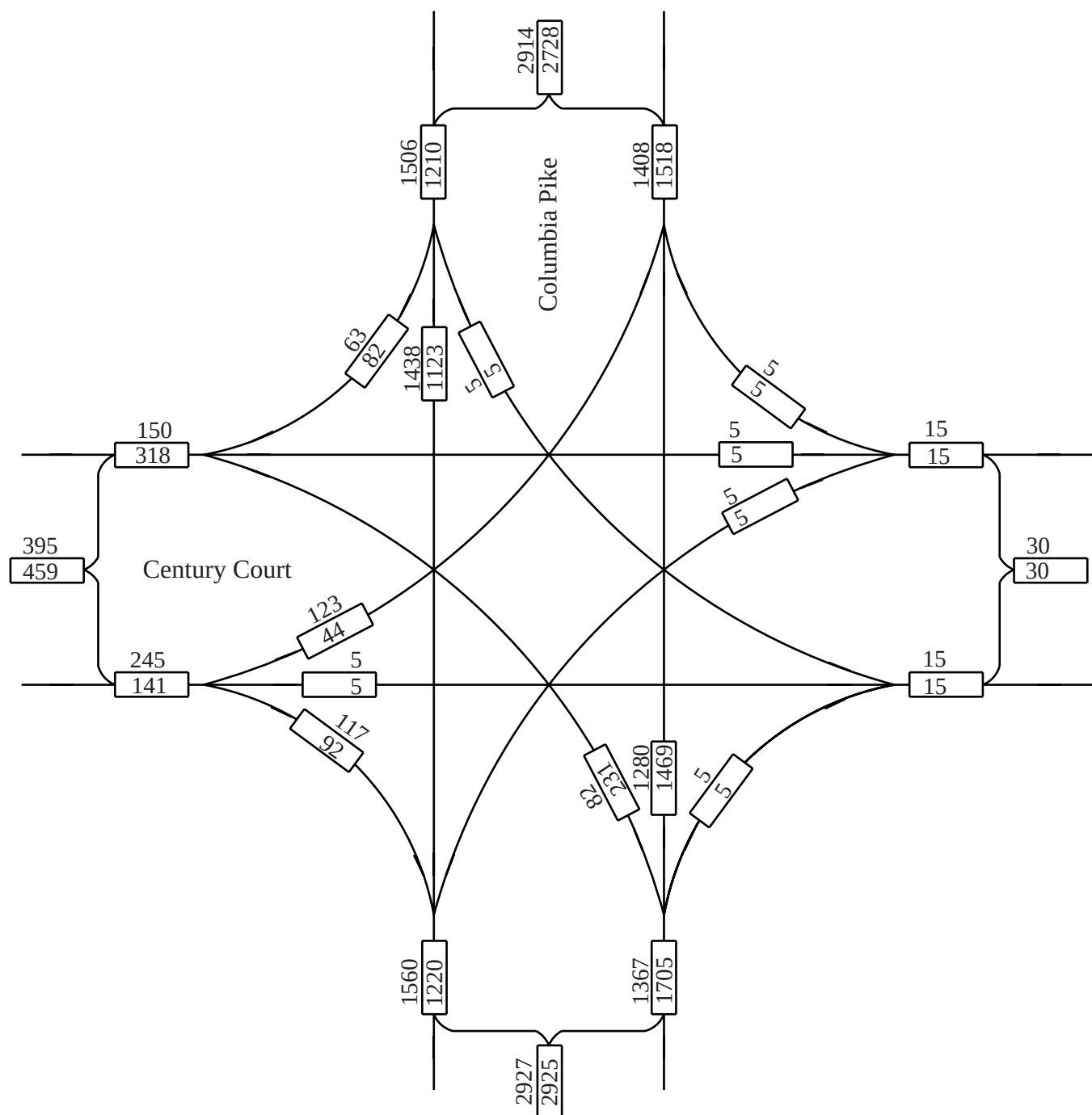


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Beasley Drive
 Year Year 2032 DHVs
 Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
Traffic Engineering and Planning



No Scale

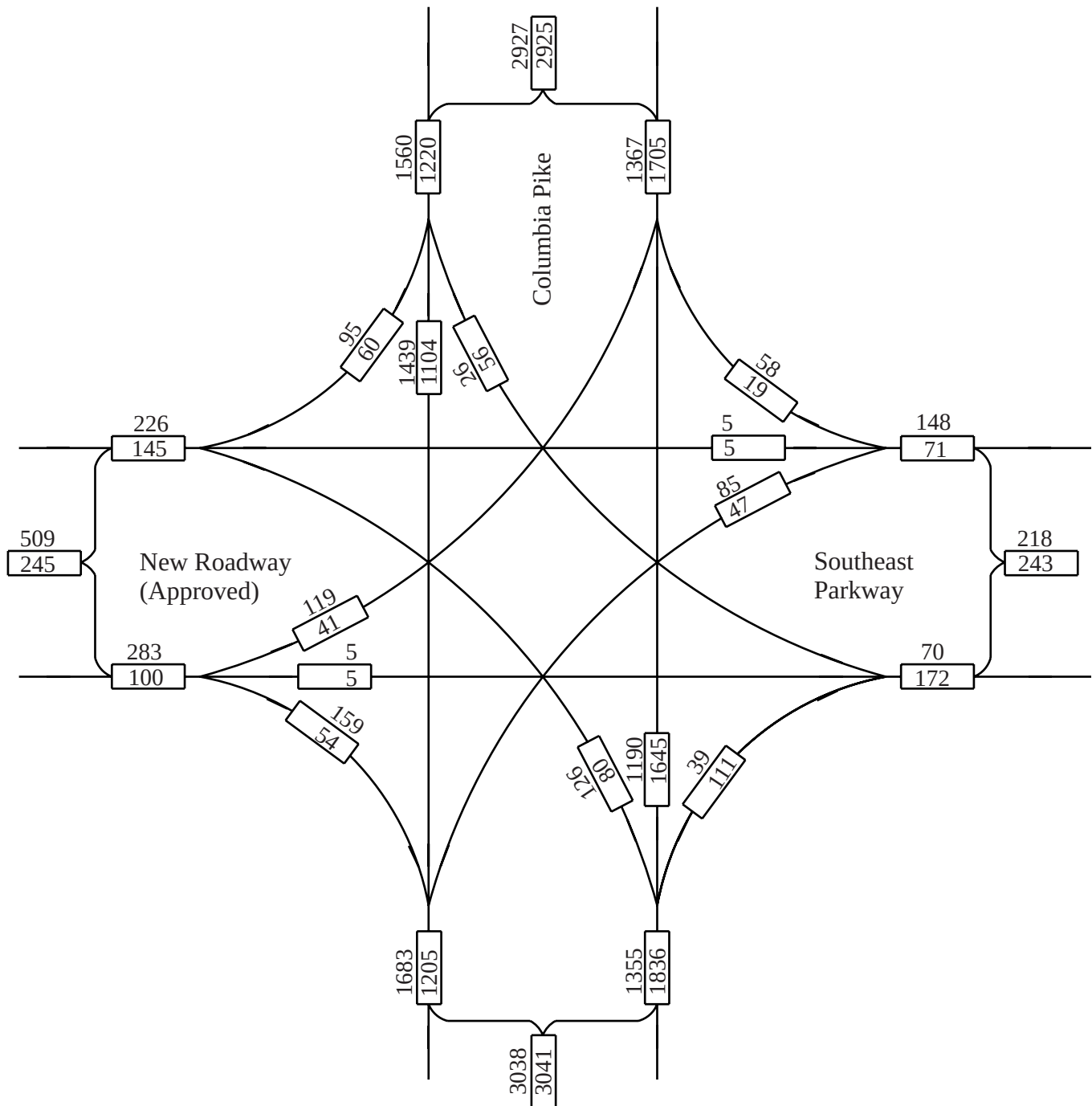
XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location	Columbia Pike and Century Court
----------	---------------------------------

Year	Year 2032 DHVs
2010	1,000
2011	1,000
2012	1,000
2013	1,000
2014	1,000
2015	1,000
2016	1,000
2017	1,000
2018	1,000
2019	1,000
2020	1,000
2021	1,000
2022	1,000
2023	1,000
2024	1,000
2025	1,000
2026	1,000
2027	1,000
2028	1,000
2029	1,000
2030	1,000
2031	1,000
2032	1,000

Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

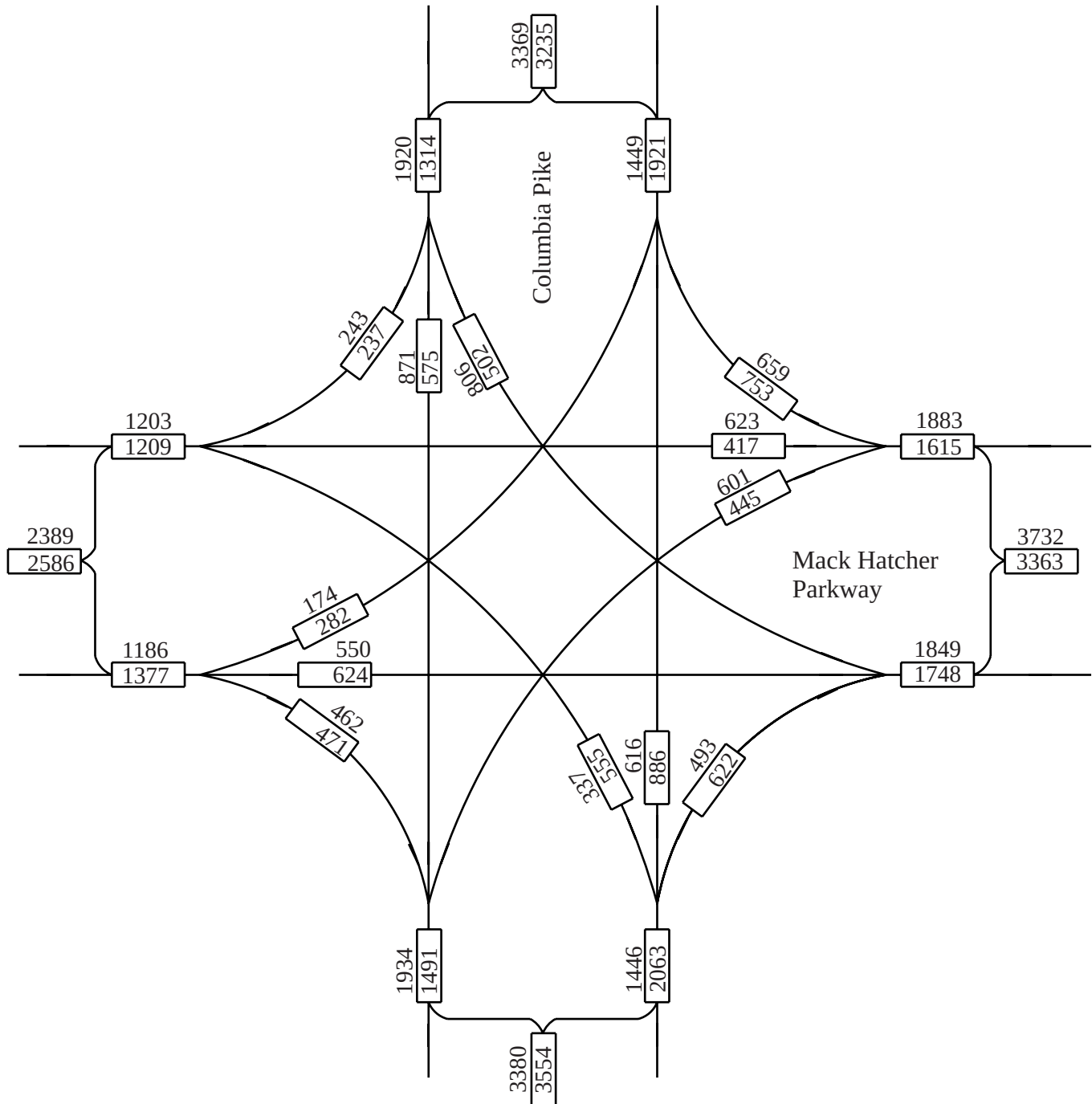


No Scale

XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Southeast Parkway
 Year Year 2032 DHVs
 Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning



No Scale

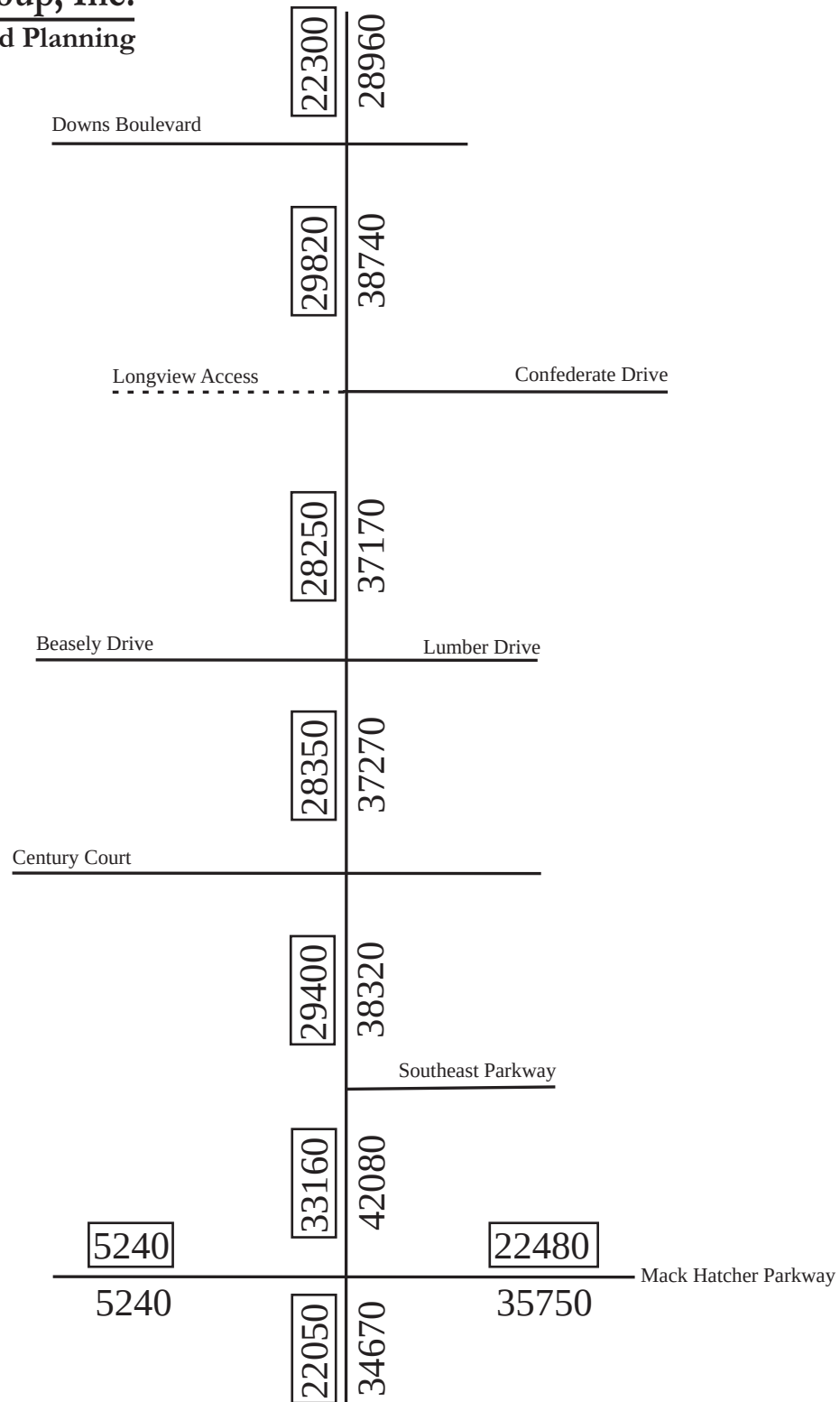
XX - AM Peak Hour Volumes
 XX - PM Peak Hour Volumes

Location Columbia Pike and Mack Hatcher Parkway

Year Year 2032 DHVs

Description Future Network (with Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

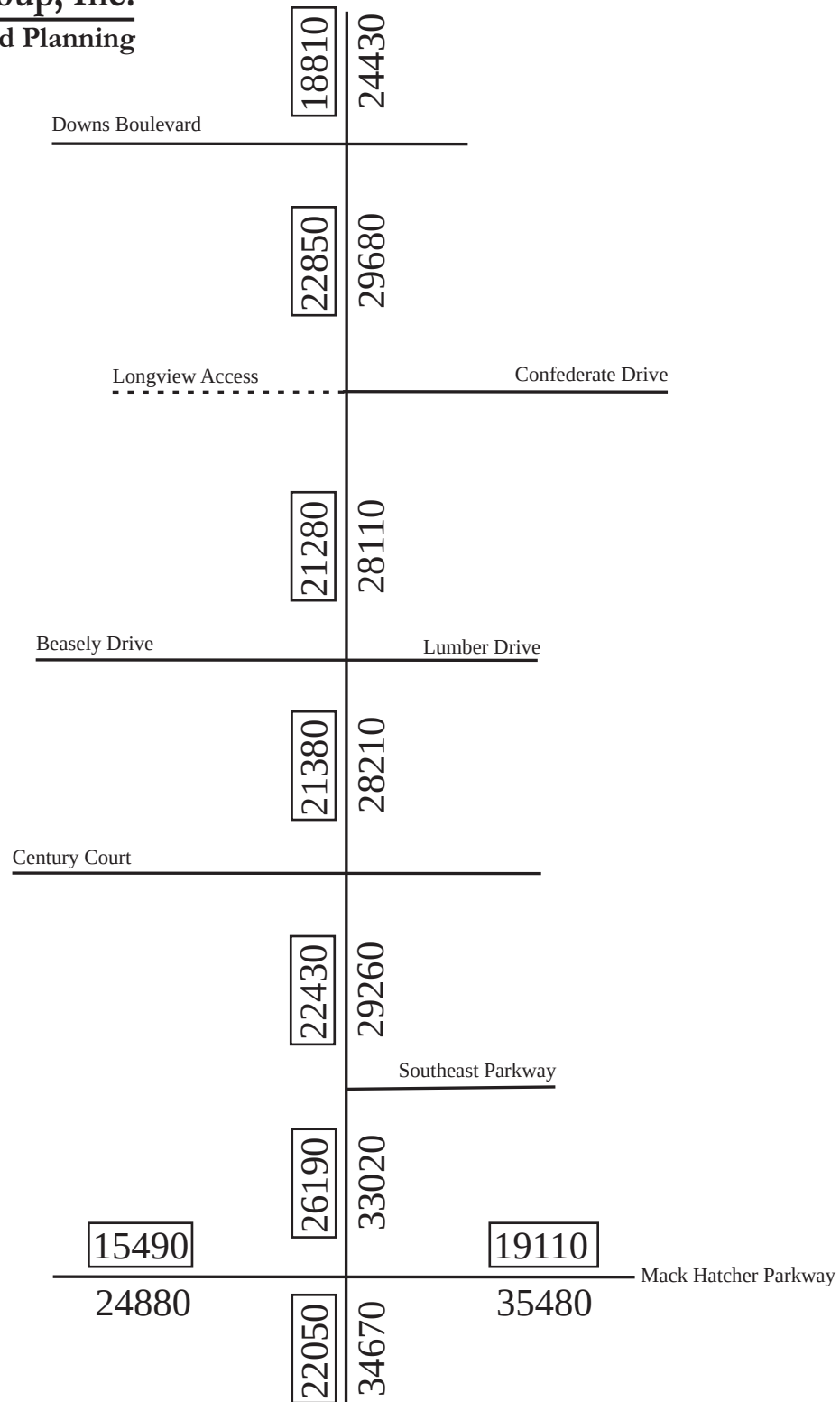


No Scale

XX - Year 2012 ADTs
 XX - Year 2032 ADTs

Location Columbia Pike
 Year Year 2012 and Year 2032 ADTs
 Description Existing Network (w/o Mack Hatcher Ext.)

F i s c h b a c h
Transportation Group, Inc.
 Traffic Engineering and Planning

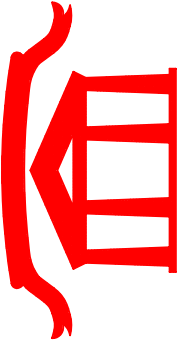


No Scale

XX - Year 2012 ADTs
 XX - Year 2032 ADTs

Location Columbia Pike
 Year Year 2012 and Year 2032 ADTs
 Description Future Network (with Mack Hatcher Ext.)

APPENDIX –TYPICAL CROSS-SECTIONS AND FUNCTIONAL PLANS



S.E.I. PROJECT NO. 612	SHEET NO.
CITY OF FRANKLIN ---	1

INDEX OF SHEETS

FUNCTIONAL PLANS

- 1
- 2, 2A
- 3, 4, 5
- TITLE SHEET
- TYPICAL SECTIONS
- FUNCTIONAL LAYOUTS

CITY OF FRANKLIN
DEPARTMENT OF ENGINEERING
WILLIAMSON COUNTY

COLUMBIA AVENUE (U.S. 31 / S.R. 6)

CITY OF FRANKLIN PROJECT NO.

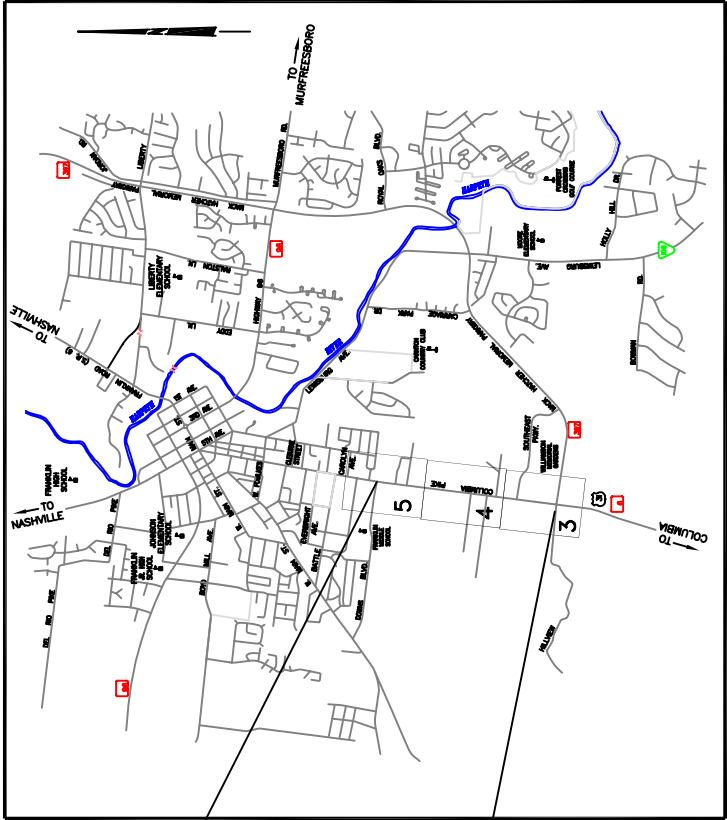
FROM: MACK HATCHER MEMORIAL PARKWAY (S.R. 397)
TO: DOWNS BLVD.

ARMY CORPS OF ENGINEERS PERMIT
WATER QUALITY PERMIT NO.:
T.D.O.T. PERMIT NO.:
N.P.D.E.S. PERMIT NO.:

FUNCTIONAL

RIGHT-OF-WAY PLANS ISSUED
CONSTRUCTION PLANS ISSUED

NO EQUATIONS, NO EXCLUSIONS



END PROJECT
DOWNS BLVD.
STA. 82+25±

BEGIN PROJECT
MACK HATCHER PKWY.
STA. 20+40

SPECIAL NOTE

PROPOSALS MAY BE REJECTED BY THE FRANKLIN TRANSPORTATION COMMITTEE IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

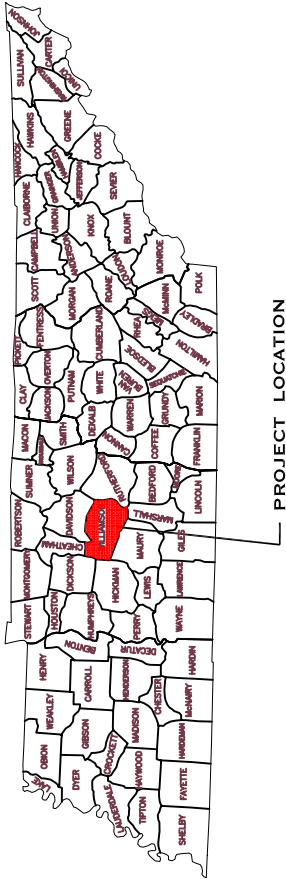
THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED: MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE CONSTRUCTION DOCUMENTS

DESIGNED BY SULLIVAN ENGINEERING, INC.
DESIGNER RICHARD D. SULLIVAN, P.E.
CONTACT PAUL V. COLLINS

LOCATION MAP

NOT TO SCALE

APPROX. PROJECT LENGTH 6,185 LF



APPROVED BY:

MAYOR, CITY OF FRANKLIN	DATE
DIRECTOR OF ENGINEERING, CITY OF FRANKLIN	DATE

SEI
SULLIVAN ENGINEERING, INC.
1722B GEN. GEO. PATTON DRIVE
SUITE 400 BRENTWOOD, TN. 37027

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	07	612	2

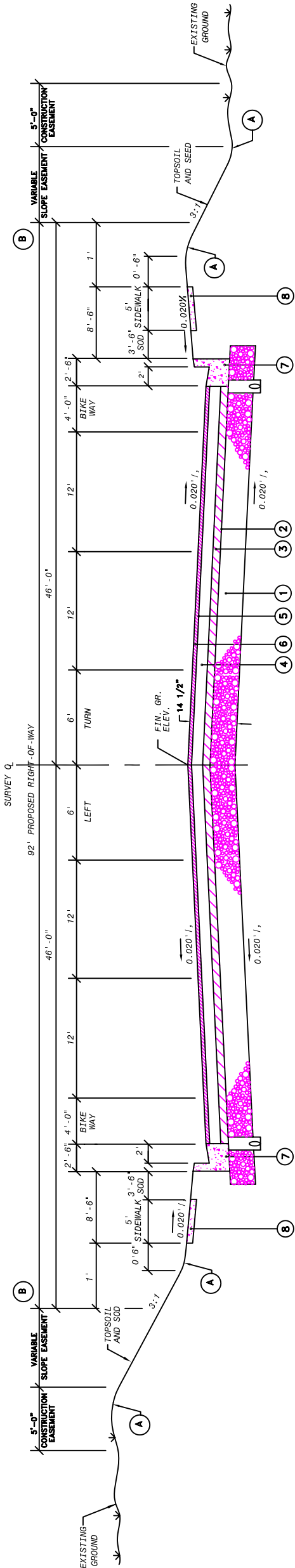
REV. 6-10-05: DELETED PROPOSED 3-LANE TYPICAL SECTION.

REV. 2-27-06: ADDED PROPOSED 4-LANE TYPICAL SECTION.

REV. 9-14-07: REVISED BOTH TYPICAL SECTIONS.

REV. 11-13-07: REVISED BOTH TYPICAL SECTIONS.

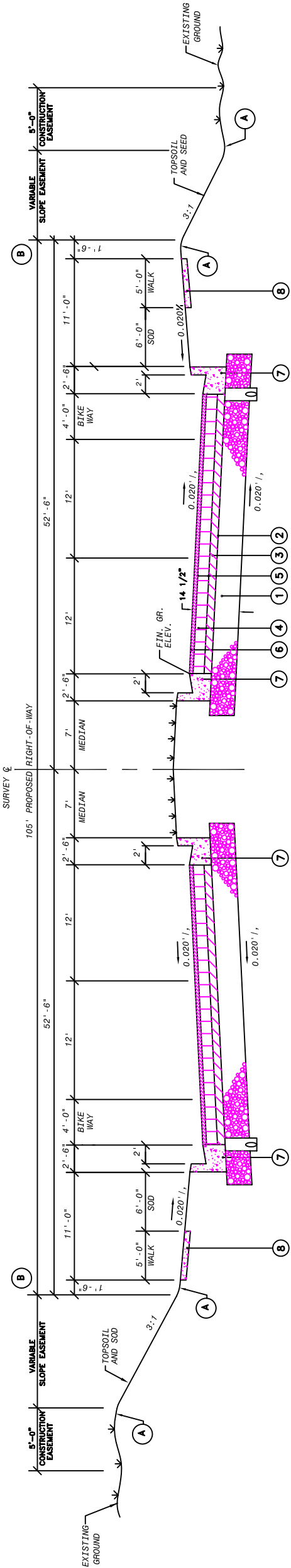
REV. 11-07-08: REMOVED REFERENCES TO MULTIPLE OPTIONS.



COLUMBIA AVENUE (U.S. 31/S.R. 6)
PROPOSED 5-LANE TYPICAL SECTION C

(FOR ADDITIONAL DETAILS NOT SHOWN COORDINATE WITH T.D.O.T. ST. DWG. NO. RD-TS-7A)

FROM: Mack Hatcher Parkway (Begin Project) TO: Southeast Parkway
FROM: Confederate Drive TO: Downs Boulevard



COLUMBIA AVENUE (U.S. 31/S.R. 6)
PROPOSED 4-LANE W/MEDIAN TYPICAL SECTION C

(FOR ADDITIONAL DETAILS NOT SHOWN COORDINATE WITH T.D.O.T. ST. DWG. NO. RD-TS-7A)

FROM: Southeast Parkway TO: Alpha Drive

ASSUMED PAVING SCHEDULE		
T.D.O.T. ITEM NO.	DESCRIPTION	T.D.O.T. ITEM No. DESCRIPTION
1	303-01 8" + MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D" (TO BE PLACED IN A MAXIMUM OF TWO EQUAL LIFTS)	5 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC)
2	402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) (0.50 - 0.55 GAL./SQ. YD.)	6 411-01.01 MINERAL AGGREGATE (ACS) GRADING "D"
	402-02 AGGREGATE FOR COVER MATERIAL (PC) (8 - 12 LB./SQ. YD.)	411-01.02 ASPHALT CEMENT (ACS) GRADING "D" (1 1/2" + THICKNESS, 159 LBS./SQ.YD.)
3	307-03.09 BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING A (3" + THICKNESS, 345 LBS./SQ. YD.)	7 702-03 CONCRETE COMBINED CURB AND GUTTER (TYPE 6 - 30) (COORDINATE WITH T.D.O.T. STANDARD DRAWING NO. RP-NUC-11)
4	307-03.16 BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING "BM-2" (2" + 226 LBS./SQ. YD.)	8 701-01.01 CONCRETE SIDEWALK (4")

NOTES	
A	COORDINATE W/STD. DWG. NO. RD-S-11 & RD-S-11A FOR ROUNDING DETAILS.
B	UTILITIES ARE TO BE LOCATED IN THE OUTERMOST 5'-0" OF THE RIGHT-OF-WAY
C	COORDINATE WITH FUNCTIONAL LAYOUTS FOR PAVEMENT TRANSITIONS.

THE CITY OF
FRANKLIN



SULLIVAN ENGINEERING, INC.
1700 10TH AVE. N.W.
SUITE 200
BIRMINGHAM, ALABAMA 35203

COLUMBIA PIKE
(U.S. 31 / S.R. 6)

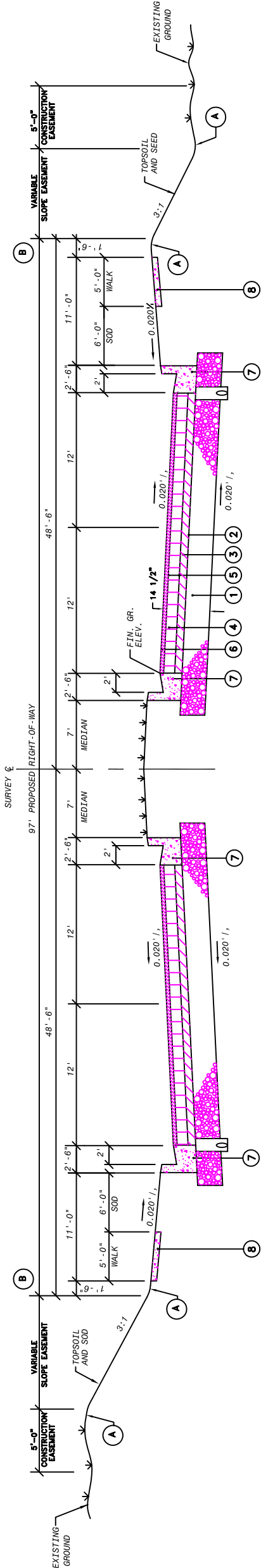
TYPICAL SECTIONS

NOT TO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	07	612	2A

REV. 11-13-07: ADDED THIS SHEET TO THE PLANS.

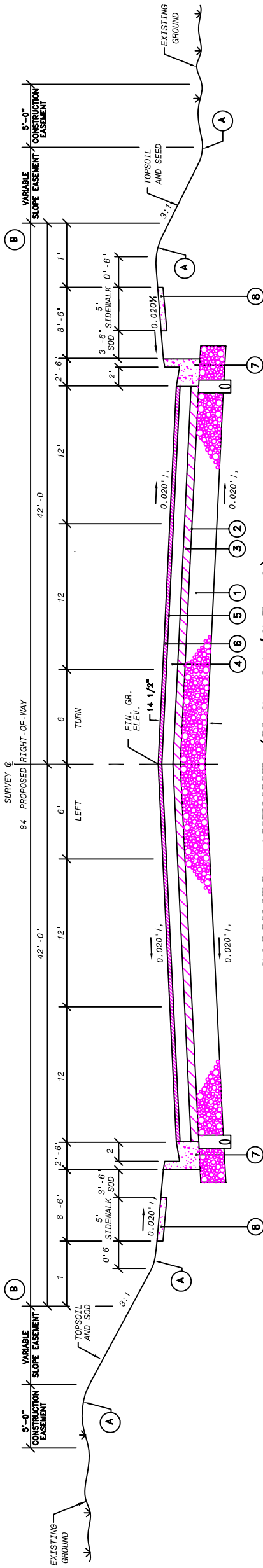
REV. 11-07-08: REMOVED REFERENCES TO MULTIPLE OPTIONS.



COLUMBIA AVENUE (U.S. 31/S.R. 6)
PROPOSED 4-LANE W/MEDIAN TYPICAL SECTION C

(FOR ADDITIONAL DETAILS NOT SHOWN COORDINATE WITH T.D.O.T. ST. DWG. NO. RD-TS-7A)

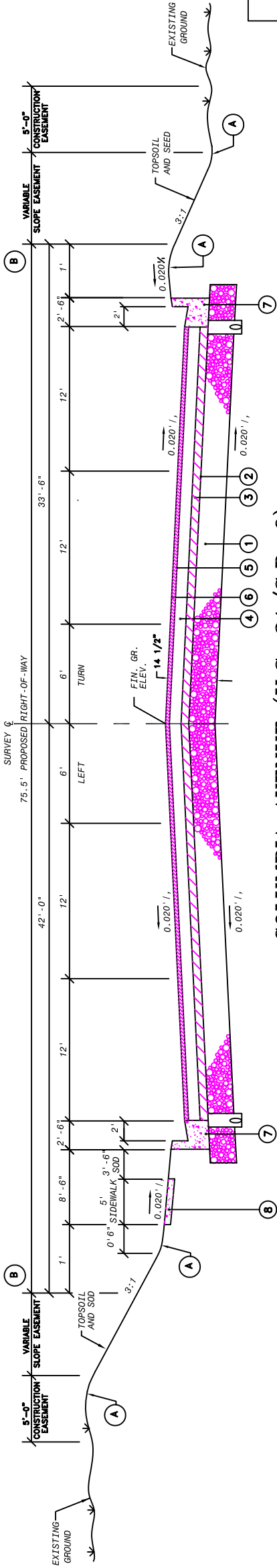
FROM: Alpha Drive TO: Confederate Drive



COLUMBIA AVENUE (U.S. 31/S.R. 6)
PROPOSED 5-LANE TYPICAL SECTION C

(FOR ADDITIONAL DETAILS NOT SHOWN COORDINATE WITH T.D.O.T. ST. DWG. NO. RD-TS-7A)

FROM: Confederate Drive TO: James Avenue (End Project)



COLUMBIA AVENUE (U.S. 31/S.R. 6)
PROPOSED 5-LANE TYPICAL SECTION C

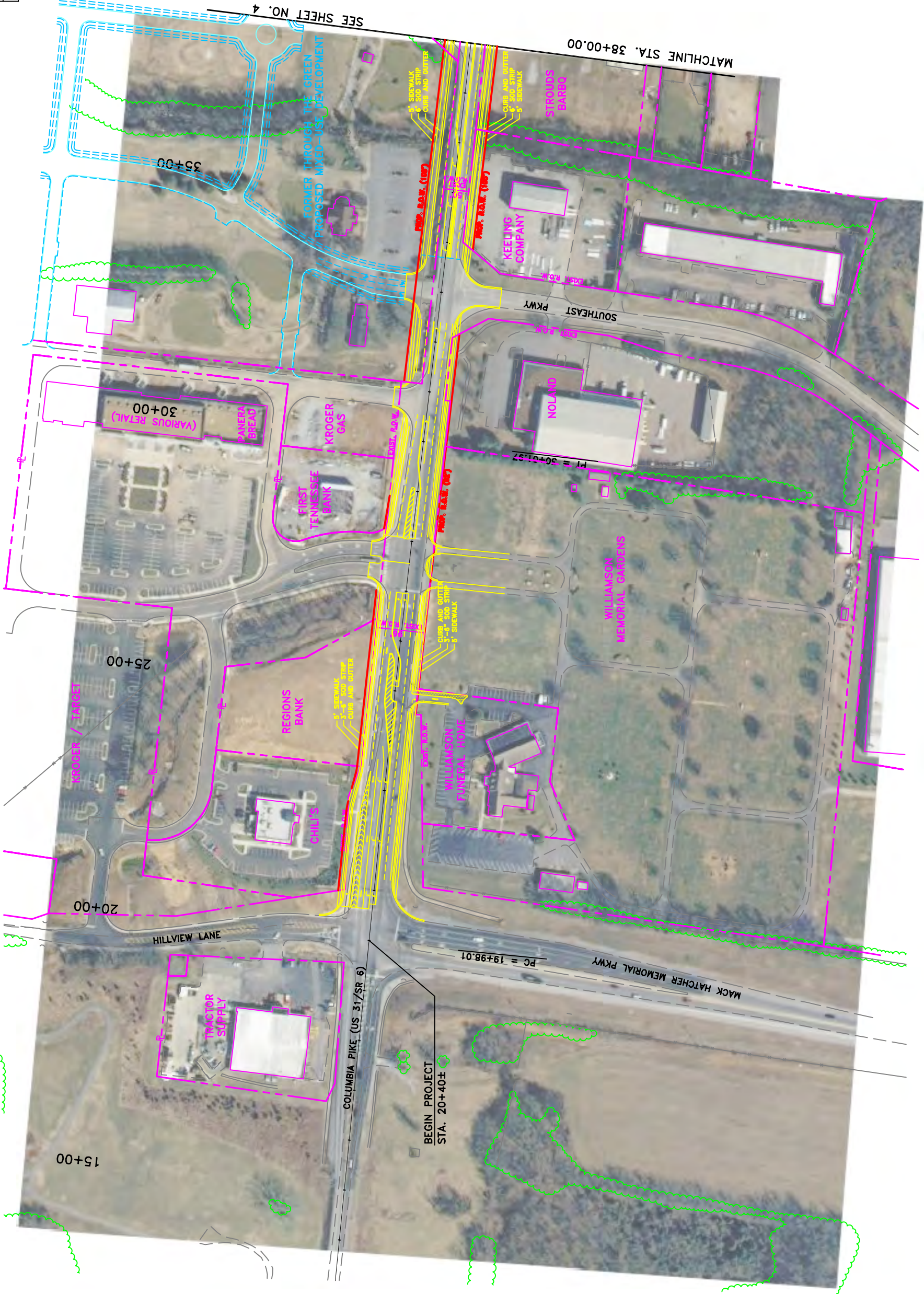
(FOR ADDITIONAL DETAILS NOT SHOWN COORDINATE WITH T.D.O.T. ST. DWG. NO. RD-TS-7A)

FROM: Confederate Drive TO: James Avenue (End Project)

NOTES
Ⓐ COORDINATE W/STD. DWG. NO. RD-S-11 & RD-S-11A FOR ROUNDING DETAILS.
Ⓑ UTILITIES ARE TO BE LOCATED IN THE OUTERMOST 5'-0" OF THE RIGHT-OF-WAY
Ⓒ COORDINATE WITH FUNCTIONAL LAYOUTS FOR PAVEMENT TRANSITIONS.

THE CITY OF FRANKLIN
SEI SULLIVAN ENGINEERING, INC. 17000 CEN. EXP. PARKWAY NORTH SUITE 200 BIRMINGHAM, ALABAMA 35243
COLUMBIA PIKE (U.S. 31 / S.R. 6)
TYPICAL SECTIONS
NOT TO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	07	612	3



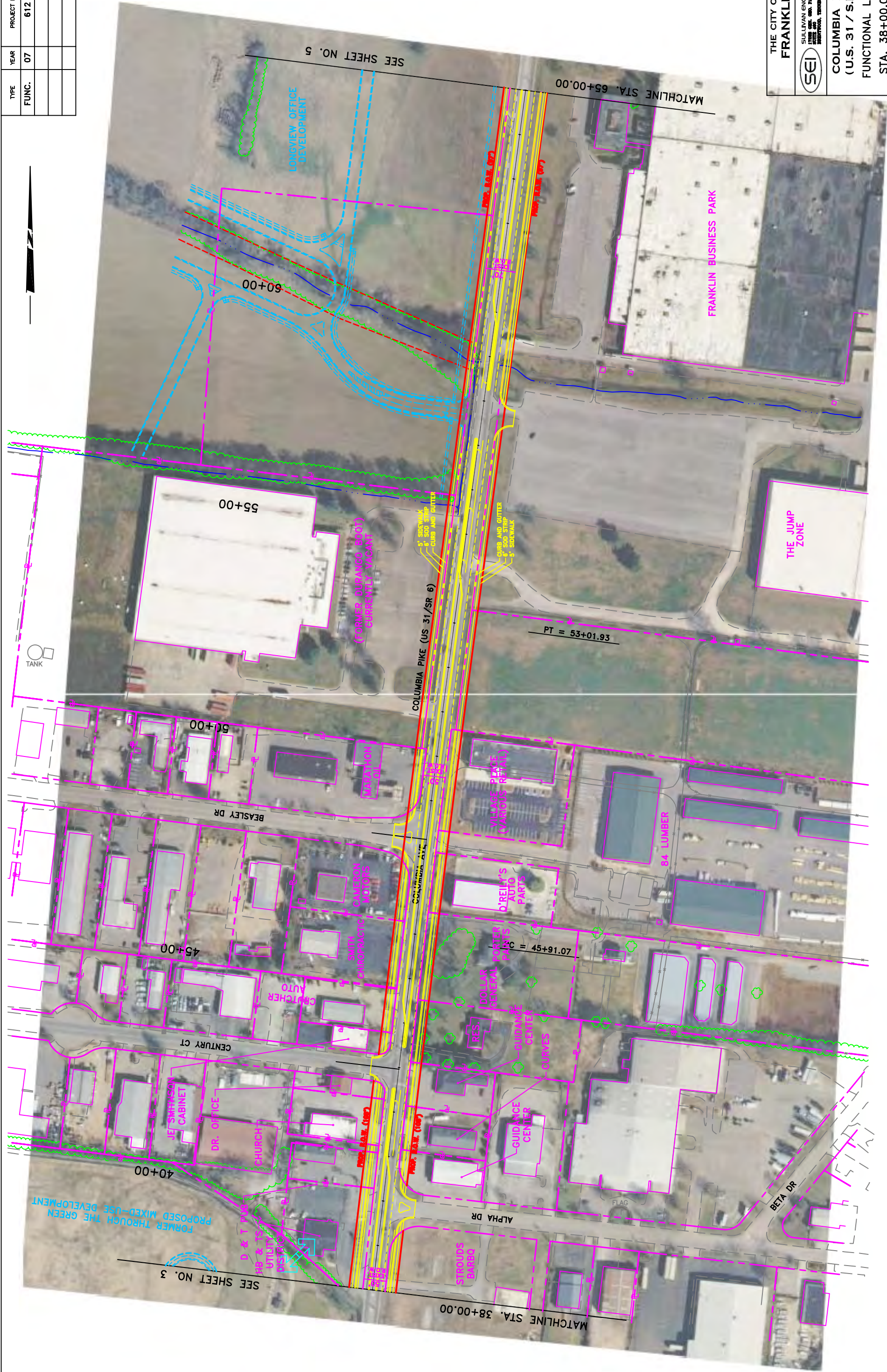
THE CITY OF
FRANKLIN



SULLIVAN ENGINEERING, INC.
1000 PATTEN DRIVE
NASHVILLE, TENNESSEE 37203

COLUMBIA PIKE
(U.S. 31 / S.R. 6)
FUNCTIONAL LAYOUT
BEGIN PROJECT TO
STA. 38+00.00
SCALE: 1"=100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	07	612	4



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COLUMBIA PIKE
(U.S. 31 / S.R. 6)

FUNCTIONAL LAYOUT
STA. 38+00.00 TO
STA. 65+00.00
SCALE: 1"=100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNC.	07	612	5

REV. 11-07-08: REMOVED REFERENCES TO MULTIPLE OPTIONS.

THE CITY OF
FRANKLIN



SULLIVAN ENGINEERING, INC.
STATE OF OHIO - REG. PROFESSIONAL ENGINEERS
RESIDENTIAL, COMMERCIAL, INDUSTRIAL

COLUMBIA PIKE
(U.S. 31 / S.R. 6)
FUNCTIONAL LAYOUT
STA. 65+00.00 TO
END PROJECT
SCALE: 1"=100'

