

Notice of Meeting

CITY COUNCIL WORK SESSION

Monday, March 27, 2023

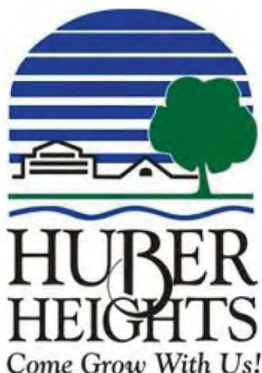
*at or about 6:00 p.m. at City Hall –
Council Chambers – 6131 Taylorsville Road*

Huber Heights Mayor Jeff Gore has scheduled a City Council Work Session to discuss:

- City Manager Report
- Bulletproof Vest Grant Application – Police Division
- Community Garage Sales
- NatureWorks Grant – Thomas Cloud Park
- Supplemental Appropriations
- 2023 Street Program – Award Contracts
- 2023 Sidewalk Program And Concrete Portion Of 2023 Street Program – Award Contracts
- 2023 Rehabilitation Of Sewer Lines Project – Award Contract
- Water Infrastructure Update
- East Sanitary Sewer Extension Project – Award Contract
- Water Main Replacement Projects – Engineering Design – Solicit Bids
- Ongoing Water Main Replacement Program Schedule
- Fire Division Staffing Update
- Case BDP 23-02 – Metropolitan Holdings – Rezoning/ Basic Development Plan – 6801 Executive Boulevard
- Case 23-06 – 2023 Comprehensive Plan
- Horizon Line – Development Agreement Amendment
- Dial Park – Concept Planning
- Liquor Permit #13176630420 – Cassano's – 6315 Brandt Pike
- Board And Commission Appointments
- City Manager Search Process

Please Note:

The meeting will be viewable by the public on live stream available at www.hhoh.org



Distributed – March 23, 2023

For more information, visit www.hhoh.org



**CITY OF HUBER HEIGHTS
STATE OF OHIO**

City Council Work Session

**March 27, 2023
6:00 P.M.**

City Hall - Council Chambers - 6131 Taylorsville Road - Huber Heights, Ohio

- 1. Call Meeting To Order/Roll Call**
- 2. Approval Of Minutes**
 - A. February 21, 2023
 - B. March 15, 2023
- 3. Work Session Topics Of Discussion**
 - A. City Manager Report
 - B. Bulletproof Vest Grant Application - Police Division
 - C. Community Garage Sales
 - D. NatureWorks Grant - Thomas Cloud Park
 - E. Supplemental Appropriations

- F. 2023 Street Program - Award Contracts
- G. 2023 Sidewalk Program And Concrete Portion Of 2023 Street Program - Award Contracts
- H. 2023 Rehabilitation of Sewer Lines Project - Award Contract
- I. Water Infrastructure Update
- J. East Sanitary Sewer Extension Project - Award Contract
- K. Water Main Replacement Projects - Engineering Design - Solicit Bids
- L. Ongoing Water Main Replacement Program Schedule
- M. Fire Division Staffing Update
- N. Case BDP 23-02 - Metropolitan Holdings - Rezoning/Basic Development Plan - 6801 Executive Boulevard
- O. Case ZC 23-06 - 2023 Comprehensive Plan
- P. Horizon Line - Development Agreement Amendment
- Q. Dial Park - Concept Planning
- R. Liquor Permit #13176630420 - Cassanos - 6315 Brandt Pike
- S. Board And Commission Appointments
 - * Parks And Recreation Board - Reappointment
 - * Citizens Water And Sewer Advisory Board - Appointment
- T. City Manager Search Process

4. **Adjournment**

**CITY OF HUBER HEIGHTS
STATE OF OHIO**

Council Work Session Meeting Minutes

Name of Body: Council Work Session

Date: March 27, 2023

Time: 6:00 P.M.

Place: City Hall – 6131 Taylorsville Road – Council Chambers

Members Present:

Kathleen Baker, Councilmember
Nancy Byrge, Councilmember
Mark Campbell, Councilmember
Anita Kitchen, Councilmember
Ed Lyons, Councilmember
Richard Shaw, Councilmember
Don Webb, Councilmember
Jeff Gore, Mayor

Guests Present:

City Staff Present: Russ Bergman, Mark Lightner, Aaron Sorrell, Bryan Chodkowski, Matt Sorg, and Anthony Rodgers.

Topics of Discussion:

- City Manager Report
- Bulletproof Vest Grant Application – Police Division
- Community Garage Sales
- NatureWorks Grant – Thomas Cloud Park

- Supplemental Appropriations
- 2023 Street Program – Award Contracts
- 2023 Sidewalk Program And Concrete Portion Of 2023 Street Program – Award Contracts
- 2023 Rehabilitation Of Sewer Lines Project – Award Contract
- Water Infrastructure Update
- East Sanitary Sewer Extension Project – Award Contract
- Water Main Replacement Projects – Engineering Design – Solicit Bids
- Ongoing Water Main Replacement Schedule
- Fire Division Staffing Update
- Case BDP 23-02 – Metropolitan Holdings – Rezoning/Basic Development Plan – 6801 Executive Boulevard
- Case 23-06 – 2023 Comprehensive Plan
- Horizon Line – Development Agreement Amendment
- Dial Park – Concept Planning
- Liquor Permit #13176630420 – Cassano’s – 6315 Brandt Pike
- Board And Commission Appointments
- City Manager Search Process

1. **Call Meeting To Order/Roll Call**

Mayor Jeff Gore convened the Council Work Session at 6:00 P.M.

Anthony Rodgers took Roll Call.

2. **Approval of Minutes**

The following minutes were approved unanimously at the beginning of this meeting:

- February 21, 2023
- March 15, 2023

There were no changes or corrections to these minutes as submitted.

This Council Work Session was recorded by the City and the recording of this meeting will be posted to the City's website and will also be maintained by the City consistent with the City's records retention schedule.

3. **Work Session Topics Of Discussion**

City Manager Report

Bryan Chodkowski said he would defer the City Manager Report until the City Council Meeting following this Council Work Session in the interest of time.

Bulletproof Vest Grant Application – Police Division

Police Chief Mark Lightner distributed information and proposed legislation to authorize a grant application to the Bureau of Justice Assistance Bulletproof Vest Partnership to purchase replacement protective body armor for the Police Division (see attached). He said this is annual legislation. He said the Police Division has a replacement rotation schedule of bulletproof vests. He said this grant allows for 50% reimbursement on the replacement of outdated bulletproof vests reducing the overall cost to the Police Division.

After discussion, the City Council agreed to recommend approval of the proposed legislation to authorize a grant application to the Bureau of Justice Assistance Bulletproof Vest Partnership to purchase replacement protective body armor for the Police Division and requested that the proposed legislation be placed on the agenda at the March 27, 2023 City

Council Meeting for a first reading as non-emergency legislation with adoption of the legislation at the March 27, 2023 City Council Meeting.

Community Garage Sales

Bryan Chodkowski distributed information and proposed legislation to change the dates for the Community Wide Garage Sales (see attached). He said this legislation would change the Community Wide Garage Sale dates to be the second Thursday, Friday, Saturday and Sunday of June and September of each year due to input received from the community.

After discussion, the City Council agreed to recommend approval of the proposed legislation to change the dates for the Community Wide Garage Sales and requested that the proposed legislation be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation with adoption of the legislation at the March 27, 2023 City Council Meeting.

NatureWorks Grant – Thomas Cloud Park

Bryan Chodkowski distributed information and proposed legislation to authorize a grant application to the Ohio Department of Natural Resources NatureWorks Local Recreation Grants Program for the acquisition of land to expand the size and amenities at Thomas Cloud Park (see attached). He said Oakes Tree Development had initially proposed to construct residential homes located within the City of Riverside adjacent to Thomas Cloud Park; however, approximately nine (9) acres of the parcel could only be accessed via Huber Heights roadway infrastructure. Acknowledging that developing the acreage presents practical challenges with respect to providing basic government services, he said the developer, Riverside, and Huber Heights mutually agreed to a purchase agreement, whereas the acreage shall be purchased for the purposes of expanding Thomas Cloud Park and increasing accessibility for Huber Heights and Riverside residents. He said the Ohio Department of Natural Resources (ODNR) NatureWorks grant is a state-funded grant program that provides up to 75% of project cost assistance to Ohio municipalities for acquisition or development of public outdoor recreation areas. Per application instructions, he said the City must utilize a resolution documenting authorization for completing a NatureWorks grant application.

After discussion, the City Council agreed to recommend approval of the proposed legislation to authorize a grant application to the Ohio Department of Natural Resources NatureWorks Local Recreation Grants Program for the acquisition of land to expand the size and amenities at Thomas Cloud Park and requested that the proposed legislation be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation with adoption of the legislation at the March 27, 2023 City Council Meeting.

Supplemental Appropriations

Bryan Chodkowski distributed information and proposed legislation to approve various supplemental appropriations for 2023 (see attached). He said that based on feedback from members of the City Council, he recommended that this proposed legislation be passed to a second reading after the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation to approve various supplemental appropriations for 2023 be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation and be passed to a second reading at the April 10, 2023 City Council Meeting.

2023 Street Program – Award Contracts

Russ Bergman distributed information and proposed legislation to award contracts for the 2023 Street Program (see attached). He said this legislation will authorize the City Manager to award and enter into contracts for the 2023 Street Program. He said the Street Improvement Fund and the Gas Tax Fund will be utilized for the construction of the different sections of this program.

After discussion, the City Council agreed to recommend approval of the proposed legislation to award contracts for the 2023 Street Program and requested that the proposed legislation be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation with adoption of the legislation at the March 27, 2023 City Council Meeting.

2023 Sidewalk Program And Concrete Portion Of 2023 Street Program – Award Contracts

Russ Bergman distributed information and proposed legislation to award contracts for the 2023 Sidewalk Program and the concrete portion of the 2023 Street Program (see attached). He said this legislation will authorize the award for:

Section A: Replacement of Concrete Sidewalks and Aprons to Coburn's Concrete, LLC. as the lowest and best bidder, at a cost not to exceed \$112,000.

Section C: Concrete Portion of the 2023 Street Program to Multi Task Construction as the lowest and best bidder at a cost not to exceed \$913,000.

After discussion, the City Council agreed to recommend approval of the proposed legislation to award contracts for the 2023 Sidewalk Program and the concrete portion of the 2023 Street Program and requested that the proposed legislation be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation with adoption of the legislation at the March 27, 2023 City Council Meeting.

2023 Rehabilitation Of Sewer Lines Project – Award Contract

Russ Bergman distributed information and proposed legislation to award a contract for the 2023 Rehabilitation of Sewer Lines Project (see attached). He said this legislation will authorize the City Manager to enter into a contract with United Survey, Inc. as the lowest and best bidder for the 2023 Rehabilitation of Sewer Lines Project at a cost not to exceed \$350,000. He said the Sewer Capital Fund will be utilized for this project.

After discussion, the City Council agreed to recommend approval of the proposed legislation to award a contract for the 2023 Rehabilitation of Sewer Lines Project and requested that the proposed legislation be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation with adoption of the legislation at the March 27, 2023 City Council Meeting.

Water Infrastructure Update

Bryan Chodkowski distributed information regarding an update on the City's water infrastructure (see attached). He reviewed the spreadsheet and he said the spreadsheet will continue to be updated for each Council Work Session.

The City Council posed questions to Bryan Chodkowski and Russ Bergman about the Water Infrastructure Update spreadsheet.

East Sanitary Sewer Extension Project – Award Contract

Bryan Chodkowski distributed information and proposed legislation to award a contract for the East Sanitary Sewer Extension Project (see attached). He said that based on feedback from members of the City Council, he recommended that this proposed legislation be passed to a second reading after the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation to award a contract for the East Sanitary Sewer Extension Project be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation and be passed to a second reading at the April 10, 2023 City Council Meeting.

Water Main Replacement Projects – Engineering Design – Solicit Bids

Bryan Chodkowski distributed information and proposed legislation to authorize a Request For Proposals (RFP) to provide engineering design for future Water Main Replacement Projects (see attached). He said that based on feedback from members of the City Council, he recommended that this proposed legislation be passed to a second reading after the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation to authorize a Request For Proposals (RFP) to provide engineering design for future Water Main Replacement Projects

be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation and be passed to a second reading at the April 10, 2023 City Council Meeting.

Ongoing Water Main Replacement Schedule

Bryan Chodkowski distributed information and proposed legislation to direct the City Engineer to prepare a schedule for two Water Main Replacement Projects valued at \$6,000,000 each to be designed and constructed at eighteen-month cycles (see attached). He said that based on feedback from members of the City Council, he recommended that this proposed legislation be passed to a second reading after the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation to direct the City Engineer to prepare a schedule for two Water Main Replacement Projects valued at \$6,000,000 each to be designed and constructed at eighteen-month cycles be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation and be passed to a second reading at the April 10, 2023 City Council Meeting.

Fire Division Staffing Update

Bryan Chodkowski distributed information regarding an update on Fire Division staffing (see attached). He reviewed the spreadsheet and he said the spreadsheet will continue to be updated for each Council Work Session.

The City Council posed questions to Bryan Chodkowski about the Fire Division Staffing Update spreadsheet.

Case BDP 23-02 – Metropolitan Holdings – Rezoning/Basic Development Plan – 6801 Executive Boulevard

Aaron Sorrell distributed information and proposed legislation for Case BDP 23-02 to approve a Rezoning to Planned Mixed Use (PM) and a Basic Development Plan for property located at 6801 Executive

Boulevard (see attached). He said he would provide a PowerPoint presentation and more detailed information regarding Case BDP 23-02 at the public hearing at the March 27, 2023 City Council Meeting following this Council Work Session. He said that he recommended that this proposed legislation be passed to a second reading after the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation for Case BDP 23-02 to approve a Rezoning to Planned Mixed Use (PM) and a Basic Development Plan for property located at 6801 Executive Boulevard be placed on the agenda at the March 27, 2023 City Council Meeting for a public hearing and a first reading as non-emergency legislation and be passed to a second reading at the April 10, 2023 City Council Meeting.

Case 23-06 – 2023 Comprehensive Plan

Aaron Sorrell distributed information and proposed legislation for Case ZC 23-06 to adopt the 2023 Comprehensive Plan (see attached). He said he would provide a PowerPoint presentation and more detailed information regarding Case ZC 23-06 at the public hearing at the March 27, 2023 City Council Meeting following this Council Work Session. He said that he recommended that this proposed legislation be adopted at the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation for Case ZC 23-06 to adopt the 2023 Comprehensive Plan be placed on the agenda at the March 27, 2023 City Council Meeting for a public hearing and a first reading as non-emergency legislation with adoption of the legislation at the March 27, 2023 City Council Meeting.

Horizon Line – Development Agreement Amendment

Bryan Chodkowski distributed information and proposed legislation to authorize a First Amendment to the Horizon Line development agreement (see attached). He said that based on feedback from members of the City Council, he recommended that this proposed legislation be

passed to a second reading after the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation to authorize a First Amendment to the Horizon Line development agreement be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation and be passed to a second reading at the April 10, 2023 City Council Meeting.

Dial Park – Concept Planning

Bryan Chodkowski distributed information and proposed legislation to direct the City Manager to plan improvements to Dial Park (see attached). He said that based on feedback from members of the City Council, he recommended that this proposed legislation be passed to a second reading after the first reading of the proposed legislation at the March 27, 2023 City Council Meeting following this Council Work Session.

After discussion, the City Council agreed to recommend that the proposed legislation to direct the City Manager to plan improvements to Dial Park be placed on the agenda at the March 27, 2023 City Council Meeting for a first reading as non-emergency legislation and be passed to a second reading at the April 10, 2023 City Council Meeting.

Liquor Permit #13176630420 – Cassano's – 6315 Brandt Pike

Anthony Rodgers distributed information regarding an application for a new liquor permit for Cassano's at 6315 Brandt Pike (see attached). He said there was an application for new liquor permit #13176630420 for Cassano's at 6315 Brandt Pike. He said the Police Division and Fire Division have reviewed the liquor permit application and have no objections to the new liquor permit.

After discussion, the City Council agreed to recommend that a motion to authorize the Clerk of Council to respond to the Ohio Division of Liquor Control with no objections to the approval of the new liquor permit

#13176630420 for Cassano's at 6315 Brandt Pike be placed on the agenda for the March 27, 2023 City Council Meeting for approval.

Board And Commission Appointments

Anthony Rodgers distributed information regarding a reappointment to the Parks and Recreation Board (see attached). He said it was the recommendation of City Staff to reappoint Vincent King to the Parks and Recreation Board for a term ending March 31, 2026. He said an updated background check was completed on Mr. King by Human Resources.

After discussion, the City Council agreed to recommend approval of the reappointment of Vincent King to the Parks and Recreation Board for a term ending March 31, 2026 and requested that the motion be placed on the agenda for approval at the March 27, 2023 City Council Meeting.

Anthony Rodgers distributed information regarding an appointment to the Citizens Water and Sewer Advisory Board (see attached). He said it was the recommendation of the City's interview panel to appoint Michael Mullen to the Citizens Water and Sewer Advisory Board for a term ending January 1, 2026. He said a background check was completed on Mr. Mullen by Human Resources.

After discussion, the City Council agreed to recommend approval of the appointment of Michael Mullen to the Citizens Water and Sewer Advisory Board for a term ending January 1, 2026 and requested that the motion be placed on the agenda for approval at the March 27, 2023 City Council Meeting.

City Manager Search Process

Anthony Rodgers distributed information regarding the City Manager search process (see attached). He said he had again reached out to Baker Tilly regarding restarting the City Manager search process. He said Patty Heminover had said that Baker Tilly was ready to initiate the recruitment phase of the City Manager search process to begin seeking applications for the City Manager position as soon as April 1, 2023. He said Baker Tilly was seeking approval to initiate the recruitment efforts. He said the recruitment brochure had been updated. He said Baker Tilly would build a timeline of activities for the City Manager search process off of the

initiation of the recruitment phase that would take approximately sixty days leading up to applicant finalist interviews in June, 2023.

Richard Shaw addressed the Education and Experience section in the recruitment brochure and he said he would like to see some modifications to the language in that section to either remove the language about an equivalent combination of education and experience or to add additional language indicating a preference for applicants with City Manager or City Administrator experience.

Mayor Jeff Gore indicated he preferred retaining the language in Education and Experience section in the recruitment brochure about an equivalent combination of education and experience to allow for a broader pool of applicants with different backgrounds, education, and experience for Council consideration.

After discussion, the City Council agreed to recommend that the Clerk of Council connect with Baker Tilly and request that Baker Tilly modify the language in the Education and Experience section in the recruitment brochure to indicate a preference for applicants with City Manager or City Administrator experience while retaining the language about an equivalent combination of education and experience. The City Council also directed the Clerk of Council to initiate the recruitment phase of the City Manager search process with Baker Tilly after completion of the proposed modifications to the recruitment brochure.

Other Business

There was no other business conducted at the Council Work Session.

4. **Adjournment**

Mayor Jeff Gore adjourned the Council Work Session at 6:57 P.M.

AI-9049

Topics of Discussion **B.**

Council Work Session

Meeting Date: 03/27/2023

Bulletproof Vest Grant Application - Police Division

Submitted By: Anthony Ashley

Department: Police

Division: Police

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Bulletproof Vest Grant Application - Police Division

Purpose and Background

Bulletproof vests have an efficiency life span of five (5) years. The Police Division uses this life span as a guideline for the replacement rotation schedule of bulletproof vests. This grant allows for 50% reimbursement on the replacement of outdated bulletproof vests reducing the overall cost to the Police Division.

Fiscal Impact

Source of Funds: Police Budget

Cost: \$14,196.38

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Resolution

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO APPLY FOR AND ACCEPT GRANT FUNDS FROM THE BUREAU OF JUSTICE ASSISTANCE BULLETPROOF VEST PARTNERSHIP FOR THE PURPOSE OF PURCHASING REPLACEMENT PROTECTIVE BODY ARMOR.

WHEREAS, the City of Huber Heights supports the need for additional police related equipment, specifically bulletproof vests; and

WHEREAS, the U.S Bureau of Justice Assistance provides the allocation of funding in the form of the Bulletproof Vest Partnership program for purchasing new or additional bulletproof vests; and

WHEREAS, the Bureau of Justice Assistance Bulletproof Vest Partnership Act of 2000 requires that funding priority be given to jurisdictions with populations under 100,000; and,

WHEREAS, the Huber Heights Police Division has been a past recipient of Bulletproof Vest Partnership funds which provide for a 50 percent reimbursement to the City for the purchase of bulletproof vests.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City of Huber Heights hereby endorses and supports the submission of an application for the Bulletproof Vest Partnership program and authorizes the necessary actions to implement said grant, if approved by the U.S. Bureau of Justice Assistance.

Section 2. The City Manager is hereby authorized to apply for and, if awarded, enter into an agreement with the U.S. Bureau of Justice Assistance to administer the grant to implement the Bulletproof Vest Partnership program.

Section 3. Reimbursement made to the Police Division under this grant will be re-appropriated to the Police Fund.

Section 4. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 5. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9074

Topics of Discussion C.

Council Work Session

Meeting Date: 03/27/2023

Community Garage Sales

Submitted By: Sarah Williams

Department: Economic Development

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Community Garage Sales

Purpose and Background

This legislation would change the Community Wide Garage Sale dates to be the second Thursday, Friday, Saturday and Sunday of June and September of each year due to input received from the community.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Resolution

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

DECLARING THE COMMUNITY WIDE GARAGE SALE DATES TO BE THE SECOND THURSDAY, FRIDAY, SATURDAY AND SUNDAY OF JUNE AND SEPTEMBER OF EACH YEAR AS THE ANNUAL COMMUNITY WIDE GARAGE SALE DAYS, AUTHORIZING THE CITY MANAGER TO PERMIT AND WAIVE FEES FOR OUTDOOR RETAIL SALES AND DISPLAYS, PERMIT FOR THE COMMUNITY WIDE GARAGE SALE, AND PERMIT TEMPORARY SALES IN RESIDENTIAL DISTRICTS FOR THE COMMUNITY WIDE GARAGE SALE.

WHEREAS, Huber Heights Codified Ordinance Section 1121.02 allows City Council to revise the fee schedule for required permits and services; and

WHEREAS, the City Staff has recommended that the standard fee of \$100.00 for outdoor retail sales and displays permits be waived for the second Thursday, Friday, Saturday and Sunday of June and September of each year; and

WHEREAS, the second Thursday, Friday, Saturday and Sunday of June and September each year are hereby declared as a Community Wide Garage Sale to encourage and promote interest in the community.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The second Thursday, Friday, Saturday and Sunday of June and September each year are hereby declared as Community Wide Garage Sale days.

Section 2. The \$100.00 fee for outdoor retail sales and displays permits is waived for a Community Wide Garage Sale.

Section 3. Temporary sales, outdoor retail sales and displays during a Community Wide Garage Sale are permitted by registering with the City of Huber Heights and do not count towards the two permitted sales per calendar year.

Section 4. The outdoor retail sales are permitted to feature general merchandise and are permitted during the second Thursday, Friday, Saturday and Sunday of June and September each year.

Section 5. The temporary sales are permitted to feature general merchandise and are permitted during the second Thursday, Friday, Saturday and Sunday of June and September each year.

Section 6. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 7. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9063

Topics of Discussion D.

Council Work Session

Meeting Date: 03/27/2023

NatureWorks Grant - Thomas Cloud Park

Submitted By: Kyren Gantt

Department: Economic Development

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

NatureWorks Grant - Thomas Cloud Park

Purpose and Background

In August, 2022, the City of Huber Heights acquired land through an agreement with Oakes Tree Development and the City of Riverside. The purpose of the acquisition was to expand the size and amenities of Thomas Cloud Park. Initially, Oakes Tree Development proposed to construct residential homes located within the City of Riverside adjacent to Thomas Cloud Park; however, approximately nine (9) acres of the parcel could only be accessed via Huber Heights roadway infrastructure. Acknowledging that developing the acreage presents practical challenges with respect to providing basic government services, the developer, Riverside, and Huber Heights mutually agreed to a purchase agreement, whereas the acreage shall be purchased for the purposes of expanding Thomas Cloud Park and increasing accessibility for Huber Heights and Riverside residents.

The Ohio Department of Natural Resources (ODNR) NatureWorks grant is a state-funded grant program that provides up to 75% of project cost assistance to Ohio municipalities for acquisition or development of public outdoor recreation areas. Per application instructions, the applicant must utilize an ordinance or resolution documenting authorization for completing a NatureWorks grant application.

Fiscal Impact

Source of Funds: Grant

Cost: \$162,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

The City shall have five (5) years to complete the acquisition of the acres; the purpose being to provide sufficient time and opportunity to apply for grant funding. In exchange for the time consideration, the City has agreed to pay the developer earnest monies. The total earnest monies shall equal 20% of the total purchase price of the acres. Provided that the City is able to obtain the grant(s) necessary to purchase the acres on or before December 31, 2026, those monies paid in earnest in advance of the grant's award shall be applied toward the purchase of the property and, if possible, applied as the City's matching percentage of the awarded grant.

Attachments

Resolution - City of Riverside
ODNR Authorization Form
Resolution

22-R-2786

MAYOR

RECORD OF RESOLUTIONS

Resolution No.

22-R-2786

Page 1

AUG 18 2022

ATTEST:



CLERK

CERTIFICATE OF THE CLERK

I, Yvette Smullen, Clerk of the City of Riverside, Ohio, do hereby certify that the foregoing Resolution is a true and correct copy of Resolution No. 22-R-2786 passed by the Riverside City Council on AUG 18 2022.

IN TESTIMONY WHEREOF, witness my hand and official seal this day
AUG 19 2022.



CLERK

**PURCHASE AGREEMENT BETWEEN OAKES TREES DEVELOPMENT;
THE CITY OF RIVERSIDE, OHIO; AND THE CITY OF HUBER HEIGHTS, OHIO**

WHEREAS, Oakes Trees Development (the "Developer") has proposed to construct single-family homes (the "Project") on Montgomery County parcel identification number 139 00802 0033 (the "Parcel"), a proposed site plan for the Project is attached hereto as Exhibit A for reference; and

WHEREAS, the Parcel is located within the City of Riverside, Ohio ("Riverside"); and

WHEREAS, approximately nine (9) acres (the "Acres") of the Parcel can only be accessed via the City of Huber Heights' ("Huber Heights") roadway infrastructure on Harshmanville Road, a map of which is attached hereto as Exhibit B for reference; and

WHEREAS, the Developer, Riverside, and Huber Heights wish for the Project to proceed but acknowledge that developing the Acres presents certain practical challenges with respect to providing basic governmental services; and

WHEREAS, the Developer, Riverside, and Huber Heights met and, in the interest of advancing the Project in a manner that benefits all the parties, have agreed that:

- 1) The Developer willingly offers for sale, and Huber Heights willingly agrees to purchase, the Acres under the mutually agreeable terms and conditions:
 - a. The agreed upon purchase price for the Acres shall be established via an appraisal performed by a licensed, neutral third party in accordance to Uniform Appraisal Standards or the Developer's purchase price of \$18,000 per acre, whichever amount is greater. The cost of said appraisal shall be paid equally by the Developer and Huber Heights.
 - b. The Acres shall be purchased for the purposes of expanding Tom Cloud Park, which is immediately adject to the Acres' eastern boundary line.
 - c. Huber Heights shall have five (5) years from the date of this agreement's execution of this agreement to complete its acquisition of the Acres. The purpose being to provide Huber Heights sufficient time and opportunity to apply for the grant funding necessary to purchase the Acres in accordance with the conditions noted above.
 - d. In exchange for the time considerations noted in Section 1(c), Huber Heights agrees to pay the Developer earnest monies. For the purposes of determining earnest payments in absences of an appraisal, the parties agree that Developer's purchase price of \$18,000 per acre shall be used. Total earnest monies shall equal 20% of the total purchase price of the Acres which will paid in the amounts and on the dates as follows:

- i. \$ 15,000.00 upon the execution of this agreement;
- ii. \$ 7,500.00 on or before July 1, 2023;
- iii. \$ 5,000.00 on or before July 1, 2024;
- iv. \$ 2,500.00 on or before July 1, 2025; and
- v. \$ 2,500.00 on or before July 1, 2026.

If appraisal amount comes in higher than the \$18,000 per acre price, the City will add the difference to their next deposit amount in order to get the deposit to 20% of the purchase price.


Provided that the City is able to obtain the grant(s) necessary to purchase the acres on or before December 31, 2026, those monies paid in earnest in advance of the grant's award shall be applied toward the purchase of the property and, if possible, applied as the City's matching percentage of the awarded grant.

- 2) In the event the Huber Heights has not successfully secured the necessary grant(s) to acquire the Acres by December 31, 2026, those earnest monies paid by Huber Heights as noted in Section 1(d) shall be forfeit to the Developer unless subsequent terms and conditions can be negotiated by and agreed to by the Developer and Huber Heights.
- 3) Riverside acknowledges that Huber Heights' efforts to expand Tom Cloud Park presents an opportunity for improved recreational opportunities to its future residents within the Project. Upon the execution of this agreement, Riverside agrees to adopt a resolution in support of Huber Heights' efforts to expand Tom Cloud Park.
- 4) Should Huber Heights successfully obtain the grant funds necessary to purchase the Acres, Riverside agrees and commits to meet with Huber Heights for the purposes of discussing and planning the access to and development of the Acres and each community's respective role in executing and supporting such plans.


NOW, THEREFORE AGREED AMONGST THE PARTIES, the Developer, Huber Heights, and Riverside enter into this Agreement in furtherance of their mutual interests and benefit.


Mr. Lance Oakes, Principal
Oakes Trees Development

7/14/2023
Date


Mr. Bryan RH Chodkowski, Interim City Manager
City of Huber Heights, OH

7/13/22
Date


Mr. Joshua Rauch, City Manager
City of Riverside, OH

8/22/22
Date

FORM No. 2: RESOLUTION OF AUTHORIZATION

The applicant must utilize an ordinance or resolution documenting authorization for filing this NatureWorks application. A hand signed certified copy of the ordinance or resolution must be included with the NatureWorks application. *However, if the next meeting of the governing body occurs after the July 15th grant application deadline, the certified Resolution may be submitted to ODNR up to one month after the grant deadline, or by August 15th.* If this situation applies, the applicant must include a brief explanation with their grant application.

Below is an example format for a resolution of authorization to be passed by the governing body of the local government agency. The applicant may use this example format or its own standard format. If applicants are able to obligate the funds required to satisfactorily complete the proposed project within their resolution, they should do so.

WHEREAS, the State of Ohio through the Ohio Department of Natural Resources, administers financial assistance for public recreation purposes, through the State of Ohio NatureWorks grant program and

WHEREAS, the _____ desires financial assistance under the NatureWorks Grant Program,

NOW, THEREFORE, be it resolved by the _____
(name of applicant)

That the _____ approves filing this application for financial assistance.
(name of applicant)

That _____ is hereby authorized and directed to execute
(local coordinator)
and file an application with the Ohio Department of Natural Resources and to provide all information and documentation required to become eligible for possible funding assistance.

That the _____ does agree to obligate the funds required
(name of applicant)
to satisfactorily complete the proposed project and become eligible for reimbursement under the terms of the **NatureWorks Grant Program.**

REQUIRED CERTIFICATE OF RECORDING OFFICER

I, the undersigned, hereby certify, that the foregoing is a true and correct copy of resolution adopted by the _____ held on the ____ day in the month of _____, 20__, and that I am a duly authorized to execute this certificate.

(original signature)

(title)

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO FILE AND TO ACCEPT IF AWARDED A GRANT APPLICATION WITH THE OHIO DEPARTMENT OF NATURAL RESOURCES NATUREWORKS LOCAL RECREATION GRANTS PROGRAM FOR THE ACQUISITION OF LAND TO EXPAND THE SIZE AND AMENITIES AT THOMAS A. CLOUD PARK.

WHEREAS, Oakes Tree Development proposed to construct residential homes located within the City of Riverside adjacent to Thomas A. Cloud Park; however, approximately nine (9) acres of the parcel could only be accessed via Huber Heights roadway infrastructure; and

WHEREAS, developing this acreage presents practical challenges with respect to providing basic government services, so the developer, Riverside, and Huber Heights mutually agreed to a purchase agreement, whereas the acreage shall be purchased for the purposes of expanding Thomas A. Cloud Park and increasing accessibility for Huber Heights and Riverside residents; and

WHEREAS, the Ohio Department of Natural Resources (ODNR) NatureWorks Grant Program is a state-funded grant program that provides up to 75% of project cost assistance to Ohio municipalities for acquisition or development of public outdoor recreation areas and the City of Huber Heights desires to seek financial assistance for this project under the ODNR NatureWorks Grant Program; and

WHEREAS, NatureWorks projects require at least a 25% local share commitment.

NOW, THEREFORE BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Council of Huber Heights hereby approves filing a grant application for Ohio Department of Natural Resources (ODNR) NatureWorks Grant Program for funding assistance for the acquisition of land to expand the size and amenities at Thomas A. Cloud Park

Section 2. The City Manager is hereby authorized to and directed to fully execute and file a grant application with the Ohio Department of Natural Resources (ODNR) NatureWorks Grant Program and to provide all information and documentation required to become eligible for possible funding assistance.

Section 3. The City Council of Huber Heights agrees to obligate the funds required to satisfactorily complete the proposed project and become eligible for reimbursement under the terms of the Ohio Department of Natural Resources (ODNR) Natureworks Grant Program.

Section 4. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 5. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9054

Topics of Discussion E.

Council Work Session

Meeting Date: 03/27/2023

Supplemental Appropriations

Submitted By: Jim Bell

Department: Finance **Division:** Accounting

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Supplemental Appropriations

Purpose and Background

The supplemental appropriations are for the following purposes:

- \$450,000 transfer from Sewer Fund to Sewer Capital Fund for East Sanitary Sewer Extension Project (bids received over amount budgeted).
- \$525,000 advance from General Fund to Capital Improvement Fund to purchase land for the new Public Works facility.
- \$1,000,000 advance from General Fund to Water Utility Reserve Fund for engineering for additional water main replacement design.
- \$62,400 advance from the General Fund to ED/GE Capital Improvements Fund for initial funding for the Millat Industries Project (to be reimbursed by grant proceeds).
- \$62,400 return of advance from ED/GE Capital Improvements Fund to General Fund upon receipt of grant proceeds.
- \$27,300 reduction in Accounting Division personnel expenses.
- \$27,300 for temporary staffing services for the Accounting Division.
- \$55,000 for the Street Safety Study Project.
- \$15,000 for Annual Storm Water Report and the Illicit Discharge Detection and Elimination Plan.
- \$14,545 for the remaining balance on the Comprehensive Development Plan.
- \$16,850 reduction in the Engineering section of the Gasoline Tax Fund.
- \$16,850 increase in the Public Works section of the Gasoline Tax Fund for a Ver-Mac high definition message board for traffic information.

Fiscal Impact

Source of Funds: Various Funds

Cost: \$2,059,545

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Ordinance

CITY OF HUBER HEIGHTS
STATE OF OHIO

ORDINANCE NO. 2023-O-

AUTHORIZING ADVANCES AND TRANSFERS BETWEEN VARIOUS FUNDS OF THE CITY OF HUBER HEIGHTS, OHIO AND AMENDING ORDINANCE NO. 2022-O-2562 BY MAKING SUPPLEMENTAL APPROPRIATIONS FOR EXPENSES OF THE CITY OF HUBER HEIGHTS, OHIO FOR THE PERIOD BEGINNING JANUARY 1, 2023 AND ENDING DECEMBER 31, 2023.

WHEREAS, supplemental appropriations for expenses of the City of Huber Heights must be made for appropriations of funds for various 2023 operating and project funding.

NOW, THEREFORE, BE IT ORDAINED by the City Council of Huber Heights, Ohio that:

Section 1. Authorization is hereby given to advance and transfer certain monies up to amounts not exceeding those shown and for the purposes cited in Exhibit A, and such authorization applies to any and all such advances and transfers necessary and effected after January 1, 2023.

Section 2. Ordinance No. 2022-O-2562 is hereby amended as shown in Exhibit B of this Ordinance.

Section 3. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 4. This Ordinance shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

EXHIBIT A

| | | | |
|-------------------------|-------------------------|-----------------------|---------------------------------------|
| <i>Transfer:</i> | | | |
| <u><i>Amount</i></u> | <u><i>Fund From</i></u> | <u><i>Fund To</i></u> | <u><i>Purpose</i></u> |
| \$450,000.00 | 551 Sewer | 552 Sewer Capital | East Sanitary Sewer Extension |
| | | | |
| <i>Advance:</i> | | | |
| <u><i>Amount</i></u> | <u><i>Fund From</i></u> | <u><i>Fund To</i></u> | <u><i>Purpose</i></u> |
| \$ 525,000.00 | 101 General | 406 Capital Imp. | Purchase land for PW facility |
| \$1,000,000.00 | 101 General | 504 Water Util Res. | Engineering for \$12M of watermain |
| \$ 62,400.00 | 101 General | 427 ED/GE Cap Imp | Millat Industries project pre-funding |
| \$ 62,400.00 | 427 ED/GE Cap Imp | 101 General | Return of advance - grant received |

EXHIBIT B

AMENDING ORDINANCE NO. 2022-O-2562 BY MAKING APPROPRIATIONS FOR EXPENSES OF THE CITY OF HUBER HEIGHTS, OHIO FOR THE PERIOD BEGINNING JANUARY 1, 2023 AND ENDING DECEMBER 31, 2023.

- 1) Section 1 of Ordinance No. 2022-O-2562 is hereby amended to reflect changes in the appropriations of the 101 General Fund, as follows:
 - a. Subsection d) Planning & Development, Operations and Capital increase of \$14,545.00
 - b. Subsection k) Accounting, Personnel decrease of \$27,300.00
 - c. Subsection k) Accounting, Operations and Capital increase of \$27,300.00
 - d. Subsection r) Non-Departmental, Advances increase of \$1,587,400.00.
- 2) Section 3 of Ordinance No. 2022-O-2562 is hereby amended to reflect changes in the appropriations of the 203 Gasoline Tax Fund, as follows:
 - a. Subsection a) Engineering, Operations and Capital increase of \$55,000.00
 - b. Subsection a) Engineering, Operations and Capital decrease of \$16,850.00
 - c. Subsection b) Streets, Operations and Capital increase of \$16,850.00.
- 3) Section 30 of Ordinance No. 2022-O-2562 is hereby amended to reflect an increase in the appropriations of the 406 Capital Improvement Fund, as follows:
 - a. Subsection c) Capital, Operations and Capital of \$525,000.00.
- 4) Section 33 of Ordinance No. 2022-O-2562 is hereby amended to reflect an increase in the appropriations of the 427 ED/GE Capital Improvement Fund, as follows:
 - a. Subsection a) Capital, Operations and Capital of \$62,400.00
 - b. Subsection b) Non-Departmental, Advances of \$62,400.00.
- 5) Section 42 of Ordinance No. 2022-O-2562 is hereby amended to reflect an increase in the appropriations of the 504 Water Utility Reserve Fund, as follows:
 - a. Subsection a) Capital, Operations and Capital of \$1,000,000.00
- 6) Section 44 of Ordinance No. 2022-O-2562 is hereby added to reflect an increase in the appropriations of the 551 Sewer Fund, as follows:
 - a. Subsection e) Non-Departmental, Transfers of \$450,000.00.
- 7) Section 45 of Ordinance No. 2022-O-2562 is hereby added to reflect an increase in the appropriations of the 552 Sewer Acquisition/Capital Fund, Operations and Capital of \$450,000.00.
- 8) Section 46 of Ordinance No. 2022-O-2562 is hereby added to reflect an increase in the appropriations of the 571 Storm Water Management Fund, as follows:
 - a. Subsection a) Engineering, Operations and Capital of \$15,000.00.

| | |
|---------------------------------|----------------|
| General Fund | \$1,601,945.00 |
| Gasoline Tax Fund | \$55,000.00 |
| Capital Improvements Fund | \$525,000.00 |
| ED/GE Capital Improvements Fund | \$124,800.00 |
| Water Utility Reserve Fund | \$1,000,000.00 |
| Sewer Fund | \$450,000.00 |
| Sewer Acquisition/Capital Fund | \$450,000.00 |
| Storm Water Management Fund | \$15.000.00 |

AI-9052

Topics of Discussion F.

Council Work Session

Meeting Date: 03/27/2023

2023 Street Program - Award Contracts

Submitted By: Hanane Eisentraut

Department: Engineering

Division:

Engineering

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

2023 Street Program - Award Contracts

Purpose and Background

This legislation will authorize the City Manager to award and enter into contracts for the 2023 Street Program. The Street Improvement Fund and Gas Tax Fund will be utilized for the construction of the different sections of this program.

Fiscal Impact

Source of Funds: Street Improvement Fund/Gas Tax Fund

Cost: \$1,463,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Bid Results

Map - Paving

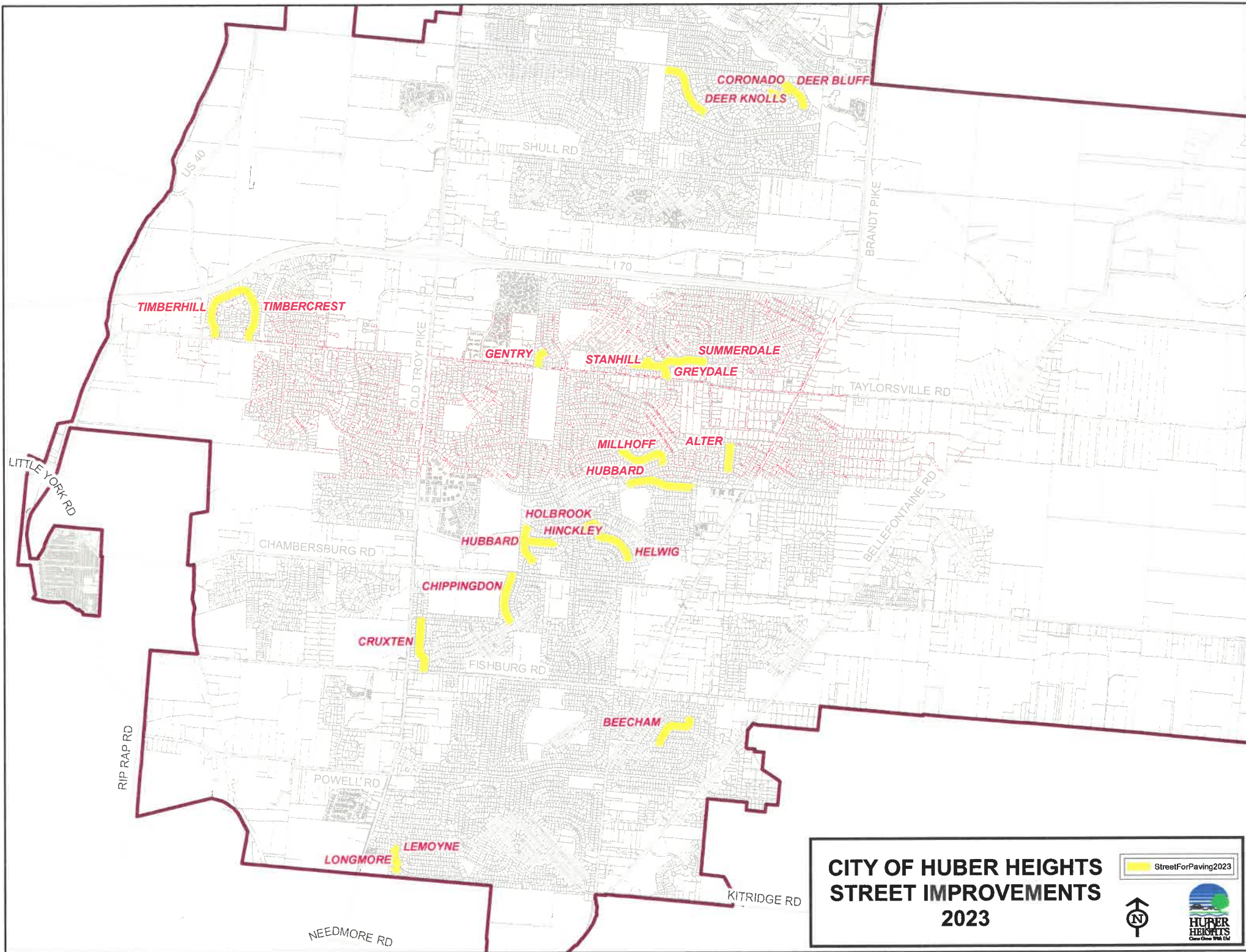
Map - Paving With Water Main Replacement

Resolution



**CITY OF HUBER HEIGHTS
2023 STREET PROGRAM
BID RESULT
BID DATE: MARCH 3, 2023**

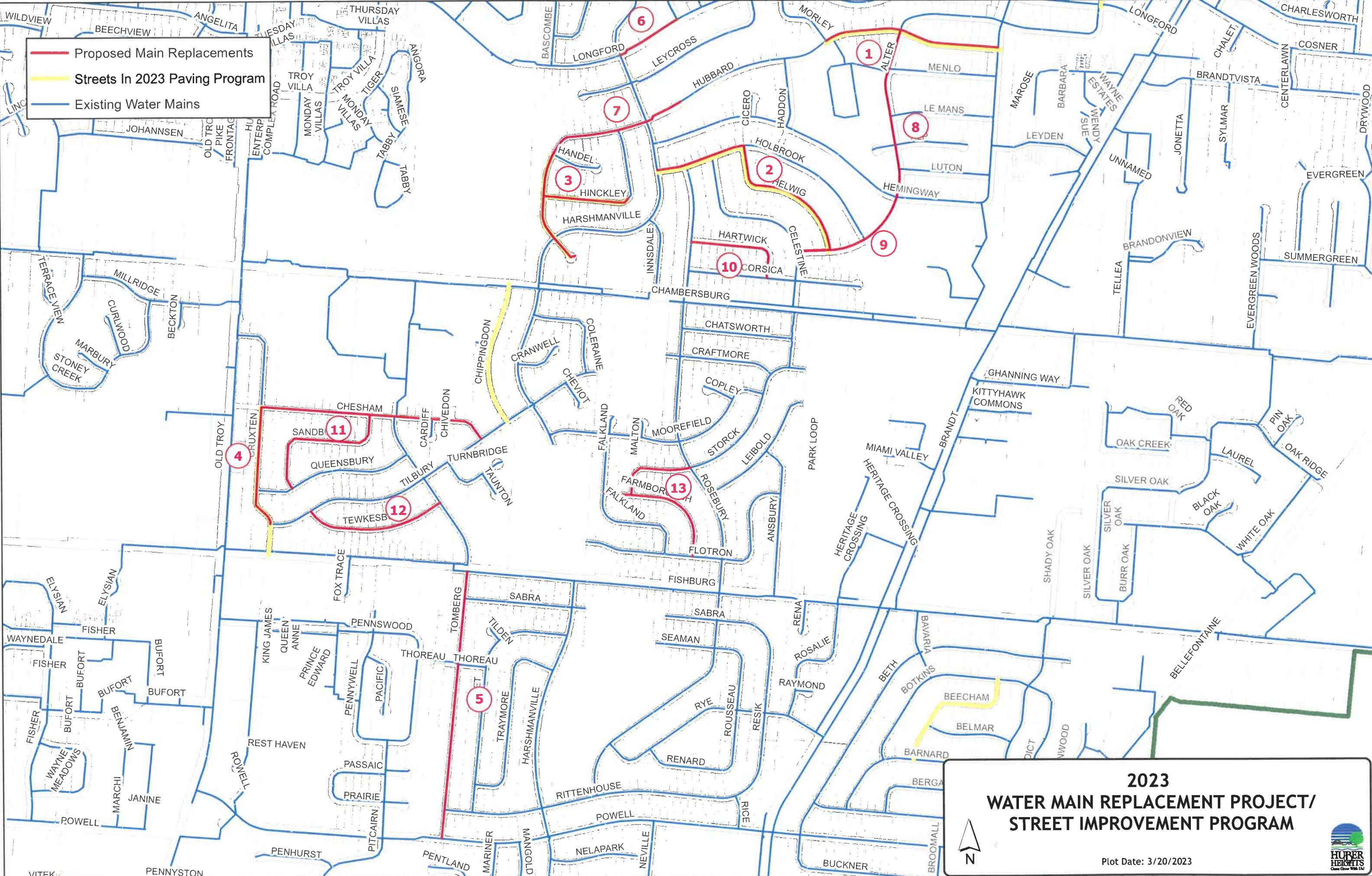
| CONTRACTOR'S NAME | SECTION A | SECTION B |
|---------------------|--|---------------------------------------|
| Barrett Paving | \$1,401,861.00 Bid Bond - Yes Days | NO BID |
| John R. Jurgensen | \$1,290,342.00 Bid Bond - Yes Days | NO BID |
| Pavement Technology | NO BID | \$25,311.00 Bid Bond - Yes Days |



**CITY OF HUBER HEIGHTS
STREET IMPROVEMENTS
2023**

StreetForPaving2023





**2023
WATER MAIN REPLACEMENT PROJECT/
STREET IMPROVEMENT PROGRAM**

Plot Date: 3/20/2023



CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO AWARD AND ENTER INTO CONTRACTS FOR THE 2023 STREET PROGRAM.

WHEREAS, City Council under Resolution No. 2023-R-7242 has previously authorized the securing of bids for the 2023 Street Program; and

WHEREAS, construction bids were received on March 3, 2023; and

WHEREAS, the City desires to secure inspectional services from outside sources for the 2023 Street Program; and

WHEREAS, Bowser-Morner, Inc. is uniquely qualified to perform these services; and

WHEREAS, this project will be funded by the Street Improvement Fund and the Gas Tax Fund.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Manager is hereby authorized to enter into a contract for Section A: Street Improvements of the 2023 Street Program with John R. Jurgensen, Company as the lowest and best bidder at a cost not to exceed \$1,420,000.00 on the terms and conditions as substantially set forth in the specifications of the contract.

Section 2. The City Manager is hereby authorized to enter into a contract for Section B: Reclamite Surfacing of the 2023 Street Program with Pavement Technology, Inc. as the lowest and best bidder at a cost not to exceed \$28,000.00 on the terms and conditions as substantially set forth in the specifications of the contract.

Section 3. The City Manager is hereby authorized to enter into a contract with Bowser-Morner, Inc. for inspectional services for the 2023 Street Improvement Program at a cost not to exceed \$15,000.00.

Section 4. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 5. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9053

Topics of Discussion G.

Council Work Session

Meeting Date: 03/27/2023

2023 Sidewalk Program And Concrete Portion Of 2023 Street Program - Award Contracts

Submitted By: Hanane Eisentraut

Department: Engineering **Division:** Engineering

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

2023 Sidewalk Program And Concrete Portion Of 2023 Street Program - Award Contracts

Purpose and Background

This legislation will authorize the award for:

Section A: Replacement of Concrete Sidewalks and Aprons to Coburn's Concrete, LLC. as the lowest and best bidder, at a cost not to exceed \$112,000.

Section C: Concrete Portion of the 2023 Street Program to Multi Task Construction as the lowest and best bidder at a cost not to exceed \$913,000.

Fiscal Impact

Source of Funds: See Financial Implications

Cost: \$1,025,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Source of Funds:

Sidewalk Program - Capital Fund

Concrete Portion of Street Program - Street Capital Fund/Stormwater Fund/Gas Tax Fund

Attachments

Bid Results

Resolution



CITY OF HUBER HEIGHTS
2023 SIDEWALK & CONCRETE PORTION OF 2023 STREET PROGRAMS
BID RESULT
BID DATE: March 3, 2023

| CONTRACTOR'S NAME | SECTION A | SECTION B | SECTION C |
|-----------------------|------------------------|------------------------|-------------------------|
| Coburns Concrete | \$101,435.00 | NO BID | NO BID |
| | Bid Bond - Yes 75 Days | | |
| Multi - Task | \$103,110.00 | NO BID | \$829,525.00 |
| | Bid Bond - Yes 75 Days | | Bid Bond - Yes 180 Days |
| A-1 Concrete Leveling | NO BID | \$2,160.00 | NO BID |
| | | Bid Bond - Yes 30 Days | |

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO ENTER INTO CONTRACTS FOR THE 2023 SIDEWALK PROGRAM AND THE CONCRETE PORTION OF THE 2023 STREET PROGRAM.

WHEREAS, City Council previously authorized the Resolution Of Necessity for the 2023 Sidewalk Program under Resolution No. 2022-R-7158 and securing of sidewalk bids under Resolution No. 2023-R-7234; and

WHEREAS, construction bids were received by the City on March 3, 2023; and

WHEREAS, it is important that this project be performed in a timely manner to complete the 2023 Sidewalk Program in an expeditious manner.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio, that:

Section 1. The City Manager is hereby authorized to enter into a contract for Section A: Replacement Concrete, Sidewalks and Aprons of the bid with Coburn’s Concrete, LLC., as the lowest and best bidder, at a cost not to exceed \$112,000.00 on the terms and conditions as substantially set forth in the bid.

Section 2. The City Manager is hereby authorized to enter into a contract for Section C: Concrete Portion of 2023 Street Program of the bid with Multi Task Construction, as the lowest and best bidder, at a cost not to exceed \$913,000.00 on the terms and conditions as substantially set forth in the bid.

Section 3. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 4. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9038

Topics of Discussion H.

Council Work Session

Meeting Date: 03/27/2023

2023 Rehabilitation of Sewer Lines Project - Award Contract

Submitted By: Hanane Eisentraut

Department: Engineering

Division: Engineering

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

2023 Rehabilitation of Sewer Lines Project - Award Contract

Purpose and Background

This legislation will authorize the City Manager to enter into a contract with United Survey, Inc. as the lowest and best bidder for the 2023 Rehabilitation of Sewer Lines Project at a cost not to exceed \$350,000. The Sewer Capital Fund will be utilized for this project.

Fiscal Impact

Source of Funds: Sewer Capital Fund

Cost: \$350,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Bid Results

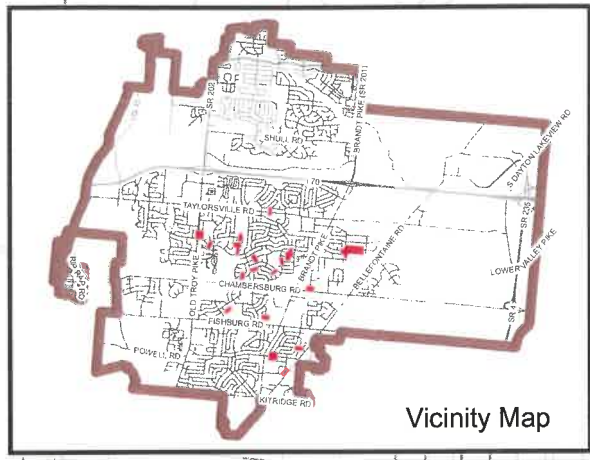
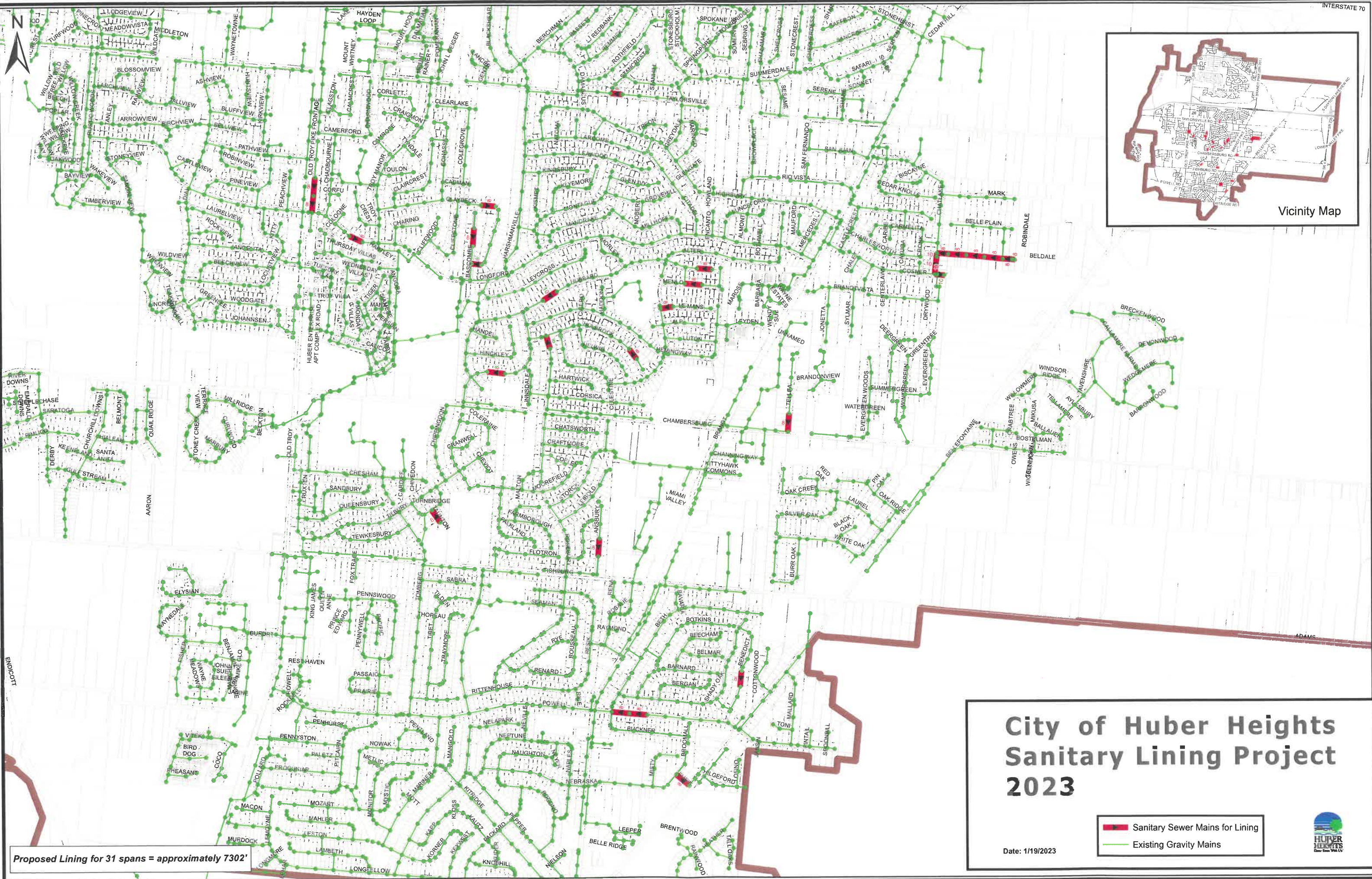
Map

Resolution



CITY OF HUBER HEIGHTS
2023 REHABILITATION OF SEWER LINES
BID RESULT
BID DATE: FEBRUARY 24, 2023

| CONTRACTOR'S NAME | BID AMOUNT | |
|--------------------------|----------------|-------------------|
| Miller Pipeline | \$504,167.60 | 120 Calendar Days |
| | Bid Bond - Yes | |
| Inliner Solutions | \$391,792.00 | 40 Calendar Days |
| | Bid Bond - Yes | |
| Insight Pipe Contracting | \$347,271.00 | 120 Calendar Days |
| | Bid Bond - Yes | |
| Insituform Technology | \$361,977.00 | 120 Calendar Days |
| | Bid Bond - Yes | |
| United Survey | \$335,160.00 | 150 Calendar Days |
| | Bid Bond - Yes | |



Vicinity Map

City of Huber Heights Sanitary Lining Project 2023

Date: 1/19/2023

-  Sanitary Sewer Mains for Lining
-  Existing Gravity Mains



Proposed Lining for 31 spans = approximately 7302'

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO ENTER INTO A CONTRACT FOR THE 2023 REHABILITATION OF SEWER LINES PROJECT.

WHEREAS, City Council under Resolution No. 2023-R-7235 has previously authorized the securing of bids for the 2023 Rehabilitation of Sewer Lines Project; and

WHEREAS, construction bids were received by the City on February 24, 2023; and

WHEREAS, funds are available to cover the cost of this work.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio, that:

Section 1. The City Manager is hereby authorized to enter into a contract for the 2023 Rehabilitation of Sewer Lines Project with United Survey Inc. as the lowest and best bidder, at a cost not to exceed \$350,000.00 on the terms and conditions as substantially set forth in the bid documents.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9057

Topics of Discussion I.

Council Work Session

Meeting Date: 03/27/2023

Water Infrastructure Update

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 02/07/2023 and 02/21/2023 and 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Water Infrastructure Update

Purpose and Background

This agenda item has been requested by Councilmembers Glenn Otto, Anita Kitchen, and Ed Lyons for an update on City water infrastructure. The updated spreadsheet on the City's current water infrastructure projects has been provided (see attached).

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Spreadsheet

| | <u>Mardi Gras Water Main Replacement</u> | | <u>2022 Water Main Replacement Program</u> | | <u>2023 Watermain Replacement Program</u> | |
|--|--|--|--|----------------|---|------------------|
| | Mardi Gras Drive | | Cruxten Drive | Alter Road | Hubbard Drive | Tewkesbury Drive |
| | Charlesgate Drive | | Hubbard Drive | Holbrook Drive | Chesham Drive | Hartwick Drive |
| | Parish Court | | Helwig Drive | | Sandbury Drive | Alter Road |
| | | | | | Longford Road | Storck Drive |
| Council Approved to Solicit Design for RFP | X | | X | | X | |
| Design Proposals Were Due | X | | X | | X | |
| Council Approved the Award Design Consultant | X | | X | | X | |
| Notice to Proceed with Design Consultant(s) | X | | X | | X | |
| Order Pipe (Poss. 8-9 mo Delay) | X | | X | | X | |
| Design Completion Date | X | | X | | 4/1/2023 | |
| Work Session for Going Out to Construction Bid | X | | X | | 4/24/2023 | |
| Council Approval to Go Out to Construction Bid | X | | X | | 4/24/2023 | |
| Advertise for Construction Bidding | X | | X | | 4/28/2023 | |
| Construction Bids Due | X | | X | | 5/19/2023 | |
| Work Session to Award Construction | X | | X | | 5/29/2023 | |
| Council Approval to Award Construction | X | | X | | 5/29/2023 | |
| Notice to Proceed with Contractor(s) | X | | X | | 6/12/2023 | |
| Estimated Pipe Delivery | X | | X | | 9/1/2023 | |
| Begin Construction | 2/15/2023 | | 3/1/2023 | | 9/1/2023 | |
| Construction Complete | 5/1/2023 | | 9/1/2023 | | 4/1/2024 | |

X = Completed

AI-9073

Topics of Discussion J.

Council Work Session

Meeting Date: 03/27/2023

East Sanitary Sewer Extension Project - Award Contract

Submitted By: Hanane Eisentraut

Department: Engineering

Division: Engineering

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 02/21/2023 and 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

East Sanitary Sewer Extension Project - Award Contract

Purpose and Background

Five (5) bids were received for the East Sanitary Sewer Extension Project. Due to inflation and supply chain issues, the bids came in higher than anticipated. The project was bid with a main bid and an alternating bid. The main bid includes the installation of 9,000 feet of large sanitary sewer, 3,200 feet of force main, and 2 new pump stations. This sanitary sewer installation will start at the Fairborn Wastewater Treatment Plant and go north along the west side of State Route 4 to the Center Point 70 Commercial Park. This work will provide full sanitary service to Center Point 70. The bid for this work is shown on the attached bid sheet. The lowest and best bid for this work was from Helm & Sons at \$3,917,449.00. There was an alternate bid requested that was for installing sanitary sewer on Chambersburg Road starting at State Route 4 and going west up Chambersburg Road approximately 6,300 feet. Unfortunately, the alternate bid came in at \$1,515,942.00, making the total bid \$5,433,391.00. This total cost was about \$1,000,000.00 over the City Engineer's estimate. Due to this overage, the installation of the sewer line on Chambersburg Road will not be part of this award and the work will be deferred to a future year. This legislation will authorize the City Manager to enter into a contract with Helm & Sons Excavating, Inc. as the lowest and best bidder for the main bid for the East Sanitary Sewer Extension project at a cost not to exceed \$4,310,000.00. The Sewer Capital Fund will be utilized for the construction of this project.

Fiscal Impact

Source of Funds: Sewer Capital Fund

Cost: \$4,310,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Bid Results

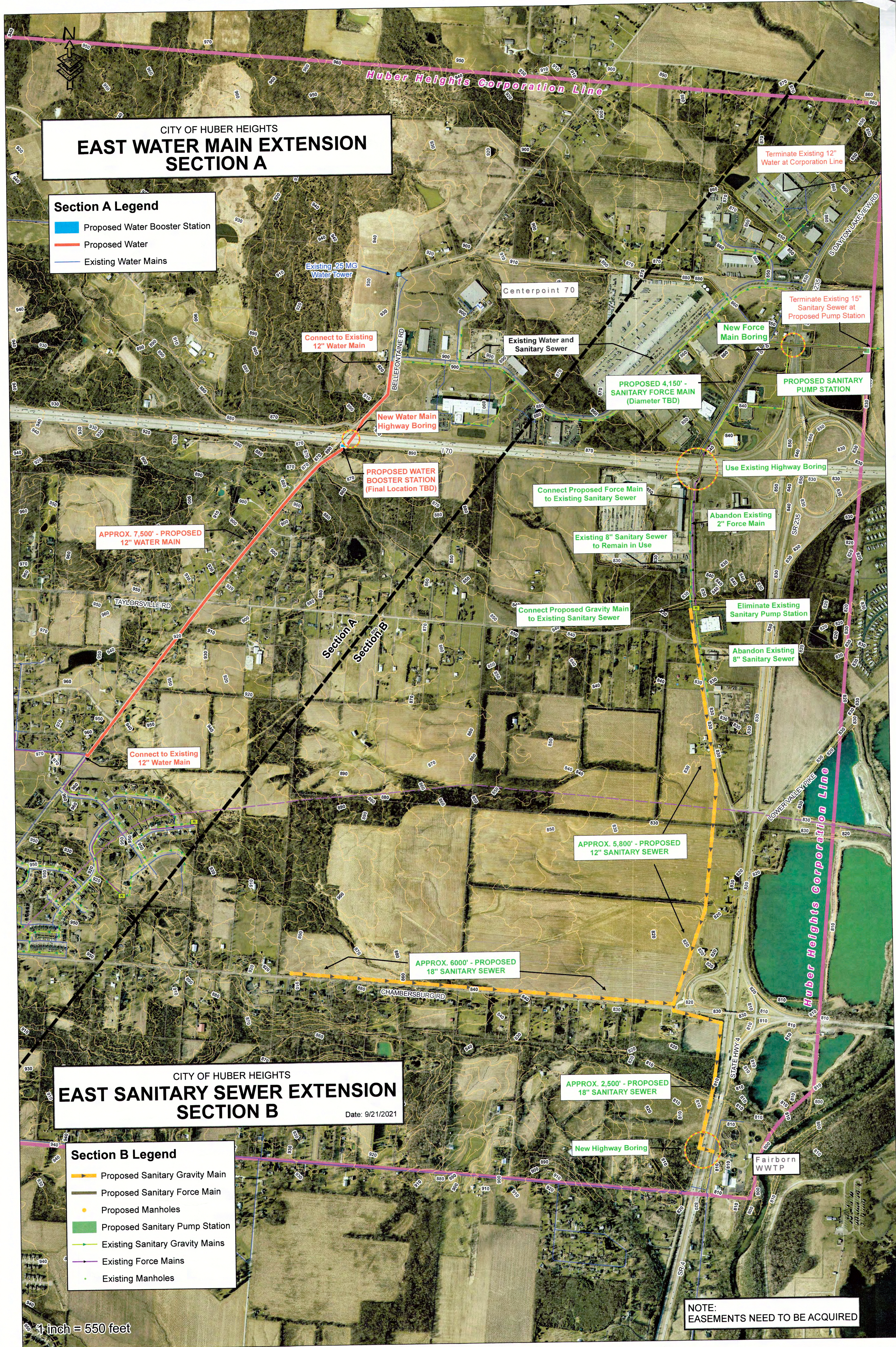
Map

Resolution



**CITY OF HUBER HEIGHTS
EAST SANITARY SEWER EXTENSION
BID RESULT
BID DATE: JANUARY 20, 2023**

| CONTRACTOR'S NAME | BASE BID | ALTERNATE BID CHAMBERSBURG SANITARY SEWER | TOTAL BID AMOUNT |
|---------------------|----------------|---|---|
| Kelchner | \$5,322,448.00 | \$2,177,935.00 | \$7,500,383.00 300 Calendar Days |
| | | | Bid Bond - Yes |
| Milcon Concrete | \$4,411,829.25 | \$1,311,325.40 | \$5,723,154.75 220 Calendar Days |
| | | | Bid Bond - Yes |
| Helms and Sons | \$3,917,449.00 | \$1,515,942.00 | \$5,433,391.00 220 Calendar Days |
| | | | Bid Bond - Yes |
| Outdoor Enterprise | \$4,462,202.00 | \$1,829,385.00 | \$6,291,587.00 465 Calendar Days |
| | | | Bid Bond - Yes |
| Kinnison Excavating | \$5,459,500.00 | \$1,725,185.00 | \$7,184,685.00 500 Calendar Days |
| | | | Bid Bond - Yes |



CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO ENTER INTO A CONTRACT FOR THE EAST
SANITARY SEWER EXTENSION PROJECT.

WHEREAS, City Council under Resolution No. 2022-R-7188, dated October 24, 2022, has
previously authorized the securing of bids for the East Sanitary Sewer Extension Project; and

WHEREAS, construction bids were received on January 20, 2023; and

WHEREAS, City Council has determined to proceed with this improvement.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Huber Heights,
Ohio that:

Section 1. The City Manager is hereby authorized to enter into a contract for the East
Sanitary Sewer Extension Project with Helms and Sons Excavating, Inc. as the lowest and best
bidder at a cost not to exceed \$4,310,000.00 on the terms and conditions as substantially set forth
in the specifications of the contract.

Section 2. It is hereby found and determined that all formal actions of this Council
concerning and relating to the passage of this Resolution were adopted in an open meeting of this
Council and all deliberations of this Council and of any of its Committees that resulted in such
formal action were in meetings open to the public and in compliance with all legal requirements
including Section 121.22 of the Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the
Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9069

Topics of Discussion K.

Council Work Session

Meeting Date: 03/27/2023

Water Main Replacement Projects - Engineering Design - Solicit Bids

Submitted By: Hanane Eisentraut

Department: Engineering

Division: Engineering

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Water Main Replacement Projects - Engineering Design - Solicit Bids

Purpose and Background

This legislation will allow the City to solicit proposals from various engineering firms to design future Water Main Replacement Projects. It is necessary to employ a qualified consulting engineering and land surveying firm in order to prepare plans for these needed improvements. Once the proposals have been received and evaluated, City Staff will return to Council for authorization to award the contract.

Fiscal Impact

Source of Funds: Water Fund

Cost: \$1,000,000

Recurring Cost? (Yes/No): No

Funds Available in Current Budget? (Yes/No): Yes

Financial Implications:

Attachments

Resolution

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO SOLICIT REQUESTS FOR PROPOSALS (RFP) FROM QUALIFIED ENGINEERING CONSULTING FIRMS TO PROVIDE ENGINEERING DESIGN FOR FUTURE WATER MAIN REPLACEMENT PROJECTS.

WHEREAS, City Staff have identified water lines within the City which are in urgent need of replacement; and

WHEREAS, it is necessary to obtain outside engineering services to design future Water Main Replacement Projects; and

WHEREAS, substantial interest has been expressed by various consulting engineering firms in the design of these improvements; and

WHEREAS, Council has determined to proceed with this work; and

WHEREAS, the Water Fund is available to cover the cost of this work.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio, that:

Section 1. The City Manager is hereby authorized to solicit requests for proposals (RFP) for the engineering of improvements to future Water Main Replacement Projects at a cost not to exceed \$1,000,000.00.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9070

Topics of Discussion L.

Council Work Session

Meeting Date: 03/27/2023

Ongoing Water Main Replacement Program Schedule

Submitted By: Hanane Eisentraut

Department: Engineering

Division: Engineering

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Ongoing Water Main Replacement Program Schedule

Purpose and Background

This legislation will direct the City Engineer to prepare a schedule for the design and construction of two \$6,000,000 water main replacement projects to be completed during 18-month cycles.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Resolution

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

DIRECTING THE CITY ENGINEER TO PREPARE A SCHEDULE FOR TWO WATER MAIN REPLACEMENT PROJECTS, VALUED AT \$6,000,000.00 EACH, TO BE DESIGNED AND CONSTRUCTED AT EIGHTEEN-MONTH CYCLES.

WHEREAS, there is a need to continue the ongoing Water Main Replacement Program; and

WHEREAS, City Staff have identified water lines within the City which are in urgent need of replacement; and

WHEREAS, Council has determined to allocate \$12,000,000.00 to be spent on two Water Main Replacement Projects at eighteen-month cycles; and

WHEREAS, it is important to prepare a schedule for those two projects so that the design and construction can be performed in a timely manner and in an expeditious manner.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Engineer is hereby directed to prepare a schedule for the design and construction of two \$6,000,000.00 Water Main Replacement Projects to be completed during eighteen-month cycles.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9058

Topics of Discussion **M.**

Council Work Session

Meeting Date: 03/27/2023

Fire Division Staffing Update

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 02/07/2023 and 02/21/2023 and 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Fire Division Staffing Update

Purpose and Background

This agenda item has been requested by Councilmembers Ed Lyons, Anita Kitchen, and Glenn Otto for an update on staffing in the Fire Division. The updated spreadsheet on the hiring activities in the Fire Division has been provided (see attached).

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Spreadsheet

Firefighter/Paramedic Hiring Status

| | | Withdraw | No Response | Background | Conditional Offer | Psych. | Phys. | Prints | PAT | Paramedic Cert | Start Date | Count Based on Start Date |
|---|--------------|----------|-------------|------------|-------------------|--------|-------|--------|-----|----------------|------------|---------------------------|
| May 6, 2022 Eligibility List | Candidate 1 | | | X | X | X | X | X | X | X | 1/3/2023 | 34 of 42 |
| | Candidate 2 | | | X | X | X | X | X | X | X | 1/3/2023 | 35 of 42 |
| | Candidate 3 | | | X | X | X | X | X | X | X | 1/4/2023 | 36 of 42 |
| | Candidate 4 | | | X | X | X | X | X | X | | X | X |
| December 9, 2022 Eligibility List | Candidate 1 | X | | | | | | | | | X | |
| | Candidate 2 | | | X | X | X | X | X | X | X | 2/20/2023 | 38 of 42 |
| | Candidate 3 | | | | | | | | | | | |
| | Candidate 4 | | | X | X | X | X | X | X | X | 2/6/2023 | 37 of 42 |
| | Candidate 5 | X | | X | | | | | | | X | |
| | Candidate 6 | | | | | | | | | | | |
| | Candidate 7 | X | | | | | | | | | X | |
| | Candidate 8 | X | | X | X | X | X | | X | X | X | |
| | Candidate 9 | | X | | | | | | | | X | |
| | Candidate 10 | X | | | | | | | | | X | |
| | Candidate 11 | | | X | X | X | X | X | X | X | 3/6/2023 | 39 of 42 |
| | Candidate 12 | | X | | | | | | | | X | |
| New Process started February 3, 2023 with a deadline for applications on February 24, 2023. | | | | | | | | | | | | |
| March 3, 2023 Eligibility List | Candidate 1* | | | X | X | | | X | X | X | TBD | 40 of 42 |
| | Candidate 2* | | | X | X | | | | X | X | TBD | 41 of 42 |
| | Candidate 3* | | | X | X | | | | X | X | TBD | 42 of 42 |
| * Pre-employment testing for each candidate has been scheduled | | | | | | | | | | | | |

| | |
|--|---|
| | indicates updates from previous meeting |
| | indicates candidate completed; waiting on results |

AI-9043

Topics of Discussion N.

Council Work Session

Meeting Date: 03/27/2023

Case BDP 23-02 - Metropolitan Holdings - Rezoning/Basic Development Plan - 6801 Executive Boulevard

Submitted By: Geri Hoskins

Department: Planning

Division: Planning

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: SmartBoard

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Case BDP 23-02 - Metropolitan Holdings - Rezoning/Basic Development Plan - 6801 Executive Boulevard

Purpose and Background

The applicant, Metropolitan Holdings, is requesting approval of a Rezoning to Planned Mixed Use (PM) and a Basic Development Plan to construct up to 320 residential units and commercial/retail space.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Site Plan

Survey

Utility Plan

Design Standards

Renderings

Fire Assessment

Traffic Impact Study

Resident Letter

Staff Report

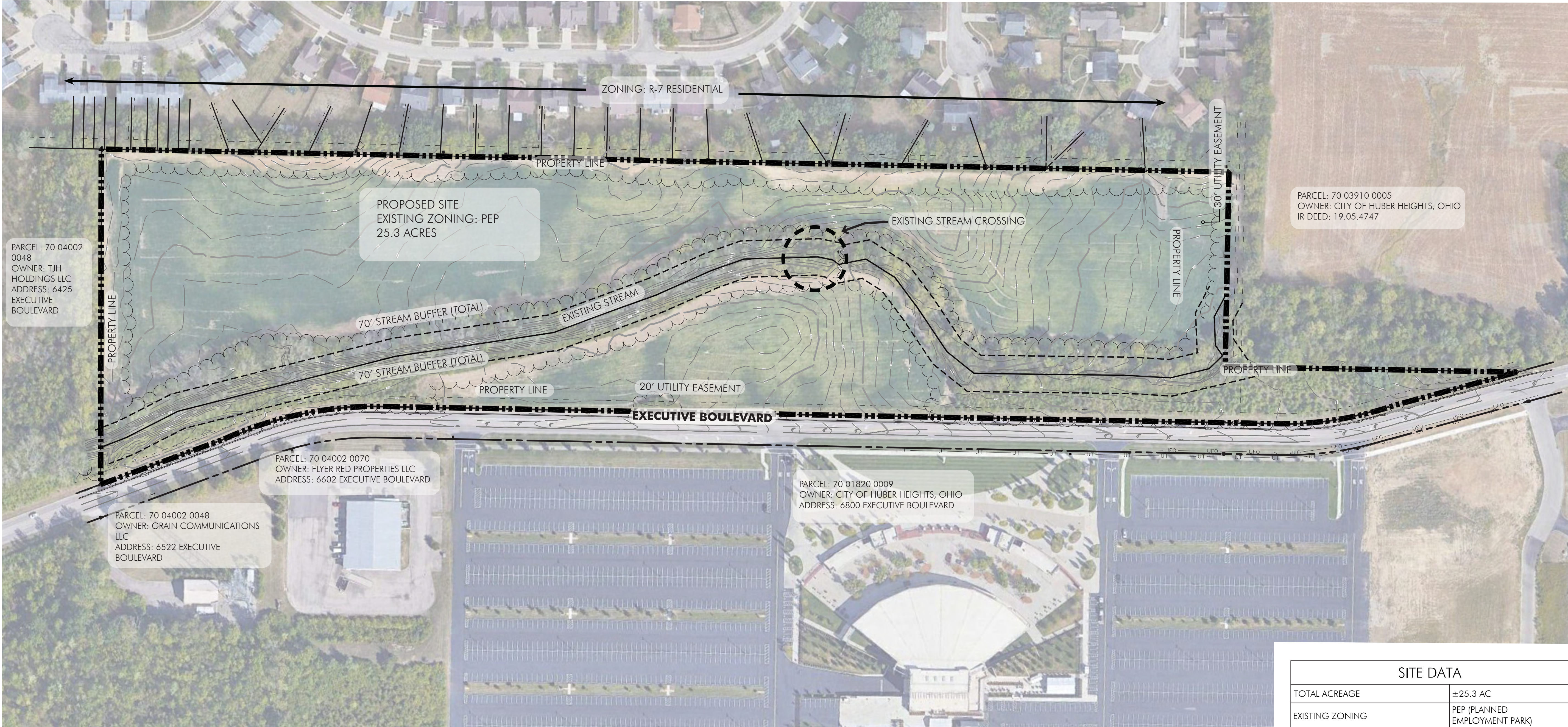
Decision Record

Minutes

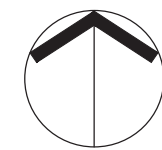
Ordinance



Vicinity Map
N.T.S.



Existing Conditions Plan
SCALE: 1" = 100'-0"



| SITE DATA | |
|-----------------|-------------------------------|
| TOTAL ACREAGE | ± 25.3 AC |
| EXISTING ZONING | PEP (PLANNED EMPLOYMENT PARK) |



Columbus
100 Northwoods Blvd, Ste A
Columbus, Ohio 43235
p 614.255.3399

Cincinnati
20 Village Square, Floor 3
Cincinnati, Ohio 45246
p 614.360.3066

PODdesign.net

Project Name

Newbauer Development Project

Executive Blvd.

Huber Heights, Ohio 45424

Prepared For

Metropolitan Holdings
1429 King Ave
Columbus, Ohio, 43212



Project Info

Project # 21082
Date 01/20/2023
By NM/RV/TF
Scale As Shown

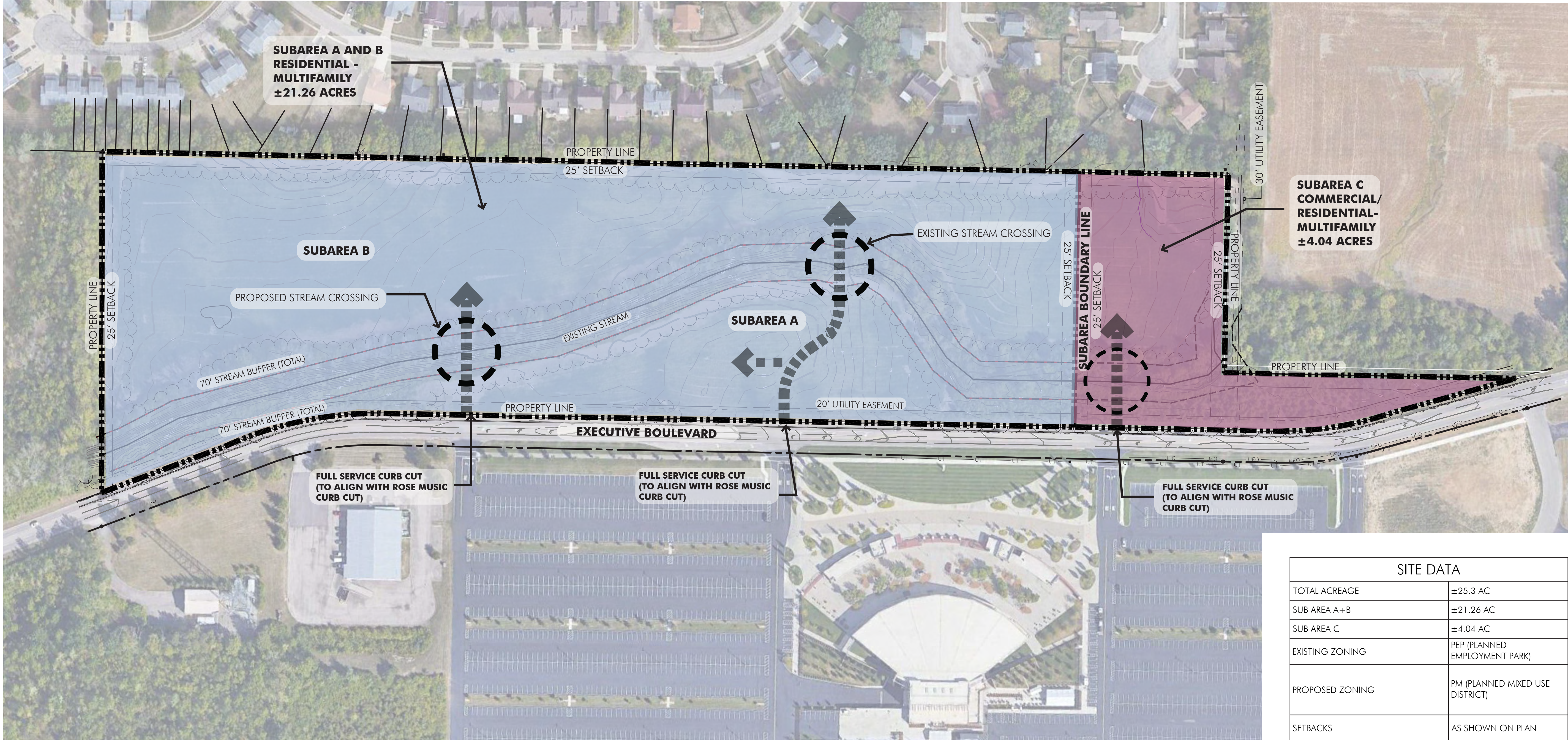
Revisions

Sheet Title

EXISTING CONDITIONS PLAN

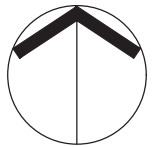
Sheet #

L1.0



| SITE DATA | |
|-----------------|---------------------------------|
| TOTAL ACREAGE | ±25.3 AC |
| SUB AREA A+B | ±21.26 AC |
| SUB AREA C | ±4.04 AC |
| EXISTING ZONING | PEP (PLANNED EMPLOYMENT PARK) |
| PROPOSED ZONING | PM (PLANNED MIXED USE DISTRICT) |
| SETBACKS | AS SHOWN ON PLAN |

BASIC DEVELOPMENT PLAN
SCALE: 1" = 100'-0"



Columbus
100 Northwoods Blvd, Ste A
Columbus, Ohio 43235
p 614.255.3399

Cincinnati
20 Village Square, Floor 3
Cincinnati, Ohio 45246
p 614.360.3066

PODdesign.net

Project Name
Newbauer Development Project
Executive Blvd.
Huber Heights, Ohio 45424

Prepared For
Metropolitan Holdings
1429 King Ave
Columbus, Ohio, 43212



Project Info
Project # 21082
Date 01/20/2023
By NM/RV/TF
Scale As Shown

Revisions

Sheet Title
BASIC DEVELOPMENT PLAN

Sheet #
L2.0

Project Name

Newbauer
Development
Project

Executive Blvd.
Huber Heights, Ohio 45424

Prepared For

Metropolitan Holdings
1429 King Ave
Columbus, Ohio, 43212



Project Info

Project # 21082
Date 01/20/2023
By NM/RV/TF
Scale As Shown

Revisions

Sheet Title

CONCEPTUAL
SITE PLAN

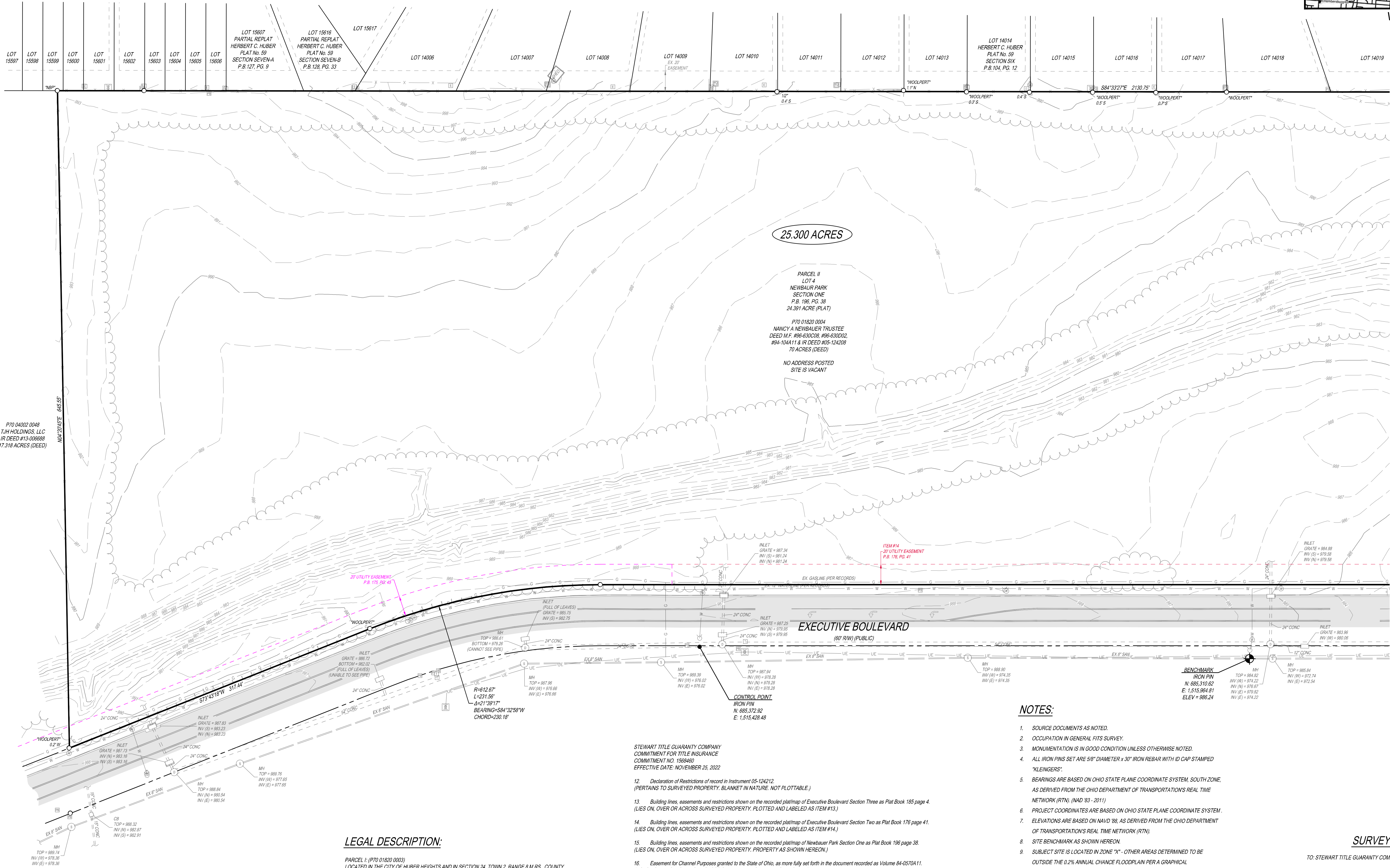
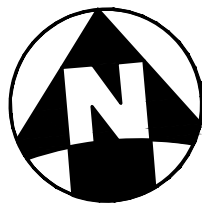
Sheet #

L3.0



CONCEPTUAL SITE PLAN
SCALE: 1" = 100'-0"

| SITE DATA | |
|-------------------------|------------------|
| TOTAL ACREAGE | ±25.3 AC |
| SUB AREA A+B | ±21.26 AC |
| SUB AREA C | ±4.04 AC |
| TOTAL UNITS | 320 UNIT MAX |
| TOTAL DENSITY | ±14.6 DU/AC |
| PROPOSED GARAGE SURFACE | 663 97 566 |



NOTE: UNDERGROUND UTILITIES ARE PLOTTED FROM A COMPILATION OF AVAILABLE RECORD INFORMATION AND SURFACE INDICATIONS OF UNDERGROUND STRUCTURES AND MAY NOT BE INCLUSIVE. PRECISE LOCATIONS AND THE EXISTENCE OR NON EXISTENCE OF UNDERGROUND UTILITIES CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.



LEGAL DESCRIPTION:

PARCEL I: (P70 01820 0003)
LOCATED IN THE CITY OF HUBER HEIGHTS AND IN SECTION 24, TOWN 2, RANGE 8 M.R.S. COUNTY OF MONTGOMERY, STATE OF OHIO AND BEING ALL OF LOT 3 OF THE PLAT OF NEWBAUER PARK SECTION ONE AS RECORDED IN PLAT BOOK 196, PAGE 38-38A IN THE PLAT RECORDS OF MONTGOMERY COUNTY, OHIO. 0.8093 ACRES

PARCEL II: (P70 01820 0004)
LOCATED IN THE CITY OF HUBER HEIGHTS AND IN SECTION 24, TOWN 2, RANGE 8 M.R.S. COUNTY OF MONTGOMERY, STATE OF OHIO AND BEING ALL OF LOT 4 OF THE PLAT OF NEWBAUER PARK SECTION ONE AS RECORDED IN PLAT BOOK 196, PAGE 38-38A IN THE PLAT RECORDS OF MONTGOMERY COUNTY, OHIO. 24.3807 ACRES.

STEWART TITLE GUARANTY COMPANY
COMMITMENT FOR TITLE INSURANCE
COMMITMENT NO. 1558469
EFFECTIVE DATE: NOVEMBER 25, 2022

12. Declaration of Restrictions of record in Instrument 05-124212 (PERTAINS TO SURVEYED PROPERTY. BLANKET IN NATURE. NOT PLOTTABLE.)
13. Building lines, easements and restrictions shown on the recorded platmap of Executive Boulevard Section Three as Plat Book 185 page 4. (LIES ON, OVER OR ACROSS SURVEYED PROPERTY. PLOTTED AND LABELED AS ITEM #13.)
14. Building lines, easements and restrictions shown on the recorded platmap of Executive Boulevard Section Two as Plat Book 176 page 41. (LIES ON, OVER OR ACROSS SURVEYED PROPERTY. PLOTTED AND LABELED AS ITEM #14.)
15. Building lines, easements and restrictions shown on the recorded platmap of Newbauer Park Section One as Plat Book 196 page 38. (LIES ON, OVER OR ACROSS SURVEYED PROPERTY. PROPERTY AS SHOWN HEREON.)
16. Easement for Channel Purposes granted to the State of Ohio, as more fully set forth in the document recorded as Volume 84-0570A11. (DOES NOT LIE ON, OVER OR ACROSS SURVEYED PROPERTY. NOT PLOTTED.)
17. Easement granted to The Dayton Power and Light Company, as more fully set forth in the document recorded as Volume 78-679D10. (DOES NOT LIE ON, OVER OR ACROSS SURVEYED PROPERTY. NOT PLOTTED.)
18. Easement granted to The Dayton Power and Light Company, as more fully set forth in the document recorded as Volume 74-367C11. (DOES NOT LIE ON, OVER OR ACROSS SURVEYED PROPERTY. NOT PLOTTED.)
19. Easement granted to The Dayton Power and Light Company, as more fully set forth in the document recorded as Volume 78-679D08. (DOES NOT LIE ON, OVER OR ACROSS SURVEYED PROPERTY. NOT PLOTTED.)
20. Easement granted to the State of Ohio Department of Transportation, as more fully set forth in the document recorded as Instrument 2005-094116. (DOES NOT LIE ON, OVER OR ACROSS SURVEYED PROPERTY. NOT PLOTTED.)

NOTES:

- SOURCE DOCUMENTS AS NOTED.
- OCCUPATION IN GENERAL FITS SURVEY.
- MONUMENTATION IS IN GOOD CONDITION UNLESS OTHERWISE NOTED.
- ALL IRON PINS SET ARE 5/8" DIAMETER x 30" IRON REBAR WITH ID CAP STAMPED "KLEINGERS".
- BEARINGS ARE BASED ON OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, AS DERIVED FROM THE OHIO DEPARTMENT OF TRANSPORTATION'S REAL TIME NETWORK (RTN). (NAD 83 - 2011)
- PROJECT COORDINATES ARE BASED ON OHIO STATE PLANE COORDINATE SYSTEM.
- ELEVATIONS ARE BASED ON NAVD 88, AS DERIVED FROM THE OHIO DEPARTMENT OF TRANSPORTATION'S REAL TIME NETWORK (RTN).
- SITE BENCHMARK AS SHOWN HEREON.
- SUBJECT SITE IS LOCATED IN ZONE "X" - OTHER AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN PER A GRAPHICAL INTERPRETATION OF FEMA'S FLOOD INSURANCE RATE MAP NO. 39113C0180E WITH AN EFFECTIVE DATE OF JANUARY 6, 2005.
- SUBJECT SITE CONTAINS 0 PARKING SPACES.
- AT THE TIME OF THE FIELD SURVEY, THE SURVEYOR DID NOT OBSERVE ANY EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
- AT THE TIME OF THE FIELD SURVEY, THE SURVEYOR DID NOT OBSERVE ANY EVIDENCE OF CHANGES IN STREET RIGHT OF WAY LINES.
- SUBJECT SITE HAS DIRECT ACCESS TO EXECUTIVE BOULEVARD, A PUBLICLY DEDICATED ROADWAY.

SURVEYOR'S CERTIFICATION

TO: STEWART TITLE GUARANTY COMPANY; METROPOLITAN HOLDINGS ACQUISITIONS LLC.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1-5, 7(a), 7(b), 7(c), 8, 9, 11(a), 13, 16 AND 17 OF TABLE A THEREOF.

THE FIELD WORK WAS COMPLETED ON 11-17-2022.
DATE OF PLAT OR MAP 12-1-2022.

MATTHEW D. HABEDANK
OHIO PROFESSIONAL SURVEYOR NO. 8811

DATE



VICINITY MAP
N.T.S

LEGEND

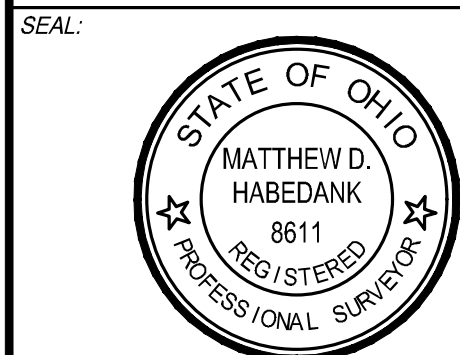
- BENCHMARK
- 5/8" IRON PIN FOUND (UNLESS OTHERWISE NOTED)
- PIPE FOUND (SIZE AS NOTED)
- 5/8" IRON PIN SET (KLEINGERS)
- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN
- STORM INLET
- WATER VALVE
- FIRE HYDRANT
- SIGN - SINGLE POST
- TELEPHONE BOX
- TELEVISION BOX
- PULL BOX
- TRANSFORMER
- ELECTRIC BOX
- GAS SERVICE
- FENCE LINE
- STORM SEWER
- SANITARY SEWER
- WATER LINE
- GAS LINE
- UNDERGROUND ELECTRIC
- UNDERGROUND FIBER OPTIC
- UNDERGROUND TELEPHONE
- TREE LINE
- ASPHALT

THE KLEINGERS GROUP

CIVIL ENGINEERING
SURVEYING
LANDSCAPE
ARCHITECTURE

www.kleingers.com

6219 Centre Park Dr.
West Chester, OH 45069
513.770.7851



NO. DATE DESCRIPTION
1 12-1-2022 ALTA - KPR

ALTA/NSPS LAND TITLE SURVEY
25.300 ACRES
SEC 18 & 24, TOWN 2, RANGE 8 MRS
CITY OF HUBER HEIGHTS
MONTGOMERY COUNTY, OHIO
FOR: METROPOLITAN HOLDINGS

PROJECT NO: 220358VSD000
DATE: 12-1-2022

SCALE: 1" = 40'

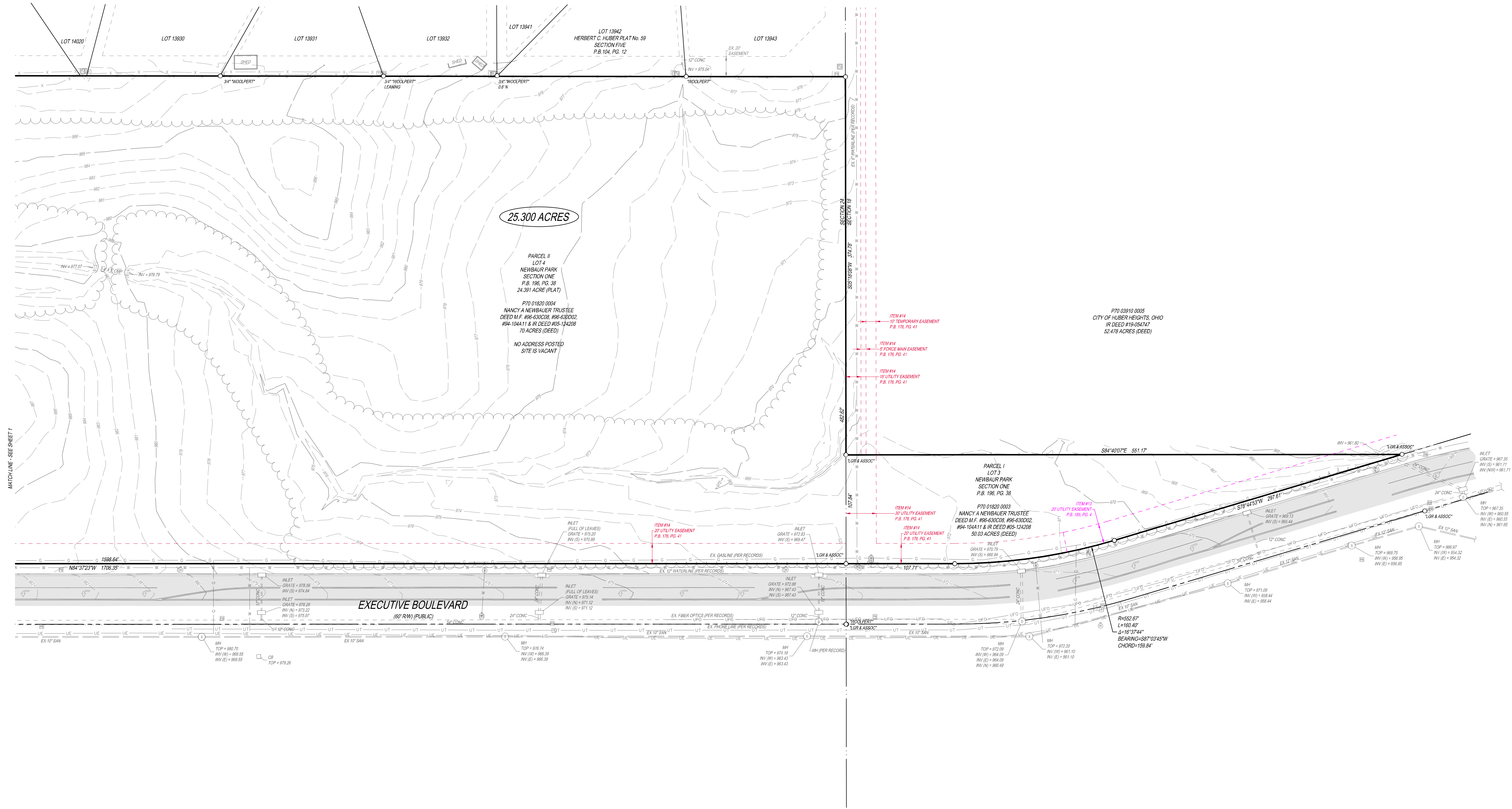
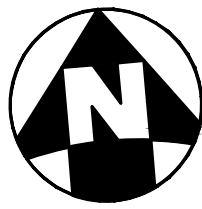
0 20 40 80

SHEET NAME:

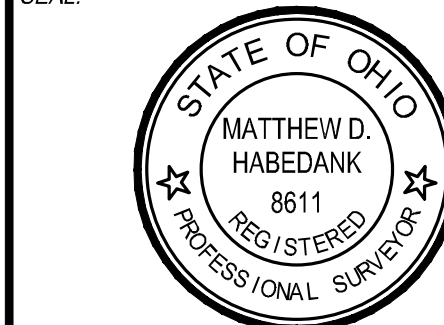
EXECUTIVE BOULEVARD

SHEET NO.

1 OF 2



NOTE:
UNDERGROUND UTILITIES ARE PLOTTED FROM A
COMPILATION OF AVAILABLE RECORD INFORMATION AND
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CANNOT BE VERIFIED. PLEASE NOTIFY THE OHIO UTILITY
PROTECTION SERVICE AT 811 OR 1-800-362-2764 BEFORE ANY
PERIOD OF EXCAVATION OR CONSTRUCTION ACTIVITY.



NO. DATE DESCRIPTION
1 12-1-2022 ALTA-KPR

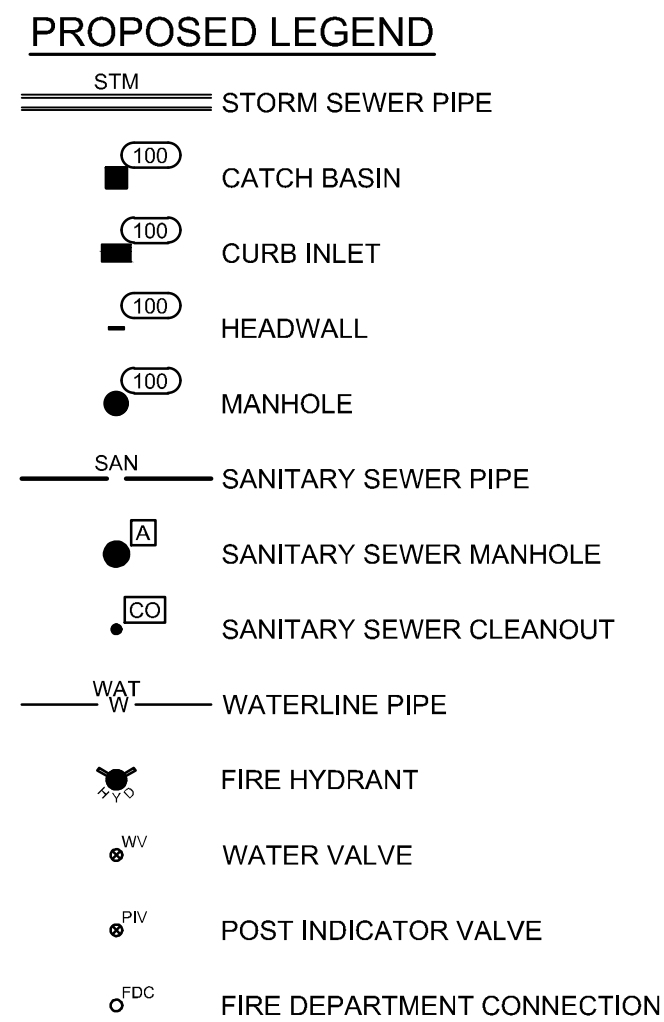
ALTA/NSPS LAND TITLE SURVEY
25.300 ACRES
SEC 16 & 24, TOWN 2, RANGE 8 MRS
CITY OF HUBER HEIGHTS, OHIO
FOR: METROPOLITAN HOLDINGS

PROJECT NO: 220358VSD000
DATE: 12-1-2022

SCALE: 1" = 40'
0 20 40 80

SHEET NAME:
EXECUTIVE BOULEVARD

SHEET NO.
2 OF 2



NOTE:
UNDERGROUND UTILITIES ARE PLOTTED FROM A
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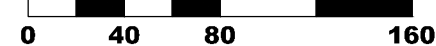
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**NEWBAUER
DEVELOPMENT
PROJECT**
CITY OF HUBER HEIGHTS
MONTGOMERY COUNTY, OHIO

| | |
|-------------|------------|
| PROJECT NO: | 220358,000 |
|-------------|------------|

DATE: 2023/01/20

SALE

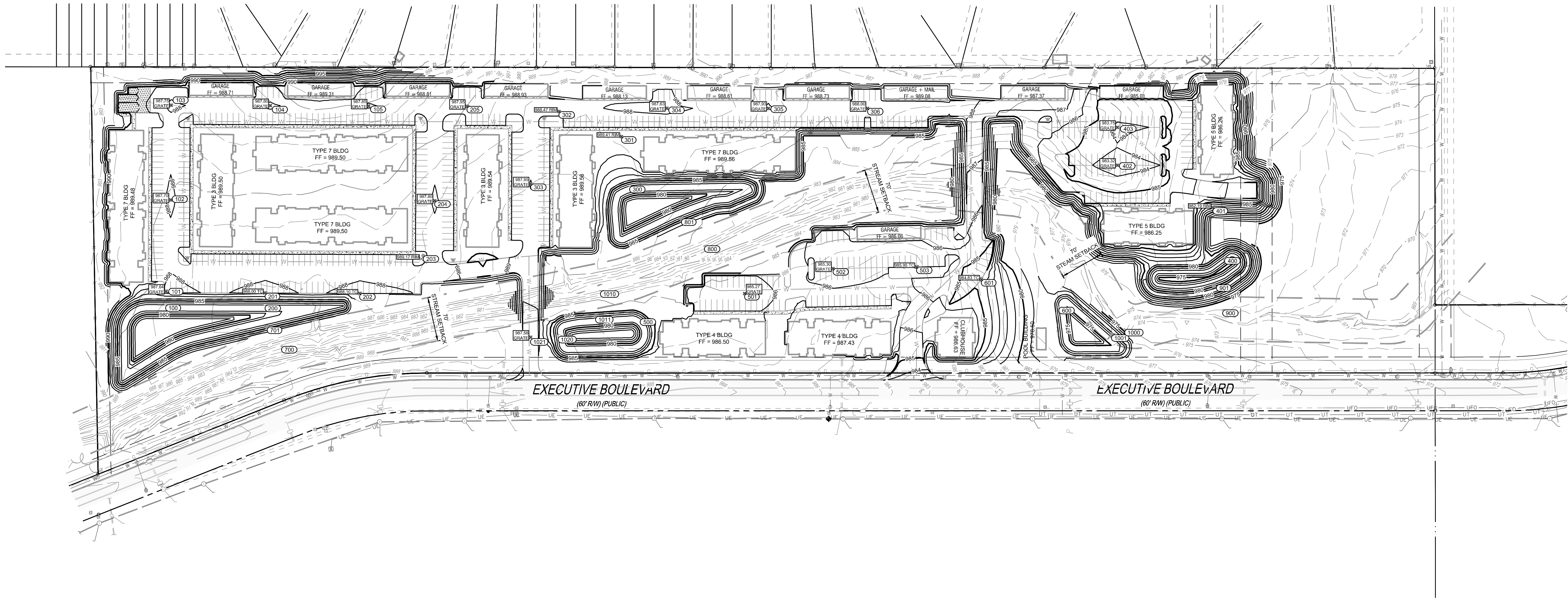


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OVERALL UTILITY PLAN

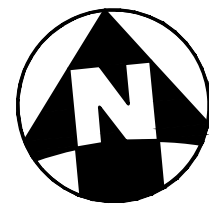
SHEET NO.

C400



GRADING LEGEND

- 1215 — EXISTING MAJOR CONTOUR
- 1216 — EXISTING MINOR CONTOUR
- 1215 — PROPOSED MAJOR CONTOUR
- 1216 — PROPOSED MINOR CONTOUR
- x 1215.00 PROPOSED SPOT ELEVATION
- ~ PROPOSED SWALE
- 100-YEAR FLOOD ROUTE



NOTE:
UNDERGROUND UTILITIES ARE PLOTTED FROM A
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CIVIL ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE
www.kleingers.com
6219 Centre Park Dr.
West Chester, OH 45069
513.779.7851

SEAL:

NO. DATE DESCRIPTION

NEWBAUER
DEVELOPMENT
PROJECT
CITY OF HUBER HEIGHTS
MONTGOMERY COUNTY, OHIO

PROJECT NO: 220358,000

DATE: 2023/01/20

SCALE:



SHEET NAME:

OVERALL
GRADING PLAN

SHEET NO.

C500



Project Zoning and Design Standards

+/- 25.3 Newbauer property located along Executive Blvd
within the Rose Music Center at The Heights Entertainment District
also known as Montgomery County, Ohio
Parcel #'s P70-01820-0003 and P70-01820-0004
January 23, 2023



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INTRODUCTION

Executive Drive/ Newbauer Development

The vision for the Executive Drive/ Newbauer Development (the “Project”) is a Planned Mixed- Use District (PM) to promote multi-use development where a resident can live, work, and play within a planned neighborhood.

The PM district allows for integration of commercial, office, residential and open space into a cohesive development. It allows projects of unique design and layout, and innovative land planning, and can provide for a harmonious community, bringing new businesses, new residents and visitors to the area. The uses of the PM District will compliment and expand the Rose Music Center at The Heights Entertainment District (the “Entertainment District”).

The Project consists of ±25.3 acres that front Executive Boulevard directly north of the Rose Music Center with the goal to include multi-family residential and commercial uses. Multi-family housing uses will create a critical mass of people necessary to support both the Project’s commercial development, and those proposed on the adjacent ±60 acres east and west of the subject property. The commercial uses on the Property, and those future developments flanking either side of the subject site, will be both appropriate for the Entertainment District, offer additional complimentary services and amenities to area residents, and will be highly sustainable based on the proximity of recently added and newly expanded housing options within the Entertainment District. The Project shall be designed so that the buildings, structures and open spaces will be preserved and maintained. Special care will be taken to protect any preexisting natural features, particularly the stream that runs the entire length of the property. Attention shall be given to make sure that the design of the project will not create any nuisances within the development impacting neighboring properties. The architecture shall be encouraged to be unique but similar in certain characteristics.

Goals of the Project

All development within the Project shall conform to these Zoning and Design Standards in order to achieve the following goals:

1. Enable development that establishes a cohesive identity.
2. Incorporate similar materials, colors, and landscape features, which were used at existing developments, including the Rose Music Center at The Heights.
3. Introduce urban-style forms and design elements.
4. Place strong emphasis on connectivity, recognizing the importance of linking the various sites within the Entertainment District to reinforce a consistent character.
5. Recognizing the importance of pedestrians to the economic vitality of mixed-use neighborhood and entertainment-type areas, and diminishing the emphasis of vehicles, encourage strong pedestrian accommodations and connectivity.

ZONING

The approval of the Basic Development Plan and rezoning from Planned Commercial (PC) to Planned Mixed Use (PM) will allow for a better-balanced community for residents, visitors, and employees.

The following uses are permitted in the Planned Mixed-Use District (PM) as outlined in Chapter 1179.02 of the City of Huber Heights Zoning Code (“Zoning Code”) shall be as follows:

- Entertainment Venues
- Hotels
- Colleges, schools and libraries
- Professional offices, including medical and dental clinics, and offices
- Restaurants and taverns
- Banks or other financial institutions. Pay-day lenders and/or title lenders shall be prohibited.
- Public facilities
- Recreational Uses
- Multi-Family Residential Dwellings
- Parking structures
- Retail commercial establishments, excluding convenience stores, gas stations or other commercial uses exhibiting similar characteristics of the aforementioned excluded uses as determined by the Planning Department. Outdoor sales and storage shall be prohibited.

SETBACKS

The following setbacks shall be established for the project:

- Front yard (Executive Boulevard) – 20 feet
- Side yard – 25 feet
- Rear yard (Adjacent to existing single family) – 25 feet

SIGNAGE

Any and all signs proposed in the Project shall be in compliance with Chapter 1189 of the City of Huber Heights Zoning Code. The Developer, or any future occupant, shall develop and submit a more comprehensive signage plan in the Detailed Development Plan to be approved by the Planning Commission.

ARCHITECTURE & SITE STANDARDS

The following section outlines the appropriate building materials and architectural features for the proposed development.

COMMERCIAL, OFFICE, & MIXED-USE BUILDINGS

Building Materials for Commercial, Office & Mixed-use Buildings

- All exterior walls of commercial, office and mixed-use buildings shall be 100% masonry materials. All buildings shall be architecturally designed so that there will be no rear of any building directly fronting Executive Boulevard as determined by the City and the Master Developer. All buildings shall have a minimum of two distinct building materials from the approved list with secondary materials covering a minimum of 10% of the total building facades. Window walls shall be considered windows by the City Code.
- All building façades shall be covered in fiber cement panel, stucco and exterior plaster, EIFS and synthetic stucco cladding systems, brick, stone, cast stone and/ or split face block.
- Mixing of exterior materials is permitted so long as it is configured in aesthetically appealing design style.
- The use of alternative materials such as metal panel, and other modern materials, as approved by Planning Commission, may be appropriate when they are used in a complimentary or similar fashion as traditional materials would be used or historically employed.
- The minimum building separation between buildings shall be 6 feet.

Roof Style

Buildings constructed may include the following roof styles:

- Flat roofs with appropriate parapet height to screen any rooftop mechanical systems if such systems are designed to be permanently installed on the roof.
- Gabled roofs with dormers with dimensional asphalt shingles and/ or standing seam metal.
- Pitched or contemporary shed roofs

All roofs, regardless of style, shall have sufficient parapet heights, cornices, fascia, soffits, eaves and/or overhangs of a character and scale complimentary to the overall scale of the building and architectural forms. Dormers, chimneys, and other aesthetically appropriate elements of architectural or visual interest are encouraged.

MULTI-FAMILY HOUSING

- Multi-family Housing is considered a structure designed to resemble a large house, series of townhomes, and garden style homes, and containing multiple units arranged above and/ or beside each other.
- The maximum number of dwellings permitted in the Project shall not exceed 320 multi-family housing units for Subareas A & B. Subarea C is intended to be developed as commercial or mixed use.

Building Materials for Multi-Family Housing

- A minimum of 50% in aggregate of Executive Boulevard-facing facades of buildings located south of the stream that bisects the property West-to-East, and within 100' of the northern boundary of the Right of Way of Executive Boulevard (collectively, the "EB Facades"), shall be covered in masonry materials, which include brick, cast stone, fiber cement panel or other masonry products approved by the City. Notwithstanding the foregoing, each EB Façade shall be covered in no less than 8% masonry materials.

- A minimum of 15% in aggregate of the remaining facades of all buildings shall be covered in masonry materials.
- All buildings shall be positioned and architecturally designed so that there will be no rear of any building directly fronting or facing Executive Boulevard, as determined by the City and the developer. All buildings shall have a minimum of two distinct building materials from the approved list with secondary materials covering a minimum of 10% of the total building facades. Window walls shall be considered windows by the City Code.
- The use of alternative materials such as double 4 vinyl, board and batten vinyl, vinyl shake, fiber cement plank, and other modern materials shall be appropriate when they are used in the same way as traditional materials would have been used.

Roof Style

Buildings constructed may include the following roof styles:

Subarea A – As illustrated in Exhibit A

- Flat roofs with appropriate parapet screening

All roofs, regardless of style, shall have sufficient parapet heights and/or cornices of a character and scale complimentary to the overall scale of the building and architectural forms. Additional aesthetically appropriate elements of architectural or visual interest are encouraged. Small architectural accent or decorative canopies, eyebrows, awnings, or other features located at entryways or porches may utilize standing-seam metal roofs or other architectural appropriate materials as deemed appropriate by the City or Master Developer.

Subarea B – As illustrated in Exhibit A

- Flat roofs with appropriate parapet screening
- Gabled roofs with or without dormers with dimensional asphalt shingles
- Hip & valley and/ or gable & valley roofs with dimensional asphalt shingles
- Mansard roofs with a combination of flat roofs and dimensional asphalt shingles
- Gable & valley roofs with dimensional asphalt shingles
- Gambrel roofs with dimensional asphalt shingles (accessory buildings only)

ARCHITECTURAL FEATURES

- In general, buildings shall include highly visible features, architectural detail and pedestrian-oriented articulation.
- Carriage houses with garages on the first floor and apartments above shall be allowed.
- Detached garages and service or utility buildings shall be allowed as accessory structures.
- Gutters and downspouts shall have a color to match or complement the finish trim of the buildings.
- When a window type and grid pattern design has been chosen for a building, the same design must be used on all elevations. Use of other window designs as “accent” windows is permitted.
- Building facades shall be broken up by using varied material, windows, and/ or façade depths
- Entrances and stairways to upper story units must be internal to the building footprint. Open breezeways internal to the building footprint are acceptable.

- Buildings need to respond to any adjacent open space and natural features present.
- The principal building facades shall maintain a consistent setback throughout the development. This setback shall be a minimum of 10' from the right of way of Executive Boulevard.
- The minimum building separation shall be 6 feet.
- Balconies, stoops, and porches are encouraged, and may project beyond the primary face of the principal building facades.

Massing/Scale

- Buildings shall be appropriate in terms of scale and massing.
- Building heights shall be a minimum of one story and up to four stories in height. The number of stories is measured at the lowest floor elevation of the primary public or common entrance of the building.
- The maximum building height shall not exceed 50 feet. The building height shall be measured from the lowest floor elevation the primary public or common entrance to the elevation of the bottom of the interior ceiling of the top floor of the building.

LANDSCAPING

To protect and promote a harmonious development that ensures a functional and logical arrangement of mixed uses, the effective and efficient use of landscaping and buffering is required. The use of pre-existing trees, natural features or amenities as part of this buffer is encouraged. The project shall include the following landscaping and buffering:

- Street trees shall be installed along Executive Boulevard every 35 lineal feet. Street trees shall be planted and spaced equally between the back of the curb and edge of sidewalk within the right of way. The type of tree and size shall be proposed by the Developer at the Detailed Development Plan application stage and approved by the Planning Commission. Any existing trees that are within this area that can be saved at the discretion of the developer and the City shall be counted towards the requirement.
- For perimeter landscaping along the north and west property line, a 25-foot buffer strip shall be provided to include landscaping materials which will maintain an opaqueness of at least 80% from a height up to 6 feet tall. For the planting materials that are used, the screen must achieve the required height, width, and opaqueness within two years of planting. The use of existing trees, natural features or amenities as part of this buffer is encouraged and if preserved, they will be used towards the calculation. Parking areas, accessways or any impervious surfaces are prohibited within this buffer strip. The placement of garage buildings and their associated facades shall be permitted to achieve the screening necessary for vehicular use and parking areas.
- Trees of at least 1 ¾" caliper shall be planted within the development at an amount of one tree for every 10 parking spaces. Trees shall be reasonably spaced around the site.
- The site shall provide a total of 25% green space to be made up of landscaped and/ or natural vegetation. The existing stream and associated setbacks shall be counted in this calculation

SITE FURNISHINGS

In order to create a consistent aesthetic appearance throughout the site, any furnishings that are used shall be consistent throughout the project. This will ensure a level of quality with the details of the development that will set it apart from other developments in the area.

LIGHTING

- Site lighting fixtures shall be downcast finished in a dark hue.
- Street lighting shall be designed and consistently placed to sufficiently match those fixtures already employed within the Entertainment District and located along Brandt Pike. Street lighting within the public ROW shall be both decorative in nature yet utilitarian and appropriate in function. Street lighting fixtures shall be spaced no more than 200 feet on center, on each side of the ROW, staggered and alternated from center or mid-point of that of the respective diagonally located fixture.
- Lighting shall be placed throughout the development as necessary to create a safe environment for residents.
- Site lighting fixtures shall not exceed a height of 25 feet
- Pedestrian-scale fixtures may be located within open spaces or other areas requiring additional lighting. These fixtures shall have decorative posts and lamps and not exceed a height of 14 feet.
- Exterior building lighting shall also be decorative, in character with the architectural style of the buildings
- Lighting Standards: The following special conditions shall apply:
 - The height of any on-site light fixture shall not exceed 25 feet in height.
 - All fixtures shall have a cut-off angle of 90 degrees or less; and shall have light shields if facing the residential neighborhood to the north.
 - No direct light source shall be visible at the property line (adjacent to residential) at ground level; and
 - Maximum illumination at the property line shall not exceed one half foot-candle

STREET AND TRANSPORTATION STANDARDS

The Project is designed to encourage walkability and other alternative modes of transportation. There shall be limited ingress and egress points onto the public streets, which will reduce traffic conflicts. The facilities in the development will be properly arranged so as to provide for proper internal pedestrian and traffic circulation.

Parking requirements

It is important that parking within the Project is approached in a strategic manner. There must be enough created to support The Project, however the design of the parking shall not dominate the master plan or take away from the streetscape. In order to achieve this balance, the placement and design of parking areas

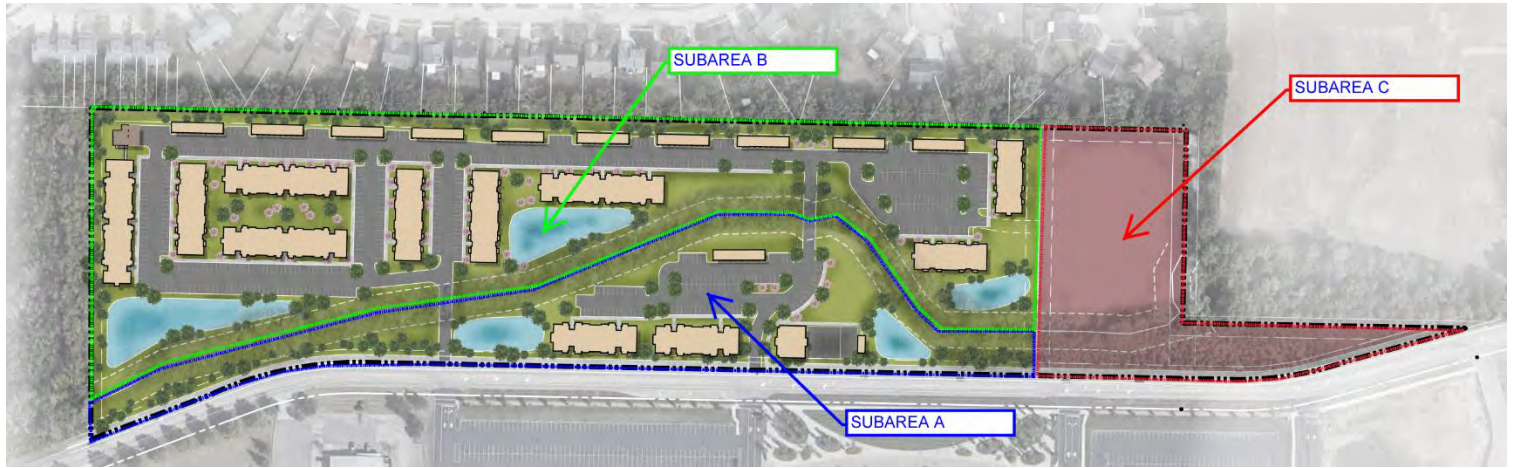
becomes very important. This design will vary depending upon the building type and the site design for each development site. The following section explores these parking requirements and considerations in more detail.

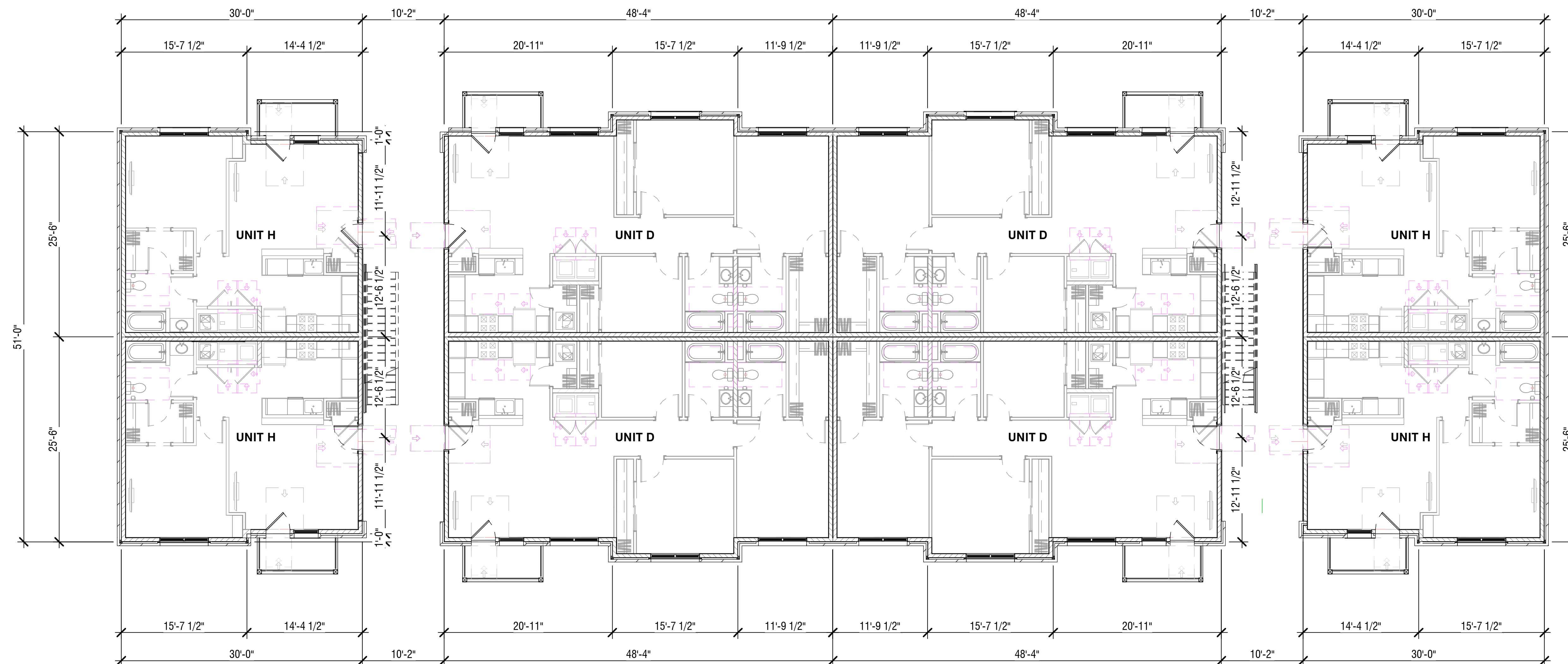
In order to ensure that there is enough parking to support future land use within The Project, the future land uses shall include a minimum of one parking space per bedroom. Parking within the Project must measure nine (9) feet by eighteen (18) feet, except on-street parallel parking spaces which shall measure eight (8) feet by twenty (20) feet. Parking drive aisles shall measure a minimum of twenty-four (24) feet in width. Additional information on parking requirements can be found in Chapter 1185 of the City of Huber Heights Zoning Codes.

CONCLUSION

The approval of a Planned Mixed-Use District (PM) will allow for a more cohesive development. The treatment of the building designs, parking, landscaping, site improvements and pedestrian spaces as outlined in these Project Zoning and Design Standards is essential to creating the pedestrian-oriented environment for the Project's walkable lifestyle community. These standards are intended to ensure the proper development of the Project, improve the quality of life for existing residents, and to attract new residents to the community.

EXHIBIT A





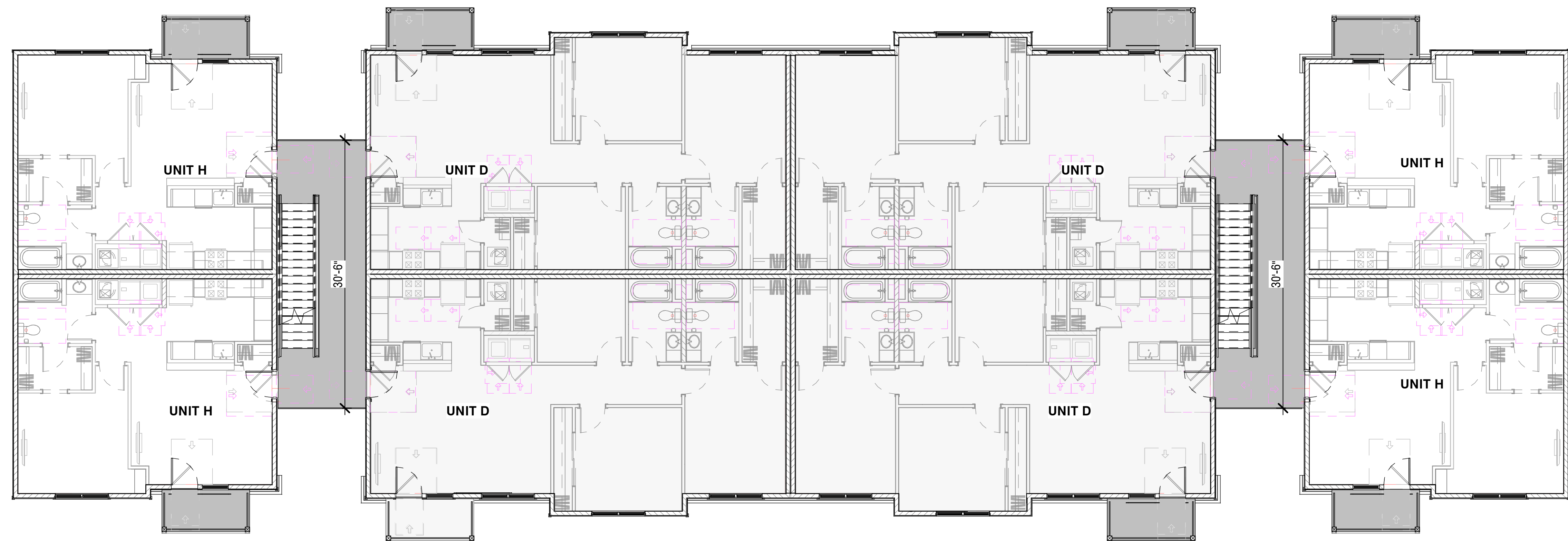
01 LEVEL - BUILDING #3

SCALE 1/16" = 1'-0"

newbauer breezeway building #3

PRELIMINARY DESIGN PACKAGE | DECEMBER 12, 2022





02 LEVEL - BUILDING #3
SCALE 1/16" = 1'-0"

newbauer breezeway building #3
PRELIMINARY DESIGN PACKAGE | DECEMBER 12, 2022





BUILDING #3 - SOUTH

SCALE 1/16" = 1'-0"



BUILDING #3 - NORTH

SCALE 1/16" = 1'-0"

newbauer breezeway building #3
PRELIMINARY DESIGN PACKAGE | DECEMBER 12, 2022

METROPOLITAN
HOLDINGS

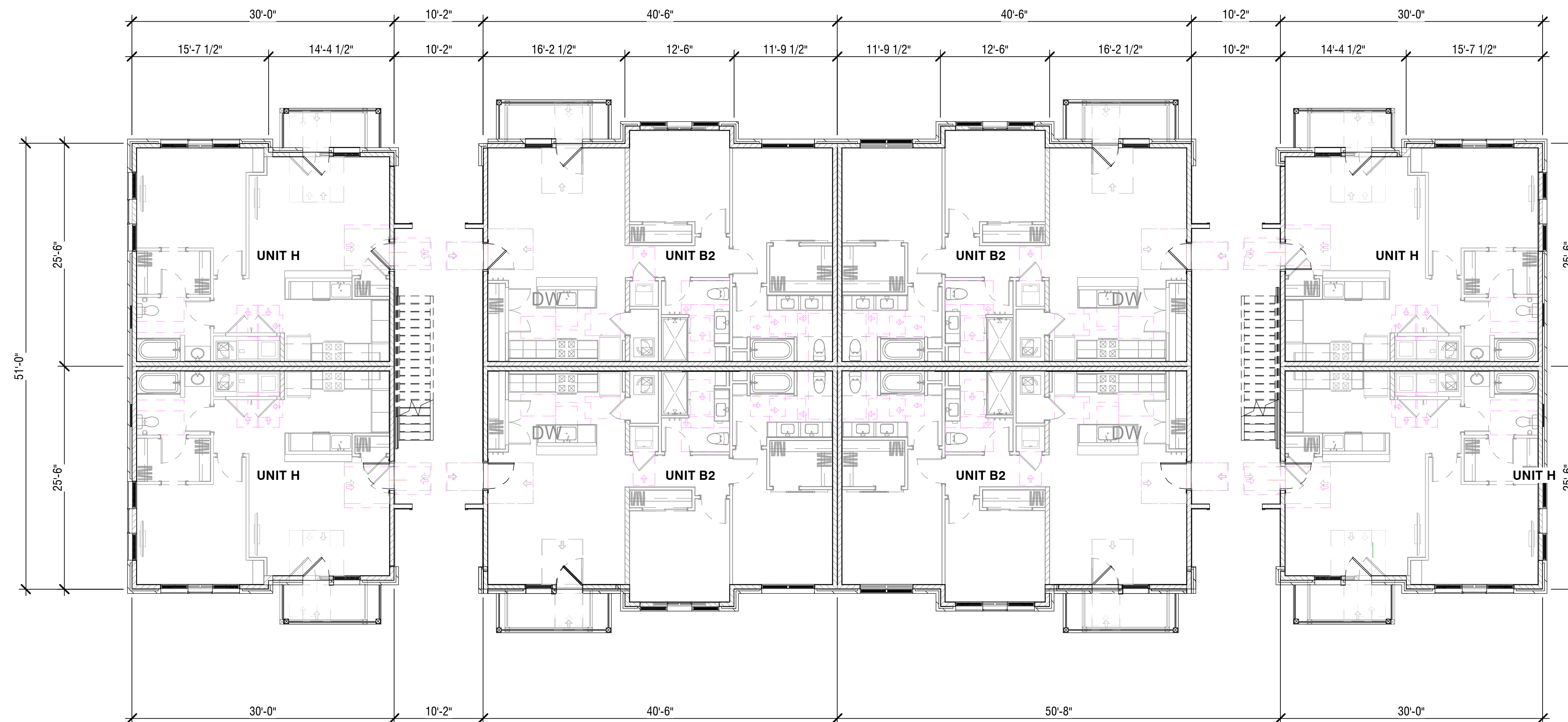
archall



BUILDING #3 - WEST
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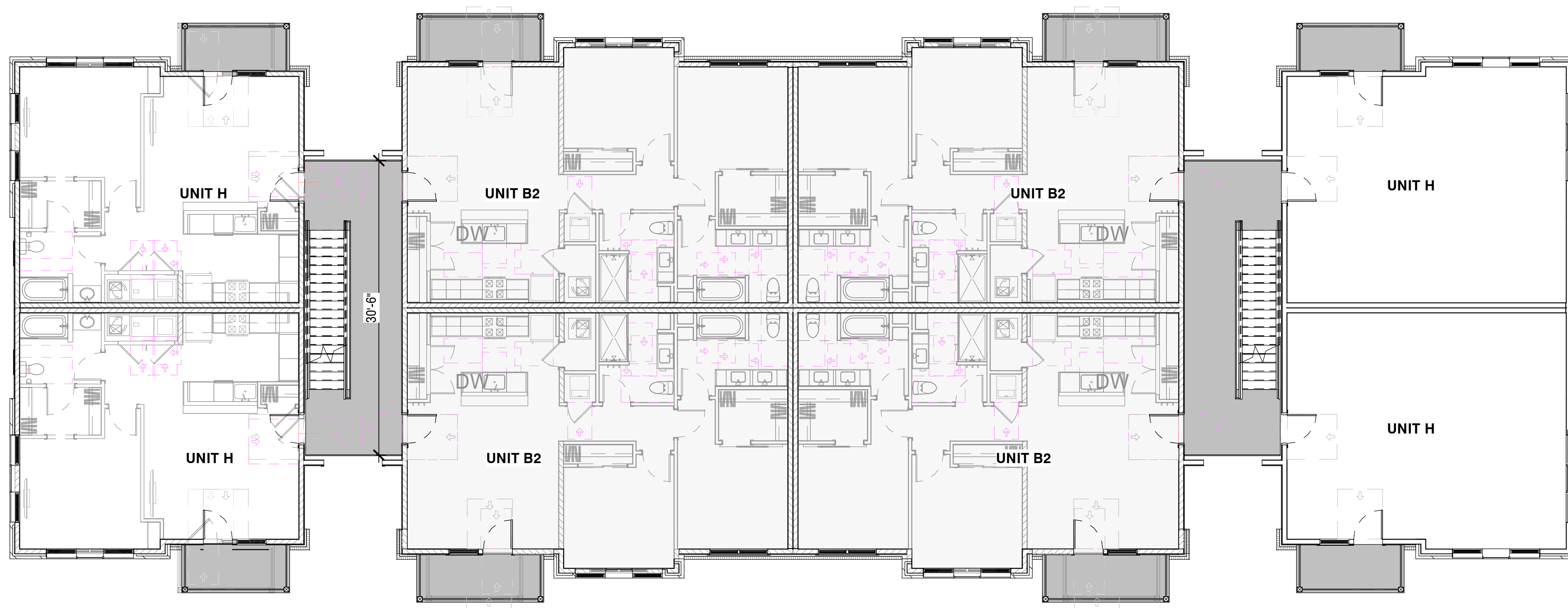
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01 LEVEL - BUILDING #4
SCALE 1/16" = 1'-0"

newbauer breezeway building #4
PRELIMINARY DESIGN PACKAGE | DECEMBER 20, 2022





02 LEVEL - BUILDING #4
SCALE 1/16" = 1'-0"

newbauer breezeway building #4
PRELIMINARY DESIGN PACKAGE | DECEMBER 20, 2022





BUILDING #4 FLAT - SOUTH
SCALE 1/16" = 1'-0"



BUILDING #4 FLAT - NORTH
SCALE 1/16" = 1'-0"

newbauer breezeway building #4
PRELIMINARY DESIGN PACKAGE | DECEMBER 20, 2022

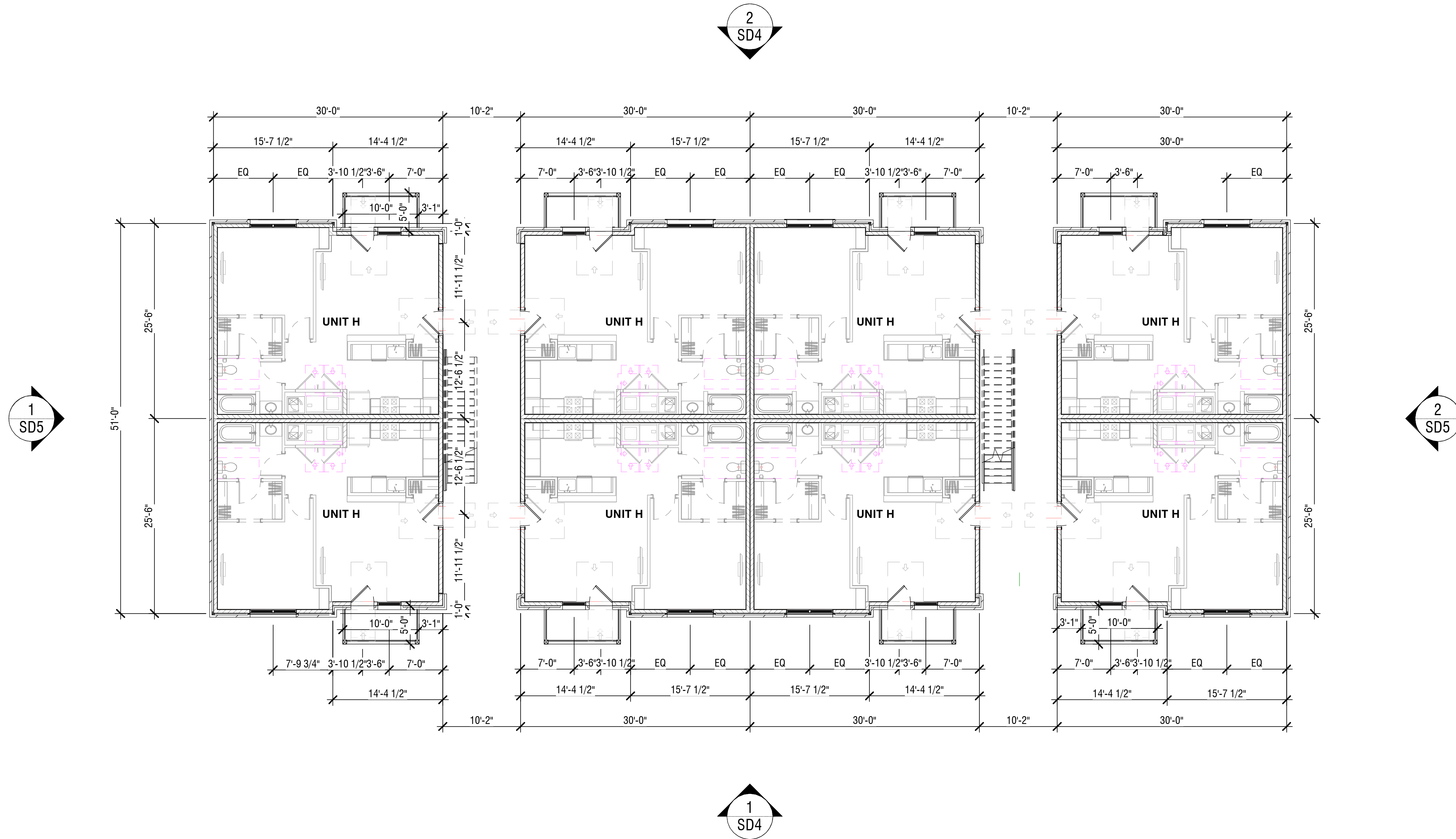




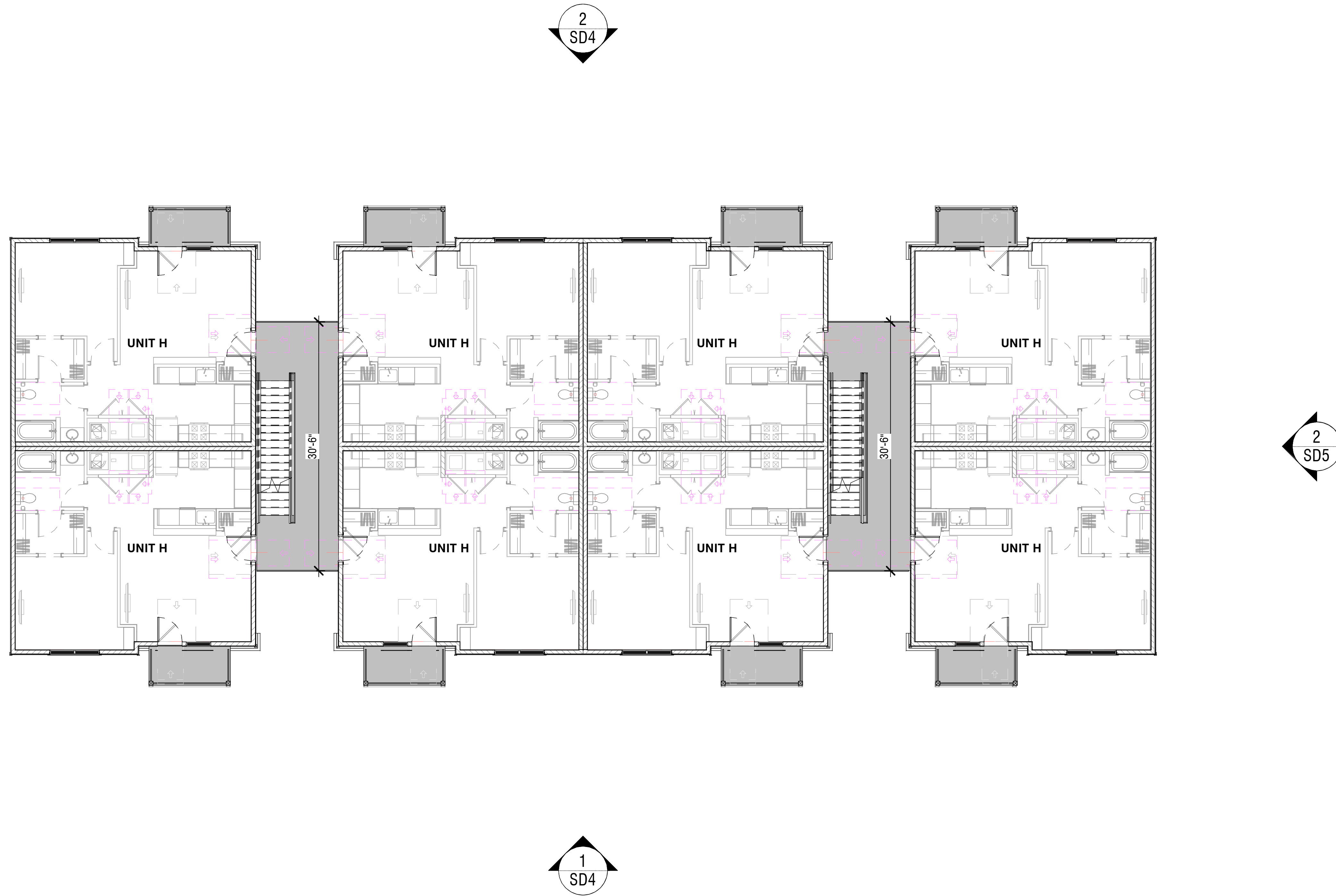
BUILDING #4 FLAT - WEST
SCALE 1/16" = 1'-0"



BUILDING #4 FLAT - EAST
SCALE 1/16" = 1'-0"



01 LEVEL - BUILDING #5
SCALE 1/16" = 1'-0"



02 LEVEL - BUILDING #5
SCALE 1/16" = 1'-0"

newbauer breezeway building #5
PRELIMINARY DESIGN PACKAGE | JANUARY 17, 2023





BUILDING #5 - SOUTH

SCALE 1/16" = 1'-0"



BUILDING #5 - NORTH

SCALE 1/16" = 1'-0"

newbauer breezeway building #5
PRELIMINARY DESIGN PACKAGE | JANUARY 17, 2023

METROPOLITAN
HOLDINGS

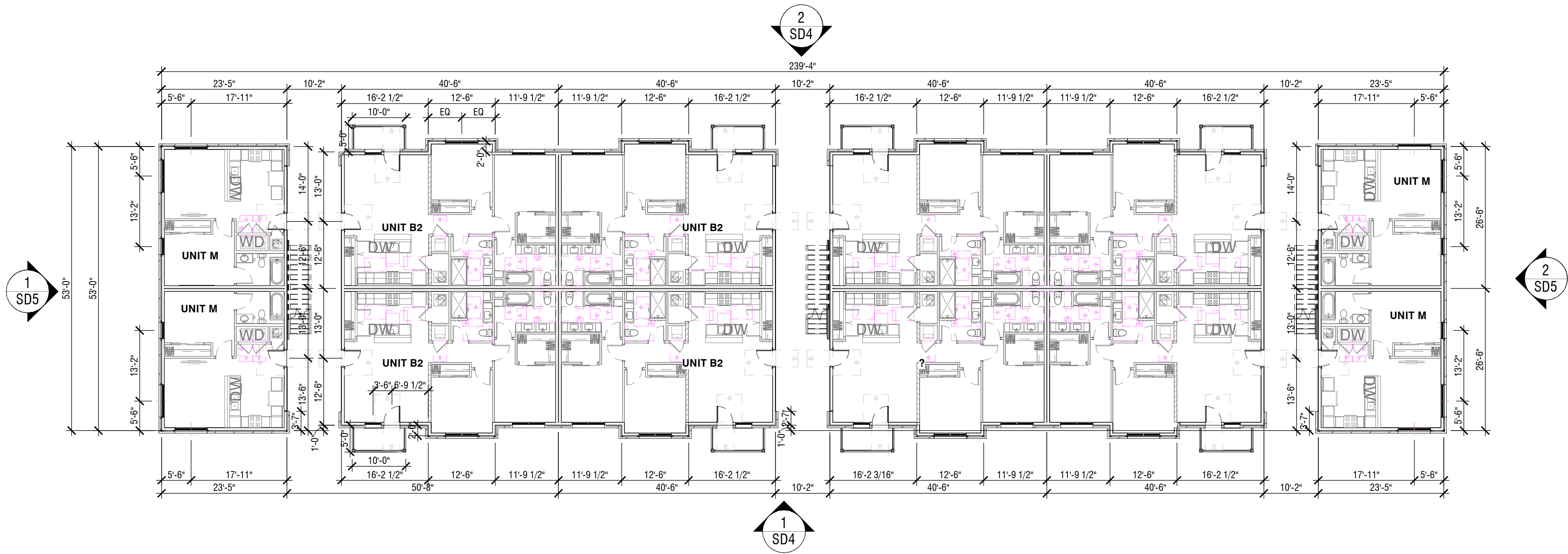
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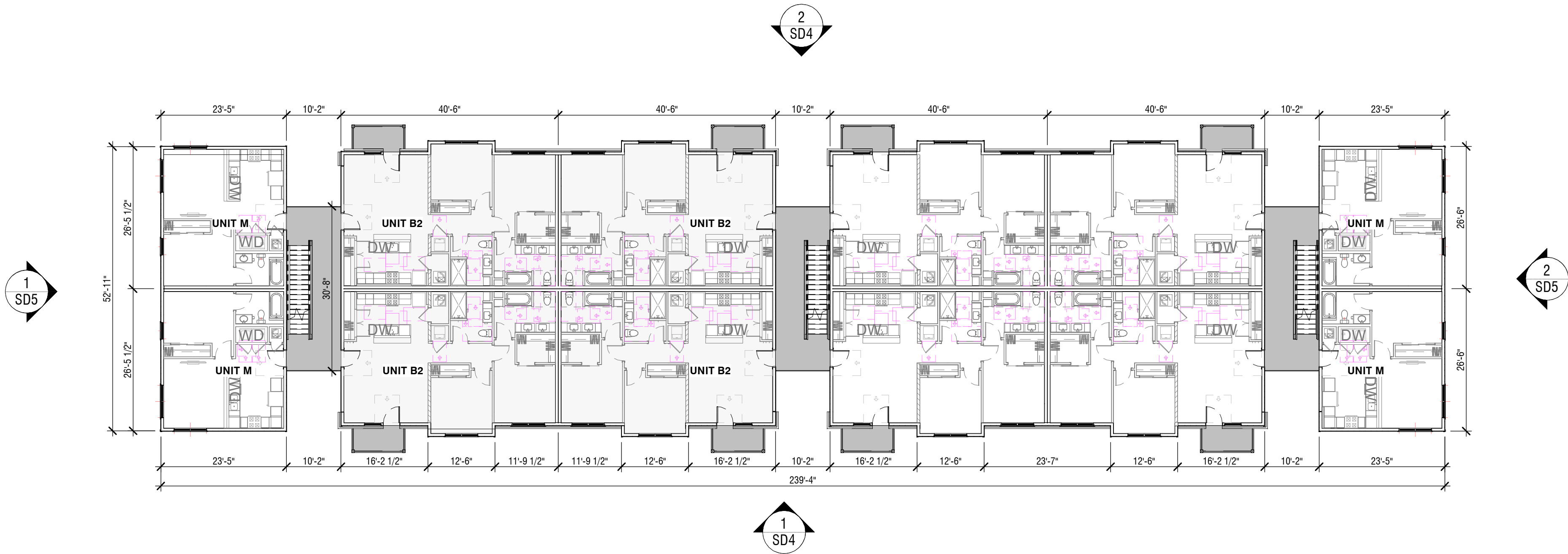


BUILDING #5 - WEST
SCALE 1/16" = 1'-0"



BUILDING #5 - EAST
SCALE 1/16" = 1'-0"





02 LEVEL - SD
SCALE 3/64" = 1'-0"

newbauer breezeway building #7
PRELIMINARY DESIGN PACKAGE | DECEMBER 12, 2022





BUILDING #7 - SOUTH
SCALE 3/64" = 1'-0"



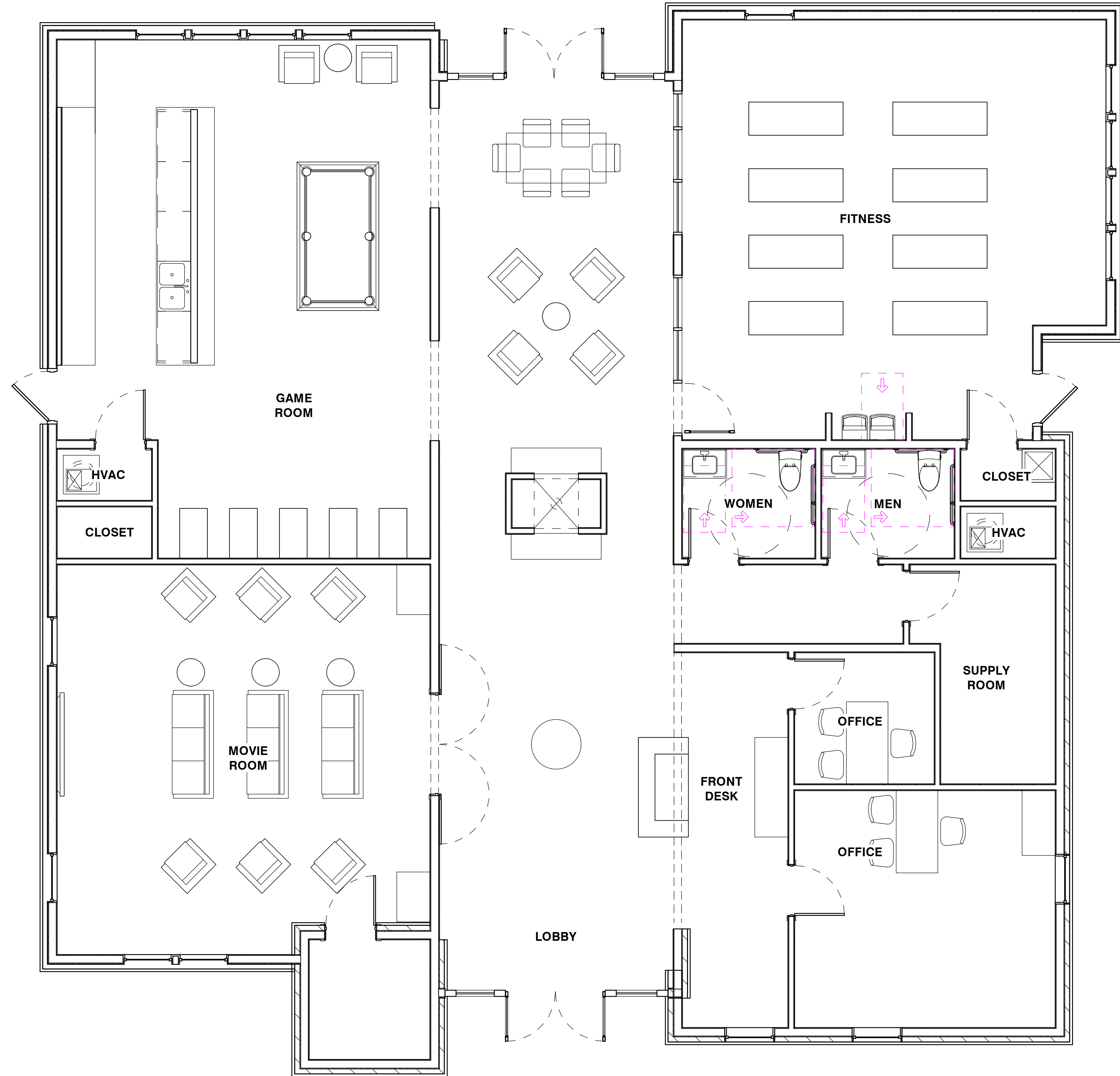
BUILDING #7 - NORTH
SCALE 3/64" = 1'-0"



BUILDING #7 - WEST
SCALE 3/64" = 1'-0"



BUILDING #7 - EAST
SCALE 3/64" = 1'-0"



clubhouse plan
SCALE 1/8" = 1'-0"

newbauer clubhouse
PRELIMINARY DESIGN PACKAGE | DECEMBER 12, 2022





side elevation 2

SCALE 1/8" = 1'-0"



side elevation 1

SCALE 1/8" = 1'-0"



poolside elevation

SCALE 1/8" = 1'-0"



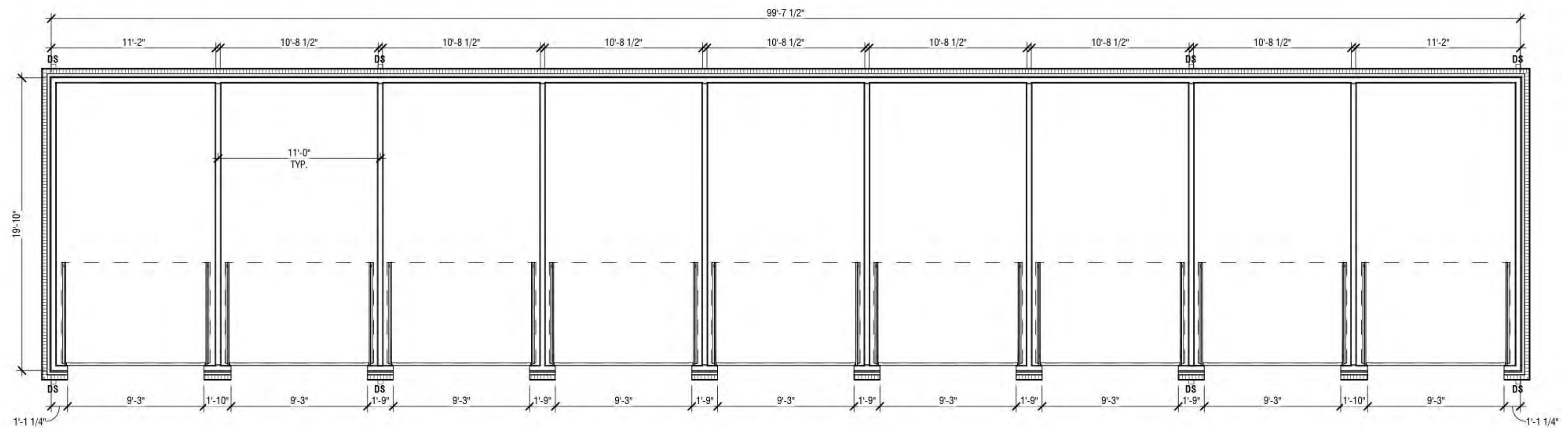
front elevation

SCALE 1/8" = 1'-0"



front elevation

SCALE 1/8" = 1'-0"



garage plan

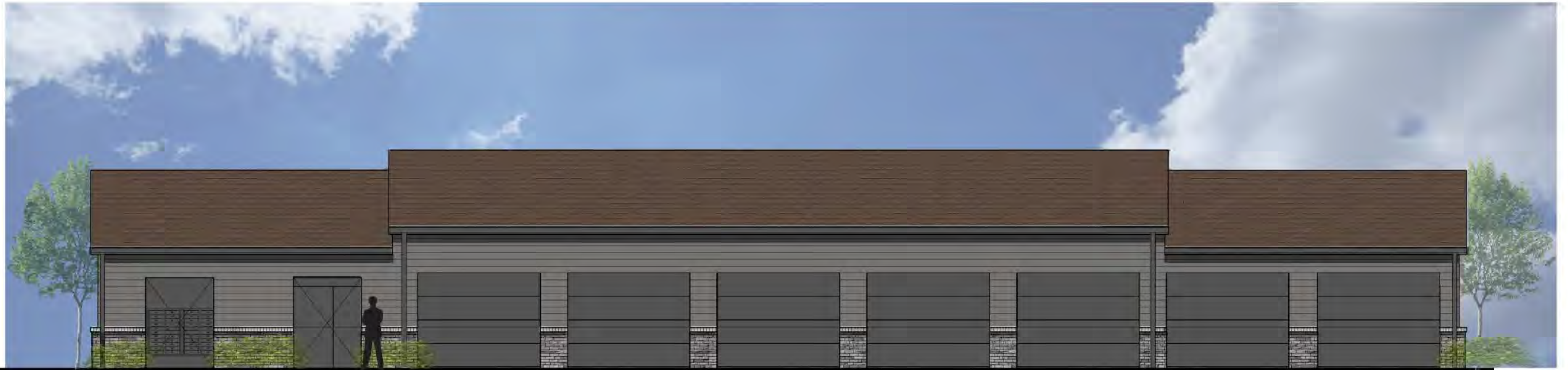
SCALE 1/8" = 1'-0"



back elevation
SCALE 1/8" = 1'-0"

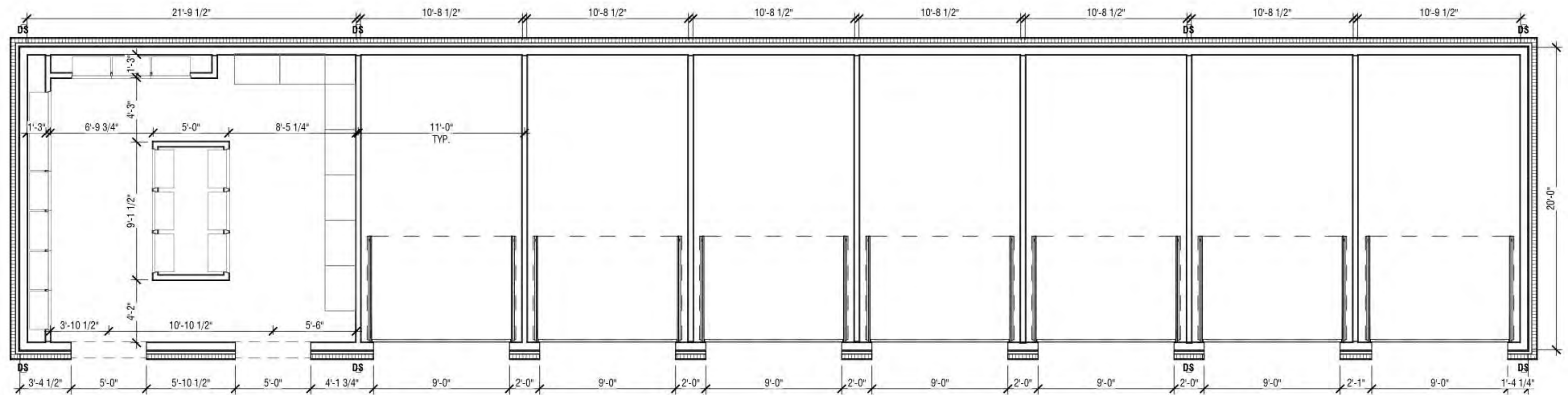


side elevation
SCALE 1/8" = 1'-0"



front elevation

SCALE 1/8" = 1'-0"



mail room plan

SCALE 1/8" = 1'-0"

newbauer garage w/ mail
PRELIMINARY DESIGN PACKAGE | DECEMBER 12, 2022

METROPOLITAN
HOLDINGS

archall



BACK ELEVATION

SCALE 1/8" = 1'-0"



SIDE ELEVATION

SCALE 1/8" = 1'-0"

newbauer garage w/ mail
PRELIMINARY DESIGN PACKAGE | DECEMBER 12, 2022

METROPOLITAN
HOLDINGS

archall



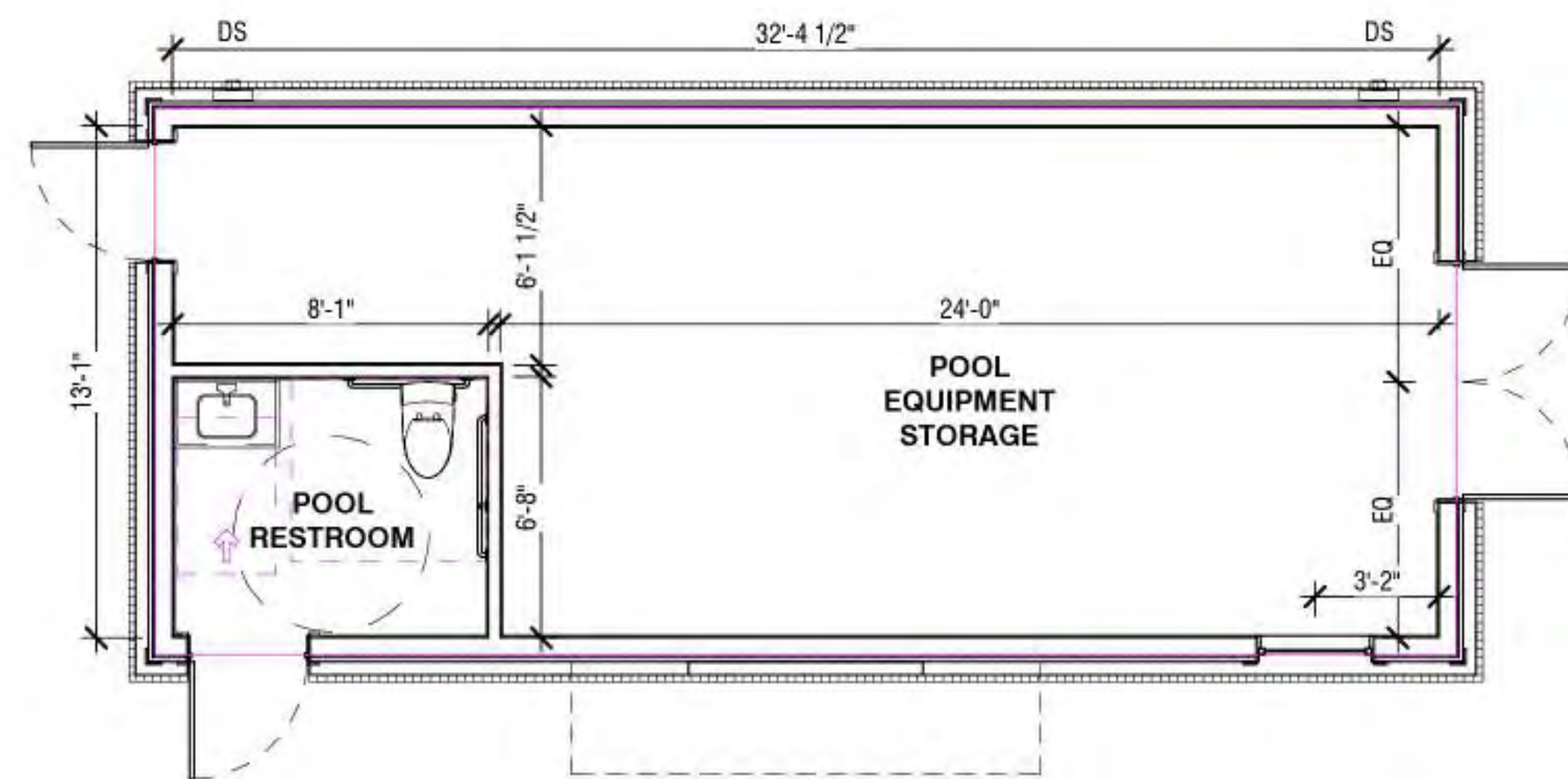
front elevation

SCALE 1/8" = 1'-0"



rear elevation

SCALE 1/8" = 1'-0"



pool bldg plan

SCALE 1/8" = 1'-0"



side elevation 1

SCALE 1/8" = 1'-0"



side elvation 2

SCALE 1/8" = 1'-0"



Huber Heights Fire Division

Inspections require two business days advance notice! (OAC)1301:7-7-09(A)(5)

| | | | |
|---------------------|----------------------|------------|----------|
| Occupancy Name: | Newbauer Development | | |
| Occupancy Address: | Executive Boulevard | | |
| Type of Permit: | HHP&D Site Plan | | |
| Additional Permits: | Choose an item. | | |
| Additional Permits: | Choose an item. | | |
| MCBR BLD: | Not Yet Assigned | HH P&D: | |
| MCBR MEC: | | HHFD Plan: | |
| MCBR ELE: | | HHFD Box: | |
| REVIEWER: | Susong | DATE: | 2/7/2023 |

Fire Department Comments:

The Huber Heights City Code Part 15 Refers to Fire Code Requirements and has adopted by reference OFC and IFC Appendices

These comments are based only on the proposed site work, fire department access and basic fire protection concept at this time. A full plan review of the building systems, fire protection, egress and life safety will need to be conducted once the architectural plans have been submitted. The proposed development will need to meet the requirements of the Ohio Fire Code 2017, Ohio Building Code 2017, and the Huber Heights Codified Ordinance. Based on the drawings provided the following requirements need to be met. Be advised that additional questions and comments may rise as the project progresses.

Requirements:

- Hydrants in multi-family and commercial districts shall be placed not more than 300 feet apart, measured on the main and not more than 400 feet from any opening in any building. All new fire hydrants and any existing fire hydrants that are in need of replacement, shall meet the Huber Heights hydrant standard for this district of two (2), five (5) inch diameter steamer nozzles. These steamer nozzles shall have a five (5) inch STORTZ quick connection and one steamer shall have a four (4) inch STORTZ connection approved by the Code Official. Huber Heights Codified Ordinance 1521.06(c). **(Current layout does not appear to meet the 300 feet spacing.)**
- If buildings are required to be sprinklered at least one fire hydrant shall be provided within 75 feet of the fire department connection for each building. Huber Heights Codified Ordinance 1521.01(e).

- Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. Ohio Fire Code 507.5.4. *(See below.)*
- A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or approved. *(No trees, bushes, plantings, etc.)* Ohio Fire Code 507.5.5.
- The water supply for fire protection shall meet the requirements of OFC 507 and Appendix B. Calculations and findings will need to be determined and provided. Water Main and hydrant extension sizes and spacing will also need to be shown in detail. Fire flow requirements shall be determined in accordance with Ohio Fire Code, Appendix B, Fire Flow Requirements for Buildings. Once the fire flow has been determined the minimum number of required fire hydrants can be confirmed. *(Building Construction Classification and Square Footage will need to be determined first).*
- Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, except for approved security gates and an unobstructed vertical height for fire apparatus access roads shall be 13 feet 6 inches, in accordance with Ohio Fire Code 503.2.1.
- Bridges shall meet the requirements of Ohio Fire Code 503.2.6.
- Fire department access roads shall be capable of supporting the imposed load of fire apparatus weighing up to 75,000 lbs. Refer to Ohio Fire Code Appendix D102.1.
- Turn radius for fire department vehicle access shall meet the requirements for Huber Heights Fire Division. (Radius has not been checked at this time due to scale on drawings.) Refer to Ohio Fire Code Appendix D103.3 and 503.2.4.
- Dead-end fire apparatus access roads shall not exceed 150 feet without a means to turn-around. Ohio Fire Code Appendix D 103.4 and 503.2.5. (Road in front of Building 4).
- Buildings where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet, shall be provided with approved aerial fire apparatus access roads. OFC Appendix D105.1. Refer to D105.2, D105.3 and D105.4 for additional requirements.
- If required, fire department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or otherwise approved by the fire code official. Ohio Fire Code 912.2.1.
- If required, immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be approved by the fire code official. Ohio Fire Code 912.4.

Please reference contact information below for questions or concerns with this document.

Plans reviewed by the Huber Heights Fire Division are reviewed with the intent they comply in **ALL** respects to this code, as prescribed in **SECTION (D) 104.1 of the 2017 Ohio Fire Code**. Any omissions or errors on the plans or in this review do not relieve the applicant of complying with **ALL** applicable requirements of this code. These plans have been reviewed for compliance with the Ohio Fire Code adopted by this jurisdiction. There may be other regulations applicable under local, state, or federal statutes and codes, which this department has no authority to enforce and therefore have not been evaluated as part of this plan review.

Newbauer Multifamily Development

Traffic Impact Study

Prepared for: Metropolitan Holdings

February 10, 2023



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I. Purpose of Report & Study Objectives

The purpose of this traffic analysis and report is to document the potential traffic impacts of a proposed multifamily development located in Huber Heights, OH. This traffic impact study (TIS) is required by the City of Huber Heights as part of the development approval process.

II. Proposed Development

A. Off-Site Developments

The study area includes the proposed site access points and the intersections of Executive Boulevard with Meijer Access Signal and Brandt Pike.

The surrounding area is largely developed with residential developments to the north, industrial developments to the west, retail developments to the east, and the Rose Music Center to the south. The existing site is currently undeveloped and is located opposite the Rose Music Center along Executive Boulevard.

B. On-Site Development

Location

The site is located on the north side of Executive Parkway, approximately $\frac{3}{4}$ mile west of Brandt Pike. **Figure 1** shows the location of the proposed site in western Ohio and **Figure 2** shows the study area.

Figure 1 – Location in Western Ohio (Huber Heights outlined in dashed red)

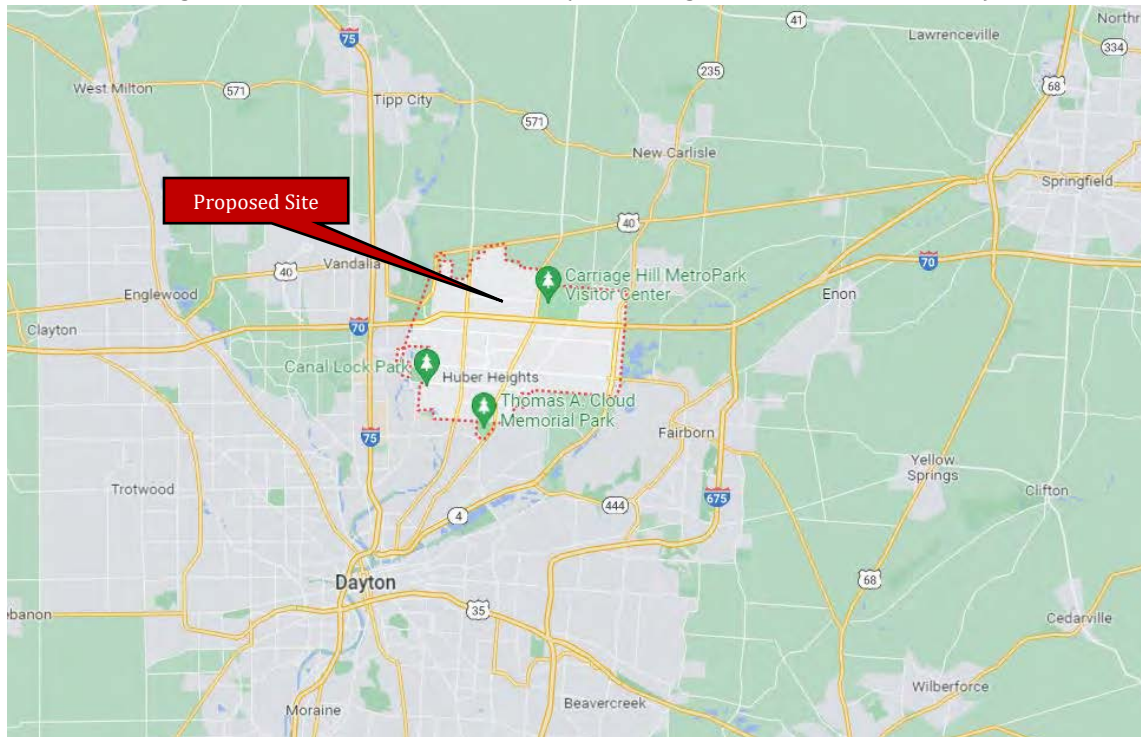


Figure 2 – Location of the Proposed Development (Yellow), Site Drives, and Study Intersections



Land Use & Intensity

The site is proposed to develop as multifamily residential with 300 total units. The development is proposed to have two full access points aligning with the two westerly, existing access points to the Rose Music Center. The site concept plan is provided in **Appendix A**.

III. Area Conditions

A. Area of Influence

The study intersections for the proposed development are listed below. Numbers correspond to **Figure 2**.

1. Executive Boulevard & Site Access 1 / Rose Music Center Access 1
2. Executive Boulevard & Site Access 2 / Rose Music Center Access 2
3. Executive Boulevard & Meijer Access
4. Executive Boulevard & Brandt Pike

Executive Boulevard is a three-lane section with a two-way left turn lane (TWLTL) and a posted speed limit of 35 MPH. Brandt Pike is generally a four-lane section with a center median and dedicated left turn lanes at intersections.

B. Jurisdictions

The proposed site and all intersections are under City of Huber Heights jurisdiction.

C. Traffic Volumes & Conditions

AM and PM peak turning movement counts for all study intersections were collected on January 19, 2023, by Carpenter Marty Transportation (CM). Growth rate data for the study area was obtained from the ODOT Traffic Forecasting Management System (TFMS). The study area shows 0% growth along Executive Boulevard and a 0.5% growth along Brandt Pike. Thus, a 0.5% growth rate was utilized for the entire study area to produce conservative results.

Count data and TFMS growth rate data can be found in **Appendix B**.

IV. Projected Traffic

A. Background Traffic

For analysis, the Opening Year of the development is 2024 and the Design, or Horizon Year, is 2044. The previously described linear annual growth rate was applied to the count data to produce background, or No Build, volumes for the Opening and Horizon Years.

B. Trip Generation

Trips for the proposed development were generated using the ITE methodologies and the Trip Generation Manual, 11th Edition. Land use code (LUC) 220 – *Multifamily Housing (Low-Rise) – Not Close to Rail Transit* was used to generate trips for the proposed development. Pass-by and internal capture reductions do not apply. **Table 1** summarizes the trip generation for the proposed development. The full trip generation details can be found in **Appendix C**.

Table 1 – Proposed Site Trip Generation Summary

| Land Use | Size | Weekday AM Peak | | Weekday PM Peak | |
|---|--------------------|-----------------|------|-----------------|------|
| | | Entry | Exit | Entry | Exit |
| 220 – Multifamily Housing (Low-Rise) – Not Close to Rail Transit | 300 Dwelling Units | 28 | 88 | 94 | 55 |

Site traffic was distributed to/from the site based on count data, knowledge of the surrounding area, and engineering judgement. Site traffic was added to the No Build traffic to produce Build traffic for the Opening and Horizon Years. The full volume calculations can be found in **Appendix D**.

V. Traffic Analysis

A. Turn Lane Warrant & Length Analysis

A turn lane warrant analysis was conducted at the proposed site access points using standard ODOT turn lane warrant graphs. If a turn lane was warranted in any particular scenario, the length was calculated using methodologies in the ODOT Location and Design

(L&D) Manual and it was represented as such in the capacity analysis unless otherwise noted.

B. Capacity Analysis

Synchro 11 software, using the latest module of the Highway Capacity Manual, was used to analyze capacity at all intersections. A minimum Level-of-Service (LOS) of D for the overall intersection/approaches, and LOS E for individual movements, during peak traffic hours was considered acceptable at each intersection. If unacceptable LOS/delay occurred in No Build or Build analysis scenarios, mitigation was determined to bring LOS/delay back to acceptable levels.

VI. Results

A. Turn Lane Warrant & Length Analysis

Results of the turn lane warrant analysis show that no turn lanes are warranted at either site access point. It should be noted that a TWLTL exists along the site frontage of Executive Boulevard and will be utilized by entering site traffic. The full turn lane warrant analysis, including calculated turn lane lengths for existing turn lanes at the signalized intersections, can be found in **Appendix E**.

B. Capacity Analysis

Results of the baseline capacity analysis for the study intersections in each analysis scenario can be seen in **Table 2**. Signal timings, including cycle lengths and splits, were optimized for each scenario. Planning level clearance intervals were utilized per methodology from the ODOT Analysis and Traffic Simulation (OATS) Manual. The full capacity analysis can be found in **Appendix F**.

Table 2 – Baseline Capacity Analysis Summary (LOS/delay)

| Intersection | Approach/ Movement | Opening Year (2024) | | | | Horizon Year (2044) | | | |
|--|-----------------------|---------------------|---------------|----------------|---------------|---------------------|---------------|----------------|---------------|
| | | AM No Build | AM Build | PM No Build | PM Build | AM No Build | AM Build | PM No Build | PM Build |
| Brandt Pike & Executive Blvd. | EB | B/19.3 | B/19.6 | C/20.1 | C/20.5 | B/19.2 | B/19.7 | C/20.3 | C/20.9 |
| | NB | A/5.4 | A/5.8 | A/6.7 | A/6.8 | A/5.8 | A/6.2 | A/7.1 | A/7.3 |
| | SB | B/16.3 | B/17.5 | B/14.4 | B/15.1 | B/18.3 | B/19.5 | B/15.3 | B/16.0 |
| | Total | B/12.6 | B/13.7 | B/11.1 | B/11.6 | B/13.8 | B/14.9 | B/11.6 | B/12.1 |
| Meijer Drive & Executive Blvd. | EB | A/6.5 | A/7.0 | A/7.1 | A/7.4 | A/6.6 | A/7.1 | A/7.3 | A/7.6 |
| | WB | A/6.5 | A/6.7 | A/6.8 | A/7.2 | A/6.6 | A/6.8 | A/6.8 | A/7.3 |
| | NB | B/12.4 | B/12.4 | B/13.5 | B/13.5 | B/12.4 | B/12.4 | B/13.5 | B/13.5 |
| | Total | A/7.2 | A/7.3 | A/8.8 | A/8.7 | A/7.2 | A/7.4 | A/8.8 | A/8.8 |
| Site Access 1/ Rose Music Center Access 1 & Executive Blvd. | EBL | --- | A/7.8 | --- | A/7.8 | --- | A/7.9 | --- | A/7.8 |
| | WBL | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 |
| | NB | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 | A/0.0 |
| | SB | --- | B/11.7 | --- | B/13.3 | --- | B/12.1 | --- | B/14.0 |
| Site Access 2/ Rose Music Center Access 2 & Executive Blvd. | EBL | --- | A/7.8 | --- | A/7.9 | --- | A/7.9 | --- | A/7.9 |
| | WBL | A/0.0 | A/0.0 | A/7.9 | A/7.9 | A/0.0 | A/0.0 | A/7.9 | A/8.0 |
| | NB | A/9.0 | A/9.3 | A/9.7 | A/9.9 | A/9.0 | A/9.4 | A/9.9 | B/10.1 |
| | SB | --- | B/12.0 | --- | B/13.7 | --- | B/12.4 | --- | B/14.4 |

As shown in **Table 2**, all intersections operate with acceptable LOS/delay.

VII. Recommendations and Conclusions

Based on the results of the turn lane warrant analysis, no turn lanes meet warrants for the proposed access points, and none are recommended. A TWLTL is present along Executive Boulevard and will provide left turn deceleration and storage for site ingress. Based on the results of the capacity analysis, all study intersections operate with acceptable LOS/delay. Thus, no improvements are required nor recommended for any study intersection.

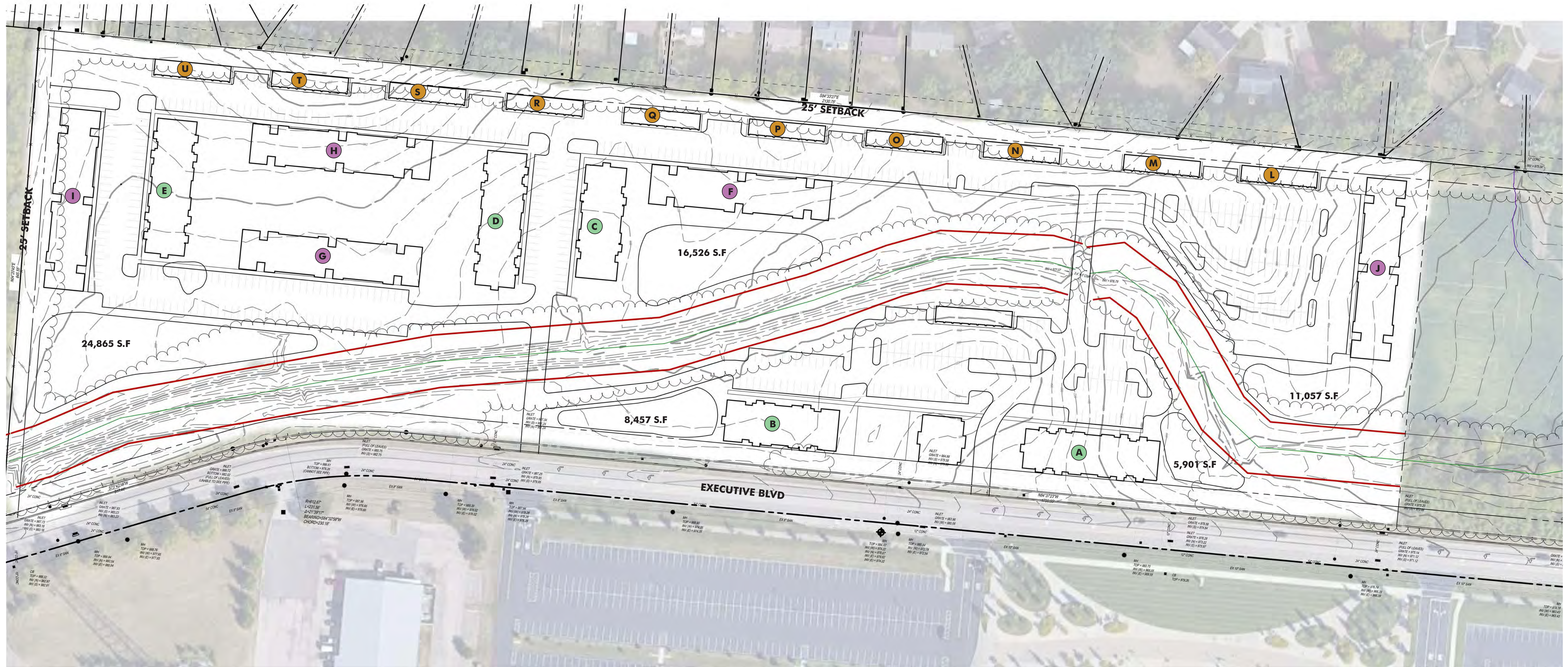
VIII. Appendices

- Appendix A – Site Plan
- Appendix B – Count Data and Growth Rates
- Appendix C – Trip Generation
- Appendix D – Volume Calculations
- Appendix E – Turn Lane Warrant and Length Analysis
- Appendix F – Capacity Analysis

Appendix A

Site Plan



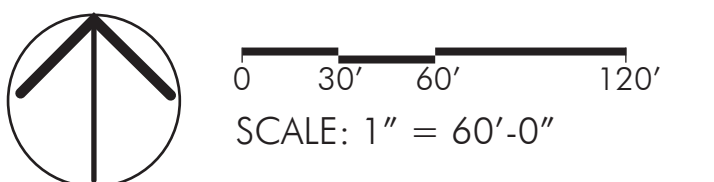


SITE DATA

| | |
|----------------|--|
| SITE ACREAGE: | 21.27 AC |
| TOTAL UNITS: | 300 UNITS |
| DENSITY: | 14.1 DU/AC |
| TOTAL PARKING: | GARAGE SPACE: 88 SPACES SURFACE SPACE: 550 SPACES TOTAL SPACE: 638 SPACES PROVIDED |

BUILDING TYPE SUMMARY

- CARRIAGE HOME BUILDING
- LARGE TOWN HOME BUILDING- 36 UNIT
- SMALL TOWN HOME BUILDING- 24 UNIT



Appendix B

Count Data and Growth Rates

Executive Boulevard & Brandt Pike - TMC

Thu Jan 19, 2023

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031227, Location: 39.872116, -84.099223

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

| Leg Direction | Executive Boulevard Eastbound | | | | Brandt Pike Northbound | | | | Brandt Pike Southbound | | | | |
|---------------------------------------|----------------------------------|-------|----|-------|---------------------------|-------|----|-------|---------------------------|-------|----|-------|-------|
| Time | L | R | U | App | L | T | U | App | T | R | U | App | Int |
| 2023-01-19 7:00AM | 3 | 19 | 0 | 22 | 12 | 49 | 0 | 61 | 188 | 8 | 0 | 196 | 279 |
| 7:15AM | 7 | 19 | 0 | 26 | 16 | 76 | 0 | 92 | 242 | 6 | 0 | 248 | 366 |
| 7:30AM | 8 | 19 | 0 | 27 | 15 | 89 | 0 | 104 | 293 | 7 | 0 | 300 | 431 |
| 7:45AM | 6 | 36 | 0 | 42 | 39 | 137 | 0 | 176 | 217 | 5 | 0 | 222 | 440 |
| Hourly Total | 24 | 93 | 0 | 117 | 82 | 351 | 0 | 433 | 940 | 26 | 0 | 966 | 1516 |
| 8:00AM | 15 | 22 | 0 | 37 | 25 | 108 | 0 | 133 | 182 | 8 | 0 | 190 | 360 |
| 8:15AM | 9 | 27 | 0 | 36 | 21 | 106 | 0 | 127 | 228 | 12 | 0 | 240 | 403 |
| 8:30AM | 4 | 20 | 0 | 24 | 36 | 117 | 0 | 153 | 244 | 15 | 0 | 259 | 436 |
| 8:45AM | 11 | 23 | 0 | 34 | 29 | 104 | 0 | 133 | 194 | 7 | 0 | 201 | 368 |
| Hourly Total | 39 | 92 | 0 | 131 | 111 | 435 | 0 | 546 | 848 | 42 | 0 | 890 | 1567 |
| 4:00PM | 46 | 41 | 0 | 87 | 37 | 260 | 0 | 297 | 161 | 9 | 0 | 170 | 554 |
| 4:15PM | 41 | 44 | 0 | 85 | 41 | 290 | 0 | 331 | 150 | 7 | 0 | 157 | 573 |
| 4:30PM | 40 | 54 | 0 | 94 | 36 | 234 | 0 | 270 | 183 | 8 | 0 | 191 | 555 |
| 4:45PM | 23 | 43 | 0 | 66 | 55 | 251 | 0 | 306 | 162 | 9 | 0 | 171 | 543 |
| Hourly Total | 150 | 182 | 0 | 332 | 169 | 1035 | 0 | 1204 | 656 | 33 | 0 | 689 | 2225 |
| 5:00PM | 34 | 54 | 0 | 88 | 37 | 275 | 0 | 312 | 170 | 5 | 0 | 175 | 575 |
| 5:15PM | 36 | 34 | 0 | 70 | 38 | 226 | 0 | 264 | 159 | 11 | 0 | 170 | 504 |
| 5:30PM | 39 | 33 | 0 | 72 | 39 | 204 | 0 | 243 | 151 | 11 | 0 | 162 | 477 |
| 5:45PM | 24 | 36 | 0 | 60 | 32 | 173 | 0 | 205 | 147 | 10 | 0 | 157 | 422 |
| Hourly Total | 133 | 157 | 0 | 290 | 146 | 878 | 0 | 1024 | 627 | 37 | 0 | 664 | 1978 |
| Total | 346 | 524 | 0 | 870 | 508 | 2699 | 0 | 3207 | 3071 | 138 | 0 | 3209 | 7286 |
| % Approach | 39.8% | 60.2% | 0% | - | 15.8% | 84.2% | 0% | - | 95.7% | 4.3% | 0% | - | - |
| % Total | 4.7% | 7.2% | 0% | 11.9% | 7.0% | 37.0% | 0% | 44.0% | 42.1% | 1.9% | 0% | 44.0% | - |
| Lights | 336 | 487 | 0 | 823 | 468 | 2653 | 0 | 3121 | 3016 | 129 | 0 | 3145 | 7089 |
| % Lights | 97.1% | 92.9% | 0% | 94.6% | 92.1% | 98.3% | 0% | 97.3% | 98.2% | 93.5% | 0% | 98.0% | 97.3% |
| Articulated Trucks | 0 | 23 | 0 | 23 | 21 | 10 | 0 | 31 | 11 | 0 | 0 | 11 | 65 |
| % Articulated Trucks | 0% | 4.4% | 0% | 2.6% | 4.1% | 0.4% | 0% | 1.0% | 0.4% | 0% | 0% | 0.3% | 0.9% |
| Buses and Single-Unit Trucks | 10 | 14 | 0 | 24 | 19 | 36 | 0 | 55 | 44 | 9 | 0 | 53 | 132 |
| % Buses and Single-Unit Trucks | 2.9% | 2.7% | 0% | 2.8% | 3.7% | 1.3% | 0% | 1.7% | 1.4% | 6.5% | 0% | 1.7% | 1.8% |

*L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Brandt Pike - TMC

Thu Jan 19, 2023

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031227, Location: 39.872116, -84.099223

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

[N] Brandt Pike

Total: 6254

In: 3209

Out: 3045

138

3071

[W] Executive Boulevard

Total: 1516

In: 870 Out: 646

346
524

Out: 3595

In: 3207

Total: 6802

[S] Brandt Pike

508

2699

Executive Boulevard & Brandt Pike - TMC

Thu Jan 19, 2023

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031227, Location: 39.872116, -84.099223

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

| Leg Direction | Executive Boulevard Eastbound | | | | Brandt Pike Northbound | | | | Brandt Pike Southbound | | | | |
|---------------------------------------|----------------------------------|-------|----|-------|---------------------------|-------|----|-------|---------------------------|-------|----|-------|-------|
| Time | L | R | U | App | L | T | U | App | T | R | U | App | Int |
| 2023-01-19 7:45AM | 6 | 36 | 0 | 42 | 39 | 137 | 0 | 176 | 217 | 5 | 0 | 222 | 440 |
| 8:00AM | 15 | 22 | 0 | 37 | 25 | 108 | 0 | 133 | 182 | 8 | 0 | 190 | 360 |
| 8:15AM | 9 | 27 | 0 | 36 | 21 | 106 | 0 | 127 | 228 | 12 | 0 | 240 | 403 |
| 8:30AM | 4 | 20 | 0 | 24 | 36 | 117 | 0 | 153 | 244 | 15 | 0 | 259 | 436 |
| Total | 34 | 105 | 0 | 139 | 121 | 468 | 0 | 589 | 871 | 40 | 0 | 911 | 1639 |
| % Approach | 24.5% | 75.5% | 0% | - | 20.5% | 79.5% | 0% | - | 95.6% | 4.4% | 0% | - | - |
| % Total | 2.1% | 6.4% | 0% | 8.5% | 7.4% | 28.6% | 0% | 35.9% | 53.1% | 2.4% | 0% | 55.6% | - |
| PHF | 0.567 | 0.729 | - | 0.827 | 0.776 | 0.854 | - | 0.837 | 0.892 | 0.667 | - | 0.879 | 0.931 |
| Lights | 30 | 90 | 0 | 120 | 115 | 444 | 0 | 559 | 850 | 39 | 0 | 889 | 1568 |
| % Lights | 88.2% | 85.7% | 0% | 86.3% | 95.0% | 94.9% | 0% | 94.9% | 97.6% | 97.5% | 0% | 97.6% | 95.7% |
| Articulated Trucks | 0 | 11 | 0 | 11 | 1 | 4 | 0 | 5 | 1 | 0 | 0 | 1 | 17 |
| % Articulated Trucks | 0% | 10.5% | 0% | 7.9% | 0.8% | 0.9% | 0% | 0.8% | 0.1% | 0% | 0% | 0.1% | 1.0% |
| Buses and Single-Unit Trucks | 4 | 4 | 0 | 8 | 5 | 20 | 0 | 25 | 20 | 1 | 0 | 21 | 54 |
| % Buses and Single-Unit Trucks | 11.8% | 3.8% | 0% | 5.8% | 4.1% | 4.3% | 0% | 4.2% | 2.3% | 2.5% | 0% | 2.3% | 3.3% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Brandt Pike - TMC

Thu Jan 19, 2023

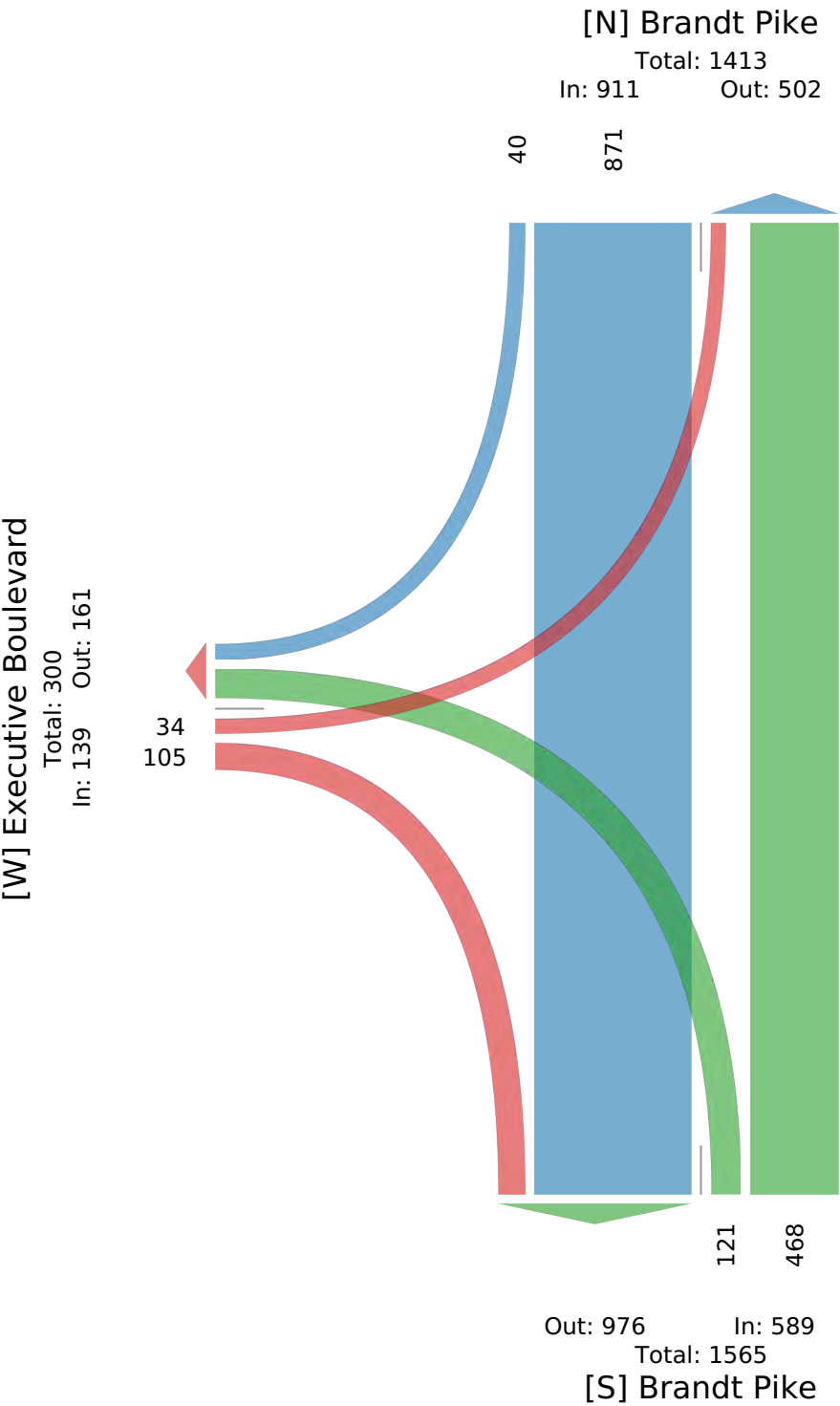
AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031227, Location: 39.872116, -84.099223

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & Brandt Pike - TMC

Thu Jan 19, 2023

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031227, Location: 39.872116, -84.099223

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

| Leg Direction | Executive Boulevard Eastbound | | | | Brandt Pike Northbound | | | | Brandt Pike Southbound | | | | |
|---------------------------------------|----------------------------------|-------|----|-------|---------------------------|-------|----|-------|---------------------------|-------|----|-------|-------|
| Time | L | R | U | App | L | T | U | App | T | R | U | App | Int |
| 2023-01-19 4:15PM | 41 | 44 | 0 | 85 | 41 | 290 | 0 | 331 | 150 | 7 | 0 | 157 | 573 |
| 4:30PM | 40 | 54 | 0 | 94 | 36 | 234 | 0 | 270 | 183 | 8 | 0 | 191 | 555 |
| 4:45PM | 23 | 43 | 0 | 66 | 55 | 251 | 0 | 306 | 162 | 9 | 0 | 171 | 543 |
| 5:00PM | 34 | 54 | 0 | 88 | 37 | 275 | 0 | 312 | 170 | 5 | 0 | 175 | 575 |
| Total | 138 | 195 | 0 | 333 | 169 | 1050 | 0 | 1219 | 665 | 29 | 0 | 694 | 2246 |
| % Approach | 41.4% | 58.6% | 0% | - | 13.9% | 86.1% | 0% | - | 95.8% | 4.2% | 0% | - | - |
| % Total | 6.1% | 8.7% | 0% | 14.8% | 7.5% | 46.7% | 0% | 54.3% | 29.6% | 1.3% | 0% | 30.9% | - |
| PHF | 0.841 | 0.903 | - | 0.886 | 0.768 | 0.905 | - | 0.921 | 0.908 | 0.806 | - | 0.908 | 0.977 |
| Lights | 136 | 186 | 0 | 322 | 153 | 1041 | 0 | 1194 | 655 | 26 | 0 | 681 | 2197 |
| % Lights | 98.6% | 95.4% | 0% | 96.7% | 90.5% | 99.1% | 0% | 97.9% | 98.5% | 89.7% | 0% | 98.1% | 97.8% |
| Articulated Trucks | 0 | 5 | 0 | 5 | 11 | 2 | 0 | 13 | 2 | 0 | 0 | 2 | 20 |
| % Articulated Trucks | 0% | 2.6% | 0% | 1.5% | 6.5% | 0.2% | 0% | 1.1% | 0.3% | 0% | 0% | 0.3% | 0.9% |
| Buses and Single-Unit Trucks | 2 | 4 | 0 | 6 | 5 | 7 | 0 | 12 | 8 | 3 | 0 | 11 | 29 |
| % Buses and Single-Unit Trucks | 1.4% | 2.1% | 0% | 1.8% | 3.0% | 0.7% | 0% | 1.0% | 1.2% | 10.3% | 0% | 1.6% | 1.3% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Brandt Pike - TMC

Thu Jan 19, 2023

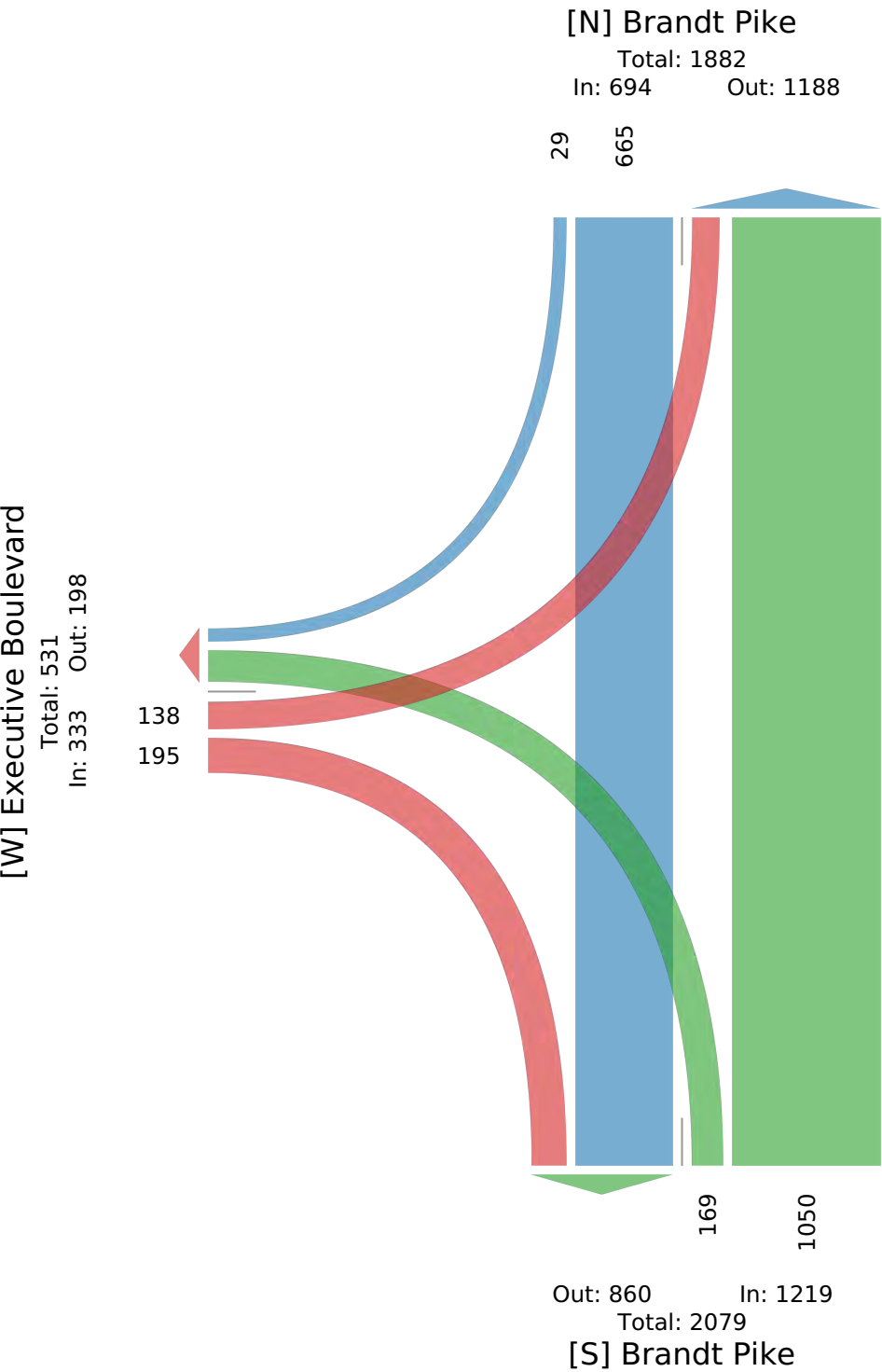
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031227, Location: 39.872116, -84.099223

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & Meijer Drive - TMC

Thu Jan 19, 2023

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031238, Location: 39.870552, -84.105399

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

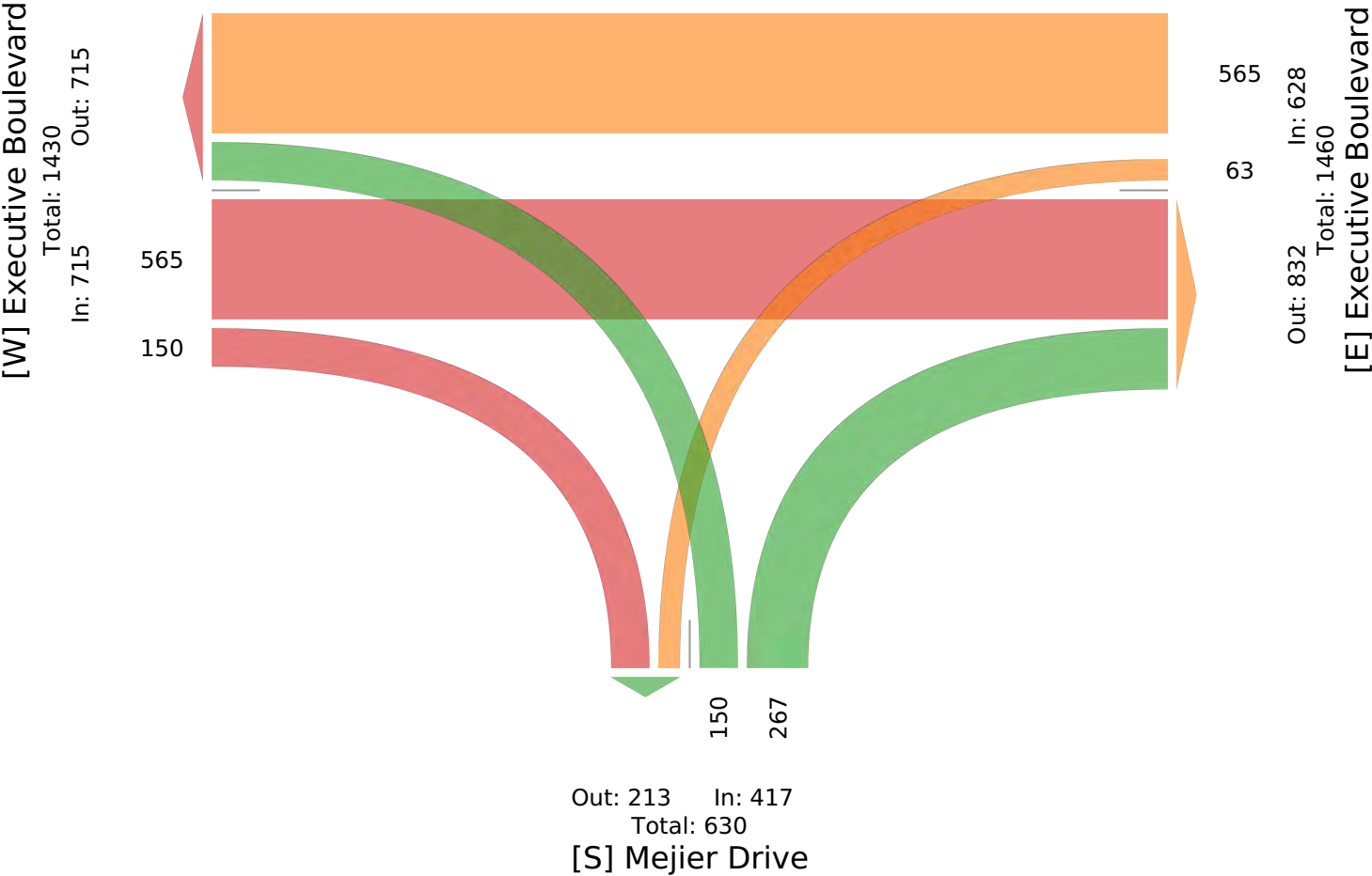
| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | Meijer Drive Northbound | | | | |
|---------------------------------------|----------------------------------|-------|----|-------|----------------------------------|-------|----|-------|----------------------------|-------|----|-------|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 7:00AM | 13 | 5 | 0 | 18 | 3 | 19 | 0 | 22 | 3 | 4 | 0 | 7 | 47 |
| 7:15AM | 10 | 4 | 0 | 14 | 0 | 20 | 0 | 20 | 6 | 7 | 0 | 13 | 47 |
| 7:30AM | 14 | 3 | 0 | 17 | 4 | 20 | 0 | 24 | 5 | 5 | 0 | 10 | 51 |
| 7:45AM | 33 | 8 | 0 | 41 | 0 | 45 | 0 | 45 | 8 | 3 | 0 | 11 | 97 |
| Hourly Total | 70 | 20 | 0 | 90 | 7 | 104 | 0 | 111 | 22 | 19 | 0 | 41 | 242 |
| 8:00AM | 26 | 4 | 0 | 30 | 3 | 28 | 0 | 31 | 4 | 9 | 0 | 13 | 74 |
| 8:15AM | 26 | 4 | 0 | 30 | 3 | 31 | 0 | 34 | 0 | 5 | 0 | 5 | 69 |
| 8:30AM | 21 | 11 | 0 | 32 | 3 | 47 | 0 | 50 | 3 | 3 | 0 | 6 | 88 |
| 8:45AM | 18 | 5 | 0 | 23 | 2 | 35 | 0 | 37 | 5 | 7 | 0 | 12 | 72 |
| Hourly Total | 91 | 24 | 0 | 115 | 11 | 141 | 0 | 152 | 12 | 24 | 0 | 36 | 303 |
| 4:00PM | 51 | 23 | 0 | 74 | 7 | 39 | 0 | 46 | 13 | 38 | 0 | 51 | 171 |
| 4:15PM | 54 | 14 | 0 | 68 | 6 | 38 | 0 | 44 | 18 | 36 | 0 | 54 | 166 |
| 4:30PM | 62 | 13 | 0 | 75 | 5 | 39 | 0 | 44 | 15 | 27 | 0 | 42 | 161 |
| 4:45PM | 48 | 10 | 0 | 58 | 6 | 48 | 0 | 54 | 14 | 20 | 0 | 34 | 146 |
| Hourly Total | 215 | 60 | 0 | 275 | 24 | 164 | 0 | 188 | 60 | 121 | 0 | 181 | 644 |
| 5:00PM | 58 | 17 | 0 | 75 | 4 | 38 | 0 | 42 | 11 | 30 | 0 | 41 | 158 |
| 5:15PM | 44 | 9 | 0 | 53 | 9 | 40 | 0 | 49 | 15 | 26 | 0 | 41 | 143 |
| 5:30PM | 46 | 12 | 0 | 58 | 6 | 42 | 0 | 48 | 11 | 26 | 0 | 37 | 143 |
| 5:45PM | 41 | 8 | 0 | 49 | 2 | 36 | 0 | 38 | 19 | 21 | 0 | 40 | 127 |
| Hourly Total | 189 | 46 | 0 | 235 | 21 | 156 | 0 | 177 | 56 | 103 | 0 | 159 | 571 |
| Total | 565 | 150 | 0 | 715 | 63 | 565 | 0 | 628 | 150 | 267 | 0 | 417 | 1760 |
| % Approach | 79.0% | 21.0% | 0% | - | 10.0% | 90.0% | 0% | - | 36.0% | 64.0% | 0% | - | - |
| % Total | 32.1% | 8.5% | 0% | 40.6% | 3.6% | 32.1% | 0% | 35.7% | 8.5% | 15.2% | 0% | 23.7% | - |
| Lights | 534 | 145 | 0 | 679 | 49 | 533 | 0 | 582 | 149 | 251 | 0 | 400 | 1661 |
| % Lights | 94.5% | 96.7% | 0% | 95.0% | 77.8% | 94.3% | 0% | 92.7% | 99.3% | 94.0% | 0% | 95.9% | 94.4% |
| Articulated Trucks | 21 | 1 | 0 | 22 | 0 | 19 | 0 | 19 | 0 | 2 | 0 | 2 | 43 |
| % Articulated Trucks | 3.7% | 0.7% | 0% | 3.1% | 0% | 3.4% | 0% | 3.0% | 0% | 0.7% | 0% | 0.5% | 2.4% |
| Buses and Single-Unit Trucks | 10 | 4 | 0 | 14 | 14 | 13 | 0 | 27 | 1 | 14 | 0 | 15 | 56 |
| % Buses and Single-Unit Trucks | 1.8% | 2.7% | 0% | 2.0% | 22.2% | 2.3% | 0% | 4.3% | 0.7% | 5.2% | 0% | 3.6% | 3.2% |

*L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Meijer Drive - TMC

Thu Jan 19, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031238, Location: 39.870552, -84.105399

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & Meijer Drive - TMC

Thu Jan 19, 2023

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031238, Location: 39.870552, -84.105399

Provided by: Carpenter Marty (CM) Transportation Inc.

6612 Singletree Drive, Columbus, OH, 43229, US

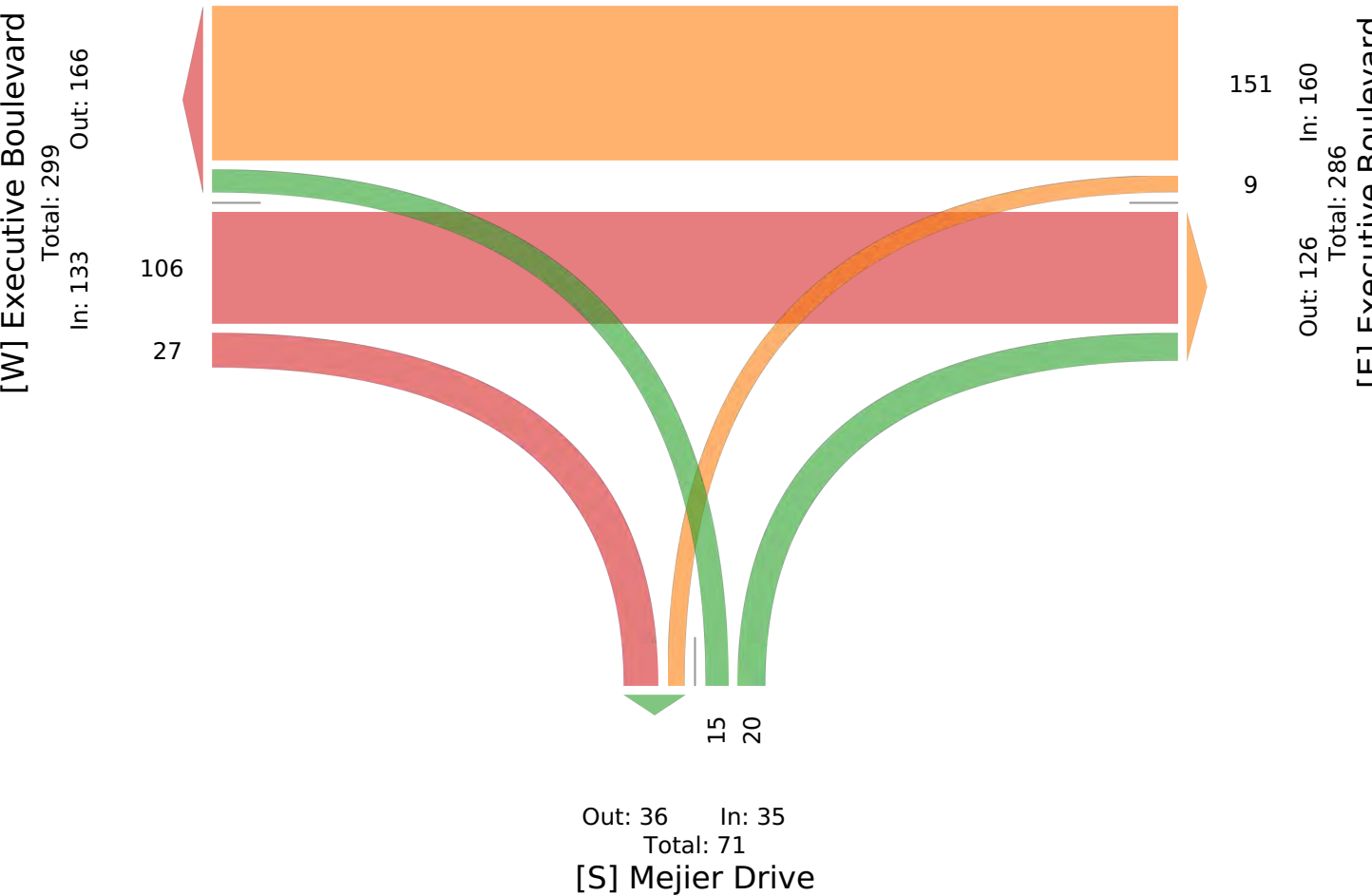
| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | Meijer Drive Northbound | | | | |
|---------------------------------------|----------------------------------|-------|----|-------|----------------------------------|-------|----|-------|----------------------------|-------|----|-------|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 7:45AM | 33 | 8 | 0 | 41 | 0 | 45 | 0 | 45 | 8 | 3 | 0 | 11 | 97 |
| 8:00AM | 26 | 4 | 0 | 30 | 3 | 28 | 0 | 31 | 4 | 9 | 0 | 13 | 74 |
| 8:15AM | 26 | 4 | 0 | 30 | 3 | 31 | 0 | 34 | 0 | 5 | 0 | 5 | 69 |
| 8:30AM | 21 | 11 | 0 | 32 | 3 | 47 | 0 | 50 | 3 | 3 | 0 | 6 | 88 |
| Total | 106 | 27 | 0 | 133 | 9 | 151 | 0 | 160 | 15 | 20 | 0 | 35 | 328 |
| % Approach | 79.7% | 20.3% | 0% | - | 5.6% | 94.4% | 0% | - | 42.9% | 57.1% | 0% | - | - |
| % Total | 32.3% | 8.2% | 0% | 40.5% | 2.7% | 46.0% | 0% | 48.8% | 4.6% | 6.1% | 0% | 10.7% | - |
| PHF | 0.803 | 0.614 | - | 0.811 | 0.750 | 0.803 | - | 0.800 | 0.469 | 0.556 | - | 0.673 | 0.845 |
| Lights | 90 | 24 | 0 | 114 | 7 | 145 | 0 | 152 | 14 | 16 | 0 | 30 | 296 |
| % Lights | 84.9% | 88.9% | 0% | 85.7% | 77.8% | 96.0% | 0% | 95.0% | 93.3% | 80.0% | 0% | 85.7% | 90.2% |
| Articulated Trucks | 10 | 1 | 0 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 13 |
| % Articulated Trucks | 9.4% | 3.7% | 0% | 8.3% | 0% | 0.7% | 0% | 0.6% | 0% | 5.0% | 0% | 2.9% | 4.0% |
| Buses and Single-Unit Trucks | 6 | 2 | 0 | 8 | 2 | 5 | 0 | 7 | 1 | 3 | 0 | 4 | 19 |
| % Buses and Single-Unit Trucks | 5.7% | 7.4% | 0% | 6.0% | 22.2% | 3.3% | 0% | 4.4% | 6.7% | 15.0% | 0% | 11.4% | 5.8% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Meijer Drive - TMC

Thu Jan 19, 2023
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031238, Location: 39.870552, -84.105399

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & Meijer Drive - TMC

Thu Jan 19, 2023

PM Peak (4 PM - 5 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031238, Location: 39.870552, -84.105399

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

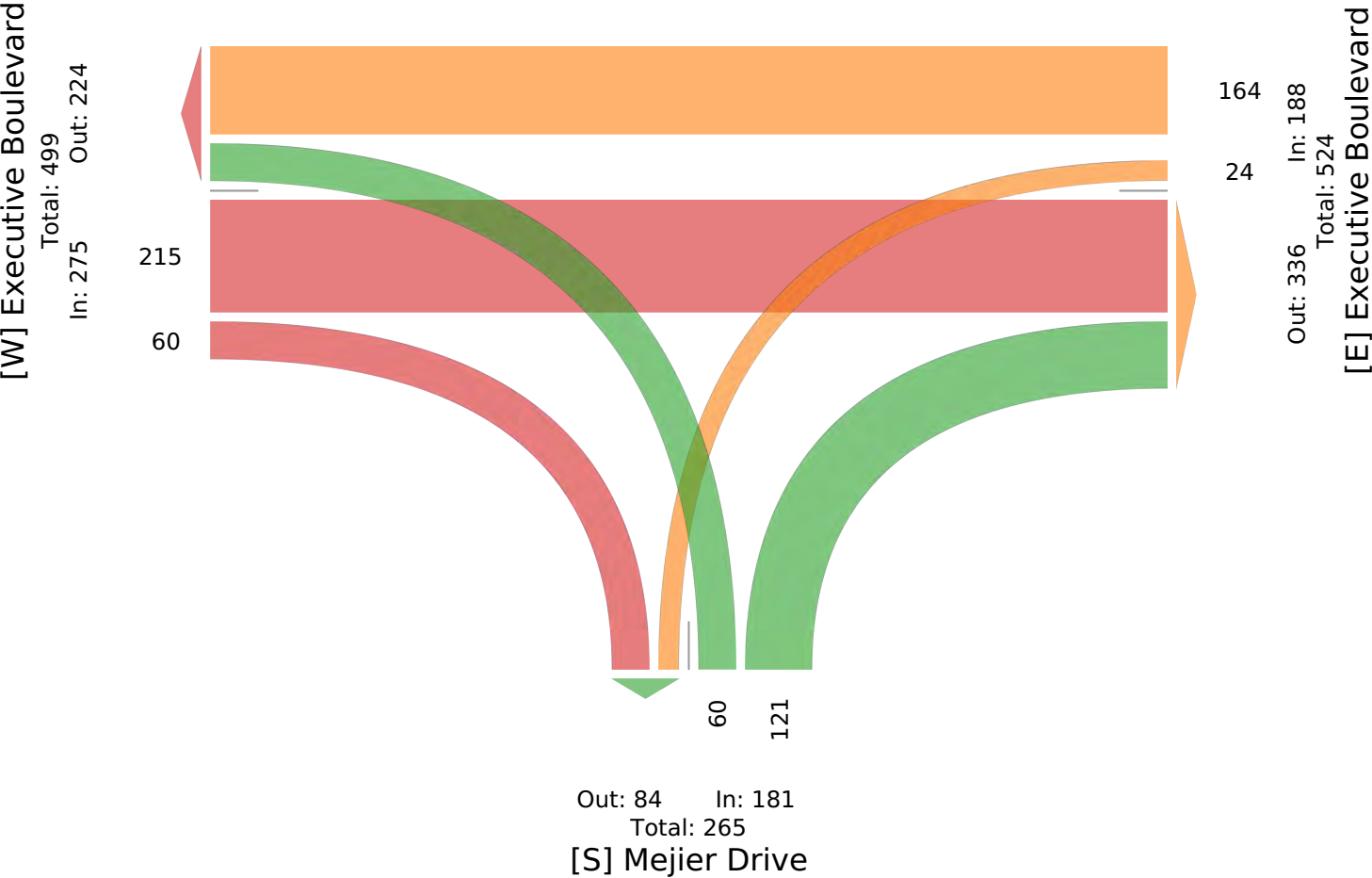
| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | Meijer Drive Northbound | | | | |
|---------------------------------------|----------------------------------|-------|----|-------|----------------------------------|-------|----|-------|----------------------------|-------|----|-------|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 4:00PM | 51 | 23 | 0 | 74 | 7 | 39 | 0 | 46 | 13 | 38 | 0 | 51 | 171 |
| 4:15PM | 54 | 14 | 0 | 68 | 6 | 38 | 0 | 44 | 18 | 36 | 0 | 54 | 166 |
| 4:30PM | 62 | 13 | 0 | 75 | 5 | 39 | 0 | 44 | 15 | 27 | 0 | 42 | 161 |
| 4:45PM | 48 | 10 | 0 | 58 | 6 | 48 | 0 | 54 | 14 | 20 | 0 | 34 | 146 |
| Total | 215 | 60 | 0 | 275 | 24 | 164 | 0 | 188 | 60 | 121 | 0 | 181 | 644 |
| % Approach | 78.2% | 21.8% | 0% | - | 12.8% | 87.2% | 0% | - | 33.1% | 66.9% | 0% | - | - |
| % Total | 33.4% | 9.3% | 0% | 42.7% | 3.7% | 25.5% | 0% | 29.2% | 9.3% | 18.8% | 0% | 28.1% | - |
| PHF | 0.867 | 0.652 | - | 0.917 | 0.857 | 0.854 | - | 0.870 | 0.833 | 0.796 | - | 0.838 | 0.942 |
| Lights | 210 | 59 | 0 | 269 | 18 | 156 | 0 | 174 | 60 | 117 | 0 | 177 | 620 |
| % Lights | 97.7% | 98.3% | 0% | 97.8% | 75.0% | 95.1% | 0% | 92.6% | 100% | 96.7% | 0% | 97.8% | 96.3% |
| Articulated Trucks | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 1 | 0 | 1 | 9 |
| % Articulated Trucks | 1.9% | 0% | 0% | 1.5% | 0% | 2.4% | 0% | 2.1% | 0% | 0.8% | 0% | 0.6% | 1.4% |
| Buses and Single-Unit Trucks | 1 | 1 | 0 | 2 | 6 | 4 | 0 | 10 | 0 | 3 | 0 | 3 | 15 |
| % Buses and Single-Unit Trucks | 0.5% | 1.7% | 0% | 0.7% | 25.0% | 2.4% | 0% | 5.3% | 0% | 2.5% | 0% | 1.7% | 2.3% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Meijer Drive - TMC

Thu Jan 19, 2023
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031238, Location: 39.870552, -84.105399

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & West Middle Music Drive - TMC

Thu Jan 19, 2023

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031222, Location: 39.870573, -84.111955

Provided by: Carpenter Marty (CM) Transportation Inc.

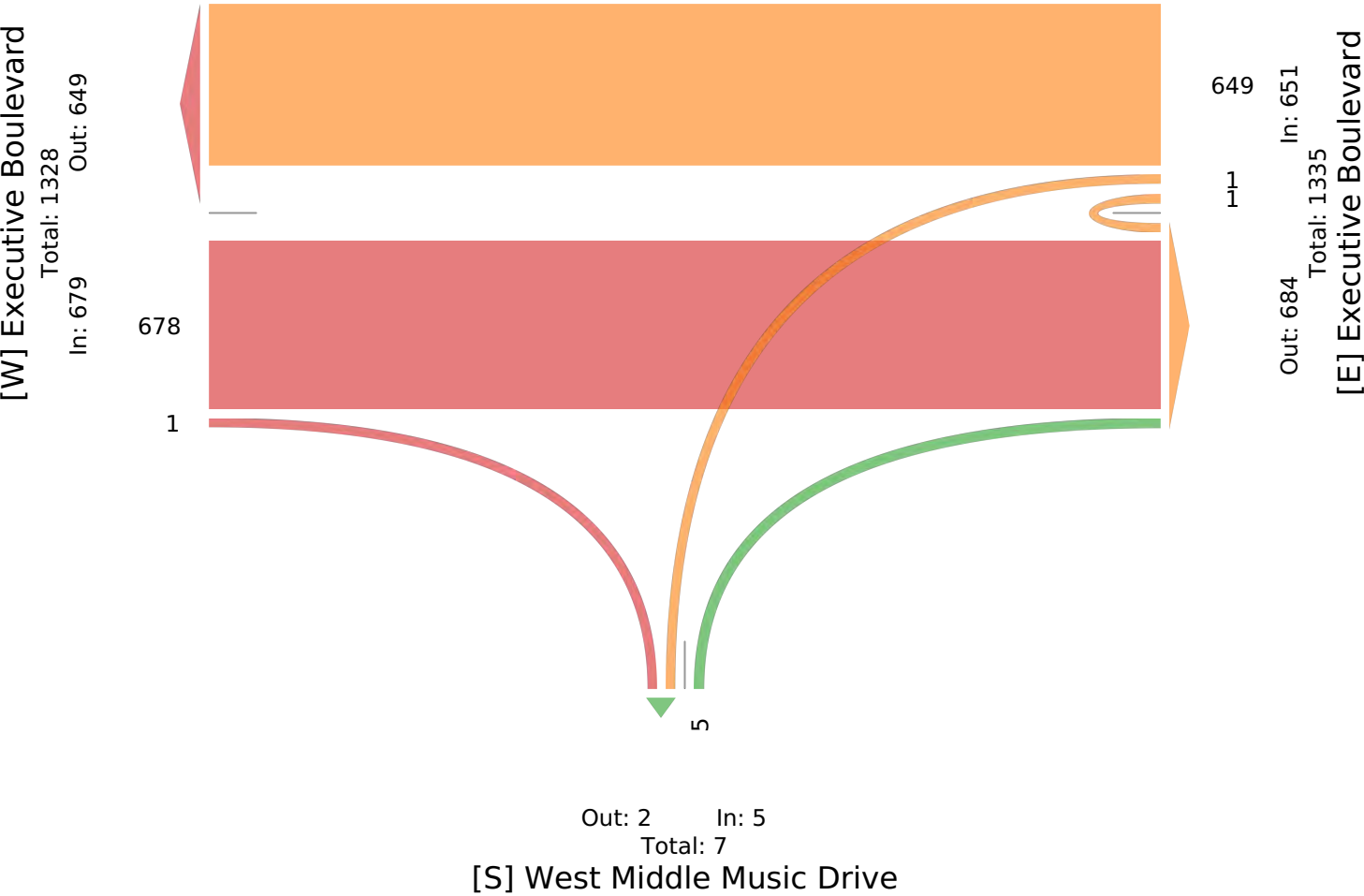
6612 Singletree Drive, Columbus, OH, 43229, US

| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | West Middle Music Drive Northbound | | | | |
|---------------------------------------|-------------------------------|------|----|-------|-------------------------------|-------|------|-------|------------------------------------|------|----|------|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 7:00AM | 16 | 0 | 0 | 16 | 0 | 21 | 0 | 21 | 0 | 0 | 0 | 0 | 37 |
| 7:15AM | 12 | 0 | 0 | 12 | 0 | 26 | 0 | 26 | 0 | 1 | 0 | 1 | 39 |
| 7:30AM | 17 | 0 | 0 | 17 | 0 | 25 | 0 | 25 | 0 | 0 | 0 | 0 | 42 |
| 7:45AM | 37 | 0 | 0 | 37 | 0 | 48 | 0 | 48 | 0 | 0 | 0 | 0 | 85 |
| Hourly Total | 82 | 0 | 0 | 82 | 0 | 120 | 0 | 120 | 0 | 1 | 0 | 1 | 203 |
| 8:00AM | 28 | 0 | 0 | 28 | 0 | 36 | 0 | 36 | 0 | 0 | 0 | 0 | 64 |
| 8:15AM | 22 | 0 | 0 | 22 | 0 | 27 | 0 | 27 | 0 | 0 | 0 | 0 | 49 |
| 8:30AM | 30 | 0 | 0 | 30 | 0 | 47 | 0 | 47 | 0 | 1 | 0 | 1 | 78 |
| 8:45AM | 20 | 0 | 0 | 20 | 0 | 42 | 0 | 42 | 0 | 0 | 0 | 0 | 62 |
| Hourly Total | 100 | 0 | 0 | 100 | 0 | 152 | 0 | 152 | 0 | 1 | 0 | 1 | 253 |
| 4:00PM | 74 | 0 | 0 | 74 | 0 | 49 | 0 | 49 | 0 | 1 | 0 | 1 | 124 |
| 4:15PM | 65 | 0 | 0 | 65 | 0 | 51 | 1 | 52 | 0 | 1 | 0 | 1 | 118 |
| 4:30PM | 74 | 1 | 0 | 75 | 0 | 45 | 0 | 45 | 0 | 1 | 0 | 1 | 121 |
| 4:45PM | 59 | 0 | 0 | 59 | 1 | 56 | 0 | 57 | 0 | 0 | 0 | 0 | 116 |
| Hourly Total | 272 | 1 | 0 | 273 | 1 | 201 | 1 | 203 | 0 | 3 | 0 | 3 | 479 |
| 5:00PM | 63 | 0 | 0 | 63 | 0 | 41 | 0 | 41 | 0 | 0 | 0 | 0 | 104 |
| 5:15PM | 54 | 0 | 0 | 54 | 0 | 43 | 0 | 43 | 0 | 0 | 0 | 0 | 97 |
| 5:30PM | 58 | 0 | 0 | 58 | 0 | 45 | 0 | 45 | 0 | 0 | 0 | 0 | 103 |
| 5:45PM | 49 | 0 | 0 | 49 | 0 | 47 | 0 | 47 | 0 | 0 | 0 | 0 | 96 |
| Hourly Total | 224 | 0 | 0 | 224 | 0 | 176 | 0 | 176 | 0 | 0 | 0 | 0 | 400 |
| Total | 678 | 1 | 0 | 679 | 1 | 649 | 1 | 651 | 0 | 5 | 0 | 5 | 1335 |
| % Approach | 99.9% | 0.1% | 0% | - | 0.2% | 99.7% | 0.2% | - | 0% | 100% | 0% | - | - |
| % Total | 50.8% | 0.1% | 0% | 50.9% | 0.1% | 48.6% | 0.1% | 48.8% | 0% | 0.4% | 0% | 0.4% | - |
| Lights | 641 | 1 | 0 | 642 | 1 | 613 | 1 | 615 | 0 | 5 | 0 | 5 | 1262 |
| % Lights | 94.5% | 100% | 0% | 94.6% | 100% | 94.5% | 100% | 94.5% | 0% | 100% | 0% | 100% | 94.5% |
| Articulated Trucks | 20 | 0 | 0 | 20 | 0 | 19 | 0 | 19 | 0 | 0 | 0 | 0 | 39 |
| % Articulated Trucks | 2.9% | 0% | 0% | 2.9% | 0% | 2.9% | 0% | 2.9% | 0% | 0% | 0% | 0% | 2.9% |
| Buses and Single-Unit Trucks | 17 | 0 | 0 | 17 | 0 | 17 | 0 | 17 | 0 | 0 | 0 | 0 | 34 |
| % Buses and Single-Unit Trucks | 2.5% | 0% | 0% | 2.5% | 0% | 2.6% | 0% | 2.6% | 0% | 0% | 0% | 0% | 2.5% |

*L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & West Middle Music Drive - TMC
Thu Jan 19, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031222, Location: 39.870573, -84.111955

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & West Middle Music Drive - TMC

Thu Jan 19, 2023

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031222, Location: 39.870573, -84.111955

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

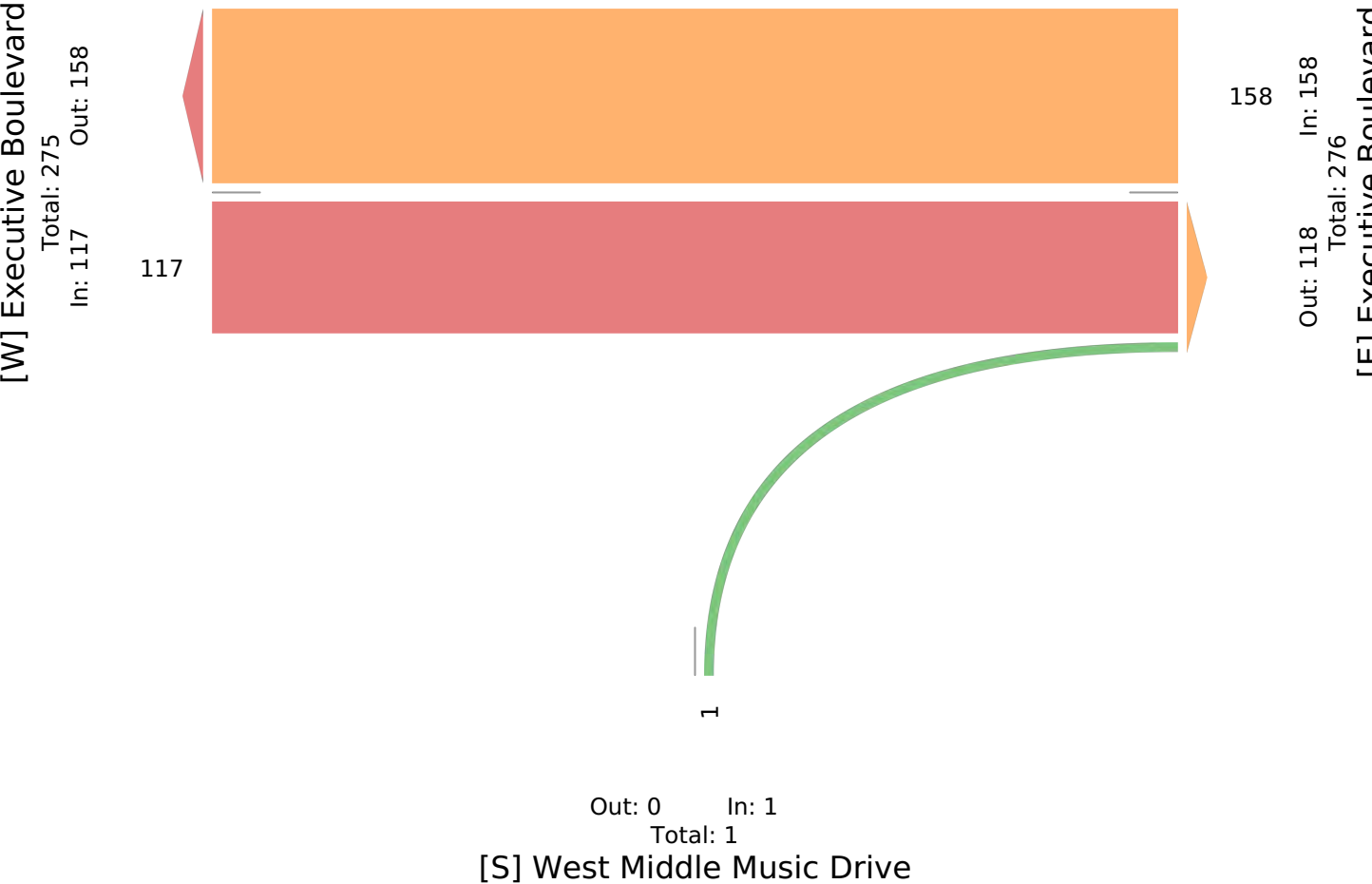
| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | West Middle Music Drive Northbound | | | | |
|---------------------------------------|----------------------------------|----|----|-------|----------------------------------|-------|----|-------|---------------------------------------|-------|----|-------|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 7:45AM | 37 | 0 | 0 | 37 | 0 | 48 | 0 | 48 | 0 | 0 | 0 | 0 | 85 |
| 8:00AM | 28 | 0 | 0 | 28 | 0 | 36 | 0 | 36 | 0 | 0 | 0 | 0 | 64 |
| 8:15AM | 22 | 0 | 0 | 22 | 0 | 27 | 0 | 27 | 0 | 0 | 0 | 0 | 49 |
| 8:30AM | 30 | 0 | 0 | 30 | 0 | 47 | 0 | 47 | 0 | 1 | 0 | 1 | 78 |
| Total | 117 | 0 | 0 | 117 | 0 | 158 | 0 | 158 | 0 | 1 | 0 | 1 | 276 |
| % Approach | 100% | 0% | 0% | - | 0% | 100% | 0% | - | 0% | 100% | 0% | - | - |
| % Total | 42.4% | 0% | 0% | 42.4% | 0% | 57.2% | 0% | 57.2% | 0% | 0.4% | 0% | 0.4% | - |
| PHF | 0.791 | - | - | 0.791 | - | 0.823 | - | 0.823 | - | 0.250 | - | 0.250 | 0.812 |
| Lights | 100 | 0 | 0 | 100 | 0 | 151 | 0 | 151 | 0 | 1 | 0 | 1 | 252 |
| % Lights | 85.5% | 0% | 0% | 85.5% | 0% | 95.6% | 0% | 95.6% | 0% | 100% | 0% | 100% | 91.3% |
| Articulated Trucks | 9 | 0 | 0 | 9 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 10 |
| % Articulated Trucks | 7.7% | 0% | 0% | 7.7% | 0% | 0.6% | 0% | 0.6% | 0% | 0% | 0% | 0% | 3.6% |
| Buses and Single-Unit Trucks | 8 | 0 | 0 | 8 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 14 |
| % Buses and Single-Unit Trucks | 6.8% | 0% | 0% | 6.8% | 0% | 3.8% | 0% | 3.8% | 0% | 0% | 0% | 0% | 5.1% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & West Middle Music Drive - TMC

Thu Jan 19, 2023
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031222, Location: 39.870573, -84.111955

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & West Middle Music Drive - TMC

Thu Jan 19, 2023

PM Peak (4 PM - 5 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031222, Location: 39.870573, -84.111955

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

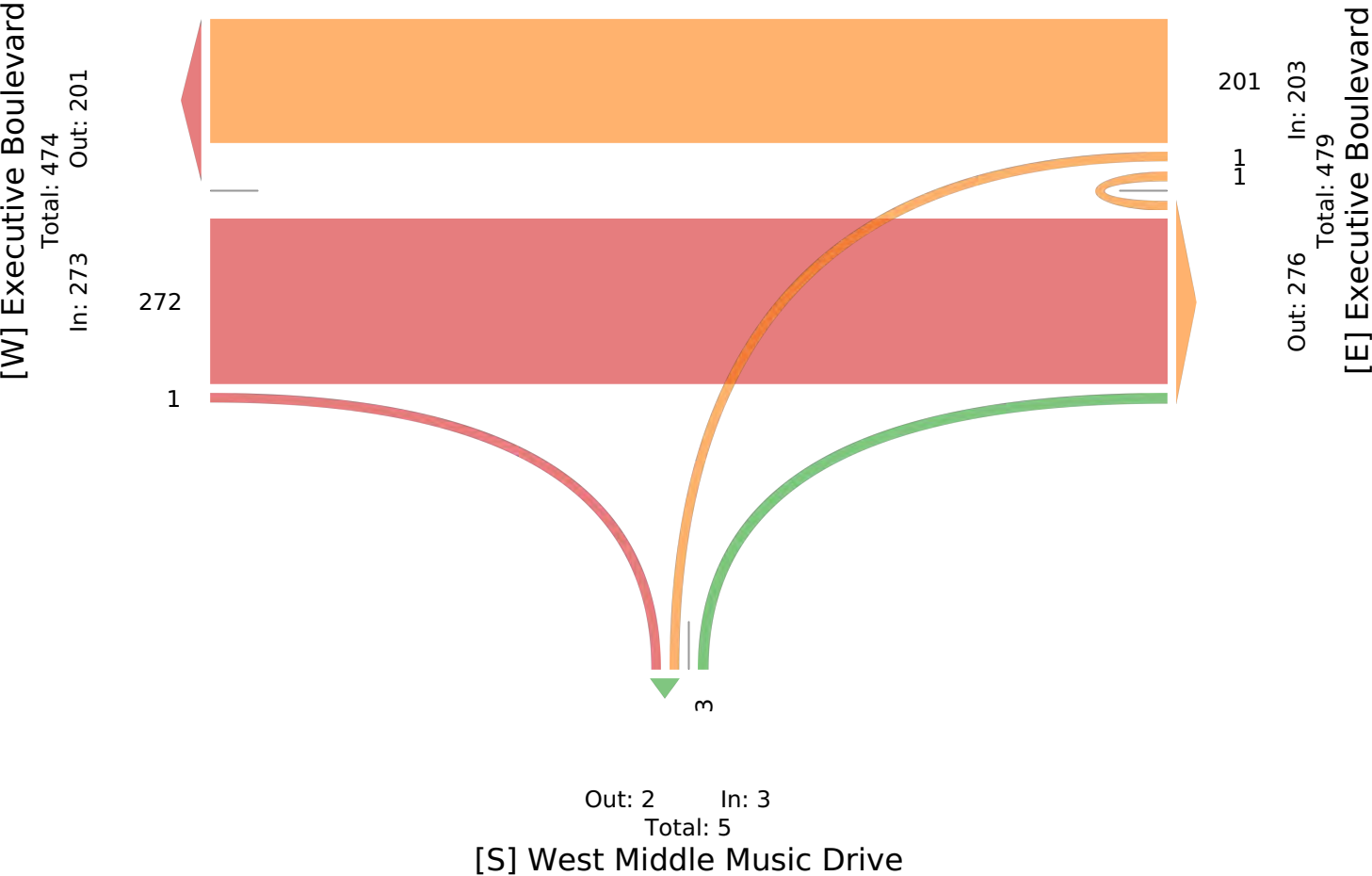
| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | West Middle Music Drive Northbound | | | | |
|---------------------------------------|----------------------------------|-------|----|--------------|----------------------------------|-------|-------|--------------|---------------------------------------|-------|----|--------------|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 4:00PM | 74 | 0 | 0 | 74 | 0 | 49 | 0 | 49 | 0 | 1 | 0 | 1 | 124 |
| 4:15PM | 65 | 0 | 0 | 65 | 0 | 51 | 1 | 52 | 0 | 1 | 0 | 1 | 118 |
| 4:30PM | 74 | 1 | 0 | 75 | 0 | 45 | 0 | 45 | 0 | 1 | 0 | 1 | 121 |
| 4:45PM | 59 | 0 | 0 | 59 | 1 | 56 | 0 | 57 | 0 | 0 | 0 | 0 | 116 |
| Total | 272 | 1 | 0 | 273 | 1 | 201 | 1 | 203 | 0 | 3 | 0 | 3 | 479 |
| % Approach | 99.6% | 0.4% | 0% | - | 0.5% | 99.0% | 0.5% | - | 0% | 100% | 0% | - | - |
| % Total | 56.8% | 0.2% | 0% | 57.0% | 0.2% | 42.0% | 0.2% | 42.4% | 0% | 0.6% | 0% | 0.6% | - |
| PHF | 0.919 | 0.250 | - | 0.910 | 0.250 | 0.897 | 0.250 | 0.890 | - | 0.750 | - | 0.750 | 0.966 |
| Lights | 265 | 1 | 0 | 266 | 1 | 192 | 1 | 194 | 0 | 3 | 0 | 3 | 463 |
| % Lights | 97.4% | 100% | 0% | 97.4% | 100% | 95.5% | 100% | 95.6% | 0% | 100% | 0% | 100% | 96.7% |
| Articulated Trucks | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 8 |
| % Articulated Trucks | 1.5% | 0% | 0% | 1.5% | 0% | 2.0% | 0% | 2.0% | 0% | 0% | 0% | 0% | 1.7% |
| Buses and Single-Unit Trucks | 3 | 0 | 0 | 3 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 8 |
| % Buses and Single-Unit Trucks | 1.1% | 0% | 0% | 1.1% | 0% | 2.5% | 0% | 2.5% | 0% | 0% | 0% | 0% | 1.7% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & West Middle Music Drive - TMC

Thu Jan 19, 2023
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031222, Location: 39.870573, -84.111955

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & Westernmost Music Drive - TMC

Thu Jan 19, 2023

Full Length (7 AM-9 AM, 4 PM-6 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031236, Location: 39.870683, -84.113972

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

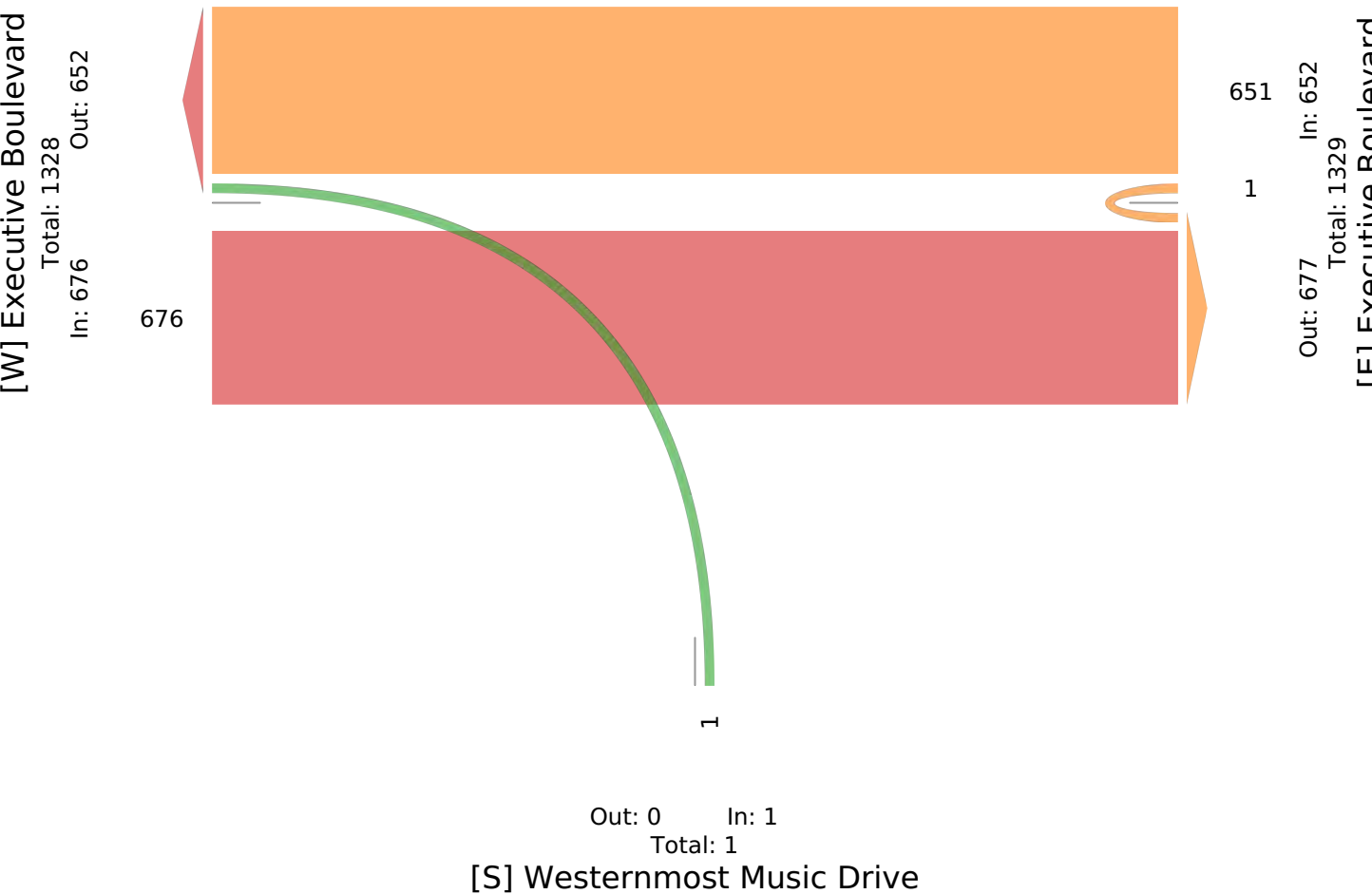
| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | Westernmost Music Drive Northbound | | | | |
|---------------------------------------|----------------------------------|----|----|-------|----------------------------------|-------|------|-------|---------------------------------------|----|----|------|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 7:00AM | 15 | 0 | 0 | 15 | 0 | 21 | 0 | 21 | 0 | 0 | 0 | 0 | 36 |
| 7:15AM | 12 | 0 | 0 | 12 | 0 | 26 | 0 | 26 | 0 | 0 | 0 | 0 | 38 |
| 7:30AM | 17 | 0 | 0 | 17 | 0 | 25 | 0 | 25 | 0 | 0 | 0 | 0 | 42 |
| 7:45AM | 38 | 0 | 0 | 38 | 0 | 49 | 0 | 49 | 0 | 0 | 0 | 0 | 87 |
| Hourly Total | 82 | 0 | 0 | 82 | 0 | 121 | 0 | 121 | 0 | 0 | 0 | 0 | 203 |
| 8:00AM | 27 | 0 | 0 | 27 | 0 | 35 | 0 | 35 | 0 | 0 | 0 | 0 | 62 |
| 8:15AM | 22 | 0 | 0 | 22 | 0 | 29 | 0 | 29 | 0 | 0 | 0 | 0 | 51 |
| 8:30AM | 30 | 0 | 0 | 30 | 0 | 47 | 0 | 47 | 0 | 0 | 0 | 0 | 77 |
| 8:45AM | 21 | 0 | 0 | 21 | 0 | 41 | 0 | 41 | 0 | 0 | 0 | 0 | 62 |
| Hourly Total | 100 | 0 | 0 | 100 | 0 | 152 | 0 | 152 | 0 | 0 | 0 | 0 | 252 |
| 4:00PM | 75 | 0 | 0 | 75 | 0 | 49 | 0 | 49 | 0 | 0 | 0 | 0 | 124 |
| 4:15PM | 64 | 0 | 0 | 64 | 0 | 50 | 0 | 50 | 0 | 0 | 0 | 0 | 114 |
| 4:30PM | 73 | 0 | 0 | 73 | 0 | 48 | 0 | 48 | 0 | 0 | 0 | 0 | 121 |
| 4:45PM | 59 | 0 | 0 | 59 | 0 | 57 | 0 | 57 | 0 | 0 | 0 | 0 | 116 |
| Hourly Total | 271 | 0 | 0 | 271 | 0 | 204 | 0 | 204 | 0 | 0 | 0 | 0 | 475 |
| 5:00PM | 63 | 0 | 0 | 63 | 0 | 37 | 0 | 37 | 1 | 0 | 0 | 1 | 101 |
| 5:15PM | 55 | 0 | 0 | 55 | 0 | 44 | 0 | 44 | 0 | 0 | 0 | 0 | 99 |
| 5:30PM | 59 | 0 | 0 | 59 | 0 | 46 | 1 | 47 | 0 | 0 | 0 | 0 | 106 |
| 5:45PM | 46 | 0 | 0 | 46 | 0 | 47 | 0 | 47 | 0 | 0 | 0 | 0 | 93 |
| Hourly Total | 223 | 0 | 0 | 223 | 0 | 174 | 1 | 175 | 1 | 0 | 0 | 1 | 399 |
| Total | 676 | 0 | 0 | 676 | 0 | 651 | 1 | 652 | 1 | 0 | 0 | 1 | 1329 |
| % Approach | 100% | 0% | 0% | - | 0% | 99.8% | 0.2% | - | 100% | 0% | 0% | - | - |
| % Total | 50.9% | 0% | 0% | 50.9% | 0% | 49.0% | 0.1% | 49.1% | 0.1% | 0% | 0% | 0.1% | - |
| Lights | 641 | 0 | 0 | 641 | 0 | 618 | 1 | 619 | 1 | 0 | 0 | 1 | 1261 |
| % Lights | 94.8% | 0% | 0% | 94.8% | 0% | 94.9% | 100% | 94.9% | 100% | 0% | 0% | 100% | 94.9% |
| Articulated Trucks | 23 | 0 | 0 | 23 | 0 | 20 | 0 | 20 | 0 | 0 | 0 | 0 | 43 |
| % Articulated Trucks | 3.4% | 0% | 0% | 3.4% | 0% | 3.1% | 0% | 3.1% | 0% | 0% | 0% | 0% | 3.2% |
| Buses and Single-Unit Trucks | 12 | 0 | 0 | 12 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 25 |
| % Buses and Single-Unit Trucks | 1.8% | 0% | 0% | 1.8% | 0% | 2.0% | 0% | 2.0% | 0% | 0% | 0% | 0% | 1.9% |

*L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Westernmost Music Drive - TMC

Thu Jan 19, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031236, Location: 39.870683, -84.113972

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & Westernmost Music Drive - TMC

Thu Jan 19, 2023

AM Peak (7:45 AM - 8:45 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031236, Location: 39.870683, -84.113972

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US

| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | Westernmost Music Drive Northbound | | | | |
|---------------------------------------|----------------------------------|----|----|-------|----------------------------------|-------|----|-------|---------------------------------------|----|----|-----|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 7:45AM | 38 | 0 | 0 | 38 | 0 | 49 | 0 | 49 | 0 | 0 | 0 | 0 | 87 |
| 8:00AM | 27 | 0 | 0 | 27 | 0 | 35 | 0 | 35 | 0 | 0 | 0 | 0 | 62 |
| 8:15AM | 22 | 0 | 0 | 22 | 0 | 29 | 0 | 29 | 0 | 0 | 0 | 0 | 51 |
| 8:30AM | 30 | 0 | 0 | 30 | 0 | 47 | 0 | 47 | 0 | 0 | 0 | 0 | 77 |
| Total | 117 | 0 | 0 | 117 | 0 | 160 | 0 | 160 | 0 | 0 | 0 | 0 | 277 |
| % Approach | 100% | 0% | 0% | - | 0% | 100% | 0% | - | 0% | 0% | 0% | - | - |
| % Total | 42.2% | 0% | 0% | 42.2% | 0% | 57.8% | 0% | 57.8% | 0% | 0% | 0% | 0% | - |
| PHF | 0.770 | - | - | 0.770 | - | 0.816 | - | 0.816 | - | - | - | - | 0.796 |
| Lights | 100 | 0 | 0 | 100 | 0 | 153 | 0 | 153 | 0 | 0 | 0 | 0 | 253 |
| % Lights | 85.5% | 0% | 0% | 85.5% | 0% | 95.6% | 0% | 95.6% | 0% | 0% | 0% | - | 91.3% |
| Articulated Trucks | 11 | 0 | 0 | 11 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 12 |
| % Articulated Trucks | 9.4% | 0% | 0% | 9.4% | 0% | 0.6% | 0% | 0.6% | 0% | 0% | 0% | - | 4.3% |
| Buses and Single-Unit Trucks | 6 | 0 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 12 |
| % Buses and Single-Unit Trucks | 5.1% | 0% | 0% | 5.1% | 0% | 3.8% | 0% | 3.8% | 0% | 0% | 0% | - | 4.3% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Westernmost Music Drive - TMC

Thu Jan 19, 2023
AM Peak (7:45 AM - 8:45 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031236, Location: 39.870683, -84.113972

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US



Executive Boulevard & Westernmost Music Drive - TMC

Thu Jan 19, 2023

PM Peak (4 PM - 5 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)

All Movements

ID: 1031236, Location: 39.870683, -84.113972

Provided by: Carpenter Marty (CM) Transportation Inc.

6612 Singletree Drive, Columbus, OH, 43229, US

| Leg Direction | Executive Boulevard Eastbound | | | | Executive Boulevard Westbound | | | | Westernmost Music Drive Northbound | | | | |
|---------------------------------------|----------------------------------|----|----|-------|----------------------------------|-------|----|-------|---------------------------------------|----|----|-----|-------|
| Time | T | R | U | App | L | T | U | App | L | R | U | App | Int |
| 2023-01-19 4:00PM | 75 | 0 | 0 | 75 | 0 | 49 | 0 | 49 | 0 | 0 | 0 | 0 | 124 |
| 4:15PM | 64 | 0 | 0 | 64 | 0 | 50 | 0 | 50 | 0 | 0 | 0 | 0 | 114 |
| 4:30PM | 73 | 0 | 0 | 73 | 0 | 48 | 0 | 48 | 0 | 0 | 0 | 0 | 121 |
| 4:45PM | 59 | 0 | 0 | 59 | 0 | 57 | 0 | 57 | 0 | 0 | 0 | 0 | 116 |
| Total | 271 | 0 | 0 | 271 | 0 | 204 | 0 | 204 | 0 | 0 | 0 | 0 | 475 |
| % Approach | 100% | 0% | 0% | - | 0% | 100% | 0% | - | 0% | 0% | 0% | - | - |
| % Total | 57.1% | 0% | 0% | 57.1% | 0% | 42.9% | 0% | 42.9% | 0% | 0% | 0% | 0% | - |
| PHF | 0.903 | - | - | 0.903 | - | 0.895 | - | 0.895 | - | - | - | - | 0.958 |
| Lights | 266 | 0 | 0 | 266 | 0 | 194 | 0 | 194 | 0 | 0 | 0 | 0 | 460 |
| % Lights | 98.2% | 0% | 0% | 98.2% | 0% | 95.1% | 0% | 95.1% | 0% | 0% | 0% | - | 96.8% |
| Articulated Trucks | 4 | 0 | 0 | 4 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 10 |
| % Articulated Trucks | 1.5% | 0% | 0% | 1.5% | 0% | 2.9% | 0% | 2.9% | 0% | 0% | 0% | - | 2.1% |
| Buses and Single-Unit Trucks | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 5 |
| % Buses and Single-Unit Trucks | 0.4% | 0% | 0% | 0.4% | 0% | 2.0% | 0% | 2.0% | 0% | 0% | 0% | - | 1.1% |

* L: Left, R: Right, T: Thru, U: U-Turn

Executive Boulevard & Westernmost Music Drive - TMC

Thu Jan 19, 2023
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks)
All Movements
ID: 1031236, Location: 39.870683, -84.113972

Provided by: Carpenter Marty (CM) Transportation Inc.
6612 Singletree Drive, Columbus, OH, 43229, US





TFMS - Segment Forecast Report

| Username | Email | Script Import Date | Script Version | Model Version |
|----------|-------------------|----------------------|----------------|---------------|
| Lyates | lyates@cmtran.com | 4/14/2020 5:30:19 PM | 2020.001 | 2022.1900 |

Forecast Summary

| Project ID | Project Name | Opening Year | Design Year |
|------------|--------------------------|--------------|-------------|
| | Newbauer Multifamily TIS | 2024 | 2044 |

Project Description

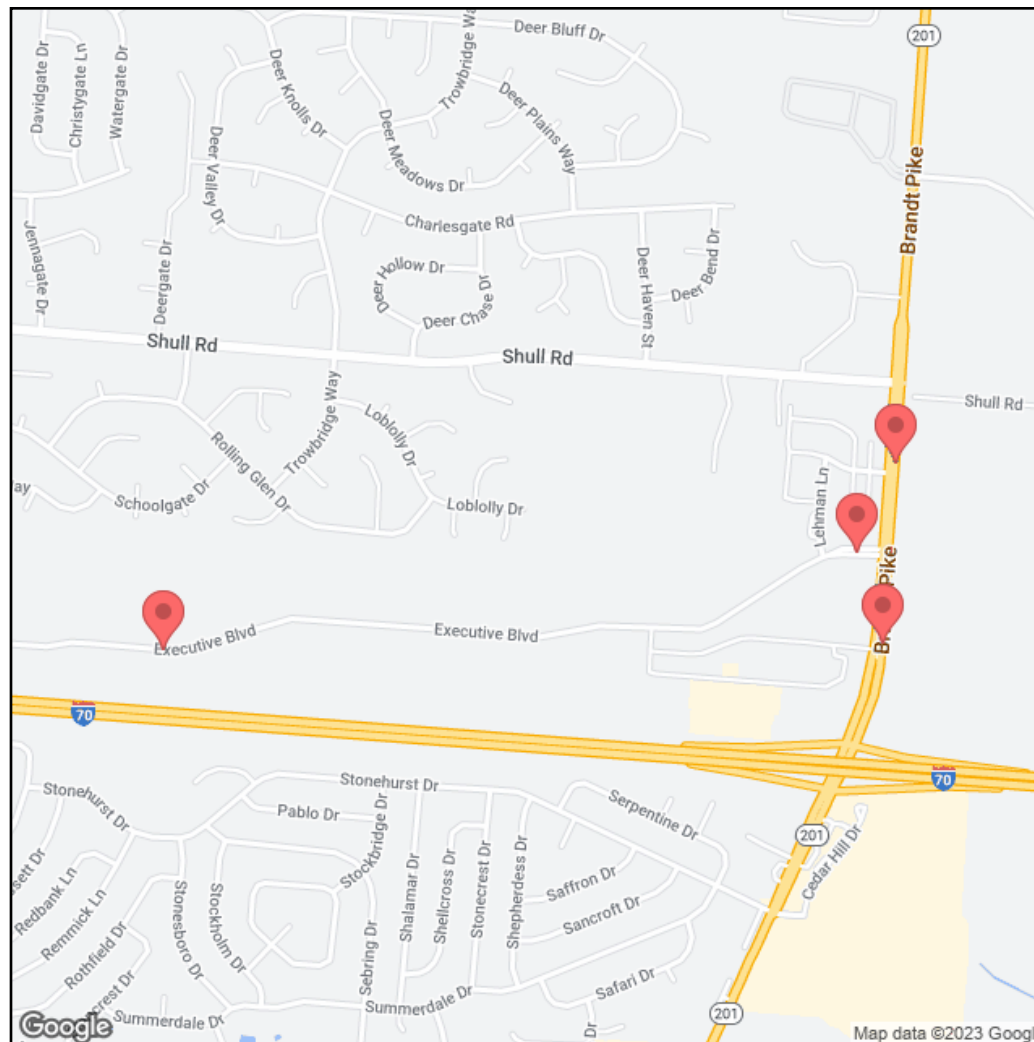
*Users of this data need to be aware that there are limitations to the forecasts generated by this product that make it suitable only for roadway design projects which are low risk.

Segment Information

| Segment ID | LRS ID | BMP | EMP | Length | Latitude | Longitude |
|------------|----------------|-------|-------|--------|-------------------|------------------|
| 1616435 | MMOTMR01780**C | 0.085 | 2.021 | 1.936 | -84.1183147767569 | 39.8701017047566 |
| 1616436 | MMOTMR01780**C | 2.021 | 2.110 | 0.089 | -84.0999697474068 | 39.8720583521852 |
| 1654452 | SMOTSR00201**C | 8.302 | 8.587 | 0.285 | -84.0992817128272 | 39.8702279060628 |
| 1654457 | SMOTSR00201**C | 8.587 | 8.810 | 0.223 | -84.0989361976613 | 39.8738945461435 |

Forecast Information

| Segment ID | 2024 AADT | 2044 AADT | DHV-30 | K% | D% | T24% | TD% |
|------------|-----------|-----------|--------|------|------|------|-----|
| 1616435 | 5,800 | 5,800 | 600 | 10.0 | 50.8 | 0 | 0 |
| 1616436 | 5,800 | 5,800 | 600 | 10.0 | 60.2 | 0 | 0 |
| 1654452 | 19,500 | 21,500 | 2,800 | 12.8 | 60.2 | 2 | 1 |
| 1654457 | 19,500 | 21,500 | 2,800 | 12.8 | 60.2 | 2 | 1 |



Definitions:

- o AADT – Annual Average Daily Traffic
- o DHV30 – Design Hour Volume for 30th highest hour of the year
- o $DHV30 = K * AADT$
- o K % – Design Hour Factor
- o D % – Peak Direction Factor
- o T24 % – Percent Daily Trucks
- o TD % – Percent Design Hour Trucks

| Forecast Segment ID | Route | BMP | EMP |
|---------------------|----------------|-------|-------|
| 1616435 | MMOTMR01780**C | 0.085 | 2.021 |

Forecast

| Year | K% | T24 % (Existing) | PA AADT | PA Method | PA Growth Rate % | PA Calculated Rate % |
|-------|------|------------------|---------|-----------|------------------|----------------------|
| 2050 | 10.0 | 0 | 5,800 | Model | -0.700 | 0.000 |
| AADT | D% | TD % (Existing) | BC AADT | BC Method | BC Growth Rate % | BC Calculated Rate % |
| 5,800 | 50.8 | 0 | 0 | Model | -999999.000 | 0.000 |

Warning: The growth rate was negative and was capped.

Warning: FORECAST TRUCKS ZERO BECAUSE NO TRUCK COUNTS ON SEGMENT

Regression

| Method Number | PA AADT | BC AADT | AADT |
|---------------|---------|---------|-------|
| 1 | 4,673 | | 4,673 |

95% Confidence Min/Max

| PA Min | PA Max | BC Min | BC Max | Year |
|--------|--------|--------|--------|------|
| -6591 | 12586 | 0 | 12111 | 2050 |

| Method Number | PA Growth % | BC Growth % | PA Drop Count | BC Drop Count | PA AADT | BC AADT | PA Adjustment | PA Adjustment |
|---------------|-------------|-------------|---------------|---------------|---------|---------|---------------|---------------|
| 1 | -0.66 | 0.00 | 0 | 0 | -1,103 | | 4,673 | |
| 2 | 1.31 | 0.00 | 0 | 0 | 2,190 | | 7,966 | |
| 3 | 1.31 | 0.00 | 0 | 0 | 2,190 | | 7,966 | |
| 4 | -999999.00 | 0.00 | 0 | 0 | | | | |
| 5 | -999999.00 | 0.00 | 0 | 0 | | | | |
| 6 | -999999.00 | 0.00 | 0 | 0 | | | | |

Adjustment Info

| ID | Adjustment Methods Name | Model vs Count AADT | Adjusted AADT | Model vs Count BC | Adjusted BC | PA Growth Rate % | BC Growth Rate % |
|--------------------|-------------------------|---------------------|---------------|---------------------------|-------------|---------------------------|------------------|
| 1 | DIF | -74,001 | 20,436 | -21,539 | 12,111 | 1.52 | 0.00 |
| 2 | RAT | 0.07 | 6,837 | 0.00 | | 0.63 | 0.00 |
| 3 | MRAT | 1.18 | 8,949 | 1.56 | 4,359 | -0.71 | 0.00 |
| 4 | RAF | | 14,693 | | 8,235 | 0.41 | 0.00 |
| Adjust Method AADT | | Adjust Method BC | | Selected PA Growth Rate % | | Selected BC Growth Rate % | |
| Model Ratio | | Model Ratio | | -0.700 | | 0.000 | |

Method 1 - 4 Volume

| PA Min Volume | PA Max Volume | BC Min Volume | BC Max Volume | Total Min Volume | Total MaxVolume |
|---------------|---------------|---------------|---------------|------------------|-----------------|
| 4590 | 8325 | 0 | 12111 | 4590 | 20436 |

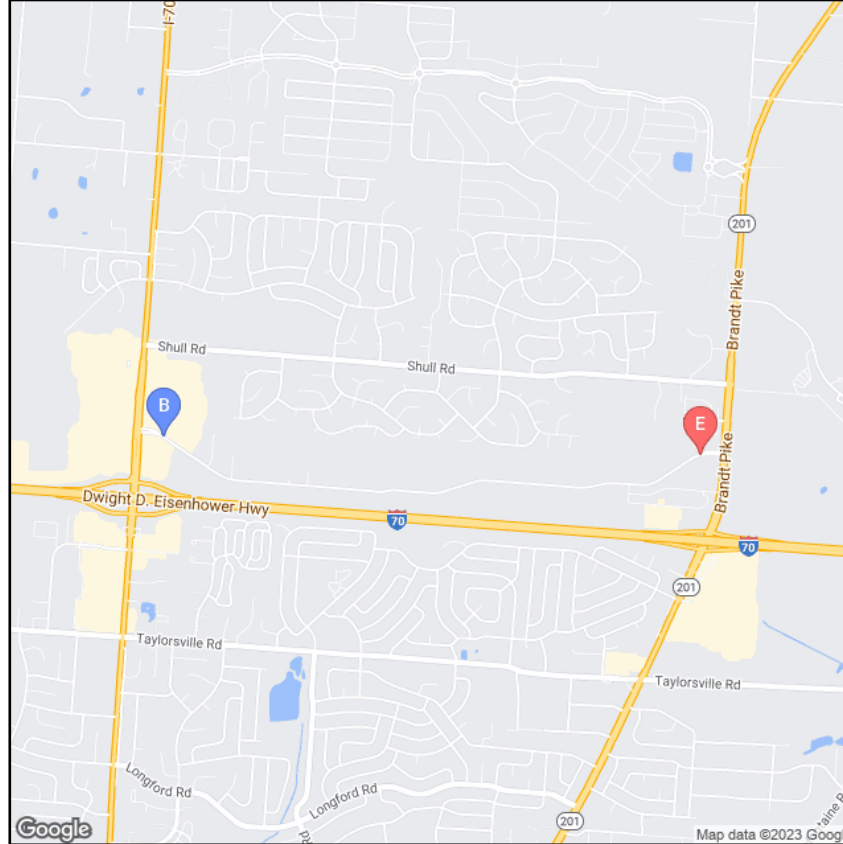
Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

Historical Count

| Year | All | Cars | Trucks |
|--------|-------|-------|--------|
| * 2021 | 5,776 | 5,776 | |

* Pivot Point



| Segment ID | LRS ID | BMP | EMP | Length | Yr 2024 AADT | Yr 2044 AADT | DHV30 | K % | D % | T24 % | TD % |
|------------|--------------------|-------|-------|--------|-----------------|-----------------|-------|------|------|-------|------|
| 1616435 | MMOTMR01780** C | 0.085 | 2.021 | 1.936 | 5,800 | 5,800 | 600 | 10.0 | 50.8 | 0 | 0 |

| Forecast Segment ID | Route | BMP | EMP |
|---------------------|----------------|-------|-------|
| 1616436 | MMOTMR01780**C | 2.021 | 2.110 |

Forecast

| Year | K% | T24 % (Existing) | PA AADT | PA Method | PA Growth Rate % | PA Calculated Rate % |
|-------|------|------------------|---------|-----------|------------------|----------------------|
| 2050 | 10.0 | 0 | 5,800 | Model | -0.200 | 0.000 |
| AADT | D% | TD % (Existing) | BC AADT | BC Method | BC Growth Rate % | BC Calculated Rate % |
| 5,800 | 60.2 | 0 | 0 | Model | -999999.000 | 0.000 |

Warning: The growth rate was negative and was capped.

Warning: FORECAST TRUCKS ZERO BECAUSE NO TRUCK COUNTS ON SEGMENT

Regression

| Method Number | PA AADT | BC AADT | AADT |
|---------------|---------|---------|-------|
| 1 | 4,673 | | 4,673 |

95% Confidence Min/Max

| PA Min | PA Max | BC Min | BC Max | Year |
|--------|--------|--------|--------|------|
| -6591 | 12586 | 0 | 75 | 2050 |

| Method Number | PA Growth % | BC Growth % | PA Drop Count | BC Drop Count | PA AADT | BC AADT | PA Adjustment | PA Adjustment |
|---------------|-------------|-------------|---------------|---------------|---------|---------|---------------|---------------|
| 1 | -0.66 | 0.00 | 0 | 0 | -1,103 | | 4,673 | |
| 2 | 1.31 | 0.00 | 0 | 0 | 2,190 | | 7,966 | |
| 3 | 1.31 | 0.00 | 0 | 0 | 2,190 | | 7,966 | |
| 4 | -999999.00 | 0.00 | 0 | 0 | | | | |
| 5 | -999999.00 | 0.00 | 0 | 0 | | | | |
| 6 | -999999.00 | 0.00 | 0 | 0 | | | | |

Adjustment Info

| ID | Adjustment Methods Name | Model vs Count AADT | Adjusted AADT | Model vs Count BC | Adjusted BC | PA Growth Rate % | BC Growth Rate % |
|--------------------|-------------------------|---------------------|---------------|---------------------------|-------------|---------------------------|------------------|
| 1 | DIF | -9,046 | 4,837 | -251 | 75 | -0.61 | 0.00 |
| 2 | RAT | 0.39 | 5,410 | 0.00 | | -0.22 | 0.00 |
| 3 | MRAT | 0.94 | 5,410 | 1.30 | 17 | -0.23 | 0.00 |
| 4 | RAF | | 5,124 | | 46 | -0.42 | 0.00 |
| Adjust Method AADT | | Adjust Method BC | | Selected PA Growth Rate % | | Selected BC Growth Rate % | |
| Ratio | | Model Ratio | | -0.200 | | 0.000 | |

Method 1 - 4 Volume

| PA Min Volume | PA Max Volume | BC Min Volume | BC Max Volume | Total Min Volume | Total MaxVolume |
|---------------|---------------|---------------|---------------|------------------|-----------------|
| 4762 | 5410 | 0 | 75 | 4762 | 5485 |

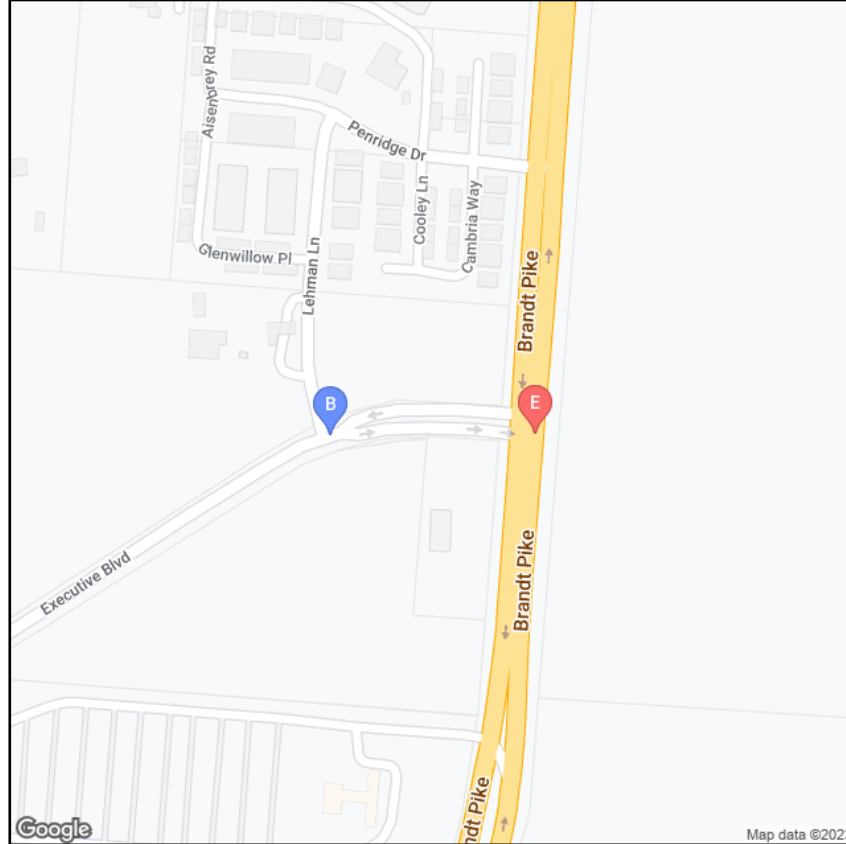
Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

Historical Count

| Year | All | Cars | Trucks |
|--------|-------|-------|--------|
| * 2021 | 5,776 | 5,776 | |

* Pivot Point



| Segment ID | LRS ID | BMP | EMP | Length | Yr 2024 AADT | Yr 2044 AADT | DHV30 | K % | D % | T24 % | TD % |
|------------|--------------------|-------|-------|--------|-----------------|-----------------|-------|------|------|-------|------|
| 1616436 | MMOTMR01780** C | 2.021 | 2.110 | 0.089 | 5,800 | 5,800 | 600 | 10.0 | 60.2 | 0 | 0 |

| Forecast Segment ID | Route | BMP | EMP |
|---------------------|----------------|-------|-------|
| 1654452 | SMOTSR00201**C | 8.302 | 8.587 |

Forecast

| Year | K% | T24 % (Existing) | PA AADT | PA Method | PA Growth Rate % | PA Calculated Rate % |
|--------|--------|------------------|---------|-----------|------------------|----------------------|
| 2050 | ◆ 12.8 | 2 | 22,000 | Average | 0.500 | 0.500 |
| AADT | D% | TD % (Existing) | BC AADT | BC Method | BC Growth Rate % | BC Calculated Rate % |
| 22,330 | ◆ 60.2 | 1 | 330 | Average | ● -3.800 | 0.000 |

● Warning: The growth rate was negative and was capped.

◆ K/D factors from TCDS were used.

Regression

| Method Number | PA AADT | BC AADT | AADT |
|---------------|---------|---------|--------|
| 2 | 25,430 | -482 | 24,948 |

95% Confidence Min/Max

| PA Min | PA Max | BC Min | BC Max | Year |
|--------|--------|--------|--------|------|
| 17487 | 40503 | -1188 | 590 | 2050 |

| Method Number | PA Growth % | BC Growth % | PA Drop Count | BC Drop Count | PA AADT | BC AADT | PA Adjustment | PA Adjustment |
|---------------|-------------|-------------|---------------|---------------|---------|---------|---------------|---------------|
| 1 | 1.53 | -4.57 | 0 | 0 | 26,319 | -6 | 27,154 | -106 |
| 2 | 1.22 | -8.55 | 6 | 1 | 23,094 | -434 | 25,430 | -482 |
| 3 | 1.81 | -8.55 | 0 | 0 | 28,043 | -434 | 28,671 | -482 |
| 4 | 1.80 | -8.48 | 4 | 4 | 28,145 | -443 | 28,612 | -476 |
| 5 | 2.17 | -11.72 | 0 | 0 | 30,196 | -765 | 30,618 | -782 |
| 6 | 2.98 | -10.93 | 3 | 4 | 34,898 | -693 | 35,045 | -707 |

Adjustment Info

| ID | Adjustment Methods Name | Model vs Count AADT | Adjusted AADT | Model vs Count BC | Adjusted BC | PA Growth Rate % | BC Growth Rate % |
|--------------------|-------------------------|---------------------|---------------|---------------------------|-------------|---------------------------|------------------|
| 1 | DIF | 4,300 | 18,183 | 75 | 401 | -0.19 | 0.79 |
| 2 | RAT | 1.29 | 17,911 | 1.30 | 424 | -0.24 | 1.04 |
| 3 | MRAT | 0.94 | 17,911 | 1.30 | 419 | -0.24 | 0.98 |
| 4 | RAF | | 18,047 | | 410 | -0.21 | 0.89 |
| Adjust Method AADT | | Adjust Method BC | | Selected PA Growth Rate % | | Selected BC Growth Rate % | |
| Average | | Average | | -0.200 | | 0.900 | |

Method 1 - 4 Volume

| PA Min Volume | PA Max Volume | BC Min Volume | BC Max Volume | Total Min Volume | Total MaxVolume |
|---------------|---------------|---------------|---------------|------------------|-----------------|
| 17487 | 17782 | 401 | 424 | 17888 | 18206 |

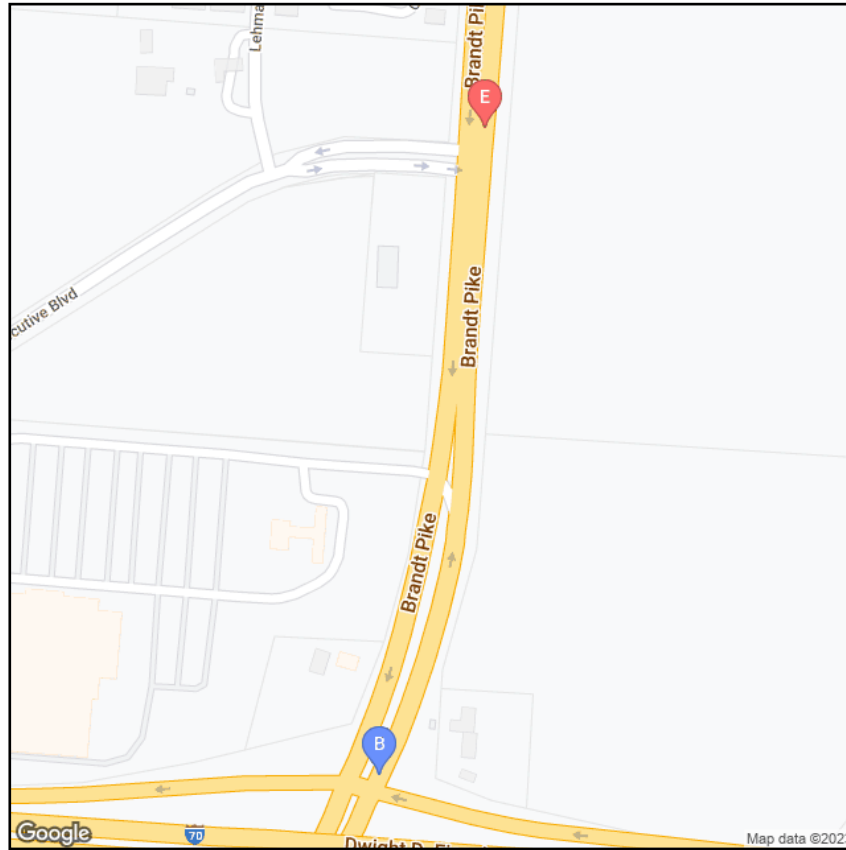
Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

Historical Count

| Year | All | Cars | Trucks |
|--------|--------|--------|--------|
| 2006 | 14,650 | 14,120 | 530 |
| 2009 | 15,060 | 14,400 | 660 |
| 2013 | 16,280 | 15,662 | 617 |
| 2015 | 16,043 | 15,434 | 608 |
| 2018 | 17,143 | 16,673 | 470 |
| * 2021 | 19,122 | 18,796 | 326 |

* Pivot Point



| Segment ID | LRS ID | BMP | EMP | Length | Yr 2024 AADT | Yr 2044 AADT | DHV30 | K % | D % | T24 % | TD % |
|------------|----------------|-------|-------|--------|-----------------|-----------------|-------|------|------|-------|------|
| 1654452 | SMOTSR00201**C | 8.302 | 8.587 | 0.285 | 19,500 | 21,500 | 2800 | 12.8 | 60.2 | 2 | 1 |

| Forecast Segment ID | Route | BMP | EMP |
|---------------------|----------------|-------|-------|
| 1654457 | SMOTSR00201**C | 8.587 | 8.810 |

Forecast

| Year | K% | T24 % (Existing) | PA AADT | PA Method | PA Growth Rate % | PA Calculated Rate % |
|--------|--------|------------------|---------|-----------|------------------|----------------------|
| 2050 | ◆ 12.8 | 2 | 22,000 | Average | 0.600 | 0.600 |
| AADT | D% | TD % (Existing) | BC AADT | BC Method | BC Growth Rate % | BC Calculated Rate % |
| 22,330 | ◆ 60.2 | 1 | 330 | Average | ● -4.200 | 0.000 |

● Warning: The growth rate was negative and was capped.

◆ K/D factors from TCDS were used.

Regression

| Method Number | PA AADT | BC AADT | AADT |
|---------------|---------|---------|--------|
| 2 | 25,430 | -482 | 24,948 |

95% Confidence Min/Max

| PA Min | PA Max | BC Min | BC Max | Year |
|--------|--------|--------|--------|------|
| 18645 | 40503 | -1188 | 590 | 2050 |

| Method Number | PA Growth % | BC Growth % | PA Drop Count | BC Drop Count | PA AADT | BC AADT | PA Adjustment | PA Adjustment |
|---------------|-------------|-------------|---------------|---------------|---------|---------|---------------|---------------|
| 1 | 1.53 | -4.57 | 0 | 0 | 26,319 | -6 | 27,154 | -106 |
| 2 | 1.22 | -8.55 | 6 | 1 | 23,094 | -434 | 25,430 | -482 |
| 3 | 1.81 | -8.55 | 0 | 0 | 28,043 | -434 | 28,671 | -482 |
| 4 | 1.80 | -8.48 | 4 | 4 | 28,145 | -443 | 28,612 | -476 |
| 5 | 2.17 | -11.72 | 0 | 0 | 30,196 | -765 | 30,618 | -782 |
| 6 | 2.98 | -10.93 | 3 | 4 | 34,898 | -693 | 35,045 | -707 |

Adjustment Info

| ID | Adjustment Methods Name | Model vs Count AADT | Adjusted AADT | Model vs Count BC | Adjusted BC | PA Growth Rate % | BC Growth Rate % |
|--------------------|-------------------------|---------------------|---------------|---------------------------|-------------|---------------------------|------------------|
| 1 | DIF | 10,054 | 19,059 | 168 | 335 | -0.01 | 0.10 |
| 2 | RAT | 2.11 | 18,989 | 2.06 | 344 | -0.03 | 0.19 |
| 3 | MRAT | 0.99 | 18,989 | 1.05 | 343 | -0.03 | 0.18 |
| 4 | RAF | | 19,024 | | 339 | -0.02 | 0.14 |
| Adjust Method AADT | | Adjust Method BC | | Selected PA Growth Rate % | | Selected BC Growth Rate % | |
| Difference | | Difference | | 0.000 | | 0.100 | |

Method 1 - 4 Volume

| PA Min Volume | PA Max Volume | BC Min Volume | BC Max Volume | Total Min Volume | Total MaxVolume |
|---------------|---------------|---------------|---------------|------------------|-----------------|
| 18645 | 18724 | 335 | 344 | 18980 | 19068 |

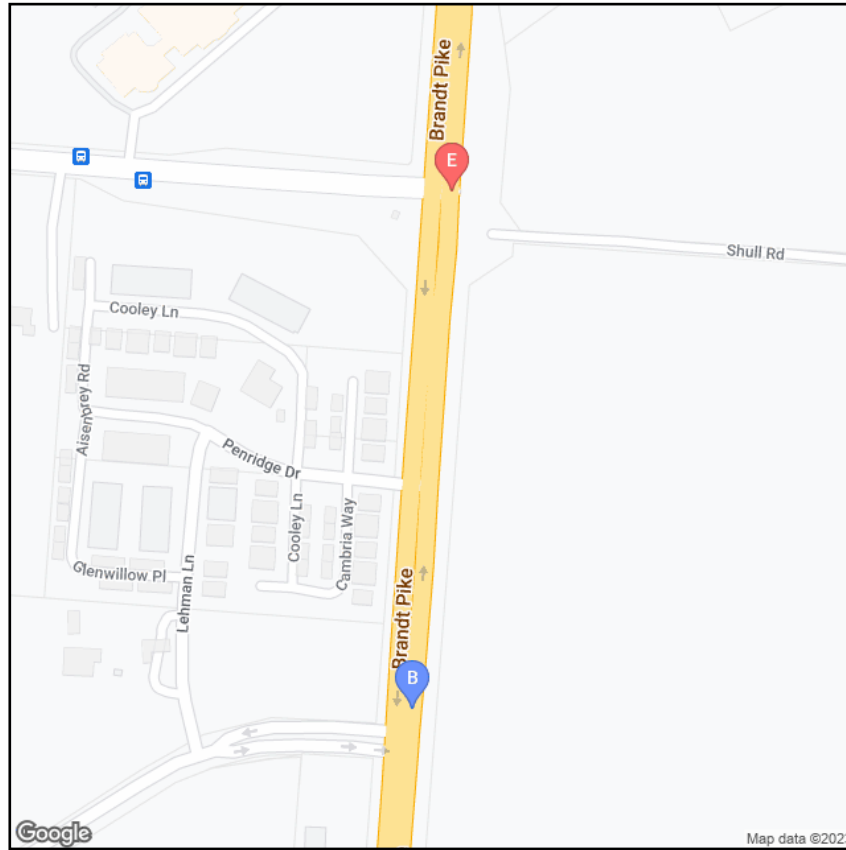
Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

Historical Count

| Year | All | Cars | Trucks |
|--------|--------|--------|--------|
| 2006 | 14,650 | 14,120 | 530 |
| 2009 | 15,060 | 14,400 | 660 |
| 2013 | 16,280 | 15,662 | 617 |
| 2015 | 16,043 | 15,434 | 608 |
| 2018 | 17,143 | 16,673 | 470 |
| * 2021 | 19,122 | 18,796 | 326 |

* Pivot Point



| Segment ID | LRS ID | BMP | EMP | Length | Yr 2024 AADT | Yr 2044 AADT | DHV30 | K % | D % | T24 % | TD % |
|------------|----------------|-------|-------|--------|-----------------|-----------------|-------|------|------|-------|------|
| 1654457 | SMOTSR00201**C | 8.587 | 8.810 | 0.223 | 19,500 | 21,500 | 2800 | 12.8 | 60.2 | 2 | 1 |

Appendix C

Trip Generation

Scenario - 1

Scenario Name: AM Peak

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

| Land Use & Data Source | Location | IV | Size | Time Period | Method | Entry | Exit | Total |
|--|------------------------|----------------|------|--|---------------------|--------|--------|-------|
| | | | | | Rate/Equation | Split% | Split% | |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | General Urban/Suburban | Dwelling Units | 300 | Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. | Best Fit (LIN) | 28 | 88 | 116 |
| Data Source: Trip Generation Manual 11.1 Ed | | | | | T = 0.31(X) + 22.85 | 24% | 76% | |

VEHICLE TO PERSON TRIP CONVERSION

| BASELINE SITE VEHICLE CHARACTERISTICS: | | | | | | |
|--|----------------------------------|----------|---------------------------------|------|---|----------|
| Land Use | Baseline Site Vehicle Mode Share | | Baseline Site Vehicle Occupancy | | Baseline Site Vehicle Directional Split | |
| | Entry (%) | Exit (%) | Entry | Exit | Entry (%) | Exit (%) |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 100 | 100 | 1 | 1 | 24 | 76 |
| ESTIMATED BASELINE SITE PERSON TRIPS: | | | | | | |
| Land Use | Person Trips by Vehicle | | Person Trips by Other Modes | | Total Baseline Site Person Trips | |
| | Entry | Exit | Entry | Exit | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 28 | 88 | 0 | 0 | 28 | 88 |
| | 116 | | 0 | | 116 | |

INTERNAL VEHICLE TRIP REDUCTION

| LAND USE GROUP ASSIGNMENT: | |
|--|----------------|
| Land Use | Land Use Group |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | Residential |

| | | | |
|--|-------|------|-------|
| BALANCED PERSON TRIPS: | | | |
| INTERNAL PERSON TRIPS: | | | |
| 220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit | | | |
| Internal Person Trips From | Entry | Exit | Total |
| Total Internal Person Trips | 0 | 0 | 0 |
| INTERNAL VEHICLE TRIPS AND CAPTURE: | | | |
| 220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit | | | |
| Total Internal Person Trips | 0 | 0 | 0 |
| Vehicle Mode Share | 100% | 100% | - |
| Vehicle Occupancy | 1.00 | 1.00 | - |
| Total Vehicle Internal Trips | 0 | 0 | 0 |
| Total External Vehicle Trips | 28 | 88 | 116 |
| Internal Vehicle Trip Capture | 0% | 0% | 0% |

PASS-BY VEHICLE TRIP REDUCTION

| Land Use | External Vehicle Trips | | Pass-by Vehicle Trip % | | Pass-by Vehicle Trips | |
|--|------------------------|------|------------------------|----------|-----------------------|------|
| | Entry | Exit | Entry (%) | Exit (%) | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 28 | 88 | 0.00% | 0.00% | 0 | 0 |

DIVERTED VEHICLE TRIP REDUCTION

| Land Use | External Vehicle Trips | | Diverted Vehicle Trip % | | Diverted Vehicle Trips | |
|--|------------------------|------|-------------------------|----------|------------------------|------|
| | Entry | Exit | Entry (%) | Exit (%) | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 28 | 88 | 0.00% | 0.00% | 0 | 0 |

EXTRA VEHICLE TRIP REDUCTION

| Land Use | (External - (Pass-by + Diverted)) Vehicle Trips | | Extra Vehicle Trip Reduction % | | Extra Reduced Vehicle Trips | |
|--|---|------|--------------------------------|----------|-----------------------------|------|
| | Entry | Exit | Entry (%) | Exit (%) | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 28 | 88 | 0.00% | 0.00% | 0 | 0 |

NEW VEHICLE TRIPS

| Land Use | New Vehicle Trips | | |
|--|-------------------|------|-------|
| | Entry | Exit | Total |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 28 | 88 | 116 |

RESULTS

| Site Totals | Entry | Exit | Total |
|--------------------------------|-------|------|-------|
| Vehicle Trips Before Reduction | 28 | 88 | 116 |
| Internal Vehicle Trips | 0 | 0 | 0 |
| External Vehicle Trips | 28 | 88 | 116 |
| Internal Vehicle Trip Capture | 0% | 0% | 0% |
| Pass-by Vehicle Trips | 0 | 0 | 0 |
| Diverted Vehicle Trips | 0 | 0 | 0 |
| Extra Reduced Vehicle Trips | 0 | 0 | 0 |
| New Vehicle Trips | 28 | 88 | 116 |

Scenario - 2

Scenario Name: PM Peak

User Group:

Dev. phase: 1

No. of Years to Project 0

Analyst Note:

Traffic :

Warning:

VEHICLE TRIPS BEFORE REDUCTION

| Land Use & Data Source | Location | IV | Size | Time Period | Method | Entry | Exit | Total |
|--|------------------------|----------------|------|--|---------------------|--------|--------|-------|
| | | | | | Rate/Equation | Split% | Split% | |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | General Urban/Suburban | Dwelling Units | 300 | Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. | Best Fit (LIN) | 94 | 55 | 149 |
| Data Source: Trip Generation Manual 11.1 Ed | | | | | T = 0.43(X) + 20.55 | 63% | 37% | |

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

| Land Use | Baseline Site Vehicle Mode Share | | Baseline Site Vehicle Occupancy | | Baseline Site Vehicle Directional Split | |
|--|----------------------------------|----------|---------------------------------|------|---|----------|
| | Entry (%) | Exit (%) | Entry | Exit | Entry (%) | Exit (%) |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 100 | 100 | 1 | 1 | 63 | 37 |

ESTIMATED BASELINE SITE PERSON TRIPS:

| Land Use | Person Trips by Vehicle | | Person Trips by Other Modes | | Total Baseline Site Person Trips | |
|--|-------------------------|------|-----------------------------|------|----------------------------------|------|
| | Entry | Exit | Entry | Exit | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 94 | 55 | 0 | 0 | 94 | 55 |
| | 149 | | 0 | | 149 | |

INTERNAL VEHICLE TRIP REDUCTION

LAND USE GROUP ASSIGNMENT:

| Land Use | Land Use Group |
|--|----------------|
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | Residential |

BALANCED PERSON TRIPS:

INTERNAL PERSON TRIPS:

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

| | | | |
|-----------------------------|-------|------|-------|
| Internal Person Trips From | Entry | Exit | Total |
| Total Internal Person Trips | 0 | 0 | 0 |

INTERNAL VEHICLE TRIPS AND CAPTURE:

220 - Multifamily Housing (Low-Rise)-Not Close to Rail Transit

| | | | |
|-------------------------------|------|------|-----|
| Total Internal Person Trips | 0 | 0 | 0 |
| Vehicle Mode Share | 100% | 100% | - |
| Vehicle Occupancy | 1.00 | 1.00 | - |
| Total Vehicle Internal Trips | 0 | 0 | 0 |
| Total External Vehicle Trips | 94 | 55 | 149 |
| Internal Vehicle Trip Capture | 0% | 0% | 0% |

PASS-BY VEHICLE TRIP REDUCTION

| Land Use | External Vehicle Trips | | Pass-by Vehicle Trip % | | Pass-by Vehicle Trips | |
|--|------------------------|------|------------------------|----------|-----------------------|------|
| | Entry | Exit | Entry (%) | Exit (%) | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 94 | 55 | 0.00% | 0.00% | 0 | 0 |

DIVERTED VEHICLE TRIP REDUCTION

| Land Use | External Vehicle Trips | | Diverted Vehicle Trip % | | Diverted Vehicle Trips | |
|--|------------------------|------|-------------------------|----------|------------------------|------|
| | Entry | Exit | Entry (%) | Exit (%) | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 94 | 55 | 0.00% | 0.00% | 0 | 0 |

EXTRA VEHICLE TRIP REDUCTION

| Land Use | (External - (Pass-by + Diverted)) Vehicle Trips | | Extra Vehicle Trip Reduction % | | Extra Reduced Vehicle Trips | |
|--|---|------|--------------------------------|----------|-----------------------------|------|
| | Entry | Exit | Entry (%) | Exit (%) | Entry | Exit |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 94 | 55 | 0.00% | 0.00% | 0 | 0 |

NEW VEHICLE TRIPS

| Land Use | New Vehicle Trips | | |
|--|-------------------|------|-------|
| | Entry | Exit | Total |
| 220 - Multifamily Housing (Low-Rise) - Not Close to Rail Transit | 94 | 55 | 149 |

RESULTS

| Site Totals | Entry | Exit | Total |
|--------------------------------|-------|------|-------|
| Vehicle Trips Before Reduction | 94 | 55 | 149 |
| Internal Vehicle Trips | 0 | 0 | 0 |
| External Vehicle Trips | 94 | 55 | 149 |
| Internal Vehicle Trip Capture | 0% | 0% | 0% |
| Pass-by Vehicle Trips | 0 | 0 | 0 |
| Diverted Vehicle Trips | 0 | 0 | 0 |
| Extra Reduced Vehicle Trips | 0 | 0 | 0 |
| New Vehicle Trips | 94 | 55 | 149 |

Appendix D

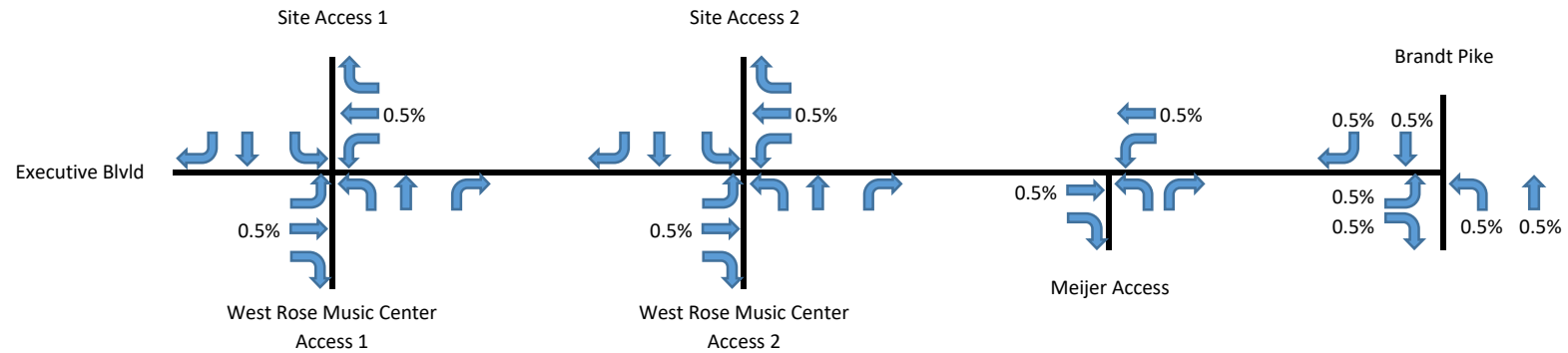
Volume Calculations

Newbauer Multifamily TIS Traffic Volume Calculations

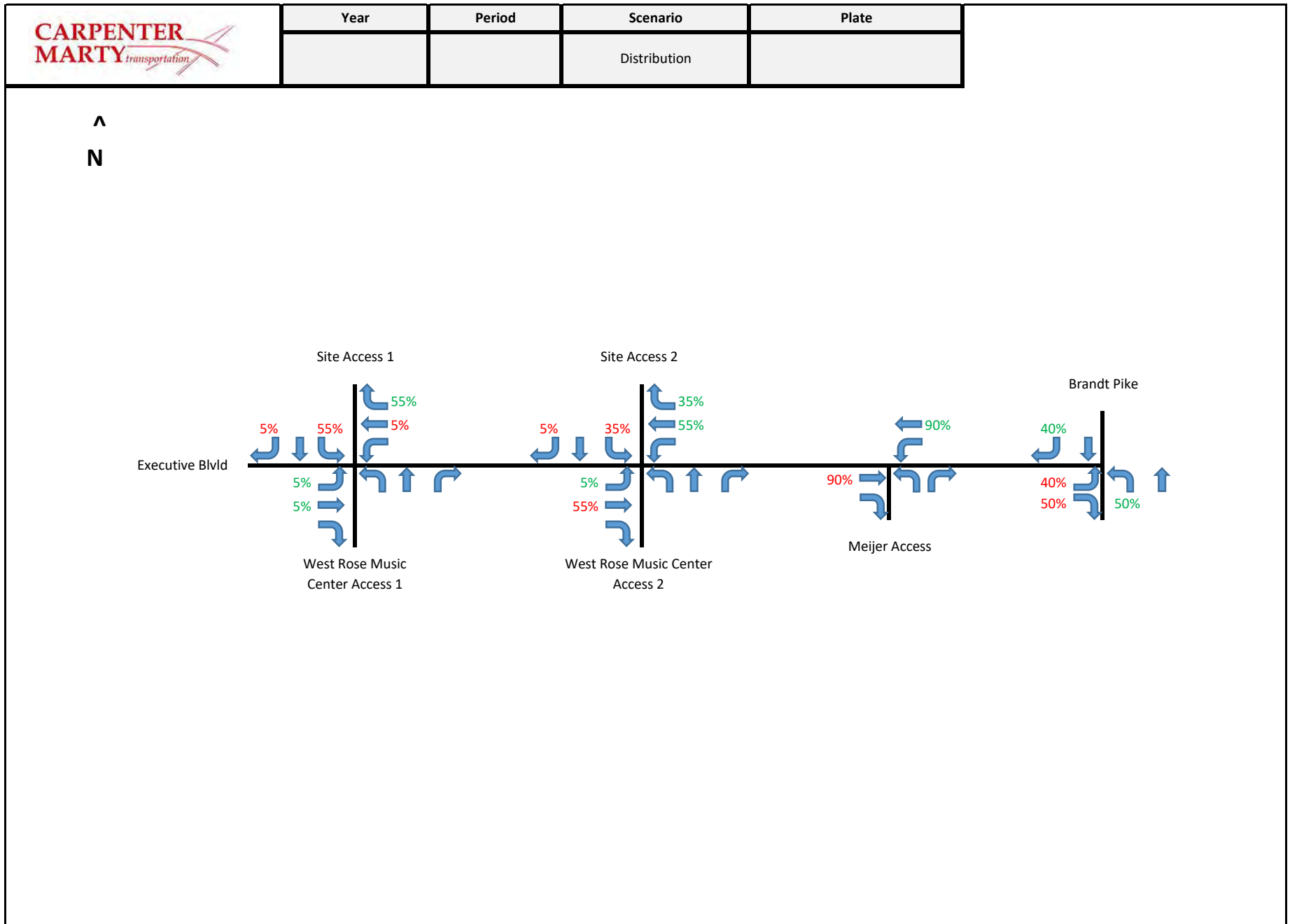


| Year | Period | Scenario | Plate |
|------|--------|--------------|-------|
| | | Growth Rates | |

^
N



Newbauer Multifamily TIS
Traffic Volume Calculations

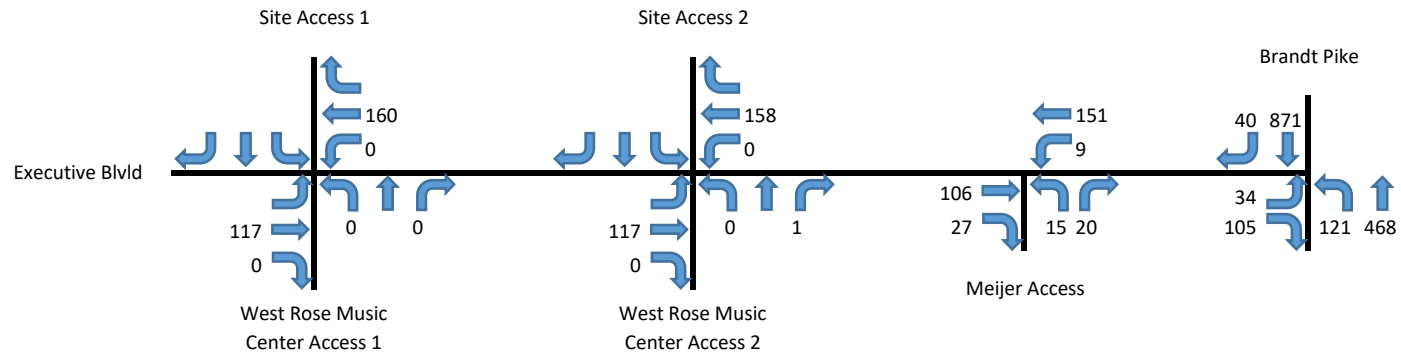


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|-------|
| 2023 | AM | Count | |

^
N

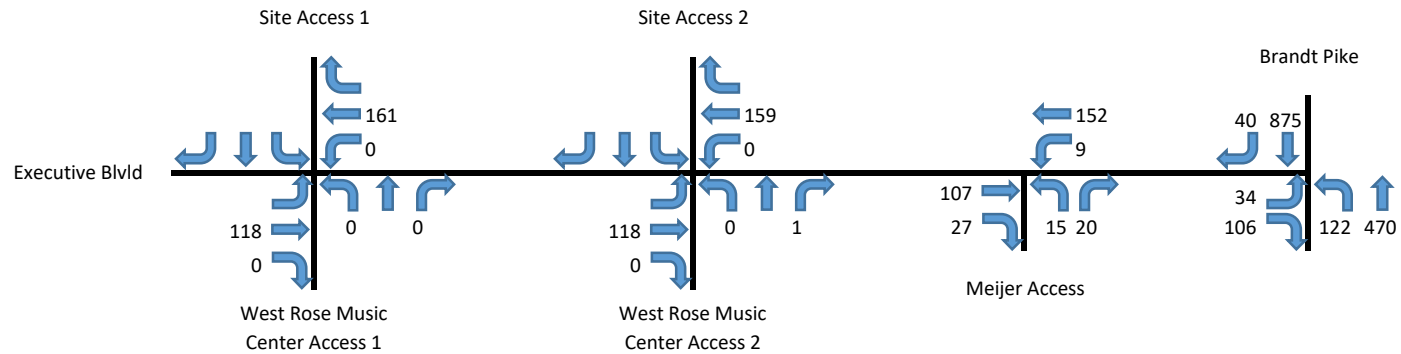


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|-------|
| 2024 | AM | No Build | A1 |

^
N



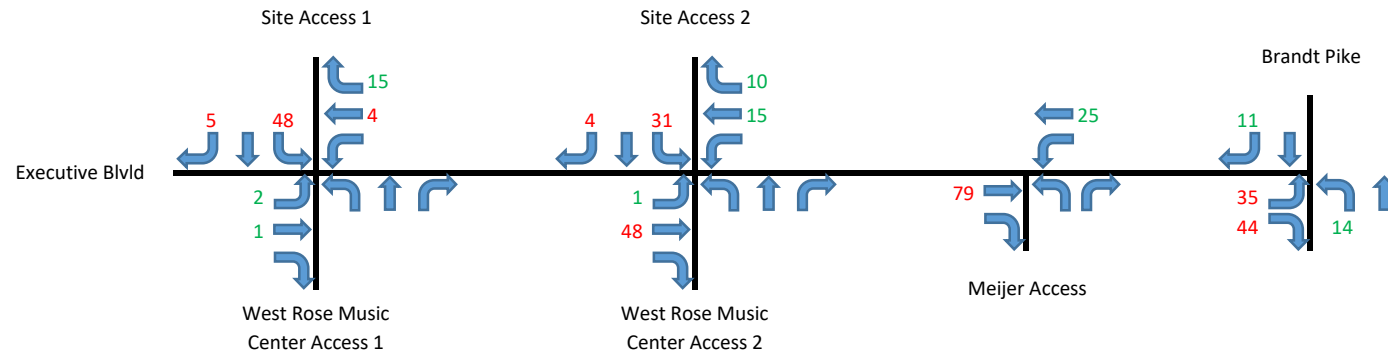
Newbauer Multifamily TIS Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|-------------------|-------|
| | AM | Non-Pass-By Trips | B1 |

^
N

Enter 28
Exit 88

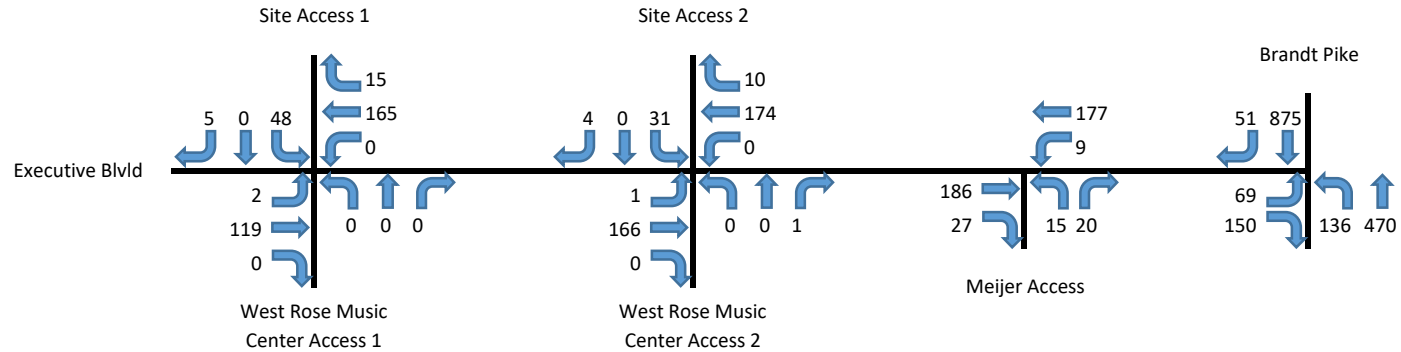


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|--------------|
| 2024 | AM | Build | C1 = A1 + B1 |

^
N

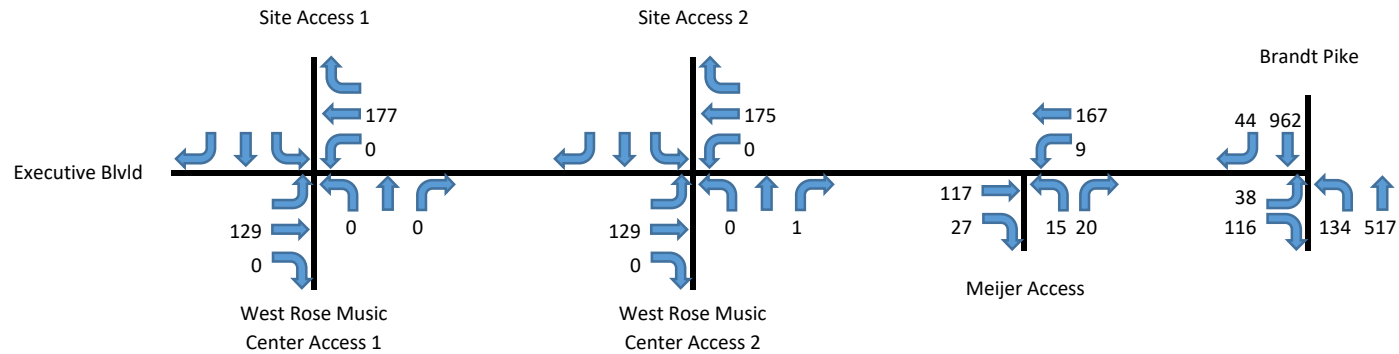


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|-------|
| 2044 | AM | No Build | D1 |

^
N

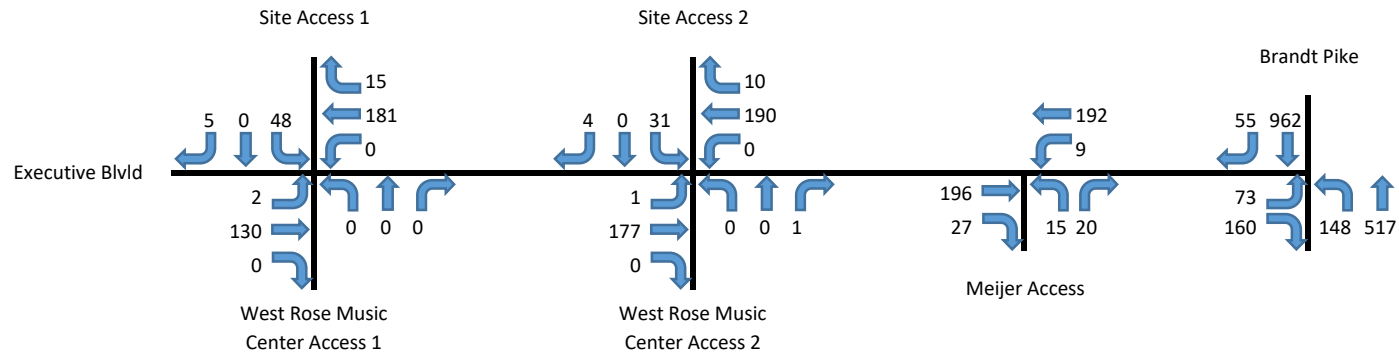


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|--------------|
| 2044 | AM | Build | E1 = B1 + D1 |

^
N

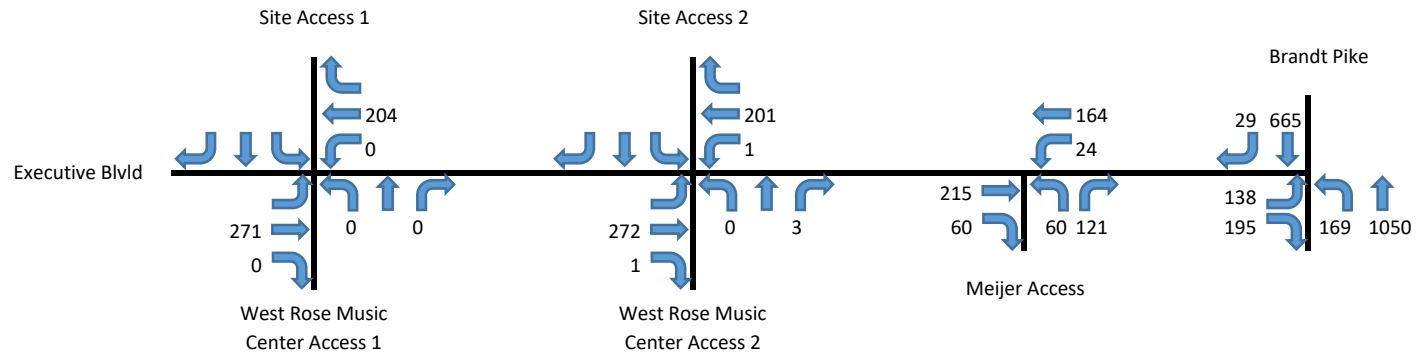


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|-------|
| 2023 | PM | Count | |

^
N

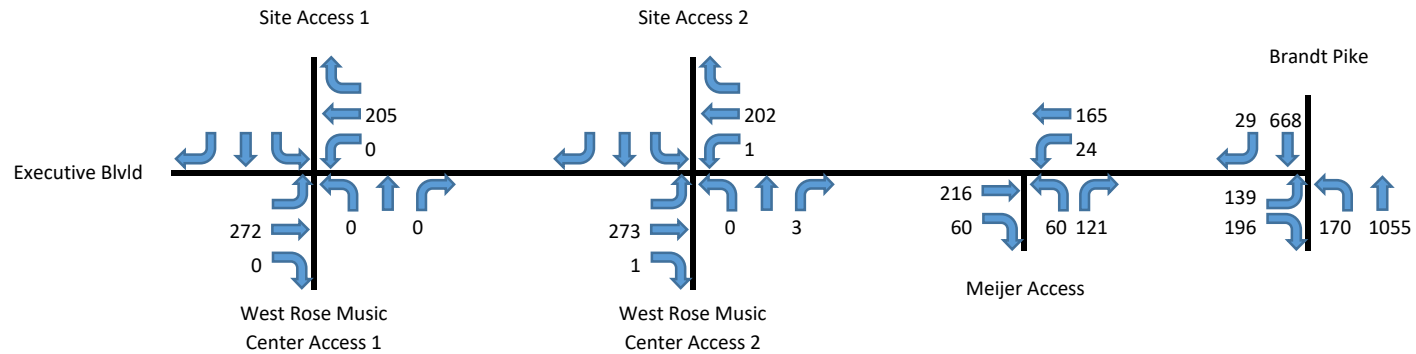


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|-------|
| 2024 | PM | No Build | A2 |

^
N



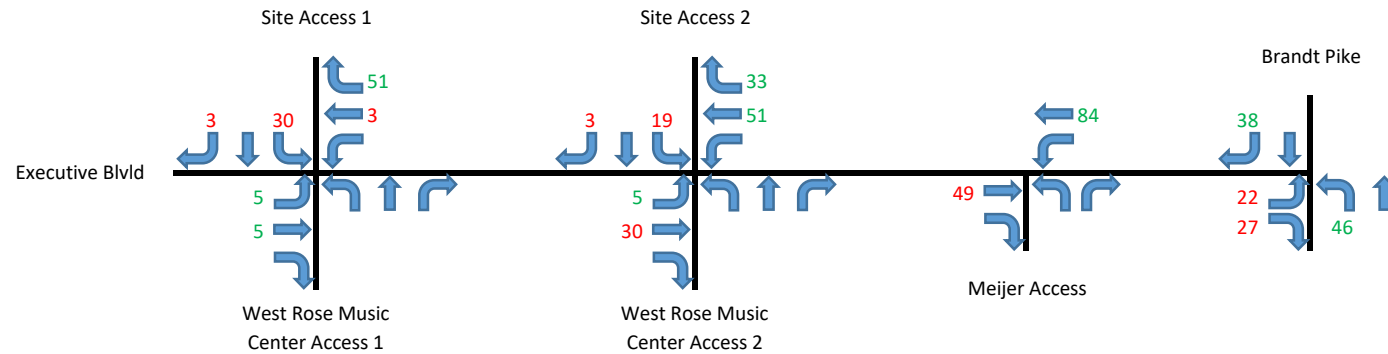
Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|-------------------|-------|
| | PM | Non-Pass-By Trips | B2 |

^
N

Enter 94
Exit 55

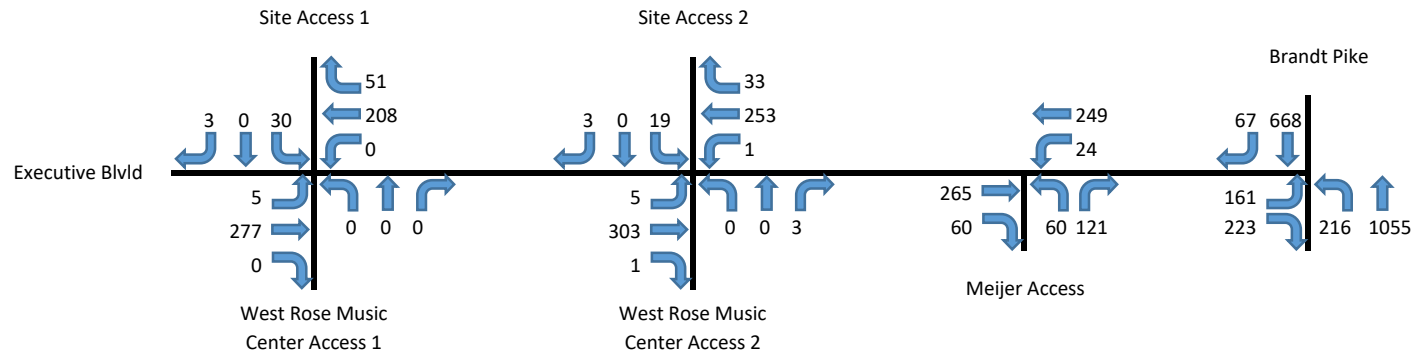


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|--------------|
| 2024 | PM | Build | C2 = A2 + B2 |

^
N

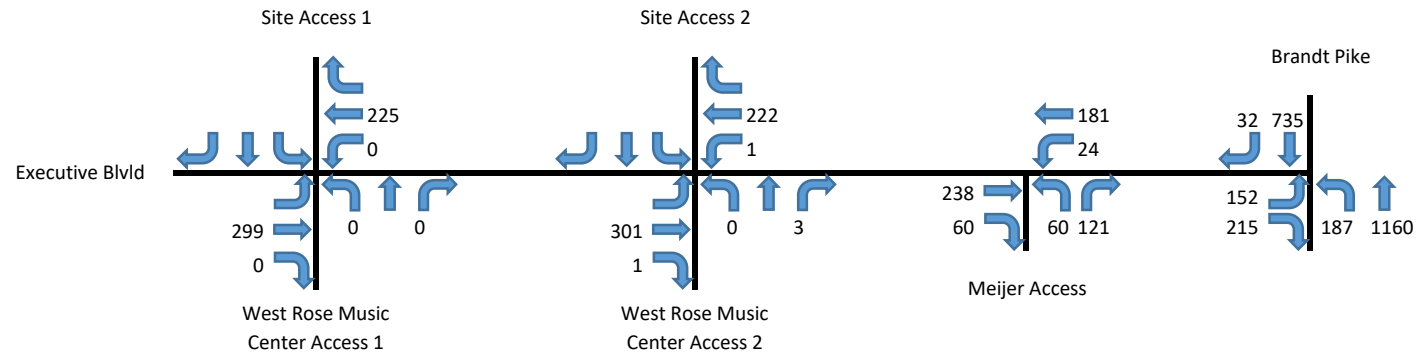


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|-------|
| 2044 | PM | No Build | D2 |

^
N

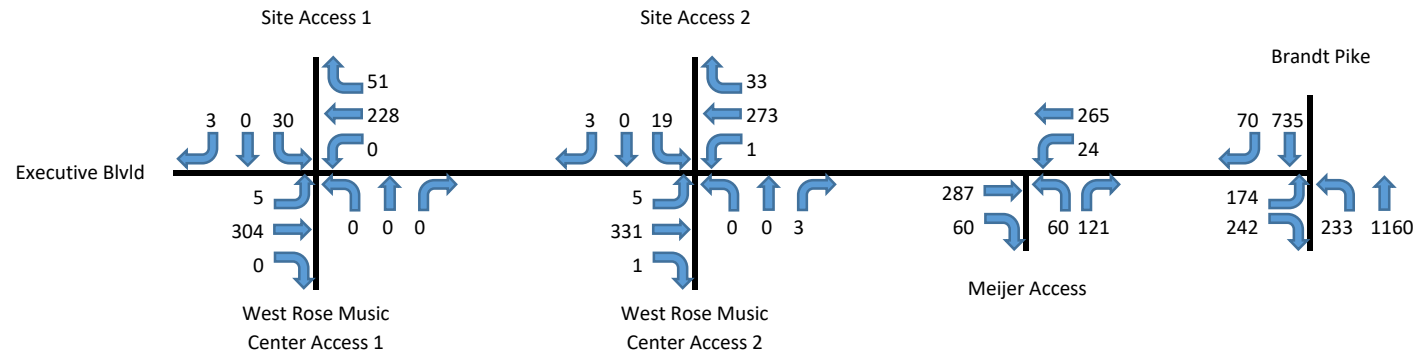


Newbauer Multifamily TIS
Traffic Volume Calculations



| Year | Period | Scenario | Plate |
|------|--------|----------|--------------|
| 2044 | PM | Build | E2 = B2 + D2 |

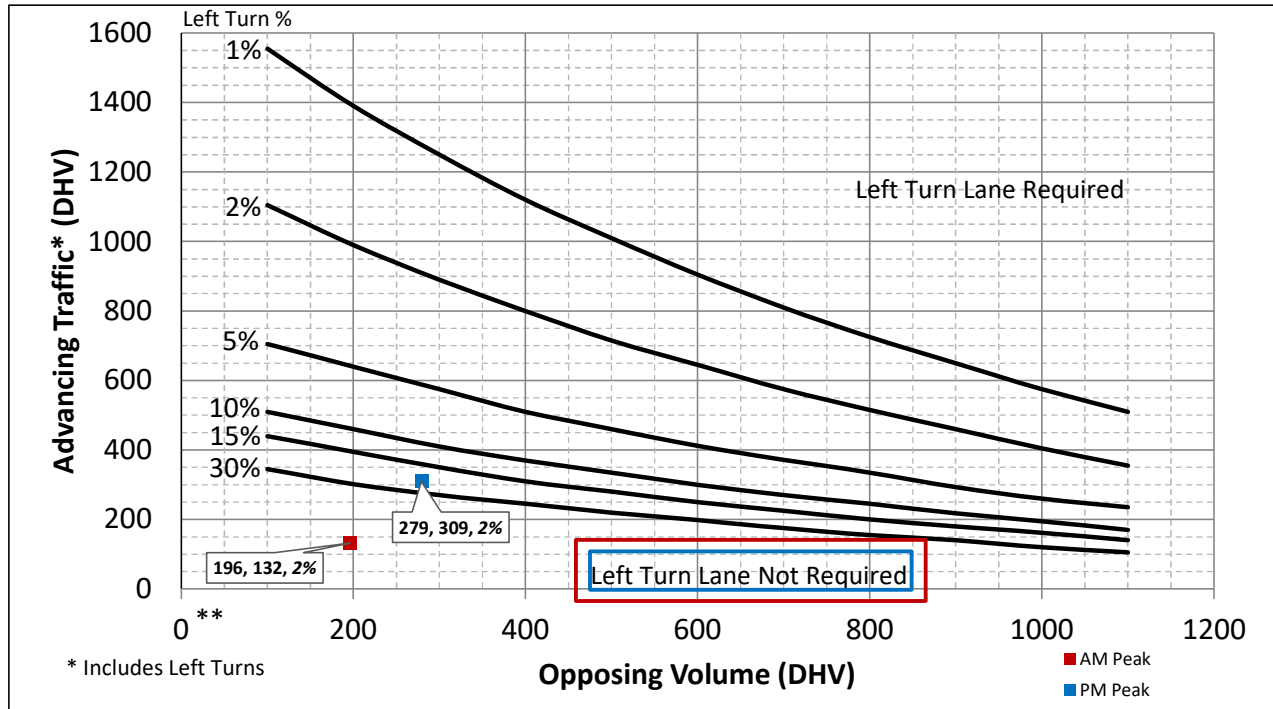
^
N



Appendix E

Turn Lane Lane Warrant and Length Analysis

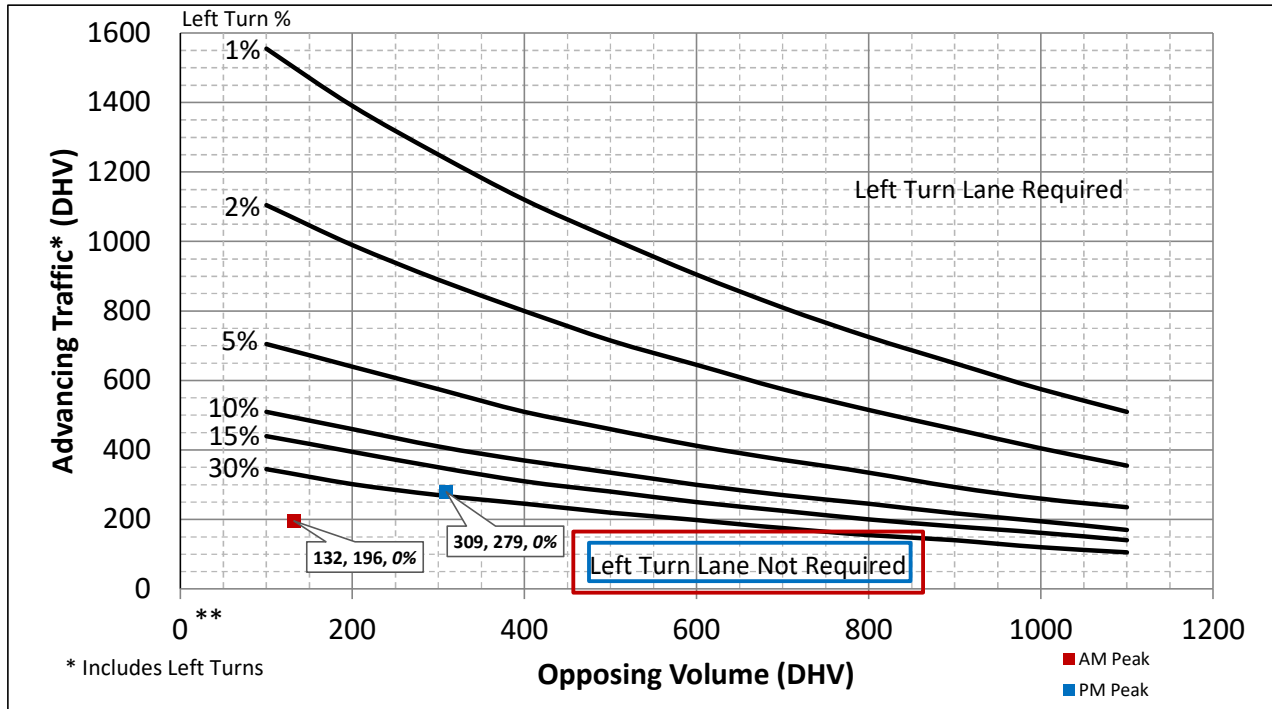
2-Lane Highway Left Turn Lane Warrant (= < 40 mph or 70 kph Posted Speed)



Turn Lane Length Calculations

| | | | |
|--------------------------|----------------------|--------------|---|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 2 | VPH |
| | Advancing Traffic | 132 | VPH |
| | Opposing Volume | 196 | VPH |
| | Left Turn Percentage | 2% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | * Turn Lane Length includes 50 ft diverging taper |
| | Offset Width | 12 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 5 | VPH |
| | Advancing Traffic | 309 | VPH |
| | Opposing Volume | 279 | VPH |
| | Left Turn Percentage | 2% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | * Turn Lane Length includes 50 ft diverging taper |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| Is Left Turn Warrant Met | | No | No Left Turn Lane Required |

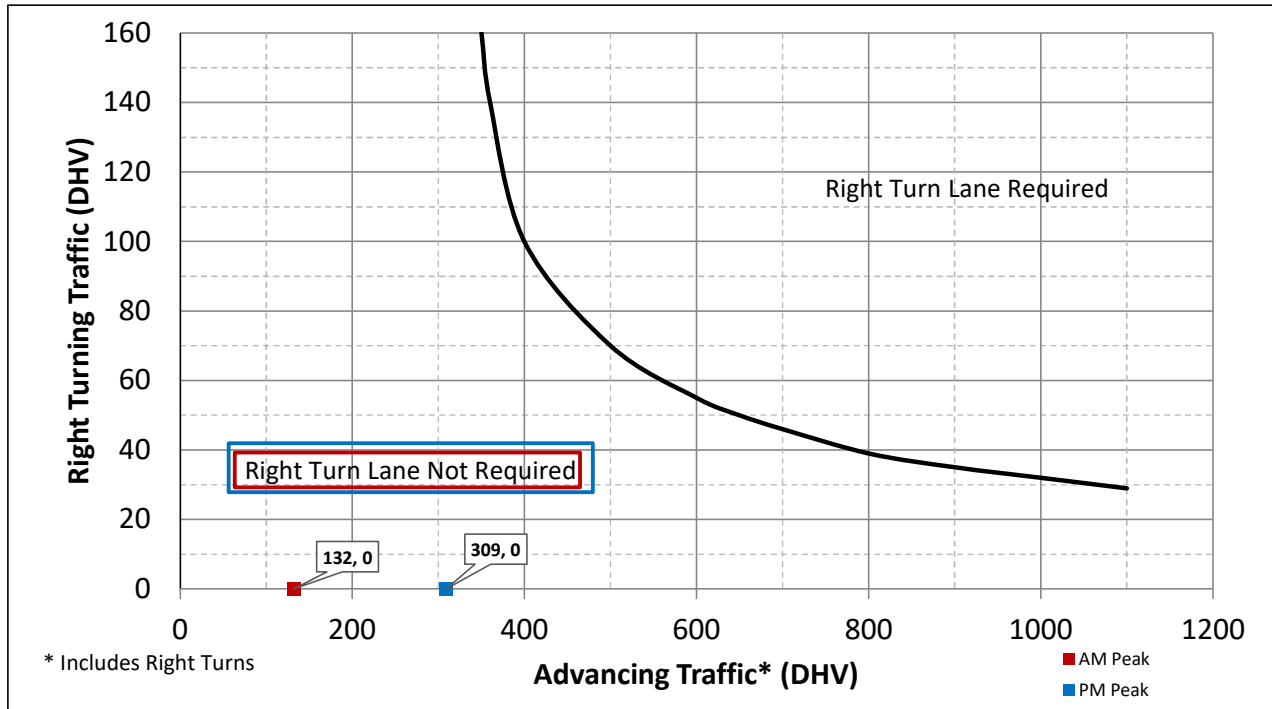
2-Lane Highway Left Turn Lane Warrant
(= < 40 mph or 70 kph Posted Speed)



Turn Lane Length Calculations

| | | | |
|--------------------------|----------------------|--------------|---|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 0 | VPH |
| | Advancing Traffic | 196 | VPH |
| | Opposing Volume | 132 | VPH |
| | Left Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | * Turn Lane Length includes 50 ft diverging taper |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 0 | VPH |
| | Advancing Traffic | 279 | VPH |
| | Opposing Volume | 309 | VPH |
| | Left Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | * Turn Lane Length includes 50 ft diverging taper |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| Is Left Turn Warrant Met | | No | No Left Turn Lane Required |

2-Lane Highway Right Turn Lane Warrant
(= < 40 mph or 70 kph Posted Speed)



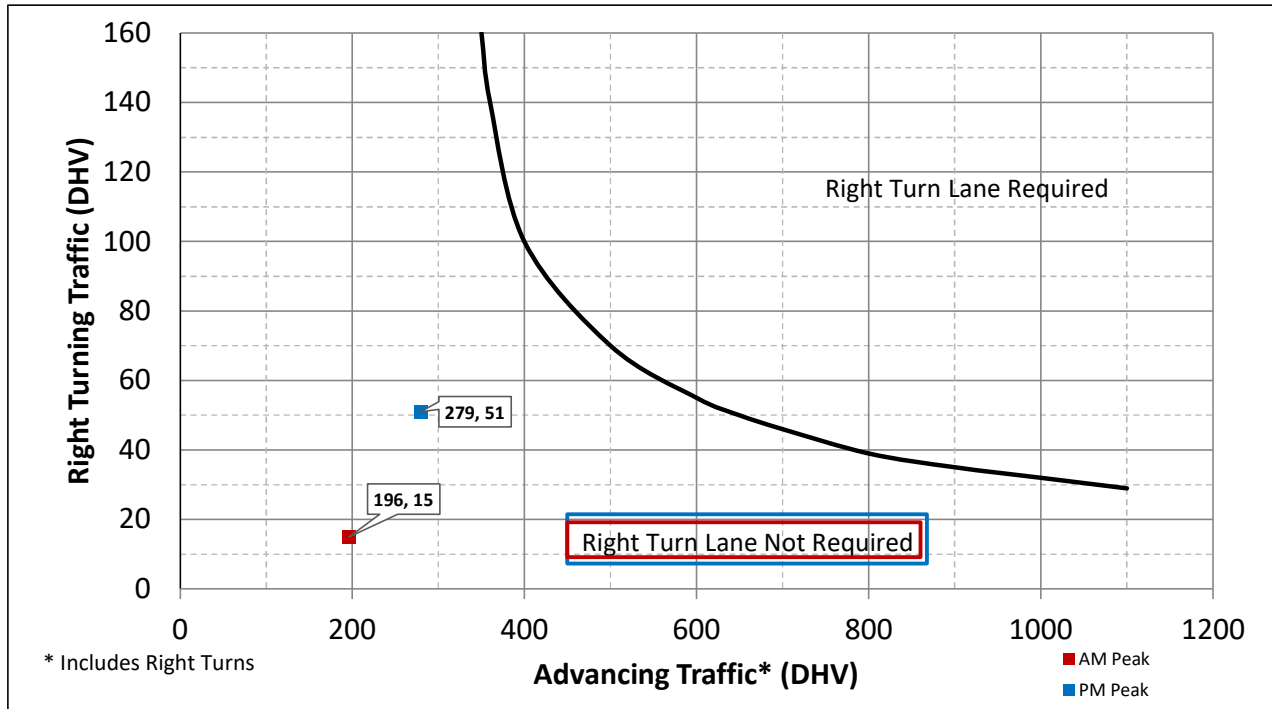
Turn Lane Length Calculations

| | | | |
|---------------------------|-----------------------|--------------|-----------------------------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 0 | VPH |
| | Advancing Traffic | 132 | VPH |
| | Right Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 0 | VPH |
| | Advancing Traffic | 309 | VPH |
| | Right Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| Is Right Turn Warrant Met | | No | No Right Turn Lane Required |

* Turn Lane Length includes 50 ft diverging taper

* Turn Lane Length includes 50 ft diverging taper

2-Lane Highway Right Turn Lane Warrant
(= < 40 mph or 70 kph Posted Speed)



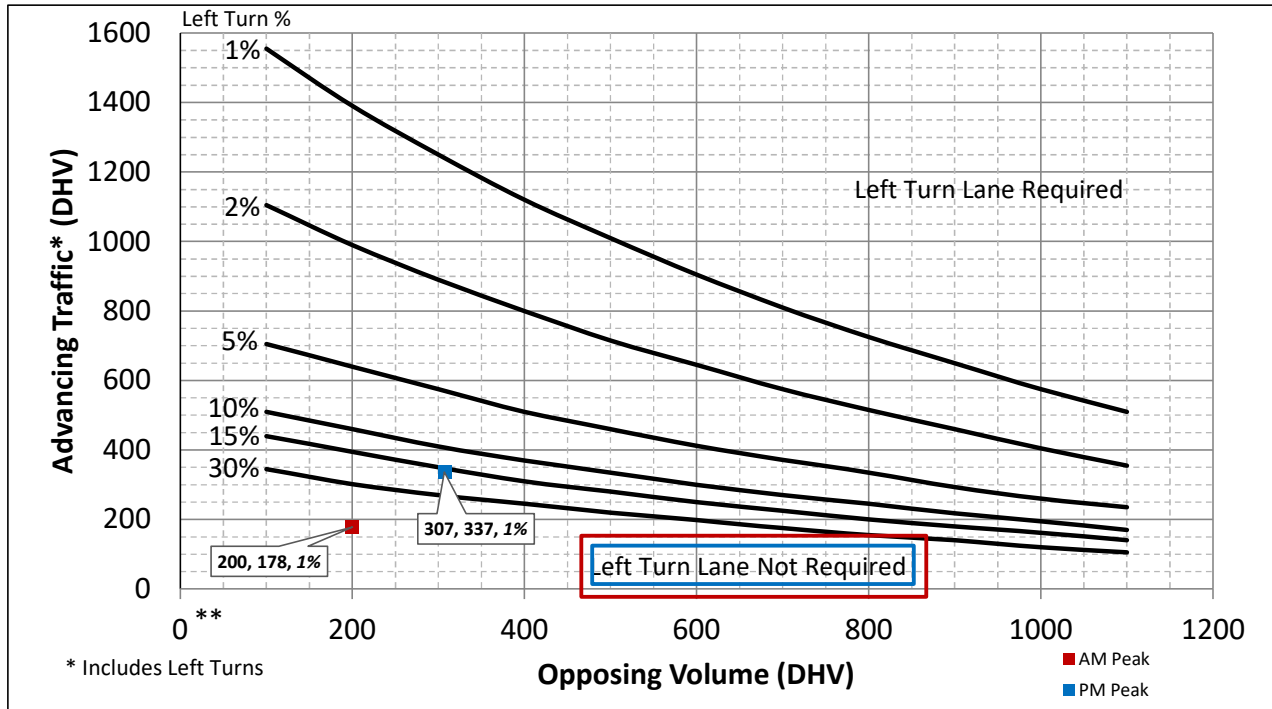
Turn Lane Length Calculations

| | | | |
|---------------------------|-----------------------|--------------|-----------------------------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 15 | VPH |
| | Advancing Traffic | 196 | VPH |
| | Right Turn Percentage | 8% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 51 | VPH |
| | Advancing Traffic | 279 | VPH |
| | Right Turn Percentage | 18% | |
| | Location Type | Through Road | |
| | Condition | C | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 165 | |
| Is Right Turn Warrant Met | | No | No Right Turn Lane Required |

* Turn Lane Length includes 50 ft diverging taper

* Turn Lane Length includes 50 ft diverging taper

2-Lane Highway Left Turn Lane Warrant
(= < 40 mph or 70 kph Posted Speed)



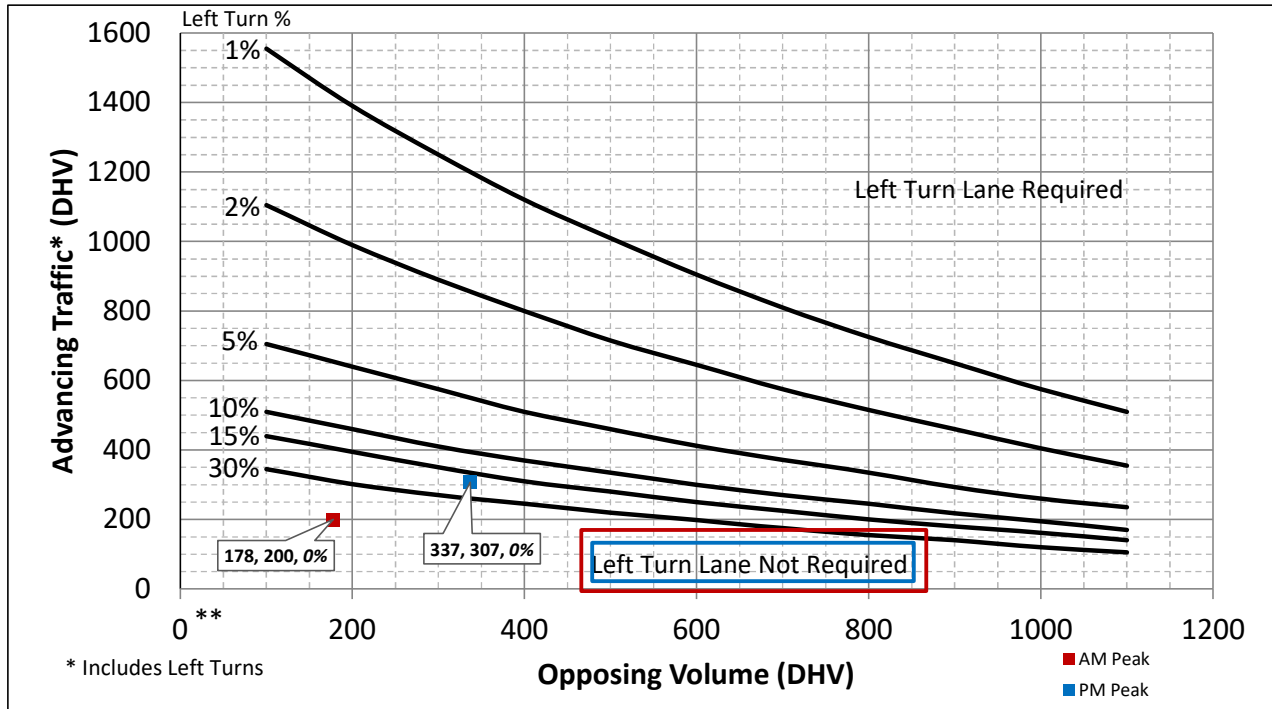
Turn Lane Length Calculations

| | | | |
|---------------------------------|----------------------|--------------|-----------------------------------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 1 | VPH |
| | Advancing Traffic | 178 | VPH |
| | Opposing Volume | 200 | VPH |
| | Left Turn Percentage | 1% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 5 | VPH |
| | Advancing Traffic | 337 | VPH |
| | Opposing Volume | 307 | VPH |
| | Left Turn Percentage | 1% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| Is Left Turn Warrant Met | | No | No Left Turn Lane Required |

* Turn Lane Length includes 50 ft diverging taper

* Turn Lane Length includes 50 ft diverging taper

2-Lane Highway Left Turn Lane Warrant
(= < 40 mph or 70 kph Posted Speed)



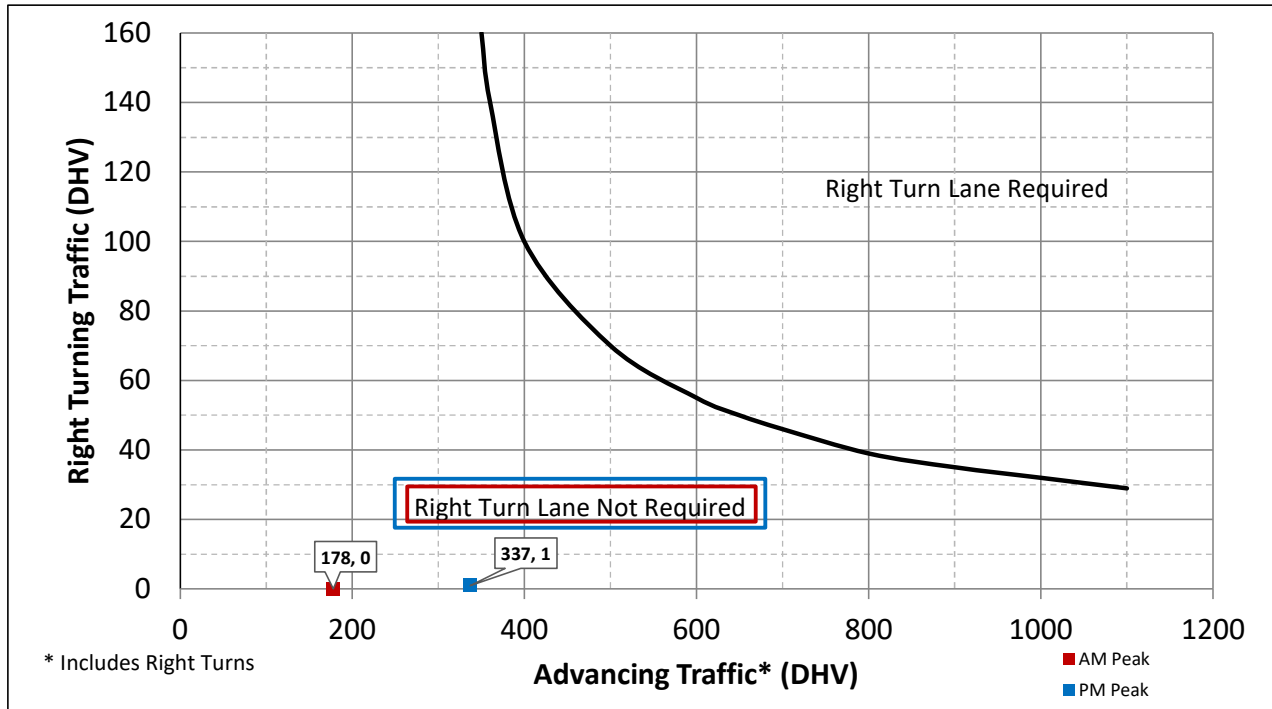
Turn Lane Length Calculations

| | | | |
|--------------------------|----------------------|--------------|----------------------------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 0 | VPH |
| | Advancing Traffic | 200 | VPH |
| | Opposing Volume | 178 | VPH |
| | Left Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| | Offset Width | 12 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 1 | VPH |
| | Advancing Traffic | 307 | VPH |
| | Opposing Volume | 337 | VPH |
| | Left Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| | Offset Width | 12 | |
| Is Left Turn Warrant Met | | No | No Left Turn Lane Required |

* Turn Lane Length includes 50 ft diverging taper

* Turn Lane Length includes 50 ft diverging taper

2-Lane Highway Right Turn Lane Warrant
(= < 40 mph or 70 kph Posted Speed)



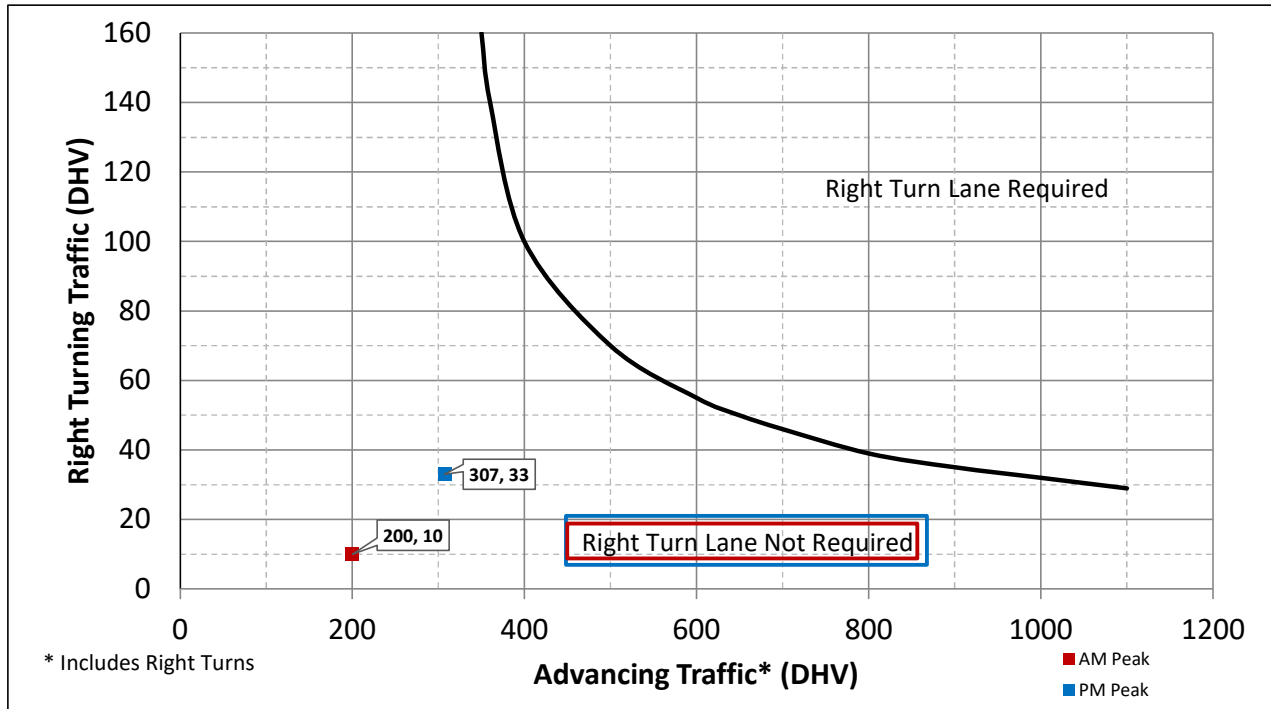
Turn Lane Length Calculations

| | | | |
|---------------------------|-----------------------|--------------|-----------------------------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 0 | VPH |
| | Advancing Traffic | 178 | VPH |
| | Right Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 1 | VPH |
| | Advancing Traffic | 337 | VPH |
| | Right Turn Percentage | 0% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 125 | |
| Is Right Turn Warrant Met | | No | No Right Turn Lane Required |

* Turn Lane Length includes 50 ft diverging taper

* Turn Lane Length includes 50 ft diverging taper

2-Lane Highway Right Turn Lane Warrant
(= < 40 mph or 70 kph Posted Speed)



Turn Lane Length Calculations

| | | | |
|---------------------------|-----------------------|--------------|-----------------------------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 10 | VPH |
| | Advancing Traffic | 200 | VPH |
| | Right Turn Percentage | 5% | |
| | Location Type | Through Road | |
| | Condition | B | |
| | Vehicles/Cycle | 1 | |
| PM Peak | Turn Lane Length | 125 | |
| | Design Speed | 40 | mph |
| | Traffic Control | Unsignalized | |
| | Cycle Length | Unsignalized | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 33 | VPH |
| | Advancing Traffic | 307 | VPH |
| | Right Turn Percentage | 11% | |
| | Location Type | Through Road | |
| | Condition | C | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | 165 | |
| Is Right Turn Warrant Met | | No | No Right Turn Lane Required |

* Turn Lane Length includes 50 ft diverging taper

* Turn Lane Length includes 50 ft diverging taper

Left Turn Lane Length Calculations

| | | | |
|----------------|----------------------|----------------------|-----------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 2 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 9 | VPH |
| | Advancing Traffic | 201 | VPH |
| | Left Turn Percentage | 4% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | See Column to Right | 165 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 2 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 24 | VPH |
| | Advancing Traffic | 289 | VPH |
| | Left Turn Percentage | 8% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | See Column to Right | 165 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |

Left Turn Lane Length Calculations

| | | | |
|---------|----------------------|----------------------|-----------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 2 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 15 | VPH |
| | Advancing Traffic | 35 | VPH |
| | Left Turn Percentage | 43% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | See Column to Right | 165 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 2 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 60 | VPH |
| | Advancing Traffic | 181 | VPH |
| | Left Turn Percentage | 33% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | See Column to Right | 165 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |

Right Turn Lane Length Calculations

| | | | |
|----------------|-----------------------|----------------------|-----------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 2 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 20 | VPH |
| | Advancing Traffic | 35 | VPH |
| | Right Turn Percentage | 57% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 1 | |
| | Turn Lane Length | See Column to Right | 165 |
| | | | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 2 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 60 | Assume 60 |
| | Turn Lane Volume | 121 | VPH |
| | Advancing Traffic | 181 | VPH |
| | Right Turn Percentage | 67% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 3 | |
| | Turn Lane Length | See Column to Right | 265 |
| | | | |

Left Turn Lane Length Calculations

| | | | |
|---------|----------------------|----------------------|-----------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 3 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 40 | Assume 40 |
| | Turn Lane Volume | 148 | VPH |
| | Advancing Traffic | 665 | VPH |
| | Left Turn Percentage | 22% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 4 | |
| | Turn Lane Length | See Column to Right | 290 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 3 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 40 | Assume 40 |
| | Turn Lane Volume | 233 | VPH |
| | Advancing Traffic | 1393 | VPH |
| | Left Turn Percentage | 17% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 6 | |
| | Turn Lane Length | See Column to Right | 365 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |

Left Turn Lane Length Calculations

| | | | |
|---------|----------------------|----------------------|-----------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 3 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 40 | Assume 40 |
| | Turn Lane Volume | 73 | VPH |
| | Advancing Traffic | 233 | VPH |
| | Left Turn Percentage | 31% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 2 | |
| | Turn Lane Length | See Column to Right | 215 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 3 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 40 | Assume 40 |
| | Turn Lane Volume | 174 | VPH |
| | Advancing Traffic | 416 | VPH |
| | Left Turn Percentage | 42% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 5 | |
| | Turn Lane Length | See Column to Right | 315 |
| | Offset Width | 12 | |
| | Approach Taper | 320 | |

| Dual Left Turn Lane Lengths | |
|--------------------------------|--------|
| Storage Length Per Lane | 120 ft |
| Outer Lane Deceleration Length | 125 ft |
| Inner Lane Deceleration Length | 75 ft |
| | |
| Total Outer Lane Length | 245 ft |
| Total Inner Lane Length | 195 ft |

Right Turn Lane Length Calculations

| | | | |
|---------|-----------------------|----------------------|-----------|
| AM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 3 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 40 | Assume 40 |
| | Turn Lane Volume | 160 | VPH |
| | Advancing Traffic | 233 | VPH |
| | Right Turn Percentage | 69% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 4 | |
| | Turn Lane Length | See Column to Right | 290 |
| PM Peak | Design Speed | 40 | mph |
| | Traffic Control | Signalized - 3 Phase | |
| | Cycle Length | Unknown | |
| | Cycles Per Hour | 40 | Assume 40 |
| | Turn Lane Volume | 242 | VPH |
| | Advancing Traffic | 416 | VPH |
| | Right Turn Percentage | 58% | |
| | Location Type | Intersection | |
| | Condition | B or C | |
| | Vehicles/Cycle | 7 | |
| | Turn Lane Length | See Column to Right | 390 |

Appendix F

Capacity Analysis

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

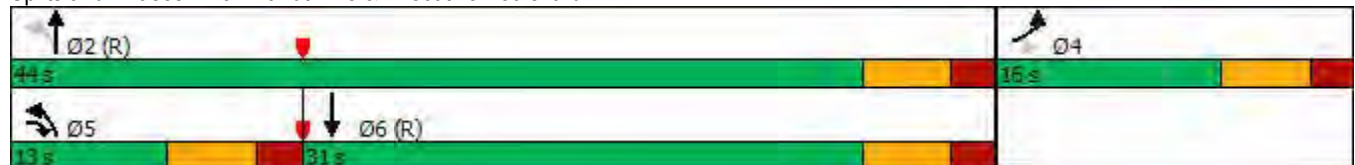


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 13 | 31 |
| Maximum Split (%) | 73.3% | 26.7% | 21.7% | 51.7% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 47 | 31 | 47 | 0 |
| End Time (s) | 31 | 47 | 0 | 31 |
| Yield/Force Off (s) | 25 | 41 | 54 | 25 |
| Yield/Force Off 170(s) | 25 | 41 | 54 | 25 |
| Local Start Time (s) | 47 | 31 | 47 | 0 |
| Local Yield (s) | 25 | 41 | 54 | 25 |
| Local Yield 170(s) | 25 | 41 | 54 | 25 |

Intersection Summary













| | |
|--|----------------------|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 55 |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | |

Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary 5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 34 | 106 | 122 | 470 | 875 | 40 |
| Future Volume (veh/h) | 34 | 106 | 122 | 470 | 875 | 40 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 37 | 114 | 131 | 505 | 941 | 43 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 2 | 2 |
| Cap, veh/h | 479 | 368 | 431 | 2244 | 1534 | 70 |
| Arrive On Green | 0.15 | 0.15 | 0.10 | 0.65 | 0.44 | 0.44 |
| Sat Flow, veh/h | 3127 | 1434 | 1739 | 3561 | 3554 | 158 |
| Grp Volume(v), veh/h | 37 | 114 | 131 | 505 | 483 | 501 |
| Grp Sat Flow(s),veh/h/ln | 1564 | 1434 | 1739 | 1735 | 1777 | 1842 |
| Q Serve(g_s), s | 0.6 | 3.9 | 2.1 | 3.6 | 12.5 | 12.5 |
| Cycle Q Clear(g_c), s | 0.6 | 3.9 | 2.1 | 3.6 | 12.5 | 12.5 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.09 |
| Lane Grp Cap(c), veh/h | 479 | 368 | 431 | 2244 | 788 | 816 |
| V/C Ratio(X) | 0.08 | 0.31 | 0.30 | 0.23 | 0.61 | 0.61 |
| Avail Cap(c_a), veh/h | 521 | 388 | 454 | 2244 | 788 | 816 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.8 | 18.0 | 8.0 | 4.4 | 12.8 | 12.8 |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.4 | 0.2 | 3.6 | 3.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 3.4 | 0.6 | 0.9 | 4.9 | 5.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 21.8 | 18.5 | 8.4 | 4.6 | 16.3 | 16.2 |
| LnGrp LOS | C | B | A | A | B | B |
| Approach Vol, veh/h | 151 | | | 636 | 984 | |
| Approach Delay, s/veh | 19.3 | | | 5.4 | 16.3 | |
| Approach LOS | B | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.8 | | 15.2 | | 12.2 | 32.6 |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | 10.0 | | 7.0 | 25.0 |
| Max Q Clear Time (g_c+I1), s | 5.6 | | 5.9 | | 4.1 | 14.5 |
| Green Ext Time (p_c), s | 3.6 | | 0.2 | | 0.1 | 4.5 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 12.6 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

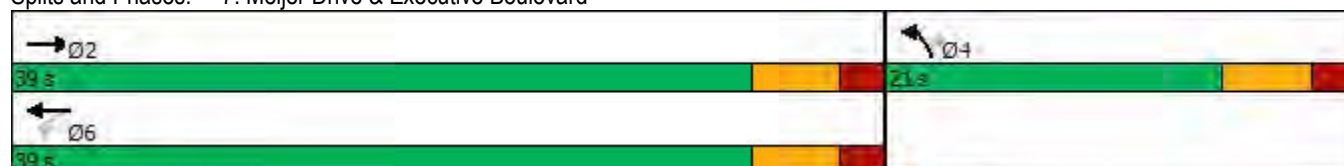
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|-----------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBTL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 39 | 21 | 39 |
| Maximum Split (%) | 65.0% | 35.0% | 65.0% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 39 | 0 |
| End Time (s) | 39 | 0 | 39 |
| Yield/Force Off (s) | 33 | 54 | 33 |
| Yield/Force Off 170(s) | 33 | 54 | 33 |
| Local Start Time (s) | 0 | 39 | 0 |
| Local Yield (s) | 33 | 54 | 33 |
| Local Yield 170(s) | 33 | 54 | 33 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |

Splits and Phases: 7: Meijer Drive & Executive Boulevard



HCM 6th Signalized Intersection Summary






7: Meijer Drive & Executive Boulevard

01/31/2023

| | → | ↘ | ↙ | ← | ↖ | ↗ |
|------------------------------|------|------|------|------|------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↗ | | ↖ | ↗ | ↖ | ↗ |
| Traffic Volume (veh/h) | 107 | 27 | 9 | 152 | 15 | 20 |
| Future Volume (veh/h) | 107 | 27 | 9 | 152 | 15 | 20 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1693 | 1693 |
| Adj Flow Rate, veh/h | 126 | 32 | 11 | 179 | 18 | 24 |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 14 | 14 |
| Cap, veh/h | 620 | 157 | 675 | 869 | 384 | 342 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1302 | 331 | 1199 | 1826 | 1612 | 1434 |
| Grp Volume(v), veh/h | 0 | 158 | 11 | 179 | 18 | 24 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1633 | 1199 | 1826 | 1612 | 1434 |
| Q Serve(g_s), s | 0.0 | 2.4 | 0.2 | 2.4 | 0.4 | 0.5 |
| Cycle Q Clear(g_c), s | 0.0 | 2.4 | 2.6 | 2.4 | 0.4 | 0.5 |
| Prop In Lane | | 0.20 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 778 | 675 | 869 | 384 | 342 |
| V/C Ratio(X) | 0.00 | 0.20 | 0.02 | 0.21 | 0.05 | 0.07 |
| Avail Cap(c_a), veh/h | 0 | 1283 | 1046 | 1435 | 576 | 512 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 6.4 | 7.1 | 6.4 | 12.3 | 12.4 |
| Incr Delay (d2), s/veh | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 0.5 | 0.0 | 0.6 | 0.1 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 6.5 | 7.1 | 6.5 | 12.4 | 12.5 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 158 | | | 190 | 42 | |
| Approach Delay, s/veh | 6.5 | | | 6.5 | 12.4 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 6 | |
| Phs Duration (G+Y+Rc), s | 26.0 | | 16.0 | | 26.0 | |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | |
| Max Green Setting (Gmax), s | 33.0 | | 15.0 | | 33.0 | |
| Max Q Clear Time (g_c+I1), s | 4.4 | | 2.5 | | 4.6 | |
| Green Ext Time (p_c), s | 0.9 | | 0.1 | | 1.0 | |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 7.2 | | | |
| HCM 6th LOS | | | A | | | |

Intersection

Int Delay, s/veh 0

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|---|------|---|---|---|---|
| Lane Configurations |  | |  |  |  |  |
| Traffic Vol, veh/h | 118 | 0 | 0 | 161 | 0 | 0 |
| Future Vol, veh/h | 118 | 0 | 0 | 161 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 15 | 15 | 4 | 4 | 0 | 0 |
| Mvmt Flow | 148 | 0 | 0 | 201 | 0 | 0 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 148 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.14 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.236 |
| Pot Cap-1 Maneuver | - | - | 1421 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1421 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|------|-----|
| Capacity (veh/h) | - | - | - | - | 1421 | - |
| HCM Lane V/C Ratio | - | - | - | - | - | - |
| HCM Control Delay (s) | 0 | 0 | - | - | 0 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | - | - | - | 0 | - |

HCM 6th TWSC
12: Rose Music Center Access 2 & Executive Boulevard

01/31/2023

Intersection

Int Delay, s/veh 0

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ |
| Traffic Vol, veh/h | 118 | 0 | 0 | 159 | 0 | 1 |
| Future Vol, veh/h | 118 | 0 | 0 | 159 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 175 | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 15 | 15 | 4 | 4 | 0 | 0 |
| Mvmt Flow | 146 | 0 | 0 | 196 | 0 | 1 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 146 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.14 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.236 |
| Pot Cap-1 Maneuver | - | - | 1424 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1424 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|------|-----|
| Capacity (veh/h) | - | 906 | - | - | 1424 | - |
| HCM Lane V/C Ratio | - | 0.001 | - | - | - | - |
| HCM Control Delay (s) | 0 | 9 | - | - | 0 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - |

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

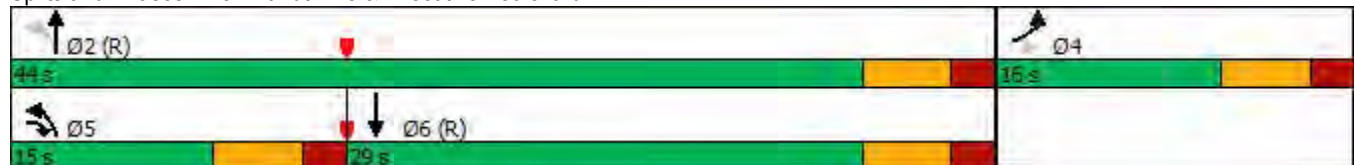


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 15 | 29 |
| Maximum Split (%) | 73.3% | 26.7% | 25.0% | 48.3% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 45 | 29 | 45 | 0 |
| End Time (s) | 29 | 45 | 0 | 29 |
| Yield/Force Off (s) | 23 | 39 | 54 | 23 |
| Yield/Force Off 170(s) | 23 | 39 | 54 | 23 |
| Local Start Time (s) | 45 | 29 | 45 | 0 |
| Local Yield (s) | 23 | 39 | 54 | 23 |
| Local Yield 170(s) | 23 | 39 | 54 | 23 |

Intersection Summary

| | |
|--|----------------------|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 55 |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | |













Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary

5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 69 | 150 | 136 | 470 | 875 | 51 |
| Future Volume (veh/h) | 69 | 150 | 136 | 470 | 875 | 51 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 74 | 161 | 146 | 505 | 941 | 55 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 2 | 2 |
| Cap, veh/h | 511 | 387 | 423 | 2209 | 1468 | 86 |
| Arrive On Green | 0.16 | 0.16 | 0.11 | 0.64 | 0.43 | 0.43 |
| Sat Flow, veh/h | 3127 | 1434 | 1739 | 3561 | 3505 | 199 |
| Grp Volume(v), veh/h | 74 | 161 | 146 | 505 | 490 | 506 |
| Grp Sat Flow(s),veh/h/ln | 1564 | 1434 | 1739 | 1735 | 1777 | 1834 |
| Q Serve(g_s), s | 1.2 | 5.5 | 2.4 | 3.7 | 13.0 | 13.0 |
| Cycle Q Clear(g_c), s | 1.2 | 5.5 | 2.4 | 3.7 | 13.0 | 13.0 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.11 |
| Lane Grp Cap(c), veh/h | 511 | 387 | 423 | 2209 | 764 | 789 |
| V/C Ratio(X) | 0.14 | 0.42 | 0.35 | 0.23 | 0.64 | 0.64 |
| Avail Cap(c_a), veh/h | 521 | 392 | 499 | 2209 | 764 | 789 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.5 | 18.0 | 8.6 | 4.6 | 13.4 | 13.4 |
| Incr Delay (d2), s/veh | 0.1 | 0.7 | 0.5 | 0.2 | 4.1 | 4.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 4.7 | 0.7 | 1.0 | 5.2 | 5.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 21.6 | 18.7 | 9.1 | 4.9 | 17.5 | 17.4 |
| LnGrp LOS | C | B | A | A | B | B |
| Approach Vol, veh/h | 235 | | | 651 | 996 | |
| Approach Delay, s/veh | 19.6 | | | 5.8 | 17.5 | |
| Approach LOS | B | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.2 | | 15.8 | | 12.4 | 31.8 |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | 10.0 | | 9.0 | 23.0 |
| Max Q Clear Time (g_c+I1), s | 5.7 | | 7.5 | | 4.4 | 15.0 |
| Green Ext Time (p_c), s | 3.6 | | 0.2 | | 0.1 | 3.8 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 13.7 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

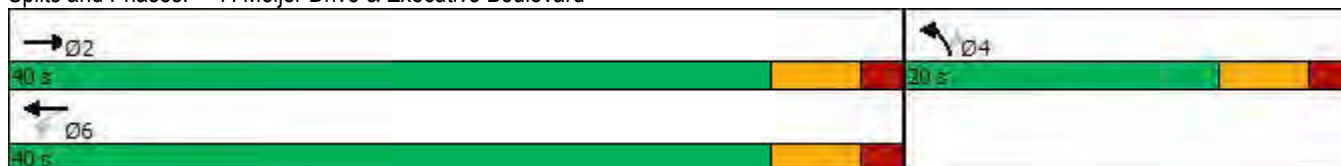
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBTL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 40 | 20 | 40 |
| Maximum Split (%) | 66.7% | 33.3% | 66.7% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 40 | 0 |
| End Time (s) | 40 | 0 | 40 |
| Yield/Force Off (s) | 34 | 54 | 34 |
| Yield/Force Off 170(s) | 34 | 54 | 34 |
| Local Start Time (s) | 0 | 40 | 0 |
| Local Yield (s) | 34 | 54 | 34 |
| Local Yield 170(s) | 34 | 54 | 34 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |

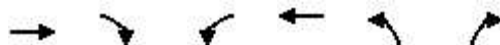
Splits and Phases: 7: Meijer Drive & Executive Boulevard



HCM 6th Signalized Intersection Summary

7: Meijer Drive & Executive Boulevard








01/31/2023



| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|------------------------------|------|------|------|------|------|------|
| Lane Configurations | | | | | | |
| Traffic Volume (veh/h) | 186 | 27 | 9 | 177 | 15 | 20 |
| Future Volume (veh/h) | 186 | 27 | 9 | 177 | 15 | 20 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1693 | 1693 |
| Adj Flow Rate, veh/h | 219 | 32 | 11 | 208 | 18 | 24 |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 14 | 14 |
| Cap, veh/h | 687 | 100 | 593 | 869 | 384 | 342 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1444 | 211 | 1102 | 1826 | 1612 | 1434 |
| Grp Volume(v), veh/h | 0 | 251 | 11 | 208 | 18 | 24 |
| Grp Sat Flow(s), veh/h/ln | 0 | 1655 | 1102 | 1826 | 1612 | 1434 |
| Q Serve(g_s), s | 0.0 | 3.9 | 0.3 | 2.8 | 0.4 | 0.5 |
| Cycle Q Clear(g_c), s | 0.0 | 3.9 | 4.2 | 2.8 | 0.4 | 0.5 |
| Prop In Lane | | 0.13 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 788 | 593 | 869 | 384 | 342 |
| V/C Ratio(X) | 0.00 | 0.32 | 0.02 | 0.24 | 0.05 | 0.07 |
| Avail Cap(c_a), veh/h | 0 | 1339 | 960 | 1478 | 537 | 478 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 6.8 | 8.1 | 6.5 | 12.3 | 12.4 |
| Incr Delay (d2), s/veh | 0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 0.9 | 0.0 | 0.7 | 0.1 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 7.0 | 8.1 | 6.6 | 12.4 | 12.5 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 251 | | | 219 | 42 | |
| Approach Delay, s/veh | 7.0 | | | 6.7 | 12.4 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 26.0 | | 16.0 | | 26.0 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 34.0 | | 14.0 | | 34.0 |
| Max Q Clear Time (g_c+I1), s | | 5.9 | | 2.5 | | 6.2 |
| Green Ext Time (p_c), s | | 1.5 | | 0.0 | | 1.2 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 7.3 | | | |
| HCM 6th LOS | | | A | | | |

Intersection

Int Delay, s/veh 1.8

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|---|---|------|---|---|------|---|---|------|------|---|------|
| Lane Configurations |  |  | |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 2 | 119 | 0 | 0 | 165 | 15 | 0 | 0 | 0 | 48 | 0 | 5 |
| Future Vol, veh/h | 2 | 119 | 0 | 0 | 165 | 15 | 0 | 0 | 0 | 48 | 0 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 15 | 15 | 15 | 4 | 4 | 4 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 149 | 0 | 0 | 206 | 19 | 0 | 0 | 0 | 60 | 0 | 6 |









| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 225 | 0 | 0 | 149 | 0 | 0 | 374 | 380 | 149 | 371 | 371 | 216 |
| Stage 1 | - | - | - | - | - | - | 155 | 155 | - | 216 | 216 | - |
| Stage 2 | - | - | - | - | - | - | 219 | 225 | - | 155 | 155 | - |
| Critical Hdwy | 4.25 | - | - | 4.14 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.335 | - | - | 2.236 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1270 | - | - | 1420 | - | - | 587 | 556 | 903 | 586 | 559 | 824 |
| Stage 1 | - | - | - | - | - | - | 852 | 773 | - | 786 | 724 | - |
| Stage 2 | - | - | - | - | - | - | 788 | 721 | - | 847 | 769 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1270 | - | - | 1420 | - | - | 582 | 555 | 903 | 585 | 558 | 824 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 582 | 555 | - | 585 | 558 | - |
| Stage 1 | - | - | - | - | - | - | 850 | 771 | - | 784 | 724 | - |
| Stage 2 | - | - | - | - | - | - | 782 | 721 | - | 845 | 767 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|----|------|
| HCM Control Delay, s | 0.1 | 0 | 0 | 11.7 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | - | 1270 | - | - | 1420 | - | - | 601 |
| HCM Lane V/C Ratio | - | - | 0.002 | - | - | - | - | - | 0.11 |
| HCM Control Delay (s) | 0 | 0 | 7.8 | - | - | 0 | - | - | 11.7 |
| HCM Lane LOS | A | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | - | 0 | - | - | 0 | - | - | 0.4 |

Intersection

Int Delay, s/veh 1.1

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|---|---|---|---|---|------|---|---|------|------|---|------|
| Lane Configurations |  |  |  |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 1 | 166 | 0 | 0 | 174 | 10 | 0 | 0 | 1 | 31 | 0 | 4 |
| Future Vol, veh/h | 1 | 166 | 0 | 0 | 174 | 10 | 0 | 0 | 1 | 31 | 0 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | 175 | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 15 | 15 | 15 | 4 | 4 | 4 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 205 | 0 | 0 | 215 | 12 | 0 | 0 | 1 | 38 | 0 | 5 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 227 | 0 | 0 | 205 | 0 | 0 | 431 | 434 | 205 | 429 | 428 | 221 |
| Stage 1 | - | - | - | - | - | - | 207 | 207 | - | 221 | 221 | - |
| Stage 2 | - | - | - | - | - | - | 224 | 227 | - | 208 | 207 | - |
| Critical Hdwy | 4.25 | - | - | 4.14 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.335 | - | - | 2.236 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1268 | - | - | 1355 | - | - | 538 | 518 | 841 | 536 | 519 | 819 |
| Stage 1 | - | - | - | - | - | - | 800 | 734 | - | 781 | 720 | - |
| Stage 2 | - | - | - | - | - | - | 783 | 720 | - | 794 | 731 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1268 | - | - | 1355 | - | - | 534 | 517 | 841 | 535 | 518 | 819 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 534 | 517 | - | 535 | 518 | - |
| Stage 1 | - | - | - | - | - | - | 799 | 733 | - | 780 | 720 | - |
| Stage 2 | - | - | - | - | - | - | 778 | 720 | - | 792 | 730 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|----|-----|----|
| HCM Control Delay, s | 0 | 0 | 9.3 | 12 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | 841 | 1268 | - | - | 1355 | - | - | 557 |
| HCM Lane V/C Ratio | - | 0.001 | 0.001 | - | - | - | - | - | 0.078 |
| HCM Control Delay (s) | 0 | 9.3 | 7.8 | - | - | 0 | - | - | 12 |
| HCM Lane LOS | A | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | 0 | 0 | - | - | 0 | - | - | 0.3 |

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

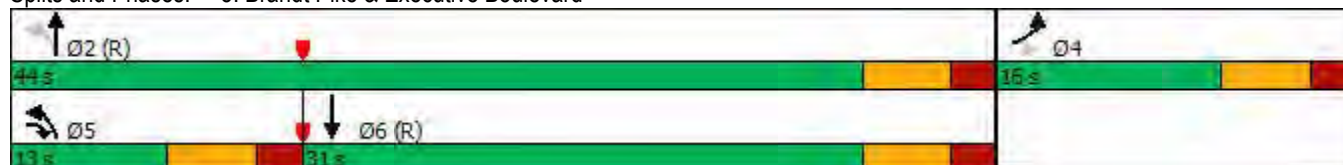


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 13 | 31 |
| Maximum Split (%) | 73.3% | 26.7% | 21.7% | 51.7% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 47 | 31 | 47 | 0 |
| End Time (s) | 31 | 47 | 0 | 31 |
| Yield/Force Off (s) | 25 | 41 | 54 | 25 |
| Yield/Force Off 170(s) | 25 | 41 | 54 | 25 |
| Local Start Time (s) | 47 | 31 | 47 | 0 |
| Local Yield (s) | 25 | 41 | 54 | 25 |
| Local Yield 170(s) | 25 | 41 | 54 | 25 |

Intersection Summary

| | |
|--|----------------------|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 55 |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | |













Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary

5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 139 | 196 | 170 | 1055 | 668 | 29 |
| Future Volume (veh/h) | 139 | 196 | 170 | 1055 | 668 | 29 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1856 | 1856 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 142 | 200 | 173 | 1077 | 682 | 30 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 3 | 3 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 569 | 434 | 525 | 2253 | 1469 | 65 |
| Arrive On Green | 0.17 | 0.17 | 0.11 | 0.63 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3428 | 1572 | 1781 | 3647 | 3561 | 152 |
| Grp Volume(v), veh/h | 142 | 200 | 173 | 1077 | 349 | 363 |
| Grp Sat Flow(s),veh/h/ln | 1714 | 1572 | 1781 | 1777 | 1777 | 1843 |
| Q Serve(g_s), s | 2.2 | 6.3 | 2.8 | 9.6 | 8.5 | 8.5 |
| Cycle Q Clear(g_c), s | 2.2 | 6.3 | 2.8 | 9.6 | 8.5 | 8.5 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.08 |
| Lane Grp Cap(c), veh/h | 569 | 434 | 525 | 2253 | 753 | 781 |
| V/C Ratio(X) | 0.25 | 0.46 | 0.33 | 0.48 | 0.46 | 0.46 |
| Avail Cap(c_a), veh/h | 571 | 435 | 536 | 2253 | 753 | 781 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.8 | 18.0 | 7.4 | 5.8 | 12.4 | 12.4 |
| Incr Delay (d2), s/veh | 0.2 | 0.8 | 0.4 | 0.7 | 2.1 | 2.0 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.8 | 5.8 | 0.8 | 2.5 | 3.3 | 3.4 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 22.0 | 18.8 | 7.8 | 6.5 | 14.5 | 14.4 |
| LnGrp LOS | C | B | A | A | B | B |
| Approach Vol, veh/h | 342 | | | 1250 | 712 | |
| Approach Delay, s/veh | 20.1 | | | 6.7 | 14.4 | |
| Approach LOS | C | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.0 | | 16.0 | | 12.6 | 31.4 |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | 10.0 | | 7.0 | 25.0 |
| Max Q Clear Time (g_c+I1), s | 11.6 | | 8.3 | | 4.8 | 10.5 |
| Green Ext Time (p_c), s | 8.6 | | 0.2 | | 0.1 | 3.7 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 11.1 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

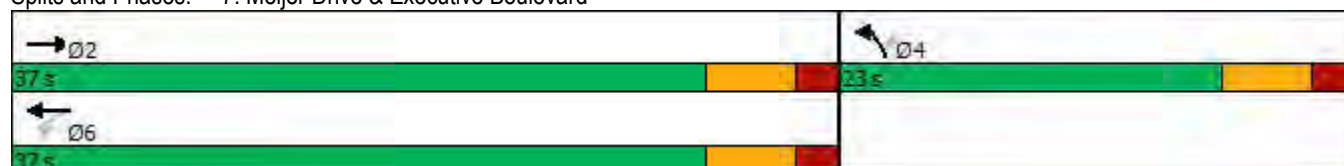
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|-----------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBT |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 37 | 23 | 37 |
| Maximum Split (%) | 61.7% | 38.3% | 61.7% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 37 | 0 |
| End Time (s) | 37 | 0 | 37 |
| Yield/Force Off (s) | 31 | 54 | 31 |
| Yield/Force Off 170(s) | 31 | 54 | 31 |
| Local Start Time (s) | 0 | 37 | 0 |
| Local Yield (s) | 31 | 54 | 31 |
| Local Yield 170(s) | 31 | 54 | 31 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |

Splits and Phases: 7: Meijer Drive & Executive Boulevard



HCM 6th Signalized Intersection Summary






7: Meijer Drive & Executive Boulevard

01/31/2023

| | → | ↘ | ↙ | ← | ↖ | ↗ |
|------------------------------|------|------|------|------|------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↰ | | ↱ | ↰ | ↱ | ↱ |
| Traffic Volume (veh/h) | 216 | 60 | 24 | 165 | 60 | 121 |
| Future Volume (veh/h) | 216 | 60 | 24 | 165 | 60 | 121 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1796 | 1796 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 230 | 64 | 26 | 176 | 64 | 129 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 7 | 7 | 2 | 2 |
| Cap, veh/h | 670 | 187 | 561 | 855 | 424 | 377 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1408 | 392 | 1042 | 1796 | 1781 | 1585 |
| Grp Volume(v), veh/h | 0 | 294 | 26 | 176 | 64 | 129 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1800 | 1042 | 1796 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 4.3 | 0.7 | 2.4 | 1.2 | 2.8 |
| Cycle Q Clear(g_c), s | 0.0 | 4.3 | 5.0 | 2.4 | 1.2 | 2.8 |
| Prop In Lane | | 0.22 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 857 | 561 | 855 | 424 | 377 |
| V/C Ratio(X) | 0.00 | 0.34 | 0.05 | 0.21 | 0.15 | 0.34 |
| Avail Cap(c_a), veh/h | 0 | 1328 | 834 | 1326 | 721 | 642 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 6.9 | 8.4 | 6.4 | 12.6 | 13.3 |
| Incr Delay (d2), s/veh | 0.0 | 0.2 | 0.0 | 0.1 | 0.2 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 1.1 | 0.1 | 0.6 | 0.4 | 0.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 7.1 | 8.5 | 6.5 | 12.8 | 13.8 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 294 | | | 202 | 193 | |
| Approach Delay, s/veh | 7.1 | | | 6.8 | 13.5 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 26.0 | | 16.0 | | 26.0 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 31.0 | | 17.0 | | 31.0 |
| Max Q Clear Time (g_c+I1), s | | 6.3 | | 4.8 | | 7.0 |
| Green Ext Time (p_c), s | | 1.7 | | 0.4 | | 1.0 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 8.8 | | | |
| HCM 6th LOS | | | A | | | |

Intersection

Int Delay, s/veh 0

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|---|------|---|---|---|---|
| Lane Configurations |  | |  |  |  |  |
| Traffic Vol, veh/h | 272 | 0 | 0 | 205 | 0 | 0 |
| Future Vol, veh/h | 272 | 0 | 0 | 205 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 283 | 0 | 0 | 214 | 0 | 0 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 283 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.15 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.245 |
| Pot Cap-1 Maneuver | - | - | 1262 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1262 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|------|-----|
| Capacity (veh/h) | - | - | - | - | 1262 | - |
| HCM Lane V/C Ratio | - | - | - | - | - | - |
| HCM Control Delay (s) | 0 | 0 | - | - | 0 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | - | - | - | 0 | - |

HCM 6th TWSC
12: Rose Music Center Access 2 & Executive Boulevard

01/31/2023

Intersection

Int Delay, s/veh 0.1

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ |
| Traffic Vol, veh/h | 273 | 1 | 1 | 202 | 0 | 3 |
| Future Vol, veh/h | 273 | 1 | 1 | 202 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 175 | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 3 | 3 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 281 | 1 | 1 | 208 | 0 | 3 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 282 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.15 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.245 |
| Pot Cap-1 Maneuver | - | - | 1263 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1263 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 9.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | - | 763 | - | - | 1263 | - |
| HCM Lane V/C Ratio | - | 0.004 | - | - | 0.001 | - |
| HCM Control Delay (s) | 0 | 9.7 | - | - | 7.9 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - |

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

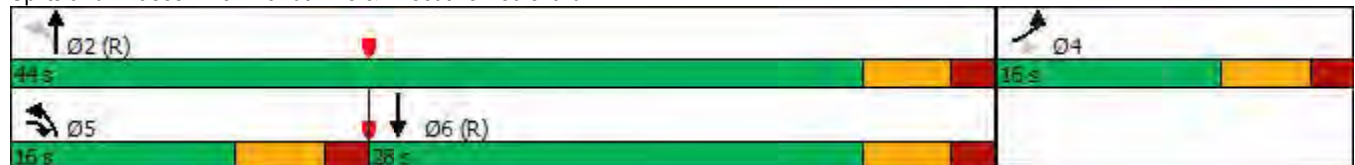


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 16 | 28 |
| Maximum Split (%) | 73.3% | 26.7% | 26.7% | 46.7% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 44 | 28 | 44 | 0 |
| End Time (s) | 28 | 44 | 0 | 28 |
| Yield/Force Off (s) | 22 | 38 | 54 | 22 |
| Yield/Force Off 170(s) | 22 | 38 | 54 | 22 |
| Local Start Time (s) | 44 | 28 | 44 | 0 |
| Local Yield (s) | 22 | 38 | 54 | 22 |
| Local Yield 170(s) | 22 | 38 | 54 | 22 |

Intersection Summary













| | |
|--|----------------------|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 55 |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | |

Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary 5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 161 | 223 | 216 | 1055 | 668 | 67 |
| Future Volume (veh/h) | 161 | 223 | 216 | 1055 | 668 | 67 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1856 | 1856 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 164 | 228 | 220 | 1077 | 682 | 68 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 3 | 3 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 571 | 440 | 512 | 2252 | 1370 | 137 |
| Arrive On Green | 0.17 | 0.17 | 0.11 | 0.63 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3428 | 1572 | 1781 | 3647 | 3357 | 325 |
| Grp Volume(v), veh/h | 164 | 228 | 220 | 1077 | 371 | 379 |
| Grp Sat Flow(s),veh/h/ln | 1714 | 1572 | 1781 | 1777 | 1777 | 1812 |
| Q Serve(g_s), s | 2.5 | 7.3 | 3.7 | 9.6 | 9.2 | 9.2 |
| Cycle Q Clear(g_c), s | 2.5 | 7.3 | 3.7 | 9.6 | 9.2 | 9.2 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.18 |
| Lane Grp Cap(c), veh/h | 571 | 440 | 512 | 2252 | 746 | 761 |
| V/C Ratio(X) | 0.29 | 0.52 | 0.43 | 0.48 | 0.50 | 0.50 |
| Avail Cap(c_a), veh/h | 571 | 441 | 607 | 2252 | 746 | 761 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.9 | 18.2 | 7.9 | 5.8 | 12.8 | 12.8 |
| Incr Delay (d2), s/veh | 0.3 | 1.1 | 0.6 | 0.7 | 2.4 | 2.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 6.7 | 1.1 | 2.5 | 3.6 | 3.6 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 22.2 | 19.2 | 8.5 | 6.5 | 15.1 | 15.1 |
| LnGrp LOS | C | B | A | A | B | B |
| Approach Vol, veh/h | 392 | | | 1297 | 750 | |
| Approach Delay, s/veh | 20.5 | | | 6.8 | 15.1 | |
| Approach LOS | C | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.0 | | 16.0 | | 12.8 | 31.2 |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | 10.0 | | 10.0 | 22.0 |
| Max Q Clear Time (g_c+I1), s | 11.6 | | 9.3 | | 5.7 | 11.2 |
| Green Ext Time (p_c), s | 8.6 | | 0.1 | | 0.2 | 3.4 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 11.6 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

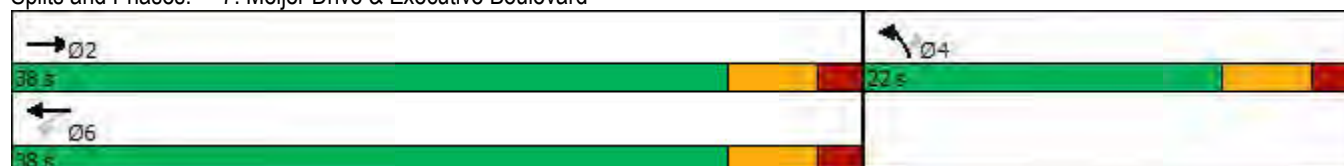
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBTL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 38 | 22 | 38 |
| Maximum Split (%) | 63.3% | 36.7% | 63.3% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 38 | 0 |
| End Time (s) | 38 | 0 | 38 |
| Yield/Force Off (s) | 32 | 54 | 32 |
| Yield/Force Off 170(s) | 32 | 54 | 32 |
| Local Start Time (s) | 0 | 38 | 0 |
| Local Yield (s) | 32 | 54 | 32 |
| Local Yield 170(s) | 32 | 54 | 32 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |












Splits and Phases: 7: Meijer Drive & Executive Boulevard



HCM 6th Signalized Intersection Summary








7: Meijer Drive & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 265 | 60 | 24 | 249 | 60 | 121 |
| Future Volume (veh/h) | 265 | 60 | 24 | 249 | 60 | 121 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1796 | 1796 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 282 | 64 | 26 | 265 | 64 | 129 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 7 | 7 | 2 | 2 |
| Cap, veh/h | 703 | 159 | 522 | 855 | 424 | 377 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1475 | 335 | 994 | 1796 | 1781 | 1585 |
| Grp Volume(v), veh/h | 0 | 346 | 26 | 265 | 64 | 129 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1810 | 994 | 1796 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 5.2 | 0.7 | 3.8 | 1.2 | 2.8 |
| Cycle Q Clear(g_c), s | 0.0 | 5.2 | 5.9 | 3.8 | 1.2 | 2.8 |
| Prop In Lane | | 0.18 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 862 | 522 | 855 | 424 | 377 |
| V/C Ratio(X) | 0.00 | 0.40 | 0.05 | 0.31 | 0.15 | 0.34 |
| Avail Cap(c_a), veh/h | 0 | 1379 | 806 | 1369 | 679 | 604 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 7.1 | 9.0 | 6.8 | 12.6 | 13.3 |
| Incr Delay (d2), s/veh | 0.0 | 0.3 | 0.0 | 0.2 | 0.2 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 1.4 | 0.1 | 1.0 | 0.4 | 0.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 7.4 | 9.1 | 7.0 | 12.8 | 13.8 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 346 | | | 291 | 193 | |
| Approach Delay, s/veh | 7.4 | | | 7.2 | 13.5 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 6 | |
| Phs Duration (G+Y+Rc), s | 26.0 | | 16.0 | | 26.0 | |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | |
| Max Green Setting (Gmax), s | 32.0 | | 16.0 | | 32.0 | |
| Max Q Clear Time (g_c+I1), s | 7.2 | | 4.8 | | 7.9 | |
| Green Ext Time (p_c), s | 2.1 | | 0.4 | | 1.6 | |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 8.7 | | | |
| HCM 6th LOS | | | A | | | |

Intersection









Int Delay, s/veh 0.8

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|---|---|------|---|---|------|---|---|------|------|---|------|
| Lane Configurations |  |  | |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 5 | 277 | 0 | 0 | 208 | 51 | 0 | 0 | 0 | 30 | 0 | 3 |
| Future Vol, veh/h | 5 | 277 | 0 | 0 | 208 | 51 | 0 | 0 | 0 | 30 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 5 | 5 | 5 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 289 | 0 | 0 | 217 | 53 | 0 | 0 | 0 | 31 | 0 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 270 | 0 | 0 | 289 | 0 | 0 | 544 | 569 | 289 | 543 | 543 | 244 |
| Stage 1 | - | - | - | - | - | - | 299 | 299 | - | 244 | 244 | - |
| Stage 2 | - | - | - | - | - | - | 245 | 270 | - | 299 | 299 | - |
| Critical Hdwy | 4.12 | - | - | 4.15 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.245 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1293 | - | - | 1256 | - | - | 453 | 435 | 755 | 451 | 447 | 795 |
| Stage 1 | - | - | - | - | - | - | 714 | 670 | - | 760 | 704 | - |
| Stage 2 | - | - | - | - | - | - | 763 | 690 | - | 710 | 666 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1293 | - | - | 1256 | - | - | 450 | 433 | 755 | 450 | 445 | 795 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 450 | 433 | - | 450 | 445 | - |
| Stage 1 | - | - | - | - | - | - | 711 | 667 | - | 757 | 704 | - |
| Stage 2 | - | - | - | - | - | - | 760 | 690 | - | 707 | 663 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|----|------|
| HCM Control Delay, s | 0.1 | 0 | 0 | 13.3 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | - | 1293 | - | - | 1256 | - | - | 468 |
| HCM Lane V/C Ratio | - | - | 0.004 | - | - | - | - | - | 0.073 |
| HCM Control Delay (s) | 0 | 0 | 7.8 | - | - | 0 | - | - | 13.3 |
| HCM Lane LOS | A | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | - | 0 | - | - | 0 | - | - | 0.2 |

| Intersection | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|------|---|---|------|------|---|------|
| Int Delay, s/veh | 0.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 5 | 303 | 1 | 1 | 253 | 33 | 0 | 0 | 3 | 19 | 0 | 3 |
| Future Vol, veh/h | 5 | 303 | 1 | 1 | 253 | 33 | 0 | 0 | 3 | 19 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | 175 | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 3 | 3 | 3 | 5 | 5 | 5 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 312 | 1 | 1 | 261 | 34 | 0 | 0 | 3 | 20 | 0 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 295 | 0 | 0 | 313 | 0 | 0 | 604 | 619 | 312 | 604 | 603 | 278 |
| Stage 1 | - | - | - | - | - | - | 322 | 322 | - | 280 | 280 | - |
| Stage 2 | - | - | - | - | - | - | 282 | 297 | - | 324 | 323 | - |
| Critical Hdwy | 4.13 | - | - | 4.15 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.227 | - | - | 2.245 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1261 | - | - | 1230 | - | - | 413 | 407 | 733 | 410 | 413 | 761 |
| Stage 1 | - | - | - | - | - | - | 694 | 655 | - | 727 | 679 | - |
| Stage 2 | - | - | - | - | - | - | 729 | 671 | - | 688 | 650 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1261 | - | - | 1230 | - | - | 410 | 405 | 733 | 407 | 411 | 761 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 410 | 405 | - | 407 | 411 | - |
| Stage 1 | - | - | - | - | - | - | 691 | 652 | - | 724 | 678 | - |
| Stage 2 | - | - | - | - | - | - | 725 | 670 | - | 682 | 647 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|-----|------|
| HCM Control Delay, s | 0.1 | 0 | 9.9 | 13.7 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | - | 733 | 1261 | - | - | 1230 | - | - | 435 |
| HCM Lane V/C Ratio | - | 0.004 | 0.004 | - | - | 0.001 | - | - | 0.052 |
| HCM Control Delay (s) | 0 | 9.9 | 7.9 | - | - | 7.9 | - | - | 13.7 |
| HCM Lane LOS | A | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | 0 | 0 | - | - | 0 | - | - | 0.2 |

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

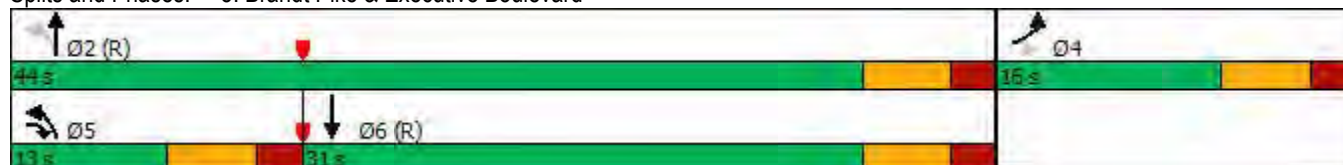


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 13 | 31 |
| Maximum Split (%) | 73.3% | 26.7% | 21.7% | 51.7% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 47 | 31 | 47 | 0 |
| End Time (s) | 31 | 47 | 0 | 31 |
| Yield/Force Off (s) | 25 | 41 | 54 | 25 |
| Yield/Force Off 170(s) | 25 | 41 | 54 | 25 |
| Local Start Time (s) | 47 | 31 | 47 | 0 |
| Local Yield (s) | 25 | 41 | 54 | 25 |
| Local Yield 170(s) | 25 | 41 | 54 | 25 |

Intersection Summary

Cycle Length 60
Control Type Actuated-Coordinated
Natural Cycle 55
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green













Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary

5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 38 | 116 | 134 | 517 | 962 | 44 |
| Future Volume (veh/h) | 38 | 116 | 134 | 517 | 962 | 44 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 41 | 125 | 144 | 556 | 1034 | 47 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 2 | 2 |
| Cap, veh/h | 488 | 376 | 405 | 2234 | 1515 | 69 |
| Arrive On Green | 0.16 | 0.16 | 0.11 | 0.64 | 0.44 | 0.44 |
| Sat Flow, veh/h | 3127 | 1434 | 1739 | 3561 | 3555 | 157 |
| Grp Volume(v), veh/h | 41 | 125 | 144 | 556 | 531 | 550 |
| Grp Sat Flow(s),veh/h/ln | 1564 | 1434 | 1739 | 1735 | 1777 | 1842 |
| Q Serve(g_s), s | 0.7 | 4.2 | 2.3 | 4.1 | 14.4 | 14.4 |
| Cycle Q Clear(g_c), s | 0.7 | 4.2 | 2.3 | 4.1 | 14.4 | 14.4 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.09 |
| Lane Grp Cap(c), veh/h | 488 | 376 | 405 | 2234 | 778 | 806 |
| V/C Ratio(X) | 0.08 | 0.33 | 0.36 | 0.25 | 0.68 | 0.68 |
| Avail Cap(c_a), veh/h | 521 | 391 | 424 | 2234 | 778 | 806 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.6 | 17.9 | 9.0 | 4.5 | 13.5 | 13.5 |
| Incr Delay (d2), s/veh | 0.1 | 0.5 | 0.5 | 0.3 | 4.8 | 4.6 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.2 | 3.7 | 0.7 | 1.0 | 5.8 | 6.0 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 21.7 | 18.4 | 9.5 | 4.8 | 18.3 | 18.2 |
| LnGrp LOS | C | B | A | A | B | B |
| Approach Vol, veh/h | 166 | | | 700 | 1081 | |
| Approach Delay, s/veh | 19.2 | | | 5.8 | 18.3 | |
| Approach LOS | B | | | A | B | |
| Timer - Assigned Phs | 2 | | | 4 | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.6 | | | 15.4 | 12.4 | 32.3 |
| Change Period (Y+Rc), s | 6.0 | | | 6.0 | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | | 10.0 | 7.0 | 25.0 |
| Max Q Clear Time (g_c+I1), s | 6.1 | | | 6.2 | 4.3 | 16.4 |
| Green Ext Time (p_c), s | 4.0 | | | 0.2 | 0.1 | 4.3 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 13.8 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

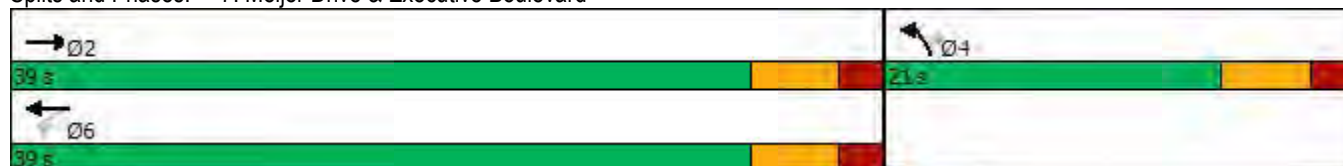
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBTL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 39 | 21 | 39 |
| Maximum Split (%) | 65.0% | 35.0% | 65.0% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 39 | 0 |
| End Time (s) | 39 | 0 | 39 |
| Yield/Force Off (s) | 33 | 54 | 33 |
| Yield/Force Off 170(s) | 33 | 54 | 33 |
| Local Start Time (s) | 0 | 39 | 0 |
| Local Yield (s) | 33 | 54 | 33 |
| Local Yield 170(s) | 33 | 54 | 33 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |

Splits and Phases: 7: Meijer Drive & Executive Boulevard



HCM 6th Signalized Intersection Summary






7: Meijer Drive & Executive Boulevard

01/31/2023

| | → | ↘ | ↙ | ← | ↖ | ↗ |
|------------------------------|------|------|------|------|------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↰ | | ↰ | ↰ | ↰ | ↰ |
| Traffic Volume (veh/h) | 117 | 27 | 9 | 167 | 15 | 20 |
| Future Volume (veh/h) | 117 | 27 | 9 | 167 | 15 | 20 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1693 | 1693 |
| Adj Flow Rate, veh/h | 138 | 32 | 11 | 196 | 18 | 24 |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 14 | 14 |
| Cap, veh/h | 633 | 147 | 664 | 869 | 384 | 342 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1329 | 308 | 1186 | 1826 | 1612 | 1434 |
| Grp Volume(v), veh/h | 0 | 170 | 11 | 196 | 18 | 24 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1637 | 1186 | 1826 | 1612 | 1434 |
| Q Serve(g_s), s | 0.0 | 2.5 | 0.2 | 2.6 | 0.4 | 0.5 |
| Cycle Q Clear(g_c), s | 0.0 | 2.5 | 2.8 | 2.6 | 0.4 | 0.5 |
| Prop In Lane | | 0.19 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 780 | 664 | 869 | 384 | 342 |
| V/C Ratio(X) | 0.00 | 0.22 | 0.02 | 0.23 | 0.05 | 0.07 |
| Avail Cap(c_a), veh/h | 0 | 1286 | 1031 | 1435 | 576 | 512 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 6.4 | 7.2 | 6.5 | 12.3 | 12.4 |
| Incr Delay (d2), s/veh | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 0.6 | 0.0 | 0.7 | 0.1 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 6.6 | 7.3 | 6.6 | 12.4 | 12.5 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 170 | | | 207 | 42 | |
| Approach Delay, s/veh | 6.6 | | | 6.6 | 12.4 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 26.0 | | 16.0 | | 26.0 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 33.0 | | 15.0 | | 33.0 |
| Max Q Clear Time (g_c+I1), s | | 4.5 | | 2.5 | | 4.8 |
| Green Ext Time (p_c), s | | 0.9 | | 0.1 | | 1.1 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 7.2 | | | |
| HCM 6th LOS | | | A | | | |

Intersection

Int Delay, s/veh 0

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|---|------|---|---|---|---|
| Lane Configurations |  | |  |  |  |  |
| Traffic Vol, veh/h | 129 | 0 | 0 | 177 | 0 | 0 |
| Future Vol, veh/h | 129 | 0 | 0 | 177 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 15 | 15 | 4 | 4 | 0 | 0 |
| Mvmt Flow | 161 | 0 | 0 | 221 | 0 | 0 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 161 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.14 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.236 |
| Pot Cap-1 Maneuver | - | - | 1406 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1406 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|------|-----|
| Capacity (veh/h) | - | - | - | - | 1406 | - |
| HCM Lane V/C Ratio | - | - | - | - | - | - |
| HCM Control Delay (s) | 0 | 0 | - | - | 0 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | - | - | - | 0 | - |

HCM 6th TWSC
12: Rose Music Center Access 2 & Executive Boulevard

01/31/2023

Intersection

Int Delay, s/veh 0

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ |
| Traffic Vol, veh/h | 129 | 0 | 0 | 175 | 0 | 1 |
| Future Vol, veh/h | 129 | 0 | 0 | 175 | 0 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 175 | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 15 | 15 | 4 | 4 | 0 | 0 |
| Mvmt Flow | 159 | 0 | 0 | 216 | 0 | 1 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 159 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.14 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.236 |
| Pot Cap-1 Maneuver | - | - | 1408 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1408 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|------|-----|
| Capacity (veh/h) | - | 892 | - | - | 1408 | - |
| HCM Lane V/C Ratio | - | 0.001 | - | - | - | - |
| HCM Control Delay (s) | 0 | 9 | - | - | 0 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - |

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

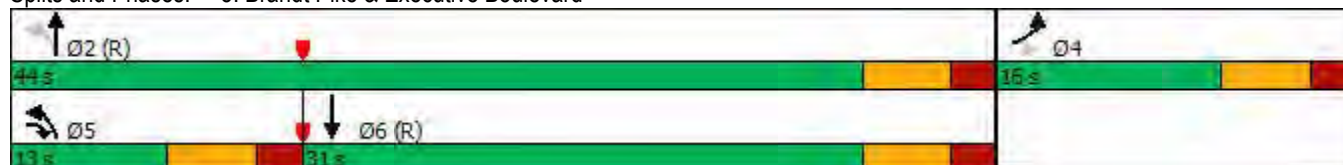


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 13 | 31 |
| Maximum Split (%) | 73.3% | 26.7% | 21.7% | 51.7% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 47 | 31 | 47 | 0 |
| End Time (s) | 31 | 47 | 0 | 31 |
| Yield/Force Off (s) | 25 | 41 | 54 | 25 |
| Yield/Force Off 170(s) | 25 | 41 | 54 | 25 |
| Local Start Time (s) | 47 | 31 | 47 | 0 |
| Local Yield (s) | 25 | 41 | 54 | 25 |
| Local Yield 170(s) | 25 | 41 | 54 | 25 |

Intersection Summary

Cycle Length 60
Control Type Actuated-Coordinated
Natural Cycle 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green













Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary

5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 73 | 160 | 148 | 517 | 962 | 55 |
| Future Volume (veh/h) | 73 | 160 | 148 | 517 | 962 | 55 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 78 | 172 | 159 | 556 | 1034 | 59 |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 2 | 2 |
| Cap, veh/h | 513 | 391 | 399 | 2206 | 1461 | 83 |
| Arrive On Green | 0.16 | 0.16 | 0.11 | 0.64 | 0.43 | 0.43 |
| Sat Flow, veh/h | 3127 | 1434 | 1739 | 3561 | 3511 | 195 |
| Grp Volume(v), veh/h | 78 | 172 | 159 | 556 | 538 | 555 |
| Grp Sat Flow(s),veh/h/ln | 1564 | 1434 | 1739 | 1735 | 1777 | 1835 |
| Q Serve(g_s), s | 1.3 | 5.9 | 2.6 | 4.2 | 14.9 | 14.9 |
| Cycle Q Clear(g_c), s | 1.3 | 5.9 | 2.6 | 4.2 | 14.9 | 14.9 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.11 |
| Lane Grp Cap(c), veh/h | 513 | 391 | 399 | 2206 | 760 | 785 |
| V/C Ratio(X) | 0.15 | 0.44 | 0.40 | 0.25 | 0.71 | 0.71 |
| Avail Cap(c_a), veh/h | 521 | 395 | 413 | 2206 | 760 | 785 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(l) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.5 | 18.0 | 9.6 | 4.7 | 14.1 | 14.1 |
| Incr Delay (d2), s/veh | 0.1 | 0.8 | 0.6 | 0.3 | 5.5 | 5.3 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.4 | 5.0 | 0.8 | 1.1 | 6.1 | 6.3 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 21.6 | 18.8 | 10.3 | 5.0 | 19.6 | 19.4 |
| LnGrp LOS | C | B | B | A | B | B |
| Approach Vol, veh/h | 250 | | | 715 | 1093 | |
| Approach Delay, s/veh | 19.7 | | | 6.2 | 19.5 | |
| Approach LOS | B | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.2 | | 15.8 | | 12.5 | 31.6 |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | 10.0 | | 7.0 | 25.0 |
| Max Q Clear Time (g_c+l1), s | 6.2 | | 7.9 | | 4.6 | 16.9 |
| Green Ext Time (p_c), s | 4.0 | | 0.2 | | 0.1 | 4.2 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 14.9 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

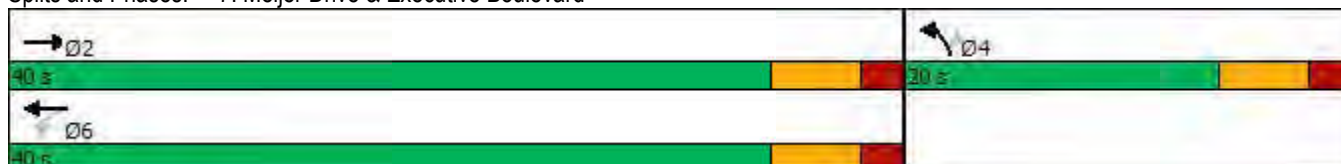
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBTL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 40 | 20 | 40 |
| Maximum Split (%) | 66.7% | 33.3% | 66.7% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 40 | 0 |
| End Time (s) | 40 | 0 | 40 |
| Yield/Force Off (s) | 34 | 54 | 34 |
| Yield/Force Off 170(s) | 34 | 54 | 34 |
| Local Start Time (s) | 0 | 40 | 0 |
| Local Yield (s) | 34 | 54 | 34 |
| Local Yield 170(s) | 34 | 54 | 34 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |

Splits and Phases: 7: Meijer Drive & Executive Boulevard










HCM 6th Signalized Intersection Summary 7: Meijer Drive & Executive Boulevard

01/31/2023

| | → | ↘ | ↙ | ← | ↖ | ↗ |
|------------------------------|------|------|------|------|------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↰ | | ↱ | ↰ | ↱ | ↱ |
| Traffic Volume (veh/h) | 196 | 27 | 9 | 192 | 15 | 20 |
| Future Volume (veh/h) | 196 | 27 | 9 | 192 | 15 | 20 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1693 | 1693 | 1826 | 1826 | 1693 | 1693 |
| Adj Flow Rate, veh/h | 231 | 32 | 11 | 226 | 18 | 24 |
| Peak Hour Factor | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Percent Heavy Veh, % | 14 | 14 | 5 | 5 | 14 | 14 |
| Cap, veh/h | 693 | 96 | 583 | 869 | 384 | 342 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1455 | 202 | 1090 | 1826 | 1612 | 1434 |
| Grp Volume(v), veh/h | 0 | 263 | 11 | 226 | 18 | 24 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1656 | 1090 | 1826 | 1612 | 1434 |
| Q Serve(g_s), s | 0.0 | 4.2 | 0.3 | 3.1 | 0.4 | 0.5 |
| Cycle Q Clear(g_c), s | 0.0 | 4.2 | 4.4 | 3.1 | 0.4 | 0.5 |
| Prop In Lane | | 0.12 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 789 | 583 | 869 | 384 | 342 |
| V/C Ratio(X) | 0.00 | 0.33 | 0.02 | 0.26 | 0.05 | 0.07 |
| Avail Cap(c_a), veh/h | 0 | 1341 | 946 | 1478 | 537 | 478 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 6.8 | 8.2 | 6.6 | 12.3 | 12.4 |
| Incr Delay (d2), s/veh | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 1.0 | 0.0 | 0.8 | 0.1 | 0.2 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 7.1 | 8.2 | 6.7 | 12.4 | 12.5 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 263 | | | 237 | 42 | |
| Approach Delay, s/veh | 7.1 | | | 6.8 | 12.4 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 26.0 | | 16.0 | | 26.0 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 34.0 | | 14.0 | | 34.0 |
| Max Q Clear Time (g_c+I1), s | | 6.2 | | 2.5 | | 6.4 |
| Green Ext Time (p_c), s | | 1.6 | | 0.0 | | 1.3 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 7.4 | | | |
| HCM 6th LOS | | | A | | | |

Intersection









Int Delay, s/veh 1.7

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|---|---|------|---|---|------|---|---|------|------|---|------|
| Lane Configurations |  |  | |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 2 | 130 | 0 | 0 | 181 | 15 | 0 | 0 | 0 | 48 | 0 | 5 |
| Future Vol, veh/h | 2 | 130 | 0 | 0 | 181 | 15 | 0 | 0 | 0 | 48 | 0 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 15 | 15 | 15 | 4 | 4 | 4 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 163 | 0 | 0 | 226 | 19 | 0 | 0 | 0 | 60 | 0 | 6 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 245 | 0 | 0 | 163 | 0 | 0 | 408 | 414 | 163 | 405 | 405 | 236 |
| Stage 1 | - | - | - | - | - | - | 169 | 169 | - | 236 | 236 | - |
| Stage 2 | - | - | - | - | - | - | 239 | 245 | - | 169 | 169 | - |
| Critical Hdwy | 4.25 | - | - | 4.14 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.335 | - | - | 2.236 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1249 | - | - | 1404 | - | - | 557 | 532 | 887 | 556 | 535 | 803 |
| Stage 1 | - | - | - | - | - | - | 838 | 763 | - | 767 | 710 | - |
| Stage 2 | - | - | - | - | - | - | 769 | 707 | - | 833 | 759 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1249 | - | - | 1404 | - | - | 551 | 531 | 887 | 555 | 534 | 803 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 551 | 531 | - | 555 | 534 | - |
| Stage 1 | - | - | - | - | - | - | 836 | 761 | - | 765 | 710 | - |
| Stage 2 | - | - | - | - | - | - | 763 | 707 | - | 831 | 757 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|----|------|
| HCM Control Delay, s | 0.1 | 0 | 0 | 12.1 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | - | 1249 | - | - | 1404 | - | - | 572 |
| HCM Lane V/C Ratio | - | - | 0.002 | - | - | - | - | - | 0.116 |
| HCM Control Delay (s) | 0 | 0 | 7.9 | - | - | 0 | - | - | 12.1 |
| HCM Lane LOS | A | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | - | 0 | - | - | 0 | - | - | 0.4 |

| Intersection | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|------|---|---|------|------|---|------|
| Int Delay, s/veh | 1.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 1 | 177 | 0 | 0 | 190 | 10 | 0 | 0 | 1 | 31 | 0 | 4 |
| Future Vol, veh/h | 1 | 177 | 0 | 0 | 190 | 10 | 0 | 0 | 1 | 31 | 0 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | 175 | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 15 | 15 | 15 | 4 | 4 | 4 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 219 | 0 | 0 | 235 | 12 | 0 | 0 | 1 | 38 | 0 | 5 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 247 | 0 | 0 | 219 | 0 | 0 | 465 | 468 | 219 | 463 | 462 | 241 |
| Stage 1 | - | - | - | - | - | - | 221 | 221 | - | 241 | 241 | - |
| Stage 2 | - | - | - | - | - | - | 244 | 247 | - | 222 | 221 | - |
| Critical Hdwy | 4.25 | - | - | 4.14 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.335 | - | - | 2.236 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1247 | - | - | 1339 | - | - | 511 | 496 | 826 | 509 | 497 | 798 |
| Stage 1 | - | - | - | - | - | - | 786 | 724 | - | 762 | 706 | - |
| Stage 2 | - | - | - | - | - | - | 764 | 706 | - | 780 | 720 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1247 | - | - | 1339 | - | - | 507 | 496 | 826 | 508 | 497 | 798 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 507 | 496 | - | 508 | 497 | - |
| Stage 1 | - | - | - | - | - | - | 785 | 723 | - | 761 | 706 | - |
| Stage 2 | - | - | - | - | - | - | 759 | 706 | - | 778 | 719 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|----|--|--|----|--|--|-----|--|--|------|--|--|
| HCM Control Delay, s | 0 | | | 0 | | | 9.4 | | | 12.4 | | |
| HCM LOS | | | | | | | A | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | 826 | 1247 | - | - | 1339 | - | - | 530 |
| HCM Lane V/C Ratio | - | 0.001 | 0.001 | - | - | - | - | - | 0.082 |
| HCM Control Delay (s) | 0 | 9.4 | 7.9 | - | - | 0 | - | - | 12.4 |
| HCM Lane LOS | A | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | 0 | 0 | - | - | 0 | - | - | 0.3 |

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

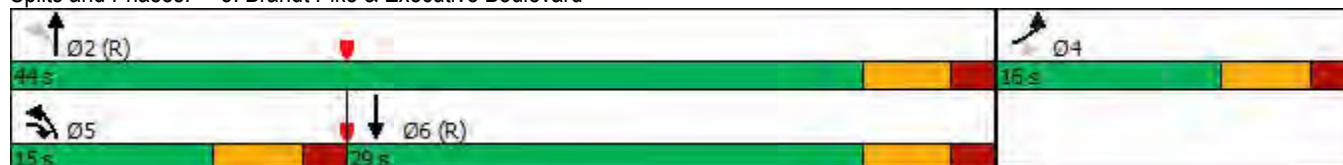


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 15 | 29 |
| Maximum Split (%) | 73.3% | 26.7% | 25.0% | 48.3% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 45 | 29 | 45 | 0 |
| End Time (s) | 29 | 45 | 0 | 29 |
| Yield/Force Off (s) | 23 | 39 | 54 | 23 |
| Yield/Force Off 170(s) | 23 | 39 | 54 | 23 |
| Local Start Time (s) | 45 | 29 | 45 | 0 |
| Local Yield (s) | 23 | 39 | 54 | 23 |
| Local Yield 170(s) | 23 | 39 | 54 | 23 |

Intersection Summary

Cycle Length 60
Control Type Actuated-Coordinated
Natural Cycle 55
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green













Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary

5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 152 | 215 | 187 | 1160 | 735 | 32 |
| Future Volume (veh/h) | 152 | 215 | 187 | 1160 | 735 | 32 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1856 | 1856 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 155 | 219 | 191 | 1184 | 750 | 33 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 3 | 3 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 570 | 437 | 500 | 2252 | 1463 | 64 |
| Arrive On Green | 0.17 | 0.17 | 0.11 | 0.63 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3428 | 1572 | 1781 | 3647 | 3561 | 153 |
| Grp Volume(v), veh/h | 155 | 219 | 191 | 1184 | 384 | 399 |
| Grp Sat Flow(s),veh/h/ln | 1714 | 1572 | 1781 | 1777 | 1777 | 1843 |
| Q Serve(g_s), s | 2.4 | 7.0 | 3.1 | 11.0 | 9.6 | 9.6 |
| Cycle Q Clear(g_c), s | 2.4 | 7.0 | 3.1 | 11.0 | 9.6 | 9.6 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.08 |
| Lane Grp Cap(c), veh/h | 570 | 437 | 500 | 2252 | 750 | 777 |
| V/C Ratio(X) | 0.27 | 0.50 | 0.38 | 0.53 | 0.51 | 0.51 |
| Avail Cap(c_a), veh/h | 571 | 438 | 568 | 2252 | 750 | 777 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 21.8 | 18.2 | 7.8 | 6.0 | 12.8 | 12.8 |
| Incr Delay (d2), s/veh | 0.3 | 0.9 | 0.5 | 0.9 | 2.5 | 2.4 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.9 | 6.4 | 0.9 | 2.9 | 3.7 | 3.8 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 22.1 | 19.0 | 8.3 | 6.9 | 15.3 | 15.2 |
| LnGrp LOS | C | B | A | A | B | B |
| Approach Vol, veh/h | 374 | | | 1375 | 783 | |
| Approach Delay, s/veh | 20.3 | | | 7.1 | 15.3 | |
| Approach LOS | C | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.0 | | 16.0 | | 12.7 | 31.3 |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | 10.0 | | 9.0 | 23.0 |
| Max Q Clear Time (g_c+l1), s | 13.0 | | 9.0 | | 5.1 | 11.6 |
| Green Ext Time (p_c), s | 9.5 | | 0.2 | | 0.2 | 3.7 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 11.6 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

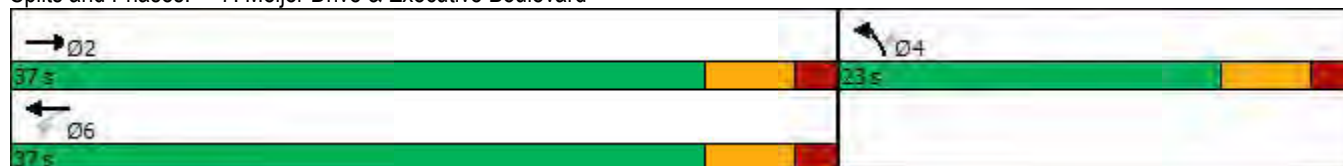
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBT |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 37 | 23 | 37 |
| Maximum Split (%) | 61.7% | 38.3% | 61.7% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 37 | 0 |
| End Time (s) | 37 | 0 | 37 |
| Yield/Force Off (s) | 31 | 54 | 31 |
| Yield/Force Off 170(s) | 31 | 54 | 31 |
| Local Start Time (s) | 0 | 37 | 0 |
| Local Yield (s) | 31 | 54 | 31 |
| Local Yield 170(s) | 31 | 54 | 31 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |












Splits and Phases: 7: Meijer Drive & Executive Boulevard



HCM 6th Signalized Intersection Summary






7: Meijer Drive & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations |  | |  |  |  |  |
| Traffic Volume (veh/h) | 238 | 60 | 24 | 181 | 60 | 121 |
| Future Volume (veh/h) | 238 | 60 | 24 | 181 | 60 | 121 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1796 | 1796 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 253 | 64 | 26 | 193 | 64 | 129 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 7 | 7 | 2 | 2 |
| Cap, veh/h | 686 | 174 | 543 | 855 | 424 | 377 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1440 | 364 | 1021 | 1796 | 1781 | 1585 |
| Grp Volume(v), veh/h | 0 | 317 | 26 | 193 | 64 | 129 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1805 | 1021 | 1796 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 4.7 | 0.7 | 2.6 | 1.2 | 2.8 |
| Cycle Q Clear(g_c), s | 0.0 | 4.7 | 5.4 | 2.6 | 1.2 | 2.8 |
| Prop In Lane | | 0.20 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 859 | 543 | 855 | 424 | 377 |
| V/C Ratio(X) | 0.00 | 0.37 | 0.05 | 0.23 | 0.15 | 0.34 |
| Avail Cap(c_a), veh/h | 0 | 1332 | 811 | 1326 | 721 | 642 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 7.0 | 8.7 | 6.5 | 12.6 | 13.3 |
| Incr Delay (d2), s/veh | 0.0 | 0.3 | 0.0 | 0.1 | 0.2 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 1.2 | 0.1 | 0.7 | 0.4 | 0.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 7.3 | 8.7 | 6.6 | 12.8 | 13.8 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 317 | | | 219 | 193 | |
| Approach Delay, s/veh | 7.3 | | | 6.8 | 13.5 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 6 | |
| Phs Duration (G+Y+Rc), s | 26.0 | | 16.0 | | 26.0 | |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | |
| Max Green Setting (Gmax), s | 31.0 | | 17.0 | | 31.0 | |
| Max Q Clear Time (g_c+l1), s | 6.7 | | 4.8 | | 7.4 | |
| Green Ext Time (p_c), s | 1.9 | | 0.4 | | 1.1 | |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 8.8 | | | |
| HCM 6th LOS | | | A | | | |

Intersection

Int Delay, s/veh 0

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|---|------|---|---|---|---|
| Lane Configurations |  | |  |  |  |  |
| Traffic Vol, veh/h | 299 | 0 | 0 | 225 | 0 | 0 |
| Future Vol, veh/h | 299 | 0 | 0 | 225 | 0 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 311 | 0 | 0 | 234 | 0 | 0 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 311 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.15 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.245 |
| Pot Cap-1 Maneuver | - | - | 1233 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1233 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|------|-----|
| Capacity (veh/h) | - | - | - | - | 1233 | - |
| HCM Lane V/C Ratio | - | - | - | - | - | - |
| HCM Control Delay (s) | 0 | 0 | - | - | 0 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | - | - | - | 0 | - |

HCM 6th TWSC
12: Rose Music Center Access 2 & Executive Boulevard

01/31/2023

Intersection

Int Delay, s/veh 0.1

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ |
| Traffic Vol, veh/h | 301 | 1 | 1 | 222 | 0 | 3 |
| Future Vol, veh/h | 301 | 1 | 1 | 222 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 175 | 150 | - | 0 | 0 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 3 | 3 | 5 | 5 | 0 | 0 |
| Mvmt Flow | 310 | 1 | 1 | 229 | 0 | 3 |

| Major/Minor | Major1 | Major2 | Minor1 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 311 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | - | 4.15 |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | - | 2.245 |
| Pot Cap-1 Maneuver | - | - | 1233 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Platoon blocked, % | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1233 |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | WB | NB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 9.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | - | 735 | - | - | 1233 | - |
| HCM Lane V/C Ratio | - | 0.004 | - | - | 0.001 | - |
| HCM Control Delay (s) | 0 | 9.9 | - | - | 7.9 | - |
| HCM Lane LOS | A | A | - | - | A | - |
| HCM 95th %tile Q(veh) | - | 0 | - | - | 0 | - |

Timing Report, Sorted By Phase

5: Brandt Pike & Executive Boulevard

01/31/2023

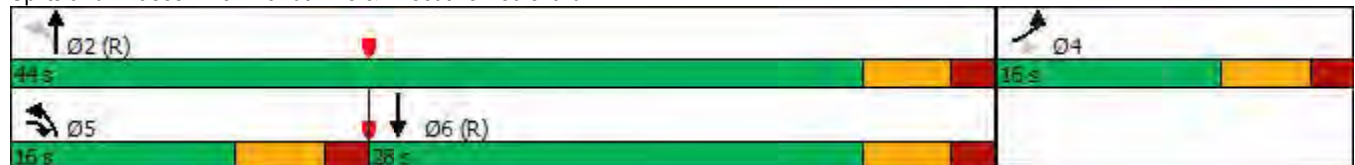


| Phase Number | 2 | 4 | 5 | 6 |
|------------------------|-------|-------|-------|-------|
| Movement | NBTL | EBL | NBL | SBT |
| Lead/Lag | | | Lead | Lag |
| Lead-Lag Optimize | | | Yes | Yes |
| Recall Mode | C-Min | None | None | C-Min |
| Maximum Split (s) | 44 | 16 | 16 | 28 |
| Maximum Split (%) | 73.3% | 26.7% | 26.7% | 46.7% |
| Minimum Split (s) | 26 | 16 | 13 | 26 |
| Yellow Time (s) | 4 | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 7 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 | 0 |
| Walk Time (s) | | | | |
| Flash Dont Walk (s) | | | | |
| Dual Entry | Yes | Yes | No | No |
| Inhibit Max | Yes | Yes | Yes | Yes |
| Start Time (s) | 44 | 28 | 44 | 0 |
| End Time (s) | 28 | 44 | 0 | 28 |
| Yield/Force Off (s) | 22 | 38 | 54 | 22 |
| Yield/Force Off 170(s) | 22 | 38 | 54 | 22 |
| Local Start Time (s) | 44 | 28 | 44 | 0 |
| Local Yield (s) | 22 | 38 | 54 | 22 |
| Local Yield 170(s) | 22 | 38 | 54 | 22 |

Intersection Summary

| | |
|--|----------------------|
| Cycle Length | 60 |
| Control Type | Actuated-Coordinated |
| Natural Cycle | 55 |
| Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green | |













Splits and Phases: 5: Brandt Pike & Executive Boulevard



HCM 6th Signalized Intersection Summary

5: Brandt Pike & Executive Boulevard

01/31/2023

| |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations |  |  |  |  |  |  |
| Traffic Volume (veh/h) | 174 | 242 | 233 | 1160 | 735 | 70 |
| Future Volume (veh/h) | 174 | 242 | 233 | 1160 | 735 | 70 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | 1.00 | 1.00 | | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1856 | 1856 | 1870 | 1870 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 178 | 247 | 238 | 1184 | 750 | 71 |
| Peak Hour Factor | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 | 0.98 |
| Percent Heavy Veh, % | 3 | 3 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 571 | 442 | 488 | 2251 | 1374 | 130 |
| Arrive On Green | 0.17 | 0.17 | 0.11 | 0.63 | 0.42 | 0.42 |
| Sat Flow, veh/h | 3428 | 1572 | 1781 | 3647 | 3374 | 310 |
| Grp Volume(v), veh/h | 178 | 247 | 238 | 1184 | 406 | 415 |
| Grp Sat Flow(s),veh/h/ln | 1714 | 1572 | 1781 | 1777 | 1777 | 1814 |
| Q Serve(g_s), s | 2.7 | 8.0 | 4.0 | 11.0 | 10.3 | 10.3 |
| Cycle Q Clear(g_c), s | 2.7 | 8.0 | 4.0 | 11.0 | 10.3 | 10.3 |
| Prop In Lane | 1.00 | 1.00 | 1.00 | | | 0.17 |
| Lane Grp Cap(c), veh/h | 571 | 442 | 488 | 2251 | 744 | 760 |
| V/C Ratio(X) | 0.31 | 0.56 | 0.49 | 0.53 | 0.55 | 0.55 |
| Avail Cap(c_a), veh/h | 571 | 442 | 581 | 2251 | 744 | 760 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 22.0 | 18.4 | 8.5 | 6.0 | 13.1 | 13.1 |
| Incr Delay (d2), s/veh | 0.3 | 1.6 | 0.8 | 0.9 | 2.9 | 2.8 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 7.3 | 1.2 | 2.9 | 4.1 | 4.1 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 22.3 | 20.0 | 9.2 | 6.9 | 16.0 | 15.9 |
| LnGrp LOS | C | B | A | A | B | B |
| Approach Vol, veh/h | 425 | | | 1422 | 821 | |
| Approach Delay, s/veh | 20.9 | | | 7.3 | 16.0 | |
| Approach LOS | C | | | A | B | |
| Timer - Assigned Phs | 2 | | 4 | | 5 | 6 |
| Phs Duration (G+Y+Rc), s | 44.0 | | 16.0 | | 12.9 | 31.1 |
| Change Period (Y+Rc), s | 6.0 | | 6.0 | | 6.0 | 6.0 |
| Max Green Setting (Gmax), s | 38.0 | | 10.0 | | 10.0 | 22.0 |
| Max Q Clear Time (g_c+l1), s | 13.0 | | 10.0 | | 6.0 | 12.3 |
| Green Ext Time (p_c), s | 9.5 | | 0.0 | | 0.2 | 3.5 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 12.1 | | | |
| HCM 6th LOS | | | B | | | |

Timing Report, Sorted By Phase

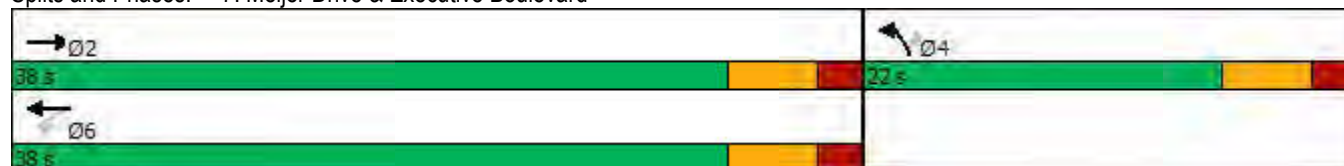
7: Meijer Drive & Executive Boulevard

01/31/2023



| Phase Number | 2 | 4 | 6 |
|------------------------|------------------------|-------|-------|
| Movement | EBT | NBL | WBTL |
| Lead/Lag | | | |
| Lead-Lag Optimize | | | |
| Recall Mode | Min | Min | None |
| Maximum Split (s) | 38 | 22 | 38 |
| Maximum Split (%) | 63.3% | 36.7% | 63.3% |
| Minimum Split (s) | 26 | 16 | 26 |
| Yellow Time (s) | 4 | 4 | 4 |
| All-Red Time (s) | 2 | 2 | 2 |
| Minimum Initial (s) | 20 | 10 | 20 |
| Vehicle Extension (s) | 3 | 3 | 3 |
| Minimum Gap (s) | 3 | 3 | 3 |
| Time Before Reduce (s) | 0 | 0 | 0 |
| Time To Reduce (s) | 0 | 0 | 0 |
| Walk Time (s) | | | |
| Flash Dont Walk (s) | | | |
| Dual Entry | Yes | Yes | Yes |
| Inhibit Max | Yes | Yes | Yes |
| Start Time (s) | 0 | 38 | 0 |
| End Time (s) | 38 | 0 | 38 |
| Yield/Force Off (s) | 32 | 54 | 32 |
| Yield/Force Off 170(s) | 32 | 54 | 32 |
| Local Start Time (s) | 0 | 38 | 0 |
| Local Yield (s) | 32 | 54 | 32 |
| Local Yield 170(s) | 32 | 54 | 32 |
| Intersection Summary | | | |
| Cycle Length | 60 | | |
| Control Type | Actuated-Uncoordinated | | |
| Natural Cycle | 45 | | |

Splits and Phases: 7: Meijer Drive & Executive Boulevard



HCM 6th Signalized Intersection Summary








7: Meijer Drive & Executive Boulevard

01/31/2023

| | → | ↘ | ↙ | ← | ↖ | ↗ |
|------------------------------|------|------|------|------|------|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↰ | | ↱ | ↰ | ↱ | ↱ |
| Traffic Volume (veh/h) | 287 | 60 | 24 | 265 | 60 | 121 |
| Future Volume (veh/h) | 287 | 60 | 24 | 265 | 60 | 121 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | | 1.00 | 1.00 | | 1.00 | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Work Zone On Approach | No | | | No | No | |
| Adj Sat Flow, veh/h/ln | 1870 | 1870 | 1796 | 1796 | 1870 | 1870 |
| Adj Flow Rate, veh/h | 305 | 64 | 26 | 282 | 64 | 129 |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Percent Heavy Veh, % | 2 | 2 | 7 | 7 | 2 | 2 |
| Cap, veh/h | 714 | 150 | 505 | 855 | 424 | 377 |
| Arrive On Green | 0.48 | 0.48 | 0.48 | 0.48 | 0.24 | 0.24 |
| Sat Flow, veh/h | 1499 | 315 | 973 | 1796 | 1781 | 1585 |
| Grp Volume(v), veh/h | 0 | 369 | 26 | 282 | 64 | 129 |
| Grp Sat Flow(s),veh/h/ln | 0 | 1814 | 973 | 1796 | 1781 | 1585 |
| Q Serve(g_s), s | 0.0 | 5.6 | 0.8 | 4.1 | 1.2 | 2.8 |
| Cycle Q Clear(g_c), s | 0.0 | 5.6 | 6.4 | 4.1 | 1.2 | 2.8 |
| Prop In Lane | | 0.17 | 1.00 | | 1.00 | 1.00 |
| Lane Grp Cap(c), veh/h | 0 | 864 | 505 | 855 | 424 | 377 |
| V/C Ratio(X) | 0.00 | 0.43 | 0.05 | 0.33 | 0.15 | 0.34 |
| Avail Cap(c_a), veh/h | 0 | 1382 | 783 | 1369 | 679 | 604 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 0.0 | 7.2 | 9.3 | 6.8 | 12.6 | 13.3 |
| Incr Delay (d2), s/veh | 0.0 | 0.3 | 0.0 | 0.2 | 0.2 | 0.5 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 0.0 | 1.5 | 0.1 | 1.1 | 0.4 | 0.9 |
| Unsig. Movement Delay, s/veh | | | | | | |
| LnGrp Delay(d),s/veh | 0.0 | 7.6 | 9.4 | 7.1 | 12.8 | 13.8 |
| LnGrp LOS | A | A | A | A | B | B |
| Approach Vol, veh/h | 369 | | | 308 | 193 | |
| Approach Delay, s/veh | 7.6 | | | 7.3 | 13.5 | |
| Approach LOS | A | | | A | B | |
| Timer - Assigned Phs | | 2 | | 4 | | 6 |
| Phs Duration (G+Y+Rc), s | | 26.0 | | 16.0 | | 26.0 |
| Change Period (Y+Rc), s | | 6.0 | | 6.0 | | 6.0 |
| Max Green Setting (Gmax), s | | 32.0 | | 16.0 | | 32.0 |
| Max Q Clear Time (g_c+I1), s | | 7.6 | | 4.8 | | 8.4 |
| Green Ext Time (p_c), s | | 2.2 | | 0.4 | | 1.7 |
| Intersection Summary | | | | | | |
| HCM 6th Ctrl Delay | | | 8.8 | | | |
| HCM 6th LOS | | | A | | | |

Intersection









Int Delay, s/veh 0.8

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|--------------------------|---|---|------|---|---|------|---|---|------|------|---|------|
| Lane Configurations |  |  | |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 5 | 304 | 0 | 0 | 228 | 51 | 0 | 0 | 0 | 30 | 0 | 3 |
| Future Vol, veh/h | 5 | 304 | 0 | 0 | 228 | 51 | 0 | 0 | 0 | 30 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | - | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 2 | 2 | 2 | 5 | 5 | 5 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 317 | 0 | 0 | 238 | 53 | 0 | 0 | 0 | 31 | 0 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 291 | 0 | 0 | 317 | 0 | 0 | 593 | 618 | 317 | 592 | 592 | 265 |
| Stage 1 | - | - | - | - | - | - | 327 | 327 | - | 265 | 265 | - |
| Stage 2 | - | - | - | - | - | - | 266 | 291 | - | 327 | 327 | - |
| Critical Hdwy | 4.12 | - | - | 4.15 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.245 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1271 | - | - | 1226 | - | - | 420 | 408 | 728 | 418 | 419 | 774 |
| Stage 1 | - | - | - | - | - | - | 690 | 651 | - | 740 | 689 | - |
| Stage 2 | - | - | - | - | - | - | 744 | 675 | - | 686 | 648 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1271 | - | - | 1226 | - | - | 417 | 406 | 728 | 417 | 417 | 774 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 417 | 406 | - | 417 | 417 | - |
| Stage 1 | - | - | - | - | - | - | 687 | 648 | - | 737 | 689 | - |
| Stage 2 | - | - | - | - | - | - | 741 | 675 | - | 683 | 645 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|----|----|
| HCM Control Delay, s | 0.1 | 0 | 0 | 14 |
| HCM LOS | | | A | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | - | - | 1271 | - | - | 1226 | - | - | 435 |
| HCM Lane V/C Ratio | - | - | 0.004 | - | - | - | - | - | 0.079 |
| HCM Control Delay (s) | 0 | 0 | 7.8 | - | - | 0 | - | - | 14 |
| HCM Lane LOS | A | A | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | - | 0 | - | - | 0 | - | - | 0.3 |

| Intersection | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|------|---|---|------|------|---|------|
| Int Delay, s/veh | 0.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  |  |  |  | |  |  | | |  | |
| Traffic Vol, veh/h | 5 | 331 | 1 | 1 | 273 | 33 | 0 | 0 | 3 | 19 | 0 | 3 |
| Future Vol, veh/h | 5 | 331 | 1 | 1 | 273 | 33 | 0 | 0 | 3 | 19 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 125 | - | 175 | 150 | - | - | 0 | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 3 | 3 | 3 | 5 | 5 | 5 | 0 | 0 | 0 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 341 | 1 | 1 | 281 | 34 | 0 | 0 | 3 | 20 | 0 | 3 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-------|
| Conflicting Flow All | 315 | 0 | 0 | 342 | 0 | 0 | 653 | 668 | 341 | 653 | 652 | 298 |
| Stage 1 | - | - | - | - | - | - | 351 | 351 | - | 300 | 300 | - |
| Stage 2 | - | - | - | - | - | - | 302 | 317 | - | 353 | 352 | - |
| Critical Hdwy | 4.13 | - | - | 4.15 | - | - | 7.1 | 6.5 | 6.2 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.227 | - | - | 2.245 | - | - | 3.5 | 4 | 3.3 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1240 | - | - | 1200 | - | - | 383 | 382 | 706 | 380 | 387 | 741 |
| Stage 1 | - | - | - | - | - | - | 670 | 636 | - | 709 | 666 | - |
| Stage 2 | - | - | - | - | - | - | 712 | 658 | - | 664 | 632 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1240 | - | - | 1200 | - | - | 380 | 380 | 706 | 377 | 385 | 741 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 380 | 380 | - | 377 | 385 | - |
| Stage 1 | - | - | - | - | - | - | 667 | 633 | - | 706 | 665 | - |
| Stage 2 | - | - | - | - | - | - | 708 | 657 | - | 658 | 629 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|------|------|
| HCM Control Delay, s | 0.1 | 0 | 10.1 | 14.4 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | - | 706 | 1240 | - | - | 1200 | - | - | 404 |
| HCM Lane V/C Ratio | - | 0.004 | 0.004 | - | - | 0.001 | - | - | 0.056 |
| HCM Control Delay (s) | 0 | 10.1 | 7.9 | - | - | 8 | - | - | 14.4 |
| HCM Lane LOS | A | B | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | - | 0 | 0 | - | - | 0 | - | - | 0.2 |

I just read the City is considering authorizing a zoning change to allow major changes to the Executive Boulevard **“A developer has proposed a \$40 million, 320-unit apartment complex immediately north of the Rose Music Center, just a few hundred yards down Executive Boulevard from an even bigger recently approved 530-unit apartment complex.**

If both projects come to fruition, the area could see well over 1,000 new residents in a matter of years. “ (from the DDNs)

I live north of the Executive Boulevard street, and we have a major problem with traffic now. Highly suggest before any zoning change are made, the City do an traffic study of the entire I-70 area @01 &202). Adding a 1,000 new residents(1,000 cars) just north of I-70 will create a significant impact to the problem we now have.

Delbert Balster

Rose Petal Dr.

Memorandum

Staff Report for Meeting of February 14, 2023

To: Huber Heights City Planning Commission

From: Aaron K. Sorrell, Interim City Planner

Date: February 9, 2023

Subject: Rezoning and Basic Development Plan
Case: BDP 23-02
(Newbauer Site – 320 Unit Apartment Development)

Department of Planning and Zoning

City of Huber Heights

APPLICANT/OWNER: Metropolitan Holdings, LTD. – Applicant
Nancy Newbauer, Trustee - Owner

DEVELOPMENT NAME: Metropolitan Holdings - Newbauer Site

ADDRESS/LOCATION: 6801 Executive Blvd.

ZONING/ACREAGE: PEP / 25.3 Acres

EXISTING LAND USE: Vacant / Agricultural

**ZONING
ADJACENT LAND:** North: R-7
East: PEP
West: I-1
South: PEP (Rose Music Center)

REQUEST: The applicant requests a rezoning to Planned Mixed Use (PM) and approval of a basic development plan to construct up to 320 residential units and commercial/retail space.

ORIGINAL APPROVAL: N/A

APPLICABLE HHCC: Chapter 1171, 1179, 1181

CORRESPONDENCE: In Favor – None Received
In Opposition – One email received.

STAFF ANALYSIS AND RECOMMENDATION:

Overview

The applicant requests a rezoning of 25.3 acres to Planned Mixed Use and approval of a Basic Development Plan to facilitate the construction of up to 320 residential units (1- and 2-bedroom apartments) on approximately 21.3 acres and approximately 4 acres for commercial / retail uses.

The applicant recently completed the Parkview Apartments near Executive Blvd. and Brandt Pike. That project has been extremely successful and the applicant has been in discussions with the city for quite some time regarding this development, and the city's desire to see additional housing units support the burgeoning entertainment district anchored by the Rose Music Center.

Other entertainment uses include TJ Chumps and Warped Wing, which is under construction. The current Community Entertainment District boundary does not include this site, but may be extended in the near future to capture this proposed commercial area, as well as Warped Wing to the west.

Site Characteristics

The overall site is bisected by a natural stream (non-delineated) which effectively creates two residential sites above and below the stream, and one commercial area above the stream. The developer has chosen to maintain the stream as a natural amenity and develop the area with a 70-foot stream protection buffer, typical best practice developments along waterways. Staff is very supportive of maintaining the natural stream feature.

The site has access to all utilities along Executive Blvd.

Applicable Zoning Regulations

This application is the first step in the development process and the Basic Development Plan sets the following parameters:

- Allowable Uses
- Site Density
- Development parameters (general layout, setbacks, height, massing)
- Pedestrian and vehicular connections

The applicant is proposing a comprehensive set of development standards. The staff analysis focuses on the conformity of the proposed development regulations to those found within the zoning code. Since this is a Basic Development Plan, not all development information is required, such as detailed lighting and landscaping plans.

The applicable zoning chapters include: 1171 General Provisions, 1179 Planned Mixed Use, and 1181 General Provisions.

Chapter 1171 General Provisions

1171.01 Purpose.

Planned Unit Developments Districts may be permitted as amendments to the zoning map, after application and approval of specific and detailed plans, where tracts suitable in location and character for the uses and structures proposed are to be planned and developed as units. The provisions of this chapter are adopted to unify planning and development in such districts. Applications for rezoning of land into a Planned Unit Development District shall be granted only when the basic development plan for the project is such that the public health, safety and morals shall not be jeopardized by a departure from the restrictions on corresponding uses in the standard zoning district. PUD rezonings may be approved only when a basic development plan for the area has been approved by Council. A detailed development plan shall then be approved for zoning permit to be approved for development in the District. Normally the detailed development plan shall be approved by the Planning Commission after the rezoning and basic development plan have been approved by Council. Owners shall have the option however, of submitting a combined basic and detailed development plan ("combined development plan") if they should so desire for some or all of the site.

1171.05 Contents of basic development plan.

- (a) The basic development plan shall consist of at least the following information together with such other data and materials as may be required by the City:*
 - (1) Site plan showing the actual shape and dimensions of the lot to be built upon or to be changed in its use together with the location of the existing and proposed structures with approximate square footages, number of stories including heights of structures;*
 - (2) Typical elevation views of the front and side of each type of building;*
 - (3) Planning location and dimensions of all proposed drives, service access road, sidewalks and curb openings;*
 - (4) Parking lot areas (show dimensions of a typical parking space), unloading areas, fire lanes and handicapped parking;*
 - (5) Landscaping plan, walls and fences;*
 - (6) Storm water detention and surface drainage;*
 - (7) Exterior lighting plan;*
 - (8) Vehicular circulation pattern;*
 - (9) Location and square footage of signs;*
 - (10) Topographic survey; and*
 - (11) Listing of proposed uses taken from the list of permitted and special uses of the PUD zoning district to which rezoning is being sought.*
- (b) The Planning Commission shall schedule both the proposed rezoning and the issue of approval of the basic development plan for a combined public hearing, following which it shall make its recommendation indicating approval, approval with modification or disapproval.*

Chapter 1179 (PM) Planned Mixed Use District

1179.01 - Purpose

The Planned Mixed-Use District (PM) is established to promote multi-use development where a citizen can work, shop, play, and live within a planned neighborhood. This planning concept allows uses that typically are separated by traditional zoning to be part of an overall multiple use design concept allowing each use to complement another. By permitting residential, commercial, office, and institutional uses in the same district with the proper use of landscaping, buffering, access points, and parking, a PM development can provide a well balanced community for residents, visitors, and employees and provide unique characteristics that traditional land use planning often neglects. The PM also promotes different land uses that may act as transitional zoning between conflicting land use zones.

1179.02 - Permitted uses.

The uses outlined as permitted uses in the (PR) Planned Residential District, (PO) Planned Office District, (PP) Planned Public and Private Buildings and Grounds District, and (PC) Planned Commercial District are principal uses permitted in the (PM) Planned Mixed Use District except as prohibited in this chapter.

1179.03 - Accessory uses.

The uses outlined as accessory uses in the (PR) Planned Residential District, (PO) Planned Office District, (PP) Planned Public and Private Buildings and Grounds District, and (PC) Planned Commercial District are accessory uses permitted in the (PM) Planned Mixed Use District except as prohibited in this chapter.

1179.04 - Special uses.

The following shall be permitted as special uses:

- (a) Places of worship.
- (b) Fraternal organizations, service clubs and other nonprofit organizations in accordance with the provisions of Chapter 1135. In addition to the criteria set forth in Chapter 1135, the parking requirements may have to be reviewed yearly as determined by the Planning Commission.
- (c) Service stations and filling stations.
- (d) Light manufacturing, compounding, processing, assembling, packaging or treatment of goods, materials and products.
- (e) Commercial printing and publishing.
- (f) Technical services and professional offices, including, but not limited to architects, engineers, surveyors, data processing facilities, testing laboratories and technical schools.
- (g) Any use the principal function of which is basic research, design and/or pilot or experimental product development or technical training.
- (h) Business and industrial service facilities.
- (i) Laboratories: experimental, film, testing, research or engineering.
- (j) Computer-communications hardware assembly, testing and operation; development, testing, operation and maintenance of software; and communications services and facilities that are incidental to the principal use.
- (k) Medical, dental and optical manufacturing.

1179.05 - Prohibited uses.

The following uses are specifically prohibited:

- (a) Bingo Establishments and Instant Bingo Facilities;

- (b) Kennels, unless as an accessory use to a veterinarian;
- (c) Cemeteries;
- (d) Airports;
- (e) Blacksmith shops;
- (f) Machine shops, sheet metal and commercial painting shops;
- (g) Lumber yards;
- (h) Establishments for display, hire, sale and repair of farm implements, semi-tractors, and semi-trailers;
- (i) Truck stops or service stations servicing and/or repairing semis, semi-tractors and semi-trailers;
- (j) Parking of semis, semi-tractors and semi-trailers except for the purposes of loading or unloading and located in a designated loading space for a reasonable length of time necessary to load or unload;
- (k) Sexually oriented businesses;
- (l) Outside storage except for trash containers or recycling containers that are screened as required by this chapter;
- (m) Above ground parking garages.

1179.06 - Development standards.

Except when specifically modified herein, the provisions of the Planning and Zoning Code shall govern. The following development standards apply to a PM development:

- (a) Minimum Land Area Requirement. A minimum of 20 acres shall be required.
- (b) Covenants. The developer of a PM development shall be required to submit a set of covenants or deed restrictions with the Basic Development Plan application that will outline, at a minimum, development standards and guidelines established in this chapter and any other requirements the developer and/or Planning Commission deems necessary. The Planning Commission may require additional or amended covenants as it deems necessary to ensure compliance with the Planning and Zoning Code and the Planned Mixed-Use District.
- (c) Required Mix of Land Uses. A developer shall be required to provide a mix of land uses in a PM Development. At a minimum, at least two of the following uses are required in a PM Development: residential, commercial, office, institutional, and/or industrial.
- (d) Site Planning.
 - (1) The combination of different uses whether as part of one building or as part of the overall development shall be designed and developed so as not to create a nuisance by excessive noise, light, vibration, odor or any other annoyances for any uses within the development or neighboring properties.
 - (2) A PM development is to be designed so that buildings and structures are clustered and open space areas are preserved and maintained. Special care shall be given to protect preexisting natural features including, but not limited to, woodlands, ravines, streams, lakes, ponds, and/or flood plains. Impervious surface coverage, including, but not limited to, buildings, parking area, and accessways, shall not exceed 75 percent of the total development area. Therefore, 25 percent of the development area shall be reserved for green space.
 - (3) The number of ingress and egress points onto the public streets shall be limited in order to reduce the number of traffic conflict points. Adequate and properly arranged facilities for internal pedestrian and traffic circulations shall be provided. The street and thoroughfare network shall be designed to minimize truck traffic through residential areas of the development.
 - (4) Parking systems shall be designed so as to discourage single large unbroken paved lots for off-street parking and shall encourage smaller defined parking areas within the total parking system. Underground parking facilities are encouraged.

- (5) The development shall be designed to tie all the uses into one overall community and encourage walking, biking, running, and alternative modes of transportation. Developers are encouraged to incorporate bus stops, bikeways, walkways, and crosswalks into an overall thematic scheme for pedestrian traffic. Sidewalks shall be required except, in the case of a golf course or specific open space development, the Planning Commission may determine them to be unnecessary.
- (6) Any signs as proposed within this district, shall comply with Chapter 1189 "Signs". Additionally, a developer of a PM development shall develop and submit with the Detailed Development Plan application, a comprehensive set of graphic design criteria for signage in the development. This set of graphic design criteria for signage shall be approved by the Planning Commission and shall apply to all signage requests within the development. The criteria shall include, at a minimum, the sizes permitted (if different from Chapter 1189), colors permitted, materials permitted, typefaces permitted, type size permitted, and permitted illumination. Compliance with the on-site comprehensive graphics shall be verified by the Zoning Administrator during the sign permit review process.
- (7) Minimum lot area, frontage and setback requirements may be varied to allow greater flexibility in design. However, the following shall be used as a guideline for development:
- A. With multiple buildings on a single property, entirely residential buildings shall be at least 15 feet from another entirely residential building and at least 50 feet from nonresidential or mixed-use buildings.
 - B. With multiple buildings on a single property, nonresidential buildings or mixed-use buildings shall be at least 20 feet or one-half the height of the taller building apart, whichever is greater from another nonresidential or mixed-use building.
 - C. All nonresidential buildings or mixed-use buildings shall be set back at least 50 feet or the height of the structure, whichever is greater, from any residential property or residential building, whichever is closer, and from the public right-of-way. This setback applies to multiple buildings on a single property, to development within a PM development, and where it abuts to adjacent property.
- (8) No maximum height restriction shall apply, except that the proposed development meets all Federal Aviation Administration (FAA), Dayton International Airport or Wright Patterson Air Force Base height or abatement requirements
- (9) Common parking areas and accessways shall be lighted adequately with light fixtures that shall be designed to reflect light away from adjoining properties. Special attention will be given to protect entirely residential structures from light emitted from nonresidential land uses.
- (10) Nonresidential uses shall have trash containers and/or receptacles (including recycling containers) placed to the rear of all structures and shall be screened or enclosed on four sides with opening doors for the purpose of trash removal. The placement of trash containers and/or receptacles in multi-family residential developments shall be as inconspicuous as possible. The use of a wooden or vinyl fence structure, earth mound, or wall with an opaqueness of 100 percent and a height of 12 inches above the top of the largest container is required.
- (11) The architecture of nonresidential structures is encouraged to be unique yet similar in certain sections of the PM.
- (12) The distribution systems for utilities are required to be underground.
- (13) The use of privately owned open space and public dedicated park land is encouraged as part of a PM development. Privately owned open space shall be maintained by the developer or by a duly authorized owner's association.
- (14) The use of chain link fencing is prohibited. Additionally, on an entirely residential property, no fencing shall be permitted in the front yard, and, in the case of a corner lot, no fencing shall be permitted in the side yard with frontage to a public right-of-way. The covenants submitted by the developer shall establish the height requirements for fencing in the development. Fencing in a development shall be

uniform in height in related use areas. On an entirely residential property, fence height shall not exceed six feet.

- (15) With the submission of a Basic Development Plan application, the applicant is required to submit a phasing plan that details when certain sections of the development will commence construction and when the sections will be complete.

1179.07 - Landscaping.

To protect and promote a harmonious development that ensures a functional and logical arrangement of mixed uses, the effective and efficient use of landscaping and buffering is required. Therefore, a PM development shall include the following landscaping and buffering:

- (a) *Development Landscaping. Within the PM development that is proposed, entirely residential buildings shall be screened from nonresidential and mixed-use buildings with a 20 foot wide buffer strip that includes a six foot high earth mound, wooden or vinyl fence, wall, landscaping and/or mixture thereof that shall maintain an opaqueness of at least 80 percent year around. Parking areas, accessways, or any impervious surfaces are prohibited within this buffer strip. If planted materials are used, the screen must achieve the required height, width, and opaqueness within two years of planting. The use of pre-existing trees, natural features or amenities as part of this buffer is encouraged. The Planning Commission may approve some other arrangement of buffering if it determines that such an arrangement meets the intent of this requirement.*
- (b) *Perimeter Landscaping. In a section of a PM development that contains nonresidential, mixed use, or multi-family buildings that abut a neighboring property with a single-family residential zoning designation or in a PM development section that contains an entirely residential section that abuts a neighboring property with a commercial, office, or multi-family zoning designation, the perimeter of the section of the PM development shall be screened with a 25 foot wide buffer strip that includes a six foot high earth mound, wooden or vinyl fence, wall, landscaping and/or mixture thereof that shall maintain an opaqueness of at least 80 percent year-round. Parking areas, accessways or an impervious surfaces are prohibited within this buffer strip. If planted materials are used, the screen must achieve the required height, width, and opaqueness within two years of planting. The use of pre-existing trees, natural features or amenities as part of this buffer is encouraged. The Planning Commission may approve some other arrangement of buffering if it determines that such an arrangement meets the intent of this requirement.*
- (c) *Parking Lot Landscaping. All parking lots are required to have interior landscaped areas as outlined in Chapter 1185, "Parking and Loading".*
- (d) *Street Tree Requirement. All frontage property within a PM development that abuts public rights-of-way and is developed with nonresidential, mixed use, and/or multi-family buildings is required to have one street tree per 40 feet of frontage planted just outside of the street right-of-way. Unless determined to be inappropriate by the City Engineer, street trees shall be planted at least four feet from the edge of the sidewalk on private property. All frontage property within a PM development along a major collector or better as defined by the Huber Heights Thoroughfare Plan, no matter what use, shall meet this requirement. The type of tree and size shall be proposed by the developer at the Detailed Development Plan application stage and approved by the Planning Commission. A list of appropriate trees with required caliper is available in the City Engineer's Office.*

1179.08 - Parking and loading.

The provisions of [Chapter 1185](#), "Parking and Loading" shall apply, except that the off-street loading spaces and docks shall be provided with area, location and design appropriate to the needs of the development and specific uses within it, and the space designated for off-street loading shall not be used for off-street parking. Within the PM development, off-street loading areas shall be physically isolated and/or enclosed from residences in or adjacent to the PM Development. In all cases, off-street loading spaces and docks are prohibited in the front and side yards of any property.

1179.09 - Planning commission/city council review

All requirements within this chapter are to be used as guidelines and may be varied as part of the Basic or Detailed Development Plan approval if it is determined that such deviation will not adversely affect neighboring properties or the community as a whole. Additionally, any variation of these requirements shall, in no case, change the overall plan and character of the proposed development.

Chapter 1181 General Provisions

1181.17 Street trees.

Any property that is zoned commercial, industrial, institutional or multi-family and that abuts a public street right-of-way and is being developed shall have one street tree per 40 feet of frontage planted at least four feet from the edge of the sidewalk on private property as determined appropriate by the City Engineer. If the location of the proposed street trees is determined inappropriate by the City Engineer, the City Engineer shall determine a location that is appropriate for the planting of the street trees. The City Engineer shall also approve the type of and the caliper of street trees that are to be planted. A list of appropriate trees and required caliper is available in the City Engineer's office.

1181.18 Screening of service structures.

Service structures shall be screened in all zoning districts. For the purposes of this section, service structures shall include but not be limited to loading docks, storage tanks, dumpsters, electrical transformers, utility vaults which extend above the surface, cooling towers, roof top units and other equipment or elements providing service to a nonresidential (excluding agricultural uses) or multi-family building or site. Structures may be grouped together; however, screening height shall be based upon the tallest of the structures. Service structures located in the public right-of-way or public right-of-way easement shall be exempt from these provisions.

(a) Screening Requirements.

- (1) Rooftop utilities screening. All mechanical equipment located on the roof or around the perimeter of the building shall be screened by the following means and with materials that are comparable and compatible with that of the exterior building materials. Roof top mechanical units must be screened to the full height of the unit and also be fully screened from view from surrounding public rights-of-way. A sight distance analysis may be required by the City to determine the necessary height or design of rooftop utilities screening. If due to factors unique to the property or the project, it is physically impossible or impractical to screen these utilities, the Board of Zoning Appeals, may approve alternative solutions that render them aesthetically compatible with the principal structure, except for development within a planned unit development district for which the Planning Commission would have authority to approve any alternative solutions.*

 - A. A raised parapet or other architectural feature is an integral part of the building as a method of screening for rooftop mechanical equipment or to soften rooftop view.*
 - B. Screening for rooftop mechanical equipment shall incorporate similar architectural features of the building and/or be constructed of a material and color compatible with other elements of the building.*
- (2) Waste Handling Screening. All waste, recycling and related handling equipment shall be stored and kept in four-sided enclosure constructed of a brick, stone, decorative concrete material or a material compatible with the material of the principle structure.*

 - A. Curbs to protect screening material. Whenever screening materials is placed around any trash disposal unit or waste collection unit which is emptied or removed mechanically on a regularly*

occurring basis, a curb to contain the placement of the container shall be provided within the screening material on these sides where there is such material. The curbing shall be at least one foot from the material and shall be designed to prevent possible damage to the screening when the container is moved or emptied.

- (3) *Screening of other service structures. A continuous (having 100 percent opacity) planting, hedge, fence, wall of earth, which would enclose any service structure on all sides is required, unless such structure must be frequently moved, in which case screening on all but one side is required. The height of the screening material shall be one foot more than the height of the enclosed structure, but shall not be required to exceed 12 feet in height. Whenever a service structure is located next to a building wall or landscaping material, such walls or screening material, may fulfill the screening requirement for that side of the service structure if that wall or screening material is of sufficient height to meet the height requirement set out in this section. Plant material used to screen a service structure shall be an evergreen species which retains its needles throughout the year. Deciduous plant material cannot be used to fulfill this screening requirement. The height of the evergreen plant material at installation must be equal to, or greater than, two-thirds of the height of the service structure(s), and meet the height and opacity requirements within four years.*

1181.21 Lighting standards.

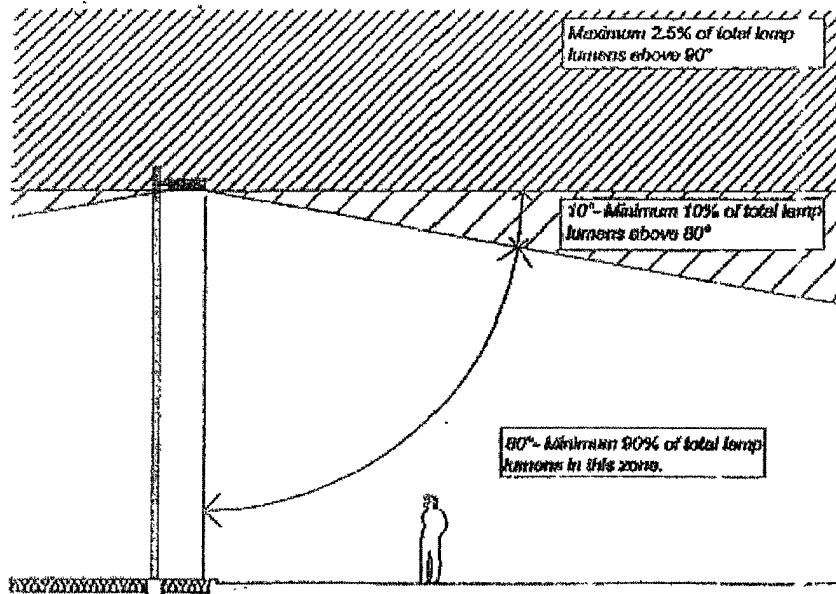
- (a) *Intent. This section intends to regulate outdoor lighting in order to: establish appropriate minimum levels of illumination, prevent unnecessary glare, and reduce both spill-over onto adjacent properties and unnecessary transmission of light into the night sky. It is not intended to eliminate the need for an applicant to seek professional assistance to determine appropriate lighting for the use and design proposed.*
- (b) *Approved Lighting Plan. Whenever the installation or modification of outdoor lighting is proposed or, for a commercial, industrial, multi-family or special use of a site plan approval, the enforcing officer shall review and approve all proposed lighting as part of the approval process. These standards shall also apply to modifications to existing lighting fixtures, whether or not site plan approval is required.*
- (1) *A lighting plan submitted for review shall contain the following:*
- A. *A site plan showing the location of all existing and proposed buildings, landscaping, streets, drives, parking areas and exterior lighting fixtures;*
 - B. *Specifications for all proposed and existing lighting fixtures. These include: photometric data, fixture height, mounting and design, glare control devices, type and color rendition of lamps, and hours of operation. A photometric plan illustrating the levels of illumination at ground level shall account for all light sources that impact the subject site, including spill-over illumination from neighboring properties; and*
 - C. *Relevant building elevation drawings showing all fixtures, the portions of the walls to be illuminated, illuminance levels of walls and the aiming of points of any remote fixtures.*
- (2) *A proposed lighting plan shall be reviewed based upon the following considerations:*
- A. *Whether the lighting is designed to minimize glare;*
 - B. *Whether light will be directed beyond the boundaries of the area to be illuminated or onto adjacent properties or streets;*
 - C. *Whether the lighting will cause negative impacts on residential districts and uses;*

- D. *Whether the plan will achieve appropriate levels of illumination for the use proposed;*
- E. *Whether the lighting is in harmony with the character of the surrounding area and the illumination levels of neighboring properties; and*
- F. *Whether the lighting is in keeping with the city's goal of prohibiting unnecessary illumination of the night sky.*
- (c) *Required Conditions. When site plan or zoning permit approval is required for the installation or modification of exterior lighting, the following conditions shall apply:*
- (1) *Light fixtures shall not be mounted in excess of the maximum height limitation of the district in which they are located. Those maximum heights are listed below:*

| | | |
|---|---------------------------|--|
| • | B-1, B-2, B-3, and EP | 25' maximum mounting height |
| • | O-1 | 20' maximum mounting height |
| • | I-1 and I-2 | 35' maximum mounting height |
| • | Planned Unit Developments | Established by the City at the detailed plan approval stage (if not addressed, maximum mounting height shall be 25') |

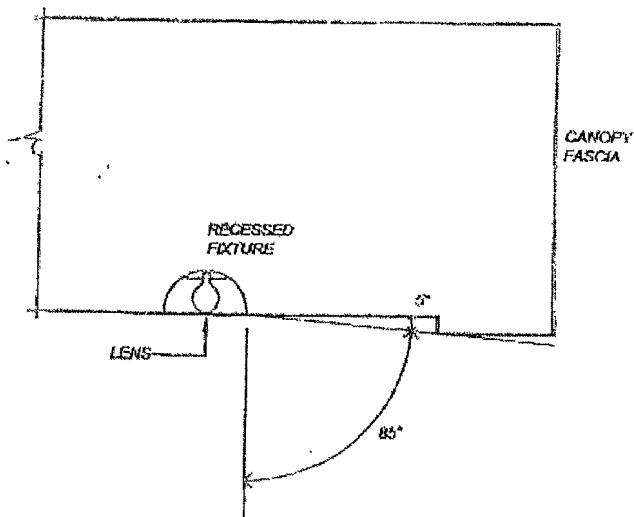
Electrical service to light fixtures shall be placed underground.

- (3) *No flashing lights or intermittent illumination shall be permitted.*
- (4) *Glare control shall be accomplished primarily through the proper selection and application of lighting equipment. Only after those means have been exhausted shall landscaping, fencing and similar screening methods be considered acceptable means for reducing glare.*
- (5) *Outdoor lighting shall be designed to achieve uniform illumination levels. The ratio of the average light level of the surface being lit to the lowest light level of the surface being lit, measured in foot-candles, shall not exceed 4:1. One foot-candle is equal to the amount of light generated by one candle shining on a square foot surface one foot away. The average illumination is determined by: adding the foot-candle value of all the points in the photometric grid, and dividing the sum by the total number of points.*
- (6) *The use of true color rendering lamps, such as metal halide, is required instead of the utilization of high and low pressure sodium lamps.*
- (7) *Only necessary lighting for security purposes and limited operations shall be permitted after a site's hours of operation.*
- (8) *Lighting for security purposes shall be directed only onto the area to be secured.*
- A. *All fixtures shall be located, shielded and aimed so that light is not cast toward adjacent properties or streets or unnecessarily transmitted into the night sky.*
- B. *Fixtures mounted on the building and designed to illuminate the facade are preferred.*
- (9) *Parking lot lighting shall be designed to provide the minimum illumination necessary to ensure adequate vision and comfort in parking areas. Full cut-off fixtures shall be used to prevent glare and direct illumination away from adjacent properties and streets. Designs that result in even levels of illumination across a parking area are preferred*



Cut-off fixture as defined by IESNA.

- (10) The illumination of gasoline service stations and convenience stores shall be the minimum level necessary to facilitate such uses. Unnecessary lighting for the purposes of attraction and advertising shall not be permitted.
- A. Areas away from gasoline pump islands that are used for parking and vehicle storage shall be illuminated in accordance with the parking area requirements of subsection (9) above.
 - B. Light fixtures mounted on canopies shall be recessed or flush with the bottom of the canopy. Where a drop-down fixture is used, the lens shall be flush with (i.e., no more than one inch beyond) the casing so that light is directed down and not sideways. All canopy lighting shall be shielded to provide a cut-off angle of 85 degrees. Fixtures shall not be mounted on the top or sides of canopies.



This illustration provides an example of a fixture with an 85-degree cut-off. Other designs that achieve the same cut-off requirement are also acceptable.

Chapter 1182 Landscaping and Screening Standards

1182.01 General information.

- (a) *Applicability. All of the requirements of this chapter of the Zoning Code are applicable to all new developments located in all zoning districts except for those located in ER, R-1, R-2, R-3, R-4, R-4B, RMV, A, WO, and C districts. For new developments located in ER, R-1, R-2, R-3, R-4, R-4B, RMV, A, WO, and C districts, only the requirements listed in the schedule of required buffers, detailed in figure 4 in Section 1182.05, shall apply. Property owners are under a continuing obligation to ensure that their property is maintained in accordance with these requirements.*
- (b) *Application Process. For PUD applications and standard zoning permit applications certain landscape information must be provided.*
 - (1) *In a PUD application, proposals in the re-zoning and basic development plan stage need to illustrate conceptual buffering and screening requirements on the basic development plan.*
 - (2) *In a PUD application in the detailed development plan stage and final plat stage, a detailed landscape plan shall be submitted as outlined in 1182.02.*

Chapter 1185 Parking and Loading

1185.02 Off-street parking standards.

- (a) *General Standards. Off-street parking facilities shall be used solely for the parking of motor vehicles except as otherwise permitted in this chapter. Other approved accessory structures such as landscaping islands, light poles, shopping cart racks, and ATMs are considered as part of the off-street parking facilities. All motor vehicles shall be in operating condition by persons on the premises in connection with any use of the premises allowed by the Zoning Ordinance.*
- (b) *Parking of motor vehicles on a residentially zoned premises shall be on a continuous hard surface, as defined by the term "hard surface driveway" in Chapter 1123.*
- (c) *Garage sales may be conducted on off-street parking facilities located on a residentially zoned premises.*
- (d) *Festival and fund-raising activities sponsored by nonprofit organizations, as well as activities/events organized by government agencies, may be conducted on off-street parking facilities.*
- (e) *Planned unit developments may be approved to permit other uses of off-street parking facilities.*

1185.03 Size and design.

- (a) *Off-street parking spaces shall meet or exceed the minimum design standards for parking lot layouts as set forth in this chapter. The minimum size for an off-street parking space shall be 18 feet in length by ten feet wide.*
- (b) *Off-street parking requirements and limitations for semis are defined in HHCO Chapter 1193.*
- (c) *Minimum Design and Construction Standards.*

- (1) *Off-street parking may be open to the sky, or enclosed in a building or structure, either above or below ground. Off-street parking areas shall meet City and, as set forth by the City Engineer, Southwest Ohio Engineers Association (S.W.O.E.A) standards. Such standards shall include, but not be limited to, driveway widths, island design, curbs, barriers, grades, turning radii, vertical clearance, stacking, and waiting areas and drainage.*
- (2) *Nonresidential uses (including multi-family residential uses).*
 - A. *Each off-street parking space shall open directly into an aisle or driveway of adequate width and design for safe and efficient vehicular access to the parking space. No parking space shall open directly onto any public street.*
 - B. *An aisle or driveway shall not be used for parking of vehicles.*
 - C. *All off-street parking areas shall be graded and have a continuous hard surface of asphalt or concrete. When approved by the City Engineer the off-street parking areas for impound lots, junked vehicle yards, dormant semi-truck parking areas, and certain storage areas may be composed of granular aggregate and a double chip seal or a fabric type pavement with aggregate base and surface stabilization or a slurry seal pavement with aggregate base as shown on the attached sketches. A chip sealed lot or a slurry seal lot or a fabric type lot shall be resealed at a minimum of five-year intervals or as designated by the City Engineer.*

1185.06 Landscaping required.

All parking lots exceeding 20 parking spaces shall have interior landscaped areas in the overall design. This requirement shall be satisfied only by those landscaped areas encompassed by the perimeter of the parking lot. Required parking or paving setbacks, screening areas, or other landscaping required by this Zoning Ordinance shall not be utilized to meet any requirement of these landscaping provisions.

- (a) *Any parking lot having a capacity of at least 20 parking spaces shall be required to have not less than five percent of the interior of the parking lot landscaped.*
- (b) *The landscaped area shall include at least one tree (not less than one and three-fourths inch caliper, measured at chest height of a species approved by the City Engineer or his designee) for every 100 square yards of interior landscaped area, living plantings aesthetically located and maintained.*
- (c) *All landscaped areas shall be designed and located in a manner that clearly defines internal streets, traffic lanes and parking areas and to standards acceptable to the Department of Engineering, Zoning and Planning.*
 - (1) *Landscaped areas shall have a minimum width of five feet.*
 - (2) *A turning radius shall be constructed where a landscaped area defines an intersection of streets, traffic lanes or parking stalls.*
 - (3) *Concrete curbing shall be placed around the perimeter of all landscaped areas.*
 - (4) *Intersection sign distance shall be maintained at all entrance and exit points to a public street and all internal intersections of streets and traffic lanes.*

1185.12 Computation.

- (a) *Number of Spaces Rounded Up.* When determination of the number of off-street parking spaces required by this chapter results in a fraction that is less than a whole, such fraction shall be rounded up to a whole number and counted as one parking space.
- (c) *Number of Parking Spaces Required.*
 - (1) *Residential uses.*
 - A. *Single-family or two-family residential with a date of final plat approval after the 31st day of December, 1990: three spaces per dwelling unit.*
 - B. *Planned Unit Development (PUD) with a date of detailed development plan approval 31st day of December, 1990: three spaces per dwelling unit.*
 - C. *Multi-family residential: two spaces per dwelling unit.*

Standards for Approval

1171.06 – General Standards For Approval

The Planning Commission shall review the application, prepared development plan and the facts presented at the hearing. The applicant shall have the burden of proof. No approval shall be given unless the Commission shall find by a preponderance of the evidence that such PUD on the proposed locations:

- (a) *Is consistent with official thoroughfare plan, comprehensive development plan and other applicable plans and policies;*
- (b) *Could be substantially completed within the period of time specified in the schedule of development submitted by the developer;*
- (c) *Is accessible from public roads that are adequate to carry the traffic that shall be imposed upon them by the proposed development. Further, the streets and driveways on the site of the proposed development shall be adequate to serve the residents or occupants of the proposed development;*
- (d) *Shall not impose an undue burden on public services such as utilities, fire and police protection, and schools;*
- (e) *Contains such proposed covenants, easements and other provisions relating to the proposed development standards as may reasonably be required for the public health, safety and welfare;*
- (f) *Shall be landscaped or otherwise improved and the location and arrangement of structures, parking areas, walks, lighting and appurtenant facilities shall be compatible with the existing intended uses, and any part of a PUD not used for structures, parking and loading areas, or accessways;*
- (g) *Shall preserve natural features such as water courses, trees and rock outcrops, to the degree possible, so that they can enhance the overall design of the PUD;*
- (h) *Is designed to take advantage of the existing land contours in order to provide satisfactory road gradients and suitable building lots and to facilitate the provision of proposed services;*
- (i) *Shall place underground all electric and telephone facilities, streetlight wiring and other wiring conduits and similar facilities in any development which is primarily designed for or occupied by dwellings, unless waived by the Commission because of technical reasons;*

- (j) Shall not create excessive additional requirements at public cost of public facilities and services and shall not be detrimental to the economic welfare of the community;*
- (k) Shall not involve uses, activities, processes, materials, equipment and conditions of operation that shall be detrimental to any persons, property or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare or odors; and*
- (l) Rezoning of the land to the PUD District and approval of the development plan shall not adversely affect the public peace, health, morals, safety or welfare.*

Staff Analysis

The analysis below is divided into two discussions: the rezoning analysis and the conformance with the zoning regulations.

Rezoning Analysis:

The applicant desires to rezone the property from PEP to PM for the purpose of constructing up to 320 residential units and commercial / retail uses. The nature of this area is evolving to a residential and entertainment district. This movement is being facilitated by market forces as well as large community investments such as the Rose, Warped Wing and TJ Chumps. This application is consistent with the evolving nature of the area and the residential component will accelerate the development of a district with a critical mass to sustain additional entertainment uses such as restaurants, taverns and breweries.

Conformance with Comprehensive Plan

The city's comprehensive plan indicates the site is located in a "Grow and Enhance" character area. Growth areas are those locations within the city where economic development and mixed uses should be encouraged, and low-density residential developments discouraged. These areas are the future economic and entertainment engines of the city.

Staff feels the rezoning from PEP to Planned Mixed Use is consistent with the comprehensive Plan. Additionally, this development provides a high-density residential product (14.6 units/acre) which will help add to the critical mass needed to support the commercial and retail components of the entertainment district.

Conformance with Zoning Regulations:

The development standards proposed by the applicant are nearly identical with the development requirements found in the Planned Mixed-Use District and the overall zoning code. Only areas of deviation are discussed in this analysis:

1179 (PM) Planned Mixed Use

Uses: The proposed uses are more restrictive than those outlined in the zoning code, such as the prohibition of fueling stations. Staff worked with the applicant to construct

the list of permitted and prohibited uses. This use list is designed to enhance the residential and entertainment district and limit or prohibit uses that may detract from the long-term success of the area.

Site Planning: The development standards allow for buildings to be spaced at a distance of no less than 6-feet between each other. The zoning code suggests spacing of 15-feet. Staff is comfortable with the 6-foot minimum spacing. This spacing meets fire code requirements. Additionally, this is a challenging site due to the bisecting stream which significantly restricts building placement.

Chapter 1181 General Provisions

The proposed development standards meet most of the General Provision requirements. However, since this is a Basic Development Plan, there is not enough detail required to fully evaluate the consistency. This will be reviewed with the Detailed Development Plan submission.

Chapter 1182 Landscaping and Screening Standards

The Basic Development Plan and proposed development plan are largely consistent with the landscaping and screening requirements. One area of divergence is the buffering between the development and the residential district to the north. The zoning code requires a 25-foot buffer strip with 6-foot high screening (mound, fence, landscaping, etc.) with 80% opacity.

The applicant is proposing a 25-foot building setback, which is consistent with the code. They are also proposing to use a mixture of landscaping and the garage buildings to provide the necessary opacity to reduce headlight trespass from impacting the north residents.

The site currently has natural vegetation along the rear property line that is approximately 25-feet wide. If the required grading can avoid removing significant existing trees, then staff is comfortable with this buffering plan. At this point in the development process, the final grading plans are still being developed and the impact to the existing treeline will not be known until the detailed development plan submission.

Chapter 1185 Parking and Loading

The applicant is proposing residential parking stalls dimensions of 9' x 18'. The zoning code requires 10' x 18'. The applicant is proposing 663 spaces, 640 are required. Staff supports this deviation in parking stall size due to the site constraints. Constructing 10' x 18' stalls will reduce the number of parking spaces by approximately 60 spaces.

Additional Comments:

Fire: See Attached.

City Engineer: The engineer had no comments at this point in the review process.

Recommendation

Staff is fully supportive of the rezoning and the development standards being proposed in the Basic Development Plan. The standards and site plan proposed by the applicant are consistent with the zoning code and comprehensive plan.

This development will provide needed housing products in Huber Heights and help develop the critical mass necessary to support the entertainment area.

Staff recommends the following conditions:

1. The Basic Development Plan and Zoning Regulations shall be those submitted with the application dated January 30, 2023.
2. The northern property buffering requirements shall be determined during the detailed development plan review.

Planning Commission Action

Planning Commission may take the following actions with a motion to:

- 1) Approve the rezoning and basic development plan application, with or without conditions.
- 2) Deny the basic development plan.
- 3) Table the application in order to gather additional information.



Planning Commission Decision Record

WHEREAS, on January 30, 2023, the applicant, Metropolitan Holdings, LTD, requested approval of a Rezoning to PM (Planned Mixed Use) and a Basic Development Plan of a proposed new 320 unit multi-family project. Property is located at 6801 Executive Boulevard, further identified as Parcel Numbers P70 01820 0003 and P70 01820 0004 of the Montgomery County Auditor's Map (Case BDP 23-02), and;

WHEREAS, on February 14, 2023, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby recommended approval of the request.

Ms. Thomas moved to approve the request by the applicant, Metropolitan Holdings, LTD, for approval of a Rezoning to PM (Planned Mixed Use) and a Basic Development Plan of a proposed new 320 unit multi-family project. Property is located on 6801 Executive Boulevard (Case BDP 23-02), in accordance with the recommendation of Staff's Memorandum dated February 9, 2023, with the following conditions:

1. The Basic Development and Zoning Regulations shall be those submitted with the application dated January 30, 2023.
2. The northern property buffering requirements shall be determined during the detailed development plan review.

Seconded by Mr. Jeffries. Roll call showed: YEAS: Ms. Vargo, Ms. Jeffries, Ms. Thomas, and Mr. Walton. NAYS: Mr. Cassity. Motion to recommend approval carried 4-1.

Terry Walton, Chair
Planning Commission

Date

**Planning Commission
February 14, 2023, Meeting
City of Huber Heights**

I. Chair Terry Walton called the meeting to order at approximately 6:00 p.m.

II. **Oath of Office, Mr. David Cassity**

III. Present at the meeting: Mr. Cassity, Mr. Jeffries, Ms. Thomas, Ms. Vargo, and Mr. Walton.

Members absent: None.

Staff Present: Aaron K. Sorrell, Interim City Planner, and Geri Hoskins, Planning & Zoning Administrative Secretary.

IV. **Opening Remarks by the Chairman and Commissioners**

V. **Citizens Comments**

None.

VI. **Swearing of Witnesses**

Mr. Walton explained the proceedings of tonight's meeting and administered the sworn oath to all persons wishing to speak or give testimony regarding items on the agenda. All persons present responded in the affirmative.

VII. **Pending Business**

None.

VIII. **New Business**

1. **REZONING AND BASIC DEVELOPMENT PLAN - The applicant, METROPOLITAN HOLDINGS, LTD, is requesting approval of a Rezoning to PM (Planned Mixed Use) and a Basic Development Plan of a proposed new 320 unit multi-family project. Property is located at 6801 Executive Boulevard (BDP 23-02).**

Mr. Sorrell stated the applicant requests a rezoning of 25.3 acres to Planned Mixed Use and approval of a Basic Development Plan to facilitate the construction of up to 320 residential units (1- and 2-bedroom apartments) on approximately 21.3 acres and approximately 4 acres for commercial / retail uses.

The applicant recently completed the Parkview Apartments near Executive Blvd. and Brandt Pike. That project has been extremely successful and the applicant has been in discussions with the city for quite some time regarding this development, and the city's desire to see additional housing units support the burgeoning entertainment district anchored by the Rose Music Center.

Other entertainment uses include TJ Chumps and Warped Wing, which is under construction. The current Community Entertainment District boundary does not include this site, but may be extended in the near future to capture this proposed commercial area, as well as Warped Wing to the west.

Site Characteristics

The overall site is bisected by a natural stream (non-delineated) which effectively creates two residential sites above and below the stream, and one commercial area above the stream. The developer has chosen to maintain the stream as a natural amenity and develop the area with a 70-foot stream protection buffer, typical best practice developments along waterways. Staff is very supportive of maintaining the natural stream feature.

The site has access to all utilities along Executive Blvd.

Applicable Zoning Regulations

This application is the first step in the development process and the Basic Development Plan sets the following parameters:

- Allowable Uses
- Site Density
- Development parameters (general layout, setbacks, height, massing)
- Pedestrian and vehicular connections

The applicant is proposing a comprehensive set of development standards. The staff analysis focuses on the conformity of the proposed development regulations to those found within the zoning code. Since this is a Basic Development Plan, not all development information is required, such as detailed lighting and landscaping plans.

The applicable zoning chapters include: 1171 General Provisions, 1179 Planned Mixed Use, and 1181 General Provisions.

Staff Analysis

The analysis below is divided into two discussions: the rezoning analysis and the conformance with the zoning regulations.

Rezoning Analysis:

The applicant desires to rezone the property from PEP to PM for the purpose of constructing up to 320 residential units and commercial / retail uses. The nature of this area is evolving to a residential and entertainment district. This movement is being facilitated by market forces as well as large community investments such as the Rose, Warped Wing and TJ Chumps. This application is consistent with the evolving nature of the area and the residential component will accelerate the development of a district with a critical mass to sustain additional entertainment uses such as restaurants, taverns and breweries.

Conformance with Comprehensive Plan

The city's comprehensive plan indicates the site is located in a "Grow and Enhance" character area. Growth areas are those locations within the city where economic development and mixed uses should be encouraged, and low-

density residential developments discouraged. These areas are the future economic and entertainment engines of the city.

Staff feels the rezoning from PEP to Planned Mixed Use is consistent with the comprehensive Plan. Additionally, this development provides a high-density residential product (14.6 units/acre) which will help add to the critical mass needed to support the commercial and retail components of the entertainment district.

Conformance with Zoning Regulations:

The development standards proposed by the applicant are nearly identical with the development requirements found in the Planned Mixed-Use District and the overall zoning code. Only areas of deviation are discussed in this analysis:

1179 (PM) Planned Mixed Use

Uses: The proposed uses are more restrictive than those outlined in the zoning code, such as the prohibition of fueling stations. Staff worked with the applicant to construct the list of permitted and prohibited uses. This use list is designed to enhance the residential and entertainment district and limit or prohibit uses that may detract from the long-term success of the area.

Site Planning: The development standards allow for buildings to be spaced at a distance of no less than 6-feet between each other. The zoning code suggests spacing of 15-feet. Staff is comfortable with the 6-feet minimum spacing. This spacing meets fire code requirements. Additionally, this is a challenging site due to the bisecting stream which significantly restricts building placement.

Chapter 1181 General Provisions

The proposed development standards meet most of the General Provision requirements. However, since this is a Basic Development Plan, there is not enough detail required to fully evaluate the consistency. This will be reviewed with the Detailed Development Plan submission.

Chapter 1182 Landscaping and Screening Standards

The Basic Development Plan and proposed development plan are largely consistent with the landscaping and screening requirements. One area of divergence is the buffering between the development and the residential district to the north. The zoning code requires a 25-foot buffer strip with 6-foot high screening (mound, fence, landscaping, etc.) with 80% opacity.

The applicant is proposing a 25-foot building setback, which is consistent with the code. They are also proposing to use a mixture of landscaping and the garage buildings to provide the necessary opacity to reduce headlight trespass from impacting the north residents.

The site currently has natural vegetation along the rear property line that is approximately 25-feet wide. If the required grading can avoid removing significant existing trees, then staff is comfortable with this buffering plan. At this point in the development process, the final grading plans are still being developed and the impact to the existing treeline will not be known until the detailed development plan submission.

Chapter 1185 Parking and Loading

The applicant is proposing residential parking stalls dimensions of 9' x 18'. The zoning code requires 10' x 18'. The applicant is proposing 663 spaces, 640 are required. Staff supports this deviation in parking stall size due to the site constraints. Constructing 10' x 18' stalls will reduce the number of parking spaces by approximately 60 spaces.

Additional Comments:

Fire: See Attached.

City Engineer: The engineer had no comments at this point in the review process.

Ms. Vargo asked about the stream crossing

Mr. Cassity asked about current zoning PEP

Mr. Jeffries asked about parking space calculations, masonry being only 15%

Ms. Vargo asked about ROW, deceleration lanes, 2 way left turn lane, how to override the traffic study, parking space size, masonry front facing buildings

Ms. Thomas commented on entrances and exits and increased traffic

Mr. Cassity commented on actual speed taken into consideration and front elevations

Ms. Vargo asked about curb cut

Mr. Jeffries asked if parking count included garages

Jamie Oberschlake from MHL stated they are familiar with Huber Heights, Parkview has 9 x 18 parking spaces, masonry will be more than Parkview.

Todd Foley from POD Design said there would be a buffer and frontage, buildings are over 100 ft. from property line. There is a gas and water line, Commercial component, amenities similar to Parkview.

Mr. Jeffries asked about 11 ft. ROW set back

Joe McCabe from MHL stated they want to protect the site, comprise with traffic, renters by choice, landscape buffer along Northern side, only 3 story

Mr. Sorrell said enough ROW to add extra lane on South side of Executive, full lane widening

Mr. Vargo asked if any trees in neighbors yards, is the stream significant, walking paths, elevators

Mr. Cassity asked about noise impact

Residents that spoke

Andrew Waldman spoke to history of noise, turnover in homes, curtains at the Rose are not used, Zoning code.

Karla Riste said current residency needs taken into account, demographics, no children, no disabilities, and no minorities . ADA compliance and bus routes, high quality, class a people

Ms. Vargo stated that everyone on the Commission lives here also.

Patricia Ayer how far from garage to property line, huge trees and fencing, access to my backyard, noise from Rose, water pressure

Jim Norgrove spoke about privacy and security, leave the trees alone and cameras

Michael Mcleod spoke on sound and noise, restricted income, water drainage, traffic study, entertainment district, trees, additional water sources, mosquito maintenance, internet

Jeff Morford against more building, traffic, retention ponds not water features, Miami County annexation.

MHL said no cameras ever into other properties, no security concerns at Parkview, 7 day management, income levels to qualify, fair housing laws, ADA compliant is Federal law, aerators or fountains, working with Metroparks

Action

Ms. Thomas moved to approve the request by the applicant, METROPOLITAN HOLDINGS, LTD, is requesting approval of a Rezoning to PM (Planned Mixed Use) and a Basic Development Plan of a proposed new 320 unit multi-family project. Property is located at 6801 Executive Boulevard (BDP 23-02).

Seconded by Mr. Jeffries. Roll call showed: YEAS: Ms. Vargo, Mr. Jeffries, Ms. Thomas, and Mr. Walton. NAYS: Mr. Cassity. Motion to approve carried 4-1.

IX. Additional Business

None

X. Approval of the Minutes

Without objection, the minutes of the January 10, 2023, Planning Commission meeting are approved.

XI. Reports and Calendar Review

Mr. Sorrell stated the next meeting he will present the Comprehensive Plan for approval.

XII. Upcoming Meetings

February 28, 2023

March 14, 2023

XIII. Adjournment

There being no further business to come before the Commission, the meeting was adjourned at approximately 8:44 p.m.

Terry Walton, Chair

Date

Geri Hoskins, Administrative Secretary

Date

CITY OF HUBER HEIGHTS
STATE OF OHIO

ORDINANCE NO. 2023-O-

TO APPROVE A REZONING TO PLANNED MIXED USE (PM) AND A BASIC DEVELOPMENT PLAN FOR THE PROPERTY LOCATED AT 6801 EXECUTIVE BOULEVARD AND FURTHER IDENTIFIED AS PARCEL NUMBERS P70 01820 0003 AND P70 01820 0004 ON THE MONTGOMERY COUNTY AUDITOR'S MAP AND TO ACCEPT THE RECOMMENDATION OF THE PLANNING COMMISSION (CASE BDP 23-02).

WHEREAS, the citizens of Huber Heights require the efficient and orderly planning of land uses within the City; and

WHEREAS, the City Planning Commission has reviewed Case BDP 23-02 and on February 14, 2023, recommended approval by a vote of 4-1 of the Rezoning to Planned Mixed Use (PM) and the Basic Development Plan; and

WHEREAS, the City Council has considered the issue.

NOW, THEREFORE, BE IT ORDAINED by the City Council of Huber Heights, Ohio that:

Section 1. The application requesting approval of a Rezoning to Planned Mixed Use (PM) and the Basic Development Plan (Case BDP 23-02) is hereby approved in accordance with the Planning Commission's recommendation and following conditions:

1. The Basic Development and Zoning Regulations shall be those submitted with the application dated January 30, 2023.
2. The northern property buffering requirements shall be determined during the Detailed Development Plan review.
3. Prior to the issuance of a zoning permit, the applicant shall enter into a PUD Agreement with the City for the purpose, but not the sole purpose, of establishing the development obligations of the applicant and requiring the submittal of a performance bond, cash bond, or letter of credit to insure the installation of landscaping as approved. The bond or letter of credit shall be in an amount equal to the applicant's estimate of the cost of installation as approved by the Planning Department and shall remain in effect until such time as the landscaping has been completed as determined by the Planning Department. Upon completion of the installation of landscaping as required by the approved landscape plan, the applicant may request release of the performance bond or letter of credit. Following an inspection by the Planning Department and upon determination by the department that the landscaping has been completed in accordance with the approved landscaping plan, 80 percent of the performance bond or letter of credit may be released. However, the performance bond or letter of credit will not be released until a maintenance bond lasting three growing seasons, or letter of credit equal to 2 percent of the initial performance bond or letter of credit to ensure maintenance of the landscaping, is submitted to and accepted by the Planning Department. The term of the maintenance bond shall be three growing seasons.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Ordinance shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9050

Topics of Discussion 0.

Council Work Session

Meeting Date: 03/27/2023

Case ZC 23-06 - 2023 Comprehensive Plan

Submitted By: Geri Hoskins

Department: Planning

Division: Planning

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: SmartBoard

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Case ZC 23-06 - 2023 Comprehensive Plan

Purpose and Background

The applicant, the City of Huber Heights, is requesting approval and adoption of the 2023 Comprehensive Plan.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Comprehensive Plan - Draft

Staff Report

Decision Record

Minutes

Resolution

HUBER HEIGHTS



COMPREHENSIVE PLAN [DRAFT]

06 MARCH 2023

YARD & COMPANY

ACKNOWLEDGMENTS

MAYOR

Jeff Gore

CITY MANAGER

Bryan Chodkowski

CITY STAFF

Sarah Williams, Project Manager

Aaron Sorrell, City Planner

Geri Hoskins, Administrative Assistant

Josh King, Parks Manager

Russell Bergman, City Engineer

STEERING COMMITTEE

Nancy Byrge, City Council

Anita Kitchen, City Council

Scott Davidson, Resident

Ron Deak, Resident

Jeffrey Held, Resident

Mia Honaker, Resident

Herman Karhoff, Resident

Estephon Ramirez, Resident

Matthew Shomper, Resident

Jen Sirucek, Resident

Steve Zbinden, Resident

PLANNING COMMISSION

Terry Walton, Chair

Jan Vargo, Vice Chair

James Jeffries

Cheryl Thomas

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OUR PLAN

The Huber Heights 2023 Comprehensive Plan aims to build a movement and coalition around a smart strategy for the future of Huber Heights. It will guide the City's growth and decision-making around mobility, public spaces, land development, and resilience for the next 10 years. The Plan's recommendations draw conclusions from an eight-month planning process involving robust data collection, stakeholder and public engagement, and testing of ideas.

LET'S GROW TOGETHER

In the spring of 2022, the City of Huber Heights initiated the update to its ten-year Comprehensive Plan. Riding a wave of accelerating growth, numerous significant public investments, the universal adoption of the Internet, and a pandemic, this Plan not only modernizes and refocuses the City, but seeks to position itself for positive and inclusive growth over the next decade.

The Plan is built on robust engagement and benchmarking against local and national market trends. It blends local expertise and data-driven findings to establish key areas of focus around mobility, land use, and implementation steps. Mobility investments center around local walkability and regional connectivity centered around a 14.5-mile Loop and a modernized Street Network Map. The Development Patterns outline a transition from thinking of the City in terms of separated, one-size-fits-all land uses to a more nuanced blend of character, scale, placemaking, and investment priorities in addition to a broader blend of housing types and uses. At the heart of it all is a strategy to reinvest in our existing communities and talent as a foundation for attracting new growth and investment.

Each section of the Plan outlines the basis for planning, key elements of the comprehensive vision, and a series of specific implementation steps to be pursued by the City and its partners. The last section of the Plan is a detailed Implementation Matrix that outlines each initiative's role in accomplishing the Plan's goals by the year 2035. After eight months of robust community conversations and planning, the Comprehensive Plan was adopted on DD MMMM 2023.

GOALS

- » Lower household annual transportation cost
- » Support multi-modal access
- » Better distribute traffic by mode, route, and time of day
- » Set a new standard for multi-modal infrastructure
- » Encourage human-centered innovation
- » Focus growth in clusters
- » Allow people to live closer to jobs and amenities
- » Encourage walkable density
- » Expand housing options
- » Focus on talent attraction/retention



S'mores bar at the "Ignite the Heights" event



HOW WE GOT HERE

The planning process meets Huber Heights at a unique time in its evolution as a growing city that is actively transitioning from a suburban bedroom community to a diverse mix of people, lifestyle demands, market forces, and physical environments. Just as the oldest sections of town are reaching the need for capital investments in infrastructure and a revitalized community energy, newer sections of town are emerging that will further broaden the appeal and strength of Huber Heights. As the physical form of the City transitions, challenges will arise that require new solutions, as will the services that need to be provided.”

Designing an effective planning process requires three primary tasks. The first is creating an identity for the planning process itself. Planning is about creating not just a document, but a broad-based movement oriented to the future. Like all effective movements or campaigns, a strong, consistent visual identity is essential. The second piece is wide-spread engagement that meets people on their own terms. This includes creating an immersive, multi-channel Engagement Plan for on and offline audiences to take part in the conversation. The last element is physical and data-driven analysis, where a variety of forces and trends exerting influence on the community are audited. Taken together, this work frames a conversation, led by staff and guided by the Steering Committee, about charting the City’s course for the next ten years.

WE'VE BEEN BUSY

Over the last decade, the City of Huber Heights has firmly established itself as a great place to live, work and play. The new era of development is focused on high quality of life, exemplified by projects like The Heights district (home to the Rose Music Center), Kroger Aquatic Center, Farmer's Market, YMCA, Eichelberger Amphitheater, Sinclair Community College, and Parkview Apartments.

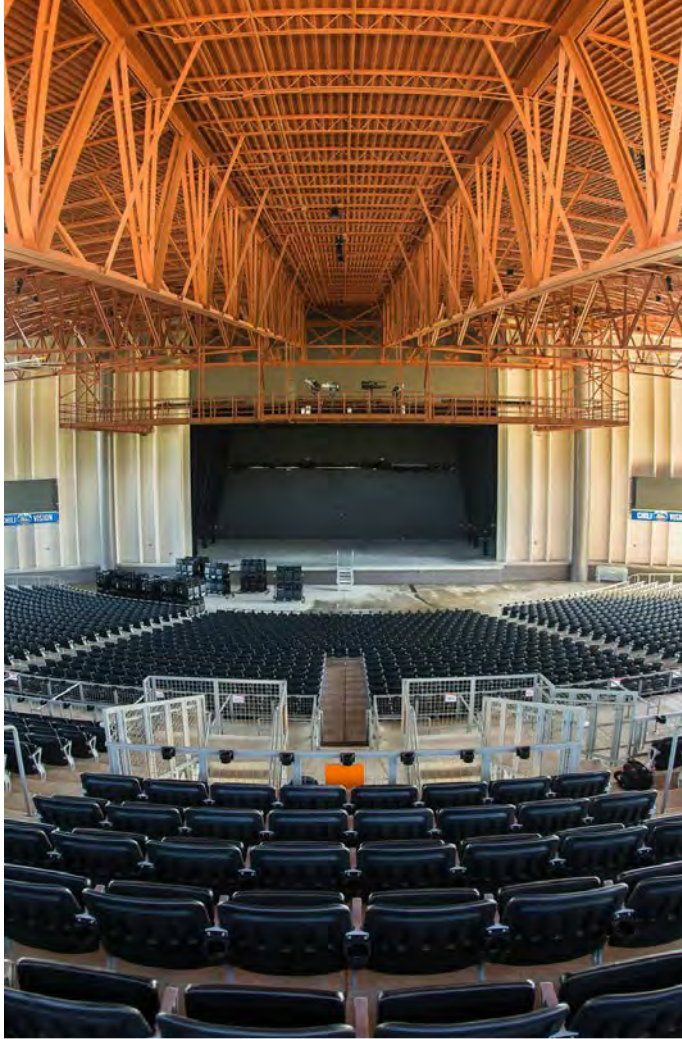
The new amenities have made further development more attractive, as shown by the swaths of new housing being built along Huber's Carriage Trails. All of this new development in Huber's northern area also benefits from being sandwiched between two major MetroParks: Taylorsville to the west and Carriage Hill to the east.

Additional projects that are improving quality of life across the City include the new Huber Heights branch of the Dayton Metro Library, the new Wayne High School building complex, the Monita Field Bike and Skate Park, Kitty Hawk Dog Park, and revitalization plans for commercial land along Brandt Pike.

TOP THREE IMPACTS ON OUR COMMUNITY OVER THE PAST 10 YEARS

1. Use of the Internet
2. The need to 'age in place'
3. Change in working conditions due to the COVID-19 pandemic (ex: remote and hybrid work options)

Based on community survey response.



Rose Music Center at The Heights



YMCA & Sinclair Community College



Wayne High School (new complex)



Monita Field Bike & Skate Park



Farmer's Market at The Heights



Kroger Aquatic Center at The Heights

HOW WE'VE CHANGED

Understanding changes that are occurring at the household level is one key component of a city's future planning. Based on U.S. Census data, households in Huber Heights are steadily increasing in median age, they are more multi-generational, their overall size is decreasing, and earnings have remained largely stagnant. These conditions impact the City's ability to provide services in several ways. It informs a growing need for residents to be able to comfortably age in place, which means access to healthcare, housing, and expanded options for getting around.

Diverse age groups are increasingly becoming more mixed, requiring a broader range of housing types to meet market demand and an increased variety of amenities able to be located closer to housing. Whereas detached homes have been able to be the predominant type of housing over the last several decades and continue to be built, new, and renovated for sale, and rental townhouses, apartments, condos, and other home configurations are being added to the mix.

Households are getting more complex...

They are getting older

37.6



2010 Median Age

40.3 +7.2%



2022 Median Age

Their earnings are stagnant

\$65,913



2010 Median Household Income
(in 2020 inflation-adjusted dollars)

\$66,134 +0.3%



2020 Median Household Income

They are getting more mixed

628



2010 # of Multi-generational Households

1,091 +73.7%



2020 # of Multi-generational Households

They are getting smaller

2.58



2010 Average Household Size

2.53 -1.9%



2020 Average Household Size

Sources: ESRI 2022 Community Profile based on 2020 and 2010 U.S. Census Bureau data and 2022 ESRI forecasts; 2016-2020 American Community Survey; 2010 U.S. Census; ESRI 2010 Census Profile

HOW WE'VE CHANGED

Most households spend a little over half of their income on housing and transportation costs. Investing in expanded housing and transportation options is a strategic way for a city to help manage the basic costs of living.

An improved transportation network can also influence a worker's willingness to return to office environments as preferences are often tied to their commute experience. Currently, the average travel time for a Huber Heights resident to get to work is 24 minutes.

Employment data shows that the daytime and nighttime populations of Huber Heights essentially flip between workers and residents daily. Among the 17,500 residents of Huber Heights in the workforce, only 11% of them work here, and the rest travel outside the City.

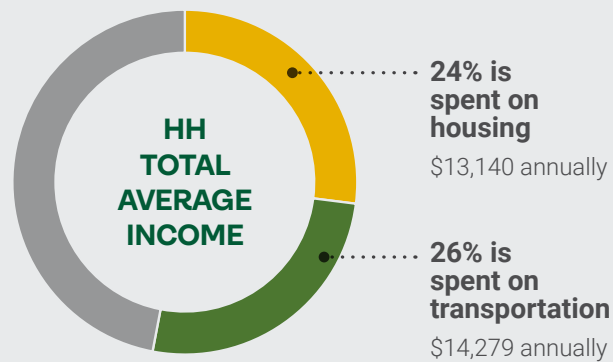
Among the 14,600 people that work in Huber Heights, 87% of them come from outside the City, mostly residing in suburban communities surrounding Dayton.

The majority of the 17,500 Huber Heights residents in the workforce commute to downtown Dayton or communities near Huber Heights.

- » 61% work white-collar jobs
- » 24% work blue-collar jobs
- » 15% are employed in the service industry

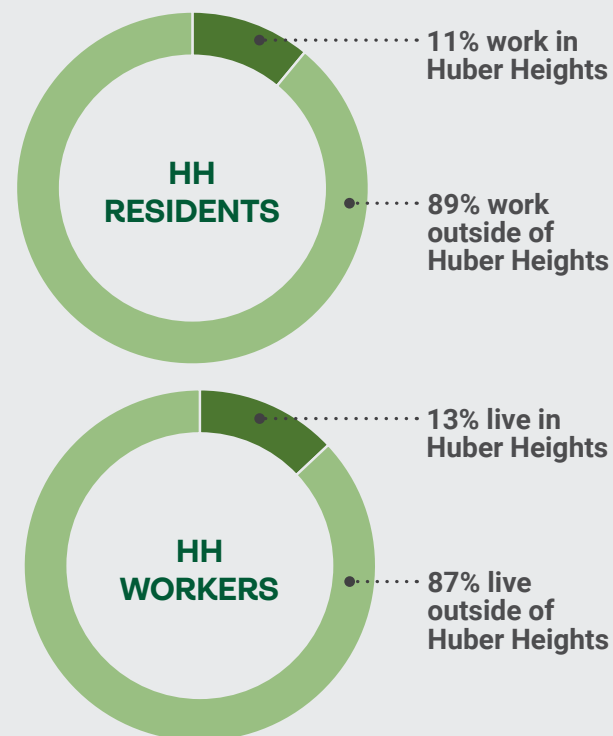
The more that Huber Heights can encourage residents to work within Huber Heights, and get more workers to reside here, the more financial and environmental benefits will be achieved for everyone.

Transportation costs are as much as housing costs...



While the average Huber Heights resident spends about the same share of their income on housing and transportation as similar municipalities in the region, Dayton residents pay a lower share. The average household in **Dayton** spends **18%** of their income on housing and **21%** on transportation.

As many people come to work in Huber Heights as leave...



Sources: H+T Affordability Index (htaindex.cnt.org); SB Friedman Development Advisors July 2022 Preliminary Industry Cluster Analysis using Longitudinal Employer-Household Dynamics and U.S. 2019 Census Bureau data

HOW WE'VE CHANGED

WHERE GROWTH IS TAKING PLACE

New development, mostly in the form of residential and commercial properties, is taking place across Huber Heights, predominately at the City's edges. New construction is mostly occurring in areas that have never been built on, either on vegetated/rural land or previous farm land, but in some cases is replacing vacant, outdated, low-quality structures.

Near the middle of the City, major redevelopment with new residential, commercial and civic spaces is planned along Brandt Pike, between Chambersburg and Fishburg roads, as described by the 2017 Brandt Pike Target Revitalization Plan and more recent development proposals. Open space along Bellefontaine Road and to the east is expected to see continued residential and light industrial development.

From an employment standpoint, an industry cluster analysis (full report provided in the Appendix) shows the three employment categories with the strongest presence in Huber Heights are:

- » Distribution and Electronic Commerce
- » Biosciences
- » IT and Data Management

Meanwhile, the top three growing industries located in Huber Heights are:

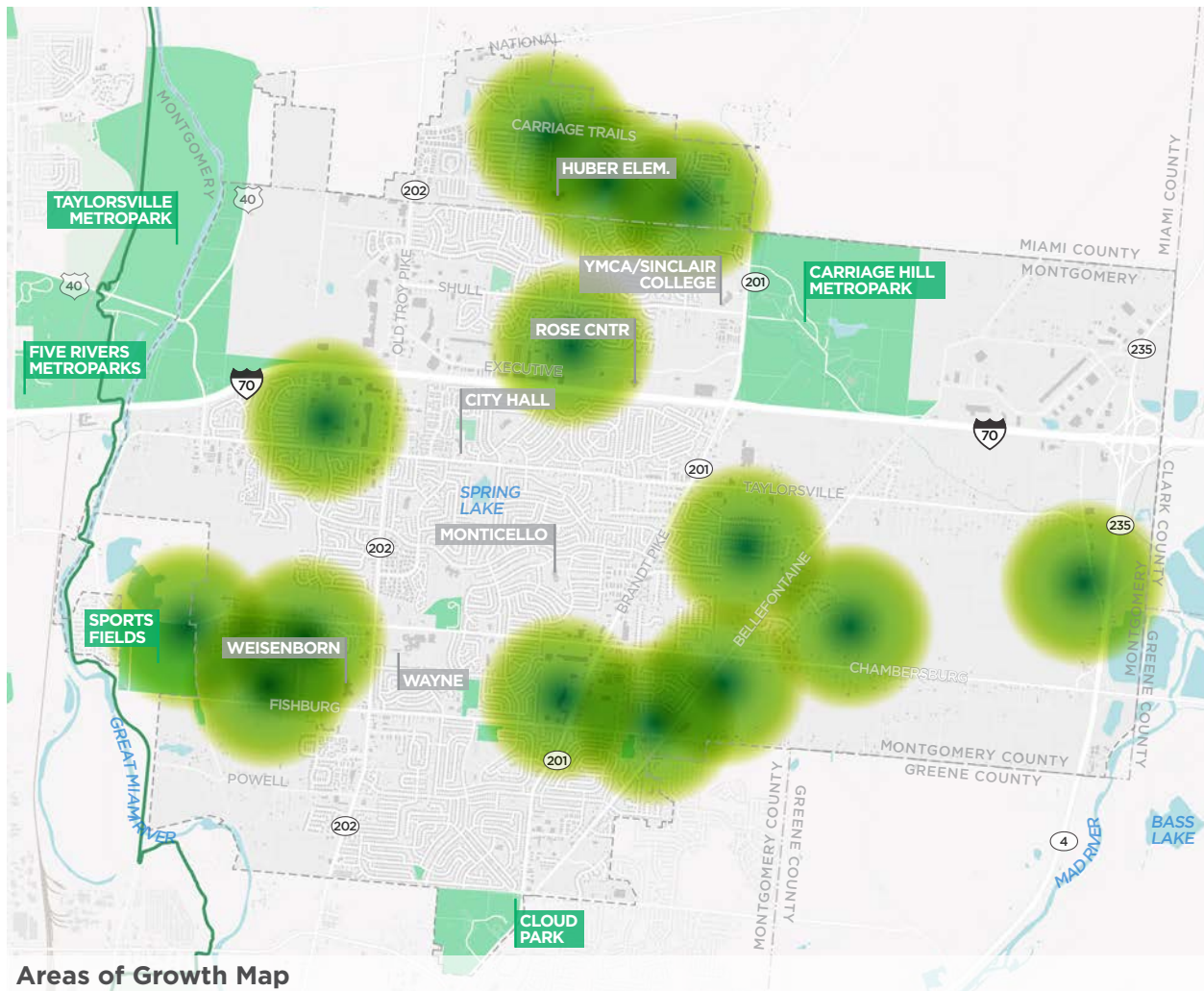
- » Federal Government
- » IT and Data Management
- » Distribution and Electronic Commerce

HUBER HEIGHT'S POPULATION GREW BY

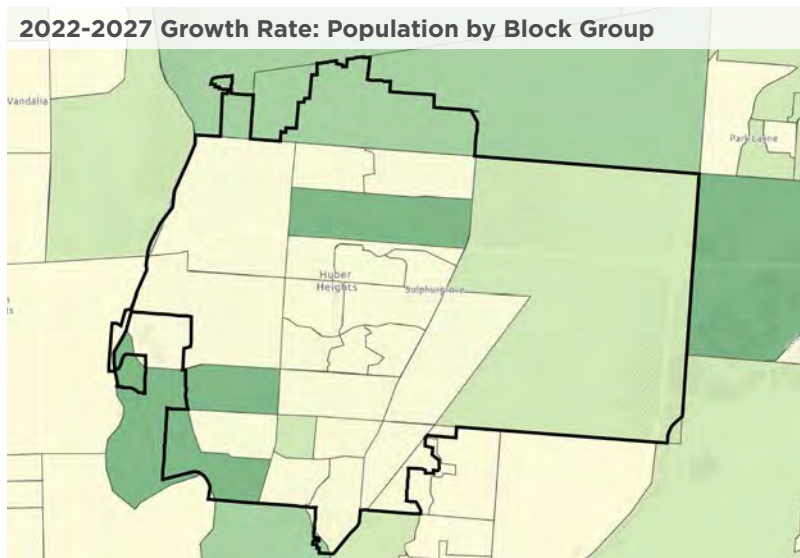
14%

FROM 2010 TO 2020.

US Census Bureau



Areas of growth identified by the Steering Committee



FUTURE GROWTH RATE

The fastest-growing areas of Huber Heights are expected to grow between 0.9% and 1.83% (shown in darker green). Areas in pale yellow are losing population at a rate between 0.26% and 0.66%.

- 0.9% to 1.83%
- 0.22% to 0.89%
- 0.25% to 0.21%
- 0.66% to -0.26%

Sources: Esri U.S. Updated Demographic (2022/2027) Data; U.S. Census 2020 geographies

CHARTING OUR COURSE

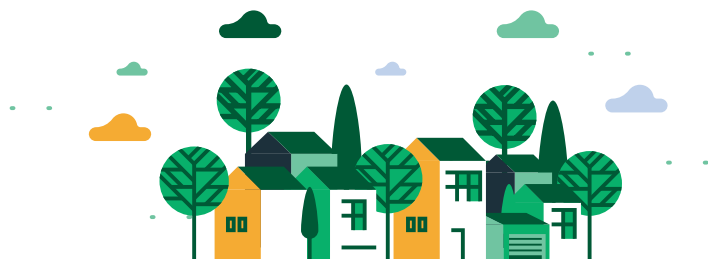
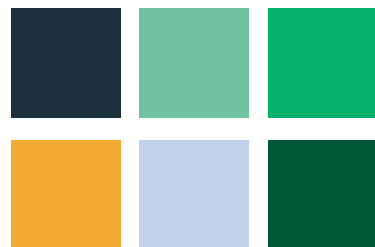
PROCESS AND BRAND

This 2023 Comprehensive Plan replaces the 2011 Comprehensive Plan. Designed as an eight-month planning process, the effort was divided into three core phases, each involving public engagement.

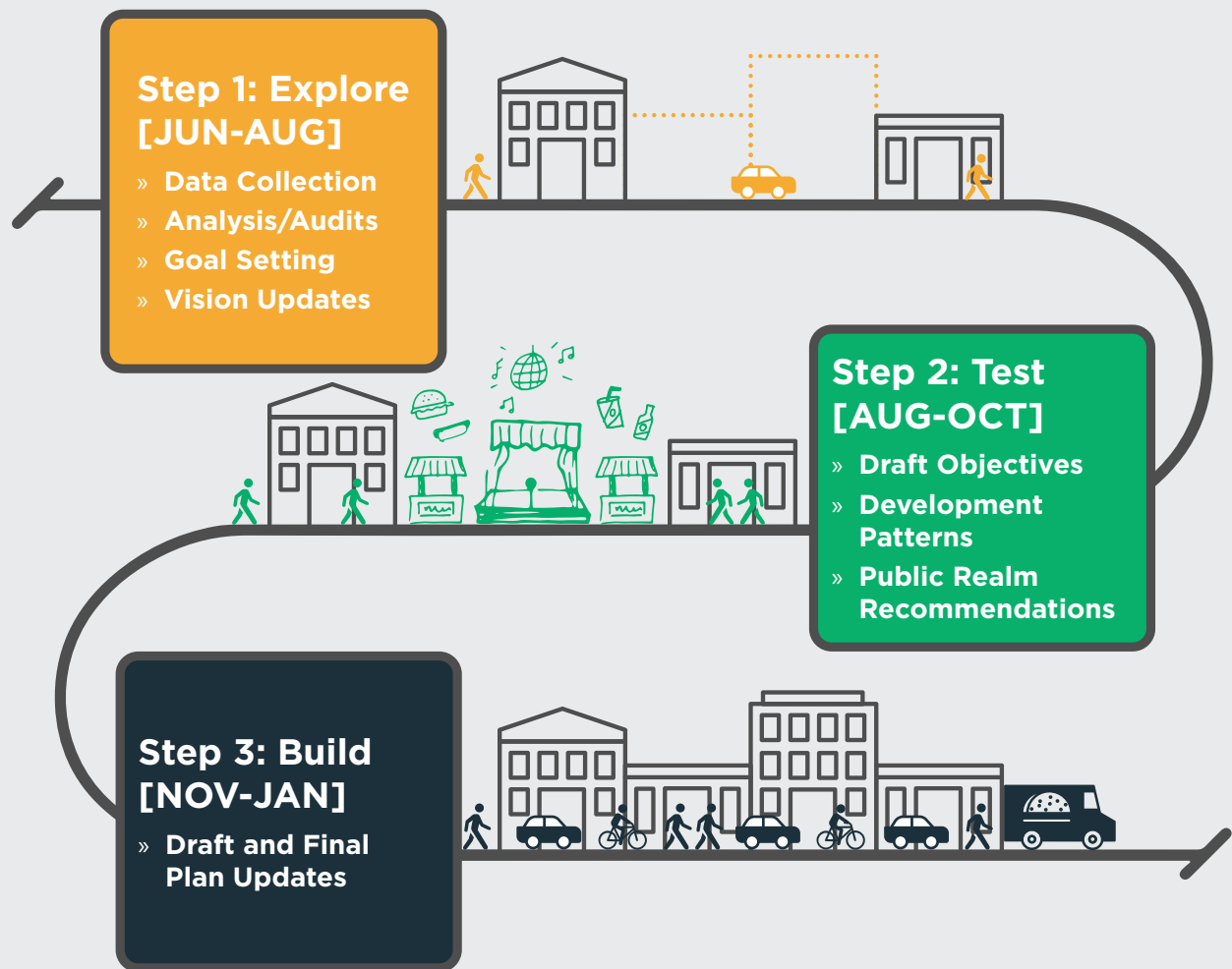
Step 1 focused on exploration where a large swath of information was gathered, analyzed, and used as a foundation for community discussions around goals, a long-term vision, and a shared identity for the future of Huber Heights.

Step 2 was a test of what was learned where stakeholders and the planning team co-created, reacted to, and refined draft objectives and recommendations for future growth. Branding for the Plan was also created and deployed to foster ongoing involvement in the work after the Plan is adopted.

Step 3 was the build-out effort of the Plan that produced a draft Plan that was presented to the community through an “Ignite the Heights” event. The final version of the Plan will be adopted in the Spring of 2023.



A Comprehensive Plan branding kit was created and used throughout the planning process.



PUBLIC ENGAGEMENT PROCESS

An Engagement Plan was devised to ensure a broad mix of audience types was reached. Those types of stakeholders included renters and owners, employees, regional economic development partners, visitors of Huber Heights, local businesses, and cultural groups, including English, Spanish, and Ahiska Turks. A mix of on- and offline engagement tools were utilized to help reach people based on their preferences.

Engagement tools included a project web page, digital and paper surveys, online and printed interactive maps, social media updates, newsletters, digital billboard advertisements, posters, postcards, flyers, and table toppers. Materials were distributed at community events and popular destinations. The public input evolved with the process, first focused on establishing a vision and later becoming more specific to desired strategies and tactics.

TACTICS EMPLOYED

- » Focus groups with local organizations and stakeholders
- » Pop-ups at popular destinations and community events
- » Project materials dropped off at restaurants and hang-out areas
- » Mapping exercise (online & in-person)
- » Surveys (online & in-person)

ENGAGEMENT REACH

- » 692 digital survey participants
- » 62 paper survey participants
- » 187 digital map participants
- » Over 200 barn event attendees



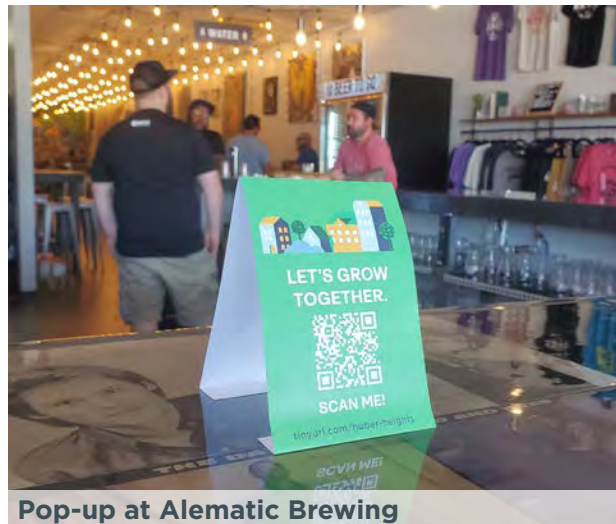
Pop-up at Alematic Brewing



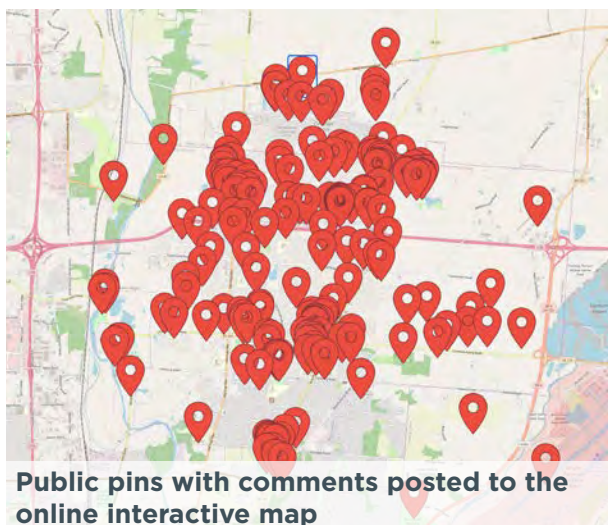
Pop-up at the Farmers Market at The Heights



Pop-up at the Farmers Market at The Heights



Pop-up at Alematic Brewing



Public pins with comments posted to the online interactive map

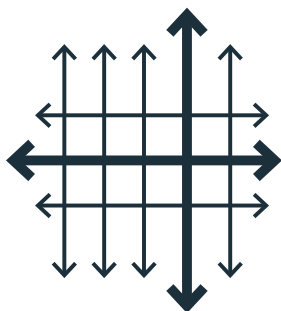


Steering Committee Meeting

PUBLIC ENGAGEMENT PROCESS

FOUR AREAS OF GROWTH

Early data and physical analysis combined with public and stakeholder input revealed four key areas of opportunity that were used to organize planning and implementation recommendations.



BUILD LOCAL WALKABILITY & REGIONAL CONNECTIVITY

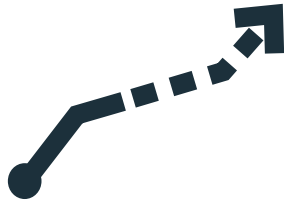
Strengths and weaknesses have been identified surrounding the traveling experience to, from, and within Huber Heights. Economic development opportunities, health and wellness, quality of life, recreational, and environmental conditions are all improved when residents and workers have the ability to safely walk, bike, scoot, or roll to daily destinations. Expanding the options for ways of traveling also provides drivers with a better experience through decreased congestion which is a reoccurring concern for community members. Investment in public transit, street infrastructure, and multi-use paths will improve daily travel within the City and with important regional destinations.



FIND OUR CENTERS

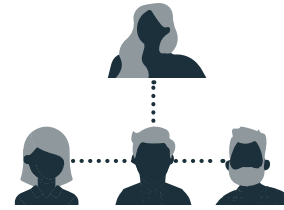
Huber Heights lacks a downtown although progress has begun with the recent development that is creating a new district at Brandt Pike and Chambersburg. Opportunity exists to continue these efforts and establish additional centers that will be complementary to one another.

The history of Huber Heights as a bedroom community for Dayton helped to establish the segmented areas that dominate the City today. Some areas are strictly residential while others are reserved for the industrial, commercial, and office. While public health was historically a driver for this separation, today's businesses and employment operations are often able to locate alongside residential dwellings with mutual benefits. Clustered centers may become important places for community interactions and building civic pride.



CONNECT OUR HISTORY TO OUR FUTURE

Residents of Huber Heights understand the connection between development, how it looks and feels, and the identity of a community. Rather than focusing only on types of land use, this Plan utilizes Development Patterns to name, describe and guide the character of places in Huber Heights. The intent is to foster more holistic development processes that connect what exists today with what is collectively desired in the coming years. Doing so will not only strengthen neighborhoods through new investment, it will retain current talent pools and improve the overall City economy by allowing new opportunities for innovation and commerce. This, in turn, will attract additional residential and employment growth.



OPERATIONALIZE THE GROWTH STRATEGY

The role of local government is to be the operating system that enables a high quality of life for all who live, work, learn, visit, and spend time in the community.

A successful operating system will need to focus on three key components: brand activation, engagement, and management. The City brand will need to be refreshed and activated to communicate and hold parties responsible for working toward the shared vision. Investment in community events, gathering places, and public engagement about the growth strategy will help maintain dialogue and trust. The alignment of City staff, tools, and resources with implementation needs will also be necessary to carry out the strategy.

PUBLIC ENGAGEMENT PROCESS

IGNITE THE HEIGHTS

Held on November 10, 2022, a special community event was organized with several goals in mind. The first was to provide community members with the opportunity to provide input and feedback on the draft Plan. The second was to activate and test potential activities at an existing site available for redevelopment, known as The Barn at The Heights. Local vendors with crafts, food, and drinks were on site along with live music, fire pits, yard games, and a s'mores bar.

Event attendees were asked to vote on the types of experiences they think should be located at The Barn in the future using color-coded balloons. The results were a tie between entertainment and attractions (pink) and restaurants and bars (orange), with a few wanting to see housing and lodging (yellow-green). The third goal was to provide an enjoyable experience for community members and spur excitement and their involvement in the future of Huber Heights.



Click the logo above to watch the event video.



Color coded balloons



Feedback on the draft Plan



Feedback on the draft Plan



Foxtail's Cocktails



Feedback on the draft Plan



PUBLIC ENGAGEMENT PROCESS

PHASE 3 INPUT SUMMARIES

In addition to the balloon activity, a Phase 3 Survey was circulated containing a set of 13 questions designed to collect input on development, household experiences, mobility and street design priorities, economic development priorities, and types of engagement preferences. Full results are provided in the Appendix.

Also present at the Ignite the Heights event was an Engagement Mobile complete with large-scale boards containing content from the draft Plan. Attendees were asked to review the planning work conducted to date and give feedback on the four areas of growth.

Based on the collected input, investment to expand sidewalks, multi-use paths, and bicycling infrastructure is a top priority. Improved street safety and daily destinations that are closer to where people live are additional priorities. The remaining options like improving transit access and expanding broadband all received support.

The feedback reinforced broader trends that indicate jobs are following where people want to live. Investments in amenities, talent attraction, early-stage company support, and a mixture of housing were all elevated as top priorities to grow the economy.

SURVEY RESPONSE THEMES

- » Expand biking and walking trail networks
- » Prioritize street safety for all users when rethinking the design of streets.
- » Expand amenities and retail offerings in Huber Heights
- » Focus on growing food and beverage destinations in mixed-use centers
- » Refresh the brand to reinforce the message that Huber Heights is a city with high quality of life and amenities



Improve street safety



A decorative horizontal line of dots, with the first two rows containing 12 dots each and the third row containing 6 dots.

● ● ● ● ● ●

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Update our planning and development process to meet our objectives

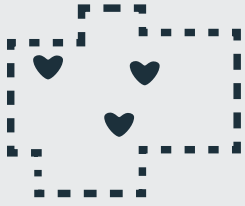


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PUBLIC ENGAGEMENT PROCESS

When asked about the preferred type of town center to focus on first, community members favored the Live Local Center which is predominately resident-oriented. This center builds off of the Brandt Pike Revitalization plans and Marian Meadows development and focuses on local services, government functions, professional services, retail, amenities, and daily needs. The Play Center, which is entertainment based, was next among the highest votes, followed by the Riverfront Center and the Work Center. These are all described in more detail later in this Plan.

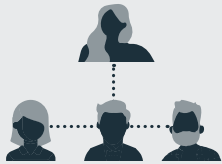
The City additionally asked community members about how they would prioritize the implementation of the growth strategy. The most supported option was the idea to broaden investment in the community through events, gathering places, and public engagement about growth. The other two ideas related to activating a community brand and better-aligning tools and resources were also supported.



FIND OUR CENTERS

Which type of center should be our primary focus?

| | |
|------------|--|
| Live Local | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |
| Work | <div><div></div><div></div><div></div><div></div><div></div><div></div></div> |
| Play | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |
| Riverfront | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |



OPERATIONALIZE THE GROWTH STRATEGY

Which of these functions would you like to see most prioritized?

| | |
|---|---|
| Refresh and activate the brand to communicate our vision | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |
| Broaden investment in community engagement (events, gathering spaces, growth) | <div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div> |
| Align staff tools and resources with implementation needs | <div><div></div><div></div><div></div><div></div><div></div><div></div></div> |



MOBILITY PLAN

The Mobility Plan outlines goals, objectives, and implementation steps to improve local walkability and regional connectivity, and provides recommendations for a catalytic 14.5-mile multi-use trail Loop. This portion of the Plan also provides a Street Network Map with supporting street sections that convey options for four street types that are anticipated to be built as part of new development and roadway reconstruction projects.

BUILD LOCAL WALKABILITY & REGIONAL CONNECTIVITY

Using a personal vehicle has been the dominant mode of transportation in Huber Heights for decades. As such, it has become a dominant force in household budgets, rivaling the cost of rent or mortgages. As the City grows, interventions and a new approach to the street network are critical to maintaining a high quality of life. Walking, biking, and other types of micro-mobility allow for a lighter impact on street surfaces, air quality, and general congestion. The following goals and objectives provide a pathway to transitioning the City to a place where all modes of transportation are viable, safe, and convenient.

GOALS + OBJECTIVES

- » Support multi-modal access
- » Better distribute traffic by mode, route, and time of day
- » Encourage walkable density
- » Encourage human-centered innovation
- » Lower household annual transportation cost
- » Set a new standard for multi-modal infrastructure

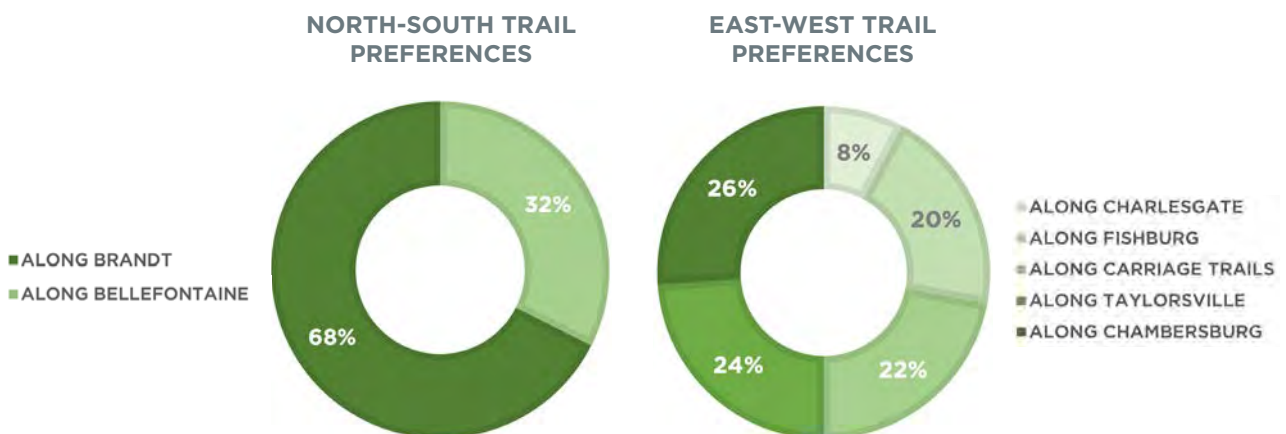


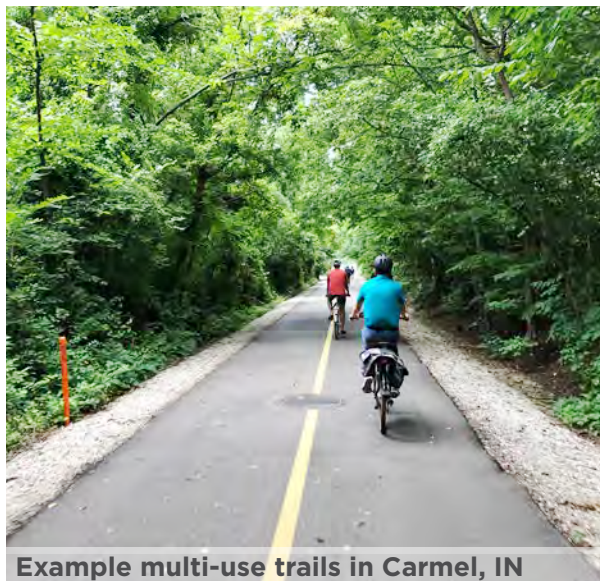
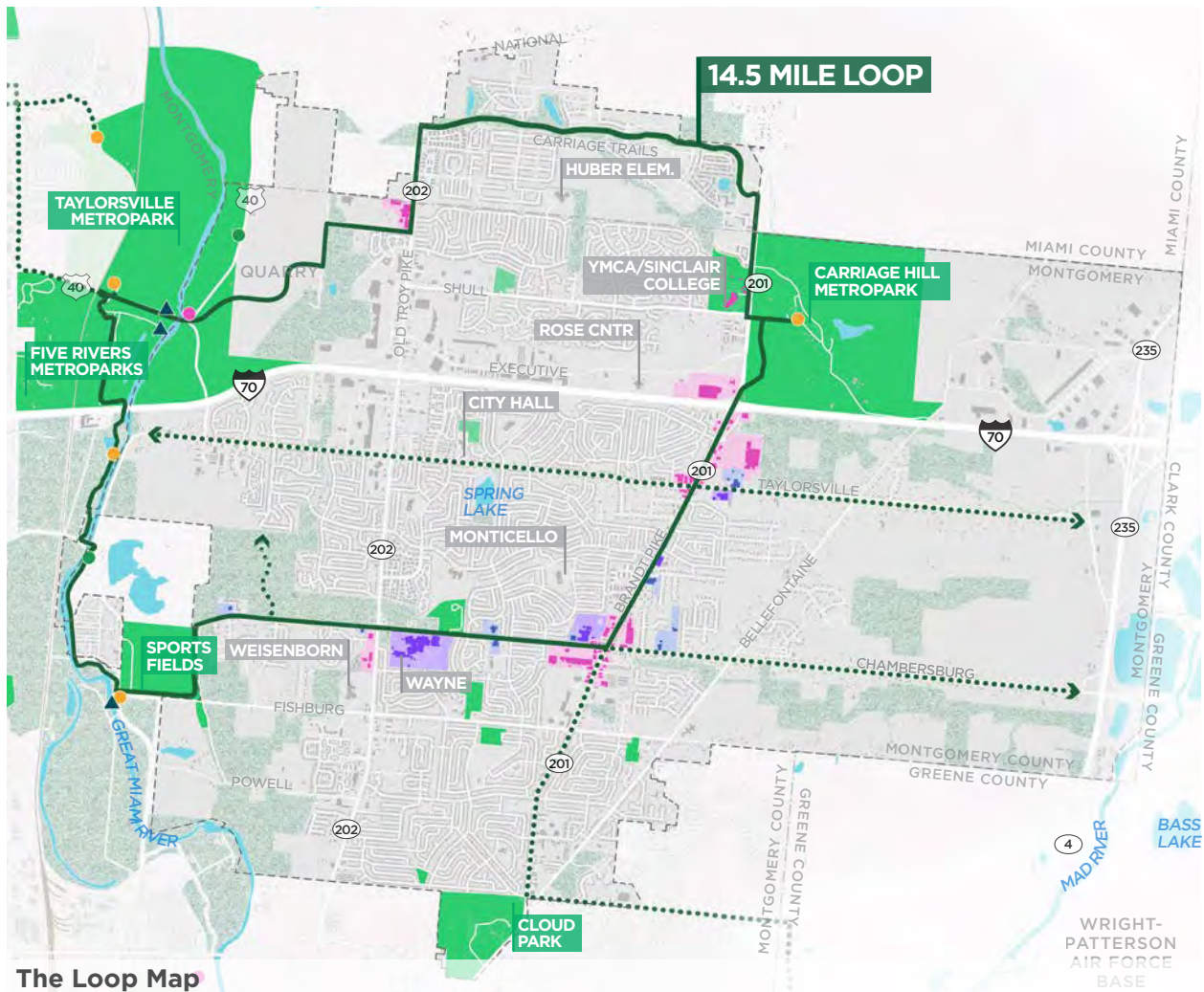
THE LOOP

One of the most desirable assets of Huber Heights is its location within the Miami Valley Region, which includes the Five Rivers MetroParks system and proximity to Dayton, Ohio. The existing Great Miami River Trail (GMRT) is a paved, 96-mile multi-use trail that goes through Warren, Montgomery, Miami, Butler, and Shelby counties. The GMRT is a key component of the region's robust trail network that encompasses 340 miles and sees over 793,000 annual visits. Huber Heights would capture significant economic benefits with the development of a connecting trail that invites regional users into Huber Heights while facilitating a healthy mode of travel for residents and workers.

The planning process generated several options for potential connections to arrive at a preferred alignment for a contiguous 14.5-mile Loop. Considerations included planned street improvements, existing right-of-way, and connection to community assets like schools, public buildings, places of worship, retail, employment, parks, and open spaces.

Longer-term trail development is recommended for Chambersburg and Taylorsville roads, along Brandt Pike south of Chambersburg, and on anticipated new roads west of Old Troy Pike.





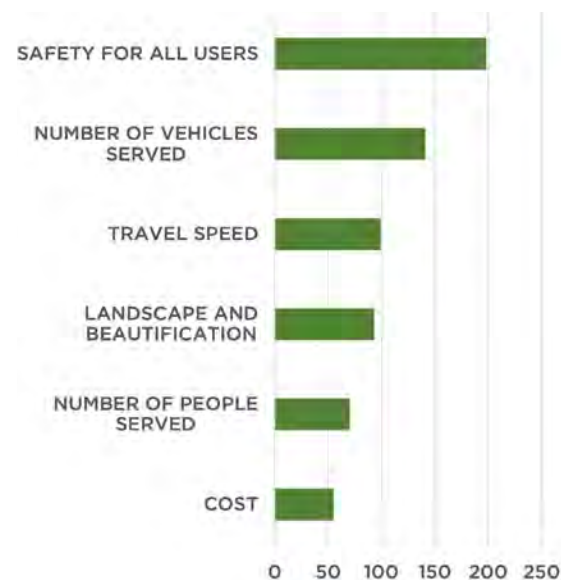
STREETS FOR EVERYONE

Streets make up the largest amount of public space in any city. An effective street network is critical for accommodating growth and enabling safe travel by all, including pedestrians, bicyclists, and vehicles. A complete street network goes further by providing users with a pleasant experience through beautification, trees, lighting, and effective stormwater management. Streets that incorporate amenities, like green infrastructure, separated bicycle lanes, comfortable bus shelters, seating, and lighting, do require more investment than the minimum standard, however, they also provide higher returns, especially when built in places with a mix of uses and a high number of daily users.

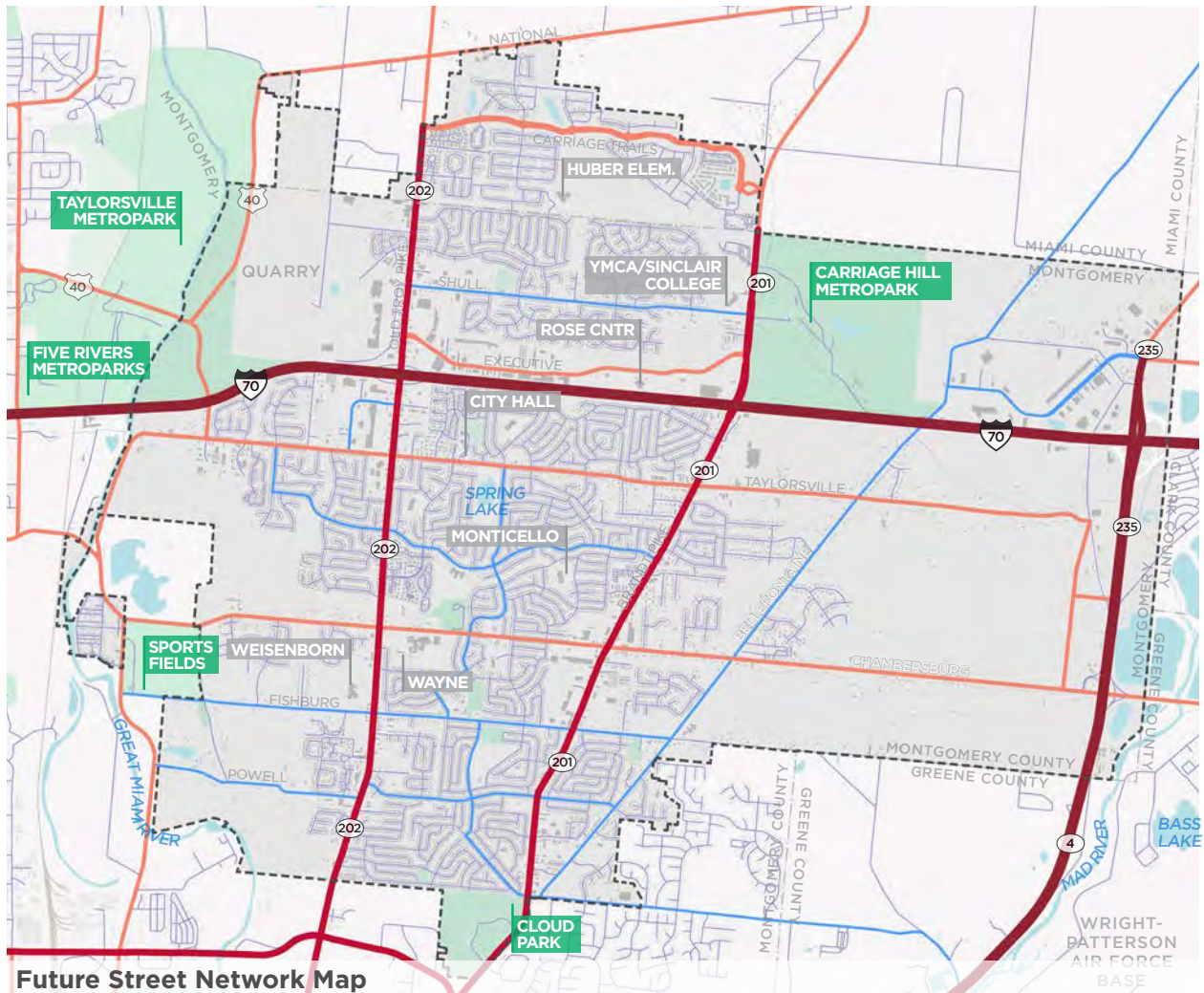
The Street Network Map shows the five types of streets that make up the roadway system in Huber Heights. While this network has been largely built out as the City has grown, design standards are needed for new streets as part of new development as well as roadway reconstruction through city-led capital improvement projects.

This section describes each of these street types in detail alongside example street sections.

STREET DESIGN PREFERENCES



“Street Design Preferences” reflects community preferences provided during this planning process.



Future Street Network Map

- Interstate/Expressway
- Primary Collector
- Local
- Arterial
- Secondary Collector

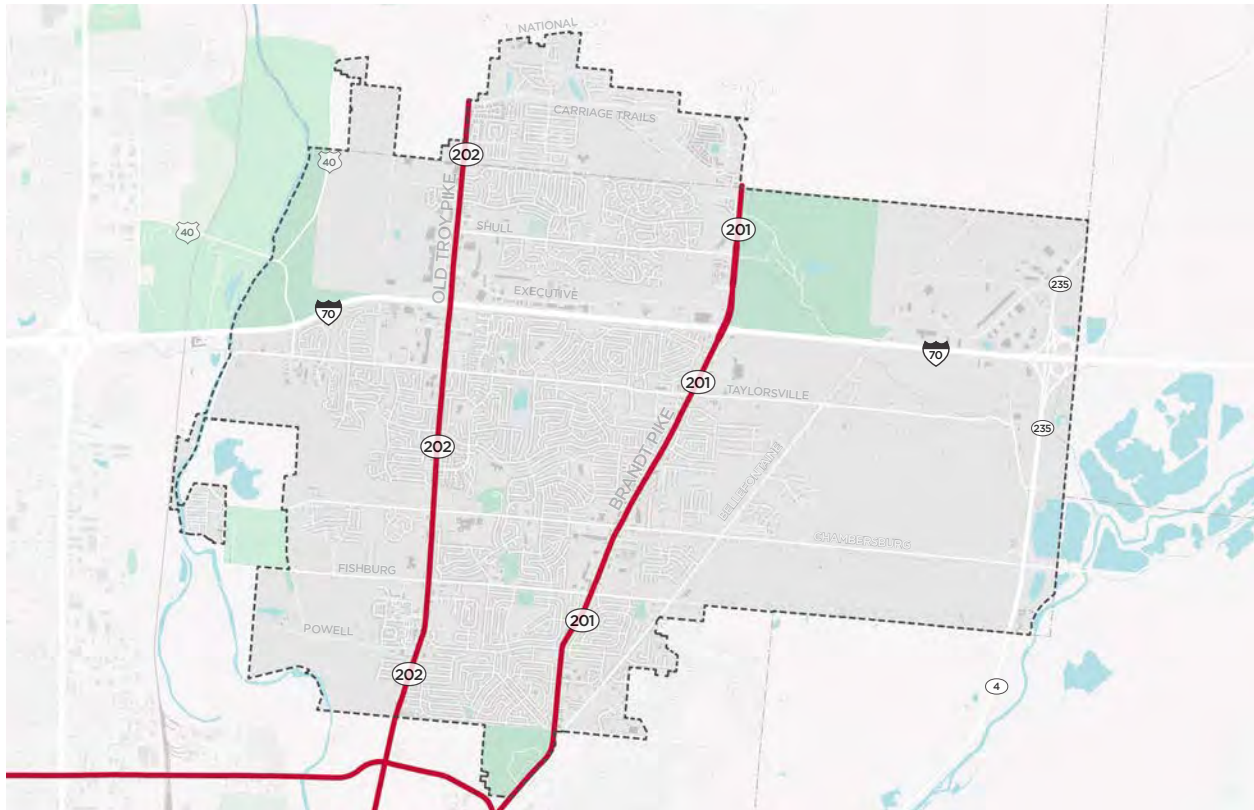


Vine Street, Cincinnati, OH



Monon Boulevard, Carmel, IN

STREETS FOR EVERYONE



ARTERIAL

Speed Limit: 35 MPH

Right-of-Way: 90-120 FT

Number of Lanes: 5

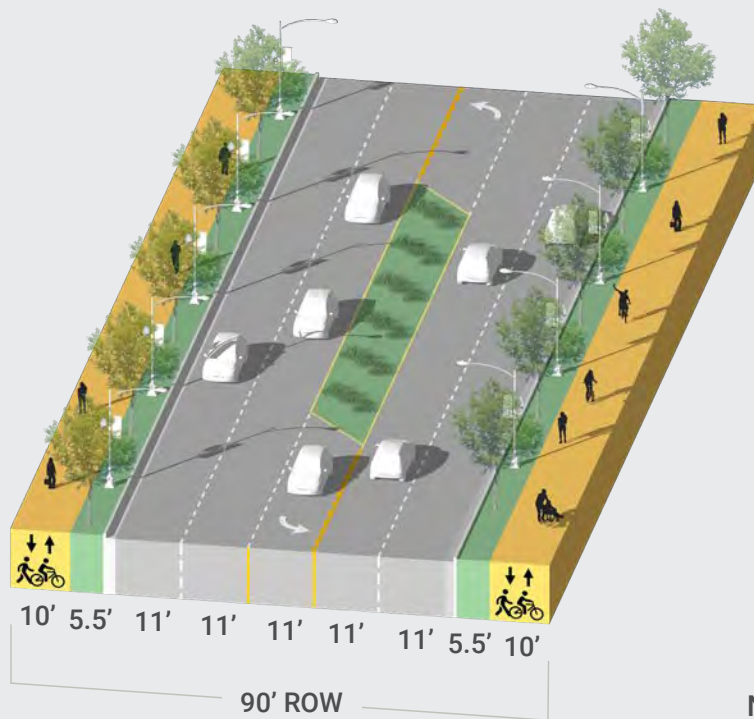
Lane Width: 11 FT

Turn Lane/Median: Not required, 11 FT min. where used

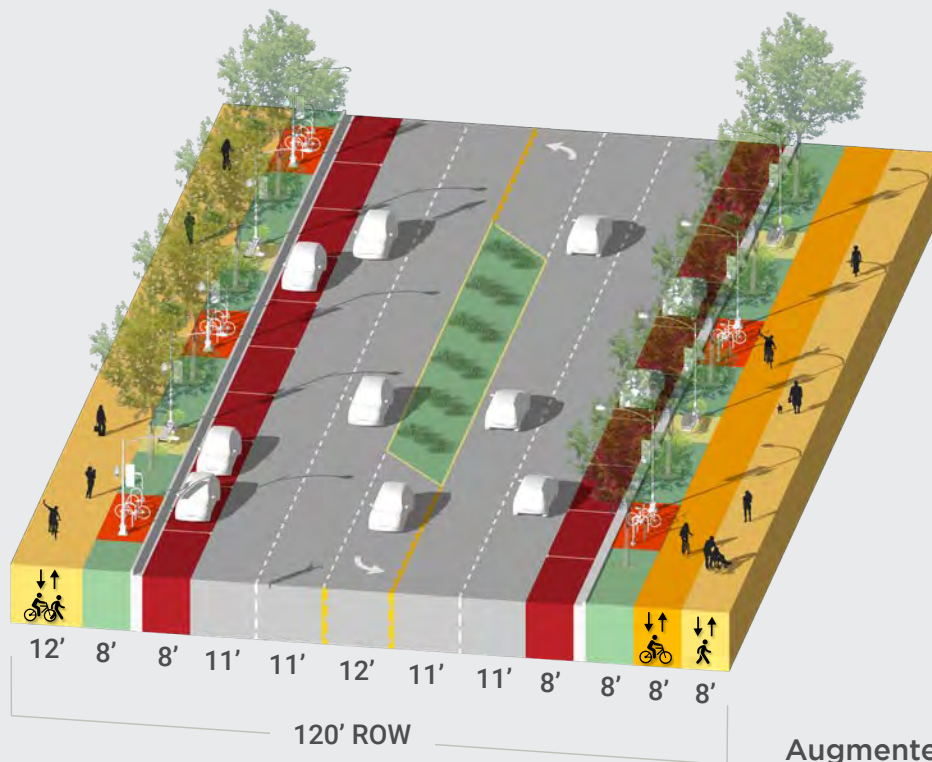
On-Street Parking: Not required, 7 FT min. where used

Tree Area: Required, 5'-6" min.

Street Trees: Required

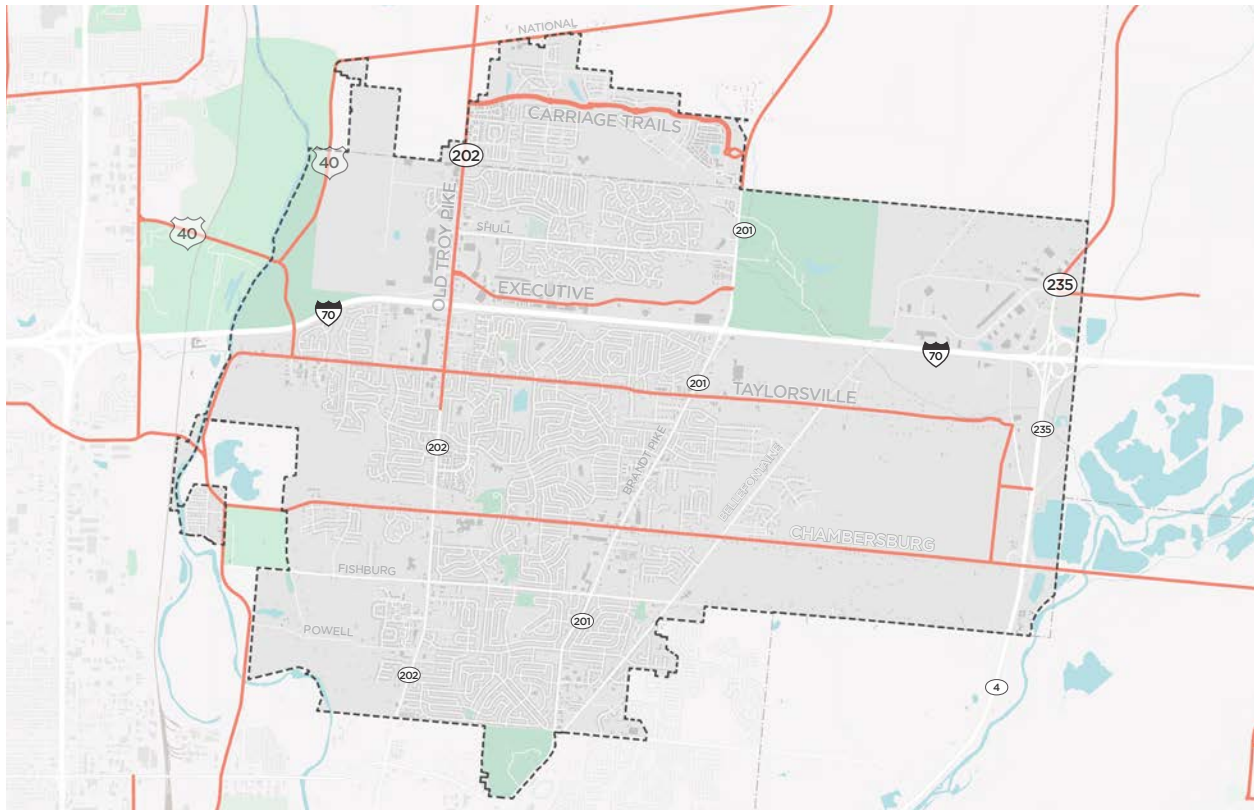


Minimum Standard



Example of Augmented Standards

STREETS FOR EVERYONE



MAJOR COLLECTOR

Speed Limit: 25-35 MPH

Right-of-Way: 60-90 FT

Number of Lanes: 3

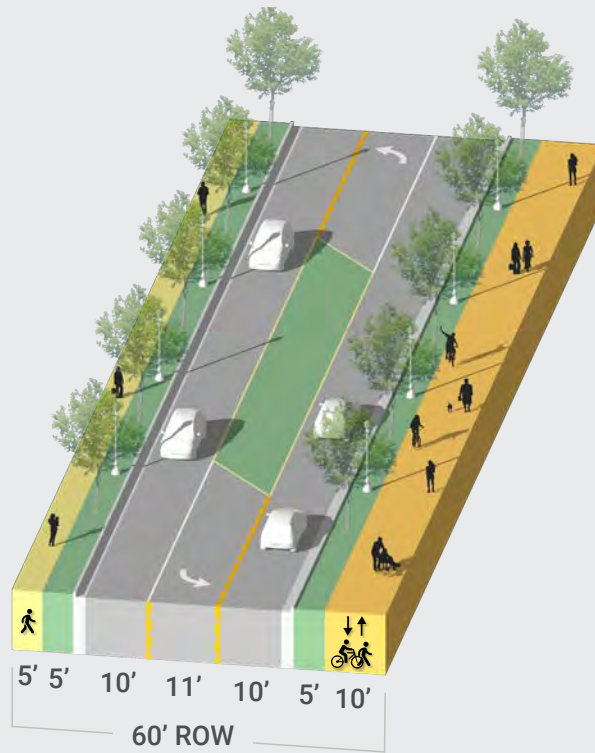
Lane Width: 10 FT

Turn Lane/Median: Not required, 11 FT min. where used

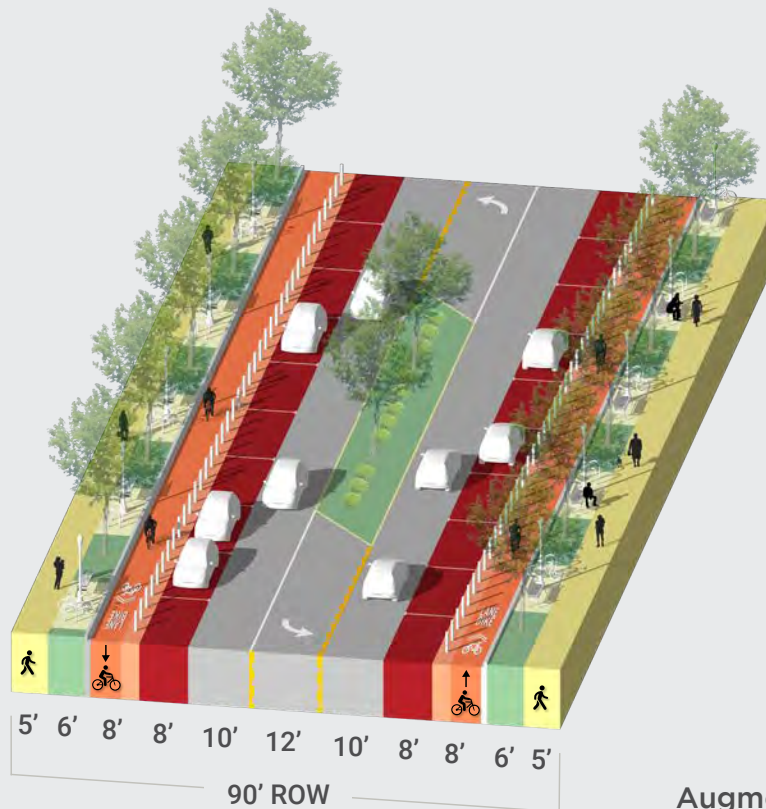
On-Street Parking: Not required, 7 FT min. where used

Tree Area: Required, 5' min.

Street Trees: Required

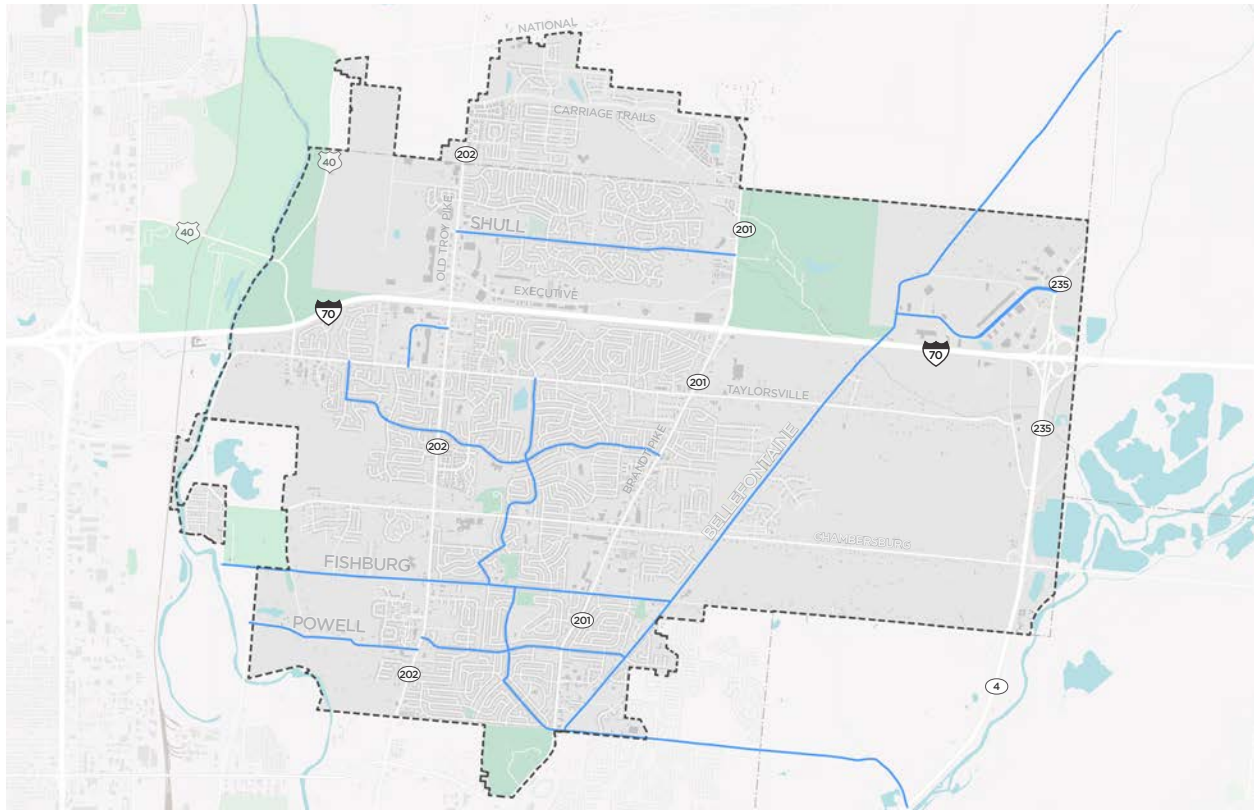


Minimum Standard



Example of Augmented Standards

STREETS FOR EVERYONE



MINOR COLLECTOR

Speed Limit: 20-25 MPH

Right-of-Way: 50-70 FT

Number of Lanes: 2

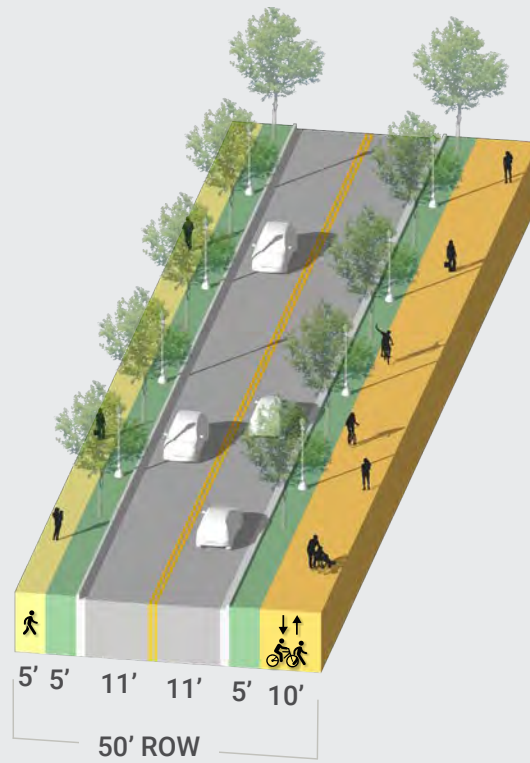
Lane Width: 11 FT

Turn Lane/Median: Not applicable

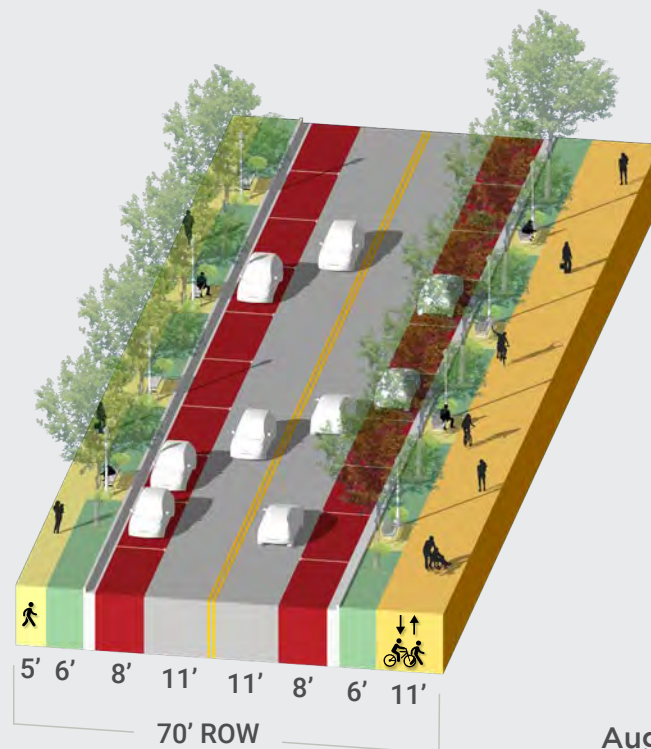
On-Street Parking: Not required, 7 FT min. where used

Tree Area: Required, 5' min.

Street Trees: Required

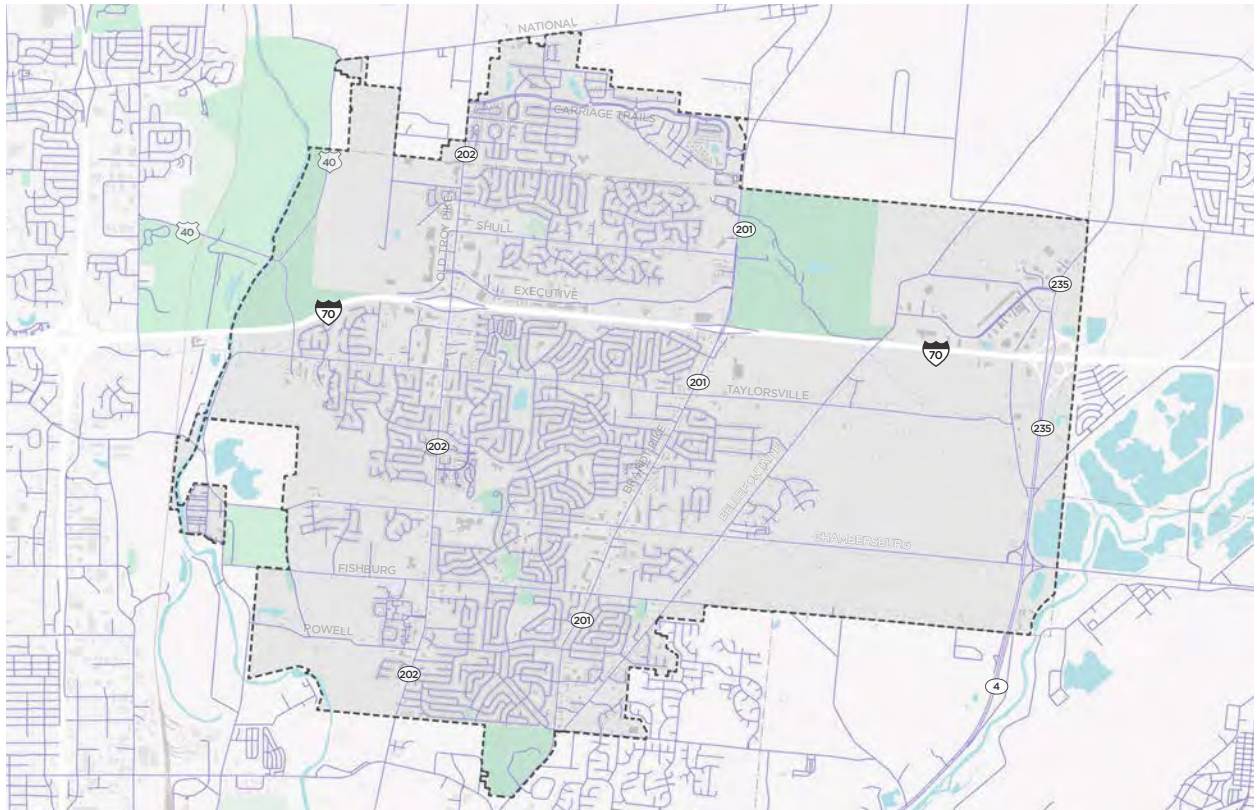


Minimum Standard



Example of Augmented Standards

STREETS FOR EVERYONE



LOCAL

Speed Limit: 20-25 MPH

Right-of-Way: 42-60 FT

Number of Lanes: 2

Lane Width: 10 FT

Turn Lane/Median: Not applicable

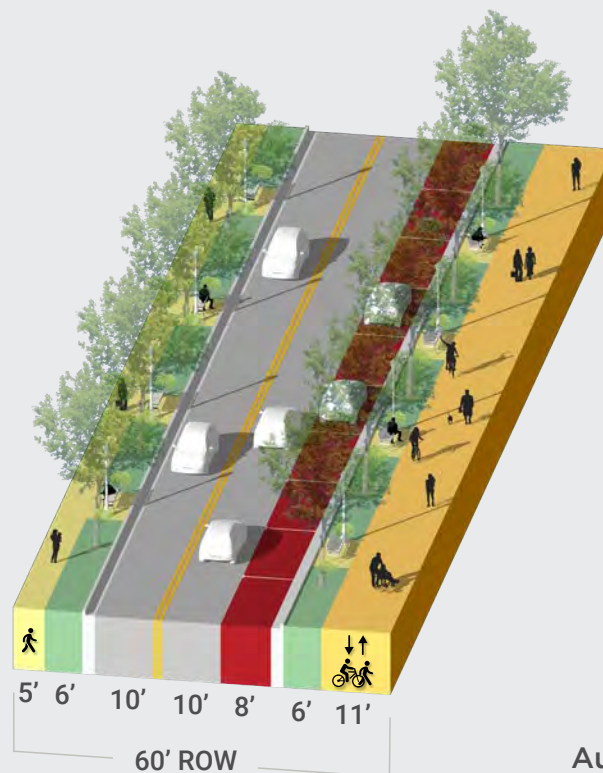
On-Street Parking: Not required, 7 FT min. where used

Tree Area: Optional

Street Trees: Required on residential streets



Minimum Standard



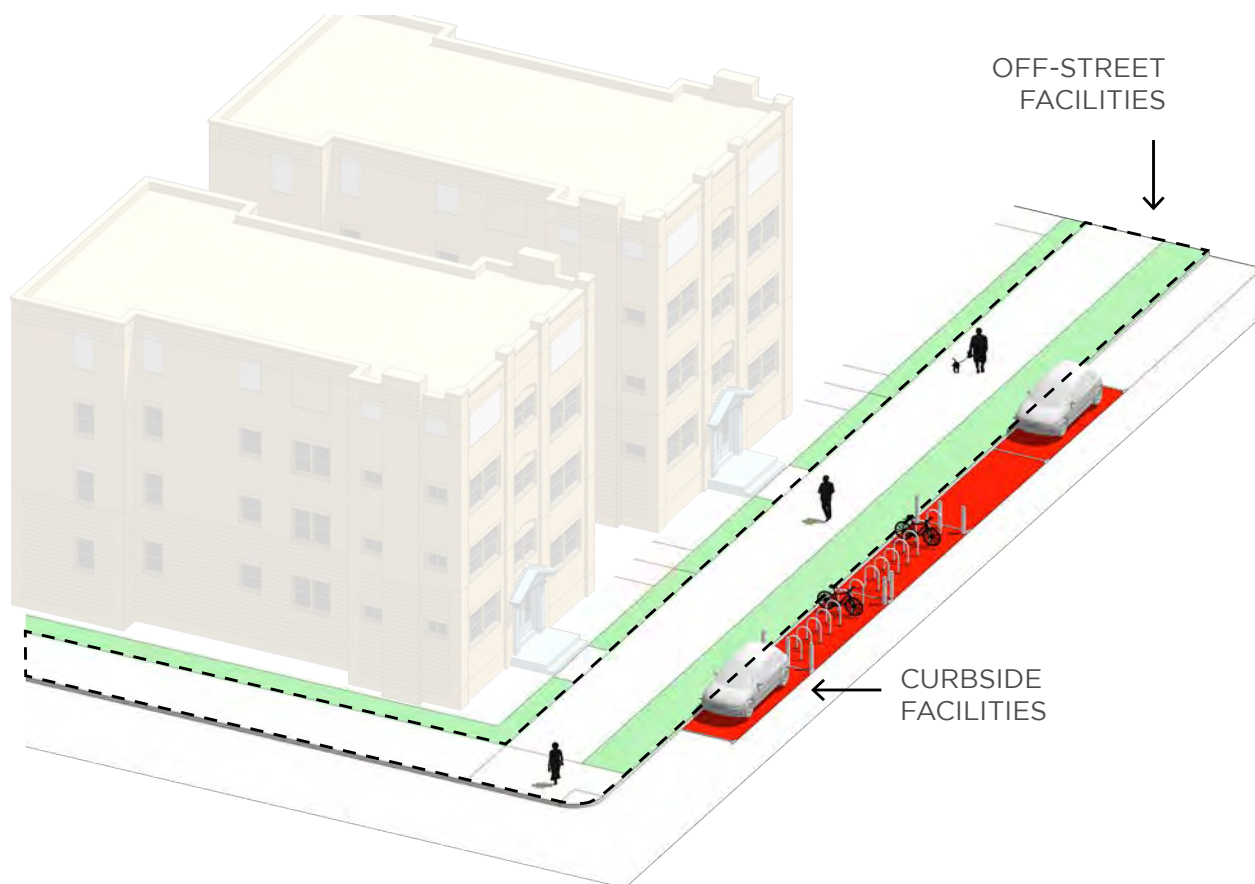
Example of
Augmented Standards

STREETS FOR EVERYONE

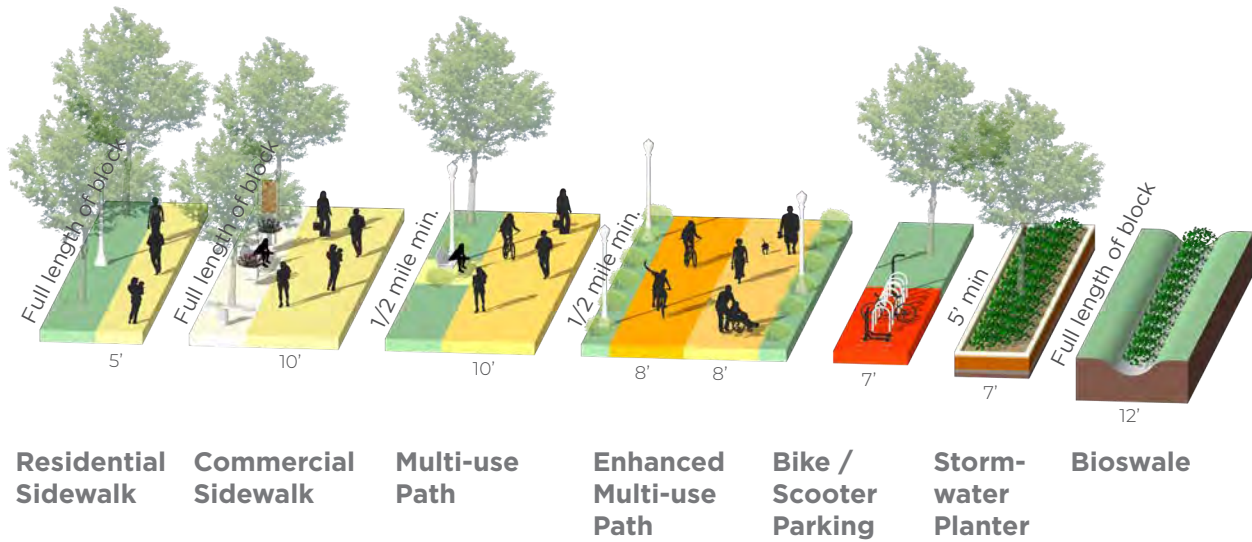
STREETSCAPE FACILITIES

Several facility types may be incorporated into street rights-of-way. These street amenities are useful in supporting effective transportation, property access, recreation, community

use, stormwater conveyance, parking, and more. In general, these facilities exist either off of the street but within the right-of-way, or along street curbs, as depicted below.



OFF-STREET FACILITIES



CURBSIDE FACILITIES



IMPLEMENTATION STEPS

To facilitate the meeting of the City's mobility goals, the following initiatives are recommended for the City to lead with particular emphasis on the first 36 months.

9-12 MONTHS

1 UPDATE LOCAL MOBILITY POLICIES

We should align our street design and use policies to meet our human-centered multi-modal infrastructure goals and objectives.

- » Adopt Street Network Map and Typical Sections
- » Update Subdivision Regulations
- » Eliminate or reduce parking minimums
- » Promote infill development
- » Support traffic calming
- » Introduce eBike incentive
- » Expand charging station availability
- » Implement access management

12-24 MONTHS

2 ALIGN STREET + TRAIL DESIGN STANDARDS WITH STATE & NATIONAL BEST PRACTICES

National resources and models should be utilized to guide our best-in-class street design.

- » Join NACTO
- » Incorporate ODOT Multi-Modal Design Guide (MDG)
- » Incorporate VisionZero goals and objectives
- » Incorporate Safe Routes to School Best Practices



Click here to see the full Implementation Matrix

24-36 MONTHS

3 CREATE LOOP MASTER PLAN

We sit on the edge of one of the country's best trail systems. The Loop will connect all of Huber.

- » Create Loop Master Plan
- » Vacate Old Shull Road

36-60 MONTHS

4 CREATE MULTI-MODAL PLANNING COORDINATOR STAFF POSITION

Dedicated staff and resources are required to modernize and activate our mobility network.

- » Create new staff position
- » Improve transit along priority routes
- » Develop public-private partnerships to improve mobility and logistics



DEVELOPMENT PATTERNS

The City of Huber Heights is made up of a variety of places, neighborhoods, and districts, each with a distinct character. Understanding these unique Development Patterns is a tool for connecting our history to our future. It is also essential for our community to remain economically nimble and vibrant. This section describes the predominant physical and natural qualities in each part of the City, along with their localized opportunities for growth. Development Patterns serve as a guide to reforming the City's zoning and subdivision regulations.

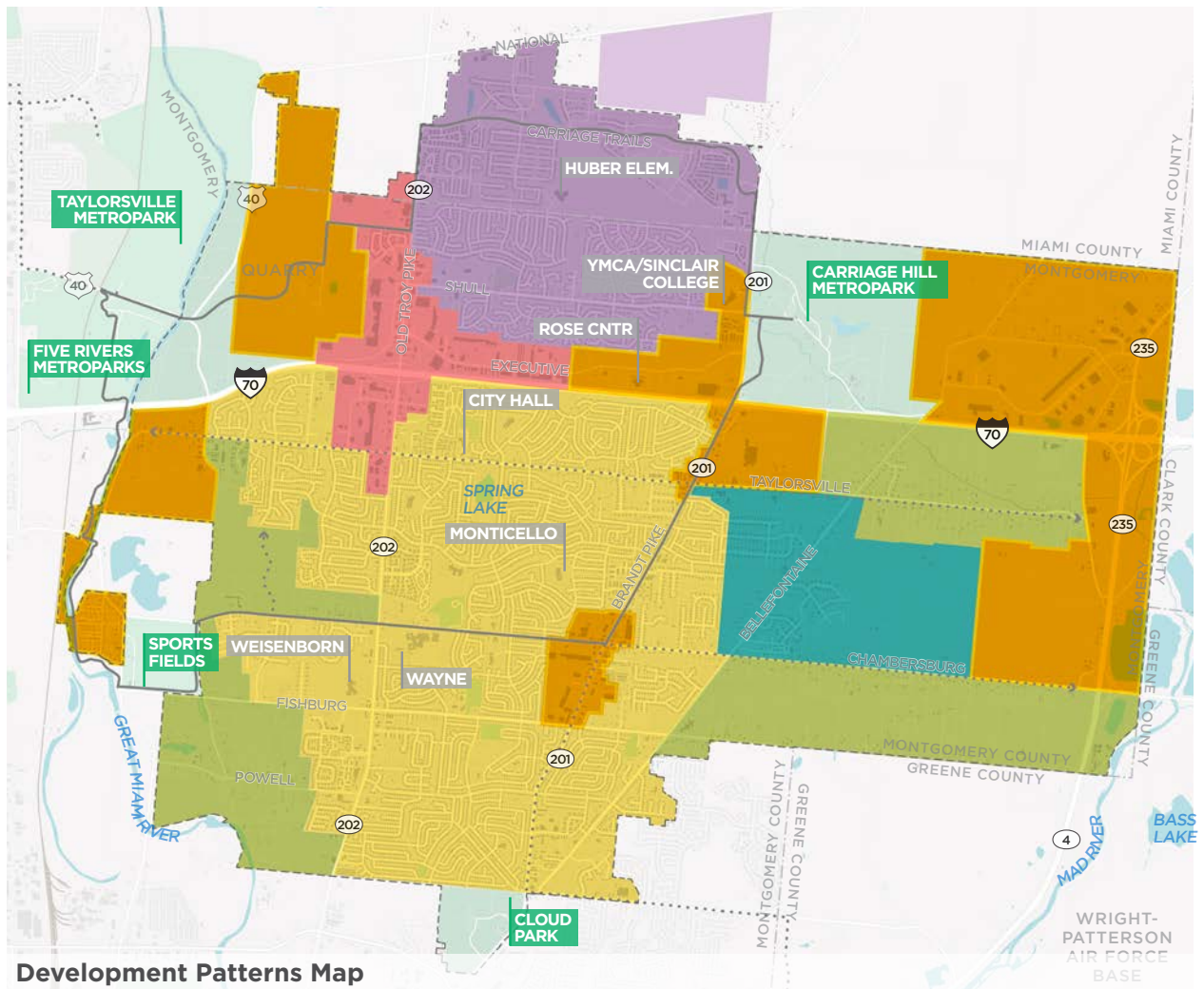
FROM LAND USE TO DEVELOPMENT PATTERNS

Traditional land use maps describe how a given property is used as one's home, office, business, park, manufacturing, etc. Land use maps are quickly outdated in growing cities and are not a useful tool for encouraging desired types of development. They also freeze a city in time, which weakens its growth and investment potential.

Development Patterns establish character areas to convey the City-wide vision and values for the built environment. Those character areas become more refined through small-area planning, where neighborhood stakeholders establish standards and programs to guide growth. Site planning, involving developers, City staff, and adjacent property owners, is where the details are decided without re-litigating the broader vision and needs of the City. This hierarchy of planning and development processes prevents the overburdening of City staff and ensures proper engagement.

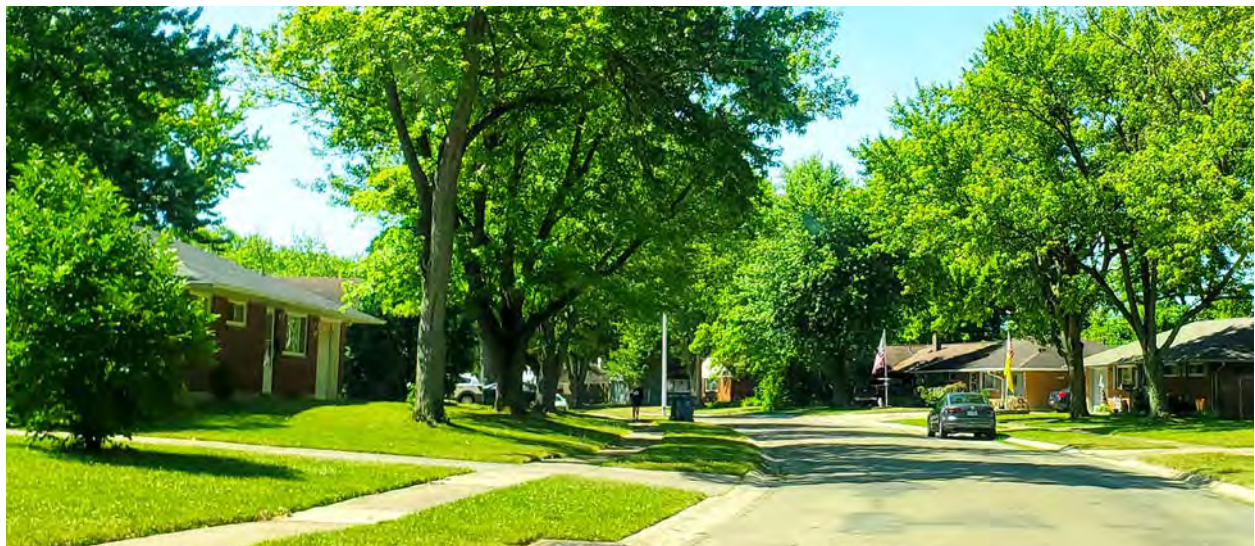
GOALS + OBJECTIVES

- » Encourage human-centered innovation
- » Focus on talent attraction/retention
- » Encourage walkable density
- » Allow people to live closer to jobs and amenities
- » Expand housing options
- » Focus growth in clusters



Development Patterns Map

■ Centers
 ■ Regional Commercial
 ■ Northtown
 ■ Southtown
 ■ East Villages
 ■ Estates



Typical residential street in Southtown

FUTURE DEVELOPMENT PATTERNS

CENTER: LIVE LOCAL

The Live Local Center is made up of the commercial properties along Brandt Pike, south of Leyden Lane to Fishburg Road, east of Celestine Street, and following parcel lines off of Brandt Pike's eastern side. Today, this area contains a mix of uses ranging from offices and services to restaurants, food markets, and entertainment. The developments are largely auto-oriented, however, in-depth revitalization plans and more

recent development proposals are supporting a transformation that will bring in higher-density residential units and infill development that will make the area walkable through a new street grid and infrastructure. The long-term vision for this Live Local Center is for it to be a gathering place that caters to local residents, providing them with daily needs as well as a wide range of services and amenities.

ESSENTIAL ELEMENTS

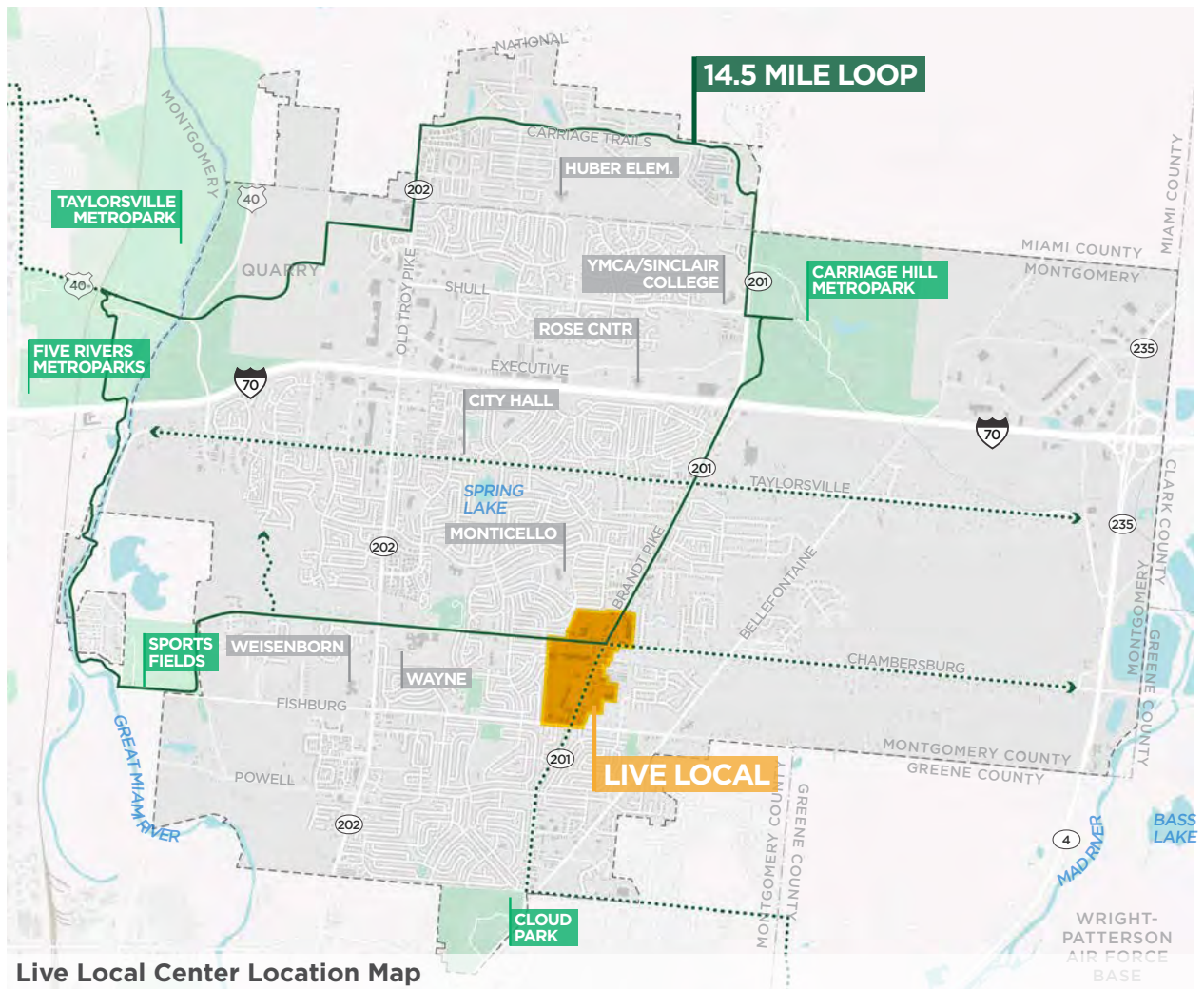
- » Build off the Brandt Pike Revitalization Plan and Marian Meadows development
- » Focus on local services, government functions, professional services, daily needs, retail, and amenities
- » Offer a wide range of housing types
- » Double down on a park-once walkable infrastructure and quality public realm
- » Update Brandt Pike Revitalization plan with recent developments and new opportunities



Brandt Pike Target Revitalization Plan

City of Huber Heights, Ohio | May 2017





FUTURE DEVELOPMENT PATTERNS

CENTER: WORK

The Work Center is generally bounded by the City and Montgomery County line to the northeast of Carriage Hill Park, along both sides of Route 235/ Valley Pike, and south to Chambersburg Road. Currently, a mix of manufacturing, industrial, and distribution uses are

located here, along with agricultural uses. Opportunity exists to attract light manufacturing with complementary residential and amenities to be strategically incorporated into a new mixed-use growth area.

ESSENTIAL ELEMENTS

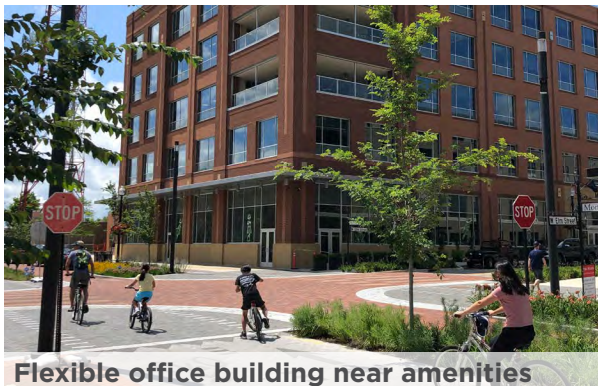
- » Build off light industrial, industrial, and corporate anchors with access to highways and Wright Patterson
- » Develop for density, flexibility, and mix of use adjacencies
- » Build housing along the eastern edge of Carriage Hill Metro Park
- » While the focus is on employment, support multi-family residential and amenities where suitable
- » Economize and share infrastructure where feasible
- » Leverage current master development interest to create an integrated mixed-use environment



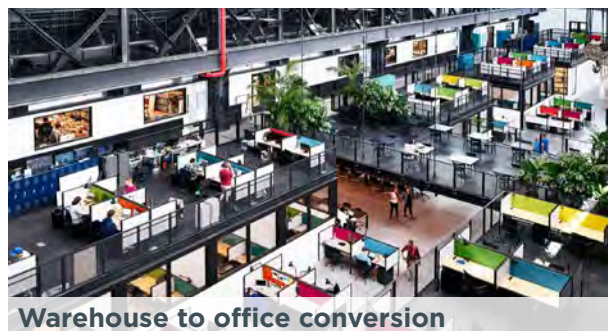
Walkable corporate park example



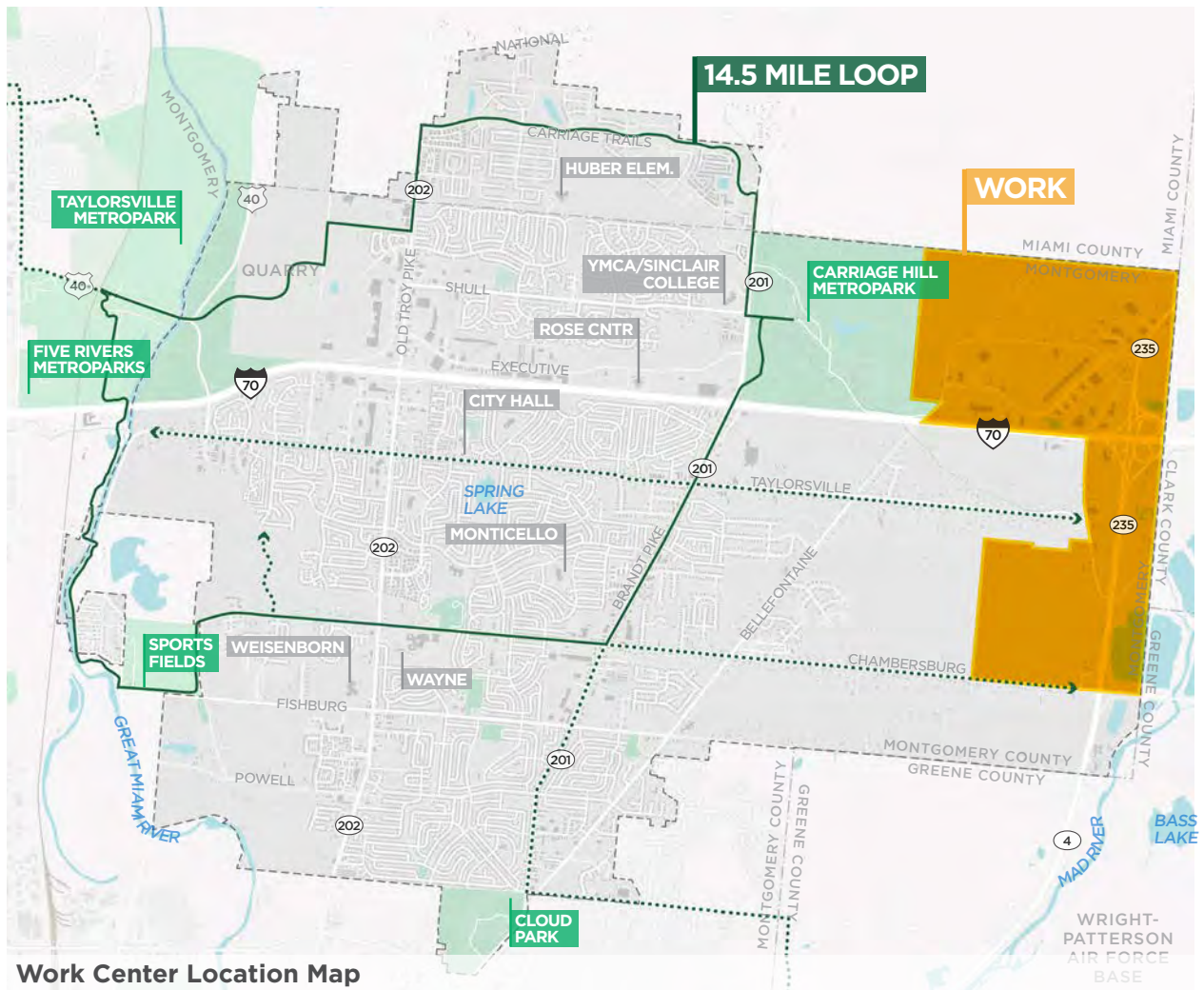
New corporate headquarters example



Flexible office building near amenities



Warehouse to office conversion



FUTURE DEVELOPMENT PATTERNS

CENTER: PLAY

The entertainment-focused Play Center includes the emerging Heights District and commercial properties along Brandt Pike, north of Taylorsville Road. This center is envisioned as a regional destination that leverages existing assets like the Rose Music Center, Kroger Aquatic Center, Sinclair Community

College, and Huber Heights YMCA to attract additional amenities located in currently underutilized spaces. Important to this center, and each of the centers is the incorporation of medium-to-high-density housing, necessary to support commercial and retail uses.

ESSENTIAL ELEMENTS

- » Build off recent momentum created by Executive Boulevard, the Rose Center, Warped Wing, the YMCA/ Aquatic Center/Sinclair, and Parkview Apartments
- » Target regionally-scaled hospitality and entertainment uses
- » Support multi-family and mixed-use development
- » Emphasize a park-once, dynamic visitor experience
- » Enhance connectivity within the district and to Carriage Hill MetroPark
- » Create sub area plan that incorporates and coordinates current market interest and future potential



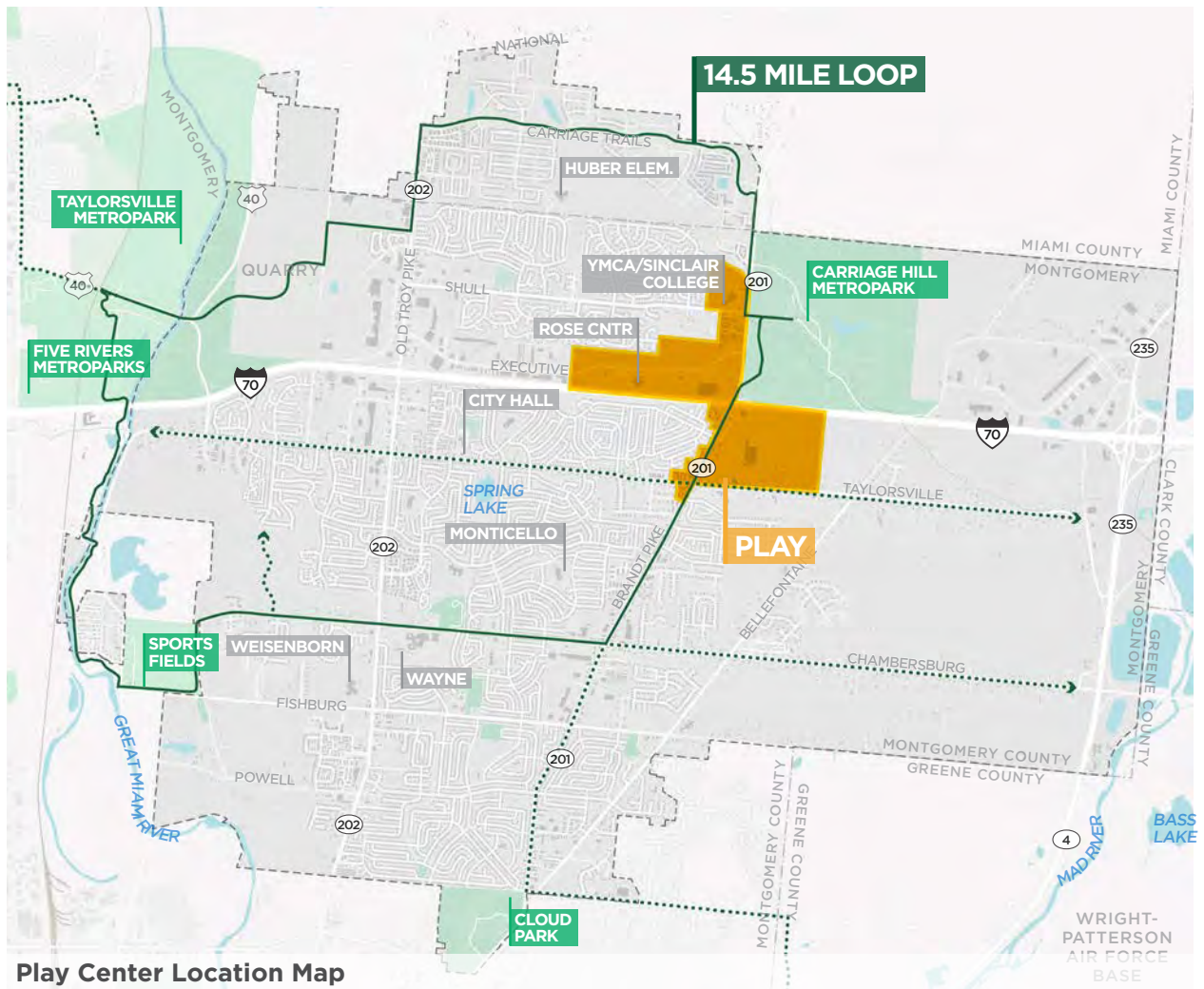
Parsons Alley, Duluth, GA



Goshen Brewing, Goshen, IN



Crocker Park, Westlake, OH



Play Center Location Map



Rose Music Center



Carriage Hill MetroPark



Kroger Aquatic Center at The Heights



Parkview apartments

FUTURE DEVELOPMENT PATTERNS

CENTER: RIVERFRONT

The Riverfront Center will likely be the most long-term City center to be developed, but it represents a key opportunity for Huber Heights to leverage its proximity to desirable natural resources and destinations: The Great Miami River, Taylorsville MetroPark, sports fields and restaurants along Rip Rap Road, and existing and planned walking, hiking, and biking trails.

Located west of Old Troy Pike and following the Great Miami River, this center is envisioned as being developed on former quarry properties and others that sit vacant, overlooking the river. It also would encompass the Miami Villa area that is in need of reinvestment. A broad mix of uses can be incorporated here, focused on high quality recreation and healthy living.

ESSENTIAL ELEMENTS

- » Capitalize on under-developed land along the river and MetroPark
- » Connect to nearby retail, employment, and neighborhoods
- » Structure development around trail and green networks
- » Focus on traditional neighborhood and trail-oriented development principles
- » Create sub area plan for the center in conjunction with the Loop master plan



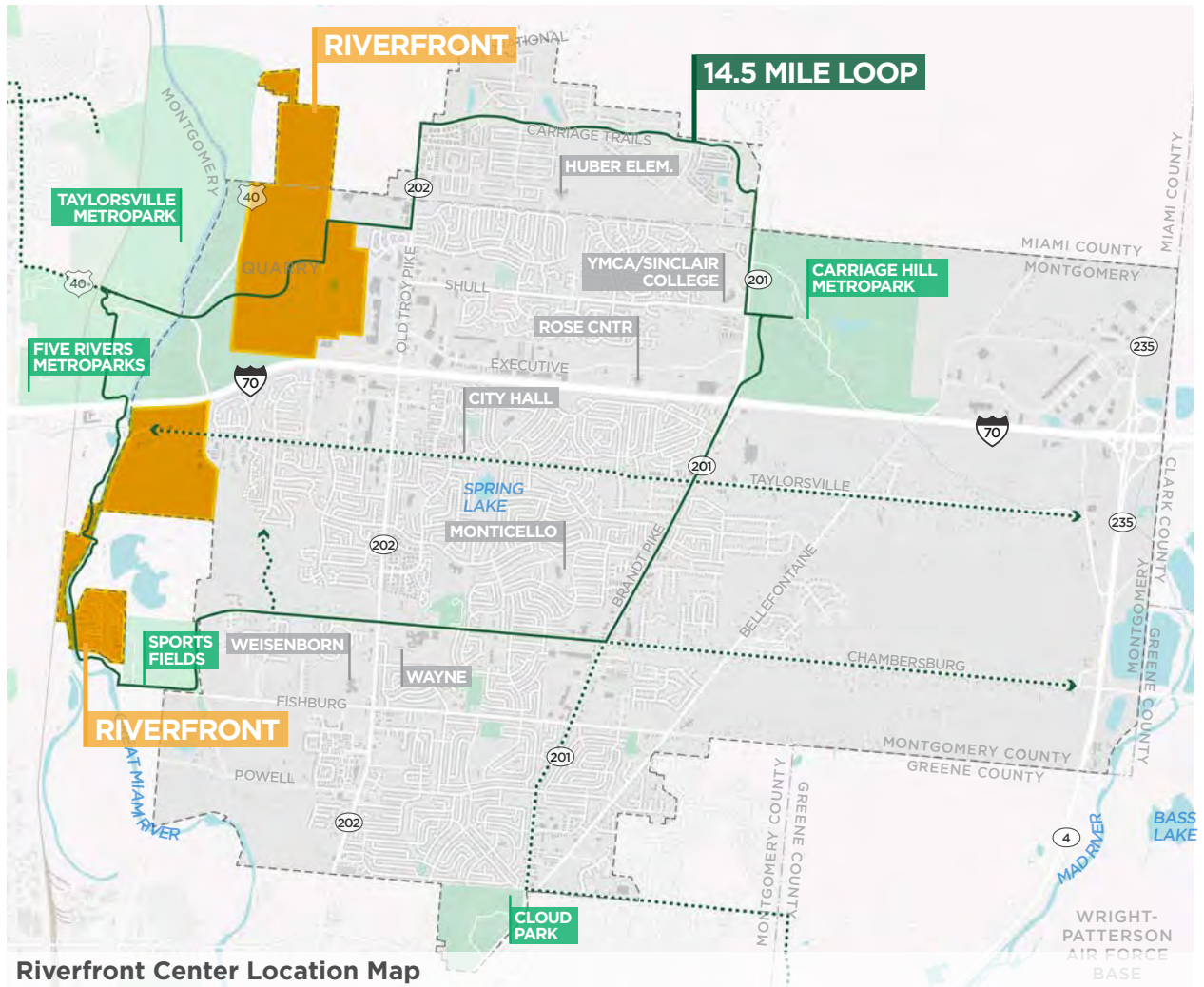
Big Lug Canteen / Monon Trail, IN



Swamp Rabbit Trail, Greenville, SC



Elkhart, IN



Riverfront Center Location Map



Swamp Rabbit Trail, Greenville, SC



Taylorsville Park trail to river

FUTURE DEVELOPMENT PATTERNS

REGIONAL COMMERCIAL

The Regional Commercial pattern encompasses the grouping of big box stores, chain restaurants, and national and regional employers that surround the Interstate 70 interchange at Old Troy Pike/Route 202.

The majority of these developments were built in the 1970s-80s and as their redevelopment becomes necessary, additional streets can be introduced and placemaking implemented to establish a walkable commercial center where a broader mix of uses are included.

ESSENTIAL ELEMENTS

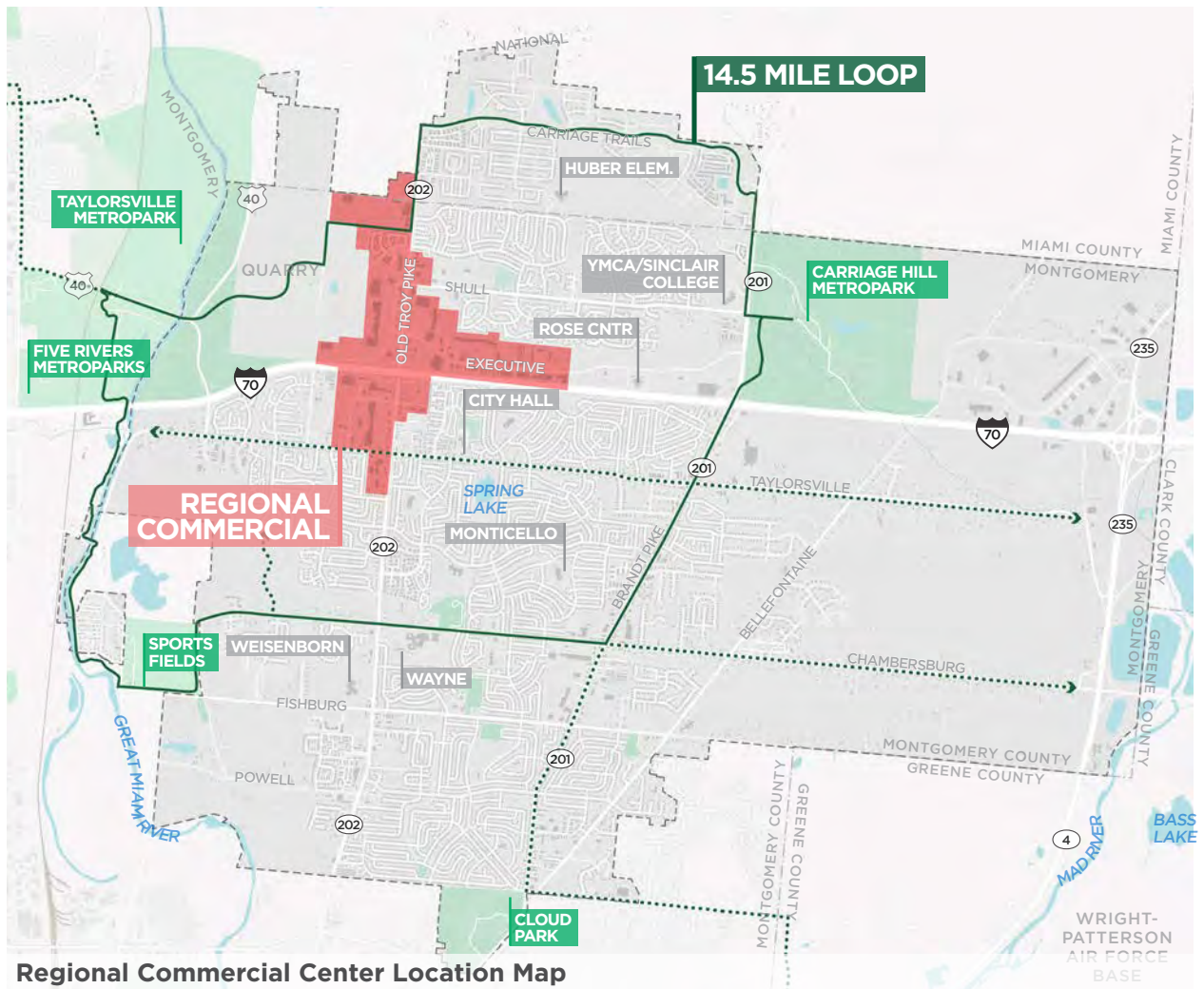
- » Large format commercial and out-lot retail
- » Focus on maintaining and growing current tenants; broadening the mix of uses; additional street connectivity; and beautification.
- » Encourage paving removal and parking lot redevelopment/reuse



Belmar, Lakewood, CO



Belmar, Lakewood, CO



Regional Commercial Center Location Map



The Van Aken District, Shaker Heights, OH

FUTURE DEVELOPMENT PATTERNS

NORTHTOWN

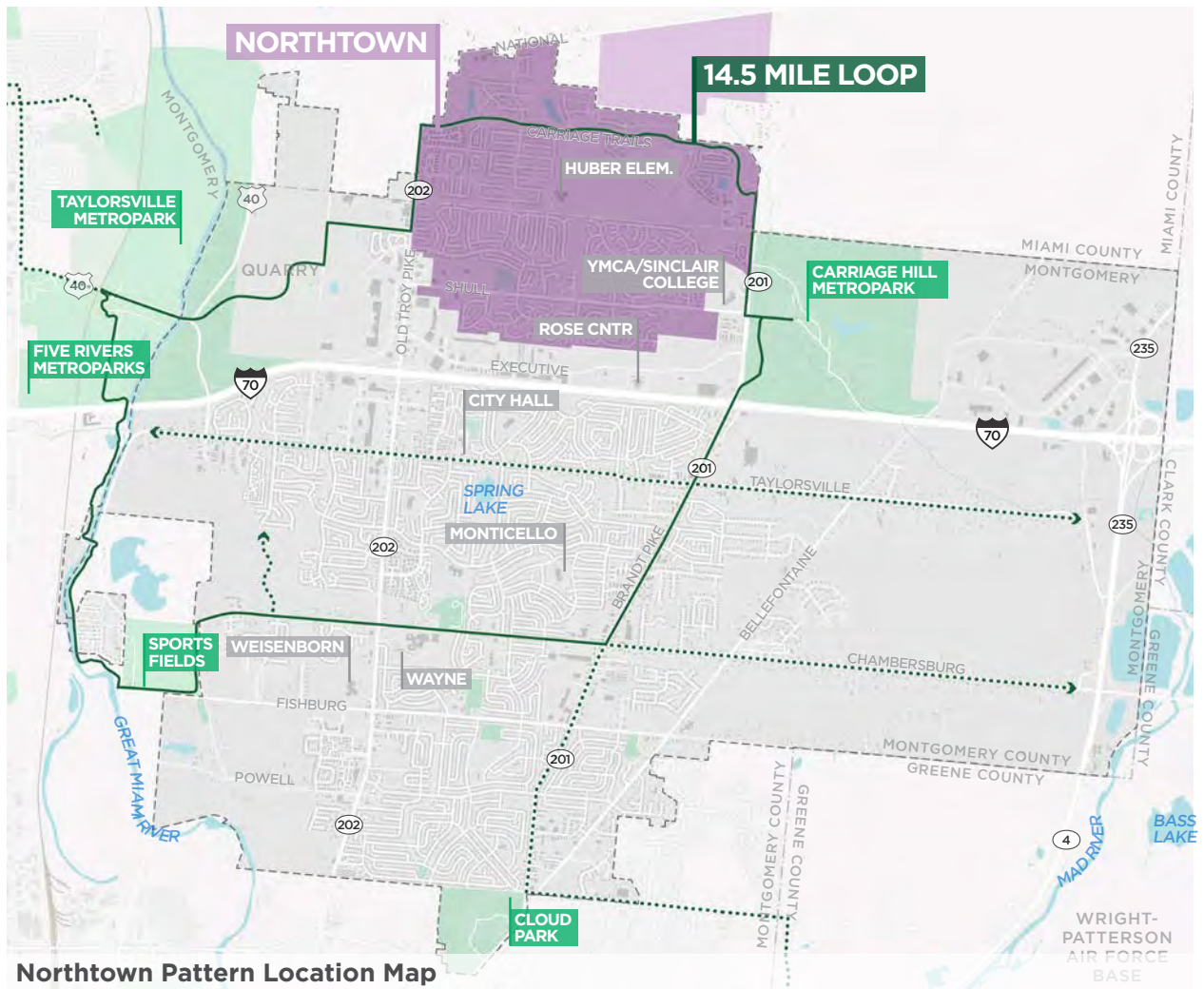
Located in the north-central area of the City, the Northtown pattern is most characterized by its detached, one to two-story homes. The area is bifurcated by the Miami and Montgomery county border which is made evident by the largely disconnected street network and 20-year difference in construction. The owner-occupied homes on the

Montgomery county side were built during the 1980s while homes on the Miami side began during the 2000s and continue to see new development taking place, east of the Charles Huber Elementary School. This pattern is anticipated to grow beyond current City-limits, as shown in a lighter purple on the map.

ESSENTIAL ELEMENTS

- » Late-century housing development
- » For existing developments, focus on completing subdivisions and completing bike/pedestrian networks
- » For new subdivisions, focus on bike/pedestrian infrastructure, external connections, streetscape, and setback garages

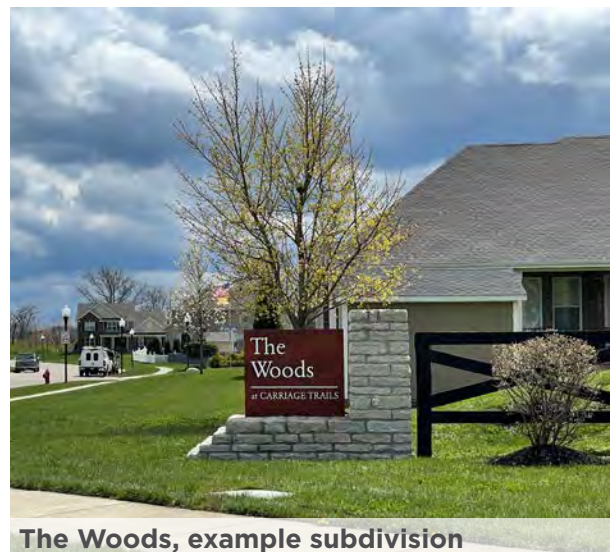




Northtown Pattern Location Map



Example home in Northtown



The Woods, example subdivision

FUTURE DEVELOPMENT PATTERNS

SOUTHTOWN

The Southtown pattern makes up the largest and most cohesive area in Huber Heights. Located south of Interstate 70, its character is driven by its residential neighborhoods, predominately detached, one and two-story brick homes. These homes are mostly original Huber Homes, including 1960s-era apartment complexes, as well as some later-built homes with matching aesthetic. Neighborhood-serving uses, like schools, parks, and small offices are located along collector streets.

Residential streets tend to be curvilinear and end in a cul-de-sac. As redevelopment and right-of-way allow, creating connections between streets would facilitate more direct mobility between neighborhoods and alleviate pressure from collector streets. To guide the next generation of neighborhood growth, targeted facade renovation grants, civic events, and marketing will need to be the focus.

ESSENTIAL ELEMENTS

- » Mid-century brick homes and apartment complexes
- » Focus on renovation, infill development, and incremental broadening of uses and housing types
- » Continue to prioritize utility upgrades and expand focus on connectivity through street tree maintenance, sidewalks, placemaking, and traffic calming
- » Expand homeowner reinvestment tools and incentives
- » Broaden focus on marketing neighborhoods



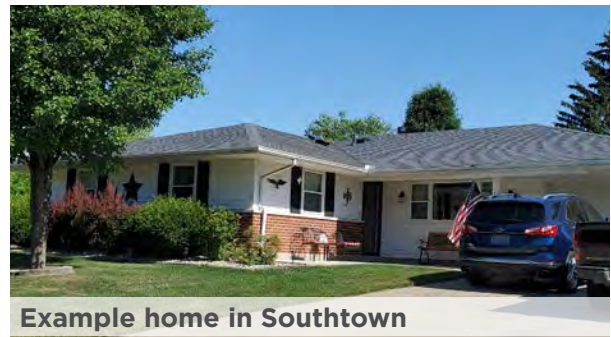
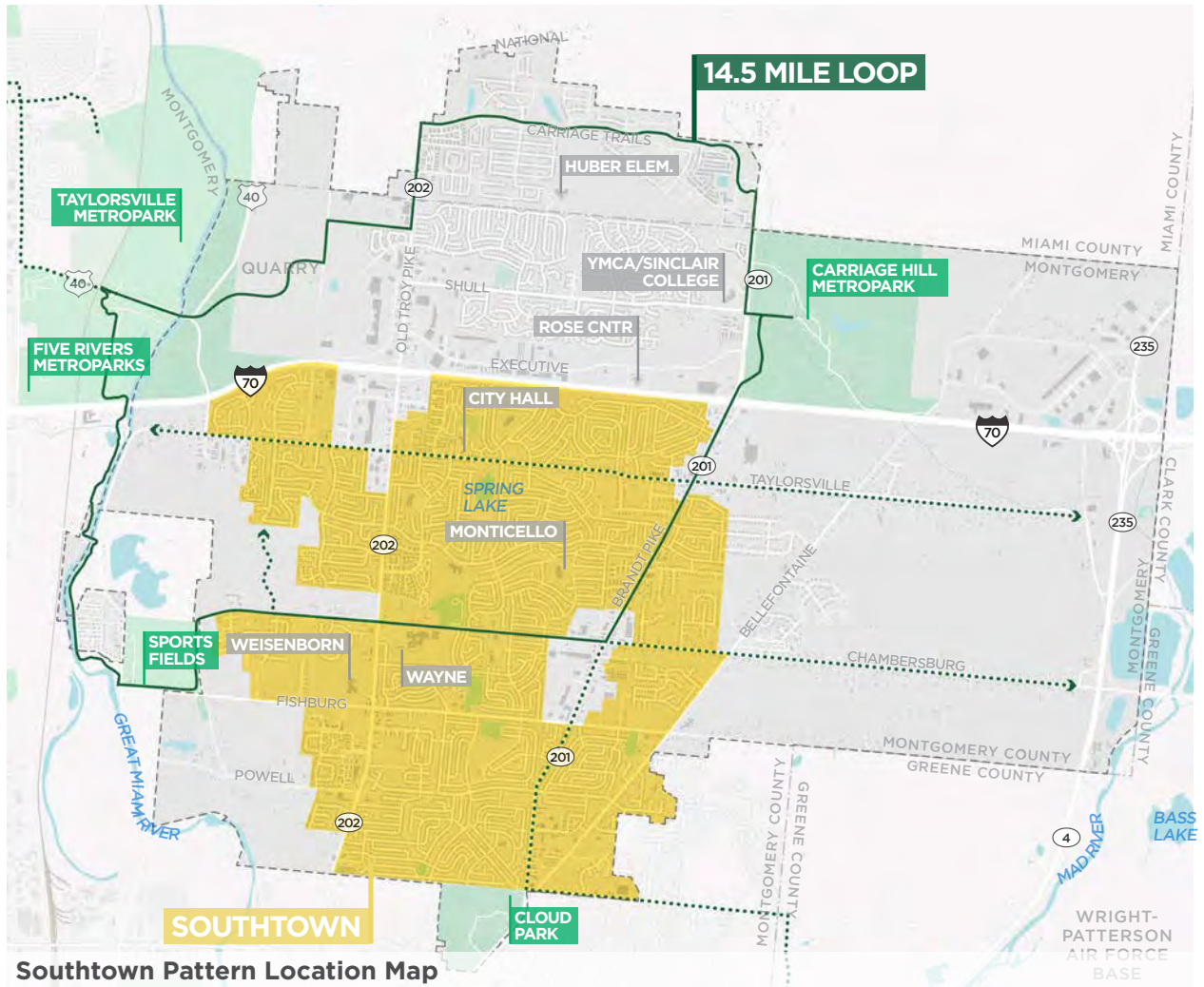
Monita Field Bike & Skate Park



Kitty Hawk Dog Park



Example apartments in Southtown



FUTURE DEVELOPMENT PATTERNS

EAST VILLAGES

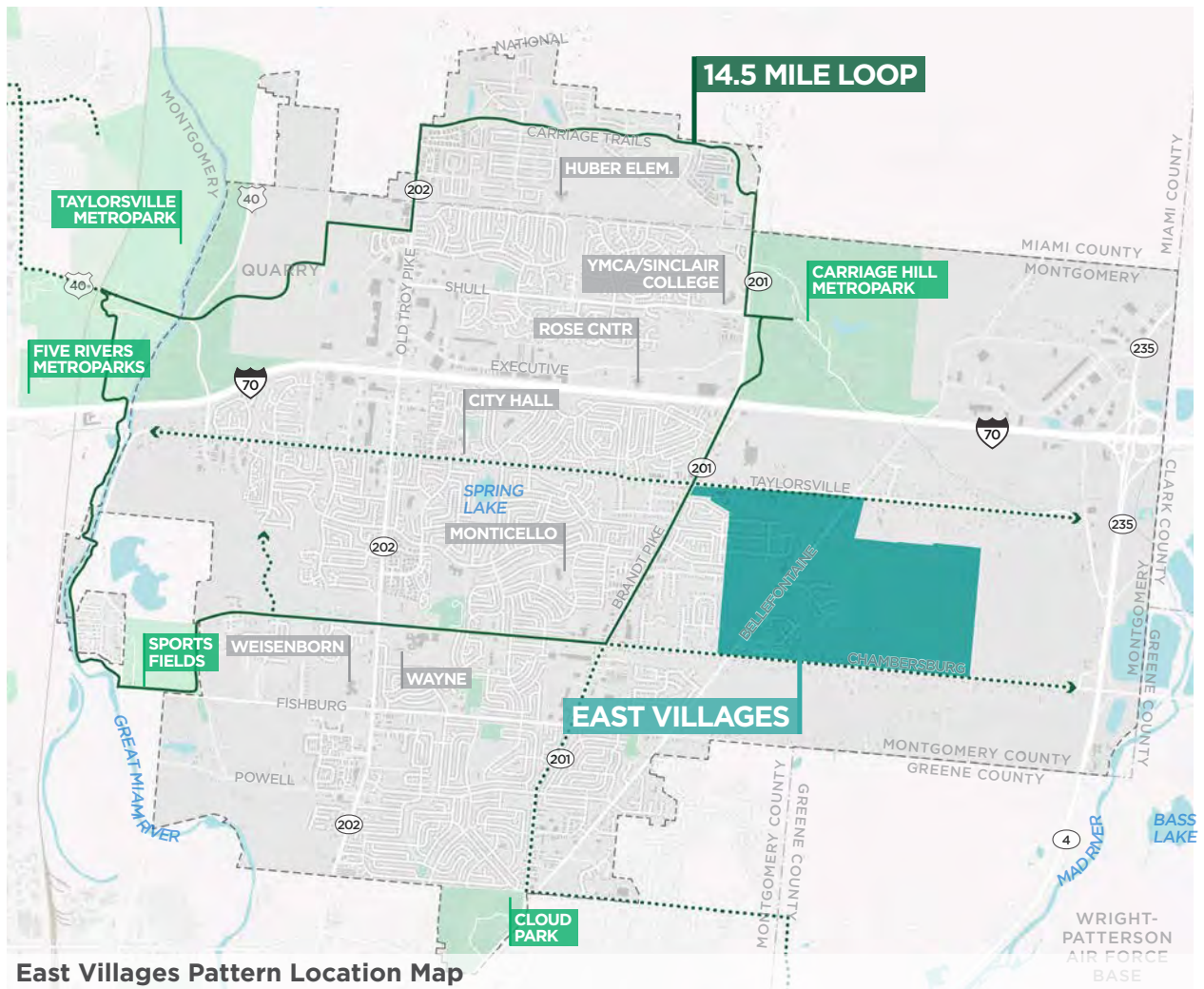
The East Villages development pattern is emerging along Bellefontaine Road between Taylorsville and Chambersburg roads. This area is currently made of a mix of rural-scale residential, agricultural uses, and wooded areas. New residential development is anticipated for undeveloped parcels.

Given the opportunity to build on large properties, new neighborhoods may be built in the form of traditional neighborhoods where blocks and streets are connected and a broad diversity of lot sizes are designed to meet many residential lifestyles and encourage walkability.

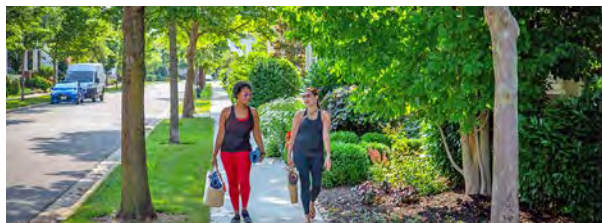
ESSENTIAL ELEMENTS

- » Largely undeveloped land that will transition to new traditional neighborhood forms
- » For new development focus should be on heightened innovation and quality; inter-connected streets, trails and green spaces; human-centered design; walkable density; and a mix of uses





East Villages Pattern Location Map



Norton Commons, Louisville, KY



Inglenook, Zionsville, IN

FUTURE DEVELOPMENT PATTERNS

ESTATES

The Estates development pattern recognizes the areas at the City's western and eastern edges that are more

rural-scale residential, where lot sizes are more than an acre, and where significant new development is not envisioned.

ESSENTIAL ELEMENTS

- » Slow growth, large lot (1 acre plus) residential
- » Maintain and enhance semi-rural character with improvements to trail connectivity and intersection safety
- » Allow for incremental, contextually relevant non-residential uses and amenities



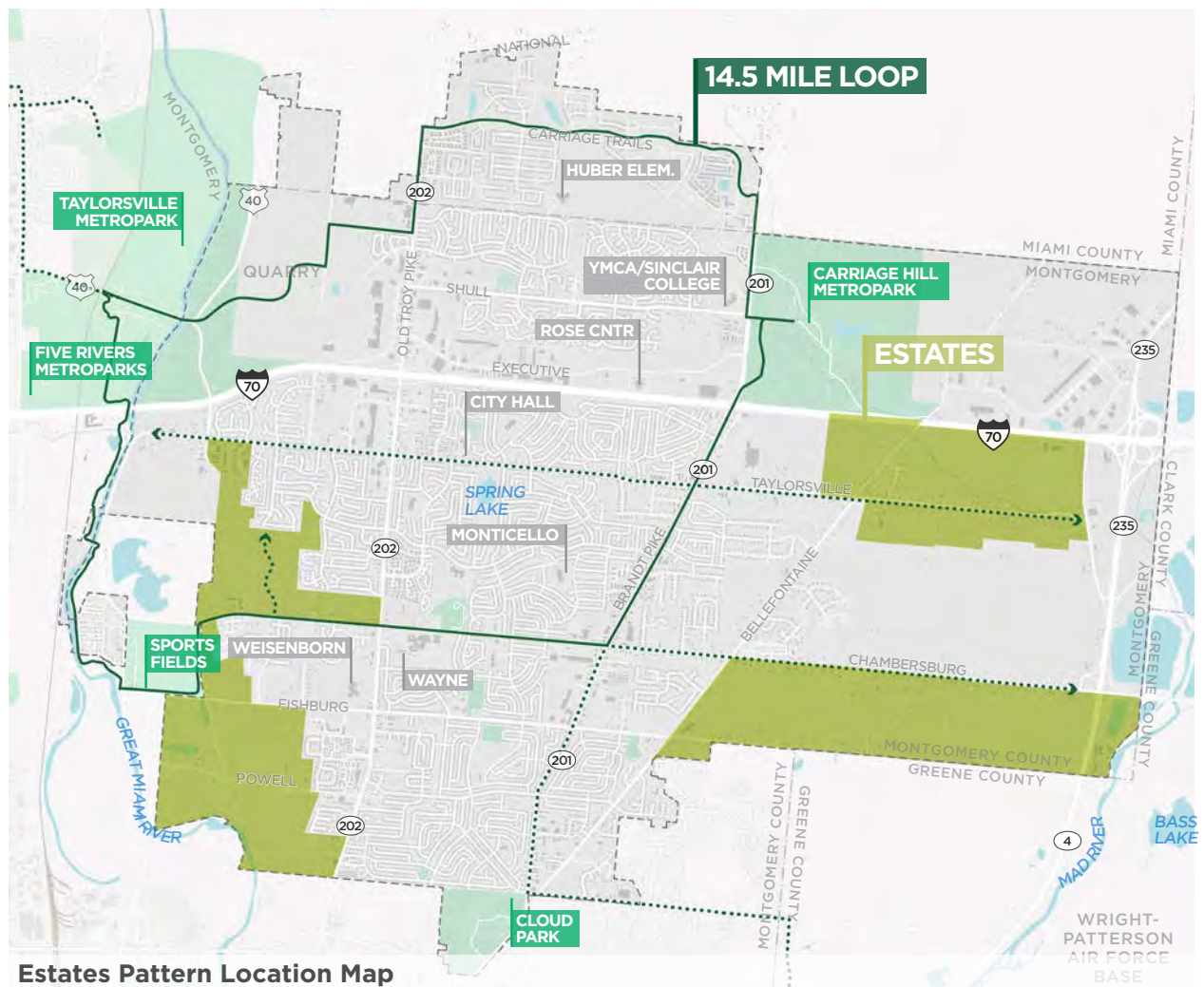
Example countryside inn



Example rural multi-use trail



Example rural multi-use trail



IMPLEMENTATION STEPS

To facilitate the meeting of the City's mobility goals, the following initiatives are recommended for the City to lead with particular emphasis on the first 36 months.

2-3 MONTHS

1 ADOPT COMPREHENSIVE PLAN

Marketing and broadcasting the Plan's adoption will launch implementation efforts.

- » Create web-based version of Plan
- » Create Spanish translation of the Plan
- » Proactively market new Comprehensive Plan Goals
- » Maintain social media and newsletter updates about Plan and growth

6-18 MONTHS

2 REFORM PLANNING & ZONING CODE

The City should modify current development standards to more easily allow the goals of this Plan to be met.

- » Foster transit supportive densities
- » Encourage a mix of housing types
- » Encourage a mix of uses
- » Decrease the overall number of residential districts
- » Eliminate barriers to density
- » Expand homeowner choices
- » Make traditional neighborhood development the default
- » Reduce reliance on zoning variances and Planned Unit Developments (PUDs)



Click here to visit the full Implementation Matrix

12-24 MONTHS

3 ALIGN INCENTIVES, FEE, & INFRASTRUCTURE PRIORITIES

Aligning development incentive tools and policies will ensure all efforts are pointed in the same direction for maximum effect.

- » Encourage adaptive reuse and home renovation
- » Encourage development on infill sites already within public service areas
- » Encourage transit-supportive and amenity-oriented development
- » Attract employees and companies from technology sectors

18-24 MONTHS

4 UPDATE CITY BRAND

Aligning development incentive tools and policies will ensure all efforts are pointed in the same direction for maximum effect.

- » Modify brand to align to this Plan
- » Activate new brand

IMPLEMENTATION STEPS

CONTINUED

18-24 MONTHS

5 UPDATE OR CREATE NEW SUB AREA PLANS & STRATEGIES

Detailing specific plans and strategies for high-priority areas of the city are critical for successful implementation of the Plan

- » Chambersburg and Brandt
- » The Heights
- » The Work Center
- » The Riverfront

24-48 MONTHS

6 EXPAND STAFF RESOURCES & CAPACITY

Proactively shaping and guiding growth requires sufficient staff capacity and expertise.

- » Expand community engagement city-wide
- » Coordinate planning and development resources
- » Broaden marketing efforts
- » Participate in regional economic development forums
- » Expand innovation in government services
- » Foster creation of growth organization(s)

EVERY 2-3 YEARS

7 UPDATE THIS PLAN

This Plan is a living document that should be regularly updated to reflect new opportunities.

- » Amend or update this Plan



Ignite the Heights | The Barn at The Heights

IMPLEMENTATION MATRIX



Click here to visit the live Implementation Matrix

9-12 MONTHS

1 MOBILITY PLAN

1.1 UPDATE LOCAL MOBILITY POLICIES

1.1.1 ADOPT STREET NETWORK MAP & TYPICAL SECTIONS

DESCRIPTION

Use this Plan to set new standards for street alignments and cross sections

GOAL

Better distribute traffic by mode, route, and time of day

WHY

Ensures that the maintenance of existing streets and creation of new streets promotes the goals and objectives of this Plan.

BY 2035 HUBER HEIGHTS WILL...

have new and reconstructed streets that meet or exceed the standards

1.1.2 UPDATE SUBDIVISION REGULATIONS

DESCRIPTION

Incorporate new street standards, increased street tree requirements, and street and trail connectivity expectations.

GOAL

Support multi-modal access

WHY

Ensures that new local streets built by developers as part of new development meet the City standard and enhance the level of safe connectivity to surrounding neighborhoods.

BY 2035 HUBER HEIGHTS WILL...

have streets in new subdivisions meet or exceed new standard and are connected internally and externally

1.1.3 ELIMINATE OR REDUCE PARKING MINIMUMS

DESCRIPTION

Lower or remove altogether parking minimums by use in the zoning ordinance

GOAL

Encourage walkable density

WHY

Overly prescribed parking inhibits affordability, walkability, environmental sustainability, and induces increased volumes of traffic.

BY 2035 HUBER HEIGHTS WILL...

have relatively fewer parking lots

CONTINUED
ON NEXT
PAGE

IMPLEMENTATION MATRIX

| | | |
|-------------|--|--|
| 9-12 MONTHS | 1 MOBILITY PLAN | |
| | 1.1 UPDATE LOCAL MOBILITY POLICIES | |
| | 1.1.4 PROMOTE INFILL DEVELOPMENT | |
| | DESCRIPTION Encourage new development on previously or under developed sites to reduce demands on an expanded street network | GOAL Encourage walkable density |
| | WHY Development on sites close to amenities and existing services reduces unnecessary length and volume of car trips required to serve new development. | BY 2035 HUBER HEIGHTS WILL... have relatively fewer vacant lots and see an increase in the redevelopment of underdeveloped sites |
| | 1.1.5 SUPPORT TRAFFIC CALMING | |
| | DESCRIPTION Encourage and support resident-led traffic calming measures to discourage cut-through and speeding traffic on neighborhood streets | GOAL Encourage human-centered innovation |
| | WHY As both traffic and connectivity increase in the short term, so will cut through neighborhood traffic. Sanctioned resident-led traffic calming both reduces the speed of these legal uses of the street and sparks creative innovation and beautification within the street. | BY 2035 HUBER HEIGHTS WILL... experience less speeding on neighborhood streets |
| | 1.1.6 INTRODUCE EBIKE INCENTIVE | |
| | DESCRIPTION Provide a credit to residents for the purchase of an eBike | GOAL Lower household annual transportation cost |
| | WHY eBikes are one of the fastest growing transportation technologies on the market. A modest incentive program helps bridge the current affordability and infrastructure gap that will shrink overtime as the user base becomes more established and the infrastructure becomes more fully developed. | BY 2035 HUBER HEIGHTS WILL... have 2% of local trips will be made by bicycle |

CONTINUED
ON NEXT
PAGE

9-12
MONTHS

1 MOBILITY PLAN

1.1 UPDATE LOCAL MOBILITY POLICIES

1.1.7 EXPAND CHARGING STATION AVAILABILITY

DESCRIPTION

Promote increased presence of electric vehicle charging stations and shift City fleets to electric-powered vehicles

GOAL

Lower household annual transportation cost

WHY

Electric vehicle adoption is accelerating and will likely continue to in the future. Car charging stations will ensure adequate infrastructure is in place to meet demand and reduce the length of trips necessary to meet charging needs.

BY 2035 HUBER HEIGHTS WILL...

meet the public's electrical fleet recharging needs and have a 100% fully electric fleet of municipal vehicles

1.1.8 IMPLEMENT ACCESS MANAGEMENT

DESCRIPTION

Reduce the number of curb cuts that interrupt traffic and pedestrian flow along arterials and major collectors

GOAL

Better distribute traffic by mode, route, and time of day

WHY

Too many driveways and curb cuts interfere with roadway traffic flow while disrupting and imperiling safe pedestrian and bicycle traffic. The use of side streets, alleys and connected parking lots coupled with removing duplicative entries off primary streets will improve safe access and mobility for all.

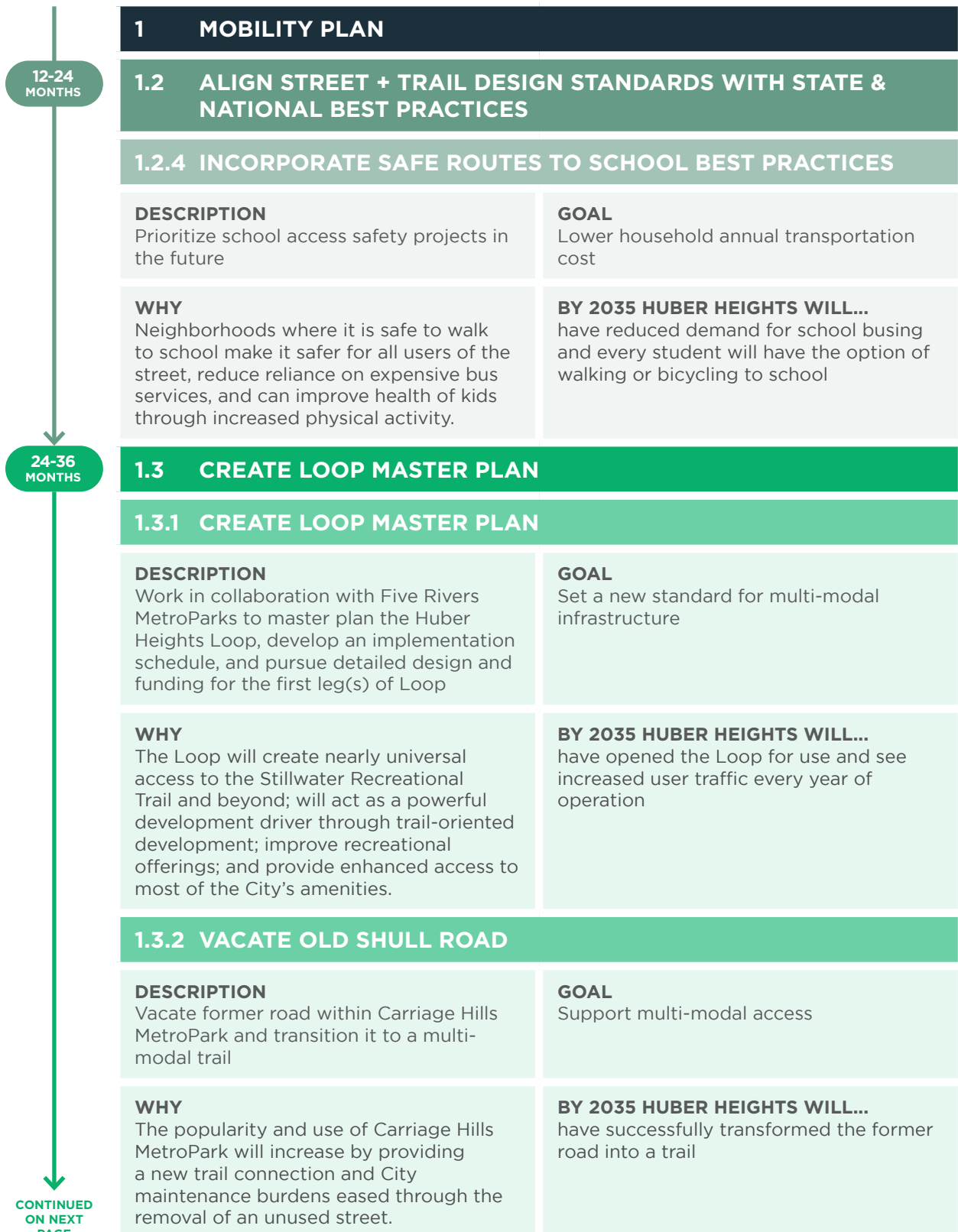
BY 2035 HUBER HEIGHTS WILL...

will have no net new curb cuts along arterials and major collectors as well as see a net reduction of curb cuts and driveways along The Loop alignment

CONTINUED
ON NEXT
PAGE

IMPLEMENTATION MATRIX

| | | |
|--|--|--|
| <div> <div>12-24 MONTHS</div> <div>CONTINUED ON NEXT PAGE</div> </div> | 1 MOBILITY PLAN | |
| | 1.2 ALIGN STREET + TRAIL DESIGN STANDARDS WITH STATE & NATIONAL BEST PRACTICES | |
| | 1.2.1 JOIN NACTO | |
| | DESCRIPTION Become a National Association of City Transportation Officials (NACTO) member and its utilize design standards for future street and trail design projects | GOAL Set a new standard for multi-modal infrastructure |
| | WHY NACTO is the leading voice on affordable, safe and equitable street design. Alignment with its guidance improves streets and attracts innovation in doing so. | BY 2035 HUBER HEIGHTS WILL... be known for its human-centered street designs. |
| | 1.2.2 INCORPORATE ODOT MULTI-MODAL DESIGN GUIDE (MDG) | |
| | DESCRIPTION Use MDG to supplement NACTO standards in new projects, as appropriate | GOAL Set a new standard for multi-modal infrastructure |
| | WHY Use of the Ohio Department of Transportation's MDG will ensure alignment with statewide best practices and possible increase project visibility to state and federal funding programs. | BY 2035 HUBER HEIGHTS WILL... be known for its human-centered street designs. |
| | 1.2.3 INCORPORATE VISIONZERO GOALS & OBJECTIVES | |
| | DESCRIPTION Pursue and adopt policies that are in line with VisionZero and explore becoming a VisionZero member City | GOAL Encourage human-centered innovation |
| | WHY VisionZero alignment and prioritization will help ensure that active steps are being made to reduce or eliminate fatal car crashes. | BY 2035 HUBER HEIGHTS WILL... have multiple years of zero traffic or pedestrian fatalities |



IMPLEMENTATION MATRIX

| | | |
|--|---|--|
|  <div>36-60 MONTHS</div> <div>CONTINUED ON NEXT PAGE</div> | 1 MOBILITY PLAN | |
| | 1.4 CREATE MULTI-MODAL PLANNING COORDINATOR STAFF POSITION | |
| | 1.3.1 CREATE NEW STAFF POSITION | |
| | DESCRIPTION Create dedicated full-time position that will facilitate the planning, design, and maintenance of multi-modal infrastructure in the City | GOAL Set a new standard for multi-modal infrastructure |
| | WHY The development of new infrastructure requires dedicated, energetic, and experienced staff leadership to guide the design, implementation, and management of new facilities to meet this Plan's goals and objectives. | BY 2035 HUBER HEIGHTS WILL... spend less on transportation than the average Ohioan |
| | 1.3.2 IMPROVE TRANSIT ALONG PRIORITY ROUTES | |
| | DESCRIPTION Work with area employers and the Regional Transit Authority (RTA) to improve the experience of transit ridership along key routes and market the improved service | GOAL Better distribute traffic by mode, route, and time of day |
| | WHY Along with supporting transit-supportive development densities, improving the experience and brand of transit ridership can provide elevated levels of service, increased access, and reduce unnecessary car trips. | BY 2035 HUBER HEIGHTS WILL... see a 5 percent increase in transit ridership |

36-60
MONTHS

1 MOBILITY PLAN

1.4 CREATE MULTI-MODAL PLANNING COORDINATOR STAFF POSITION

1.3.3 DEVELOP PUBLIC-PRIVATE PARTNERSHIPS TO IMPROVE MOBILITY & LOGISTICS

DESCRIPTION

Explore public/private partnerships to test new technologies in government services, mobility, and logistics handling through pilot projects, targeted investments in adaptive smart technologies, and data reporting within the public domain

GOAL

Encourage human-centered innovation

WHY

Innovation happening in the public domain can be a powerful driver of new technologies and company growth that will attract investment in Huber Heights while providing new and improved levels of service, safety, and reliability in City streets and public spaces.

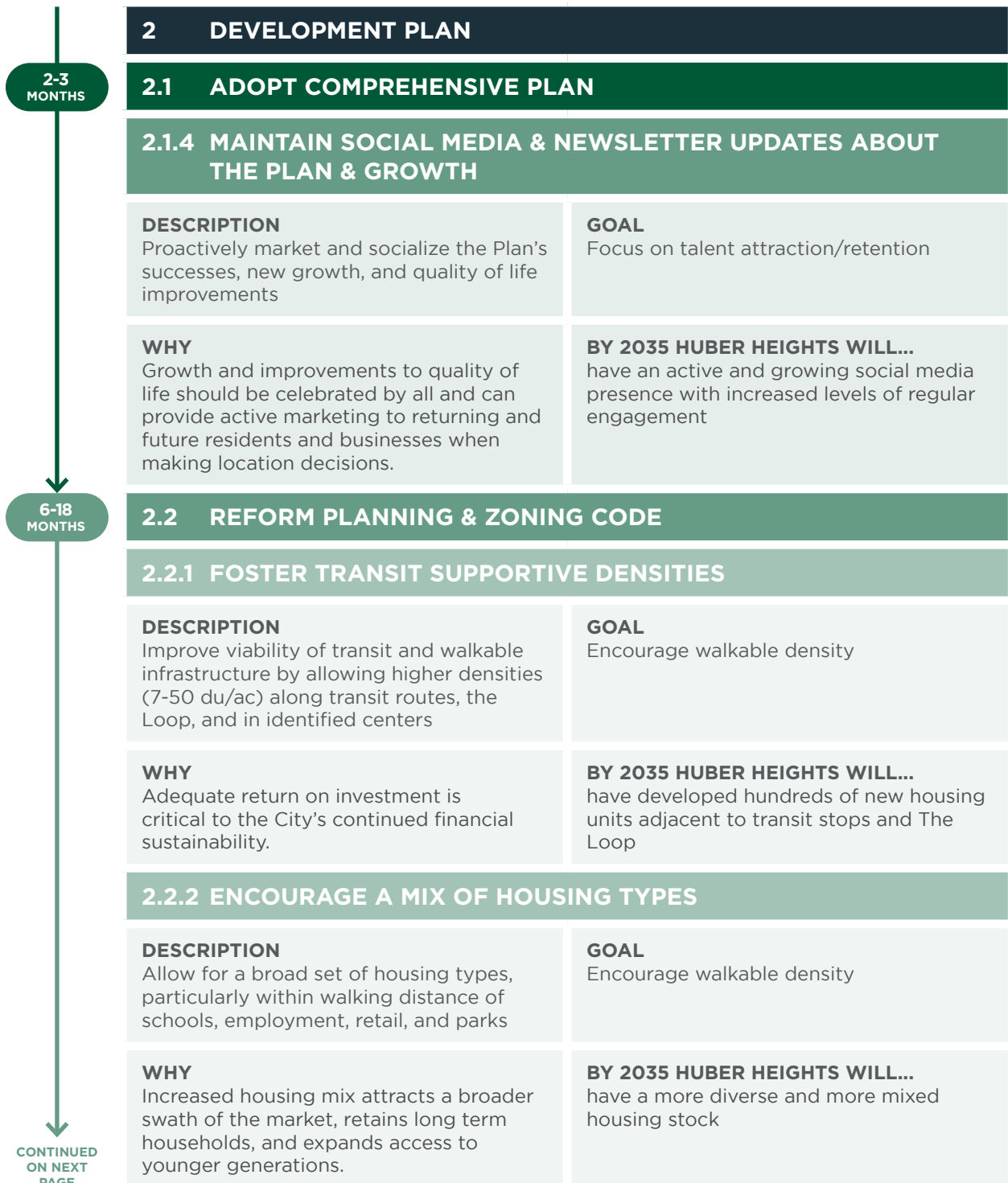
BY 2035 HUBER HEIGHTS WILL...

have piloted at least three new technologies in the public domain

IMPLEMENTATION MATRIX

| | | |
|------------|--|--|
| 2-3 MONTHS | 2 DEVELOPMENT PLAN | |
| | 2.1 ADOPT COMPREHENSIVE PLAN | |
| | 2.1.1 CREATE WEB-BASED VERSION OF PLAN | |
| | DESCRIPTION Create adaptive web version of the Plan that may be easily referenced on a variety of platforms | GOAL Encourage human-centered innovation |
| | WHY Maximize ability to maintain an updated Plan with reduced printing expenses and increased public access. | BY 2035 HUBER HEIGHTS WILL... experience a decreased need for printed copies of the Plan |
| | 2.1.2 CREATE SPANISH & RUSSIAN TRANSLATIONS OF THE PLAN | |
| | DESCRIPTION Expand access to the Plan by creating versions in other languages common to Huber Heights | GOAL Encourage human-centered innovation |
| | WHY Expanded access to this Plan will maximize opportunities for innovation and entrepreneurship while improving quality of life for all. | BY 2035 HUBER HEIGHTS WILL... have more engagement in community growth and planning by non-English speaking members of the community |
| | 2.1.3 PROACTIVELY MARKET NEW COMPREHENSIVE PLAN GOALS | |
| | DESCRIPTION Share new opportunities described in the Plan in regional and national economic development forums | GOAL Focus on talent attraction/retention |
| | WHY Reinforcing the City's clarity, leadership, and sophistication around growth to the market increases its visibility to potential partners. | BY 2035 HUBER HEIGHTS WILL... be a cornerstone in the regional economy |

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ON NEXT
PAGE



IMPLEMENTATION MATRIX

| | | |
|-------------|---|--|
| 6-18 MONTHS | 2 DEVELOPMENT PLAN | |
| | 2.2 REFORM PLANNING & ZONING CODE | |
| | 2.2.3 ENCOURAGE A MIX OF USES | |
| | DESCRIPTION Allow broader and more flexible use categories with greater mixing permitted between commercial, light manufacturing, institutional, recreational, and residential uses | GOAL Allow people to live closer to jobs and amenities |
| | WHY Mixing uses provides more market flexibility, increased proximity to amenities, and increased walkability. | BY 2035 HUBER HEIGHTS WILL... have an overall WalkScore (or its equivalent) of 40 or greater and bike score of 60 or greater |
| | 2.2.4 DECREASE THE OVERALL NUMBER OF RESIDENTIAL DISTRICTS | |
| | DESCRIPTION Reduce and simplify residential zoning districts to maximize the mixing of housing types across the City | GOAL Expand housing options |
| | WHY Too many residential zoning districts prohibit mixing of housing types within the same neighborhood. | BY 2035 HUBER HEIGHTS WILL... see increased fluidity in the types of houses constructed in most if not all areas of the City |
| | 2.2.5 ELIMINATE BARRIERS TO DENSITY | |
| | DESCRIPTION Reduce or eliminate minimum lot sizes, unit sizes, and parking minimums | GOAL Encourage walkable density |
| | WHY Minimums are overly duplicative to building codes and arbitrarily reduce market responsiveness. | BY 2035 HUBER HEIGHTS WILL... see moderate increase in high quality market-based housing development |

CONTINUED
ON NEXT
PAGE

6-18
MONTHS

2 DEVELOPMENT PLAN

2.2 REFORM PLANNING & ZONING CODE

2.2.6 EXPAND HOMEOWNER CHOICES

DESCRIPTION

Establish a universal by right allowance for accessory dwelling units (ADUs) and most home-based businesses

GOAL

Expand housing options

WHY

Expanding homeowner choice allows for broader meeting of housing needs, income opportunities, and expands range and proximity of housing options and services.

BY 2035 HUBER HEIGHTS WILL...

broaden homeowners' potential income streams

2.2.7 MAKE TRADITIONAL NEIGHBORHOOD DEVELOPMENT THE DEFAULT

DESCRIPTION

Establish new form-based standards for development that encourage safe, walkable, and human-scaled buildings fronting streets and public spaces

GOAL

Encourage walkable density

WHY

Achieving the goals of this plan will require significant effort by the private sector if codes and regulations are not modified to align with this Plan.

BY 2035 HUBER HEIGHTS WILL...

have an established, user-friendly, and market-responsive development code that raises the bar for builder quality and innovation

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ON NEXT
PAGE

IMPLEMENTATION MATRIX

| | | |
|------------------------|---|--|
| 6-18 MONTHS | 2 DEVELOPMENT PLAN | |
| | 2.2 REFORM PLANNING & ZONING CODE | |
| | 2.2.8 REDUCE RELIANCE ON ZONING VARIANCES & PLANNED UNIT DEVELOPMENTS (PUDS) | |
| | DESCRIPTION Revise zoning such that City staff may approve the majority of development and site plan proposals with clear, achievable development and subdivision standards while reserving the types of applications that require actions by Planning Commission and/or City Council for the most unique of cases. | GOAL Focus on talent attraction/retention |
| 12-24 MONTHS | WHY A revised planning and development approval process can reduce regulatory risk, incentivize quality, and minimize administrative burdens associated with regular zoning variances and Planned Unit Developments. | BY 2035 HUBER HEIGHTS WILL... will have seen a reduction in the number of variances requested |
| | 2.3 ALIGN INCENTIVES, FEE, & INFRASTRUCTURE PRIORITIES | |
| CONTINUED ON NEXT PAGE | 2.3.1 ENCOURAGE ADAPTIVE REUSE & HOME RENOVATION | |
| | DESCRIPTION Promote existing public financing tools and fill gaps in programs to incentivize home renovation and the reuse of existing buildings | GOAL Focus on talent attraction/retention |
| | WHY Maintaining the existing housing stock is the most affordable way to preserve and grow property values and protect neighborhoods from stagnation or decline. Older neighborhoods with a significant fixed-income population often require modest assistance in making home repairs that public financing can support. | BY 2035 HUBER HEIGHTS WILL... will have successfully transitioned older parts of the City to the next generation of homeowners and residents |
| | | |

12-24
MONTHS

2 DEVELOPMENT PLAN

2.3 ALIGN INCENTIVES, FEE, & INFRASTRUCTURE PRIORITIES

2.3.2 ENCOURAGE DEVELOPMENT ON INFILL SITES ALREADY WITHIN PUBLIC SERVICE AREAS

DESCRIPTION

Reduce financing and site plan approval barriers to development on infill sites already served by infrastructure

GOAL

Encourage walkable density

WHY

Developing on already serviced sites are the best way to increase walkability and make smart use of public resources. These sites often face hurdles and complexities that new sites do not face. Streamlined approvals and access to predictable incentives can bridge the gap that these sites face.

BY 2035 HUBER HEIGHTS WILL...

have relatively fewer vacant lots and see an increase in the redevelopment of underdeveloped sites

2.3.3 ENCOURAGE TRANSIT-SUPPORTIVE & AMENITY-ORIENTED DEVELOPMENT

DESCRIPTION

Incentivize growth along transit routes, future trail alignments, and adjacent to amenities such as parks, schools, recreation centers, and community centers

GOAL

Allow people to live closer to jobs and amenities

WHY

Reaping the value of and sustaining the access to the City's best shared amenities can best be achieved through modest increases to the development that may occur around them.

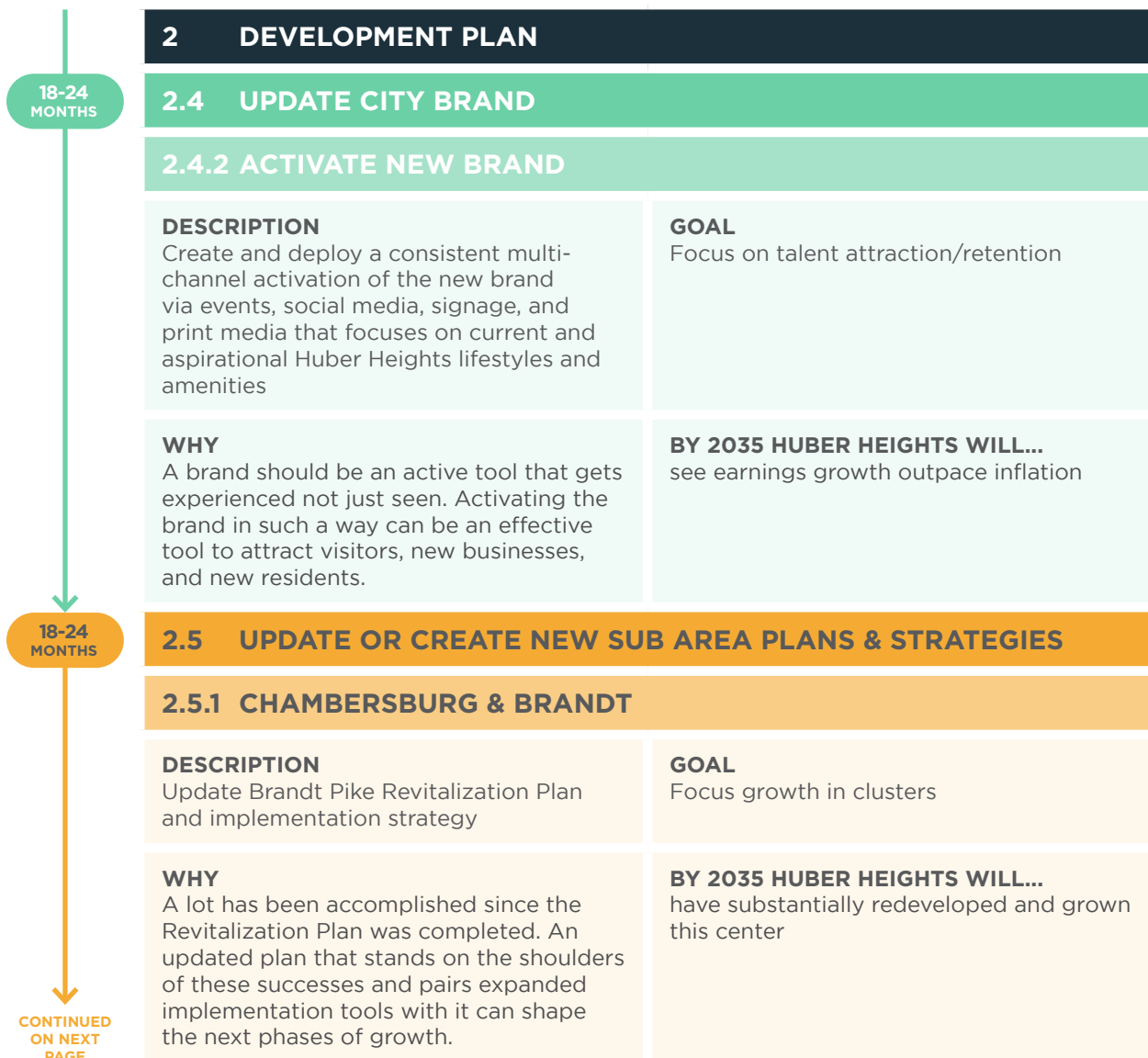
BY 2035 HUBER HEIGHTS WILL...

have developed hundreds of new housing units adjacent to transit stops, The Loop, and clustered in centers

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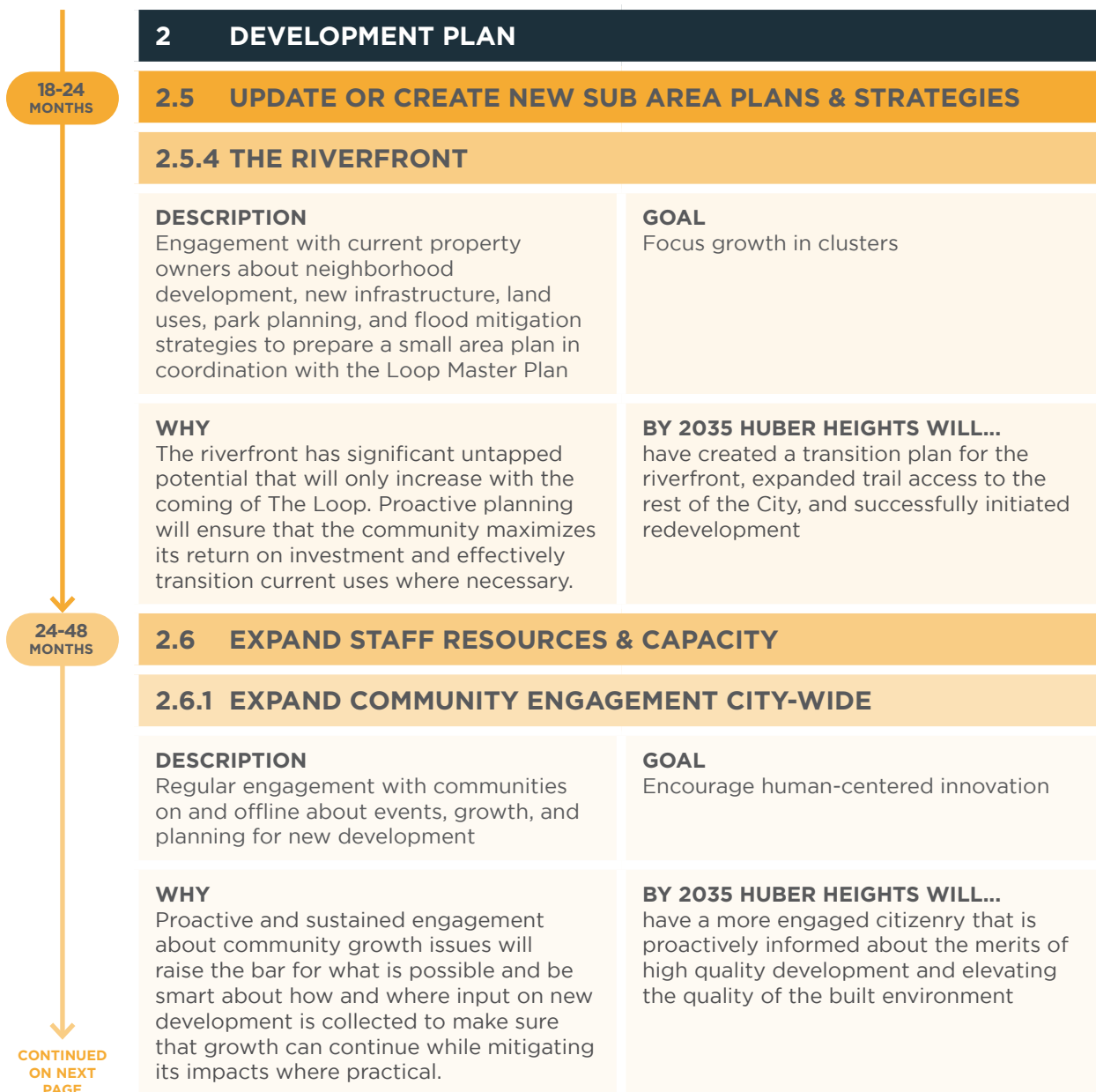
IMPLEMENTATION MATRIX

| | | |
|------------------------|--|--|
| 12-24 MONTHS | 2 DEVELOPMENT PLAN | |
| | 2.3 ALIGN INCENTIVES, FEE, & INFRASTRUCTURE PRIORITIES | |
| | 2.3.4 ATTRACT EMPLOYEES & COMPANIES FROM TECHNOLOGY SECTORS | |
| | DESCRIPTION Provide cash incentives for Work From Anywhere employees and companies to establish themselves in Huber Heights | GOAL Focus on talent attraction/retention |
| 18-24 MONTHS | WHY Huber Heights currently flies under the radar of workers who can work from anywhere. A modest, restricted cash incentive to move to the City not only improves the tax base in the short term but, as new talent puts roots down, often leads to new companies being formed in the City. | BY 2035 HUBER HEIGHTS WILL... see an increase of new companies founded and based in Huber Heights |
| | 2.4 UPDATE CITY BRAND | |
| | 2.4.1 MODIFY BRAND TO ALIGN TO THIS PLAN | |
| | DESCRIPTION Modify look, feel, and messaging of City Brand to communicate the objectives outlined in this Plan | GOAL Focus on talent attraction/retention |
| CONTINUED ON NEXT PAGE | WHY The vision and drive of Huber Heights is hidden behind the current brand. A refreshed brand can power the City's marketing and communication efforts locally and further afield. | BY 2035 HUBER HEIGHTS WILL... be known as a well understood by its quality of life, amenities, and growing economy |



IMPLEMENTATION MATRIX

| | | |
|---|--|---|
| <div>18-24 MONTHS</div> <div>CONTINUED ON NEXT PAGE</div> | 2 DEVELOPMENT PLAN | |
| | 2.5 UPDATE OR CREATE NEW SUB AREA PLANS & STRATEGIES | |
| | 2.5.2 THE HEIGHTS | |
| | DESCRIPTION Create a mixed-use, entertainment-anchored district master plan and implementation strategy for The Heights | GOAL Focus growth in clusters |
| | WHY Current development of The Heights has been limited by a variety of factors. A cohesive, multi-site development and infrastructure plan will create a unified vision, help attract development partners, and ensure that as the district grows it can hold together as a walkable environment. | BY 2035 HUBER HEIGHTS WILL... have successfully created an evening and weekend destination that is active every week of the year |
| | 2.5.3 THE WORK CENTER | |
| | DESCRIPTION Work with developers, property owners, and existing companies to create a coordinated infrastructure and development master plan | GOAL Focus growth in clusters |
| | WHY Supporting and proactively shaping current development interest can maximize public benefit and increase flexibility to be nimble to evolving markets. | BY 2035 HUBER HEIGHTS WILL... have successfully built out the infrastructure to support a diversified and densified employment base |



IMPLEMENTATION MATRIX

| | | |
|--------------|--|---|
| 24-48 MONTHS | 2 DEVELOPMENT PLAN | |
| | 2.6 EXPAND STAFF RESOURCES & CAPACITY | |
| | 2.6.2 COORDINATE PLANNING & DEVELOPMENT RESOURCES | |
| | DESCRIPTION Align staffing and planning resources to managing the essential elements of development pattern areas as well as to facilitate planning and implementation of clustered Center development | GOAL Focus growth in clusters |
| | WHY A growing suburb that in the future will see as much redevelopment as it will growth at its edges requires increased professional staff capacity to manage and shape that growth in an equitable manner that ensures a sustained return on these investments. | BY 2035 HUBER HEIGHTS WILL... have an active and experienced staff with sufficient capacity to proactively recruit, shape, and manage growth |
| | 2.6.3 BROADEN MARKETING EFFORTS | |
| | DESCRIPTION Expand regional marketing and storytelling about Huber Heights | GOAL Focus on talent attraction/retention |
| | WHY With a new Plan and brand in tow, doubling down on regional marketing can help attract visitors and new growth that can, in turn, attract and sustain new amenities and investment in the City. | BY 2035 HUBER HEIGHTS WILL... be visible regionally across platforms and media with an actively interpreted history and bold future-oriented identity |
| | 2.6.4 PARTICIPATE IN REGIONAL ECONOMIC DEVELOPMENT FORUMS | |
| | DESCRIPTION Expand and regularize presence in regional economic development forums | GOAL Focus on talent attraction/retention |
| | WHY A predictable and proactive seat at regional economic development tables will allow Huber Heights to help shape the regional agenda, stay ahead of regional trends, be informed on new development possibilities that fit the City's vision, and avail itself to new partnerships. | BY 2035 HUBER HEIGHTS WILL... be an active member and leader in regional economic development organizations |

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ON NEXT
PAGE

24-48
MONTHS

2 DEVELOPMENT PLAN

2.6 EXPAND STAFF RESOURCES & CAPACITY

2.6.5 EXPAND INNOVATION IN GOVERNMENT SERVICES

DESCRIPTION

Increase research, development, and piloting of new or updated government services in collaboration with partner agencies and organizations

GOAL

Encourage human-centered innovation

WHY

A growing City places increased demands on government processes and services. Leveraging those needs into attracting new innovation in technologies and service methods will create a sustained market for new talent and firms to root themselves in the community. It will also establish the City as a regional leader and innovator, which will further attract organizations that want to be part of that value set.

BY 2035 HUBER HEIGHTS WILL...

have established one or more civic innovation partnerships

2.6.6 FOSTER CREATION OF GROWTH ORGANIZATION(S)

DESCRIPTION

Facilitate the establishment of a of place-based growth organization first in the Brandt Revitalization Area and explore similar organizational structure(s) in other priority centers

GOAL

Focus growth in clusters

WHY

Huber Heights has a diverse set of needs geographically that are difficult to manage centrally. Place-based organizations that are focused on the needs of one specific district can proactively shape and attract growth; recruit new amenities and retailers; and manage impacts to the existing community.

BY 2035 HUBER HEIGHTS WILL...

have established and sustained one community growth organization as a successful model to be utilized elsewhere in the City

CONTINUED
ON NEXT
PAGE

IMPLEMENTATION MATRIX

2-3
YEARS

2DEVELOPMENT PLAN

2.7UPDATE THIS PLAN

2.7.1AMEND OR UPDATE THIS PLAN

DESCRIPTION

Periodically amend this Plan with new updates and completely update it by 2035

GOAL

Encourage human-centered innovation

WHY

Institutionalize implementation accountability, be nimble to solving unanticipated problems, and be responsive to new opportunities for growth.

BY 2035 HUBER HEIGHTS WILL...

Replace this Plan with a new Comprehensive Plan



APPENDIX



[Click here to visit the
Appendix Folder](#)

1. Engagement Plan
2. Summary of Understanding and Emerging Scenarios
3. Draft Comprehensive Plan Video Presentation
4. Survey 1 Summary
5. Survey 2 Summary
6. Phase 2 Engagement Boards Results
7. City of Huber Heights Market Analysis
8. City of Huber Heights Industry Cluster Analysis
9. City of Huber Heights Site SWOT Analysis and Next Steps
10. “Ignite the Heights” Video

HUBER HEIGHTS

hhoh.org



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@huberheightsohio



@hhohio



@CityofHuberHeights

Memorandum

Staff Report for Meeting of February 28, 2023

To: Huber Heights City Planning Commission
From: Aaron K. Sorrell, City Planner
Date: February 22, 2023
Subject: ZC 23-06 Comprehensive Plan Update

Department of Planning and Zoning

City of Huber Heights

| | |
|----------------------------------|---|
| APPLICANT/OWNER: | City of Huber Heights – Applicant |
| DEVELOPMENT NAME: | N/A |
| ADDRESS/LOCATION: | N/A |
| ZONING/ACREAGE: | N/A |
| EXISTING LAND USE: | N/A |
| ZONING ADJACENT LAND: | N/A |
| REQUEST: | The applicant requests the adoption of the 2023 Comprehensive Plan |
| ORIGINAL APPROVAL: | N/A |
| APPLICABLE HHCC: | City Charter, Section 9.04 |
| CORRESPONDENCE: | In Favor – None Received In Opposition – None Received |

STAFF ANALYSIS AND RECOMMENDATION:

Overview

In the Spring of 2022, the City began the effort to update our comprehensive plan with the assistance of the consulting firm Yard & Company. The previous comprehensive plan was adopted in 2011. This staff report will outline the following:

- Purpose of the comprehensive plan.
- Public engagement activities to solicit feedback.
- Key themes, vision and goals within the plan.
- Next steps.

What is a comprehensive plan, and why are they important?

A comprehensive plan is a statement of the community's goals, objectives, and policies to help guide public and private development. The comprehensive plan is the overarching policy document that guides the development and implementation of zoning and subdivision regulations, location and classification of streets, public facilities, parks and open space, and housing and economic development programs.

Key characteristics of comprehensive plans are:

- **They are comprehensive.** The plan covers the entire jurisdiction, as opposed to some limited regions or sections of a community.
- **They are general.** A comprehensive plan summarizes high-level policies, goals and objectives, as opposed to a zoning ordinance that regulates the design and use of individual parcels.
- **They are long-range.** A comprehensive plan looks forward 15 to 20 years.

Why are they important?

Developing the plan allows residents to help set goals and guide the community's priorities. Comprehensive plans:

- Identify the vision and shape the long-term development of well-designed neighborhoods, including land uses, parks, streets, open spaces, public utilities, and infrastructure.
- Outline actions the City and its partners can undertake to implement the community goals and visions outlined in the plan.

2023 Comprehensive Plan Summary

Public Engagement Efforts

An Engagement Plan was devised to ensure a broad mix of audience types was reached. A steering committee was appointed by City Council comprised of residents, business owners and elected officials. Stakeholders included renters and owners, employees, regional economic development partners, visitors of Huber Heights, local businesses, and cultural groups.

A mix of on- and offline engagement tools were utilized to help reach people based on their preferences. Engagement tools included a project web page, digital and paper

surveys, online and printed interactive maps, social media updates, newsletters, digital billboard advertisements, posters, postcards, flyers, and table toppers. Materials were distributed at community events and popular destinations. The public input evolved with the process, first focused on establishing a vision and later becoming more specific to desired strategies and tactics.

Surveys were distributed from June through September at events such as the farmer's market and National Night Out and various social media posts. Just over 1,400 people took the surveys. The engagement efforts culminated with the Ignite the Heights in November, with over 200 people attending.

Overall, between in-person events and social media efforts, we engaged with 4,800 people. The social media posts reached over 54,000 people throughout the project.

Key themes and goals within the plan

The plan recommendations are a strategy to reinvest in our existing communities and talent as a foundation for attracting new growth and investment, ensuring Huber Heights remains a destination of choice for residents, employers and other stakeholders.

Four key areas of opportunity emerged through the public engagement process:

- 1) **Build local walkability & regional connectivity.** Economic development opportunities, health and wellness, quality of life, and recreational and environmental conditions are improved when residents and workers can safely walk, bike, scoot, or roll to daily destinations. Investment in public transit, street infrastructure, and multi-use paths will improve daily travel within the City and with important regional destinations. Expanding the options for ways of traveling also provides drivers with a better experience through decreased congestion which is a reoccurring concern for community members.
- 2) **Find our centers.** The history of Huber Heights as a bedroom community for Dayton helped to establish the segmented areas that dominate the City today. Some areas are strictly residential, while others are reserved for the industrial, commercial, and office. While public health was historically a driver for this separation, today's businesses and employment operations can often locate alongside residential dwellings with mutual benefits. Clustered centers may become important places for community interactions and building civic pride.
- 3) **Connect our history to our future.** Residents of Huber Heights understand the connection between development, how it looks and feels, and a community's identity. Rather than focusing only on land use types, this plan utilizes Development Patterns to name, describe and guide the character of places in Huber Heights. The intent is to foster more holistic development processes that connect what exists today with what is collectively desired in the coming years. Doing so will not only strengthen neighborhoods through new investment; it will also retain current talent pools and improve the City's overall economy by

allowing new opportunities for innovation and commerce. This, in turn, will attract additional residential and employment growth.

- 4) **Operationalize the Growth Strategy.** The role of local government is to be the operating system that enables a high quality of life for all who live, work, learn, visit, and spend time in the community. A successful operating system will need to focus on three key components: brand activation, engagement, and management.

Based on the opportunities outlined above, the comprehensive plan guides the development and redevelopment policies of Huber Heights through the lens of two key themes: ***Mobility*** and ***Development Patterns***.

Mobility

The mobility plan focuses on how residents and stakeholders move and engage within the City, with the goal of reducing travel times and transportation costs and increasing human-scaled innovation and mobility options. Using a personal vehicle has been the dominant mode of transportation in Huber Heights for decades. As such, it has become a dominant force in household budgets, rivaling the cost of rent or mortgages.

As the City grows, interventions and a new approach to the street network are critical to maintaining a high quality of life. Walking, biking and other types of micro-mobility allow for a lighter impact on street surfaces, air quality, and general congestion.

The key goals and objectives of the mobility plan are:

- Support multi-modal access
- Better distribute traffic by mode, route, and time of day
- Encourage walkable density
- Encourage human-centered innovation
- Lower household annual transportation cost
- Set a new standard for multi-modal infrastructure

These goals are accomplished through actions such as: modernizing our street design requirements and street network, encouraging walkable development, reducing the distance between where people live, work and play, and increasing mobility choices for Huber residents, such as better pedestrian and bike connectivity and encouraging development patterns that support transit options.

Key initiatives include:

The Loop. A 14.5-mile multi-use trail that helps connect Huber Heights neighborhoods to the existing Great Miami River Trail (GMRT). A paved, 96-mile multi-use trail that goes through Warren, Montgomery, Miami, Butler, and Shelby counties. The GMRT is a key component of the region's robust trail network that encompasses 340 miles and sees over 793,000 annual visits.

Streets for Everyone. An effective street network is critical for accommodating growth and enabling safe travel by all, including pedestrians, bicyclists, and vehicles. Streets that incorporate pedestrian amenities and green infrastructure, and support multi-mobility options provide higher returns when built in places with mixed uses. A complete street network provides users a pleasant experience through beautification, trees, lighting, and effective stormwater management.

Development Patterns

Development patterns focus on the physical environment where stakeholders live, work, congregate and play. By shifting from thinking about the City as separate land uses, development patterns think about the areas in terms of physical and environmental characteristics such as scale, building design and siting, open space, density and mass.

Character-based development shifts the conversation from focusing on land use to place-making: how people feel about their areas and environments and how they function and engage within those places.

The development pattern goals include: 1) Being responsive to changing market conditions, 2) Targeting investments toward redevelopment, 3) Encouraging sustainable developments that enhance the livability of the community with less reliance on automobile trips, 4) Increasing housing diversity, and 5) Ensuring that Huber Heights is recognized as the region's leader in amenities, services and livability.

The plan outlines essential elements of each development pattern, including recommendations on character, contextual advantages, and key initiatives to realize the plan goals for each area.

The development patterns identified in the plan include:

- **Centers** (Live Local, Work, Play, Riverfront, Regional Commercial) The seven centers are distinct nodes and areas unique in their purpose, context, or redevelopment opportunity.
- **Northtown:** This is the north-central area of the City and is currently seeking extensive residential growth. Ensuring bike and pedestrian connectivity in future subdivisions is an essential element.
- **Southtown:** This is the City's largest area, south of I-70 and home to the original Huber Homes. The essential elements in this development pattern focus on redevelopment, infrastructure upgrades and incremental broadening of amenities and uses.
- **East Villages:** This is largely undeveloped land on the City's east side. The essential elements include emphasizing traditional neighborhood development, including connected streets, where blocks and streets are connected, and a broad diversity of lot sizes designed to meet many residential lifestyles and encourage walkability. This area has or will have access to public utilities, encouraging additional development.

- **Estates:** The Estates development pattern recognizes the areas at the City's western and eastern edges that are more rural-scale residential, where lot sizes are more than an acre, and where significant new development is not envisioned due to utility or environmental constraints.

The complete goals and implementation matrix for the Mobility Plan and Development Patterns are found on page 73 of the plan.

Recommendation

The 2023 Comprehensive Plan draws from the rich history of Huber Heights. It recognizes that the City has evolved from a bedroom community to a regional destination for entertainment, employment, and innovation. The plan recognizes the strength and talents of our residents and community assets and our locational advantages.

The Mobility Plan builds upon our current efforts to improve mobility options, particularly for bicyclists and pedestrians, and encourages the City to modernize our street design standards. The Loop can be an economic engine by linking Huber Heights neighborhoods to the 340-mile regional trail network.

Modernizing our street design standards and emphasizing connectivity can pay dividends in creating great neighborhoods and corridors people want to experience while reducing congestion and household transportation costs. The street sections illustrated in this plan are consistent with ODOT's Multimodal Design Guide and eligible for ODOT funding. Additionally, the mobility plan encourages a commitment to Vision Zero (zero roadway deaths) goals and Safe Route to Schools best practices.

The Development Patterns lens encourages the City to emphasize neighborhood character, context and building design and put less emphasis on a strict separation of land uses. The plan advocates a hybrid form-based development code rather than the current Euclidean zoning code.

The plan encourages a more efficient and market-responsive approach to land utilization, allowing smaller lots, less parking and more nimble land use regulations and processes. Additionally, the plan recommends a more robust public engagement process while plans are being formulated and refined. Staff strongly support these goals.

The plan charts a path forward over the next 15 to 20 years that build upon our past successes and leverages the opportunities ahead to build a multi-dimensional community that provides the housing, jobs, amenities, and quality of life that future generations demand and deserve.

Staff recommends the adoption of the 2023 Comprehensive Plan.

Planning Commission Action

Planning Commission may take the following actions with a motion to:

- 1) Approve the adoption of the 2023 Comprehensive Plan as submitted or with recommended changes;
- 2) Table the item for additional discussion or information; or,
- 3) Recommend denial of the 2023 Comprehensive plan.



Planning Commission Decision Record

WHEREAS, on February 22, 2023, the applicant, City of Huber Heights, requested adoption of the 2023 Comprehensive Plan (Case ZC 23-06), and;

WHEREAS, on February 28, 2023, the Planning Commission did meet and fully discuss the details of the request.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission hereby recommended approval of the request.

Mr. Cassity moved to approve the request by the applicant, City of Huber Heights, for adoption of the 2023 Comprehensive Plan (Case ZC 23-06), in accordance with the recommendation of Staff's Memorandum dated February 22, 2023, with the following conditions:

1. The property maintenance regulations shall be reviewed during the same period as the City's development codes.

Seconded by Ms. Vargo. Roll call showed: YEAS: Ms. Thomas, Mr. Jeffries, Ms. Vargo, Mr. Cassity, and Mr. Walton. NAYS: None. Motion to recommend approval carried 5-0.

Terry Walton, Chair
Planning Commission

Date

**Planning Commission
February 28, 2023, Meeting
City of Huber Heights**

- I. Chair Terry Walton called the meeting to order at approximately 6:00 p.m.
- II. Present at the meeting: Mr. Cassity, Mr. Jeffries, Ms. Thomas, Ms. Vargo, and Mr. Walton.

Members absent: None.

Staff Present: Aaron K. Sorrell, Interim City Planner, and Geri Hoskins, Planning & Zoning Administrative Secretary.

- III. **Opening Remarks by the Chairman and Commissioners**

Mr. Walton thanked everyone for their condolences.

- IV. **Citizens Comments**

None.

- V. **Swearing of Witnesses**

Mr. Walton explained the proceedings of tonight's meeting and administered the sworn oath to all persons wishing to speak or give testimony regarding items on the agenda. All persons present responded in the affirmative.

- VI. **Pending Business**

None.

- VII. **New Business**

- 1. **REPLAT - The applicant, CITY OF HUBER HEIGHTS, is requesting approval of a Replat of 40.407 acres into four lots of various size to facilitate redevelopment. Property is located at 7125 Executive Boulevard (RP 23-05).**

Mr. Sorrell stated that the applicant requests a replat of 40.407 acres into four lots of various sizes. The replat is requested to facilitate redevelopment of the area by allowing the developer to purchase the four lots at various periods according to a redevelopment agreement executed between the City and the developer, Pride One. This replat is the initial steps in the redevelopment process.

The developer will be coming forward with a rezoning and basic development plan approval in the subsequent months.

February 28, 2023

The Planning Commission should consider this replat an interim step. Additional replat(s) will be needed based upon the terms and conditions imposed during the basic development plan approval.

This replat conforms with Section 1105 (preliminary plat) of the City Code of Regulations. This plat is simply for the subdivision of the land and not for the dedication of any streets, alleyways or easements.

This replat conforms with Chapter 1178 (Planned Employment Park), which requires a minimum frontage of 100-feet.

The applicant desires to subdivide 40.407 acres into four lots of various sizes to facilitate the transfer and subsequent redevelopment of the land. The replat meets all requirements of the subdivision regulations and current zoning classification.

A rezoning and basic development plan approval request will be forthcoming and therefore Planning Commission should consider this replat an interim step in the redevelopment process.

Action

Mr. Jeffries moved to approve the request by the applicant, CITY OF HUBER HEIGHTS, for approval of a Replat of 40.407 acres into four lots of various size to facilitate redevelopment. Property is located at 7125 Executive Boulevard (RP 23-05).

Seconded by Ms. Thomas. Roll call showed: YEAS: Mr. Cassity, Ms. Vargo, Ms. Thomas, Mr. Jeffries, and Mr. Walton. NAYS: None. Motion to approve carried 5-0.

2. COMPREHENSIVE PLAN - The applicant, CITY OF HUBER HEIGHTS, is requesting adoption of the 2023 Comprehensive Plan (ZC 23-06).

Mr. Sorrell presented the 2023 Comp Plan (attached).

Discussion on the property maintenance code being reviewed during the same period as the City's development codes.

Action

Mr. Cassity moved to approve the request by the applicant, CITY OF HUBER HEIGHTS, for adoption of the 2023 Comprehensive Plan (ZC 23-06) in accordance with the recommendation of Staff's memorandum dated February 22, 2023, as amended.

Seconded by Ms. Vargo. Roll call showed: YEAS: Ms. Thomas, Mr. Jeffries, Ms. Vargo, Mr. Cassity, and Mr. Walton. NAYS: None. Motion to adopt carried 5-0.

VIII. Additional Business

IX. Approval of the Minutes

Without objection, the minutes of the February 14, 2023, Planning Commission meeting are approved.

X. Reports and Calendar Review

Mr. Sorrell stated a Rezoning for a campground behind and north of Gander Mountain and a BDP for Sheetz at 8245 Brandt Pike. Also Flying Ace will give an informal presentation about carwash on Brandt Pike.

XI. Upcoming Meetings

March 14, 2023
March 28, 2023

XII. Adjournment

There being no further business to come before the Commission, the meeting was adjourned at approximately 8:15 p.m.

Terry Walton, Chair

Date

Geri Hoskins, Administrative Secretary

Date

ZC 23-06

2023 Comprehensive Plan

February 28, 2023

1

Presentation Contents

- Purpose of the comprehensive plan
- Community engagement efforts
- Key themes, goals, and implementation recommendations
- Next steps

Brief overview:

- Current comprehensive plan was adopted in 2011
- Update began in spring 2022
- Engaged Yard & Company to assist in the development of the plan



2

What is a comprehensive plan?

A statement of the community's goals, objectives, and policies to help guide public and private development.

Key characteristics of comprehensive plans are:

- **They are comprehensive.** The plan covers the entire jurisdiction, as opposed to a limited areas or sections of a community.
- **They are general.** A comprehensive plan summarizes high-level policies, goals and objectives, as opposed to a zoning ordinance that regulates the design and use of individual parcels.
- **They are long-range.** A comprehensive plan looks forward 15* to 20 years.

3

Why are comprehensive plans important?

Developing the plan allows residents to help set goals and guide the community's priorities.

Comprehensive plans:

- Identify the vision and shape the long-term development of well-designed neighborhoods, including land uses, parks, streets, open spaces, public utilities, and infrastructure.
- Outline actions the City and its partners can undertake to implement the community goals and visions outlined in the plan.



4

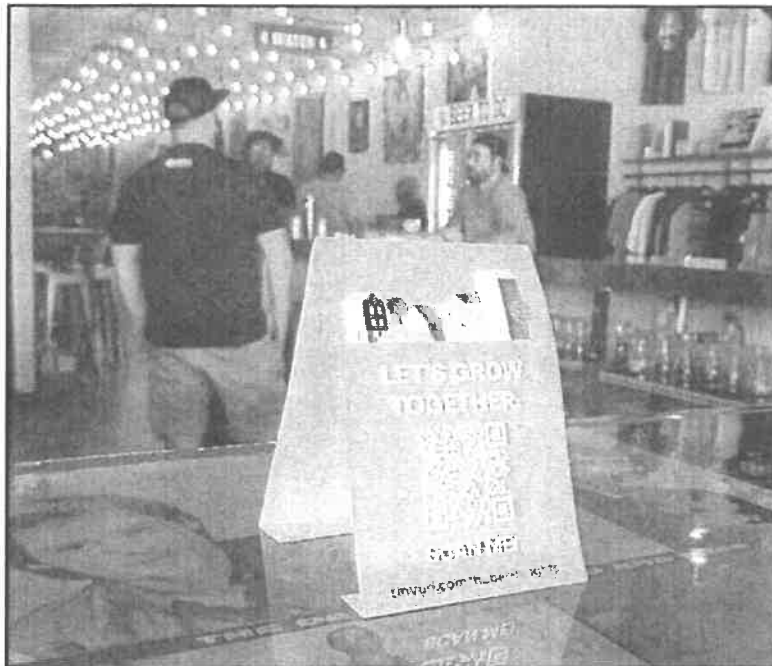
Community Engagement Efforts

- Branding
- Steering committee
- Surveys (online, offline, mapping)
- Multimedia
- Public events



A Comprehensive Plan branding kit was created and used throughout the planning process.

5



Pop-up at Alematic Brewing

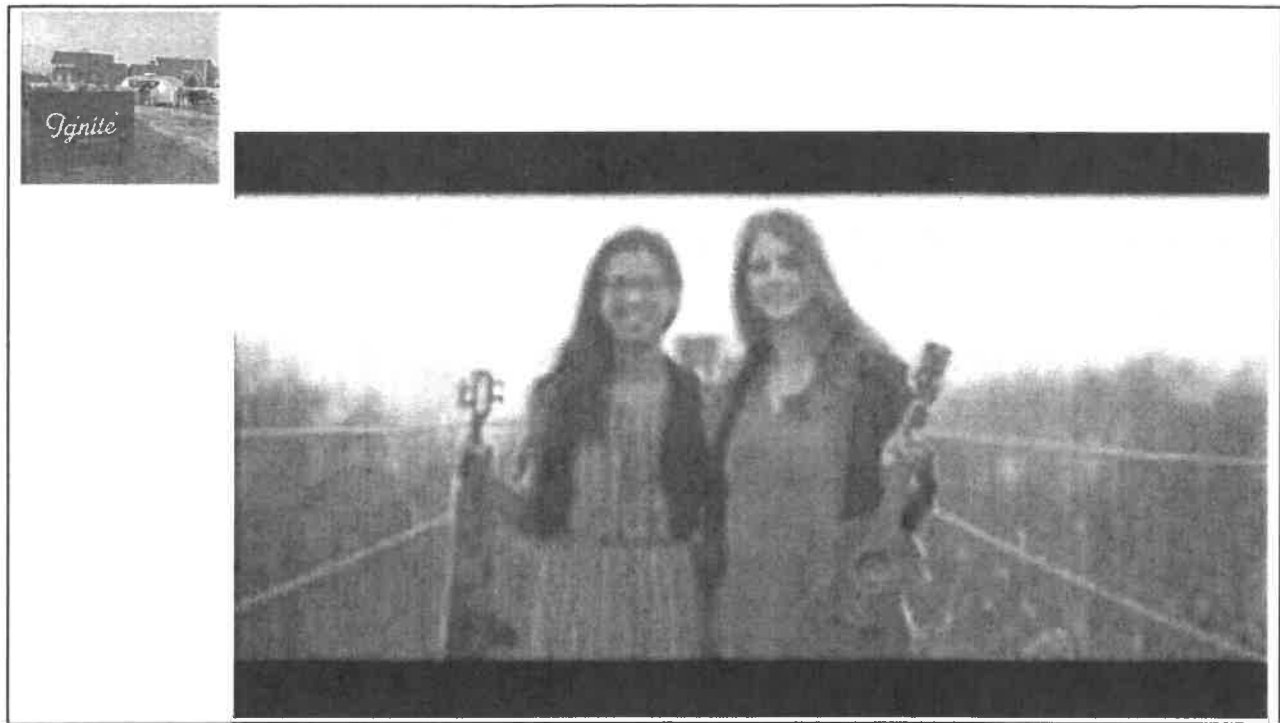


Pop-up at the Farmers Market at The Heights



Feedback on the draft Plan

6



7

Community Engagement Efforts

Reach:

- 1400 surveys
- 200 people at Ignite the Heights
- Over 4,800 direct engagements
- 54,000 reached through social media



Public pins with comments posted to the online interactive map



Steering Committee Meeting

8



9

BUILD LOCAL WALKABILITY & REGIONAL CONNECTIVITY

What would most improve your local walkability & regional connectivity?

| | |
|--|---|
| Improve street safety | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
| Expand bike/walk networks | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
| Improve transit access | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
| Bring leisure, employment, ability to meet daily needs near home | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
| Expand number of connections that get me where I need to go | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |
| Expand broadband and utility grid capacity | <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> |

10



CONNECT OUR HISTORY TO OUR FUTURE

How can the City best leverage our history for an even better future?

Update our planning and development process to meet our objectives



Broaden economic development objectives and toolkit



Promote a wide range of housing types and price points



11



FIND OUR CENTERS

Which type of center should be our primary focus?

Live Local



Work



Play



Riverfront



12



OPERATIONALIZE THE GROWTH STRATEGY

Which of these functions would you like to see most prioritized?

Refresh and activate the brand to communicate our vision



Broaden investment in community engagement (events, gathering spaces, growth)



Align staff tools and resources with implementation needs



13

Key Themes, Goals and Initiatives

MOBILITY PLAN

GOALS + OBJECTIVES

- » Support multi-modal access
- » Better distribute traffic by mode, route, and time of day
- » Encourage walkable density
- » Encourage human-centered innovation
- » Lower household annual transportation cost
- » Set a new standard for multi-modal infrastructure

DEVELOPMENT PATTERNS

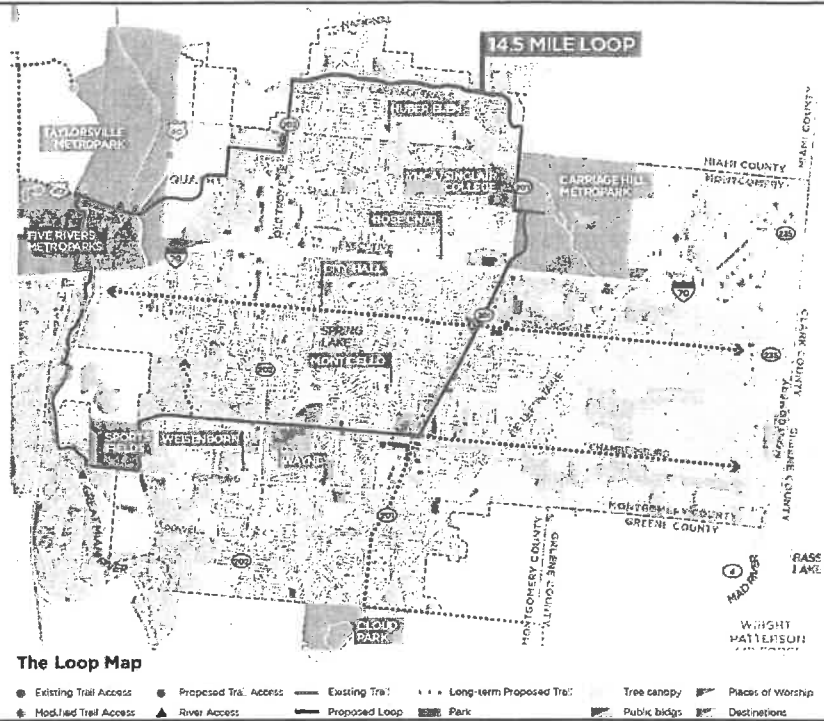
GOALS + OBJECTIVES

- » Encourage human-centered innovation
- » Focus on talent attraction/retention
- » Encourage walkable density
- » Allow people to live closer to jobs and amenities
- » Expand housing options
- » Focus growth in clusters

More intentional

14

MOBILITY PLAN THE LOOP



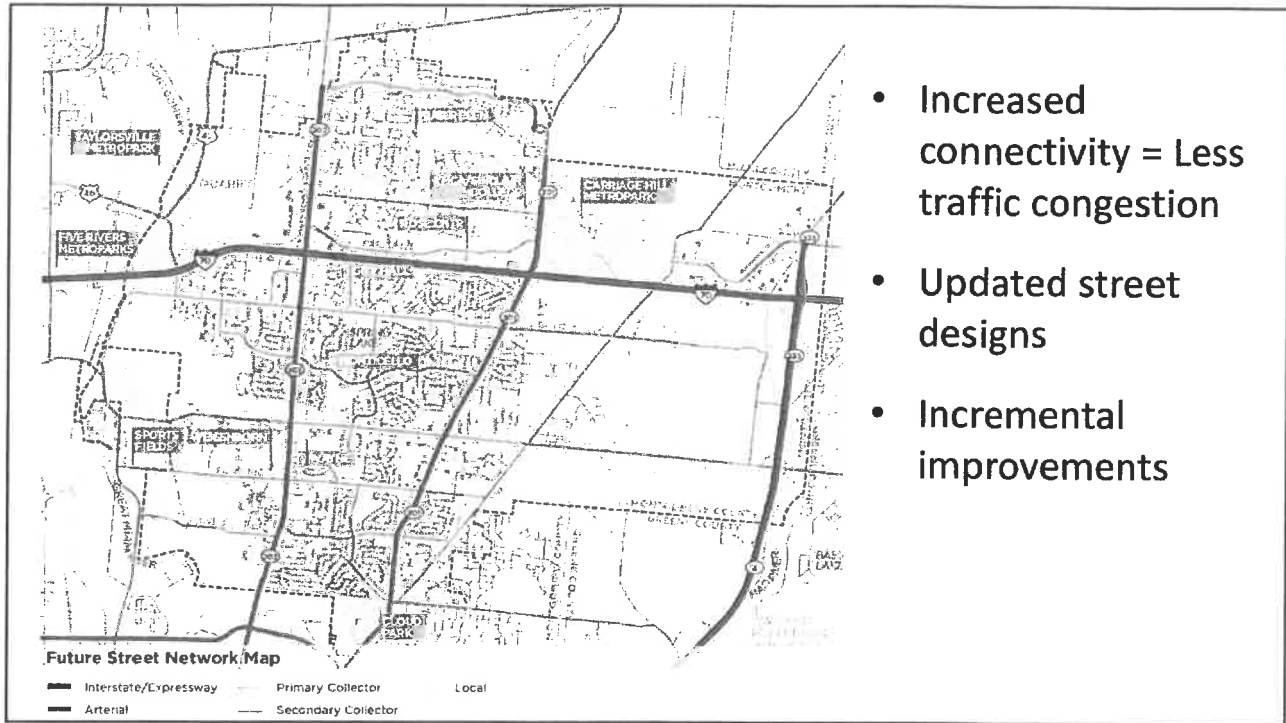
15

MOBILITY PLAN **STREETS FOR EVERYONE**

- Streets make up the largest amount of public space
- An effective street network is critical for accommodating growth and enabling safe travel by all, including pedestrians, bicyclists, and vehicles.
- Focus on developing “complete streets”

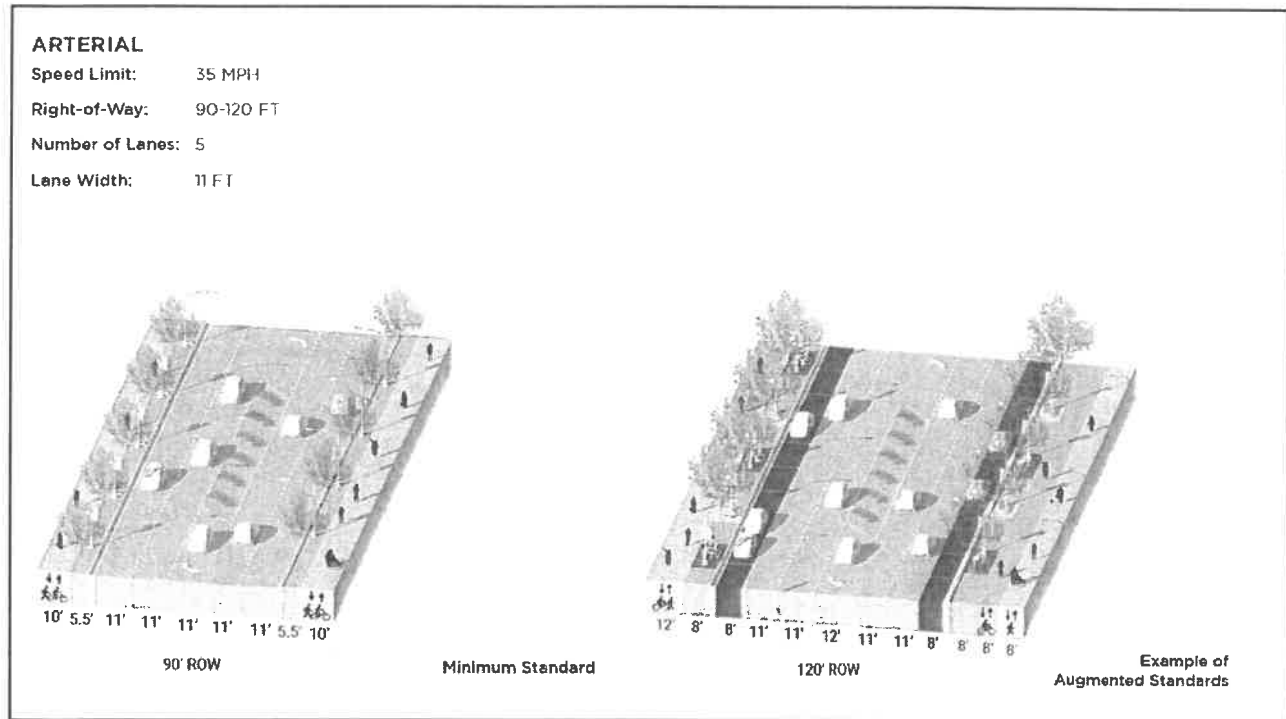


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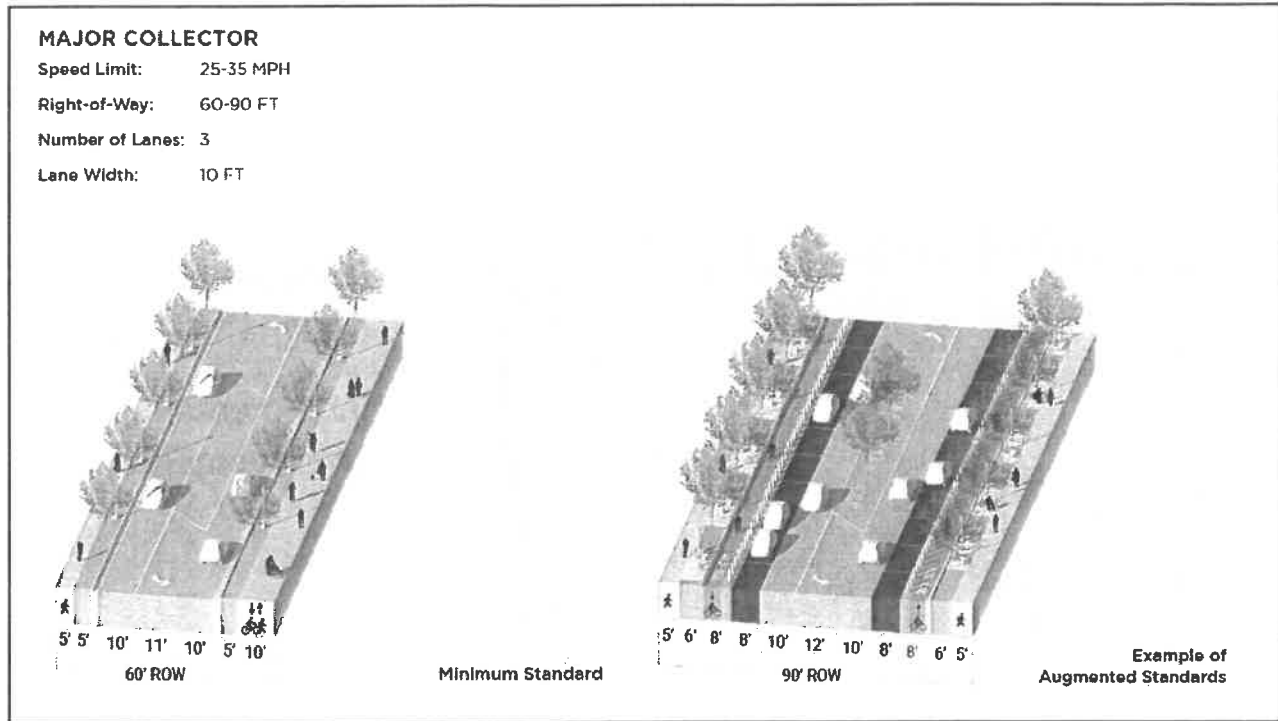


- Increased connectivity = Less traffic congestion
- Updated street designs
- Incremental improvements

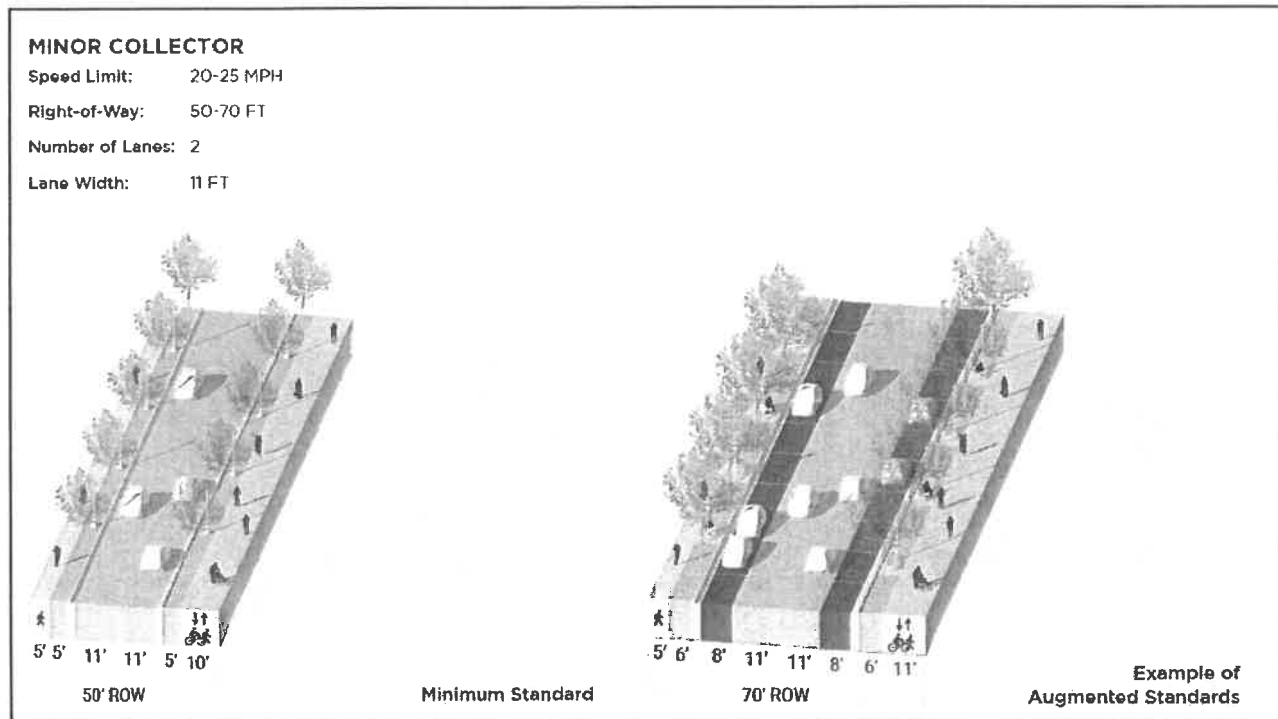
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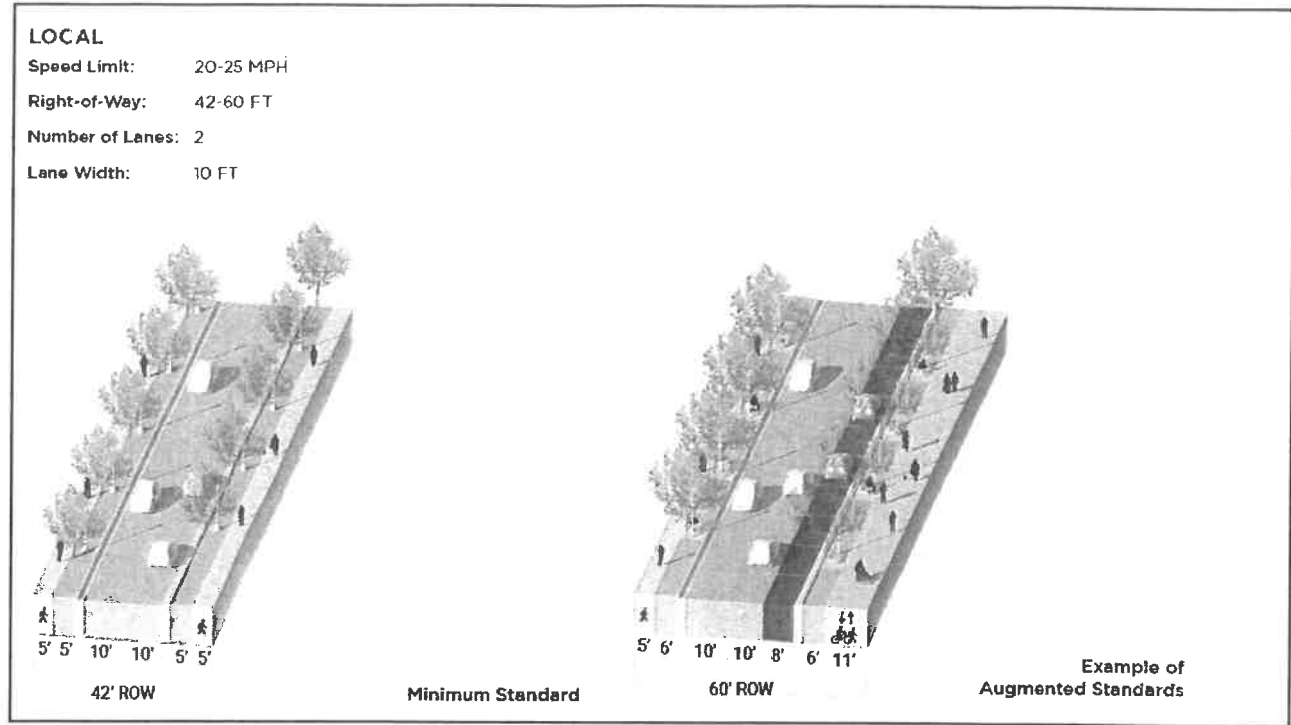
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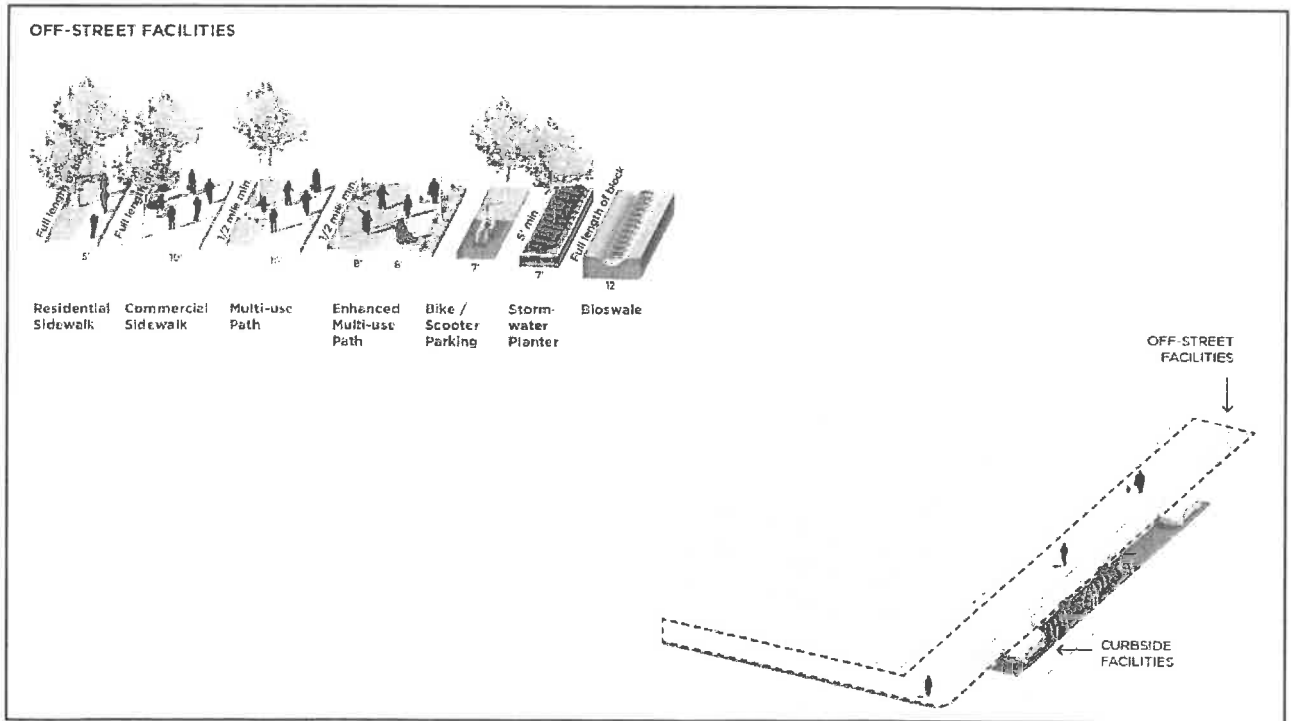
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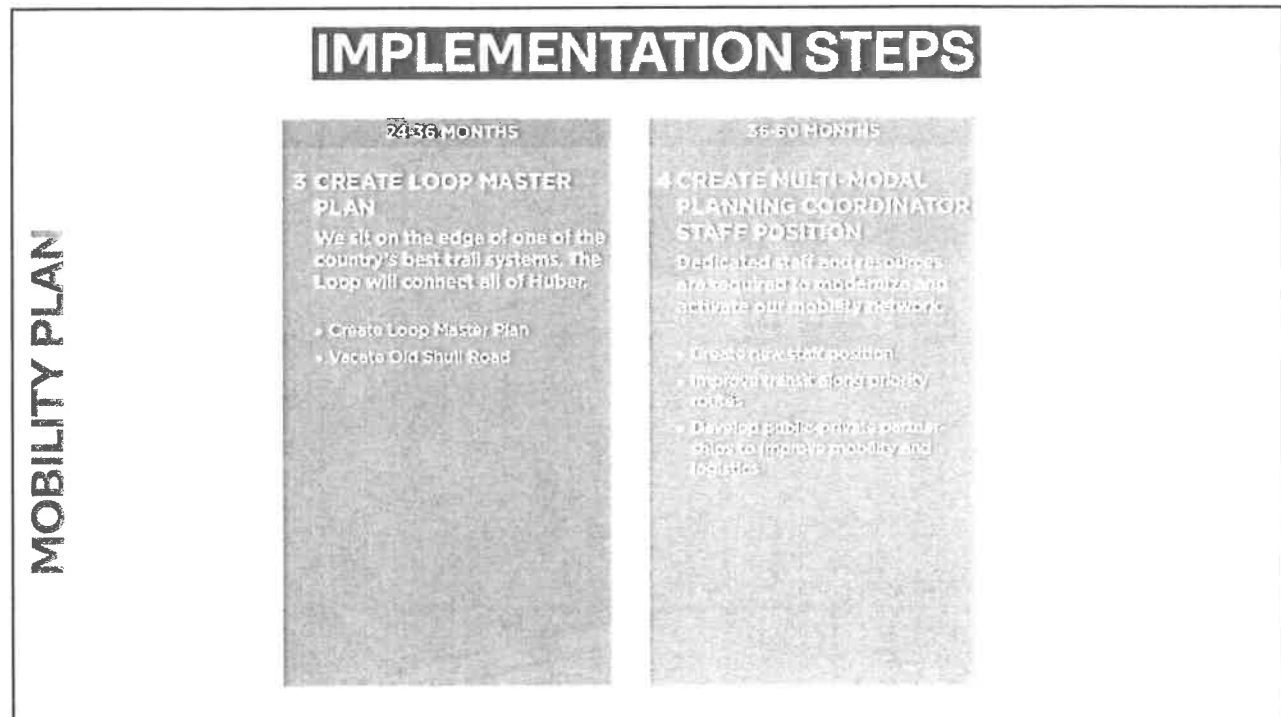
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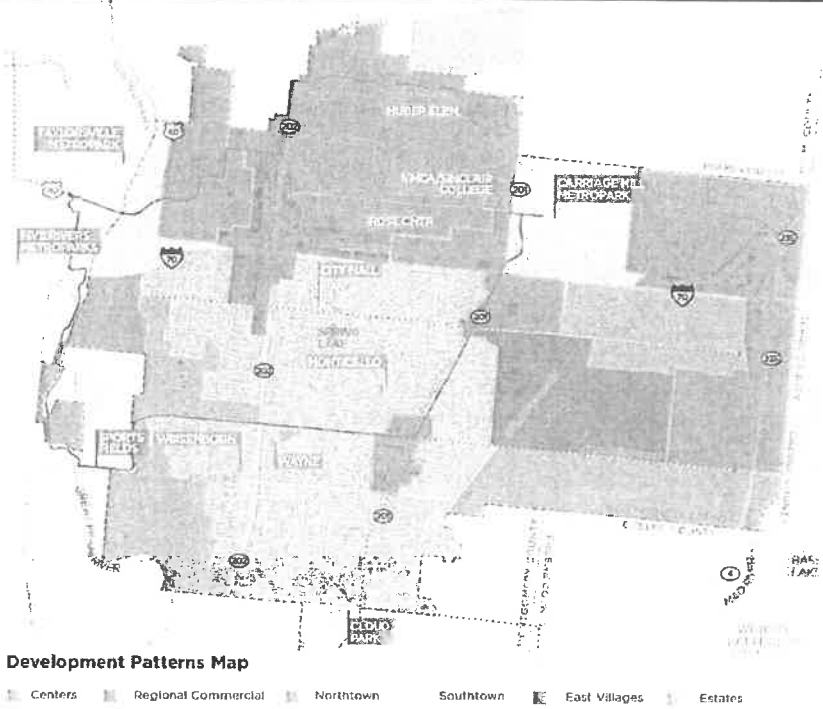
23



24

DEVELOPMENT PATTERNS

Develop patterns focus on the physical environment where people live, work and play.



25

DEVELOPMENT PATTERNS

By shifting from thinking about the City as separate land uses, development patterns think about the areas in terms of physical and environmental characteristics such as scale, building design and siting, open space, density and mass.

Focus on **place-making**: *how people feel about their areas and environments and how they function and engage within those places.*



GOALS + OBJECTIVES

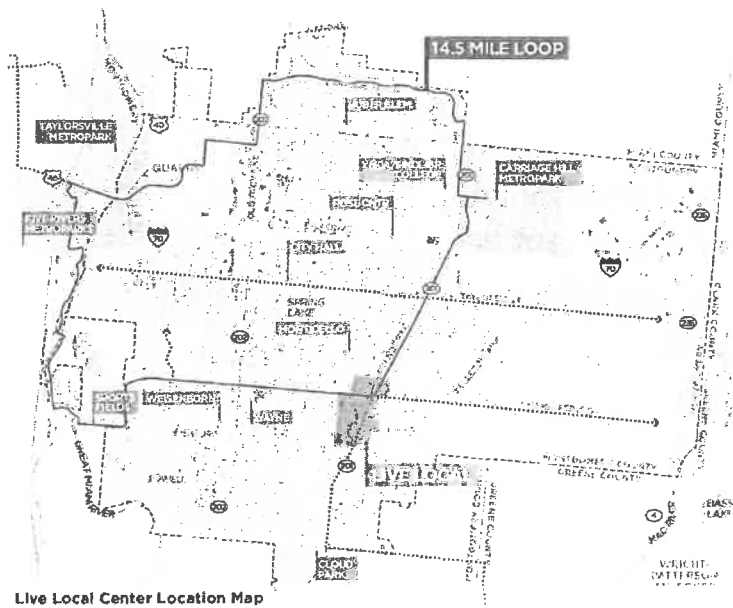
- » Encourage human-centered innovation
- » Focus on talent attraction/retention
- » Encourage walkable density
- » Allow people to live closer to jobs and amenities
- » Expand housing options
- » Focus growth in clusters

26

CENTER: LIVE LOCAL

ESSENTIAL ELEMENTS

- » Build off the Brandt Pike Revitalization Plan and Marian Meadows development
- » Focus on local services, government functions, professional services, daily needs, retail, and amenities
- » Offer a wide range of housing types
- » Double down on a park-once walkable infrastructure and quality public realm
- » Update Brandt Pike Revitalization plan with recent developments and new opportunities

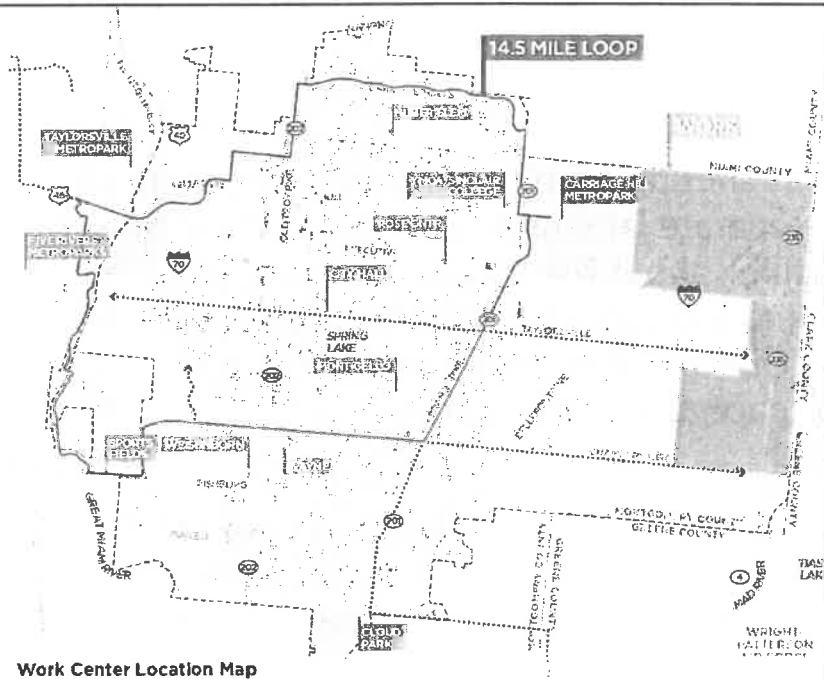


27

CENTER: WORK

ESSENTIAL ELEMENTS

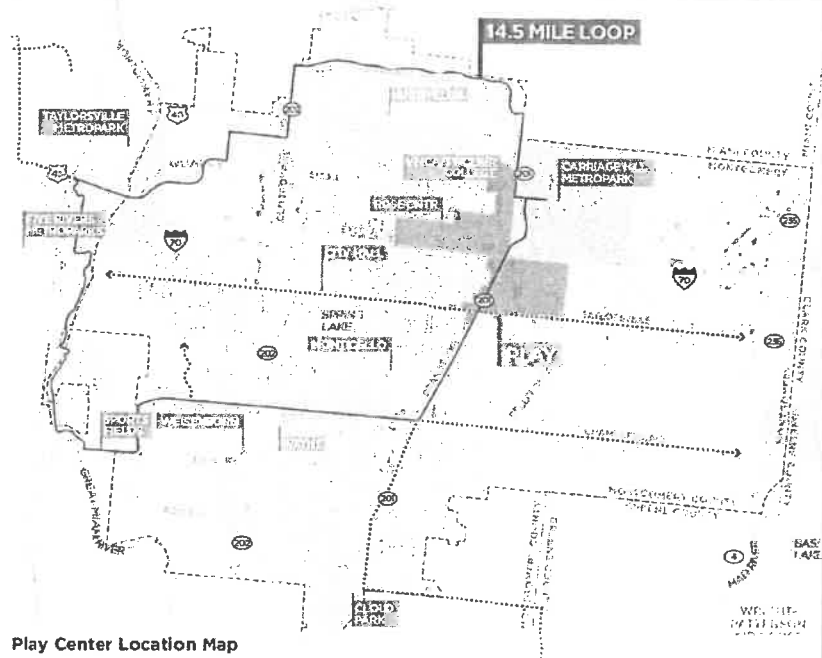
- » Build off light industrial, industrial, and corporate anchors with access to highways and Wright Patterson
- » Develop for density, flexibility, and mix of use adjacencies
- » Build housing along the eastern edge of Carriage Hill Metro Park
- » While the focus is on employment, support multi-family residential and amenities where suitable
- » Economize and share infrastructure where feasible
- » Leverage current master development interest to create an integrated mixed-use environment



28

CENTER: PLAY**ESSENTIAL ELEMENTS**

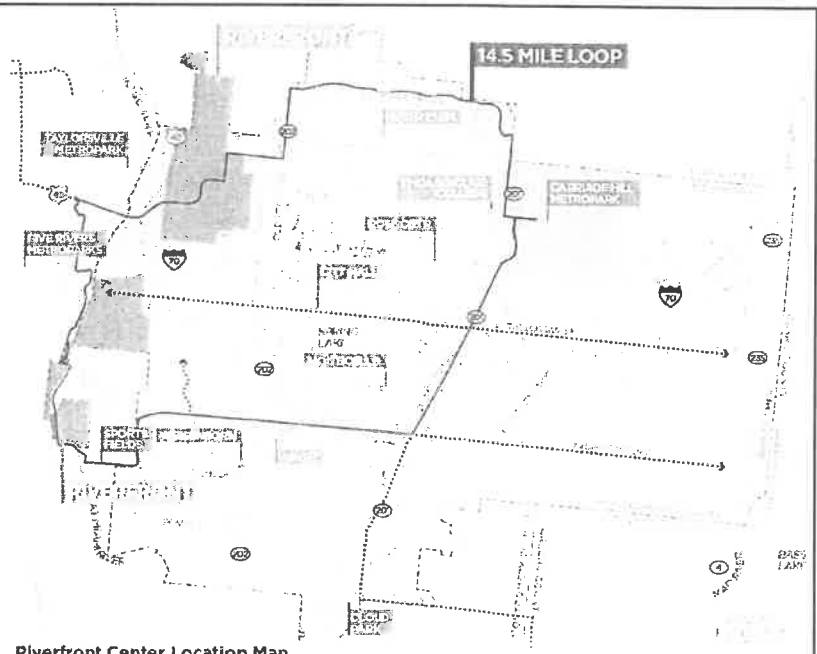
- » Build off recent momentum created by Executive Boulevard, the Rose Center, Warped Wing, the YMCA/ Aquatic Center/Sinclair, and Parkview Apartments
- » Target regionally-scaled hospitality and entertainment uses
- » Support multi-family and mixed-use development
- » Emphasize a park-once, dynamic visitor experience
- » Enhance connectivity within the district and to Carriage Hill MetroPark
- » Create sub area plan that incorporates and coordinates current market interest and future potential

**Play Center Location Map**

29

CENTER: RIVERFRONT**ESSENTIAL ELEMENTS**

- » Capitalize on under-developed land along the river and MetroPark
- » Connect to nearby retail, employment, and neighborhoods
- » Structure development around trail and green networks
- » Focus on traditional neighborhood and trail-oriented development principles
- » Explore annexation of land between Huber Heights and MetroPark
- » Create sub area plan for the center in conjunction with the Loop master plan

**Riverfront Center Location Map**

30

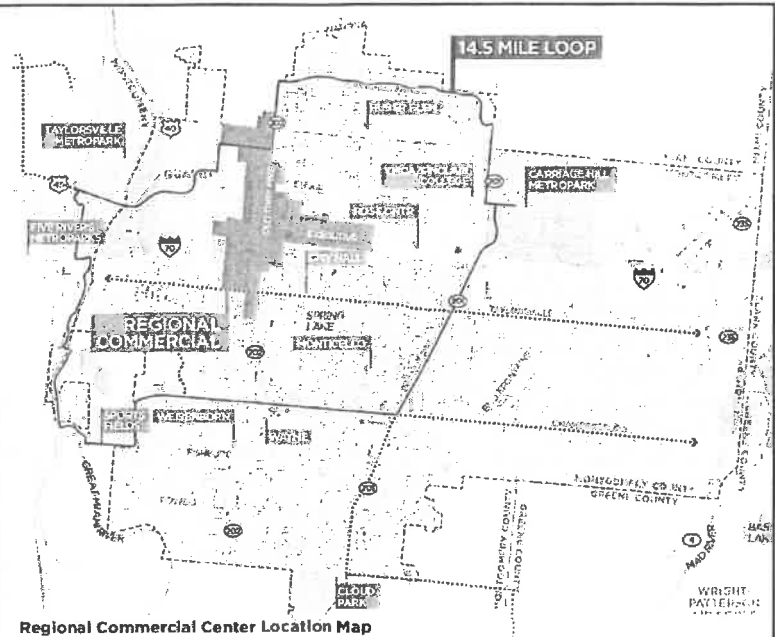
REGIONAL COMMERCIAL



Liberty Center, Liberty Township, OH

ESSENTIAL ELEMENTS

- » Large format commercial and out-lot retail
- » Focus on maintaining and growing current tenants; broadening the mix of uses; additional street connectivity; and beautification.
- » Encourage paving removal and parking lot redevelopment/reuse



Regional Commercial Center Location Map

31

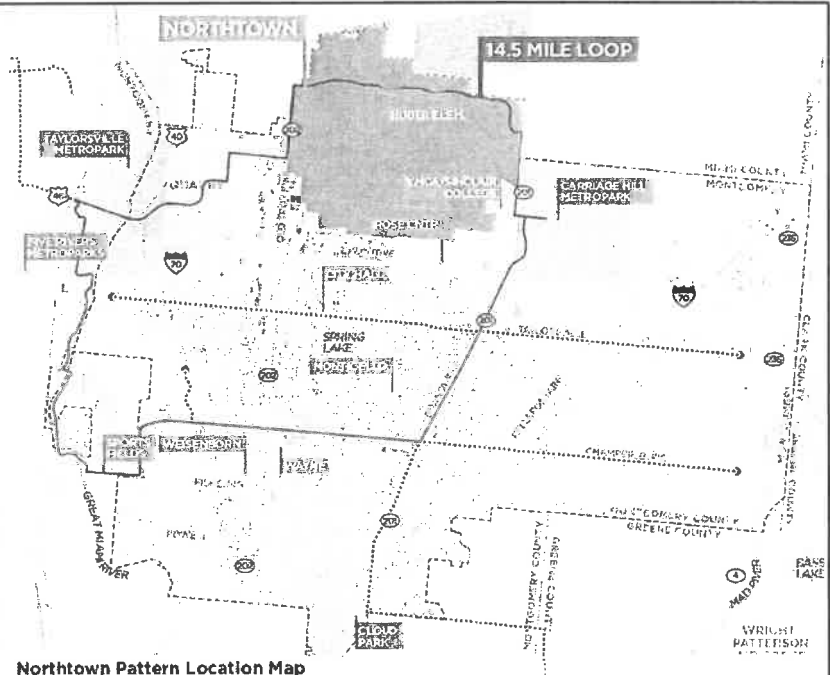
NORTHTOWN



Norton Commons, Louisville, KY

ESSENTIAL ELEMENTS

- » Late-century housing development
- » For existing developments, focus on completing subdivisions and completing bike/pedestrian networks
- » For new subdivisions, focus on bike/pedestrian infrastructure, external connections, streetscape, and setback garages



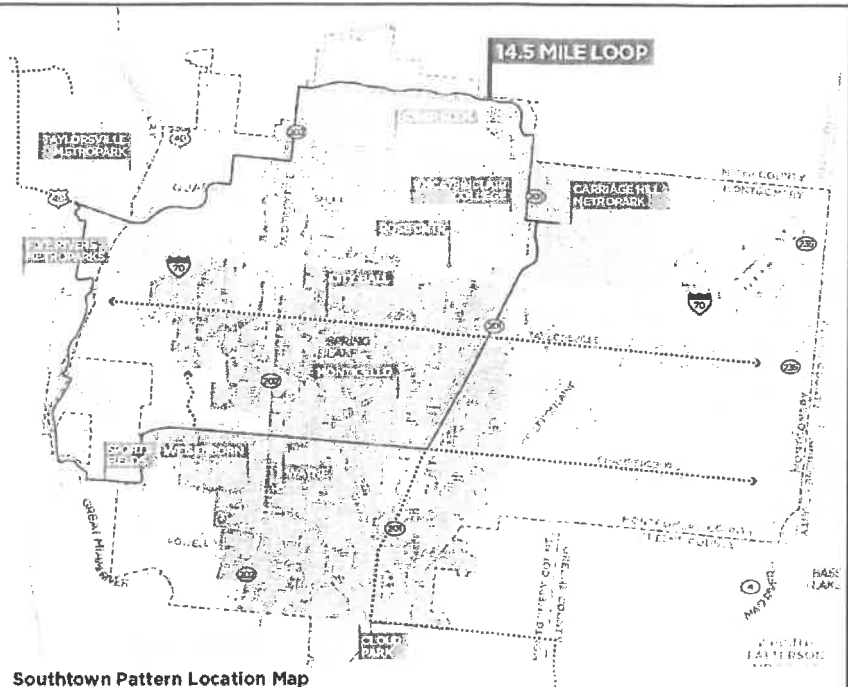
Northtown Pattern Location Map

32

SOUTHTOWN

ESSENTIAL ELEMENTS

- » Mid-century brick homes and apartment complexes
- » Focus on renovation, infill development, and incremental broadening of uses and housing types
- » Continue to prioritize utility upgrades and expand focus on connectivity through street tree maintenance, sidewalks, placemaking, and traffic calming
- » Expand homeowner reinvestment tools and incentives
- » Broaden focus on marketing neighborhoods



Southtown Pattern Location Map

33

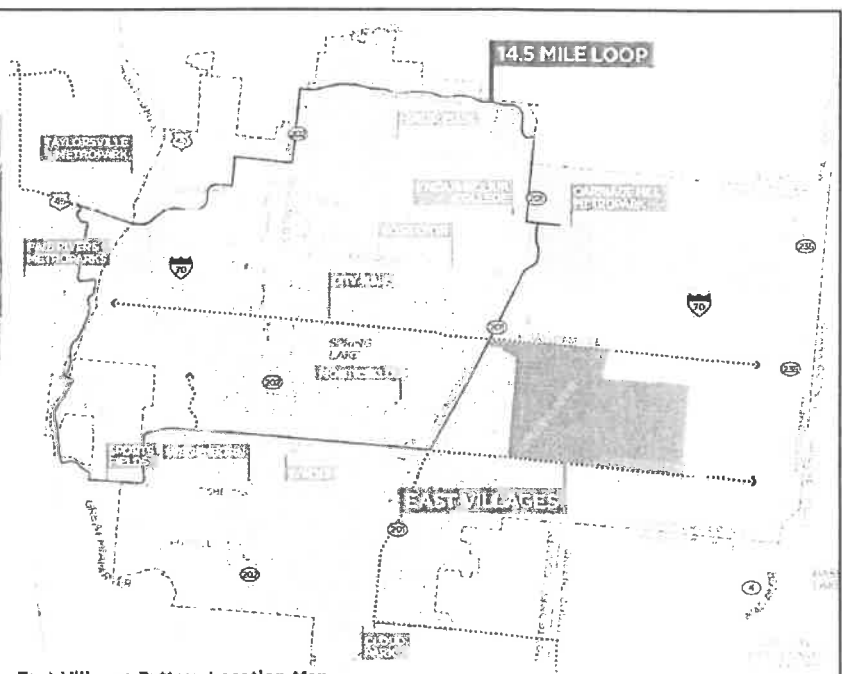
EAST VILLAGES



Wheeler District, OKC

ESSENTIAL ELEMENTS


- » Largely undeveloped land that will transition to new traditional neighborhood forms
- » For new development focus should be on heightened innovation and quality; inter-connected streets, trails and green spaces; human-centered design; walkable density; and a mix of uses



East Villages Pattern Location Map

34

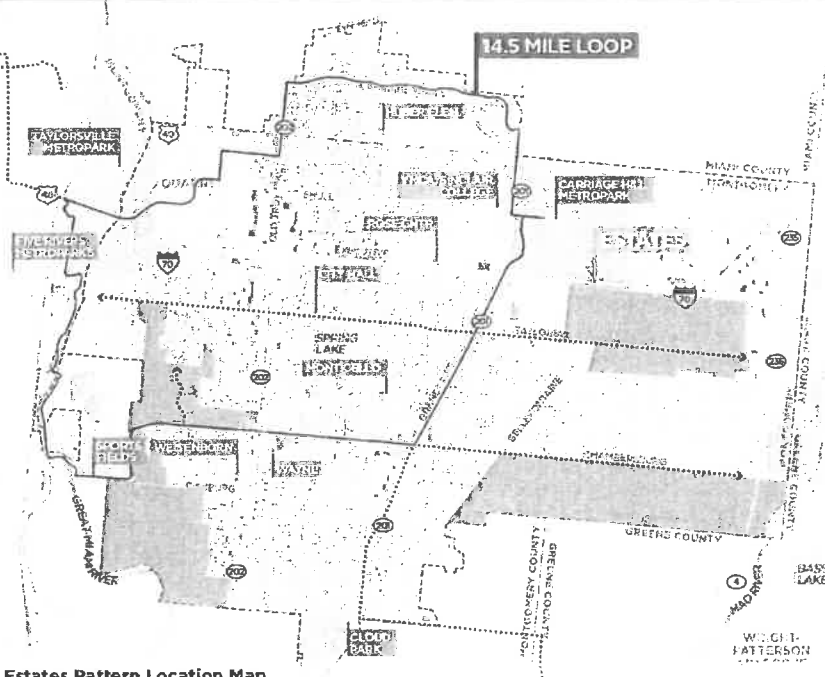
ESTATES



Example residential estate

ESSENTIAL ELEMENTS

- » Slow growth, large lot (1 acre plus) residential
- » Maintain and enhance semi-rural character with improvements to trail connectivity and intersection safety
- » Allow for incremental, contextually relevant non-residential uses and amenities



Estates Pattern Location Map

35

DEVELOPMENT PATTERNS

IMPLEMENTATION STEPS

| 2-3 MONTHS | 6-18 MONTHS |
|---|--|
| <h3>1 ADOPT COMPREHENSIVE PLAN</h3> <p>Marketing and broadcasting the Plan's adoption will launch implementation efforts.</p> <ul style="list-style-type: none"> » Create web-based version of Plan » Create Spanish translation of the Plan » Proactively market new Comprehensive Plan Goals » Maintain social media and newsletter updates about Plan and growth | <h3>2 REFORM PLANNING & ZONING CODE</h3> <p>The City should modify current development standards to more easily allow the goals of this Plan to be met.</p> <ul style="list-style-type: none"> » Foster transit supportive densities » Encourage a mix of housing types » Encourage a mix of uses » Decrease the overall number of residential districts » Eliminate barriers to density » Expand homeowner choices » Make traditional neighborhood development the default » Reduce reliance on zoning variances and Planned Unit Developments (PUDs) |

36



37

Staff Analysis and Recommendation

- The 2023 Comprehensive Plan draws from the rich history of Huber Heights and recognizes we have evolved from a bedroom community to a regional destination for entertainment, employment, and innovation.
- The plan builds on the strength and talents of our residents and community assets and our locational advantages.



38

Staff Analysis and Recommendation

The Mobility Plan builds upon our current efforts to improve mobility options, particularly for bicyclists and pedestrians, and encourages the City to modernize our street design standards.

- The Loop can be an economic engine by linking Huber Heights neighborhoods to the 340-mile regional trail network.



Example multi-use trails in Carmel, IN

39

Staff Analysis and Recommendation

- Updating our street standards and emphasizing connectivity will create great corridors and reduce congestion and household transportation costs.
- The street sections illustrated in this plan are consistent with ODOT's Multimodal Design Guide and eligible for ODOT funding.
- The mobility plan encourages a commitment to Vision Zero (zero roadway deaths) goals and Safe Route to Schools best practices.



40

Staff Analysis and Recommendation

The Development Patterns lens encourages the City to emphasize neighborhood character, context and building design and put less emphasis on a strict separation of land uses.

- The plan advocates a hybrid form-based development code rather than the current Euclidean zoning code.



41

Staff Analysis and Recommendation

- The plan encourages a more efficient and market-responsive approach to land utilization, allowing smaller lots, less parking and more nimble land use regulations and processes.
- The plan recommends a more robust public engagement process while plans are being formulated and refined. Staff strongly support these goals.



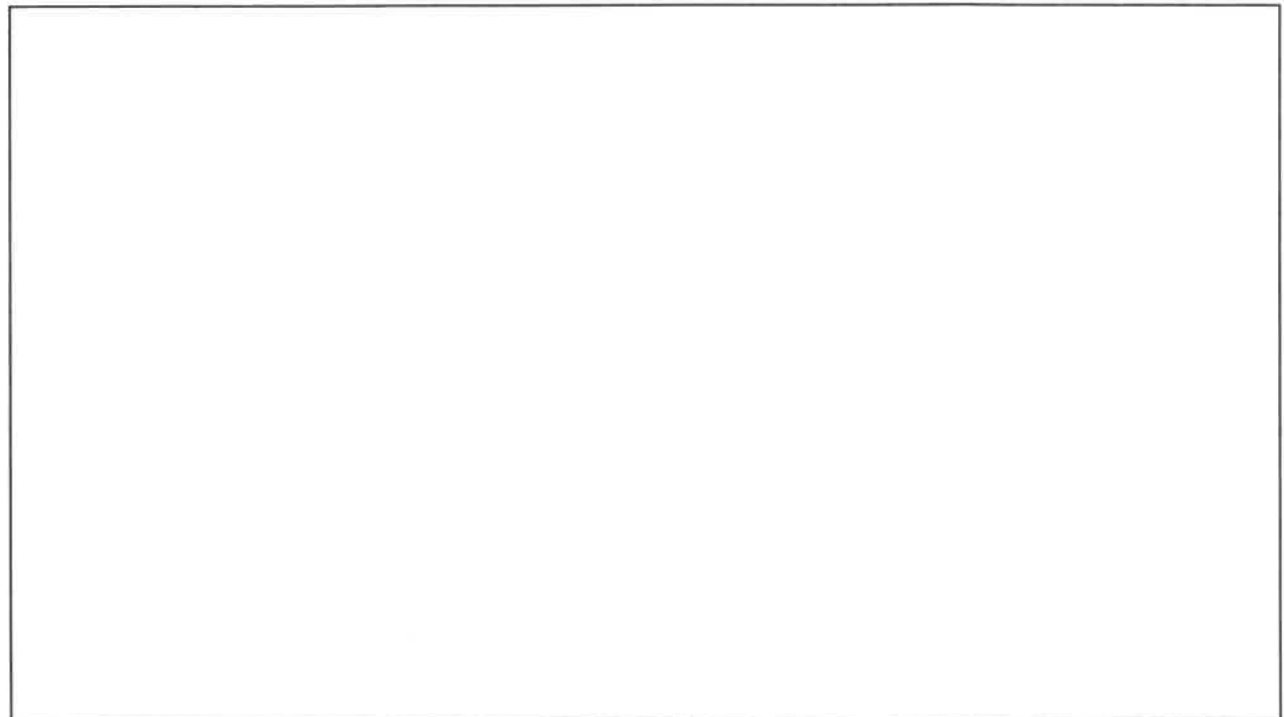
42

Staff Analysis and Recommendation

The plan charts a path forward over the next 15 to 20 years that build upon our past successes and leverages the opportunities ahead to build a multi-dimensional community that provides the housing, jobs, amenities, and quality of life that future generations demand and deserve.

Staff recommends the adoption of the 2023 Comprehensive Plan.

43



44

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE ADOPTION OF THE 2023 COMPREHENSIVE PLAN AND TO
ACCEPT THE RECOMMENDATION OF THE PLANNING COMMISSION (CASE ZC 23-06).

WHEREAS, the citizens of Huber Heights require the efficient and orderly planning of land uses
within the City; and

WHEREAS, the City of Huber Heights has grown significantly in population and area since the
adoption of the 2011 Comprehensive Plan; and

WHEREAS, the City began a robust public engagement and planning process to update the
Comprehensive Plan in early 2022; and

WHEREAS, the City Planning Commission has reviewed Case ZC 23-06 and on February 28, 2023,
recommended approval by a vote of 5-0 of the adoption of the 2023 Comprehensive Plan; and

WHEREAS, the City Council has considered the issue.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The application requesting adoption of the 2023 Comprehensive Plan (ZC 23-06)
is hereby approved in accordance with the Planning Commission's recommendation and
following conditions:

1. The City's property maintenance codes shall be reviewed during the same period as
the City's development codes.

Section 2. The 2023 Comprehensive Plan, or components of the 2023 Comprehensive Plan shall
be periodically reviewed and updated as frequently as the City Council deems necessary to provide
for the orderly development of the City of Huber Heights.

Section 3. It is hereby found and determined that all formal actions of this Council concerning
and relating to the passage of this Resolution were adopted in an open meeting of this Council, and
that all deliberations of this Council and of any of its Committees that resulted in such formal action
were in meetings open to the public and in compliance with all legal requirements including Section
121.22 of the Ohio Revised Code.

Section 4. This Resolution shall go into effect upon its passage as provided by law and the
Charter of the City of Huber Heights.

Passed by Council on the ____ day of ____, 2023;
____ Yeas; ____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9056

Topics of Discussion P.

Council Work Session

Meeting Date: 03/27/2023

Horizon Line - Development Agreement Amendment

Submitted By: Bryan Chodkowski

Department: Economic Development

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Horizon Line - Development Agreement Amendment

Purpose and Background

The City of Huber Heights and Horizon Line Development, LLC entered into the Horizon Line Development Agreement dated December 22, 2022. Through the course of regular business, the City has recommended the developer expand the initial purchase of 17.5 +/- acres of property from the City for a multi-family development to include an additional 4.4 +/- acres for commercial development. The developer is agreeable to the City's recommendation but has requested certain contractual timeframes be extended to accommodate the City's recommendation to purchase the additional acres.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Resolution

Exhibit A

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

AUTHORIZING THE CITY MANAGER TO ENTER INTO THE FIRST AMENDMENT TO THE HORIZON LINE DEVELOPMENT AGREEMENT BETWEEN THE CITY OF HUBER HEIGHTS AND HORIZON LINE DEVELOPMENT, LLC.

WHEREAS, the City of Huber Heights (the “City”) and Horizon Line Development, LLC (the “Developer”) entered into the Horizon Line Development Agreement dated December 22, 2022; and

WHEREAS, the City has recommended the Developer expand the initial purchase of 17.5 +/- acres property from the City for a multifamily development to include an additional 4.4 +/- acres for commercial development; and

WHEREAS, the Developer is agreeable to the City’s recommendation but has requested certain contractual timeframes be extended.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Manager is hereby authorized and directed to execute a First Amendment to the Horizon Line Development Agreement, attached hereto as Exhibit A as if incorporated herein.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

EXHIBIT A

**FIRST AMENDMENT TO
HORIZON LINE DEVELOPMENT AGREEMENT**

This First Amendment (“Amendment”) is to the Horizon Line Development Agreement dated December 22, 2023 by and between the City of Huber Heights, Ohio and Horizon Line Development, LLC, an Ohio limited liability company (“Agreement”). For good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. All capitalized terms in this Amendment shall have the same meaning as set forth in the Agreement unless specifically changed herein.

2. The “Effective Date” of the Agreement is hereby changed from January 1, 2023 to May 1, 2023.

3. The “Concept Plan” shall include the “Horizon Line Property” (17.6 +/- acres) and the 4.4 acres of property adjacent to the south boundary of the Horizon Line Property being a portion on the “Horizon Line Option Commercial Property” as set forth in Exhibit B of the Agreement. (the “4.4 Acres”).

4. The Closing shall include the purchase of the Horizon Line Property and the 4.4 Acres. The Purchase Price for the Horizon Line Property shall remain Two Million Eighty Eight Thousand Dollars (\$2,088,000.00) and the Purchase Price for the 4.4 Acres shall be Ninety Thousand Dollars (\$90,000.00) per acre.

5. Developer shall construct, or cause to be constructed, on the 4.4 Acres various tavern/bars, restaurants and retail establishments (excluding gas stations) with the total minimum investment on the combined 4.4 Acres and Horizon Line Option Commercial Property (if purchased) of \$90,000,000.

6. Provisions regarding the closing of the Horizon Line Property such as real estate tax prorations, shall also apply to the 4.4 Acres.

7. Section 2.13 is amended by changing the March 31, 2023 date to July 31, 2023 so it reads: “Unless extended by the parties, in the event that the Closing Date has not occurred on or before July 31, 2023, this Agreement shall terminate irrespective of any financial expenditure, investment or other use of resources on the party of any party.

8. The Minimum Service Payment provisions for the Horizon Line Property, shall apply and extend to the 4.4 Acres and remaining the Horizon Line Option Property. Payment amounts for the 4.4 Acres and remaining Horizon Line Option Property shall be computed and payable for such property in the same fashion as for the Horizon Line Property.

9. All other provisions of the Agreement not amended herein shall remain in full force an effect. In the event of a conflict the provision of this Amendment shall prevail.

SIGNATURE PAGE FOLLOWS

EXHIBIT A

IN WITNESS WHEREOF, the Parties have caused this Amendment to the Horizon Line Development Agreement to be executed in their respective names by their duly authorized representatives, all as of the date first written above.

CITY OF HUBER HEIGHTS, OHIO

By: _____
Bryan RH Chodkowski
City Manager

STATE OF OHIO)
) SS:
COUNTY OF MONTGOMERY)

On this ____ day of _____, 2023, before me a Notary Public personally appeared Bryan RH Chodkowski, the authorized representative of the City of Huber Heights, Ohio, and acknowledged the execution of the foregoing instrument, and that the same is his voluntary act and deed on behalf of the City of Huber Heights, Ohio and the voluntary act and deed of the City of Huber Heights, Ohio.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal on the date and year aforesaid.

Notary Public

EXHIBIT A

IN WITNESS WHEREOF, the Parties have caused this Amendment to the Horizon Line Development Agreement to be executed in their respective names by their duly authorized representatives, all as of the date first written above.

HORIZON LINE DEVELOPMENT, LLC,
an Ohio limited liability company

By: _____
Douglas C. Leohr, Manager

By: _____
Greg Geisler, Manager

STATE OF OHIO)
) SS:
COUNTY OF MEDINA)

On this _____ day of _____, 2023, before me a Notary Public personally appeared Douglas C. Leohr, Manager of Horizon Line Development, LLC, an Ohio limited liability company, and acknowledged the execution of the foregoing instrument, and that the same is his voluntary act and deed on behalf of Horizon Line Development, LLC.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal on the date and year aforesaid.

Notary Public

STATE OF OHIO)
) SS:
COUNTY OF MEDINA)

On this _____ day of _____, 2023, before me a Notary Public personally appeared Greg Geisler, Manager of Horizon Line Development, LLC, an Ohio limited liability company, and acknowledged the execution of the foregoing instrument, and that the same is his voluntary act and deed on behalf of Horizon Line Development, LLC.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my official seal on the date and year aforesaid.

Notary Public

AI-9059

Topics of Discussion Q.

Council Work Session

Meeting Date: 03/27/2023

Dial Park - Concept Planning

Submitted By: Bryan Chodkowski

Department: City Manager

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Dial Park - Concept Planning

Purpose and Background

The City budgeted \$315,000 in the 2023 City Budget to begin making improvements to Dial Park. To demonstrate to the community the City's commitment to facilitating these improvements, this legislation directs the City Manager to produce and provide a conceptual site plan to the Parks and Recreation Board with proposed improvements to Dial Park within ninety (90) days of this legislation's adoption. Said improvements shall be limited to a play structure, possible swing set, and picnic shelter at a total cost not to exceed \$315,000.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Resolution

CITY OF HUBER HEIGHTS
STATE OF OHIO

RESOLUTION NO. 2023-R-

DIRECTING THE CITY MANAGER TO PLAN IMPROVEMENTS TO DIAL PARK.

WHEREAS, the City of Huber Heights (the “City”) desires to make certain improvements to Dial Park; and

WHEREAS, the City budgeted \$315,000.00 in the 2023 City Budget to begin making said improvements, and

WHEREAS, the City would like to demonstrate to the community its commitment to facilitating these improvements.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Huber Heights, Ohio that:

Section 1. The City Manager is directed to produce and provide a conceptual site plan to the Parks and Recreation Board with proposed improvements to Dial Park within ninety (90) days of this legislation’s adoption. Said improvements shall be limited to a play structure, possible swing set, and picnic shelter at a total cost not to exceed \$315,000.00.

Section 2. It is hereby found and determined that all formal actions of this Council concerning and relating to the passage of this Resolution were adopted in an open meeting of this Council and that all deliberations of this Council and of any of its Committees that resulted in such formal action were in meetings open to the public and in compliance with all legal requirements including Section 121.22 of the Ohio Revised Code.

Section 3. This Resolution shall go into effect upon its passage as provided by law and the Charter of the City of Huber Heights.

Passed by Council on the _____ day of _____, 2023;
_____ Yeas; _____ Nays.

Effective Date:

AUTHENTICATION:

Clerk of Council

Mayor

Date

Date

AI-9039

Topics of Discussion R.

Council Work Session

Meeting Date: 03/27/2023

Liquor Permit #13176630420 - Cassanos - 6315 Brandt Pike

Submitted By: Anthony Rodgers

Department: City Council

Type of New

Liquor Permit:

Motion/Ordinance/

Resolution No.:

Agenda Item Description

Liquor Permit #13176630420 - Cassanos - 6315 Brandt Pike

Review and Comments - Police Division

The Police Division has no objections to the approval of this liquor permit.

Review and Comments - Fire Division

The Fire Division has no objections to the approval of this liquor permit.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Memorandum - Fire Division

Liquor Permit



Huber Heights Fire Division

TO: Anthony Rodgers, Clerk of Council

FROM: Keith Knisley, Fire Chief

DATE: 02/27/2023

RE: Liquor Permit # 13176630420

I am writing to inform you that there are no outstanding Fire Code Violations for the Cassano's restaurant located at 6315 Brandt Pike which is currently under construction.

NOTICE TO LEGISLATIVE
AUTHORITY

OHIO DIVISION OF LIQUOR CONTROL
6606 TUSSING ROAD, P.O. BOX 4005
REYNOLDSBURG, OHIO 43068-9005
(614)644-2360 FAX(614)644-3166

TO

| | | | |
|----------------|-----|-------------|---|
| 13176630420 | | NEW | CASSANOS INC 6315 BRANDT PIKE HUBER HGTS OH 45324 |
| PERMIT NUMBER | | TYPE | |
| ISSUE DATE | | | |
| 02 16 2023 | | | |
| FILING DATE | | | |
| D1 | | | |
| PERMIT CLASSES | | | |
| 57 | 083 | A | D71912 |
| TAX DISTRICT | | RECEIPT NO. | |

FROM 02/21/2023

| | | |
|----------------|-------------|------|
| PERMIT NUMBER | | TYPE |
| ISSUE DATE | | |
| FILING DATE | | |
| PERMIT CLASSES | | |
| TAX DISTRICT | RECEIPT NO. | |



MAILED 02/21/2023

RESPONSES MUST BE POSTMARKED NO LATER THAN. 03/24/2023

IMPORTANT NOTICE

PLEASE COMPLETE AND RETURN THIS FORM TO THE DIVISION OF LIQUOR CONTROL
WHETHER OR NOT THERE IS A REQUEST FOR A HEARING.

REFER TO THIS NUMBER IN ALL INQUIRIES **A NEW 1317663-0420**

(TRANSACTION & NUMBER)

(MUST MARK ONE OF THE FOLLOWING)

WE REQUEST A HEARING ON THE ADVISABILITY OF ISSUING THE PERMIT AND REQUEST THAT
THE HEARING BE HELD ☐ IN OUR COUNTY SEAT. ☐ IN COLUMBUS.

WE DO NOT REQUEST A HEARING. ☐

DID YOU MARK A BOX? IF NOT, THIS WILL BE CONSIDERED A LATE RESPONSE.

PLEASE SIGN BELOW AND MARK THE APPROPRIATE BOX INDICATING YOUR TITLE:

(Signature)

(Title) ☐ Clerk of County Commissioner

(Date)

☐ Clerk of City Council

☐ Township Fiscal Officer

CLERK OF HUBER HGTS CITY COUNCIL
6131 TAYLORSVILLE RD
HUBER HGTS OHIO 45424

AI-9040

Topics of Discussion **S.**

Council Work Session

Meeting Date: 03/27/2023

Parks And Recreation Board Reappointment - V. King

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?: No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

Board And Commission Appointments

* Parks And Recreation Board - Reappointment

Purpose and Background

City Staff recommend the reappointment of Vincent King to the Parks and Recreation Board for a term ending March 31, 2026. An updated background check is in process on Mr. King by Human Resources.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

No file(s) attached.

AI-9065

Topics of Discussion

Council Work Session

Meeting Date: 03/27/2023

Citizens Water And Sewer Advisory Appointment - M. Mullen

Submitted By: Karen Powell

Department: City Council

Council Committee Review?: Council Work Session

Date(s) of Committee Review: 03/27/2023

Audio-Visual Needs: None **Emergency Legislation?:** No

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

- * Citizens Water And Sewer Advisory Board - Appointment

Purpose and Background

The City's interview panel recommends the appointment of Michael Mullen to the Citizens Water and Sewer Advisory Board for a term ending January 1, 2026. A background check on Mr. Mullen was processed through Human Resources.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

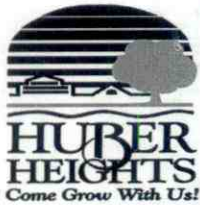
Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

Application - M. Mullen



6131 Taylorsville Road
Huber Heights, Ohio 45424
Phone: (937) 233-1423
Fax: (937) 233-1272
www.hhoh.org
An Equal Opportunity Employer

Application For City Boards and Commissions

3/20/23 4:00
RECEIVED ON:
FEB 24 2023
CLERK OF COUNCIL

Qualified applicants are considered for all positions without regard to race, color, religion, sex, national origin, marital or veteran status, or disability.

PLEASE COMPLETE ALL SECTIONS AND EACH QUESTION COMPLETELY AND ACCURATELY

| | |
|--|----------------------------------|
| Board or Commission Applied For: CITIZENS WATER & SEWER ADVISORY BOARD | Date Applied: 02/24/23 |
|--|----------------------------------|

| | | |
|-------------------|----------------------|----------------|
| MULLEN | MICHAEL | D |
| Last Name | First Name | Middle Name |
| 7242 | TROY PIKE | DAYTON OH |
| Address | City | State |
| | | 45424 |
| Zip Code | | |
| n/a | 937-477-7117 | mdmul@aol.com |
| Home Phone Number | Daytime Phone Number | E-mail Address |

EDUCATION

| | SCHOOL | COURSE OF STUDY OR DEGREE EARNED |
|-----------------|--|----------------------------------|
| HIGH SCHOOL | MONTGOMERY COUNTY JVS-ENVI. SCI. TWIN VALLEY NORTH - LEWISBURG, OH | DIPLOMA |
| COLLEGE | THE OHIO STATE UNIVERSITY | BS - NAT. RES / AG. EDUC. |
| GRADUATE SCHOOL | THE OHIO STATE UNIVERSITY, WRIGHT STATE, UNIV OF DAYTON | - COURSEWORK |
| OTHER (Specify) | | |

COMMUNITY INVOLVEMENT

Please list all civic, community, or non-profit organizations to which you have belonged or currently do belong, and your dates of service.

| Organization | Dates of Service |
|----------------------------|---------------------------------|
| BOY SCOUTS OF AMERICAN | MERIT BADGE COUNSELOR - PRESENT |
| WLCZ STAKEHOLDERS ADVISORY | 2021 - PRESENT |
| | |
| | |

EMPLOYMENT HISTORY

| Name of Employer | Position(s) Held | Dates of Employment |
|--|------------------------------|---------------------|
| MIAMI VALLEY CTC | NATURAL RESOURCES INSTRUCTOR | 1983 - 2017 |
| MONTGOMERY SOIL & WATER CONSERVATION DISTRICT | EDUCATION SPECIALIST | 2020 - PRESENT |
| | | |
| | | |

REFERENCES

| | | |
|--------------|---|------------------|
| ED EVERMAN | MSWCD 10025 AMITY RD BROOKVILLE, OH 45309 | 937-854-7646 |
| Name | Address | Telephone Number |
| DAVE PELTZ | MVCTC 6500 HOFF RD CLAYTON, OH 45315 | 937-837-7781 |
| Name | Address | Telephone Number |
| NICK WHEELER | MSWCD 10025 AMITY RD BROOKVILLE, OH 45309 | 937-854-7646 |
| Name | Address | Telephone Number |

STATEMENT OF INTEREST

Please tell us why you are interested in serving on this board or commission

I have always had an interest in local politics. I believe my background in the environmental industry gives me a working knowledge of water and wastewater systems. I am a Qualified Construction Stormwater Inspector and perform as such with MSWCD. I am available and interested in working with the City leaders and citizens of Huber Heights in regard to their water and sewer operations. I have prepared numerous young people for employment in the water/wastewater industry over my 34 year teaching career.

REQUIREMENTS AND APPLICANT STATEMENT

Are you at least 18 years of age? ☒ Yes ☐ No

Do you currently reside in the City of Huber Heights? ☒ Yes ☐ No

Have you resided in the City of Huber Heights for at least one year prior to making this application? ☒ Yes ☐ No

Are you a registered voter? ☒ Yes ☐ No

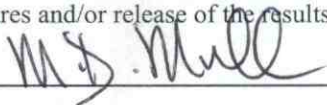
Are you willing to sign a release to allow the City of Huber Heights to perform a background screening and criminal records check? ☒ Yes ☐ No

I certify that all of the information furnished in this application and its addenda are true and complete to the best of my knowledge. I understand that the City of Huber Heights may investigate the information I have furnished and I realize that any omissions, misrepresentation or false information in this application and/or its addenda may lead to revocation of any volunteer appointment.

I hereby acknowledge that I, voluntarily and of my own free will, have applied for a volunteer position with the City of Huber Heights with the understanding that the City may use a variety of screening procedures to evaluate my qualifications and suitability for appointment. I have been advised that these screening procedures might include, but are not limited to, interviews, criminal record checks, driving records checks and reference checks. I also acknowledge that any such screening procedures, as reasonably required by the City of Huber Heights, are prerequisites to my appointment to a volunteer position with the City of Huber Heights.

In addition, I also hereby understand that the City of Huber Heights cannot guarantee the confidentiality of the results of, or information obtained through the aforementioned screening procedures. Decisions of the Ohio Supreme Court regarding the Ohio Public Records Act indicate that, with certain enumerated exceptions, records maintained by a governmental entity are a matter of public record and, should a proper request be made by a member of the public for such records, the governmental entity would be required to make such records available to that member of the public within a reasonable time. Additionally, all information furnished in this application is subject to disclosure under the Ohio Public Records Act.

Therefore, in consideration of my application being reviewed by the City of Huber Heights, under no legal disability, and on behalf of my heirs and assigns, hereby release and agree to hold harmless the City of Huber Heights and any of its agents, employees, or related officials from any and all liability, whatever the type and nature resulting from the administration of any such screening procedures and/or release of the results therefrom.



Signature

02/24/23

Date

AI-9067

Topics of Discussion T.

Council Work Session

Meeting Date: 03/27/2023

City Manager Search Process

Submitted By: Anthony Rodgers

Department: City Council

Council Committee Review?: Council Work Session **Date(s) of Committee Review:** 01/17/2023 and 02/07/2023 and 03/27/2023

Audio-Visual Needs: None

Emergency Legislation?:

**Motion/Ordinance/
Resolution No.:**

Agenda Item Description or Legislation Title

City Manager Search Process

Purpose and Background

This agenda item is to provide an update on the restart of the City Manager search process.

Fiscal Impact

Source of Funds: N/A

Cost: N/A

Recurring Cost? (Yes/No): N/A

Funds Available in Current Budget? (Yes/No): N/A

Financial Implications:

Attachments

No file(s) attached.
