



Planning Commission

November 19, 2024 6:00 PM,

City Hall, 111 E. Maple Avenue (Ground Floor), Council Chambers

CALL TO ORDER

ROLL CALL

CONSENT AGENDA

The Consent Agenda consists of routine items of business to be acted upon by the Planning Commission with little or no public discussion. The staff or committee recommendation for each item is included in the Planning Commission packet. Any item may be removed by a commissioner or staff member to become part of the regular agenda.

1. **Planning Commission Minutes – October 29, 2024**
2. **Case 24-320-08 – Final Plat – McBee Acres** – A request for Final Plat approval for McBee Acres generally located at the northwest corner of US 24 and Salem Drive.

PUBLIC HEARINGS

1. **Continued Case 24-125-05 Rezoning/PUD – 19300 E 37th Terrace** – A request by JC Weston Construction to rezone the property from C-2 (General Commercial) to R-30/PUD (High Density Residential/Planned Unit Development) and approving a preliminary development plan.
2. **Continued Case 24-100-24 – Rezoning – 2131 S. Scott Avenue** – A request by Andrew Rocco Mazzella to rezone the property from R-12 (Two-Family Residential) to C-2 (General Commercial).
3. **Continued Case 24-100-25 – Rezoning – 2301 S. Chrysler Avenue** – A request by the

City to rezone the property from I-1 (Industrial) and R-6 (Single Family Residential) to R-6 (Single Family Residential).

4. **Case 24-100-26 – Rezoning – 17200 E. Medical Center Pkwy, 17203 & 17221 E. 23rd Street** – A request by the City to rezone the property from R-30/PUD (High Density Residential/Planned Unit Development) to C-2 (General Commercial).

OTHER BUSINESS

1. Training provided by Lauber Law

ROUNDTABLE - NEXT MEETING DECEMBER 10, 2024

ADJOURNMENT



Planning Commission Minutes

October 29, 2024 6:00 PM

City Hall, 111 E. Maple Avenue (Ground Floor), Council Chambers

CALL TO ORDER

A meeting of the Planning Commission was held at 6:00 PM on 10/29/2024, in the 111 E Maple Avenue City Council Chambers, Independence, MO 64050. The meeting was called to order.

ROLL CALL

Upon roll call, the following members were present - Laurie Dean Wiley, Eric Ashbaugh, Edward Nesbitt, Dan O'Neill, Virginia Ferguson, Jose Torres, Michael Young. Absent - .

CONSENT AGENDA

The Consent Agenda consists of routine items of business to be acted upon by the Planning Commission with little or no public discussion. The staff or committee recommendation for each item is included in the Planning Commission packet. Any item may be removed by a commissioner or staff member to become part of the regular agenda.

1. Planning Commission Minutes – October 15, 2024

Motion

Commissioner Edward Nesbitt made a motion to approve the Consent Agenda. Commissioner Dan O'Neill seconded the motion. The motion was approved Yes 7, No 0, Abstained 0.

CASE TO BE CONTINUED - STAFF RECOMMENDS THIS CASE BE CONTINUED TO THE NOVEMBER 19, 2024 MEETING.

- 1. Case 24-100-24 – Rezoning – 2131 S. Scott Avenue –** A request by Andrew Rocco Mazzella to rezone the property from R-12 (Two-Family Residential) to C-2 (General Commercial).

Motion

Commissioner Edward Nesbitt made a motion to continue the case to the November 19, 2024 meeting. Commissioner Michael Young seconded the motion. The motion was approved Yes 7, No 0, Abstained 0.

2. **Continued Case 24-125-05 Rezoning/PUD – 19300 E 37th Terrace** – A request by JC Weston Construction to rezone the property from C-2 (General Commercial) to R-30/PUD (High Density Residential/Planned Unit Development) and approving a preliminary development plan.

Motion

Commissioner Edward Nesbitt made a motion to continue the case to the November 19, 2024 meeting. Commissioner Virginia Ferguson seconded the motion. The motion was approved Yes 7, No 0, Abstained 0.

PUBLIC HEARINGS

1. **Continued Case 24-100-17 – Rezoning – 18th Street** – A request by the City of Independence to rezone the properties at 10120, 10124, 10125, 10200, 10201, 10202, and 10205 E. 18th Street S. and 1802 S. Ash Avenue from C-2 (General Commercial) to R-6 (Single-Family Residential); 10321, 10323, 10325 and 10327 E. 18th Street S. from C-2 (General Commercial) to R-12 (Two-Family Residential); and 1803 S. Ash Avenue from C-2 (General Commercial) and R-12 (Two-Family Residential) to R-6 (Single-Family Residential).

Staff Presentation

Gabe Glaser presented the case. Mr. Glaser presented the Commission with a vicinity map, noting the area and surrounding zoning. He presented the Commission with an aerial map indicating the project area and explained the surrounding land uses.

Public Comments

No public comments.

Motion

Commissioner Dan O'Neill made a motion to approve the case. Commissioner Jose Torres seconded the motion. The motion was approved Yes 7, No 0, Abstained 0.

2. **Case 24-100-25 – Rezoning – 2301 S. Chrysler Avenue** – A request by the City to rezone the property from I-1 (Industrial) and R-6 (Single Family Residential) to R-6 (Single Family Residential).

Staff Presentation

Brian Harker presented the case. Mr. Harker presented the Commission with a vicinity map, noting the area and surrounding zoning. He presented the Commission with an aerial map indicating the project area and explained the surrounding land uses.

Commissioner Nesbitt expressed concern that this is a historic site for the City and questioned if it's considered historic. In response to Commissioner Nesbitt's question, Mr. Arroyo stated if the site is considered historic, any plans would have to go through the Heritage Commission. Mr.

Arroyo believes the school district plans to use the stadium and not tear it down. Commissioner Nesbitt stated he would like more details about their plans for this site.

Commissioner Ashbaugh questioned if the Parks Department is still providing upkeep of the property and if they're in favor of this rezoning. Mr. Arroyo said this request came from the City Manager's Office and the City is in favor of this rezoning. Commissioner Ashbaugh stated he would like to continue this case to get more information.

In response to Chairwoman Wiley's question, Mr. Harker noted the rezoning is not needed for a use change, it's only needed because each parcel can only have one zoning type, which this would correct.

Motion

Commissioner Eric Ashbaugh made a motion to continue this case to the November 19, 2024 meeting. Commissioner Edward Nesbitt seconded the motion. The motion was approved Yes 5, No 2, Abstained 0.

OTHER BUSINESS

1. **Case 24-175-08 – UDO Amendment #71 – Trash Haulers** – The City proposes Amendment #71 of the Unified Development Ordinance pertaining to Trash Haulers.

Staff Presentation

Rick Arroyo presented the case. He stated when the UDO was adopted in 2009, there were no use regulations within Chapter 14 of the City Code for uses related to trash haulers or as reference within the code as refuse collection. Currently, only Chapter 19 – Transportation Article 5, outlines the application process for those wishing to operate a refuse collection business by obtaining a certificate of public convenience and necessity. Mr. Arroyo said the intent of this proposed amendment is to include use regulations for refuse collection business in Chapter 14 of the UDO. He noted this proposed amendment allows refuse collectors within the Industrial I-1 and I-2 zoning districts with the application of a Special Use permit as proposed in Section 14-302. Mr. Arroyo stated a new section, 14-428, has been proposed under Chapter 14, Article 4. This section provides the applicability, and procedures and standards for application of a refuse collection business use. Staff believes these proposed amendments will better serve our community and better regulate these uses.

In response to Commissioner Nesbitt's question, Mr. Arroyo said current trash haulers would be grandfathered in and would not be required to get this permit.

Public Comments

No public comments.

Motion

Commissioner Edward Nesbitt made a motion to approve the case. Commissioner Eric Ashbaugh seconded the motion. The motion was approved Yes 7, No 0, Abstained 0.

2. **Training provided by Lauber Law**

Chairwoman Wiley noted that the training has been moved to the November 19, 2024 meeting.

ROUNDTABLE - NEXT MEETING NOVEMBER 19, 2024

Mr. Arroyo provided the Commission with information on the difference between Preliminary and Final Plats.

ADJOURNMENT

The meeting was adjourned at 6:47 p.m.

MEETING DATE: November 19, 2024

STAFF: Gabriel Glaser, Planner

PROJECT NAME: McBee Acres

CASE NUMBER/REQUEST: **Case 24-320-08 – Final Plat – McBee Acres** – A request for Final Plat approval for McBee Acres generally located at the northwest corner of US 24 and Salem Drive.

APPLICANT: McBee Construction Company

PROPERTY LOCATION: generally located at the northwest corner of US 24 and Salem Drive

SURROUNDING ZONING/LAND USE:

North: Unincorporated Jackson County...duplexes
East: Unincorporated Jackson County ...single-family houses and church
South: C-2 (General Commercial)...gas station
C-1 (Neighborhood Commercial)...retail and day care
R-6 (Single Family Residential...church
West: Unincorporated Jackson County)...single family residential

FURTHER ACTION:

Following action by the Planning Commission, this final plat request is scheduled for 1st reading by the City Council on December 16, 2024 and the 2nd reading on January 6, 2025.

RECOMMENDATION

Staff recommends **APPROVAL** of this Final Plat with the following conditions.

1. Correct addresses based on attached address exhibit (Exhibit A).
2. Label the loop street on the northern and western, "E. Lynchburg Place N.", and, the southern and eastern part of the loop, "E. 16th Terrace N.". Change "S. Salem Dr." to "E. 16th Terr N.".
3. Remove the lot line (solid line) at the intersection of E. Lynchburg Place N. and N. Salem Drive. The Right-of-Way should be continuous, without breaks.
4. Change "Block 1" and "Block 2" to "Lot 1" and "Lot 2". This change will need to be reflected in the drainage easement language.
5. Language regarding the maintenance of drainage easements will need to be reviewed by Staff to verify concurrence with the recorded covenants.
6. Please indicate/delineate the boundaries for Drainage Easement "A". Ensure that the boundaries of Drainage Easement "B" match the Preliminary Development Plan. These

easements will need to be reviewed by City Staff. If any revisions are required, comments will be provided.

7. An Operation and Maintenance Manual for the stormwater system will need to be developed and submitted for review prior to issuance of any Certificate of Occupancy for buildings on this site. Requirement as per the Environmental Compliance Division of the Municipal Services Department.
8. Remove 25' Building Line (Note: varied exterior setbacks and minimum 20' rear yard setbacks will need to be indicated on Final Development Plan, in accordance with the approved Preliminary Development Plan #22-125-01).
9. Submit Final Development Plan prior to construction. Final Development Plan is required to be submitted in accordance with City Code 14-703-06 and can be processed concurrently with Building Permit application(s).
10. Covenants, Conditions, and Restrictions CCR's shall be submitted for review and found to be in concurrence with the Final Plat prior to approval and recording of the Final Plat.

PROJECT DESCRIPTION & BACKGROUND INFORMATION

PROJECT DESCRIPTION: A request for Final Plat approval, following the approval of the rezoning and preliminary development plan for McBee Acres.

Current Zoning: R-12/PUD (Two-Family Residential/Planned Unit Development)

Current Use: Vacant tracts

Proposed Use: Two-Family Residential

Proposal:

The applicant received approval of a preliminary development plan in April of 2022 (Ordinance #19316). One of the conditions for approval of Ordinance #19316 required the applicant to record a Final Plat of the proposed development site.

Physical Characteristics of Property:

This application for a Final Plat consists of two unplatted property tax parcels totaling ~11.45 acres in area. In addition, a dead-end section of Lexington Rd., located along the South/Southwest border of this site, has been vacated. The North half of the vacated Right-of-Way (30.5') is included in this application for a Final Plat.

The properties that make up this application were annexed into the City of Independence in 2015 (Ordinance #18524). The vacated Right-of-Way was annexed in 2022 (Ordinance #19315). Before this time, the properties that make up this application for a Final Plat would have been located in Unincorporated Jackson County.

Characteristics of the Areas:

The surrounding land use of this area consists of a mixture of single-family, two-family, and multi-family residences, as well as a mixture of light commercial, general commercial, and public/civic uses.

ANALYSIS

Historic and Archeological Sites:

There are no apparent historic or archeological issues with this property.

Public Utilities:

The property owner will need to make the necessary infrastructure improvements to this site. The installation of infrastructure at this site has been approved to move forward at-risk subject to the final plat.

Floodplain/Stream Buffer:

There are no floodplain/stream buffer issues with this property.

CIP Investments:

The City does not have any capital improvements projects planned near this area.

Platting:

This site has received approval of a preliminary development plan as part of an application for a Rezoning/PUD. This plan included 39 duplexes on 2 lots. As such, these duplexes will be owned and managed by the developer who will lease them out to tenants.

Elevations:

Based on the Preliminary Development Plan approved by City Council, each residential building will contain two adjoining identical two-story units constructed on a slab foundation. The first floor will feature about 700 square feet with a living room, dining room, ½ bath and a single car garage. The second floor will contain roughly 800 SF divided into three bedrooms and two bathrooms. Exterior building materials will consist of Hardie Board siding with veneer cultured stone on the front elevation, all in a light grey color. Asphalt composite shingles in a dark grey/black color will be used on all roofs.

Driveways and Sidewalks:

The preliminary development plan for this project indicates that each duplex will have a two-car width driveway. In addition, building elevations submitted as part of the preliminary development plan indicate that each duplex will be outfitted with 2 garages—one for each dwelling unit. Each duplex will have capacity for 4 off-street parking spaces.

Condition #6 of the applicant's approval for a Rezoning/PUD requires at least 13 additional off-street parking spaces to be added between certain lots. This will help to keep street parking at a minimum.

The preliminary development plan for this project indicates that a sidewalk will be constructed in the Right-of-Way around the boundaries of the interior lot (Lot 2)

Streets and Access:

The two lots will be accessed from Salem Dr. to the East. All buildings will be accessed by a looped public street connecting to Salem Drive. The development entrance shall meet minimum sight distance requirements prior to recording of the Final Plat.

This proposed project is not expected to adversely affect the street network in the vicinity of the project. Jackson County is requiring a construction permit for the project's connection with Salem Drive and has been involved early on with the project.

Landscaping:

The applicant will provide a tree preservation/landscape plan for the project showing new plantings and how the existing tree lines along the north and east sides of the site will be retained or improved. A landscape feature must be added around the central and northwest detention basins. The applicant will provide a landscape/tree preservation plan as part of a Final Development Plan.

Detention Basin Easements:

Ownership and maintenance of detention basin easements will be recorded with the First Final Plat.

EXHIBITS

1. Narrative
2. Application
3. Final Plat
4. Front Elevation
5. Preliminary Plat
6. Comprehensive Plan map

Ground Up Development LLC
1203 E US HWY 24
Independence, MO 64050

Attn: City of Independence Planning & Zoning Department
111 E Maple Ave., Independence, MO 64050

October 1, 2024

Dear Recipient,

Ground Up Development, LLC hereby submits the Final Development Plan for McBee Acres located at 19004 E. Lexington Rd and 1801 N Salem Drive located on 11.45 total acres near the intersection of US 24 HWY and main entrance from North Salem Drive consisting of a subdivision of 39 duplexes, or 78 total family dwellings. The two lots that make up the 11.45 acres are zoned R12PUD for residential use.

This development will include single slab, up to three bedroom duplexes, with an attached garage for each family, including amenities provided such as an on call maintenance and a walking trail. This development will be constructed and then managed by the current developer who plans to make each until available to rent to the general public.

Thank you for your time and assistance in the project. Ground Up Development is committed to producing a subdivision which values the needs of its families and surrounding businesses. The future development is consistent with the goals, policies, and standards of the City of Independence, in addition to the public health safety, environment, and general welfare of the public. Please direct any further question or concerns to the provided contact information below.

Thank you,



Jack Murphy
Project Manager
816-918-9338
jmurphy@mcbeecustomhomes.com

Application Type (check all that apply)

Land Use	Land Subdivision	Site Development	Use Permit	Other
☐ Rezoning ☐ PUD Rezoning	☐ Preliminary Plat ☒ Final Plat ☐ Minor Subdivision	☐ Final Site Plan ☐ Preliminary Dev Plan ☐ Final Dev Plan (PUD)	☐ Special Use ☐ Homebased Business ☐ Short-Term Rental	☐ Admin. Adjustment ☐ Variance ☐ Street Name Change ☐ Special Sign Permit

Project Information and Location

McBee Acres

Project Name

1801 N Salem Drive and 19004 E Lexington Rd

Project Address/Location

11.45

Sq. Ft. of Building

Acreage

Number of Lots/Tracts

Steam Buffer (Yes or No)

R12PUD

Vacant

Subdivision of 39 Duplexes

Existing Zoning

Proposed Zoning

Existing Land Use

Proposed Land Use

Basic Application Requirements (See the Planning & Zoning Application Guide for additional requirements)

- | | |
|---|--|
| ☒ Completed & Signed Application Form
☒ Application Fee
☐ Cover Letter Describing Details of Project | ☐ One 24" x 36" set of plans for Land Sub. & Site Dev.
☒ One PDF copy of a plat map or site plan
☐ Legal Description of the property in question |
|---|--|

Contact Information

Applicant

Suzie Zaslavsky McBee Construction Co

Name Company

1203 E US Hwy 24, Independence, MO 64050

Address

913-568-1902 preconstruction@mcbeecom

Phone Email

Architect/Engineer/Surveyor/Other: Civil Engineer

Robert Walquist Quist Engineering

Name Company

821 NE Columbus St, Lees Summit, MO 64063

Address

816-550-5675 rwalquist@quistengineering.

Phone Email

Owner

Steve McBee Ground Up Development

Name Company

103 Industrial Pkwy, Gallatin, MO 64640

Address

816-985-3822 smcbee@mcbeecompanies

Phone Email

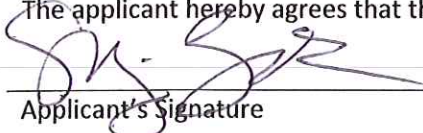
Architect/Engineer/Surveyor/Other: _____

Name Company

Address

Phone Email

The applicant hereby agrees that the information provided above is accurate.

 10/1/24

Applicant's Signature Date

 10/01/24

Owner's Signature Date

FINAL PLAT
McBEE ACRES
SECTION 20, TOWNSHIP 50 NORTH, RANGE 31 WEST,
A SUBDIVISION IN THE CITY OF INDEPENDENCE, JACKSON COUNTY, MISSOURI

A part of the Southeast Quarter of Section 20, Township 50 North, Range 31 West, Independence, Jackson County, Missouri, described as follows:

Beginning at the Northeast corner of Lot 160, ELM GROVE 6TH PLAT, a subdivision of record; thence S 81°47'24"E, along the South line of SALEM EAST, a subdivision of record, for 45.95 feet; thence N 86°40'36"E along said South line for 247.75 feet; thence N 62°34'06"E along said South line for 272.30 feet to the Southeast corner of Lot 183, SALEM EAST; thence S 38°05'23"E, along the right of way line of Salem Drive (807'w), for 459.89 feet to the Northeast corner of Lot 1, CORRECTED PLAT SALEM JUNCTION, a subdivision of record; thence S 51°53'36"W along said Lot 1 for 185.77 feet; thence S 51°53'36"E along said Lot 185.77 feet to the Southeast corner of Lot 1, SALEM EAST; thence S 51°53'36"E along said Lot 1 for 185.77 feet to the Centerline of Old Lexington Road (611'w); thence S 78°39'31"W along said Center line for 403.74 feet; thence N 81°56'42"W along said Centerline for 180.67 feet to the East line of ELM GROVE 6TH PLAT; thence N 2°22'58"E along said East line for 162.18 feet; thence N 8°49'09"W along said East line for 164.36 feet; thence N 6°48'19"E along said East line for 153.73 feet; thence N 16°33'42"E along said East line for 81.95 feet; thence N 2°22'58"E along said East line for 131.34 feet to the Point of Beginning.

PLAT DEDICATION: *The undersigned owner of the Property described herein has caused the same to be subdivided in the manner shown on this plat and the property shall hereafter be known as:*

This property is not in the floodway according to the Federal Emergency Management Agency National Flood Insurance Program Boundary and Floodway Map, based on current Map 29095C0190H dated December 7, 2023.

An easement or license is hereby granted to the City of Independence, Missouri, to locate, construct and maintain, or to authorize the location, construction and maintenance of poles, wires, anchors, conduits, and/or structures for water, gas, sanitary sewer, storm sewer, surface drainage channel, electricity, telephone, cable television, or any other necessary public utility or services, any or all of them, upon, over, or under those areas outlined or designated upon this plat as "utility easements" (U/E) or within any street or thoroughfare dedicated to public use on this plat. Grantors, on behalf of themselves, their heirs, their assigns and successors in interest, hereby waives, to the fullest extent on this plat. Grantors, on behalf of themselves, their heirs, their assigns and successors in interest, hereby waives, to the fullest extent allowed by law, any right to request restoration of rights previously transferred and vacation of the easement herein granted.

Ground Up Development, LLC, a Missouri limited liability corporation, have caused these presents to be signed by its Manager this _____ day of _____, 2024

State of Missouri)
County of Jackson) SS

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal at my office in said County and State, the day and year last above written.

Approved by the City Council and Mayor of the City of Independence, Missouri pursuant to Ordinance 17339.

Vincent Brice
Jackson County Assessment Department

DATE

Thomas W. Clemons
THOMAS W. CLEMONS, REG. P.L.S. NO. 1958
1996

[illegible]

U/E	UTILITY EASEMENT
B/L	BUILDING LINE
■	EXISTING REBAR
+	EXISTING "+" CUT IN CONCRETE
○	SET 1 1/2" REBAR & PLASTIC CAP MO PLS #1958
▲	SET COTTONPICKER SPINDLE

1. The bearings and coordinates shown on this plat are based upon the Missouri Coordinate System of 1983, West Zone, by GPS Observations using the MoDot GPS Network.

PREPARED FOR/ DEVELOPER:
GROUND UP DEVELOPMENT, LLC

N. Whitney Rd.

N.W. 1/4

N.E. 1/4

N. Salem Dr.

E. Lexington Rd.

S.W. 1/4

S.E. 1/4

US Highway 24

E. Kentucky Rd.

Project Location

SEC. 20, T-50-N, R-31-W



PRELIMINARY PLAT FOR
MCBEE ACRES
INDEPENDENCE, JACKSON COUNTY, MISSOURI

DEVELOPER:
MCBEE DEVELOPMENT
(407) 982-0524

SYMBOL LEGEND

PROPOSED	EXISTING
MH	MH
Curb Inlet	Curb Inlet
Manhole	Manhole
Field Inlet	Field Inlet
Fire Hydrant	Fire Hydrant
Water Valve	Water Valve
Water Meter	Water Meter
Shuttle	Shuttle
Utility Pole	Utility Pole
Gas Line	Gas Line
Electric Transformer	Electric Transformer
Telephone Pole	Telephone Pole
Cable Pole	Cable Pole
Open Ditch	Open Ditch

LINE LEGEND

PROPOSED	EXISTING
Storm Line	Storm Line
Sanitary Line	Sanitary Line
Water Line	Water Line
Building Line	Building Line
Easement Line	Easement Line
4' Sidewalk	4' Sidewalk
2' Curb	2' Curb
Contour	Contour
Fence Line	Fence Line
Gas Line	Gas Line
Overhead Telephone Line	Overhead Telephone Line
Underground Telephone Line	Underground Telephone Line
Overhead Electrical Line	Overhead Electrical Line

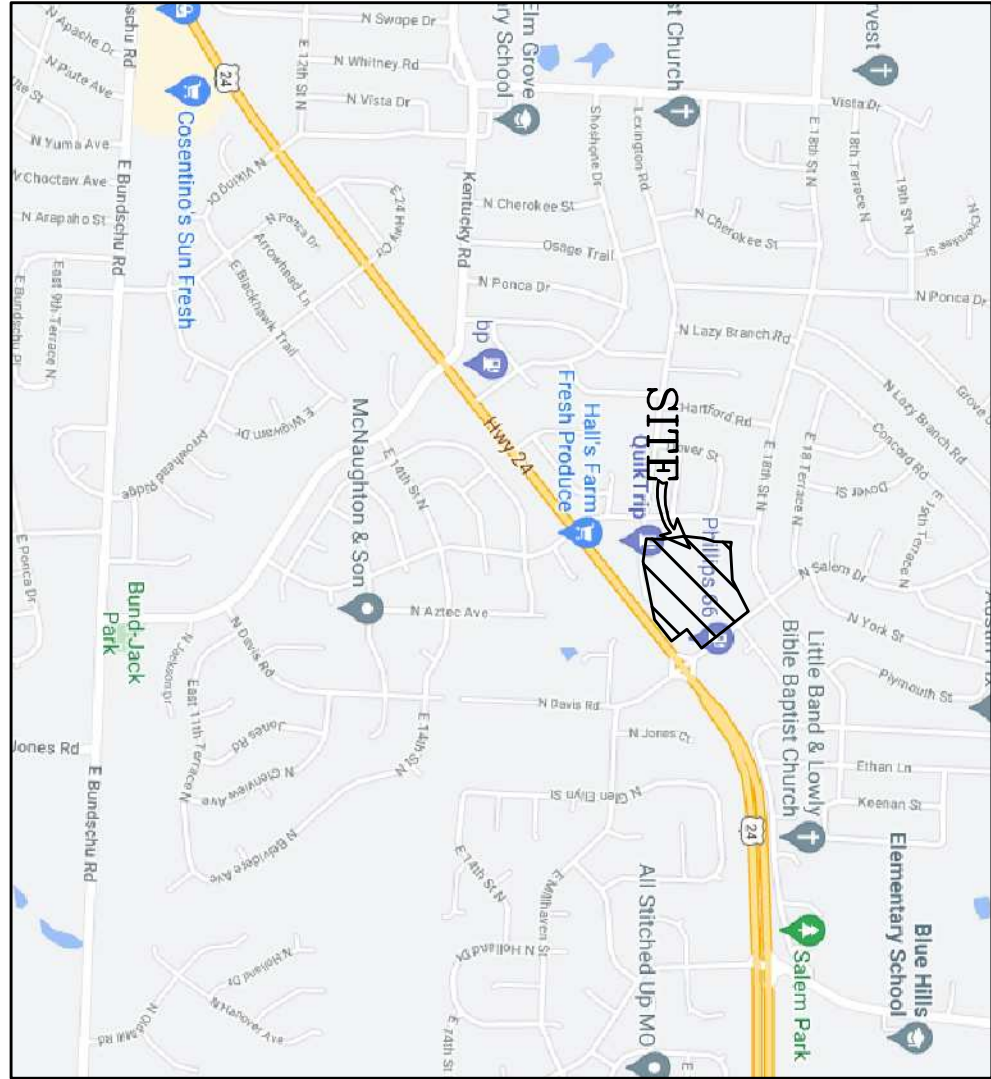
UTILITY NOTES:
1. SANITARY SEWER MAIN SHALL BE BUILT TO CITY STANDARDS AND DEDICATED TO THE CITY ALONG WITH A 15' UTILITY EASEMENT.
2. WATER MAIN SHALL BE BUILT TO CITY STANDARDS AND DEDICATED TO THE CITY ALONG WITH A 15' UTILITY EASEMENT.

NOTE:

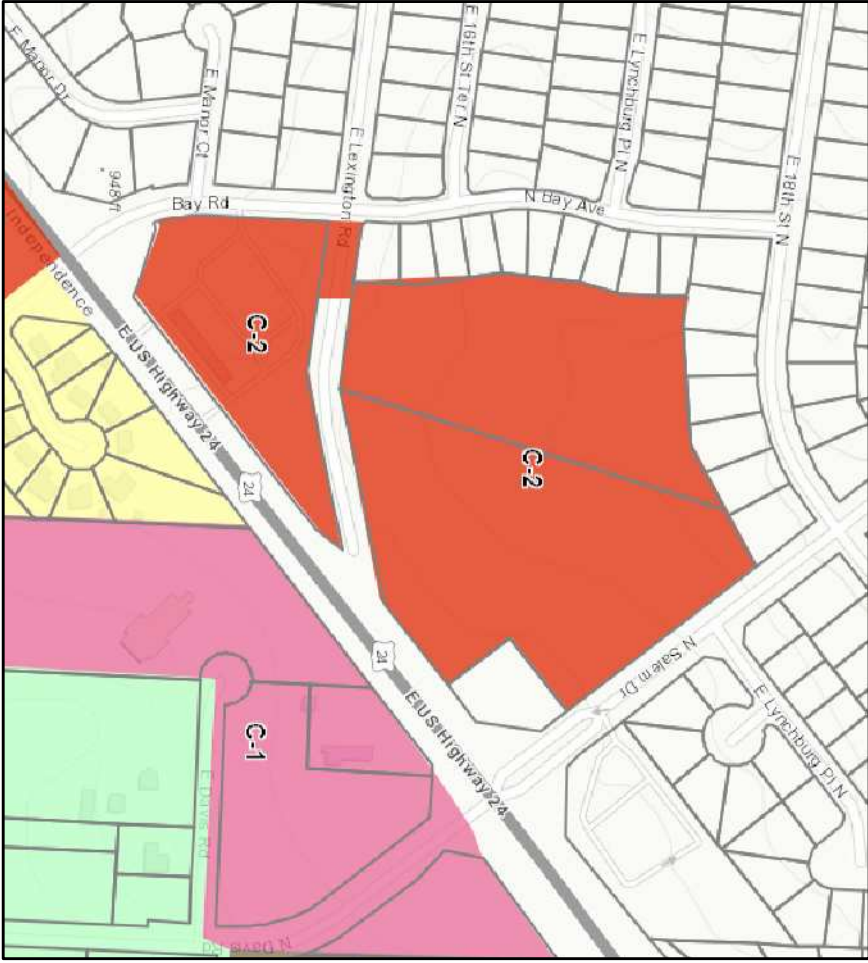
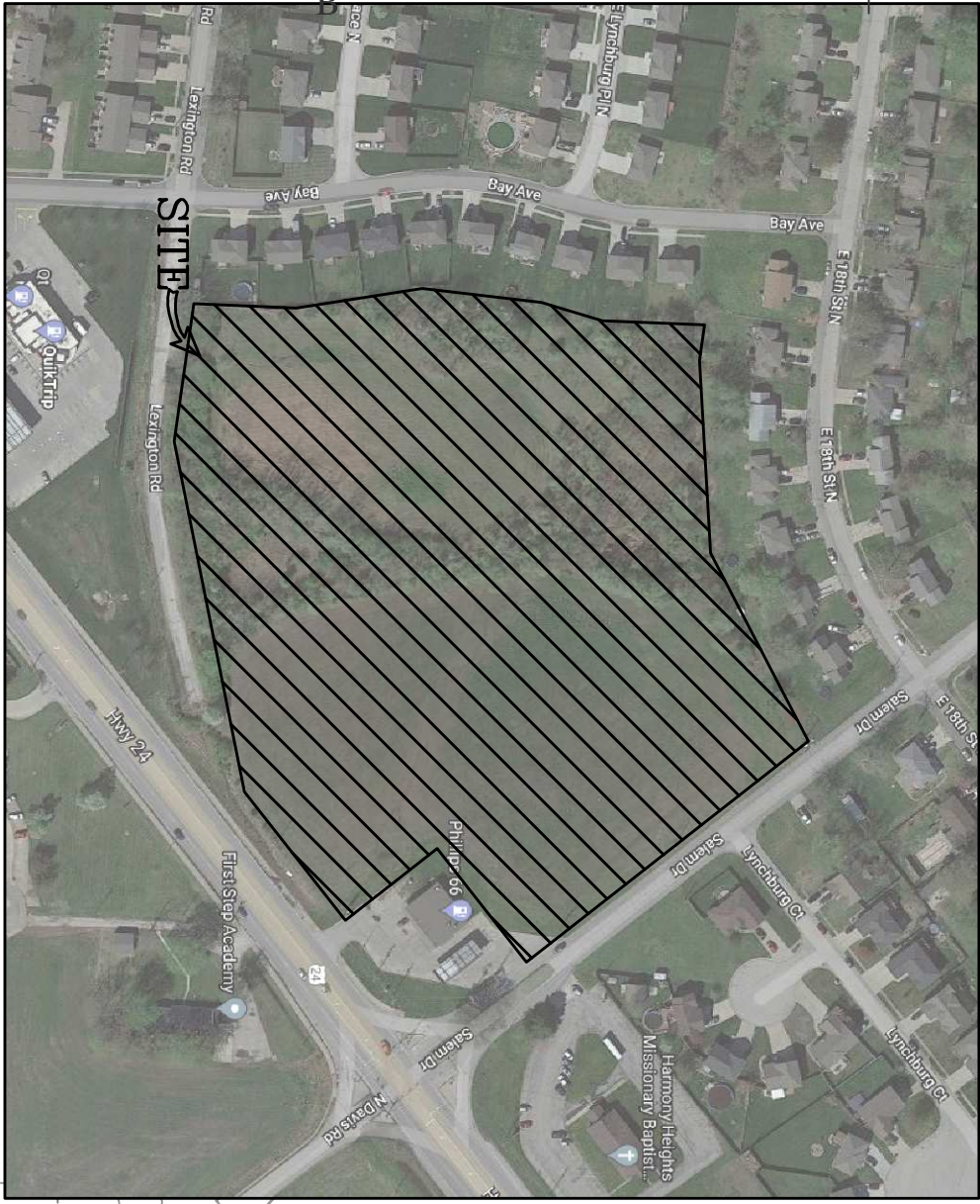
- EXISTING ZONING = C-2
- TOTAL AREA = 11.4386
- TOTAL LOTS = 3
- TOTAL LOTS = 78 UNITS
- UNITS PER ACRE = 6.8 UNITS / ACRE
- THIS DEVELOPMENT WILL IMPROVE THE EXISTING DETENTION BASIN TO MITIGATE THE INCREASE IN STORM WATER RUNOFF DO TO THE ADDITION OF IMPERVIOUS MATERIAL.
- ALL ROADS SHALL BE 28' BACK TO BACK W/ 50' ROW.
- BUILDING SET BACKS
- FRONT YARD = 25'
- REAR YARD = 25'
- CORNER = 15'
- DEDICATED ROW = 119.92'
- PERCENT OF GREEN SPACE = 57%

PERVIOUS VS IMPERVIOUS CALCULATIONS

LOT SIZE	497,890 SF
IMPERVIOUS SURFACES	
BUILDINGS, PORCHES, DRIVES,	
PARKING,	156,000 SF
STREETS	43,224 SF
SIDEWALKS	16,969 SF
TOTAL	216,193 SF
CALCULATIONS	
I/P = 43% IMPERVIOUS	
57% PERVIOUS (GREEN)	



LOCATION MAP

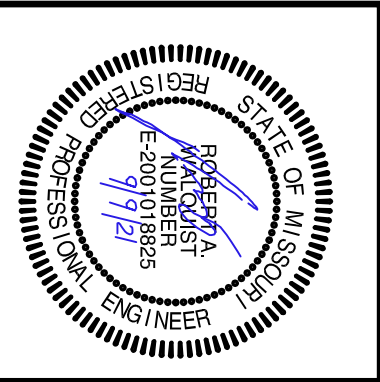


DESCRIPTION:

A part of the Southeast Quarter of Section 20, Township 50 North, Range 31 West, Independence, Jackson County, Missouri, described as follows:

Beginning at the Northeast corner of Lot 160, ELM GROVE 6TH PLAT, a subdivision of record; thence S 81°47'24"E, along the South line of SALEM EAST, a subdivision of record, for 45.95 feet; thence N 86°40'36"E, along said South line for 247.75 feet; thence N 62°34'08"E, along said South line for 272.30 feet to the Southeast corner of Lot 183, SALEM EAST; thence S 36°03'23"E, along the right of way line of Salem Drive (807'W), for 459.89 feet to the Northeast corner of Lot 1, CORRECTION PLAT 7, SALEM JUNCTION, a subdivision of record; thence S 51°53'36"W, along said Lot 1 for 185.77 feet; thence S 36°05'23"E, along said Lot 1 for 150.08 feet; thence S 51°53'36"W, along the Northern right of way line U.S. Highway Route 24 for 209.89 feet to the Northern right of way line of Old Lexington Road (619'W); thence S 78°39'31"W, along said Northern line for 459.00 feet; thence N 81°56'42"W, along said Northern line for 178.49 feet to the East line of ELM GROVE-6TH PLAT; thence N 2°22'58"E, along said East line for 153.73 feet; thence N 8°49'09"W, along said East line for 164.36 feet; thence N 6°48'19"E, along said East line for 131.34 feet; thence N 16°33'42"E, along said East line for 81.95 feet; thence N 2°22'58"E, along said East line for 131.34 feet to the Point of Beginning.

PRELIMINARY PLAT



McBEE ACRES
INDEPENDENCE, JACKSON COUNTY, MISSOURI

Quist Engineering, Inc
Civil Engineering for Residential & Commercial Site Development
821 NE Columbus St.
Lee's Summit, Missouri 64063
Phone: (816) 550-5675
email: rwalquist@quistengineering.com

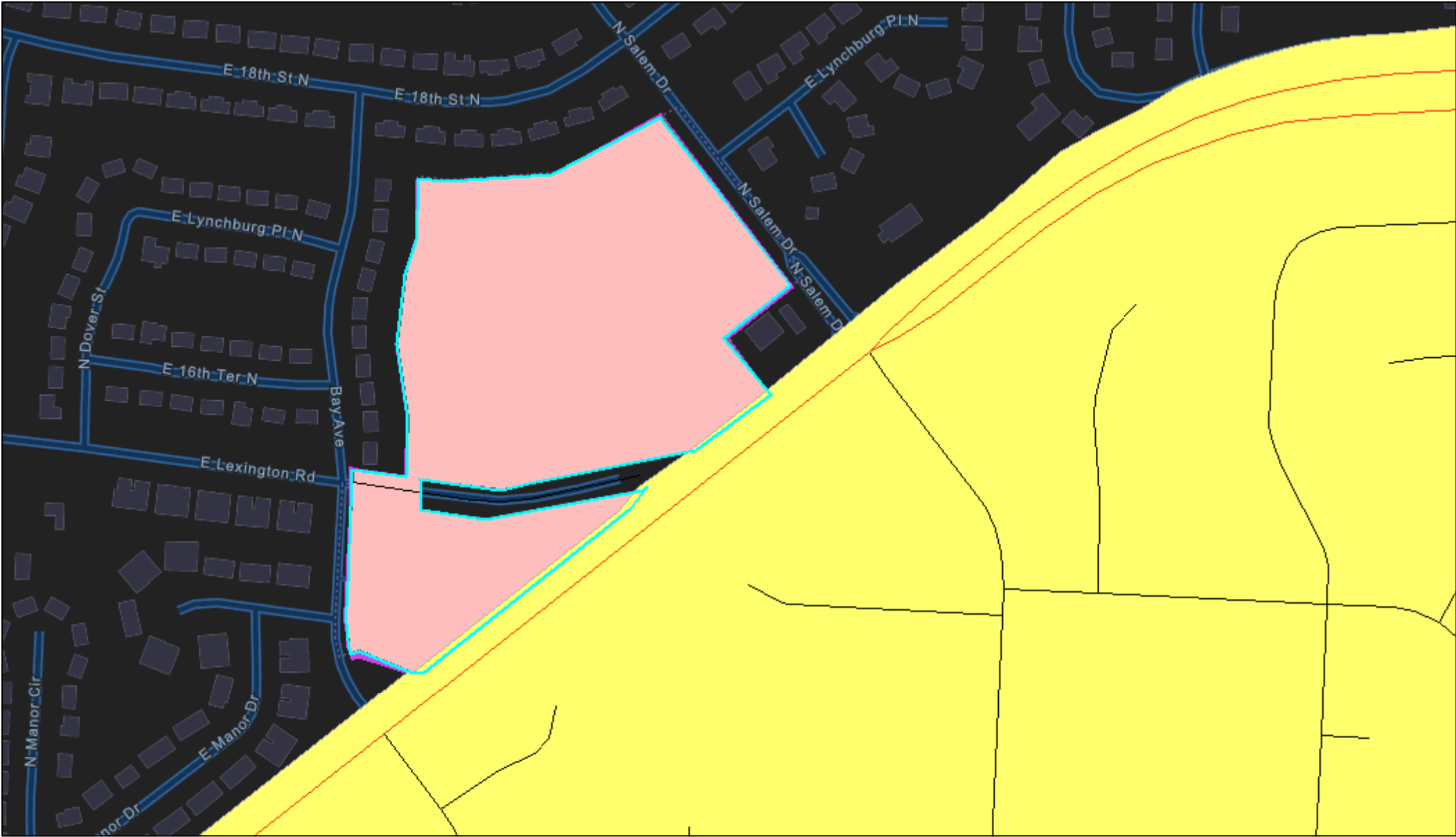
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REVISIONS
1-31-22
2-7-22

SHEET NO.
C200

JOB NO.
E21-314

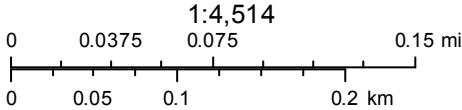
Comprehensive Plan Map



11/7/2024, 9:08:15 AM

- | Streets | Proposed Land Use (Comp Plan) |
|-----------|-------------------------------|
| — Highway | Residential Neighborhoods |
| — Local | Neighborhood Commercial |

City Limits



MEETING DATE: November 19, 2024

STAFF: Brian L. Harker, Senior Planner

PROJECT NAME: Infinity Apartments

CASE NUMBER/REQUEST: **24-125-05 - 19300 E. 37th Terrace S.** – A request by JC Weston Construction to rezone the property from C-2 (General Commercial) to R-30/PUD (High Density Residential/Planned Unit Development) and approving a preliminary development plan

APPLICANTS/OWNERS: Clint Burkdoll

PROPERTY ADDRESS: 19300 E. 37th Terrace S.

SURROUNDING ZONING/LAND USE:

North: C-2 (General Commercial)...undeveloped tract

South: C-2 (General Commercial)...box stores

East: R-18/PUD (Moderate-Density Residential/Planned Unit Development)...apartments

West: C-2 (General Commercial) and R-30/PUD (High-Density Residential/Planned Unit Development)...nursing home and aptment complex.

PUBLIC NOTICE:

- Letters to adjoining property owners – August 15, 2024
- Public Notice published in the Independence Examiner – August 24, 2024
- Signs posted on property – August 23, 2024

FURTHER ACTION:

Following action by the Planning Commission, this rezoning request is scheduled for first reading by the City Council on December 16, 2024 and the public hearing/second reading on January 6, 2025.

RECOMMENDATION

Staff recommends **APPROVAL** of this Rezoning/Preliminary Development Plan request.

1. A building setback deviation shall be granted for the easternmost building (i.e., Building D) to allow the building to be set back 16 feet from the Jackson Drive right-of-way instead of 50-feet.
2. A building height deviation shall be granted for the easternmost building (i.e., Building D) to allow the building may be as high as 50-feet tall on the non-garage side and 60 feet tall on the garage side.
3. In exchange for the building height and building setback deviations, the significant landscaping as shown on the landscape plan shall be provided.
4. The applicant shall provide an additional amenity in addition to the pool and clubhouse. Staff will work with the applicant to ensure that amenities are provided at the final development plan stage.

5. The Final Development Plan should provide elevations for the masonry trash enclosures.
6. The office/clubhouse and apartment buildings and units within will be addressed on the Final Development Plan as prescribed by the Community Development Department.

PROJECT DESCRIPTION & BACKGROUND INFORMATION

PROJECT DESCRIPTION: – A request by JC Weston Construction to construction a 300-unit apartment complex at 19300 E. 37 Terrace S.

Current Zoning:	C-2 (General Commercial)	Proposed Zoning:	R-30/PUD (High Residential/Planned Unit Development)
Current Use:	Undeveloped tract		
Zoning History	1965 – 1974: R-1 (Single-Family Residential) 1974 - 2009: C-P-2 (Planned General Commercial) 2009 - Present: C-2 (General Commercial)		

Property History:
The property has never been platted. In 1974, the property was rezoned from R-1 to C-P-2 with the site plan being approved in 1975. This project was never developed, and this undeveloped tract got its current size and configuration with the creation of 37th Terrace and Jackson Drive.

Proposal:
The proposed Infinity Apartments (originally submitted as Jackson Apartments) is a 304-unit, multi-family development consisting of four separate four-story buildings with underground parking. The proposed development, on 11.67-acres, is located in the northwest corner of Jackson Drive and 37th Terrace. The development will include a clubhouse & pool, and a mix of regular parking, covered carport parking, and garage spaces. The development will have a density of 25.7-units per acre. There will be 6.194-acres of open space.

Physical Characteristics of Property:
The applicant’s 11.67-acre property at its southern end is more open and level, but as proceeding to the north it becomes steeper and more wooded as it descends toward the railroad right-of-way. Trees line the two ravines going northeast and northwest. There is a thick stand of trees abutting the apartment complex to the west.

Characteristics of the Areas:
The vicinity of the proposed development is dominated by retail, institutional and multiple-family residential uses. To the south, across 39th Terrace is box retail. Then, to the southwest across the intersection of 37th Terrace and Jackson Drive is Centerpoint Medical Center. East across Jackson Drive is an apartment complex. To the west lies a nursing home and further west another apartment complex. North of the property, down the steep embankment, lies a railroad right-of-way and a heavily wooded area.

ANALYSIS

Consistency with *Independence for All*, Strategic Plan:

The project should achieve livability, choice, access, health and safety through a quality-built environment. The project will improve visual appearance, improve public infrastructure and facilities, and stabilize and revitalize a neighborhood.

Comprehensive Plan Tools and Policies for the Current Designation:

The relevant Guiding Principle would be that it facilitates the development of a connected, mixed-use neighborhood where appropriate.

Zoning:

The applicant proposes R-30/PUD zoning, which allows; multiple-family housing, home based daycare, government facilities, churches, schools, utilities, cemeteries, crops and gardening. District C-2 (General Commercial) allows for retail, office, restaurants, banks, business and personal improvement services, hotels, construction services, daycare centers, nursing homes, government facilities, churches, employment agencies, funeral and interment services, schools, colleges and universities, veterinary and animal boarding services, sports and entertainment facilities, medical services, repair services and crop agriculture.

Historic and Archeological Sites:

There are no apparent historic or archeological issues with this property.

Public Utilities:

Water, sewer and electrical services are available to the property. Utilities to service the development will be installed along the private drive aisles to serve each proposed building as shown on the preliminary site development plan. Water and sewer lines will be provided with one tap per building for each utility. Proposed easements will be provided for public utilities at the time of final platting

Floodplain/Stream Buffer/Detention Basin:

The property is neither in a floodplain nor near a stream requiring accompanying stream buffer zones. The property will drain to the northeast where a detention pond will be sited.

Drainage Study:

BMP's are required per the City's design criteria and will be implemented on this development. Design will abide by the MARC/APWA Manual of Best Management Practices.

The proposed project will consist

	EXISTING PEAK FLOWS	PROPOSED PEAK FLOWS	Design Storm (cfs)
(cfs) 10 Year	21.65	23.95	100 Year 30.68 32.40

EXISTING VOLUME PROPOSED VOLUME Design Storm (ac-ft) (ac-ft) 10 Year 2.84 3.76 100 Year 5.65 6.78

6 of new multi-family residential homes, open space, parking, a clubhouse and pool, and an on-site detention basin. Stormwater runoff from the proposed development will be controlled utilizing the existing on-site detention basin. The basin has been determined in preliminary analysis to have storage capacity for the development's increase in runoff. The basin's control structure will need modifications to control the 10- and 100-year storm events peak release rates per the City's requirements. BMP's will be required to treat water quality and will be designed per the City's requirements.

Parking Lot and Access:

Access to the Infinity Apartments will be from 37th Terrace and Jackson Drive. The 37th Terrace entrance will be at the southwest corner of the property while the proposed entrance off-of Jackson Drive will be further north than the existing road cut that's nearer the intersection. Both drives connect to a looping parking lot where all but the south parking lot are behind the building lines of the apartment structures. All maneuvering aisles will be two-way and none of the parking aisles are more than two cars deep. They will have landscaped endcap and islands.

Parking:

The UDO requires 564-parking spaces (441-based on the unit counts and 123 additional visitor's spaces). The 304-unit apartment complex would have 500-parking spaces (48 for the studio units, 360 for the one and two-bedroom units, 32 for the four-bedroom units and 60 others for visitors); this results in a 1.64 parking spaces per unit that is equivalent or greater than industry standards and the number of other apartment developments in the region. Although the development is 64 spaces short of the new requirements, the site is constrained by the topography of the site, the existing right-of-way, and the existing detention basin that must be sized for not only this development but the adjacent developments as well.

The UDO allows for approval of an alternative parking plan. The applicant submitted a parking letter outlining this alternative parking plan. Staff supports the alternative parking plan given the site constraints mentioned above.

Sidewalk:

A completed sidewalk is required along 37th Terrace.

Traffic Study:

This traffic study summarizes the anticipated traffic impacts of the proposed Infinity Apartments development with the following:

Left-turn and right-turn lane warrants at the driveway intersections were analyzed in conjunction with MoDOT's Access Management Guidelines, and no turn lanes would be warranted at either site driveway.

It should be noted that the site plan shows a full-access driveway that would require a median break along Jackson Drive. Although a northbound left-turn lane is not warranted due to traffic volumes at this intersection, a median break without a dedicated turn lane is not recommended as drivers would not be expecting a left-turn driver slowing down to make the turn on a divided roadway without a left-turn lane present. There is an existing bridge just north of the intersection and a significant retaining wall on the east side of Jackson Drive that would make it difficult to construct a northbound left-turn lane. If a dedicated left-turn lane is not feasible, the driveway access should be limited to right-in/right-out access.

In general, acceptable traffic operations can be expected in and around the proposed development with the addition of the Jackson Apartments development. The development traffic will have minimal impact on the traffic operations in the study area. No improvements would be required.

Amenities:

Provided amenities will include an outdoor swimming pool and clubhouse. The applicant provided an amenity package exhibit. Staff recommends an additional amenity in addition to the pool and

clubhouse and will work with the applicant to ensure that amenities are provided at the final development plan stage.

CIP Investments:

The City does not have any capital improvements projects planned near this area.

Elevations:

The four proposed apartment structures will be arranged in a circle. Building D will front S. Jackson Drive with the parking behind. Building C will set much further back from the right-of-way of E. 37th Terrace S. with its parking between it and the roadway. Buildings A and B will be on the far side of the circle and arranged around the interior parking lot loop and the pool and clubhouse in the middle. There will be four carport structures as well.

There be 76-units per building. The mix of apartments will be 44-studios, 128-one bedroom, 116-two bedroom and 16-three bedroom.

The four-story apartment structures will have three-colors of fiber lap siding, Hardie architectural panels, prefinished fiber siding-board and batten, ledgerstone veneer and a standing seam roof. Additionally, there are white and dark bronze various fiber trims, cast stone banding and metal coping and trims. The rear “basements” of the buildings will have exposed garages.

The club house and carports will mimic the architectural style of the apartment building utilizing the same Fiber Cement walls, stone veneer wainscots and pitched roofs with architectural shingles.

Building Height:

The buildings will be as high as 48-feet tall on their exterior lot line sides opposite the sides with their exposed garage entries and just under 60 feet tall when accounting for the tuckunder garages. The maximum building height allowed in the R-30 District is 35 feet; the UDO allows for 1 foot increase in building height for 1 foot of building set back beyond the minimum required. Thus, the only building that does not meet the building height requirement is Building D (i.e., the building closest to Jackson Drive). As a trade off to the height, the applicant proposes to increase the street trees along Jackson Drive which will provide shade along the sidewalk but also softens the height of this building. As part of the PUD approval process, the UDO allows for PUD plans to deviate from strict compliance with specified standards. Staff supports the building height deviation for Building D.

Building Setback:

The easternmost building (i.e., Building D) has a setback from the Jackson Drive right-of-way of 16-feet instead of 50-feet required. Staff supports the setback deviation for Building D as the applicant proposes to significantly increase the landscaping along Jackson Drive to minimize any effects.

Landscaping and Buffering:

The preliminary development plan indicates landscaping as required per UDO. A buffer is required for the southwest portion of the site adjacent to the Sunterra Springs development. A final development plan stage, staff will ensure compliance with the landscape provision of the UDO.

REVIEW CRITERIA

Recommendations and decisions for proposed planned unit development rezoning and its accompanying preliminary development plan must be based on consideration of the criteria listed in Section 14-703-05-H:

1. **The consistency with the Comprehensive Plan.**
The Comprehensive Plan envisions Residential Neighborhoods and the proposed rezoning aligns with this.
2. **The consistency with the PUD standards of Section 14-902, including the statement of purpose.**
The preliminary development plan is generally consistent with the PUD standards of Section 14-902 with the exception of Building D which does not meet the building setback and building height requirements. However, the applicant proposes to significantly increase the street trees along Jackson Drive to minimize any impact.
3. **The nature and extent of Common Open Space in the PUD.**
Except for the detention basin, most of the Common Open Space is useable. There are stands of trees in the northern part of the tract.
4. **The reliability of the proposals for maintenance and conservation of Common Open Space.**
The complex will be on one lot under a unified ownership with the owner maintaining the site.
5. **The adequacy or inadequacy of the amount and function of Common Open Space in terms of the densities and dwelling types proposed in the plan.**
The design is such the much of the Common Open Space is fairly spaced around the apartment complex's buildings.
6. **The extent to which the proposed use will adversely affect the capacity of safety portions of the street network or present parking problems in the vicinity of the property. Whether adequate provision for public services, provides adequate control over vehicular traffic, and furthers the amenities of light and air, recreation, and visual enjoyment.**
A traffic study was conducted on this property's impact to neighboring streets. In general, acceptable traffic operations can be expected in and around the proposed development with the addition of the Jackson Apartments development. The development's traffic will have minimal impact on the traffic operations in the study area. No improvements would be required.
7. **The extent to which the proposed use will have a substantially adverse effect on adjacent property and the development or conservation of the neighborhood area.**
As mentioned above, this parcel is the last developable parcel at Jackson and 37th Terrace. As part of this development, studies were required for storm water, sanitary sewer and traffic. All studies were reviewed and any issues mitigated.
8. **Whether potential adverse impacts have been mitigated to the maximum practical extent.**
Storm water, sanitary sewer and traffic issues have been reviewed and mitigated.
9. **Whether the Preliminary Development Plan represents such a unique development proposal that it could not have accomplished through use of (non-PUD) conventional zoning regulations.**

There are building setback and issues that would have required variances with a non-PUD zoning. The PUD also helps to sure adequate amenities and needed studies (i.e. traffic and storm water) were provided.

10. **The sufficiency of the terms and conditions proposed to protect the interest of the public and the residents of the PUD in the case of a plan that proposes development over a period of years.**

This project will not be phased.

EXHIBITS

1. Narrative
2. Application
3. Notification letter
4. Mailing list
5. Mailing affidavit
6. PUD Site Plan
7. Landscaping Plan
8. Elevations
9. Comprehensive Plan map
10. Zoning map

JACKSON APARTMENTS COVER LETTER

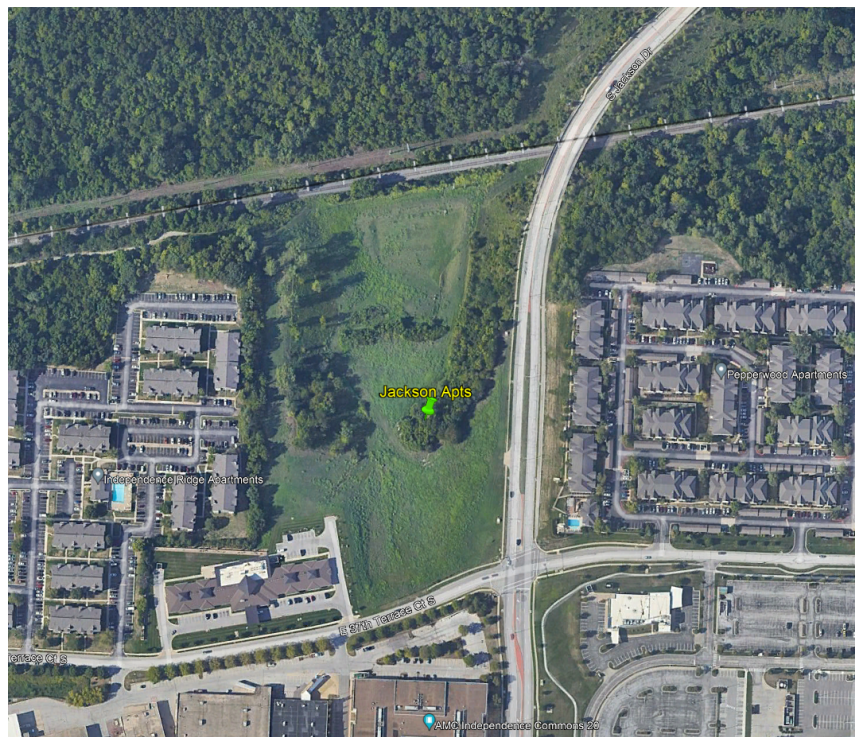


June 11, 2024

City of Independence, MO
111 E Maple Ave.
Independence, MO 64050

To whom it may concern:

Mr. Clint Burkdoll is proposing a new residential development of four, 4-story (plus garage level) apartment buildings at the NW corner of E 37th Terrace and S Jackson Drive. The 300-unit development would also include a clubhouse & pool, and a mix of regular parking, covered carport parking, and garage spaces. This submittal is for a PUD Rezoning and PDP plan. The proposed rezoning is for R-30.



Landscaping will follow City of Independence guidelines including screening of the adjacent commercial site and utilize native plantings where feasible. Regional detention exists in a tract on the north end of the proposed development. A preliminary stormwater study has been conducted to determine requirements for allowing runoff from the proposed site into the basin. A proposed full access drive entrance is located on E 37th Terr and a right-in, right-out only entrance is proposed for Jackson Drive. A preliminary traffic impact study has been included with the submittal as well.

While there are no known wetlands or floodplain on site, the topography is quite challenging. The east and west sides of the property slope down toward the center, creating a small valley. A railroad borders the site to the north. The apartment buildings will line the exterior edges with 4 floors of living units, and a garage floor on the lower, downhill side. Parking will encompass the interior area, with the clubhouse & pool in the center. The natural drainage patterns will allow for easy access to the existing basin.

Site Summary

Units: 300

Total acreage: 508,393 Sq.Ft. (11.67 ac. (including existing 1.67 ac. detention basin tract))

Open Space Area: 269,866 Sq.Ft. (6.194 ac.)

Density: 25.7 units/ac.

Parking:

Off-Street Spaces = 212

Attached Garage Spaces = 168

Detached Garage Spaces = 40

Carport Spaces = 30

Total Parking Provided = 450

Utilities

Utilities to service the development will be installed along the private drive aisles to serve each proposed building as shown on the preliminary site development plan. Water and sewer lines will be provided with one tap per building for each utility. Proposed easements will be provided for public utilities at the time of final platting.

Restrictions

Existing easements will remain in place, and are shown on the preliminary plat and preliminary site plan. Proposed easements will be provided for public utilities at the time of final platting.

Variance

On both the west and east sides of the property, there will be a couple of locations where buildings are less than minimum setback requirements. This will be part of the PUD rezoning process and specifics will be added at the time of writing the ordinance.

Sincerely,



Adam DeGonia, PE
Project Engineer

Application Type (check all that apply)

Land Use	Land Subdivision	Site Development	Use Permit	Other
☐ Rezoning ☒ PUD Rezoning	☒ Preliminary Plat ☐ Final Plat ☐ Minor Subdivision	☐ Final Site Plan ☒ Preliminary Dev Plan ☐ Final Dev Plan (PUD)	☐ Special Use ☐ Homebased Business	☐ Admin. Adjustment ☐ Variance ☐ Street Name Change ☐ Special Sign Permit

Project Information and Location

Jackson Apartments

Project Name

19300 E 37th Terrace, Independence, MO 64057

Project Address/Location

Sq. Ft. of Building	Acreage	Number of Lots/Tracts	Steam Buffer (Yes or No)
C-2	PUD R-30	Vacant	Residential - Apartment
Existing Zoning	Proposed Zoning	Existing Land Use	Proposed Land Use

Basic Application Requirements (See the Planning & Zoning Application Guide for additional requirements)

☐ Completed & Signed Application Form ☐ Application Fee ☐ Cover Letter Describing Details of Project	☐ One 24" x 36" set of plans for Land Sub. & Site Dev. ☐ One PDF copy of a plat map or site plan ☐ Legal Description of the property in question
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Contact Information

Applicant

Clint Burkdoll JC Weston Construction

Name Company

PO Box 66, Gardner, KS 66030

Address

913.285.2900

Phone

metrokc1@gmail.com

Email

Architect/Engineer/Surveyor/Other: Engineer

Adam DeGonia McClure

Name Company

1700 Swift Ave, Ste 100, NKC, MO 64116

Address

816-502-3915

Phone

adegonia@mcclurevision

Email

Owner

Center Place Development

Name Company

7584 SE State Route P, Rockville, MO 64780

Address

Phone

Email

Architect/Engineer/Surveyor/Other: Architect

Michael Gaillard Rosemann & Associates

Name Company

1526 Grand Blvd, Kansas City, MO 64108

Address

816.472.1448

Phone

mgaillard@rosemann.com

Email

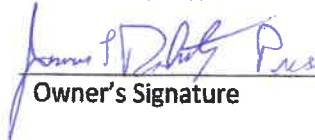
The applicant hereby agrees that the information provided above is accurate.



Applicant's Signature

05/09/2024

Date



Owner's Signature

05/10/2024

Date 12:48 PM

Property Owner Notification Letter

Date: August ____, 2024 [no later than 8/23/24]

Case No. 24-125-07 – Jackson Place

Dear Property Owner – Center Place Development:

This letter is to notify you that an application has been submitted for consideration by the Planning Commission and City Council. A full public hearing will be held by the Planning Commission, and the City Council will consider only new information on the dates and times below.

Proposed Case Type (Check One):

☐ Rezoning ☒ Rezoning/PUD ☐ Special Use Permit
☒ Preliminary Development Plan

Proposed project description: Jackson Apartments

Applicant: JC Weston Construction

Location of Property: 19300 E. 37th Terrace

Planning Commission Meeting Date: September 10, 2024 at 6:00 p.m.

City Council Meeting Date: October 21, 2024 at 6:00 p.m.

Location of Public Hearing: City Council Chambers City Hall,
111 E. Maple Avenue, Independence, Missouri

All interested persons are invited to attend and will have an opportunity to be heard at the full public hearing (Planning Commission). You may file a protest petition with the Community Development Department. For more information or to get copies of a petition, please contact Planning staff at 816-325-7421.



William B. Moore
Applicant /Agent / Attorney

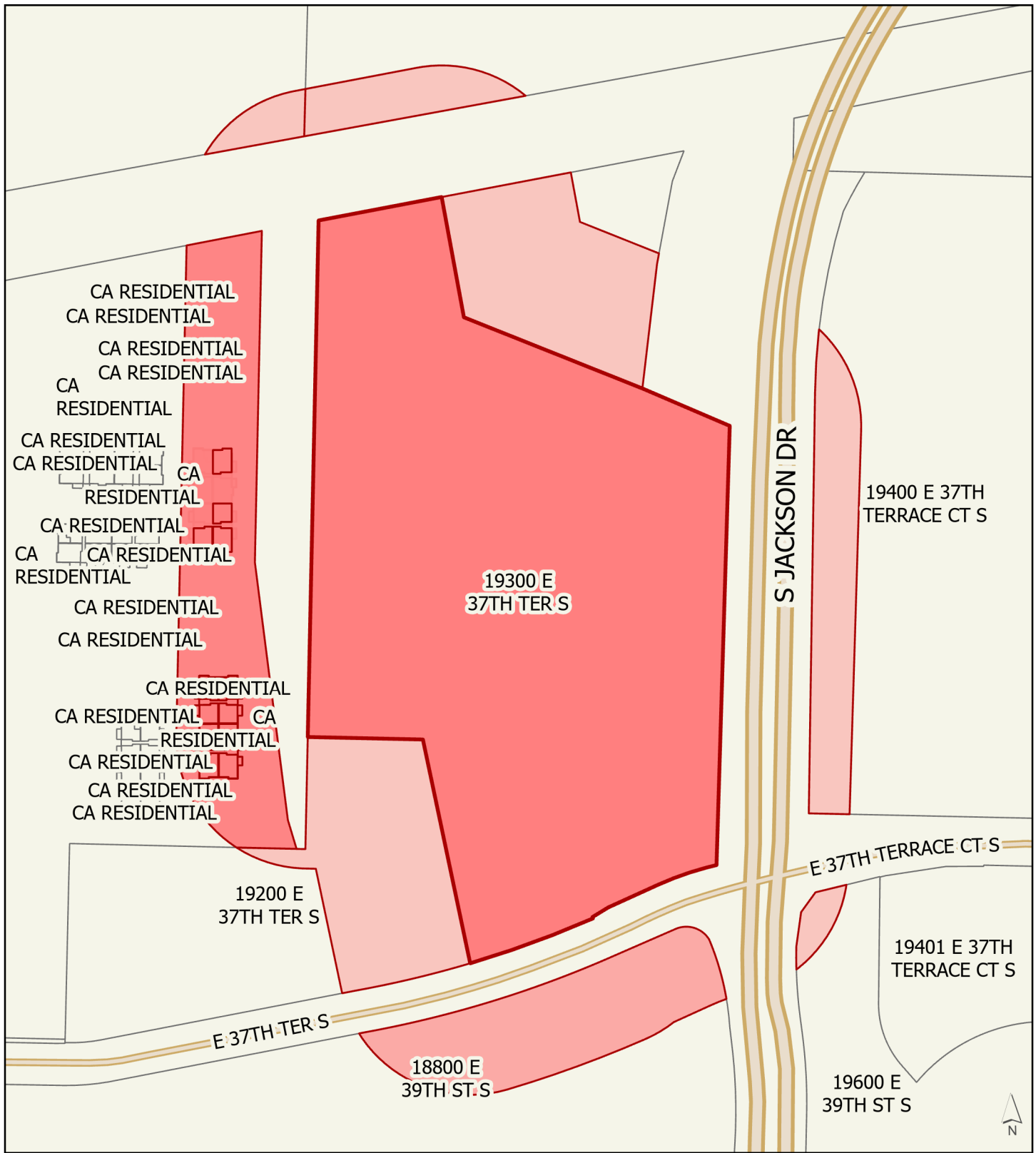
For more information, contact the Community Development Department at 816-325.7421.

PROPERTY OWNERS WITHIN 185 FEET
Independence Ridge Apartments Independence Ridge LLC 5201 Johnson Dr., Ste 100 Mission, KS 66205
Sunterra Springs Sunterra Independence RE LLC 901 Pier Vire Dr., Ste 201 Idaho Falls, IN 83402
DT Independence Commons LLC 3300 Enterprise Pkwy Beachwood, OH 44122
Centerpoint Medical Center of Indep LLC PO Box 80610 Indianapolis, IN 46280
Pepperwood Apartments Pepperwood Apartments LLC 3330 Dundee Rd., Ste S1 Northbrook, IL 60062
Covenant Land Trust LLC 214 S Spring St Independence, MO 64050

Notification Area

24-125-05

19300 E 37th Ter S, Independence, MO 64057



-  Subject Property
-  185 ft Notification Area

0 50 100 200 Feet

Prepared by Joshua Garrett, Community Development
Date: 7/18/2024

PROPERTY OWNER NOTIFICATION AFFIDAVIT

STATE OF MISSOURI

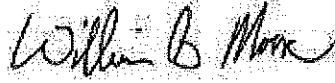
COUNTY OF JACKSON

Case No. 24-125-07 – Jackson Place

I, William B. Moore, of lawful age being first duly sworn upon oath, state:

That I am the attorney for the property for which the application was filed and did, not later than fifteen (15) days prior to the date of the public hearing scheduled before the Plan Commission, mail notices to all persons owning property within 185 feet of the subject property. **The list of property owners to whom notice has been mailed is attached.**

These notices were mailed on the 21st day of August, 2024.



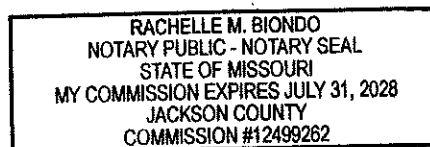
William B. Moore, Agent

Subscribed and sworn to before me this 21st day of August, 2024.



Notary Public

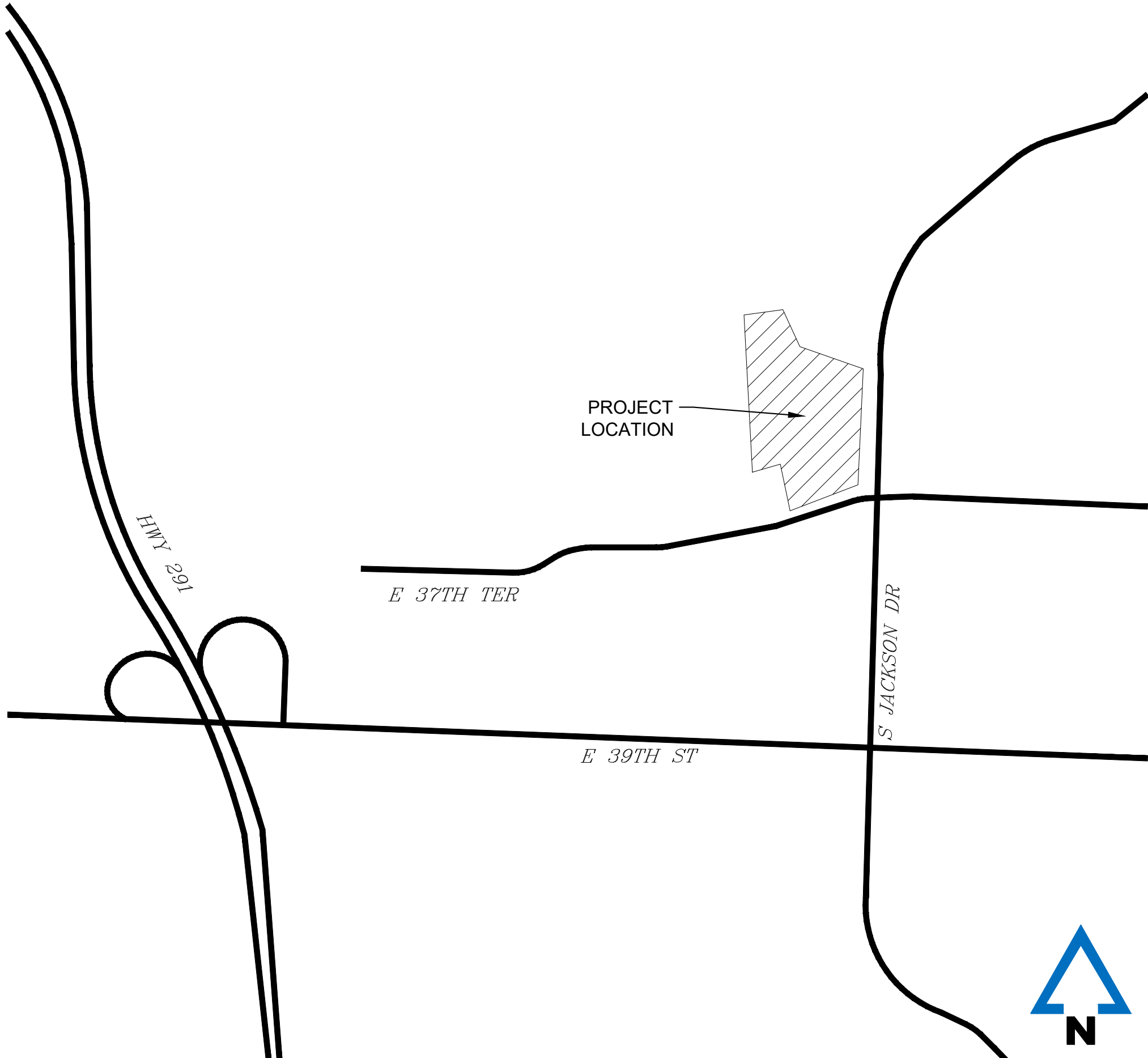
7/31/28
Commission Expiration Date



INFINITY APARTMENTS
PRELIMINARY DEVELOPMENT PLANS

LOCATED IN
SECTION 20 TOWNSHIP 49N, RANGE 31W
INDEPENDENCE, JACKSON COUNTY, MISSOURI

Development Summary Table				
a	Zoning			
	Existing		C-2	
	Proposed		R-30 PUD	
b	Total Land Area			
	Existing		11.67 Acres	
c	Right-of-Way			
	Existing		0.00 Acres	
	Proposed		0.00 Acres	
d	Net Land Area			
	Existing		11.67 Acres	
	Proposed		11.67 Acres	
e	Proposed Uses			
	Jackson Apartments		Apartments	
f	Structure Height & Number of Floors			
	Number of floors		4 stories	Apartments
	Height Above Grade		12 feet	
	Number of floors		1 stories	Clubhouse
	Height Above Grade		0 feet	
g	Gross Floor Area & Number of Units			
	Building Footprint	19,416	SF	Apartments
	Gross Area Per Building	87,372	SF	
	Units per Building	76	EA	
	Number of Buildings	4	EA	
	Total Gross Area	349,488	SF	
	Total Number of Units	304	Units	
	Project Total	349,488	SF	
	Project Total	304	Units	
i	Density			
	Net Density (Units/Proposed Net Land Area)	26.0	Units per Acre	E 37th Terrace
	Floor Area Ratio (Gross Building Area/Proposed Net Land Area)	29947.6	SF per Acre	E 37th Terrace
j	Vehicle Parking			
	Ratio Required		See Ordinance	
	Stalls Required	562		Lot/Phase 1
	Off-Street Parking	255		
	Attached Garage Parking	176		
	Detached Garage Parking	33		
	Carport Parking	36		
	Stalls Provided	500		
		Total Required	562	Stalls
		Total Provided	500	Stalls



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

Sheet List Table	
Sheet Number	Sheet Title
C001	TITLE SHEET
C002	PRELIMINARY PLAT
C200	SITE PLAN
C201	SITE PLAN WITH TOPOGRAPHY
L100	LANDSCAPE PLAN
L500	LANDSCAPE DETAILS
A4-5	4/5 SPLIT RESIDENTIAL BUILDING ELEVATIONS
A-201	CLUBHOUSE & GARAGE ELEVATIONS

FLOODPLAIN:
PER THE "FLOOD INSURANCE RATE MAP", COMMUNITY PANEL NO. 29095C0311G, HAVING AN EFFECTIVE JANUARY 20, 2017 AS PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY. OUR REVIEW OF THIS MAP INDICATES THAT THIS PARCEL OF LAND LIES WITHIN ZONE X WHICH IS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN."

LEGAL DESCRIPTION
LOT 2 AND TRACT A, JACKSON BUSINESS PARK, A SUBDIVISION IN INDEPENDENCE, JACKSON COUNTY, MISSOURI.

DEVELOPER: JC WESTON CONSTRUCTION, LLC CONTACT NAME: CLINT BURKDOLL ADDRESS: PO BOX 66 GARDNER, KS 66030 PHONE: 913.285.2900 EMAIL: METROKCC1@GMAIL.COM	
PLANNER & CIVIL ENGINEER MCCLURE ENGINEERING CONTACT NAME: ADAM DEGONIA ADDRESS: 1700 SWIFT ST STE 100 NORTH KANSAS CITY, MO 64116 PHONE: 816.502.3915 EMAIL: ADEGONIA@MCCLUREVISION.COM	
SURVEYOR MCCLURE ENGINEERING CONTACT NAME: STEVE WHITAKER ADDRESS: 1700 SWIFT ST STE 100 NORTH KANSAS CITY, MO 64116 PHONE: 816.756.0444 EXT. 2850 EMAIL: SWHITAKER@MCCLUREVISION.COM	



1700 Swift Ave., Suite 100
North Kansas City, Missouri 64116
P 816-756-0444
F 816-756-1763

Ankeny, IA | Carroll, IA
Cedar Rapids, IA | Clive, IA
Coralville, IA | Council Bluffs, IA
Fort Dodge, IA | Sioux City, IA
Columbia, MO | Macon, MO
North Kansas City, MO | Springfield, MO
Lenexa, KS
Portsmouth, NH

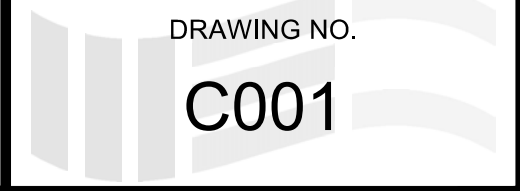
NOTICE:
McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively, "Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors' guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities, or conflicts contained within the Plans and Specifications.

MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2024

REVISIONS		
2024.06.10	INITIAL CITY COMMENTS	
2024.10.02	CITY COMMENTS	
2024.11.01	CITY COMMENTS #3	
PROJECT INFO		
2023001513-000		
ENGINEER	DRAWN BY	CHECKED BY
AVD	MRB	AVD

INFINITY APARTMENTS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

TITLE SHEET
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DRAWING NO.
C001

PROJECT BENCHMARK TABLE			
BM#	NORTHING	EASTING	ELEV. DESCRIPTION
120002	1050948.82	2829948.66	850.36' TBM / MAG SPIKE
120003	1050890.57	2829952.62	850.63' TBM / MAG SPIKE
120006	1050943.56	2829949.47	848.22' TBM / MAG SPIKE
120007	1050911.78	2829948.69	850.46' TBM / MAG SPIKE
120010	1051002.69	2829952.83	844.88' TBM / MAG SPIKE
120012	1050965.83	2829953.14	846.50' TBM / MAG SPIKE
120013	1050694.28	2829941.56	857.01' TBM / MAG SPIKE
120014	1050665.14	2829948.83	858.27' TBM / MAG SPIKE
120015	1050648.19	2829949.25	858.39' TBM / MAG SPIKE
120016	1050624.14	2829956.42	857.31' TBM / MAG SPIKE
120017	1050608.12	2829961.10	857.40' TBM / MAG SPIKE
120018	1050592.03	2829956.80	859.14' TBM / MAG SPIKE
120020	1050554.67	2829958.31	860.12' TBM / MAG SPIKE

LEGAL DESCRIPTION

LOT 2 AND TRACT A, JACKSON BUSINESS PARK, A SUBDIVISION IN INDEPENDENCE, JACKSON COUNTY, MISSOURI.

AREA SUMMARY

TOTAL AREA: 508,393 +/- SQ. FT. (11.67 +/- ACRES)

ZONING NOTE

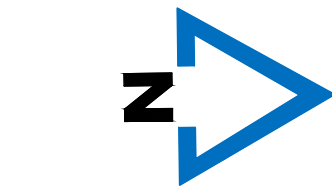
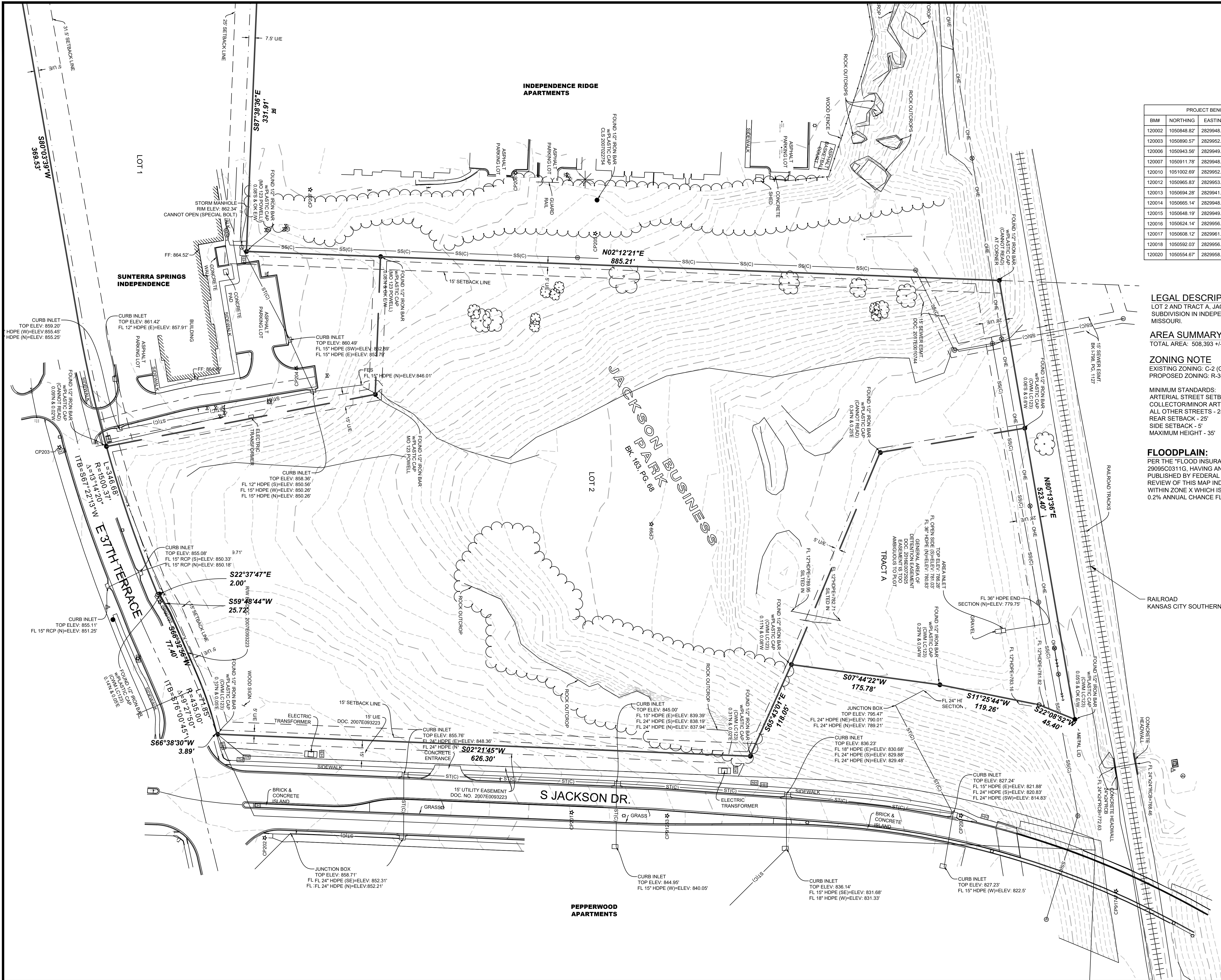
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PROPOSED ZONING: R-30 (PUD)

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COLLECTOR/MINOR ARTERIAL STREET SETBACK - 35'
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REAR SETBACK - 25'
SIDE SETBACK - 5'
MAXIMUM HEIGHT - 35'

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- KEY NOTES**
- 1 PROPERTY LINE (TYP.)
 - 2 EXISTING RIGHT-OF-WAY
 - 3 PROPOSED ASPHALT PRIVATE DRIVE PAVEMENT
 - 4 PROPOSED CARPORT PARKING
 - 5 EXISTING DETENTION BASIN
 - 6 PROPOSED PRIVATE STORM SEWER
 - 7 PROPOSED PRIVATE SANITARY SEWER
 - 8 PROPOSED CONCRETE PAVEMENT (GARAGE DRIVE ENTRY)
 - 9 EXISTING 12" PUBLIC SANITARY SEWER
 - 10 EXISTING 15" PUBLIC STORM SEWER
 - 11 EXISTING DRIVEWAY
 - 12 PROPOSED WATER MAIN
 - 13 GARAGE PARKING
 - 14 PROPOSED DUMPSTER ENCLOSURE
 - 15 PROPOSED DRIVEWAY
 - 16 PROPOSED CONNECTION TO EXISTING PUBLIC WATER
 - 17 PROPOSED PUBLIC WATER EXTENSION
 - 18 PROPOSED SIDEWALK EXTENSION
 - 19 PROPOSED FIRE HYDRANT
 - 20 EXISTING DETENTION BASIN CONTROL STRUCTURE
 - 21 PROPOSED CURB CUT
 - 22 PROPOSED POOL FENCE
 - 23 PROPOSED SANITARY CONNECTION TO EXISTING SANITARY SEWER
 - 24 PROPOSED RETAINING WALL

- LEGEND**
- PROPOSED CONCRETE PAVEMENT
 - PROPOSED ASPHALT PAVEMENT
 - PROPOSED BUILDINGS
 - PROPOSED CARPORT PARKING
 - PARKING STALL COUNT
 - EX. SANITARY SEWER LINE
 - EX. STORM SEWER LINE
 - EX. UNDERGROUND ELECTRIC LINE
 - EX. WATER LINE
 - EX. OVERHEAD ELECTRIC
 - EX. UTILITY POLE
 - EX. WATER VALVE
 - EX. LIGHT POLE
 - EX. MANHOLE
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 - NEW FENCE
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LEGAL DESCRIPTION
LOT 2 AND TRACT A, JACKSON BUSINESS PARK, A SUBDIVISION IN INDEPENDENCE, JACKSON COUNTY, MISSOURI.

SITE ADDRESS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

AREA SUMMARY
TOTAL AREA: 508,393 +/- SQ. FT. (11.67 +/- ACRES)
OPEN SPACE AREA: 227,534 +/- SQ. FT. (45%)

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SITE DEVELOPMENT DATA
PROPOSED BUILDING = 4 BUILDINGS (76 UNITS EACH)

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MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2024

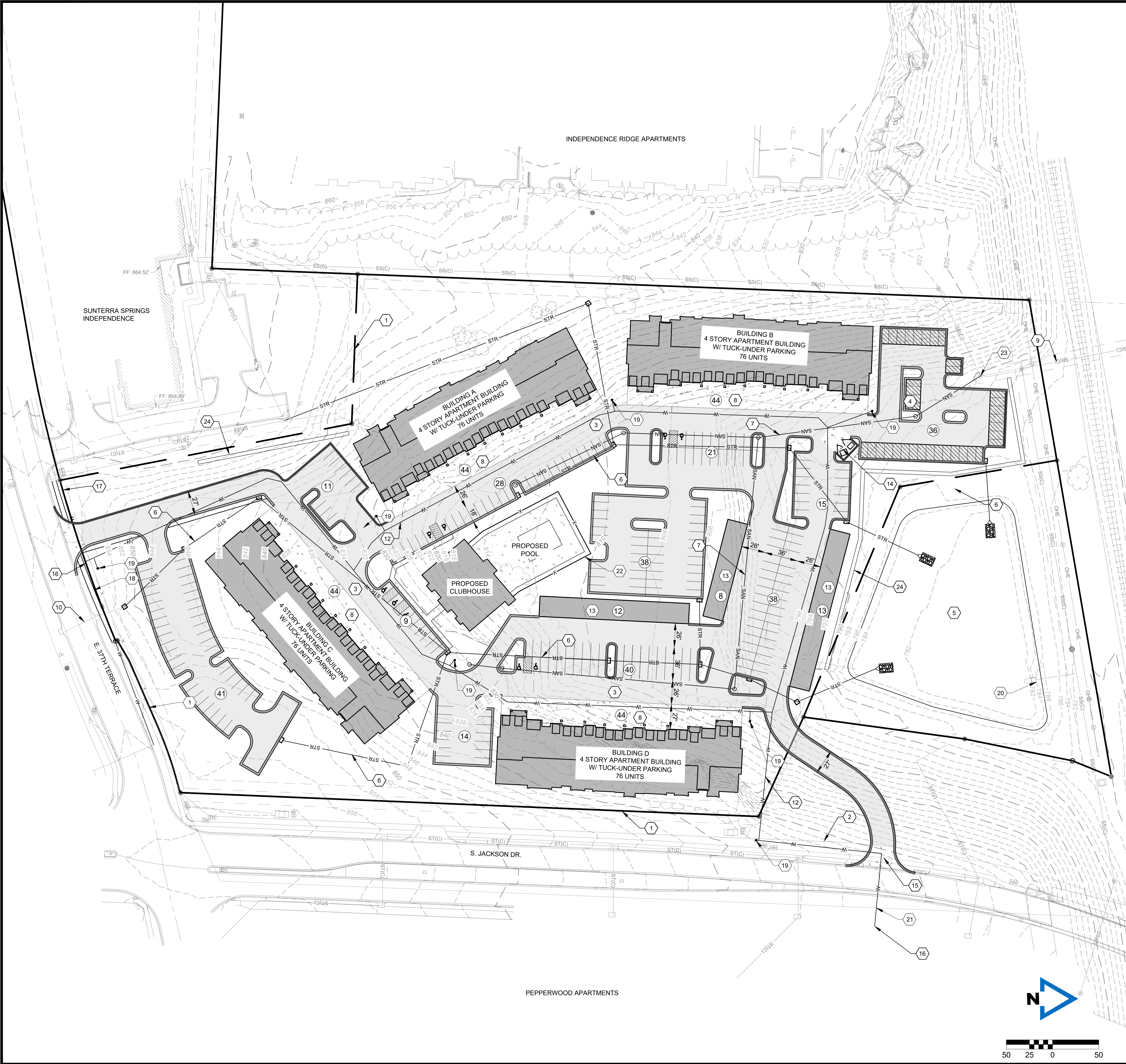
REVISIONS
2024.06.10 INITIAL CITY COMMENTS
2024.10.02 CITY COMMENTS
2024.11.01 CITY COMMENTS #3

PROJECT INFO
2023001513-000
ENGINEER: AVD
DRAWN BY: MRB
CHECKED BY: AVD

INFINITY APARTMENTS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

DRAWING NO.
C200

SITE PLAN
P:\2023001513-000\04-DRAWINGS\05\INTELLMENT\PRELIMINARY DEVELOPMENT PLANS\2023001513 SITE.DWG



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 - EXISTING 2' CONTOUR
 - EXISTING 10' CONTOUR

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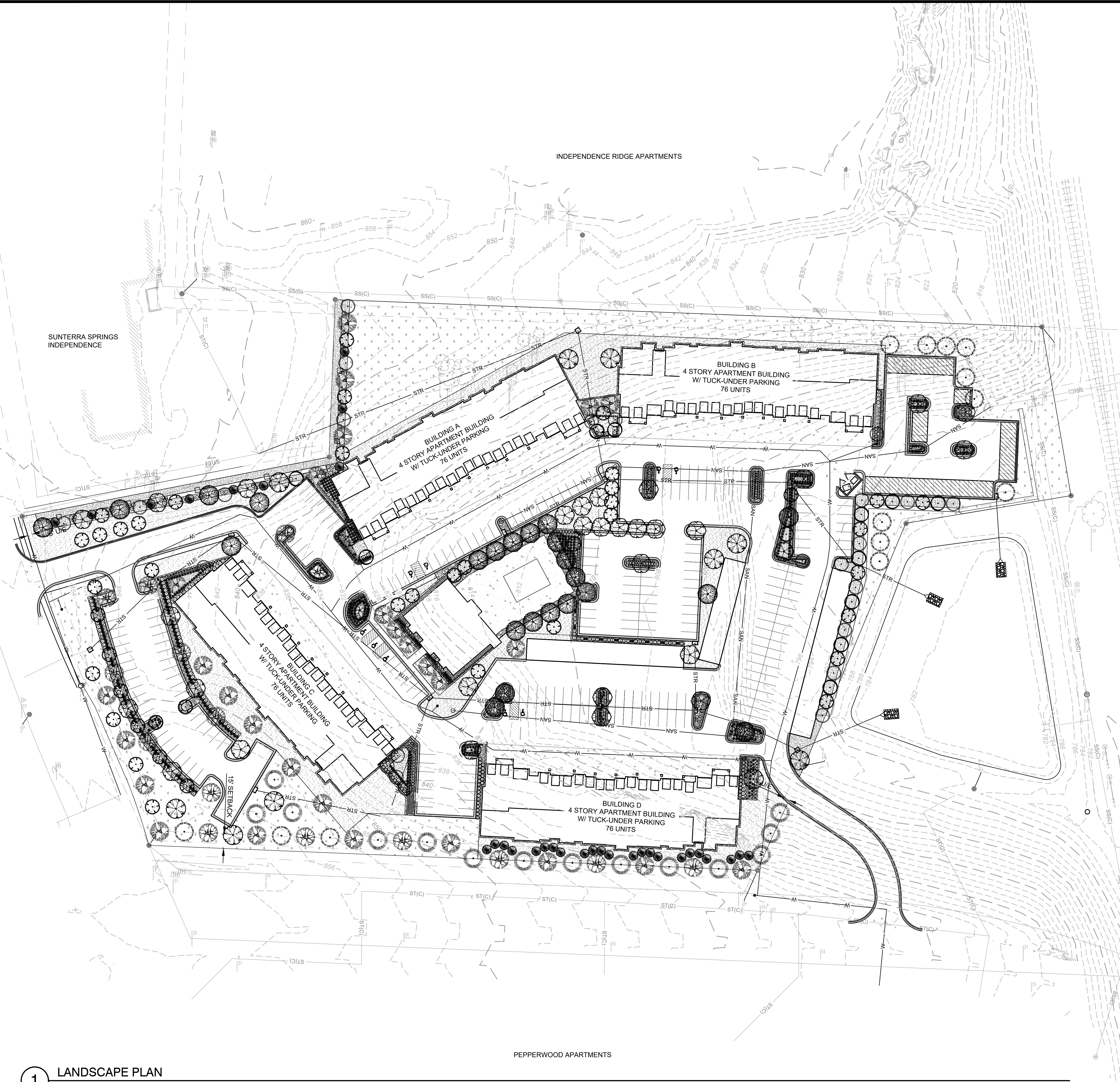
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PROJECT INFO
2023001513-000
ENGINEER: AVD
DRAWN BY: MRB
CHECKED BY: AVD

INFINITY APARTMENTS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057
SITE PLAN WITH TOPOGRAPHY
P:\2023001513-000\04-DRAWINGS\01-INITIAL PRELIMINARY DEVELOPMENT PLANS\2023001513 SITE.DWG

DRAWING NO.
C201



LANDSCAPE REQUIREMENTS: PER CHAPTER 14 ARTICLE 5 SECTION 14-503 OF THE INDEPENDENCE, MO UDO		
STREET TREES (14.503.02.C)	REQUIREMENT	PROVIDED
S JACKSON DRIVE	1 TREE PER 50 FEET OF FRONTAGE (626 LF FRONTAGE)	12.5 TREES REQUIRED - 35 TREES PROVIDED
E 37TH DRIVE	1 TREE PER 50 FEET OF FRONTAGE (360 LF FRONTAGE)	7.2 TREES REQUIRED - 8 TREES PROVIDED
PARKING LOT PERIMETER (14.503.05)	REQUIREMENT	PROVIDED
PARKING LOT PERIMETER	1 TREE AND 3 SHRUBS PER 40 LF	PROVIDED PER PLAN
PARKING LOT INTERIOR (14.503.07)	REQUIREMENT	PROVIDED
PARKING LOT INTERIOR	AT LEAST 1 TREE AND 3 SHRUBS PER EVERY 20 PARKING SPACES (500)	30 TREES REQUIRED - 40 TREES PROVIDED 90 SHRUBS REQUIRED - 180 + PROVIDED
BUFFERYARDS (14.503.07)	REQUIREMENT	PROVIDED
SOUTHWEST PROPERTY LINE	HIGH IMPACT SCREENING (ADJACENT PROP C-2) A MASONRY WALL OR WOOD FENCE AND A LOW-IMPACT SCREEN	PROVIDED PER PLAN

PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONT
TREES				
	BET NIG	24	Betula nigra / River Birch	B&B, 2" Cal.
	CAT SPE	11	Catalpa speciosa / Northern Catalpa	B&B, 2" Cal.
	CER CAN	43	Cercis canadensis / Eastern Redbud	B&B, 1.5" Cal.
	CRA GRE	12	Crataegus viridis / Green Hawthorn	B&B, 1.5" Cal.
	GLE SKY	30	Gleditsia triacanthos inermis 'Skyline' / Skyline Honey Locust	B&B, 2" Cal.
	MAG SWE	24	Magnolia virginiana / Sweetbay Magnolia	B&B, 1.5" Cal.
	PIN STR	14	Pinus strobus / White Pine	6'-8' Ht.
	PIN FAS	32	Pinus strobus 'Fastigiata' / Pyramidal White Pine	6'-8' Ht.
	PLA OCC	28	Platanus occidentalis / American Sycamore	B&B, 2" Cal.
	QUE BIC	15	Quercus bicolor / Swamp White Oak	B&B, 2" Cal.
	TAX DIS	13	Taxodium distichum / Bald Cypress	B&B, 2" Cal.
SHRUBS				
	CEA HER	140	Ceanothus herbaceus / Jersey Tea	5 gal
	COR FA4	56	Cornus sericea 'Farrow' / Arctic Fire® Red Twig Dogwood	5 gal
	FOT GAR	102	Fothergilla gardenii / Dwarf Fothergilla	5 gal
	HYD SMO	241	Hydrangea arborescens / Smooth Hydrangea	5 gal
	HYD TMR	110	Hydrangea paniculata 'Little Lime' / Little Lime Hydrangea	5 gal
	HYD ALI	8	Hydrangea quercifolia 'Alice' / Alice Oakleaf Hydrangea	5 gal
GRASSES				
	PAN SHD	673	Panicum virgatum 'Shenandoah' / Shenandoah Switch Grass	1 gal
	SCH SCO	432	Schizachyrium scoparium / Little Bluestem	1 gal
PERENNIALS				
	ASC TUB	70	Asclepias tuberosa / Butterfly Milkweed	1 gal
	COR LA2	92	Coreopsis lanceolata / Lanceleaf Tickseed	1 gal
GROUND COVERS				
	DG	949 sf	Decomposed Granite	SF
	FH	50,211 sf	Festuca var. / Heal-Tolerant Fescue Sod	SF
	NS	74,912 sf	Native Seed Mix / Native Grass Seed Mix	Seed
	RR	10,352 sf	Rock Mulch / Native Buff Rock	SF
	WM	31,350 sf	Wood Mulch / Cedar Wood Mulch	SF

2 PLANT SCHEDULE

NTS



McCLURE™

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PROJECT INFO
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ENGINEER: AVD DRAWN BY: MRB CHECKED BY: AVD

INFINITY APARTMENTS
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INDEPENDENCE, MO 64057

LANDSCAPE PLAN
P:2023001513-000-004-DRAWINGS/LANDSCAPE/2023001513-000 L5.DWG

DRAWING NO.
L100

LANDSCAPE NOTES:

1. FIELD VERIFY UTILITIES SHOWN ON PLANS PRIOR TO WORK COMMENCEMENT. INFORMATION SHOWN ON PLAN IS FROM AVAILABLE INFORMATION AND ALL LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO UTILITIES MADE FROM CONSTRUCTION ACTIVITY. IMMEDIATELY NOTIFY PROJECT LANDSCAPE ARCHITECT AND ENGINEER IF DISCREPANCIES ARISE.
2. COMPLETE REQUIRED LANDSCAPING FOR THE ENTIRE SITE IN CONFORMANCE TO THE PLANS AND SPECIFICATIONS, INCLUDING BUT NOT LIMITED TO: SEEDED AREAS, SODDED AREAS, SHRUB BEDS, AND SITE CLEAN-UP.
3. VERIFY QUANTITIES PRIOR TO COMMENCING WORK. REPORT DISCREPANCIES TO THE LANDSCAPE ARCHITECT. PLANT MATERIAL TO BE SPACED AS SHOWN, UNLESS OTHERWISE NOTED.
4. PLANT MATERIAL SHALL COMPLY WITH ALL SIZING AND GRADING STANDARDS OF LATEST EDITION OF AMERICAN STANDARD FOR NURSERY STOCK (A.S.N.S.) LATEST EDITION PUBLISHED BY (ANLA) ANSI Z60.1. THIS IS A REPRESENTATIVE GUIDELINE SPECIFICATION ONLY AND WILL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR THE PLANT MATERIAL.
5. THE OWNER RESERVES THE RIGHT TO SUBSTITUTE PLANT MATERIAL, TYPE, SIZE AND/OR QUANTITY. LARGER SIZED PLANT MATERIALS OF THE SPECIES LISTED MAY BE USED IF THE STOCK CONFORMS TO A.S.N.S. VEGETATION SUBSTITUTIONS SHALL BE APPROVED BY PROJECT LANDSCAPE ARCHITECT. SUBSTITUTIONS MADE WITHOUT WRITTEN APPROVAL WILL BE REPLACED WITH APPROVED SELECTIONS AT CONTRACTOR'S COST.
6. DISTURBED AREAS DUE TO CONSTRUCTION ACTIVITIES NOT IDENTIFIED ON THESE PLANS SHALL BE REPAIRED AND RESTORED TO ORIGINAL OR BETTER CONDITIONS AT CONTRACTOR'S COST. SOD WITH A TURF-TYPE TALL FESCUE BLEND SHALL BE PROVIDED FOR AREAS NOT DESIGNATED AS BEDS & PAVEMENT.
7. CONTRACTOR SHALL COMPLY WITH APPLICABLE CODES AND ORDINANCES REGARDING LANDSCAPING. REFER TO SPECIFICATIONS FOR PLANT MATERIAL, SOILS, AND INSTALLATION METHODS.
8. INSTALL PLANT MATERIAL IN ACCORDANCE WITH A.S.N.S. STANDARDS.
9. INSTALL FINISHED GRADES OF SOD, LANDSCAPE BEDS, AND MULCH 1" BELOW ABUTTING PAVEMENT SURFACES TO ALLOW UNINHIBITED DRAINAGE TO NON-PAVEMENT SURFACES.
10. REMOVE ALL TWINE, WIRE, AND BURLAP FROM TREE AND SHRUB ROOT BALLS. REMOVE ALL PLASTIC WRAP, FABRIC ROPE, ROT PROOF WRAP, AND PLANT IDENTIFICATION TAGS.
11. TREES SHALL NOT BE PLANTED CLOSER THAN EIGHT HORIZONTAL FEET OF UNDERGROUND UTILITIES UNLESS OTHERWISE NOTED OR PER PLANS. MODIFICATIONS TO TREE PLACEMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT AND CAN BE SUBJECT TO CITY REVIEW AND APPROVAL. CONTRACTOR IS RESPONSIBLE FOR UNAPPROVED RELOCATION(S) OR MODIFICATION(S) TO TREE LOCATIONS.
12. PROVIDE NATURAL TOPSOIL THAT IS FERTILE, FRIABLE, WITHOUT MIXTURE OF SUBSOIL MATERIALS, AND OBTAINED FROM A WELL DRAINED, AVAILABLE SITE. IT SHALL NOT CONTAIN SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. TOPSOIL SHALL BE SCREENED AND FREE FROM CLAY, LUMPS, STONES, ROOTS, PLANTS, OR SIMILAR SUBSTANCES 1" OR MORE IN DIAMETER, DEBRIS, OR OTHER OBJECTS WHICH MIGHT BE A HINDRANCE TO PLANTING OPERATIONS. TOPSOIL SHALL CONTAIN AT LEAST 4-6% ORGANIC MATTER BY WEIGHT AND HAVE A PH RANGE OF 5.5 TO 7.0.
13. PLANT MATERIAL TO BE GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AND ACCEPTANCE. PLANT MATERIALS SHALL BE A ONE-TIME-REPLACEMENT AND RECORDS KEPT BY THE LANDSCAPE CONTRACTOR FOR ALL REPLACEMENTS.
14. PLANT MATERIAL SHALL BE OF EXCELLENT QUALITY, FREE OF DISEASE & INFESTATION-TRUE TO TYPE, VARIETY, SIZE SPECIFIED, & FORM PER ANSI STANDARDS.
15. WATER-IN EACH PLANT IMMEDIATELY FOLLOWING INSTALLATION AND CONTINUE WATERING ROUTINE UNTIL SUBSTANTIAL PROJECT COMPLETION. CONTRACTOR IS REQUIRED TO COORDINATE WATERING REQUIREMENTS TO THE OWNER THEREAFTER.
16. ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES.
17. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT CONFORMING TO THE SPECIFICATIONS.
18. THE LANDSCAPE CONTRACTOR SHALL TEST PROPOSED PLANTING AREAS FOR SOIL NUTRIENT DEFICIENCIES AND UNDESIRABLE SOIL TEXTURE AND STRUCTURE. BASED ON THE RESULTS OF THIS TESTING, THE LANDSCAPE CONTRACTOR SHALL PROVIDE AND INCORPORATE SOIL CONDITIONING MATERIALS (IE: FERTILIZER, SAND, COMPOST, ETC.) AS NECESSARY TO DEVELOP A PLANT GROWTH MEDIUM OF ADEQUATE FERTILITY, STRUCTURE, AND TEXTURE FOR THE ESTABLISHMENT OF LANDSCAPE MATERIALS. PEAT IS NOT ACCEPTABLE.
19. THE LANDSCAPE CONTRACTOR SHALL REMOVE FROM THE SITE ALL ROCK GREATER THAN 1-INCH AND ALL DEBRIS IN THE AREAS OF PROPOSED NEW PLANTINGS.
15. DAMAGED TURF AREAS ADJACENT TO PLANTING AREAS SHALL BE RESTORED AND SODDED TO MATCH EXISTING ADJACENT TOPOGRAPHY AND TURF TYPE.
16. PLANTING SCHEDULE:

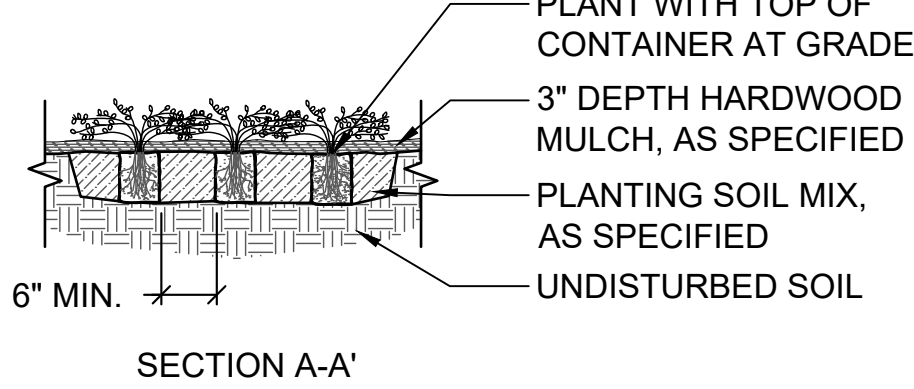
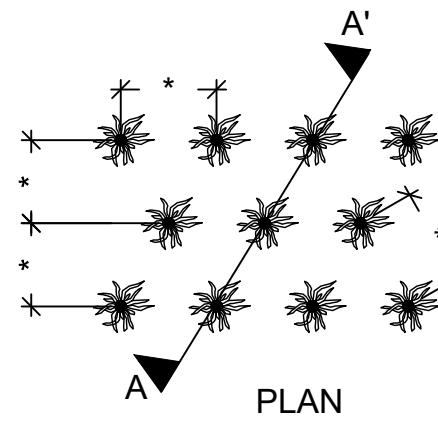
TREE PLANTING:	MARCH 15 - JUNE 15	OR	SEPTEMBER 15 - DECEMBER 31
SHRUB PLANTING:	APRIL 15 - JUNE 15	OR	AUGUST 15 - OCTOBER 15
SOD/SEED PLANTING:	MARCH 15 - JUNE 15	OR	SEPTEMBER 15 - DECEMBER 1
17. SEED PLANTING: AS SPECIFIED
18. TEMPORARY COVER CROP: USE AN ANNUAL RYE GRASS WITH NOT LESS THAN 87% GERMINATION, NOT LESS THAN 90% PURE SEED, AND NOT MORE THAN 0.5% WEED SEED. ANNUAL RYE GRASS SPECIES TO BE WEAR RESISTANT, FREE FROM DISEASE AND IN EXCELLENT CONDITION.
19. SEED PLANTING FERTILIZER: COMMERCIAL-GRADE COMPLETE GRANULAR OR PELLETTED FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF FAST- AND SLOW-RELEASE NITROGEN, 50% DERIVED FROM ORGANIC SOURCES OF UREA FORMALDEHYDE, PHOSPHORUS, AND POTASSIUM IN THE FOLLOWING COMPOSITION: 9-12LBS/1000SF OF ACTUAL NITROGEN, 10-13% PHOSPHORUS, AND 7-12% POTASSIUM, BY WEIGHT.
20. ANCHOR STRAW MULCH BY CRIMPING INTO SOIL WITH SUITABLE MECHANICAL EQUIPMENT.
21. ALL PLANTING METHODS SHALL COMPLY WITH CITY OF INDEPENDENCE, MISSOURI STANDARDS.

IRRIGATION NOTES:

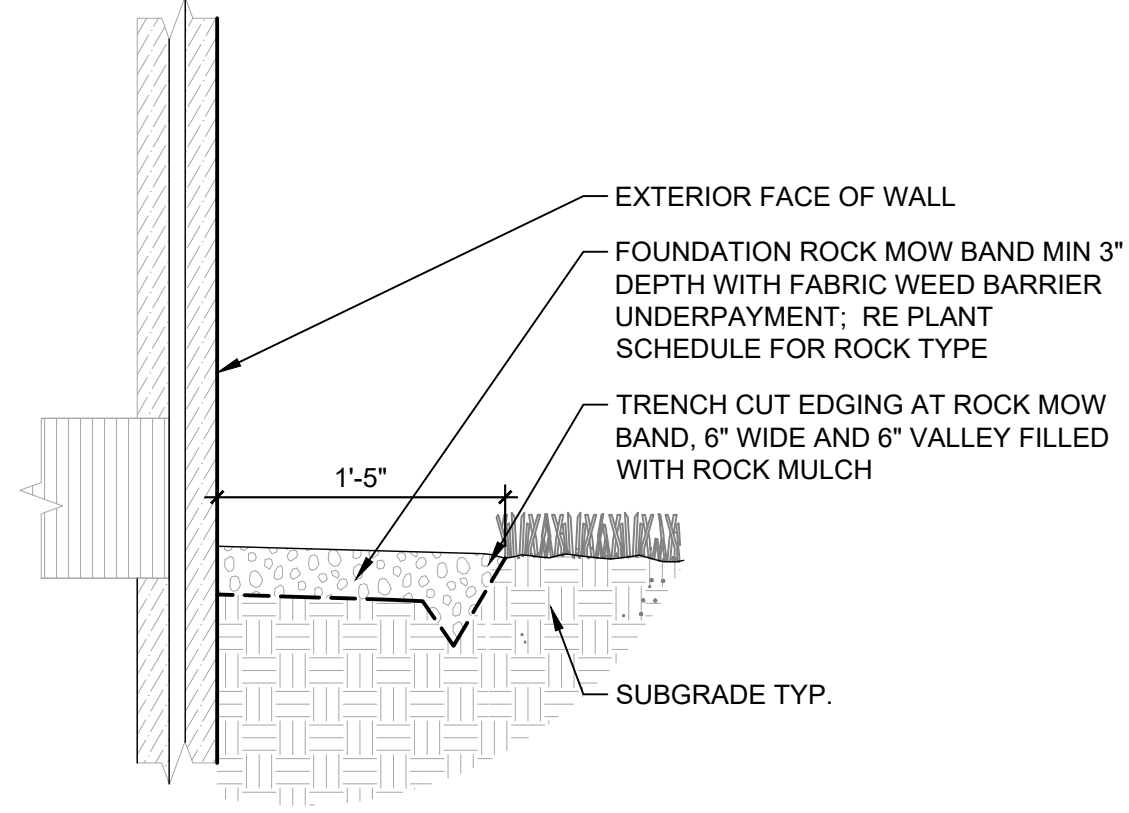
1. IRRIGATION TO BE INSTALLED BY OTHERS - LANDSCAPE ARCHITECT AND OWNER TO APPROVE PRIOR TO INSTALLATION

CONTRACTOR STAGING NOTES:

1. THE CONTRACTOR SHALL NOT STOCKPILE ANY SOILS OR OTHER STORED/STAGED MATERIALS ATOP OR WITHIN A 10' OFFSET TO EACH SIDE OF AN EXISTING CULVERT THAT TRAVERSES THE PROJECT LIMITS.
2. ANY INTERNAL HAUL ROADS OR ACCESS PATHS THAT MAY CROSS AN EXISTING CULVERT WITHIN THE PROJECT LIMITS, SHALL INSTALL STEEL TRAFFIC PLATES OR OTHER ENGINEER APPROVED PROTECTION MEANS TO SPAN OVER THE CULVERT.
3. ANY STAGING LIMITS UTILIZED BY THE CONTRACTOR OUTSIDE OF THE ESTABLISHED PROJECT LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR AND RESTORED TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
4. STOCKPILED TOPSOIL SHALL NOT EXCEED FOUR FEET (4') IN HEIGHT.



SECTION A-A'



2 GROUNDCOVER PLANTING

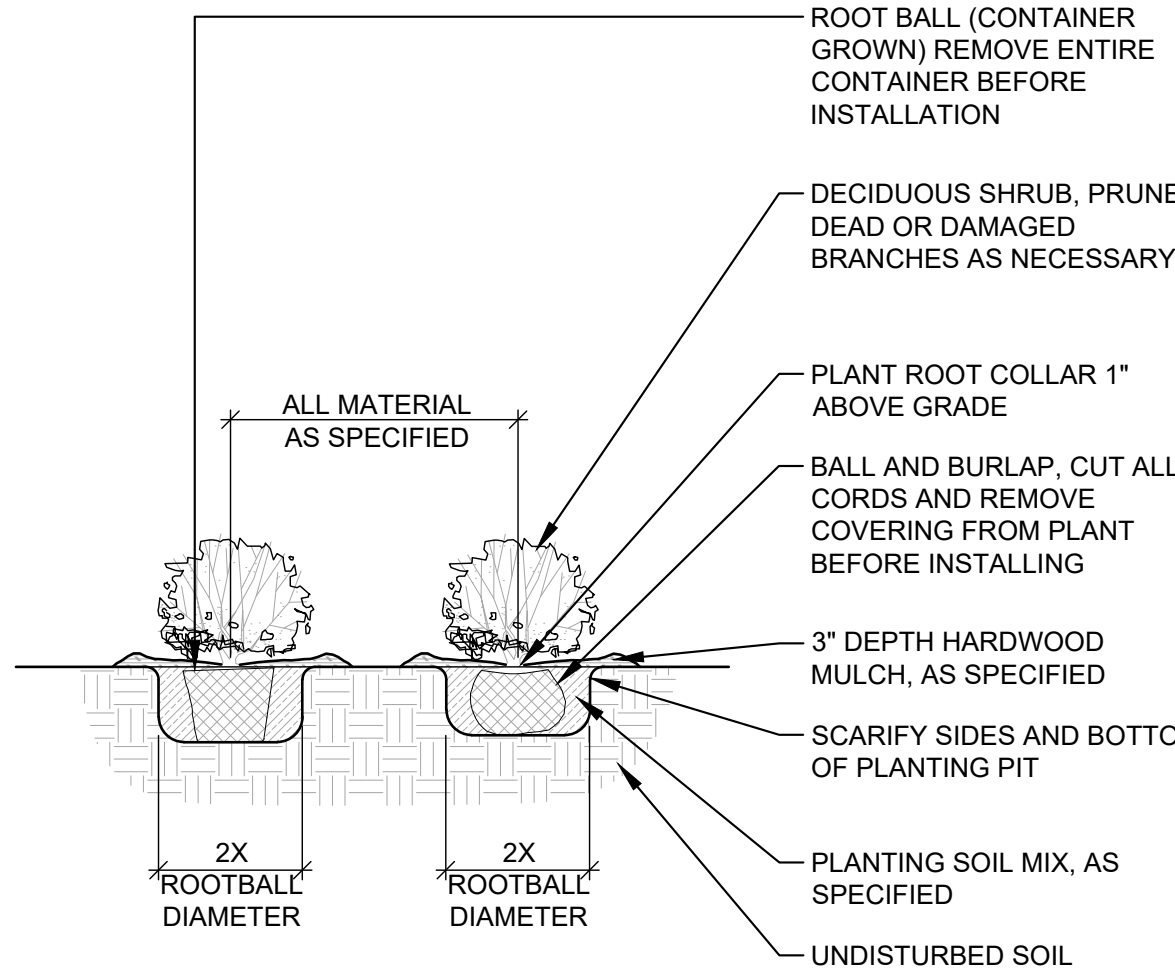
1" = 1'-0"

329333.01-03

3 FOUNDATION ROCK MOW BAND - TRENCH CUT EDGE

1" = 1'-0"

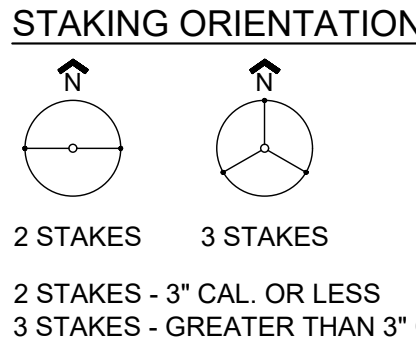
329413.01-10



4 SHRUB AND PERENNIAL PLANTING

1/2" = 1'-0"

329333.01-04



NOTES:

1. PRUNE ONLY DEAD OR BROKEN BRANCHES AND WEAK OR NARROW CROTCHES
2. DO NOT REMOVE LOWER LIMBS AND SPROUTS FOR AT LEAST TWO GROWING SEASON
3. KEEP PLANTS MOIST AND SHADED UNTIL PLANTING
4. DO NOT FERTILIZE FOR AT LEAST ONE GROWING SEASON
5. AMENDED BACKFILL SHALL BE PER SPECS.
6. FIRST WATERING PROCEDURE: FOLLOWING SOIL BACKFILL INSTALLATION, FILL PLANTING PIT WITH WATER UNTIL IT SEEPS OUT OF THE GROUND, OBSERVE MINIMAL BUBBLING ASSURING AIR POCKETS HAVE BEEN FILLED WITH WATER

5 DECIDUOUS TREE PLANTING

1/2" = 1'-0"

329343.01-03

6 DECIDUOUS TREE PLANTING ON A SLOPE

1/2" = 1'-0"

329343.01-05

1 LANDSCAPE NOTES

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MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2024

REVISIONS
2024.06.10 INITIAL CITY COMMENTS
2024.10.02 CITY COMMENTS
2024.11.01 CITY COMMENTS #3

PROJECT INFO
2023001513-000

ENGINEER	DRAWN BY	CHECKED BY
AVD	MRB	AVD

INFINITY APARTMENTS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

LANDSCAPE DETAILS
P:2023001513-000-004-DRAWINGS LANDSCAPE:2023001513-000 L500.DWG

DRAWING NO.
L500

MATERIAL LEGEND

- | | | |
|--|---|------|
| | 8" PREFINISHED FIBER LAP SIDING - COLOR 1 | FB-1 |
| | 8" PREFINISHED FIBER LAP SIDING - COLOR 2 | FB-2 |
| | 8" PREFINISHED FIBER LAP SIDING - COLOR 3 | FB-3 |
| | HARDIE ARCHITECTURAL PANELS - COLOR 4 | HP-1 |
| | PREFINISHED FIBER SIDING - BOARD & BATTEN | FB-4 |
| | CAST STONE BANDING, WINDOW SILLS AND CAPS | CS-1 |
| | LEDGESTONE VENEER | ST-1 |
| | PREFINISHED FIBER TRIM - WHITE | TR-1 |
| | PREFINISHED FIBER TRIM - DARK BRONZE | TR-2 |
| | METAL COPING & TRIMS | MT-1 |
| | STANDING SEAM ROOF | RF-1 |



2 4-STORY ELEVATION

1/8" = 1'-0"



1 5-STORY ELEVATION

1/8" = 1'-0"

ELEVATIONS

08/05/24

JACKSON DR. & 37TH TERR.

19300 E. 37TH TERRACE

A4

MATERIAL LEGEND

	8" PREFINISHED FIBER LAP SIDING - COLOR 1	FB-1
	8" PREFINISHED FIBER LAP SIDING - COLOR 2	FB-2
	8" PREFINISHED FIBER LAP SIDING - COLOR 3	FB-3
	HARDIE ARCHITECTURAL PANELS - COLOR 4	HP-1
	PREFINISHED FIBER SIDING - BOARD & BATTEN	FB-4
	CAST STONE BANDING, WINDOW SILLS AND CAPS	CS-1
	LEDGESTONE VENEER	ST-1
	PREFINISHED FIBER TRIM - WHITE	TR-1
	PREFINISHED FIBER TRIM - DARK BRONZE	TR-2
	METAL COPING & TRIMS	MT-1
	STANDING SEAM ROOF	RF-1



2 SIDE ELEVATION
1/8" = 1'-0"



1 SIDE ELEVATION
1/8" = 1'-0"

ELEVATIONS

08/05/24

JACKSON DR. & 37TH TERR.

19300 E. 37TH TERRACE

A5

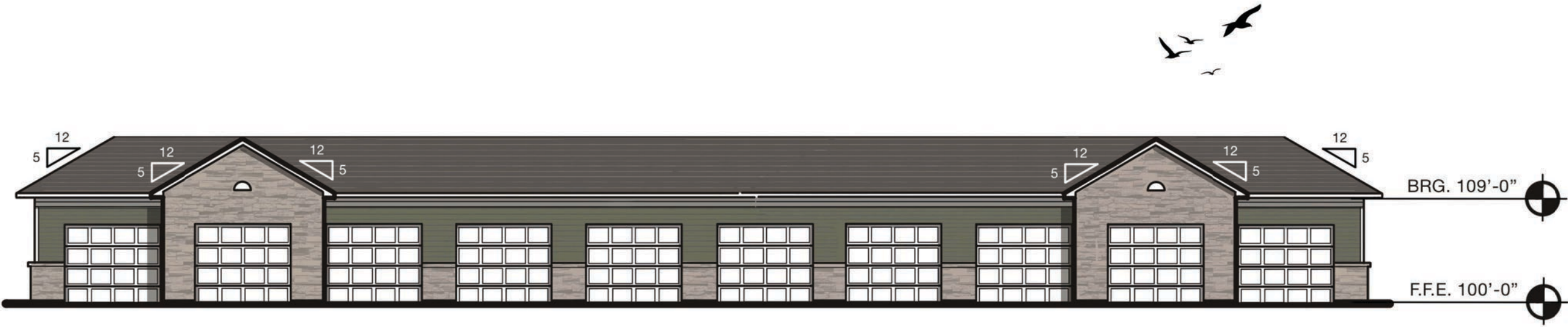
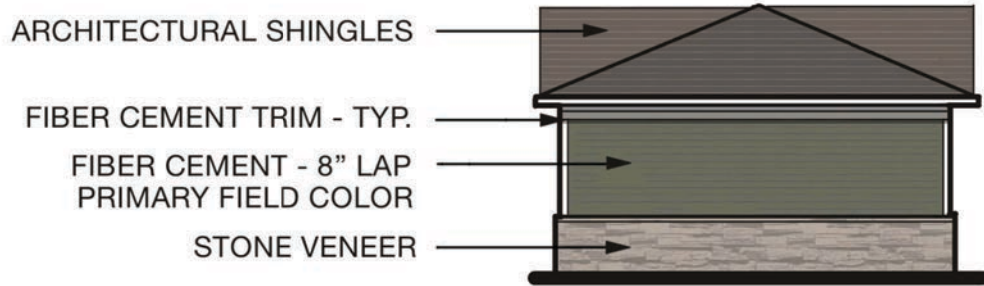
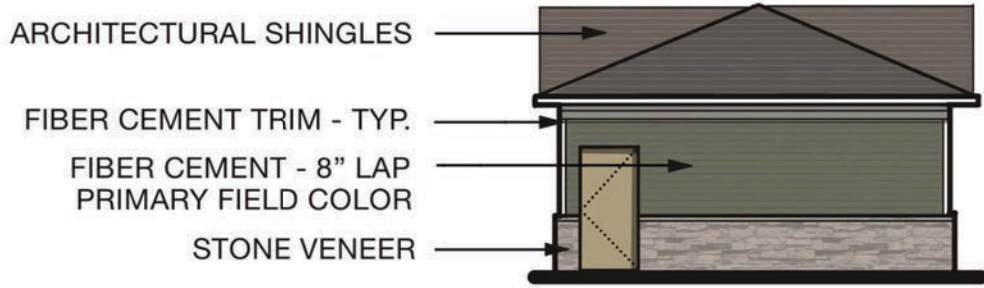
JACKSON APARTMENTS
19300 E. 37TH TERRACE
INDEPENDENCE, MO 64057

SHEET TITLE:
CLUBHOUSE & GARAGE ELEVATIONS

PROJECT NUMBER:

SHEET NUMBER:

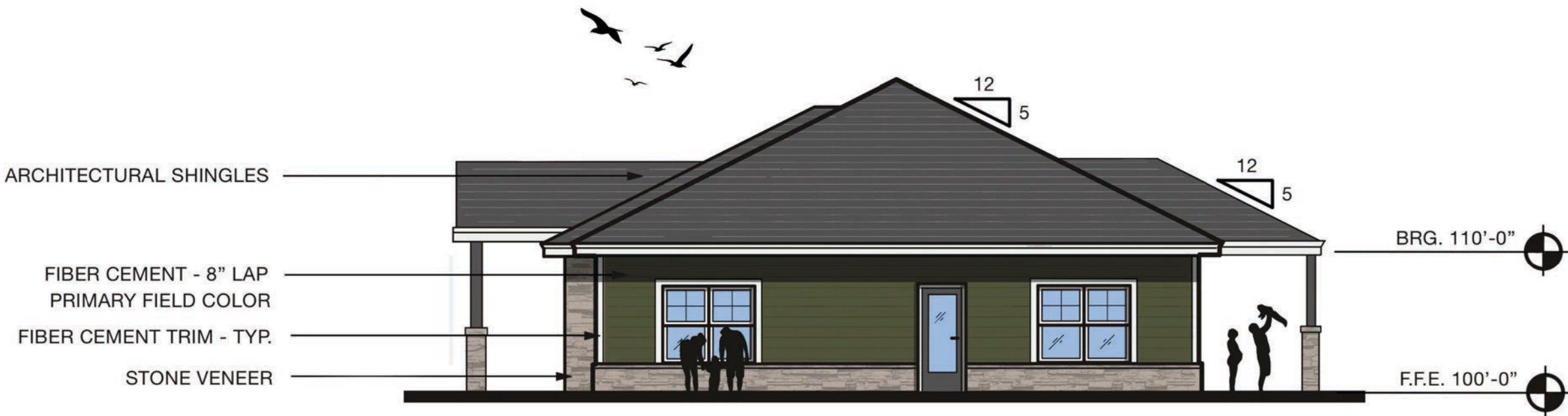
A-201



GARAGE ELEVATIONS

N.T.S.

5



SIDE ELEVATION

N.T.S.

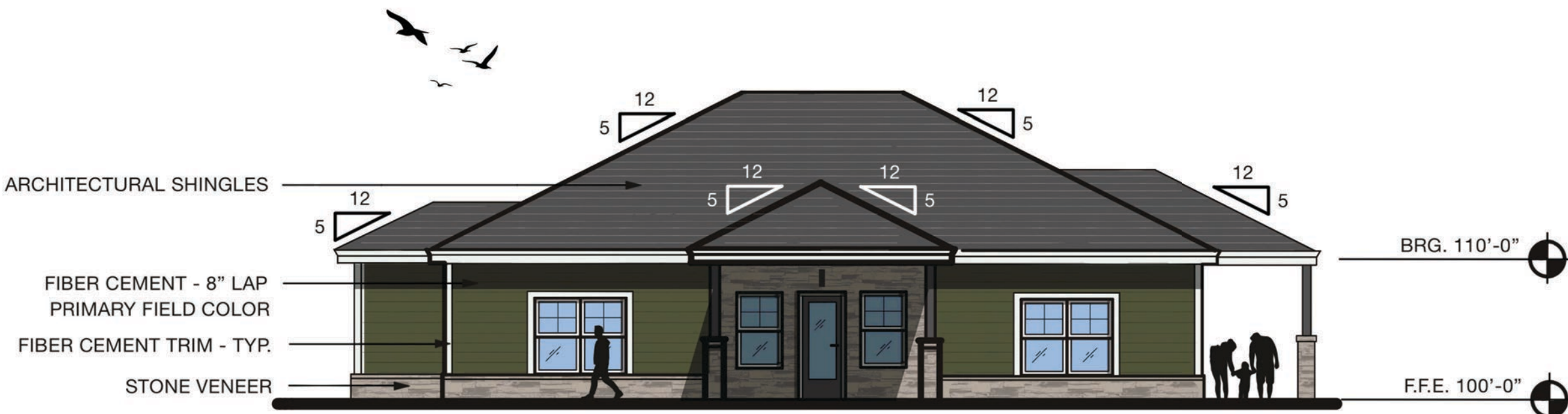
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SIDE ELEVATION

N.T.S.

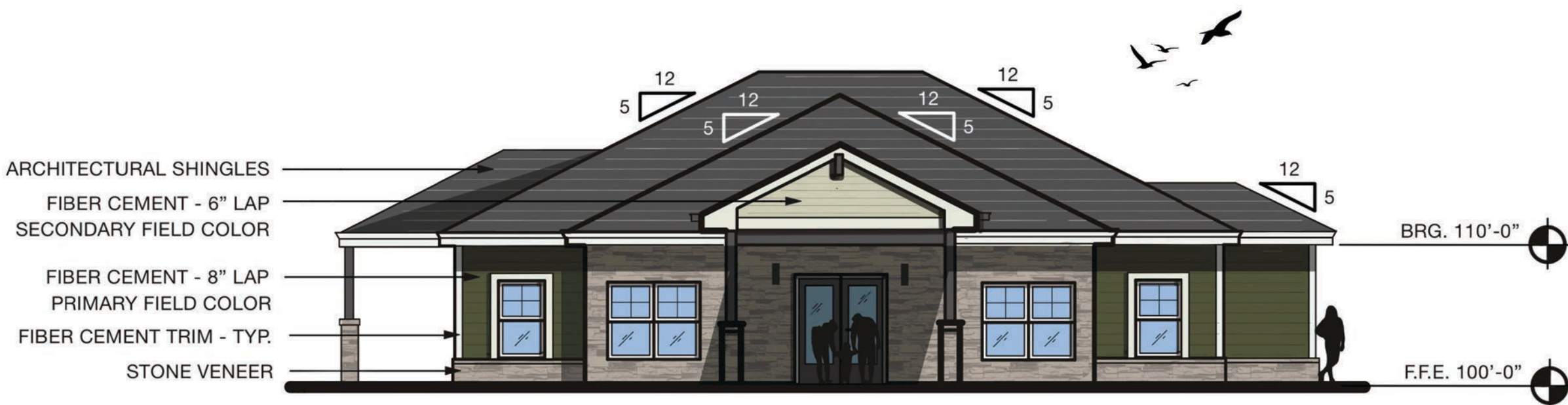
2



REAR ELEVATION

N.T.S.

3



FRONT ELEVATION

N.T.S.

1

A photograph of a modern outdoor pool area at dusk. The pool is surrounded by a stone wall and a pergola. In the foreground, there are two lounge sofas with cushions facing a central fire pit. The sky is a mix of blue and orange from the setting sun. The text "JACKSON DRIVE & 37TH TERR AMENITIES" is overlaid in white, bold, sans-serif font.

JACKSON DRIVE & 37TH TERR AMENITIES

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- Private Study Booths
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CONVENIENCE AROUND EVERY CORNER

- Package Room
- 24 Hour Emergency Maintenance
- Vending Machines
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- Coffee Bar
- Leasing Office
- Courtesy Officer On Site
- Guest Suite

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TRAFFIC IMPACT STUDY

JACKSON APARTMENTS

INDEPENDENCE, MO

Prepared For:
McClure

Prepared By:
Janelle Clayton, PE, PTOE

May 8, 2024

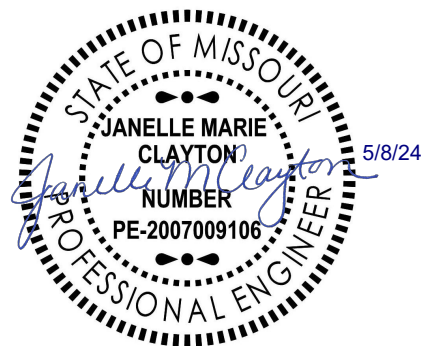


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LEVELS OF SERVICE

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INTRODUCTION

The proposed Jackson Apartments development is a 300-unit, multi-family development consisting of four separate three-story buildings with underground parking. The proposed development is located in the northwest quadrant of the intersection of S Jackson Drive & 37th Terrace in Independence, Missouri. The approximate location of the proposed development is shown in the Google Earth image below.



The existing property is vacant and is bordered to the north by railroad tracks and to the west by Sunterra Springs Rehabilitation Center and apartment homes.

This study analyzes the traffic impacts on the surrounding roadway network for the *Existing*, *Existing + Site*, and *Future + Site* traffic-volume scenarios.

EXISTING CONDITIONS

Existing Traffic Volumes: Existing AM and PM peak-hour traffic volumes at the following intersections were via video camera during the hours of 7:00-9:00 AM and 4:00-6:00 PM on Tuesday, April 23, 2024:

- Jackson Drive & 37th Terrace
- 37th Terrace & Sunterra Springs Drive
- 37th Terrace & Arrowhead Avenue

The counts were processed by Miovision Technologies, Inc. and can be found in the Appendix. In general, the AM peak hour generally occurred from 7:15 – 8:15 AM, and the PM peak hour generally occurred from 4:15 – 5:15 PM. The Existing AM and PM peak-hour volumes are shown on **Figure 1**.

Existing Roadway Network: Current roadway characteristics near the study area are summarized in **Table 1**.

Table 1: Existing Roadway Characteristics

Roadway	Classification	Section	Median Type	Posted Speed Limit
Jackson Drive	Major Arterial	4-Lane	Median-Divided	35 mph
37 th Terrace	Collector	2-Lane	Undivided	30 mph
Arrowhead Avenue	Collector	4-Lane	Undivided	Not Posted - 25 mph

*Classifications as listed in the City's Thoroughfare Plan

The intersection of Jackson Drive & 37th Terrace is currently operating under traffic signal control. Left-turn lanes are provided on all approaches to the intersection. Full pedestrian accommodations are provided on all legs of the intersection with pedestrian signal heads and pushbuttons. The intersection of 37th Terrace & Arrowhead Avenue is currently operating under two-way stop control on the minor-road approaches. Arrowhead Lane is four lanes south of 37th Terrace and two lanes north of 37th Terrace.

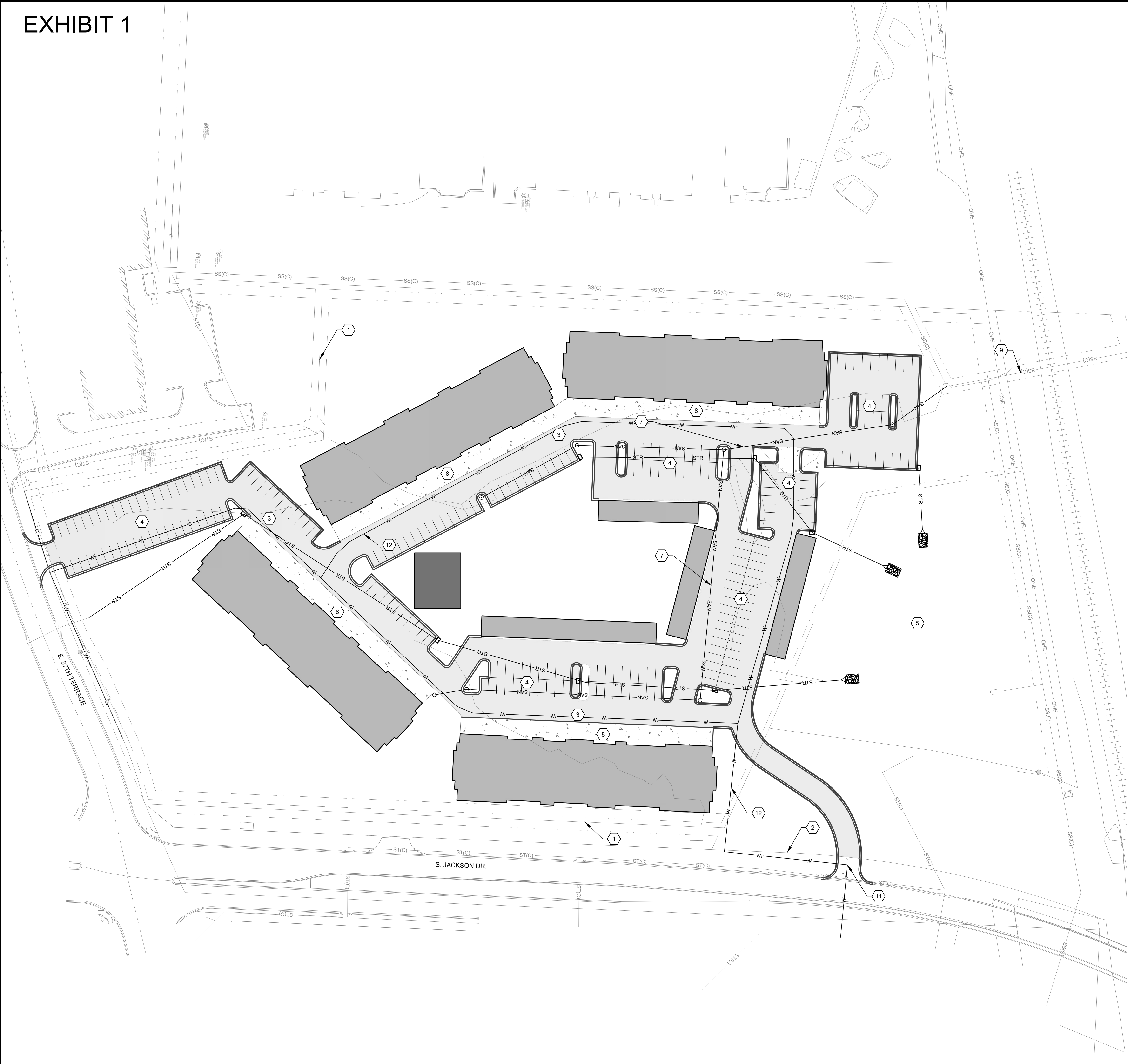
A sidewalk is currently present along the west side of Jackson Drive along the frontage of the property. A shared-use path is provided on the east side of Jackson Drive. A sidewalk is present on the north side of 37th Terrace approximately 200' west of Jackson Drive, then stops and resumes at the Sunterra Springs property.

RideKC has an existing bus route along 37th Terrace with a stop just west of Sunterra Springs, as well as a route along Jackson Drive.

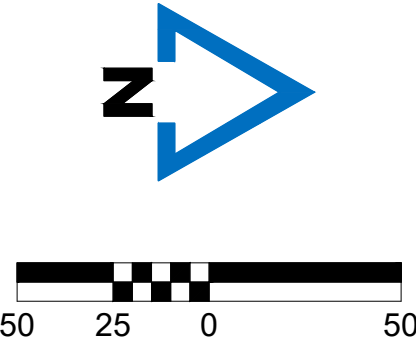
PROPOSED CONDITIONS

Proposed Land Use: The proposed Jackson Apartment multi-family development includes 300 apartment units in four separate buildings. The site plan for the proposed development is shown on **Exhibit 1**.

EXHIBIT 1



- KEY NOTES
- 1 PROPERTY LINE (TYP.)
 - 2 EXISTING RIGHT-OF-WAY
 - 3 PROPOSED ASPHALT PRIVATE DRIVE PAVEMENT
 - 4 PROPOSED PARKING AREA
 - 5 EXISTING DETENTION BASIN
 - 6 PROPOSED PRIVATE STORM SEWER
 - 7 PROPOSED PRIVATE SANITARY SEWER
 - 8 PROPOSED CONCRETE PAVEMENT (GARAGE DRIVE ENTRY)
 - 9 EXISTING PUBLIC SANITARY SEWER
 - 10 EXISTING PUBLIC STORM SEWER
 - 11 EXISTING DRIVEWAY
 - 12 PROPOSED WATER MAIN





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EXPIRES: DECEMBER 31, 2024

REVISIONS		
PROJECT INFO		
2023001513-000		
ENGINEER	DRAWN BY	CHECKED BY
AVG	MRB	AVG

JACKSON APARTMENTS
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SITE PLAN WITH TOPOGRAPHY
P:\2023001513-000\04-DRAWINGS\CIVIL\TITLEMENT\PRELIMINARY DEVELOPMENT PLANS\2023001513 SITE.DWG



DRAWING NO.
C201

Proposed Access Plan: The development will be served by two full-access driveways; one on Jackson Drive and one on 37th Terrace. **Table 2** summarizes the access locations. Note: Distances are taken from the center of the intersection.

Table 2: Proposed Site Access

Access Name	Intersecting Roadway	Access Type	Access Location
Drive 1	Jackson Drive	Full Access	Approx. 775' north of 37 th Terrace
Drive 2	37 th Terrace	Full Access	Approx. 355' west of Jackson Drive

It should be noted that Drive 2 is only approximately 100' east, center to center, from the Sunterra Springs driveway, which is not an ideal spacing for adjacent driveways. However, the volumes into and out of the Sunterra Springs driveway were less than 10 vehicles per hour during the peak hours and would not be expected to cause regular conflict.

Intersection Sight Distance: Intersection sight-distance measurements were taken in the field at the locations of the proposed site driveways. Based on AASHTO's *A Policy on Geometric Design of Highways and Streets*, the amount of sight distance that is desirable for a 35-mph road (Jackson Drive) is 390' for a left-turning vehicle (Case B1) and 335' for a right-turning vehicle (Case B2). The amount of sight distance that is desirable for a 30-mph road (37th Terrace) is 335' for a left-turning vehicle (Case B1) and 290' for a right-turning vehicle (Case B2).

The results of the intersection sight distances recorded in the field are summarized below. It should be noted that if available sight distance was well over the recommended value, a field measured value of ">distance" is recorded below. If the sight-distance requirements were not easily reached by simple observation, actual distances were recorded.

Jackson Drive & Proposed Drive 1 (North Drive)

	<u>AASHTO Recommended</u>	<u>Field Measured</u>
Left-Turning Vehicle	390'	>390'
Right-Turning Vehicle	335'	685'



37th Terrace & Proposed Drive 2 (South Drive)

	<u>AASHTO Recommended</u>	<u>Field Measured</u>
Left-Turning Vehicle	335'	495'
Right-Turning Vehicle	290'	>290'



Trip Generation: The estimated trip generation for the proposed Jackson Apartments development was based upon the 11th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Handbook* for Land Use 220-Multi-Family (Low-Rise). **Table 3** depicts the trip generation for the site.

Table 3: Proposed Trip Generation

				AM Peak Hour (VPH)			PM Peak Hour (VPH)		
Land Use	Qty	Unit	ADT (VPD)	TOTAL	IN	OUT	TOTAL	IN	OUT
220 – Multifamily Housing (Low-Rise)	300	DU	1,998	116	28	88	150	94	56

Trip Distribution: Estimates of the expected trip distribution to and from the Jackson Apartments development were based upon the available and planned street network and existing traffic flow. The trip-distribution patterns that were utilized are as follows:

- To the north via Jackson Drive 5%
- To the south via Jackson Drive 40%
- To the east via 37th Terrace 20%
- To the west via 37th Terrace 35%

Existing + Site Traffic Volumes: The expected development-related traffic volumes were added to the existing volumes and were assigned to the existing and planned street system. The *Existing + Site* AM and PM peak-hour volumes are shown on **Figures 2 & 3**, respectively.

Future + Site Traffic Volumes: Historical ADT traffic volumes from the years 2016-2050 as shown in the Mid America Regional Council (MARC) model were analyzed to determine an appropriate

growth rate for a future 20-year design volume. The results indicated a fairly flat growth rate. However, due to the potential for development still occurring in the area, a growth rate of 2% per year for 20 years was utilized. The site-generated traffic volumes from Jackson Apartments development were added to these background future traffic volumes to develop the *Future + Site* AM and PM peak-hour traffic volumes and are shown **Figures 4 & 5**, respectively.

ANALYSES

A series of intersection capacity analyses were completed at the study intersections to determine the expected levels of service, the lengths of delays, and the vehicle queues experienced by drivers. The study intersections were analyzed based upon the 6th Edition of the Transportation Research Board's (TRB) *Highway Capacity Manual*. A description of the level-of-service criteria used in these analyses is shown below:

Level of Service Definitions		
Level of Service	Signalized Intersection Average Control Delay (sec/veh)	Unsignalized Intersection Average Control Delay (sec/veh)
A	<10	<10
B	<20	<15
C	<35	<25
D	<55	<35
E	<80	<50
F	≥80	≥50

The amount of control delay is assigned a level of service based on driver acceptance with LOS "A" representing little or no delay and LOS "F" representing long delays. The queues shown on the figures represent the 95th percentile queue, or the queue that has only a 5% chance of being exceeded during the peak hour. All capacity analysis output is included in the Appendix attached to this report. It should be noted that all completed analyses utilized the Synchro 12 software package.

Existing Traffic Conditions: **Figures 6 & 7** depict the results of the completed analyses for the existing AM and PM peak-hour traffic volume scenarios. As shown on the figures, all individual movements at the study intersections currently operate at LOS "C" or better with minimal queuing.

Existing + Site Traffic Conditions: As shown on **Figures 8 & 9**, all individual movements at the study intersections would be expected to operate at LOS "C" or better with minimal queuing with the addition of the Redwood multi-family development.

Turn Lane Warrants

Left-turn and right-turn lane warrants were analyzed in conjunction with MoDOT's *Access Management Guidelines* for the proposed driveway intersections and can be found in the Appendix. No turn lanes would be warranted for the *Existing + Site* traffic volume scenario.

Future + Site Traffic Conditions: The results of the capacity analysis for the *Future + Site* traffic volume scenario are shown on **Figures 10 & 11**. As shown on the figures, all individual movements at the study intersections would be expected to operate at LOS "C" or better during the *Future + Site* volume scenario.

Turn Lane Warrants

Left-turn and right-turn lane warrants were analyzed in conjunction with MoDOT's *Access Management Guidelines* for the proposed driveway intersections and can be found in the Appendix. No turn lanes would be warranted for the *Future + Site* traffic volume scenario.

SUMMARY & RECOMMENDATIONS

This traffic study summarizes the anticipated traffic impacts of the proposed Jackson Apartments development.

Left-turn and right-turn lane warrants at the driveway intersections were analyzed in conjunction with MoDOT's *Access Management Guidelines*, and no turn lanes would be warranted at either site driveway.

It should be noted that the site plan shows a full-access driveway that would require a median break along Jackson Drive. Although a northbound left-turn lane is not warranted due to traffic volumes at this intersection, a median break without a dedicated turn lane is not recommended as drivers would not be expecting a left-turn driver slowing down to make the turn on a divided roadway without a left-turn lane present. There is an existing bridge just north of the intersection and a significant retaining wall on the east side of Jackson Drive that would make it difficult to construct a northbound left-turn lane. If a dedicated left-turn lane is not feasible, the driveway access should be limited to right-in/right-out access.

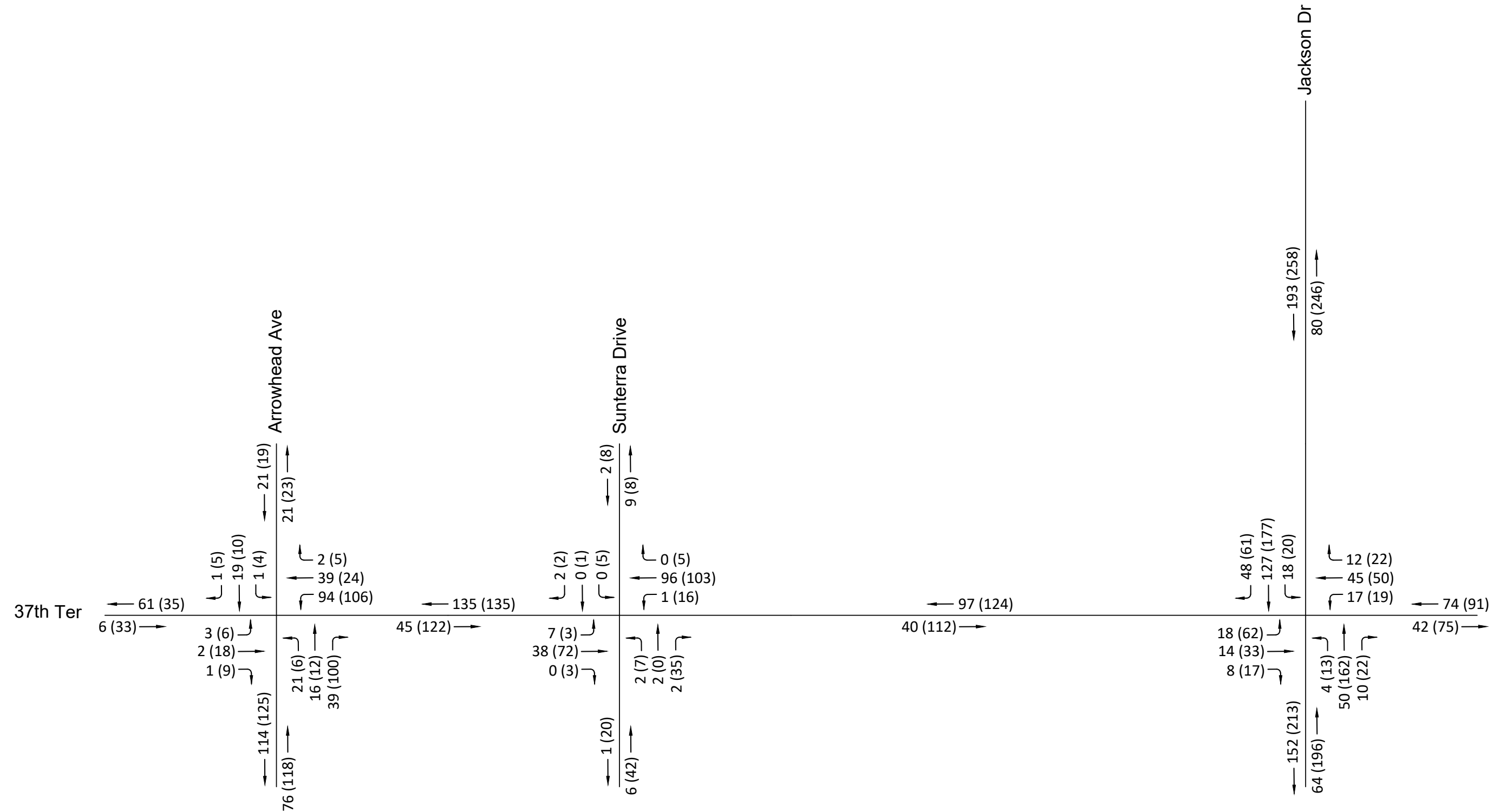
In general, acceptable traffic operations can be expected in and around the proposed development with the addition of the Jackson Apartments development. The development traffic will have minimal impact on the traffic operations in the study area. No improvements would be required.

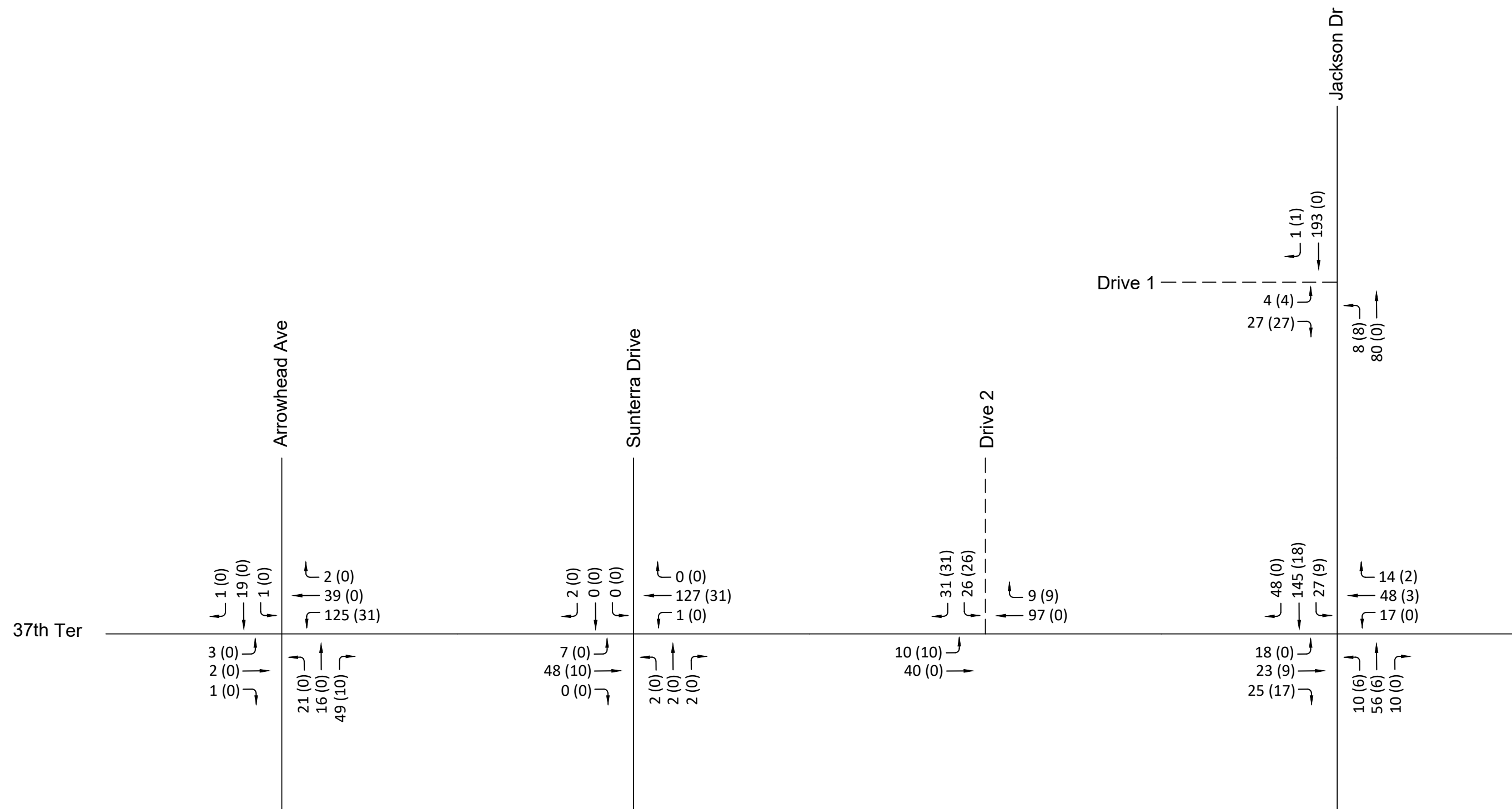
We appreciate the opportunity to serve you on this very important project. Please feel free to contact us if you should have any questions.

Respectfully submitted,
Merge Midwest Engineering, LLC

A handwritten signature in blue ink that reads "Janelle M. Clayton". The signature is written in a cursive, flowing style.

Janelle M. Clayton, P.E., PTOE
Manager / Co-Owner



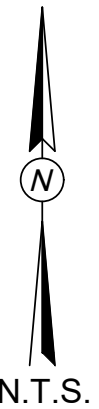


LEGEND

The diagram illustrates the relationship between three variables:

- Site Generated Volume (vph)**: Indicated by an arrow pointing to the value **500 (500)**.
- Total Peak Volume (vph)**: Indicated by an arrow pointing to the value **500 (500)**.
- Vehicle Movement**: Indicated by an arrow pointing to the value **500 (500)**.

All three variables are represented by the same value, **500 (500)**.



PROJECT NUMBER

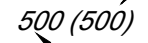
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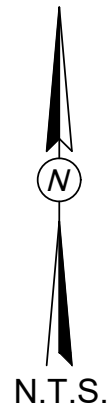
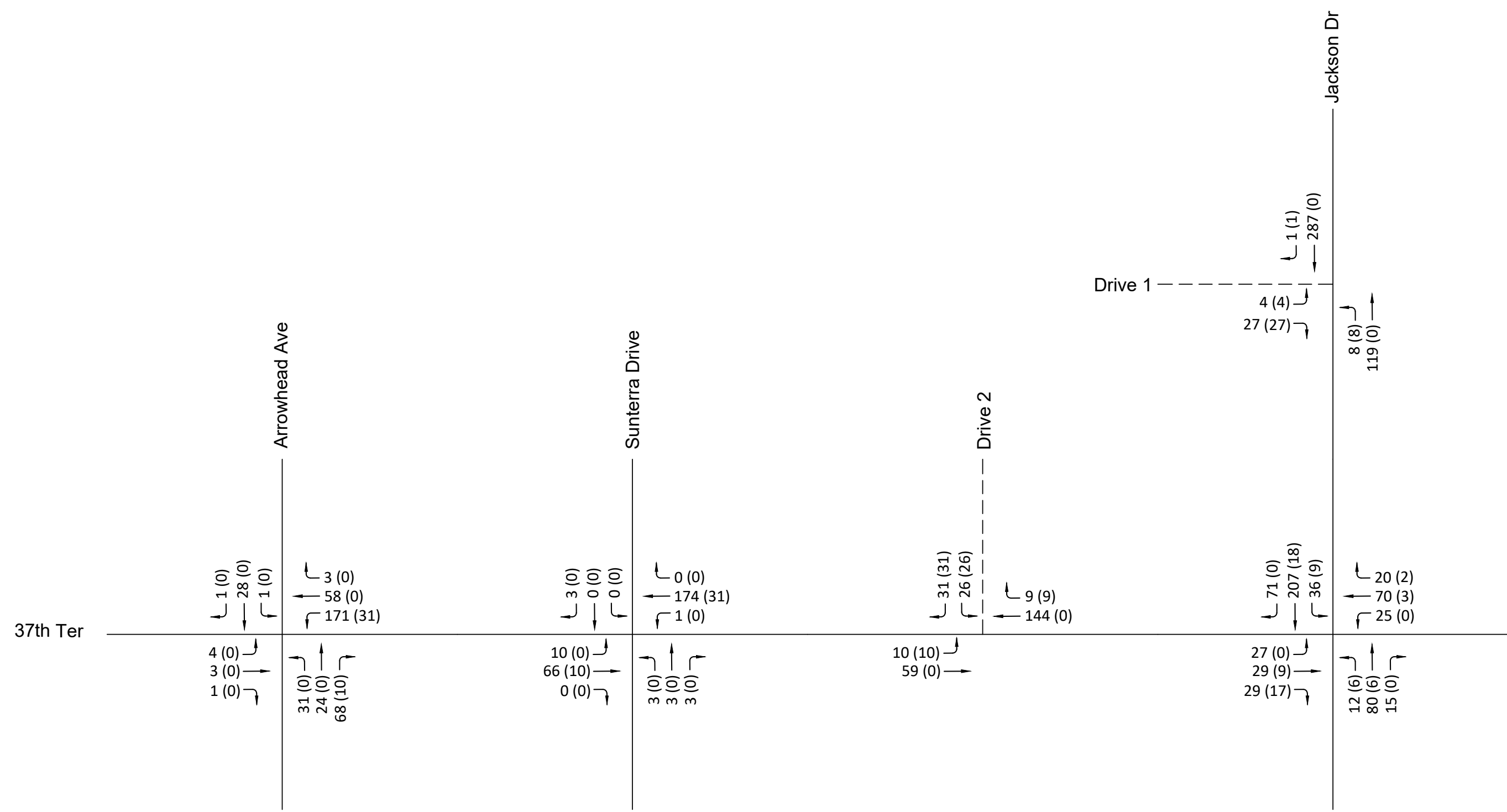
MAY 2024

EXISTING + SITE
TRAFFIC VOLUMES
AM PEAK HOUR

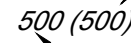
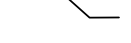
FIGURE 2

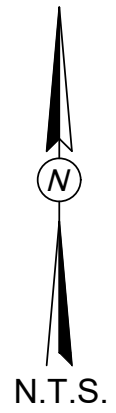
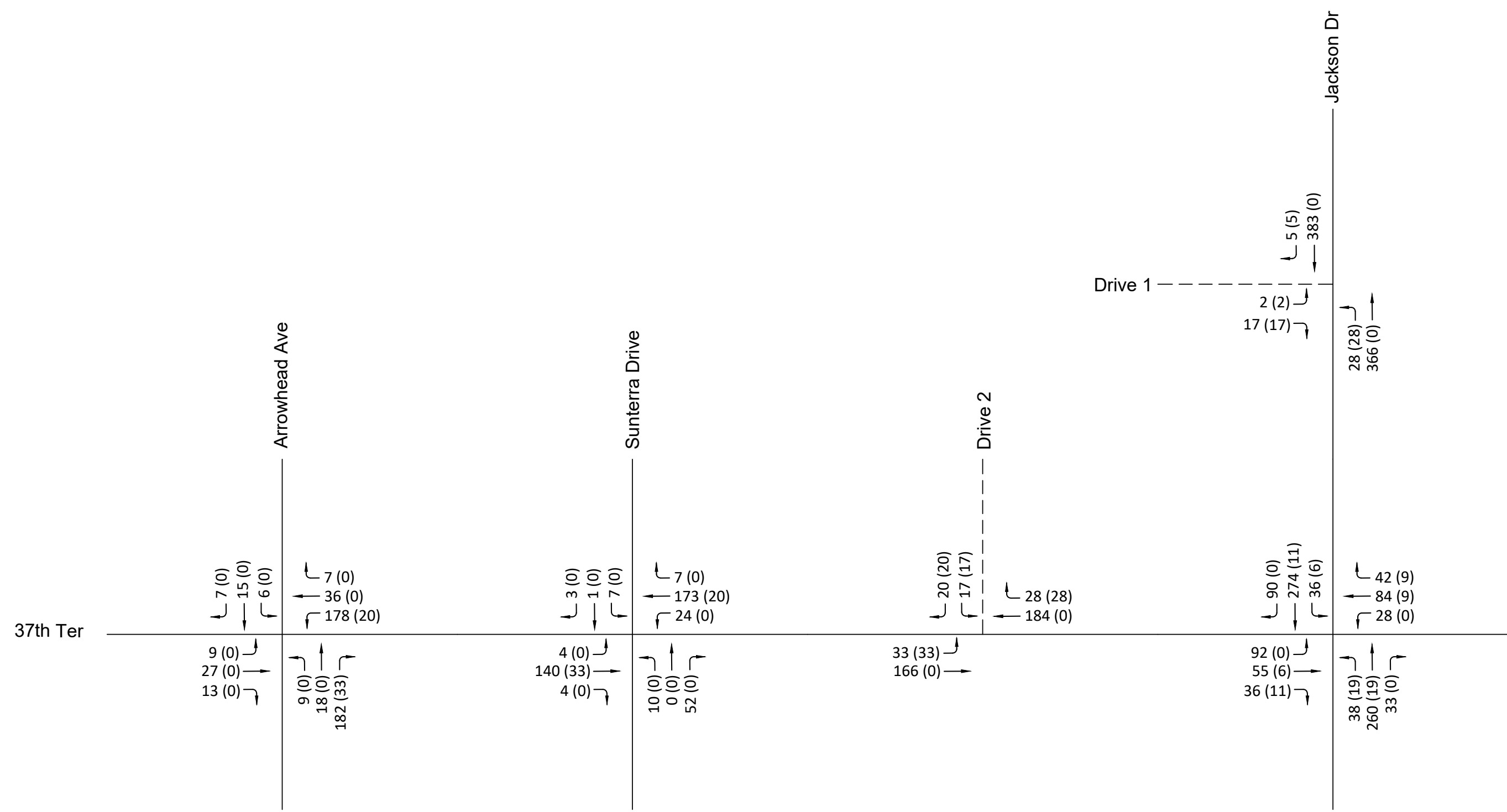
LEGEND

 Vehicle Movement
 Total Peak Volume (vph)
 Site Generated Volume (vph)



LEGEND

 Site Generated Volume (vph)
 Total Peak Volume (vph)
 Vehicle Movement



LEGEND

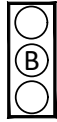
Estimated Queue Length

- C (150')

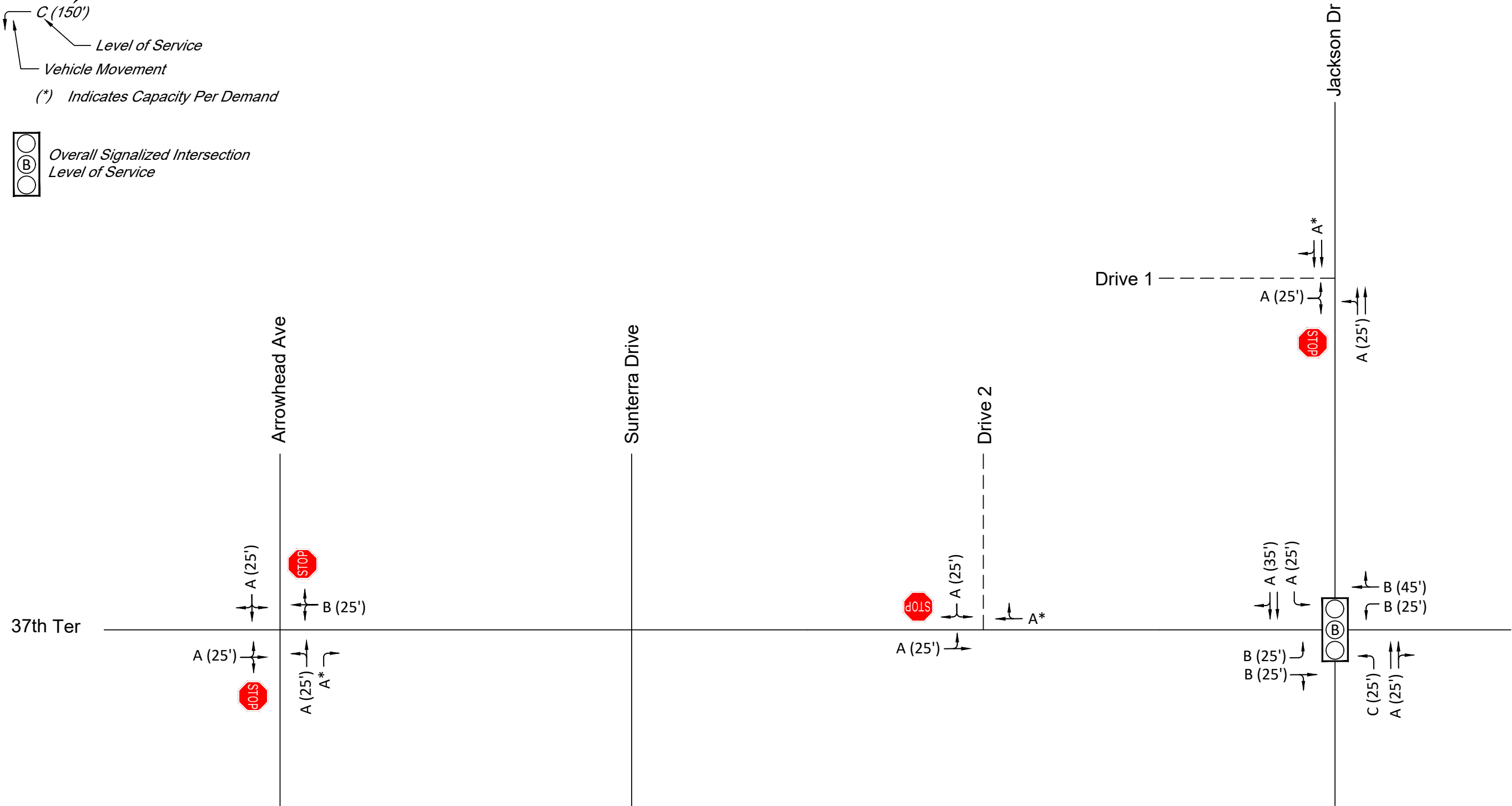
– *Level of Service*

- *Vehicle Movement*

(*) Indicates Capacity Per Demand



*Overall Signalized Intersection
Level of Service*



N.T.S.



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MIDWEST
ENGINEERING

PROJECT NUMBER
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DATE
MAY 2024

FIGURE 6

EXISTING
LEVELS OF SERVICE
AM PEAK HOUR

LEGEND

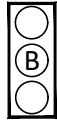
Estimated Queue Length

$C(150')$

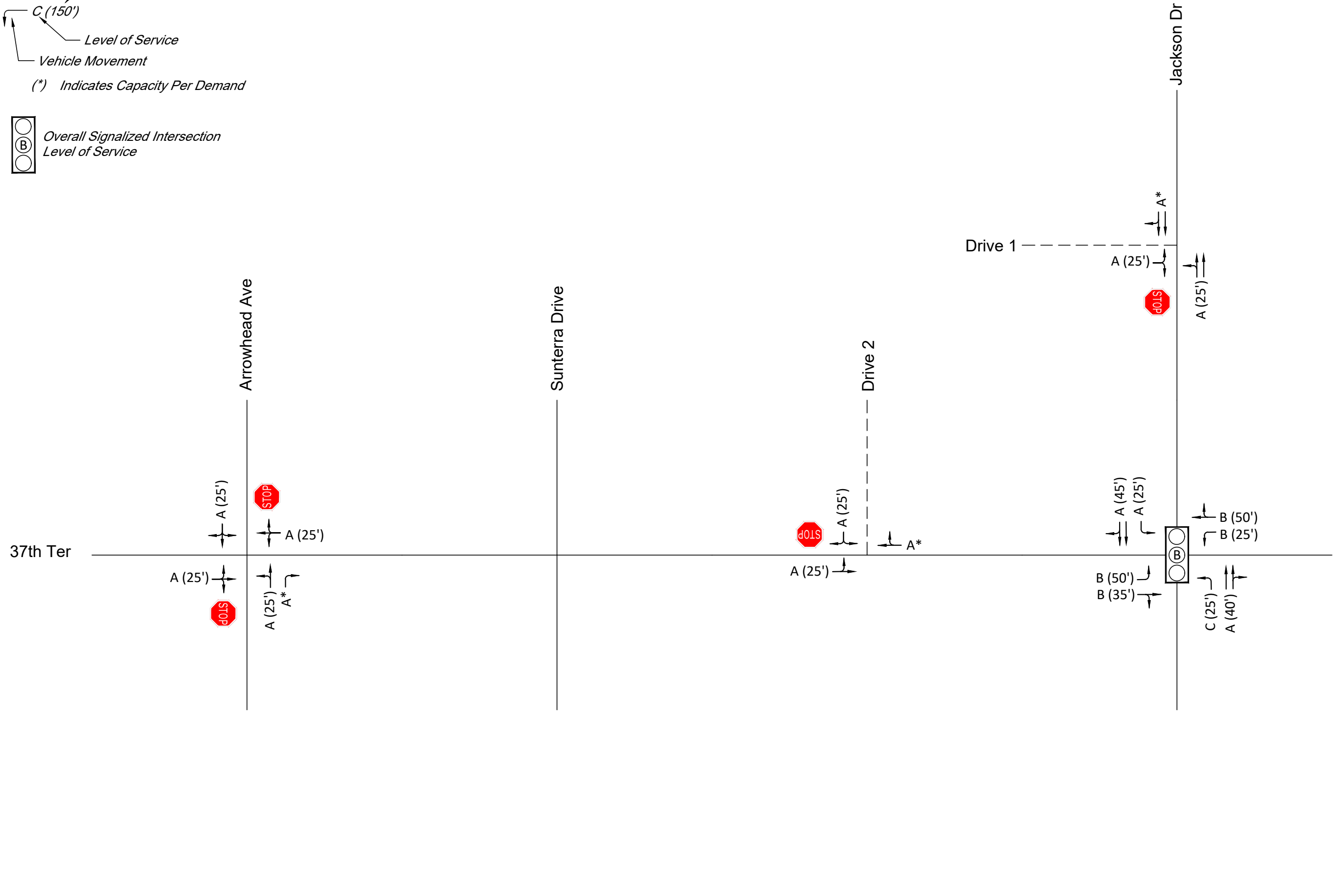
– *Level of Service*

- *Vehicle Movement*

(*) Indicates Capacity Per Demand



*Overall Signalized Intersection
Level of Service*



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ENGINEERING**

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DATE
MAY 2024

FIGURE 7

EXISTING
LEVELS OF SERVICE
PM PEAK HOUR

LEGEND

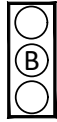
Estimated Queue Length

$C(150')$

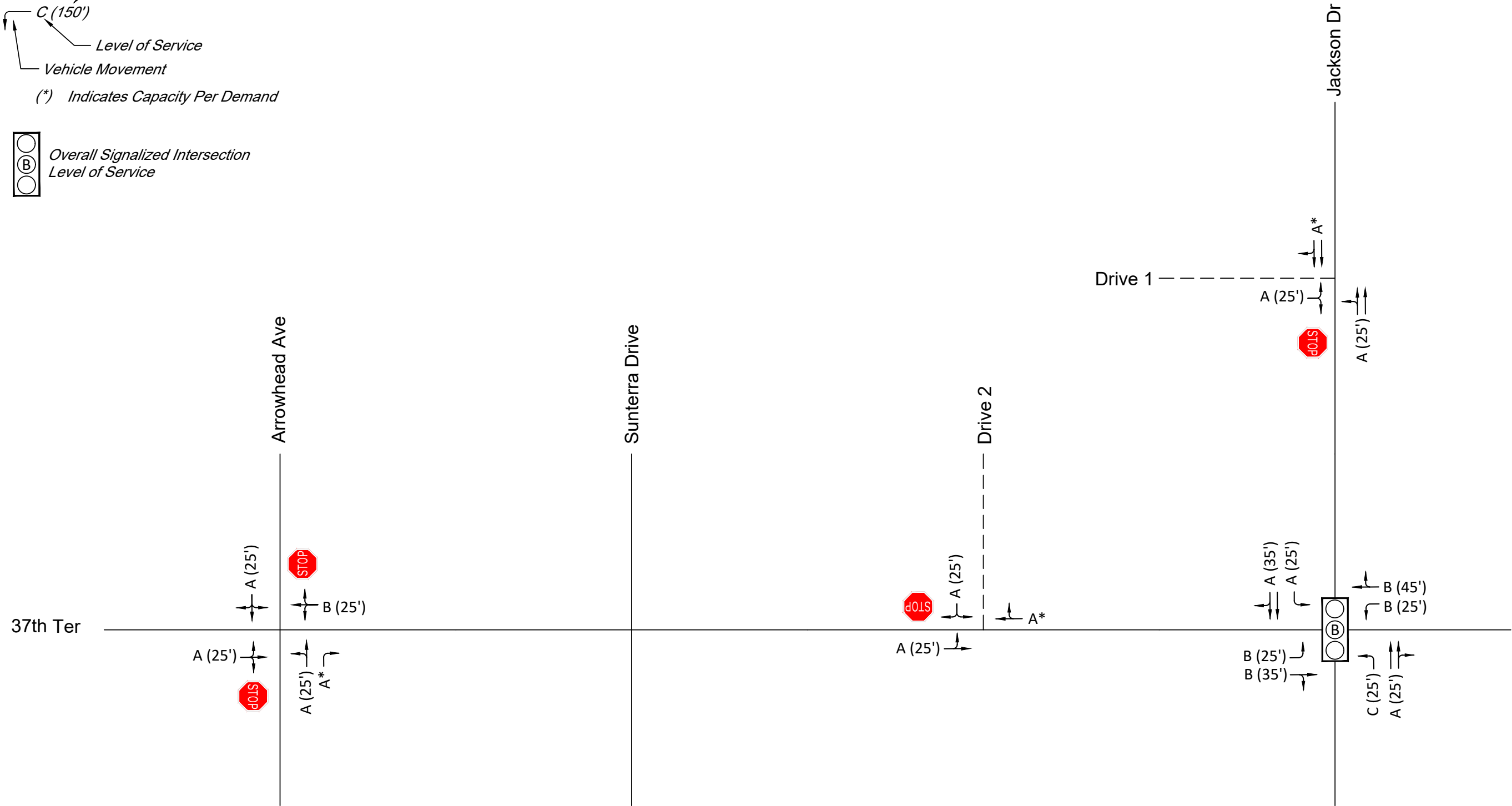
– *Level of Service*

- *Vehicle Movement*

(*) Indicates Capacity Per Demand



*Overall Signalized Intersection
Level of Service*



N.T.S.



**MERGE
MIDWEST
ENGINEERING**

PROJECT NUMBER
24035

DATE
MAY 2024

FIGURE 8

EXISTING + SITE
LEVELS OF SERVICE
AM PEAK HOUR

LEGEND

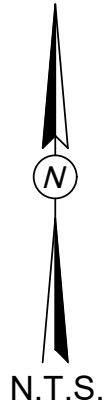
Estimated Queue Length

Level of Service

Vehicle Movement

(*) Indicates Capacity Per Demand

Overall Signalized Intersection Level of Service



	PROJECT NUMBER		FIGURE 9	EXISTING + SITE LEVELS OF SERVICE PM PEAK HOUR
	24035	DATE		
		MAY 2024		

LEGEND

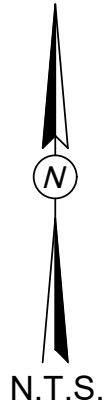
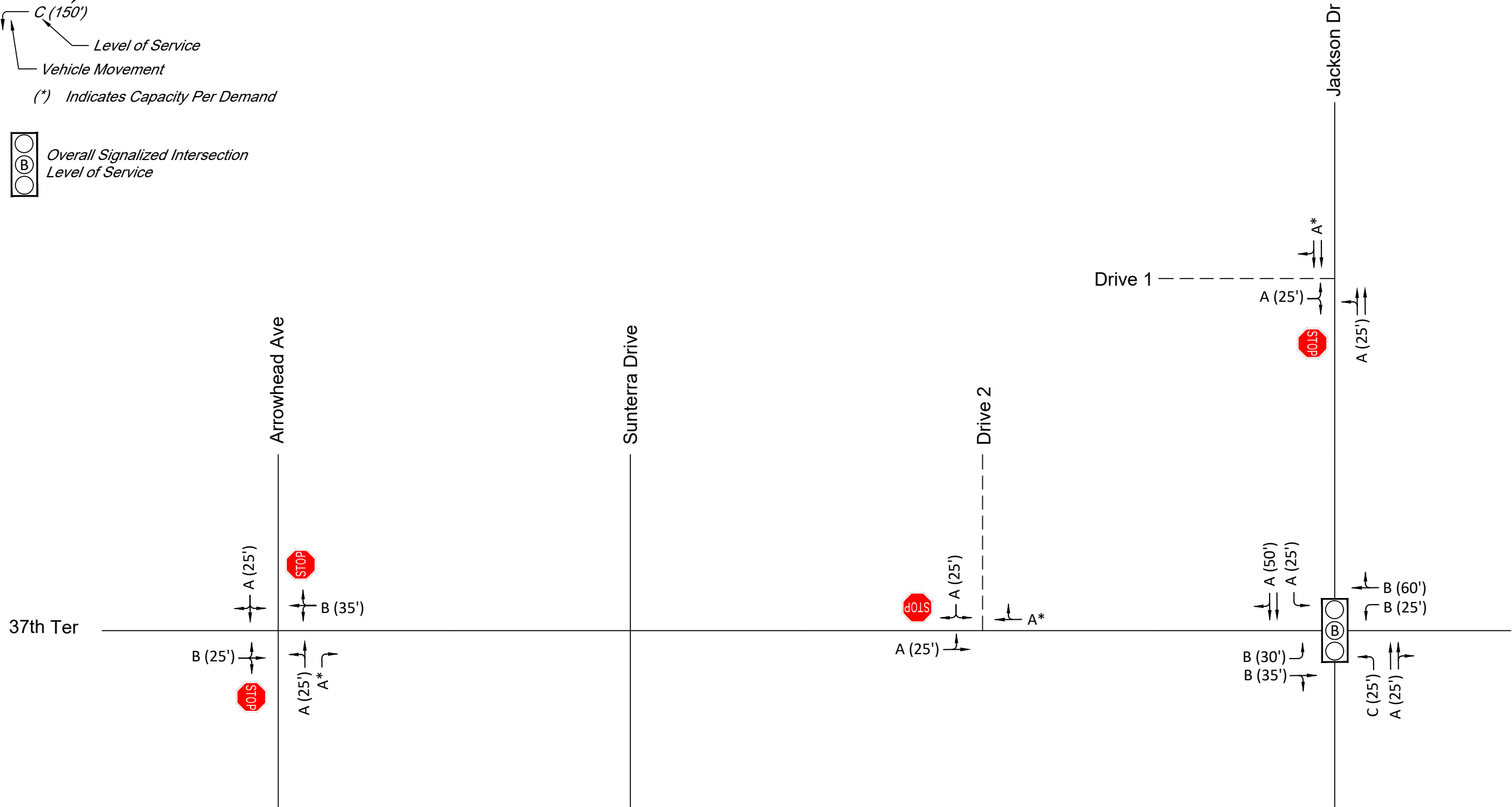
Estimated Queue Length

Level of Service

Vehicle Movement

(*) Indicates Capacity Per Demand

Overall Signalized Intersection
Level of Service



	PROJECT NUMBER 24035		FIGURE 10	FUTURE + SITE LEVELS OF SERVICE AM PEAK HOUR
	DATE MAY 2024			

FIGURE 10

LEGEND

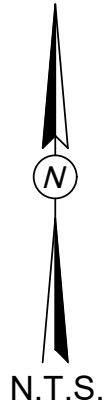
Estimated Queue Length

Level of Service

Vehicle Movement

(*) Indicates Capacity Per Demand

Overall Signalized Intersection
Level of Service



	PROJECT NUMBER		FUTURE + SITE LEVELS OF SERVICE PM PEAK HOUR
	24035	DATE	
		MAY 2024	

FIGURE 11

FUTURE + SITE
LEVELS OF SERVICE
PM PEAK HOUR

PROJECT NUMBER
24035

DATE
MAY 2024



APPENDIX

RAW TURNING MOVEMENT
TRAFFIC COUNTS

TRIP GENERATION CALCULATIONS

SYNCHRO REPORTS

TURN LANE WARRANTS



Jackson Drive & 37th Terrace - TMC

Tue Apr 23, 2024

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

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177141, Location: 39.051366, -94.352227



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Jackson Drive Southbound						37th Terrace Westbound						Jackson Drive Northbound						37th Terrace Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-04-23 7:00AM	9	16	2	0	27	0	2	5	6	0	13	0	3	4	0	0	7	0	0	4	3	0	7	0	54
7:15AM	12	34	5	0	51	0	3	10	6	0	19	0	4	17	1	0	22	0	4	6	6	0	16	0	108
7:30AM	15	34	4	0	53	0	3	10	6	0	19	0	3	7	1	0	11	0	3	1	5	0	9	0	92
7:45AM	11	35	3	0	49	1	3	16	4	0	23	0	3	14	0	0	17	0	1	3	3	0	7	0	96
Hourly Total	47	119	14	0	180	1	11	41	22	0	74	0	13	42	2	0	57	0	8	14	17	0	39	0	350
8:00AM	10	24	6	0	40	0	3	9	1	0	13	0	0	12	2	0	14	1	0	4	4	0	8	0	75
8:15AM	6	19	2	0	27	0	2	7	1	0	10	0	1	11	1	0	13	0	2	3	2	0	7	0	57
8:30AM	12	31	4	0	47	0	4	9	4	0	17	0	2	14	1	0	17	0	5	0	6	0	11	0	92
8:45AM	19	31	6	0	56	0	5	9	2	0	16	0	3	13	1	0	17	0	0	0	5	0	5	0	94
Hourly Total	47	105	18	0	170	0	14	34	8	0	56	0	6	50	5	0	61	1	7	7	17	0	31	0	318
4:00PM	8	32	3	0	43	0	5	8	5	0	18	0	7	47	5	0	59	0	5	11	16	0	32	0	152
4:15PM	12	43	5	0	60	0	5	15	5	0	25	0	8	48	5	0	61	0	3	13	14	0	30	0	176
4:30PM	12	41	8	0	61	1	3	3	2	0	8	0	3	31	3	0	37	0	7	8	15	0	30	0	136
4:45PM	18	44	3	0	65	1	5	14	5	0	24	0	4	41	2	0	47	1	3	5	16	0	24	1	160
Hourly Total	50	160	19	0	229	2	18	40	17	0	75	0	22	167	15	0	204	1	18	37	61	0	116	1	624
5:00PM	16	49	4	0	69	1	9	15	7	0	31	1	7	42	2	0	51	0	4	7	17	0	28	0	179
5:15PM	14	35	5	0	54	0	3	8	3	0	14	0	7	46	6	0	59	0	7	4	12	0	23	0	150
5:30PM	19	40	1	0	60	0	8	7	4	0	19	1	9	36	2	0	47	0	3	6	16	0	25	1	151
5:45PM	20	40	3	0	63	0	7	11	12	0	30	0	10	28	2	0	40	0	3	2	14	0	19	0	152
Hourly Total	69	164	13	0	246	1	27	41	26	0	94	2	33	152	12	0	197	0	17	19	59	0	95	1	632
Total	213	548	64	0	825	4	70	156	73	0	299	2	74	411	34	0	519	2	50	77	154	0	281	2	1924
% Approach	25.8%	66.4%	7.8%	0%	-	-	23.4%	52.2%	24.4%	0%	-	-	14.3%	79.2%	6.6%	0%	-	-	17.8%	27.4%	54.8%	0%	-	-	-
% Total	11.1%	28.5%	3.3%	0%	42.9%	-	3.6%	8.1%	3.8%	0%	15.5%	-	3.8%	21.4%	1.8%	0%	27.0%	-	2.6%	4.0%	8.0%	0%	14.6%	-	-
Lights	211	545	63	0	819	-	67	152	71	0	290	-	70	398	32	0	500	-	46	75	153	0	274	-	1883
% Lights	99.1%	99.5%	98.4%	0%	99.3%	-	95.7%	97.4%	97.3%	0%	97.0%	-	94.6%	96.8%	94.1%	0%	96.3%	-	92.0%	97.4%	99.4%	0%	97.5%	-	97.9%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	2	3	1	0	6	-	3	4	2	0	9	-	4	13	2	0	19	-	4	2	1	0	7	-	41
% Buses and Single-Unit Trucks	0.9%	0.5%	1.6%	0%	0.7%	-	4.3%	2.6%	2.7%	0%	3.0%	-	5.4%	3.2%	5.9%	0%	3.7%	-	8.0%	2.6%	0.6%	0%	2.5%	-	2.1%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	1	-
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Jackson Drive & 37th Terrace - TMC

Tue Apr 23, 2024

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

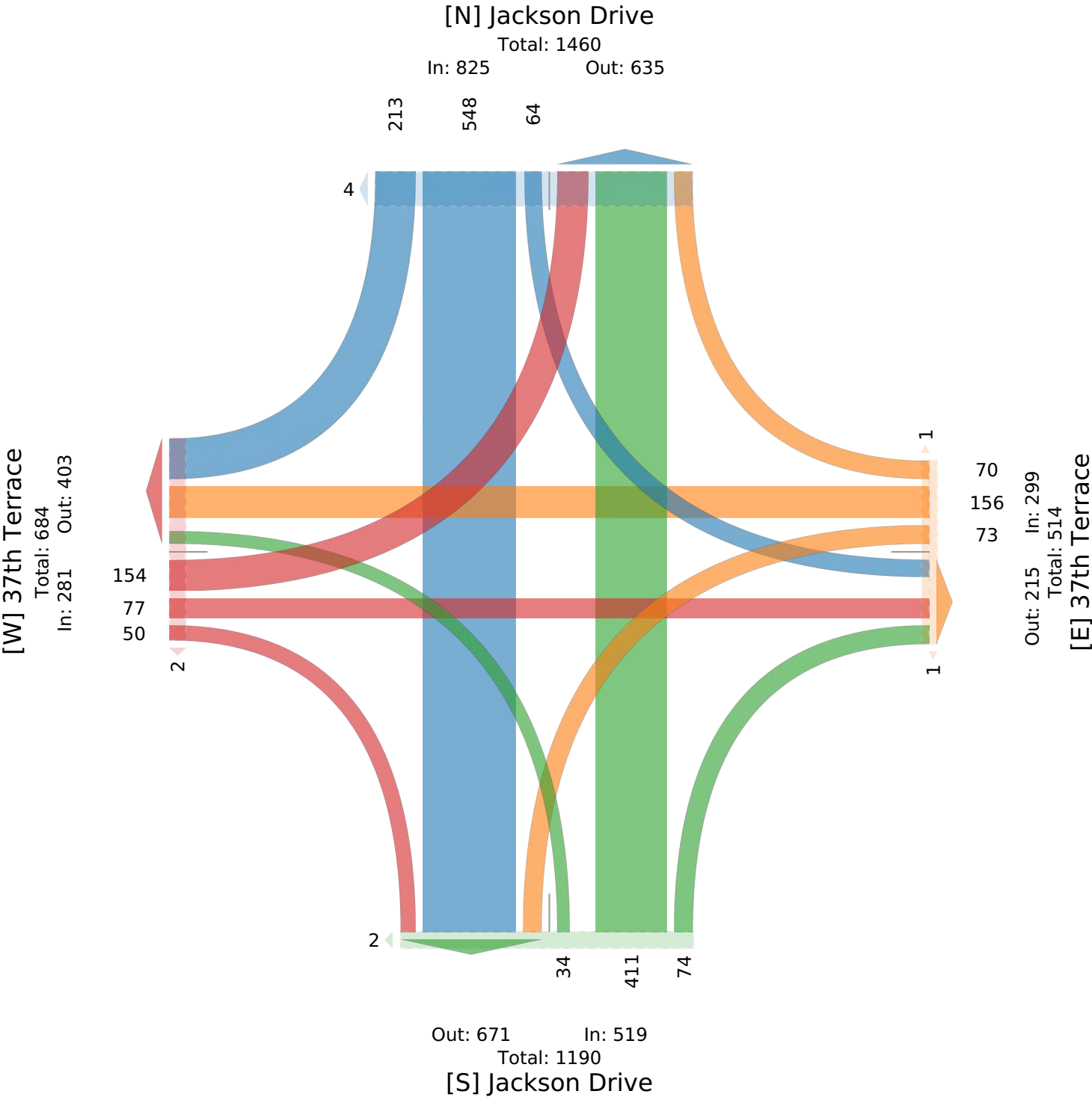
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177141, Location: 39.051366, -94.352227



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



Jackson Drive & 37th Terrace - TMC

Tue Apr 23, 2024

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177141, Location: 39.051366, -94.352227



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Jackson Drive Southbound						37th Terrace Westbound						Jackson Drive Northbound						37th Terrace Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-04-23 7:15AM	12	34	5	0	51	0	3	10	6	0	19	0	4	17	1	0	22	0	4	6	6	0	16	0	108
7:30AM	15	34	4	0	53	0	3	10	6	0	19	0	3	7	1	0	11	0	3	1	5	0	9	0	92
7:45AM	11	35	3	0	49	1	3	16	4	0	23	0	3	14	0	0	17	0	1	3	3	0	7	0	96
8:00AM	10	24	6	0	40	0	3	9	1	0	13	0	0	12	2	0	14	1	0	4	4	0	8	0	75
Total	48	127	18	0	193	1	12	45	17	0	74	0	10	50	4	0	64	1	8	14	18	0	40	0	371
% Approach	24.9%	65.8%	9.3%	0%	-	-	16.2%	60.8%	23.0%	0%	-	-	15.6%	78.1%	6.3%	0%	-	-	20.0%	35.0%	45.0%	0%	-	-	-
% Total	12.9%	34.2%	4.9%	0%	52.0%	-	3.2%	12.1%	4.6%	0%	19.9%	-	2.7%	13.5%	1.1%	0%	17.3%	-	2.2%	3.8%	4.9%	0%	10.8%	-	-
PHF	0.800	0.907	0.750	-	0.910	-	1.000	0.703	0.708	-	0.804	-	0.625	0.735	0.500	-	0.727	-	0.500	0.583	0.750	-	0.625	-	0.859
Lights	48	127	18	0	193	-	11	45	17	0	73	-	10	50	4	0	64	-	7	13	18	0	38	-	368
% Lights	100%	100%	100%	0%	100%	-	91.7%	100%	100%	0%	98.6%	-	100%	100%	100%	0%	100%	-	87.5%	92.9%	100%	0%	95.0%	-	99.2%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	0	0	0	0	0	-	1	0	0	0	1	-	0	0	0	0	0	-	1	1	0	0	2	-	3
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-	8.3%	0%	0%	0%	1.4%	-	0%	0%	0%	0%	0%	-	12.5%	7.1%	0%	0%	5.0%	-	0.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Jackson Drive & 37th Terrace - TMC

Tue Apr 23, 2024

AM Peak (7:15 AM - 8:15 AM)

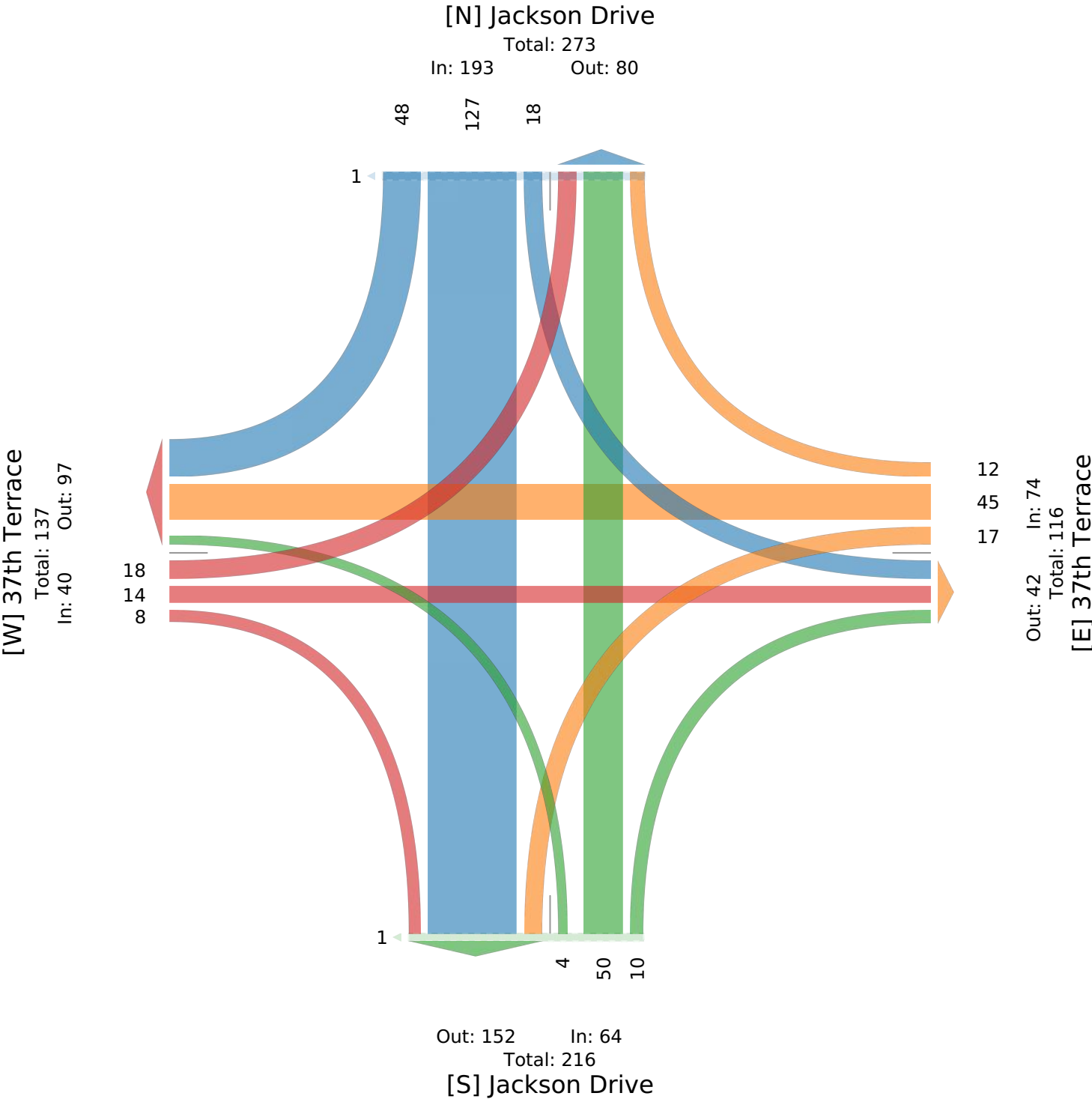
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177141, Location: 39.051366, -94.352227



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



Jackson Drive & 37th Terrace - TMC

Tue Apr 23, 2024

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

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177141, Location: 39.051366, -94.352227



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Jackson Drive Southbound						37th Terrace Westbound						Jackson Drive Northbound						37th Terrace Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-04-23 4:15PM	12	43	5	0	60	0	5	15	5	0	25	0	8	48	5	0	61	0	3	13	14	0	30	0	176
4:30PM	12	41	8	0	61	1	3	3	2	0	8	0	3	31	3	0	37	0	7	8	15	0	30	0	136
4:45PM	18	44	3	0	65	1	5	14	5	0	24	0	4	41	2	0	47	1	3	5	16	0	24	1	160
5:00PM	16	49	4	0	69	1	9	15	7	0	31	1	7	42	2	0	51	0	4	7	17	0	28	0	179
Total	58	177	20	0	255	3	22	47	19	0	88	1	22	162	12	0	196	1	17	33	62	0	112	1	651
% Approach	22.7%	69.4%	7.8%	0%	-	-	25.0%	53.4%	21.6%	0%	-	-	11.2%	82.7%	6.1%	0%	-	-	15.2%	29.5%	55.4%	0%	-	-	-
% Total	8.9%	27.2%	3.1%	0%	39.2%	-	3.4%	7.2%	2.9%	0%	13.5%	-	3.4%	24.9%	1.8%	0%	30.1%	-	2.6%	5.1%	9.5%	0%	17.2%	-	-
PHF	0.806	0.903	0.625	-	0.924	-	0.611	0.783	0.679	-	0.710	-	0.688	0.844	0.600	-	0.803	-	0.607	0.635	0.912	-	0.933	-	0.909
Lights	58	176	19	0	253	-	21	46	19	0	86	-	20	158	11	0	189	-	15	32	61	0	108	-	636
% Lights	100%	99.4%	95.0%	0%	99.2%	-	95.5%	97.9%	100%	0%	97.7%	-	90.9%	97.5%	91.7%	0%	96.4%	-	88.2%	97.0%	98.4%	0%	96.4%	-	97.7%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	0	1	1	0	2	-	1	1	0	0	2	-	2	4	1	0	7	-	2	1	1	0	4	-	15
% Buses and Single-Unit Trucks	0%	0.6%	5.0%	0%	0.8%	-	4.5%	2.1%	0%	0%	2.3%	-	9.1%	2.5%	8.3%	0%	3.6%	-	11.8%	3.0%	1.6%	0%	3.6%	-	2.3%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Jackson Drive & 37th Terrace - TMC

Tue Apr 23, 2024

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

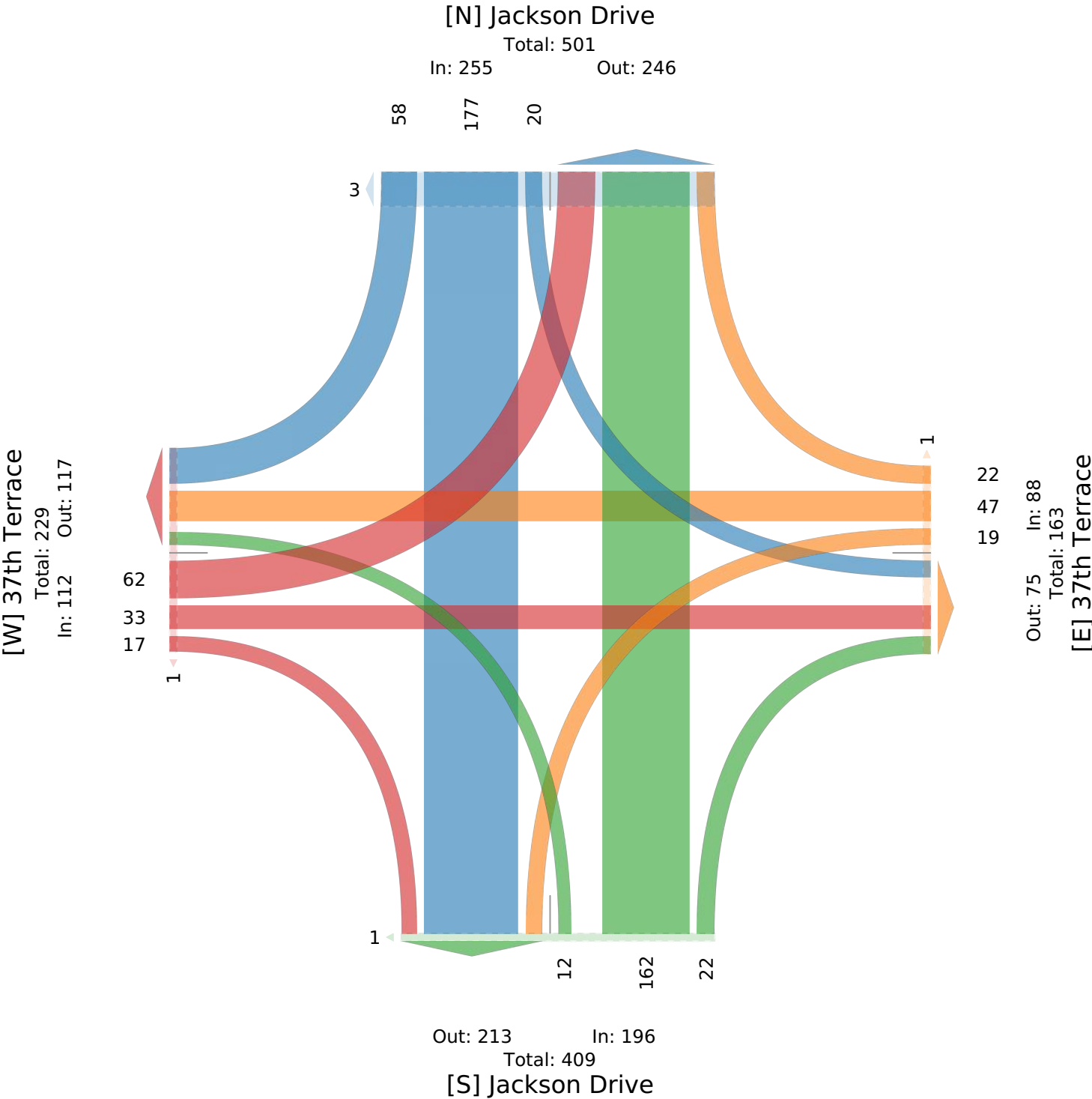
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177141, Location: 39.051366, -94.352227



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



37th Terrace & Sunterra Springs East Drive - TMC

Tue Apr 23, 2024

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

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177142, Location: 39.050914, -94.353823



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Sunterra Springs East Drive Southbound							37th Terrace Westbound							Driveway Northbound							37th Terrace Eastbound							
Time	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		Int
2024-04-23 7:00AM	0	0	0	0	0	1		1	12	0	0	13	0		1	0	0	0	1	0		0	6	0	0	6	0		20
7:15AM	1	0	0	0	1	0		0	22	0	0	22	0		1	0	0	0	1	0		0	16	2	0	18	0		42
7:30AM	0	0	0	0	0	0		0	25	1	0	26	0		1	1	1	0	3	0		0	8	1	0	9	0		38
7:45AM	1	0	0	0	1	1		0	26	0	0	26	0		0	0	1	0	1	0		0	7	4	0	11	0		39
Hourly Total	2	0	0	0	2	2		1	85	1	0	87	0		3	1	2	0	6	0		0	37	7	0	44	0		139
8:00AM	0	0	0	0	0	0		0	21	0	0	21	0		0	1	0	0	1	0		0	7	0	0	7	0		29
8:15AM	0	0	0	0	0	0		1	12	1	0	14	0		0	0	0	0	0	0		1	8	0	0	9	0		23
8:30AM	0	0	0	0	0	0		0	21	1	0	22	0		1	0	1	0	2	0		0	10	0	0	10	0		34
8:45AM	0	0	0	0	0	0		4	24	1	0	29	0		2	0	0	0	2	0		0	6	1	0	7	0		38
Hourly Total	0	0	0	0	0	0		5	78	3	0	86	0		3	1	1	0	5	0		1	31	1	0	33	0		124
4:00PM	0	0	1	0	1	0		2	16	2	0	20	0		9	0	0	0	9	0		1	25	1	0	27	0		57
4:15PM	1	0	1	0	2	0		3	28	2	0	33	0		6	0	1	0	7	0		1	21	0	0	22	0		64
4:30PM	0	0	0	0	0	0		2	13	5	0	20	0		8	0	3	0	11	0		1	23	0	0	24	0		55
4:45PM	0	0	2	0	2	0		1	24	8	0	33	0		7	0	0	0	7	0		1	15	0	0	16	0		58
Hourly Total	1	0	4	0	5	0		8	81	17	0	106	0		30	0	4	0	34	0		4	84	1	0	89	0		234
5:00PM	0	0	2	0	2	0		1	33	0	0	34	0		8	0	1	0	9	0		0	21	1	0	22	0		67
5:15PM	2	1	3	0	6	0		0	24	5	0	29	0		7	0	2	0	9	0		2	17	0	0	19	0		63
5:30PM	0	0	0	0	0	0		3	18	6	0	27	0		12	0	1	0	13	0		0	15	2	0	17	0		57
5:45PM	0	0	0	0	0	0		1	28	5	0	34	0		8	0	3	0	11	0		1	13	0	0	14	0		59
Hourly Total	2	1	5	0	8	0		5	103	16	0	124	0		35	0	7	0	42	0		3	66	3	0	72	0		246
Total	5	1	9	0	15	2		19	347	37	0	403	0		71	2	14	0	87	0		8	218	12	0	238	0		743
% Approach	33.3%	6.7%	60.0%	0%	-	-		4.7%	86.1%	9.2%	0%	-	-		81.6%	2.3%	16.1%	0%	-	-		3.4%	91.6%	5.0%	0%	-	-		-
% Total	0.7%	0.1%	1.2%	0%	2.0%	-		2.6%	46.7%	5.0%	0%	54.2%	-		9.6%	0.3%	1.9%	0%	11.7%	-		1.1%	29.3%	1.6%	0%	32.0%	-		-
Lights	5	1	9	0	15	-		19	338	37	0	394	-		71	2	13	0	86	-		8	211	12	0	231	-		726
% Lights	100%	100%	100%	0%	100%	-		100%	97.4%	100%	0%	97.8%	-		100%	100%	92.9%	0%	98.9%	-		100%	96.8%	100%	0%	97.1%	-		97.7%
Articulated Trucks	0	0	0	0	0	-		0	0	0	0	0	-		0	0	0	0	0	-		0	0	0	0	0	-		0
% Articulated Trucks	0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%
Buses and Single-Unit Trucks	0	0	0	0	0	-		0	9	0	0	9	-		0	0	1	0	1	-		0	7	0	0	7	-		17
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-		0%	2.6%	0%	0%	2.2%	-		0%	0%	7.1%	0%	1.1%	-		0%	3.2%	0%	0%	2.9%	-		2.3%
Pedestrians	-	-	-	-	-	2		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	-		0
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-
Bicycles on Crosswalk	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	-		0
% Bicycles on Crosswalk	-	-	-	-	-	0%		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

37th Terrace & Sunterra Springs East Drive - TMC

Tue Apr 23, 2024

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

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177142, Location: 39.050914, -94.353823



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Sunterra Springs East Drive

Total: 48

In: 15 Out: 33

5 1 9

2

[W] 37th Terrace

Total: 604

In: 238 Out: 366

12
218
8

19
347
37

Out: 298 In: 403

Total: 701

[E] 37th Terrace

14 2 71

Out: 46 In: 87

Total: 133

[S] Driveway

37th Terrace & Sunterra Springs East Drive - TMC

Tue Apr 23, 2024

AM Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177142, Location: 39.050914, -94.353823



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Suntterra Springs East Drive Southbound							37th Terrace Westbound							Driveway Northbound							37th Terrace Eastbound							
Time	R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*		R	T	L	U	App	Ped*	Int	
2024-04-23 7:15AM	1	0	0	0	1	0		0	22	0	0	22	0		1	0	0	0	1	0		0	16	2	0	18	0		42
7:30AM	0	0	0	0	0	0		0	25	1	0	26	0		1	1	1	0	3	0		0	8	1	0	9	0		38
7:45AM	1	0	0	0	1	1		0	26	0	0	26	0		0	0	1	0	1	0		0	7	4	0	11	0		39
8:00AM	0	0	0	0	0	0		0	21	0	0	21	0		0	1	0	0	1	0		0	7	0	0	7	0		29
Total	2	0	0	0	2	1		0	94	1	0	95	0		2	2	2	0	6	0		0	38	7	0	45	0		148
% Approach	100%	0%	0%	0%	-	-		0%	98.9%	1.1%	0%	-	-		33.3%	33.3%	33.3%	0%	-	-		0%	84.4%	15.6%	0%	-	-		-
% Total	1.4%	0%	0%	0%	1.4%	-		0%	63.5%	0.7%	0%	64.2%	-		1.4%	1.4%	1.4%	0%	4.1%	-		0%	25.7%	4.7%	0%	30.4%	-		-
PHF	0.500	-	-	-	0.500	-		-	0.904	0.250	-	0.913	-		0.500	0.500	0.500	-	0.500	-		-	0.594	0.438	-	0.625	-		0.881
Lights	2	0	0	0	2	-		0	94	1	0	95	-		2	2	2	0	6	-		0	36	7	0	43	-		146
% Lights	100%	0%	0%	0%	100%	-		0%	100%	100%	0%	100%	-		100%	100%	100%	0%	100%	-		0%	94.7%	100%	0%	95.6%	-		98.6%
Articulated Trucks	0	0	0	0	0	-		0	0	0	0	0	-		0	0	0	0	0	-		0	0	0	0	0	-		0
% Articulated Trucks	0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%
Buses and Single-Unit Trucks	0	0	0	0	0	-		0	0	0	0	0	-		0	0	0	0	0	-		0	2	0	0	2	-		2
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%	0%	0%	0%	0%	-		0%	5.3%	0%	0%	4.4%	-		1.4%
Pedestrians	-	-	-	-	-	1		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		
% Pedestrians	-	-	-	-	-	100%		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-
Bicycles on Crosswalk	-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		-	-	-	-	-	0		
% Bicycles on Crosswalk	-	-	-	-	-	0%		-	-	-	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-		-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

37th Terrace & Sunterra Springs East Drive - TMC
Tue Apr 23, 2024
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1177142, Location: 39.050914, -94.353823

[N] Sunterra Springs East Drive

Total: 11
In: 2 Out: 9

2

1

[W] 37th Terrace

Total: 143
In: 45 Out: 98

7
38

94

1

Out: 40 In: 95
Total: 135
[E] 37th Terrace

Out: 1 In: 6
Total: 7
[S] Driveway

2 2 2

37th Terrace & Sunterra Springs East Drive - TMC

Tue Apr 23, 2024

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177142, Location: 39.050914, -94.353823



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Sunterra Springs East Drive Southbound						37th Terrace Westbound						Driveway Northbound						37th Terrace Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-04-23 5:00PM	0	0	2	0	2	0	1	33	0	0	34	0	8	0	1	0	9	0	0	21	1	0	22	0	67
5:15PM	2	1	3	0	6	0	0	24	5	0	29	0	7	0	2	0	9	0	2	17	0	0	19	0	63
5:30PM	0	0	0	0	0	0	3	18	6	0	27	0	12	0	1	0	13	0	0	15	2	0	17	0	57
5:45PM	0	0	0	0	0	0	1	28	5	0	34	0	8	0	3	0	11	0	1	13	0	0	14	0	59
Total	2	1	5	0	8	0	5	103	16	0	124	0	35	0	7	0	42	0	3	66	3	0	72	0	246
% Approach	25.0%	12.5%	62.5%	0%	-	-	4.0%	83.1%	12.9%	0%	-	-	83.3%	0%	16.7%	0%	-	-	4.2%	91.7%	4.2%	0%	-	-	-
% Total	0.8%	0.4%	2.0%	0%	3.3%	-	2.0%	41.9%	6.5%	0%	50.4%	-	14.2%	0%	2.8%	0%	17.1%	-	1.2%	26.8%	1.2%	0%	29.3%	-	-
PHF	0.250	0.250	0.417	-	0.333	-	0.417	0.780	0.667	-	0.912	-	0.729	-	0.583	-	0.808	-	0.375	0.786	0.375	-	0.818	-	0.918
Lights	2	1	5	0	8	-	5	102	16	0	123	-	35	0	6	0	41	-	3	65	3	0	71	-	243
% Lights	100%	100%	100%	0%	100%	-	100%	99.0%	100%	0%	99.2%	-	100%	0%	85.7%	0%	97.6%	-	100%	98.5%	100%	0%	98.6%	-	98.8%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	0	0	0	0	0	-	0	1	0	0	1	-	0	0	1	0	1	-	0	1	0	0	1	-	3
% Buses and Single-Unit Trucks	0%	0%	0%	0%	0%	-	0%	1.0%	0%	0%	0.8%	-	0%	0%	14.3%	0%	2.4%	-	0%	1.5%	0%	0%	1.4%	-	1.2%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

37th Terrace & Sunterra Springs East Drive - TMC

Tue Apr 23, 2024

PM Peak (5 PM - 6 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177142, Location: 39.050914, -94.353823



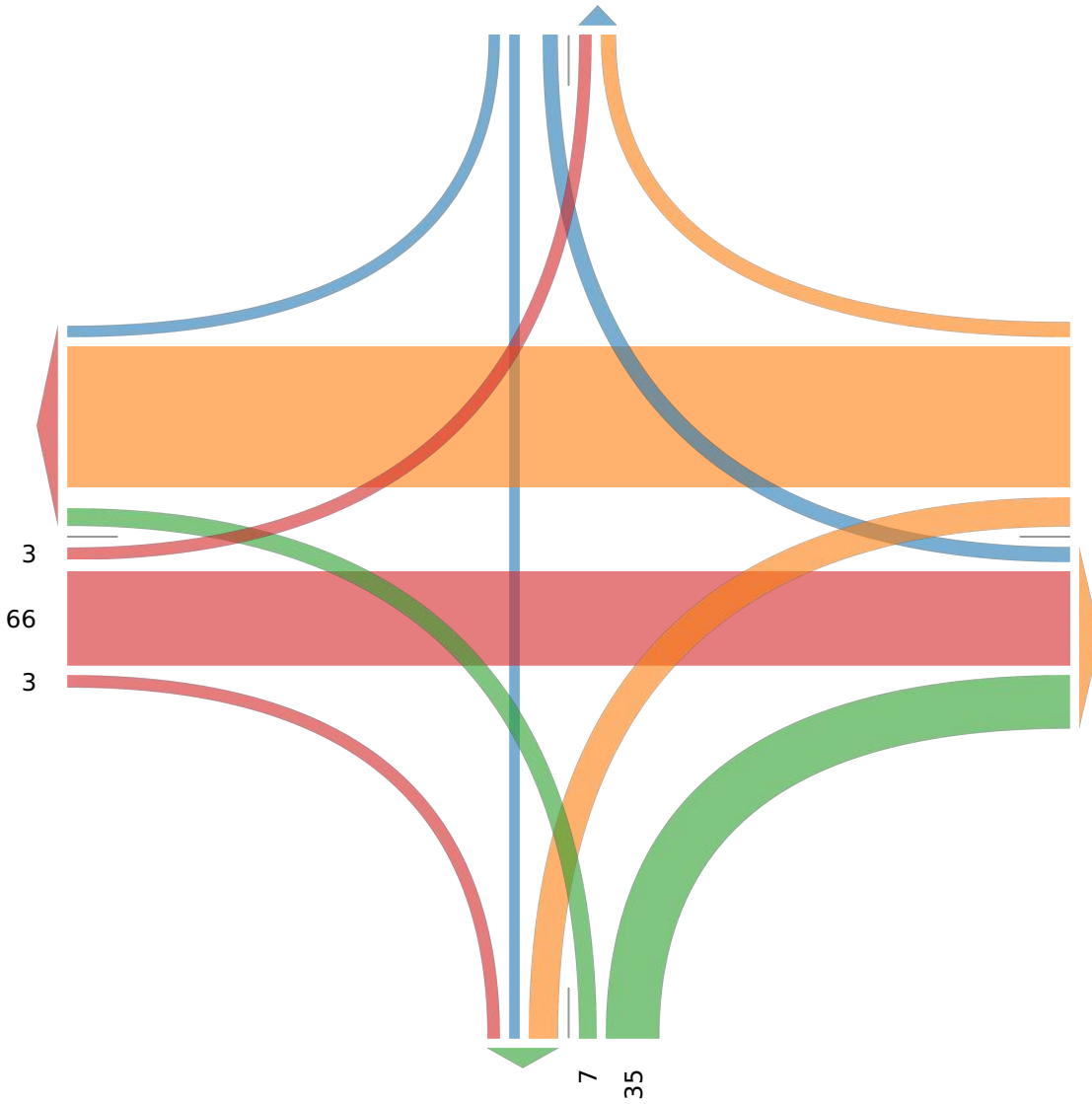
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Sunterra Springs East Drive

Total: 16
In: 8 Out: 8

2 1 5

[W] 37th Terrace
Total: 184
In: 72 Out: 112



5
103
16
Out: 106 In: 124
Total: 230
[E] 37th Terrace

Out: 20 In: 42
Total: 62
[S] Driveway

Arrowhead Avenue & 37th Terrace - TMC

Tue Apr 23, 2024

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

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177143, Location: 39.050331, -94.359381



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	North Southbound						37th Terrace Westbound						Arrowhead Avenue Northbound						37th Terrace Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-04-23 7:00AM	0	5	0	0	5	0	0	5	20	0	25	1	7	2	0	0	9	0	0	0	0	0	0	0	39
7:15AM	0	4	1	0	5	0	1	13	21	0	35	0	16	1	1	0	18	0	0	0	0	0	0	0	58
7:30AM	0	1	0	0	1	0	0	15	23	0	38	0	7	2	5	0	14	0	0	2	0	0	2	0	55
7:45AM	1	3	1	0	5	0	1	7	34	0	42	0	9	4	3	0	16	0	0	0	1	0	1	0	64
Hourly Total	1	13	2	0	16	0	2	40	98	0	140	1	39	9	9	0	57	0	0	2	1	0	3	0	216
8:00AM	0	9	0	0	9	0	1	7	19	0	27	0	12	4	5	0	21	0	0	0	1	0	1	0	58
8:15AM	0	6	0	0	6	0	0	10	18	0	28	0	11	6	8	0	25	0	1	0	1	0	2	0	61
8:30AM	0	3	0	0	3	1	0	9	24	0	33	1	8	2	0	0	10	0	1	1	0	0	2	0	48
8:45AM	0	2	0	0	2	0	3	9	25	0	37	0	16	1	8	0	25	0	0	0	0	0	0	0	64
Hourly Total	0	20	0	0	20	1	4	35	86	0	125	1	47	13	21	0	81	0	2	1	2	0	5	0	231
4:00PM	1	1	0	0	2	1	1	6	16	0	23	0	28	3	0	0	31	0	1	7	1	0	9	2	65
4:15PM	4	1	0	0	5	0	0	1	37	0	38	0	25	1	3	0	29	0	0	5	0	0	5	0	77
4:30PM	1	6	2	0	9	0	3	5	17	0	25	0	22	5	0	0	27	2	4	6	4	0	14	0	75
4:45PM	0	2	1	0	3	4	1	10	25	0	36	0	25	1	2	0	28	0	3	4	2	0	9	4	76
Hourly Total	6	10	3	0	19	5	5	22	95	0	122	0	100	10	5	0	115	2	8	22	7	0	37	6	293
5:00PM	0	1	1	0	2	0	1	8	27	0	36	0	28	5	1	0	34	0	2	3	0	0	5	0	77
5:15PM	0	5	2	0	7	2	1	8	21	0	30	0	19	4	2	0	25	0	1	5	0	0	6	0	68
5:30PM	0	2	0	0	2	1	0	3	19	0	22	0	21	1	0	0	22	2	2	3	0	0	5	0	51
5:45PM	0	3	0	0	3	1	0	9	28	0	37	1	32	6	1	0	39	0	3	4	0	0	7	0	86
Hourly Total	0	11	3	0	14	4	2	28	95	0	125	1	100	16	4	0	120	2	8	15	0	0	23	0	282
Total	7	54	8	0	69	10	13	125	374	0	512	3	286	48	39	0	373	4	18	40	10	0	68	6	1022
% Approach	10.1%	78.3%	11.6%	0%	-	-	2.5%	24.4%	73.0%	0%	-	-	76.7%	12.9%	10.5%	0%	-	-	26.5%	58.8%	14.7%	0%	-	-	-
% Total	0.7%	5.3%	0.8%	0%	6.8%	-	1.3%	12.2%	36.6%	0%	50.1%	-	28.0%	4.7%	3.8%	0%	36.5%	-	1.8%	3.9%	1.0%	0%	6.7%	-	-
Lights	7	51	8	0	66	-	12	125	365	0	502	-	280	47	38	0	365	-	18	39	10	0	67	-	1000
% Lights	100%	94.4%	100%	0%	95.7%	-	92.3%	100%	97.6%	0%	98.0%	-	97.9%	97.9%	97.4%	0%	97.9%	-	100%	97.5%	100%	0%	98.5%	-	97.8%
Articulated Trucks	0	1	0	0	1	-	0	0	0	0	0	-	0	0	1	0	1	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	1.9%	0%	0%	1.4%	-	0%	0%	0%	0%	0%	-	0%	0%	2.6%	0%	0.3%	-	0%	0%	0%	0%	0%	-	0.2%
Buses and Single-Unit Trucks	0	2	0	0	2	-	1	0	9	0	10	-	6	1	0	0	7	-	0	1	0	0	1	-	20
% Buses and Single-Unit Trucks	0%	3.7%	0%	0%	2.9%	-	7.7%	0%	2.4%	0%	2.0%	-	2.1%	2.1%	0%	0%	1.9%	-	0%	2.5%	0%	0%	1.5%	-	2.0%
Pedestrians	-	-	-	-	-	10	-	-	-	-	-	3	-	-	-	-	-	4	-	-	-	-	-	6	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	100%
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Arrowhead Avenue & 37th Terrace - TMC

Tue Apr 23, 2024

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

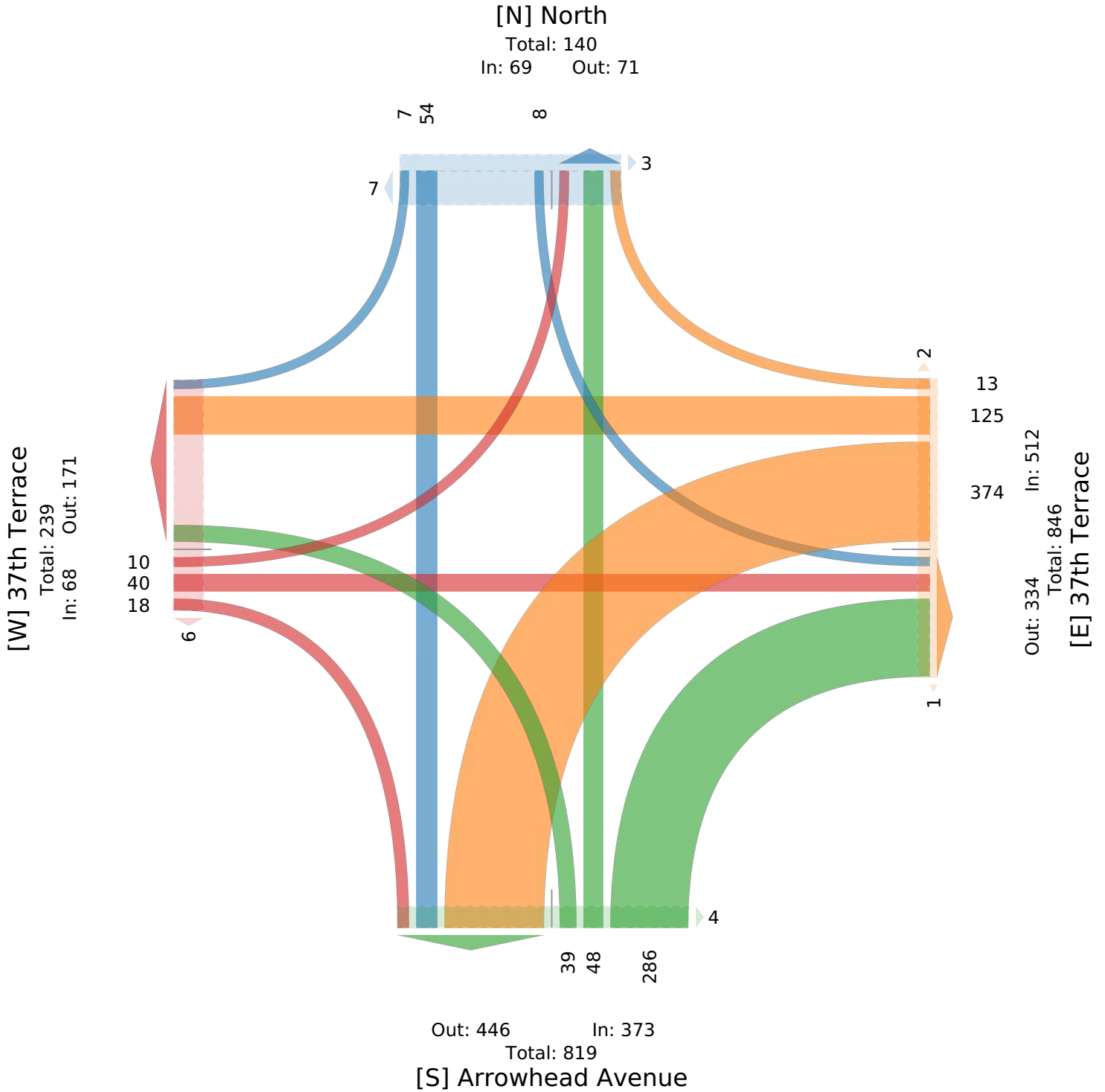
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177143, Location: 39.050331, -94.359381



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



Arrowhead Avenue & 37th Terrace - TMC

Tue Apr 23, 2024

AM Peak (7:30 AM - 8:30 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177143, Location: 39.050331, -94.359381



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	North Southbound						37th Terrace Westbound						Arrowhead Avenue Northbound						37th Terrace Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-04-23 7:30AM	0	1	0	0	1	0	0	15	23	0	38	0	7	2	5	0	14	0	0	2	0	0	2	0	55
7:45AM	1	3	1	0	5	0	1	7	34	0	42	0	9	4	3	0	16	0	0	0	1	0	1	0	64
8:00AM	0	9	0	0	9	0	1	7	19	0	27	0	12	4	5	0	21	0	0	0	1	0	1	0	58
8:15AM	0	6	0	0	6	0	0	10	18	0	28	0	11	6	8	0	25	0	1	0	1	0	2	0	61
Total	1	19	1	0	21	0	2	39	94	0	135	0	39	16	21	0	76	0	1	2	3	0	6	0	238
% Approach	4.8%	90.5%	4.8%	0%	-	-	1.5%	28.9%	69.6%	0%	-	-	51.3%	21.1%	27.6%	0%	-	-	16.7%	33.3%	50.0%	0%	-	-	-
% Total	0.4%	8.0%	0.4%	0%	8.8%	-	0.8%	16.4%	39.5%	0%	56.7%	-	16.4%	6.7%	8.8%	0%	31.9%	-	0.4%	0.8%	1.3%	0%	2.5%	-	-
PHF	0.250	0.528	0.250	-	0.583	-	0.500	0.650	0.691	-	0.804	-	0.813	0.667	0.656	-	0.760	-	0.250	0.250	0.750	-	0.750	-	0.930
Lights	1	18	1	0	20	-	2	39	93	0	134	-	37	15	21	0	73	-	1	1	3	0	5	-	232
% Lights	100%	94.7%	100%	0%	95.2%	-	100%	100%	98.9%	0%	99.3%	-	94.9%	93.8%	100%	0%	96.1%	-	100%	50.0%	100%	0%	83.3%	-	97.5%
Articulated Trucks	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	0	1	0	0	1	-	0	0	1	0	1	-	2	1	0	0	3	-	0	1	0	0	1	-	6
% Buses and Single-Unit Trucks	0%	5.3%	0%	0%	4.8%	-	0%	0%	1.1%	0%	0.7%	-	5.1%	6.3%	0%	0%	3.9%	-	0%	50.0%	0%	0%	16.7%	-	2.5%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Arrowhead Avenue & 37th Terrace - TMC

Tue Apr 23, 2024

AM Peak (7:30 AM - 8:30 AM)

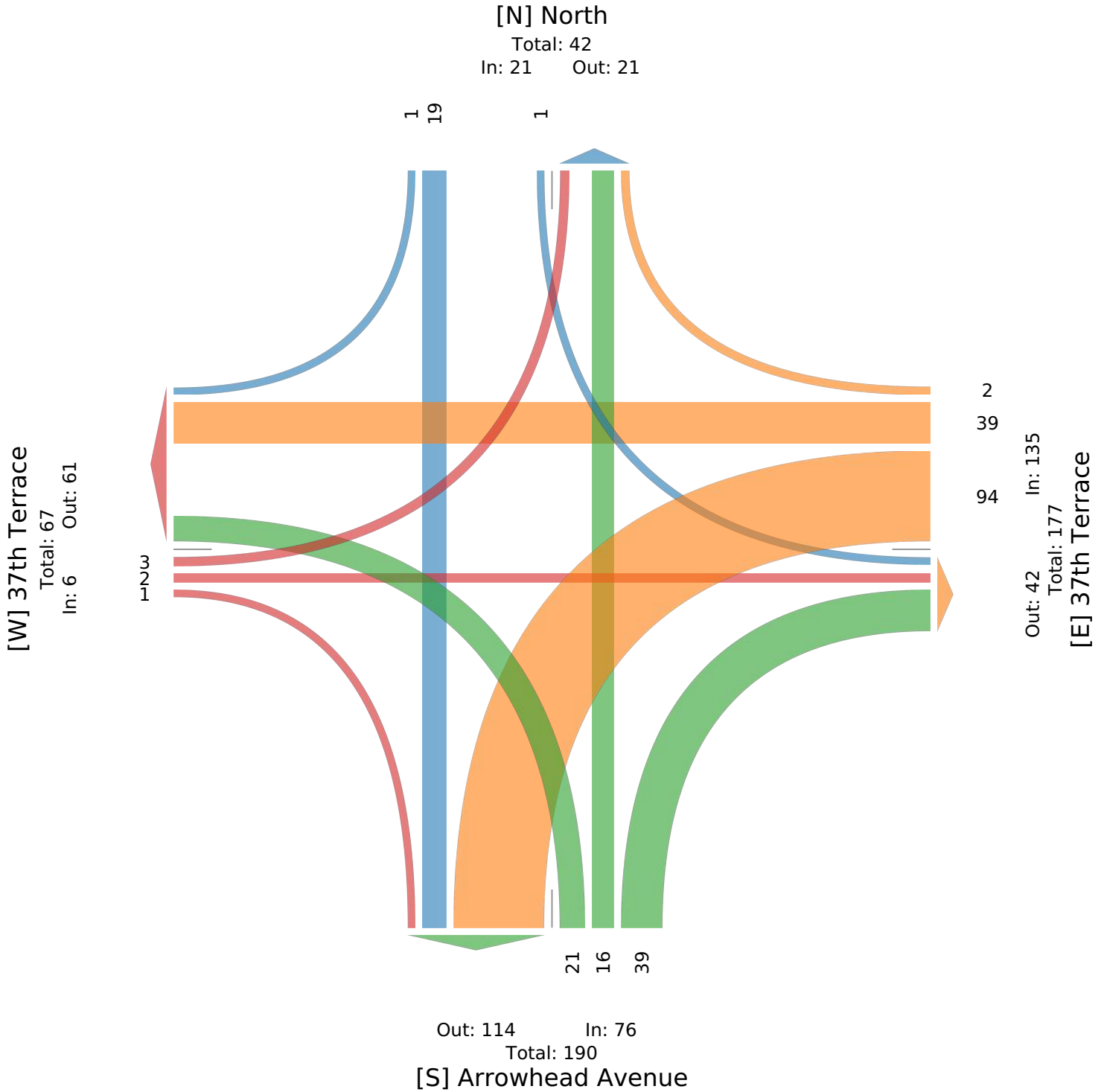
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177143, Location: 39.050331, -94.359381



Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



Arrowhead Avenue & 37th Terrace - TMC

Tue Apr 23, 2024

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

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Crosswalk)

All Movements

ID: 1177143, Location: 39.050331, -94.359381

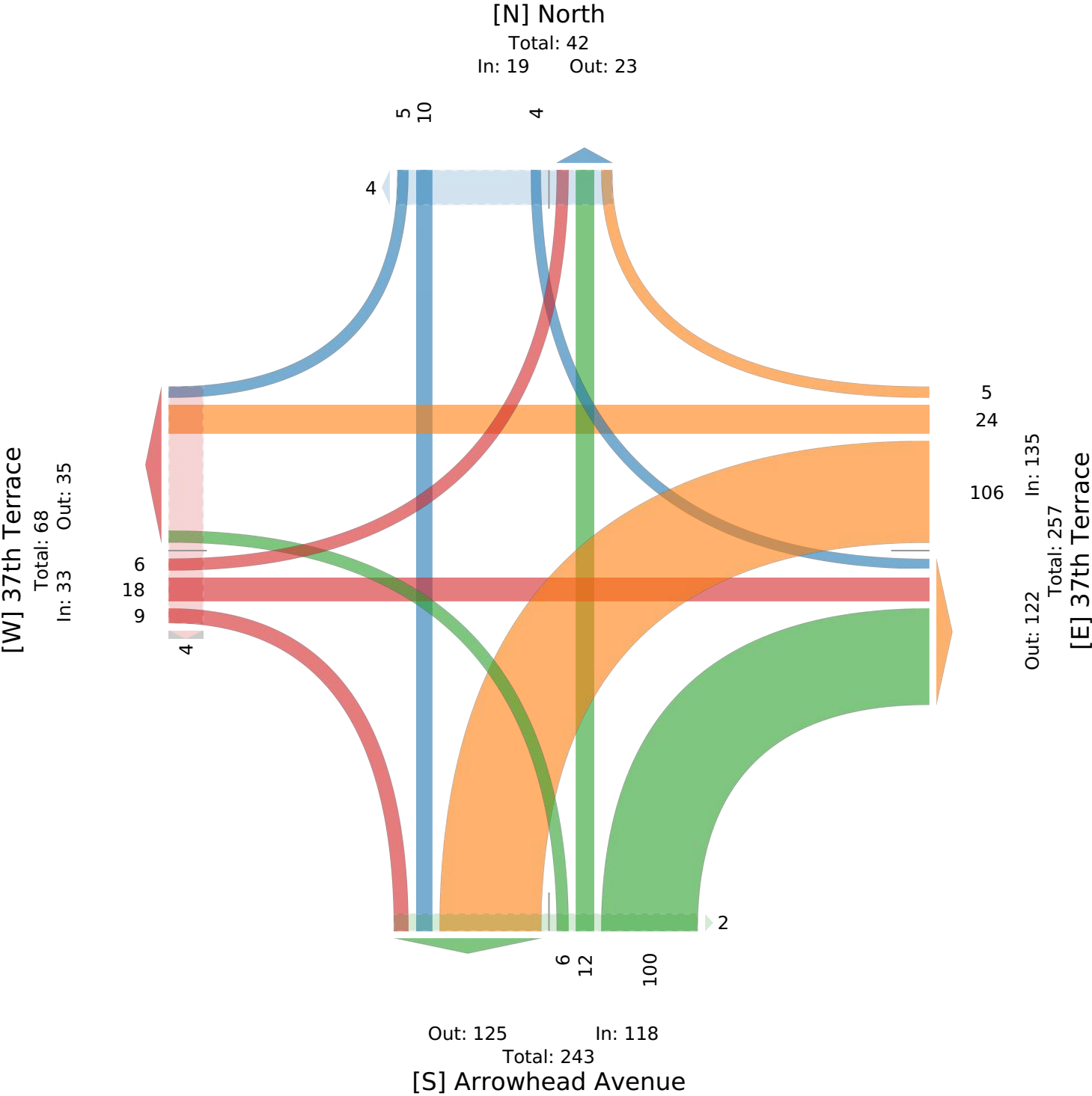


Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	North Southbound						37th Terrace Westbound						Arrowhead Avenue Northbound						37th Terrace Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-04-23 4:15PM	4	1	0	0	5	0	0	1	37	0	38	0	25	1	3	0	29	0	0	5	0	0	5	0	77
4:30PM	1	6	2	0	9	0	3	5	17	0	25	0	22	5	0	0	27	2	4	6	4	0	14	0	75
4:45PM	0	2	1	0	3	4	1	10	25	0	36	0	25	1	2	0	28	0	3	4	2	0	9	4	76
5:00PM	0	1	1	0	2	0	1	8	27	0	36	0	28	5	1	0	34	0	2	3	0	0	5	0	77
Total	5	10	4	0	19	4	5	24	106	0	135	0	100	12	6	0	118	2	9	18	6	0	33	4	305
% Approach	26.3%	52.6%	21.1%	0%	-	-	3.7%	17.8%	78.5%	0%	-	-	84.7%	10.2%	5.1%	0%	-	-	27.3%	54.5%	18.2%	0%	-	-	-
% Total	1.6%	3.3%	1.3%	0%	6.2%	-	1.6%	7.9%	34.8%	0%	44.3%	-	32.8%	3.9%	2.0%	0%	38.7%	-	3.0%	5.9%	2.0%	0%	10.8%	-	-
PHF	0.313	0.417	0.500	-	0.528	-	0.417	0.600	0.716	-	0.888	-	0.893	0.600	0.500	-	0.868	-	0.563	0.750	0.375	-	0.589	-	0.990
Lights	5	8	4	0	17	-	4	24	103	0	131	-	98	12	5	0	115	-	9	18	6	0	33	-	296
% Lights	100%	80.0%	100%	0%	89.5%	-	80.0%	100%	97.2%	0%	97.0%	-	98.0%	100%	83.3%	0%	97.5%	-	100%	100%	100%	0%	100%	-	97.0%
Articulated Trucks	0	1	0	0	1	-	0	0	0	0	0	-	0	0	1	0	1	-	0	0	0	0	0	-	2
% Articulated Trucks	0%	10.0%	0%	0%	5.3%	-	0%	0%	0%	0%	0%	-	0%	0%	16.7%	0%	0.8%	-	0%	0%	0%	0%	0%	-	0.7%
Buses and Single-Unit Trucks	0	1	0	0	1	-	1	0	3	0	4	-	2	0	0	0	2	-	0	0	0	0	0	-	7
% Buses and Single-Unit Trucks	0%	10.0%	0%	0%	5.3%	-	20.0%	0%	2.8%	0%	3.0%	-	2.0%	0%	0%	0%	1.7%	-	0%	0%	0%	0%	0%	-	2.3%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Arrowhead Avenue & 37th Terrace - TMC
 Tue Apr 23, 2024
 PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
 All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks,
 Pedestrians, Bicycles on Crosswalk)
 All Movements
 ID: 1177143, Location: 39.050331, -94.359381



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

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 59

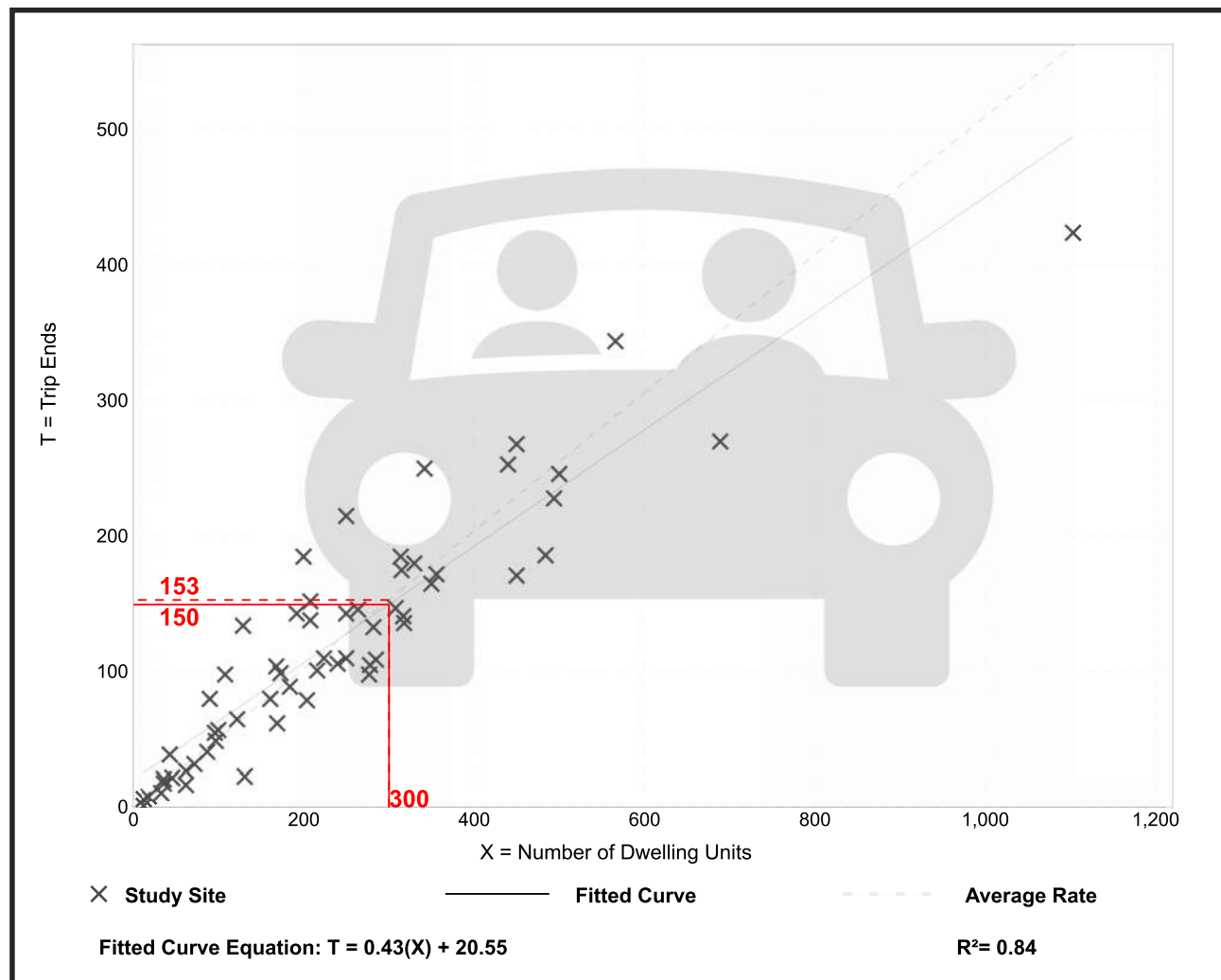
Avg. Num. of Dwelling Units: 241

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Calculated Trip Ends:

Average Rate: 153 (Total), 96 (Entry), 57 (Exit)

Fitted Curve: 150 (Total), 94 (Entry), 56 (Exit)

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

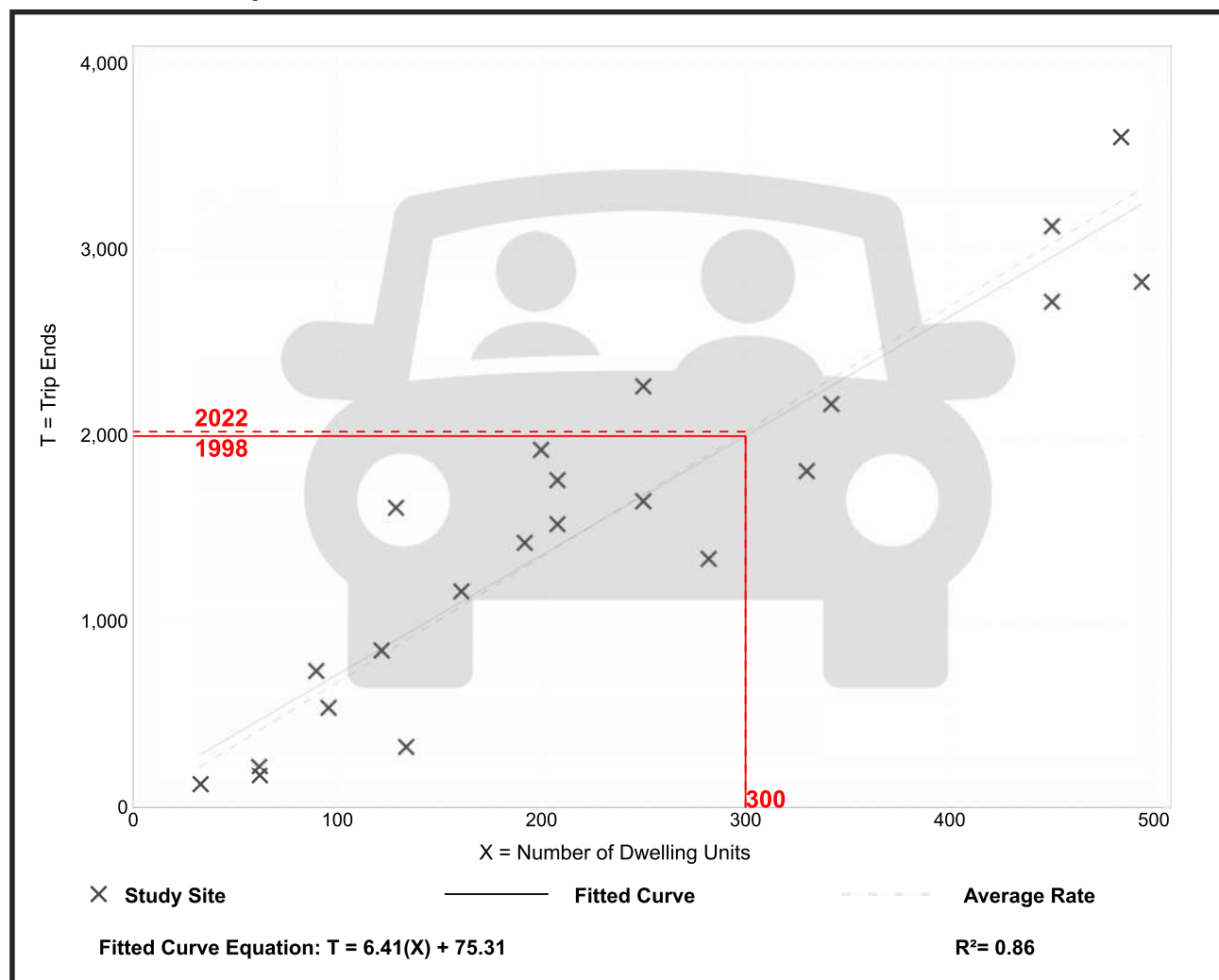
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Calculated Trip Ends:

Average Rate: 2022 (Total), 1011 (Entry), 1011 (Exit)

Fitted Curve: 1998 (Total), 999 (Entry), 999 (Exit)

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

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 49

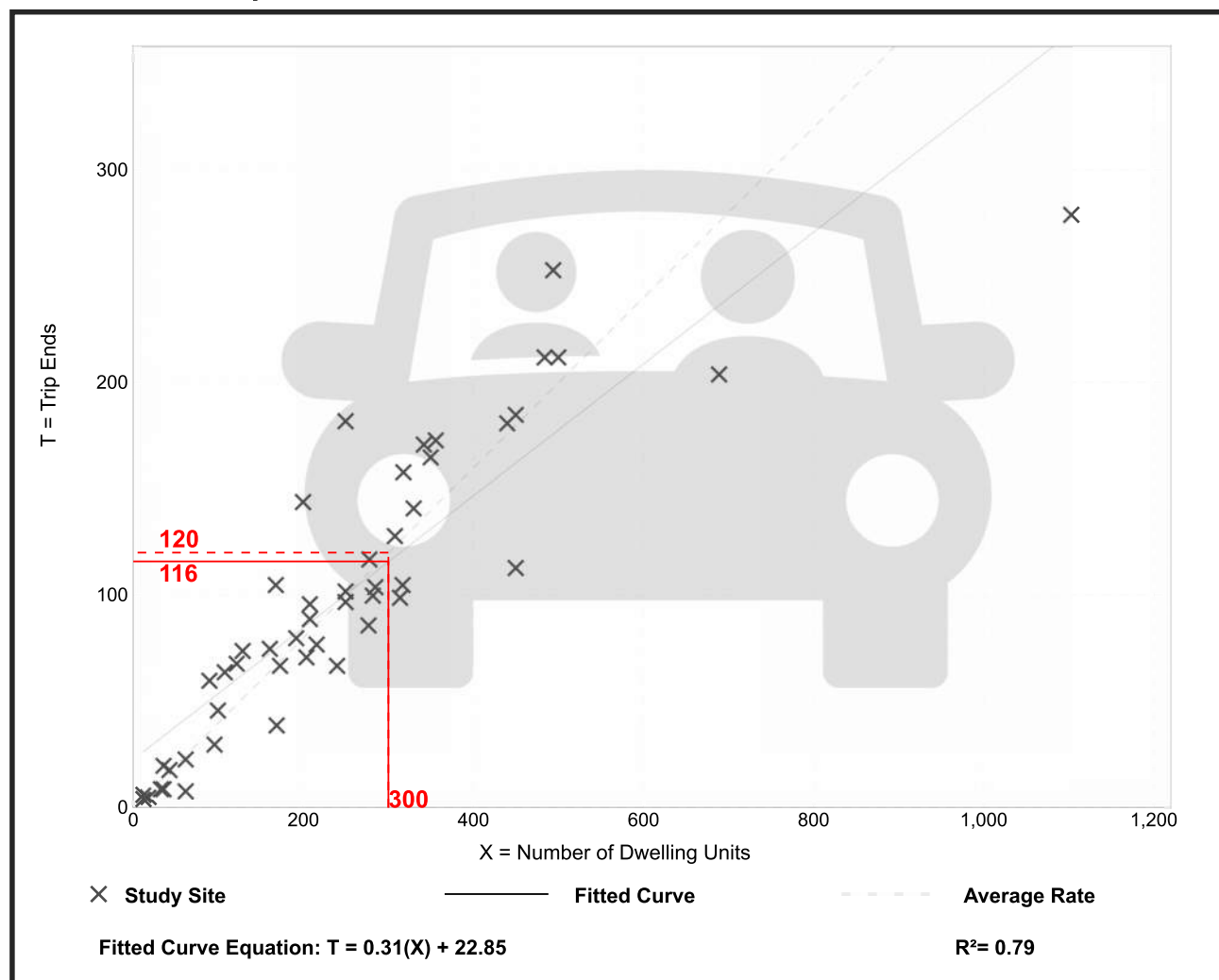
Avg. Num. of Dwelling Units: 249

Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Calculated Trip Ends:

Average Rate: 120 (Total), 29 (Entry), 91 (Exit)

Fitted Curve: 116 (Total), 28 (Entry), 88 (Exit)

HCM 7th Signalized Intersection Summary

2: Jackson Dr & 37th Terr

Jackson Apartments TIS

Existing AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	14	8	17	45	12	4	50	10	18	127	48
Future Volume (veh/h)	18	14	8	17	45	12	4	50	10	18	127	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1796	1707	1870	1870	1781	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	16	9	20	52	14	5	58	12	21	148	56
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	7	13	2	2	8	2	2	2	2	2	2
Cap, veh/h	325	181	102	358	238	64	17	1293	260	774	1185	431
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.01	0.44	0.44	0.04	0.46	0.46
Sat Flow, veh/h	1335	1080	607	1386	1419	382	1781	2949	592	1781	2552	928
Grp Volume(v), veh/h	21	0	25	20	0	66	5	34	36	21	101	103
Grp Sat Flow(s),veh/h/ln	1335	0	1687	1386	0	1802	1781	1777	1764	1781	1777	1703
Q Serve(g_s), s	0.7	0.0	0.6	0.6	0.0	1.6	0.1	0.6	0.6	0.3	1.6	1.7
Cycle Q Clear(g_c), s	2.3	0.0	0.6	1.2	0.0	1.6	0.1	0.6	0.6	0.3	1.6	1.7
Prop In Lane	1.00		0.36	1.00		0.21	1.00		0.34	1.00		0.54
Lane Grp Cap(c), veh/h	325	0	283	358	0	302	17	779	773	774	825	791
V/C Ratio(X)	0.06	0.00	0.09	0.06	0.00	0.22	0.30	0.04	0.05	0.03	0.12	0.13
Avail Cap(c_a), veh/h	580	0	605	623	0	646	248	779	773	960	825	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	17.6	18.2	0.0	18.0	24.7	8.1	8.1	7.0	7.6	7.7
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.1	0.0	0.4	9.6	0.1	0.1	0.0	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.2	0.0	0.6	0.1	0.2	0.2	0.1	0.6	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.1	0.0	17.8	18.2	0.0	18.4	34.3	8.2	8.2	7.1	7.9	8.0
LnGrp LOS	B		B	B		B	C	A	A	A	A	A
Approach Vol, veh/h	46			86			75			225		
Approach Delay, s/veh	18.4			18.4			9.9			7.9		
Approach LOS	B			B			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	28.0		14.4	6.5	29.3		14.4				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	22.0		18.0	7.0	22.0		18.0				
Max Q Clear Time (g_c+I1), s	2.3	2.6		4.3	2.1	3.7		3.6				
Green Ext Time (p_c), s	0.0	0.3		0.1	0.0	1.0		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	11.4											
HCM 7th LOS	B											

Lanes, Volumes, Timings
2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)	17.7	14.4		17.6	15.3		19.8	6.8		5.2	5.6	
LOS	B	B		B	B		B	A		A	A	
Approach Delay (s/veh)		15.9			15.9			7.6			5.6	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	4	3		4	11		1	3		2	8	
Queue Length 95th (ft)	21	20		20	41		9	15		8	32	
Internal Link Dist (ft)		273			543			818			694	
Turn Bay Length (ft)	150			115			90			95		
Base Capacity (vph)	519	648		538	703		268	2353		927	2332	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.04		0.04	0.09		0.02	0.03		0.02	0.09	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 46.6

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.17

Intersection Signal Delay (s/veh): 9.1

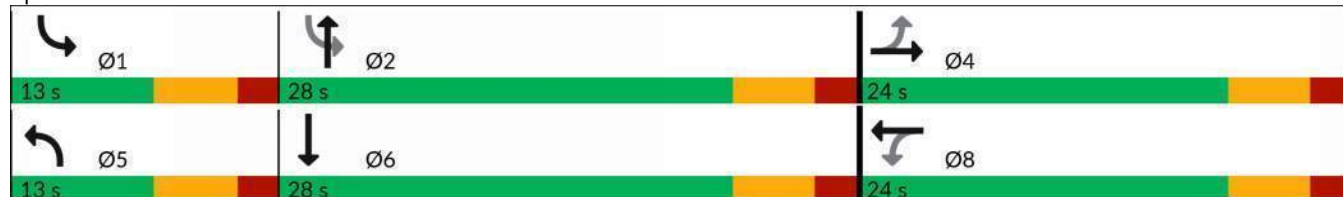
Intersection LOS: A

Intersection Capacity Utilization 26.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Jackson Dr & 37th Terr



Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	
Traffic Vol, veh/h	3	2	1	94	39	2	21	16	39	1	19	1
Future Vol, veh/h	3	2	1	94	39	2	21	16	39	1	19	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	50	2	2	2	2	2	6	5	2	5	2
Mvmt Flow	3	2	1	101	42	2	23	17	42	1	20	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	106	127	21	86	86	17	22	0	0	59	0	0
Stage 1	23	23	-	62	62	-	-	-	-	-	-	-
Stage 2	83	104	-	24	24	-	-	-	-	-	-	-
Critical Hdwy	7.12	7	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	6	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	6	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.45	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	873	682	1057	900	804	1062	1594	-	-	1545	-	-
Stage 1	995	790	-	949	843	-	-	-	-	-	-	-
Stage 2	925	725	-	994	876	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	813	672	1057	882	792	1062	1594	-	-	1545	-	-
Mov Cap-2 Maneuver	813	672	-	882	792	-	-	-	-	-	-	-
Stage 1	994	789	-	935	831	-	-	-	-	-	-	-
Stage 2	863	714	-	990	875	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	9.61			10.06			2.01			0.35		
HCM LOS	A			B								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1022	-	-	788	856	85	-
HCM Lane V/C Ratio	0.014	-	-	0.008	0.17	0.001	-
HCM Control Delay (s/veh)	7.3	0	-	9.6	10.1	7.3	0
HCM Lane LOS	A	A	-	A	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0	0.6	0	-

HCM 7th Signalized Intersection Summary

2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	33	17	19	50	22	13	162	22	20	177	61
Future Volume (veh/h)	62	33	17	19	50	22	13	162	22	20	177	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1826	1781	1856	1767	1826	1870	1870
Adj Flow Rate, veh/h	68	36	19	21	55	24	14	178	24	22	195	67
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	5	8	3	9	5	2	2
Cap, veh/h	343	219	115	363	234	102	42	1303	173	646	1122	374
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.42	0.42	0.04	0.43	0.43
Sat Flow, veh/h	1320	1153	608	1349	1235	539	1697	3128	416	1739	2618	872
Grp Volume(v), veh/h	68	0	55	21	0	79	14	99	103	22	130	132
Grp Sat Flow(s), veh/h/ln	1320	0	1761	1349	0	1773	1697	1763	1781	1739	1777	1713
Q Serve(g_s), s	2.3	0.0	1.3	0.7	0.0	1.9	0.4	1.8	1.8	0.4	2.3	2.4
Cycle Q Clear(g_c), s	4.2	0.0	1.3	2.0	0.0	1.9	0.4	1.8	1.8	0.4	2.3	2.4
Prop In Lane	1.00		0.35	1.00		0.30	1.00		0.23	1.00		0.51
Lane Grp Cap(c), veh/h	343	0	334	363	0	336	42	734	742	646	762	734
V/C Ratio(X)	0.20	0.00	0.16	0.06	0.00	0.23	0.33	0.14	0.14	0.03	0.17	0.18
Avail Cap(c_a), veh/h	590	0	664	616	0	668	236	734	742	823	762	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	17.1	17.9	0.0	17.3	24.2	9.1	9.1	7.7	8.9	8.9
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.1	0.0	0.4	4.6	0.4	0.4	0.0	0.5	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.2	0.0	0.7	0.2	0.6	0.7	0.1	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.4	0.0	17.3	18.0	0.0	17.7	28.8	9.5	9.5	7.7	9.4	9.4
LnGrp LOS	B		B	B		B	C	A	A	A	A	A
Approach Vol, veh/h	123			100			216			284		
Approach Delay, s/veh	18.5			17.7			10.7			9.3		
Approach LOS	B			B			B			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	27.0		15.6	7.2	27.6		15.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	21.0		19.0	7.0	21.0		19.0				
Max Q Clear Time (g_c+I1), s	2.4	3.8		6.2	2.4	4.4		4.0				
Green Ext Time (p_c), s	0.0	1.0		0.3	0.0	1.3		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	12.4											
HCM 7th LOS	B											

Lanes, Volumes, Timings
2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	33	17	19	50	22	13	162	22	20	177	61
Future Volume (vph)	62	33	17	19	50	22	13	162	22	20	177	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	115		0	90		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.948			0.954			0.982			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1766	0	1770	1761	0	1671	3418	0	1719	3405	0
Flt Permitted	0.706			0.721			0.950			0.625		
Satd. Flow (perm)	1315	1766	0	1343	1761	0	1671	3418	0	1131	3405	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			24			24			67	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		353			623			898			774	
Travel Time (s)		8.0			14.2			20.4			17.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	8%	3%	9%	5%	2%	2%
Adj. Flow (vph)	68	36	19	21	55	24	14	178	24	22	195	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	55	0	21	79	0	14	202	0	22	262	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		D.P+P	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8						2		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	10.0		7.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		13.0	24.0	
Total Split (s)	25.0	25.0		25.0	25.0		13.0	27.0		13.0	27.0	
Total Split (%)	38.5%	38.5%		38.5%	38.5%		20.0%	41.5%		20.0%	41.5%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	21.0		7.0	21.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effect Green (s)	10.4	10.4		10.4	10.4		7.1	27.4		27.2	27.4	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.15	0.58		0.58	0.58	
v/c Ratio	0.24	0.14		0.07	0.19		0.06	0.10		0.03	0.13	
Control Delay (s/veh)	18.8	12.9		16.7	13.7		19.8	7.4		5.6	6.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lanes, Volumes, Timings
2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)	18.8	12.9		16.7	13.7		19.8	7.4		5.6	6.4	
LOS	B	B		B	B		B	A		A	A	
Approach Delay (s/veh)		16.2			14.4			8.2			6.4	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	13	7		4	11		3	11		2	12	
Queue Length 95th (ft)	50	35		22	46		18	40		10	44	
Internal Link Dist (ft)		273			543			818			694	
Turn Bay Length (ft)	150			115			90			95		
Base Capacity (vph)	537	732		548	733		251	1996		741	2006	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.08		0.04	0.11		0.06	0.10		0.03	0.13	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 47.2

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.24

Intersection Signal Delay (s/veh): 9.7

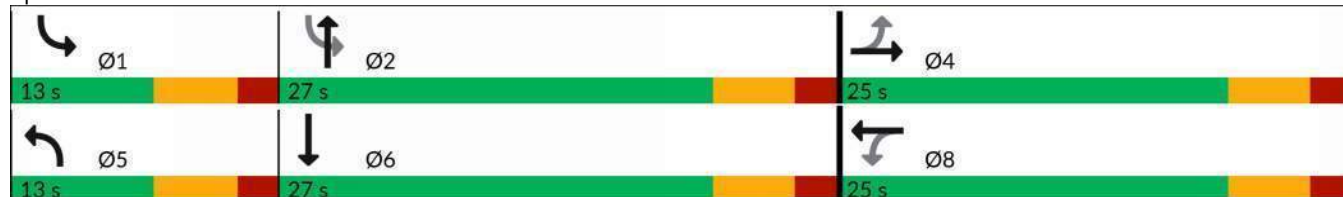
Intersection LOS: A

Intersection Capacity Utilization 36.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Jackson Dr & 37th Terr



Intersection												
Int Delay, s/veh	5.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	6	18	9	106	24	5	6	12	100	4	10	5
Future Vol, veh/h	6	18	9	106	24	5	6	12	100	4	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	3	2	20	2	2	2	2	10	2
Mvmt Flow	6	18	9	107	24	5	6	12	101	4	10	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	57	146	13	52	47	12	15	0	0	113	0	0
Stage 1	21	21	-	24	24	-	-	-	-	-	-	-
Stage 2	36	125	-	27	23	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.52	6.4	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.018	3.48	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	940	745	1068	945	844	1018	1603	-	-	1476	-	-
Stage 1	998	878	-	991	875	-	-	-	-	-	-	-
Stage 2	979	792	-	987	876	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	902	740	1068	908	838	1018	1603	-	-	1476	-	-
Mov Cap-2 Maneuver	902	740	-	908	838	-	-	-	-	-	-	-
Stage 1	995	876	-	987	871	-	-	-	-	-	-	-
Stage 2	943	789	-	956	873	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	9.48		9.72		0.37		1.57	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	600	-	-	838	898	355	-
HCM Lane V/C Ratio	0.004	-	-	0.04	0.152	0.003	-
HCM Control Delay (s/veh)	7.3	0	-	9.5	9.7	7.4	0
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.5	0	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	27	8	80	193	1
Future Vol, veh/h	4	27	8	80	193	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	31	9	93	224	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	290	113	226	0	-	0
Stage 1	225	-	-	-	-	-
Stage 2	65	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	677	919	1340	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	950	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	672	919	1340	-	-	-
Mov Cap-2 Maneuver	672	-	-	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	950	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.28	0.74	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	327	-	877	-	-
HCM Lane V/C Ratio	0.007	-	0.041	-	-
HCM Control Delay (s/veh)	7.7	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 7th Signalized Intersection Summary

2: Jackson Dr & 37th Terr

Jackson Apartments TIS

Existing AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	23	25	17	48	14	10	56	10	27	145	48
Future Volume (veh/h)	18	23	25	17	48	14	10	56	10	27	145	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1796	1707	1870	1870	1781	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	27	29	20	56	16	12	65	12	31	169	56
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	7	13	2	2	8	2	2	2	2	2	2
Cap, veh/h	328	140	150	338	247	71	38	1282	231	772	1200	385
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.02	0.43	0.43	0.05	0.45	0.45
Sat Flow, veh/h	1328	792	851	1348	1399	400	1781	3009	541	1781	2646	848
Grp Volume(v), veh/h	21	0	56	20	0	72	12	38	39	31	112	113
Grp Sat Flow(s),veh/h/ln	1328	0	1643	1348	0	1798	1781	1777	1773	1781	1777	1718
Q Serve(g_s), s	0.7	0.0	1.5	0.7	0.0	1.8	0.3	0.6	0.7	0.5	1.9	2.0
Cycle Q Clear(g_c), s	2.5	0.0	1.5	2.2	0.0	1.8	0.3	0.6	0.7	0.5	1.9	2.0
Prop In Lane	1.00		0.52	1.00		0.22	1.00		0.31	1.00		0.49
Lane Grp Cap(c), veh/h	328	0	290	338	0	317	38	757	756	772	806	779
V/C Ratio(X)	0.06	0.00	0.19	0.06	0.00	0.23	0.31	0.05	0.05	0.04	0.14	0.15
Avail Cap(c_a), veh/h	557	0	573	570	0	627	242	757	756	927	806	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	0.0	18.1	19.0	0.0	18.2	24.9	8.7	8.7	7.3	8.2	8.3
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.1	0.0	0.4	4.6	0.1	0.1	0.0	0.4	0.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.5	0.2	0.0	0.7	0.2	0.2	0.2	0.2	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.4	0.0	18.4	19.1	0.0	18.6	29.5	8.8	8.8	7.3	8.6	8.7
LnGrp LOS	B		B	B		B	C	A	A	A	A	A
Approach Vol, veh/h	77			92			89			256		
Approach Delay, s/veh	18.7			18.7			11.6			8.5		
Approach LOS	B			B			B			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	28.0		15.1	7.1	29.4		15.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	22.0		18.0	7.0	22.0		18.0				
Max Q Clear Time (g_c+I1), s	2.5	2.7		4.5	2.3	4.0		4.2				
Green Ext Time (p_c), s	0.0	0.3		0.2	0.0	1.1		0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	12.4											
HCM 7th LOS	B											

Lanes, Volumes, Timings

2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing + Site AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	23	25	17	48	14	10	56	10	27	145	48
Future Volume (vph)	18	23	25	17	48	14	10	56	10	27	145	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	115		0	90		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.922			0.967			0.977			0.963	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1591	0	1770	1778	0	1770	3458	0	1770	3408	0
Flt Permitted	0.714			0.720			0.950			0.704		
Satd. Flow (perm)	1330	1591	0	1341	1778	0	1770	3458	0	1311	3408	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		29			16			12			56	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		353			623			898			774	
Travel Time (s)		8.0			14.2			20.4			17.6	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	2%	7%	13%	2%	2%	8%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	21	27	29	20	56	16	12	65	12	31	169	56
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	56	0	20	72	0	12	77	0	31	225	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		D.P+P	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8						2		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	10.0		7.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		13.0	24.0	
Total Split (s)	24.0	24.0		24.0	24.0		13.0	28.0		13.0	28.0	
Total Split (%)	36.9%	36.9%		36.9%	36.9%		20.0%	43.1%		20.0%	43.1%	
Maximum Green (s)	18.0	18.0		18.0	18.0		7.0	22.0		7.0	22.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effect Green (s)	10.2	10.2		10.2	10.2		7.1	31.9		31.6	34.2	
Actuated g/C Ratio	0.21	0.21		0.21	0.21		0.15	0.65		0.65	0.70	
v/c Ratio	0.08	0.16		0.07	0.19		0.05	0.03		0.03	0.09	
Control Delay (s/veh)	19.7	13.4		19.6	16.8		21.8	8.2		4.9	5.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lanes, Volumes, Timings
2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing + Site AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)	19.7	13.4		19.6	16.8		21.8	8.2		4.9	5.4	
LOS	B	B		B	B		C	A		A	A	
Approach Delay (s/veh)		15.1			17.4			10.1			5.4	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)	4	5		4	11		3	3		4	10	
Queue Length 95th (ft)	21	31		20	44		15	16		10	35	
Internal Link Dist (ft)		273			543			818			694	
Turn Bay Length (ft)	150			115			90			95		
Base Capacity (vph)	499	615		503	677		258	2267		916	2402	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.09		0.04	0.11		0.05	0.03		0.03	0.09	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 48.8

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.19

Intersection Signal Delay (s/veh): 9.8

Intersection LOS: A

Intersection Capacity Utilization 26.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Jackson Dr & 37th Terr

 Ø1	 Ø2	 Ø4
13 s	28 s	24 s
 Ø5	 Ø6	 Ø8
13 s	28 s	24 s

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	40	97	9	26	31
Future Vol, veh/h	10	40	97	9	26	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	7	4	2	2	2
Mvmt Flow	12	47	113	10	30	36

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	123	0	0 188 118
Stage 1	-	-	- 118 -
Stage 2	-	-	- 70 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1464	-	- 801 934
Stage 1	-	-	- 907 -
Stage 2	-	-	- 953 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1464	-	- 795 934
Mov Cap-2 Maneuver	-	-	- 795 -
Stage 1	-	-	- 900 -
Stage 2	-	-	- 953 -

Approach	EB	WB	SB
HCM Control Delay, s/v	1.5	0	9.51
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	360	-	-	-	865
HCM Lane V/C Ratio	0.008	-	-	-	0.077
HCM Control Delay (s/veh)	7.5	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection												
Int Delay, s/veh	6.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	
Traffic Vol, veh/h	3	2	1	125	39	2	21	16	49	1	19	1
Future Vol, veh/h	3	2	1	125	39	2	21	16	49	1	19	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	50	2	2	2	2	2	6	5	2	5	2
Mvmt Flow	3	2	1	134	42	2	23	17	53	1	20	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	106	138	21	86	86	17	22	0	0	70	0	0
Stage 1	23	23	-	62	62	-	-	-	-	-	-	-
Stage 2	83	115	-	24	24	-	-	-	-	-	-	-
Critical Hdwy	7.12	7	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	6	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	6	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.45	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	873	673	1057	900	804	1062	1594	-	-	1531	-	-
Stage 1	995	790	-	949	843	-	-	-	-	-	-	-
Stage 2	925	716	-	994	876	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	813	662	1057	882	792	1062	1594	-	-	1531	-	-
Mov Cap-2 Maneuver	813	662	-	882	792	-	-	-	-	-	-	-
Stage 1	994	789	-	935	830	-	-	-	-	-	-	-
Stage 2	863	706	-	990	875	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.63	10.27	1.78	0.35
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1022	-	-	784	861	85	-
HCM Lane V/C Ratio	0.014	-	-	0.008	0.207	0.001	-
HCM Control Delay (s/veh)	7.3	0	-	9.6	10.3	7.4	0
HCM Lane LOS	A	A	-	A	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0	0.8	0	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	17	28	246	258	5
Future Vol, veh/h	2	17	28	246	258	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	2	19	31	270	284	5

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	483	145	289	0	-	0
Stage 1	286	-	-	-	-	-
Stage 2	197	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	513	877	1270	-	-	-
Stage 1	737	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	499	877	1270	-	-	-
Mov Cap-2 Maneuver	499	-	-	-	-	-
Stage 1	718	-	-	-	-	-
Stage 2	817	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.55	0.96	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	368	-	812	-	-
HCM Lane V/C Ratio	0.024	-	0.026	-	-
HCM Control Delay (s/veh)	7.9	0.2	9.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 7th Signalized Intersection Summary

2: Jackson Dr & 37th Terr

Jackson Apartments TIS

Existing + Site PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	39	28	19	59	31	32	181	22	26	188	61
Future Volume (veh/h)	62	39	28	19	59	31	32	181	22	26	188	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1826	1781	1856	1767	1826	1870	1870
Adj Flow Rate, veh/h	68	43	31	21	65	34	35	199	24	29	207	67
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	5	8	3	9	5	2	2
Cap, veh/h	323	192	138	343	219	115	91	1316	157	644	1084	341
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.05	0.41	0.41	0.05	0.41	0.41
Sat Flow, veh/h	1296	1011	729	1326	1157	605	1697	3172	378	1739	2660	837
Grp Volume(v), veh/h	68	0	74	21	0	99	35	109	114	29	136	138
Grp Sat Flow(s),veh/h/ln	1296	0	1739	1326	0	1761	1697	1763	1788	1739	1777	1720
Q Serve(g_s), s	2.4	0.0	1.9	0.7	0.0	2.5	1.0	2.0	2.0	0.5	2.5	2.7
Cycle Q Clear(g_c), s	4.9	0.0	1.9	2.6	0.0	2.5	1.0	2.0	2.0	0.5	2.5	2.7
Prop In Lane	1.00		0.42	1.00		0.34	1.00		0.21	1.00		0.49
Lane Grp Cap(c), veh/h	323	0	330	343	0	334	91	731	742	644	724	701
V/C Ratio(X)	0.21	0.00	0.22	0.06	0.00	0.30	0.39	0.15	0.15	0.05	0.19	0.20
Avail Cap(c_a), veh/h	555	0	641	581	0	650	231	731	742	800	724	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	0.0	17.7	18.8	0.0	17.9	23.6	9.4	9.4	7.6	9.8	9.8
Incr Delay (d2), s/veh	0.3	0.0	0.3	0.1	0.0	0.5	2.7	0.4	0.4	0.0	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.7	0.2	0.0	1.0	0.4	0.7	0.8	0.1	0.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.4	0.0	18.0	18.8	0.0	18.4	26.2	9.8	9.9	7.7	10.4	10.5
LnGrp LOS	C		B	B		B	C	A	A	A	B	B
Approach Vol, veh/h	142			120			258			303		
Approach Delay, s/veh	19.1			18.5			12.1			10.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	27.4		15.8	8.8	27.0		15.8				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	21.0		19.0	7.0	21.0		19.0				
Max Q Clear Time (g_c+I1), s	2.5	4.0		6.9	3.0	4.7		4.6				
Green Ext Time (p_c), s	0.0	1.1		0.4	0.0	1.4		0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	13.5											
HCM 7th LOS	B											

Lanes, Volumes, Timings

2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing + Site PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	39	28	19	59	31	32	181	22	26	188	61
Future Volume (vph)	62	39	28	19	59	31	32	181	22	26	188	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	115		0	90		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.937			0.948			0.984			0.963	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1745	0	1770	1748	0	1671	3427	0	1719	3408	0
Flt Permitted	0.693			0.709			0.950			0.612		
Satd. Flow (perm)	1291	1745	0	1321	1748	0	1671	3427	0	1107	3408	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			34			21			67	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		353			623			898			774	
Travel Time (s)		8.0			14.2			20.4			17.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	8%	3%	9%	5%	2%	2%
Adj. Flow (vph)	68	43	31	21	65	34	35	199	24	29	207	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	74	0	21	99	0	35	223	0	29	274	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		D.P+P	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8						2		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	10.0		7.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		13.0	24.0	
Total Split (s)	25.0	25.0		25.0	25.0		13.0	27.0		13.0	27.0	
Total Split (%)	38.5%	38.5%		38.5%	38.5%		20.0%	41.5%		20.0%	41.5%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	21.0		7.0	21.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effect Green (s)	10.5	10.5		10.5	10.5		7.1	28.9		28.7	26.6	
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.15	0.59		0.59	0.55	
v/c Ratio	0.25	0.19		0.07	0.25		0.14	0.11		0.04	0.14	
Control Delay (s/veh)	20.8	13.5		18.8	14.9		22.7	7.3		5.3	7.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lanes, Volumes, Timings 2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Existing + Site PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)	20.8	13.5		18.8	14.9		22.7	7.3		5.3	7.8	
LOS	C	B		B	B		C	A		A	A	
Approach Delay (s/veh)		17.0			15.6			9.4			7.6	
Approach LOS		B			B			A			A	
Queue Length 50th (ft)	14	8		4	13		7	12		3	13	
Queue Length 95th (ft)	50	41		22	53		33	44		12	47	
Internal Link Dist (ft)		273			543			818			694	
Turn Bay Length (ft)	150			115			90			95		
Base Capacity (vph)	513	712		525	715		244	2042		741	1894	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.13	0.10		0.04	0.14		0.14	0.11		0.04	0.14	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 48.7

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.25

Intersection Signal Delay (s/veh): 10.9

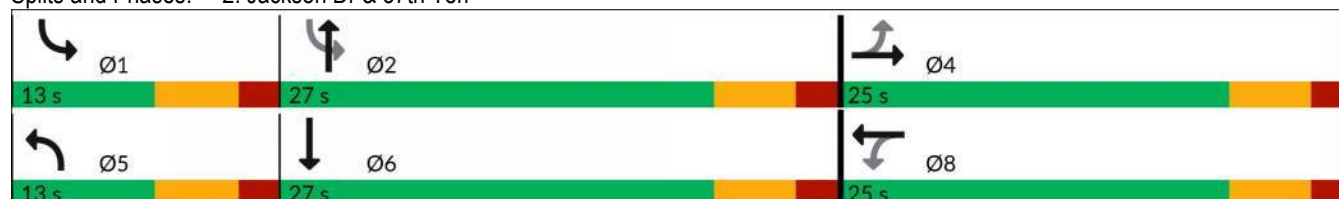
Intersection LOS: B

Intersection Capacity Utilization 39.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Jackson Dr & 37th Terr



Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	112	124	28	17	20
Future Vol, veh/h	33	112	124	28	17	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	123	136	31	19	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	167	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.12	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.218	-	-
Pot Cap-1 Maneuver	1411	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1411	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.73	0	10.07
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	410	-	-	-	751
HCM Lane V/C Ratio	0.026	-	-	-	0.054
HCM Control Delay (s/veh)	7.6	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection												
Int Delay, s/veh	5.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	6	18	9	126	24	5	6	12	133	4	10	5
Future Vol, veh/h	6	18	9	126	24	5	6	12	133	4	10	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	3	2	20	2	2	2	2	10	2
Mvmt Flow	6	18	9	127	24	5	6	12	134	4	10	5

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	57	179	13	52	47	12	15	0	0	146	0	0
Stage 1	21	21	-	24	24	-	-	-	-	-	-	-
Stage 2	36	159	-	27	23	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.52	6.4	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.018	3.48	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	940	714	1068	945	844	1018	1603	-	-	1435	-	-
Stage 1	998	878	-	991	875	-	-	-	-	-	-	-
Stage 2	979	767	-	987	876	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	902	709	1068	907	838	1018	1603	-	-	1435	-	-
Mov Cap-2 Maneuver	902	709	-	907	838	-	-	-	-	-	-	-
Stage 1	995	876	-	987	871	-	-	-	-	-	-	-
Stage 2	943	763	-	956	873	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	9.6		9.85		0.29		1.58	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	600	-	-	816	899	355	-
HCM Lane V/C Ratio	0.004	-	-	0.041	0.174	0.003	-
HCM Control Delay (s/veh)	7.3	0	-	9.6	9.8	7.5	0
HCM Lane LOS	A	A	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.6	0	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	27	8	119	287	1
Future Vol, veh/h	4	27	8	119	287	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	31	9	138	334	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	422	167	335	0	-	0
Stage 1	334	-	-	-	-	-
Stage 2	88	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	560	847	1221	-	-	-
Stage 1	697	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	555	847	1221	-	-	-
Mov Cap-2 Maneuver	555	-	-	-	-	-
Stage 1	692	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	9.75	0.55	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	227	-	794	-	-
HCM Lane V/C Ratio	0.008	-	0.045	-	-
HCM Control Delay (s/veh)	8	0.1	9.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 7th Signalized Intersection Summary

2: Jackson Dr & 37th Terr

Jackson Apartments TIS

Future + Site AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	29	29	25	70	20	12	80	15	36	207	71
Future Volume (veh/h)	27	29	29	25	70	20	12	80	15	36	207	71
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1796	1707	1870	1870	1781	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	31	34	34	29	81	23	14	93	17	42	241	83
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	7	13	2	2	8	2	2	2	2	2	2
Cap, veh/h	315	153	153	340	261	74	44	1221	218	743	1154	387
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.41	0.41	0.06	0.44	0.44
Sat Flow, veh/h	1290	824	824	1333	1401	398	1781	3013	538	1781	2613	877
Grp Volume(v), veh/h	31	0	68	29	0	104	14	54	56	42	162	162
Grp Sat Flow(s),veh/h/ln	1290	0	1648	1333	0	1799	1781	1777	1774	1781	1777	1713
Q Serve(g_s), s	1.1	0.0	1.8	1.0	0.0	2.6	0.4	1.0	1.0	0.7	2.9	3.0
Cycle Q Clear(g_c), s	3.7	0.0	1.8	2.8	0.0	2.6	0.4	1.0	1.0	0.7	2.9	3.0
Prop In Lane	1.00		0.50	1.00		0.22	1.00		0.30	1.00		0.51
Lane Grp Cap(c), veh/h	315	0	307	340	0	335	44	720	719	743	785	757
V/C Ratio(X)	0.10	0.00	0.22	0.09	0.00	0.31	0.32	0.07	0.08	0.06	0.21	0.21
Avail Cap(c_a), veh/h	548	0	604	581	0	660	241	720	719	875	785	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	17.9	19.1	0.0	18.2	24.8	9.5	9.5	7.6	8.9	8.9
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.1	0.0	0.5	4.1	0.2	0.2	0.0	0.6	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.7	0.3	0.0	1.0	0.2	0.4	0.4	0.2	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	19.9	0.0	18.3	19.2	0.0	18.7	28.9	9.7	9.7	7.6	9.5	9.6
LnGrp LOS	B		B	B		B	C	A	A	A	A	A
Approach Vol, veh/h	99			133			124			366		
Approach Delay, s/veh	18.8			18.8			11.8			9.3		
Approach LOS	B			B			B			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.2	27.0		15.6	7.3	28.9		15.6				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	21.0		19.0	7.0	21.0		19.0				
Max Q Clear Time (g_c+I1), s	2.7	3.0		5.7	2.4	5.0		4.8				
Green Ext Time (p_c), s	0.0	0.5		0.3	0.0	1.7		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	12.8											
HCM 7th LOS	B											

Lanes, Volumes, Timings

2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Future + Site AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	29	29	25	70	20	12	80	15	36	207	71
Future Volume (vph)	27	29	29	25	70	20	12	80	15	36	207	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	115		0	90		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.925			0.967			0.977			0.962	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1598	0	1770	1778	0	1770	3458	0	1770	3405	0
Flt Permitted	0.690			0.713			0.950			0.682		
Satd. Flow (perm)	1285	1598	0	1328	1778	0	1770	3458	0	1270	3405	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			22			17			77	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		353			623			898			774	
Travel Time (s)		8.0			14.2			20.4			17.6	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	2%	7%	13%	2%	2%	8%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	31	34	34	29	81	23	14	93	17	42	241	83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	31	68	0	29	104	0	14	110	0	42	324	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		D.P+P	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8						2		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	10.0		7.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		13.0	24.0	
Total Split (s)	25.0	25.0		25.0	25.0		13.0	27.0		13.0	27.0	
Total Split (%)	38.5%	38.5%		38.5%	38.5%		20.0%	41.5%		20.0%	41.5%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	21.0		7.0	21.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effect Green (s)	10.3	10.3		10.3	10.3		7.1	27.2		28.2	29.5	
Actuated g/C Ratio	0.21	0.21		0.21	0.21		0.14	0.55		0.57	0.60	
v/c Ratio	0.11	0.19		0.10	0.27		0.05	0.06		0.05	0.16	
Control Delay (s/veh)	19.3	12.9		19.2	17.2		21.7	8.8		5.3	6.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lanes, Volumes, Timings
2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Future + Site AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)	19.3	12.9		19.2	17.2		21.7	8.8		5.3	6.2	
LOS	B	B		B	B		C	A		A	A	
Approach Delay (s/veh)		14.9			17.6			10.2			6.1	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)	6	7		6	16		3	5		5	15	
Queue Length 95th (ft)	27	35		25	56		17	22		14	50	
Internal Link Dist (ft)		273			543			818			694	
Turn Bay Length (ft)	150			115			90			95		
Base Capacity (vph)	505	649		522	712		256	1921		802	2073	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.10		0.06	0.15		0.05	0.06		0.05	0.16	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 49.1

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.27

Intersection Signal Delay (s/veh): 10.1

Intersection LOS: B

Intersection Capacity Utilization 28.3%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Jackson Dr & 37th Terr

 Ø1	 Ø2	 Ø4
13 s	27 s	25 s
 Ø5	 Ø6	 Ø8
13 s	27 s	25 s

Intersection

Int Delay, s/veh 2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	59	144	9	26	31
Future Vol, veh/h	10	59	144	9	26	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	7	4	2	2	2
Mvmt Flow	12	69	167	10	30	36

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	178	0	0 265 173
Stage 1	-	-	- 173 -
Stage 2	-	-	- 92 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1398	-	- 725 871
Stage 1	-	-	- 857 -
Stage 2	-	-	- 932 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1398	-	- 718 871
Mov Cap-2 Maneuver	-	-	- 718 -
Stage 1	-	-	- 850 -
Stage 2	-	-	- 932 -

Approach	EB	WB	SB
HCM Control Delay, s/v	1.1	0	9.95
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	261	-	-	-	794
HCM Lane V/C Ratio	0.008	-	-	-	0.083
HCM Control Delay (s/veh)	7.6	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection												
Int Delay, s/veh	7.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔	↔		↔	
Traffic Vol, veh/h	4	3	1	171	58	3	31	24	68	1	28	1
Future Vol, veh/h	4	3	1	171	58	3	31	24	68	1	28	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	50	2	2	2	2	2	6	5	2	5	2
Mvmt Flow	4	3	1	184	62	3	33	26	73	1	30	1

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	156	198	31	126	126	26	31	0	0	99	0	0
Stage 1	33	33	-	92	92	-	-	-	-	-	-	-
Stage 2	124	166	-	34	33	-	-	-	-	-	-	-
Critical Hdwy	7.12	7	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	6	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	6	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.45	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	810	620	1044	847	765	1050	1581	-	-	1494	-	-
Stage 1	983	782	-	915	818	-	-	-	-	-	-	-
Stage 2	880	679	-	982	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	724	606	1044	822	747	1050	1581	-	-	1494	-	-
Mov Cap-2 Maneuver	724	606	-	822	747	-	-	-	-	-	-	-
Stage 1	983	781	-	894	800	-	-	-	-	-	-	-
Stage 2	791	664	-	976	867	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.21		11.47	1.85	0.25
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1015	-	-	700	804	60	-
HCM Lane V/C Ratio	0.021	-	-	0.012	0.31	0.001	-
HCM Control Delay (s/veh)	7.3	0	-	10.2	11.5	7.4	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	1.3	0	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	17	28	366	383	5
Future Vol, veh/h	2	17	28	366	383	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	3	2	2
Mvmt Flow	2	19	31	402	421	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	686	213	426	0	-	0
Stage 1	424	-	-	-	-	-
Stage 2	263	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	381	792	1129	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	369	792	1129	-	-	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	609	-	-	-	-	-
Stage 2	757	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v10.25		0.79	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	256	-	707	-	-
HCM Lane V/C Ratio	0.027	-	0.03	-	-
HCM Control Delay (s/veh)	8.3	0.2	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 7th Signalized Intersection Summary

2: Jackson Dr & 37th Terr

Jackson Apartments TIS

Future + Site PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	55	36	28	84	42	38	260	33	36	274	90
Future Volume (veh/h)	92	55	36	28	84	42	38	260	33	36	274	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1826	1781	1856	1767	1826	1870	1870
Adj Flow Rate, veh/h	101	60	40	31	92	46	42	286	36	40	301	99
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	5	8	3	9	5	2	2
Cap, veh/h	294	202	135	324	227	114	104	1273	159	595	1061	342
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.06	0.40	0.40	0.06	0.40	0.40
Sat Flow, veh/h	1251	1047	698	1295	1176	588	1697	3154	393	1739	2642	852
Grp Volume(v), veh/h	101	0	100	31	0	138	42	159	163	40	201	199
Grp Sat Flow(s),veh/h/ln	1251	0	1745	1295	0	1764	1697	1763	1785	1739	1777	1717
Q Serve(g_s), s	4.0	0.0	2.6	1.1	0.0	3.6	1.2	3.1	3.1	0.7	4.0	4.1
Cycle Q Clear(g_c), s	7.6	0.0	2.6	3.7	0.0	3.6	1.2	3.1	3.1	0.7	4.0	4.1
Prop In Lane	1.00		0.40	1.00		0.33	1.00		0.22	1.00		0.50
Lane Grp Cap(c), veh/h	294	0	337	324	0	341	104	712	720	595	713	689
V/C Ratio(X)	0.34	0.00	0.30	0.10	0.00	0.40	0.40	0.22	0.23	0.07	0.28	0.29
Avail Cap(c_a), veh/h	506	0	634	545	0	641	227	712	720	725	713	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	18.1	19.6	0.0	18.5	23.6	10.2	10.2	7.8	10.6	10.6
Incr Delay (d2), s/veh	0.7	0.0	0.5	0.1	0.0	0.8	2.5	0.7	0.7	0.0	1.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	0.3	0.0	1.4	0.5	1.1	1.2	0.2	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.5	0.0	18.5	19.8	0.0	19.2	26.2	10.9	11.0	7.9	11.5	11.7
LnGrp LOS	C		B	B		B	C	B	B	A	B	B
Approach Vol, veh/h	201			169			364			440		
Approach Delay, s/veh	20.5			19.3			12.7			11.3		
Approach LOS	C			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	27.1		16.1	9.2	27.0		16.1				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	21.0		19.0	7.0	21.0		19.0				
Max Q Clear Time (g_c+I1), s	2.7	5.1		9.6	3.2	6.1		5.7				
Green Ext Time (p_c), s	0.0	1.6		0.6	0.0	2.1		0.6				
Intersection Summary												
HCM 7th Control Delay, s/veh	14.5											
HCM 7th LOS	B											

Lanes, Volumes, Timings

2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Future + Site PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	55	36	28	84	42	38	260	33	36	274	90
Future Volume (vph)	92	55	36	28	84	42	38	260	33	36	274	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150		0	115		0	90		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.940			0.950			0.983			0.963	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1751	0	1770	1752	0	1671	3423	0	1719	3408	0
Flt Permitted	0.669			0.692			0.950			0.557		
Satd. Flow (perm)	1246	1751	0	1289	1752	0	1671	3423	0	1008	3408	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		40			39			22			72	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		353			623			898			774	
Travel Time (s)		8.0			14.2			20.4			17.6	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	2%	5%	8%	3%	9%	5%	2%	2%
Adj. Flow (vph)	101	60	40	31	92	46	42	286	36	40	301	99
Shared Lane Traffic (%)												
Lane Group Flow (vph)	101	100	0	31	138	0	42	322	0	40	400	0
Turn Type	Perm	NA		Perm	NA		Prot	NA		D.P+P	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8						2		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	10.0		7.0	10.0	
Minimum Split (s)	24.0	24.0		24.0	24.0		13.0	24.0		13.0	24.0	
Total Split (s)	25.0	25.0		25.0	25.0		13.0	27.0		13.0	27.0	
Total Split (%)	38.5%	38.5%		38.5%	38.5%		20.0%	41.5%		20.0%	41.5%	
Maximum Green (s)	19.0	19.0		19.0	19.0		7.0	21.0		7.0	21.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)	7.0	7.0		7.0	7.0			7.0			7.0	
Flash Don't Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effect Green (s)	11.3	11.3		11.3	11.3		7.2	26.4		27.4	26.4	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.15	0.54		0.56	0.54	
v/c Ratio	0.35	0.23		0.11	0.32		0.17	0.17		0.06	0.21	
Control Delay (s/veh)	22.0	13.4		18.4	15.8		23.9	9.9		6.2	9.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	

Lanes, Volumes, Timings
2: Jackson Dr & 37th Terr

Jackson Apartments TIS
Future + Site PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay (s/veh)	22.0	13.4		18.4	15.8		23.9	9.9		6.2	9.0	
LOS	C	B		B	B		C	A		A	A	
Approach Delay (s/veh)		17.7			16.3			11.5			8.7	
Approach LOS		B			B			B			A	
Queue Length 50th (ft)	21	12		6	20		9	19		5	21	
Queue Length 95th (ft)	68	50		28	70		40	67		16	74	
Internal Link Dist (ft)		273			543			818			694	
Turn Bay Length (ft)	150			115			90			95		
Base Capacity (vph)	493	717		510	717		244	1850		664	1865	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.20	0.14		0.06	0.19		0.17	0.17		0.06	0.21	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 49.2

Natural Cycle: 65

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.35

Intersection Signal Delay (s/veh): 12.2

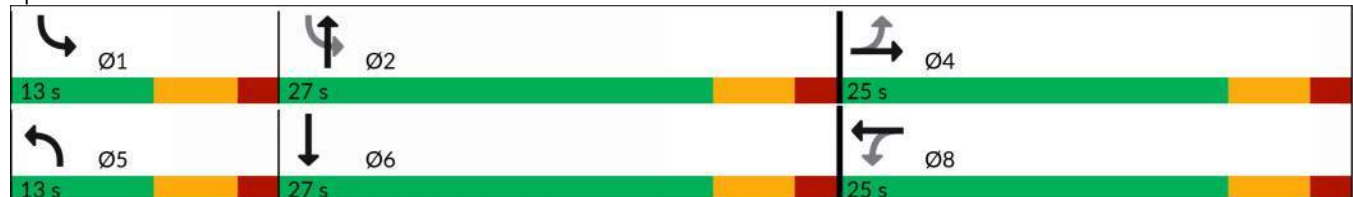
Intersection LOS: B

Intersection Capacity Utilization 52.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 2: Jackson Dr & 37th Terr



Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	33	166	184	28	17	20
Future Vol, veh/h	33	166	184	28	17	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	182	202	31	19	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	233	0	473
Stage 1	-	-	218
Stage 2	-	-	255
Critical Hdwy	4.12	-	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	2.218	-	3.518
Pot Cap-1 Maneuver	1335	-	550
Stage 1	-	-	819
Stage 2	-	-	788
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1335	-	533
Mov Cap-2 Maneuver	-	-	533
Stage 1	-	-	794
Stage 2	-	-	788

Approach	EB	WB	SB
HCM Control Delay, s/v	1.29	0	10.83
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	298	-	-	-	658
HCM Lane V/C Ratio	0.027	-	-	-	0.062
HCM Control Delay (s/veh)	7.8	0	-	-	10.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕	↕		↕	
Traffic Vol, veh/h	9	27	13	178	36	7	9	18	182	6	15	7
Future Vol, veh/h	9	27	13	178	36	7	9	18	182	6	15	7
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	3	2	20	2	2	2	2	10	2
Mvmt Flow	9	27	13	180	36	7	9	18	184	6	15	7

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	85	251	19	77	71	18	22	0	0	202	0	0
Stage 1	31	31	-	36	36	-	-	-	-	-	-	-
Stage 2	55	220	-	41	34	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.13	6.52	6.4	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.13	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.527	4.018	3.48	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	901	652	1060	909	820	1010	1593	-	-	1370	-	-
Stage 1	986	869	-	977	865	-	-	-	-	-	-	-
Stage 2	958	721	-	971	866	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	845	645	1060	851	811	1010	1593	-	-	1370	-	-
Mov Cap-2 Maneuver	845	645	-	851	811	-	-	-	-	-	-	-
Stage 1	981	866	-	970	859	-	-	-	-	-	-	-
Stage 2	905	716	-	925	863	-	-	-	-	-	-	-

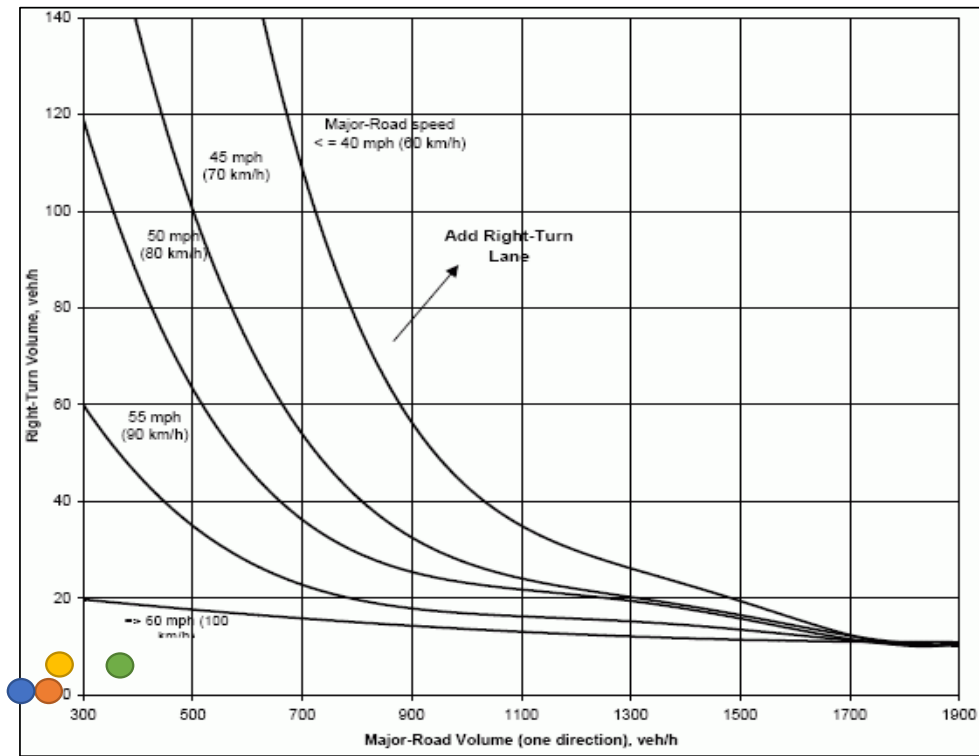
Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.09		10.75	0.31	1.64
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	600	-	-	756	848	363	-
HCM Lane V/C Ratio	0.006	-	-	0.065	0.263	0.004	-
HCM Control Delay (s/veh)	7.3	0	-	10.1	10.8	7.6	0
HCM Lane LOS	A	A	-	B	B	A	A
HCM 95th %tile Q(veh)	0	-	-	0.2	1.1	0	-

Jackson Drive & Drive 1 - 35 MPH

SB Right-Turn Lane

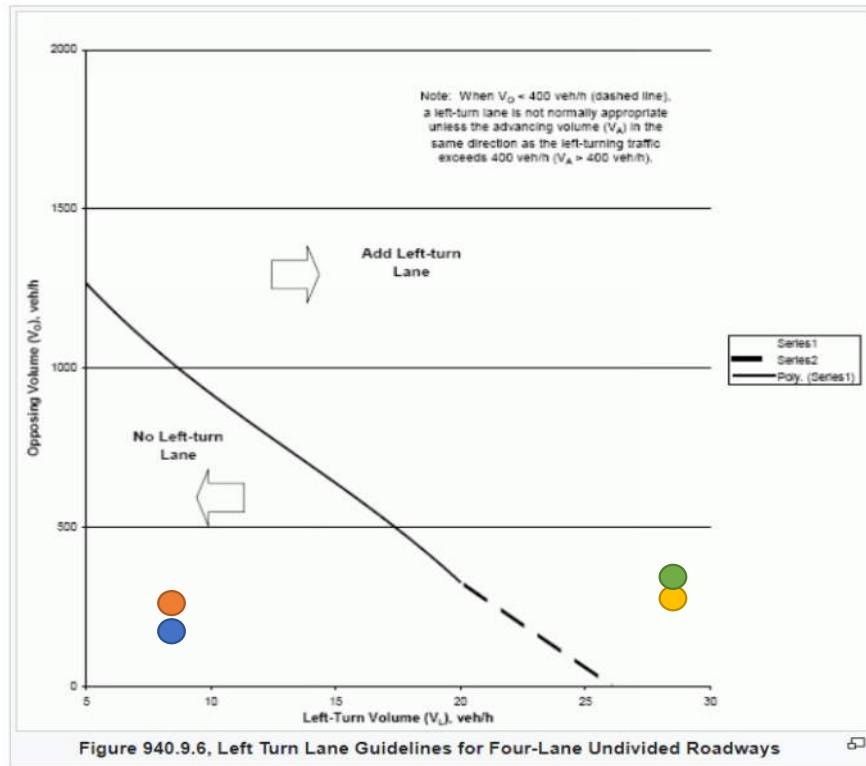
Volume Scenario	Advancing Volume	Right-Turn Volume	Lane Warranted?	Symbol
AM Ex + Site	194	1	NO	●
AM Fut + Site	288	1	NO	●
PM Ex + Site	263	5	NO	●
PM Fut + Site	388	5	NO	●



Jackson Drive & Drive 1 - 35 MPH

SB Left-Turn Lane

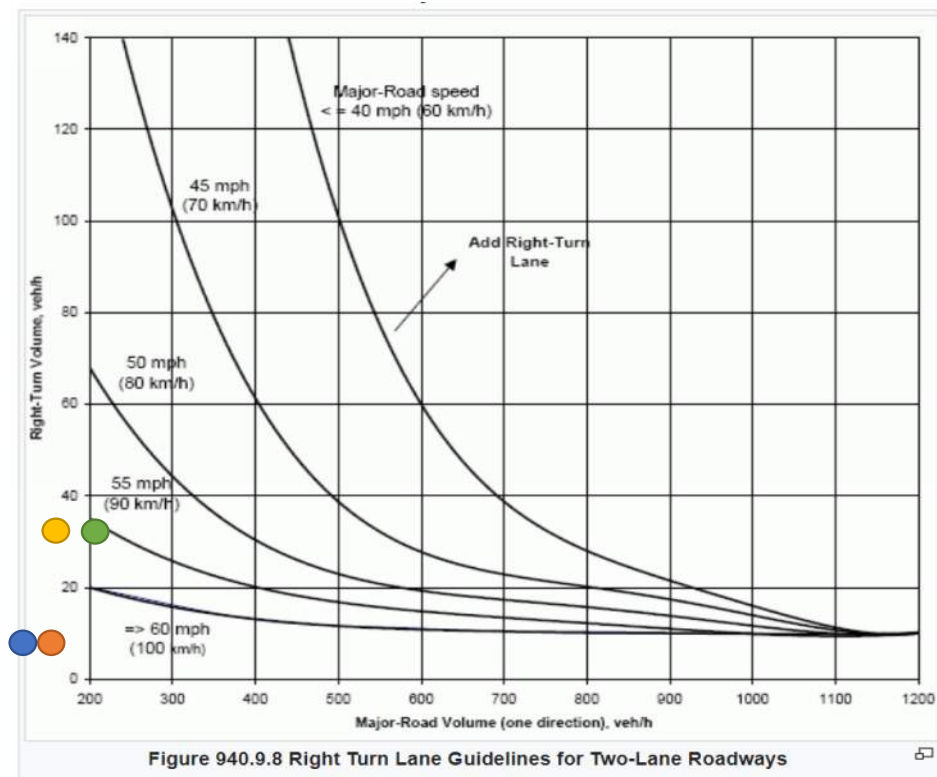
Volume Scenario	Opposing Volume	Advancing Volume	Left-Turn Volume	Percentage of Left-Turns	Lane Warranted?	Symbol
AM Ex + Site	194	88	8	9%	NO	Blue Circle
AM Fut + Site	288	127	8	6%	NO	Orange Circle
PM Ex + Site	263	274	28	10%	NO	Yellow Circle
PM Fut + Site	388	393	28	7%	NO	Green Circle



37th Terrace & Drive 2 - 30 MPH

WB Right-Turn Lane

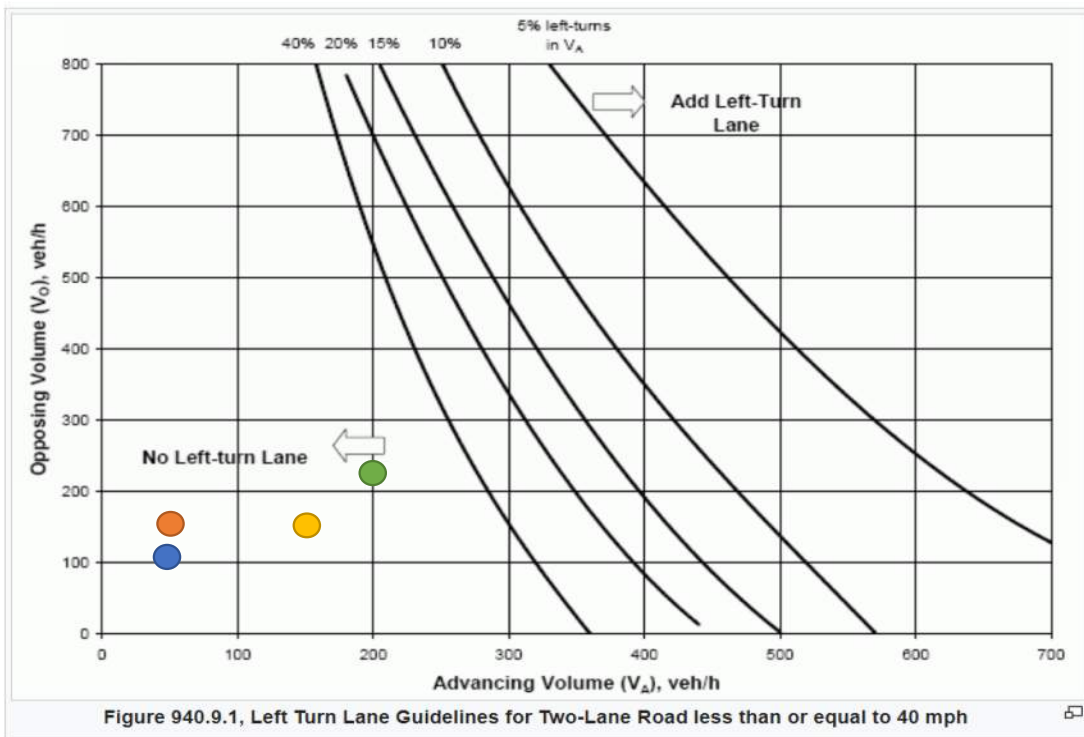
Volume Scenario	Advancing Volume	Right-Turn Volume	Lane Warranted?	Symbol
AM Ex + Site	106	9	NO	●
AM Fut + Site	153	9	NO	●
PM Ex + Site	152	28	NO	●
PM Fut + Site	212	28	NO	●



37th Terrace & Drive 2 - 30 MPH

EB Left-Turn Lane

Volume Scenario	Opposing Volume	Advancing Volume	Left-Turn Volume	Percentage of Left-Turns	Lane Warranted?	Symbol
AM Ex + Site	106	50	10	20%	NO	Blue Circle
AM Fut + Site	153	69	10	14%	NO	Orange Circle
PM Ex + Site	152	145	33	23%	NO	Yellow Circle
PM Fut + Site	212	199	33	17%	NO	Green Circle



INFINITY APARTMENTS PARKING LETTER



November 4, 2024

City of Independence, MO
111 E Maple Ave.
Independence, MO 64050

To whom it may concern:

Our proposed apartment complex includes 304 units with 500 parking spaces, providing a parking ratio of approximately 1.64 spaces per unit. This ratio aligns with industry standards and has been effective in similar developments in the region.

A strong point of comparison is The Encore Apartments in Belton, Missouri, which features 322 units and a total of 516 parking spaces, resulting in a comparable 1.6 parking ratio. The breakdown at The Encore includes a combination of 296 surface parking spaces, 62 tuck-under attached garages, 80 detached garages, and 78 carports. Despite the variety of parking options and this parking ratio, there have been no reported issues with parking availability, and adjacent public street parking is not allowed due to its status as a main arterial road. This situation suggests that the provided parking allocation meets the needs of both tenants and guests effectively.

Furthermore, the Yates & Yates management team has extensive experience—over 55 years combined—spanning more than 30 multifamily housing projects, including new constructions that transitioned into lease-ups. This portfolio, covering over 1,200 units across eight Kansas City properties, has consistently demonstrated that parking has not posed a challenge.

The clear record of success at The Encore Apartments and the team's comprehensive property management expertise support the conclusion that the parking provision of 500 spaces for our new complex will sufficiently meet the needs of residents and visitors alike. We trust that these insights will provide confidence to the City of Independence as it considers approval of our project.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Adam V. DeGonia'.

Adam DeGonia, PE
Project Engineer

NOTICE:
McClure Engineering Co. is not responsible or liable for any issues, claims, damages, or losses (collectively, "Losses") which arise from failure to follow these Plans, Specifications, and the engineering intent they convey, or for Losses which arise from failure to obtain and/or follow the engineers' or surveyors' guidance with respect to any alleged errors, omissions, inconsistencies, ambiguities, or conflicts contained within the Plans and Specifications.

MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2024

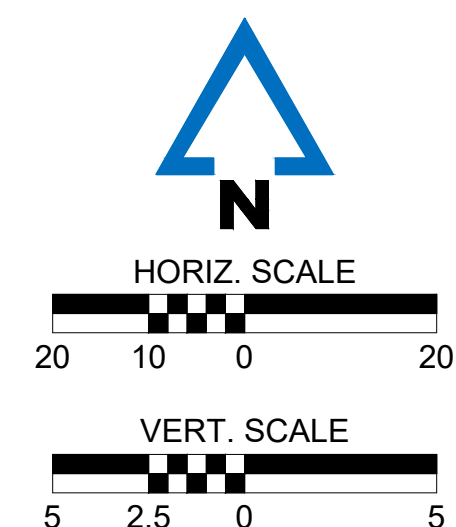
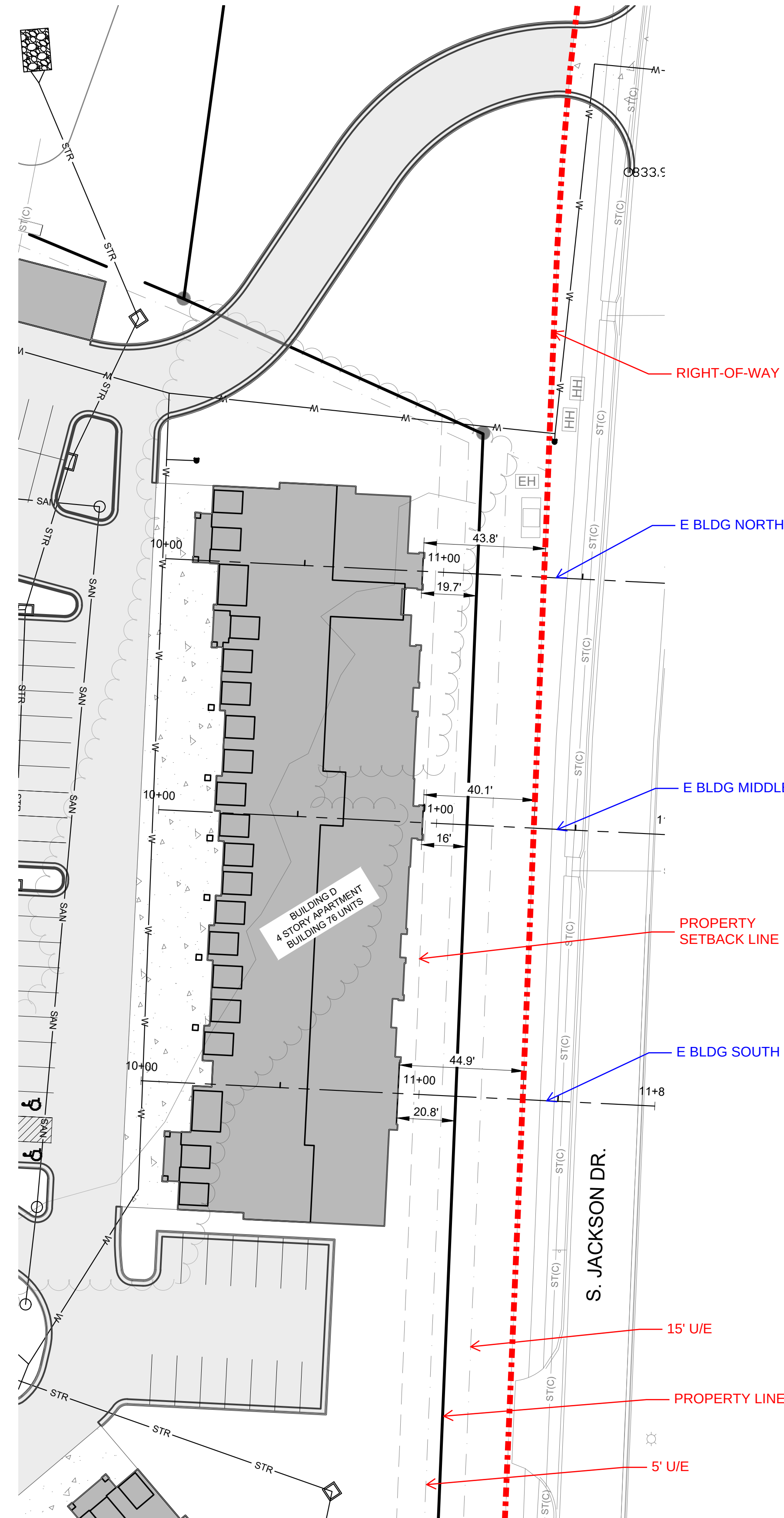
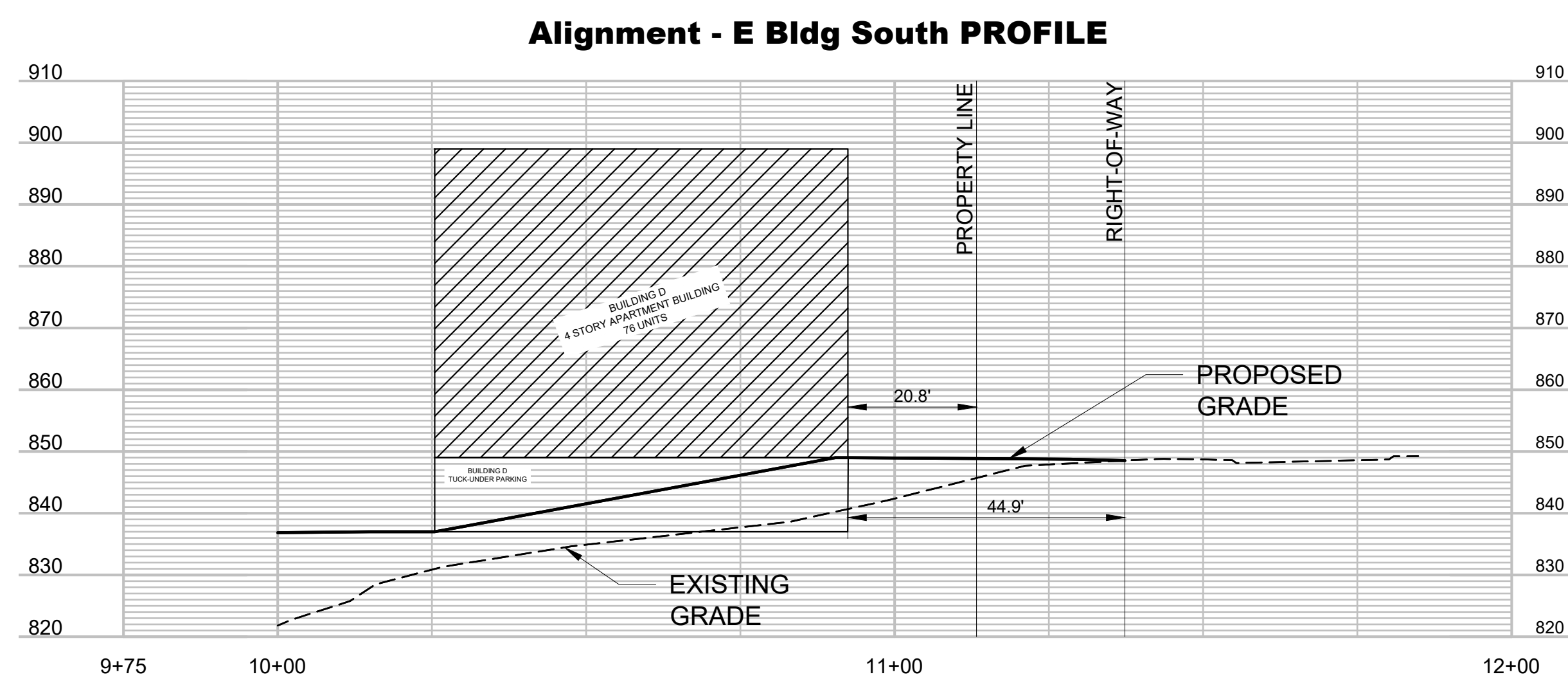
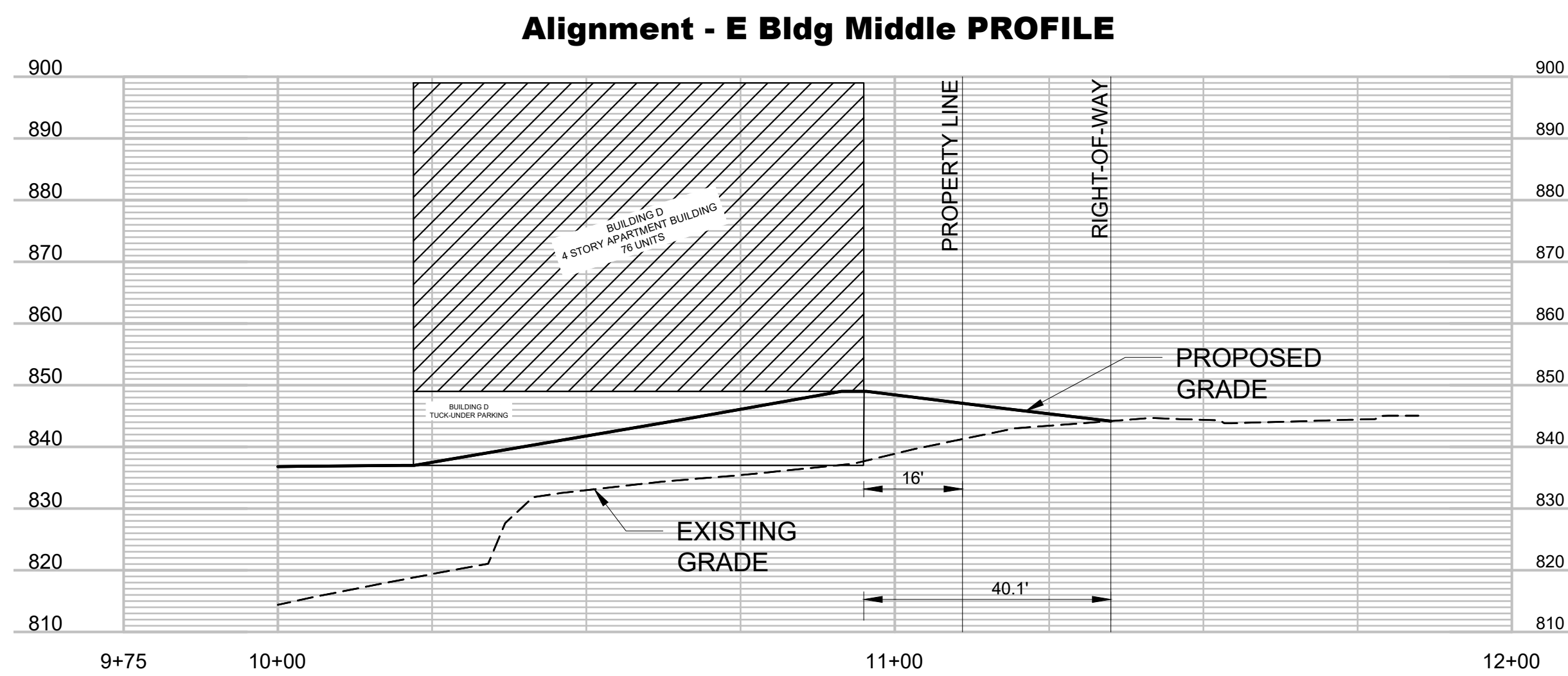
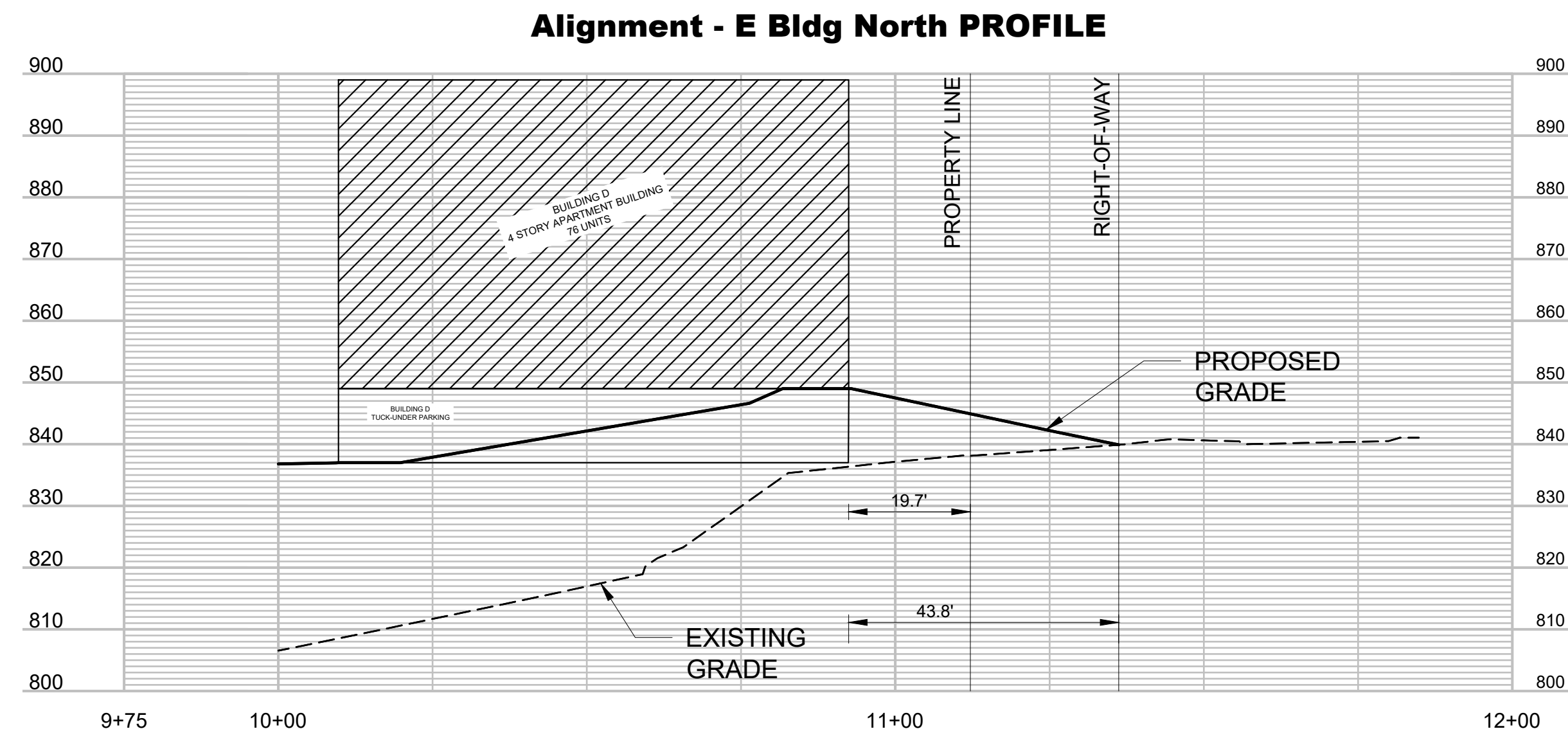
REVISIONS
2024.06.10 INITIAL CITY COMMENTS
2024.10.02 CITY COMMENTS
2024.11.01 CITY COMMENTS #3

PROJECT INFO
2023001513-000
ENGINEER: AVD
DRAWN BY: MRB
CHECKED BY: AVD

INFINITY APARTMENTS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

SITE PLAN WITH TOPOGRAPHY
P:\2023001513-000\04-DRAWINGS\01\INTELL\MENT\EX\H\BTS\2023001513 E BLDG PROFILES.DWG

DRAWING NO.
C201





McClure

1700 Swift (Suite 100), North Kansas City, Missouri, 64116
Phone: 816.756.0444

PRELIMINARY SEWER CAPACITY STUDY

Jackson Apartments

(E 37th Terrace Ct S & S Jackson Drive in Independence, Jackson County, Missouri)

Independence, MO

NE Quarter of Section 20, Township 49N, Range 31W

Prepared by:

McClure

Contact: Adam DeGonia
1700 Swift St. Ste 100
North Kansas City, MO 64116
816.502.3915
adegonia@mcclurevision.com

October 4, 2024

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General Information.....	3
Methodology	3
Existing Condition Analysis	3
Proposed Condition Analysis.....	4
Summary & Conclusions	5

Appendix

Preliminary Site Plan	A-1
Existing City Sewer Map	A-2
Drainage Area Map.....	A-3
Capacity Analysis	A-4
City of Independence Design Criteria.....	A-5

GENERAL INFORMATION:

The proposed Jackson Apartments development will be constructed near the intersection of E 37th Terrace Court S and S Jackson Drive in Independence, Missouri. The 11.67-acre site is in the NE quarter of section 20, township 49N, range 31W. Refer to **Appendix A-1** for the project site plan. The property is currently undeveloped. The proposed project will consist of new multi-family residential homes, open space, parking, a clubhouse and pool, and an on-site detention basin.

METHODOLOGY:

The sewer capacity design criteria consist of the City of Independence's currently adopted Code of Ordinances, Chapter 20, Article 9, Sec. 20.09.002 and 20.09.003.

EXISTING CONDITION ANALYSIS:

As previously indicated, the site is currently undeveloped with grassland and wooded cover in some locations. Existing sewer lines run along the west and north sides of the boundaries. A map of the existing city sewers within proximity of the site is included in **Appendix A-2**.

The sewer line serving the Pepperwood Apartments (east of the site) runs along the proposed Jackson Apartment' north side. It begins as an 8" VCP pipe, transitions to a 12" PVC pipe, and then combines with the existing sewer on the west side before running north under the railroad tracks.

An 8" PVC sewer line runs north along the west property boundary, serving only the Sunterra Springs facility.

The sewer line for the Independence Ridge apartments (west of the site) runs northwest, crosses the railroad tracks, then turns back east to combine with the existing and proposed sewer lines from the subject property. This combined line flows north into an inverted siphon with 6" and 12" components. The City is currently reviewing options for improving this and the interceptor immediately downstream.

PROPOSED CONDITION ANALYSIS:

The proposed project will consist of new multi-family residential homes, open space, parking, a clubhouse and pool, and an on-site detention basin. There will be 4-4 story apartment buildings constructed on site. Due to the type and size of development, sewer mains no larger than 8" are anticipated for serving the overall site.

Final design grading has not been completed yet, but with the site's topography, the proposed drainage pattern of the site is not likely to change from that of the pre-developed drainage pattern.

As this study is part of an overall preliminary development plan submittal, no engineering design has been completed on the proposed sewers. However, an estimate based on site topography

conditions has been assumed and was used as basis for the pipe calculations found in the Capacity Analysis in **Appendix A-4**.

The table below shows the minimum hourly peak flow rate calculations for the existing, proposed, and future sewers affecting this site. This table can also be found in the Capacity Analysis in **Appendix A-4**.

MINIMUM HOURLY PEAK FLOW RATE CALCULATIONS				
LAND USE	OUTGOING PIPE SIZE (IN.)	AREA (AC.)	SEWER CAPACITY FLOW FACTOR (CFS/AC.)	MIN. HOURLY PEAK FLOW RATE (CFS)
MULTI-FAMILY (EXISTING, PEPPERWOOD APTS)	8	21.1	0.02	0.42
MULTI-FAMILY (EXISTING, INDEPENDENCE RIDGE)	8	25.07	0.03	0.75
MULTI-FAMILY (PROPOSED)	8	11.67	0.03	0.35
COMMERCIAL (OTHER)	12	81.85	0.02	1.64
COMMERCIAL (SUNTERRA SPRINGS)	8	3.35	0.02	0.07
FUTURE A (C-2 COMMERCIAL)	TBD	23.5	0.02	0.47
FUTURE B (R-6 RESIDENTIAL)	TBD	6	0.03	0.18
FUTURE C (R-6 RESIDENTIAL)	TBD	5.6	0.03	0.17
FUTURE D (C-2 COMMERCIAL)	TBD	5.6	0.02	0.11
FUTURE E (R-6 RESIDENTIAL)	TBD	10.0	0.03	0.30
FUTURE F (C-2 & R-6)	TBD	6.1	0.025	0.15
FUTURE G (R-18 RESIDENTIAL PUD)	TBD	14.2	0.03	0.43

A total peak flow to the site outfall location once full build out (including 71 acres of future development) is complete is determined to be 5.04 cfs. The amount of flow added by our proposed development accounts for 0.35 cfs of that flow.

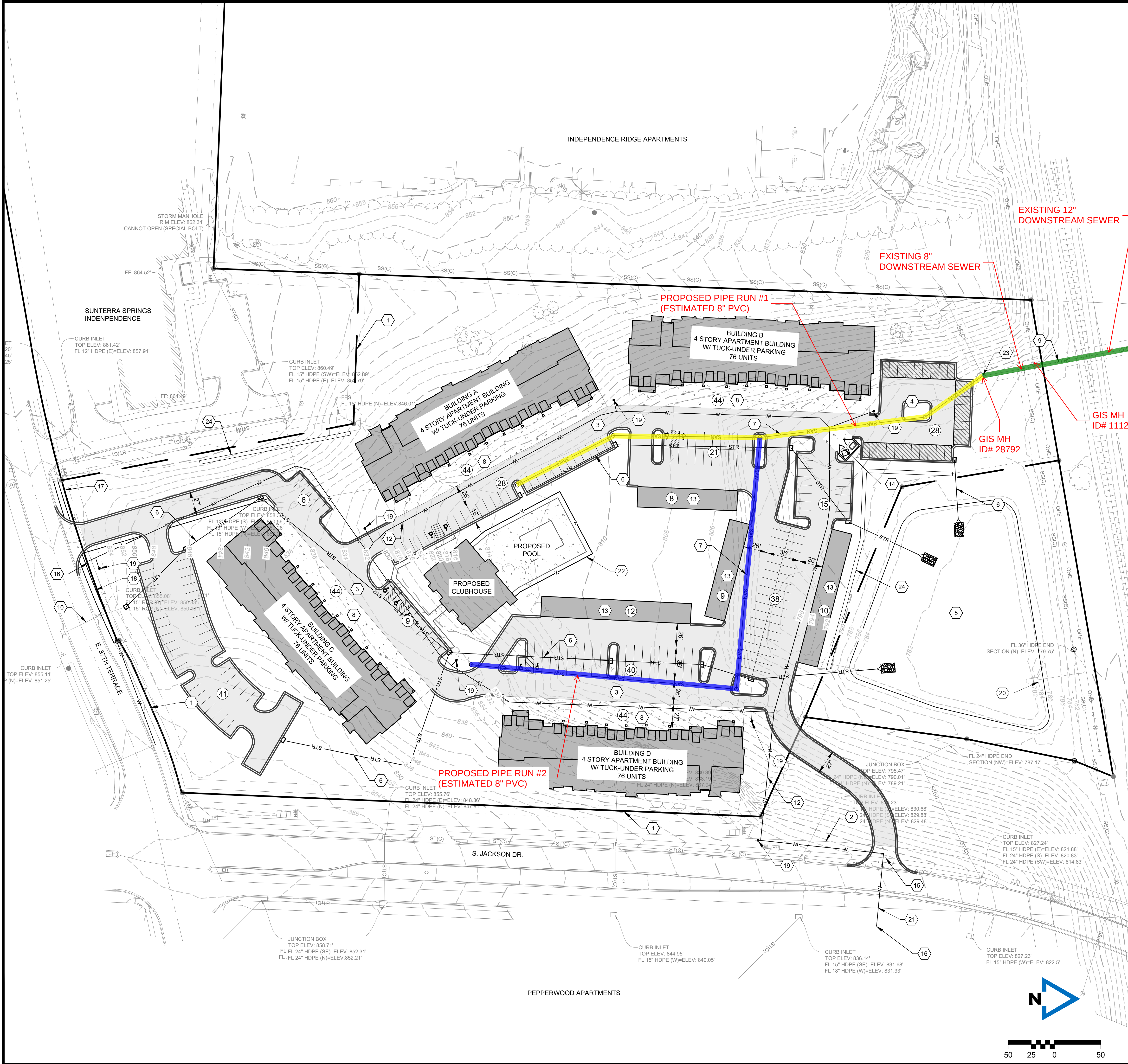
SUMMARY & CONCLUSION:

The proposed Jackson Apartments development will be constructed near the intersection of E 37th Terrace Court S and S Jackson Drive in Independence, Missouri. The proposed project will consist of new multi-family residential homes, open space, parking, a clubhouse and pool, and an on-site detention basin.

Analysis shows a capacity of the existing 15" downstream sewer to be 3.58 cfs. After full build out of the proposed site, an additional 0.35 cfs will be added to the system bringing the total flow to 5.04 cfs, which is above the capacity of the downstream system.

The City is reviewing options for improvement of the downstream interceptor. Once a potential solution is determined, the owner will work with the city under the Independence Cost Share Ordinance Sec. 20.09.016 to construct improvements.

APPENDIX A-1
PRELIMINARY SITE PLAN



KEY NOTES

- 1 PROPERTY LINE (TYP.)
- 2 EXISTING RIGHT-OF-WAY
- 3 PROPOSED ASPHALT PRIVATE DRIVE PAVEMENT
- 4 PROPOSED CARPORT PARKING
- 5 EXISTING DETENTION BASIN
- 6 PROPOSED PRIVATE STORM SEWER
- 7 PROPOSED PRIVATE SANITARY SEWER
- 8 PROPOSED CONCRETE PAVEMENT (GARAGE DRIVE ENTRY)
- 9 EXISTING 8" PUBLIC SANITARY SEWER
- 10 EXISTING 15" PUBLIC STORM SEWER
- 11 EXISTING DRIVEWAY
- 12 PROPOSED WATER MAIN
- 13 GARAGE PARKING
- 14 PROPOSED DUMPSTER ENCLOSURE
- 15 PROPOSED DRIVEWAY
- 16 PROPOSED CONNECTION TO EXISTING/PUBLIC WATER
- 17 PROPOSED PUBLIC WATER EXTENSION
- 18 PROPOSED SIDEWALK EXTENSION
- 19 PROPOSED FIRE HYDRANT
- 20 EXISTING DETENTION BASIN CONTROL STRUCTURE
- 21 PROPOSED CURB CUT
- 22 PROPOSED POOL FENCE
- 23 PROPOSED SANITARY CONNECTION TO EXISTING SANITARY SEWER
- 24 PROPOSED RETAINING WALL

LEGEND

- | | |
|--|-------------------------------|
| | PROPOSED CONCRETE PAVEMENT |
| | PROPOSED ASPHALT PAVEMENT |
| | PROPOSED BUILDINGS |
| | PROPOSED CARPORT PARKING |
| | PARKING STALL COUNT |
| | EX. SANITARY SEWER LINE |
| | EX. STORM SEWER LINE |
| | EX. UNDERGROUND ELECTRIC LINE |
| | EX. WATER LINE |
| | EX. OVERHEAD ELECTRIC |
| | EX. UTILITY POLE |
| | EX. WATER VALVE |
| | EX. LIGHT POLE |
| | EX. MANHOLE |
| | EX. FIRE HYDRANT |
| | NEW FENCE |
| | NEW STORM SEWER LINE |
| | NEW FIBER OPTIC LINE |
| | NEW WATER LINE |
| | NEW SANITARY SEWER LINE |
| | NEW SANITARY MANHOLE |
| | NEW NON-SETBACK STORM INLET |
| | NEW JUNCTION BOX |
| | NEW WATER TEE |
| | NEW WATER THRUST BLOCK |
| | NEW WATER VALVE |
| | NEW FIRE HYDRANT |
| | EXISTING 2' CONTOUR |
| | EXISTING 10' CONTOUR |

LEGAL DESCRIPTION

LOT 2 AND TRACT A, JACKSON BUSINESS PARK, A SUBDIVISION IN INDEPENDENCE, JACKSON COUNTY, MISSOURI.

SITE ADDRESS

19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

AREA SUMMARY

TOTAL AREA: 508,393 +/- SQ. FT. (11.67 +/- ACRES)
OPEN SPACE AREA: 237,178 +/- SQ. FT. (47%)

ZONING NOTE

EXISTING ZONING: C-2 (GENERAL COMMERCIAL)
PROPOSED ZONING: R-30 (PUD)

MINIMUM STANDARDS:

ARTERIAL STREET SETBACK - 50'
COLLECTOR/MINOR ARTERIAL STREET SETBACK - 35'
ALL OTHER STREETS - 25'
REAR SETBACK - 25'
SIDE SETBACK - 5'
MAXIMUM HEIGHT - 35'

SITE DEVELOPMENT DATA

PROPOSED BUILDING = 4 BUILDINGS (76 UNITS EACH)

OFF-STREET PARKING = 198 SPACES
ATTACHED GARAGE PARKING(44/BUILDING) =176 SPACES
DETACHED GARAGE PARKING = 39 SPACES
CARPORT PARKING = 28 SPACES
TOTAL PARKING PROVIDED = 441 SPACES

FLOODPLAIN:

PER THE "FLOOD INSURANCE RATE MAP", COMMUNITY PANEL NO. 29095C0311G, HAVING AN EFFECTIVE JANUARY 20, 2017 AS PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY. OUR REVIEW OF THIS MAP INDICATES THAT THIS PARCEL OF LAND LIES WITHIN ZONE X WHICH IS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN."



1700 Swift Ave., Suite 100
North Kansas City, Missouri 64116
P 816-756-0444
F 816-756-1763

Ankeny, IA | Carroll, IA
Cedar Rapids, IA | Clive, IA
Coralville, IA | Council Bluffs, IA
Fort Dodge, IA | Sioux City, IA
Columbia, MO | Macon, MO
North Kansas City, MO | Springfield, MO
Lenexa, KS
Portsmouth, NH

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MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2024

REVISIONS
2024.06.10 INITIAL CITY COMMENTS

PROJECT INFO
2023001513-000
ENGINEER
AVD
DRAWN BY
MRB
CHECKED BY
AVD

JACKSON APARTMENTS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

DRAWING NO.
C201

SITE PLAN WITH TOPOGRAPHY
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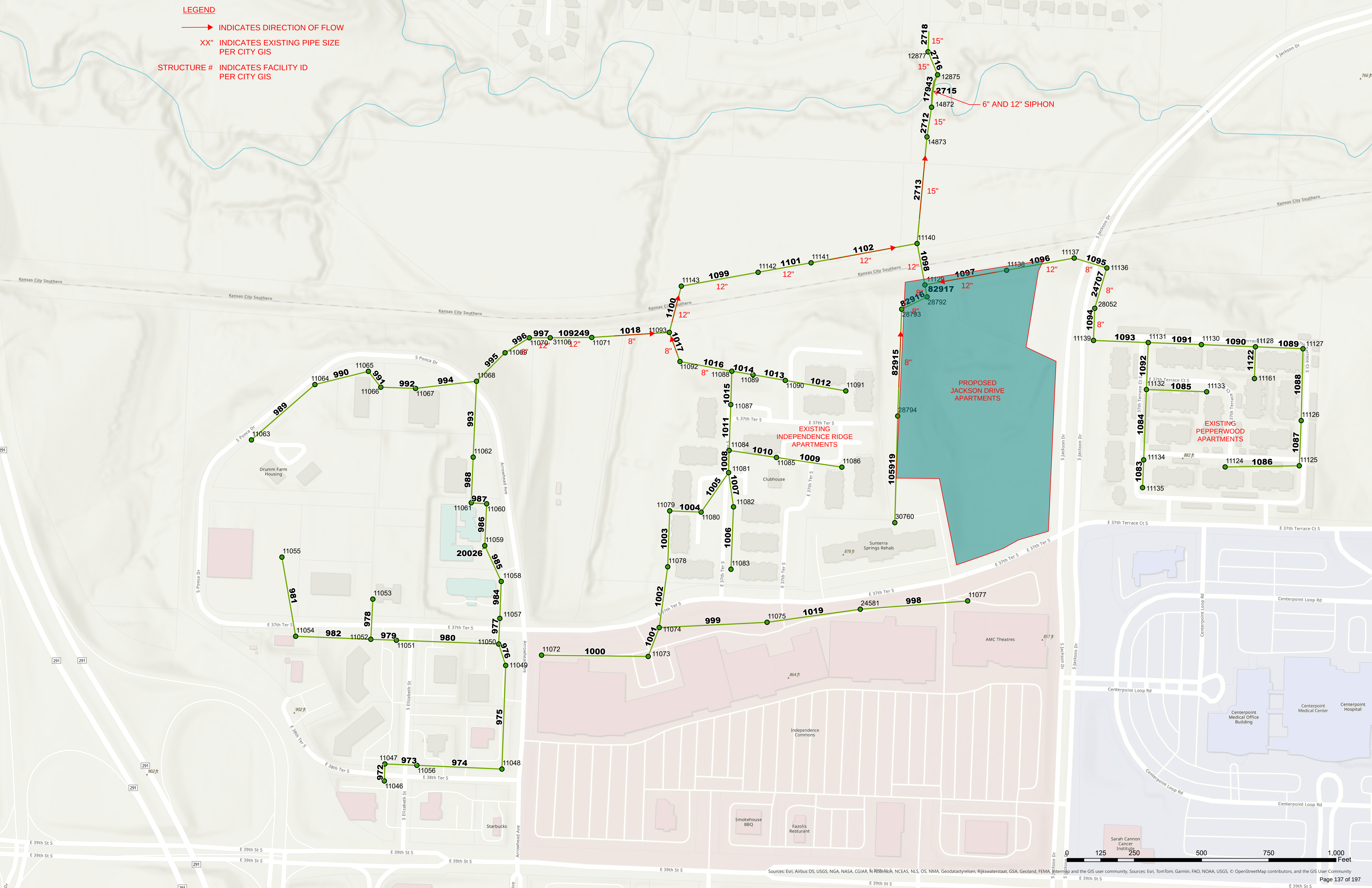
APPENDIX A-2
EXISTING SEWER MAP

LEGEND

→ INDICATES DIRECTION OF FLOW

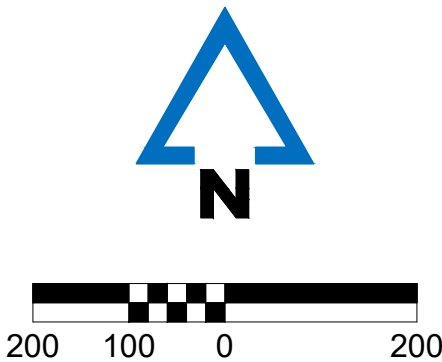
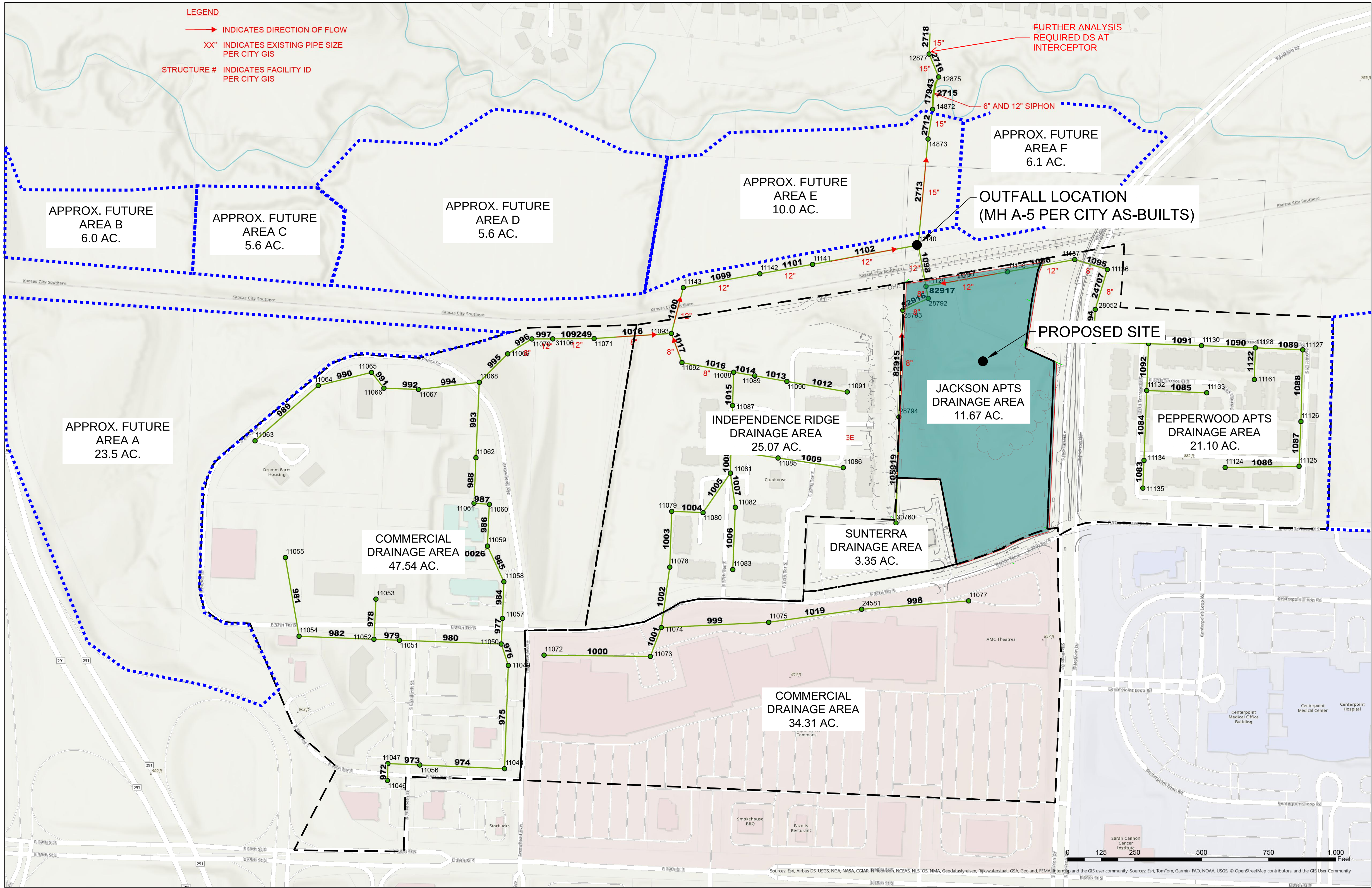
XX" INDICATES EXISTING PIPE SIZE
PER CITY GIS

STRUCTURE # INDICATES FACILITY ID
PER CITY GIS



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, FAO, Robinson, NCEAS, NLS, OS, NMA, Geodatasysteem, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community. Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

APPENDIX A-3
DRAINAGE AREA MAP



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Coralville, IA | Council Bluffs, IA
Fort Dodge, IA | Sioux City, IA
Columbia, MO | Macon, MO
North Kansas City, MO | Springfield, MO
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MISSOURI CERTIFICATE OF AUTHORITY NO. E-2006023253
EXPIRES: DECEMBER 31, 2024

REVISIONS

2024.06.10 INITIAL CITY COMMENTS

PROJECT INFO

2023001513-000

ENGINEER: AVD DRAWN BY: MRB CHECKED BY: AVD

INFINITY APARTMENTS
19300 E 37TH TERRACE
INDEPENDENCE, MO 64057

DRAINAGE AREA MAP
P:2023001513-00003-ENGINEERING/CIVIL/SEWER CAPACITY STUDY/2023001513-000 DMAP EXISTING.DWG

DRAWING NO.
A-3

APPENDIX A-4

CAPACITY ANALYSIS

MINIMUM HOURLY PEAK FLOW RATE CALCULATIONS				
LAND USE	OUTGOING PIPE SIZE (IN.)	AREA (AC.)	SEWER CAPACITY FLOW FACTOR (CFS/AC.)	MIN. HOURLY PEAK FLOW RATE (CFS)
MULTI-FAMILY (EXISTING, PEPPERWOOD APTS)	8	21.1	0.02	0.42
MULTI-FAMILY (EXISTING, INDEPENDENCE RIDGE)	8	25.07	0.03	0.75
MULTI-FAMILY (PROPOSED)	8	11.67	0.03	0.35
COMMERCIAL (OTHER)	12	81.85	0.02	1.64
COMMERCIAL (SUNTERRA SPRINGS)	8	3.35	0.02	0.07
FUTURE A (C-2 COMMERCIAL)	TBD	23.5	0.02	0.47
FUTURE B (R-6 RESIDENTIAL)	TBD	6	0.03	0.18
FUTURE C (R-6 RESIDENTIAL)	TBD	5.6	0.03	0.17
FUTURE D (C-2 COMMERCIAL)	TBD	5.6	0.02	0.11
FUTURE E (R-6 RESIDENTIAL)	TBD	10.0	0.03	0.30
FUTURE F (C-2 & R-6)	TBD	6.1	0.025	0.15
FUTURE G (R-18 RESIDENTIAL PUD)	TBD	14.2	0.03	0.43

TOTAL PEAK FLOW TO SITE OUTFALL POINT (CFS) 5.04
TOTAL CAPACITY AT SITE OUTFALL (CFS) 3.58

PROJECT SITE PIPE CALCULATIONS					
PIPE	SIZE (IN.)	SLOPE (FT/FT)	N	FULL FLOW VELOCITY (FT/S)	FULL FLOW CAPACITY (CFS)
1	8	0.06	0.011	10.02	3.50
2	8	0.05	0.011	9.15	3.19
EXIST.	15	0.0022	0.011	2.92	3.58

APPENDIX A-5
CITY OF INDEPENDENCE DESIGN CRITERIA

Sec. 20.09.002. - General requirements.

Sanitary sewer systems shall be designed for the ultimate tributary population and shall be based on the best information available, including current zoning regulations and approved planning and zoning reports. Only gravity sewers, in accordance with provisions contained herein, shall be considered for acceptance by the City.

Sewers shall be designed to provide capacity based on the following criteria unless directed otherwise by the City Engineer:

- A. Single Family Residential - .015 cfs/acre
- B. Multi-Family Residential - .03 cfs/acre
- C. Commercial .02 cfs/acre
- D. Industrial and High Rise (in excess of three stories). A unit flow study is required.

Sec. 20.09.003. - Pipe size.

No gravity sewer main shall be less than eight inches in diameter. The sewer shall be sized based on the criteria set forth in Section 20.09.001 and 20.09.002. Pipe sizing shall be based on the Manning formula:

$$Q = \frac{1.486 R^2 S^{1/2}}{n}$$

Where:

- Q = Pipe flow capacity in cubic feet per second (cfs)
- A = Inside area of pipe in square feet
- R = Hydraulic Radius
- S = Pipe slope in feet per foot n = Pipe roughness coefficient

Value for n shall be as follows for the particular type used:

RCP	- .013
VCP	- .013
Plastic composite	- .011
Ductile Iron	- .012

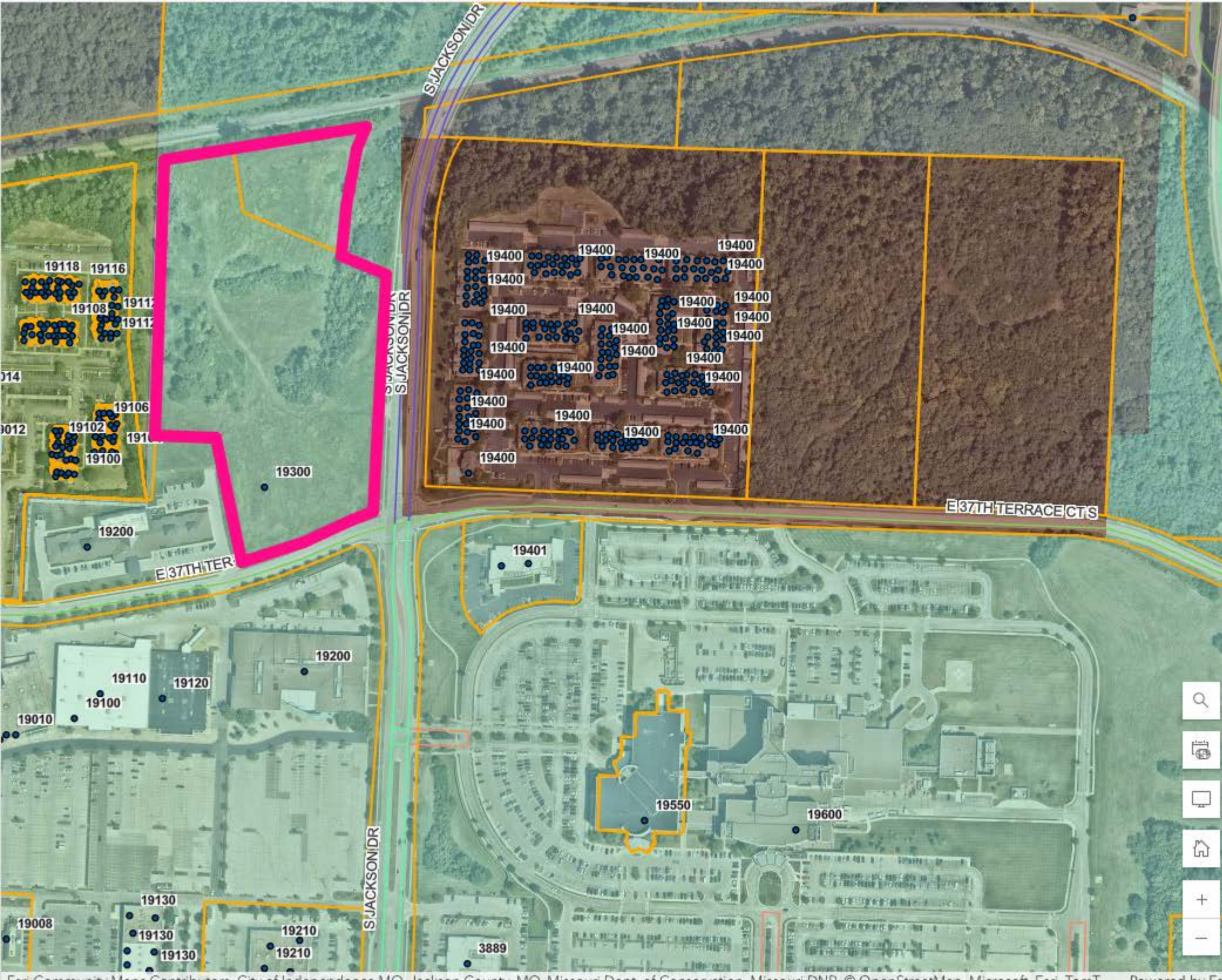
Headwater depths in a manhole shall not exceed one foot above the pipe opening. Headloss coefficients (K) at the manhole shall be as follows:.

Condition		
Thru flow		.15
Junction		.4
Contraction transition		.1
Expansion transition		.2
90 degree bend		.4
45 degree and less bends		.3

Properties

Zoning District

- ARTS
- BP
- BP/PUD
- C-1
- C-2
- C-2/HL
- C-2/I-1/U
- C-2/PUD
- C-2/SUP
- C-3
- C-3/SUP
- DFD
- I-1
- I-1/HL
- I-1/SUP
- I-1/U
- I-2
- O-1
- O-1/PUD
- R-1
- R-12
- R-12/HL
- R-12/HL



MEETING DATE: November 19, 2024

STAFF: Brian I. Harker, Senior Planner

PROJECT NAME: Venue Smart

CASE NUMBER/REQUEST: **Case 24-100-24 – Rezoning – 2131 S. Scott Avenue** – A request by Andrew Rocco Mazzella to rezone the property from R-12 (Two-Family Residential) to C-2 (General Commercial)

APPLICANT: Andrew Rocco Mazzella

PROPERTY LOCATION: 2131 S. Scott Avenue

SURROUNDING ZONING/LAND USE:

North: R-12 (Two-Family Residential)...single-family homes
S/SW: C-2 (General Commercial)...business maintenance service and restaurant
East: C-2 (General Commercial)...pawn shop
West: R-12 (Two-Family Residential)...single-family residence

PUBLIC NOTICE:

- Letters to property owners – October 28, 2024
- Public Notice published in the Independence Examiner – October 12, 2024
- Signs posted on property – October 25, 2024

FURTHER ACTION:

Following action by the Planning Commission, this rezoning request is scheduled for first reading by the City Council on December 16, 2024 and the public hearing/second reading on January 6, 2025.

RECOMMENDATION

Staff recommends **APPROVAL** of this rezoning request.

PROJECT DESCRIPTION & BACKGROUND INFORMATION

PROJECT DESCRIPTION: A request by Andrew Rocco Mazzella to rezone the property at 2131 S. Scott Avenue from R-12 (Two-Family Residential) to C-2 (General Commercial).

Current Zoning:	R-12 (Two-Family Residential)	Proposed Zoning:	C-2 (General Commercial)
------------------------	-------------------------------	-------------------------	--------------------------

Current Use: Vacant lot

Proposed Use: Accessory Storage Building for Venue Smart

Zoning History: Prior to adoption of the Unified Development Ordinance (UDO) in 2009, the property had been zoned R-2 (Two-Family Residential) since 1965. The property has been a vacant lot since the 1970's.

Proposal:

Venue Smart, LLC/Airgead has been located at this location since 2019. The applicant intends to build a new accessory storage building immediately adjacent to his cleaning service's existing office and storage facility to the south. The applicant owns four platted lots. Three are already zoned C-2 (General Commercial) for the operation on site. The fourth, on the north, needs to be rezoned both to replat all four lots into one and redevelop the property and place a new structure on the vacant lot.

Physical Characteristics of Property:

The three most southern lots contain the existing building and parking lot. The existing building abuts the eastern property line and is close to the 23rd Street right-of-way. The west side of the three lots is an unimproved parking lot. The north lot is largely graveled with a small green space by Scott Avenue. It abuts the single-family neighborhood to the north. Currently, it the site of trailers and storage containers; uses to be replaced with a new indoor storage facility.

Characteristics of the Area:

The 23rd Street corridor is predominately a mix of commercial uses. Immediately to the west of the parking lot, across Scott Avenue is a Burger King and an adjacent single-family home. Just five feet east the existing office and storage building lies the 23rd Street Pawn Shop. North of this corridor and property, the area though zoned R-12 (Two-Family Residential) is predominately small single-family homes.

ANALYSIS**Consistency with *Independence for All*, Strategic Plan:**

Rezoning this property is consistent with the *Independence for All*, Strategic Plan. Objectives of the plan is to, "increase economic prosperity of the community," and, "grow business and industry."

Comprehensive Plan Tools and Policies for the Current Designation:

The Comprehensive Plan envisions the future land use of this property and the surrounding area to be Residential Established Neighborhoods. "Neighborhood serving commercial developments, parks, and civic uses are also common in neighborhoods."

Sub-Area Plans:

This area is not covered by any sub-area plans.

Zoning:

The R-12 (Two-Family Residential) zoning classification allows for one or two-family dwellings and various other uses (schools, churches, government facilities, cemeteries, home-based daycare, agriculture and others with conditions. The proposed C-2 (General Commercial) uses include offices, retail shops, hair salons, light auto repair, restaurants and various other related uses and would allow the existing business to expand.

Platting:

As part of this project, the applicant must replat the properties. A Minor Subdivision has been submitted given it will be a single lot subdivision and there will be no rights-of-way dedicated. The review of this plat is contingent on this rezoning.

Historic and Archeological Sites:

There are no apparent historic or archeological issues with this property.

Public Utilities:

All public utilities are already in the adjacent rights-of-way.

Floodplain/Stream Buffer:

The lots are not in a federally identified floodplain. There is not any stream buffer zones in the vicinity or on the property.

CIP Investments:

The City does not have any capital improvements projects planned near this area.

Elevations:

The applicant intends to construct a 3,850-square foot metal building with a façade of Hardie board siding. The owner will need to work with staff during the Final Plan Review and construction permitting process to improve the project architecturally to meet the City's nonresidential design standards. The building/addition will abut the north side of the existing block building abutting the east property line. Therefore, the addition's east side would have a zero-lot line as well. Given the nearness of the two buildings to one another, they would have to be attached.

Streets, Sidewalks, Access and Parking:

The applicant will provide half-street improvements along Scott Avenue including a public sidewalk. A public sidewalk will be extended along 23rd Street as well. Parking for 19 cars will be provided, including one van-accessible parking space and cross-hatched area adjacent to the ramp. The main building, with its office space, will require 12 parking spaces and the new storage building will require 4 spaces. The site will be subject to the City's codes on stormwater and water quality.

Landscaping:

The applicant will need to provide a landscaping plan in association with the Final Plan Review and the Building Permit. The applicant will need to provide street, parking lot perimeter plantings and the 20 percent of 20 feet greenspace and planting requirements around the building per the UDO. Further, a 15-foot-wide buffer screen, with a fence and required plantings must be provided along the northern edge of the property as it abuts residentially zoned property.

REVIEW CRITERIA

Recommendations and decisions on rezoning applications must be based on consideration of all the following criteria:

1. Conformance of the requested zoning with the Comprehensive Plan.

The Comprehensive Plan envisions Residential Established Neighborhood uses for the area. "Neighborhood serving commercial developments, parks, and civic uses are also common in neighborhoods." As mentioned above, this rezoning would allow the existing businesses to expand operations.

2. Conformance of the requested zoning with any adopted neighborhood or sub-area plans in which the property is located or abuts.

There is not a sub-area plan for the vicinity.

3. **The compatibility of the proposed zoning with the zoning and use of nearby property, including any overlay zoning.**

The new C-2 zoning is necessary for the consolidation of the four-lot property into a single lot redevelopment project and to allow for the expansion of the existing business.

4. **The compatibility of the proposed zoning and allowed uses with the character of the neighborhood.**

The proposed C-2 zoning, and its associated uses, would fit with the commercial nature of the 23rd Street corridor.

5. **The suitability of the subject property for the uses to which it has been restricted under the existing zoning regulations.**

The property, given its adjacency to commercially zoned tracts and its use as a gravel parking lot and storage area, makes a residential use less likely at that location.

6. **The length of time the subject property has remained vacant as zoned.**

The property has been vacant and underutilized for decades.

7. **The extent to which approving the rezoning will detrimentally affect nearby properties.**

The rezoning should have no detrimental effect on area properties. The rezoning will eliminate a vacant lot, bring a new building and provide a 15-foot-wide landscape buffer and screen abutting the adjacent residential neighborhood.

8. **The gain, if any, to the public health, safety, and welfare due to denial of the application, as compared to the hardship imposed upon the landowner, if any, as a result of denial of the application.**

If rezoning is denied, the applicant will not be able to expand operations and to make improvements to the property.

EXHIBITS

1. Narrative
2. Application
3. Notification letter
4. Address List
5. Notification Area Map
6. Affidavit
7. Proposed Zoning Area
8. Proposed Site Plan
9. Proposed Elevation
10. Minor Subdivision Drawing
11. Comp Plan Map
12. Zoning map



1212 SW LUTTRELL, SUITE C ~ BLUE SPRINGS, MISSOURI 64015 ~ PHONE: 816-295-5951 ~ EMAIL: erwin@gardhorizon.com

March 01, 2024

Bryan Harker
City of Independence
111 East Maple Avenue
Independence, Missouri 64050

RE: Rezoning and Minor Subdivision
11602 East 23rd Street

Mr. Harker:

This project has been ongoing for some time and the property owner has instructed us to follow up on this project and pursue finalizing the rezoning of this property and the combining of the subject lots into a single lot in order to remove the internal lot lines and to allow them to apply for a building permit to expand their building at this location.

Accompanying this cover letter is a copy of the previously submitted application forms and cover letter and an updated copy of the three exhibits previously submitted.

Please review this information and let me know what is needed to move this project forward.

Thanks.

Sincerely

Erwin W. Gard, PLS, CET
Owner / Manager

Planning & Zoning Application Form

Staff Use Only	
Case Number:	
PC/BOA Meeting:	
City Council Dates:	

Application Type (check all that apply)

Land Use	Land Subdivision	Site Development	Use Permit	Other
☐ Rezoning ☐ PUD Rezoning	☐ Preliminary Plat ☐ Final Plat ☒ Minor Subdivision	☐ Final Site Plan ☐ Preliminary Dev Plan ☐ Final Dev Plan (PUD)	☐ Special Use ☐ Homebased Business ☐ Short-Term Rental	☐ Admin. Adjustment ☐ Variance ☐ Street Name Change

Project Information and Location

AIRGEAD

Project Name

11602 E. 23rd Street, Independence, MO 64050

Project Address/Location

N/A

0.6401

1

No

Sq. Ft. of Building

Acreage

Number of Lots/Tracts

Steam Buffer (Yes or No)

C-2 & R-12

C-2 & R-12

Commercial

Commercial

Existing Zoning

Proposed Zoning

Existing Land Use

Proposed Land Use

Basic Application Requirements (See the Planning & Zoning Application Guide for additional requirements)

- | | |
|--|---|
| ☒ Completed & Signed Application Form
☒ Application Fee
☒ Cover Letter Describing Details of Project | ☒ Plat Map, Development Plan, or Other Map (24" x 36" & 8.5" x 11" hard copy, and electronic copy)
☒ Legal Description of the property in question |
|--|---|

Contact Information

Applicant

Name: Andrew Rocco Mazzella

Company: Airgead, LLC

Address: 11602 E. 23rd Street, Independence, MO 6405

Phone: 816-701-6640

E-mail: Rocco Mazzella <Rocco@venuesmartllc.com>

Owner

Name: Andrew Rocco Mazzella

Company: Airgead, LLC

Address: 11602 E. 23rd Street, Independence, MO 64050

Phone: 816-701-6640

E-mail: Rocco Mazzella <Rocco@venuesmartllc.com>

~~Architect/Engineer~~/Surveyor/Other:

Name: Erwin W. Gard, PLS,CET

Company: Gard Horizon, LLC

Address: 1040 SW Luttrell, Suite E2, Blue Springs, MO

Phone: 816-295-5951

64015

E-mail: erwin@gardhorizon.com

Architect/Engineer/Surveyor/Other: _____

Name: _____

Company: _____

Address: _____

Phone: _____

E-mail: _____

The applicant hereby agrees that the information provided above is accurate.

Applicant's Signature

Date

for Rocco Mazzella

Owner's Signature

Date

for Rocco Mazzella

Appendix B - Property Owner Notification Letter

City of Independence, Missouri

Date: 10/28/2024

Case No. 24-100-24

Dear Property Owner:

This letter is to notify you that an application has been submitted for consideration by the Planning Commission and City Council. A full public hearing will be held by the Planning Commission and the City Council will consider new information on the dates and times below.

Proposed Case Type (Check One):

- ☒ Rezoning ☐ Rezoning/PUD ☐ Special Use Permit
☐ Preliminary Development Plan

Proposed project description: Rezoning Lot 85 from Residential to Commercial

Applicant: Andrew Rocco Mazzella

Location of Property: (Lot 85) 2131 S. Scott Ave. Indep., MO 64050 (Englewood Park Subdivision)

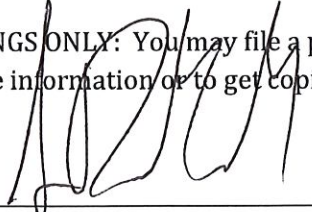
Planning Commission Meeting Date: Nov. 19, 2024, at 6:00 p.m.

City Council Meeting Date: Jan. 6, 2025, at 6:00 p.m.

Location of public hearings: City Council Chambers, City Hall
111 E Maple Ave, Independence, Missouri, 64050

All interested persons are invited to attend and will have an opportunity to be heard at the full public hearing (Planning Commission).

REZONINGS ONLY: You may file a protest petition with the Community Development Department. For more information or to get copies of a petition, please contact Planning staff at 816-325-7421.

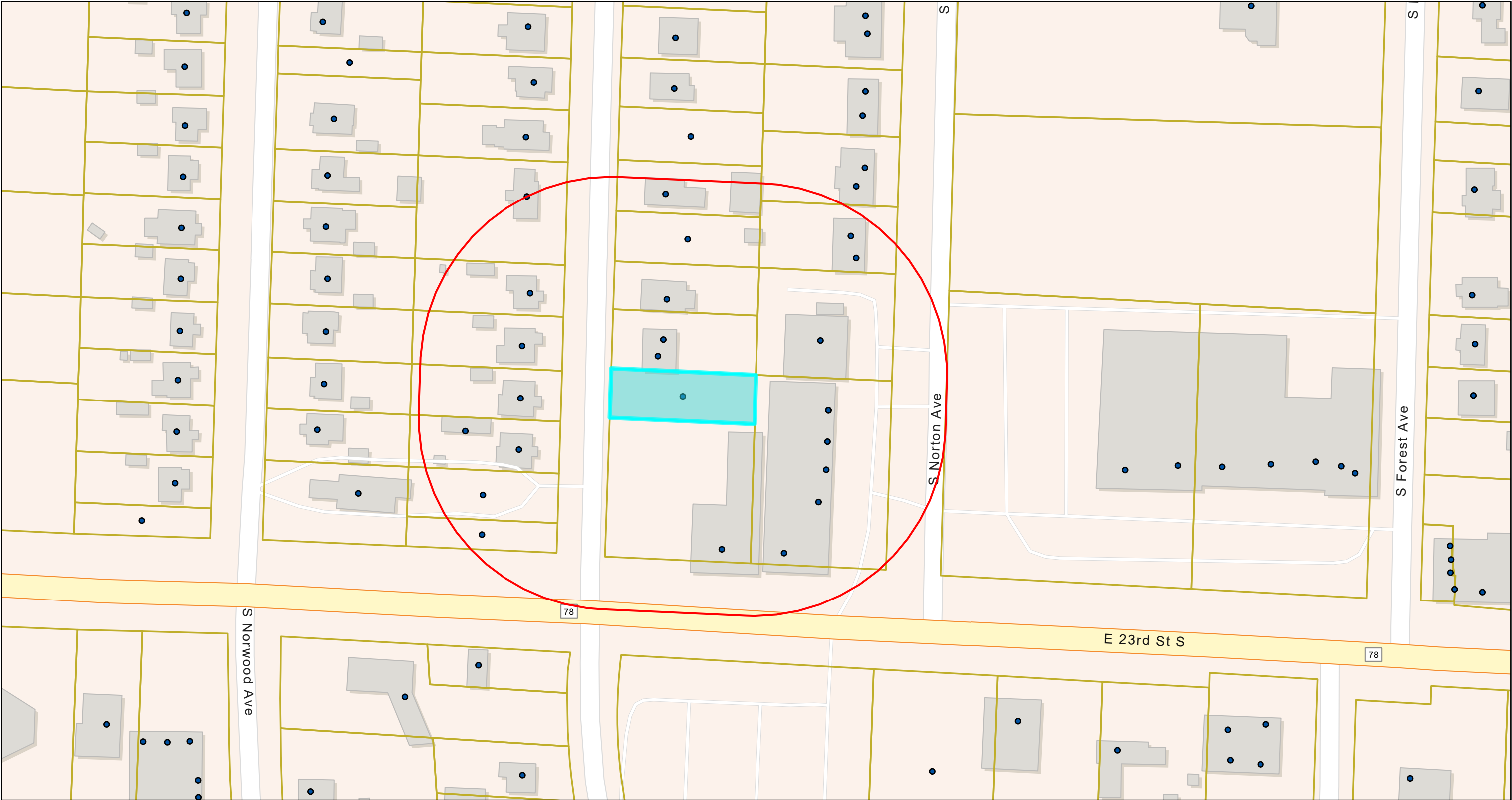


Applicant (or Owner/Agent)

For more information, contact the Community Development Department at 816-325-7421.

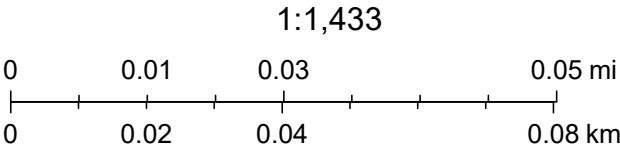
Property Address	Property Owner	Owner Address	City	State	Zip Code
2128 S SCOTT AVE	SITKON HEATHER LYN	2128 S SCOTT AVE	INDEPENDENCE	MO	64052
11605 E 23RD ST S	AH 23RD	162 W GRAND AVE STE 300	CHICAGO	IL	60654
2138 S SCOTT AVE	SACHI REAL ESTATE LLC	8831 LONG STREET	LENEXA	KS	66215
2132 S SCOTT AVE	BEAVER TALL PROPERTIES LLC	1701 MCKINLEY ST	KANSAS CITY	MO	64126
11511 E 23RD ST S	THE RCA FAMILY TRUST DATED MAY 26 2020	2715 S DILLINGHAM	GRAIN VALLEY	MO	64029
2125 S SCOTT AVE	FEDO GREGORY G & PATRICIA M-TRUSTEES	85 BEACH DR	LAKE TAPAWINGO	MO	64015
2136 S SCOTT AVE	SACHI REAL ESTATE LLC	8831 LONG STREET	LENEXA	KS	66215
11602 E 23RD ST S	AIRGEAD LLC	117 W 20TH ST # 802	KANSAS CITY	MO	64108
2129 S SCOTT AVE	BECKY MACKEY PROPERTIES LLC	10817 WILDFLOWER DR	LEES SUMMIT	MO	64086
2200 S NORTON AVE	B & T PROPERTY LLC	2200 S NORTON AVE	INDEPENDENCE	MO	64050
11507 E 23RD ST S	FIVE STAR TRADERS LLC	3942 BROADWAY ST	KANSAS CITY	MO	64111
2134 S SCOTT AVE	BAKER NOAH	2134 1/2 S SCOTT AVE	INDEPENDENCE	MO	64052
2127 S SCOTT AVE	SNR PROPERTIES SCOTT LLC	PO BOX 389	OAK GROVE	MO	64075
2230 S NORTON AVE UNIT A	WILSON ORVILLE D	700 S TRAIL RIDGE DR	INDEPENDENCE	MO	64050
2136 S NORTON AVE	HAWTHORNE PARKVILLE LLC	1226 E 25TH ST S	INDEPENDENCE	MO	64055
2130 S SCOTT AVE	DAUGHERTY DANNA M	2130 S SCOTT AVE	INDEPENDENCE	MO	64052
11701 E 23RD ST S	DIAMOND GIRLS BARTENDERS LLC	1000 S NOLAND RD	INDEPENDENCE	MO	64050
11710 E 23RD ST S	DB COMMERCIAL REALTY LLC	11724 E 23RD ST S	INDEPENDENCE	MO	64050
2131 S SCOTT AVE	AIRGEAD LLC	11602 E 23RD STREET	INDEPENDENCE	MO	64050
2124 S SCOTT AVE	CARTWRIGHT EVA L	2124 S SCOTT AVE	INDEPENDENCE	MO	64052

Rezoning #24-100-24 - Notification Area



10/25/2024, 1:51:57 PM

- Addresses
- Parcels (General Use- AGOL)
- City Limits



Esri Community Maps Contributors, City of Independence MO, Kansas City, MO, Jackson County, MO, Missouri Dept. of Conservation, Missouri DNR, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Appendix C - Property Owner Notification Affidavit

STATE OF MISSOURI

COUNTY OF JACKSON

Case No. 24-100-24

I, Andrew Rocco Mizzella, of lawful age being first duly sworn upon oath, state:

That I am the (agent, owner, attorney) for the property for which the application was filed and did, not later than fifteen (15) days prior to the date of the public hearing scheduled before the Planning Commission, mail notices to all persons owning property within 185 feet of the subject property. **The list of property owners to whom notice has been mailed is attached.**

These notices were mailed on the 28th day of October, 2024.



Signature of Agent, Owner or Attorney

Subscribed and sworn to before me this 28th day of October, 2024.

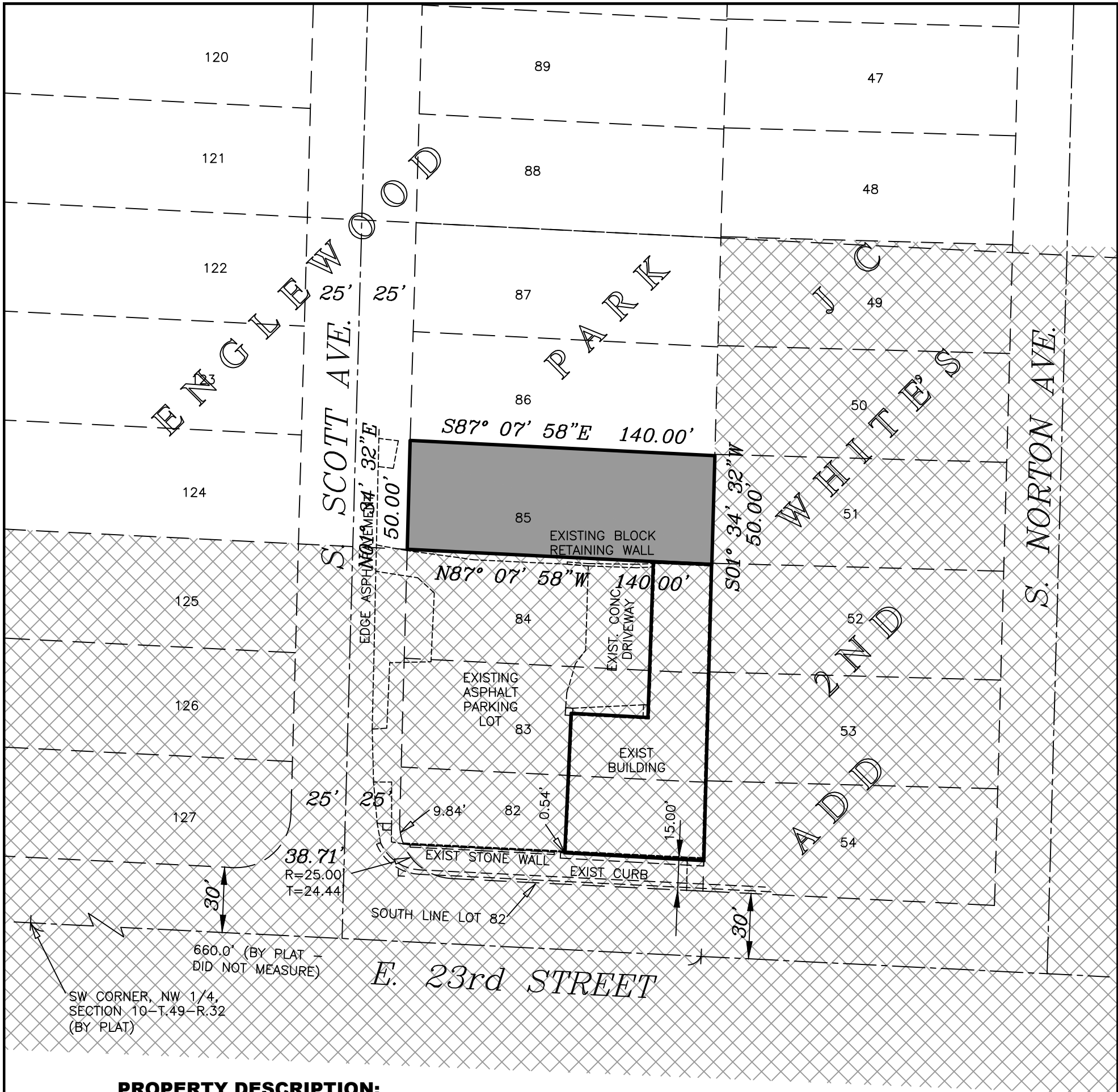


Notary Public

May 1, 2026

Commission Expiration Date

Z:\CAD drawing (from home comp)\CAD Drawings\Subdivision Files\Englewood Park (IN)\Englewood Park MASTER.dwg, 9/8/2023 1:17:28 PM, DWG To PDF.ppt

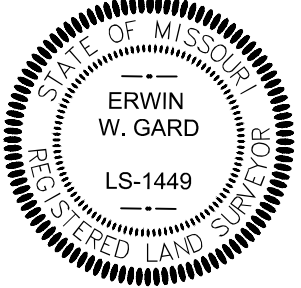


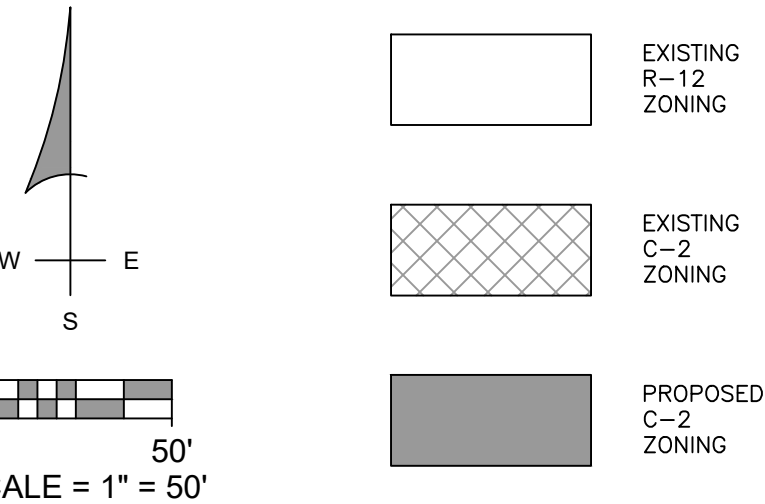
PROPERTY DESCRIPTION:
7,003 SQUARE FEET OR 0.1608 ACRES.

ALL OF LOT 85, ENGLEWOOD PARK, A SUBDIVISION IN INDEPENDENCE, JACKSON COUNTY, MISSOURI.

SURVEYOR'S DECLARATION:
I HEREBY DECLARE THAT WE HAVE PREPARED THIS DRAWING FOR THE PURPOSE OF A REZONING APPLICATION AND DOES NOT REPRESENT A BOUNDARY SURVEY AS DEFINED BY THE MISSOURI STANDARDS FOR PROPERTY BOUNDARY SURVEYS.


ERWIN W. GARD, PLS-1449


09/08/2023
DATE



GARD HORIZON LLC

LAND SURVEYING : BUILDING PERMIT & HOUSE PLAN SERVICES
REAL ESTATE : LARGE FORMAT SCANS & PRINTS

1212 SW Luttrell, Suite C
Blue Springs, Missouri 64015

Phone: 816-295-5951
Web: gardhorizon.com

Erwin W. Gard, Owner
Professional Surveyor ~ Realtor

Cell: 816-853-4559
Email: erwin@gardhorizon.com

REZONING MAP

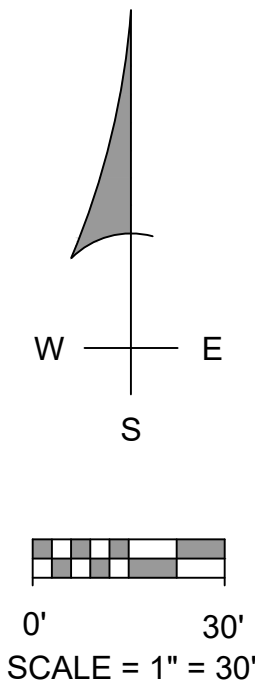
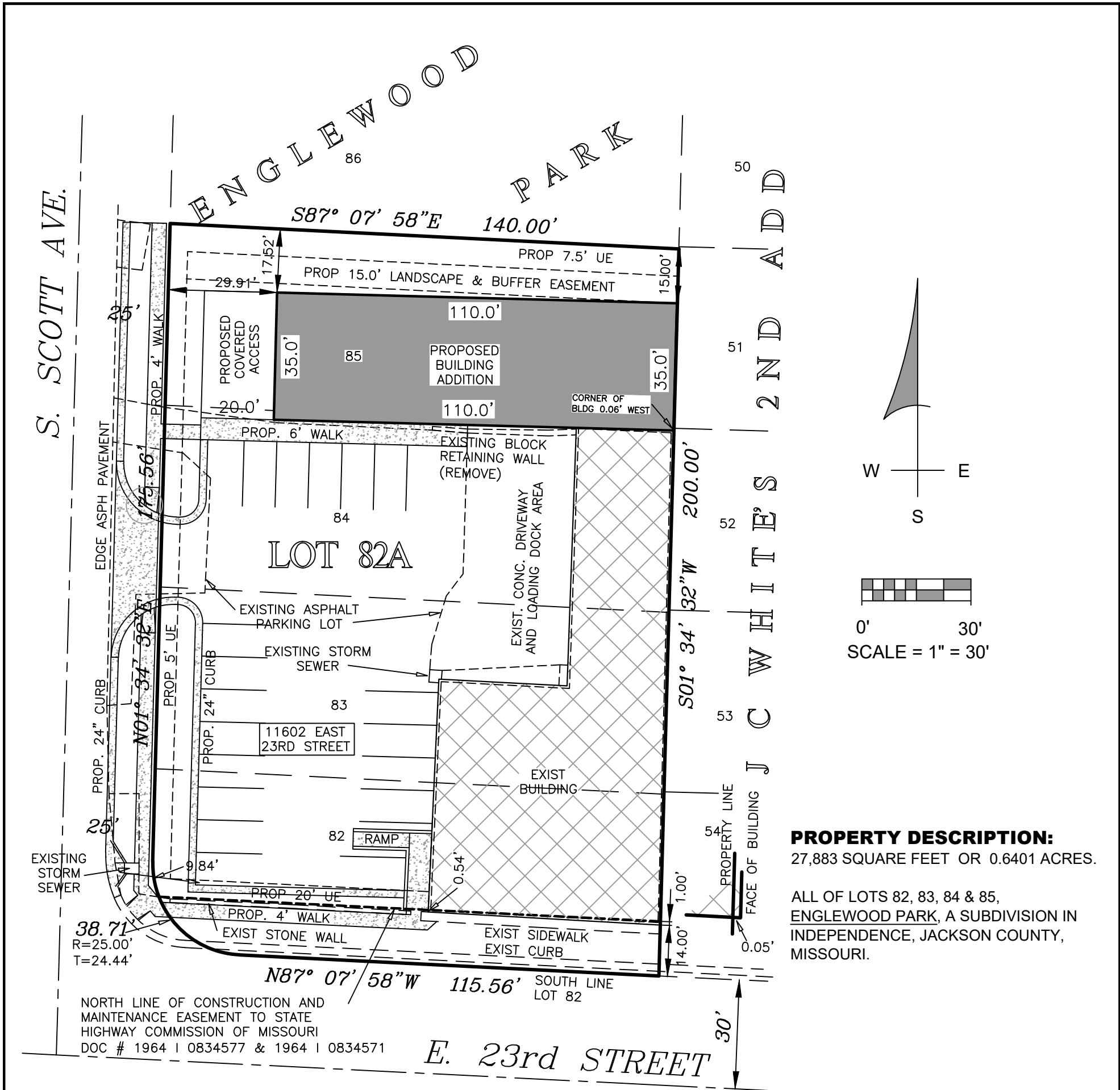
2131 S. SCOTT AVENUE
LOT 85, ENGLEWOOD PARK,
INDEPENDENCE, JACKSON COUNTY, MISSOURI

AIRGEAD, LLC

11602 E. 23RD STREET
INDEPENDENCE, MISSOURI 64052

JOB NO.:
1199-2301
MASTER FOLDER:
CAD Drawings\Sub
SUB FOLDER:
E
FILE NAME:
ENGLEWOOD PK MSTR
FIELD BOOK ~ PAGE
GPS & 42
DRAWN BY:
E. GARD

SHEET
1
OF
1



PROPERTY DESCRIPTION:
27,883 SQUARE FEET OR 0.6401 ACRES.

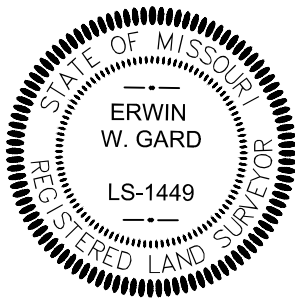
ALL OF LOTS 82, 83, 84 & 85,
ENGLEWOOD PARK, A SUBDIVISION IN
INDEPENDENCE, JACKSON COUNTY,
MISSOURI.

- SURVEY NOTES:**
1. THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY AND NO CORNER MARKERS WERE CONFIRMED OR SET.
 2. THE BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON MISSOURI COORDINATE SYSTEM OF 1983 USING THE MODOT NETWORK APRIL 2021.
 3. NO EASEMENTS WERE SHOWN ON THE PLAT AND A TITLE REPORT WAS NOT PROVIDED BY THE CLIENT TO DISCLOSE POSSIBLE EASEMENTS THAT MIGHT AFFECT THE SUBJECT PROPERTY.

SURVEYOR'S DECLARATION:
I HEREBY DECLARE THAT WE HAVE PREPARED THIS DRAWING FOR THE PURPOSE OF A REZONING APPLICATION AND DOES NOT REPRESENT A BOUNDARY SURVEY AS DEFINED BY THE MISSOURI STANDARDS FOR PROPERTY BOUNDARY SURVEYS.

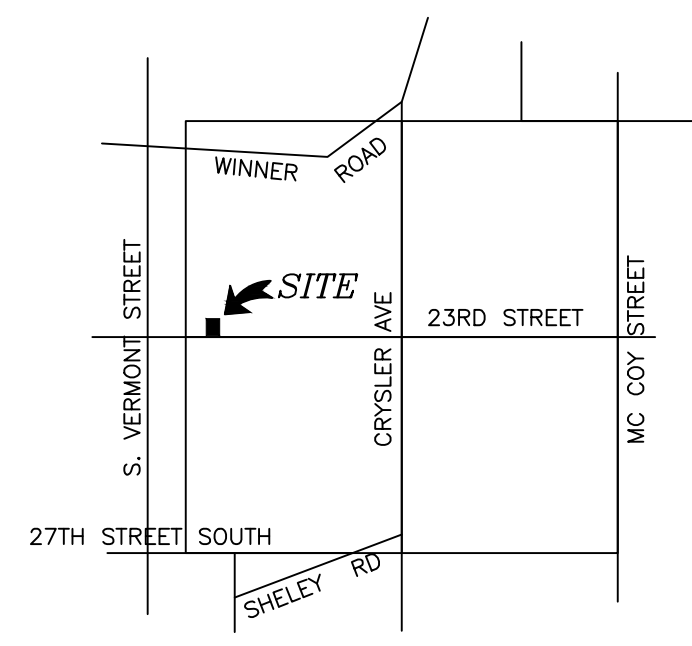
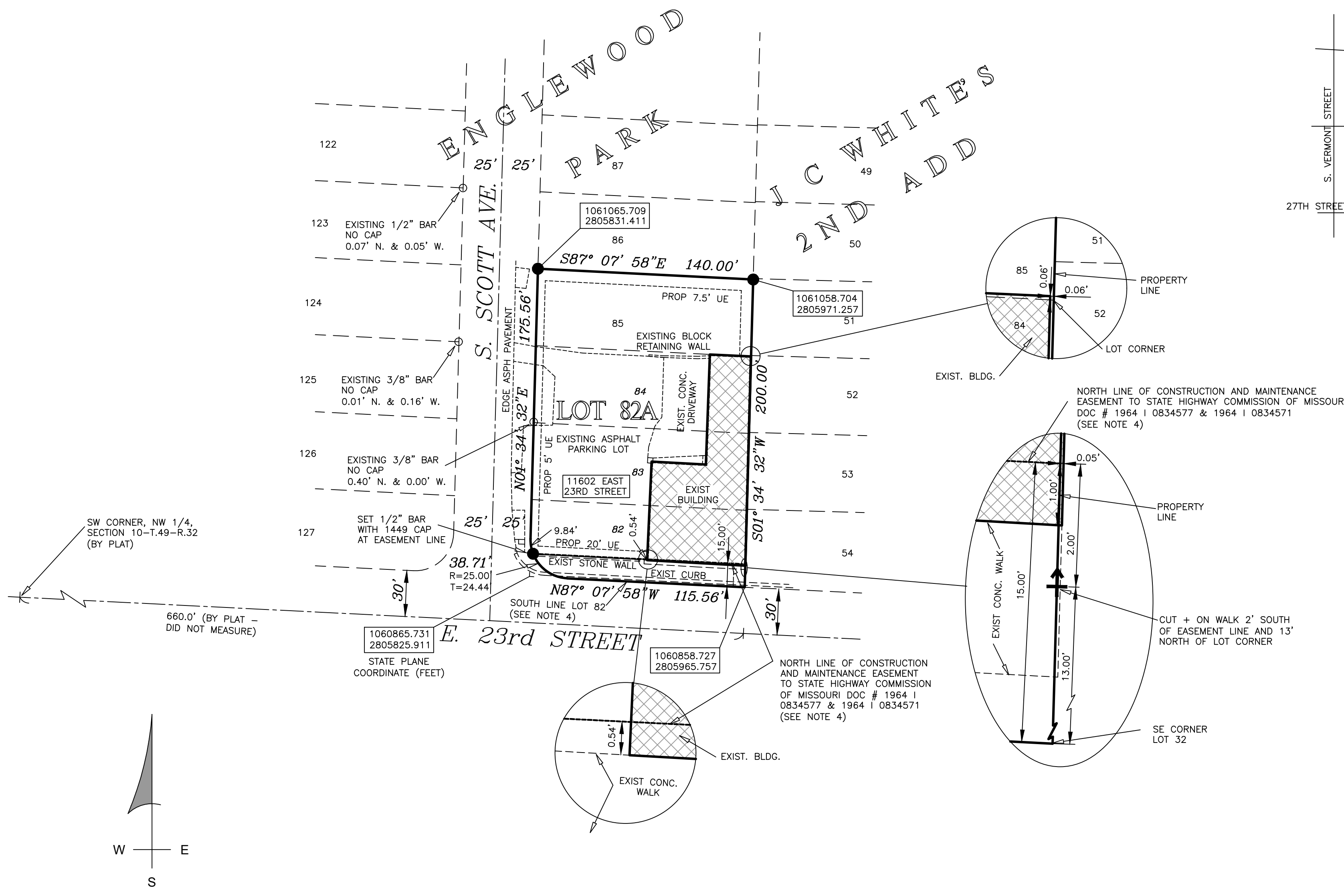

ERWIN W. GARD, PLS-1449

03/01/24
DATE



GARD HORIZON LLC LAND SURVEYING : BUILDING PERMIT & HOUSE PLAN SERVICES REAL ESTATE : LARGE FORMAT SCANS & PRINTS 1212 SW Luttrell, Suite C Blue Springs, Missouri 64015 Phone: 816-295-5951 Web: gardhorizon.com Erwin W. Gard, Owner Professional Surveyor ~ Realtor Cell: 816-853-4559 Email: erwin@gardhorizon.com	REZONING PLOT PLAN 11602 EAST 23RD STREET LOTS 82-85, ENGLEWOOD PARK, INDEPENDENCE, JACKSON COUNTY, MISSOURI AIRGEAD, LLC 11602 E. 23RD STREET INDEPENDENCE, MISSOURI 64052	<table><tr><td colspan="2">JOB NO.: 1199-2301</td></tr><tr><td colspan="2">MASTER FOLDER: CAD Drawings\Sub</td></tr><tr><td colspan="2">SUB FOLDER: E</td></tr><tr><td colspan="2">FILE NAME: ENGLEWOOD PK MSTR</td></tr><tr><td colspan="2">FIELD BOOK ~ PAGE GPS & 42</td></tr><tr><td colspan="2">DRAWN BY: E. GARD</td></tr><tr><td>SHEET 1</td><td>OF 1</td></tr></table>	JOB NO.: 1199-2301		MASTER FOLDER: CAD Drawings\Sub		SUB FOLDER: E		FILE NAME: ENGLEWOOD PK MSTR		FIELD BOOK ~ PAGE GPS & 42		DRAWN BY: E. GARD		SHEET 1	OF 1
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MASTER FOLDER: CAD Drawings\Sub																
SUB FOLDER: E																
FILE NAME: ENGLEWOOD PK MSTR																
FIELD BOOK ~ PAGE GPS & 42																
DRAWN BY: E. GARD																
SHEET 1	OF 1															





VICINITY MAP
SECTION 10-T.49-R.32
NOT TO SCALE

MINOR SUBDIVISION
ENGLEWOOD PARK - REPLAT A

THIS IS A REPLAT OF LOTS 82, 83, 84 & 85, ENGLEWOOD PARK, A SUBDIVISION IN THE NW 1/4, SECTION 10-T.49-R.32, INDEPENDENCE, JACKSON COUNTY, MISSOURI

DEDICATION:
THE UNDERSIGNED PROPRIETORS OF THE TRACT OF LAND DESCRIBED IN THIS PLAT HAVE CAUSED THE SAME TO BE SUBDIVIDED IN THE MANNER SHOWN HEREON WHICH SHALL HEREAFTER BE KNOWN AS:

ENGLEWOOD PARK - REPLAT A

STREETS: ALL THOROUGHFARES SHOWN ON THIS PLAT AND NOT HERETOFORE DEDICATED TO PUBLIC USE ARE HEREBY SO DEDICATED.
EASEMENTS: AN EASEMENT OR LICENSE IS HEREBY GRANTED TO INDEPENDENCE, MISSOURI TO LOCATE, CONSTRUCT AND MAINTAIN OR TO AUTHORIZE THE LOCATION, CONSTRUCTION OR MAINTENANCE OF POLES, WIRES, CONDUITS AND/OR STRUCTURES FOR WATER, GAS, SANITARY SEWER, STORM SEWER, ELECTRICITY, TELEPHONE, CABLE T.V. OR ANY OTHER PUBLIC SERVICE OR UTILITY, ANY OR ALL OF THEM UPON, OVER OR UNDER THOSE AREAS OUTLINED AND DESIGNATED UPON THIS PLAT AS "UTILITY EASEMENT" (U.E.), "DRAINAGE EASEMENT" (D.E.), "WATER EASEMENT" (W.E.), OR "SEWER EASEMENT" (S.E.) AND WITHIN ANY STREET OR THOROUGHFARE DEDICATED TO PUBLIC USE ON THIS PLAT. WHERE AN EASEMENT IS DEDICATED TO A SPECIFIC USE, THE USE THEREOF SHALL BE RESTRICTED TO SAID USE. ALL EASEMENTS SHALL BE KEPT FREE AND CLEAR OF ALL BUILDINGS, STRUCTURES OR OTHER OBSTRUCTIONS (EXCEPT DRIVEWAYS, PAVED AREAS, GRASS, SHRUBS, AND FENCES) WHICH WOULD INTERFERE WITH : A) THE PROPER, SAFE, AND CONTINUOUS USE AND MAINTENANCE OR RECONSTRUCTION OF THE FACILITIES LOCATED WITHIN SAID EASEMENT, AND, B) THE AGENTS AND EMPLOYEES OF INDEPENDENCE, MISSOURI AND ITS FRANCHISED UTILITIES FROM GOING UPON SAID EASEMENT IN THE EXERCISING OF THE RIGHTS GRANTED BY SAID EASEMENT.
BUILDING SET BACK LINE: BUILDING LINE(S) OR SET BACK LINE(S) SHALL BE AS REQUIRED BY THE ZONING OF THE PROPERTY.

IN TESTIMONY WHEREOF: AIRGEAD, LLC, HAS CAUSED THESE PRESENTS TO BE SIGNED THIS _____ DAY OF _____, 20____.

ANDREW ROCCO MAZZELLA

NOTARY CERTIFICATION:
STATE OF MISSOURI)
COUNTY OF JACKSON)
ON THIS _____ DAY OF _____, 20____, BEFORE ME THE UNDERSIGNED NOTARY PUBLIC, PERSONALLY APPEARED ANDREW ROCCO MAZZELLA, KNOWN BY ME TO BE THE PERSON DESCRIBED HEREIN AND WHO EXECUTED THE FOREGOING INSTRUMENT AND BEING DULY SWORN BY ME DID ACKNOWLEDGE THAT HE IS THE OWNER / MANAGER OF AIRGEAD, LLC AND THAT HE EXECUTED THIS INSTRUMENT AS THEIR FREE ACT AND DEED OF SAID AIRGEAD, LLC.

IN TESTIMONY THEREOF:
I HAVE HEREUNTO SET MY HAND AND AFFIXED MY SEAL THE DAY AND YEAR LAST WRITTEN ABOVE.

MY COMMISSION EXPIRES _____, NOTARY PUBLIC

PROPERTY DESCRIPTION:
27,883 SQUARE FEET OR 0.6401 ACRES.

ALL OF LOTS 82, 83, 84 & 85, ENGLEWOOD PARK, A SUBDIVISION IN INDEPENDENCE, JACKSON COUNTY, MISSOURI.

CITY OF INDEPENDENCE APPROVALS:

ALEXANDER LOPEZ _____ DATE _____
MUNICIPAL SERVICES CITY ENGINEER

TOM SCANNELL _____ DATE _____
DIRECTOR OF COMMUNITY DEVELOPMENT

APPROVED BY THE CITY COUNCIL AND MAYOR OF THE CITY OF INDEPENDENCE, MISSOURI, PURSUANT TO ORDINANCE NO. 17339.

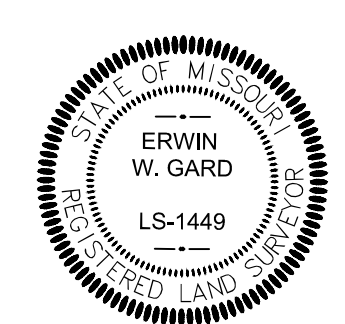
CITY CLERK

JACKSON COUNTY APPROVALS:

ASSESSOR'S OFFICE _____ DATE _____

GIS _____ DATE _____

- SURVEY NOTES:**
- SEMI-PERMANENT MONUMENTATION:
SET 1/2" BAR WITH CAP STAMPED "E.W.GARD PLS-1449" AT CORNERS MARKED "•".
 - THE BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE MISSOURI COORDINATE SYSTEM OF 1983, WEST ZONE, BY GPS OBSERVATIONS USING THE MoDOT GPS NETWORK IN JUNE, 2022. GRID FACTOR EQUALS 0.9999021.
 - THE SOURCE OF THE DESCRIPTION USED FOR THIS PLAT WAS DERIVED FROM THE PLAT OF ENGLEWOOD PARK.
 - THE RIGHT-OF-WAY EXCEPTED IN THE DEED IS ACTUALLY AN EASEMENT AND NOT A FEE SIMPLE CONVEYANCE OF RIGHT-OF-WAY; THEREFORE, IT IS THIS SURVEYOR'S PROFESSIONAL OPINION THAT THE FEE SIMPLE OWNERSHIP CONTINUES TO EXTEND TO THE PLATTED LOT LINE.
 - THIS SURVEY AND PLAT MEETS OR EXCEEDS THE STANDARDS FOR URBAN CLASS PROPERTY AS DEFINED BY THE CURRENT "MISSOURI STANDARDS FOR PROPERTY BOUNDARY SURVEYS".
 - THE SUBJECT PROPERTY IS LOCATED IN ZONE "X" AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 29095 C 0279 G HAVING AN EFFECTIVE DATE OF JANUARY 20, 2017. LANDS LOCATED IN ZONE "X" ARE THOSE AREAS DETERMINED TO BE SUBJECT TO MINIMAL FLOODING.
 - THE SURVEYOR'S "CERTIFICATION" STATEMENT USED HEREON IS MADE TO THE PARTIES NAMED HEREIN AND IS NOT TRANSFERABLE TO ADDITIONAL PARTIES, INSTITUTIONS, OR SUBSEQUENT OWNERS AND MEANS AN EXPRESSION OF PROFESSIONAL BELIEF REGARDING THE DATA SHOWN ON THIS PLAT AND DOES NOT REPRESENT A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.

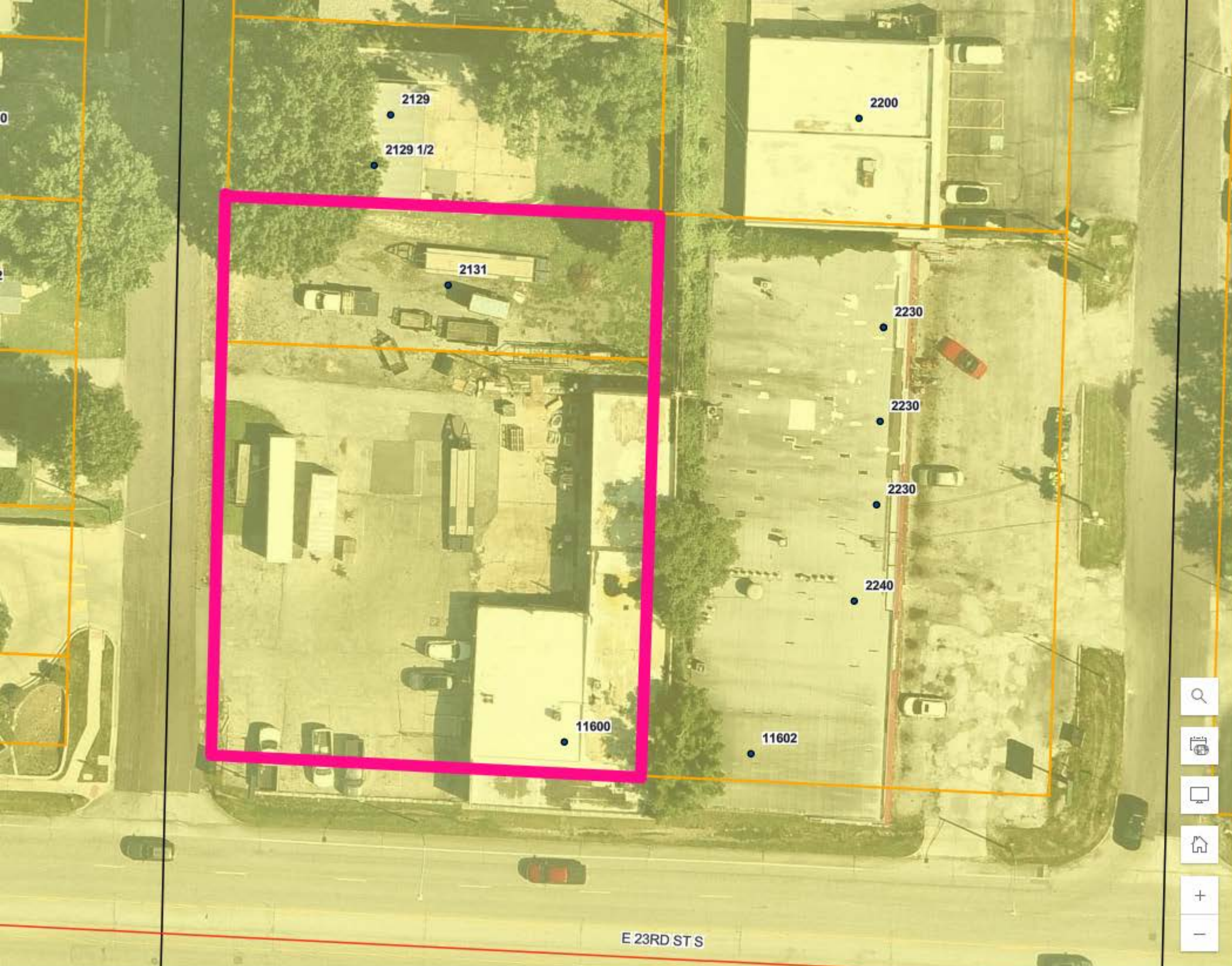


ERWIN W. GARD, PLS-1449

03/01/24
DATE

GARD HORIZON LLC
LAND SURVEYING : BUILDING PERMIT & HOUSE PLAN SERVICES
REAL ESTATE : LARGE FORMAT SCANS & PRINTS
1212 SW Luttrell, Suite C
Blue Springs, Missouri 64015
Phone: 816-295-5951
Web: gardhorizon.com
Erwin W. Gard, Owner
Professional Surveyor - Realtor
Cell: 816-853-4559
Email: erwin@gardhorizon.com

MINOR SUBDIVISION
ALL OF LOTS 82, 83, 84 & 85, ENGLEWOOD PARK
INDEPENDENCE, JACKSON COUNTY, MISSOURI
AIRGEAD, LLC
11602 E. 23RD STREET
INDEPENDENCE, MO 64052
JOB NO: 1199-2201
WORK FOLDER: CAD Drawings\Sub
JOB FOLDER: E
FILE NAME: ENGLEWOOD PK MSTR
FIELD BOOK - PAGE 42 -
DRAWN BY: E. GARD
SHEET 1 OF 1



Zoning & Land Use

Properties

Proposed Land Use (Comp Plan)

Residential Neighborhoods

Residential Urban Neighborhoods

Mixed Use

Neighborhood Commercial

Community Commercial

Regional Commercial

Office

Business Park

Industrial

Civic / Public

Community Attractions & Tourism

Parks

Agricultural

Invalid Rule

Zoning District

ARTS

BP

BP/PUD

C-1

C-2

C-2/HL

C-2/I-1/U

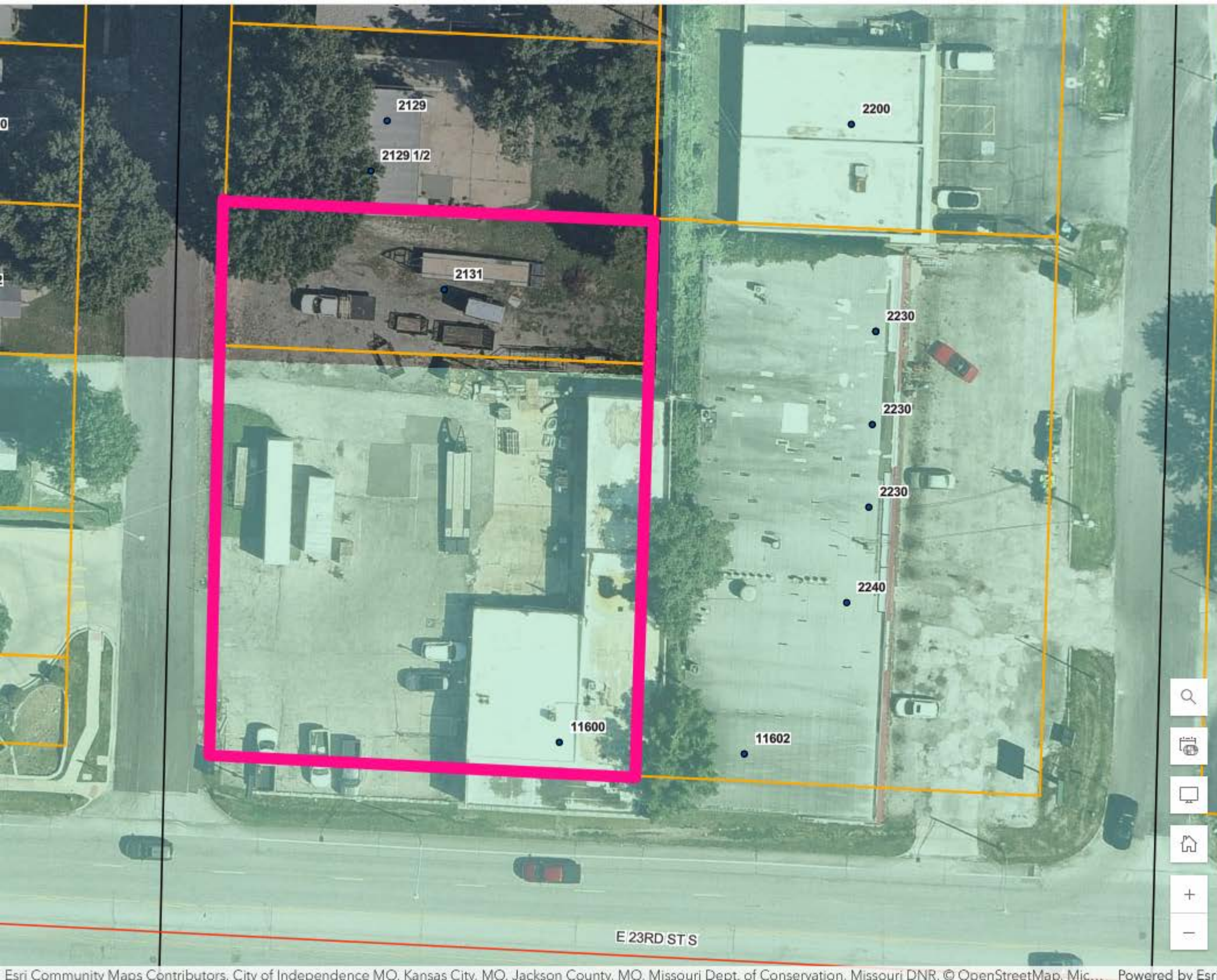
Esri Community Maps Contributors, City of Independence MO, Kansas City, MO, Jackson County, MO, Missouri Dept. of Conservation, Missouri DNR, © OpenStreetMap, Mic... Powered by Esri

Page 161 of 197

Properties

Zoning District

- ARTS
- BP
- BP/PUD
- C-1
- C-2
- C-2/HL
- C-2/I-1/U
- C-2/PUD
- C-2/SUP
- C-3
- C-3/SUP
- DFD
- I-1
- I-1/HL
- I-1/SUP
- I-1/U
- I-2
- O-1
- O-1/PUD
- R-1
- R-12
- R-12/HL
- R-12/PUD



MEETING DATE: November 19, 2024

STAFF: Brian L. Harker, Senior Planner

PROJECT NAME: Crysler Stadium

CASE NUMBER/REQUEST: **Case 24-100-25 – Rezoning – 2301 S. Crysler Avenue** – A request by the City to rezone the property from I-1 (Industrial) and R-6 (Single Family Residential) to R-6 (Single Family Residential).

APPLICANT: City of Independence

PROPERTY LOCATION: 2301 S. Crysler Avenue

SURROUNDING ZONING/LAND USE:

North: C-2/SP (General Commercial/Special Use)...auto sales/repair
C-2 (General Commercial)...single-family homes

East: C-2 (General Commercial)...church
R-18/PUD (Moderate Density Residential/Planned Unit Development)...four-plexes

South: R-6 (Single-Family Residential)...single-family homes

West: R-6 (Single-Family Residential)...national guard armory
I-1 (Industrial)...veterinary clinic
C-2 (General Commercial)...pharmacy

PUBLIC NOTICE:

- Letters to property owners – October 10, 2024
- Public Notice published in the Independence Examiner – October 12, 2024
- Signs posted on property – October 11, 2024

FURTHER ACTION:

Following action by the Planning Commission, this rezoning request is scheduled for first reading by the City Council on December 2, 2024 and the public hearing/second reading on December 16, 2024.

RECOMMENDATION

Staff recommends **APPROVAL** of this rezoning request.

PROJECT DESCRIPTION & BACKGROUND INFORMATION

PROJECT DESCRIPTION: The Independence School District is entering an agreement with the City of Independence for Crysler Stadium and the adjoining parcel to the south.

Current Zoning:	I-1 (Industrial) and R-6 (Single-Family Residential)	Proposed Zoning:	R-6 (Single-Family Residential)
------------------------	--	-------------------------	---------------------------------

Current and Continuing Use: Baseball stadium and beach volleyball court

Background on Property Transfer:

Recently, there has been very limited usage of this facility by local community groups. About three years ago, American Legion teams were using the stadium Mondays through Saturdays for games, and Van Horn and Truman Varsity teams would sometimes use the field for their home games. For the summer 2023 season (the last season the Parks Recreation and Tourism Department operated the stadium), games were scheduled about a dozen times, but these were only make-up games for Queen City Baseball due to rainouts at the Mill Creek ballfields. Back in the summer of 2022 there were four or five Saturday/Sunday tournaments which would have been the last time the stadium generated revenue. The Parks, Recreation & Tourism Department has over \$1.2 million in identified capital funding needs for Crysler Stadium. Despite its history and nostalgia, it is difficult to justify investing that amount of capital in a facility that is used so minimally by the public.

In 2023 the Independence School District (ISD) approached the City about using Crysler Stadium as a home field for Van Horn High School, but did not want to invest their capital dollars in a facility the school district did not own.

Consequently, the ISD Superintendent reached out to the City to see if there was a way for ISD to use the facility for the Van Horn baseball team. About one year ago, the City Council approved a 12-month lease agreement between the City of Independence and the Independence School District for the use of Crysler Stadium. At the time, it was explained to the City Council that it was the desire of both parties to facilitate the transfer of Crysler Stadium to the Independence School District. Earlier this month, both parties extended the agreement by mutual consent for an additional 12-month period to allow the development agreement to be finalized.

ISD intends to continue use of the facility as a baseball field for Van Horn High School. The district does not intend to demolish the stadium. ISD spent a significant amount of manpower, hours, and money so the facility could be used last season. This included investing significant resources in facility enhancements, including turf maintenance, property maintenance, blight removal, and the impending replacement of the outfield scoreboard.

Because of these reasons, staff believes the transference of Crysler Stadium from the City of Independence to the Independence School District is beneficial to the citizens of the City and the residents of the school district.

Zoning History:

Prior to 2009 the I-1 (Industrial) portion of the property was zoned M-1 (Industrial) and the R-6 (Single-Family Residential) portion was zoned R-1b (Single-Family Residential). The R-1b (Single-Family Residential) portion of the property was zoned R-1 (Single-Family Residential) before 1980. The property was M-1 (Industrial) and R-1 (Single-Family Residential) from 1965 to 1980.

Proposal:

This is a request by the City of Independence to rezone the property from R-6 (Single-Family Residential) and I-1 (Industrial) to R-6 (Single-Family Residential). Although the property has a

public use and the use is permitted in both I-1 and R-6 zonings, the UDO requires that there be only one zoning per lot, therefore the property when replatted needs to be rezoned.

Physical Characteristics of Property:

The property is already developed and is the site of a baseball stadium with grandstands, a concession area, paved parking lot, beach volleyball area and an undeveloped field to the southeast on an adjacent lot that will be joined with the main property in a single-lot plat. The south, southeast and east sides of the property have a perimeter of trees. The northwest corner of the property (where the parking lot sits) is almost entirely covered with pavement.

Characteristics of the Area:

The property sets southeast of a busy intersection, 23rd Street and Chrysler Avenue. The 23rd Street corridor is predominately commercial uses. Southwest of the property is a national guard armory. South and Southeast of the property are single-family and multiple-family uses; however, a railroad right-of-way abuts immediately to the east separating the multiple-family residences and a church from the property.

ANALYSIS

Consistency with *Independence for All*, Strategic Plan:

The sale will improve public infrastructure and facilities.

Comprehensive Plan Tools and Policies for the Current Designation:

Support existing and expanded use of community facilities.

Sub-Area Plans:

The area is not covered by a sub-area plan.

Zoning:

Although the property has a public use that is permitted in both I-1 and R-6 zonings, the uses listed for the existing and proposed zonings are as follows. The I-1 (Industrial) zoning allows for warehousing, wholesaling, vehicle repair, small engine repair, vehicle storage, office use, government facilities, utilities and manufacturing. Allowed uses in R-6 districts include single-family homes, home based child-care, government facilities, churches, schools, utilities, cemeteries, crops, and gardening.

Platting:

The property consists of two unplatted tracts. A 5.987-acre tract, abutting the southeast corner of 23rd Street and Chrysler Avenue, containing a large parking lot, the stadium and a beach volleyball area and an undeveloped 3.014-acre tract to its southeast. These will be platted into one, single-lot subdivision (a Minor Subdivision) as part of the property's transference from the City of Independence to the Independence School District.

Historic and Archeological Sites:

While nostalgic and of cultural significance, the site is not significant enough to be designated as a historic property.

Public Utilities:

All utilities are available in nearby rights-of-way and easements.

Floodplain/Stream Buffer:

There is a 170-foot-wide Stream Buffer that runs through the middle of this property outside of the baseball field. In addition, a small portion of the northwest corner of the property lies within the FEMA defined floodplain.

CIP Investments:

The City does not have any capital improvements projects planned near this area.

Access and Sidewalks:

There is an existing sidewalk along 23rd Street and no driveway access from the property along that street. A continuous paved surface provides access to S. Chrysler Avenue and is contiguous with the “sidewalk” adjacent to the street.

Landscaping:

The northwest side of the property has little green space except abutting the 23rd Street right-of-way and adjacent to the beach volleyball courts. The stadium has green lawn areas and trees around its perimeter. The southeast tract is an undeveloped green space flanked by trees.

REVIEW CRITERIA

Recommendations and decisions on rezoning applications must be based on consideration of all the following criteria:

1. Conformance of the requested zoning with the Comprehensive Plan.

The Comprehensive Plan envisions Park uses for the area. The Tools and Policies state the need to, “Support existing and expanded use of community facilities as ‘third places’ where residents of all ages can connect with programming and services, volunteer opportunities and opportunities for civic engagement.”

2. Conformance of the requested zoning with any adopted neighborhood or sub-area plans in which the property is located or abuts.

There are no sub-area plans for the vicinity.

3. The compatibility of the proposed zoning with the zoning and use of nearby property, including any overlay zoning.

There are nearby R-6 zoned homes to the south and R-18/PUD zoned properties to the east.

4. The compatibility of the proposed zoning and allowed uses with the character of the neighborhood.

The proposed R-6 zoning is compatible with the area’s existing neighborhood.

5. The suitability of the subject property for the uses to which it has been restricted under the existing zoning regulations.

The I-1 (Industrial) zoning is not compatible with the surrounding retail, government, religious and residential uses.

6. The length of time the subject property has remained vacant as zoned.

This statement is not applicable to this case.

7. The extent to which approving the rezoning will detrimentally affect nearby properties.

The additional R-6 zoning to the tract should have no detrimental effect on area properties. ISD will be able to continue using the Stadium for the Van Horn High School baseball team.

- 8. The gain, if any, to the public health, safety, and welfare due to denial of the application, as compared to the hardship imposed upon the landowner, if any, as a result of denial of the application.**

If rezoning is denied, the property cannot be replatted per Code. Transferring Crysler Stadium from the City to the Independence School District is beneficial to the citizens of the City and the residents of the school district.

EXHIBITS

1. Narrative
2. Application
3. Notification letter
4. Notification Aera Map
5. Address List
6. Affidavit
7. Final Plat
8. Comprehensive Plan map
9. Zoning map

From: [Jim Holtcamp](#)
To: [Brian Harker](#)
Subject: RE: 24-3006 Chrysler Stadium Minor Subdivision
Date: Monday, September 16, 2024 10:39:29 AM

Brian,

The City is interested in entering an agreement with the Independence School District for Chrysler Stadium and the adjoining parcel to the south. Rather than writing several separate easements for our infrastructure we decided that it would be more cost effective to submit a plat and address the easements that way. Please let me know if you need anything else.
Thanks

Jim

Application Type (check all that apply)

Land Use	Land Subdivision	Site Development	Use Permit	Other
☐ Rezoning ☐ PUD Rezoning	☐ Preliminary Plat ☐ Final Plat ☐ Minor Subdivision	☐ Final Site Plan ☐ Preliminary Dev Plan ☐ Final Dev Plan (PUD)	☐ Special Use ☐ Homebased Business ☐ Short-Term Rental	☐ Admin. Adjustment ☐ Variance ☐ Street Name Change ☐ Special Sign Permit

Project Information and Location

Crysler Stadium

Project Name

2301 S. Chrysler Avenue

Project Address/Location

	9-acres	1	Yes
Sq. Ft. of Building	Acreage	Number of Lots/Tracts	Stream Buffer (Yes or No)
I-1 and R-6	R-6	stadium	stadium
Existing Zoning	Proposed Zoning	Existing Land Use	Proposed Land Use

Basic Application Requirements (See the Planning & Zoning Application Guide for additional requirements)

☐ Completed & Signed Application Form ☐ Application Fee ☐ Cover Letter Describing Details of Project	☐ One 24" x 36" set of plans for Land Sub. & Site Dev. ☐ One PDF copy of a plat map or site plan ☐ Legal Description of the property in question
---	---

Contact Information

Applicant

Jim Holtcamp	City of Independence
Name	Company
111 E. Maple	
Address	
816-325-7000	jholtcamp@indepmo.org
Phone	Email

Architect/Engineer/Surveyor/Other: _____

Name	Company
Address	
Phone	Email

Owner

City of Independence	
Name	Company
111E. Maple	
Address	
816-325-7000	
Phone	Email

Architect/Engineer/Surveyor/Other: _____

Name	Company
Address	
Phone	Email

The applicant hereby agrees that the information provided above is accurate.

Applicant's Signature _____ Date _____

Owner's Signature _____ Date _____

Appendix B - Property Owner Notification Letter

City of Independence, Missouri

Date: 10/10/2024

Case No. 24-100-25

Dear Property Owner:

This letter is to notify you that an application has been submitted for consideration by the Planning Commission and City Council. A full public hearing will be held by the Planning Commission and the City Council will consider new information on the dates and times below.

Proposed Case Type (Check One):

- ☒ Rezoning ☐ Rezoning/PUD ☐ Special Use Permit
☐ Preliminary Development Plan

Proposed project description: Rezone from R-6 (Single Family Residential) and I-1 (Industrial) to

Applicant: City of Independence R-6 (Single-Family Residential)

Location of Property: 2301 S. Eryslar Avenue

Planning Commission Meeting Date: October 29, 2024 at 6:00 p.m.

City Council Meeting Date: December 16, 2024 at 6:00 p.m.

Location of public hearings: City Council Chambers, City Hall
111 E Maple Ave, Independence, Missouri, 64050

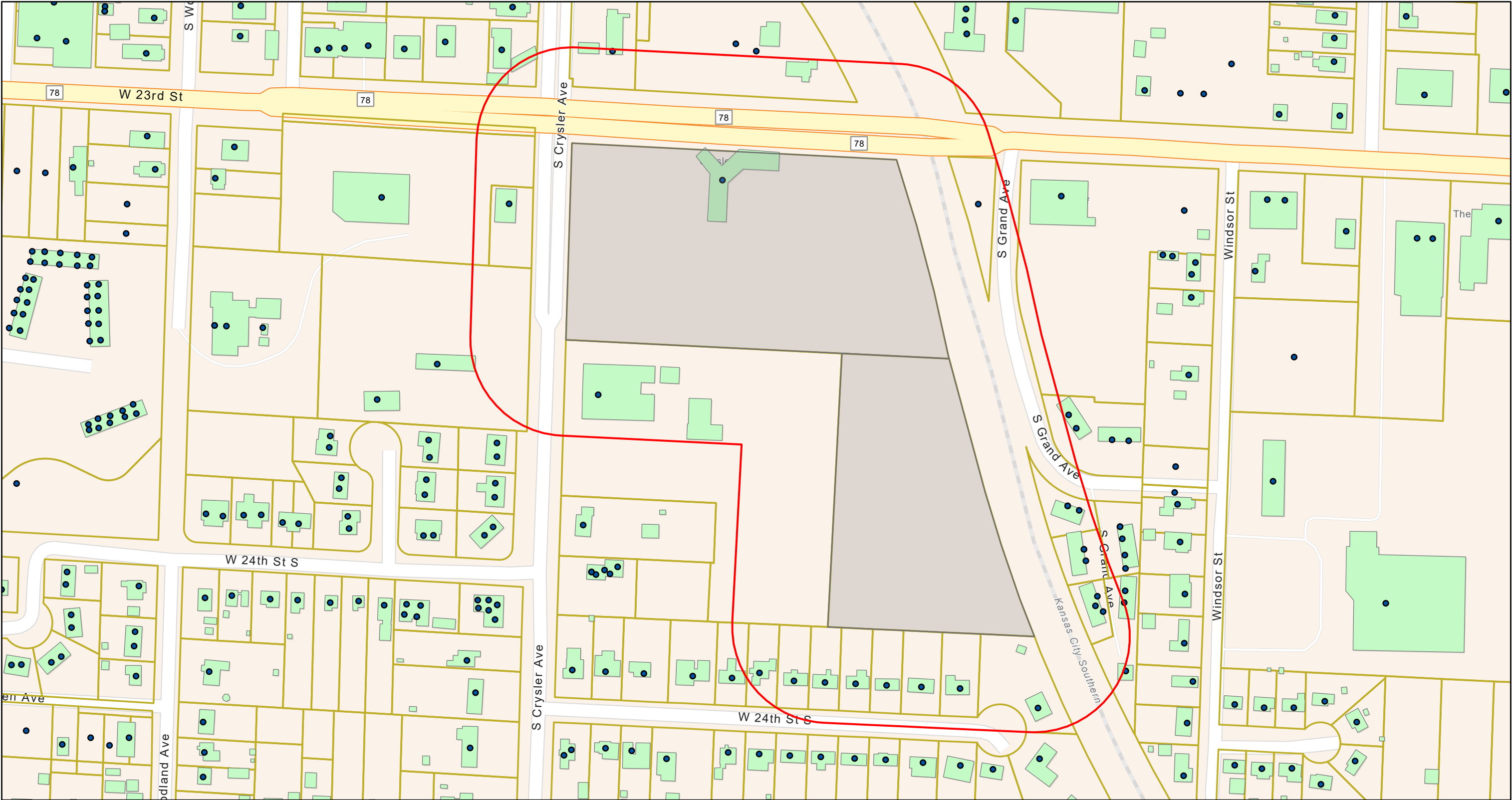
All interested persons are invited to attend and will have an opportunity to be heard at the full public hearing (Planning Commission).

REZONINGS ONLY: You may file a protest petition with the Community Development Department. For more information or to get copies of a petition, please contact Planning staff at 816-325-7421.

Applicant (or Owner/Agent)

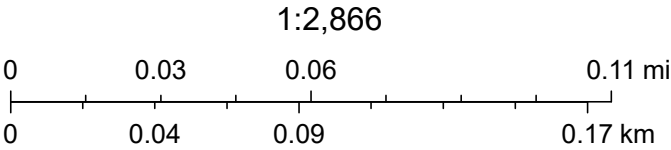
For more information, contact the Community Development Department at 816-325-7421.

185ft Notification Area - 2301 S Crysler



10/10/2024, 12:54:06 PM

- Addresses
- Building Footprints
- Parcels (General Use- AGOL)
- City Limits



Esri Community Maps Contributors, City of Independence MO, Kansas City, MO, Jackson County, MO, Missouri Dept. of Conservation, Missouri DNR, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Owner	Address	City
Shan, LLC	5401 E. Winner Road	Kansas City
Kay Lander	1101 S. Crysler Avenue	Independence
Sabrina D. Mitchell	1104 W. 23rd Street S.	Independence
BDA Properties, LLC	820 S. Riner Road	Buckner
Central Assembly of God	1009 W. 23rd Street S.	Independence
Shelly Sherman and She Zhou	7611 State Line, Unbit 268	Kansas City
Steven Lahue	2318 S. Grand Avenue	Independence
23 28 S. Grand Avenue, LLC	3225 McLead Drive, Suite 777	Las Vegas
The Crovo Family Trust	12099 Oakview Way	San Diego
Metzger Gary W. and Maria Del Carmen	2324 1/2 S. Grand Avenue	Independence
Meridan Equities, LLC	301 Jones Avenue	Warrensburg
Margaret Ann Hartshorn	1100 W. 24th Street S.	Independence
Stephan and Denise Bryant	1110 W. 24th Street S.	Independence
Roberts Investment Group, LLC	5101 Wyandotte, Apt 15	Kansas City
Russell D. Michael Trustee	10504 E. 20th Street S.	Independence
Kenneth L. and Michelle R. Hentz	1204 W. 24th Street S.	Independence
Cynthia Lynn Woodley and Beverly E. Lentz	1208 W. 24th Street S.	Independence
Maria Jesus and Richard Solis	1210 W. 24th Street S.	Independence
Harkosity, LLC	Four Embarcadaro Center, Ste 1400 #85	Sna Francisco
Jennifer L. Rodriguez	1218 W. 24th Street S.	Independence
State of Missouri	301 W. High Street, RM 590	Jefferson City
Kevin Frisbie Trustee	PO Box 520095	Independence
Animals Best Friends	PO Box 493	Independence
Cole CV Independence (W 23rd Street) MO, LLC	PO Box 1610	Cockeyville Hunt VA

State	Zip
MO	64127
MO	64052
MO	64050
MO	64016
MO	64055
MO	64114
MO	64055
NV	89121
CA	92128
MO	64055
MO	64093
MO	64052
MO	64052
MO	64112
MO	64052
MO	64052
MO	64052
MO	64052
CA	94111
MO	64052
MO	64102
MO	64052
MO	64051
MD	21030

Property Owner Notification Affidavit

STATE OF MISSOURI

COUNTY OF JACKSON

Case No. 24-100-25

I, Miranda Rice, of lawful age being first duly sworn upon oath, state:

That I am the (agent, owner, attorney) for the property for which the application was filed and did, not later than fifteen (15) days prior to the date of the public hearing scheduled before the Planning Commission, mail notices to all persons owning property within 185 feet of the subject property. **The list of property owners to whom notice has been mailed is attached.**

These notices were mailed on the 10 day of October, 2024.

Miranda Rice

Signature of Agent, Owner or Attorney

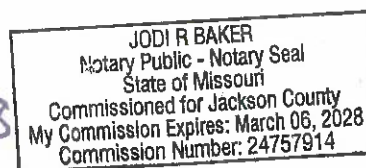
Subscribed and sworn to before me this 10 day of October, 2024.

Jodi R Baker

Notary Public

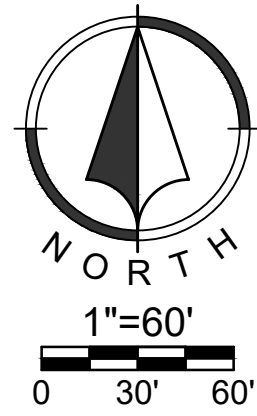
10/10/2024 *March 6, 2028*

Commission Expiration Date



MINOR SUBDIVISION
CRYSLER STADIUM

PART OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 49 NORTH, RANGE 32 WEST,
IN THE CITY OF INDEPENDENCE, COUNTY OF JACKSON, STATE OF MISSOURI



NOTES:

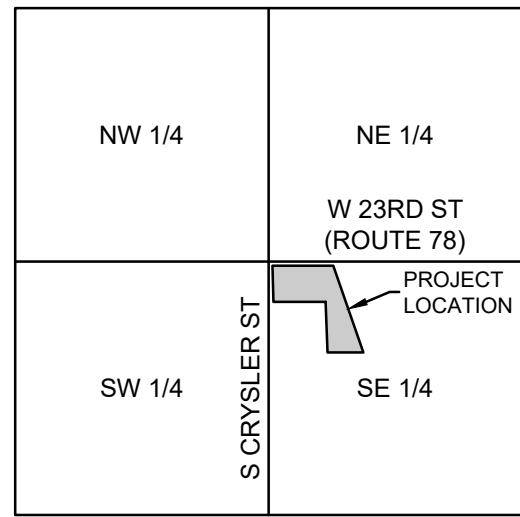
- Basis of Bearings: As determined by GPS observations, referenced to the Missouri State Plane Coordinate System, West Zone (NAD 83).
- Error of Closure:
Precision, 1 part in: 419772.392'
Error distance: 0.008'
Error direction: N67° 18' 33.59"E
Perimeter: 3428.280'
- All bearings and distances shown on this plat are measured unless otherwise noted.
- Flood Plain Note: According to the F.E.M.A. Flood Insurance Rate Map Number 29095C0283G, revised 1/20/2017, this tract graphically lies in OTHER AREAS, ZONE X, defined as areas determined to be outside the 0.2% annual chance floodplain, also in SPECIAL FLOOD HAZARD AREAS, ZONE A, defined without Base Flood Elevation (BFE).
- There shall be no clearing, grading, construction, or disturbance of vegetation.
- Any stream buffer shown hereon is subject to conservation easements that restrict disturbance and use of these areas.
- The location and limits of the stream buffer shown hereon were provided by the City of Independence.

Missouri Geographic Reference
System Station: JA-133
North Coord. = 323,228.261 m East Coord. = 857,271.288 m
(1 meter = 3.28083333 feet) Grid Factor = 0.9998970

Plat Corners (State Plane Coordinates in Meters)		
Point No.	North	East
1	323296.409	855868.126
2	323291.117	855972.288
3	323286.659	856060.552
4	323257.259	856069.497
5	323109.953	856108.510
6	323006.255	856142.934
7	323011.343	856037.873
8	323172.698	856042.546
9	323181.302	855864.793

LEGEND:

- ▲ FOUND SECTION CORNER AS NOTED
- △ SET SECTION CORNER
- FOUND MONUMENT AS NOTED
- SET 1/2" X 24" REBAR WITH RIC
- MOCL52011003572 KSCLS234 CAP
- (M) MEASURED
- (P) PLATTED
- (D) DEED
- (GU/E) GENERAL UTILITY EASEMENT
- (A/E) ACCESS EASEMENT
- FIRST ORDER STREAMLINE ZONE
- FEMA ZONE LINE



LOCATION MAP
SECTION 10-T49N-R32W
Scale 1" = 200'

BOUNDARY DESCRIPTION:

A tract of land located in the Northwest Quarter of the Southeast Quarter of Section 10, Township 49 North, Range 32 West of the Fifth Principal Meridian, all in the City of Independence, County of Jackson, State of Missouri, being more particularly described by Randy G. Zerr, Missouri PLS-2018016442, on August 7, 2024 as follows:

Commencing at the Center corner of Section 10, thence South 01°39'31" West, along the West line of the Southeast Quarter, 45.43 feet; thence departing said West line, South 88°20'29" East, 40.00 feet to the Point of Beginning, said point being the intersection of the East right-of-way line of South Chrysler Avenue and the South right-of-way line of West 23rd Street as both now established in August 2024.

From the Point of Beginning, thence South 87°05'30" East, along said South right-of-way line, 342.22 feet; thence South 87°06'30" East, along said South right-of-way line, 389.98 feet to the West right-of-way line of the Kansas City Southern Railroad (formerly known as the Gulf Mobile and Ohio Railroad) as now established in August 2024; thence, departing the said South right-of-way line, southeasterly on a non-tangent curve to the right, along said West right-of-way line, having an arc length of 100.85 feet, a radius of 1382.69 feet, and a chord that bears South 16°55'24" East, 100.83 feet; thence South 14°50'02" East, along said West right-of-way line, 500.00 feet; thence southeasterly on a tangent curve to the left, along said West right-of-way line, having an arc length of 358.72 feet, a radius of 2915.04 feet, and a chord that bears South 18°21'33" East, 358.49 feet to the Northeast corner of Lot 3, ALHAMBRA HEIGHTS RESURVEY, a subdivision in the City of Independence, County of Jackson, State of Missouri and recorded in the Jackson County Recorder of Deeds' office in Book 25, Page 67 (Instrument No. 19610777994); thence, departing said West right-of-way line, North 87°13'43" West, along the North line of said subdivision, 345.09 feet to the Southeast corner of a Tract of land recorded in a Special Warranty Deed in Book 1033, Page 727 in the Jackson County Recorder of Deeds' office; thence North 01°39'31" East, along the West line of said Tract, 529.66 feet; thence North 87°13'43" West, along the North line of said Tract, 583.92 feet to the East right-of-way line of South Chrysler Avenue as now established in August 2024; thence North 01°39'31" East, along said East right-of-way line, 377.84 feet to the Point of Beginning containing 392,051 square feet or 9.000 acres.

DEDICATION

The undersigned proprietor of the above described tract of land has caused the same to be subdivided in the manner as shown on the accompanying plat, which subdivision and plat shall hereafter be known as:

"CRYSLER STADIUM"

The proprietors, successors, and assigns, of property described on this plat hereby dedicate for public use all land described on this plat as streets or public ways not heretofore dedicated. Acceptance of the dedication of land for public right-of-way purposes described on this plat is for the sole purpose of maintaining right-of-way and does not constitute acceptance of any terms or conditions set forth in any agreement not shown on this plat.

EXECUTION

IN TESTIMONY WHEREOF, the undersigned proprietor has caused this instrument to be executed this ____ day of ____ 20__.

City Manager of the City of Independence

Zack Walker, City Manager

STATE OF _____)
COUNTY OF _____) SS

BE IT REMEMBERED, that on this ____ day of ____ 20__, before me a Notary Public in and for said County and State, came Zack Walker, City Manager of the City of Independence, who is personally known to me to be the same person who executed the foregoing instrument of writing on behalf of said corporation, and he duly acknowledged the execution of the same to be the act and deed of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the day and year last written above.

Notary Public My Appointment Expires: _____

APPROVALS

Approved by the City Council and Mayor of the City of Independence, Missouri, Pursuant to Ordinance No. 17339.

By: _____ Date: _____
City Clerk, Susanne Holland

By: _____ Date: _____
Community Development Director, Tom Scarnell

By: _____ Date: _____
Municipal Services Engineer, Alexander Lopez

Jackson County Assessment Department:

By: _____

Date: _____

Certification:

I hereby certify that this Boundary Survey is based upon an actual field survey performed by me or under my direct supervision during August 2024, and that said survey meets or exceeds the current Missouri Standards for Property Boundary Surveys, urban type property, as established by the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects and the Department of Agriculture Land Survey Program of the State of Missouri.

DRAFT COPY

Randy G. Zerr, Missouri PLS-2018016442
RIC MO CLS-2011003572
rzerr@ric-consult.com

CRYSLER STADIUM

Prepared For:
CITY OF INDEPENDENCE
C/O JIM HOLT CAMP
111 EAST MAPLE AVENUE
INDEPENDENCE, MISSOURI 64050



102 Abbie Avenue 913.317.9500
Kansas City, Kansas 66103 www.ric-consult.com

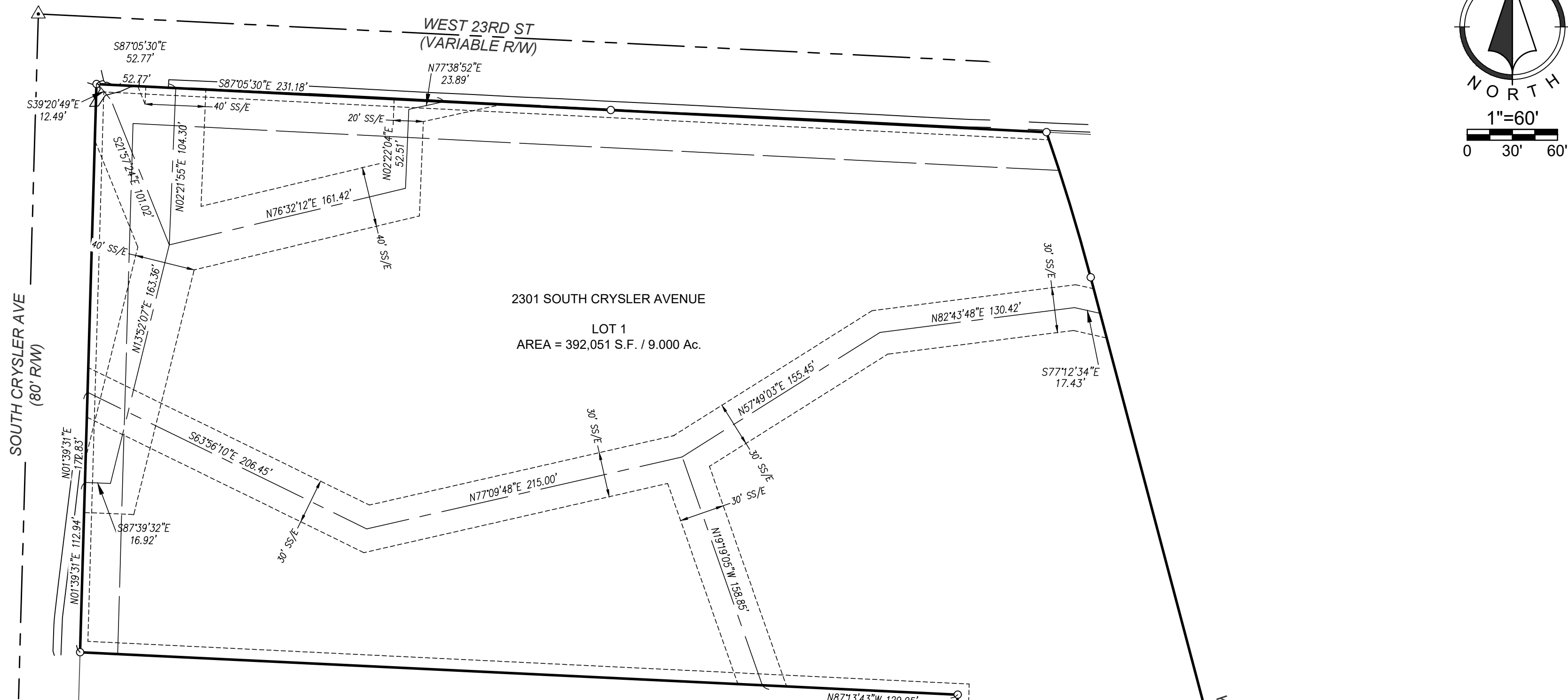
Date of Preparation: AUGUST, 2024 Revised: SEPTEMBER, 2024

Certificates of Authorization:
Missouri CLS-2011003572; Kansas CLS-234

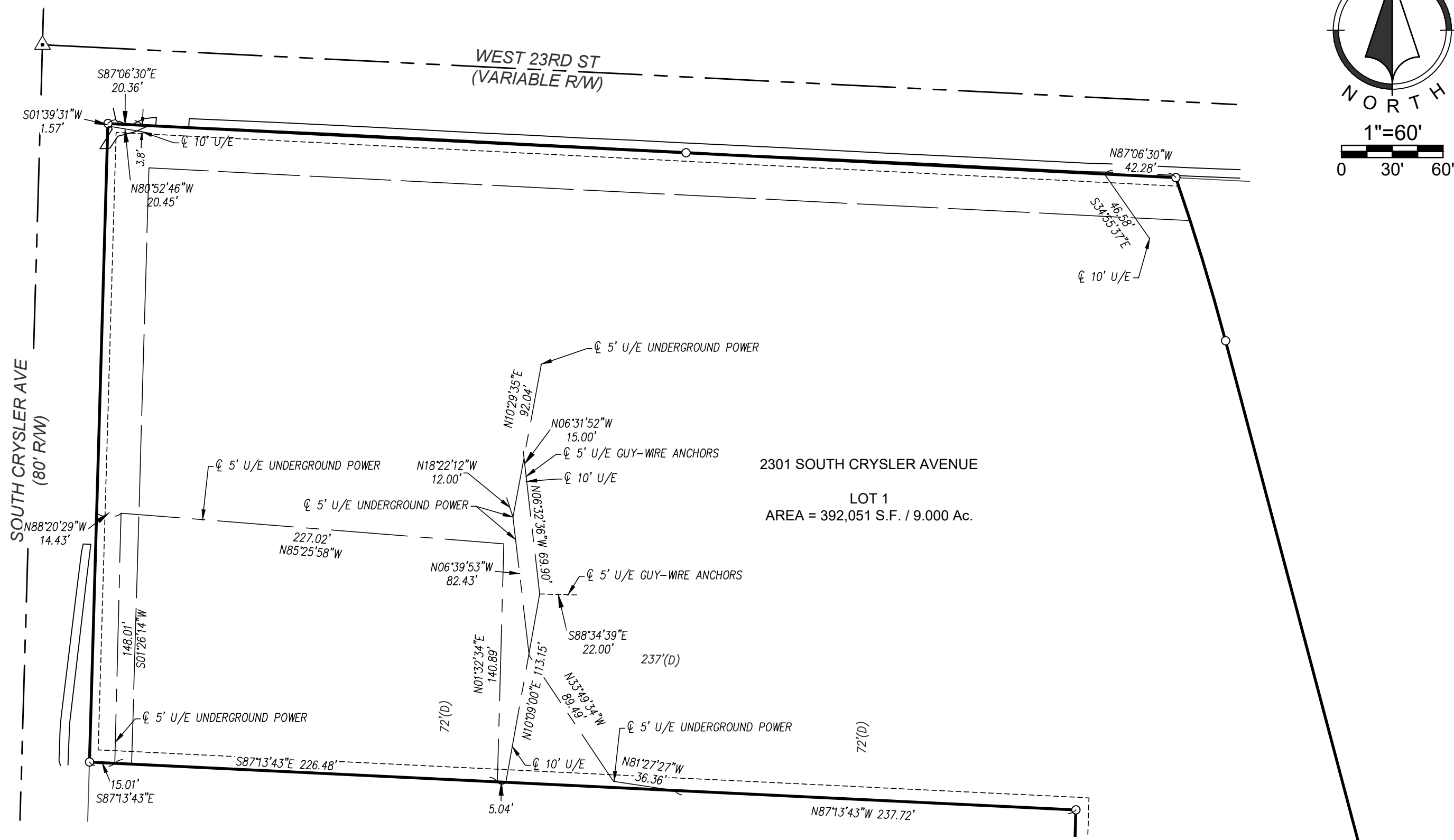
MINOR SUBDIVISION
CRYSLER STADIUM

PART OF THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 49 NORTH, RANGE 32 WEST,
IN THE CITY OF INDEPENDENCE, COUNTY OF JACKSON, STATE OF MISSOURI

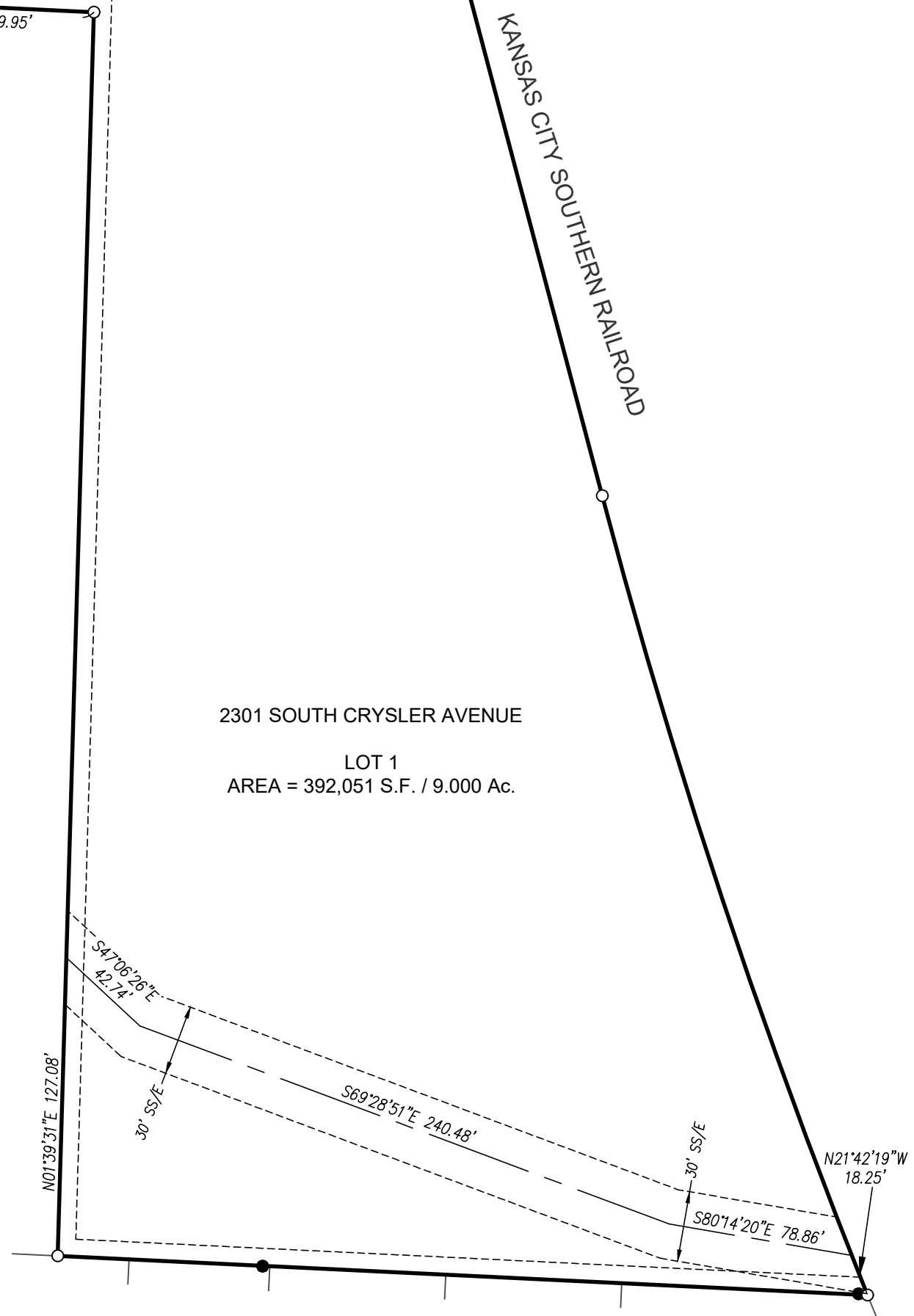
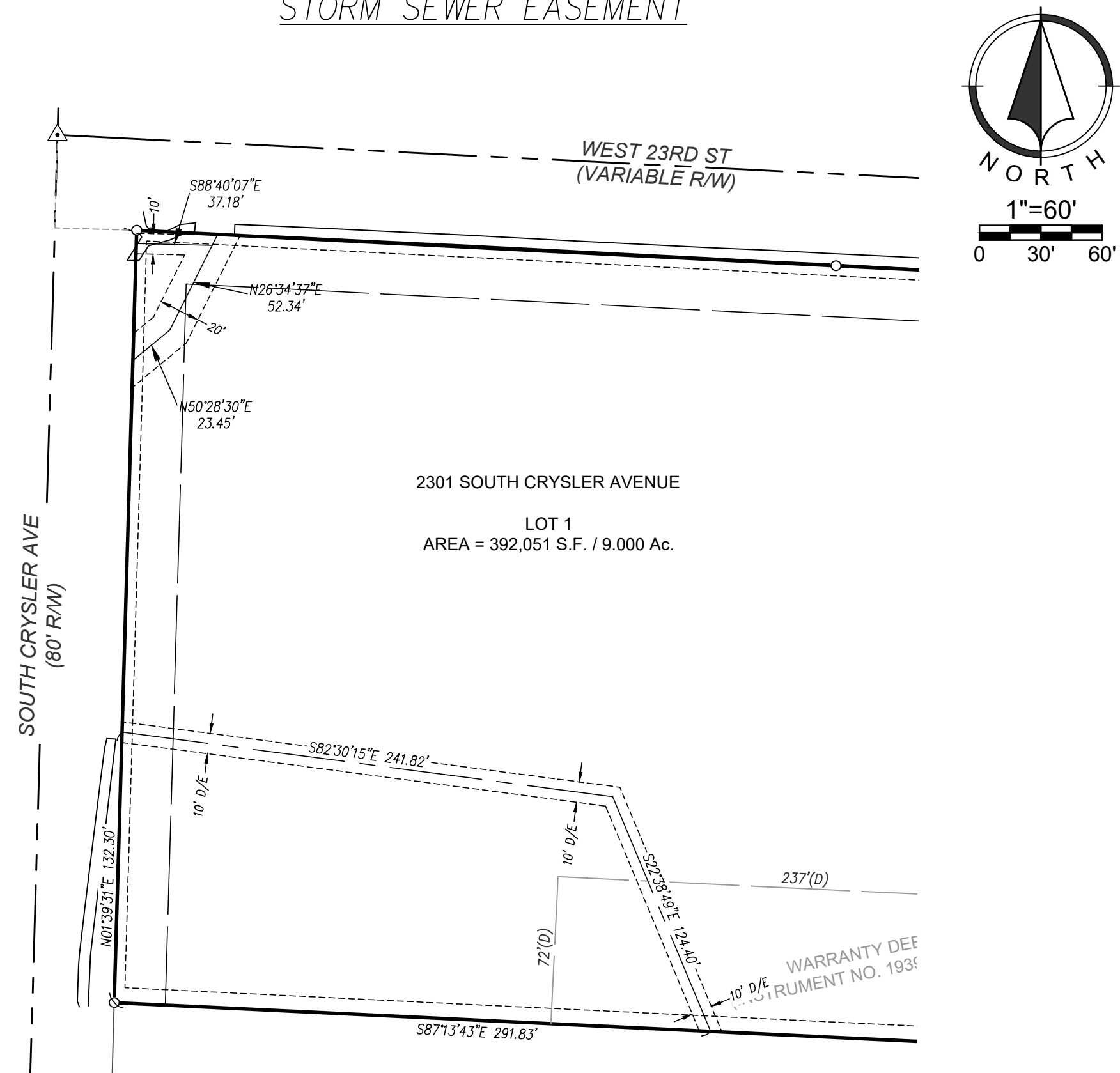
SANITARY SEWER EASEMENTS



ELECTRICAL POWER EASEMENTS

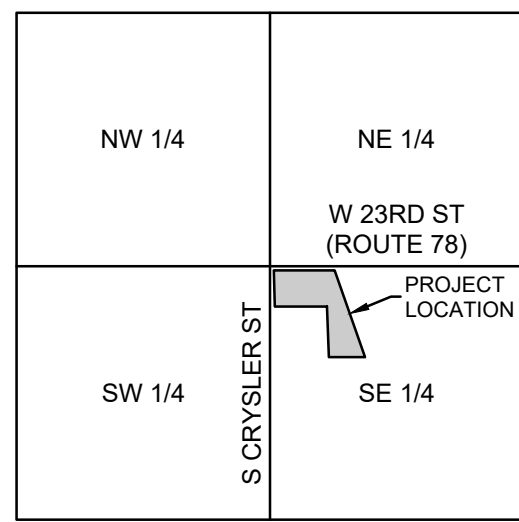


STORM SEWER EASEMENT



LEGEND:

- D/E DRAINAGE EASEMENT
SS/E SANITARY SEWER EASEMENT
U/E UTILITY EASEMENT



LOCATION MAP

SECTION 10-T49N-R32W
Scale 1" = 2000'

DRAFT COPY

I hereby certify that this Boundary Survey is based upon an actual field survey performed by me or under my direct supervision during August 2024, and that said survey meets or exceeds the current Missouri Standards for Property Boundary Surveys, urban type property, as established by the Missouri Board for Architects, Professional Engineers, Professional Land Surveyors and Professional Landscape Architects and the Department of Agriculture Land Survey Program of the State of Missouri.

Randy G. Zerr, Missouri PLS-2018016442
RIC MO CLS-2011003572
rzerr@ric-consult.com

CRYSLER STADIUM

Prepared For:
CITY OF INDEPENDENCE
C/O JIM HOLT CAMP
111 EAST MAPLE AVENUE
INDEPENDENCE, MISSOURI 64050

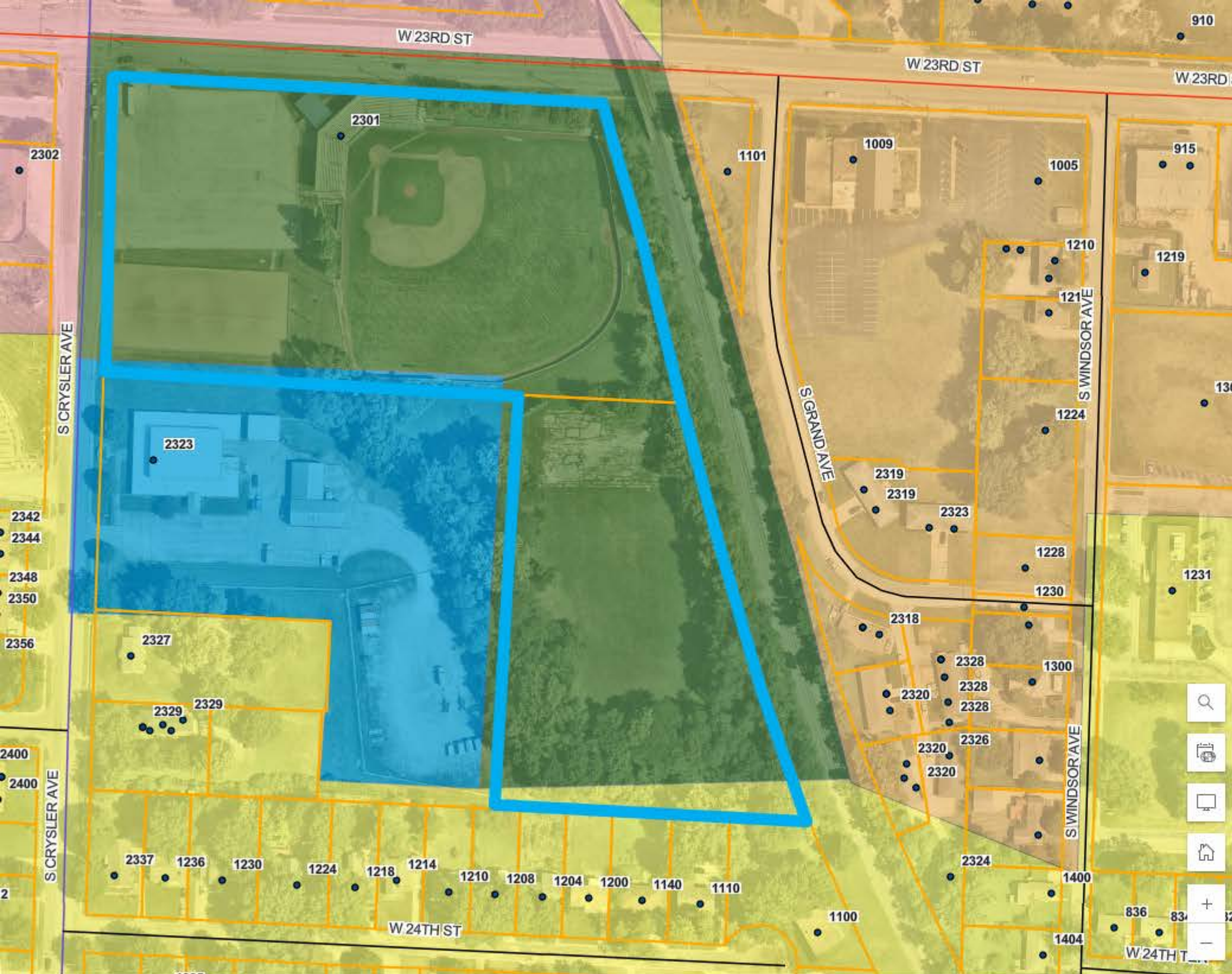


102 Abbie Avenue
Kansas City, Kansas 66103
913.317.9500
www.ric-consult.com

Date of Preparation:
AUGUST, 2024

Revised:
SEPTEMBER, 2024

Certificates of Authorization:
Missouri CLS-2011003572; Kansas CLS-234



Zoning & Land Use

Properties

Parks

Public Safety

Fire Districts

Police Districts

1

2

3

4

5

6

7

8

9

10

11

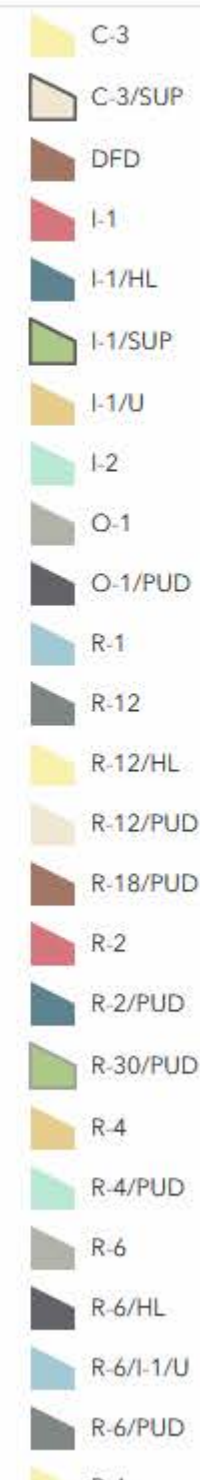
12

13

14

15

16



MEETING DATE: November 19, 2024

STAFF: Gabriel Glaser, Planner

PROJECT NAME: Rezoning – Medical Center Parkway

CASE NUMBER/REQUEST: **Case 24-100-26 – Rezoning – 17200 E Medical Center Parkway, 17203 & 17221 E 23rd St** – A request to rezone from R-30/PUD (High Density Residential/Planned Unit Development) to C-2 (General Commercial).

APPLICANT: City of Independence

PROPERTY LOCATION: 17200 E Medical Center Parkway; and 17203 & 17221 E 23rd St S

SURROUNDING ZONING/LAND USE:

North:	R-6 (Single Family Residential)	Single-Family Residences
East:	C-2 (General Commercial)	Office
	R-30/PUD (High Density Residential/Planned Unit Development)	Assisted Living Facility
South:	C-2 (General Commercial)	Medical Services/City Owned Park (Clothier)
West:	R-6 (Single Family Residential)	Civic/Public Use (Religious)
	C-1 (Light Commercial)	General Retail
	C-2 (General Commercial)	Assembly/Event Space

PUBLIC NOTICE:

- Letters to property owners – October 31, 2024
- Public Notice published in the Independence Examiner – November 2, 2024
- Signs posted on property – November 1, 2024

FURTHER ACTION:

Following action by the Planning Commission, this rezoning request is scheduled for first reading by the City Council on December 16, 2024 and the public hearing/second reading on January 6, 2025.

RECOMMENDATION

Staff recommends **APPROVAL** of this rezoning request.

PROJECT DESCRIPTION & BACKGROUND INFORMATION

PROJECT DESCRIPTION: The City is seeking to rezone this property

Current Zoning:	R-30/PUD (High Density Residential/Planned Unit Development)	Proposed Zoning:	C-2 (General Commercial)
------------------------	--	-------------------------	--------------------------

Current Use: Government Building/Facilities (Independence Utility Center/Independence Communications Center)

Proposed Use: Government Building/Facilities (Independence Justice Campus)

Zoning History:

This application for a rezoning consists of 3 properties which were annexed into the City of Independence in 1963 (Ordinance #14868). Two tax parcels that comprise the majority of the site remain unplatted. The southern region of the site was platted in 1977 as Lot 7 of the Medical Center Park subdivision.

When the City assigned zoning district classifications to properties, in 1965, this undeveloped site was designated an R-4 (Apartments) classification. In 1980, when the City updated its Zoning District Map, the designation of this property changed to C-P-2 (Planned General Commercial). In November 2008, the City Council approved the rezoning request from C-P-2 to R-4-PUD for the Truman Manor which consisted of 399 multi-family units across 6 buildings. In 2009, when the City adopted the Unified Development Ordinance, the R-4-PUD was converted to R-30/PUD (High Density Residential/Planned Unit Development) classification. This project was never constructed.

Proposal:

The City has owned this property since acquiring the property in 2014. Since that time, the City has repurposed the former medical office building adjacent to 23rd Street into the Independence Utilities Center as well as constructing the Independence Communication Center along Medical Center Parkway. The City seeks to rezone this site to align the zoning with the existing and future City uses as well as the existing zoning along 23rd Street and M-291.

Physical Characteristics of Property:

The site is roughly 14 acres in size and contains 2 government buildings—the Independence Utility Center and Communications Center. The site is bound by Missouri 78 Highway to the North, RD Mize Rd to the West, and Medical Center Parkway along the Southern and Eastern property boundaries. The property has an easterly aspect, sloping down about 50' from the Northwest corner to Southeast corner.

Characteristics of the Area:

This property is surrounded by a variety of zoning district classifications and uses. To the West, there are a variety of light commercial and general commercial uses along RD Mize Rd and 291 Hwy. To the South, across Medical Center Parkway, there is a long-term care facility, health services business, and a city-owned park (Clothier). To the East, across Medical Center Parkway, there is another business district used primarily for offices. Across Missouri 78 Highway, to the North, there is a primarily single-family neighborhood.

ANALYSIS

Consistency with *Independence for All*, Strategic Plan:

This rezoning meets the City's objective to improve public infrastructure and facilities as it would align the zoning with existing and future uses.

Comprehensive Plan Tools and Policies for the Current Designation:

The Comprehensive Plan envisions Civic uses which includes government uses. With two existing government facilities already located here, rezoning this site ensures that this high-quality development is well-planned, and makes the best use of existing infrastructure.

Sub-Area Plans:

There are no sub-area plans for this site.

Zoning:

The existing zoning classification allows for high-density residential uses. The proposed C-2 (General Commercial) classification allows for government facilities, and better conforms the lot and building standards with the existing and proposed development.

Historic and Archeological Sites:

There are no apparent historic or archeological issues with this property.

Public Utilities:

Infrastructure is already existing at this property.

Floodplain/Stream Buffer:

This property is not located within any floodplain nor are there any stream crossings through this property.

CIP Investments:

The 23rd Street Complete Street project is planned for Fiscal Year 2025-26 and 2026-27. This project will construct new sidewalks, pedestrian signal upgrades, sidewalk ramps and street trees along both sides of 23rd Street between Lee's Summit Road and M-291. Future phases will extend the pedestrian facilities east to Speck Road.

REVIEW CRITERIA

Recommendations and decisions on rezoning applications must be based on consideration of all the following criteria:

1. Conformance of the requested zoning with the Comprehensive Plan.

The Comprehensive Plan envisions Civic Use for this area. The Tools and Policies state the need to, "ensure that high quality developments are well planned and connected to existing development through the efficient use of streets, utilities and infrastructure."

2. Conformance of the requested zoning with any adopted neighborhood or sub-area plans in which the property is located or abuts.

This property is not located within a sub-area plan.

3. The compatibility of the proposed zoning with the zoning and use of nearby property, including any overlay zoning.

This property is surrounded by a variety of varying zoning classifications, including C-1 (Light Commercial), C-2 (General Commercial), R-6 (Single-Family Residential), and R-30/PUD (High Density Residential/Planned Unit Development). Rezoning this property will match much of the zoning of the surrounding properties along 23rd Street and M-291 Hwy.

4. The compatibility of the proposed zoning and allowed uses with the character of the neighborhood.

The proposed C-2 (General Commercial) zoning is compatible with the area's existing land use.

5. The suitability of the subject property for the uses to which it has been restricted under the existing zoning regulations.

The R-30/PUD (High Density Residential/Planned Unit Development) zoning remains from the unbuilt development plan. This zoning is no longer suitable since the City owns the property. Further, the proposed C-2 zoning conforms with much of the zoning of the surrounding properties along M-291 and 23rd Street.

6. The length of time the subject property has remained vacant as zoned.

The property is currently being used for government facilities and will continue to do so.

7. The extent to which approving the rezoning will detrimentally affect nearby properties.

The rezoning should have no detrimental effect on area properties.

8. The gain, if any, to the public health, safety, and welfare due to denial of the application, as compared to the hardship imposed upon the landowner, if any, as a result of denial of the application.

The rezoning would align the zoning with the existing and future City uses as well as the existing zoning along 23rd Street and M-291.

EXHIBITS

1. Narrative
2. Application
3. Notification letter
4. Address List
5. Notification Area Map
6. Affidavit
7. Comprehensive Plan map
8. Zoning map



November 6, 2024

Case #24-100-26 – Rezoning from R-30/PUD to C-2

The City of Independence acquired these properties in June of 2014. Since that time, the properties have housed 2 government facilities—the Independence Utility Center and the Independence Communications Center.

In April of 2023, Independence City Council voted to approve funding for Project Advocates, LLC, to provide services for the development and administration of the Justice Center Project. As part of the planning efforts for the proposed Justice Center Project, Staff propose to rezone the subject properties from the current designation R-30/PUD (High Density Residential/Planned Unit Development) to C-2 (General Commercial). Rezoning the subject properties to C-2 will alter the applicable Lot and Building Standards--amongst other standards--for the proposed development.

In addition to this application for a rezoning, Staff will process an application for a Minor Subdivision separately. Minor Subdivisions are processed administratively and entails combining two or more lots in to no more than three new lots.

Both rezoning and replatting the subject properties will ensure that the proposed Justice Center Project is well planned and consists of one lot and zoning classification.

Thank you for your consideration of this application.

Application Type (check all that apply)

Land Use	Land Subdivision	Site Development	Use Permit	Other
☒ Rezoning ☐ PUD Rezoning	☐ Preliminary Plat ☐ Final Plat ☐ Minor Subdivision	☐ Final Site Plan ☐ Preliminary Dev Plan ☐ Final Dev Plan (PUD)	☐ Special Use ☐ Homebased Business	☐ Admin. Adjustment ☐ Variance ☐ Street Name Change ☐ Special Sign Permit

Project Information and Location

Justice Center Project

Project Name

17200 E. Medical Center Pkwy, 17203 & 17221 E. 23rd Street

Project Address/Location

-	14	3	No
Sq. Ft. of Building	Acreage	Number of Lots/Tracts	Steam Buffer (Yes or No)
R-30/PUD	C-2	Government Facilities	Government Facilities
Existing Zoning	Proposed Zoning	Existing Land Use	Proposed Land Use

Basic Application Requirements (See the Planning & Zoning Application Guide for additional requirements)

☒ Completed & Signed Application Form ☐ Application Fee ☒ Cover Letter Describing Details of Project	☐ One 24" x 36" set of plans for Land Sub. & Site Dev. ☒ One PDF copy of a plat map or site plan ☒ Legal Description of the property in question
---	---

Contact Information

Applicant

City of Independence

Name	Company
111 E Maple Ave, Independence, Mo 64050	
Address	
(816)325-7109	CDPlanning@indepmo.org
Phone	Email

Architect/Engineer/Surveyor/Other: _____

Name	Company
Address	
Phone	Email

Owner

City of Independence

Name	Company
Address	
Phone	Email

Architect/Engineer/Surveyor/Other: _____

Name	Company
Address	
Phone	Email

The applicant hereby agrees that the information provided above is accurate.

11/7/2024
Applicant's Signature Date

11/7/2024
Owner's Signature Date

Property Owner Notification Letter

City of Independence, Missouri

Date: 10-31-24

Case No. 24-100-26

Dear Property Owner:

This letter is to notify you that an application has been submitted for consideration by the Planning Commission and City Council. A full public hearing will be held by the Planning Commission and the City Council will consider new information on the dates and times below.

Proposed Case Type (Check One):

- ☒ Rezoning ☐ Rezoning/PUD ☐ Special Use Permit
☐ Preliminary Development Plan

Proposed project description: Request by the City to rezone property from R-30/PUD
(High Density Residential/Planned Unit Development) to C-2 (General Commercial).

Applicant: City of Independence

Location of Property: 17200 E. Medical Center Pkwy, 17203 & 17221 E 23rd Street

Planning Commission Meeting Date: November 19, 2024, at 6:00 p.m.

City Council Meeting Date: January 6, 2025, at 6:00 p.m.

Location of public hearings: City Council Chambers, City Hall
 111 E Maple Ave, Independence, Missouri, 64050

All interested persons are invited to attend and will have an opportunity to be heard at the full public hearing (Planning Commission).

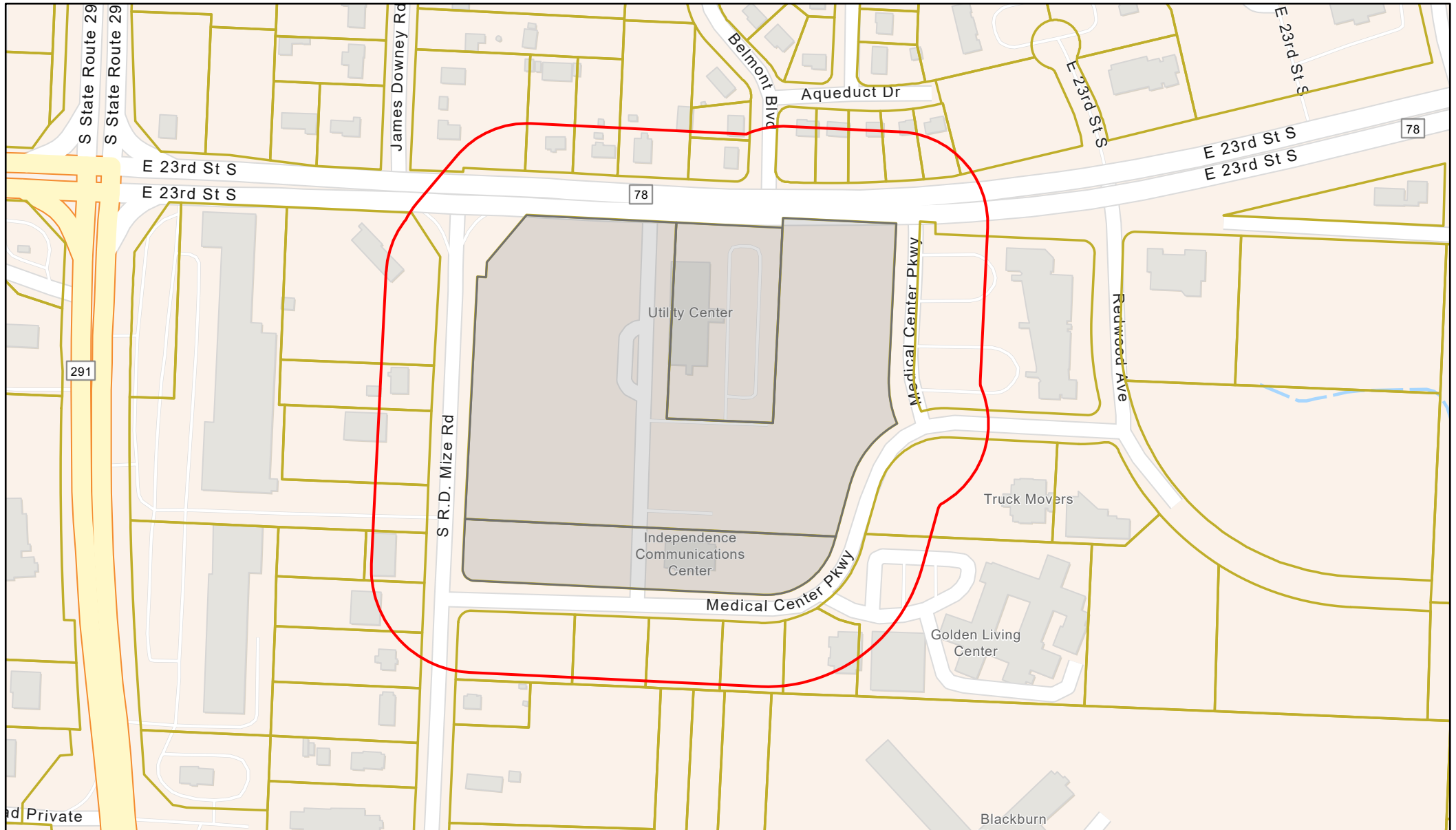
REZONINGS ONLY: You may file a protest petition with the Community Development Department. For more information or to get copies of a petition, please contact Planning staff at 816-325-7421.

Applicant (or Owner/Agent)

For more information, contact the Community Development Department at 816-325-7421.

Property	Property Owner	Address	City	State	ZIP Code
17421 E MEDICAL CENTER PKWY	COMPREHENSIVE MENTAL HEALTH SERVICES INC	PO BOX 260	INDEPENDENCE	MO	64051
17501 E MEDICAL CENTER PKWY	DHA PROPERTIES LLC	2310 S REDWOOD AVE	INDEPENDENCE	MO	64057
17203 E 23RD ST S	CITY OF INDEPENDENCE	111 E MAPLE	INDEPENDENCE	MO	64050
2318 S R D MIZE RD	SCHERER MARK & RITA	2320 CASTLE DR	INDEPENDENCE	MO	64057
17441 E MEDICAL CENTER PKWY	THE BAPTIST HOME	400 E HIGH DR	JEFFERSON CITY	MO	65101
17306 E 23RD ST S	NICHOLS ERIN JACQUELYN COLLEEN	17306 E 23RD ST S	INDEPENDENCE	MO	64057
17208 E 23RD ST S	SEVY MARK A & NATALIE C	812 E RED RD	INDEPENDENCE	MO	64055
17813 E AQUEDUCT DR	LIGGETT DAVID M JR & KATHLEEN M	17813 AQUEDUCT DR	INDEPENDENCE	MO	64057
17218 E 23RD ST S	THE KURTZ FAMILY TRUST DATED 12-27-2004	120 E RUBY AVE	INDEPENDENCE	MO	64050
17817 E AQUEDUCT DR	DANDD LLC	9323 W 146TH ST	OVERLAND PARK	KS	66221
2240 S BELMONT BLVD	CSMA BLT LLC	1850 PARKWAY PL STE 900	MARIETTA	GA	30067
17200 E 23RD ST S	MOTE APRIL	17200 E 23RD ST S	INDEPENDENCE	MO	64057
2410 S R D MIZE RD	ALVAREZ GUSTAVO MONTOYA	2410 S R D MIZE RD	INDEPENDENCE	MO	64057
2301 S M 291 HWY	PLANET PARTNERS 23 LLC	4250 NE SUN CT	LEES SUMMIT	MO	64064
17801 E AQUEDUCT DR	NGUYEN HAO SON	17801 AQUEDUCT DR	INDEPENDENCE	MO	64057
16999 E 23RD ST S	GRACE AND TRUTH MINISTRIES	PO BOX 1400	LEES SUMMIT	MO	64063
2400 S R D MIZE RD	COULTER TIM & BRENDA	1220 S SWOPE DR	INDEPENDENCE	MO	64057
17805 E AQUEDUCT DR	BELT DEREK & TINA M	17805 AQUEDUCT DR	INDEPENDENCE	MO	64057
17809 E AQUEDUCT DR	MENDEZ JOSE R & ROSA H	17809 AQUEDUCT DR	INDEPENDENCE	MO	64057
2406 S R D MIZE RD	SOLE PROPERTY LLC	2406 E R D MIZE RD	INDEPENDENCE	MO	64057
2220 S BELMONT BLVD	YOUNG LUTHER & NANCY E	2220 BELMONT BLVD	INDEPENDENCE	MO	64057
17810 E 23RD ST S	ELROD JERALD E-TRUSTEE	709 NE SHORELINE DR	LEES SUMMIT	MO	64064

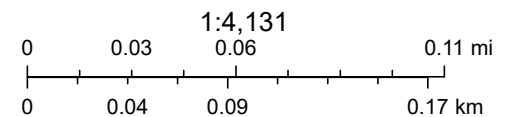
185ft Notification Area



10/31/2024, 9:12:03 AM

 Parcels (General Use- AGOL)

 City Limits



Esri Community Maps Contributors, City of Independence MO, Jackson County, MO, Missouri Dept. of Conservation, Missouri DNR, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Property Owner Notification Affidavit

STATE OF MISSOURI

COUNTY OF JACKSON

Case No. 24-100-26

I, Je'Nai Moulon, of lawful age being first duly sworn upon oath, state:

That I am the (agent, owner, attorney) for the property for which the application was filed and did, not later than fifteen (15) days prior to the date of the public hearing scheduled before the Planning Commission, mail notices to all persons owning property within 185 feet of the subject property. **The list of property owners to whom notice has been mailed is attached.**

These notices were mailed on the 31 day of October, 2024.

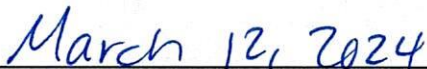


Signature of Agent, Owner or Attorney

Subscribed and sworn to before me this 31 day of October, 2024.



Notary Public

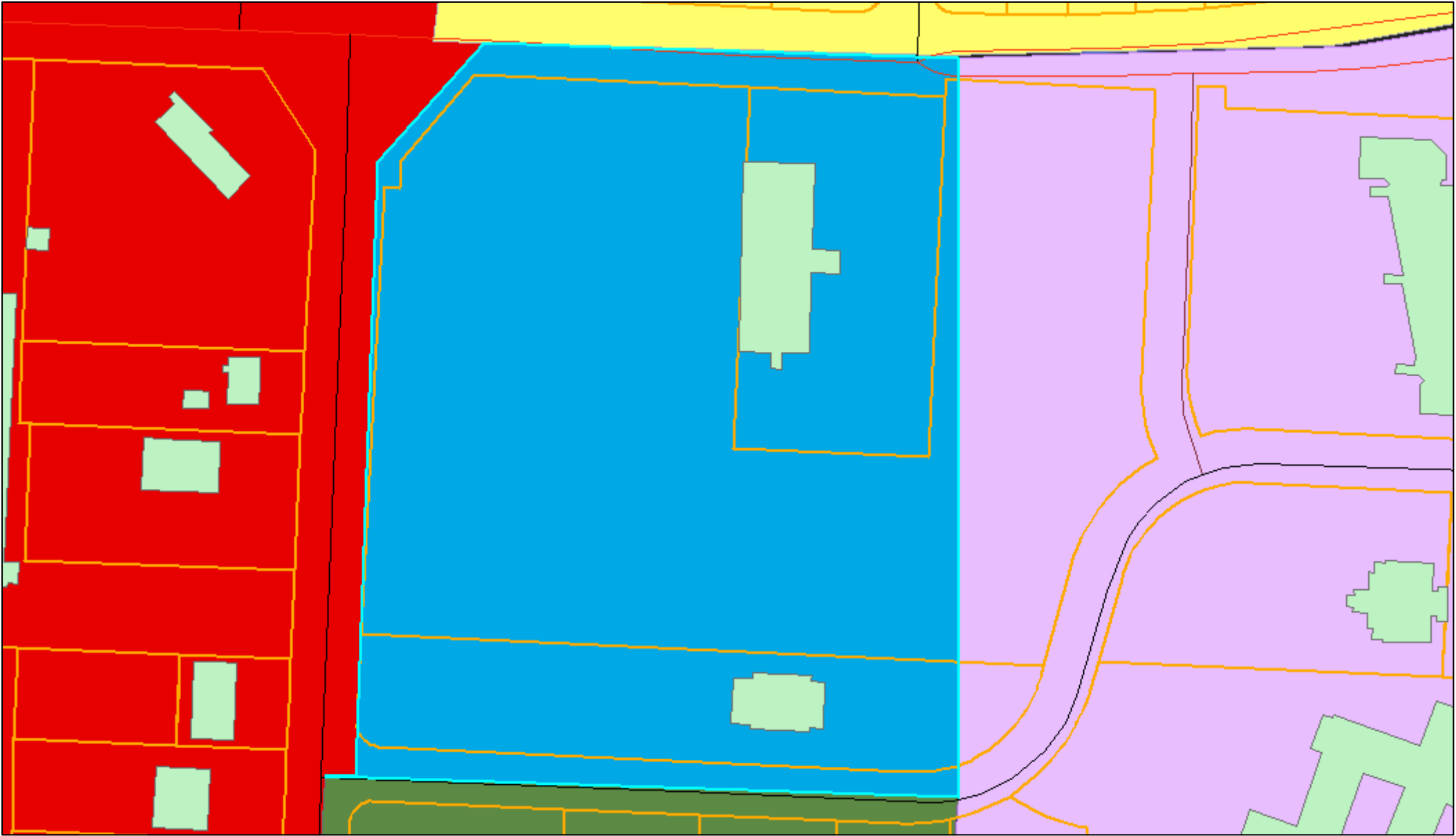


Commission Expiration Date



RECEIVED
JAN 10 1964
U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

Comprehensive Plan Map



11/7/2024, 8:24:35 AM

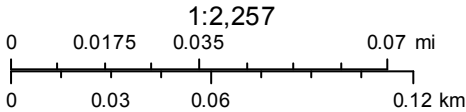
Streets

- Private
 - Highway
 - Local
- Building Footprint
- Parcels

Proposed Land Use (Comp Plan)

- Residential Neighborhoods
- Community Commercial
- Office
- Civic / Public
- Parks

City Limits



Zoning Map



11/7/2024, 8:26:01 AM

Streets

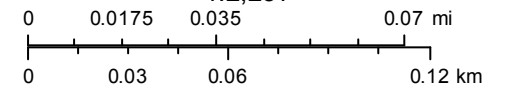
- Private
- Highway
- Local

Zoning District

- C-1
- C-2
- R-30/PUD
- R-6

City Limits

1:2,257



**Independence Planning Commission
Training Presentation Regarding City Council Resolution No. 6975**



Presented by Jeremy Cover, City Counselor
Lauber Municipal Law
November 19, 2024

1

Resolution No. 6975

Lauber Municipal Law

- ☑ Adopted by the City Council on January 2, 2024
- ☑ A Resolution Establishing Standards for the Recruitment and Selection of Board Members, Establishing Standards for Communication, and Establishing Expectations, Duties, and Norms of Behavior for all Appointed City Boards, Commissions, and Committees

2

Section 1

Membership, Recruitment, and Appointment

Lauber Municipal Law

- Ⓜ Outlines the process and procedures for the City Council to appoint members to Boards, Commissions, and Committees
- Ⓜ Since you all have already been appointed, we're moving on

3

Section 2

Communications

Lauber Municipal Law

- Ⓜ The Board or Commission should communicate with the City Council only through approved minutes, work plans, progress reports, or formal recommendations/resolutions voted on by the Board or Commission
- Ⓜ Board and Commission chairs shall communicate with the Staff Liaison on matters related to the Board and Commission's operations and agendas
- Ⓜ Each Board and Commission shall be assigned a City Council Liaison, who shall serve as the conduit between the Board or Commission and the City Council

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Section 2

Communications

Lauber Municipal Law

- Ⓜ Board and Commission Members shall adhere to the “One Body, One Voice” principle in communications to the Council on matters under the Board or Commission’s purview, or may become under the purview of the Board or Commission

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Section 3

Expectations, Duties, and Norms of Behavior

Lauber Municipal Law

- Ⓜ Training of Members
 - Ⓜ Implements onboarding program for new members regarding meeting procedures, Sunshine law, ethics, etc.
 - Ⓜ LML puts on City Officials Training seminars every spring
 - Ⓜ City Clerk will notify Staff Liaisons once new COT dates are set

6

Section 3

Expectations, Duties, and Norms of Behavior

Lauber Municipal Law

Ⓜ Duties

- Ⓜ The Presiding Officer (Board or Commission Chair) has the following duties:
 - Act as meeting facilitator
 - Maintain a tone of civility during debate
 - Ensure the public has a meaningful opportunity to participate, and that meetings operate fairly and impartially
 - Ensure the Board or Commission's questions and discussions are germane to the issues presented

7

Section 3

Expectations, Duties, and Norms of Behavior

Lauber Municipal Law

Ⓜ Duties

- Ⓜ Board and Commission Members have the following duties:
 - To ensure the Board has a quorum at all meetings, and commit sufficient time to ensure regular and punctual attendance
 - Be prepared, attentive, and participate
 - Abide by Rules of Procedure and the City and State Laws
 - Notify the Staff Liaison as soon as they learn they will not be able to attend a meeting and of any changes to contact information

8

Section 3

Expectations, Duties, and Norms of Behavior

Lauber Municipal Law

- Ⓜ Norms of behavior
 - Ⓜ Board and Commission Members are encouraged to share their experience and knowledge with new Members
 - Ⓜ Board and Commission Members should treat all City employees with respect
 - Ⓜ Board and Commission Members should be mindful or arguing or debating the merits of staff's professional judgment
 - Ⓜ Board and Commission Members should not use language or communication methods that a reasonable person would find humiliating, intimidating, hostile, or offensive

9

Section 3

Expectations, Duties, and Norms of Behavior

Lauber Municipal Law

- Ⓜ Norms of behavior
 - Ⓜ Board and Commission interaction with staff during meetings:
 - Criticism of staff should be made in private
 - Members may not direct or issues order to staff
 - Questions should be directed to the appropriate City staff
 - Ⓜ All appointed members of City Boards and Commissions should be mindful of the City Charter prohibition regarding interference with administration

10

**Independence Planning Commission
Training Presentation Regarding City Council Resolution No. 6975**

Jeremy Cover, City Counselor
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Lindsey Gallman, Paralegal
lgallman@indepmo.org