



PLANNING & ZONING COMMISSION MEETING

HELD AT THE GOVERNMENT CENTER BOARD ROOM
1 GOVERNMENT CTR ♦ BALLWIN MO 63011

**July 6, 2021
7:00 P.M.**

AGENDA

1. Call to Order

2. Approval of Minutes

4. SUB 21-02 –Subdivision Consolidation

Z 21-01 – 14811 Manchester Road Rezone

Z 21-02 – Implement MRD Overlay District and Site Plan Approval

Parc Place at Vlasits, 14811 Manchester Road, Ballwin MO 63011

Petitioner: Brent Evans, Landau Group LLC, 4700 S Lindbergh Blvd, St Louis MO 63126

Mr. Evans of the Landau Group is proposing to combine three existing lots (14811, 14819, and 14821 Manchester Rd) into a single lot to allow the development and construction of a mixed-use multi-family apartment complex/retail commercial building on the site. Mr. Evans is also requesting that Ballwin rezone the entirety of 14811 Manchester to C-1 Commercial, as well as an overlay zone to be applied to the parcels at 14811, 14819, and 14821 Manchester Rd. This petition proposes a seven-story (86 feet) tall mixed-use multi-family apartment complex and retail commercial space (2090 square feet).

5. New Business – Municode Meetings Portal

6. Adjournment

Residents of Ballwin are afforded an equal opportunity to participate in the programs and services of the City of Ballwin regardless of race, color, religion, sex, age, disability, familial status, national origin or political affiliation. If one requires an accommodation, please call (636) 227-8580 V or (636) 527-9200 TDD or 1-800-735-2466 (Relay Missouri) no later than 5:00 p.m. on the third business day preceding the hearing. Offices are open between 8:00 a.m. and 5:00 p.m. Monday through Friday.



**MINUTES OF THE
PLANNING AND ZONING COMMISSION MEETING
1 GOVERNMENT CTR ♦ BALLWIN MO 63011
MAY 3, 2021**

Chairman Weaver called the meeting to order at 7:00 p.m. Members in attendance were:

PRESENT

Chairman Mark Weaver
Secretary Lisa Zimmerman
Commissioner Gary Carr
Commissioner Olivia Pieknik
Commissioner Chad Silker
Commissioner Michael Swain
Commissioner Victoria Winfrey
Alderman Kevin Roach
Mayor Tim Pogue

Planning Technician Shawn Edghill
City Administrator Eric Sterman
City Attorney Robert E. Jones

ABSENT

Commissioner Grant Alexander

Approval of Minutes

A motion was made by Mayor Pogue to accept the minutes of the April 5, 2021 meeting as submitted. Secretary Zimmerman seconded the motion, which received unanimous approval from the Commission members present.

SUE 21-02 – Medical Marijuana Dispensary

Justice Grown Dispensary, 14787 Manchester Road, Ballwin MO 63011
Petitioner: Vince Field, 311 N Aberdeen St., Ste. 200, Chicago, IL 60607

Mr. Steve Marion represented the petitioner, requesting approval for the petition.

Commissioner Carr asked about the method of secure storage for product. Mr. Marion said there is a wire mesh vault room; if there is glass, it is bulletproof glass. There is also a vault for money. Mr. Carr asked about the emergency contact. Mr. Marion said there is local representation as well as regional representation.

Commissioner Winfrey voiced her concerns about adequate parking. Mr. Marion said that customers typically order online. They also make reservations to enter the building. There is a verification process to identify customers and their qualifications. Secretary Zimmerman asked if edibles will be sold and if they are marketed to children. Mr. Marion said that edibles will be sold, but are definitely not marketed to children. He said that it is up to the end user to treat the product like prescription medicine or alcohol and keep it away from children.

Commissioner Swain asked about odor mitigation. Mr. Marion said they use activated charcoal filters to make sure no odors are emitted outside the building.

Commissioner Pieknik asked if their employees are armed. Mr. Marion said armed guards are not used. The security cameras are monitored at all times, both inside the facility and remotely.

Commissioner Winfrey asked whether there would ever be a line of people outside the building waiting to enter. Mr. Marion said that for the near future, there is not enough supply in Missouri to expect a large customer base. Chairman Weaver asked if the product being sold is grown in Missouri. Mr. Marion said that product must be grown in the state where it is sold, so yes. Chairman Weaver asked how many facilities Justice Grown has in Missouri. Mr. Marion said there are five, which is the maximum for a license holder, but they are helping others throughout the state. Chairman Weaver stated that he does lock work for some dispensaries. City Attorney Jones asked if Chairman Weaver is being paid by this petitioner. Chairman Weaver said he is not. City Attorney Jones said there is no conflict of interest.

Chairman Weaver asked about the plans showing a possible future drive-through. City Attorney Jones said the petitioner would have to come before the Commission with an amended SUE if they wanted to add one in the future.

Commissioner Winfrey asked about the hours of operation. Mr. Marion said the hours will be Mon/Tues/Wed from 10:00-6:00; Thurs/Fri/Sat from 10:00-8:00; and Sun 12:00-6:00.

Alderman Roach asked what the status is for the petitioner's state license. Mr. Marion said that once the build-out is complete and they are ready to open, the state will issue the license. Missouri has mandated that all facilities must be finished and ready to open by September 30, 2021. The petitioner is expected to be ready by August of 2021, and to open in September or October.

Secretary Zimmerman asked about disposal of product that is no longer sellable. Mr. Marion said there are disposal methods which render the product unusable.

Chairman Weaver opened the public hearing and asked if anyone wished to speak in favor of Petition SUE 21-02. No one came forward, and Chairman Weaver asked if anyone wished to speak in opposition to the petition. No one came forward, and Chairman Weaver closed the public hearing.

Mayor Pogue asked if the petitioner had a chance to review the petition review report prepared by staff, and if they are willing to comply with all staff recommendations. Mr. Marion said they plan to comply. City Attorney Jones said the bill that is considered by the Board of Aldermen typically incorporates the petition review report by reference and requires compliance.

Mayor Pogue made a motion to recommend approval of Petition SUB 21-02 to the Board of Aldermen, provided the petitioner comply with all staff recommendations. Alderman Roach seconded the motion. A voice vote was taken with the following results: Weaver, Zimmerman, Pieknik, Silker, Swain, Winfrey, Roach, and Pogue – Aye; Carr – Nay.

Other Business

Election of Officers took place, with Mark Weaver being reelected Chairman. Secretary Zimmerman stated that she will be resigning from the Commission due to personal obligations, and Commissioner Pieknik was elected to replace her as Secretary.

Planning Technician Edghill stated that there may be a July meeting, which would conflict with the observance of the Independence Day holiday. Alderman Roach made a motion to move the July meeting to Tuesday, July 6, if necessary. Secretary Zimmerman seconded the motion, which received unanimous approval from the Commission members present.

Adjournment

Commissioner Swain made a motion to adjourn the meeting. Commissioner Pieknik seconded the motion, which received unanimous approval from the Commission members present. The meeting was adjourned at 7:30 p.m.

J. Mark Weaver, Chairman
Planning & Zoning Commission

SUBDIVISION PETITION REVIEW REPORT

Petition Number:	SUB 21-02
Petitioner:	Mr. Brent P. Evans Landau Group, LLC 4700 S. Lindbergh Blvd. St. Louis, MO 63126
Agents:	George Restovich Restovich & Assocs. 214 N. Clay Ave, Ste. 100 Kirkwood, MO 63122 Gabriel McKee V3 Studios 2717 Sutton Blvd. Maplewood, MO 63143
Project Name:	Parc Place at Vlasia Consolidation Sub.
Requested Action:	Subdivision Approval
Review Date:	04/02/2021
Code Section:	Chapter 25, Article II, Sec. 25-26;
Location:	14811, 14819, 14821 Manchester Rd.
Existing Land Use/Zoning:	Commercial / C-1
Surrounding Land Use/Zoning:	North – Vlasia Park / PA South - Commercial / C-1 West – Commercial / C-1 East –Commercial / C-1
Plan Designation:	Multi-Family Apartments / Retail Commercial

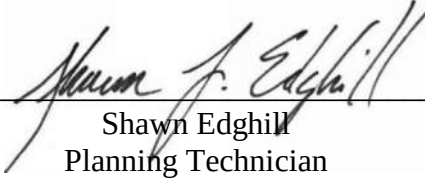
Project Description:

Mr. Restovich and Mr. McKee, on behalf of Mr. Evans of the Landau Group are proposing to combine the three existing lots of this petition into a single lot. Due to code setback requirements and related property line regulations, this is necessary to allow the development and construction of a mixed-use multi-family apartment complex/retail commercial building on the site.

Subdivision Ordinance Requirements (Chapter 25) (Although this petition is a consolidation of properties rather than the more common splitting of properties, it is still subject to the provisions of the subdivision ordinance and is therefore evaluated accordingly in this section)

1. Sidewalks (Article II, Sec 25-28): The Subdivision Ordinance, the Ballwin sidewalk policy and the MRD ordinance require sidewalks at several locations. This issue was extensively addressed in the review report for petition Z21-01.
2. Streetlights (Article II, Sec 25-29): No streetlights are required for this subdivision, but a lighting plan will be requested alongside the Site Plan.
3. Deed Restrictions (Article II, Sec 25-30(a)): There are no known deed restrictions on the property involved in this petition.
4. Boundary Lines, Bearings and Distances (Article II, Sec 25-30(b)(1)): All required boundary lines, bearings, distances, district lines, etc. have been shown on this preliminary plat submittal.
5. Street Lines (Article II, Sec 25-30(b)(2)): The existing street has been delineated as required by the code.
6. Streetlights (Article II, Sec 25-30 (b)(3)): No streetlights are proposed or appropriate as a part of this petition.
7. Underground Utilities and Structures (Article II, Sec 25-30 (b)(4)): No such utilities are shown, but since there is no construction review associated with this petition there is no need to submit this information.
8. Dedications (Article II, Sec 25-30 (b)(5)): No public dedications are proposed as a part of this petition.
9. Lines of Adjoining Lands (Article II, Sec 25-30 (b)(6)): The lines of all adjoining lands and streets have been shown as required in a preliminary plat submittal.
10. Identification System (Article II, Sec 25-30 (b)(7)): All lots have been given proper identification numbers.

11. Building Lines and Easements (Article II, Sec 25-30 (b)(8)): While all current easements on the parcel are shown, **the 10' building line setback along Manchester Rd. per the MRD Overlay request additionally included has not been shown and it will be required on the final recorded document. If Z21-02 results in the recommendation of a variance to be sought through the Board of Adjustment, then said variance's building line will need to be shown.**
12. Subdivision name, legal description, property owner and presentation details (Article II, Sec 25-30 (b)(9)): These issues have all been addressed on the preliminary plat, via Petition Z21-02 or through the accompanying petitioning forms.
13. Storm Water Control (Article II, Sec 25-30 (b)(10)): No new development is associated with the consolidation plat per se. A separate development plan for a mixed-use building on this site is reviewed in the report on petition Z21-02.
14. Lot size (Article II, Sec 25-30 (b)(11)): the size of the lot is provided in acreage at 4.34 ac, rather than by square feet (Which should be listed around 189,000 square feet.)


Shawn Edghill
Planning Technician

PARCEL IDENTIFICATION NUMBER
22R110054 / 23R440741 / 23R440916

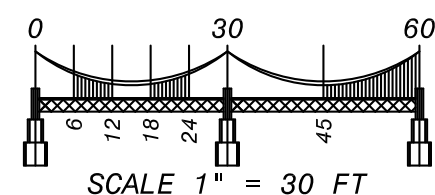
LOT CONSOLIDATION PLAT

MANCHESTER APARTMENTS

14811, 14819, AND 14821 MANCHESTER ROAD

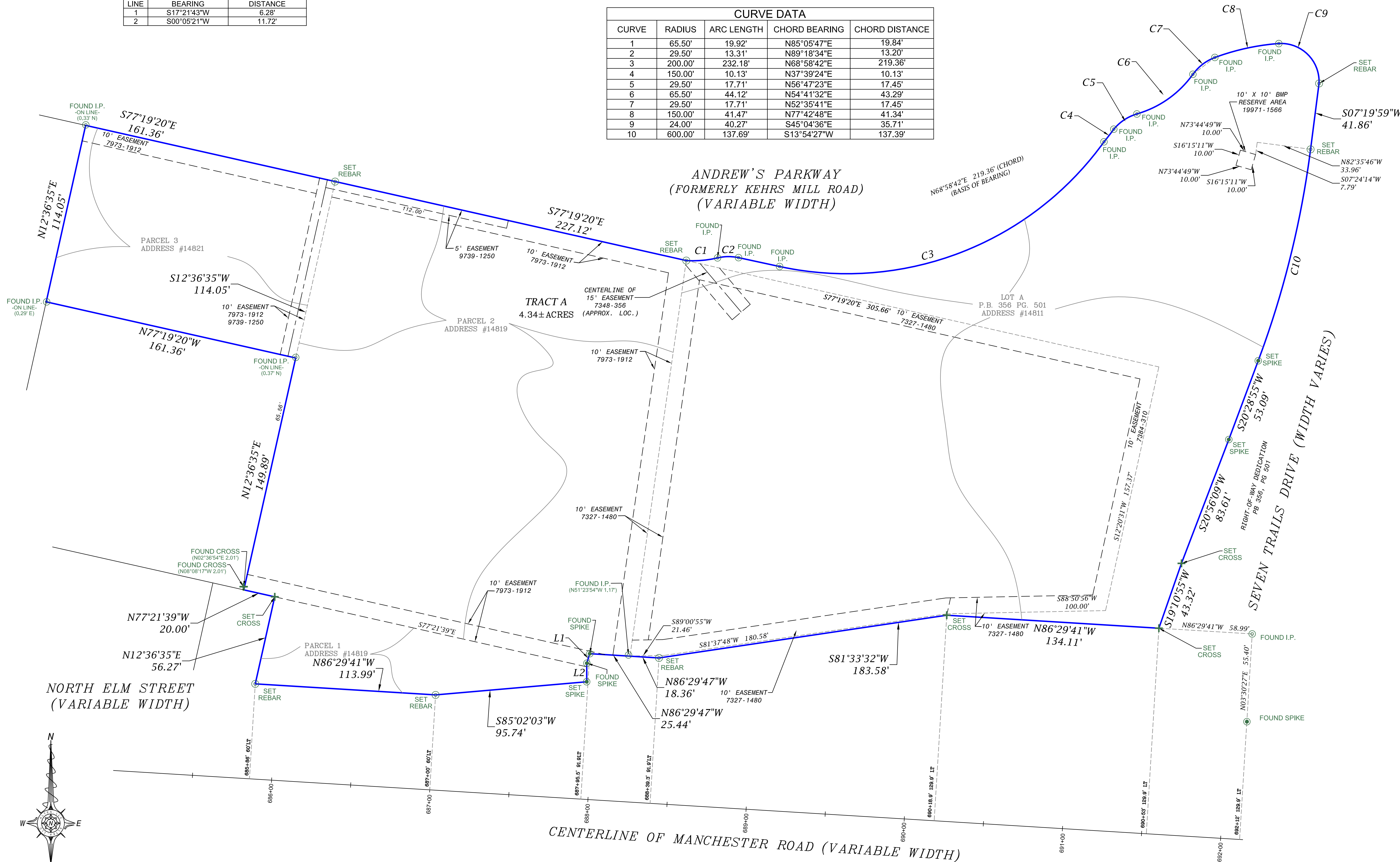
PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST
ST. LOUIS COUNTY, MO

CURRENT SITE ZONING CLASSIFICATION
"C1" COMMERCIAL



LINE TABLE		
LINE	BEARING	DISTANCE
1	S17°21'43"W	6.28'
2	S00°05'21"W	11.72'

CURVE DATA				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1	65.50'	19.92'	N85°05'47"E	19.84'
2	29.50'	13.31'	N89°18'34"E	13.20'
3	200.00'	232.18'	N68°58'42"E	219.36'
4	150.00'	10.13'	N37°39'24"E	10.13'
5	29.50'	17.71'	N56°47'23"E	17.45'
6	65.50'	44.12'	N54°41'32"E	43.29'
7	29.50'	17.71'	N52°35'41"E	17.45'
8	150.00'	41.47'	N77°42'48"E	41.34'
9	24.00'	40.27'	S45°04'36"E	35.71'
10	600.00'	137.69'	S13°54'27"W	137.39'



ABBREVIATIONS			
I.P. = IRON PIPE	I.R. = IRON ROD	ELEV. = ELEVATION	PG. = PAGE
B.M. = BENCH MARK	S.F. = SQUARE FEET	CONC. = CONCRETE	R.O.W. = RIGHT-OF-WAY
P.B. = PLAT BOOK	BLDG. = BUILDING	COR. = CORNER	CL. = CENTERLINE
BK. = BOOK	ESMT. = EASEMENT	FL. = FLOW LINE	(S) = SURVEYED
NP. = NOW OR FORMERLY	ASPH. = ASPHALT	(R) = RECORD	(A) = ACTUAL
PROP. = PROPERTY	FL. = FLOW LINE	(C) = CALCULATED	F.F. = FINISHED FLOOR
T.F. = TOP OF FOUNDATION	P.V.C. = POLYVINYL CHLORIDE PIPE	R.C.P. = REINFORCED CONCRETE PIPE	V.C.P. = VITRIFIED CLAY PIPE

SURVEY MARKERS	
	FOUND/ SET SEMI-PERMANENT MONUMENT
	FOUND/ SET PERMANENT MONUMENT
	FOUND/ SET CROSS
	FOUND/ SET ANCHOR
	FOUND/ SET NOTCH
	FOUND/ SET ARROW
	SET STAKE

LINE TYPES	
	BOUNDARY LINE
	EASEMENT LINE
	SETBACK LINE
	BUILDING FOOTPRINT
	CENTERLINE
	PARCEL LINE
	U.S. SURVEY SECTION LINE
	CHAIN FENCE
	WOOD, VINYL, OR METAL FENCE
	WIRE FENCE
	SANITARY SEWER
	STORM SEWER LINE
	UNDERGROUND TELEPHONE LINE
	OVERHEAD WIRE
	UNDERGROUND ELECTRIC LINE
	FIBER OPTIC LINE
	NATURAL GAS LINE
	FUEL PIPELINE
	CABLE TELEVISION LINE
	STEAM LINE
	TREE/ SHRUB LINE

SYMBOL LEGEND	
	SANITARY MANHOLE
	STORM MANHOLE
	COMBINED STORM & SANITARY MANHOLE
	GRATED MANHOLE
	GRATED INLET
	AREA INLET
	GAS LIGHT
	GAS DRIP
	GAS VALVE
	GAS METER
	CABLE BOX
	CABLE PEDESTAL
	SIGN
	CLEANOUT/ LAMP HOLE
	BOLLARD
	WATER HYDRANT W/ PUMP
	WATER VALVE
	WATER METER
	FIRE HYDRANT
	GAS MANHOLE
	TELEPHONE MANHOLE
	ELECTRIC MANHOLE
	FIBER OPTIC MANHOLE
	STEAM MANHOLE
	WATER MANHOLE
	ELECTRIC LIGHT
	ELECTRIC METER
	ELECTRIC PEDESTAL
	TELEPHONE BOX
	TELEPHONE PEDESTAL
	AIR CONDITIONING UNIT
	MAILBOX
	UTILITY POLE
	UTILITY POLE W/ LIGHT
	UTILITY POLE WITH TRANSFORMER
	GUY WIRE WITH ANCHOR
	WATER SHUT OFF
	SPRINKLER

REVISIONS		
NO.	REVISION/ ISSUE	DATE

PREPARED FOR
BRENT P. EVANS
LANDAU GROUP LLC
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ALTEA, LLC
Consulting Land Surveyors
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PHONE: (636) 477-6000
FAX: (636) 998-0950
WWW.ALTEALS.COM
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ALTEA, LLC
PROFESSIONAL LAND SURVEYING
CERTIFICATE OF AUTHORITY: 2013023731

SHEET IDENTIFICATION	
CONSOLIDATION	
PROJECT NUMBER 20-2590 LC	
FIELD CREW: KE/JH	SHEET 1 OF 2
SURVEYED: 12/17/2020	
DRAFTER: MJM	
DRAFTED: 3/3/2021	
REVIEWER: BLH	
REVIEWED: 3/3/2021	

PARCEL IDENTIFICATION NUMBER

22R110054 / 23R440741 / 23R440916

LOT CONSOLIDATION PLAT

MANCHESTER APARTMENTS

14811, 14819, AND 14821 MANCHESTER ROAD

PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST

ST. LOUIS COUNTY, MO

CURRENT SITE ZONING CLASSIFICATION

"C1" COMMERCIAL

OWNER'S CERTIFICATE

THE UNDERSIGNED OWNERS OF THE LAND DESCRIBED IN THE FOREGOING SURVEYORS CERTIFICATE HAVE CAUSED SAID TRACTS OF LAND TO BE SURVEYED AND CONSOLIDATED AS SHOWN ON THIS PLAT, WHICH SHALL HEREAFTER BE KNOWN AS "MANCHESTER APARTMENTS".

THIS PLAT DOES NOT CREATE ANY NEW EASEMENTS, NOR DOES IT RELEASE ANY EXISTING EASEMENT RIGHTS.

THIS PLAT IS SUBJECT TO ANY AND ALL EASEMENTS OF RECORD.

THIS LOT CONSOLIDATION PLAT DOES NOT REDUCE ANY LOT BELOW THE MINIMUM REQUIRED FRONTAGE OR AREA PER THE CURRENT ZONING CLASSIFICATION.

IT IS HEREBY CERTIFIED THAT ALL TAXES ON THE SUBJECT TRACT HAVE BEEN PAID IN FULL.

BRENT P. EVANS
LANDAU GROUP LLC,

PRINT NAME, MEMBER OF LANDAU GROUP _____

SIGNATURE, MEMBER OF LANDAU GROUP _____ DATE _____

STATE OF MISSOURI }
COUNTY OF _____ } SS

ON THIS _____ DAY OF _____, 2021, BEFORE ME PERSONALLY APPEARED BRENT P. EVANS, MEMBER OF LANDAU GROUP, LLC, TO ME KNOWN TO BE THE PERSONS DESCRIBED IN AND WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED THAT BRENT P. EVANS, MEMBER OF LANDAU GROUP LLC, EXECUTED THE SAME AS HIS FREE ACT AND DEED.

IN TESTIMONY WHEREOF, I HAVE HEREUNTO SET MY HAND AND AFFIXED MY OFFICIAL SEAL ON THE DAY AND YEAR LAST ABOVE WRITTEN, IN THE STATE AND COUNTY FIRST ABOVE WRITTEN.

NOTARY PUBLIC: _____
PRINT NAME: _____
MY COMMISSION EXPIRES: _____

PROPERTY DESCRIPTION (ORIGINAL AS SURVEYED)

14811 MANCHESTER ROAD:

A TRACT OF LAND BEING PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST OF ST. LOUIS COUNTY AND FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE ON THE NORTH RIGHT OF WAY OF MANCHESTER ROAD (A.K.A. STATE HIGHWAY 100), AS DEFINED BY QUITCLAIM DEED IN DEED BOOK 16931 PAGES 2329 THRU 2335 OF THE ST. LOUIS COUNTY RECORDS, SAID IRON PIPE BEING AT STATION 692+12 OFFSET NORTH 129.9 FEET FROM THE CENTERLINE OF SAID MANCHESTER ROAD AS DEFINED IN SAID DOCUMENT; THENCE ALONG SAID RIGHT OF WAY, NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST, 58.99 FEET TO THE POINT OF BEGINNING, AT STATION 690+53 OFFSET NORTH 129.9 FEET; THENCE ALONG THE NORTHERN RIGHT-OF-WAY OF MANCHESTER ROAD THE FOLLOWING COURSES AND DISTANCES, NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 134.11 FEET TO A POINT; THENCE SOUTH 81 DEGREES 33 MINUTES 32 SECONDS WEST, 183.58 FEET TO A POINT; THENCE NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST 18.36 FEET TO A POINT; THENCE DEPARTING SAID RIGHT-OF-WAY, NORTH 08 DEGREES 06 MINUTES 18 SECONDS EAST, 252.06 FEET TO THE SOUTHERN RIGHT-OF-WAY LINE OF ANDREW'S PARKWAY, VARIABLE WIDTH; THENCE ALONG SAID RIGHT-OF-WAY LINE THE FOLLOWING COURSES AND DISTANCES, ALONG A CURVE TO LEFT, HAVING A RADIUS OF 65.50 FEET AT AN ARC DISTANCE OF 19.92 FEET AND CHORD BEARING OF NORTH 85 DEGREES 05 MINUTES 47 SECONDS EAST, 19.84 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 29.50 FEET AT AN ARC DISTANCE OF 13.31 FEET AND CHORD BEARING OF NORTH 89 DEGREES 18 MINUTES 34 SECONDS EAST, 13.20 FEET TO A POINT; THENCE SOUTH 77 DEGREES 45 MINUTES 34 SECONDS EAST; 26.51 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 200 FEET AT AN ARC DISTANCE OF 232.18 FEET AND A CHORD BEARING OF NORTH 08 DEGREES 58 MINUTES 42 SECONDS EAST, 219.36 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 150.00 FEET AT AN ARC DISTANCE OF 10.13 FEET AND A CHORD BEARING OF NORTH 37 DEGREES 39 MINUTES 24 SECONDS EAST, 10.13 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 29.50 FEET AT AN ARC DISTANCE OF 17.71 FEET AND A CHORD BEARING OF NORTH 56 DEGREES 47 MINUTES 23 SECONDS EAST, 17.45 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 65.50 FEET AT AN ARC DISTANCE OF 44.12 FEET AND A CHORD BEARING OF NORTH 04 DEGREES 42 MINUTES 48 SECONDS EAST, 41.34 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 232.18 FEET AND A CHORD BEARING OF NORTH 08 DEGREES 58 MINUTES 42 SECONDS EAST, 43.29 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 29.50 FEET AT AN ARC DISTANCE OF 17.71 FEET AND A CHORD BEARING OF NORTH 52 DEGREES 35 MINUTES 41 SECONDS EAST, 17.45 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 41.47 FEET AND A CHORD BEARING OF NORTH 77 DEGREES 42 MINUTES 49 SECONDS EAST, 41.34 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 24.00 FEET AT AN ARC DISTANCE OF 40.27 FEET AND A CHORD BEARING OF SOUTH 45 DEGREES 04 MINUTES 36 SECONDS EAST, 35.71 FEET TO A POINT LOCATED ON THE WESTERN RIGHT-OF-WAY LINE OF SEVEN TRAILS DRIVE, HAVING A VARIABLE WIDTH; THENCE ALONG SAID RIGHT-OF-WAY LINE THE FOLLOWING COURSES AND DISTANCES; SOUTH 07 DEGREES 19 MINUTES 59 SECONDS WEST, 41.86 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 600.00 FEET AT AN ARC DISTANCE OF 137.69 FEET AND A CHORD BEARING OF SOUTH 13 DEGREES 54 MINUTES 27 SECONDS WEST, 137.39 FEET TO A POINT; THENCE SOUTH 20 DEGREES 28 MINUTES 55 SECONDS WEST, 53.09 FEET TO A POINT; THENCE SOUTH 20 DEGREES 10 MINUTES 55 SECONDS WEST, 53.61 FEET TO A POINT; THENCE SOUTH 19 DEGREES 10 MINUTES 55 SECONDS WEST, 43.32 FEET TO THE POINT OF BEGINNING AND CONTAINING APPROXIMATELY 2.31 ACRES (100,924 SQUARE FEET).

PROPERTY DESCRIPTION (SURVEYED)

CONSOLIDATED TRACT A:

A TRACT OF LAND BEING PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST OF ST. LOUIS COUNTY AND FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE ON THE NORTH RIGHT OF WAY OF MANCHESTER ROAD (A.K.A. STATE HIGHWAY 100), AS DEFINED BY QUITCLAIM DEED IN DEED BOOK 16931 PAGES 2329 THRU 2335 OF THE ST. LOUIS COUNTY RECORDS, SAID IRON PIPE BEING AT STATION 692+12 OFFSET NORTH 129.9 FEET FROM THE CENTERLINE OF SAID MANCHESTER ROAD AS DEFINED IN SAID DOCUMENT; THENCE ALONG SAID RIGHT OF WAY, NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST, 58.99 FEET TO THE POINT OF BEGINNING, AT STATION 690+53 OFFSET NORTH 129.9 FEET; THENCE ALONG THE NORTHERN RIGHT-OF-WAY OF MANCHESTER ROAD THE FOLLOWING COURSES AND DISTANCES, NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 134.11 FEET TO A POINT; THENCE SOUTH 81 DEGREES 33 MINUTES 32 SECONDS WEST, 183.58 FEET TO A POINT; THENCE NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST 18.36 FEET TO A POINT; THENCE DEPARTING SAID RIGHT-OF-WAY, NORTH 08 DEGREES 06 MINUTES 18 SECONDS EAST, 252.06 FEET TO THE SOUTHERN RIGHT-OF-WAY LINE OF ANDREW'S PARKWAY, VARIABLE WIDTH; THENCE ALONG SAID RIGHT-OF-WAY LINE, SOUTH 77 DEGREES 45 MINUTES 34 SECONDS EAST, 26.51 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 200.00 FEET AT AN ARC DISTANCE OF 232.18 FEET AND A CHORD BEARING OF NORTH 08 DEGREES 58 MINUTES 42 SECONDS EAST, 219.36 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 150.00 FEET AT AN ARC DISTANCE OF 10.13 FEET AND A CHORD BEARING OF NORTH 37 DEGREES 39 MINUTES 24 SECONDS EAST, 10.13 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 29.50 FEET AT AN ARC DISTANCE OF 17.71 FEET AND A CHORD BEARING OF NORTH 56 DEGREES 47 MINUTES 23 SECONDS EAST, 17.45 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 65.50 FEET AT AN ARC DISTANCE OF 44.12 FEET AND A CHORD BEARING OF NORTH 04 DEGREES 42 MINUTES 48 SECONDS EAST, 41.34 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 232.18 FEET AND A CHORD BEARING OF NORTH 08 DEGREES 58 MINUTES 42 SECONDS EAST, 43.29 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 29.50 FEET AT AN ARC DISTANCE OF 17.71 FEET AND A CHORD BEARING OF NORTH 52 DEGREES 35 MINUTES 41 SECONDS EAST, 17.45 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 41.47 FEET AND A CHORD BEARING OF NORTH 77 DEGREES 42 MINUTES 49 SECONDS EAST, 41.34 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 24.00 FEET AT AN ARC DISTANCE OF 40.27 FEET AND A CHORD BEARING OF SOUTH 45 DEGREES 04 MINUTES 36 SECONDS EAST, 35.71 FEET TO A POINT LOCATED ON THE WESTERN RIGHT-OF-WAY LINE OF SEVEN TRAILS DRIVE, HAVING A VARIABLE WIDTH; THENCE ALONG SAID RIGHT-OF-WAY THE FOLLOWING BEARING AND DISTANCES; SOUTH 07 DEGREES 19 MINUTES 59 SECONDS WEST, 41.86 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 600.00 FEET AT AN ARC DISTANCE OF 137.69 FEET AND A CHORD BEARING OF SOUTH 13 DEGREES 54 MINUTES 27 SECONDS WEST, 137.39 FEET TO A POINT; THENCE SOUTH 20 DEGREES 28 MINUTES 55 SECONDS WEST, 53.09 FEET TO A POINT; THENCE SOUTH 20 DEGREES 10 MINUTES 55 SECONDS WEST, 53.61 FEET TO A POINT; THENCE SOUTH 19 DEGREES 10 MINUTES 55 SECONDS WEST, 43.32 FEET TO THE POINT OF BEGINNING AND CONTAINING APPROXIMATELY 4.34 ACRES (189,195 SQUARE FEET).

PROPERTY DESCRIPTION (ORIGINAL)

ORIGINAL LEGAL DESCRIPTION:

PARCEL 1:
LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST, ST. LOUIS COUNTY, MISSOURI, EXCEPTING THEREFROM THAT PART CONVEYED TO THE STATE OF MISSOURI FOR ROAD PURPOSES.

PARCEL 2:
A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT AN IRON PIPE IN THE NORTH LINE OF TOWN OF BALLWIN, DISTANT 20 FEET WEST OF THE EAST LINE OF OAK STREET, 40 FEET WIDE, AS SHOWN ON THE PLAT OF THE TOWN OF BALLWIN; THENCE NORTH 09 DEGREES 03 MINUTES EAST 294.76 FEET TO AN IRON PIPE; THENCE NORTH 76 DEGREES 37 MINUTES WEST 227.12 FEET TO AN IRON PIPE; THENCE SOUTH 13 DEGREES 23 MINUTES WEST 264 FEET TO AN OLD CONCRETE MONUMENT IN THE NORTH LINE OF THE TOWN OF BALLWIN; THENCE ALONG SAID NORTH LINE, SOUTH 76 DEGREES 37 MINUTES EAST 247.12 FEET TO THE POINT OF BEGINNING, ACCORDING TO SURVEY MADE BY RICHARD W. HALTERMAN, SR., SURVEYOR ON AUGUST 8, 1951.

PARCEL 3:
A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A POINT BEING 150 FEET NORTH OF THE NORTH LINE OF THE TOWN OF BALLWIN (ORIGINAL PLAT) AND 5 FEET EAST OF A CONTINUATION OF THE CENTER LINE OF ELM STREET (40 FEET WIDE); THENCE NORTHWARDLY ALONG A LINE PARALLEL TO AND 5 FEET EAST OF A CONTINUATION OF THE CENTER LINE OF ELM STREET 114 FEET, MORE OR LESS, TO A POINT; THENCE WESTWARDLY ALONG A LINE PARALLEL TO THE NORTH LINE OF THE TOWN OF BALLWIN (ORIGINAL PLAT) 161.36 FEET, MORE OR LESS, TO A POINT; THENCE SOUTHWARDLY ALONG A LINE PARALLEL TO A CONTINUATION TO THE CENTER LINE OF ELM STREET 114 FEET, MORE OR LESS, TO A POINT; THENCE EASTWARDLY ALONG A LINE PARALLEL TO THE NORTH LINE OF THE TOWN OF BALLWIN (ORIGINAL PLAT) 161.36 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

ORIGINAL LEGAL FOR 14811 MANCHESTER:
LOT A OF BALLWIN GOVERNMENT CENTER CONSOLIDATION AND RIGHT-OF-WAY DEDICATION PLAT, A SUBDIVISION IN ST. LOUIS COUNTY, MISSOURI ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 356 PAGE 501 OF THE ST. LOUIS COUNTY RECORDS.

PROPERTY DESCRIPTION (SURVEYED)

14819 MANCHESTER ROAD:

A TRACT OF LAND BEING PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST OF ST. LOUIS COUNTY AND FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE ON THE NORTH RIGHT OF WAY OF MANCHESTER ROAD (A.K.A. STATE HIGHWAY 100), AS DEFINED BY QUITCLAIM DEED IN DEED BOOK 16931 PAGES 2329 THRU 2335 OF THE ST. LOUIS COUNTY RECORDS, SAID IRON PIPE BEING AT STATION 692+12 OFFSET NORTH 129.9 FEET FROM THE CENTERLINE OF SAID MANCHESTER ROAD AS DEFINED IN SAID DOCUMENT; THENCE ALONG SAID RIGHT OF WAY, NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 58.99 FEET TO A POINT, AT STATION 690+53 OFFSET NORTH 129.9 FEET; THENCE ALONG THE NORTHERN RIGHT-OF-WAY OF MANCHESTER ROAD THE FOLLOWING COURSES AND DISTANCES, NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 134.11 FEET TO A POINT; THENCE SOUTH 81 DEGREES 33 MINUTES 32 SECONDS WEST, 183.58 FEET TO A POINT; THENCE NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST 18.36 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING ALONG THE NORTHERN RIGHT-OF-WAY LINE OF MANCHESTER ROAD, NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST, 25.44 FEET TO A POINT, BEING AT STATION 687+95.5 OFFSET NORTH 91.9 FEET; THENCE SOUTH 17 DEGREES 21 MINUTES 43 SECONDS WEST, 6.28 FEET TO A POINT; THENCE SOUTH 00 DEGREES 05 MINUTES 21 SECONDS WEST 11.72 FEET TO A POINT; THENCE SOUTH 85 DEGREES 02 MINUTES 59 SECONDS WEST, 113.99 FEET TO A POINT BEING AT STATION 685+86 OFFSET NORTH 60.0 FEET; THENCE LEAVING SAID MANCHESTER ROAD, NORTH 12 DEGREES 36 MINUTES 35 SECONDS EAST, 56.27 FEET TO A POINT; THENCE NORTH 77 DEGREES 21 MINUTES 39 SECONDS WEST, 20.00 FEET TO A POINT; THENCE NORTH 12 DEGREES 36 MINUTES 35 SECONDS EAST, 263.95 FEET TO A POINT ON THE SOUTHERN RIGHT-OF-WAY LINE OF ANDREW'S PARKWAY, VARIABLE WIDTH; THENCE ALONG SAID RIGHT-OF-WAY LINE, SOUTH 77 DEGREES 19 MINUTES 20 SECONDS EAST, 161.36 FEET TO A POINT; THENCE DEPARTING SAID RIGHT-OF-WAY LINE, SOUTH 12 DEGREES 36 MINUTES 35 SECONDS WEST, 114.05 FEET TO THE POINT OF BEGINNING AND CONTAINING APPROXIMATELY 1.60 ACRES (69,867 SQUARE FEET).

PROPERTY DESCRIPTION (SURVEYED)

14821 MANCHESTER ROAD:

A TRACT OF LAND BEING PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST OF ST. LOUIS COUNTY AND FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE ON THE NORTH RIGHT OF WAY OF MANCHESTER ROAD (A.K.A. STATE HIGHWAY 100), AS DEFINED BY QUITCLAIM DEED IN DEED BOOK 16931 PAGES 2329 THRU 2335 OF THE ST. LOUIS COUNTY RECORDS, SAID IRON PIPE BEING AT STATION 692+12 OFFSET NORTH 129.9 FEET FROM THE CENTERLINE OF SAID MANCHESTER ROAD AS DEFINED IN SAID DOCUMENT; THENCE ALONG SAID RIGHT OF WAY, NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 58.99 FEET, AT STATION 690+53 OFFSET NORTH 129.9 FEET; THENCE ALONG THE NORTHERN RIGHT-OF-WAY OF MANCHESTER ROAD THE FOLLOWING COURSES AND DISTANCES, NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 134.11 FEET TO A POINT; THENCE SOUTH 81 DEGREES 33 MINUTES 32 SECONDS WEST, 183.58 FEET TO A POINT; THENCE NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST 43.8 FEET TO A POINT, BEING AT STATION 687+95.5 OFFSET NORTH 91.9 FEET; THENCE SOUTH 17 DEGREES 21 MINUTES 43 SECONDS WEST, 6.28 FEET TO A POINT; THENCE SOUTH 00 DEGREES 05 MINUTES 21 SECONDS WEST 11.72 FEET TO A POINT; THENCE SOUTH 85 DEGREES 02 MINUTES 59 SECONDS WEST 113.99 FEET TO A POINT BEING AT STATION 685+86 OFFSET NORTH 60.0 FEET; THENCE LEAVING SAID MANCHESTER ROAD, NORTH 12 DEGREES 36 MINUTES 35 SECONDS EAST, 56.27 FEET TO A POINT; THENCE NORTH 77 DEGREES 21 MINUTES 39 SECONDS WEST, 20.00 FEET TO A POINT; THENCE NORTH 12 DEGREES 36 MINUTES 35 SECONDS EAST, 263.95 FEET TO A POINT ON THE SOUTHERN RIGHT-OF-WAY LINE OF ANDREW'S PARKWAY, VARIABLE WIDTH; THENCE ALONG SAID RIGHT-OF-WAY LINE, SOUTH 77 DEGREES 19 MINUTES 20 SECONDS EAST, 161.36 FEET TO A POINT; THENCE DEPARTING SAID RIGHT-OF-WAY LINE, SOUTH 12 DEGREES 36 MINUTES 35 SECONDS WEST, 114.05 FEET TO THE POINT OF BEGINNING AND CONTAINING APPROXIMATELY 0.42 ACRES (18,403 SQUARE FEET).

CITY CERTIFICATION

THIS IS TO CERTIFY THAT THIS LOT CONSOLIDATION PLAT OF "MANCHESTER APARTMENTS" AS BEEN APPROVED BY THE CITY OF BALLWIN, MISSOURI THIS _____ DAY OF _____, 2021.

CITY CLERK _____

PRINT NAME _____

MAYOR _____

PRINT NAME _____

TITLE NOTES (SCHEDULE B-2)

FOR THE SOURCE OF PROPERTY DESCRIPTION, EASEMENTS, DEDICATIONS AND EXCEPTIONS, ALTEA, LLC, EXCLUSIVELY USED THE TITLE DOCUMENTS PROVIDED BY TITLE EXPERTS LLC AND FIRST AMERICAN TITLE INSURANCE COMPANY, FILE/COMMITMENT NUMBER TEFA-21-19108.

1.-11.) GENERAL EXCEPTIONS WITH NO COMMENT BY SURVEYOR.

12.) EASEMENT TO LACLEDE GAS CO. ACCORDING TO INSTRUMENT RECORDED 7343-1956; AS SHOWN HEREON.

13.) EASEMENT GRANTED TO MSD ACCORDING TO INSTRUMENT RECORDED 9739-1250; AS SHOWN HEREON.

14.) EASEMENT GRANTED TO MSD ACCORDING TO INSTRUMENT RECORDED 7973-1912; AS SHOWN HEREON.

15.) EASEMENT GRANTED TO LACLEDE GAS COMPANY PER 7384-310; AS SHOWN HEREON.

16.) EASEMENT TO ST. LOUIS COUNTY SEWER COMPANY PER 7348-356; AS SHOWN HEREON.

17.) TEMPORARY SLOPE CONSTRUCTION EASEMENT TO ST. LOUIS COUNTY PER 8292-108; NOT LOCATED ON SUBJECT PROPERTY.

18.) DEED OF EASEMENT FOR SIDEWALKS GRANTED TO CITY OF BALLWIN, MISSOURI, PER 14159-1990; NOT LOCATED ON SUBJECT PROPERTY.

19.) EASEMENT AGREEMENT BETWEEN CITY OF BALLWIN, MISSOURI, AND TAYCO SEVEN TRAILS DRIVE LLC PER 19987-1440; THE EASEMENT DESCRIPTION AS RECORDED DOES NOT PROVIDE ANY SPECIFIC LOCATION REFERENCED TO THE BOUNDARY LINES AND, THEREFORE, CANNOT BE GRAPHICALLY PLOTTED.

20.) MAINTENANCE AGREEMENT BETWEEN CITY OF BALLWIN AND MSD PER 19971-1566; AS SHOWN HEREON.

21.) SIGN EASEMENT AGREEMENT BETWEEN CITY OF BALLWIN AND SEVEN TRAILS INVESTORS, LLC PER 19990-969; NOT LOCATED ON SUBJECT PROPERTY.

22.) RIGHT OF WAY DEDICATION PER PLAT BOOK 356 PAGE 501; AS SHOWN HEREON.

23.-28.) GENERAL EXCEPTIONS WITH NO COMMENT BY SURVEYOR.

29.) POTENTIAL ENCROACHMENT OF CONCRETE PARKING AND CONCRETE CURB OVER PROPERTY LINE; AS SHOWN HEREON.

30.) POTENTIAL ENCROACHMENT OF ASPHALT ROAD AND CONCRETE WALK OVER PROPERTY LINE; AS SHOWN HEREON.

31.) POTENTIAL ENCROACHMENT OF ASPHALT AND CONCRETE CURB THAT LIE IN EASEMENT; AS SHOWN HEREON.

32.-36.) GENERAL EXCEPTIONS WITH NO COMMENT BY SURVEYOR.

3-11-21

DATE

STATE OF MISSOURI

THOMAS M JAMBORETTZ

LS-2314

REGISTERED LAND SURVEYOR

AS AGENT OF ALTEA, LLC

ABBREVIATIONS

I.P. = IRON PIPE
B.M. = BENCH MARK
P.B. = PLAT BOOK
BK. = BOOK
ESMT. = EASEMENT
NP. = NOW OR FORMERLY
ASPH. = ASPHALT
FL. = FLOW LINE
RECORD. = SURVEYED
(C) = CALCULATED
T.F. = TOP OF FOUNDATION

I.R. = IRON ROD
ELEV. = ELEVATION
PG. = PAGE
S.F. = SQUARE FEET
BLDG. = BUILDING
CONC. = CONCRETE
R.O.W. = RIGHT-OF-WAY
COR. = CORNER
CL. = CENTERLINE
SURV. = SURVEYED
A. = ACTUAL
F.F. = FINISHED FLOOR

P.V.C. = POLYVINYL CHLORIDE PIPE
R.C.P. = REINFORCED CONCRETE PIPE
V.C.P. = VITRIFIED CLAY PIPE

SURVEY MARKERS

FOUND/ SET SEMI-PERMANENT MONUMENT

FOUND/ SET PERMANENT MONUMENT

FOUND/ SET CROSS

FOUND/ SET ANCHOR

FOUND/ SET NOTCH

FOUND/ SET ARROW

SET STAKE

LINE TYPES

BOUNDARY LINE

EASEMENT LINE

SETBACK LINE

BUILDING FOOTPRINT

CENTERLINE

PARCEL LINE

U.S. SURVEY SECTION LINE

CHAIN FENCE

WOOD, VINYL, OR METAL FENCE

WIRE FENCE

SANITARY SEWER

STORM SEWER LINE

UNDERGROUND TELEPHONE LINE

OVERHEAD WIRE

UNDERGROUND ELECTRIC LINE

FIBER OPTIC LINE

NATURAL GAS LINE

CABLE TELEVISION LINE

STEAM LINE

TREE/ SHRUB LINE

SYMBOL LEGEND

SANITARY MANHOLE

STORM MANHOLE

COMBINED STORM & SANITARY MANHOLE

GRATED MANHOLE

GRATED INLET

AREA INLET

GAS LIGHT

GAS DRIP

GAS VALVE

GAS METER

CABLE BOX

CABLE PEDESTAL

MAILBOX

SIGN

CLEANOUT/ LAMP HOLE

BOLLARD

WATER HYDRANT W/ PUMP

WATER VALVE

WATER METER

FIRE HYDRANT

GAS MANHOLE

TELEPHONE MANHOLE

ELECTRIC MANHOLE

FIBER OPTIC MANHOLE

STEAM MANHOLE

WATER MANHOLE

ELECTRIC LIGHT

ELECTRIC METER

ELECTRIC PEDESTAL

TELEPHONE BOX

TELEPHONE PEDESTAL

AIR CONDITIONING UNIT

MAILBOX

UTILITY POLE

UTILITY POLE W/ LIGHT

UTILITY POLE WITH TRANSFORMER

GUY WIRE WITH ANCHOR

WATER SHUT OFF

SPRINKLER

REVISIONS

NO.	REVISION / ISSUE	DATE

PREPARED FOR

BRENT P. EVANS
LANDAU GROUP LLC
PHONE: 314-409-1506

ALTEA, LLC

Consulting Land Surveyors

3906 S. OLD HWY 94,
SUITE 600
ST. CHARLES, MO 63304
PHONE: (636) 477-6000
FAX: (636) 998-0950
WWW.ALTEA.LLC.COM
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ALTEA, LLC

PROFESSIONAL LAND SURVEYING

CERTIFICATE OF AUTHORITY: 2013023731

SHEET IDENTIFICATION

CONOLIDATION

PROJECT NUMBER

20-2590 LC

FIELD CREW:

KE/JH

SHEET

SURVEYED:

12/17/2020

DRAFTED:

MJM

DRAFTED:

3/3/2021

REVIEWED:

BLH

REVIEWED:

3/3/2021

2

OF 2

ZONING ORDINANCE CHANGE PETITION REVIEW REPORT

Petition Number:	Z 21-01
Petitioner:	Brent Evans Landau Group, LLC 4700 S. Lindbergh Blvd. St. Louis, MO 63126 314-409-1506
Agent:	George Restovich Restovich & Assocs. 214 N. Clay Ave, Ste. 100 Kirkwood, MO 63122 314-343-7700
Project Name:	14811 Manchester Rezone
Location:	14811 Manchester Rd.
Review Date:	04/05/21
Requested Action:	Rezone entirety of 14811 Manchester to C-1 Commercial
Code Section:	Zoning Ordinance (Article IX, Section 1)
Existing Land Use/Zoning:	C-1 Commercial/PA Public Activity
Surrounding Land Use/Zoning:	North: PA Public Activity South: C-1 Commercial East: C-1 Commercial West: C-1 Commercial

Proposal Description:

A petition has been received from Brent Evans on behalf of Landau Group, LLC requesting that Ballwin rezone the entirety of 14811 Manchester to C-1 Commercial. Currently only a portion of the site is zoned as such.

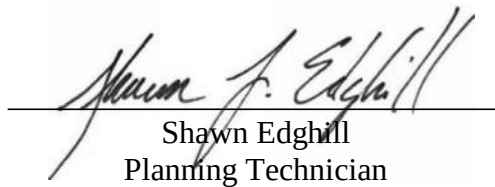
This zoning change request is part of a three-petition group being brought forward requesting for the construction of a seven-story mixed-use apartment complex at a lot made up of the consolidation of 14811, 14819, and 14821 Manchester Rd. This rezone is being requested for the purpose of ensure homogeneity at the parcel due to a change in the parcel's shape in the past.

In 2002, Vlasik Park was updated, which included the implementation of an extension to Kehrs Mill Road that connected to Seven Trails Dr. Andrews Parkway, as it is called today, changed the shape of the parcel at 14811 Manchester Rd, by creating an extension to the parcel's northeastern corner. Since the parcel's change nearly 20 years ago there has not been any update to the zone of the parcel to match the parcel's shape, and subsequently, the parcel has been split-zoned. During the parcel's tenure as the City's Government Center, this was not a major issue, but following the sale of the location later last year, this is now an item that will need to be addressed.

The C-1 Commercial rezone for the whole of the parcel at 14811 Manchester Rd will act as a portion of the base zone unto which the MRD Overlay Zone will also be proposed.

Recommendations:

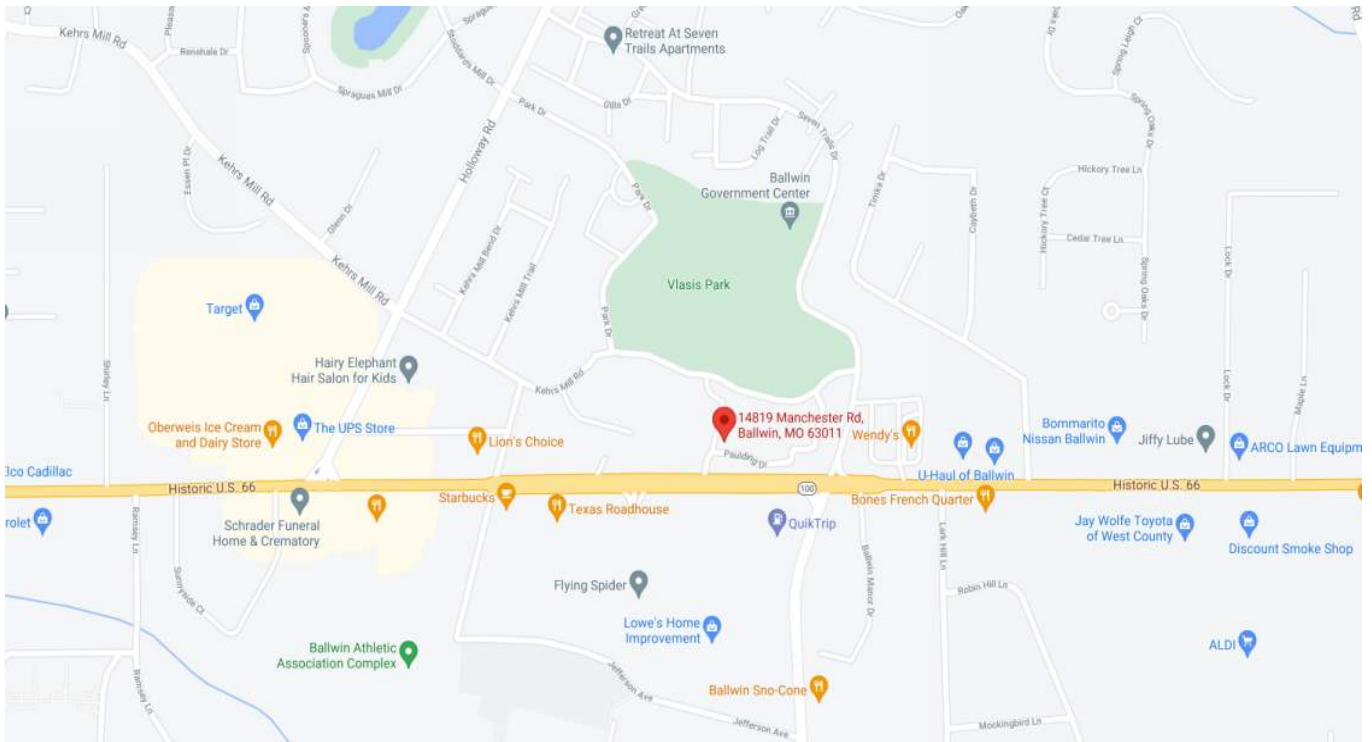
Staff has no objections to this proposal.



Shawn Edghill
Planning Technician

ZONING ORDINANCE CHANGE PETITION REVIEW REPORT

Petition Number:	Z 21-02
Petitioner:	Brent Evans Landau Group, LLC 4700 S. Lindbergh Blvd. St. Louis, MO 63126 314-409-1506
Agent:	George Restovich Restovich & Assocs. 214 N. Clay Ave, Ste. 100 Kirkwood, MO 63122 314-343-7700
Project Name:	Parc Place at Vlasis
Location:	14811, 14819, and 14821 Manchester Rd.
Requested Action:	Implement MRD Overlay and Approve Site Plan Proposal
Code Section:	Zoning Ordinance (Article XIIC)
Existing Land Use/Zoning:	C-1 Commercial (Will still act as base to MRD Overlay)
Surrounding Land Use/Zoning:	North: PA Public Activity South: C-1 Commercial East: C-1 Commercial West: C-1 Commercial



**Figure 1: Map View of the Location of 14811, 14819, and 14821 Manchester Rd.
Map obtained through Google Maps.**

**Figure 2: Proposed Development as seen from the intersection of Seven Trails Dr. and
Andrews Parkway (northeast corner of property) in Vlasik Park. Rendering by V3 Studios.**



Proposal Description:

Brent Evans, on behalf of Landau Group, LLC, is requesting an overlay zone to be applied to the parcels at 14811, 14819, and 14821 Manchester Rd. This petition proposes a seven-story (86 feet) tall mixed-use multi-family apartment complex and retail commercial space (2090 square feet).

This site is primarily bounded by commercial uses in the C-1 Commercial zoning district and PA Public Activity. Across Andrews Parkway, Vlasik Park sits to the north of the site, zoned PA Public Activity. Across Seven Trails Dr., U-Gas sits to the east, Salem United Methodist Church to the west, and across Manchester Rd., Olde Towne Plaza and QuikTrip to the south, all commercially zoned.

The site sits at the northwest corner of the intersection of Manchester Rd. and Ries Rd. /Seven Trails Dr. The site is bounded on all side by roads or access routes: Andrews Parkway to the north, Seven Trails to the east, Manchester Rd to the South, and N. Elm St as access to the west. The site is extremely variable in topography, ranging from 620 to 660 feet above sea level, with retaining walls currently in use along the parcel's southern border with Manchester Rd, and at several points along the parcel's northern border along Andrews Parkway.

C-1 Commercial District Regulations (Article IX):

This proposal entails the complete redevelopment of the previous Government Center (14811 Manchester) and J.B. Auto (14819 Manchester), partially zoned as commercial. The MRD regulations may supersede or amend the requirements of the C-1 district. Any regulation not superseded or amended will still apply.

The C-1 district issues applicable to this site are as follows:

1. Article IX, Section 2 identifies a list of uses that are allowed by right in the C-1 district. Article XIV of the zoning ordinance establishes additional uses that are allowed by special use exception in the C-1 district. The MRD Governing Ordinance will include a listing of the uses allowed in the development.
2. Art. IX, Section 3 limits the height of structures to a maximum of 45 feet. The MRD Overlay supersedes this height restriction to a minimum of 2 stories, with no maximum height restriction set.
3. Art. IX, Section 4. (1) (i) requires buildings fronting on Manchester Rd. to have a minimum setback of 60' and buildings on other roadways to have a minimum setback of 40'. The MRD Overlay supersedes this setback to enforce that a new construction must be built within 10 feet of a roadway to encourage massing along the roadway. This is further discussed in the MRD section below.
4. Art. IX, Section 4. (1) (iv) requires the provision of a 10' deep landscaped area along all roadway frontages of the site. Setback requirements through the MRD Overlay supersede this requirement.

5. Art. IX, Section 5. (1) requires the provision of parking in accordance with the provisions of Article XV. The MRD Overlay supersedes this requirement, see Art. XIIC, Section 5 for more information.
6. Art. IX, Section 6. requires the submission of the site development plan to MoDOT for its review. The petitioner has submitted its site development plan to MoDOT for their review and they are involved with the Traffic Impact Survey being conducted by Lochmueller.
7. Art. IX, Section 7. (1) requires that the minimum spacing of curb cuts be 500' between centerlines. The submitted plan appears to be in accordance with this requirement. The petitioner has proposed to keep all existing curb cuts on 14811, 14819, and 14821 Manchester Rd, providing egress of all tenants and consumers to Andrews Parkway or Manchester Rd.

At the scoping meeting for the traffic study, the issue of a right-in/right-out configuration for the N. Elm St. /Manchester Rd. intersection came up. It is currently understood that tenants of the proposed development will be discouraged to use the Manchester Rd egress at N. Elm St as a means of entrance.

8. Art. IX, Section 7. (2) requires the construction of a 6' wide sidewalk along Manchester Rd. There is currently a sidewalk along Manchester Rd that is buffered by the retaining wall built in 2002 at the rear of 14811 Manchester Rd.
9. Art. IX, Section 7. (3) requires that a cross access, driveway/parking lot vehicular interconnection easement be established for the benefit of the adjoining properties. The ordinance allows this requirement to be waived for topographic or site design reasons, and it can be waived as a part of the MRD approval process.

The petitioner has proposed the extension of N. Elm St. between Andrews Parkway and Manchester Rd; however, it has been indicated that this will be intended for exit only onto Manchester. Otherwise, interconnection for this property is fairly well developed due to its access to Seven Trails Dr. and Holloway via Andrews Parkway. Interconnection to the west with Salem United Methodist Church is unlikely due to unfavorable topographical changes between 14821 Manchester Rd. and the church and the creation of new traffic in the church's parking area.

Manchester Road Revitalization Overlay District (MRD) Regulations (Article XIIC):

The MRD (Manchester Road Revitalization Overlay District) does not stand on its own. It works only as an overlay amending an underlying zoning district. The MRD may amend or waive the development provisions of the underlying zoning district and the subdivision ordinance, while bringing forward an addition of multiple-family land use. The uses allowed in the underlying zoning district and the applicable special use exception (SUE) regulations are therefore critical and limiting to an MRD district. The underlying zoning district to the Parc Place at Vlasits project site is the C-1 district.

The MRD district allows the waiver or modification of the regulations of the underlying district, but the governing ordinance must specifically outline and describe what those changes and waivers are. Any underlying district regulations that are not superseded or waived will still apply.

1. Article XIIC, Section 1, Purpose: This section describes the purpose of the MRD district, which is to "... promote the local economy and mixed use development within the Manchester Rd. corridor while simultaneously maintaining the functional capacity of the highway. The MRD encourages a wide range of well-planned, market sensitive commercial and mixed use development scenarios. The preferred land development pattern in the area will offer a pedestrian oriented development with residential and/or commercial uses that provide high quality services and amenities that prolong and enhance the shopping, working and living experience".

While the proposed development appears to be consistent with the provisions of this section, there is some concern to how minimal the commercial use has become to the development, which appears to have become increasingly focused on a solely multi-family residential focus, rather than a mixed-use construction. To that end, the purpose of the MRD Overlay District is to promote mixed-use development, not necessarily focus in on any specific use.

2. Art. XIIC, Section 2, Permitted Uses: This section addresses permitted uses. As aforementioned, the MRD Overlay will promote the allowance for the multi-family residential use proposed in this project.
3. Art. XIIC, Section 3, Intensity of Use: This section allows relief from or the amendment of the regulations of the underlying zoning ordinance (C-1 district) and associated site development regulations through the passage of a governing ordinance. Such relief or amendment is allowed if the petitioner can demonstrate that it achieves the purposes of this ordinance. Any regulation that is not waived or amended is still in effect. Should any commercial use occupy the retail commercial space which is found to require a Special Use Exception (SUE), the incoming commercial tenant will still be required to undergo the SUE Petition process.
4. Art. XIIC, Section 4, Height Regulations: Unlike other zoning regulations, the MRD Overlay Zone has a minimum requirement of 2 stories, but no maximum height restrictions. The proposed development complies with this requirement. The proposed building will be 86 feet in height, culminating in 7 stories. Due to recessing of the property
5. Art. XIIC, Section 5, Parking and Loading Regulations: The MRD Overlay imposes **no minimum parking or loading requirements. It is the petitioner's responsibility to demonstrate the parking needs of the proposed development.** The proposal brings forward a two story parking facility beneath five stories of multi-family residence, comprised of 237 parking spots for the building's 196 multi-family apartment units.

To provide some reference, Article XV, Section 1 (2) states that a multi-family dwelling district such as R-4 or R-5 PIM would generally have 1.5 parking spots for each dwelling unit, which in this case would require 294 parking spaces to meet the amount of automobiles expected from 196 apartments.

Were this the case, this would bring forward a deficit of 57 spaces. It is Staff's recommendation that the petitioner should be required to provide a detailed explanation on how the parking garage meets the parking needs of their proposed development. Tenants of these apartments will not be permitted to utilize Vlasik Park's parking lots overnight in a scenario where the parking garage fills up.

The parking facility complies with subsection (3), which requires that "Parking facilities shall be concentrated in areas that are landscaped and buffered to minimize visibility from major rights-of way, residential units, and adjoining properties. The parking facility will be largely shielded from view by Manchester Rd, due to the topography of the site, resulting in the bottom 24 feet of the building to be recessed and the residential facades to be what is visible from street-level. The two-level parking structure provides 237 spaces for the residents of the building, 8 of which are set to be ADA compliant, and 9 additional parking spots available to the public, 2 of which are set to be ADA complaint.

6. Art. XIIC, Section 6, *Setbacks*: All new buildings under the MRD Overlay are required to maintain no more than a 10 foot setback from the right-of-way, with the intent being to mass the building on the property line. There are a few points along the building's length where it complies with this requirement, but a majority of the building is not massed as close to the property line along Andrews Parkway as required by the Code. The positioning of the building is far more central in its parcel than the Overlay intends.

It is Staff's recommendation that the petitioner should be required to provide a detailed explanation as to why they are intending to construct in a manner not befitting the overlay's setback requirements. Taking into consideration the context around the site, notably Vlasik Park to the immediate north and a retaining wall along Manchester Rd to the immediate south of the proposed development, it could be feasible to permit an allowance for a variance, but such a variance will need to be evaluated and provided by the Board of Adjustment.

7. Art. XIIC, Section 7, *Pedestrian Access*: This section requires that pedestrian access be an integral part of the overall design of each (MRD) development and shall provide safe and convenient circulation throughout, to and from off-street parking areas and connect with abutting properties, rights-of-way, developments and transit facilities. The proposal appears to provide plenty of information to ensure circulation on the site, including 6 ft. sidewalks along Andrews Parkway and the internal egresses, proposed crosswalks, including one to the park connecting into a rock/mulch trail bridging to "The Lawn on the Parc".

- i. Art. XIIC, Section 7 (1), *Identifiable entrance*: The proposal is utilizing two currently existing points of egress along Andrews Parkway and one pre-existing egress onto Manchester Rd via the Elm Street stub.

The Elm Street egress may be exit-only, which seems difficult to manage if the Elm Street stub is still utilized by the resident living at 105 N. Elm St.

- ii. Art. XIIC, Section 7 (4): This subsection requires landscaping areas, benches, fountains, artwork, shade structures, pavement enhancements, tables and chairs, illumination and similar amenities to enhance the pedestrian ways. The proposal does provide landscaping and rain gardens, including a rock/mulch trail connecting the proposal to Vlasik Park. A major item of note here is that 14819 Manchester Rd has two levels of retaining walls.

Speaking with the petitioner, Staff was informed that the railroad tie wall retaining wall is set to be removed during the construction process. Additionally, the plans provide a section of greenspace, taking up the whole of the 14821 Manchester parcel as “The Lawn on the Parc.” It is set to include landscaping and tables, but the strip of asphalt as a pseudo-road for the purpose of food trucks brings up a minor concern: there does not appear to be any turn-around space for a food truck.

8. Art. XIIC, Section 8, Use Limitations: This section outlines special use limitations related to certain specific possible land uses within a MRD Overlay. Should the commercial location indicated in the provided design drawings already have an intended tenant, it would benefit that tenant to be made known during this process and be approved by the Commission and Board, otherwise they will need to go through the process separately.
 - i. *Art. XIIC, Section 8 (1)*: This subsection requires that unless specifically provided in the MRD Governing Ordinance, no outdoor display, storage or sales of merchandise, fixtures, vehicles or materials are allowed in the MRD except by the governing ordinance (11-16). Nothing relative to this subsection are proposed as a part of this petition.
 - ii. *Art. XIIC, Section 8 (2)*: This subsection allows uses permitted by special use exception in the underlying district pursuant to the MRD process.
 - iii. *Art. XIIC, Section 8 (3)*: This subsection contains regulations governing drive through facilities. There are no such facilities indicated on this plan.
9. Art. XIIC, Section 9, Architectural and Site Design Standards:
 - i. *Art. XIIC, Section 9 (1) Materiality of the exterior*: A minimum of 50% of each exterior wall shall consist of the following materials:
 - (a) Stone material
 - (b) Brick material
 - (c) Stucco or similar exterior insulated finish system (EIFS)
 - (d) Decorative metal panel system

The petitioner provided proposed building material and their percentages of the overall square footage to be as follows:

- (e) Brick (25.79%)
- (f) Wood Look Fiber Cement (23.62%)
- (g) Varied Grey Fiber Cement (11.38%)
- (h) Decorative metal panel (21.28%)
- (i) Glazed (17.93%)

It is Staff’s belief that the materiality of the proposed exterior meets Code requirements.

- ii. *Art. XIIC, Section 9 (2) Flat rooftop screening or architectural treatments*: This subsection establishes rooftop requirements to ensure that treatments are undertaken to conceal flat rooftops. Façade height changes have been provided to help conceal the flat rooftop, but the elevations fail to provide information on location of rooftop equipment. Pedestrian areas of the façade, including balconies, roof decks, and the pool deck will all be required to comply with protection from the weather.

iii. *Art. XIIC, Section 9 (3) Architectural wall treatment:* This subsection requires the avoiding of monotonous materiality on the exterior of any large buildings with walls in excess of 1,500 square feet. The elevations provided by the petitioner appear to show wall treatments that vary greatly in textures, colors and materials in a manner that complies with this requirement.

iv. *Art. XIIC, Section 9 (4) Contextual relatability:* This subsection sets a requirement that any building under the MRD zone is required to be proportionally similar to existing development in the surrounding area. Any newly proposed building with excessively long façade walls which exceed the perpendicular dimension ratio of 2:1, the longer building faces will be required to implement variations along the wall plan, including architectural design or site planning features including monuments, pergolas, artwork, landscaping, etc.

The perpendicular dimension ratio for this proposal is 492.344 x 202, or a ratio of approximately 2.437:1, exceeding the threshold listed above. Variations are proposed including landscaping, rain gardens, and architectural design implementation such as terraced patio space and variations along façades that aid in reducing the impact of excessively long walls.

v. *Art. XIIC, Section 9 (5) Architectural treatment consistency and compatibility:* Architectural treatments and the use of screening devices shall be consistent and compatible on all facades of all buildings visible from off site and throughout the site. This architectural style is more modern than that of the surrounding buildings, most of which were built over many different decades. Compatibility by the proposal is inconsistent with the surrounding parcels, but consistent with the architectural standards as regulated by this zone under this section.

vi. *Art. XIIC, Section 9 (6) Enhancement of pedestrian experience:* This subsection requires that monotonous and continuous wall planes are to be avoided through the breaking of architectural massing and features including enhances pedestrian areas, landscaping, retaining walls, etc. The applicant was provided information showing landscaping, rain gardens, greenspace, and a small rock/mulch trail that help to incentivize pedestrian activity and the wall planes of the structure itself utilized architectural and material variation that help to extensively break up the façade of the building.

vii. *Art. XIIC, Section 9 (7) Landscaping:* This subsection states that landscaping shall be used to complement and enhance a building's design, color, and material. Irrigation is requirement to promote longevity and a healthy appearance. The rendering provided for evaluation gives a helpful understanding as to the landscaping proposal, but a landscaping plan will be required.

It will be required for the petitioner to utilize native or acclimatized species that thrives in this proposed environment, but that will be properly maintained in a way that does not negatively affect Vlasik Park or any other surrounding property.

- viii. *Art. XIIC, Section 9 (8)*: Screening between commercial and adjoining properties that are of lesser density, including recreational use, is addressed by this subsection. It is Staff's opinion that there has been an attempt by the petitioner to screen and gradually integrate a building of this magnitude to Vlasik Park. The petitioner has proposals for landscaping, greenspace, and a rock/mulch trail that aids with circulation through the site and Vlasik Park.
 - ix. *Art. XIIC, Section 9 (9)*: This subsection establishes screening standards for rooftop and ground-mounted equipment and fixtures.
 - x. *Art. XIIC, Section 9 (10)*: This subsection states that loading docks, trash enclosures, outdoor storage and sales areas and similar facilities and functions shall be incorporated into the overall design of the building and site, shall be located near the service entrances of buildings and shall be 100% screened with vegetation or structures in a manner that is architecturally compatible with the development. An enclosure has been included on A001 (Level 1 Parking) and A002 (Level 2 Parking).
 - xi. *Art. XIIC, Section 9 (11)*: This subsection addresses the creation of gateway features. No such feature is part of the site plan.
10. *Art. XIIC, Section 10, Urban Design Elements*: These urban design guides are to be considered when reviewing any requested relief from the requirements of the underlying zoning.
- i. *Art. XIIC, Section 10(1 - 3)*: These subsections provide considerations for urban design elements including landmarks, public art, enhancing landscapes with streetlights.

The petitioner has proposed the updating of the monument sign at the northwestern corner of the intersection of Seven Trails Dr. and Manchester Rd. That new sign will need to be reviewed at a later date by City Staff through the usual sign permitting process, but also under the legal context found in Ordinance 12-14 between the City of Ballwin and Seven Trails Investors, LLC, where in an easement deed was entered into and executed, and includes the allowance for Seven Trails to maintain a panel on the current sign. The Sign Easement agreement includes a clause which states that should the City of Ballwin replace the sign, Seven Trails will have the right to a panel of similar dimension as currently exists on the existing monument sign.

Additionally, the petitioner has included within the proposal that as part of the new development, a new sidewalk will be constructed along the southern side of Andrews Parkway.

- ii. *Art. XIIC, Section 10(4 and 5)*: These subsections relate to access management with the Manchester Rd Corridor. The petitioner is utilizing currently existing egresses. Mitigation of traffic congestion and roadway capacity problems is highly desired.

According to the Traffic Impact Survey (TIS) undertaken by Lochmueller, there is currently a significant delay for the southbound approach at the signalized intersection at Manchester Road and Ries/Seven Trails. This delay is considered acceptable and is largely attributable to the signal's lengthy cycle.

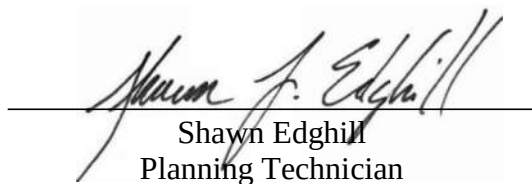
Staff has noted the TIS's forecasted changes to the signal's delay. Lochmueller claims that the levels are reasonable; the forecasted delay climbs from the current 72.7 sec/veh to 77.0 sec/veh. The signal's level of service for southbound drivers is designated an "E", second to last in terms of quality, and the forecasted delay is close to the threshold of "F", met by a delay of 80 sec/veh. According to Lochmueller's report, the southbound approach operates with available capacity. One item of note is that a change to the proposal occurred during Lochmueller's evaluation wherein the petitioner removed a commercial space from their plans and replaced it with a lobby. This may have an impact on the traffic number, albeit very slightly. MoDOT states that Manchester is currently due for optimization for the coming year. Data is expected to be collected with new timing plans developed and implemented from Winter 2021-2022 and into Spring 2022.

Lochmueller recommends consideration to be given by the petitioner to an internal pathway/sidewalk system to promote mobility throughout the site. Additionally, continental crosswalks are recommended to be striped across the existing access drives at the Andrews Parkway/ Paulding Dr. and Andrews Parkway/ N. Elm St intersections, as well as the provision of a midblock pedestrian crosswalk across Andrews Parkway to facilitate circulation between the residences and the park. The crosswalk at the Andrews Parkway/ Paulding Dr. intersection has been proposed by the petitioner. There is also a midblock crosswalk proposed on N. Elm St. for the foot traffic expected by pedestrians walking from the "Lawn on the Parc" towards the development or Vlasik Park. If another crosswalk is recommended at the intersection of N. Elm and Andrews Parkway, then it might behoove the petitioner to consider Yield to Pedestrian signage along the access route.

Recommendations have also been provided that the Andrews Parkway/ Paulding Dr. and Andrews Parkway/ N. Elm St intersections should be placed under STOP control to ensure safe operating conditions.

Staff Recommendation:

Staff recommends that the petitioner be required to obtain a variance through the Board of Adjustment for the building's non-compliance with the MRD Overlay's setback requirement before the matter is brought before the Board of Aldermen. Additionally, an explanation should be given by the petitioner on the matter of parking space availability. In the case of approval by the Commission, Staff recommends the imposition of a restriction in the Governing Ordinance on any future tenants of the proposed development from utilizing any of Vlasik Park's parking lots for overnight parking. Finally, any and all landscaping must be composed of native or acclimatized species that are properly irrigated to ensure healthy appearance and are maintained in a manner that reflects well upon the City's central parkland and refrains from negatively impacting Vlasik Park.



Shawn Edghill
Planning Technician

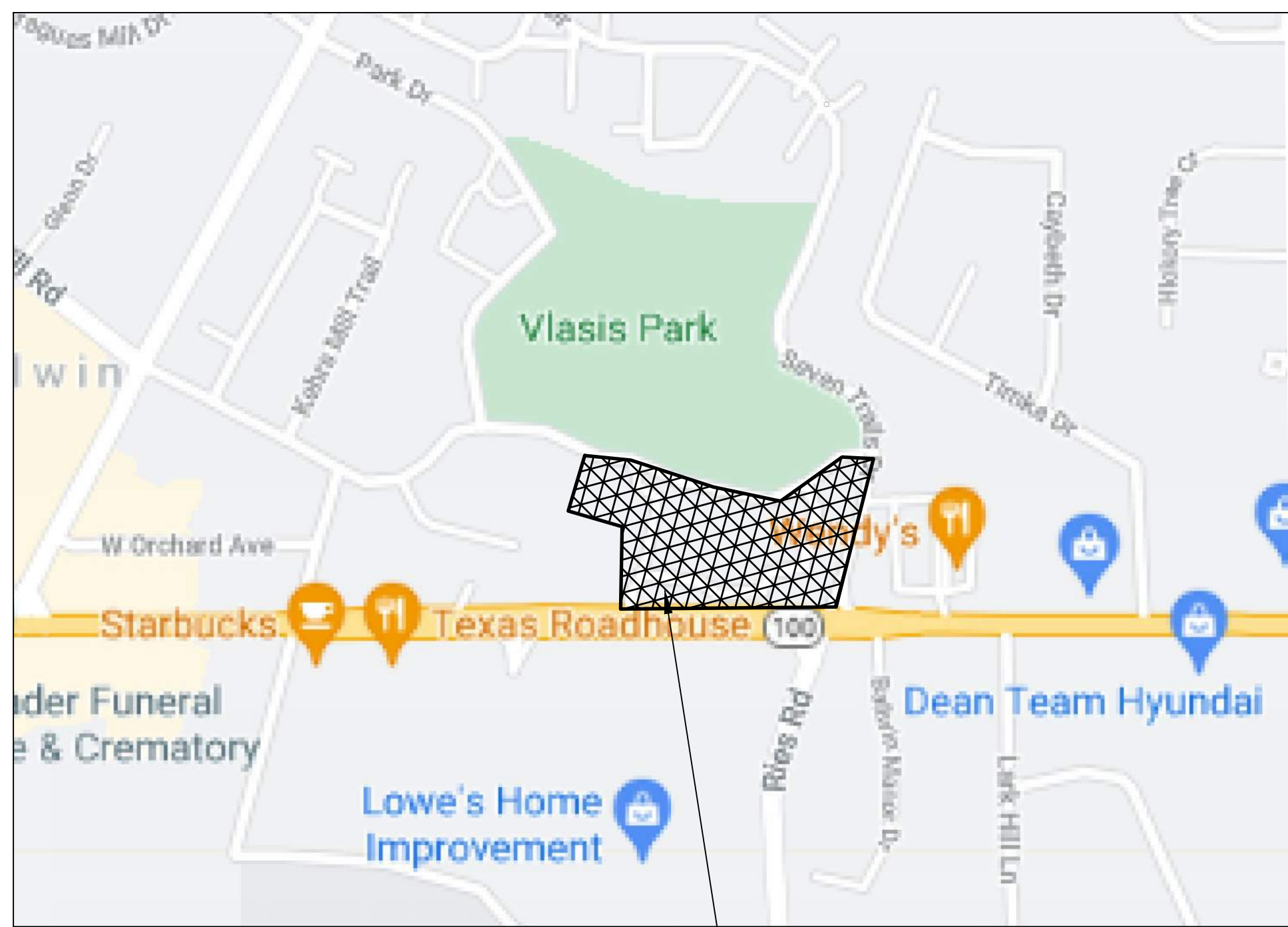
PARC PLACE AT VLASIS

SITE DEVELOPMENT PLAN

14811, 14819, 14821 MANCHESTER ROAD
CITY OF BALLWIN, ST. LOUIS COUNTY, MISSOURI, 63011

LOCATION MAP

SCALE: NTS, MAP IMAGE SOURCE: GOOGLE



PROJECT LOCATION

LEGEND

EXISTING (FOR REFERENCE ONLY)
SEE SURVEY SHEET CXXX FOR LEGEND

— RW —	RIGHT OF WAY
— PL —	PROPERTY LINE
---	EASEMENT
— 500 —	MAJOR CONTOUR
— 502 —	MINOR CONTOUR
==	STORM SEWER
— T —	TREE
— G —	GRATE INLET
— M —	STORM MANHOLE
— C —	CURB INLET
— S —	SANITARY SEWER
— SM —	SANITARY MANHOLE
— CO —	CLEAN OUT
— OE —	OVERHEAD ELECTRIC
— UE —	UNDERGROUND ELECTRIC
— PP —	POWER POLE AND GUY WIRE
— LS —	LIGHT STANDARD
— G —	NATURAL GAS
— GV —	GAS VALVE
— W —	WATER
— WV —	WATER VALVE
— FH —	FIRE HYDRANT
— S —	SIGN
— F —	FENCE
— SL —	SAWCUT LINE
— X —	AREA OF DEMOLITION

PROPOSED

— SF —	ACCESSIBLE ROUTE
— 553.87 —	SILT FENCE
— 550 —	SPOT ELEVATION
— 552 —	MAJOR CONTOUR
— ST —	MINOR CONTOUR
— RD —	STORM SEWER
— UD —	ROOF DRAIN
— G —	UNDERDRAIN
— M —	GRATE INLET
— C —	STORM MANHOLE
— S —	CURB INLET
— SS —	SANITARY SEWER
— CO —	SANITARY MANHOLE
— OE —	CLEAN OUT
— UE —	OVERHEAD ELECTRIC
— E —	UNDERGROUND ELECTRIC
— X —	LIGHT STANDARD
— G —	NATURAL GAS
— W —	WATER
— F —	FIRE SERVICE
— FH —	FIRE HYDRANT
— S —	SIGN
— F —	FENCE
— X —	ASPHALT PAVEMENT
— X —	CONCRETE PAVEMENT
— X —	BIORETENTION BASIN

DIFFERENTIAL RUNOFF CALCULATIONS

Existing Drainage Area

Area ID	Roof Area (ac)	PI Factor (cfs/ac)	Roof/Pavement Area (ac)	PI Factor (cfs/ac)	Grass Area (ac)	PI Factor (cfs/ac)	Total Area (ac)	15 Yr/20 Min. Q (cfs)	100 Yr/20 Min. Q (cfs)
EX	0.00	4.20	1.80	3.54	2.86	1.70	4.67	11.26	15.20

Proposed Drainage Area

Area ID	Roof Area (ac)	PI Factor (cfs/ac)	Roof/Pavement Area (ac)	PI Factor (cfs/ac)	Gravel Area (ac)	PI Factor (cfs/ac)	Green Roof Area (ac)	PI Factor (cfs/ac)	Grass Area (ac)	PI Factor (cfs/ac)	Total Area (ac)	15 Yr/20 Min. Q (cfs)	100 Yr/20 Min. Q (cfs)
PR	1.22	4.20	1.14	3.54	0.05	3.35	0.40	1.70	1.86	1.70	4.67	13.16	17.77

Differential Runoff

15 Year/20 Minute Storm Event

Existing Q = 11.26 c.f.s.

Proposed Q = 13.16 c.f.s.

Differential Runoff = 1.90 c.f.s.

Differential runoff is less than 2.0 c.f.s.; therefore detention is not required

SITE COVERAGE CALCULATIONS

Site Coverage Calculations

Building = 1.62 acres

Pavement = 1.19 acres

Grass = 1.86 acres

Total = 4.67 acres

Impervious Area = 2.81 acres

% of Site = 60%

Grass Area = 1.86 acres

% of Site = 40%

PARKING CALCULATIONS

PROPOSED PARKING:

P1 LEVEL = 62 PARKING SPACES (INCLUDING 8 ADA)

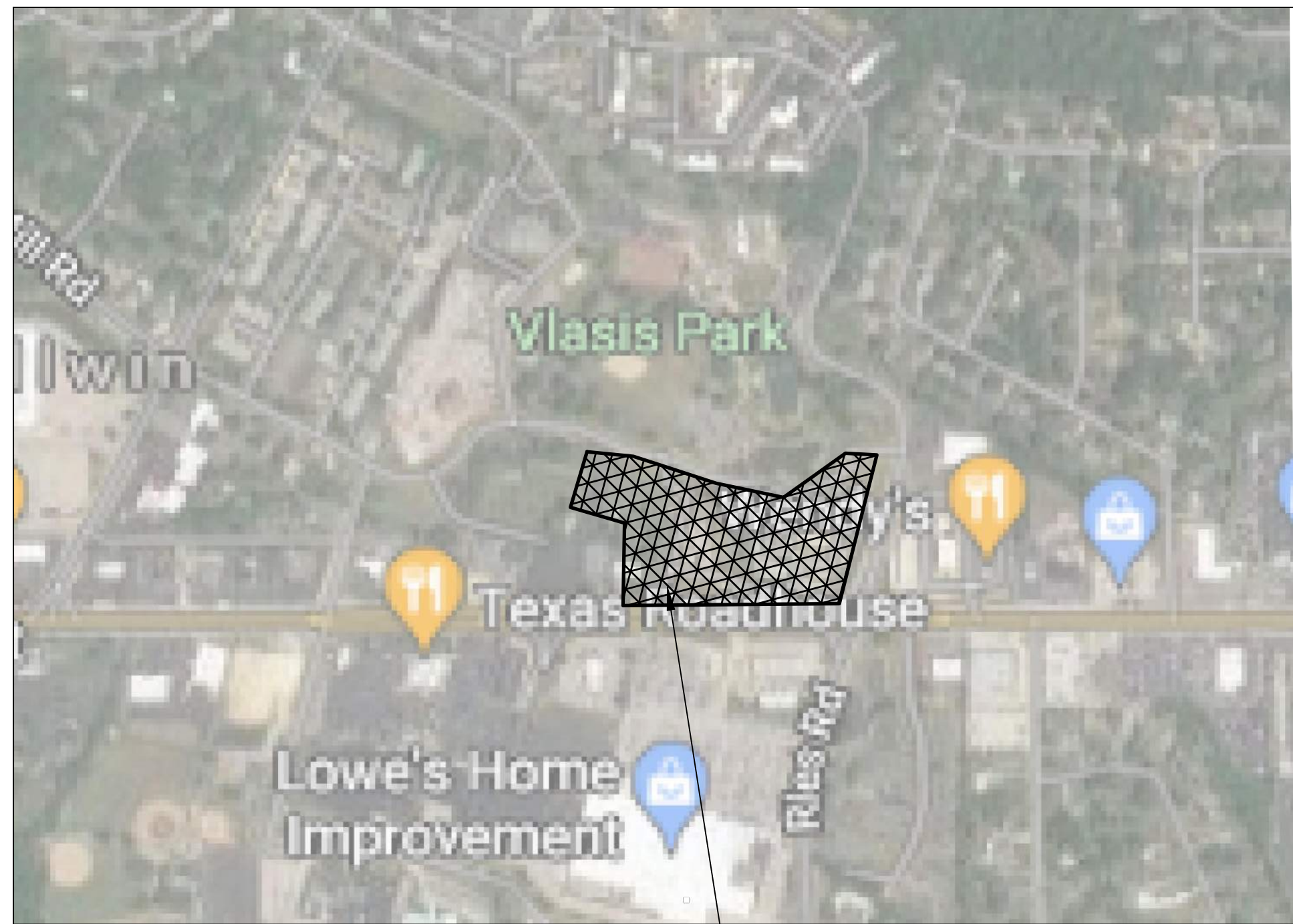
P2 LEVEL = 173 PARKING SPACES

SURFACE = 9 PARKING SPACES (INCLUDING 2 ADA)

TOTAL = 244 PARKING SPACES (INCLUDING 10 ADA)

LOCATION MAP-AERIAL

SCALE: NTS, MAP IMAGE SOURCE: GOOGLE



PROJECT LOCATION

SURVEY INFORMATION

SEE SHEETS C001 - C003

GENERAL INFORMATION

PROPERTY ADDRESS	LOCATOR #	MUNICIPALITY	OWNER	EXISTING ZONING
14811 MANCHESTER ROAD	23R440916	BALLWIN	CITY OF BALLWIN	C-1 COMMERCIAL
14819 MANCHESTER ROAD	23R440741	BALLWIN	JAMES R & PATRICIA BUZZANGA	C-1 COMMERCIAL
14821 MANCHESTER ROAD	22R110054	BALLWIN	JAMES R & PATRICIA BUZZANGA	C-1 COMMERCIAL

TOTAL AREA:
14811 MANCHESTER: 2.32 ACRES
14819 MANCHESTER: 1.60 ACRES
14821 MANCHESTER: 0.42 ACRES
TOTAL: 4.34 ACRES

PROPOSED ZONING: C1 WITH MANCHESTER ROAD REVITALIZATION (MRD) OVERLAY

OWNER UNDER CONTRACT:
LANDAU GROUP, LLC
MR. BRENT EVANS
112 S. HANLEY RD., SUITE 200
ST. LOUIS, MO 63105
314.409.1506

PLAN SUBMITTER:
SEAN ACKLEY, P.E.
G&W ENGINEERING
138 WELDON PARKWAY
ST. LOUIS, MO 63043
314.469.3737

UTILITIES/REVIEW AGENCIES

MISSOURI AMERICAN WATER COMPANY
727 CRAIG ROAD
ST. LOUIS, MO 63141
PHONE: 314-996-2386
FAX: 314-569-3972

SPIRE ENERGY (FORMERLY LACLEDE GAS)
700 MARKET STREET
ST. LOUIS, MO 63101
PHONE: 314-658-5417
FAX: 314-658-9414

AMEREN MISSOURI (ELECTRIC)
1901 CHOUTEAU AVENUE
ST. LOUIS, MO 63103
PHONE: 314-992-8602
FAX: 314-992-8615

AT&T (COMMUNICATIONS)
909 CHESTNUT STREET
ST. LOUIS, MO 63101
PHONE: 636-949-4230
FAX: 636-949-1315

CHARTER COMMUNICATIONS
101 NORTHWEST PLAZA DRIVE
ST. ANN, MO 63074
PHONE: 314-455-9142

METROPOLITAN ST. LOUIS SEWER DISTRICT (SEWER)
2350 MARKET STREET
ST. LOUIS, MO 63103
PHONE: 314-768-6325
FAX: 314-768-6342

METRO WEST FIRE PROTECTION DISTRICT
17085 MANCHESTER ROAD
WILLOWOOD, MO 63040
PHONE: 636-452-2100

CITY OF BALLWIN
1 GOVERNMENT CENTER
BALLWIN, MO 63011
PHONE: 636-207-2320

MISSOURI DEPARTMENT OF TRANSPORTATION
AREA ENGINEER, RYAN PEARCY, P.E.
1590 WOODLAKE DRIVE
CHESTERFIELD, MO 63017
PHONE: 314-453-5086

MISSOURI DEPARTMENT OF NATURAL RESOURCES
1101 RIVERSIDE DRIVE
JEFFERSON CITY, MO 65101
PHONE: 573-751-3443

ABBREVIATIONS

AI = AREA INLET	ME = MATCH EXISTING
ASPH = ASPHALT	MEAS = MEASURED
ATS = ADJUST TO GRADE	MH = MANHOLE
BLDG = BUILDING	N/F = NOW OR FORMERLY
C&G = CURB AND GUTTER	OC = ON CENTER
CI = CURB INLET	OHE = OVERHEAD ELECTRIC
CMU = CONCRETE MASONRY UNIT	PB = PLAT BOOK
CO = CLEANOUT	PG = PAGE
CONC = CONCRETE	PR = PROPOSED
DB = DEED BOOK	PUMI = PRIVATE UNDER MSD INSPECTION
DGI = DOUBLE GRATE INLET	PVC = POLYVINYL CHLORIDE PIPE
DIA = DIAMETER	PVMT = PAVEMENT
DIP = DUCTILE IRON PIPE	RCP = REINFORCED CONCRETE PIPE
E = ELECTRIC	REC = RECORD
ELEV = ELEVATION	ROW = RIGHT OF WAY
EOP = EDGE OF PAVEMENT	RR = RAILROAD
EP = END OF PIPE	RW = RETAINING WALL
ESMT = EASEMENT	SP = STANDPIPE
EX = EXISTING	SQ = SQUARE
EXIST = EXISTING	T = TELEPHONE CABLE
FD = FLOOR DRAIN	TBA = TO BE ABANDONED
FIN = FINISH	TBR = TO BE REMOVED
FLR = FLOOR	UGE = UNDERGROUND ELECTRIC
FL = FLOW LINE	UGT = UNDERGROUND TELEPHONE
FND = FOUND	VCP = VITRIFIED CLAY PIPE
FOL = FIBER OPTIC LINE	UIP = USE IN PLACE
FT = FEET	W = WIDE
G = GAS	WTR = WATER
GI = GRATE INLET	WW = WINDOW WELL
LA = LANDSCAPED AREA	

SHEET INDEX

C000	COVER SHEET
C001	C003 TOPOGRAPHIC SURVEY
C100	EXISTING CONDITIONS & DEMOLITION PLAN
C200	SITE PLAN
C300	GRADING PLAN
C400	UTILITY PLAN
A000	LEVEL 1 - PARKING LEVEL 1
A001	LEVEL 2 - PARKING LEVEL 2
A003	LEVEL 3 - RESIDENTIAL LEVEL 1
A004	LEVEL 4-6 - RESIDENTIAL LEVEL 2-4
A005	LEVEL 7 - RESIDENTIAL LEVEL 5

PRELIMINARY - NOT FOR CONSTRUCTION

SITE DEVELOPMENT PLAN

PARC PLACE AT VLASIS

14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

No.	Description	Date
1	PRELIM TO CITY	05-07-2021

Sheet Title:

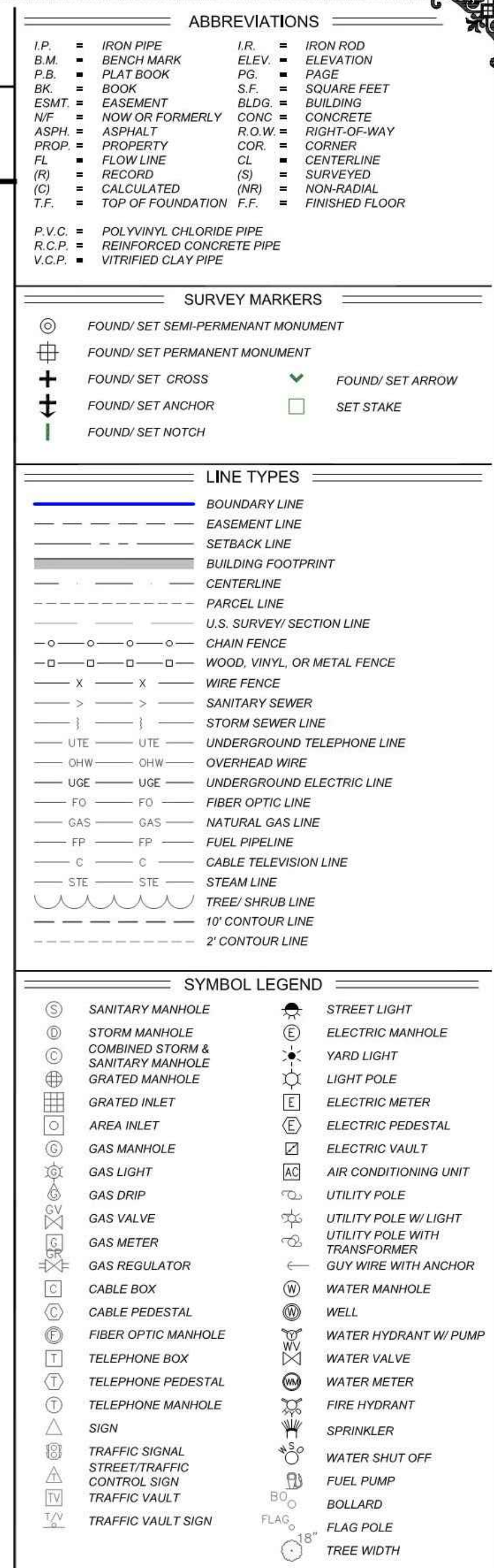
COVER SHEET

Project Number:	Sheet Number:
2021-0192-00	
Drawn By:	
SMA	
Issue Date:	
04-xx-2021	

C000

(PRINTED ON 30" X 42" PAPER)
MSD PROJECT NO.: 21MSD-00XXX
MSD BASEMAP: 22R/23R

MATCH LINE SHEET 2



THIS IS TO DECLARE TO BREKENT EVANS, THAT AT HIS REQUEST, ALTEA LLC, DURING THE MONTH OF JANUARY 2018, HAS CONDUCTED A VISUAL SURVEY AND TOPOGRAPHIC SURVEY OF PART LOTS 56, 58, AND 58 IN BLOCK 16 OF THE FIRST TOWN OF BALLWIN AND A TRACT OF LAND IN A SURVEY 1908, OF THE FIRST TOWN OF BALLWIN, IN THE COUNTY OF ST. LOUIS, MISSOURI, TOGETHER WITH THE LOCATION OF OBSERVED IMPROVEMENTS THEREON, AND TO RECORD THE RESULTS OF SAID SURVEY IN THE PUBLIC RECORDS OF SAID COUNTY, CORRECTLY INDICATED ON THE ABOVE PLAT. THIS SURVEY WAS EXECUTED IN ACCORDANCE WITH THE CURRENT MISSOURI STANDARDS FOR PROPERTY SURVEYING. THE PLAT HEREON IS NOT A PART OF THE SURVEY, BUT THE INFORMATION DEPICTED HEREON IS FROM THE RECORD PLAT OR CITY BLOCK RECORDS OF SAID COUNTY, PLAT 100, BLOCK 16, AND THE INFORMATION OBTAINED OR DERIVED AS A PART OF THIS SURVEY. A DECLARATION IS MADE TO THE ORIGINAL PURCHASER OF THIS SURVEY ONLY AND IS NOT BINDING ON THE ORIGINAL GRANTOR. THE GRANTOR OF THIS SURVEY HEREON IS FROM EVIDENCE OBSERVED DURING THE COURSE OF THIS SURVEY AND IS NOT A GUARANTEE OF THE ACCURACY OF THE INFORMATION AVAILABLE INFORMATION. NO GUARANTEE IS MADE OR CERTAINTY GIVEN AS TO THE ORIGIN OR OWNERSHIP OF FEENCES. DUE TO EACH MUNICIPALITY'S POLICY OF TOWNSHIP, THE INFORMATION HEREON IS NOT A GUARANTEE THAT THIS SURVEY MAY BE IN VIOLATIONS THAT THE SURVEYOR IS NOT AWARE OF.

PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF
THE ORIGINAL TOWN OF BALLWIN AND A TRACT
OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45
NORTH, RANGE 4 EAST
ST. LOUIS COUNTY, MO

TOPOGRAPHIC SURVEY PREPARED BY OTHERS IS PROVIDED FOR REFERENCE ONLY!
THE ENGINEER'S SEAL IN THE TITLE BLOCK DOES NOT APPLY TO SURVEY INFORMATION

TOPOGRAPHIC SURVEY

Scale: NOT TO SCALE

General Contractor: TBD
Civil Engineer: G&W ENGINEERING
138 WELDON PKWY
MARYLAND HEIGHTS, MO
63043
(314) 236-6379
Structural Engineer: TBD
MEP Engineer: TBD

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PRELIMINARY - NOT FOR CONSTRUCTION
SITE DEVELOPMENT PLAN
PARC PLACE AT VLASIS
14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

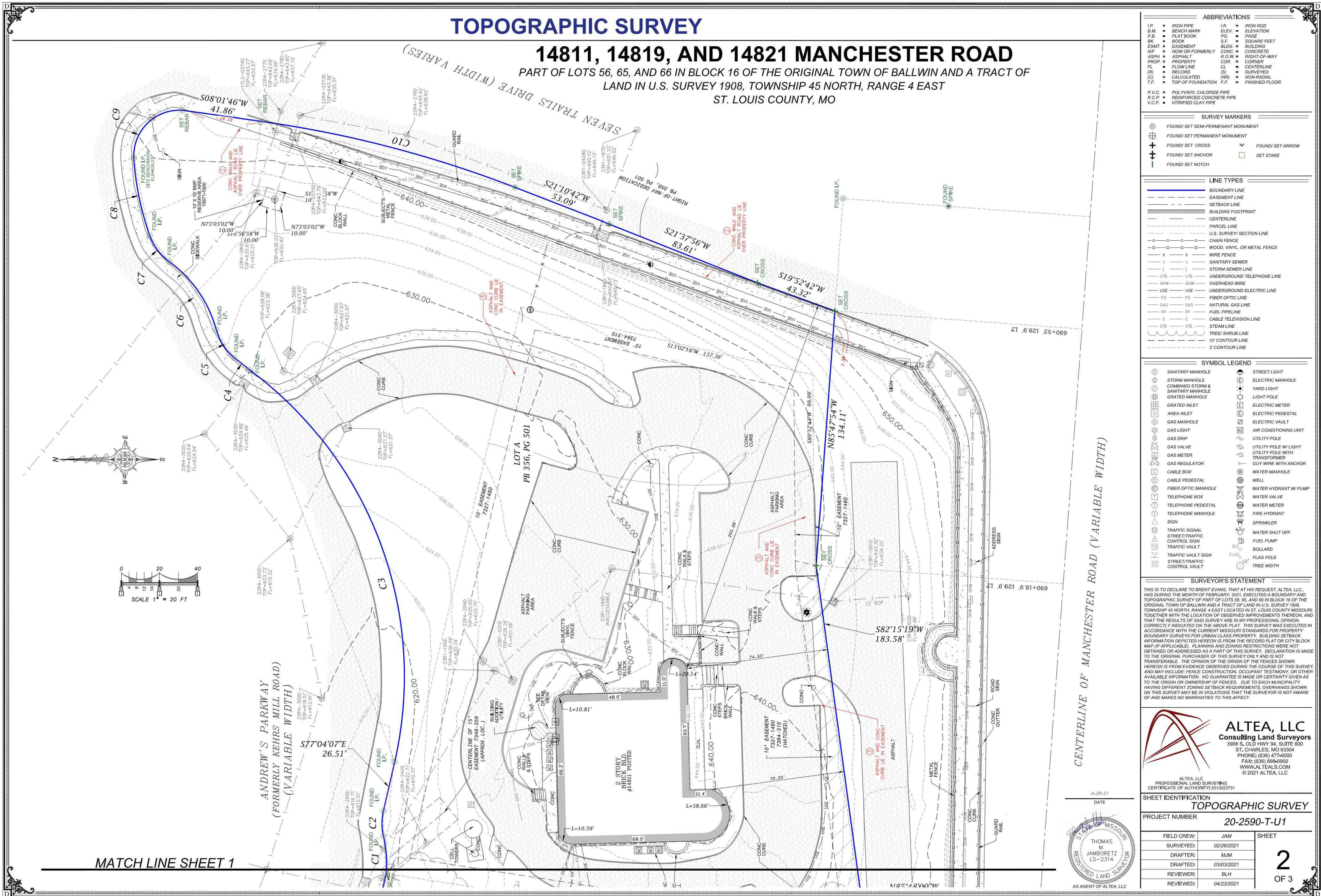
No.	Description	Date
1	PRELIM TO CITY	05-07-2021

Sheet Title:

TOPOGRAPHIC SURVEY

Project Number: 2021-0192-00
Drawn By: SMA
Issue Date: 04-xx-2021
C002

(PRINTED ON 30" X 42" PAPER)
MSD PROJECT NO.: 21MSD-00XXXX
MSD BASEMAP: 22R/23R



ABBREVIATIONS	
I.P. = IRON PIPE	I.R. = IRON ROD
B.M. = BENCH MARK	ELEV. = ELEVATION
P.B. = PLAT BOOK	PS. = PAGE
BK. = BOOK	S.F. = SQUARE FEET
EMT. = EASEMENT	B.S. = BUILDING
N.F. = NOW OR FORMERLY	CONC. = CONCRETE
ASPH. = ASPHALT	R.O.W. = RIGHT-OF-WAY
PROP. = PROPERTY	COR. = CORNER
FL. = FLOW LINE	CL. = CENTERLINE
RECORD = RECORD	(S) = SURVEYED
(C) = CALCULATED	(NR) = NON-RADIAL
T.F. = TOP OF FOUNDATION	F.F. = FINISHED FLOOR
P.V.C. = POLYVINYL CHLORIDE PIPE	
R.C.P. = REINFORCED CONCRETE PIPE	
V.C.P. = VITRIFIED CLAY PIPE	

SURVEY MARKERS	
⊙	FOUND/SET SEMI-PERMANENT MONUMENT
⊕	FOUND/SET PERMANENT MONUMENT
⊕	FOUND/SET CROSS
⊕	FOUND/SET ANCHOR
⊕	FOUND/SET NOTCH
⊕	FOUND/SET ARROW
⊕	SET STAKE

LINE TYPES	
---	BOUNDARY LINE
---	EASEMENT LINE
---	SETBACK LINE
---	BUILDING FOOTPRINT
---	CENTERLINE
---	PARCEL LINE
---	U.S. SURVEY SECTION LINE
---	CHAIN FENCE
---	WOOD, VINYL, OR METAL FENCE
---	WIRE FENCE
---	SANITARY SEWER
---	STORM SEWER LINE
---	UNDERGROUND TELEPHONE LINE
---	OVERHEAD WIRE
---	UNDERGROUND ELECTRIC LINE
---	FIBER OPTIC LINE
---	NATURAL GAS LINE
---	FUEL PIPELINE
---	CABLE TELEVISION LINE
---	STEAM LINE
---	TREE SHRUB LINE
---	10' CONTOUR LINE
---	2' CONTOUR LINE

SYMBOL LEGEND	
⊙	SANITARY MANHOLE
⊙	STORM MANHOLE
⊙	COMBINED STORM & SANITARY MANHOLE
⊙	GRATED MANHOLE
⊙	GRATED INLET
⊙	AREA INLET
⊙	GAS MANHOLE
⊙	GAS LIGHT
⊙	GAS DRIP
⊙	GAS VALVE
⊙	GAS METER
⊙	GAS REGULATOR
⊙	CABLE BOX
⊙	CABLE PEDESTAL
⊙	FIBER OPTIC MANHOLE
⊙	TELEPHONE BOX
⊙	TELEPHONE PEDESTAL
⊙	TELEPHONE MANHOLE
⊙	SIGN
⊙	TRAFFIC SIGNAL
⊙	STREET/TRAFFIC CONTROL SIGN
⊙	TRAFFIC VAULT
⊙	TRAFFIC VAULT SIGN
⊙	STREET/TRAFFIC CONTROL VAULT
⊙	STREET LIGHT
⊙	ELECTRIC MANHOLE
⊙	YARD LIGHT
⊙	LIGHT POLE
⊙	ELECTRIC METER
⊙	ELECTRIC PEDESTAL
⊙	ELECTRIC VAULT
⊙	AIR CONDITIONING UNIT
⊙	UTILITY POLE
⊙	UTILITY POLE W/ LIGHT
⊙	UTILITY POLE WITH TRANSFORMER
⊙	GUY WIRE WITH ANCHOR
⊙	WATER MANHOLE
⊙	WELL
⊙	WATER HYDRANT W/ PUMP
⊙	WATER VALVE
⊙	WATER METER
⊙	FIRE HYDRANT
⊙	SPRINKLER
⊙	WATER SHUT OFF
⊙	FUEL PUMP
⊙	BOLLARD
⊙	FLAG POLE
⊙	TREE WIDTH

SURVEYOR'S STATEMENT
THIS IS TO DECLARE TO BRENT EVANS, THAT AT HIS REQUEST, ALTEA, LLC, HAS DURING THE MONTH OF FEBRUARY, 2021, EXECUTED A BOUNDARY AND TOPOGRAPHIC SURVEY OF PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST LOCATED IN ST. LOUIS COUNTY, MISSOURI, TOGETHER WITH THE LOCATION OF OBSERVED IMPROVEMENTS THEREON, AND THAT THE RESULTS OF SAID SURVEY ARE IN MY PROFESSIONAL OPINION CORRECTLY INDICATED ON THE ABOVE PLAT. THIS SURVEY WAS EXECUTED IN ACCORDANCE WITH THE CURRENT MISSOURI STANDARDS FOR PROPERTY BOUNDARY SURVEYS FOR URBAN CLASS PROPERTY. BUILDING SETBACK INFORMATION DEPICTED HEREON IS FROM THE RECORD PLAT OR CITY BLOCK MAP (IF APPLICABLE). PLANNING AND ZONING RESTRICTIONS WERE NOT OBTAINED OR ADDRESSED AS A PART OF THIS SURVEY. DECLARATION IS MADE TO THE ORIGINAL PURCHASER OF THIS SURVEY ONLY AND IS NOT TRANSFERABLE. THE OPINION OF THE ORIGIN OF THE FENCES SHOWN HEREON IS FROM EVIDENCE OBSERVED DURING THE COURSE OF THIS SURVEY AND MAY INCLUDE: FENCE CONSTRUCTION, OCCUPANT TESTIMONY, OR OTHER AVAILABLE INFORMATION. NO GUARANTEE IS MADE OR CERTAINTY GIVEN AS TO THE ORIGIN OR OWNERSHIP OF FENCES. DUE TO EACH MUNICIPALITY HAVING DIFFERENT ZONING SETBACK REQUIREMENTS, OVERHANGS SHOWN ON THIS SURVEY MAY BE IN VIOLATIONS THAT THE SURVEYOR IS NOT AWARE OF AND MAKES NO WARRANTIES TO THIS EFFECT.

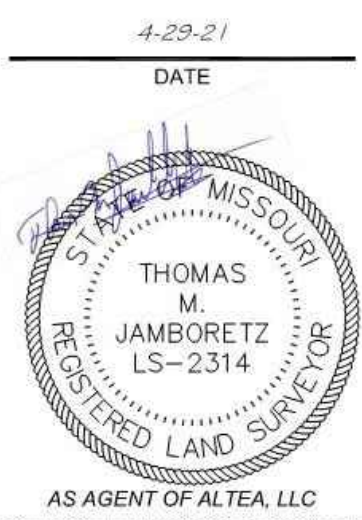
ALTEA, LLC
Consulting Land Surveyors
3908 S. OLD HWY 94, SUITE 600
ST. CHARLES, MO 63304
PHONE: (636) 477-6000
FAX: (636) 898-0950
WWW.ALTEA.LLC
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ALTEA, LLC
PROFESSIONAL LAND SURVEYING
CERTIFICATE OF AUTHORITY: 2013023731

SHEET IDENTIFICATION
TOPOGRAPHIC SURVEY

PROJECT NUMBER: 20-2590-T-U1

FIELD CREW:	JAM	SHEET
SURVEYED:	02/26/2021	2
DRAFTER:	MJM	OF 3
DRAFTED:	03/03/2021	
REVIEWER:	BLH	
REVIEWED:	04/23/2021	



TOPOGRAPHIC SURVEY PREPARED BY OTHERS IS PROVIDED FOR REFERENCE ONLY!
THE ENGINEER'S SEAL IN THE TITLE BLOCK DOES NOT APPLY TO SURVEY INFORMATION.

TOPOGRAPHIC SURVEY
Scale: NOT TO SCALE

General Contractor: TBD
Civil Engineer: G&W ENGINEERING
138 WELDON PKWY
MARYLAND HEIGHTS, MO
63043
(314) 236-6379
Structural Engineer: TBD
MEP Engineer: TBD

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TOPOGRAPHIC SURVEY NOTES

14811, 14819, AND 14821 MANCHESTER ROAD

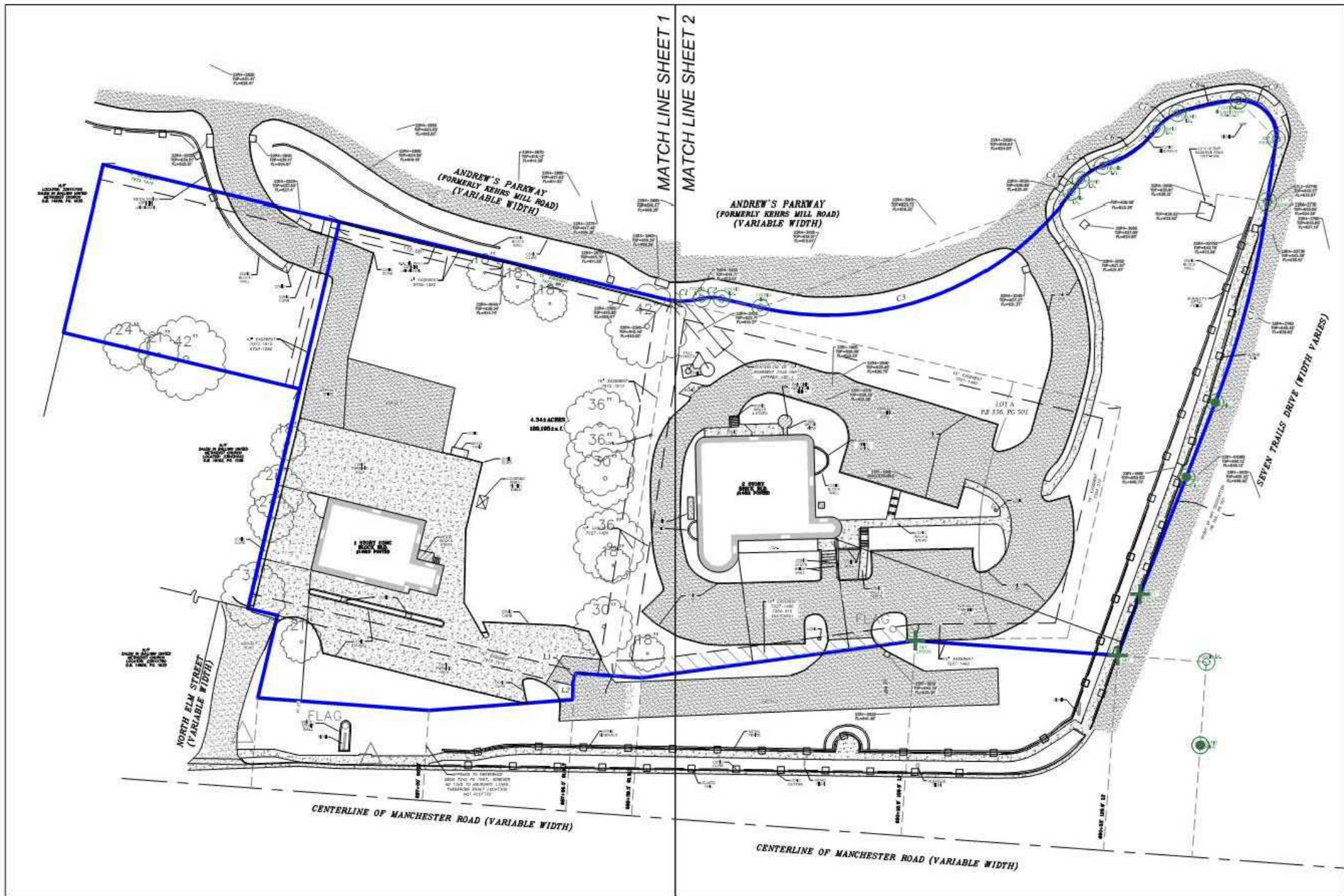
PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST

ST. LOUIS COUNTY, MO

PROPERTY DESCRIPTION

A TRACT OF LAND BEING PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST OF ST. LOUIS COUNTY AND FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT AN IRON PIPE ON THE NORTH RIGHT OF WAY OF MANCHESTER ROAD (A.K.A. STATE HIGHWAY 100), AS DEFINED BY OUTCLAIM DEED IN DEED BOOK 1801 PAGES 2329 THRU 2335 OF THE ST. LOUIS COUNTY RECORDS, SAID IRON PIPE BEING AT STATION 692+12 OFFSET NORTH 129.9 FEET FROM THE CENTERLINE OF SAID MANCHESTER ROAD AS DEFINED IN SAID DOCUMENT; THENCE ALONG SAID RIGHT OF WAY, NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST, 56.99 FEET TO THE POINT OF BEGINNING; AT STATION 690+53 OFFSET NORTH 129.9 FEET; THENCE ALONG THE NORTHERN RIGHT-OF-WAY OF MANCHESTER ROAD THE FOLLOWING COURSES AND DISTANCES, NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 134.11 TO A POINT; THENCE SOUTH 81 DEGREES 33 MINUTES 35 SECONDS WEST, 183.56 FEET TO A POINT; THENCE NORTH 86 DEGREES 29 MINUTES 47 SECONDS WEST 15.36 TO A POINT; THENCE NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 25.44 FEET TO A POINT; BEING AT STATION 697+65.5 OFFSET NORTH 91.9 FEET; THENCE SOUTH 17 DEGREES 21 MINUTES 43 SECONDS WEST, 6.28 FEET TO A POINT; THENCE SOUTH 00 DEGREES 05 MINUTES 21 SECONDS WEST 11.72 FEET TO A POINT; THENCE SOUTH 85 DEGREES 02 MINUTES 05 SECONDS WEST 95.74 FEET TO A POINT; BEING AT STATION 697+00 OFFSET NORTH 60.0 FEET; THENCE NORTH 86 DEGREES 29 MINUTES 41 SECONDS WEST, 113.99 FEET TO A POINT BEING AT STATION 685+86 OFFSET NORTH 60.0 FEET; THENCE LEAVING SAID MANCHESTER ROAD, NORTH 12 DEGREES 36 MINUTES 35 SECONDS EAST, 56.27 FEET TO A POINT; THENCE NORTH 77 DEGREES 21 MINUTES 39 SECONDS WEST, 20.00 FEET TO A POINT; THENCE NORTH 12 DEGREES 36 MINUTES 35 SECONDS EAST, 149.89 FEET TO A POINT; THENCE NORTH 77 DEGREES 19 MINUTES 20 SECONDS WEST, 161.36 FEET TO A POINT; THENCE NORTH 12 DEGREES 36 MINUTES 35 SECONDS EAST, 114.05 FEET TO A POINT; THENCE SOUTH 77 DEGREES 19 MINUTES 20 SECONDS EAST, 388.48 FEET TO A POINT AT THE SOUTHERN RIGHT-OF-WAY LINE OF ANDREWS PARKWAY, HAVING A VARIABLE WIDTH THENCE ALONG SAID RIGHT-OF-WAY THE FOLLOWING BEARING AND DISTANCES, SOUTH 77 DEGREES 19 MINUTES 20 SECONDS EAST, 388.48 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 65.50 FEET AT AN ARC DISTANCE OF 19.62 FEET AND CHORD BEARING OF NORTH 85 DEGREES 05 MINUTES 47 SECONDS EAST, 15.84 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 29.50 FEET AT AN ARC DISTANCE OF 15.31 FEET AND CHORD BEARING OF NORTH 86 DEGREES 18 MINUTES 34 SECONDS EAST, 13.20 FEET TO A POINT; THENCE SOUTH 77 DEGREES 46 MINUTES 54 SECONDS EAST, 26.51 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 200 FEET AT AN ARC DISTANCE OF 232.18 FEET AND A CHORD BEARING OF NORTH 68 DEGREES 59 MINUTES 42 SECONDS EAST, 219.36 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 150.00 FEET AT AN ARC DISTANCE OF 103.13 FEET AND A CHORD BEARING OF NORTH 37 DEGREES 39 MINUTES 4 SECONDS EAST, 10.13 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 29.50 FEET AT AN ARC DISTANCE OF 17.71 FEET AND A CHORD BEARING OF NORTH 58 DEGREES 47 MINUTES 23 SECONDS EAST, 17.45 FEET TO A POINT; THENCE ALONG A CURVE TO LEFT, HAVING A RADIUS OF 65.50 FEET AT AN ARC DISTANCE OF 44.12 FEET AND A CHORD BEARING OF NORTH 54 DEGREES 41 MINUTES 32 SECONDS EAST, 43.29 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 150.00 FEET AT AN ARC DISTANCE OF 41.47 FEET AND A CHORD BEARING OF NORTH 77 DEGREES 42 MINUTES 48 SECONDS EAST, 41.34 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 24.00 FEET AT AN ARC DISTANCE OF 40.27 FEET AND A CHORD BEARING OF SOUTH 45 DEGREES 04 MINUTES 36 SECONDS WEST, 35.71 FEET TO A POINT; THENCE ALONG THE WESTERN RIGHT-OF-WAY LINE OF SEVEN TRAILS DRIVE, HAVING A VARIABLE WIDTH THENCE ALONG SAID RIGHT-OF-WAY THE FOLLOWING BEARING AND DISTANCES, SOUTH 07 DEGREES 19 MINUTES 59 SECONDS WEST, 47.86 FEET TO A POINT; THENCE ALONG A CURVE TO RIGHT, HAVING A RADIUS OF 60.00 FEET AT AN ARC DISTANCE OF 137.69 FEET AND A CHORD BEARING OF SOUTH 13 DEGREES 54 MINUTES 27 SECONDS WEST, 137.69 FEET TO A POINT; THENCE SOUTH 20 DEGREES 26 MINUTES 55 SECONDS WEST, 53.9 FEET TO A POINT; THENCE SOUTH 20 DEGREES 56 MINUTES 09 SECONDS WEST, 83.61 FEET TO A POINT; THENCE SOUTH 19 DEGREES 10 MINUTES 55 SECONDS WEST, 43.32 FEET TO THE POINT OF BEGINNING AND CONTAINING APPROXIMATELY 4.34 ACRES (189,195 SQUARE FEET).



TITLE NOTES (SCHEDULE B-2)

FOR THE SOURCE OF PROPERTY DESCRIPTION, EASEMENTS, DEDICATIONS AND EXCEPTIONS, ALTEA, LLC, EXCLUSIVELY USED THE TITLE DOCUMENTS PROVIDED BY TITLE EXPERTS LLC AND FIRST AMERICAN TITLE INSURANCE COMPANY, FILED COMMITMENT NUMBER CHA20-1881-TX, DATED 11/23/2020.

1.-11.) GENERAL EXCEPTIONS WITH NO COMMENT BY SURVEYOR.

12.) EASEMENT TO LACLEDE GAS CO, ACCORDING TO INSTRUMENT RECORDED 7343-1556; AS SHOWN HEREON.

13.) EASEMENT GRANTED TO MSD ACCORDING TO INSTRUMENT RECORDED 9739-1250; AS SHOWN HEREON.

14.) EASEMENT GRANTED TO MSD ACCORDING TO INSTRUMENT RECORDED 7973-1912; AS SHOWN HEREON.

15.) EASEMENT GRANTED TO LACLEDE GAS COMPANY PER 7348-310; AS SHOWN HEREON.

16.) EASEMENT TO ST. LOUIS COUNTY SEWER COMPANY PER 7348-356; AS SHOWN HEREON.

17.) TEMPORARY SLOPE CONSTRUCTION EASEMENT TO ST. LOUIS COUNTY PER 8250-108; NOT LOCATED ON SUBJECT PROPERTY.

18.) DEED OF EASEMENT FOR SIDEWALKS GRANTED TO CITY OF BALLWIN, MISSOURI, PER 14159-1992; NOT LOCATED ON SUBJECT PROPERTY.

19.) EASEMENT AGREEMENT BETWEEN CITY OF BALLWIN, MISSOURI, AND TAYCO SEVEN TRAILS DRIVE LLC PER 19997-1440; THE EASEMENT DESCRIPTION AS RECORDED DOES NOT PROVIDE ANY SPECIFIC LOCATION REFERENCED TO THE BOUNDARY LINES AND, THEREFORE, CANNOT BE GRAPHICALLY PLOTTED.

20.) MAINTENANCE AGREEMENT BETWEEN CITY OF BALLWIN AND MSD PER 19971-1566; AS SHOWN HEREON.

21.) SIGN EASEMENT AGREEMENT BETWEEN CITY OF BALLWIN AND SEVEN TRAILS INVESTORS, LLC PER 19990-969; NOT LOCATED ON SUBJECT PROPERTY.

22.) RIGHT OF WAY DEDICATION PER PLAT BOOK 356 PAGE 501; AS SHOWN HEREON.

23.-28.) GENERAL EXCEPTIONS WITH NO COMMENT BY SURVEYOR.

29.) POTENTIAL ENCROACHMENT OF CONCRETE PARKING AND CONCRETE CURB OVER PROPERTY LINE; AS SHOWN HEREON.

30.) POTENTIAL ENCROACHMENT OF ASPHALT ROAD AND CONCRETE WALK OVER PROPERTY LINE; AS SHOWN HEREON.

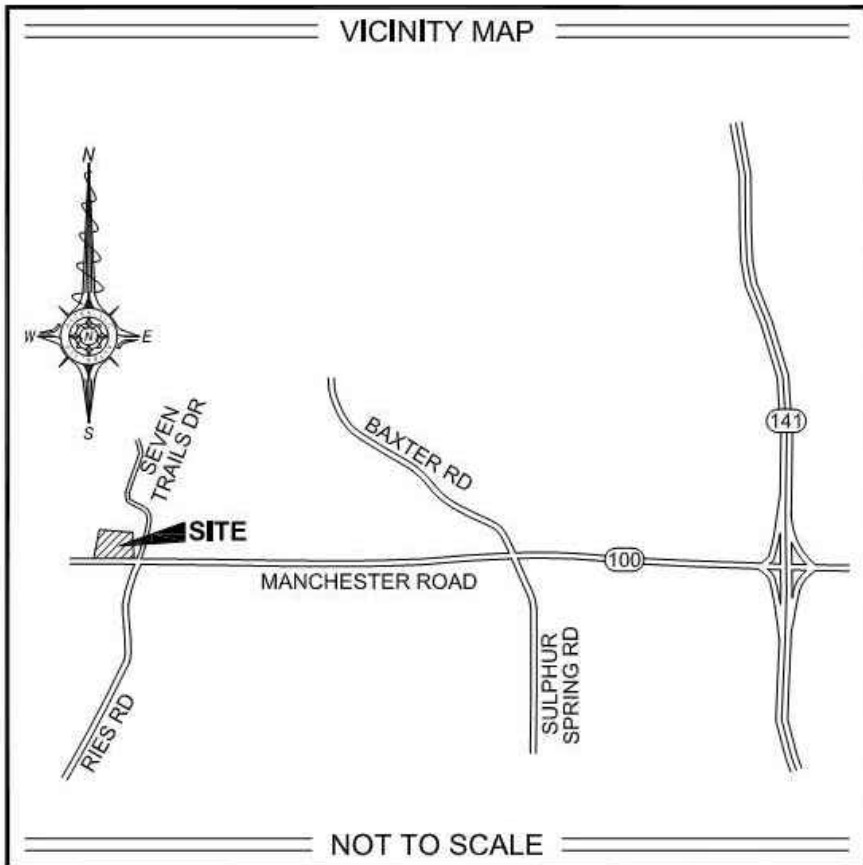
31.) POTENTIAL ENCROACHMENT OF ASPHALT AND CONCRETE CURB THAT LIE IN EASEMENT; AS SHOWN HEREON.

32.) POTENTIAL ENCROACHMENT OF CONCRETE PARKING THAT LIES IN EASEMENT; AS SHOWN HEREON.

33.-36.) GENERAL EXCEPTIONS WITH NO COMMENT BY SURVEYOR.

CURVE DATA				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1	65.50'	19.92'	N85°05'47"E	19.84'
2	29.50'	13.31'	N89°18'34"E	13.20'
3	200.00'	232.18'	N68°58'42"E	219.36'
4	150.00'	10.13'	N37°39'24"E	10.13'
5	29.50'	17.71'	N56°47'23"E	17.45'
6	65.50'	44.12'	N54°41'32"E	43.29'
7	29.50'	17.71'	N52°35'41"E	17.45'
8	150.00'	41.47'	N77°42'48"E	41.34'
9	24.00'	40.27'	S45°04'36"E	35.71'
10	600.00'	137.69'	S13°54'27"W	137.39'

LINE TABLE		
LINE	BEARING	DISTANCE
1	S17°21'43"W	6.28'
2	S00°05'21"W	11.72'

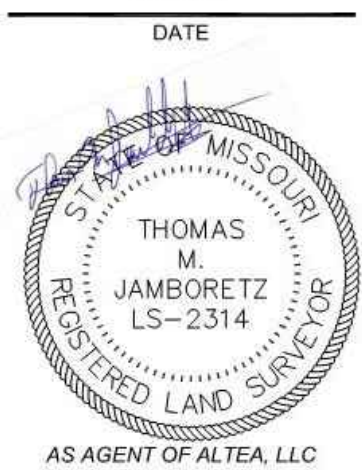


- POTENTIAL ENCROACHMENTS**
- 1. CONC PARKING AND CONC CURB OVER PROPERTY LINE
 - 2. ASPHALT ROAD AND CONC WALK OVER PROPERTY LINE
 - 3. ASPHALT AND CONC CURB LIE IN EASEMENT
 - 4. CONC PARKING LIES IN EASEMENT

FLOOD ZONE DESIGNATION

THE SUBJECT PROPERTY (PARCEL 1, PARCEL 2, PARCEL 3) LIES WITHIN ZONE X AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP 29180208K AND 29180208L, DATED 02/04/2015 LOCATED WITHIN THE CITY OF BALLWIN, ST. LOUIS COUNTY, MISSOURI. ZONE X IS DEFINED AS AREAS OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN.

- SURVEYOR'S NOTES**
- SOURCE OF TITLE EXAMINATION: CHA20-1881-TX, EFFECTIVE DATE 11/23/2020.
 - BASIS OF BEARINGS: BALLWIN GOVERNMENT CENTER CONSOLIDATION AND RIGHT-OF-WAY DEDICATION PLAT, PLAT BOOK 356 PAGE 501
 - THE SUBJECT TRACT CONTAINS: 4.34 ACRES MORE OR LESS (189,195 SQUARE FEET MORE OR LESS)
 - AS PER ALTA OPTIONAL TABLE A ITEM 11, THE UTILITIES AS SHOWN ON THIS DRAWING WERE DEVELOPED FROM A REQUEST TO MISSOURI ONE CALL AND ABOVE GROUND OBSERVATIONS ONLY. THIS COMPANY HAS MADE NO ATTEMPT TO EXCAVATE OR GO BELOW SURFACE TO LOCATE UTILITIES AND DOES NOT EXTEND OR IMPLY A GUARANTY OR WARRANTY AS TO THE EXACT LOCATION OF OR COMPLETE INVENTORY OF UTILITIES IN THIS AREA. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES (WHETHER SHOWN OR NOT) PRIOR TO EXCAVATION OR CONSTRUCTION AND TO PROTECT SAID UTILITIES FROM DAMAGE.
 - BASIS OF CONTOURS ARE DERIVED FROM TIES TO MISSOURI STATE PLANE COORDINATES USING GPS OBSERVATIONS REFERENCED TO MODOT VRS NETWORK ON FEBRUARY 1, 2021 WITH THE FOLLOWING PARAMETERS:
ZONE: MISSOURI EAST 2401
HORIZONTAL DATUM: NAD83
PROJECTION FACTOR: 1.0000878
VRS BASE STATION PRS143356476177
N = 926366.50
E = 831267.15
ELEV = 459.87
US SURVEY FOOT
VERTICAL DATUM: NAVD83 (GEOID 128)
 - SITE BENCHMARK - ELEVATION = 639.37, FOUND L.P. AT THE NORTH EAST CORNER OF SITE.



- ABBREVIATIONS**
- | | |
|--------------------------|-----------------------|
| I.P. = IRON PIPE | I.R. = IRON ROD |
| B.M. = BENCH MARK | ELEV. = ELEVATION |
| P.B. = PLAT BOOK | RS. = PAGE |
| BK. = BOOK | S.F. = SQUARE FEET |
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- P.V.C. = POLYVINYL CHLORIDE PIPE
R.C.P. = REINFORCED CONCRETE PIPE
V.C.P. = VITRIFIED CLAY PIPE
- SURVEY MARKERS**
- | | | | |
|---|-----------------------------------|---|-----------------|
| ⊙ | FOUND/SET SEMI-PERMANENT MONUMENT | ✓ | FOUND/SET ARROW |
| ⊕ | FOUND/SET PERMANENT MONUMENT | □ | SET STAKE |
| + | FOUND/SET CROSS | | |
| ⊥ | FOUND/SET ANCHOR | | |
| ⊢ | FOUND/SET NOTCH | | |
- LINE TYPES**
- | | | |
|---------|-----------------------------|----------------------------|
| --- | BOUNDARY LINE | |
| - - - - | EASEMENT LINE | |
| --- | SETBACK LINE | |
| --- | BUILDING FOOTPRINT | |
| --- | CENTERLINE | |
| --- | PARCEL LINE | |
| --- | U.S. SURVEY SECTION LINE | |
| --- | CHAIN FENCE | |
| --- | WOOD, VINYL, OR METAL FENCE | |
| --- | X | WIRE FENCE |
| --- | > | SANITARY SEWER |
| --- | | STORM SEWER LINE |
| --- | --- | UNDERGROUND TELEPHONE LINE |
| --- | --- | OVERHEAD WIRE |
| --- | --- | UNDERGROUND ELECTRIC LINE |
| --- | --- | FIBER OPTIC LINE |
| --- | --- | NATURAL GAS LINE |
| --- | --- | FUEL PIPELINE |
| --- | --- | CABLE TELEVISION LINE |
| --- | --- | STEAM LINE |
| --- | --- | TREE SHRUB LINE |
| --- | --- | 10' CONTOUR LINE |
| --- | --- | 2' CONTOUR LINE |
- SYMBOL LEGEND**
- | | | | |
|---|-----------------------------------|---|-------------------------------|
| ⊙ | SANITARY MANHOLE | ⊙ | STREET LIGHT |
| ⊙ | STORM MANHOLE | ⊙ | ELECTRIC MANHOLE |
| ⊙ | COMBINED STORM & SANITARY MANHOLE | ⊙ | YARD LIGHT |
| ⊙ | GRATED MANHOLE | ⊙ | LIGHT POLE |
| ⊙ | GRATED INLET | ⊙ | ELECTRIC METER |
| ⊙ | AREA INLET | ⊙ | ELECTRIC PEDESTAL |
| ⊙ | GAS MANHOLE | ⊙ | ELECTRIC VAULT |
| ⊙ | GAS LIGHT | ⊙ | AIR CONDITIONING UNIT |
| ⊙ | GAS DRIP | ⊙ | UTILITY POLE |
| ⊙ | GAS VALVE | ⊙ | UTILITY POLE W/ LIGHT |
| ⊙ | GAS METER | ⊙ | UTILITY POLE WITH TRANSFORMER |
| ⊙ | GAS REGULATOR | ⊙ | GUY WIRE WITH ANCHOR |
| ⊙ | CABLE BOX | ⊙ | WATER MANHOLE |
| ⊙ | CABLE PEDESTAL | ⊙ | WELL |
| ⊙ | FIBER OPTIC MANHOLE | ⊙ | WATER HYDRANT W/ PUMP |
| ⊙ | TELEPHONE BOX | ⊙ | WATER VALVE |
| ⊙ | TELEPHONE PEDESTAL | ⊙ | WATER METER |
| ⊙ | TELEPHONE MANHOLE | ⊙ | FIRE HYDRANT |
| ⊙ | SIGN | ⊙ | SPRINKLER |
| ⊙ | TRAFFIC SIGNAL | ⊙ | WATER SHUT OFF |
| ⊙ | STREET/TRAFFIC CONTROL SIGN | ⊙ | FUEL PUMP |
| ⊙ | TRAFFIC VAULT | ⊙ | BOLLARD |
| ⊙ | TRAFFIC VAULT SIGN | ⊙ | FLAG POLE |
| ⊙ | | ⊙ | TREE WIDTH |

- SURVEYOR'S STATEMENT**
- THIS IS TO DECLARE TO BRENT EVANS, THAT AT HIS REQUEST, ALTEA, LLC, HAS DURING THE MONTH OF FEBRUARY, 2021, EXECUTED A BOUNDARY AND TOPOGRAPHIC SURVEY OF PART OF LOTS 56, 65, AND 66 IN BLOCK 16 OF THE ORIGINAL TOWN OF BALLWIN AND A TRACT OF LAND IN U.S. SURVEY 1908, TOWNSHIP 45 NORTH, RANGE 4 EAST LOCATED IN ST. LOUIS COUNTY, MISSOURI, TOGETHER WITH THE LOCATION OF OBSERVED IMPROVEMENTS THEREON, AND THAT THE RESULTS OF SAID SURVEY ARE IN MY PROFESSIONAL OPINION CORRECTLY INDICATED ON THE ABOVE PLAT. THIS SURVEY WAS EXECUTED IN ACCORDANCE WITH THE CURRENT MISSOURI STANDARDS FOR PROPERTY BOUNDARY SURVEYS FOR URBAN CLASS PROPERTY. BUILDING SETBACK INFORMATION DEPICTED HEREON IS FROM THE RECORD PLAT OR CITY BLOCK MAP (IF APPLICABLE). PLANNING AND ZONING RESTRICTIONS WERE NOT OBTAINED OR ADDRESSED AS A PART OF THIS SURVEY. DECLARATION IS MADE TO THE ORIGINAL PURCHASER OF THIS SURVEY ONLY AND IS NOT TRANSFERABLE. THE OPINION OF THE ORIGIN OF THE FENCES SHOWN HEREON IS FROM EVIDENCE OBSERVED DURING THE COURSE OF THIS SURVEY AND MAY INCLUDE: FENCE CONSTRUCTION, OCCUPANT TESTIMONY, OR OTHER AVAILABLE INFORMATION. NO GUARANTEE IS MADE OR CERTAINTY GIVEN AS TO THE ORIGIN OR OWNERSHIP OF FENCES.

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ALTEA, LLC
PROFESSIONAL LAND SURVEYING
CERTIFICATE OF AUTHORITY 2013023731

SHEET IDENTIFICATION

PROJECT NUMBER: 20-2590-T-U1

FIELD CREW: JAM
SURVEYED: 02/26/2021
DRAFTER: MJM
DRAFTED: 03/03/2021
REVIEWER: BLH
REVIEWED: 04/23/2021

NOTES

3 OF 3

PRELIMINARY - NOT FOR CONSTRUCTION

SITE DEVELOPMENT PLAN

PARC PLACE AT VLASIS

14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

No.	Description	Date
1	PRELIM TO CITY	05-07-2021

Sheet Title:

TOPOGRAPHIC SURVEY

Project Number: 2021-0192-00
Drawn By: SMA
Issue Date: 04-xx-2021
Sheet Number: C003

TOPOGRAPHIC SURVEY PREPARED BY OTHERS IS PROVIDED FOR REFERENCE ONLY!
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TOPOGRAPHIC SURVEY
Scale: NOT TO SCALE

(PRINTED ON 30" X 42" PAPER)
MSD PROJECT NO. 21MSD-00XXXX
MSD BASEMAP: 22R/23R

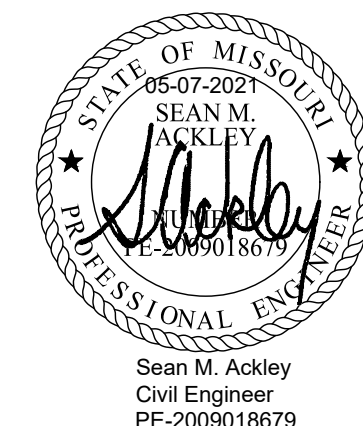
General Contractor: TBD

Civil Engineer: G&W ENGINEERING
138 WELDON PKWY
MARYLAND HEIGHTS, MO
63043
(314) 236-6379

Structural Engineer: TBD

MEP Engineer: TBD

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SITE DEVELOPMENT PLAN

PARC PLACE AT

14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

No.	Description	Date
1	PRELIM TO CITY	05-07-2021

Sheet Title:

EXISTING CONDITIONS & DEMOLITION PLAN

Project Number: 2021-0192.00
 Drawn By: SMA
 Issue Date: 04-xx-2021

Sheet Number: C100

(PRINTED ON 30" X 42" PAPER)
MSD PROJECT NO.: 21MSD-00XXX
MSD BASEMAP: 22R/23R

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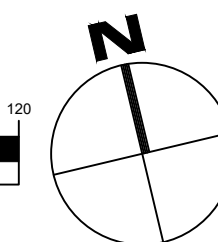
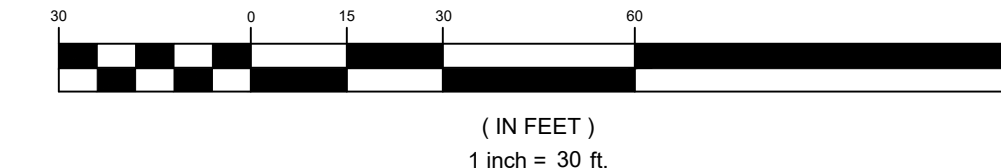
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C. EXISTING ITEMS SHOWN IN GRAY AND NOT OTHERWISE NOTED TO BE DISTURBED ARE TO BE KEPT IN PLACE.

KEYED NOTES - DEMOLITION PLAN

1. REMOVE EXISTING BUILDING
2. REMOVE EXISTING PAVEMENT/CURB
3. SAWCUT PAVEMENT FULL DEPTH
4. REMOVE EXISTING TREE
5. REMOVE EXISTING WALL
6. REMOVE EXISTING STORM SEWER
7. REMOVE EXISTING SANITARY SEWER
8. REMOVE EXISTING POWER POLE
9. REMOVE EXISTING ELECTRIC LINE
10. REMOVE EXISTING FIBER OPTIC LINE
11. CELL TOWER TO BE RELOCATED (COORDINATE W/ AT&T)
12. USE IN PLACE

GRAPHIC SCALE



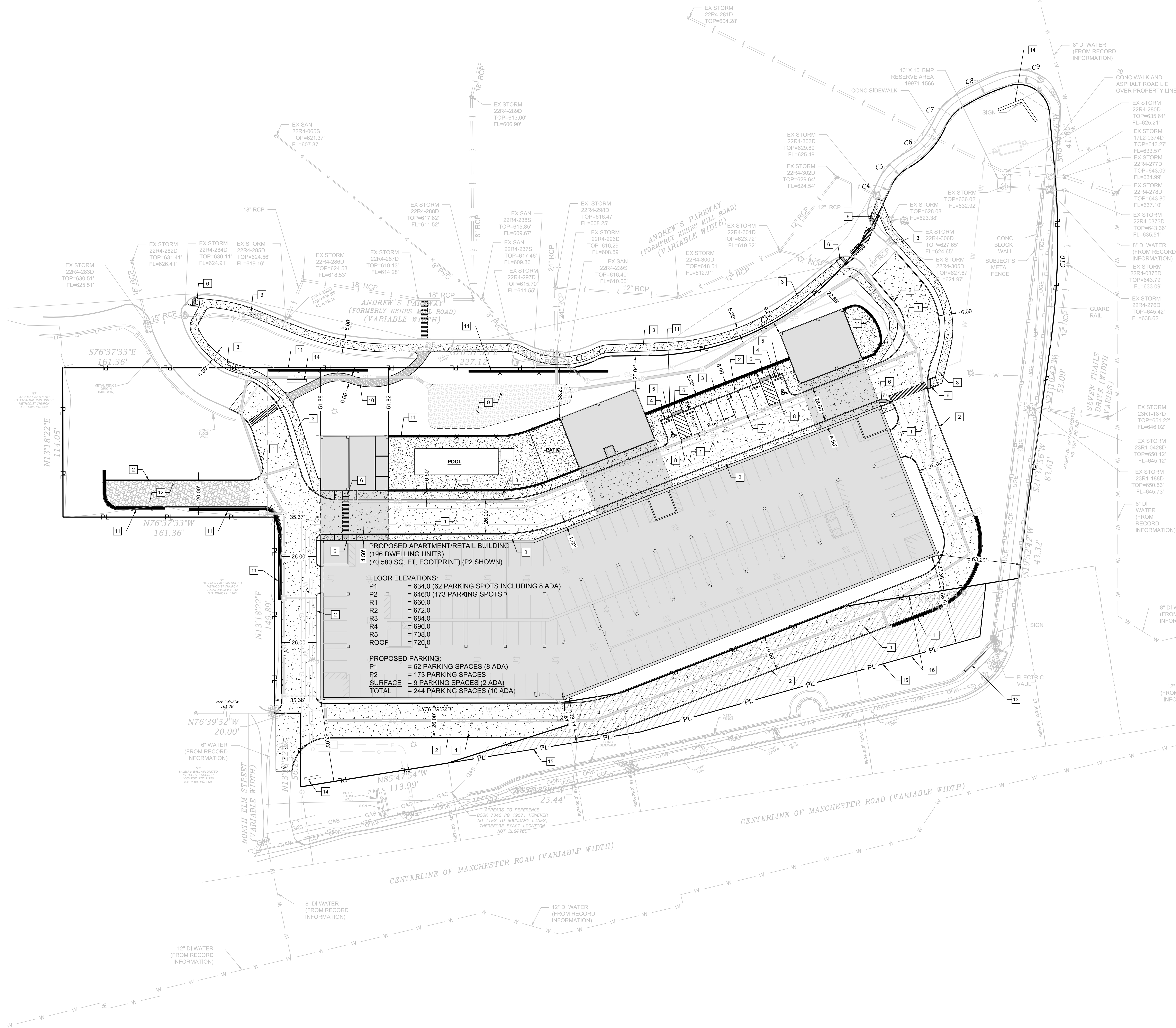
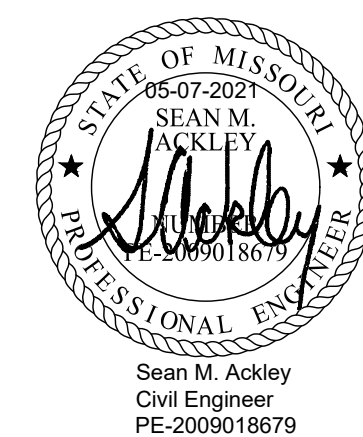
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Civil Engineer: G&W ENGINEERING
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MEP Engineer: TBD

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KEYED NOTES - SITE PLAN

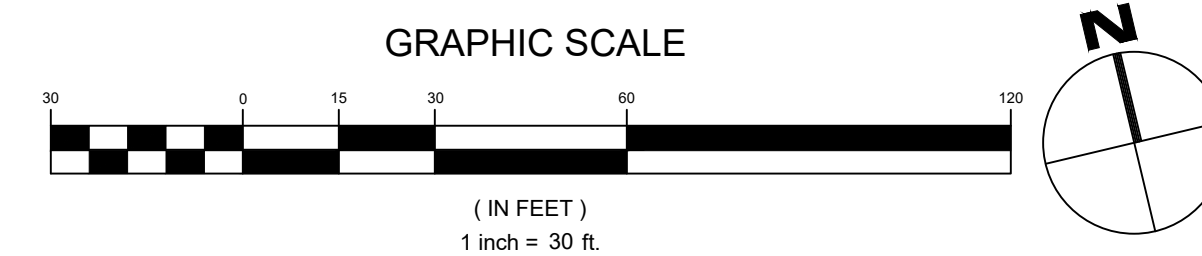
1. PROPOSED PAVEMENT
2. 6" VERTICAL CONCRETE CURB
3. CONCRETE SIDEWALK
4. ADA SIGN
5. WHEEL STOP
6. ADA RAMP
7. PAVEMENT MARKING - 4" WIDE WHITE PAINT
8. PAVEMENT MARKING - 4" WIDE BLUE PAINT (ACCESSIBLE SPACES)
9. WATER QUALITY BASIN
10. ROCK/MULCH TRAIL (NON-ADA COMPLIANT)
11. RETAINING WALL WITH RAILING (DESIGN BY OTHERS)
12. FOOD TRUCK AREA
13. NEW SIGN FOR BALLWIN
14. NEW SIGN
15. NEW PROPERTY LINE
16. AREA TO BE OBTAINED FROM MODOT

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SITE DEVELOPMENT PLAN

PARC PLACE AT VLASIS

114811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

Sheet Title:

No.	Description	Date
1	PRELIM TO CITY	05-07-2021

SITE PLAN

Project Number:
3031-0193.00

Drawn By:
SMA
Issue Date:
04-xx-202

C200

General Contractor: TBD

Civil Engineer: G&W ENGINEERING
138 WELDON PKWY.
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Structural Engineer: TBD

MEP Engineer: TBD

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PARC PLACE AT VLASIS

14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

No.	Description	Date
1	PRELIM TO CITY	05-07-2021

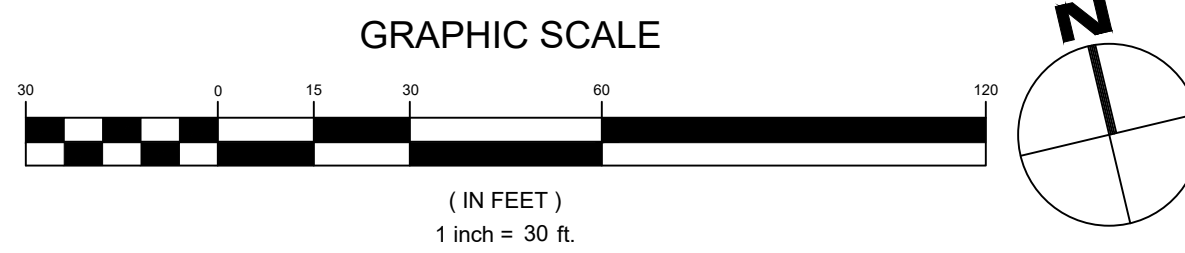
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GRADING PLAN

Project Number: 2021-0192-00
Drawn By: SMA
Issue Date: 04-xx-2021

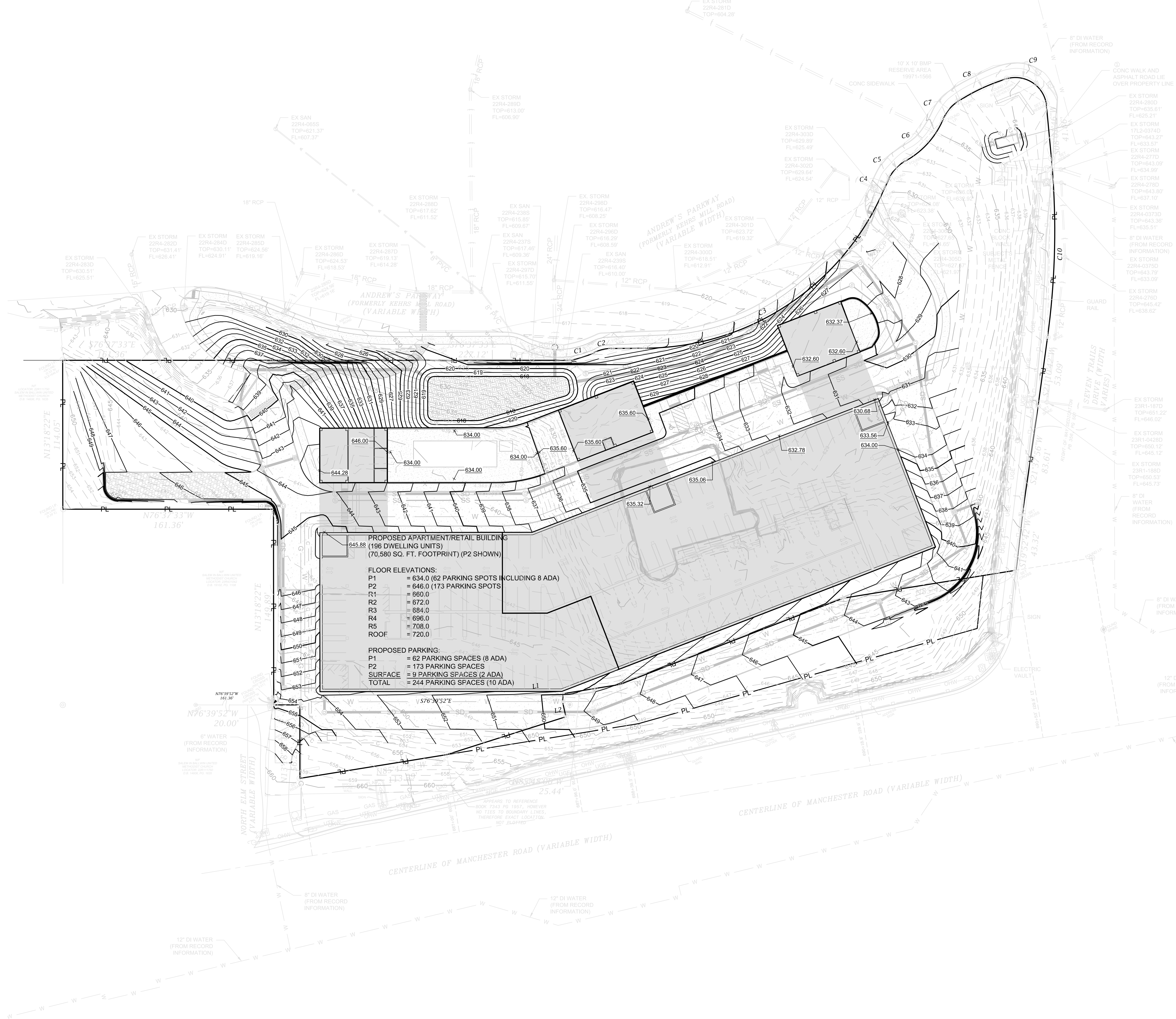
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General Contractor: TBD

Civil Engineer: G&W ENGINEERING
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Structural Engineer: TBD

MEP Engineer: TBD

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Sean M. Ackley
Civil Engineer
PE-200919679

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SITE DEVELOPMENT PLAN
PARC PLACE AT VLASIS
14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

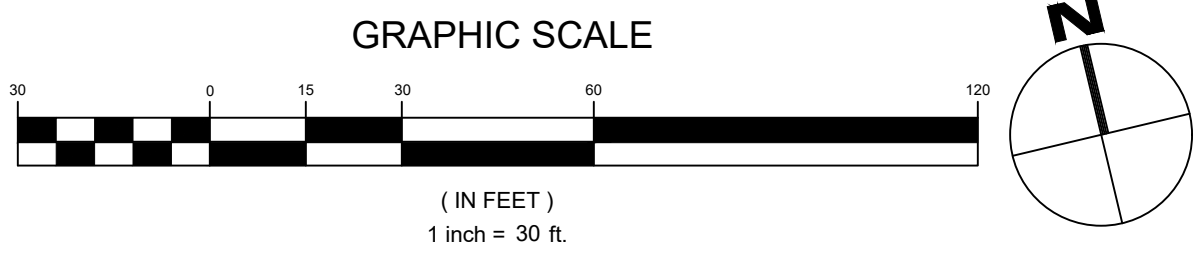
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UTILITY PLAN

Project Number: 2021-0192-00
Drawn By: SMA
Issue Date: 04-xx-2021
Sheet Number: C400

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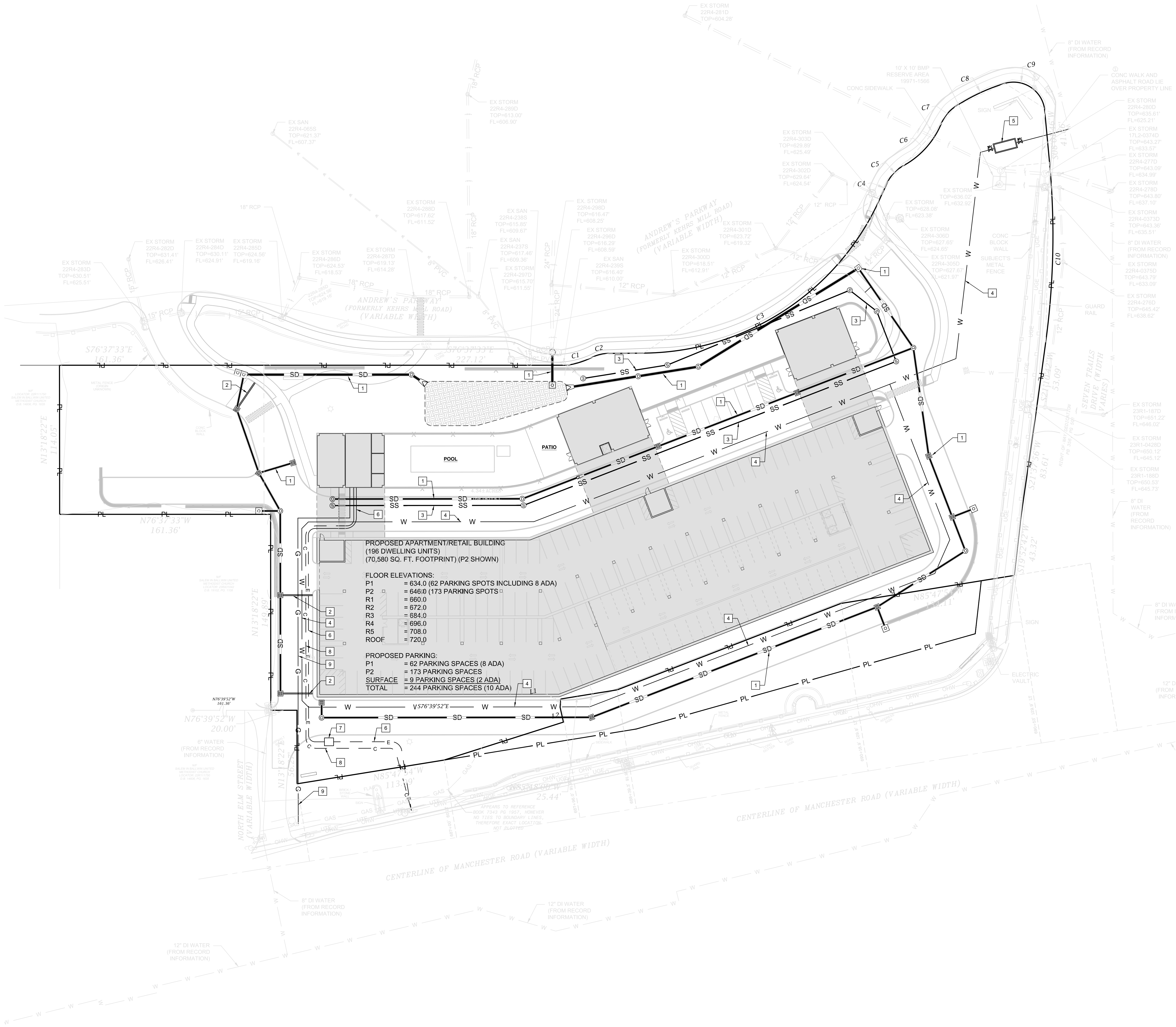


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KEYED NOTES - UTILITY PLAN

- STORM SEWER PER MSD STANDARDS
- TRENCH DRAIN
- SANITARY SEWER PER MSD STANDARDS
- WATER LINE PER MISSOURI AMERICAN WATER COMPANY DETAILS
- FIRE FLOW METER PER MISSOURI AMERICAN WATER COMPANY DETAILS
- UNDERGROUND ELECTRIC LINE PER AMEREN STANDARDS
- TRANSFORMER PER AMEREN STANDARDS
- COMMUNICATION LINE
- GAS SERVICE PER SPIRE STANDARDS



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PROGRAM LEGEND

- PARKING (237 SPOTS)
- AMENITIES, CIRULATION, UTILITY
- COMMERCIAL
- 3 BEDS, 2 BATHS
- 2 BEDS, 2 BATHS
- 2 BED, 1 BATH
- 1 BED, 1 BATH

General Contractor: TBD

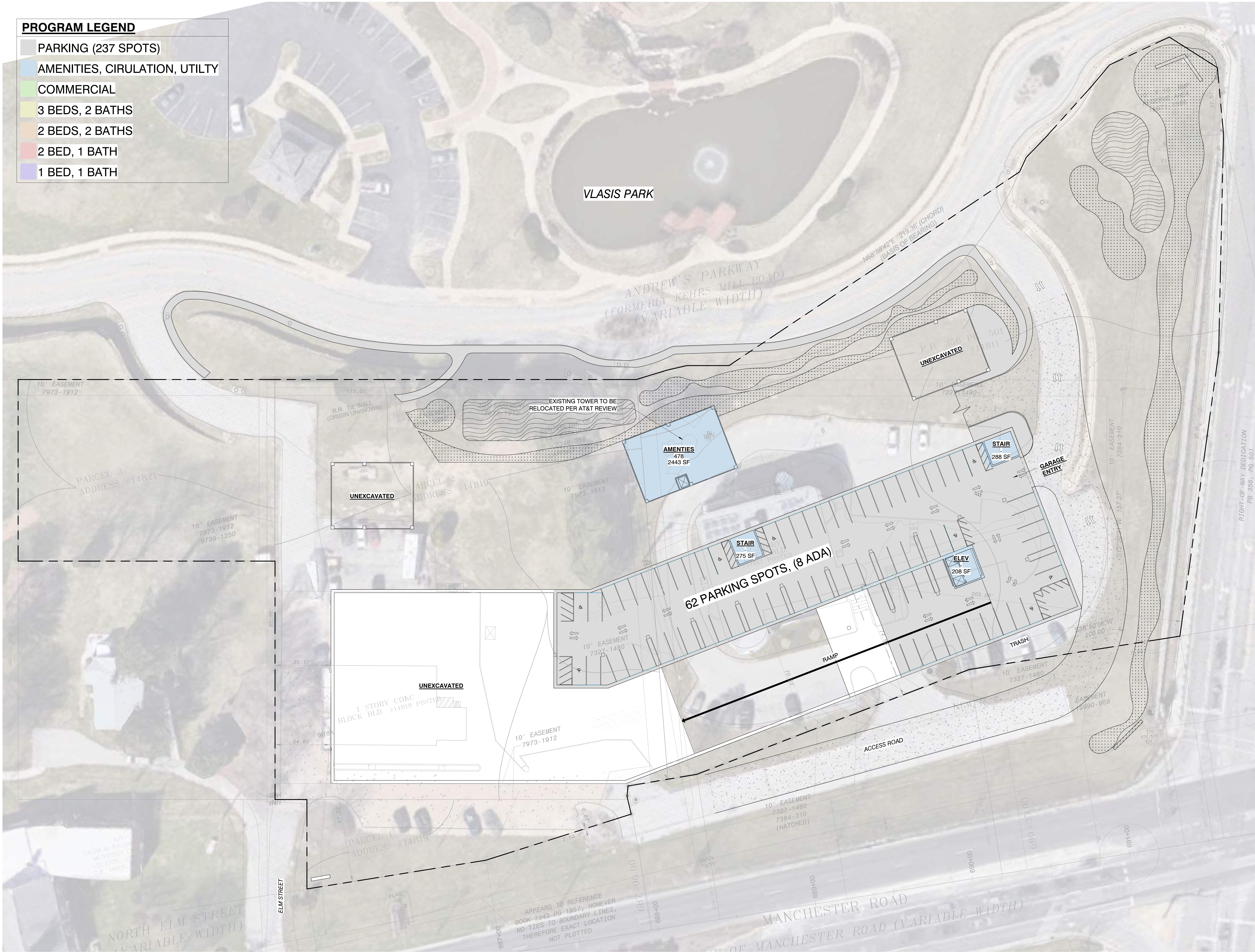
Civil Engineer: G&W ENGINEERING
138 WELDON PKWY
MARYLAND HEIGHTS, MO 63043
(314) 236-6379
Structural Engineer: TBD

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GROUND UP APARTMENT BUILDING

PARC PLACE AT VLASIS

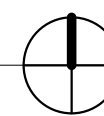
14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

No.	Description	Date
1	PRE DESIGN	05-03-2021

Sheet Title:

LEVEL 1 - PARKING
LEVEL 1

Project Number: 21015
Drawn By: V3
Issue Date: 05-03-2021



A001

1 LEVEL 1 - PARKING PLAN 01
A001 3/64" = 1'-0"

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PROGRAM LEGEND	
	PARKING (237 SPOTS)
	AMENITIES, CIRULATION, UTILTY
	COMMERCIAL
	3 BEDS, 2 BATHS
	2 BEDS, 2 BATHS
	2 BED, 1 BATH
	1 BED, 1 BATH

AMENITIES	
GYM / WORKOUT / YOGA	
LOUNGE	
REMOTE OFFICING	
EVENT SPACE	
MULTI-PURPOSE SPACE	

UNITS PER FLOOR:	
38 UNITS THIS FLOOR (196 TOTAL)	
3/2	(4)
2/2	(18)
2/1	(6)
1/1	(10)

V

THREE STUDIOS LLC

2717 Sutton Boulevard
St. Louis, Missouri 63143
888. 895. 2842

General Contractor:

TBD

Civil Engineer:

G&W ENGINEERING
138 WELDON PKWY
MARYLAND HEIGHTS, MO 63043
(314) 236-6379

Structural Engineer:

TBD

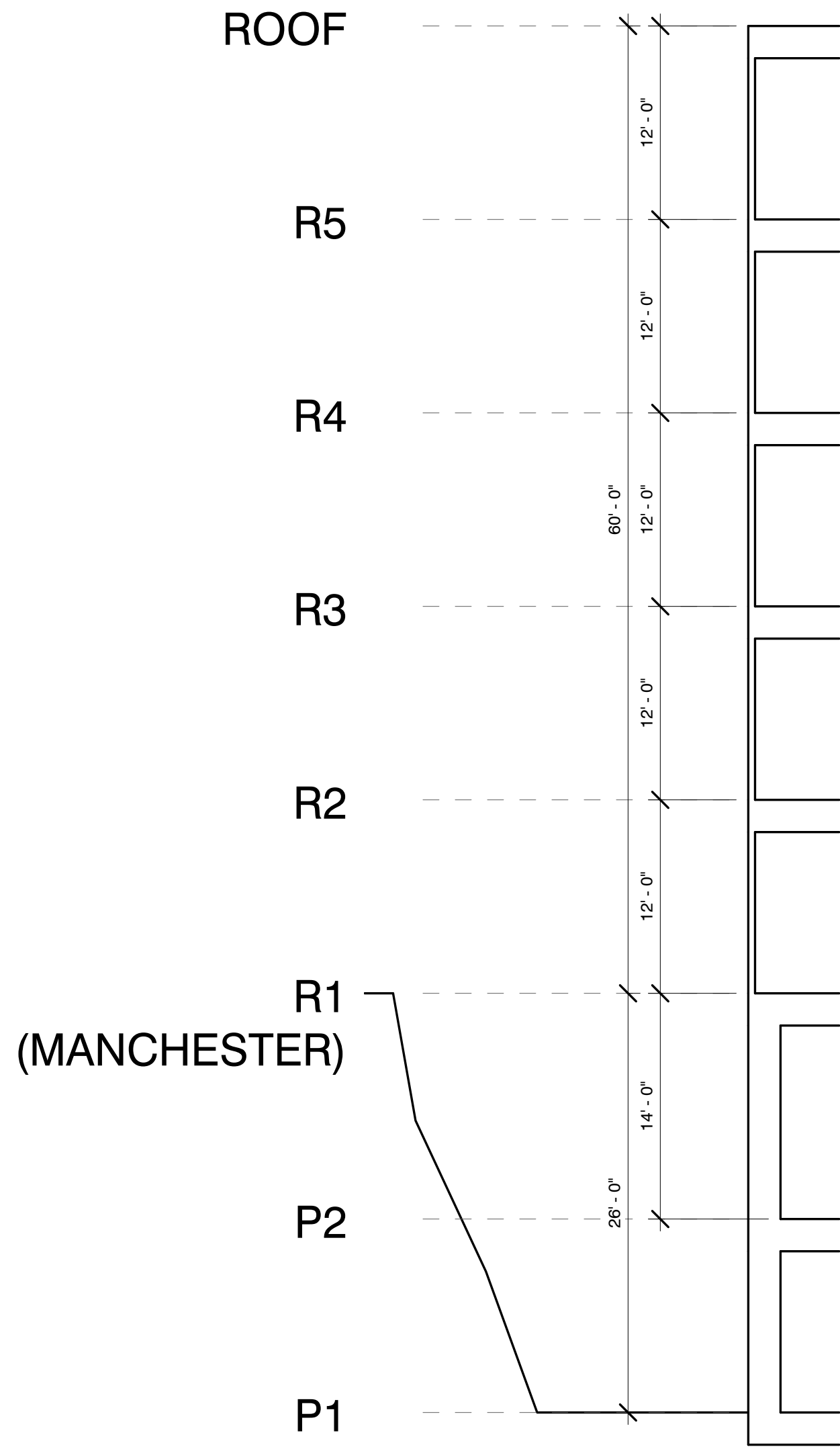
MEP Engineer:

TBD

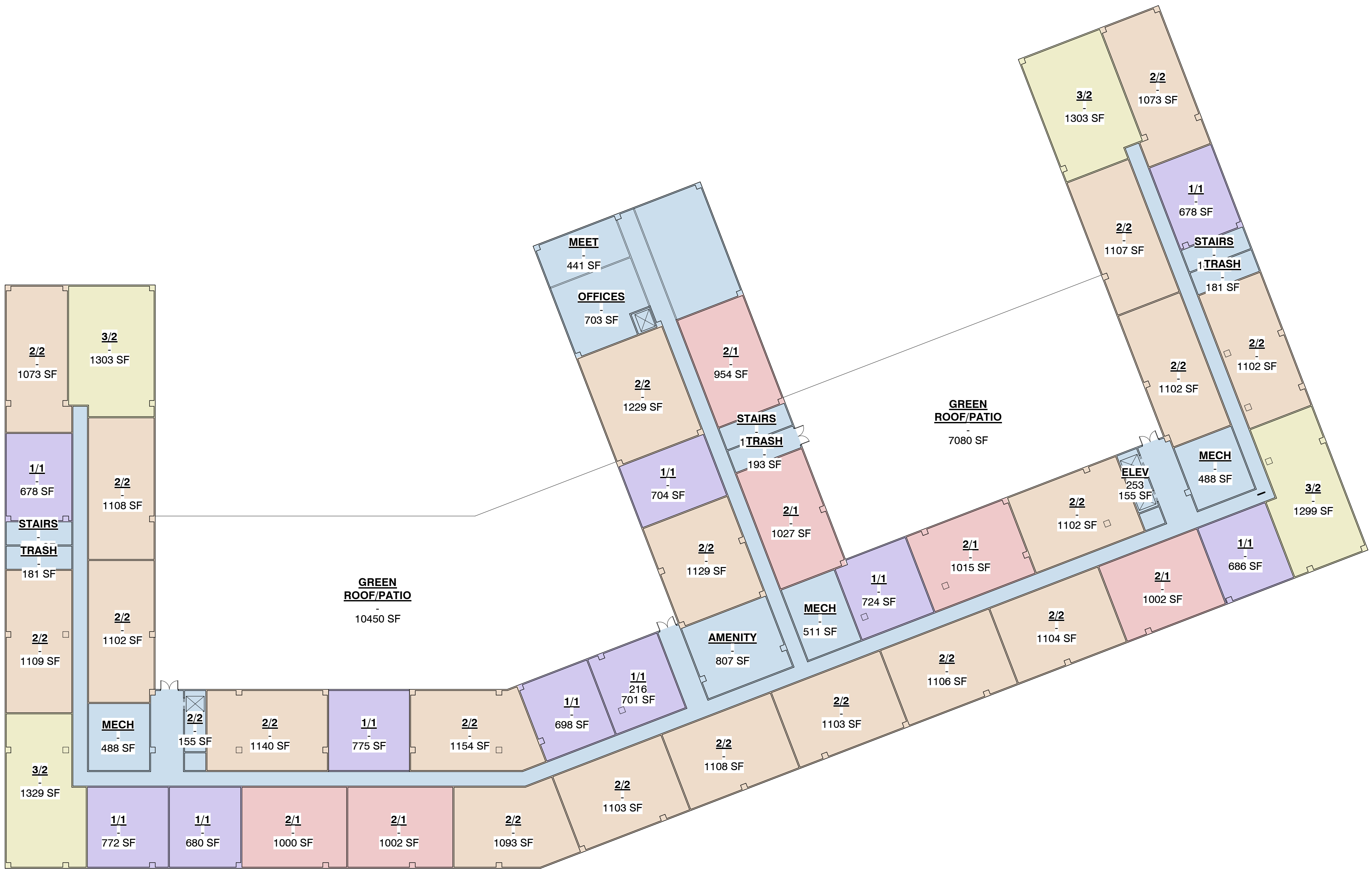
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2 | BUILDING SECTION
A003 | 1/8" = 1'-0"



1 | LEVEL 3 - FLOOR PLAN
A003 | 3/64" = 1'-0"

GROUND UP APARTMENT BUILDING

PARC PLACE AT VLASIS

14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

No.	Description	Date
1	PRE DESIGN	05-03-2021

Sheet Title:

LEVEL 3 -
RESIDENTIAL LEVEL
1

Project Number:
21015

Drawn By:
V3

Issue Date:
05-03-2021

A003

PROGRAM LEGEND

	PARKING (237 SPOTS)
	AMENITIES, CIRCULATION, UTILITY
	COMMERCIAL
	3 BEDS, 2 BATHS
	2 BEDS, 2 BATHS
	2 BED, 1 BATH
	1 BED, 1 BATH

<u>AMENITIES</u>
GYM / WORKOUT / YOGA
LOUNGE
REMOTE OFFICING
EVENT SPACE
MULTI-PURPOSE SPACE

UNITS PER FLOOR:

41 UNITS PER FLOOR (196 TOTAL)

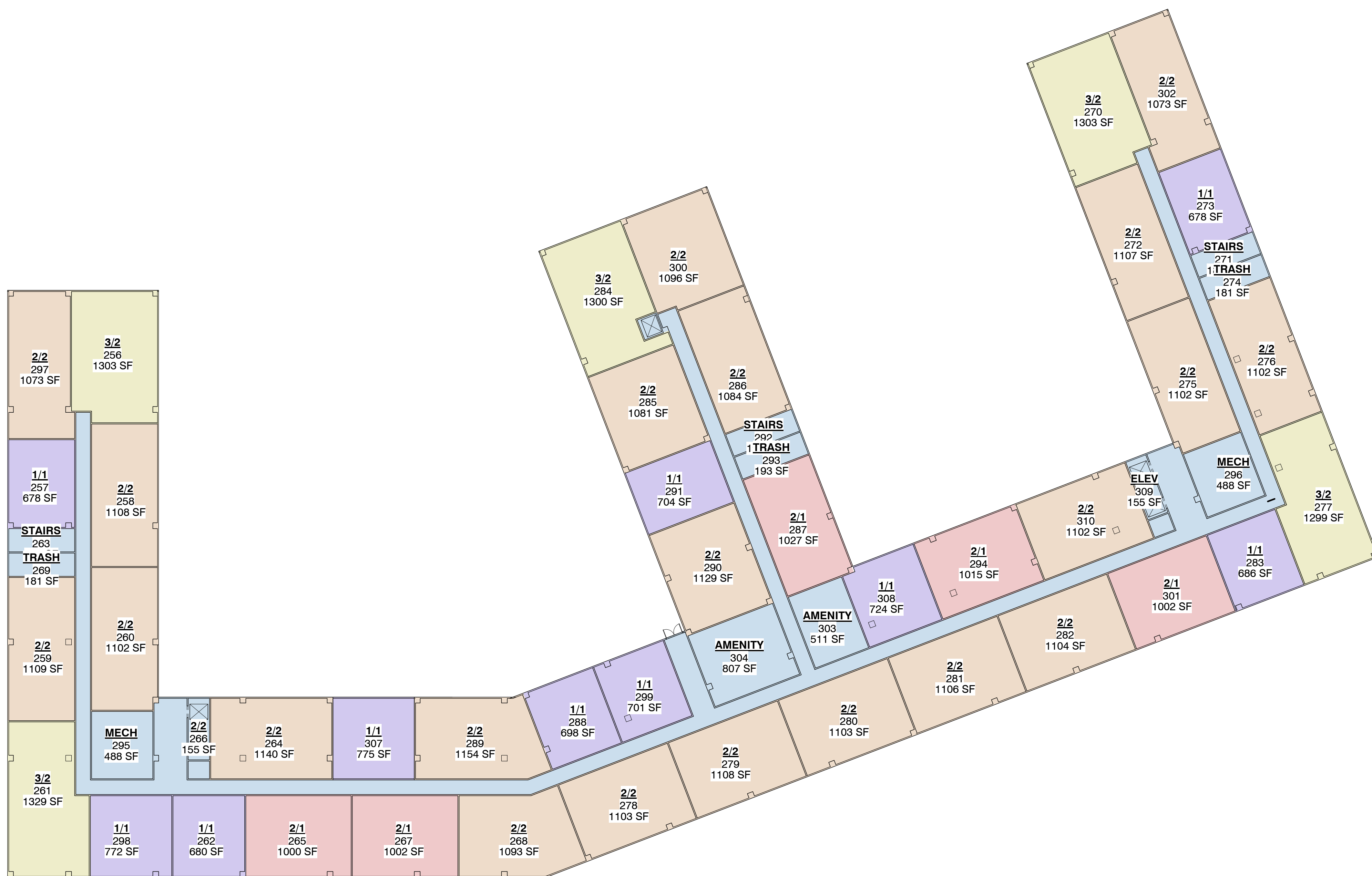
3/2	(5)
2/2	(21)
2/1	(5)
1/1	(10)

General Contractor:	TBD
Civil Engineer:	G&W ENGINEERING 138 WELDON PKWY MARYLAND HEIGHTS, MO 63043 (314) 236-6379
Structural Engineer:	TBD
MEP Engineer:	TBD

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GROUND UP APARTMENT BUILDING

PARC PLACE AT VLASIS

14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

[illegible]

Sheet Title:

LEVEL 4-6 -
RESIDENTIAL LEVEL
2-4

Project Number: 21015
 Drawn By: V3
 Issue Date: 05-03-2021

Sheet Number: **A004**

PROGRAM LEGEND

	PARKING (237 SPOTS)
	AMENITIES, CIRCULATION, UTILITY
	COMMERCIAL
	3 BEDS, 2 BATHS
	2 BEDS, 2 BATHS
	2 BED, 1 BATH
	1 BED, 1 BATH

AMENITIES

GYM / WORKOUT / YOGA
LOUNGE
REMOTE OFFICING
EVENT SPACE
MULTI-PURPOSE SPACE

UNITS PER FLOOR:

35 UNITS THIS FLOOR (196 TOTAL)

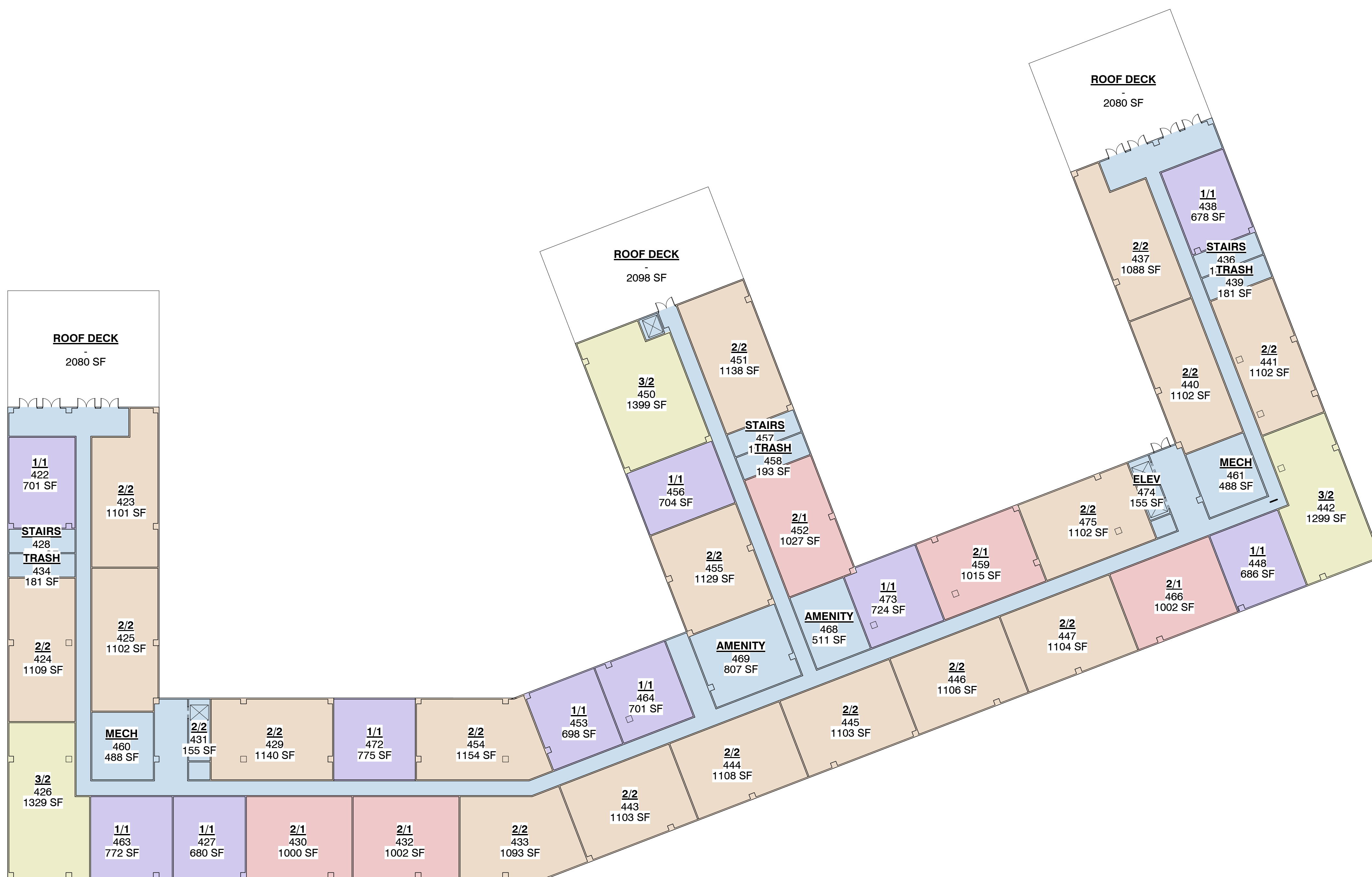
3/2	(3)
2/2	(17)
2/1	(5)
1/1	(10)

General Contractor:	TBD
Civil Engineer:	G&W ENGINEERING 138 WELDON PKWY MARYLAND HEIGHTS, MO 63043 (314) 236-6379
Structural Engineer:	TBD
MEP Engineer:	TBD

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DESIGN DRAWINGS
NOT FOR CONSTRUCTION



GROUND UP APARTMENT BUILDING
PARC PLACE AT VLASIS

14811, 14819, 14821 MANCHESTER RD
BALLWIN, MO 63011

[illegible]

Sheet Title:

LEVEL 7 -
RESIDENTIAL LEVEL
5

Project Number: 21015
 Drawn By: V3
 Issue Date: 05-03-2021

Sheet Number: A005

A005

JUNE 16, 2021

Park Place at Vlasis Traffic Impact Study

Ballwin, Missouri

Prepared for:

Mr. Scott Goforth, PE

G&W Engineering

138 Weldon Parkway

Maryland Heights, MO 63043

Prepared by:

Lochmueller Group

411 N. 10th Street

Suite 200

St. Louis, MO 63101

314.621.3395



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Executive Summary

The Lochmueller Group has completed a traffic impact study for Park Place at Vlasis, a proposed multifamily apartment building with garage parking, and two retail spaces in Ballwin, Missouri. The subject site is bounded by Andrew's Parkway/Kehrs Mill Road to the north, Manchester Road (Missouri Route 100) to the south, Seven Trails Drive to the east, and North Elm Street to the west. The existing one-story U-Haul building and two-story former Ballwin City Hall building are to be removed. It is our understanding that the project is anticipated to be completed in 2022.

To quantify study area traffic volumes, weekday turning movement counts were performed at the subject intersections in May 2021 during the weekday AM and PM peak periods. Data from 2016 was also provided by MoDOT. In order to remove the impacts associated with COVID-19, the data from both years were compared and a composite of traffic volumes that represent current traffic without the influence of COVID-19 was developed.

Baseline Operating Conditions (Pre-Development)

The study intersections and movements largely function with favorable levels of service in both peak periods considered. The signalized intersection at Manchester Road at Ries Road/Seven Trails Drive functions at acceptable levels during both peak hours with the exception of the southbound approach of Seven Trails Drive. The southbound approach operates at LOS E in the morning and afternoon peak hours. However, the volume to capacity ratio for the southbound approach is 0.53 in the morning and 0.71 in the afternoon, respectively, indicating that there is available capacity. The delay for the southbound approach is largely attributable to the signal's lengthy cycle length. Furthermore, the peak queues remain reasonable and are accommodated within the existing designated turn lanes.

The side-street stop-controlled intersections of Seven Trails Drive with the Mobil/Wendy's access drive and Andrews Parkway/Kehrs Mill Road currently operate favorably in both peak hours.

Proposed Development

The proposed development would generate a total of approximately 76 and 106 trips during the weekday morning and afternoon peak hours, respectively, once fully developed. However, a portion of the trips would be internally captured within the site given that the small retail uses are proposed to serve the residents. Therefore, a total of 74 **new** trips would be attracted to the site during the weekday AM peak hour and 97 **new** trips during the weekday PM peak hour.

Site Access and Internal Site Circulation Review

Access to the site would be provided via three existing, unsignalized access points including a right-in right-out drive at Manchester Road and North Elm Street, a full-access drive at Paulding Drive and Andrews Parkway/Kehrs Mill Road, and a full access drive at North Elm Street and Andrews Pkwy/Kehrs Mill Road. As shown in the proposed site plans, all access points retain the same lane configurations as currently exist.

Currently, STOP control only exists at the southbound right-turn movement of North Elm Street onto Manchester Road. It is recommended that traffic exiting the site at all unsignalized access drives be

placed under STOP control via the installation of signage and pavement marking, specifically at the two existing drives along Andrews Parkway/Kehrs Mill Road at North Elm Street and at Paulding Drive.

As proposed, the development provides 240 parking spaces for the apartment building and 11 parking spaces for the small retail buildings. It is acknowledged the proposed number of parking spaces does not satisfy Ballwin's City Code Article XV, Section 1, which requires a minimum of 300 parking spaces for the apartments and 23 parking spaces for the small retail buildings.

It is recommended that consideration be given to an internal pathways/sidewalk system to allow pedestrian mobility throughout the site. Wherever necessary, continental crosswalks within the parking field, coupled with pedestrian signage, should be encouraged. Furthermore, continental crosswalks should be provided across the existing access drives of Andrews Parkway/Kehrs Mill Road with Paulding Drive and North Elm Street, to accommodate residents of the apartment building accessing the adjacent Vlasik Park. Consideration should also be given to providing a midblock pedestrian crossing of Andrews Parkway/Kehrs Mill Road in the vicinity of the development to facilitate foot traffic between the residences and the park.

Forecasted Operating Conditions (Post-Development)

The additional traffic generated by the proposed development would have minimal impact on the overall operations at the signalized intersection of Manchester Road and Ries Road/Seven Trails Drive. The overall LOS would be unchanged due to the development's traffic. The westbound approach of Manchester Road to the intersection would decline from a LOS B to LOS C during the weekday morning peak hour, however the approach maintains acceptable operations and the increase in delay is slight. The southbound approach of Seven Trails Drive to the intersection would maintain a LOS E despite the introduction of the development's traffic, which would add a total of 31 new trips to the southbound approach in the morning peak hour and 24 new trips to the southbound approach in the afternoon peak hour, which equates to roughly one new vehicle for each cycle of the signal. Given the minimal additional traffic, no mitigation is recommended to the signalized intersection of Manchester Road with Ries Road/Seven Trails Drive.

The side-street, stop-controlled intersections of Andrews Parkway/Kehrs Mill Road with Paulding Drive and North Elm Street would operate favorably during both peak hours following construction of the proposed development. Minimal queues and optimal LOS are anticipated in the post development condition. In addition, the right turn only access drive along Manchester Road at North Elm street would continue to function with LOS B and LOS C during the morning and afternoon peak hour, respectively, and the anticipated queues are not expected to have any spillover impact on internal site circulation.

In summary, it can be concluded that the traffic generated by the proposed development could be accommodated acceptably, as proposed. No further recommendations or mitigation are required along the study area roadways or intersections.

Introduction

Lochmueller Group has completed a traffic impact study for a proposed mixed-use residential development in Ballwin, Missouri. As proposed, the development provides for the construction of a 200-unit apartment building and a two-level parking garage beneath the apartments. In addition, there would be two, small retail buildings (2,502 SF and 2,090 SF) adjacent to the residential which would accommodate uses intended to serve residents of the development. The proposed site is bounded by Manchester Road (Missouri Route 100) to the south, Seven Trails Drive to the east, Andrews Parkway/Kehrs Mill Road to the north, and North Elm Street to the west, as shown in **Figure 1**. The existing one-story U-Haul building and two-story former Ballwin City Hall building are to be removed. It is our understanding that completion of the project is anticipated in 2022. Access to the site would be provided via three existing access points including a right-in/right-out drive at Manchester Road and North Elm Street, two full-access drives to Andrews Parkway/Kehrs Mill Road via Paulding Drive (eastern drive) and North Elm Street (western drive). **Figure 2** illustrates the proposed site plan for the Park Place at Vlasis development.



Figure 1. Proposed Development Location

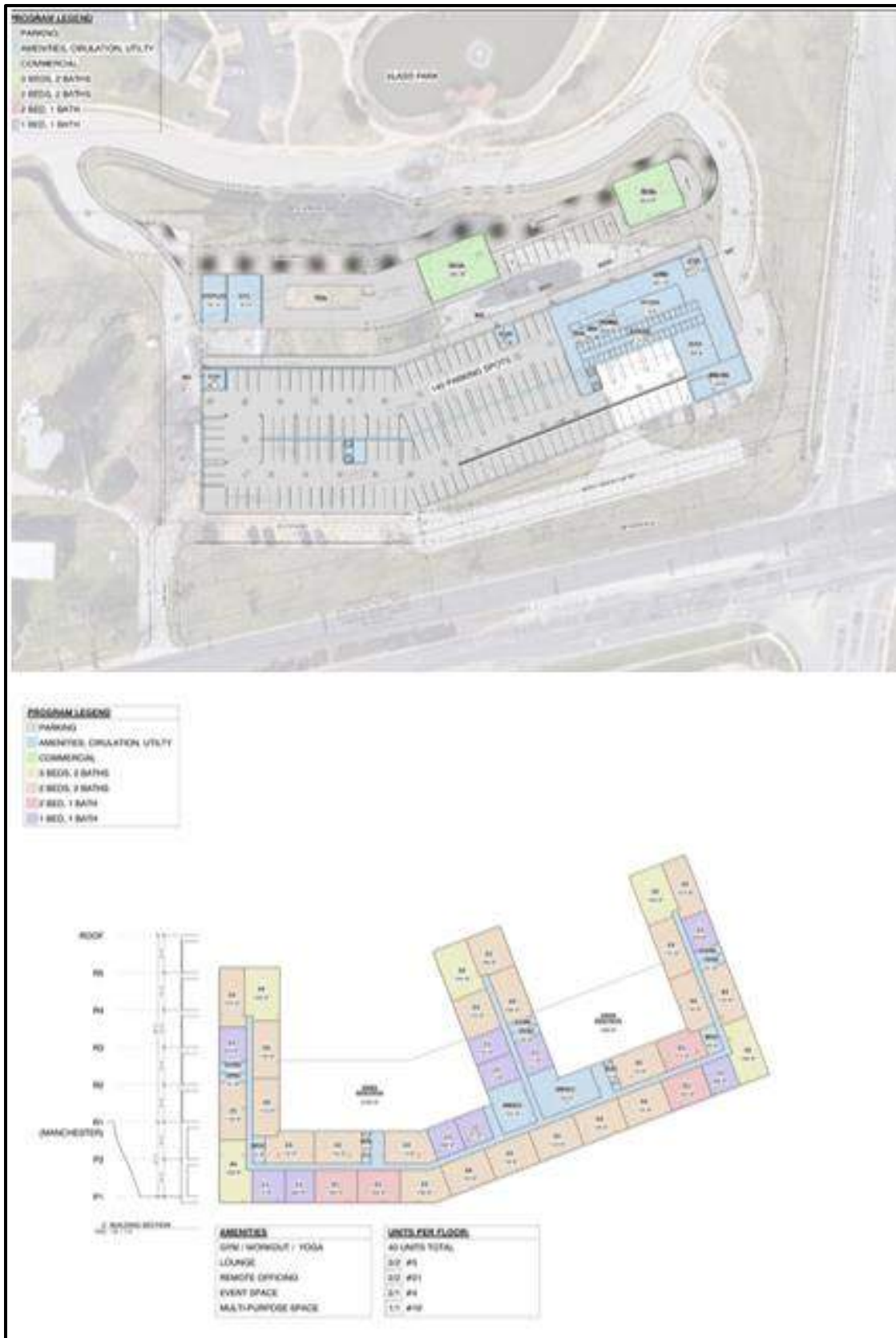


Figure 2. Proposed Park Place at Vlasis Site Plan (provided by others)

The purpose of this traffic impact study is to summarize the amount of traffic that would be generated by the proposed multifamily mixed-use development and identify the impacts of the site's generated traffic upon the surrounding road system. This analysis will identify existing and forecasted operating conditions, thereby providing a measure of the site-generated traffic impacts. The following scenarios will be evaluated:

- Existing Conditions
- Forecasted Conditions (existing + full development)

Given the nature of the development, the traffic impact study focuses on the morning and afternoon peak period of a typical weekday. These time periods were chosen since they represent the peak periods of operation for the proposed uses as well as peak periods of the adjacent roadways, in particular Manchester Road.

Existing Conditions

To identify the traffic impacts associated with the proposed development, it was first necessary to quantify roadway, traffic, and operating conditions as they currently exist.

Existing Roadway Network

The study area road system was inventoried to identify existing roadway types, lane configuration, functional classifications, posted speeds, access provisions, and intersection control. The traffic data was collected at the following intersections:

- Manchester Road & Ries Road/ Seven Trails Drive (signalized)
- Seven Trails Drive & Mobil/Wendy's Entrance (side-street stop-controlled)
- Seven Trails Drive & Andrew's Parkway/Kehrs Mill Road (side-street stop-controlled)

Manchester Road (MO-100) is an undivided four-lane principal arterial traveling in the east and west directions along the proposed site's frontage. This state route has a posted speed limit of 40 miles per hour (mph) through the study area.

At the signalized intersection with Ries Road/Seven Trails Drive, dedicated left turn lanes are provided along Manchester Road. The eastbound left turn lane is approximately 215 feet in length, exclusive of taper while the westbound left turn lane is continuous. Protected plus permissive phasing is provided to the eastbound and westbound left turn movements onto Seven Trails Drive and Ries Road.

West of the signalized intersection with Ries Road/Seven Trails Drive, a raised median is provided that extends to the signalized intersection with Ballpark Drive. There are two openings within the median; one at Old Towne Plaza's unsignalized drive and the other at Metro West Fire Protection District's Station 1.

Seven Trails Drive is an undivided local two-lane roadway that runs in the north and south directions, east of the proposed development. The posted speed limit is 25 mph through the study area. To the south, Seven Trails Drive connects to Manchester Road via a signalized intersection, providing access to

the commercial corridor. To the north, Seven Trails Drive connects to Andrews Parkway/Kehrs Mill Road, providing access to Vlasik Park, Ballwin City Public Works, and residential areas northwest of the proposed site. Further north, Seven Trails Drive terminates at Holloway Road.

At the signalized intersection with Manchester Road, the southbound approach on Seven Trail Drive is comprised of a dedicated left turn lane, a shared left/through lane and a dedicated right turn lane. The dedicated left turn lane is approximately 255 feet in length, exclusive of taper and the dedicated right turn lane is approximately 285 feet in length, exclusive of taper. The southbound approach is split phased (served by separate phases of the traffic signal in a cycle) and does not run concurrently with the northbound approach from Ries Road.

North of Manchester Road, approximately 400 feet measured centerline to centerline, there is an unsignalized intersection serving Mobil, Wendy's and the Range St. Louis West. This intersection is offset by 135 feet (centerline to centerline) from the unsignalized intersection with Andrews Parkway/Kehrs Mill Road, which is located further to the north. At both intersections, Seven Trails Drive is comprised of a single free-flow lane in each direction with stop-control employed for the side streets.

Ries Road is a major collector comprised of a lane in each direction that runs in the north / south directions and is the south leg of the Manchester Road and Ries Road/Seven Trails signalized intersection. The posted speed limit is 30 mph.

At the intersection with Manchester Road, the northbound approach on Ries Road is comprised of dedicated left turn lane, a shared left/through lane and a dedicated right turn lane. The dedicated left turn lane is approximately 125 feet in length, exclusive of taper and dedicated right turn lane is approximately 225 feet in length, exclusive of taper.

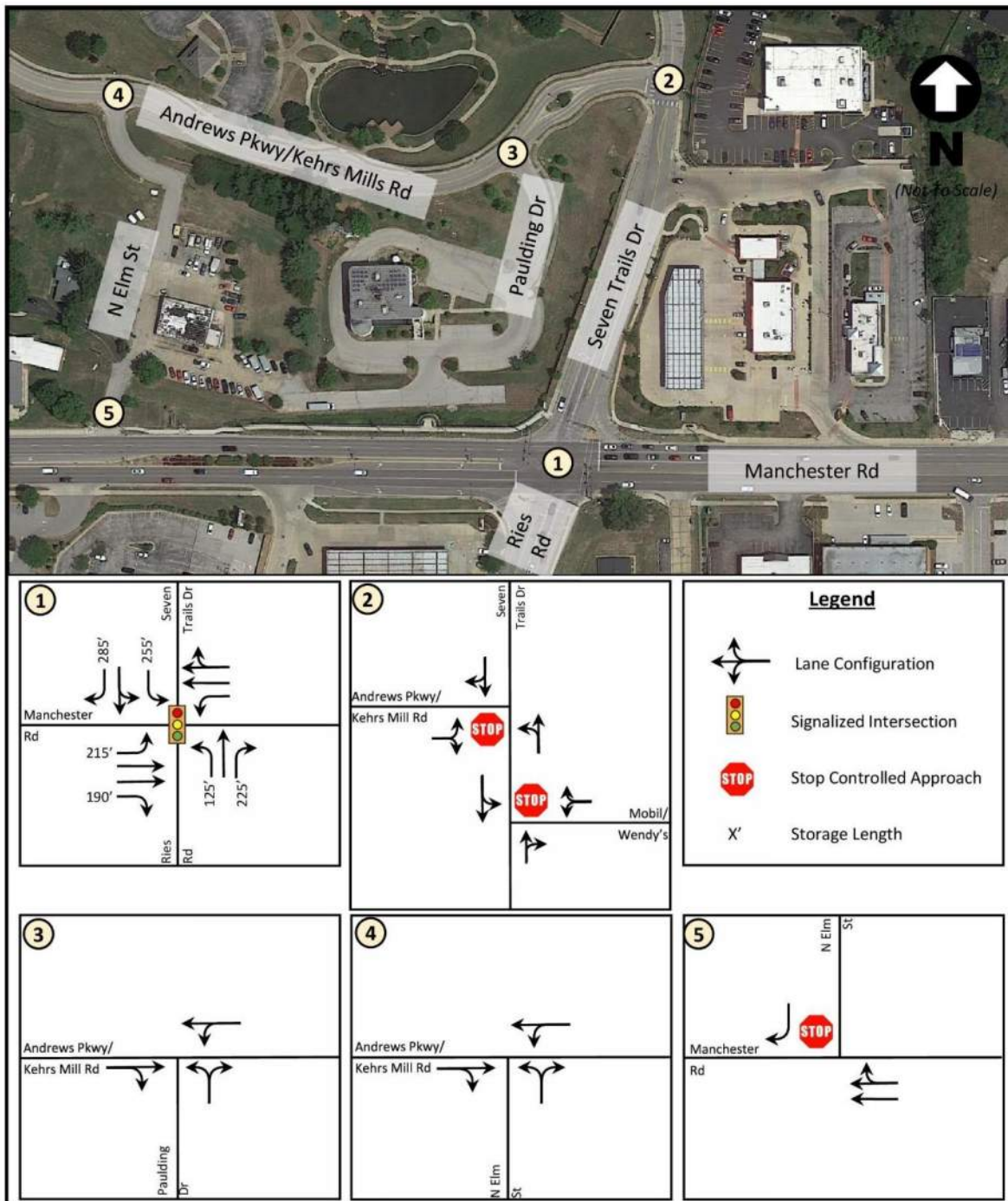
Andrews Parkway/Kehrs Mill Road is a local two-lane roadway that runs in the east and west directions, north of the proposed development, intersecting Seven Trails Drive to the east and Ballpark Drive west of the proposed site, providing access to Vlasik Park, Ballwin City Public Works, and residential areas to the west of Ballpark Drive. The posted speed is 15 mph adjacent to the site.

Andrews Parkway/Kehrs Mill Road intersects two access points to the proposed site at Paulding Drive and at North Elm Street. Both intersections are single-lane, uncontrolled approaches on all the three legs.

North Elm Street is a local two-lane roadway that runs in the north and south directions, west of the proposed development site. North Elm Street intersects Manchester Road to the south and Andrews Parkway/Kehrs Mill Road to the north. North Elm Street is limited to right turns only at its intersection with Manchester Road, with free-flow traffic conditions on Manchester Road and stop-control in the southbound direction on North Elm Street. There is no defined traffic control at its intersection with Andrews Parkway, therefore a yield condition is implied.

Paulding Drive is a local two-lane roadway that provides direct access to the former Ballwin City Hall building from Andrews Parkway/Kehrs Mill Road and from North Elm Street. There is no defined traffic control at its intersection with Andrews Parkway, therefore a yield condition is implied.

The existing lane configuration and traffic control at the intersections included in this study are depicted in **Figure 3**.



Pedestrian and Bicycle Accommodations

Sidewalks are provided along both sides of Manchester Road, Ries Road, Seven Trails Drive and some portions of Andrews Parkway/Kehrs Mill Road within the study area. Between Paulding Drive and Park Drive, a sidewalk is only provided along the north side of Andrews Parkway. Similarly, north of Andrews Parkway, a sidewalk is only provided on the west side of Seven Trails Drive. Along Paulding Drive, sidewalks are existing along the east side of the road. Crosswalks are provided across the north, east, and south legs at the intersection of Manchester Road and Ries Road/Seven Trails Drive and across the west and south legs of the intersection at Seven Trails Drive and Andrews Parkway/Kehrs Mill Road. There is also a trail system within Vlasik Park that connects to the sidewalks along Andrews Parkway and Seven Trails Drive.

There are no dedicated bicycle facilities within the study area roadway network; bicycles share the road.

Baseline Traffic Volumes

To quantify study area traffic volumes, weekday turning movement counts were performed at the subject intersections on Wednesday, May 5, 2021 from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. In addition, 2016 traffic volumes for Manchester Road and Ries Road/Seven Trails Drive, collected from late spring were provided by MoDOT.

In order to remove the impacts associated with COVID-19, the data from both years were compared. It was presumed that the turning movements from Manchester Road to and from Seven Trails Drive in the 2016 counts were still representative of pre-COVID conditions since the area's residential, recreational, and commercial components are built out. The turning movements on Manchester Road to and from Ries Road and thru movements on Manchester Road from 2016 were increased using an 0.5% annual growth rate and compared to the 2021 collected data, of which the higher of the two were used in the base volumes.

Based on the collected data, the network peak hours were determined to occur from 7:30 to 8:30 AM for the weekday morning peak period and 4:30 to 5:30 PM for the weekday afternoon peak period. It is expected that the peak periods for the study area roads would coincide with the peak trip generation periods for the proposed development given the residential nature. The baseline peak hour traffic volumes are summarized in **Figure 4**. It should be noted the three access points to the proposed site, intersections #3, #4, and #5 in **Figure 3**, will only consider site generated traffic volumes, as existing turning movements are nominal and JB Auto & Tire would be removed as part of the development. Therefore, no base peak hour traffic volumes are shown at these intersections.

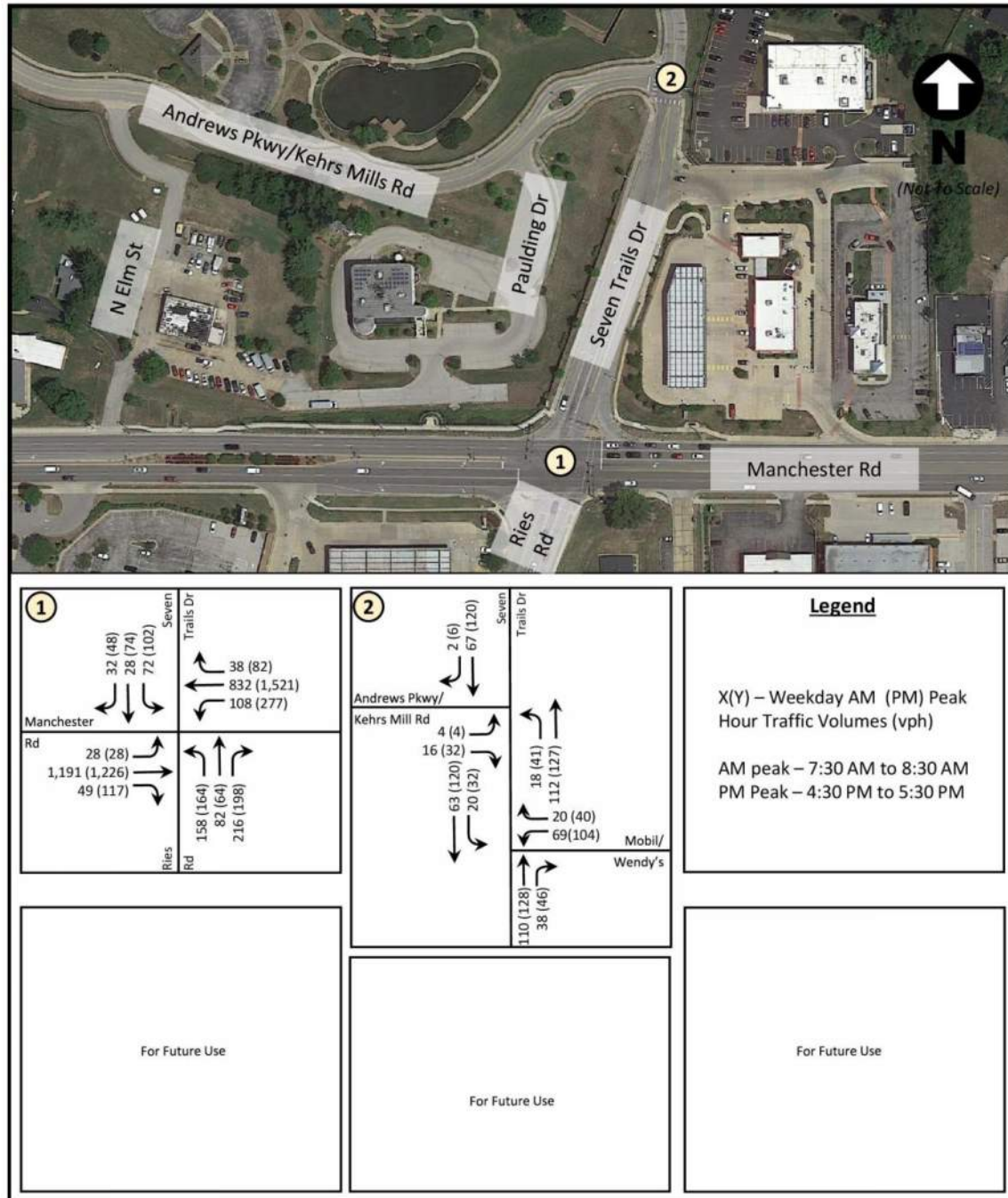


Figure 4. Baseline Peak Hour Traffic Volumes

Baseline Operating Conditions

The existing traffic operating conditions at the study intersections were evaluated based upon the traffic volumes presented in **Figure 4**. The analysis was completed using Synchro 10 traffic modeling software, which is based upon the methodologies outlined in the Highway Capacity Manual (HCM) 6th Edition, last updated in 2016 by the Transportation Research Board.

The performance of a transportation system is quantified by Levels of Service (LOS), which are measures of traffic flow that consider factors such as speed, delay, interruptions, safety, and driver comfort. There are six levels of service ranging from LOS A (“free flow”) to LOS F (“oversaturated”). LOS C is commonly used for design purposes and represents a roadway with volumes utilizing 70 to 80 percent of its capacity. LOS D is typically considered acceptable for peak period conditions in urban and suburban areas. However, LOS F is not unusual for side street stop-controlled approaches during peak period conditions, especially along major arterials.

Levels of service criteria vary depending upon the roadway component being evaluated. Intersections are most commonly evaluated, since roadway capacity is typically dictated by the number of vehicles that can be served at critical intersections. For intersections, the criteria are based on delay and the type of control (i.e. whether it is signalized or unsignalized). Signalized intersections reflect higher delay tolerances as compared to unsignalized and roundabout locations because motorists are accustomed to, and accepting of, longer delays at signals. For signalized and all-way stop intersections, the average control delay per vehicle is estimated for each movement and then aggregated for each approach and the intersection as a whole. For intersections with side-street stop control, delay is calculated for the side-street approaches and major road left-turns only, since through traffic on the major road is not required to stop. **Table 1** shows the thresholds for intersection levels of service, as defined in the HCM.

Table 1. Level of Service Definitions		
Level of Service	Control Delay per Vehicle (sec/veh)	
	Signalized	Unsignalized
A	≤ 10	0-10
B	> 10-20	> 10-15
C	> 20-35	> 15-25
D	> 35-55	> 25-35
E	> 55-80	> 35-50
F	> 80	> 50

The intersections and movements were evaluated by the following measure of effectiveness: level of service, delay (in seconds per vehicle), and 95th percentile queue length (in feet). The existing operating conditions at the intersections included in the study area are summarized in **Table 2**.

Table 2. 2021 Baseline Operating Conditions				
Intersection/ Approach	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Vehicle LOS (Delay)	95 th Queue (ft)	Vehicle LOS (Delay)	95 th Queue (ft)
<i>Manchester Road and Ries Road/ Seven Trails Drive (Signalized)</i>				
Overall Intersection	C (28.3)		D (42.8)	
Eastbound Approach	C (25.8)	623	D (42.3)	#893
Westbound Approach	B (19.0)	384	D (38.4)	#1096
Northbound Approach	D (44.0)	187	D (46.4)	183
Southbound Approach	E (60.0)	100	E (72.7)	167
<i>Seven Trails Drive and Mobil/ Wendy's Entrance (Side-street, stop-controlled)</i>				
Overall Intersection	A (3.4)		A (4.2)	
Westbound Approach	B (10.4)	< 25	B (11.9)	<25
Southbound Left-Turn	A (7.5)	<25	A (7.7)	<25
<i>Seven Trails Drive and Andrews Parkway/Kehrs Mill Road (Side-street, stop-controlled)</i>				
Overall Intersection	A (1.4)		A (1.9)	
Eastbound Approach	A (9.0)	<25	A (9.3)	<25
Northbound Left-Turn	A (7.4)	<25	A (7.6)	<25

Delay presented in seconds per vehicle

95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles

As shown above, most of the study intersections and movements function with favorable levels of service in both peak periods considered. The signalized intersection at Manchester Road at Ries Road/Seven Trails Drive functions at acceptable levels during both peak hours with the exception of the southbound approach on Seven Trails Drive. The southbound approach currently operates at LOS E in the morning and afternoon peak hours. However, the highest volume to capacity ratio for a southbound movement is 0.53 in the morning and 0.71 in the afternoon, respectively, meaning the approach operates with available capacity and can be considered acceptable. Rather, the delay for the southbound approach is largely attributable to the signal's lengthy cycle length, which run 140 and 150 seconds during the weekday morning and afternoon peak hours, respectively.

The side-street stop-controlled intersections of Seven Trails Drive with the Mobil/Wendy's Drive and at Andrews Parkway/Kehrs Mill Road currently operates favorably in both peak hours.

It should be noted that 95th percentile queues are extensive along Manchester Road, specifically those experienced by westbound motorists during the weekday afternoon peak hour. Field observations were conducted to verify that model conditions represent actual traffic patterns along Manchester Road. Due to the traffic signal coordination plan along Manchester Road, platoons of arriving vehicles from the adjacent east and west intersections (Manchester Road & Maple Lane and Manchester Road & Ballpark Drive) arrive at the back of the eastbound and westbound Manchester Road and Ries Road/Seven Trails Drive queues just as the mainline signals turn green, creating a "rolling queue", whose length is presented as the max queue in **Table 2**. However, the duration for which the max queue is maintained is relatively brief since the vehicles at the front of the queue are already beginning to proceed through the signal when the vehicles from the adjacent signals arrive.

While the motorists along Seven Trails Drive experience longer delays, the 95th percentile queues and volume to capacity ratios for the southbound approach remain minimal and are accommodated within the dedicated turn lanes. Furthermore, the peak queues do not routinely extend back so as to obstruct the intersections serving the Mobil/Wendy's or Andrews Parkway/Kehrs Mill.

Additionally, the northbound approach along Ries Road at the intersection of Manchester Road and Ries Road/Seven Trails Drive has existing 95th percentile queues of 187 feet in the morning peak hour and 183 feet in the afternoon peak hour. These 95th percentile queues do, on occasion extend out of the dedicated turn lanes and obstruct the access drive to the QuikTrip gas station located in the southwest quadrant.

Proposed Development

As stated previously, the proposed development is anticipated to include the following: a 200-unit apartment building, a two-level parking garage beneath the apartments, and two, small retail buildings (2,502 SF and 2,090 SF) adjacent to the apartment building which would accommodate uses intended to serve residents of the development. Access to the site would be provided via three existing access points including a right-in right-out drive at Manchester Road and North Elm Street, a full-access drive at Paulding Drive and Andrews Parkway/Kehrs Mill Road, and a full access drive at North Elm Street and Andrews Pkwy/Kehrs Mill Road.

Trip Generation

In forecasting the proposed uses' impact upon traffic conditions, it was necessary to identify the site's trip generation potential, as any impacts to the surrounding road system would be tied to the net increase in trip generation above and beyond the baseline. The following time periods were used in this analysis: Weekday AM Peak Hour (7 to 9 AM) and weekday PM Peak Hour (4 to 6 PM).

The Trip Generation Manual, Tenth Edition, published by the Institute of Transportation Engineers (ITE), was utilized to forecast the trip generation of the Park Place at Vlas development:

- Land Use Code 221 (Multifamily Housing Mid Rise) was used for the proposed five-story multifamily apartment building. The number of units was used as the independent variable and the average rate was used to calculate the number of trips generated, as it is a more conservative estimate.
- Land Use Code 820 (Shopping Center) was used for the proposed retail spaces. Gross floor area square feet (SF) was used as the independent variable and the average rate was used to calculate the number of trips generated, as it is a more conservative estimate.

Therefore, the trip generation estimates for both the multifamily apartment building and retail spaces should be considered conservative. Due to the nature of the proposed development as a mixed-use site, and retail concepts intended to serve the residents of the proposed apartments, it is reasonable to assume that a significant portion of the retail's trips would be "captured" from the adjacent residential community and therefore not represent an additional trip. Therefore, an internal capture reduction for the proposed retail space is assumed at 50% across both time periods. The trip generation for the proposed developed is depicted below in **Table 3**.

Table 3: Proposed New Development Trip Generation						
Use	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Retail (4,592 SF)	3	1	4	9	9	18
Residential (200 units)	20	52	72	54	34	88
Subtotal of Trips	23	53	76	63	43	106
Internal Capture	(1)	(1)	(2)	(5)	(4)	(9)
Total Trips	22	52	74	58	39	97

Directional Distribution and Trip Assignment

The site's new trip generation was assigned to the study area roadways in accordance with an anticipated directional distribution that reflects the market capture area of the proposed development. The proposed directional distribution percentages for site generated trips are presented in **Table 4** and were previously presented to MoDOT and the City of Ballwin for their review. An aerial image depicting the new trip directional distribution is presented in **Figure 5**. The distribution percentages were multiplied by the total trip generation to obtain the site generated traffic on the various roadways. The site generated traffic upon full build out is reflected in **Figure 6**.

Table 4. New Trip Directional Distribution	
Origin/Destination	Percentage
To/From East via Manchester Rd	50%
To/From West via Manchester Rd	25%
To/From West via Andrews Pkwy/ Kehrs Mill Rd	15%
To/From South via Ries Road	5%
To/From Northwest on Park Drive via Andrews Pkwy/ Kehrs Mill Rd	3%
To/From North via Seven Trails Drive	2%



Figure 5. New Trips Directional Distribution

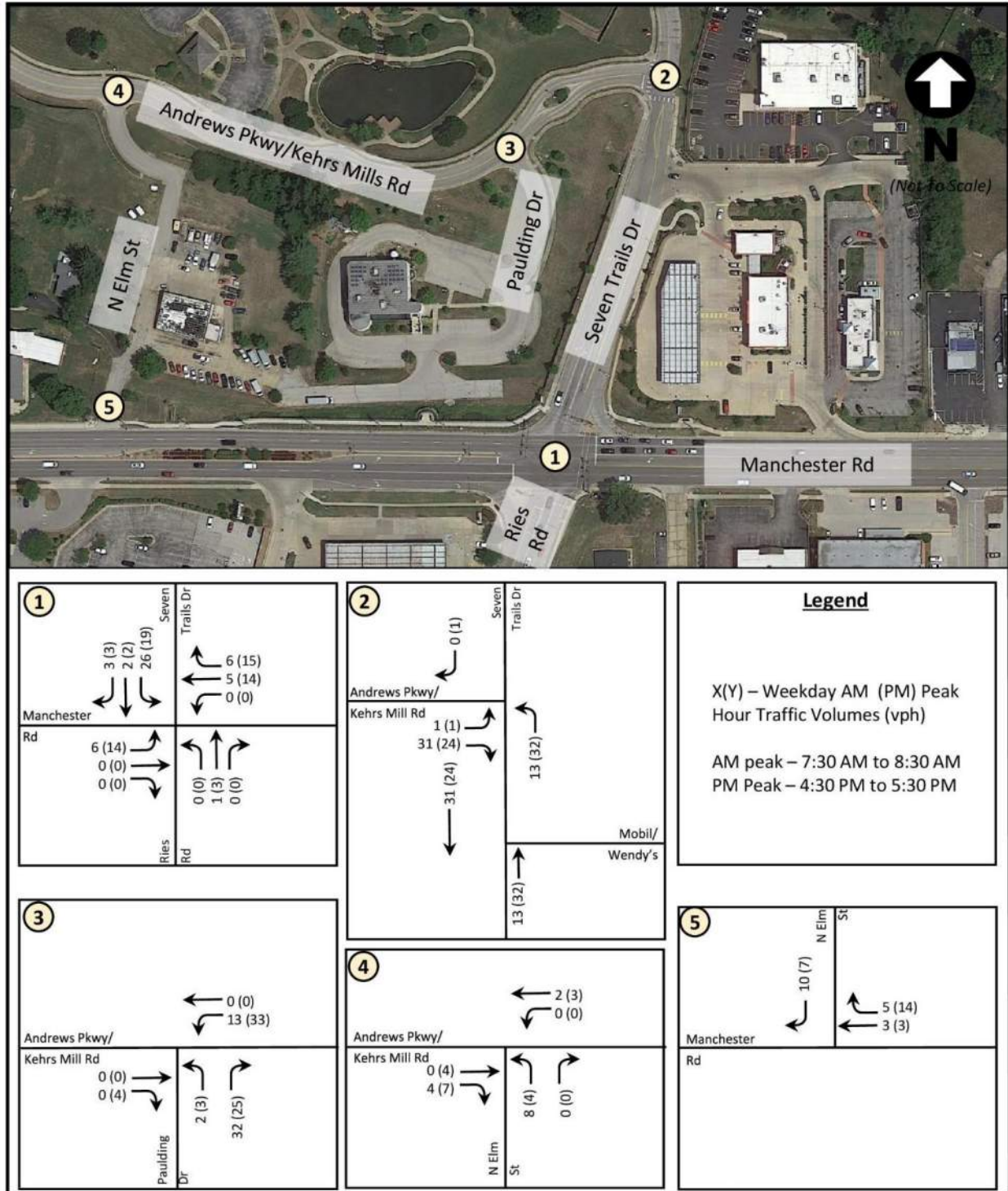


Figure 6. Site Generated Traffic Volumes

Site Access Review

Access to the site would be provided via three existing, unsignalized access points including a right-in right-out drive at Manchester Road and North Elm Street, a full-access drive at Paulding Drive and Andrews Parkway/Kehrs Mill Road, and a full access drive at North Elm Street and Andrews Pkwy/Kehrs Mill Road. As shown in the proposed site plans, all access points would retain the same lane configurations as currently exist.

Currently, STOP control only exists at the southbound right-turn movement at the right-in right-out drive at Manchester Road and North Elm Street. It is recommended that traffic exiting the site at all unsignalized access drives be placed under STOP control via the installation of signage and pavement markings, specifically at the two existing drives along Andrews Parkway/Kehrs Mill Road at North Elm Street and at Paulding Drive. All proposed drives should conform to the sight distance requirements set forth by the American Association of State Highway and Transportation Officials (AASHTO). Furthermore, as part of the design process, care should be given to ensure that signage and/or landscaping does not pose sight distance limitations at any of the proposed drive locations.

Internal Circulation Review

A cursory review of the site's internal circulation was performed to verify safe and efficient mobility within the site itself. The proposed development would capitalize on the existing internal circulation provided by North Elm Street, which begins at Andrews Parkway/Kehrs Mill Road and continues south to Manchester Road. Approximately 100 feet north of Manchester Road, Paulding Drive intersects North Elm Street as an existing east-west drive, providing internal circulation along the southern edge of the proposed site. Paulding Drive curves at the southeast corner of the proposed site, turning into a north-south drive, and continues north where it intersects Andrews Parkway/ Kehrs Mill Road, approximately 200 feet west of Seven Trails Drive. These roadways would be retained generally in place. Access to the parking structure would be provided from both North Elm Street and Paulding Drive. Additionally, east-west circulation is provided within the site by a proposed new drive connecting North Elm Street to Paulding Drive along the north side of the proposed parking structure.

Based upon the site plan provided, the proposed internal roadways would have variable widths, ranging from 24 feet (measured along the proposed east-west roadway) to 32 feet (measured along North Elm Street adjacent to the proposed parking garage). It is recommended that the Metro West Fire Protection District review the proposed site plan to ensure that the proposed internal road network adequately accommodates their emergency vehicles.

A total of 240 parking spaces for the multifamily apartment building are proposed within two levels of a parking garage underneath the residences. In addition, 11 surface parking spaces are provided on the north side of the proposed east-west drive to serve the adjacent retail uses. Consequently, a total of 251 parking spaces are provided. Ballwin's City Code Article XV, Section 1, requires one and a half parking spaces for each dwelling unit in a multi-family building and one parking space for each 200 SF of floor area for a retail store or personal service establishment, such as the small commercial spaces proposed. Thus, Ballwin's City Code requires 300 parking spaces for the 200-unit multifamily apartment building and 23 parking spaces for the small commercial spaces, resulting in a total required parking of 323 parking spaces. As proposed, the proposed site plan does not satisfy the City's parking requirements.

It is recommended that consideration be given to an internal pathways/sidewalk system to allow pedestrian mobility throughout the site and to Vlasia Park. As shown on the provided plan, a new sidewalk would be constructed along the south side of Andrews Parkway. Wherever necessary, continental crosswalks within the parking field, coupled with pedestrian signage, should be encouraged. Additionally, it is recommended to stripe continental crosswalks at the Andrews Parkway/Kehrs Mill Road intersections with North Elm Street and Paulding Drive to accommodate pedestrians. Lastly, consideration should be given to providing a midblock pedestrian crossing of Andrews Parkway/Kehrs Mill Road in the vicinity of the development to facilitate foot traffic between the residences and the park. The exact location for the midblock crossing should be investigated to ensure that adequate sight distance is provided along the roadway.

Forecasted Conditions

The forecasted scenario represents baseline conditions with the full build out of the proposed development in place. The baseline traffic volumes depicted in **Figure 4** were combined with the site generated traffic volumes reflected in **Figure 6** resulting in the forecasted traffic volumes illustrated in **Figure 7**. These forecasted traffic volumes were the basis of the forecasted conditions analysis.

The forecasted operating conditions at the study intersections and proposed access driveways were analyzed based upon the forecasted traffic volumes illustrated in **Figure 7**. The same methodology applied to the baseline conditions was again applied to the forecasted volumes in an effort to determine the adequacy of the road network to accommodate traffic generated by the proposed development and identify any further mitigation measures that may be necessary. Given Manchester Road operates with a signal coordination plan, signal timings were not modified to accommodate the proposed development as any changes would impact traffic flow along the entire corridor. The forecasted operating conditions are summarized in **Table 5**.

As shown, the proposed development has minimal impact on the overall operations at the signalized intersection of Manchester Road and Ries Road/Seven Trails Drive. The overall LOS would be unchanged due to the development's traffic. However, the southbound approach would experience a 7.8 and 4.3 second increase in vehicular delay in the morning and afternoon peak hours, respectively. As stated previously, this approach is currently operating at LOS E, but maintains available capacity. While the motorists along Seven Trails Drive experience longer delays, 95th percentile queues and volume to capacity ratios remain minimal and are accommodated within the existing turn lanes.

The proposed development would add a total of 31 and 24 new trips to the southbound approach in the morning and afternoon peak hours, respectively, which equates to roughly one new vehicle for each cycle of the signal. Given the minimal increase in vehicular delay, mitigation is not required.

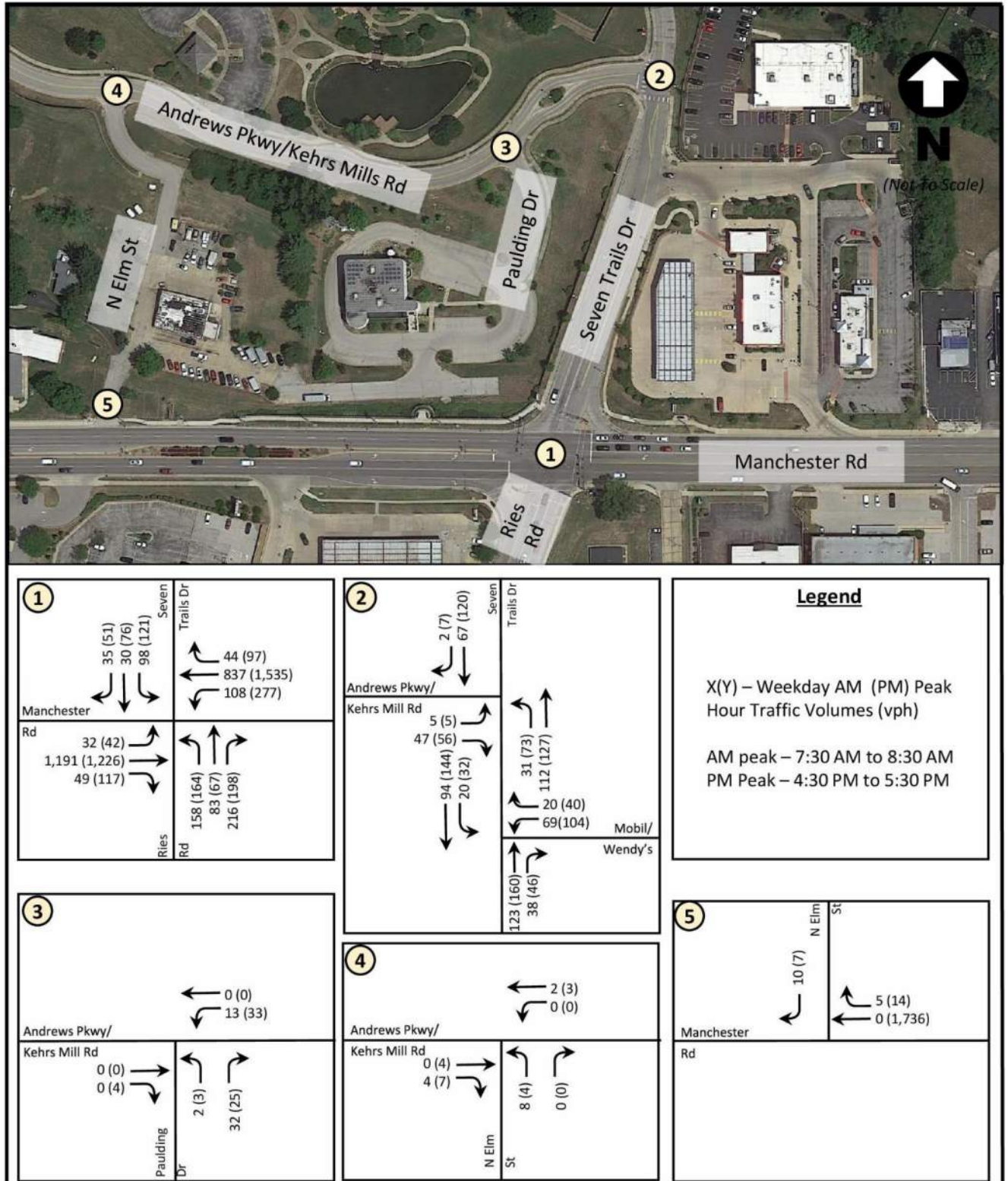


Figure 7. Forecasted Traffic Volumes

Table 5. Forecasted Operating Conditions				
Intersection/ Approach	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Vehicle LOS (Delay)	95 th Queue (ft)	Vehicle LOS (Delay)	95 th Queue (ft)
<i>Manchester Road and Ries Road/ Seven Trails Drive (Signalized)</i>				
Overall Intersection	C (30.2)		D (45.5)	
Eastbound Approach	C (26.1)	623	D (43.1)	#893
Westbound Approach	C (20.8)	390	D (42.6)	#1133
Northbound Approach	D (45.5)	188	D (46.8)	187
Southbound Approach	E (67.8)	121	E (77.0)	#192
<i>Seven Trails Drive and Mobil/ Wendy's Entrance (Side-street, stop-controlled)</i>				
Overall Intersection	A (3.0)		A (3.9)	
Westbound Approach	B (10.8)	< 25	B (12.7)	<25
Southbound Left-Turn	A (7.6)	<25	A (7.7)	<25
<i>Seven Trails Drive and Andrews Parkway/Kehrs Mill Road (Side-street, stop-controlled)</i>				
Overall Intersection	A (2.6)		A (2.9)	
Eastbound Approach	A (9.0)	<25	A (9.5)	<25
Northbound Left-Turn	A (7.4)	<25	A (7.6)	<25
<i>Andrews Parkway/Kehrs Mill Road and Paulding Drive (Side-street, stop-controlled)</i>				
Overall Intersection	A (4.5)		A (3.3)	
Westbound Left-Turn	A (7.3)	<25	A (7.4)	<25
Northbound Approach	A (8.6)	<25	A (8.7)	<25
<i>Andrews Parkway/Kehrs Mill Road and North Elm Street (Side-street, stop-controlled)</i>				
Overall Intersection	A (1.3)		A (0.4)	
Westbound Left-Turn	A (0.0)	<25	A (0.0)	<25
Northbound Approach	A (8.8)	<25	A (9.0)	<25
<i>Manchester Road and North Elm Street (Side-street, stop-controlled)</i>				
Overall Intersection	A (0.1)		A (0.0)	
Southbound Right-Turn	B (12.8)	<25	C (19.3)	<25

Delay presented in seconds per vehicle

95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles

Overall, the proposed development has minimal impact on the traffic operations for the eastbound, westbound and northbound approaches at Manchester Road and Ries Road/Seven Trails Drive. The LOS and associated delays and queues are relatively unaffected by the development's additional traffic. The eastbound, westbound, and northbound approaches would continue to experience the same LOS during both peak periods, comparable to the baseline conditions except for the westbound approach in the morning peak hour which would increase 1.8 seconds to LOS C.

It is also acknowledged that the westbound thru movement along Manchester Road at Ries Road/Seven Trails Drive currently experiences an extensive 95th percentile queue, which would increase by 37 feet (less than 2 car lengths) due to the proposed development. As stated previously, due to the traffic signal coordination plan along Manchester Road, platoons of arriving vehicles from the adjacent east and west intersections (Manchester Road & Maple Lane and Manchester Road & Ballpark Drive) arrive at the back of the eastbound and westbound Manchester Road and Ries Road/Seven Trails Drive queues just as the mainline signals turn green, creating a "rolling queue", whose length is presented as the max queue in **Table 5**. However, the duration for which the max queue is maintained is relatively brief since the

vehicles at the front of the queue are already beginning to proceed through the signal when the vehicles from the adjacent signals arrive.

The side-street, stop-controlled intersection at Seven Trails Drive and Mobil/Wendy's access and at Andrews Parkway/Kerhs Mill Road both would operate favorably during the peak hours. Minimal queues and optimal LOS are anticipated in the post development condition. Similarly, the side-street, stop-controlled intersections of Andrews Parkway/Kerhs Mill Road with Paulding Drive and North Elm Street both operate favorably during both peak hours. Minimal queues and optimal LOS are anticipated in the post development condition. Lastly, the right-in-right-out access drive along Manchester Road at North Elm Street would function at a LOS B in the morning peak hour and LOS C during the afternoon peak hour. Additionally, 95th percentile queues remain minimal, thus not having any spillover impact on internal site circulation within the site.

In summary, it can be concluded that the traffic generated by the proposed development could be accommodated reasonably. No recommendations for improvement or other mitigation measures are required along the study area roadways or intersections.

Conclusions

Lochmueller Group has completed the preceding traffic impact study for the proposed Park Place at Vlasius development in Ballwin, Missouri. The site is located in the northwest quadrant of Manchester Road (Missouri Route 100) and Ries Road/Seven Trails Drive. Access is proposed via an existing right-in right-out entrance on Manchester Road and two existing full access drives along Andrews Parkway/Kehrs Mill Road.

The intent of this study was to identify the traffic generation associated with the proposed development, analyze the traffic impacts associated with the proposed development, and determine the need for mitigation measures, if necessary, to offset those impacts to Manchester Road, Ries Road, Seven Trails Drive, Andrews Parkway/Kehrs Mill Road, Paulding Drive, and North Elm Street. Based upon the analysis outlined in this report, the following conclusions were reached:

- The signalized intersection at Manchester Road at Ries Road/Seven Trails Drive currently functions at acceptable levels during both peak hours with the exception of the southbound approach on Seven Trails Drive. The southbound approach currently operates at LOS E in the morning and afternoon peak hours. However, the volume to capacity ratio for a southbound movement is 0.53 in the morning and 0.71 in the afternoon, respectively, meaning the approach operates with available capacity. The delay for the southbound approach is largely attributable to the signal's lengthy cycle length.
- While the motorists along Seven Trails Drive currently experience longer delays, the peak queues remain reasonable and are accommodated within the existing designated turn lanes.

- The existing peak northbound queues along Ries Road do, on occasion, block the access drive to the QuikTrip gas station located in the southwest quadrant of the intersection of Manchester Road and Ries Road/Seven Trails Drive.
- The proposed development would generate a total of approximately 76 and 106 trips during the weekday morning and afternoon peak hours, respectively, once fully developed. However, a portion of the trips would be internally captured within the site since the retail uses would be oriented heavily towards serving the residences. Consequently, a total of 74 **new** trips would be attracted to the site during the weekday AM peak hour and 97 **new** trips during the weekday PM peak hour.
- Post development, it is recommended that the existing uncontrolled access drives along Andrews Parkway/Kehrs Mill Road at Paulding Drive and at North Elm Street be placed under STOP control (side-street only) to ensure safe operating conditions.
- As proposed, the development provides 240 parking spaces for the apartment building and 11 parking spaces for the small retail buildings. It is acknowledged the proposed number of parking spaces does not satisfy Ballwin's City Code Article XV, Section 1, which requires a minimum of 300 parking spaces for the apartments and 23 parking spaces for the small retail buildings.
- It is recommended that consideration be given to an internal pathways/sidewalk system to allow pedestrian mobility throughout the site. Wherever necessary, continental crosswalks within the parking field, coupled with pedestrian signage, should be encouraged.
- It is recommended that continental crosswalks be striped across the existing access drives Andrews Parkway/Kehrs Mill Road and Paulding Drive and at Andrews Parkway/Kehrs Mill Road and North Elm Street, to accommodate residents of the apartment building accessing the adjacent Vlasik Park.
- Consideration should be given to providing a midblock pedestrian crossing of Andrews Parkway/Kehrs Mill Road in the vicinity of the development to facilitate foot traffic between the residences and the park. The exact location for the midblock crossing should be investigated to ensure that adequate sight distance is provided along the roadway.
- The additional traffic generated by the proposed development would have minimal impact on the overall operations at the signalized intersection of Manchester Road and Ries Road/Seven Trails Drive. The overall LOS would be unchanged due to the development's traffic. The westbound approach of Manchester Road to the intersection would decline from a LOS B to LOS C during the weekday morning peak hour, however the approach maintains acceptable operations. The southbound approach of Seven Trails Drive to the intersection would maintain a LOS E despite the development trips, which would add a total of 31 new trips to the southbound approach in the morning peak hour and 24 new trips to the southbound approach in the afternoon peak hour, which equates to roughly one new vehicle for each cycle of the signal.

- Given the minimal additional traffic, no mitigation is recommended to the signalized intersection of Manchester Road with Ries Road/Seven Trails Drive.
- The side-street, stop-controlled intersections at Andrews Parkway/Kerhs Mill Road with Paulding Drive and North Elm Street would operate favorably during both peak hours following construction of the proposed development. Minimal queues and optimal LOS are anticipated in the post development condition.
- The right-in-right-out access drive along Manchester Road functions with LOS B and LOS C during the morning and afternoon peak hour, respectively, and the anticipated queues are not expected to have any spillover impact on internal site circulation.

This traffic study adequately describes the forecasted traffic conditions that should be expected as a consequence of the Park Place at Vlasits proposed development. Please contact our office at (314) 446-3791 if you have any questions or comments concerning this report.

Completed by Lochmueller Group, Inc.