

CITY OF WELDON SPRING
PLANNING & ZONING COMMISSION
ON MONDAY, NOVEMBER 4, 2024, AT 7:30 P.M.
WELDON SPRING CITY HALL
5401 INDEPENDENCE ROAD
WELDON SPRING, MISSOURI 63304

\*\*\*\*Tentative Agenda\*\*\*\*

\*\*\*\*Amended on 10/28/24\*\*\*\*

A NOTICE IS HEREBY GIVEN that the Planning & Zoning Commission will hold a meeting at 7:30 PM on November 4, 2024, at 5401 Independence Road Weldon Spring, Missouri, 63304, with the following tentative agenda:

- 1. CALL TO ORDER
- 2. ROLL CALL
- 3. PLEDGE OF ALLEGIANCE
- 4. APPROVAL OF MINUTES:
  - A. August 5, 2024 Planning & Zoning Regular Meeting Minutes
- 5. VISITOR'S/PUBLIC COMMENT
- 6. REPORT OF THE BOARD OF ALDERMEN
- 7. PRESENTATION:
  - A. 450 Technology Drive Conditional Use Permit & Site Plan Mark Branstetter (Panattoni Development Company) & Steve Quigley (The Clayton Engineering Company)
- 8. PUBLIC HEARING:
  - A. Conditional Use Permit (CUP-2024-01) filed by Steve Quigley of "The Clayton Engineering Company," (applicant) for Forty Nine Fifty, LLC, (owner) for the purpose of allowing a "light industrial use" (Flex Office/Warehouse) at 450 Technology Drive.
- 9. NEW BUSINESS:
  - A. Request for Conditional Use Permit (CUP-2024-01) 450 Technology Drive (Discussion/Recommendations)
  - B. Major Site Plan for Weldon Spring Pointe 450 Technology Drive (Discussion/Recommendations)

10. ADJOURNMENT

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#### CITY OF WELDON SPRING PLANNING AND ZONING COMMISSION AUGUST 5, 2024

CALL TO ORDER: The regular meeting of the Planning and Zoning Commission of the City of Weldon Spring was held on Monday, August 5, 2024, at approximately 7:30 PM. The meeting was held at the Weldon Spring City Hall at 5401 Independence Road. The meeting was called to order by Chairman Szilasi.

ROLL CALL: The following Planning and Zoning members were present:

Commissioner Busching

Mayor Licklider

Commissioner Marstall

Alderman Martiszus

Commissioner Reiter

Commissioner Wagner

Chairman Szilasi

Commissioner Castrop, Commissioner Eash, Commissioner Foster, and Commissioner Heyl were absent. A quorum is present.

Also, present were Bill Hanks (City Clerk) and Steve Lauer (City Planner).

PLEDGE OF ALLEGIANCE: The Pledge of Allegiance was recited.

APPROVAL OF MINUTES: Mayor Licklider made a motion to approve the July 1, 2024, Planning & Zoning Commission meeting minutes, with one typographical error, seconded by Commissioner Wagner. The motion carried with 7 ayes.

#### VISTOR'S/PUBLIC COMMENT:

There were no Visitor's/Public Comments at this time.

#### **BOARD REPORT:**

There was no Board Report.

#### **PUBLIC HEARING:**

Consideration of a Zoning Change Application (RZ-2024-01) filed by Chris DeGuentz, from Fischer & Frichtel Custom Homes, LLC, (applicant) for BPD CO. I, LLC, (owner) to change the present zoning from "AG" Agricultural District to "RS-1/2" Single-Family Residential District at 6101 Ozark Way: Commissioner Szilasi opened the public hearing at 7:32 PM.

• Karen Sample, 5866 Hidden Creek Drive: She had a question about the sanitary sewer connection and voiced her concern about the removal of the trees.

Before anymore comments, Chairman Szilasi gave an opportunity to Chris DeGuentz, from Fischer & Frichter, to present all the changes to proposed Persimmon Trace development to the Commission and the public

Mr. DeGuentz gave a short presentation. The major changes to the proposed development include changing the development's concept from villas to single-family residences, reducing the number of lots from 19 to 13, changing the zoning request from Planned Residential (PR) to RS-½ Single-Family Residential, and eliminating all the front entry garages.

• Darrell Bengfort, 991 O'Fallon Road: He voiced concern about the sidewalk improvements on Ozark Way would cause possible drainage issues on his property.

Mr. Lauer (City Planner) stated that sidewalk was associated with the villas concept, and the improvement would only be an interior sidewalk with the first initial concept of the proposed development

- Dustin Roberts, 5862 Hidden Creek Drive: He stated that this proposed development does not align with the City's 2015 Comprehensive Plan because this development would not preserve the nature areas.
- Janet Kolb, 300 Wolfrum Road: She stated that the City of Weldon Spring was incorporated because the residents prefer larger lot size and wanted to preserve green spaces.
- Rich Wahler, 101 Osage Way: He wants to see larger lot sizes.
- Chad Crownover, 201 Ozark Meadow Drive: He voiced concern about visibility on the offsets of the entrance points.
- Jason Hitt, 100 Osage Way: He would rather see one acre lots over 1/2 acre lot
- Tim Baker, 124 Osage Way: He wants to see trees planted on Ozark Way to act as a type of barrier from the additional traffic lights for the neighbors.

Commissioner Szilasi closed the public hearing at 8:00 PM.

Conditional Use Permit (CUP-2024-01) filed by Steve Quigley of "The Clayton Engineering Company," (applicant) for Forty Nine Fifty, LLC, (owner) for the purpose of allowing a "light industrial use" (warehouse) at 450 Technology Drive: Commissioner Szilasi opened the public hearing at 8:00 PM.

• Vonnie Shepherd, 2 Wycliffe Court: She voiced several concerns, such as a lack of the building's renderings, retention pond issues, building's height, and traffic issues on Meadows Parkway.

Keith Fryer, from the Clayton Engineering Company, answered many of the concerns brought up by Mrs. Shepherd. He stated the proposed building is approximately 100,000 square feet in size, the height of the building is 40 feet, and the plan is to eliminate the lake on the property. He added that this is only a concept because this is a build to suit option that currently does not have a user and the building would not be built until an user is found. Furthermore, the use would not require any change in zoning and the access point would be on Technology Drive.

Commissioner Szilasi closed the public hearing at 8:20 PM.

#### **NEW BUSINESS:**

Request for a Zoning Change from (AG) Agricultural District to (RS-1/2) Residential ½ Acre District (RZ-2024-01) and the Major Preliminary Plat for Persimmon Trace for 6101 Ozark Way: Mr. Lauer (City Planner) briefly summarized both staff reports, which were in the Planning & Zoning Meeting Packet, and stated that the Preliminary Plat met all the municipal code. Chairman Szilasi added that the developer already made significant changes from all the feedback that was gathered at the Conceptual/Sketch Plan Review meeting on April 16, 2024.

Commissioner Reiter asked if the City would be setting a precedence with this zoning request change approval because the Persimmon Golf Course property is zoned RS-1 (one acre) Single-Family Residential. Chairman Szilasi stated that the Commission cannot act on any hypothetical situations because the golf course is a separate issue. Mr. Lauer added that Persimmon Golf Course recently extended their lease.

Chairman Szilasi asked about the starting prices for the houses within the proposed development. Mr. DeGuentz stated that the starting base price would be approximately \$800,000 with the average sale price between \$1.3 to \$1.4 million.

Mr. DeGuentz stated that the zoning of the two adjacent subdivisions is zoned ½ acres. There was a brief discussion about zoning districts and a tree plan.

Mayor Licklider made a motion to recommend the rezoning for 6101 Ozark Way from (AG) Agricultural District to (RS-1/2) Residential ½ Acre District, seconded by Commissioner Busching. On a roll call vote, the motion carried with 6 ayes. Commissioner Reiter voted no.

Commissioner Wagner made a motion to approve the Preliminary Plat for Persimmon Trace at 6101 Ozark Way, seconded by Commissioner Reiter. On a roll call vote, the **motion carried** with 7 ayes.

Request for Conditional Use Permit (CUP-2024-01) for the purpose of allowing a "light industrial use" (warehouse) at 450 Technology Drive: Mr. Lauer (City Planner) briefly summarized the staff report for the CUP request, which was in the Planning & Zoning Meeting Packet. Chairman Szilasi and Alderman Martiszus raised concerns about the truck traffic, Meadows Parkway, and the appearance of a warehouse at 450 Technology Drive. A lengthy discussion about the unknown factors took place.

Commissioner Marstall made a motion to recommend approval of the Conditional Use Permit (CUP), which was filed by Steve Quigley of "The Clayton Engineering Company," (applicant) for Forty Nine Fifty, LLC, (owner), for the purpose of allowing a "light industrial use" (warehouse) at 450 Technology Drive. The motion was seconded by Mayor Licklider. On a roll call vote, the **motion failed** with 7 noes.

With the recommendation of denial for the Conditional Use Permit (CUP), the major site plan for Weldon Spring Pointe at 450 Technology Drive is dead on the table.

#### ADJOURNMENT:

Alderman Martiszus made a motion to adjourn the meeting at 9:00 PM, seconded by Major Licklider. The motion carried with 7 ayes.

Respectfully submitted,

William C. Hanks City Clerk









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COLOR OFTION 1







09/24/24

COLDR OPTION 2

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Technology Drive & Meadows Parkway, Weldon Spring, Missouri









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INTERSTATE VIEW - LOOKING NORTH









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FRONT PERSPECTIVE -LOCKING NORTHWEST









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FRONT PERSPECTIVE -LOOKING SOUTHEAST



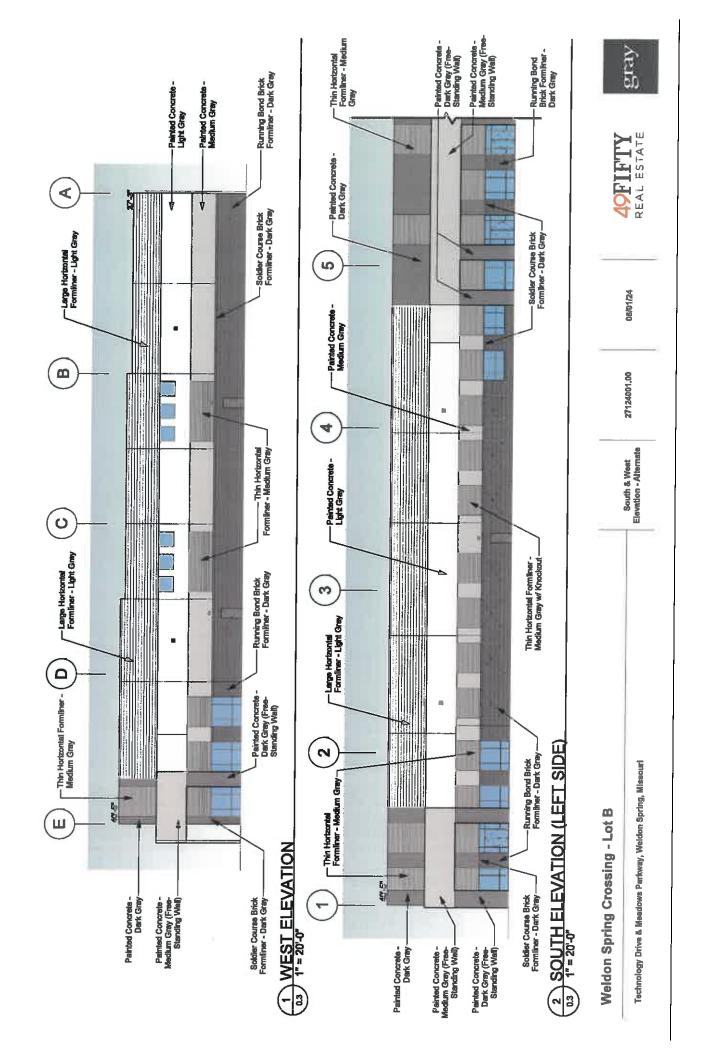


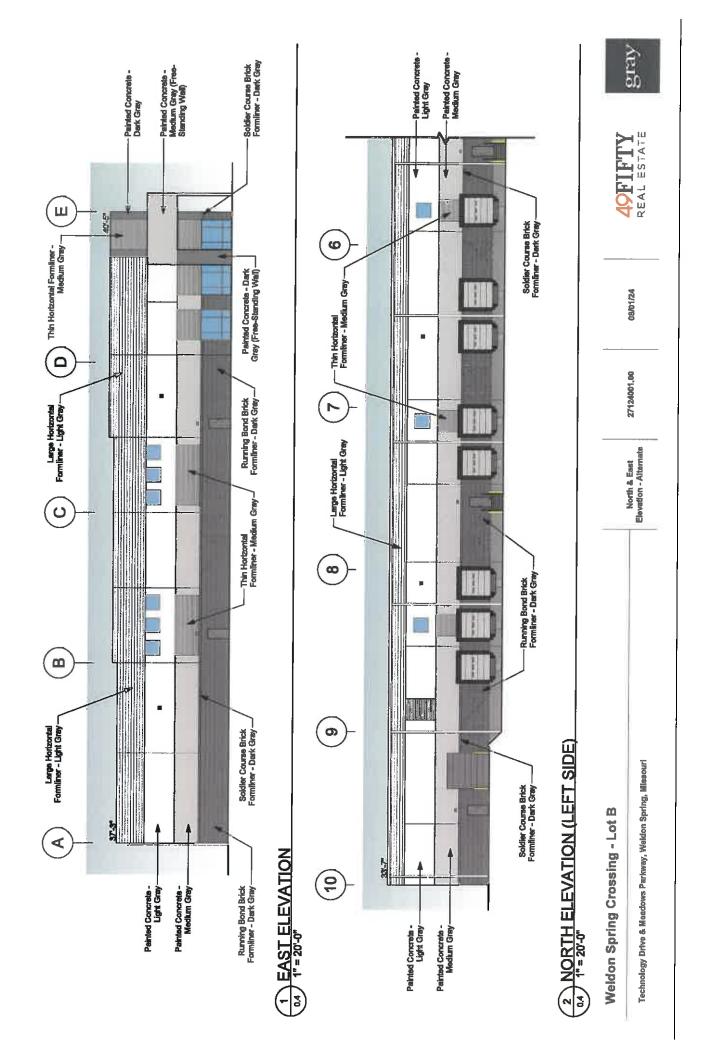


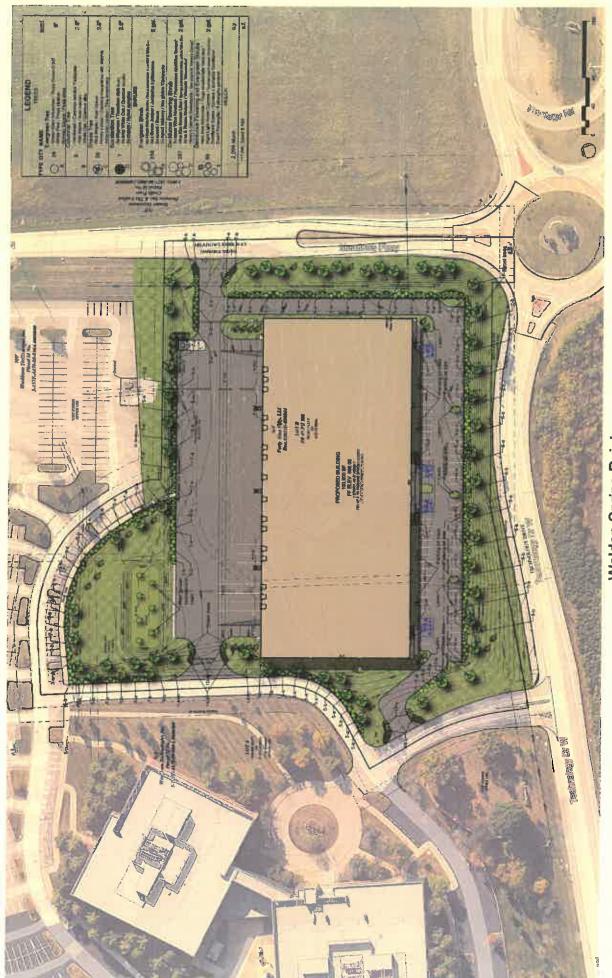


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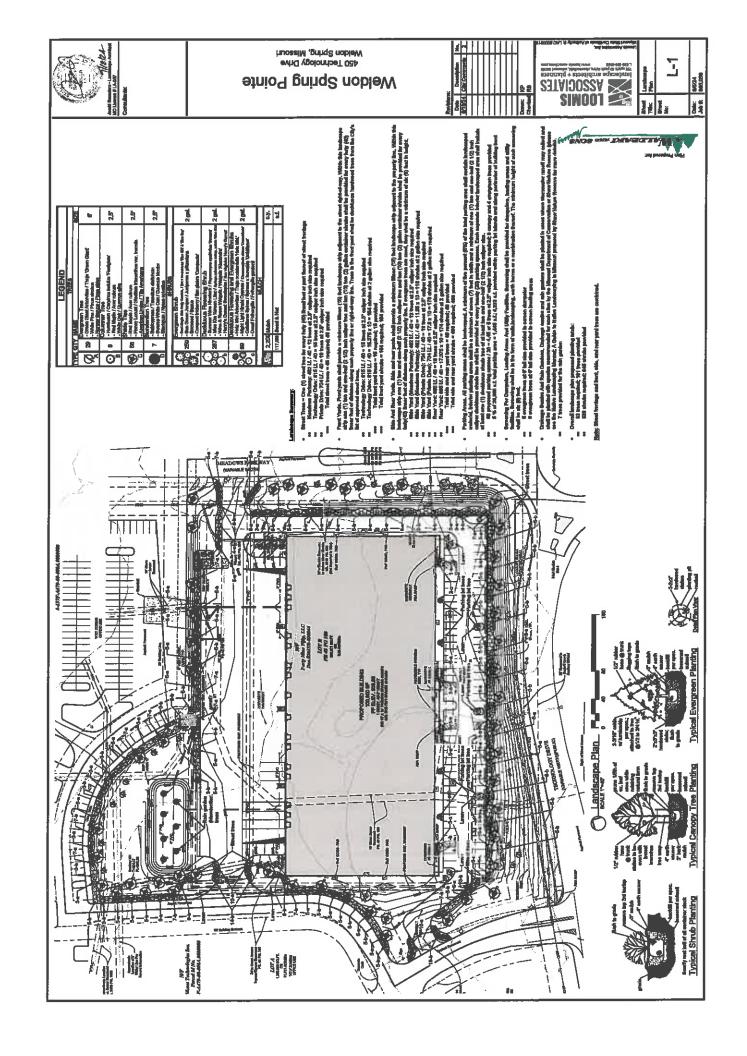
REAR PERSPECTIVE -LOOKING WEST

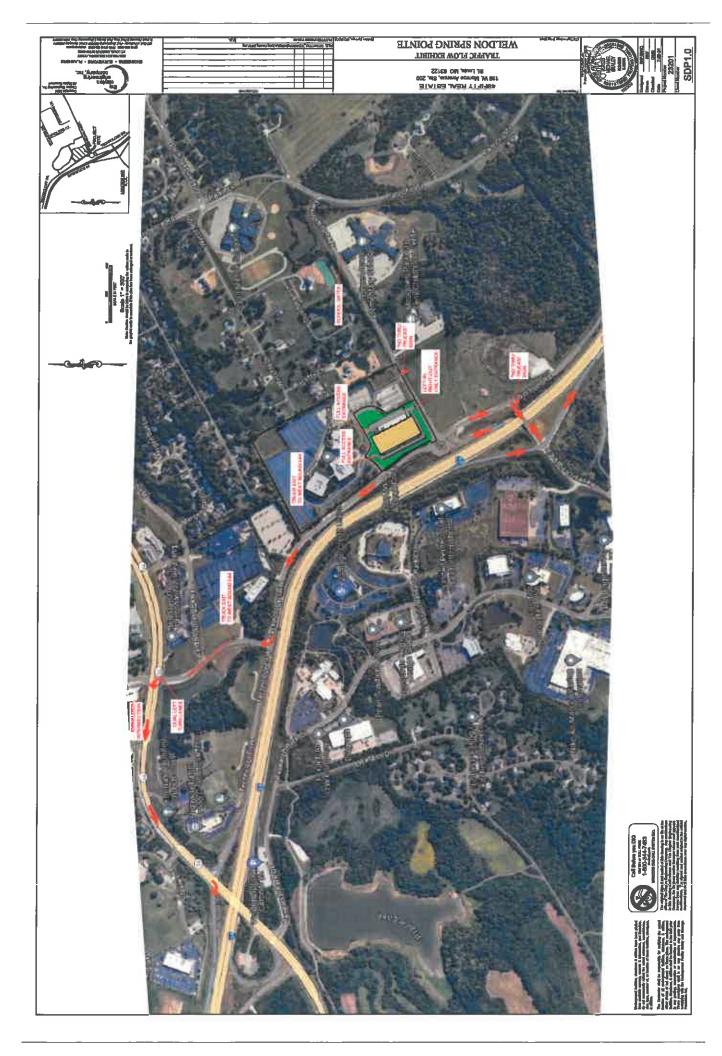


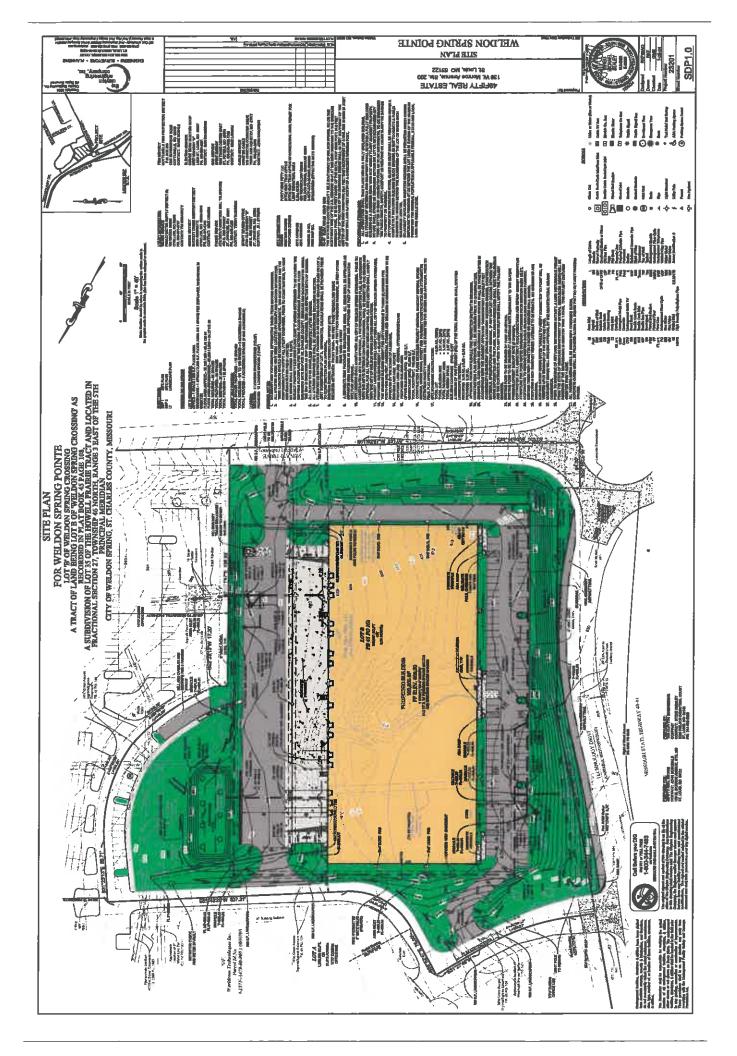


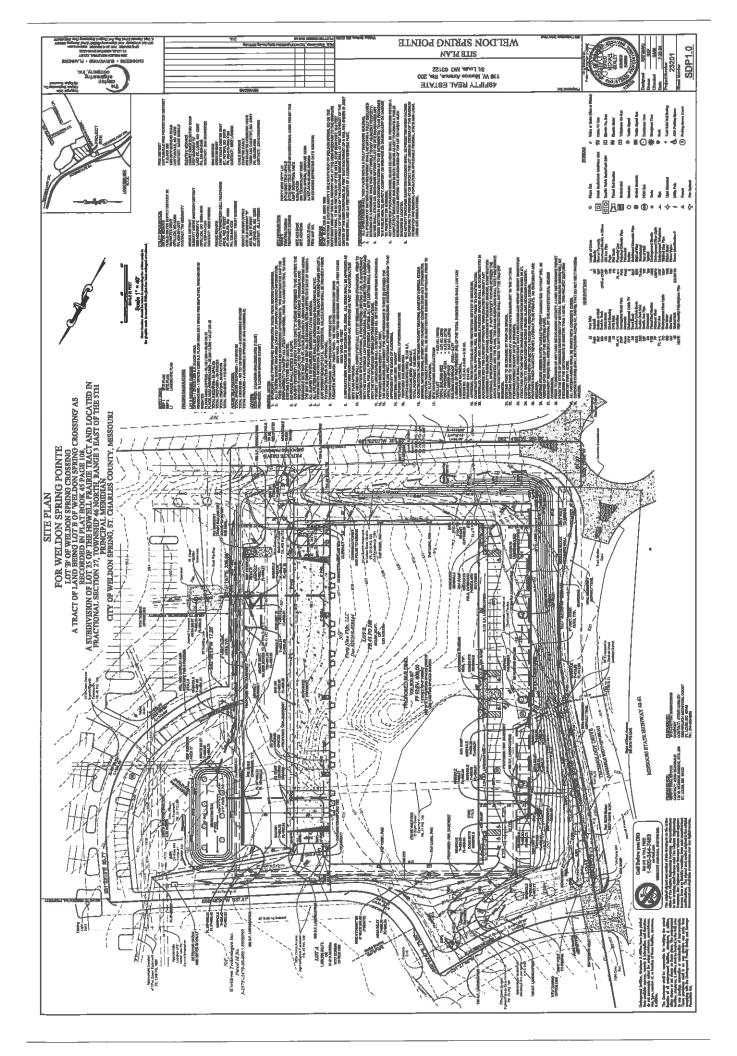


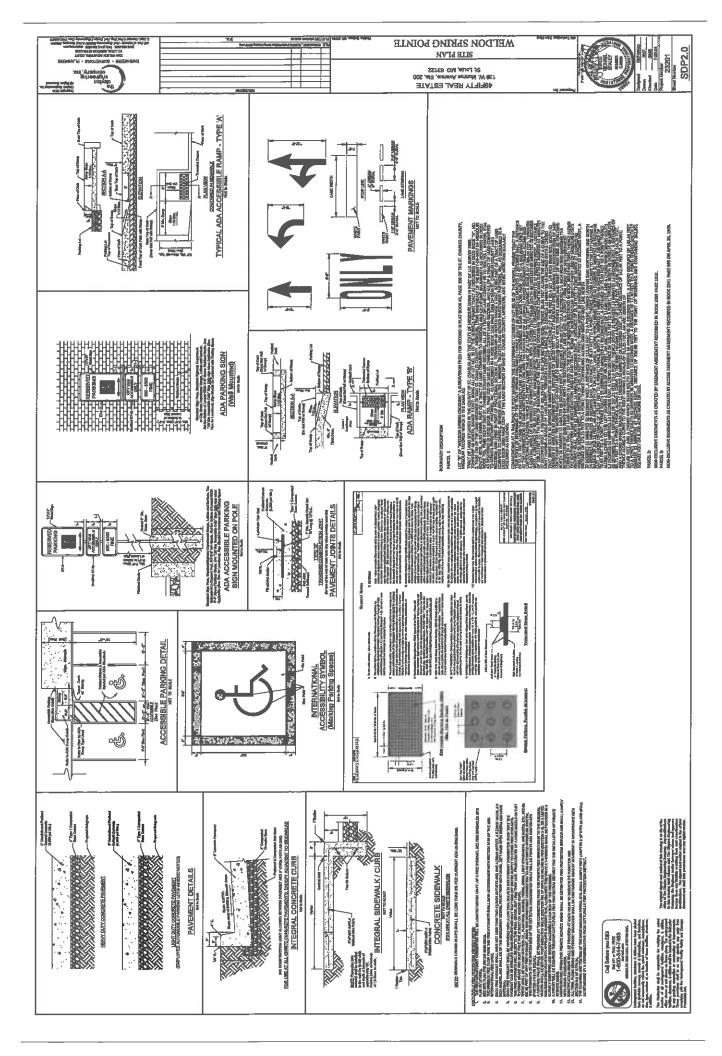
Weldon Spring Pointe
450 Technology Drive
Weldon Spring, Missouri











### MAY 15, 2024

## Weldon Spring Crossing: Development on Lot B Traffic Impact Study

#### Prepared for:

49Fifty Real Estate 139 W. Monroe Avenue, Suite 200 Kirkwood, Missouri 63122 314-802-1187

#### Prepared by:

Lochmueller Group 411 N. 10th Street, Suite 200 St. Louis, MO 63101 314.621.3395



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#### Introduction

Lochmueller Group has completed a traffic study pertaining to a proposed development in Weldon Spring, Missouri. This traffic study is intended to analyze the impact of the proposed development, which consists of a 100,800 SF building on Lot B of Weldon Spring Crossing, which would be comprised of both office and warehouse uses.

Figure 1 depicts the location of the proposed development. Access is to be provided, as shown in the concept plan illustrated in Figure 2, via three full access drives: one onto Meadows Parkway and two others from the internal access drives serving Weldon Spring Crossing. Direct access to Technology Drive West is not proposed.

The intent of this traffic study is to identify the traffic generation associated with the proposed development, analyze the traffic impacts associated with the development, and determine modifications to the supporting road system, if necessary.



Figure 1. Proposed Development Site Area

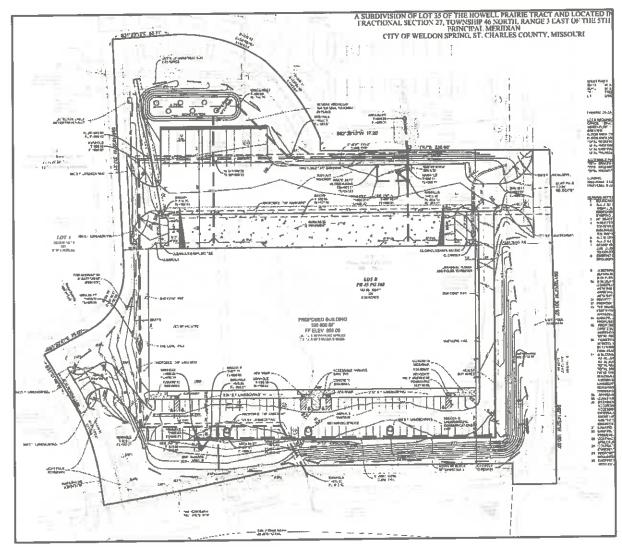


Figure 2: Proposed Concept Plan (Provided by Others)

#### **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.

#### Baseline 2024 Roadway Network

Given the intended uses and the surrounding area, traffic data was collected during the weekday morning (7:00 AM to 9:00 AM) and weekday evening (4:00 PM to 6:00 PM) peak periods. The following intersections are to be included in the study:

- Internal Intersection of Weldon Spring Crossing access drives adjacent to Lot B (unsignalized)
- Technology Drive W & the access Drive to Weldon Spring Crossing (unsignalized)
- Technology Drive W & Meadows Parkway (roundabout)

<u>Technology Drive</u> is functionally classified as a major collector with a posted speed limit of 35 miles per hour (mph) and one iane in each direction. For the purposes of this study, Technology Drive runs eastwest within the study area since it is essentially the outer road to adjacent I-64. The road intersects Meadows Parkway in a single lane roundabout intersection, where Technology Drive is the west leg, Meadows Parkway is the north leg, Technology Drive/Wolfrum Road is the east leg, and the I-64 Westbound Off-Ramp is the southeast leg.

Within the study area, Technology Drive is intersected by the access drive serving the Weldon Spring Crossing development in a T-intersection, where the access road is stop-controlled and Technology Drive flows freely. Southeast of the study area, Technology Drive provides access to I-64 Eastbound On and Off-Ramps at Research Park Circle. Northwest of the study area, Technology Drive connects to Highway 94 via Siedentop Road, which then provides access to both Eastbound and Westbound I-64.

Meadows Parkway is functionally classified as a major collector with a posted speed limit of 20 mph. The road has one lane in each direction. It provides access Weldon Spring Crossing development as well as to Independence Elementary School and Meadows Parkway Early Childhood Center. The road is privately owned, with the adjacent property owners each owning half of the roadway for the first 950 feet back from Technology Drive. Beyond that, the roadway is owned and maintained by the Francis Howell School District until its termini at Patriotic Trail. The School District closes the roadway to through traffic via gates between 9:30 AM and 3:30 PM Monday through Friday. Note, this closure is outside of the peak traffic hours of the day, and therefore, does not impact the analysis within this report.

The <u>access drive</u> to Weldon Spring Crossing is a private driveway along Technology Drive that serves the Weldon Spring Crossing development. As mentioned previously, it intersects Technology Drive in a T-intersection, with stop control for those exiting via the access drive. At this intersection the access drive, serving as the southbound approach, has dedicated left-turn and right-turn lanes. Technology Drive has an eastbound left-turn lane with 415' of storage, and no other dedicated turn lanes.

The access drive intersects a loop road within the Weldon Spring Crossing complex at an internal intersection with side-street stop-control. The side street in this intersection is the loop road.

**Figure 3** illustrates the existing lane configurations and traffic control at the intersections included in the study. For purposes of this analysis, Technology Drive was considered to run east-west and Meadows Parkway runs north-south.

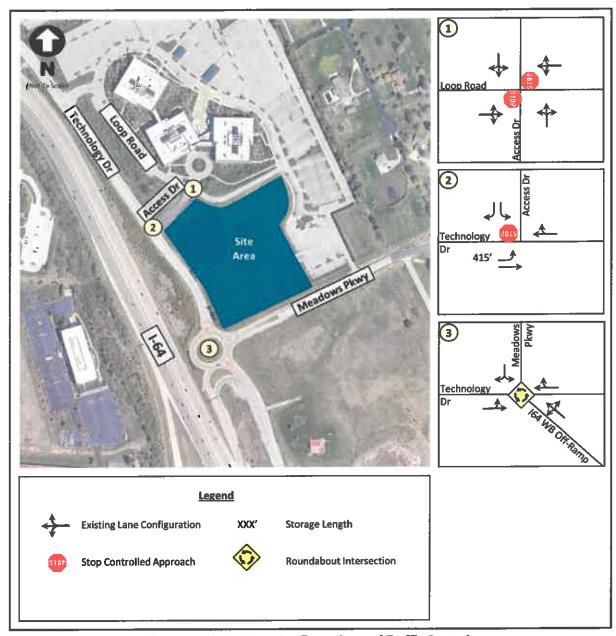


Figure 3. Existing Lane Configuration and Traffic Control

#### Crash History

A safety analysis of the study area was performed using the most recent five years of available crash data from MoDOT, which corresponded to 2018 through the end of 2022. A total of nine crashes occurred in the study area over that period. Five crashes, or 55% of crashes, resulted in property damage only. Three crashes, or 33%, resulted in minor injury. One crash resulted in suspected serious injury. No fatalities occurred within the study area during the years analyzed. A crash dashboard depicting all crashes within the study area and analyzed years is shown in Figure 4. The dashboard includes a map showing the locations of crashes by type (color) and severity (size).

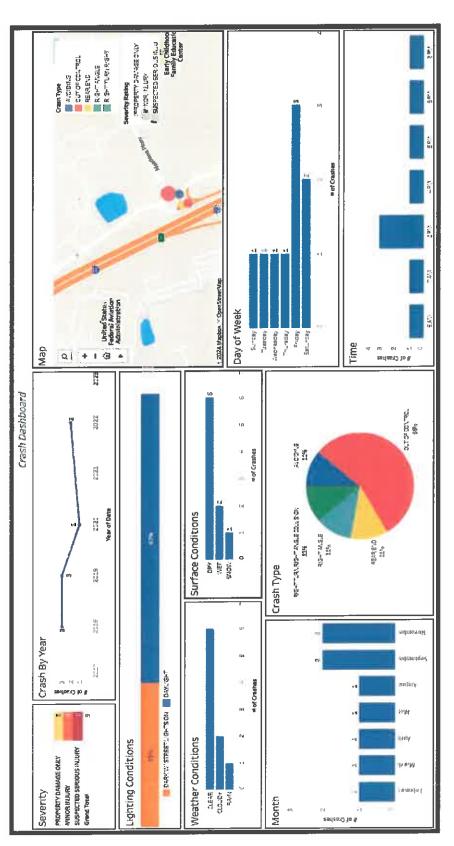


Figure 4. Crash Dashboard (2018-2022)

Eight out of the nine crashes occurred at the roundabout intersection, including all crashes resulting in injury. The most common crash type was classified as out-of-control, with five crashes of this type. One crash of each of the following also occurred: right turn right angle, right angle, avoiding, and rear end. The crash resulting in suspected serious injury was an out-of-control crash occurring in the roundabout.

#### Baseline 2024 Traffic Volumes

Traffic counts were collected on March 13, 2024, while school was in session and weather conditions were favorable. Based upon review of the data, it was determined that the peak hours of traffic flow along the area roadways were from 7:45 AM to 8:45 AM for the weekday AM peak hour and from 4:00 PM to 5:00 PM for the weekday PM peak hour. It should be noted that the gates on Meadows Parkway should have been open to traffic at this time. The 2024 Baseline Traffic Volumes are shown below in Figure 5.

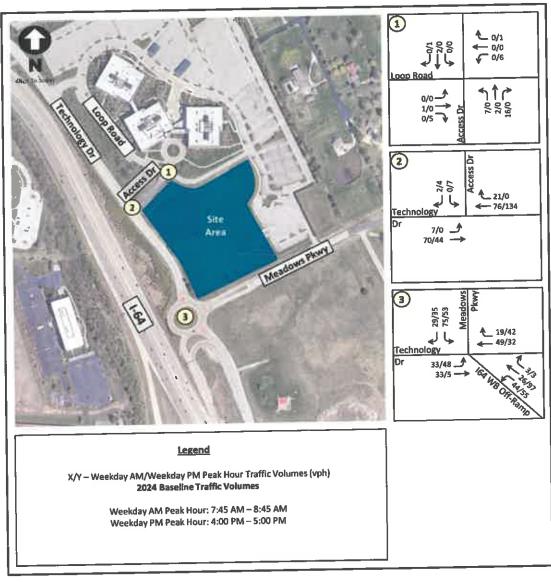


Figure 5. 2024 Baseline Traffic Volume

#### **Baseline 2024 Operating Conditions**

The baseline traffic operating conditions at the critical study intersections were evaluated based upon the traffic volumes presented in Figure 5. The analysis was completed using Synchro 11 traffic modeling software, which is based upon the methodologies outlined in the "Highway Capacity Manual" (HCM) published by the Transportation Research Board as well as SIDRA 9.1, calibrated using MoDOT's Engineering Policy Guide.

Intersection performance or traffic operations are quantified by six Levels of Service (LOS), which range from LOS A ("Free Flow") to LOS F ("Fully Saturated"). LOS C is normally used for design purposes and represents a roadway with volumes ranging from 70% to 80% of its capacity. LOS E is considered acceptable for peak period conditions in urban areas and would be an appropriate benchmark of acceptable traffic for the study area road system.

Levels of service for intersections are determined based on the average delay experienced by motorists. 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 partial (side-street) stop control, the delay is calculated for the minor movements only (side-street approaches and major road left-turns) since thru traffic on the major road is not required to stop.

**Table 1** summarizes the criterion for both signalized and unsignalized intersections, as defined by the Highway Capacity Manual (HCM) 6th Edition, last updated in 2016 by the Transportation Research Board.

**Table 1. Intersection Level of Service Thresholds** 

V V 05 (6)	Control Delay per Vehicle (sec/veh)				
Level of Service	Signalized	Unsignalized			
A	≤ 10	0-10			
В	> 10-20	> 10-15			
С	> 20-35	> 15-25			
D	> 35-55	> 25-35			
E	> 55-80	> 35-50			
F	> 80	> 50			

Operating conditions at the study intersections are summarized in **Table 2.** The measures of effectiveness reported include LOS, delay, queue, and volume-to-capacity ratio (v/c). The delay is reported in seconds per vehicle. The queue is reported in ft (ft) as the 95th percentile queue. The v/c ratio compares vehicle demand to the capacity of an associated lane group. A v/c ratio of 1.0 represents a road segment that is at full capacity.

**Table 2. Year 2024 Baseline Traffic Operating Conditions** 

Table 1. Test 2027 Beschite Traine Operating Continues							
Intersection & Movements	LOS (Delay, sec) [Queue Length, feet] <v c="" ratio=""></v>						
intersection at Woverneits	AM Peak Hour	PM Peak Hour					
1) Loop Rd & Access Dr (unsignalized	)						
Eastbound	A (9.4) [<25] <0.01>	A (0) [<25] <0.00>					
Westbound	A (0) [<25] <0.00>	A (0) [<25] <0.00>					
Northbound	A (7.2) [<25] <0.01>	A (0) [<25] <0.00>					
Southbound	A (0) [<25] <0.00>	A (0) [<25] <0.00>					
2) Technology Dr & Access Dr (unsign	nalized)						
Eastbound Left-Turn	A (7.5) [<25] <0.01>	A (0) [<25] <0.00>					
Southbound Left-Turn	A (0) [<25] <0.00>	A (9.7) [<25] <0.02>					
Southbound Right-Turn	A (8.9) [<25] <0.00>	A (9.1) [<25] <0.01>					
3) Technology Dr & Meadows Pkwy	/ I-64 WB Off-Ramp (roundabou	nt)					
Overall Intersection	A (5.6)	A (4.7)					
Eastbound	A (3.0) [<25] <0.06>	A (3.2) [<25] <0.07>					
<b>Westbound</b>	A (5.9) [<25] <0.05>	A (3.1) [<25] <0.04>					
<b>Northbound</b>	A (5.9) [<25] <0.09>	A (5.4) [<25] <0.08>					
Southbound	A (7.3) [<25] <0.06>	A (5.7) [<25] <0.13>					

Delay presented in vehicles per second

As shown, the baseline traffic conditions operate with level of service A for all approaches in both peak hours. The study area intersections carry very low traffic volumes during the peak hours and the study area has a surplus of capacity. Intersection approach results are shown in the table even if they did not carry any traffic volumes, and thus have no associated delay or queue. It can be concluded that the study intersections operate acceptably.

#### **Proposed Development**

The trip generation methodology and calculations, as well as the proposed directional distributions, associated with the proposed development were provided to the City of Weldon Spring and MoDOT for review prior to completion of the forecasted analysis in a Technical Memorandum dated April 9, 2024. Upon review of the provided Technical Memorandum, MoDOT determined that due to the low traffic generation projections, they would no longer be requiring a Traffic Impact Study for their review. The existing access points are, in their opinion, sufficient for the development to move forward. However, approvals from the City of Weldon Spring are independent of MoDOT's review and approval. Therefore, the Traffic Impact Study was prepared for the City's review.

This section summarizes the approved assumptions presented in the Technical Memorandum.

#### **Trip Generation**

In forecasting the proposed use's impacts upon traffic conditions, it is 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.

<sup>\*</sup>Roundabout intersection results from SIDRA software

As previously stated, the Weldon Spring Crossing development consists of a 100,800 SF building. Of which 15,120 SF is planned as office space, and the remaining 85,680 SF as warehouse space. The site-generated traffic volumes for the development were estimated using data provided in the Institute of Transportation Engineers (ITE) <u>Trip Generation Manual</u>, 11<sup>th</sup> Edition utilizing square footage as the determining variable. Land Use 710: General Office Building Land Use was used for the office space while Land Use 150: Warehousing was utilized for the remaining square footage dedicated to warehouse space. While the land use code for warehousing includes office and maintenance areas in addition to warehouse space in a development, it was determined that the office and warehouse space would be calculated separately for a more conservative estimate.

The forecasted trips that would be generated by the proposed development are summarized in **Table 3**. As shown, the proposed development would generate a total of approximately 67 and 72 trips during the weekday morning and evening peak hours, respectively upon completion.

**Table 3. Proposed Trip Generation** 

Land Use	Unit	Unit	Weekday AM Size Peak Hour			Weekday PM Peak Hour		
Land Use			In	Out	Total	ln	Out	Total
General Office Building	SF	15.1	29	4	33	6	29	35
Warehousing	SF	85.6	26	8	34	10	27	37
		Total:	55	12	67	16	56	72

Due to the proposed development's use as a warehouse, the number of trucks generated by the development were also calculated. The estimates were based on the Truck Trip Generation Data Plots provided in the TGM Appendices to the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. In this case, Land Use 150: Warehousing, was again utilized. Throughout the day, per ITE's data, a warehouse would generate about 0.60 truck trips per 1,000 SF of GFA. However, during the peak hours considered in this study, which coincide with the commuter peak hours, truck trip generation is about 0.05 trucks per 1,000 GFA. The forecasted truck percentages that would be generated by the proposed development are summarized in Table 4.

**Table 4. Proposed Truck Generation** 

Land Use	Unit	Size	Weekday AM Peak Hour			Weekday PM Peak Hour		
Land Use			In	Out	Total	ln	Out	Total
Warehousing	SF	85.6	1	1	2	1	2	3

As shown, the proposed warehouse development would generate a total of approximately 2 and 3 truck trips during each the weekday morning and evening peak hours, respectively. The reader is reminded that these trucks are included in the total traffic generation estimates provided in Table 3. Table 4 simply identifies the truck only trip generation numbers.

Access is to be provided to the development via three full access drives: one onto Meadows Parkway and two others from the internal access drives serving Weldon Spring Crossing. Direct access to Technology Drive West is not proposed. The access drives are located as follows:

- Access onto Meadows Parkway 485 feet north of the roundabout with Technology Drive, 310 feet south of the existing drive to the adjacent parking area
- Access onto the Internal Loop Road 290 feet east of the internal intersection with the Access
  Drive
- Access onto the Internal Access Drive 67 feet south of the internal intersection with the loop road, 230 feet north of Technology Drive

#### **Directional Distribution**

The development's trip generation would be assigned to the study area roadways in accordance with an anticipated directional distribution that reflects prevailing traffic patterns of the area based on the proposed development's uses. **Table 5** presents the directional distribution proposed for the development. The directional distribution is presented graphically in **Figure 6**. Given the proposed development's uses, it was assumed that vehicles to and from the development would primarily utilize the major highways in the area to access the site rather than local roads.

**Table 5. Directional Distribution Percentages** 

To/From	Percentage
To/From the West on I-64	40%
To/From the East on I-64	35%
To/From the Northeast on Highway 94	20%
To/From the Southwest on Highway 94	5%



Figure 6. Directional Distribution

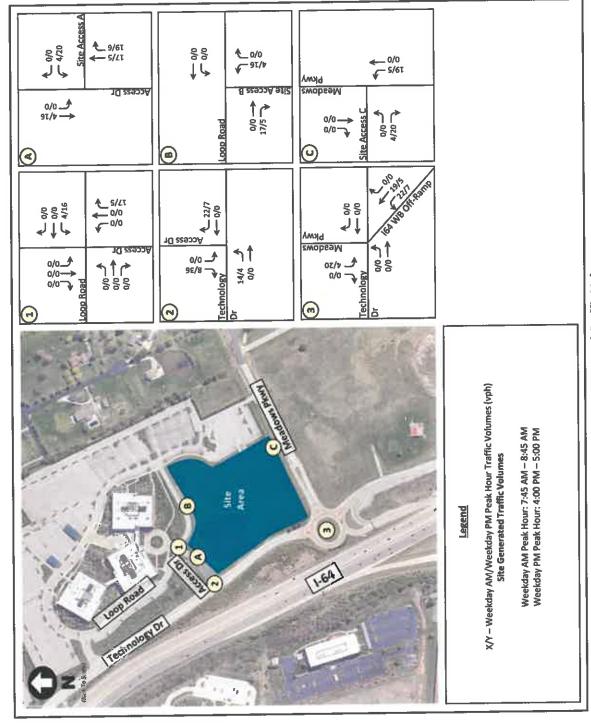


Figure 7. Site Generated Traffic Volumes

#### Year 2024 Forecasted Conditions

Forecasted operating conditions were evaluated using the same methodology applied to the baseline conditions. The site generated traffic, shown in Figure 7, was aggregated with the baseline traffic volumes (Figure 5) to produce a forecasted conditions scenario that reflects the addition of the proposed development. The resulting 2024 traffic forecast is illustrated in **Figure 8**.

#### **Forecasted Operating Conditions**

The 2024 forecasted operating conditions at the study intersections were analyzed based upon the 2024 forecasted traffic volumes illustrated in Figure 8. The 2024 forecasted conditions determined the adequacy of the road network to accommodate the additional traffic generated by the proposed development and identify any further mitigation measures that may be necessary. The 2024 forecasted operating conditions are summarized in **Table 6**. As shown, traffic conditions at the study intersections are anticipated to remain favorable, with LOS A for each approach at intersections during both peak hours of the day.

**Table 6. Year 2024 Forecasted Traffic Operating Conditions** 

LOS (Delay, sec) [Queue Length, feet] < v/c ratio>   AM Peak Hour   PM Peak Hour
Loop Rd & Access Rd (unsignalized)
Eastbound       A (9.6) [<25] <0.01>       A (8.3) [<25] <0.01>         Westbound       A (9) [<25] <0.01>       A (8.8) [<25] <0.05>         Northbound       A (7.2) [<25] <0.01>       A (0) [<25] <0.00>         Southbound       A (0) [<25] <0.00>       A (0) [<25] <0.00>         2) Technology Dr & Access Road (unsignalized)       A (7.5) [<25] <0.02>       A (7.5) [<25] <0.00>         Southbound Left-Turn       A (0) [<25] <0.00>       A (9.8) [<25] <0.02>         Southbound Right-Turn       A (9) [<25] <0.02>       A (9.4) [<25] <0.08>         3) Technology Dr & Meadows Pkwy / I-64 WB Off-Ramp (roundabout)         Overall Intersection       A (5.8)       A (5.0)
Westbound       A (9) [<25] <0.01>       A (8.8) [<25] <0.05>         Northbound       A (7.2) [<25] <0.01>       A (0) [<25] <0.00>         Southbound       A (0) [<25] <0.00>       A (0) [<25] <0.00>         2) Technology Dr & Access Road (unsignalized)       A (7.5) [<25] <0.02>       A (7.5) [<25] <0.00>         Southbound Left-Turn       A (0) [<25] <0.00>       A (9.8) [<25] <0.02>         Southbound Right-Turn       A (9) [<25] <0.02>       A (9.4) [<25] <0.08>         3) Technology Dr & Meadows Pkwy / 1-64 WB Off-Ramp (roundabout)         Overall Intersection       A (5.8)       A (5.0)
Northbound       A (7.2) [<25] <0.01>       A (0) [<25] <0.00>         Southbound       A (0) [<25] <0.00>       A (0) [<25] <0.00>         2) Technology Dr & Access Road (unsignalized)       A (7.5) [<25] <0.02>       A (7.5) [<25] <0.00>         Southbound Left-Turn       A (0) [<25] <0.00>       A (9.8) [<25] <0.02>         Southbound Right-Turn       A (9) [<25] <0.02>       A (9.4) [<25] <0.08>         3) Technology Dr & Meadows Pkwy / I-64 WB Off-Ramp (roundabout)         Overall Intersection       A (5.8)       A (5.0)
Southbound       A (0) [<25] <0.00>       A (0) [<25] <0.00>         2) Technology Dr & Access Road (unsignalized)         Eastbound Left-Turn       A (7.5) [<25] <0.02>       A (7.5) [<25] <0.00>         Southbound Left-Turn       A (0) [<25] <0.00>       A (9.8) [<25] <0.02>         Southbound Right-Turn       A (9) [<25] <0.02>       A (9.4) [<25] <0.08>         3) Technology Dr & Meadows Pkwy / I-64 WB Off-Ramp (roundabout)         Overall Intersection       A (5.8)       A (5.0)
2) Technology Dr & Access Road (unsignalized)  Eastbound Left-Turn A (7.5) [<25] <0.02> A (7.5) [<25] <0.00>  Southbound Left-Turn A (0) [<25] <0.00> A (9.8) [<25] <0.02>  Southbound Right-Turn A (9) [<25] <0.02> A (9.4) [<25] <0.08>  3) Technology Dr & Meadows Pkwy / I-64 WB Off-Ramp (roundabout)  Overall Intersection A (5.8) A (5.0)
Eastbound Left-Turn A (7.5) [<25] <0.02> A (7.5) [<25] <0.00> Southbound Left-Turn A (0) [<25] <0.00> A (9.8) [<25] <0.02> Southbound Right-Turn A (9) [<25] <0.02> A (9.4) [<25] <0.08>  3) Technology Dr & Meadows Pkwy / I-64 WB Off-Ramp (roundabout) Overall Intersection A (5.8) A (5.0)
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Southbound Right-Turn A (9) [<25] <0.02> A (9.4) [<25] <0.08>  3) Technology Dr & Meadows Pkwy / I-64 WB Off-Ramp (roundabout)  Overall Intersection A (5.8) A (5.0)
3) Technology Dr & Meadows Pkwy / I-64 WB Off-Ramp (roundabout) Overall Intersection A (5.8) A (5.0)
Overall Intersection A (5.8) A (5.0)
Overall Intersection A (5.8) A (5.0)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Eastbound A (3.2) [<25] <0.06> A (3.3) [<25] <0.07>
Westbound A (5.9) [<25] <0.05> A (3.2) [<25] <0.04>
Northbound A (6.1) [<25] <0.09> A (5.9) [<25] <0.09>
Southbound A (7.2) [<25] <0.10> A (5.9) [<25] <0.15>
4) Site Access A & Access Dr (unsignalized)
Westbound Left-Turn A (8.9) [<25] <0.01> A (8.8) [<25] <0.02>
5) Loop Rd & Site Access B (unsignalized)
Northbound Left-Turn A (8.7) [<25] <0.00> A (8.6) [<25] <0.02>
6) Site Access C & Meadows Pkwy (unsignalized)
Eastbound Approach A (8.8) [<25] <0.01> A (8.8) [<25] <0.02>
Northbound Left-Turn A (7.5) [<25] <0.01> A (7.4) [<25] <0.01>

Delay presented in vehicles per second

<sup>\*</sup>Roundabout intersection results from SIDRA software

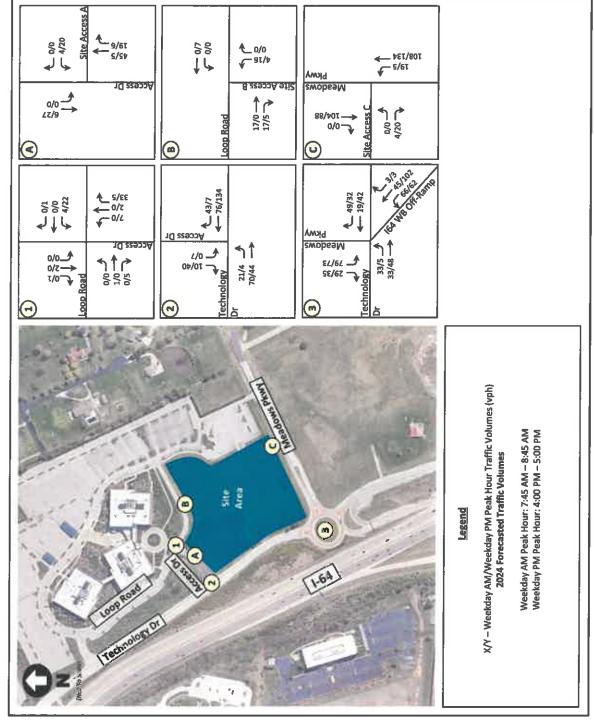


Figure 8. 2024 Forecasted Traffic Volumes

Therefore, it is evident that all study area intersections and approaches would be expected to operate at an overall level of service A during both peak hours of the day. The additional traffic generated by the proposed development is anticipated to be easily accommodated by the existing roadway network. Even with the additional traffic generated by the development roadways would have ample capacity to accommodate future growth.

#### Conclusions

Lochmueller Group has completed the preceding traffic study pertaining to the proposed officewarehouse building in Weldon Spring, Missouri. Based on the preceding study, the following can be concluded:

- Analysis of the 2024 baseline operating conditions determined that the study area intersections
  operate acceptably during the morning and afternoon peak hours of the day demonstrating a
  surplus of capacity in the roadway network. Operations for the three study intersections
  showed Level of Service A for all approaches during the morning and afternoon peak hours.
- A total of nine crashes occurred within the study area during a 5-year period. None of these
  crashes resulted in fatalities, however one resulted in suspected serious injury and three
  resulted in minor injuries. The most common crash type was out-of-control, with five crashes
  being this type.
- The proposed development will add a 100,800 SF building on Lot B of Weldon Spring Crossing.
  Of the total SF of this building, 15,120 SF is planned as office space, and the remaining 85,680 SF
  as warehouse space. Consequently, the proposed development would generate a total of
  approximately 67 and 72 trips during the weekday morning and evening peak hours,
  respectively upon completion.
- Access is to be provided to the development via three full access drives: one onto Meadows
   Parkway and two others from the internal access drives serving Weldon Spring Crossing. Direct
   access to Technology Drive West is not proposed. The access drives are located as follows:
  - Access onto Meadows Parkway 485 feet north of the roundabout with Technology
     Drive, 310 feet south of the existing drive to the adjacent parking area
  - Access onto the Internal Loop Road 290 feet east of the internal intersection with the Access Drive
  - Access onto the Internal Access Drive 67 feet south of the internal intersection with the loop road, 230 feet north of Technology Drive
- The analysis of the 2024 forecasted operating conditions determined the adequacy of the surrounding road network to accommodate the additional traffic generated by the proposed development and concluded that no mitigation will be necessary to accommodate the development.

Overall, it was concluded that the study intersections can easily accommodate the proposed development and that additional infrastructure improvements are not necessary to offset the traffic generated by the proposed development.

Please contact our office at (314) 446-3791 with any questions or comments concerning this report.

Completed by Lochmueller Group, Inc



### CITY OF WELDON SPRING

5401 Independence Road Weldon Spring, MO 63304 phone: (636) 441-2110 fax: (636) 441-8495 www.weldonspring.org

### STAFF REPORT

To: Planning & Zoning Commission

**Date:** 10/24/24

From: Steve Lauer, City Planner

Subject: 450 Technology Drive Conditional Use Permit (CUP) Request

Cc: Mayor Don Licklider, City Administrator Don Stolberg, City Clerk Bill Hanks, City Planner

Steve Lauer, City Engineer Bill Schnell & City Attorney Bob Wohler

#### **BACKGROUND:**

Application Number:

CUP-2024-01

**Property Address:** 

450 Technology Drive

Property Owner:

Forty Nine Fifty, LLC

Applicant:

The Clayton Engineering Company

**Current Zoning:** 

HTO, High-Technology Office District

Current Use:

Vacant

Proposed Use:

Light Industrial Use (Flex Office/Warehouse)

2015 Comprehensive Plan:

High Tech

Area:

8.330 acres

Location:

450 Technology Drive, which is located at the northwest corner of

the intersection of Technology Drive & Meadows Parkway

### Adjacent Land Uses & Zoning:

Direction	Zoning	Current Land Use
North	HTO	Verizon
South	HTO	Vacant (Meadows Parkway)
East	HTO	Verizon
West	N/A	Technology Drive/Interstate 64

Public Service:

School District – Francis Howell School District Fire District – Cottleville Fire Protection District

**Utilities:** 

Water – Public Water Supply District No. 2 Sewer – Duckett Creek Sanitary District

Electric - Cuivre River Electric

Gas – Spire

#### **ANALYSIS:**

The applicant is seeking approval for a conditional use permit in order to construct a flex office/warehouse which is a light industrial use in the HTO, High-Technology Office District. In addition to the warehouse unit(s) there will be an office for each unit. The major site plan (Weldon Spring Pointe) for this development has been submitted for review by the Planning & Zoning Commission contingent upon the approval of the conditional use permit.

The site has been previously subdivided as part of the Weldon Spring Crossing subdivision. The proposed site is Lot B of the Weldon Spring Crossing subdivision with Lot A being the Verizon campus which is owned by WorldCom Technologies Inc. The site has access off Meadows Parkway and Technology Drive through cross access ingress/egress easements along the common boundary of Lots A and B of Weldon Spring Crossing.

A traffic impact study was performed by Lochmueller group for this site. The conclusions of the study are as follows:

 Analysis of the 2024 baseline operating conditions determined that the study area intersections operate acceptably during the morning and afternoon peak hours of the day demonstrating a surplus of capacity in the roadway network. Operations for the three study intersections showed Level of Service A for all approaches during the morning and afternoon peak hours.

- A total of nine crashes occurred within the study area during a 5-year period.
   None of these crashes resulted in fatalities, however one resulted in suspected serious injury and three resulted in minor injuries. The most common crash type was out-of-control, with five crashes being this type.
- The proposed development will add a 100,800 SF building on Lot B of Weldon Spring Crossing. Of the total SF of this building, 15,120 SF is planned as office space, and the remaining 85,680 SF as warehouse space. Consequently, the proposed development would generate a total of approximately 67 and 72 trips during the weekday morning and evening peak hours, respectively upon completion.
  - O Access is to be provided to the development via three full access drives: one onto Meadows Parkway and two others from the internal access drives serving Weldon Spring Crossing. Direct access to Technology Drive West is not proposed. The access drives are located as follows:
  - Access onto Meadows Parkway 485 feet north of the roundabout with Technology Drive, 310 feet south of the existing drive to the adjacent parking area
  - Access onto the Internal Loop Road 290 feet east of the internal intersection with the Access Drive
  - Access onto the Internal Access Drive 67 feet south of the internal intersection with the loop road, 230 feet north of Technology Drive
- The analysis of the 2024 forecasted operating conditions determined the adequacy of the surrounding road network to accommodate the additional traffic generated by the proposed development and concluded that no mitigation will be necessary to accommodate the development.

Stormwater detention for the subdivision is located on lot A, a maintenance agreement is needed. Water would be provided to the site by Public Water Supply District No. 2 and sanitary sewer service would be provided by Duckett Creek Sanitary District.

#### **AERIAL VIEW:**



#### **CONDITIONAL USE PERMIT (CUP) CRITERIA:**

a Light Industrial Use Is permitted as a Conditional Use. In accordance with Article IX:

Conditional Use Regulations, notice of the public hearing was made in the local newspaper with general circulation on October 18, 2024, and mailed to all owners within 500' of the subject site on October 18, 2024, and public hearings were scheduled for the November 4, 2024, Planning & Zoning Commission Meeting and the November 14, 2024

Board of Aldermen Meeting. After the public hearing, the Planning and Zoning Commission shall review the application based on evidence presented during the public hearing. Consideration should be given to the effect of the requested use on the health, safety, morals and general welfare of the residents of the area in the vicinity of the property in question and the residents of the City generally.

in considering the conditional use, the Planning and Zoning Commission shall also consider

the following standards and ensure the Commission's response to each is in the affirmative.

1. Whether the proposed conditional use is consistent with the City's Comprehensive Plan and will not impede normal orderly development of the neighborhood.

Office and Light manufacturing are recommended uses for the High-Tech Land Use category.

2. The compatibility with surrounding uses and compatibility with the surrounding neighborhood, including any substantial impact on property values.

The proposed site is surrounded by properties with the same HTO, High-Technology Office Zoning District. There should be no negative impact on surrounding property values.

 The comparative size, floor area, mass and general appearance of the proposed structure in relationship to adjacent structures and buildings in the surrounding properties and neighborhood.

The proposed building is 100,800 square feet in size. The total area of the adjacent Verizon buildings is 361,166 square feet in size. The proposed building would need to meet the design standards of the Architectural Review Commission.

4. The amount of traffic movements generated by the proposed use and the relationship to the amount of traffic on abutting streets and on minor streets in the surrounding neighborhood in terms of the street's capacity to absorb the additional traffic and any significant increase in hourly or daily traffic levels.

A Traffic Impact Study was prepared by Lochmueller Group for this site.

Overall, it was concluded that the study intersections can easily accommodate the proposed development and that additional infrastructure improvements are not necessary to offset the traffic generated by the proposed development.

The added noise level created by activities associated with the proposed use and the impact of the ambient noise level of the surrounding area and neighborhood. As the businesses are located inside the building the added noise would be the truck traffic and the loading and unloading of the trucks. Any sound levels and impulse type noises shall comply with the City's noise standards.

 The impact of night lighting in terms of intensity, duration and frequency of use as it impacts adjacent properties and in terms of presence in the neighborhood.

> The lighting of the building and parking areas will have to meet the standards of the City's Lighting Regulations.

7. The impact of the landscaping of the proposed use in terms of landscaped areas, buffers and screens.

A landscape plan has been provided for the site that meets the design standards for the City. In the HTO District there were additional landscape standards that had to be met.

8. The potential for the proposed use to remain in existence for a reasonable period of time and not become vacant or unused. Consideration should also be given to unusual single purpose structures or components of a more temporary nature.

The building will be set up for one or multiple tenants. With the flexibility of rental space, the building should not become vacant or unused.

9. Whether there are any facilities near the proposed use (such as schools or hospitals) that require special protection.

The Independence Elementary School, the Bryan Middle School and the Early Childhood Development Center are all located to the east of the proposed development off Meadows Parkway and Independence Road. Meadows Parkway is gated between 9:30 AM and 3:30 PM Monday through Friday. The analysis of the Traffic Impact Study assumed none of the site's traffic would use Meadows Parkway to travel to the north past the school. In order to ensure that the site's truck traffic does not utilize Meadow Parkway to access Independence Road, the entrance on Meadows Parkway will be designed to limit trucks turning left, a condition could be added to restrict truck traffic from this development using

Meadows Parkway to the east of the site and Francis Howell could consider closing the road permanently or during off hours to discourage truck traffic.

#### **RECOMMENDATION:**

Due to the limited amount of property designated High-Technology Office District and the potential impact of such development, the Planning & Zoning Commission needs to review, and the Board of Aldermen approve all future high tech development on a case by case basis.

City staff recommends approval of this conditional use application with the following Conditions:

- 1. All operations shall take place within a fully enclosed building.
- 2. All storage of materials and equipment shall be within a fully enclosed building or a screened rear yard not visible to any adjacent property.
- 3. No use shall store or discharge beyond its lot or site boundaries any toxic matter in such concentrations as to be detrimental to or endanger the public health, safety, comfort or welfare or cause injury or damage to property or business.
- 4. Any operation producing noise, glare or heat shall be performed within a completely enclosed building in such a manner as not to create a public nuisance or hazard beyond the boundaries of the lot on which such building is located.
- 5. No activity involving radiation hazards shall be permitted which causes exposure to persons at or beyond the lot lines in excess of the maximum permitted by the general population in applicable Federal, State and local laws and regulations.
- 6. Tractor Trailer Trucks from this facility are restricted from using Meadows Parkway east of the site.
- 7. The uses within the warehouse must be limited to uses permitted within the HTO, High-Technology Office District unless a separate Conditional Use Permit (CUP) is approved by the City for other light industrial uses.



### CITY OF WELDON SPRING

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> fax: (636) 441-8495 www.weldonspring.org

## STAFF REPORT

To: Planning & Zoning Commission

**Date:** 10/24/24

From: Steve Lauer, City Planner

Subject: 450 Technology Drive - Weldon Spring Pointe Site Plan

Cc: Mayor Don Licklider, City Administrator Don Stolberg, City Clerk Bill Hanks, City Planner

Steve Lauer, City Engineer Bill Schnell & City Attorney Bob Wohler

Staff has reviewed a Site Plan application for Weldon Spring Pointe submitted by The Clayton Engineering Company for a flex office/warehouse at 450 Technology Drive and presents the following report for your review and consideration.

#### **BACKGROUND:**

The site is located at the northwest corner of Technology Drive and Meadows Parkway.

The proposed building would be located on Lot B of the Weldon Spring Crossing subdivision. The only other lot in this subdivision is Lot A which contains the adjacent Verizon campus. The subject site is currently vacant. There is an existing pond on the site. The Corps of Engineers has issued a letter stating that the pond is located in an upland area with no apparent flow into a water of the United States and is determined to be isolated. Therefore, it does not fall under the jurisdiction of Section 404 and no permit is required from the Corps of Engineers for the project of draining the pond.

The proposed flex office/warehouse building will be constructed in order to lease the building or partial units to a service type facility. Access to the site will utilize the existing access points off Technology Drive and Meadows Parkway. The light industrial use of the warehouse is contingent upon the approval of conditional use permit CUP-2024-01.

#### **PROJECT SUMMARY:**

Area:

8.330 acres

Proposed Use:

Office/Warehouse fully contained in the proposed 100,800 square

foot, 40.5-foot-high building.

**Existing Zoning:** 

HTO, High-Technology Office District

**Adjacent Zoning:** 

North:

HTO, High-Technology Office - Verizon

South:

HTO, High-Technology Office – Meadows Parkway/Vacant

East:

HTO, High-Technology Office - Verizon

West:

Technology Drive/I-64

#### **STAFF COMMENTS & RECOMMENDATIONS:**

1. The concept landscape plan which is included in your packet meets the required standards for landscaping in the HTO, High Technology Office District.

- 2. A shared use path as delineated on the City of Weldon Spring Parks and Greenway Master Plan is depicted along the frontage on Technology Drive.
- 3. The radius for the entrance on Meadows Parkway has been reduced to limit the use of the western portion of Meadows Parkway for large truck traffic.
- 4. Upon approval of the site plan, the proposed building will need to be reviewed and approved by the Architectural Review Commission.

Staff recommend approval of the major site plan for Weldon Spring Pointe.