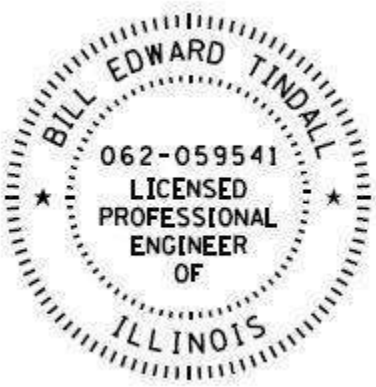
Reese Drive
Traffic Impact Study (TIS) Report

Prepared for:
City of Collinsville
125 S Center St
Collinsville, IL 62234

Prepared by:



Oates Associates, Inc
100 Lanter Court, Suite 1
Collinsville, IL 62234
Phone: (618) 345-2200
Email: oai@oatesassociates.com
Oates Project Number: 225123

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1.0 INTRODUCTION

This study is prepared for the City of Collinsville to determine the impact of additional traffic generated by the Haven Hills development from a ±9.6-acre site east of IL 157 in addition to anticipated future Westview Development in the west and Collinsville Landing Development south of the project location with an assumption that they would be completed by 2027. The purpose of this study is:

1. Identify additional traffic to be generated from the proposed and anticipated surrounding developments and their impact on the nearby intersections of Ramada Blvd. and Beverly Lane, Reese Drive and Ramada Blvd. (New connection), Ramada Blvd. and Sandridge Dr., Reese Dr. and Johnson Hill Rd.
2. Compare alternative roadway networks: (a) Reese Drive and Ramada Blvd. (new connection), and (b) Ramada Blvd. and Notting Hill Rd. (alternate connections)

The Haven Hills development would create an alternate route to connect Ramada Blvd. and Reese Dr. by extension of the east leg of Ramada Blvd. and Sandridge Dr. intersection. After construction, the site will generate additional traffic as well as create a roadway cut through for vehicles travelling from Ramada Blvd. to Johnson Hill Rd., adding traffic to the existing nearby intersections. **Figure 1** shows the proposed location of the project and **Figure 2** shows the proposed roadway connection.

The proposed Haven Hills development site (±9.6-acre) showcased in **Exhibit 2** comprises of three apartment buildings. Taking a conservative approach, the future forecast also assumes development of Westview development and Collinsville Landing development in the surrounding area within the same time frame by 2027. This study will identify the approximate amount of traffic generated during the peak hours at the nearby intersections as mentioned in the purpose of this study.

The overall area surrounding the proposed project site is a mix of residential and commercial properties on the west side and primarily residential properties on the east side of the planned location. See **Exhibit 1A** for the Vicinity Map. See **Exhibit 2** for the Proposed Plan Location that illustrates the parcels layout of proposed and anticipated site developments.

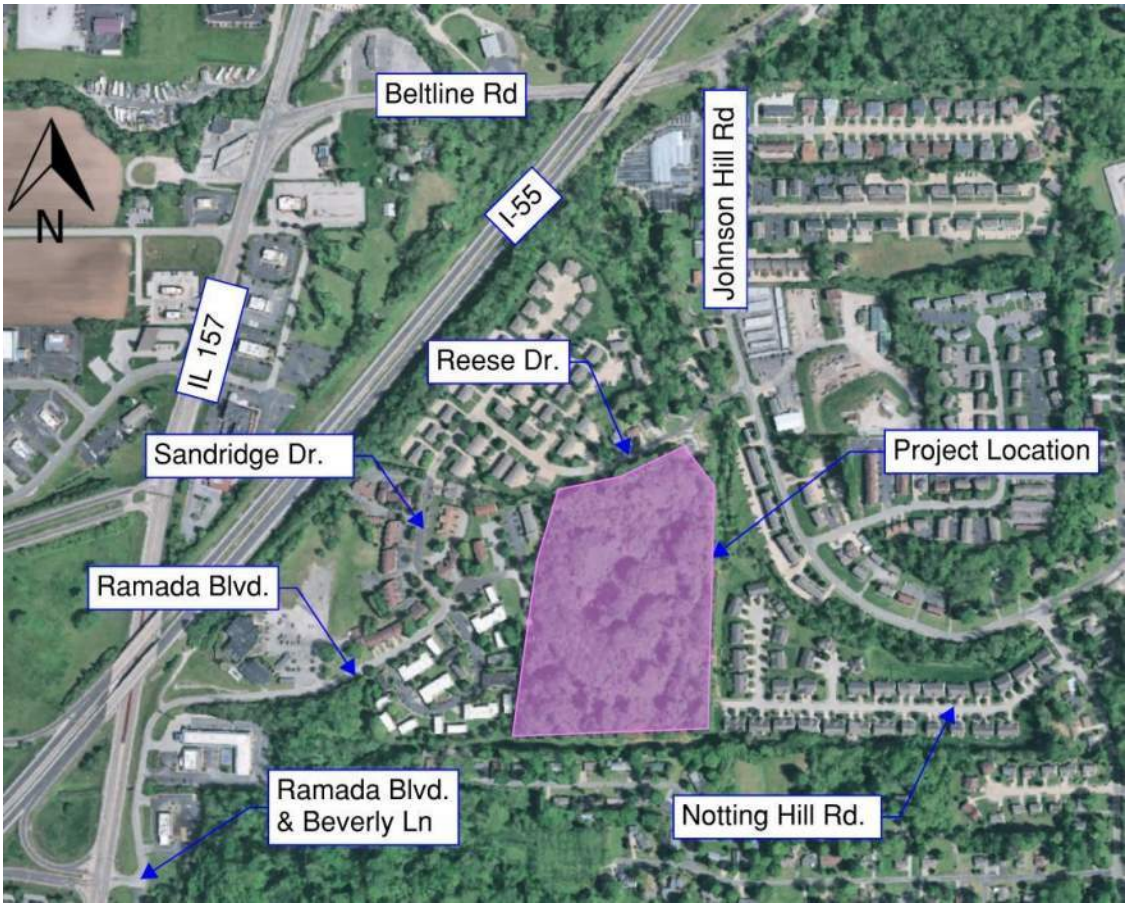


Figure 1: Location Map of the Proposed Development

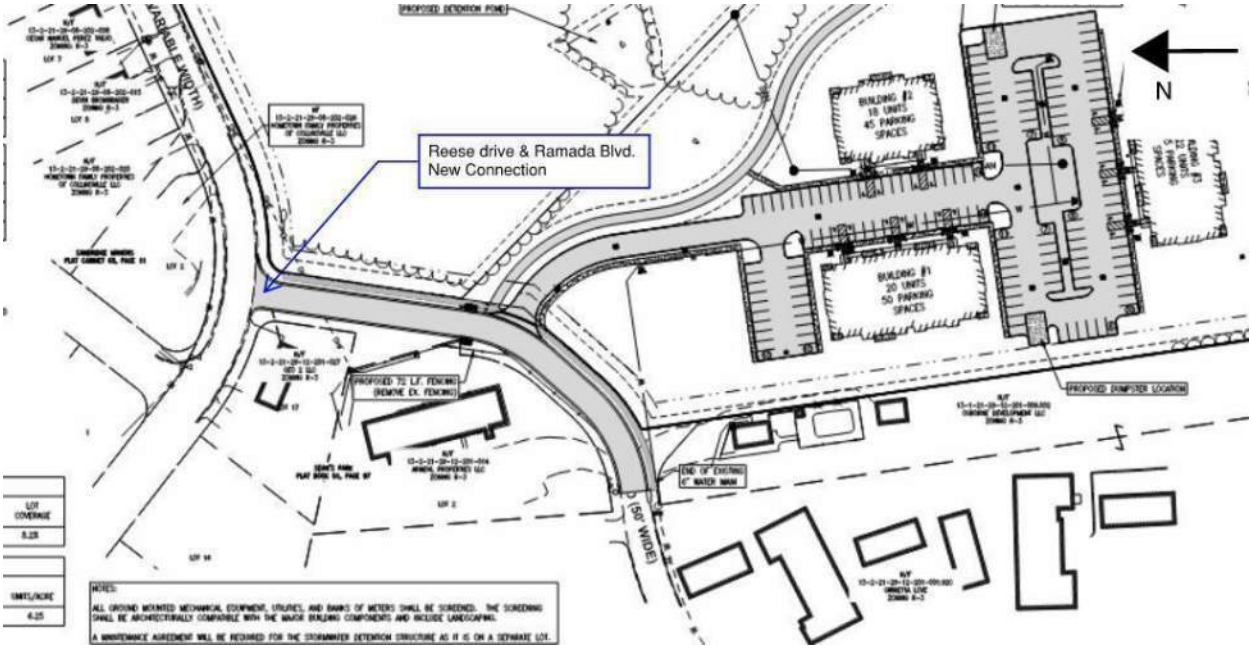


Figure 2: Proposed Roadway Connection

2.0 EXISTING CONDITIONS OF THE STUDY AREA

Existing traffic volumes for local roads were not available on the IROADS website and were extrapolated by Collinsville Landing and Westview Development TIS. ADT were obtained by estimating that the Design hour volume (DHV) = 10% of ADT.

HCS analysis was performed for Existing condition (2025), Construction Year (2027), and Design year (2047) during the same AM and PM peak hours for all intersections within project scope. AM peak hour (7:30-8:30) and PM Peak hour (4:15-5:15) were based on the Westview Development TIS. See **Exhibit 1B** for Functional Classification Map and **Exhibit 3** for design hourly volumes.

2.1 HISTORIC GROWTH RATES

Historical traffic growth data were not available in "IROADS" or the "Getting Around Illinois" website for the roadway segments within the project limits, except for Johnson Hill Road. At the intersection of Johnson Hill Road and Reese Drive, an average annual growth rate of 4.8% was observed on the south leg. However, traffic volumes remained relatively stable from 2021 to 2023, followed by an abrupt 15.3% increase in 2024. This spike is likely attributed to construction-related detour traffic and is not considered representative of long-term growth trends. On the north leg, growth rates fluctuated between -3.1% and 4.4%, with an overall average of 0.6% from 2012 to 2018.

Therefore, a general background growth rate of 0.5% has been assumed for the nearby intersections, as sustained growth rates of 3.0% or higher are typically unrealistic over extended periods. The estimated Average Daily Traffic (ADT) for the intersections within the project scope has been prorated to the year 2025 based on available Traffic Impact Study (TIS) data.

Refer to **Appendix E** for information on historic growth rates and design growth rates.

2.2 EXISTING ROADWAY SEGMENT

Ramada Blvd.

This segment of Ramada Blvd. is a two-lane undivided local road running east–west, west of the proposed Haven Hills development site with a posted speed of 25 mph.

The existing Ramada Blvd. section south of "McDonald's north entrance" consists of 12 ft wide travel lanes in each direction with 4' wide aggregate shoulder on east side and a Hot-Mix Asphalt (HMA) pavement surface. The existing Ramada Blvd. section north of "McDonald's north entrance" consists of 12 ft wide travel lanes in each direction with barrier curb and a Hot-Mix Asphalt (HMA) pavement surface. The total roadway width varies from approximately 24 ft to 30 ft (f–f), with the wider section occurring near the intersection of Ramada Blvd. and Sandridge Dr. The roadway is maintained by the City of Collinsville and has a posted speed limit of 25 mph. The prorated ADT along Ramada Blvd. for 2025 is estimated to be 3,000. No sidewalks are currently provided along this segment. However, in accordance with BLR 32-2I "Geometric Design Criteria for Uban Local Streets" for a new reconstruction, a minimum surface width of 30 ft (f–f) is required throughout the corridor and sidewalks are recommended at least on one side of the road.

Sandridge Dr.

This segment of Sandridge Dr. from Ramada Blvd. to Reese Dr. is a two-lane undivided local road running north–south, located west of the proposed Haven Hills development site with a posted speed of 25 mph. The roadway has a total width of approximately 30 ft (f–f) with V-gutters along both edges. The existing pavement surface consists of both Portland Cement Concrete (PCC) and Hot-Mix Asphalt (HMA). The prorated ADT along Sandridge Dr. is estimated to be 800. No sidewalks are currently available along this segment. Hence, in accordance with BLR 32-2I for a new reconstruction, sidewalks are recommended at least on one side of the road.

Reese Dr.

This section of Reese Drive, extending from Sandridge Drive to Johnson Hill Road, is a two-lane undivided local roadway running east–west, located north of the proposed Haven Hills development. The posted speed limit is 25 mph.

The existing portion of Reese Drive, approximately 570 feet east of the Sandridge Drive intersection, has a total roadway width of about 30 feet (f-f) and features V-gutters along both edges with a Portland Cement Concrete (PCC) pavement surface. Beyond this point, the roadway transitions to an oil-and-chip surface extending to Johnson Hill Road, where the roadway width narrows to approximately 22 feet and no curbs or gutters are present. The prorated ADT for Reese Drive in 2025 is estimated at 880 vehicles. Currently, there are no sidewalks along this corridor. For future improvements, it is recommended that the oil-and-chip section be reconstructed with full-depth pavement to ensure a consistent surface throughout. Additionally, the roadway should be widened to maintain a uniform width of 30 feet (f-f) along the entire corridor. In accordance with BLR 32-2I standards for roadway reconstruction, sidewalks are also recommended on at least one side of the roadway.

Johnson Hill Rd.

Johnson Hill Rd. is a two-lane undivided major collector running north–south, located east of the proposed Haven Hill development site. The existing roadway consists of 12 ft wide lanes with a Hot-Mix Asphalt (HMA) pavement surface and B6.24 curb and gutter. The IROADS website estimates ADT along Johnson Hill Rd. to be 3,600. No sidewalks are currently provided along the corridor. In accordance with BLR Figure 32-2G “Geometric Design Criteria for Urban Two-Way Collectors” for a new reconstruction, a minimum surface width of 30 ft (f–f) is required throughout the corridor and sidewalks are recommended at least on one side of the road.

See **Exhibit 7** for Site Photos.

2.3 EXISTING INTERSECTIONS

Intersection of Ramada Blvd. and Beverly Lane

The intersection of Beverly Lane & Ramada Blvd. is currently a 3-leg, two-way stop-controlled (TWSC) (north and south leg stop-controlled) intersection, southwest of the proposed development. Beverly Lane is a local two-lane oil and chip road with no pavement markings that runs north south and connects Ramada Blvd. to Ostle Drive. The north leg (Ramada Blvd.) has one shared lane for thru/right turns while the south leg (Beverly Lane) has one shared lane for left/thru turns. The west leg (Ramada Blvd.) has one shared lane for left/right turns.

The prorated ADT on the north leg (Ramada Blvd.) and south leg (Beverly Lane) for 2025 is estimated to be 3,000 and 930 respectively based on Collinsville Landing TIS study. The west leg is estimated to have

a prorated ADT of 3,740 based on the Collinsville Landing TIS study.

Intersection of Ramada Blvd. and Sandridge Dr./Lafayette Ct.

The intersection of Ramada Blvd. & Sandridge Dr./Lafayette Ct is currently a 4-leg, two-way stop-controlled (TWSC) (north and south leg stop-controlled) intersection west of the proposed development. Lafayette Ct. (south leg) is a local internal access road with no pavement markings that loops from south leg and connects to Ramada Blvd. again to the west. The north leg (Sandridge Dr.) and the south leg (Lafayette Ct.) has one approach lane. A single approach lane serves as a shared lane for left, thru, and right turns, hence, any reference to "one approach lane" implies this configuration. The east and west leg (Ramada Blvd.) has one approach lane.

The prorated ADT on the north leg (Sandridge Dr.) and south leg (Lafayette Ct.) is estimated to be 800 and 20 respectively based on Westview Development TIS study. The west leg (Ramada Blvd.) is estimated to have a prorated ADT of 3,000 based on the Collinsville Landing TIS study.

Intersection of Sandridge Dr. and Reese Dr.

The intersection of Sandridge Dr. and Reese Dr. currently a 3-leg, yield-controlled (east leg yield-controlled) intersection northwest of the proposed development. The north (Sandridge Dr.), south (Sandridge Dr.), and the east (Reese Dr.) legs has one approach lane.

The prorated ADT on the north leg (Sandridge Dr.) and south leg (Sandridge Dr.) is estimated to be 80 and 800 respectively based on Westview Development TIS study. The east leg (Reese Dr.) is estimated to have a prorated ADT of 880 based on the Westview Development TIS study.

Intersection of Reese Dr./Green Park Dr. and Johnson Hill Rd.

The intersection of Reese Dr./Green Park Rd. and Johnson Hill Rd. currently a 4-leg, stop-controlled (east and west leg stop-controlled) intersection northeast of the proposed development. The east (Green Park Dr.) and west legs (Reese Dr.) are offset of each other. Johnson Hill Rd., major collector running north-south, is a two-lane undivided highway with a posted speed of 30 mph and is currently maintained by the City of Collinsville. The north and south legs (Johnson Hill Rd.) as well as the east (Green Park Dr.) and the west (Reese Dr.) legs has one approach lane.

The IROADS website estimates ADT on the north leg (Johnson Hill Rd.) and south leg (Johnson Hill Rd.) to be 3,800 and 3,400 respectively. The prorated ADT on the west leg (Reese Dr.) and east leg (Green Park Dr.) is estimated to be 1,120 and 185 respectively based on Westview Development TIS study.

2.4 CRASH DATA

Crash data within the project limits were obtained from the Illinois Department of Transportation (IDOT) GIS portal for the five-year period between 2020 and 2024. A total of nineteen crashes occurred along the Ramada Boulevard and Reese Drive corridor between IL 157 and Johnson Hill Road. The majority of crashes took place along the mid-block corridor segments, with only six crashes occurring at intersections; one at Ramada Boulevard and Beverly Lane, three at Ramada Boulevard and Sandridge Drive, one at Sandridge Drive and Reese Drive, and one at Reese Drive and Johnson Hill Road.

Of the nineteen total crashes, eleven involved parked motor vehicles or fixed objects, indicating that most incidents were not directly related to roadway geometry or intersection configuration. The crashes occurred under varying environmental conditions, though most took place during daylight hours and

clear weather, suggesting that lighting and weather were not primary contributing factors. Only a few crashes occurred during rain or snow. Overall, the crash pattern does not point to a systemic geometric or intersection safety issue but rather sporadic, isolated events typical of corridor environments with roadside parking or driveways.

A summary spreadsheet containing the extracted data and a spot map showing the approximate locations of the crashes are included for reference.

See **Exhibit 5** for Spot Map and **Appendix G** for Crash History.

3.0 TRAFFIC DATA

3.1 TRIP GENERATION

The primary purpose of this study is to determine the impact of vehicular traffic to/from all three Haven Hills, Westview, and Collinsville Landing development and how much that affects the overall Level of Service (LOS) in the intersections of study. Because of the nature of the proposed establishment and nearby generators, it is assumed that the weekday traffic will control adjacent roadway operations. The study focuses on the impact of new trips on the intersections of study during construction year 2027 and design year 2047.

As per Haven Hills development revised site plan with 60 units, "ITE Trip Generation Manual 11th Edition" was used to determine the new trips for proposed land use. See **Table 1** for the Trip generation for Haven Hills Development.

Table 1: Trip generation for Haven Hills Development

Land Use	Description	Units	Weekday		
			In	Out	Total
Multi-Family Housing	3-buildings Development	60	120	120	240

DHV for capacity analysis were obtained by estimating that the Design hour volume (DHV) = 10% of Weekday Trip generated.

See **Appendix A** for detailed trip generation information.

3.2 TRIP DISTRIBUTION

Future trips generated from all three developments, the attracted trips were distributed to the nearby intersection of study based on the existing ADT distributions along the Ramada Blvd. and Reese Dr. corridor. Some assumptions were made on how the future trips will be distributed to/from the establishment. Those assumptions are:

Total Generated Trips Distribution

- 80% of traffic to/from Haven Hills Development travels west towards Ramada Blvd.
- 20% of traffic to/from Haven Hills Development travels towards Johnson Hill Rd. through New connector Road and Reese Dr.
- 100% of traffic to/from Westview Development travels west towards Ramada Blvd. Based on Westview Development TIS.
- 95% of traffic to/from Collinsville Landing Development travels west towards IL 157.
- 5% of traffic to/from Collinsville Landing Development travels north towards Johnson Hill Rd.

See **Exhibit 4** for Trip Distribution information at each intersection within project scope.

Trip diversions are expected once the proposed roadway connection of Ramada Blvd. and Reese Drive is completed to provide access to Haven Hills Development. See **Exhibit 2** for proposed roadway connection. Based on Westview Development TIS, existing PM peak trip distribution shows that approximately 30% of the trips are from the existing residential area between intersections of Sandridge Dr. & Ramada Blvd. and Johnson Hill Rd. & Reese Dr. Hence, 70% of existing trips are diverted to/from new south leg connecting Reese Dr. and Ramada Blvd. See **Appendix B** for distribution of diverted trips and **Appendix C** for Summary of Trips.

3.3 TRIP ASSIGNMENT

The trip distribution carried through the intersections of study has been assigned to match the turn movement counts and reflect the existing traffic patterns of nearby intersections. The traffic is assigned at all intersections within project scope for HCS analysis based on proration of current ADT and new trip generation. See **Appendix B** for Trip Assignments and **Appendix C** for Summary of Trips.

4.0 FINDINGS AND RECOMMENDATIONS

Figure 32-2G "Geometric Design Criteria for Urban Two-Way Collectors" of the BLRS Manual recommends a Level of Service (LOS) of "D" or better for major collector roadways. Figure 32-2.I "Geometric Design Criteria for Urban local Streets" of the BLRS Manual recommends a LOS of "D" or better for local roads.

The new connector road is an extension of a local road (Ramada Blvd.) and is expected to be functionally classified as a local road based on preliminary review of Fig:2-9 in "Highway Functional Classification Concepts, Criteria and Procedures, 2023" as recommended by BDE CH 11-2.02 (a).

Existing traffic volumes and post development traffic volumes were used to evaluate the current and post-development performance of the intersection using HCS software.

4.1 HIGHWAY CAPACITY SOFTWARE (HCS)

HCS 2022 was used in the analysis of the nearby intersections and determine the level of service for each leg of intersection analyzed. HCS analysis was performed for 3 phases namely:

- Existing Condition (2025)
- No-Build Scenarios (2027 & 2047)
- Build Scenarios (2027 & 2047)

The analysis assigned 2.0% heavy vehicles for the intersections in the study. See **Appendix D** for highway capacity software results.

4.2 EXISTING AND NO BUILD CONDITIONS

Model analysis of the existing intersections in 2025, 2027 and 2047 forecast years including background growth only.

Table 2 shows that all approaches at all the intersections within projects scope of study operates at an acceptable LOS during peak hours with the minimum LOS C or better for all forecast years through 2047.

See **Table 2** for a summary of existing operating conditions.
See **Appendix D** for HCS reports for information on LOS.

Table 2: Existing and Future No Build conditions

Intersection	Legs	2025				2027				2047			
		AM	Delay (sec)	PM	Delay (sec)	AM	Delay (sec)	PM	Delay (sec)	AM	Delay (sec)	PM	Delay (sec)
Ramada Blvd. & Beverly Lane	EB	A	8.2	A	8.8	A	8.3	A	8.8	A	8.3	A	8.9
	WB	-	-	-	-	-	-	-	-	-	-	-	-
	NB	B	13.3	C	18.0	B	13.4	C	18.2	B	14.3	C	20.4
	SB	A	10.0	A	9.6	A	10.0	A	9.6	B	10.1	A	9.7
Ramada Blvd. & Sandridge Dr.	EB	A	5.9	A	6.1	A	5.9	A	6.1	A	5.8	A	6.1
	WB	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0	A	0.0
	NB	A	9.5	B	10.7	A	9.5	B	10.8	A	9.6	B	11.1
	SB	A	8.7	A	8.6	A	8.7	A	8.6	A	8.7	B	8.6
Reese Dr. & Ramada Blvd. New	EB	-	-	-	-	-	-	-	-	-	-	-	-
	WB	-	-	-	-	-	-	-	-	-	-	-	-
	NB	-	-	-	-	-	-	-	-	-	-	-	-
	SB	-	-	-	-	-	-	-	-	-	-	-	-
Johnson Hill Rd. & Reese Dr.	EB	B	10.3	B	12.6	B	10.3	B	12.7	B	10.6	B	13.6
	WB	B	11.1	B	12.9	B	11.1	B	13.0	B	11.5	B	13.9
	NB	A	0.3	A	1.0	A	0.3	A	1.0	A	0.3	A	1.0
	SB	A	0.4	A	1.4	A	0.4	A	1.4	A	0.4	A	1.4

4.3 BUILD SCENARIOS (2027 & 2047)

Model analysis of the intersections within the project scope in 2027 and 2047 with background growth and trip generation from Haven Hills, Westview, and Collinsville Landing development.

Table 3 shows that all approaches at all the intersections within projects scope of study operates at an acceptable LOS during peak hours with the minimum LOS C or better for all forecast years through 2047.

Intersection: Ramada Blvd. and Beverly Lane

The Collinsville Landing project would convert the current south leg into an east leg of Ramada Boulevard. This change would enhance traffic flow for eastbound vehicles traveling toward Beverly Lane as they would continue through the intersection without having to slow down to make a turn. However, the intersection may still experience some additional delays due to the nearby signalized intersection of Ramada Boulevard and IL 157. If queues at that intersection extend to the east leg, vehicles on the north and east legs of the Ramada Boulevard and Beverly Lane intersection would experience additional delay during peak hours. These potential delays are independent of the Haven Hills Development.

Intersection: Ramada Blvd. and Sandridge Dr.

The proposed new connection linking Ramada Boulevard and Reese Drive by extending the east leg of Ramada Boulevard and Sandridge Drive would improve overall traffic flow, as evidenced by the reduction in control delay between the No-Build and Build scenarios. This new connection is expected to eliminate approximately 70% of the cut-through traffic currently using Sandridge Drive, as eastbound left-turn (EBLT) vehicles will now continue eastbound thru (EBT) instead. This shift will significantly reduce turning movements and enhance overall traffic circulation at this intersection.

Intersection: Johnson Hill Rd. and Reese Dr.

The intersection is projected to experience a minor increase of 0.2 seconds in control delay on the east and west legs in the years 2027 and 2047. However, all approaches are expected to maintain the same Level of Service (LOS) as the No-Build scenario during peak hours for all forecast years through 2047.

Intersection: Reese Dr. and Ramada Blvd. (New)

The proposed development would gain access via Ramada Boulevard and Reese Drive through a new roadway connection that extends the east leg of Ramada Boulevard and Sandridge Drive, connecting to the Reese Drive roadway segment to form the south leg. All legs will have one approach lane, with the south leg being stop-controlled. All approaches of this intersection are projected to operate at an acceptable Level of Service (LOS), with a minimum of LOS C or better during peak hours for all forecast years through 2047.

Based on the trips generated by the three developments and the Highway Capacity Software (HCS) analysis, it can be confirmed that the overall traffic impact from the Haven Hills Development is minimal. The Johnson Hill Road and Reese Drive intersection would experience only a minor increase of 0.2 seconds in delay over a 20-year period. The Ramada Blvd. and Beverly Ln intersection would experience only a minor increase of approximately 1.5 seconds in delay over a 20-year period.

See **Table 3** for a summary of future operating conditions during build scenarios.
See **Exhibit 2** for Proposed Roadway connection.
See **Appendix D** for HCS reports for information on LOS.

Table 3: Future Build Conditions

Intersection	Legs	2027				2047			
		AM	Delay (sec)	PM	Delay (sec)	AM	Delay (sec)	PM	Delay (sec)
Ramada Blvd. & Beverly Lane	EB	A	8.3	A	8.9	A	8.4	A	9.1
	WB	B	14.1	C	19.3	C	15.1	C	21.8
	NB	-	-	-	-	-	-	-	-
	SB	B	10.2	A	9.7	B	10.4	A	9.8
Ramada Blvd. & Sandridge Dr.	EB	A	1.1	A	1.2	A	1.0	A	1.2
	WB	A	0.0	A	0.0	A	0.0	A	0.0
	NB	A	9.5	B	10.2	A	9.5	B	10.4
	SB	A	8.7	A	8.7	A	8.8	A	8.8
Reese Dr. & Ramada Blvd. New	EB	A	0.0	A	0.0	A	0.0	A	0.0
	WB	A	5.3	A	5.2	A	5.9	A	5.1
	NB	A	8.5	A	8.7	A	8.5	A	8.7
	SB	-	-	-	-	-	-	-	-
Johnson Hill Rd. & Reese Dr.	EB	B	10.4	B	12.9	B	10.7	B	13.8
	WB	B	11.1	B	13.1	B	11.6	B	14.0
	NB	A	0.3	A	1.1	A	0.3	A	1.1
	SB	A	0.4	A	1.4	A	0.4	A	1.4

4.4 WARRANTS ANALYSIS

Section 36-3.01 of the IDOT BDE Manual was used to evaluate whether auxiliary turn lanes are warranted at the Reese Dr. and Ramada Blvd. (New) intersection. No auxiliary lanes are warranted on any legs of the intersection. See **Appendix F** for BDE section 36-3.01 and auxiliary lane analysis.

4.5 PEDESTRIAN AND CYCLIST ACCOMMODATIONS

The pedestrian and bicycle traffic along the route is expected to be minimal and have no significant impact on the intersection operations.

4.6 INTERSECTION CONFIGURATION REVIEW

Review of the intersection proposed by the Haven Hill development indicates a new access connection via Ramada Boulevard and Reese Drive, created by extending the east leg of Ramada Boulevard. All legs of the intersection would have one approach lane, with Ramada Boulevard operating as a one-way stop-controlled approach and Reese Drive operating as free flow. As demonstrated by the HCS analysis, the intersection is expected to continue operating at LOS A even after 20 years. See **Figure 2** for Ramada Blvd. and Reese Dr. connection roadway layout.

Furthermore, we propose that the intersection could be reconfigured to create a continuous alignment between the south leg and the east leg, with the existing west leg converted to a one-way stop-controlled approach. This configuration would allow approximately 70% of the cut-through traffic currently using the Sandridge Drive corridor to flow freely and avoid a residential area. All legs of the intersection are projected to operate at LOS A even after 20 years, with the bypass traffic experiencing zero seconds of control delay. See **Figure 3** for Ramada Blvd. and Reese Dr. connection.

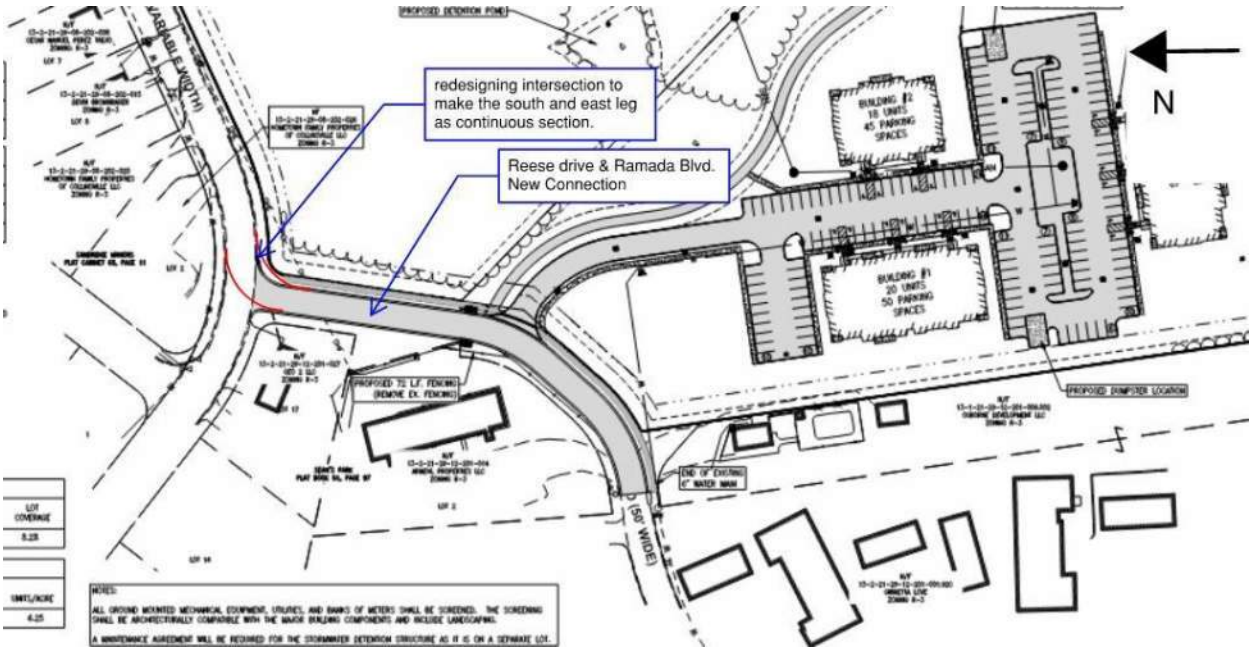


Figure 3: Ramada Blvd. and Reese Drive New connection

4.7 INTERSECTION SIGHT DISTANCE

The intersection sight distance (ISD) was evaluated for the Ramada Boulevard and Reese Drive connection to ensure safe operation under stop control conditions. According to BLRS Figure 28-3E, the required ISD for a vehicle on the minor road with stop control at a design speed of 30 mph is 335 feet.

Two layouts were reviewed for this intersection:

- The roadway layout provided for the Haven Hills Development, and
- The realigned alternative proposed to create a continuous alignment between the south and east legs, with the west leg operating under one-way stop control.

For both layouts, the available sight distance meets or exceeds the minimum required 335 feet, indicating that drivers on the minor road would have sufficient visibility to safely depart from a stopped position when an approaching vehicle first comes into view.

However, some tree pruning may be required near the intersection to remove overhanging branches or vegetation that could partially obstruct visibility. With these minor adjustments, the intersection would provide adequate sight distance for safe and efficient vehicle operations.

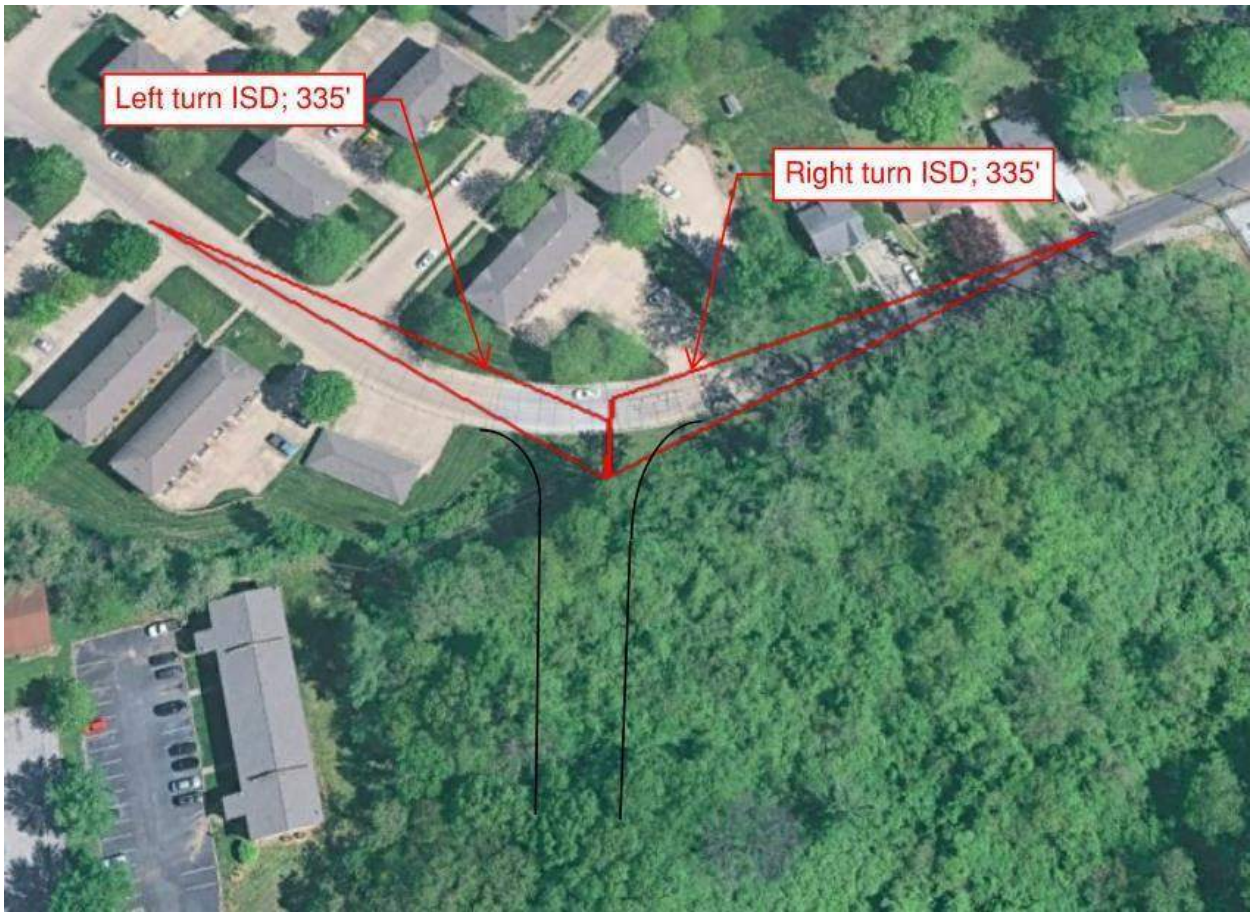


Figure 4: Intersection Sight Distance with south leg stop controlled

Figure 5: Intersection Sight Distance with west leg stop controlled

The sight visibility reviews above consider the view perspectives in horizontal terms. But the final intersection layout will also need to ensure vertical alignments maintain visibility.

5.0 ROADWAY NETWORK REVIEW

This report presents a review and comparison of three alternative roadway connection layouts provided by the city to improve overall traffic circulation and accessibility within the study area. The alternatives include:

- Option 1- Ramada and Reese Drive connection
- Option 2- Ramada and Notting Hill Road connection – Alternative 1
- Option 3- Ramada and Notting Hill Road connection – Alternative 2

See **Figure 6,7, & 8** for each option layout.

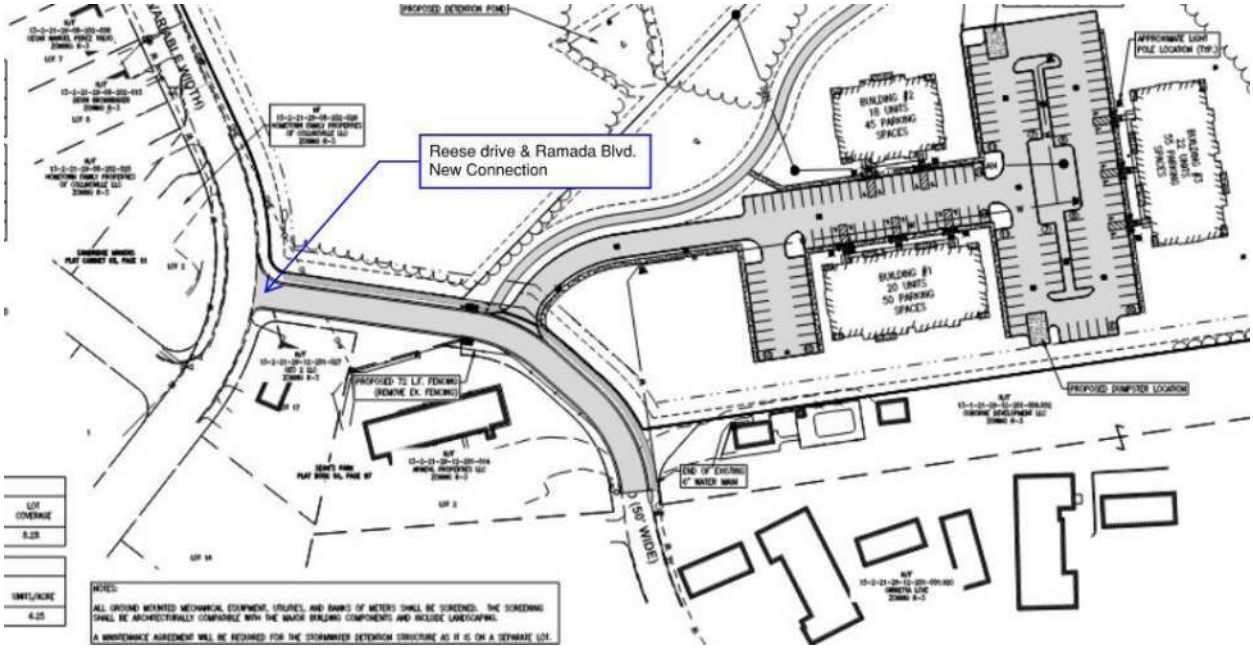


Figure 6: Reese Dr. and Ramada Blvd. New Connection

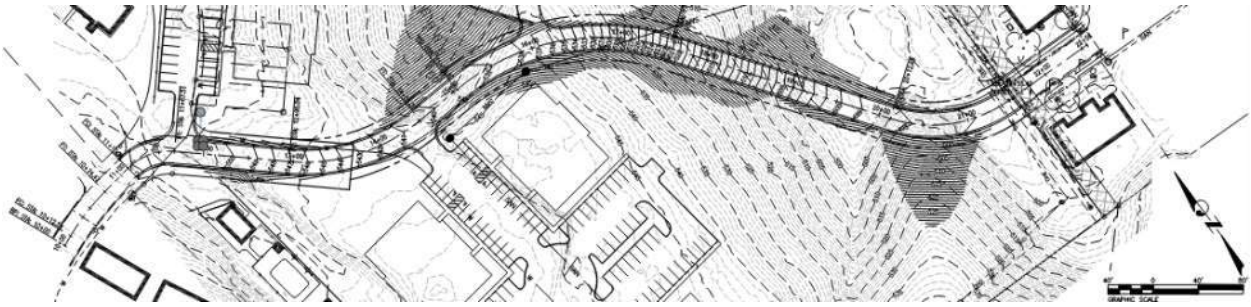


Figure 7: Ramada Blvd. and Notting Hill Road Connection-Alternative 1

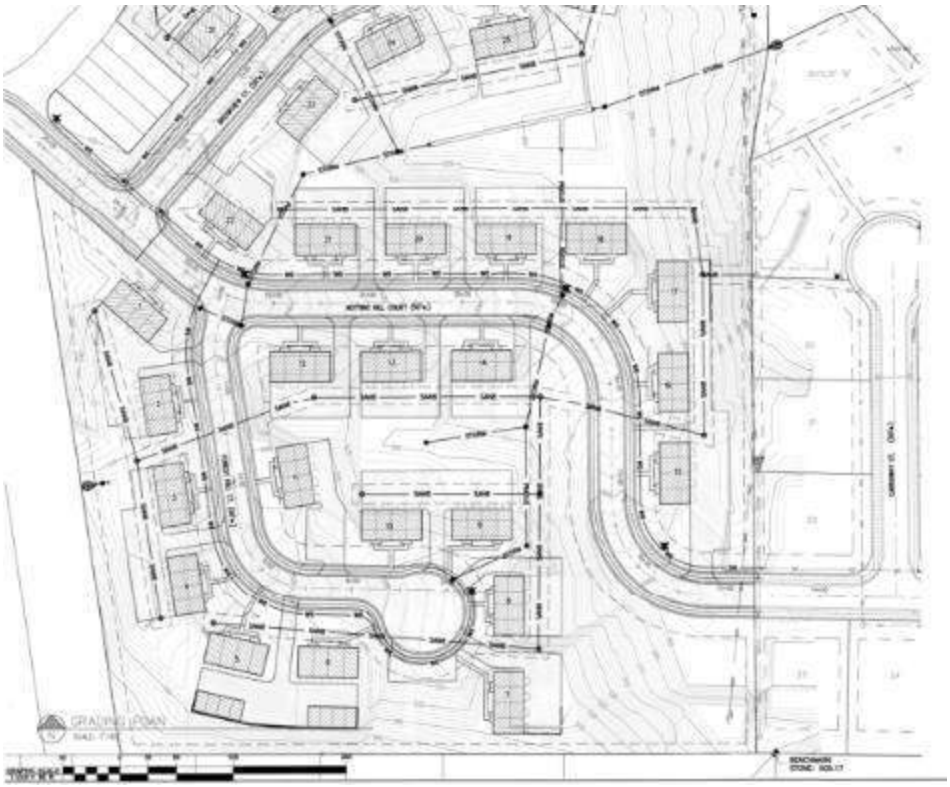


Figure 8: Ramada Blvd. and Notting Hill Road Connection -Alternative 2

Each alternative has been evaluated based on factors such as roadway connectivity and traffic flow efficiency. The goal of this review is to provide the city and the community with a clear context of variable perspectives to aid in determining which roadway connection would be the most beneficial for all stakeholders. By examining the advantages and limitations of each layout, this analysis seeks to support an informed and balanced decision that enhances mobility, safety, and long-term community development.

5.1 USABILITY REVIEW AND CITY RESPONDERS

Option 1: Ramada Boulevard and Reese Drive Connection

The layout connecting Ramada Boulevard and Reese Drive was reviewed using the information provided by the city. Based on the vertical profile, this alternative satisfies the design criteria outlined in BLR Figure 30-2A, which specifies a minimum K value of 19 for a crest vertical curve. The Ramada and Reese Drive connection achieves a minimum K value of 20, meeting the required standard.

According to the preliminary review of the Sandridge Manors Traffic Impact Study (TIS) dated April 2011, this connection would require a maximum grade of approximately 8%, which is within acceptable limits for roadway design and provides improved drivability and safety. In comparison, the existing Reese Drive corridor has an approximate grade of 12% near the intersection connection, which is not ideal, as intersection gradients should generally not exceed 5% as per BLR Chapter 34-1.02(a), to ensure safe and efficient vehicle operations. Therefore, a Reese Drive profile regrading or a design variance would be required to meet acceptable design standards.

Additionally, a visual inspection of the horizontal alignment indicates that this layout is more conducive to cut-through traffic, offering smoother connectivity and efficient vehicle movement through the area. From the city responders' perspective, this option offers a balanced solution that improves mobility while minimizing residential disruption. See **Figure 6** for roadway layout.

Option 2: Ramada Boulevard and Notting Hill Road Connection – Alternative 1

This option was evaluated based on the provided profile information. As per BLR Figure 30-2A, the minimum K value for a crest vertical curve should be 19. However, the profile for this option shows a minimum K value of 13, which does not meet the required standard.

Furthermore, the preliminary profile provided indicates a required grade of 12.74%, which exceeds desirable design limits and may present operational and safety challenges, especially during adverse weather conditions. Despite these concerns, the visual inspection of the horizontal alignment suggests that the overall layout of this option, like the Ramada and Reese Drive connection, is generally feasible for cut-through traffic due to its direct alignment and minimal turning movements. From the city responders' standpoint, this option raises concerns about neighborhood impact as the traffic would have to pass through the Notting Hill Rd residential homes. See **Figure 7** for roadway layout.

Option 3: Ramada Boulevard and Notting Hill Road Connection – Alternative 2

The option provided would require a maximum grade of approximately 8% along the proposed roadway section, which is within acceptable limits for roadway design. However, the proposed roadway corridor intersects Ramada Boulevard at an approximate grade of 8%, which is not acceptable per BLR Chapter 34-1.02(a), as intersection grades should be less than 5% to meet design standards and ensure safe vehicle operations. The vertical curve analysis indicates a K value of 25 for a sag vertical curve, which does not meet the minimum required K value of 37 as defined in BLR Figure 30-2D.

From a visual assessment of the layout, Option 3 appears more suitable for residential areas rather than for serving as a through route. The presence of multiple 90-degree turns would likely discourage cut-through traffic but provide traffic-calming benefits within residential neighborhoods. From the city responders' perspective, while this option may benefit neighborhood safety, it is not a viable through-connection for managing diverted traffic or improving overall network efficiency. Additionally, the steep approach at the intersection could pose a potential hazard for ambulances or other emergency vehicle access, particularly during high-speed emergency drive-through operations.

It is also important to note that this roadway layout is based on an older plan and is not representative of the proposed Haven Hills development. Given the anticipated changes in land use and roadway configuration associated with the Haven Hills project, the current layout would likely need to be updated or redesigned to align with the new development plan and ensure compliance with modern roadway design and safety standards. See **Figure 8** for roadway layout.

See **Exhibit 5** for Route comparison and vertical profile information.

5.2 TRAFFIC AND COMMUNITY IMPACT REVIEW

Option 1: Ramada Boulevard and Reese Drive Connection

The Ramada Boulevard and Reese Drive connector is projected to divert approximately 560 vehicles per day, representing nearly 70% of the current Average Daily Traffic (ADT) from Sandridge Drive, based on the assumed trip distribution. This diversion would significantly reduce traffic volumes through the established Sandridge residential neighborhood, thereby improving safety, reducing noise levels, and enhancing the overall quality of life for residents in that area.

From a community impact perspective, this alternative helps to redistribute traffic more efficiently across the local network while minimizing intrusion into residential zones. The alignment and design of this connection also support smooth vehicle movements, making it an effective route for cut-through traffic seeking direct access to IL 157 and surrounding corridors.

Option 2: Ramada Boulevard and Notting Hill Road Connection – Alternative 1

This option would introduce additional traffic volumes into the Notting Hill Road residential area, which currently includes approximately 34 residential buildings. It is estimated that this roadway could experience an increase of about 280 vehicles per day, assuming that half of the diverted trips from Sandridge Drive would utilize Notting Hill Road, while the remainder would continue using Sandridge to access Johnson Hill Road.

While this option would likely reduce travel times for residents of Notting Hill Road seeking access to IL 157, it would also increase local traffic volumes, potentially raising concerns related to safety, pedestrian activity, and neighborhood livability. The introduction of more through traffic into this residential corridor could alter the community's viewpoint.

Option 3: Ramada Boulevard and Notting Hill Road Connection – Alternative 2

This option offers limited benefits in terms of traffic diversion and is not considered a feasible solution for accommodating cut-through traffic. The roadway layout includes multiple 90-degree turns, which would discourage through movements and reduce overall traffic efficiency. These sharp turns may also create turning challenges for larger vehicles and lead to increased maintenance needs at intersections.

However, from a community standpoint, this configuration may provide a traffic-calming effect, making it more suitable for local residential circulation rather than regional connectivity. While this may benefit neighborhood safety, it does not effectively serve the purpose of diverting higher traffic volumes from Sandridge Drive or improving overall network mobility.

5.3 FUTURE STAGING FOR MAINTENANCE OPERATIONS

Option 1: Ramada Boulevard and Reese Drive Connection

The Ramada Boulevard and Reese Drive connector would mainly provide an additional access route for the Sandridge Drive residential area. This connection could help ease local traffic and give city crews another way in and out when performing maintenance or emergency work in that neighborhood. However, it would not improve access for the broader Reese Drive area or for Ramada Boulevard west of Sandridge Drive.

From the city's perspective, this option offers some local benefits for traffic and maintenance management, but its usefulness is limited to a smaller section of the roadway network. Any major work

along Ramada Boulevard would still likely disrupt traffic because no alternate path would be available in that area.

Option 2: Ramada Boulevard and Notting Hill Road Connection – Alternative 1
This option would create an additional travel route serving both the Reese Drive and Sandridge Drive neighborhoods. This would help spread out traffic and make it easier for city crews to redirect vehicles during road repairs, utility work, or emergencies. Having more than one way in or out of these areas would also make it easier to handle temporary road closures.

While this option would bring some extra traffic into the Notting Hill residential area, it would also make the overall roadway system more flexible and reliable for maintenance and emergency response. City staff would likely see this as a more functional option for managing traffic during planned or unplanned work.

Option 3: Ramada Boulevard and Notting Hill Road Connection – Alternative 2
This option would also connect both the Reese Drive and Sandridge Drive areas, offering another route for vehicles during maintenance or emergency events. However, the series of 90-degree turns and steeper roadway grades make this option less practical for larger maintenance trucks or emergency vehicles.

See **Figure 1** for Location Overview

6.0 CONCLUSION AND FINDINGS

The traffic impact study for the proposed Haven Hills development and surrounding anticipated developments (Westview and Collinsville Landing) concludes that the proposed Reese Drive and Ramada Boulevard (New) connector provides the most effective solution for managing additional traffic while minimizing neighborhood impacts.

The key findings are as follows:

1. **Haven Hills Development Impact**
   - Combined with trips from the Westview and Collinsville Landing developments, traffic impacts at nearby intersections from Haven Hills are minimal under forecasted peak hours through 2047.

2. **Roadway Network Improvements**

➢ **Ramada Blvd.**
   - Roadway Widening: Expand narrower sections to maintain a 30 ft (face-to-face) width along corridors.
   - Curb and Gutter: Install curbs and gutters along the corridor to match existing improvements.
   - Sidewalk Installation: Provide sidewalks on at least one side of the roadway.

➢ **Sandridge Dr.**
   - Sidewalk Installation: Provide sidewalks on at least one side of the roadway.

- **Reese Dr.**
  - Pavement Improvement: Replace existing oil-and-chip section with full depth pavement for a consistent pavement section.
  - Roadway Widening: Expand narrower sections to maintain a 30 ft (face-to-face) width along corridors.
  - Curb and Gutter: Install curbs and gutters along the corridor to match existing improvements.
  - Sidewalk Installation: Provide sidewalks on at least one side of the roadway.

- **Johnson Hill Rd.**
  - Roadway Widening: Expand narrower sections to maintain a 30 ft (face-to-face) width along corridors.
  - Sidewalk Installation: Provide sidewalks on at least one side of the roadway.

3. Intersection Performance

- **Ramada Blvd. & Beverly Lane**
  - The Collinsville Landing project converts the current south leg into the east leg of Ramada Blvd., allowing eastbound vehicles to travel without stopping for a turn.
  - This modification would enhance eastbound traffic flow, allowing vehicles to continue toward Beverly Lane without slowing to make a turn.
  - Potential delays at the north and east legs of the Ramada Boulevard and Beverly Lane intersection may still occur due to the nearby signalized intersection at Ramada Boulevard and IL 157. These delays are independent of the Haven Hills development and are primarily influenced by the existing signal timing, which favors IL 157 as the major roadway.

- **Ramada Blvd. & Sandridge Dr.**
  - Extending the east leg of Ramada Blvd. to connect with Reese Drive diverts approximately 70% of cut-through traffic from Sandridge Dr.
  - Reduction in thru-traffic decreases congestion and control delay on Sandridge Dr., improving circulation within the neighborhood.
  - Overall intersection LOS improves in both AM and PM peak periods.

- **Reese Dr. & Ramada Blvd. New connection**
  - The new intersection provides direct access from Haven Hills, creating a south leg to form a three-way intersection.
  - All legs operate at LOS C or better due to one-lane approaches and stop-controlled operations.
  - New path prevents traffic from cutting through residential streets, reducing delays caused by conflicting local traffic.

- **Johnson Hill Rd. & Reese Dr.**
  - Slight increase of approximately 0.5 seconds in control delay for east and west legs, but all approaches maintain LOS C or better.

The roadway layout and intersection comparisons presented in this report, including proposed configurations and alternative alignments, were based on a cursory review of preliminary layouts. While the review provides preliminary insights into vertical alignments, grades, overview of horizontal layout, and intersection control strategies, it does not account for the detailed design considerations required for a final engineered solution.

4. **Roadway Design Feasibility**
   - Option 1: Ramada Blvd. and Reese Drive – Roadway section meets vertical and grade design standards, supports efficient cut-through traffic, and minimizes neighborhood disruption. The intersection grade should be designed to maintain a gradient of less than 5% to comply with design standards and ensure safe vehicle operations.
   - Option 2: Ramada Blvd. and Notting Hill Rd. Alternative 1 **–** Roadway section does not meet vertical curve requirement.
   - Option 3: Ramada Blvd. and Notting Hill Rd. Alternative 2**–** The roadway section meets vertical and overall grade design standards; however, it does not meet intersection grade requirements. This option is unsuitable for through traffic and is better suited for residential traffic calming.

5. **Neighborhood and Community Impacts**
   - The new Ramada Blvd. and Reese Drive connector reduces traffic through established residential areas and minimizing cut-through vehicle conflicts.
   - In contrast, the Notting Hill Road connection would increase traffic through a residential neighborhood.

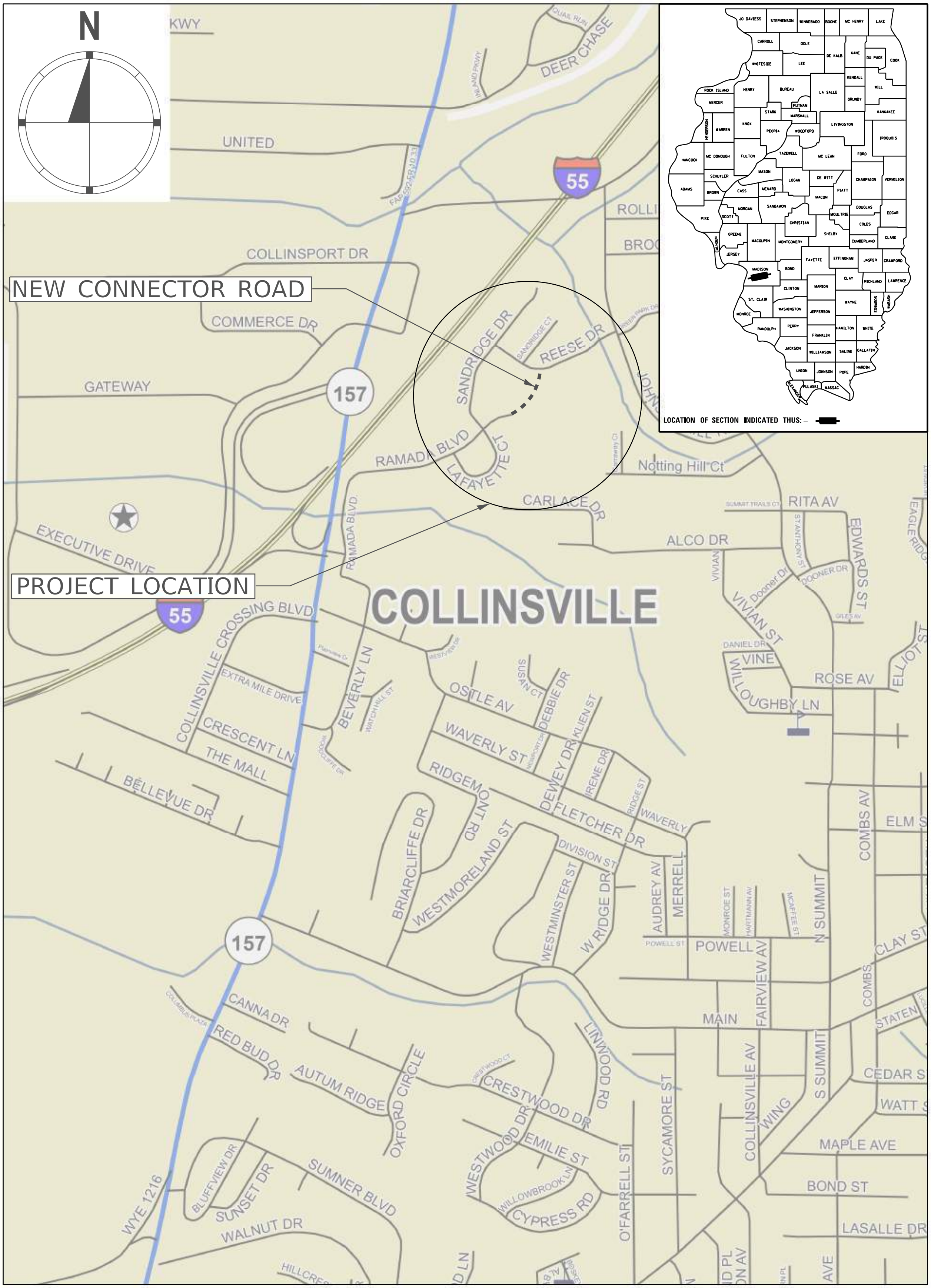
6. **Maintenance Operations**
   - Option 1: Ramada Blvd. and Reese Drive – Improves local Sandridge access but offers limited network benefits; no alternate route during major work.
   - Option 2: Ramada Blvd. and Notting Hill Rd. Alternative 1 – Provides better overall connectivity and flexibility for traffic and emergencies; may increase residential traffic.
   - Option 3: Ramada Blvd. and Notting Hill Rd. Alternative 2 – Adds connectivity but impractical due to sharp turns and steep grades, hindering emergency and maintenance access.

The suggestions for new Ramada Blvd. and Reese Dr. connection are as follows:

Intersection of Reese Dr. and Ramada Blvd. (New)

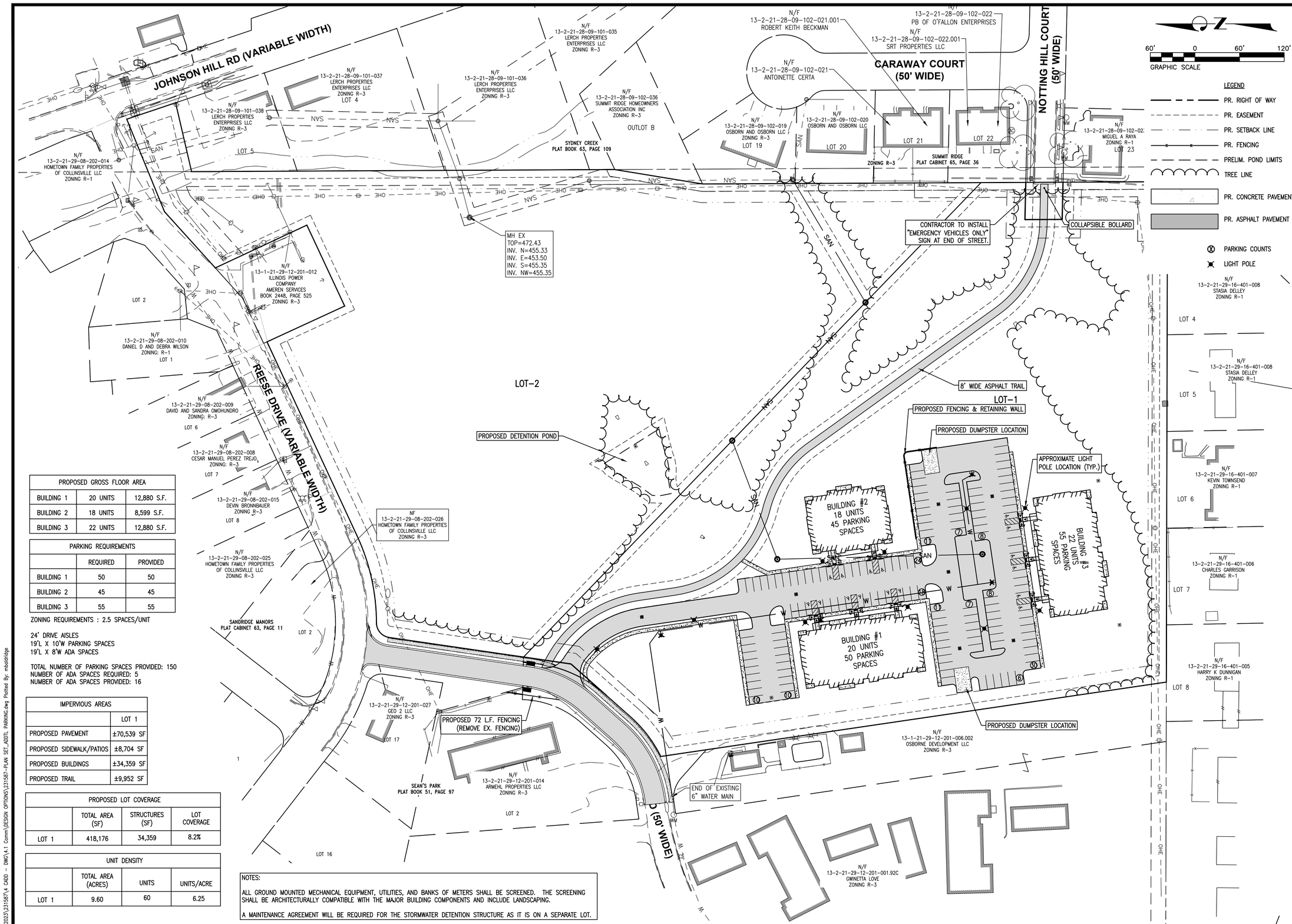
- Realign the south and east legs to create a continuous connection. Reconfigure the existing west leg as a one-way stop-controlled approach.
- Construct the south leg with one approach lane.
- Ensure that the policy intersection sight distance is maintained, accounting for the curved alignment of Reese Drive and the vertical grade changes.

Exhibit 1
Vicinity and Functional Map


N
NEW CONNECTOR ROAD
PROJECT LOCATION
COLLINSVILLE
REESE DR
SANDRIDGE DR
RAMADA BLVD
LAFAYETTE CT
CARLACE DR
COLLINSPORT DR
COMMERCE DR
GATEWAY
UNITED
EXECUTIVE DRIVE
COLLINSVILLE CROSSING BLVD
ALCO DR
RITA AV
ROSE AV
MAIN
CLAY ST
55
157
LOCATION OF SECTION INDICATED THUS:

this exhibit should have been zoomed in on project area

Exhibit 2
Proposed Plan



PROPOSED GROSS FLOOR AREA		
BUILDING 1	20 UNITS	12,880 S.F.
BUILDING 2	18 UNITS	8,599 S.F.
BUILDING 3	22 UNITS	12,880 S.F.

PARKING REQUIREMENTS		
	REQUIRED	PROVIDED
BUILDING 1	50	50
BUILDING 2	45	45
BUILDING 3	55	55

ZONING REQUIREMENTS : 2.5 SPACES/UNIT

24' DRIVE AISLES
19'L X 10'W PARKING SPACES
19'L X 8'W ADA SPACES

TOTAL NUMBER OF PARKING SPACES PROVIDED: 150
NUMBER OF ADA SPACES REQUIRED: 5
NUMBER OF ADA SPACES PROVIDED: 16

IMPERVIOUS AREAS	
	LOT 1
PROPOSED PAVEMENT	±70,539 SF
PROPOSED SIDEWALK/PATIOS	±8,704 SF
PROPOSED BUILDINGS	±34,359 SF
PROPOSED TRAIL	±9,952 SF

PROPOSED LOT COVERAGE			
	TOTAL AREA (SF)	STRUCTURES (SF)	LOT COVERAGE
LOT 1	418,176	34,359	8.2%

UNIT DENSITY			
	TOTAL AREA (ACRES)	UNITS	UNITS/ACRE
LOT 1	9.60	60	6.25

NOTES:

ALL GROUND MOUNTED MECHANICAL EQUIPMENT, UTILITIES, AND BANKS OF METERS SHALL BE SCREENED. THE SCREENING SHALL BE ARCHITECTURALLY COMPATIBLE WITH THE MAJOR BUILDING COMPONENTS AND INCLUDE LANDSCAPING.

A MAINTENANCE AGREEMENT WILL BE REQUIRED FOR THE STORMWATER DETENTION STRUCTURE AS IT IS ON A SEPARATE LOT.

P:\2023\231587\4 CADD - DWG\4.1 Comm\DESIGN OPTIONS\231587-PLAN SET_ADDTL PARKING.dwg Plotted By: mbaldridge

TWM
CONSULTING ENGINEERING
GEOSPATIAL SERVICES

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MISSOURI	ST. CHARLES ST. LOUIS COLUMBIA
TENNESSEE	NASHVILLE CHATTANOOGA ATHENS

THOUVENOT, WADE & MOERCHEN, INC.

SWANSEA OFFICE
4940 OLD COLLINSVILLE ROAD
SWANSEA, ILLINOIS
62226
(618) 624-4488
WWW.TWM-INC.COM

PROF. LICENSE	NUMBER
IL. PROF. DESIGN FIRM	184-001220
IL. PROF. ENGR. CORP.	62-035370
IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000029
KS. PROF. ENGR. FACILITY	E-3256
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL

LICENSED PROFESSIONAL ENGINEER
MARSHA J. MALLER
062-051334
OF ILLINOIS

SIGNATURE: Marsha J Maller
DATE SIGNED: JULY 31, 2025
LICENSE EXPIRATION: 11/30/2025

ISSUED FOR PLANNING & ZONING
DATE OF ISSUANCE: 07/31/2025

REV.	DATE	DESCRIPTION
△		
△		
△		
△		

DRAWN BY:	LEM
DESIGNED BY:	BYF
CHECKED BY:	NTS
APPROVED BY:	MJM
PROJECT NO:	D01231587

PROJECT:

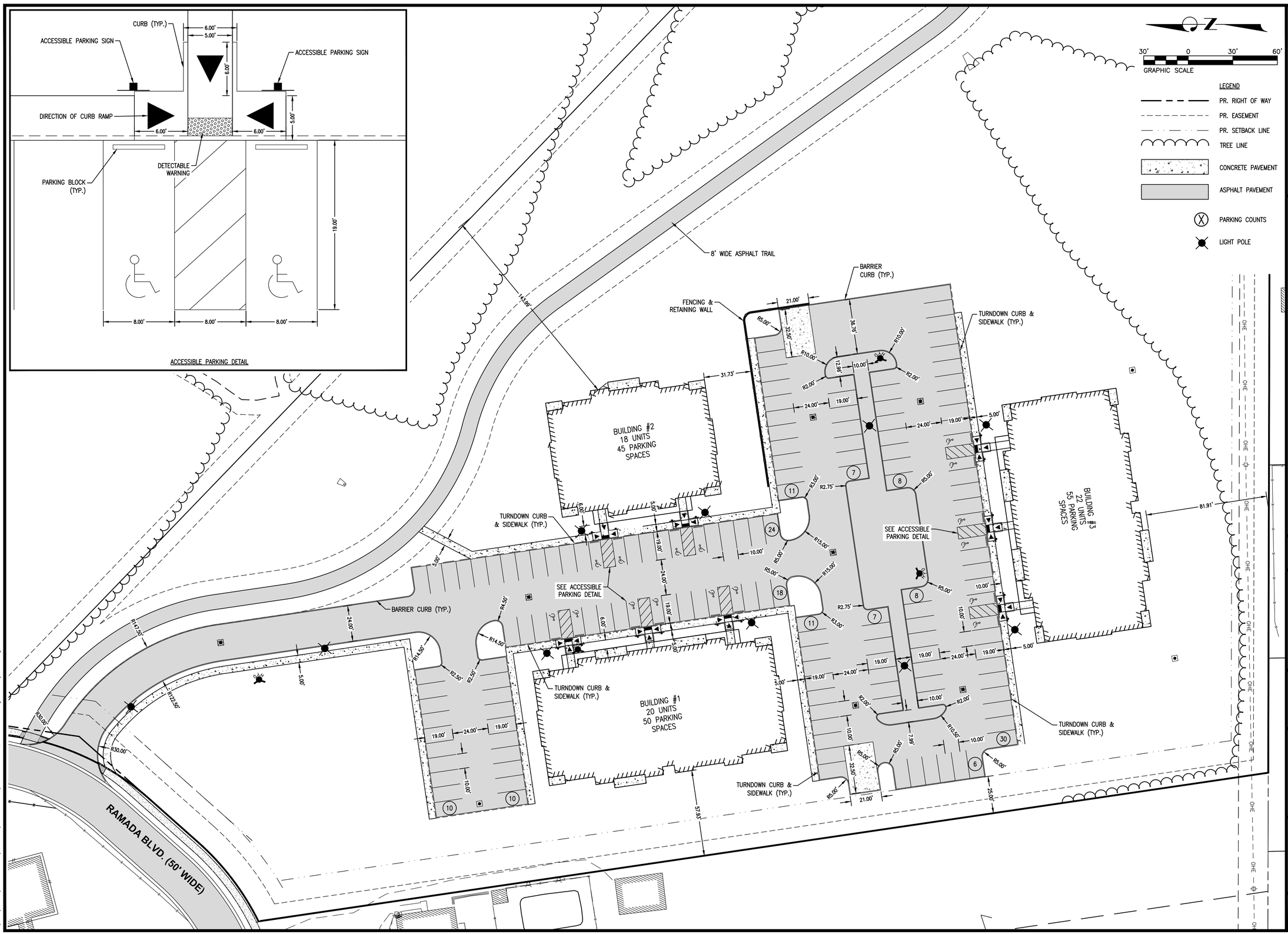
HAVEN HILL ACRES
REESE DRIVE
CITY OF COLLINSVILLE
MADISON COUNTY
ILLINOIS

TITLE:

SITE PLAN

C-3

ACCESSIBLE PARKING DETAIL



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IL. PROF. LAND SURV. CORP.	048-000029
KS. PROF. ENGR. FACILITY	E-3256
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL

LICENSED PROFESSIONAL ENGINEER
MARSHA J. WALLER
062-051334
OF ILLINOIS

SIGNATURE:
DATE SIGNED: JUNE 25, 2025
LICENSE EXPIRATION: 11/30/2025

ISSUED FOR PLANNING & ZONING
DATE OF ISSUANCE: 06/25/2025

REV.	DATE	DESCRIPTION
△		
△		
△		
△		

DRAWN BY:	LEM
DESIGNED BY:	BYF
CHECKED BY:	NTS
APPROVED BY:	MJM
PROJECT NO:	D01231587

PROJECT:

HAVEN HILL ACRES
REESE DRIVE
CITY OF COLLINSVILLE
MADISON COUNTY
ILLINOIS

TITLE:

SITE PLAN - LOT 1

C-3.1

Exhibit 3
Existing Hourly Volume (2025)

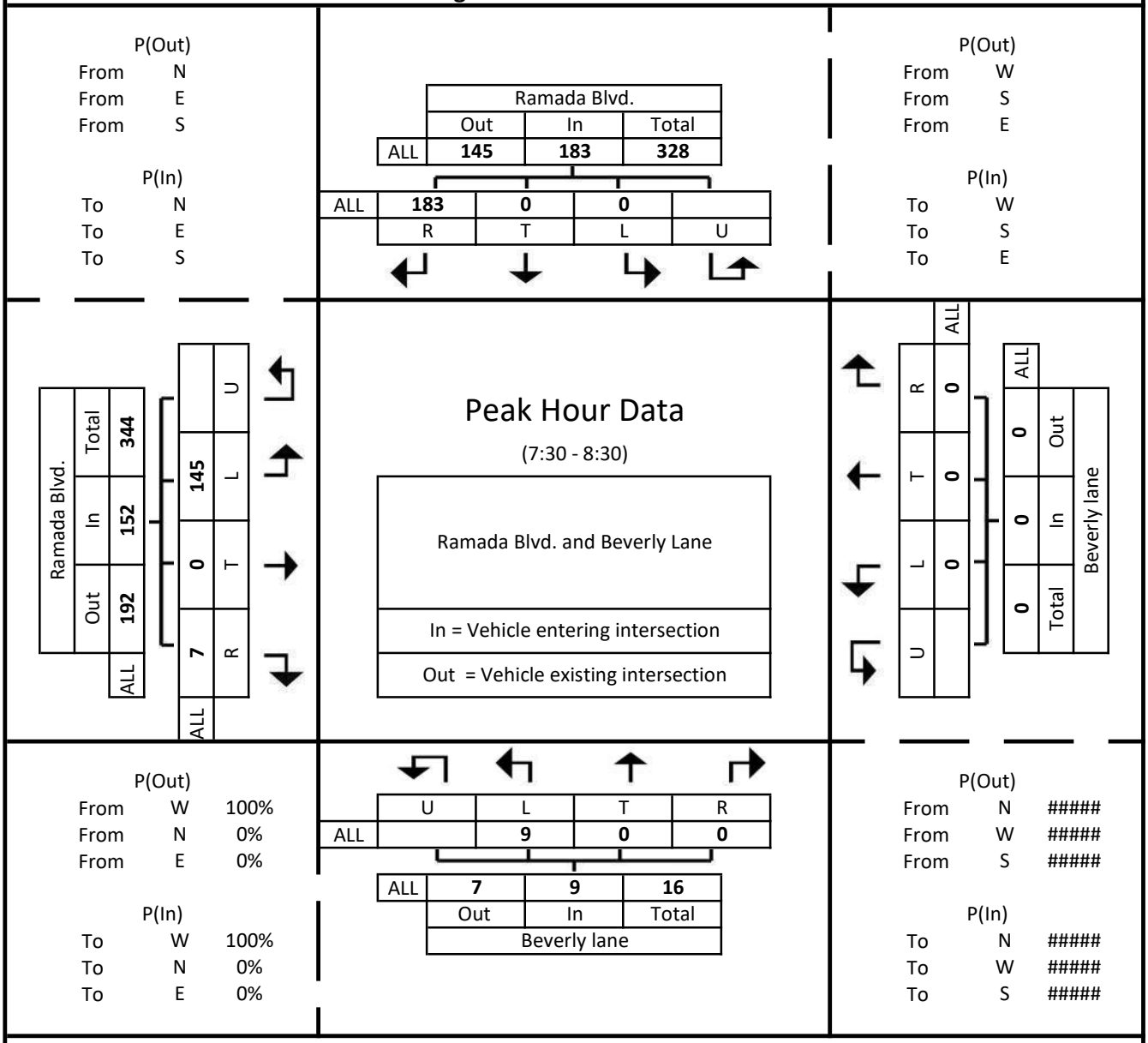
Intersection
Ramada Blvd. and Beverly Lane

OATES ASSOCIATES

Location: Ramada Blvd. and Beverly Lane
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time: 7:30:00 AM - 8:30:00 AM
Peak Hour: (7:30 - 8:30) PHF: 0.95

Project Information:
Ramada Blvd./ Beverly Lane

Turning Movement Peak Hour Data



Total Entering Intersection	344	vehicles

Total Entering North Leg	183	53%
Total Entering East Leg	0	0%
Total Entering South Leg	9	3%
Total Entering West Leg	152	44%
Check	344	100%

Total Exiting Intersection	344	vehicles

Total Exiting North Leg	145	42%
Total Exiting East Leg	0	0%
Total Exiting South Leg	7	2%
Total Exiting West Leg	192	56%
Check	344	100%

Notes:

OATES ASSOCIATES

Location: Ramada Blvd. and Beverly Lane
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time:
Peak Hour: (4:15 - 5:15) PHF: 0.95

Project Information:
0
0

Turning Movement Peak Hour Data

P(Out)
From N
From E
From S

P(In)
To N
To E
To S

Ramada Blvd.			
	Out	In	Total
ALL	262	131	393

ALL	131	0	0	
	R	T	L	U

P(Out)
From W
From S
From E

P(In)
To W
To S
To E

Ramada Blvd.		
Total		413
In		275
Out		138
ALL		

	U	
262	L	
0	T	
13	R	
ALL		

Peak Hour Data

(4:15 - 5:15)

Ramada Blvd. and Beverly Lane

In = Vehicle entering intersection

Out = Vehicle existing intersection

R	0	ALL
T	0	
L	0	
U		

ALL		
0	Out	
0	In	Beverly lane
0	Total	

P(Out)
From W 100%
From N 0%
From E 0%

P(In)
To W 100%
To N 0%
To E 0%

	U	L	T	R
ALL		7	0	0

ALL	13	7	20
	Out	In	Total
	Beverly lane		

P(Out)
From N #####
From W #####
From S #####

P(In)
To N #####
To W #####
To S #####

Total Entering Intersection	413	vehicles
Total Entering North Leg	131	32%
Total Entering East Leg	0	0%
Total Entering South Leg	7	2%
Total Entering West Leg	275	67%
Check	413	101%

Total Exiting Intersection	413	vehicles
Total Exiting North Leg	262	63%
Total Exiting East Leg	0	0%
Total Exiting South Leg	13	3%
Total Exiting West Leg	138	33%
Check	413	99%

Notes:

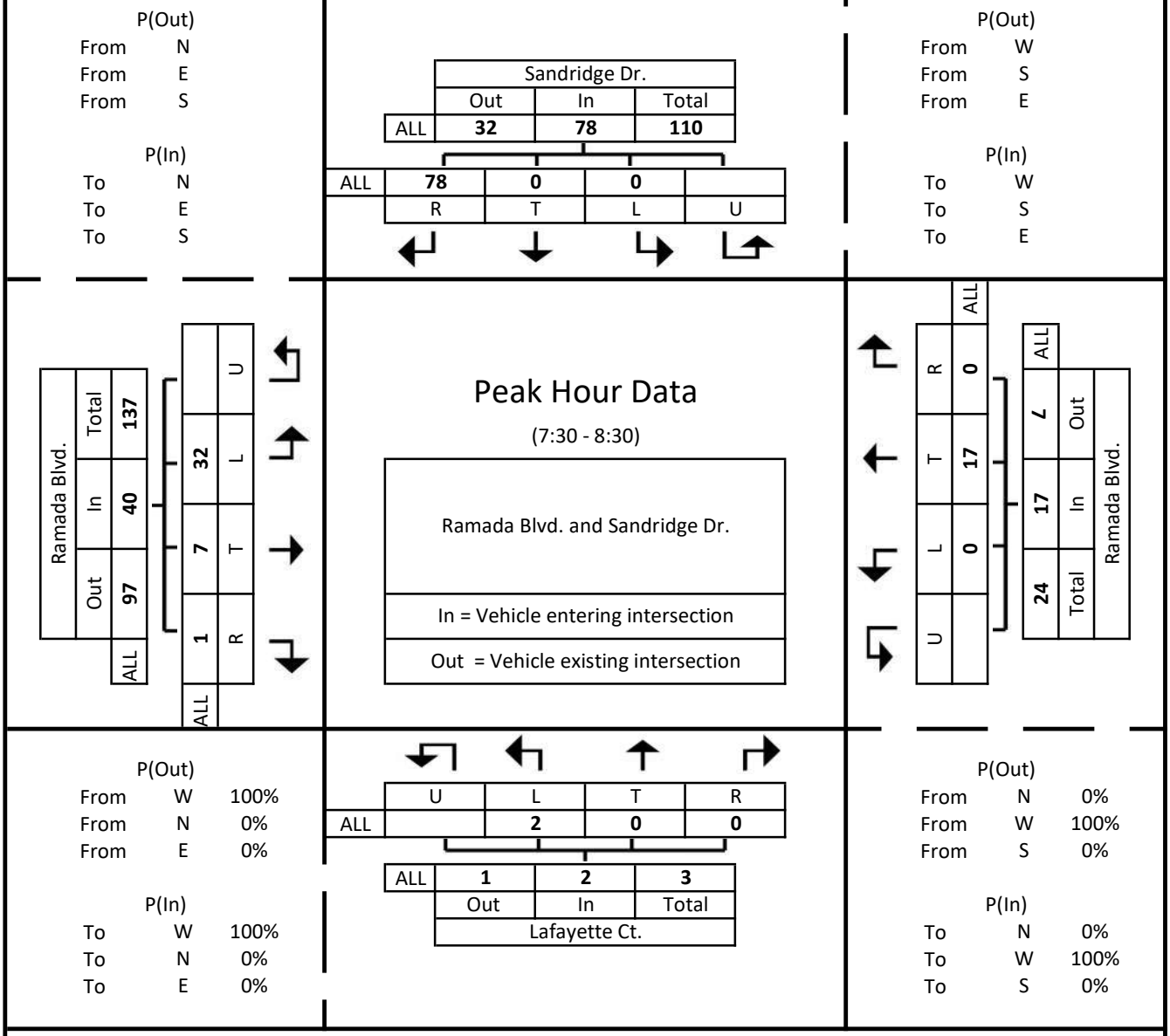
Intersection
Ramada Blvd. and Sandridge Dr.

OATES ASSOCIATES

Location: Ramada Blvd. and Sandridge Dr.
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time: 7:30:00 AM - 8:30:00 AM
Peak Hour: (7:30 - 8:30) PHF: 0.95

Project Information:
Ramada Blvd./ Sandridge Dr.

Turning Movement Peak Hour Data



Total Entering Intersection	137	vehicles
Total Entering North Leg	78	57%
Total Entering East Leg	17	12%
Total Entering South Leg	2	1%
Total Entering West Leg	40	29%
Check	137	99%

Total Exiting Intersection	137	vehicles
Total Exiting North Leg	32	23%
Total Exiting East Leg	7	5%
Total Exiting South Leg	1	1%
Total Exiting West Leg	97	71%
Check	137	100%

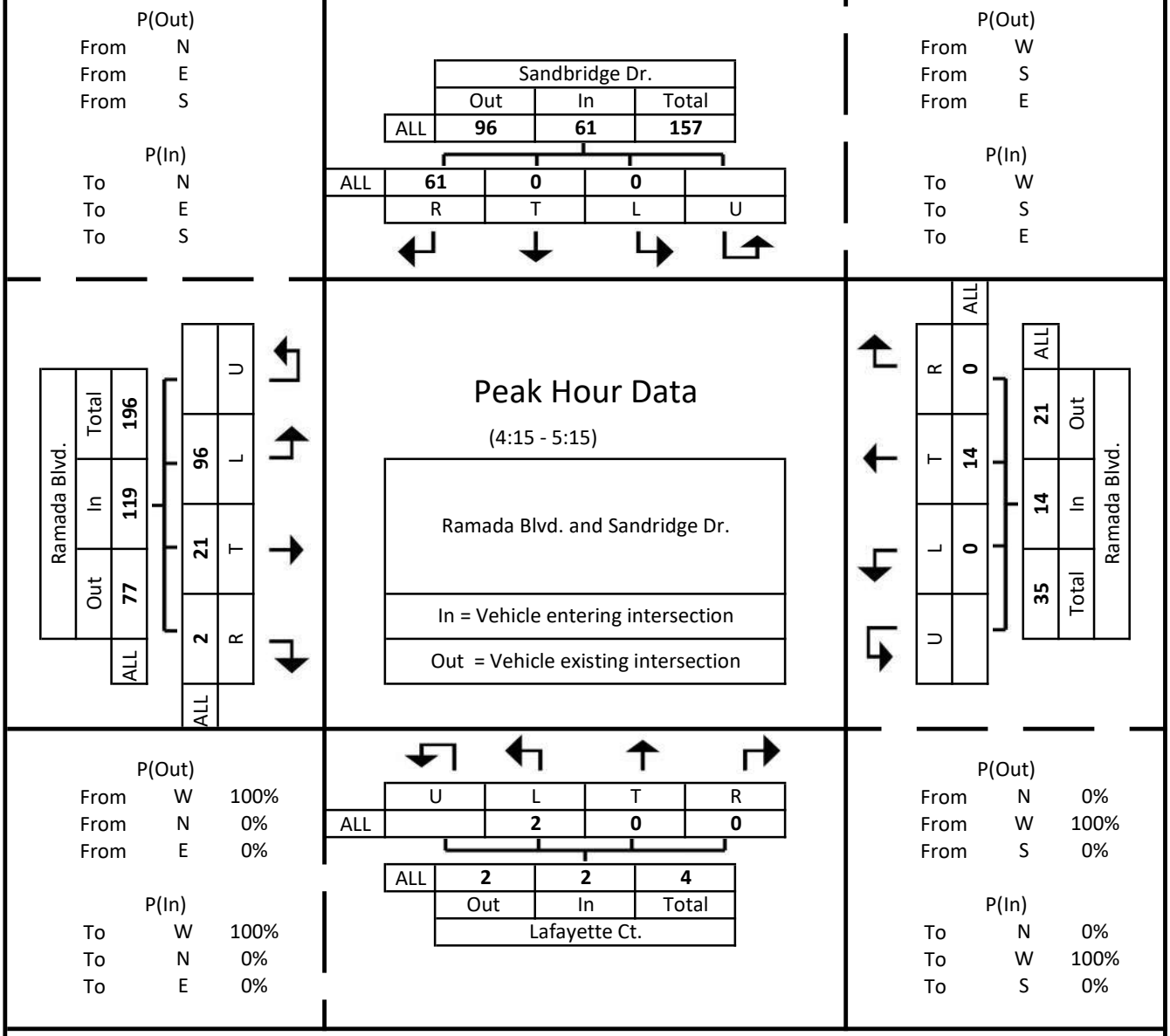
Notes:

OATES ASSOCIATES

Location: Ramada Blvd. and Sandridge Dr.
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time:
Peak Hour: (4:15 - 5:15) PHF: 0.95

Project Information:
0
0

Turning Movement Peak Hour Data



Total Entering Intersection	196	vehicles
Total Entering North Leg	61	31%
Total Entering East Leg	14	7%
Total Entering South Leg	2	1%
Total Entering West Leg	119	61%
Check	196	100%

Total Exiting Intersection	196	vehicles
Total Exiting North Leg	96	49%
Total Exiting East Leg	21	11%
Total Exiting South Leg	2	1%
Total Exiting West Leg	77	39%
Check	196	100%

Notes:

Intersection
Reese Dr. and Ramada Blvd. (New)

OATES ASSOCIATES

Location: Reese Dr. and Ramada Blvd. new
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time: 7:30:00 AM - 8:30:00 AM
Peak Hour: (7:30 - 8:30) PHF: 0.95

Project Information:
Ramada Blvd. New/Reese

Turning Movement Peak Hour Data

P(Out)
From N
From E
From S

P(In)
To N
To E
To S

	NA		
	Out	In	Total
ALL	0	0	0

ALL	0	0	0	
	R	T	L	U

P(Out)
From W
From S
From E

P(In)
To W
To S
To E

Reese Dr.		
Total		53
In		41
Out		12
	ALL	

	U	
0	L	
41	T	
0	R	
	ALL	

Peak Hour Data

(7:30 - 8:30)

Reese Dr. and Ramada Blvd. New

In = Vehicle entering intersection

Out = Vehicle existing intersection

R	0	ALL
T	12	
L	0	
U		

Reese Dr.		
Out		41
In		12
Total		53
	ALL	

P(Out)
From W #####
From N #####
From E #####

P(In)
To W #####
To N #####
To E #####

	U	L	T	R
ALL		0	0	0

ALL	0	0	0
	Out	In	Total
	Ramada Blvd. New		

P(Out)
From N 0%
From W 100%
From S 0%

P(In)
To N 0%
To W 100%
To S 0%

Total Entering Intersection	53	vehicles
Total Entering North Leg	0	0%
Total Entering East Leg	12	23%
Total Entering South Leg	0	0%
Total Entering West Leg	41	77%
Check	53	100%

Total Exiting Intersection	53	vehicles
Total Exiting North Leg	0	0%
Total Exiting East Leg	41	77%
Total Exiting South Leg	0	0%
Total Exiting West Leg	12	23%
Check	53	100%

Notes:

OATES ASSOCIATES

Location: Reese Dr. and Ramada Blvd. new
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time:
Peak Hour: (4:15 - 5:15) PHF: 0.95

Project Information:
0
0

Turning Movement Peak Hour Data

P(Out)
From N
From E
From S

P(In)
To N
To E
To S

	NA		
	Out	In	Total
ALL	0	0	0

ALL	0	0	0	
	R	T	L	U

P(Out)
From W
From S
From E

P(In)
To W
To S
To E

Reese Dr.		
Out	61	
In	86	
Total	147	
ALL		

U		
L	0	
T	86	
R	0	
ALL		

Peak Hour Data

(4:15 - 5:15)

Reese dr. and Ramada Blvd. New

In = Vehicle entering intersection

Out = Vehicle existing intersection

ALL		
R	0	
T	61	
L	0	
U		

Reese Dr.		
Out	86	
In	61	
Total	147	
ALL		

P(Out)
From W #####
From N #####
From E #####

P(In)
To W #####
To N #####
To E #####

	U	L	T	R
ALL		0	0	0

ALL	0	0	0
	Out	In	Total
	Ramada Blvd. New		

P(Out)
From N 0%
From W 100%
From S 0%

P(In)
To N 0%
To W 100%
To S 0%

Total Entering Intersection	147	vehicles	**Total Exiting Intersection**	147	vehicles
Total Entering North Leg	0	0%	**Total Exiting North Leg**	0	0%
Total Entering East Leg	61	41%	**Total Exiting East Leg**	86	59%
Total Entering South Leg	0	0%	**Total Exiting South Leg**	0	0%
Total Entering West Leg	86	59%	**Total Exiting West Leg**	61	41%
Check	147	100%	**Check**	147	100%

Notes:

Intersection
Johnson Hill Rd. and Reese Dr.

OATES ASSOCIATES

Location: Johnson Hill Rd. and Reese Dr.
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time: 7:30:00 AM - 8:30:00 AM
Peak Hour: (7:30 - 8:30) PHF: 0.95

Project Information:
Johnson Hill Rd./Reese Dr.

Turning Movement Peak Hour Data

P(Out)	
From	N
From	E
From	S

P(In)	
To	N
To	E
To	S

Johnson Hill Rd.	Out	In	Total
ALL	242	113	355

	R	T	L	U
ALL	5	103	5	

P(Out)	
From	W
From	S
From	E

P(In)	
To	W
To	S
To	E

Reese Dr.	Out	In	Total
ALL	12	40	52

	R	T	L	U
ALL	20	0	20	

Peak Hour Data

(7:30 - 8:30)

Johnson Hill Rd. and Reese Dr.

In = Vehicle entering intersection

Out = Vehicle existing intersection

	R	T	L	U
ALL	4	0	13	

Reese Dr.	Out	In	Total
ALL	12	17	29

P(Out)		
From	W	15%
From	N	76%
From	E	10%

P(In)		
To	W	3%
To	N	94%
To	E	3%

	U	L	T	R
ALL		7	218	7

Johnson Hill Rd.	Out	In	Total
ALL	136	232	368

P(Out)		
From	N	42%
From	W	0%
From	S	58%

P(In)		
To	N	24%
To	W	0%
To	S	77%

Total Entering Intersection	402	vehicles
Total Entering North Leg	113	28%
Total Entering East Leg	17	4%
Total Entering South Leg	232	58%
Total Entering West Leg	40	10%
Check	402	100%

Total Exiting Intersection	402	vehicles
Total Exiting North Leg	242	60%
Total Exiting East Leg	12	3%
Total Exiting South Leg	136	34%
Total Exiting West Leg	12	3%
Check	402	100%

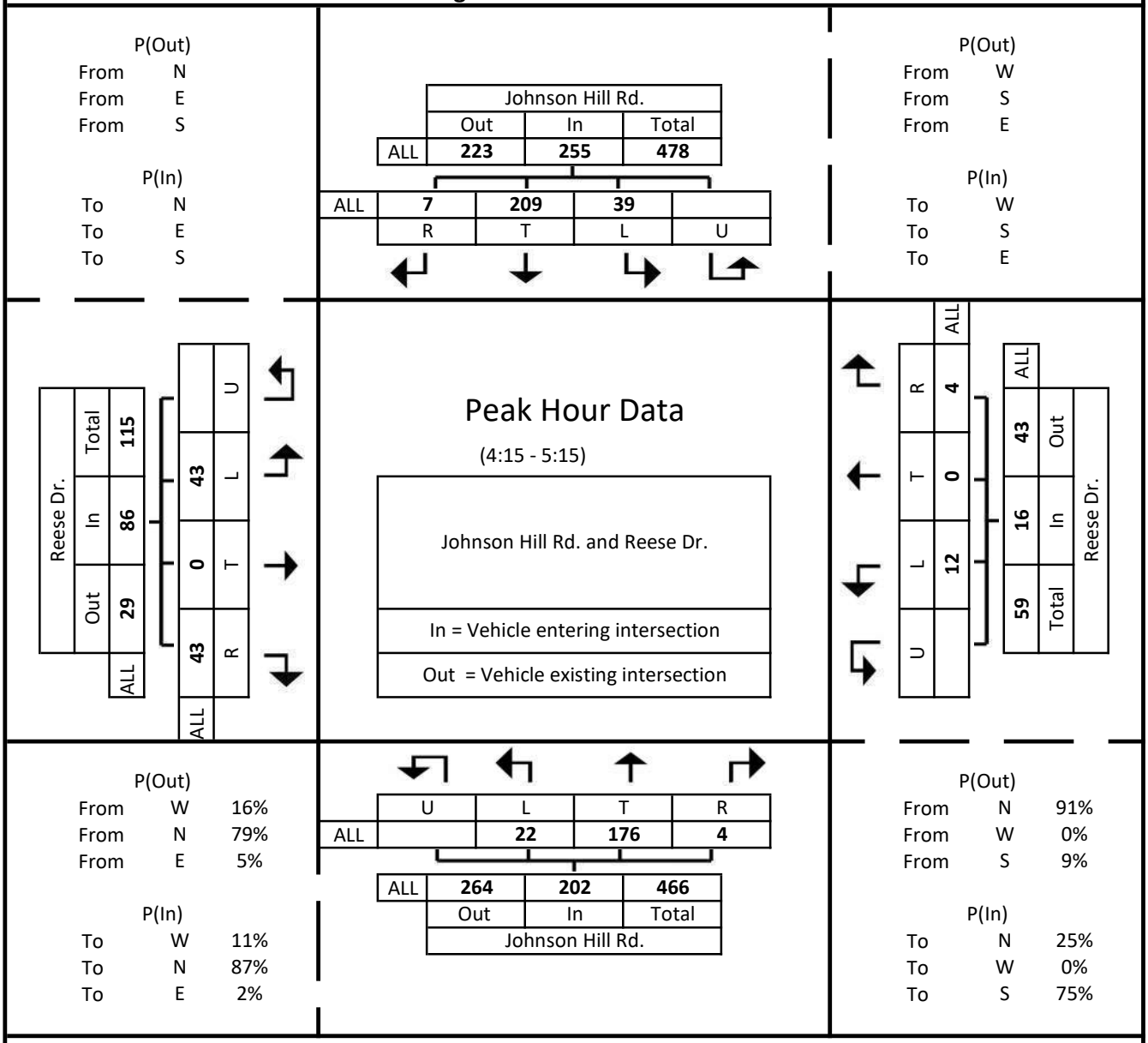
Notes:

OATES ASSOCIATES

Location: Johnson Hill Rd. and Reese Dr.
Recorder: 0
Analyst: RP
Date of Count: 9/10/2025
Time:
Peak Hour: (4:15 - 5:15) PHF: 0.95

Project Information:
0
0

Turning Movement Peak Hour Data

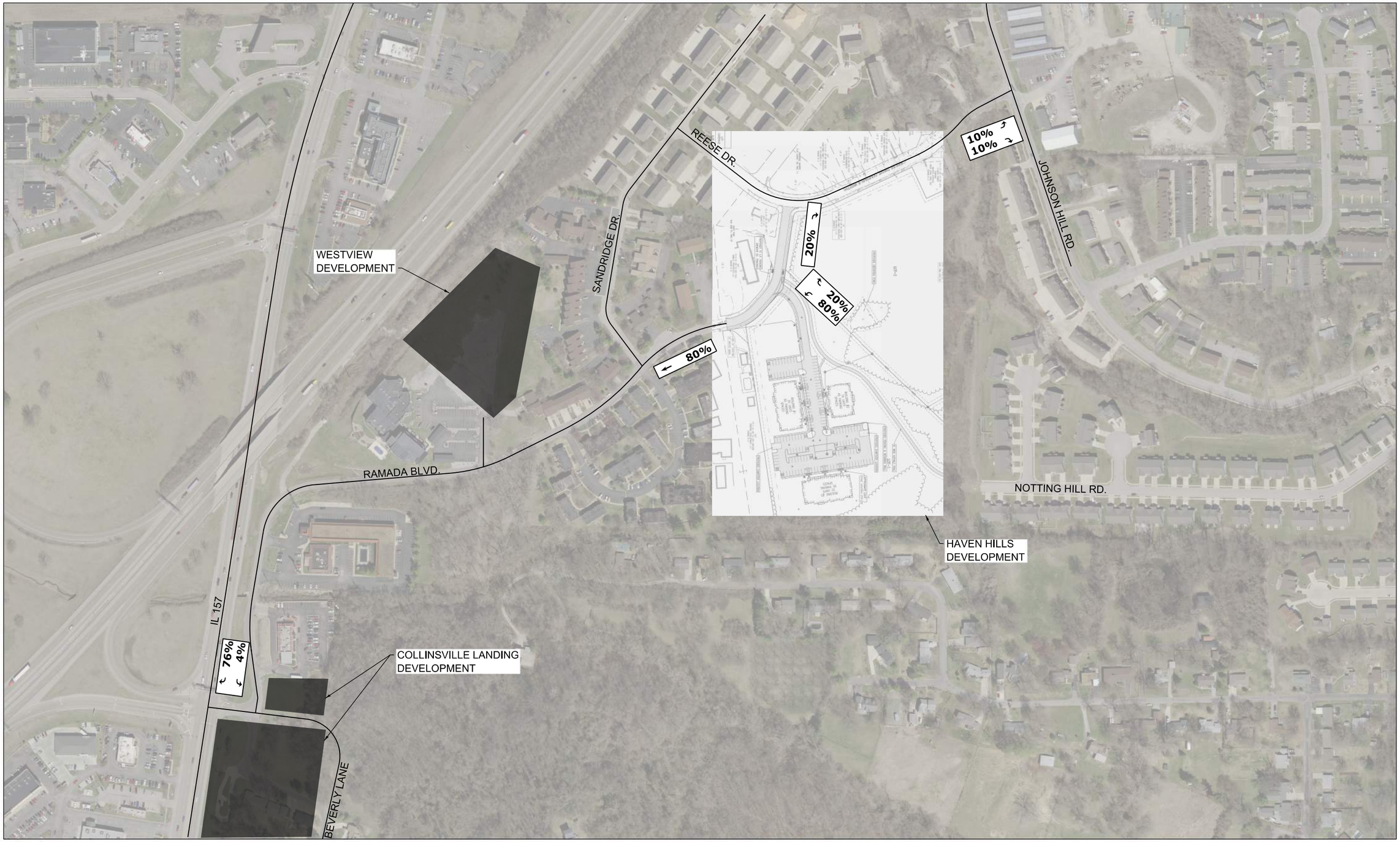


Total Entering Intersection	559	vehicles
Total Entering North Leg	255	46%
Total Entering East Leg	16	3%
Total Entering South Leg	202	36%
Total Entering West Leg	86	15%
Check	559	100%

Total Exiting Intersection	559	vehicles
Total Exiting North Leg	223	40%
Total Exiting East Leg	43	8%
Total Exiting South Leg	264	47%
Total Exiting West Leg	29	5%
Check	559	100%

Notes:

Exhibit 4
TRIP DISTRIBUTION

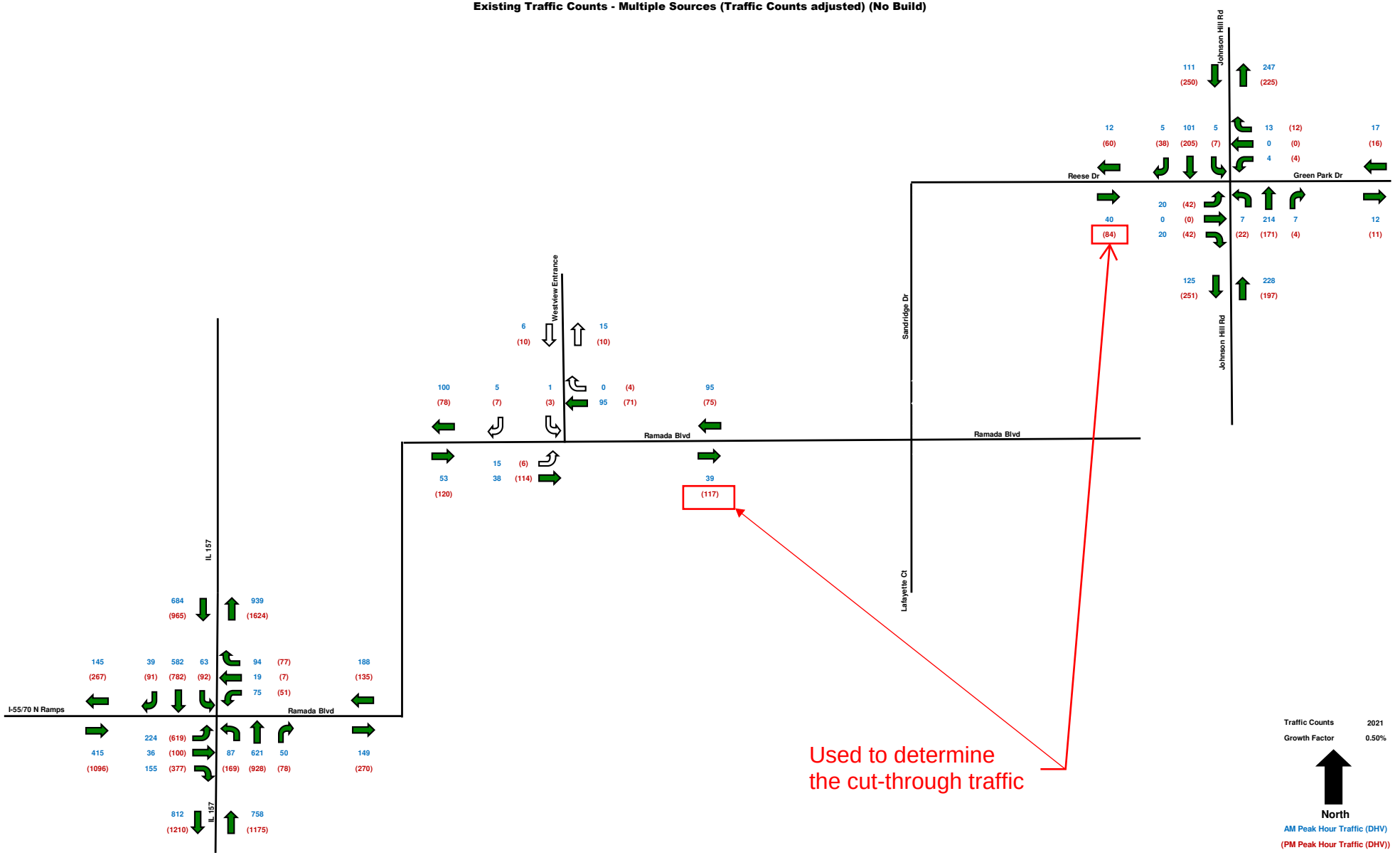


OATES ASSOCIATES

TRIP DISTRIBUTION
EXHIBIT 4

Townes at Westview Development

Existing Traffic Counts - Multiple Sources (Traffic Counts adjusted) (No Build)



Appendix D

Generated Traffic Distribution Calculations

Ramada Blvd. & Beverly Lane

Collinsville Landing TIS

Driveway Enter/Exit

	AM				Mid-Day				PM			
Traffic Generator Area #1	Enter	25	Exit	24	Enter	31	Exit	30	Enter	19	Exit	18
Traffic Generator Area #2	Enter	64	Exit	56	Enter	117	Exit	108	Enter	98	Exit	96

East Leg* AM		East Leg* PM		East Leg* PM	
OUT	IN	OUT	IN	OUT	IN
25	22	31	27	19	16
41	41	74	79	62	71
Totals: 66	63	105	106	81	87

Vehicle entering intersection.

Vehicle exiting intersection.

Total AM Volume: 129

Total MD Volume: 211

Total PM Volume: 168

INTERSECTION TRAFFIC SPLITS

Generated Traffic Distribution Calculations

	North Leg		East Leg*			South Leg		West Leg	
AM	P(Out)	P(In)	P(Out)		P(In)	P(Out)	P(In)	P(Out)	P(In)
	From W	To W	From N		To N 5%	From W	To W	From N	To N
	From S	To S	From W	100%	To W 95%	From N	To N	From E	To E
	From E	To E	From S		To S	From E	To E	From S	To S
Mid-Day	P(Out)	P(In)	P(Out)		P(In)	P(Out)	P(In)	P(Out)	P(In)
	From W	To W	From N		To N 5%	From W	To W	From N	To N
	From S	To S	From W	100%	To W 95%	From N	To N	From E	To E
	From E	To E	From S		To S	From E	To E	From S	To S
PM	P(Out)	P(In)	P(Out)		P(In)	P(Out)	P(In)	P(Out)	P(In)
	From W	To W	From N		To N 5%	From W	To W	From N	To N
	From S	To S	From W	100%	To W 95%	From N	To N	From E	To E
	From E	To E	From S		To S	From E	To E	From S	To S

*Assume generated traffic follows current directional split percentages.

Area 1

Design Hourly Volume (generated DHV from development area)	SOUTHBOUND (total vehicles)				WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR						21	1	22						25		25	47
Mid-Day PEAK HOUR						26	1	27						31		31	58
P.M. PEAK HOUR						15	1	16						19		19	35

Area 2

Design Hourly Volume (generated DHV from development area)	SOUTHBOUND (total vehicles)				WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR						39	2	41						41		41	82
Mid-Day PEAK HOUR						75	4	79						74		74	153
P.M. PEAK HOUR						67	4	71						62		62	133

Total Traffic Generation (Areas 1 and 2) 2023

Design Hourly Volume (generated DHV from development area)	SOUTHBOUND (total vehicles)				WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR						60	3	63						66		66	129
% Heavy																	
Mid-Day PEAK HOUR						101	5	106						105		105	211
% Heavy																	
P.M. PEAK HOUR						82	5	87						81		81	168
% Heavy																	

Exhibit 5
SPOT MAP

LEGEND

△	PROPERTY DAMAGE ONLY	R	RAIN
○	INJURY	D	DAYLIGHT
□	FIXED OBJECT	N	DAWN
◇	PARKED VEHICLE	L	DARKNESS, LIGHTED ROAD
⬡	PEDESTRIAN	M	DUSK
C	CLEAR	U	UNKNOWN
S	SNOW		

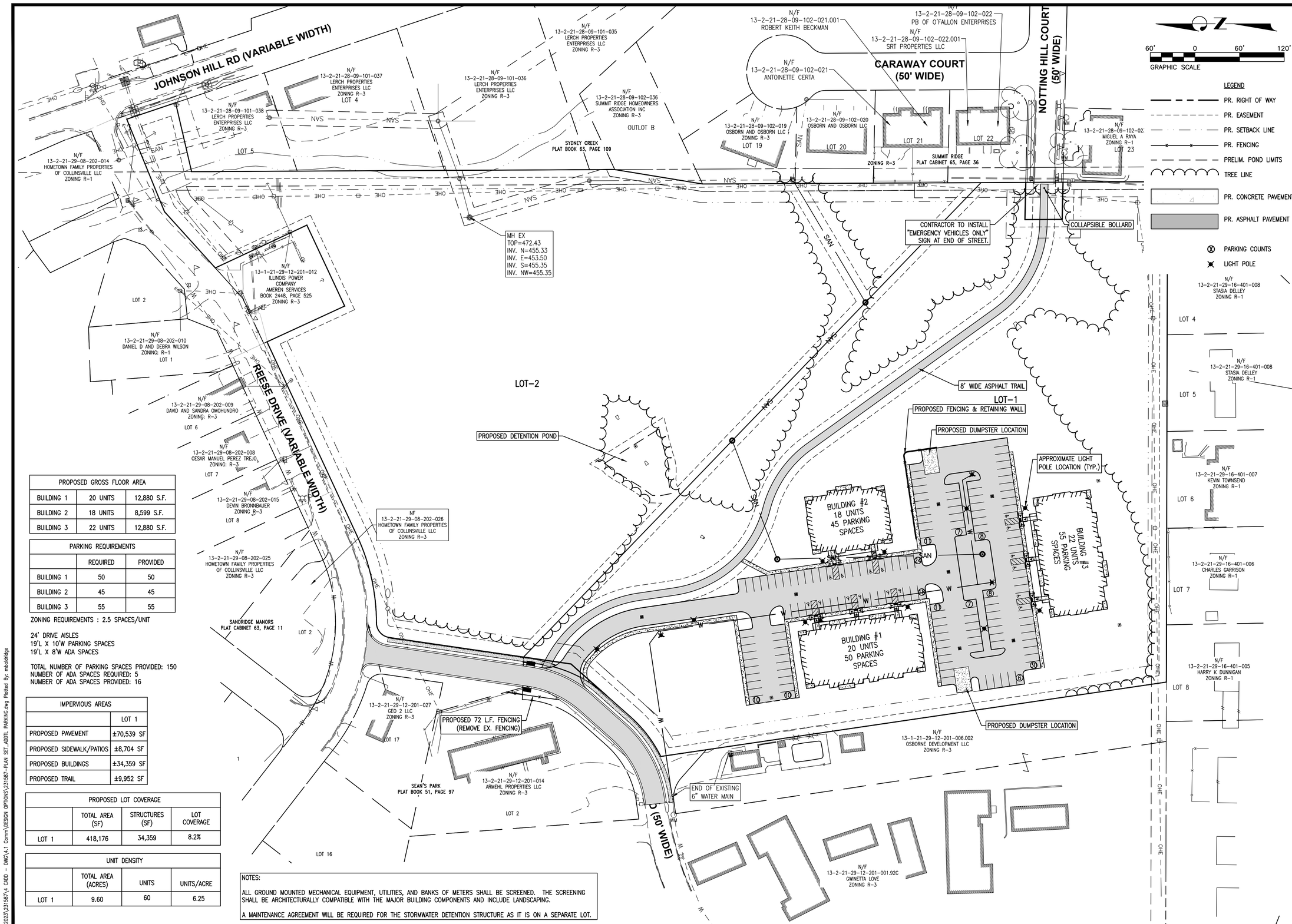
S NO.		DATE	TIME OF DAY
1.	SL	01/05/2024	AM
2.	U	12/04/2024	AM
3.	IL	10/19/2024	PM
4.	C	12/21/2023	AM
5.	CL	05/10/2023	AM
6.	CL	11/05/2023	AM
7.	CD	05/08/2023	AM
8.	CN	05/29/2023	AM
9.	CD	06/14/2022	PM
10.	RL	10/24/2022	AM
11.	CM	06/02/2022	PM
12.	U	05/07/2022	AM
13.	CL	08/06/2022	PM
14.	CD	06/09/2021	AM
15.	RL	12/23/2020	PM
16.	RL	10/27/2020	AM
17.	CM	10/19/2020	AM
18.	CD	09/14/2020	AM
19.	CD	06/18/2020	PM

OATES ASSOCIATES

SPOT MAP

EXHIBIT 4

Exhibit 6
ROUTE COMPARISON



PROPOSED GROSS FLOOR AREA		
BUILDING 1	20 UNITS	12,880 S.F.
BUILDING 2	18 UNITS	8,599 S.F.
BUILDING 3	22 UNITS	12,880 S.F.

PARKING REQUIREMENTS		
	REQUIRED	PROVIDED
BUILDING 1	50	50
BUILDING 2	45	45
BUILDING 3	55	55

ZONING REQUIREMENTS : 2.5 SPACES/UNIT

24' DRIVE AISLES
19'L X 10'W PARKING SPACES
19'L X 8'W ADA SPACES

TOTAL NUMBER OF PARKING SPACES PROVIDED: 150
NUMBER OF ADA SPACES REQUIRED: 5
NUMBER OF ADA SPACES PROVIDED: 16

IMPERVIOUS AREAS	
	LOT 1
PROPOSED PAVEMENT	±70,539 SF
PROPOSED SIDEWALK/PATIOS	±8,704 SF
PROPOSED BUILDINGS	±34,359 SF
PROPOSED TRAIL	±9,952 SF

PROPOSED LOT COVERAGE			
	TOTAL AREA (SF)	STRUCTURES (SF)	LOT COVERAGE
LOT 1	418,176	34,359	8.2%

UNIT DENSITY			
	TOTAL AREA (ACRES)	UNITS	UNITS/ACRE
LOT 1	9.60	60	6.25

NOTES:

ALL GROUND MOUNTED MECHANICAL EQUIPMENT, UTILITIES, AND BANKS OF METERS SHALL BE SCREENED. THE SCREENING SHALL BE ARCHITECTURALLY COMPATIBLE WITH THE MAJOR BUILDING COMPONENTS AND INCLUDE LANDSCAPING.

A MAINTENANCE AGREEMENT WILL BE REQUIRED FOR THE STORMWATER DETENTION STRUCTURE AS IT IS ON A SEPARATE LOT.

P:\2023\231587\4 CADD - DWG\4.1 Comm\DESIGN OPTIONS\231587-PLAN SET_ADDTL PARKING.dwg Plotted By: mbaldridge

TWM
CONSULTING ENGINEERING
GEOSPATIAL SERVICES

ILLINOIS	SWANSEA COLUMBIA GLEN CARBON PEORIA DECATUR
MISSOURI	ST. CHARLES ST. LOUIS COLUMBIA
TENNESSEE	NASHVILLE CHATTANOOGA ATHENS

THOUVENOT, WADE & MOERCHEN, INC.

SWANSEA OFFICE
4940 OLD COLLINSVILLE ROAD
SWANSEA, ILLINOIS
62226
(618) 624-4488
WWW.TWM-INC.COM

PROF. LICENSE	NUMBER
IL. PROF. DESIGN FIRM	184-001220
IL. PROF. ENGR. CORP.	62-035370
IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000029
KS. PROF. ENGR. FACILITY	E-3256
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL

LICENSED PROFESSIONAL ENGINEER
MARSHA J. MALLER
062-051334
OF ILLINOIS

SIGNATURE: Marsha J Maller
DATE SIGNED: JULY 31, 2025
LICENSE EXPIRATION: 11/30/2025

ISSUED FOR PLANNING & ZONING
DATE OF ISSUANCE: 07/31/2025

REV.	DATE	DESCRIPTION
△		
△		
△		
△		

DRAWN BY:	LEM
DESIGNED BY:	BYF
CHECKED BY:	NTS
APPROVED BY:	MJM
PROJECT NO:	D01231587

PROJECT:

HAVEN HILL ACRES
REESE DRIVE
CITY OF COLLINSVILLE
MADISON COUNTY
ILLINOIS

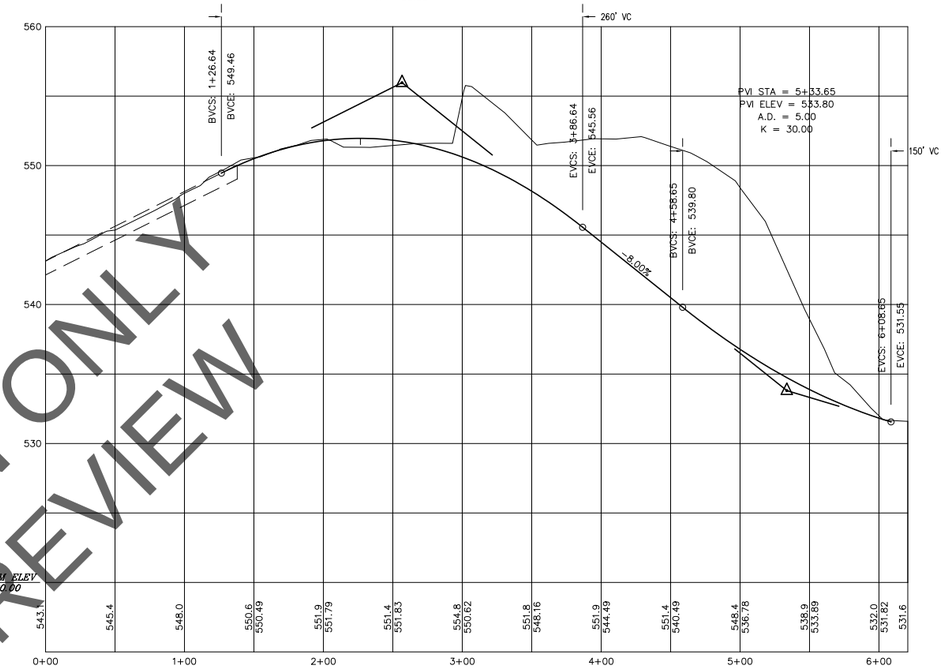
TITLE:

SITE PLAN

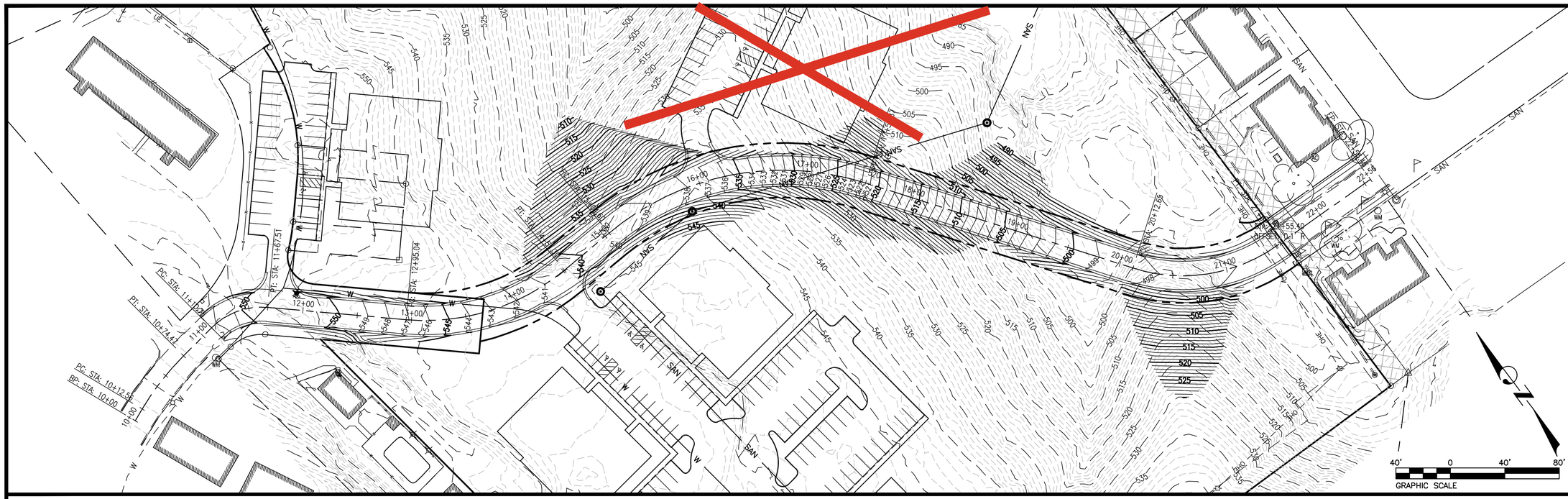
C-3

RAMADA to REESE CONNECTION – DRAFT
SCALE: 1"=50'

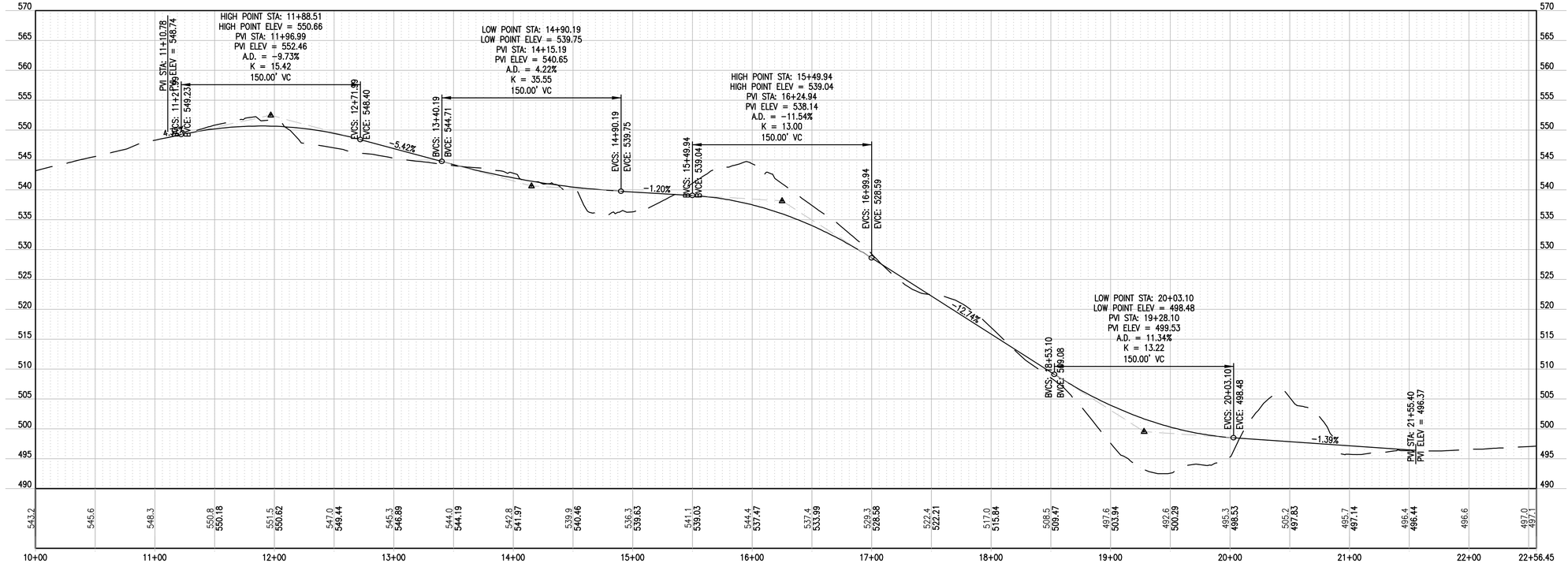
HIGH POINT ELEV = 551.96
HIGH POINT STA = 2+26.64
PVI STA = 2+56.64
PVI ELEV = 555.96
A.D. = -13.00
K = 20.00



RAMADA to REESE CONNECTION – DRAFT PROFILE
SCALE: 1"=50'



CL (10+00.00 – 22+56.45)



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MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL

SIGNATURE:
DATE SIGNED:
LICENSE EXPIRATION:

REV.	DATE	DESCRIPTION
△		
△		
△		
△		

DRAWN BY:	LEM
DESIGNED BY:	LEM
CHECKED BY:	MJM
APPROVED BY:	MJM
PROJECT NO:	D01231587

PROJECT:

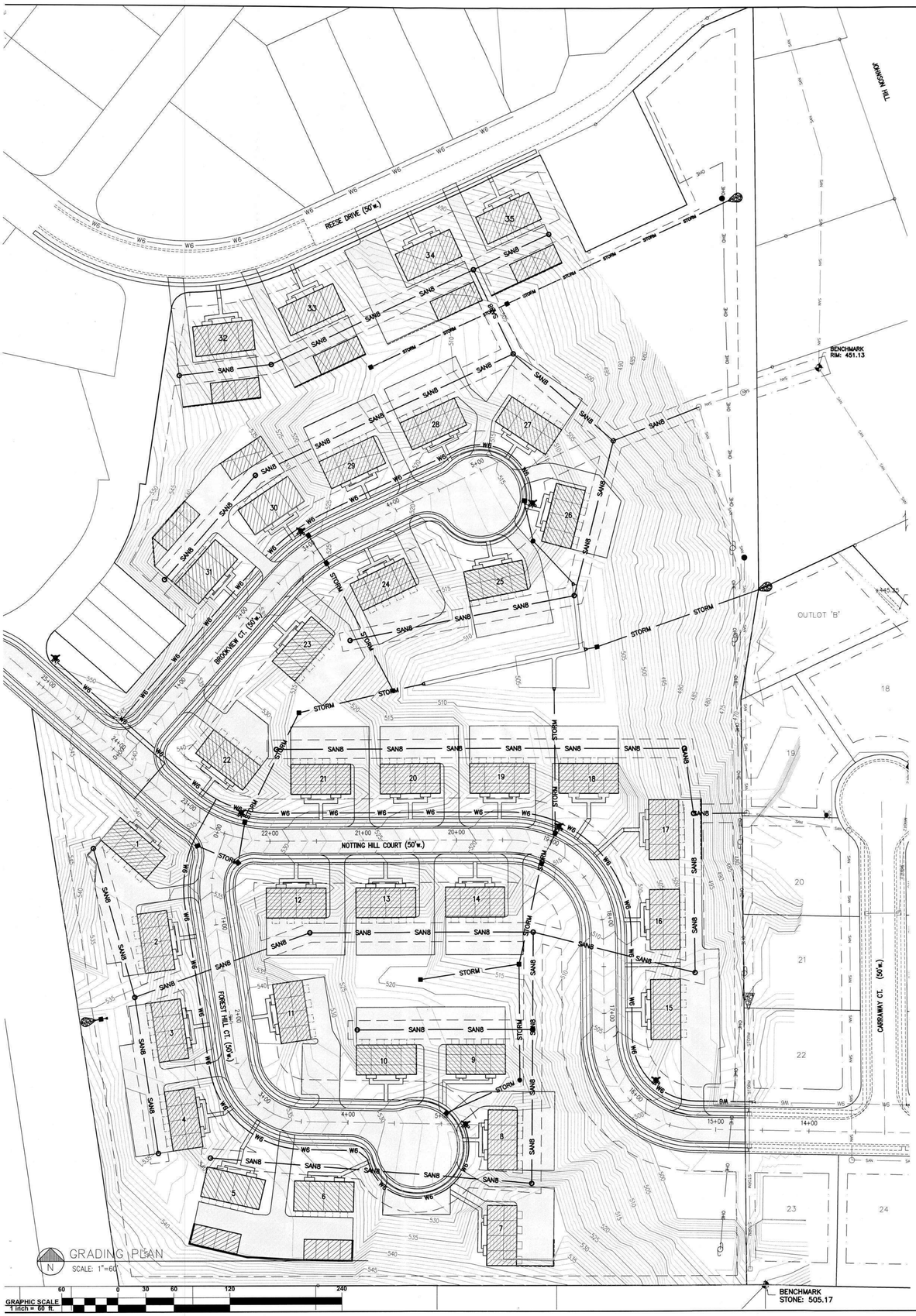
CITY OF COLLINSVILLE
MADISON COUNTY
ILLINOIS

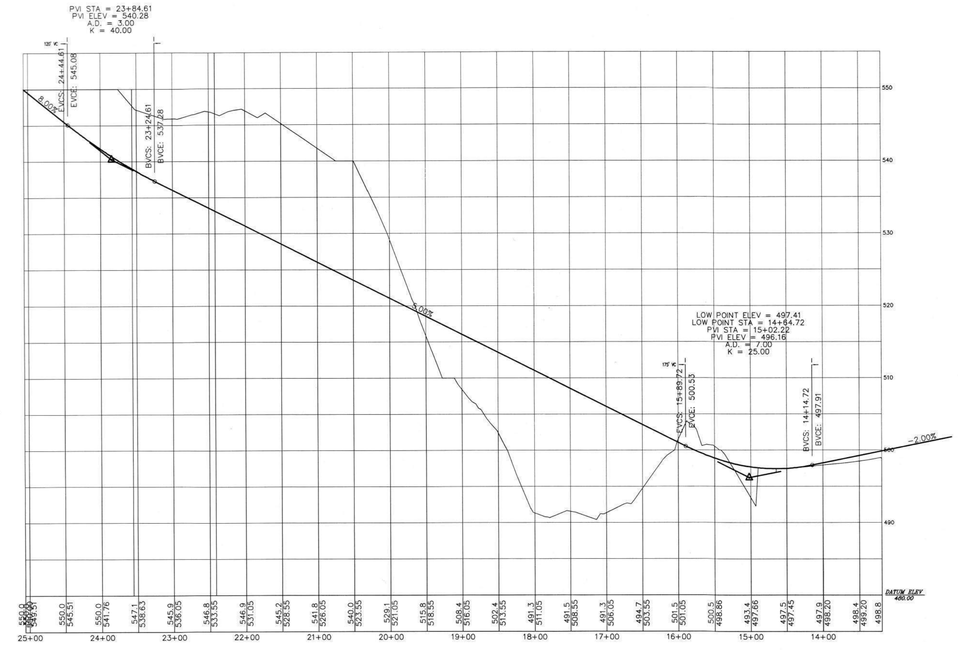
TITLE:

CONCEPT PLAN
FEASIBILITY
PLAN AND PROFILE

1 OF 1

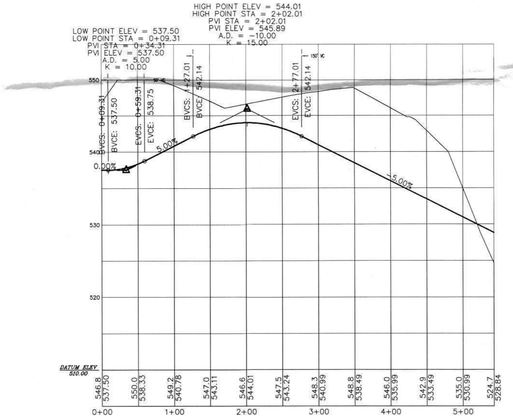
P:\2023\231587\4 CADD - DWG\4.1 Comm\231587-CNCPT-08.dwg Plotted By: lmonk





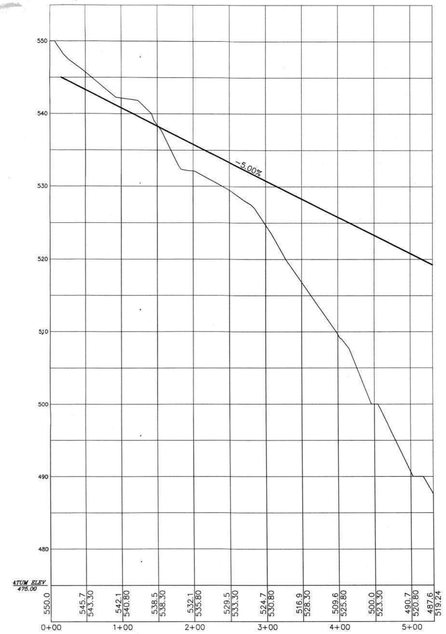
NOTTING HILL

H. SCALE: 1"=100'
V. SCALE: 1"=10'



FOREST HILL CT.

H. SCALE: 1"=100'
V. SCALE: 1"=10'



BROOKVIEW CT.

H. SCALE: 1"=100'
V. SCALE: 1"=10'

SITE DIRT WORK VOLUME CALCULATIONS:

CUT:	FILL:	NET:
±125345 cyds	±127261 cyds	±1915 cyds FILL

DIRT WORK QUANTITIES ARE APPROXIMATE AND DO NOT ACCOUNT FOR TOPSOIL REMOVAL & BACKFILL, TRENCH VOLUMES, COMPACTION, SHRINKAGE, LOSS, ETC. VOLUMES ARE BASED ON A GRID CALCULATION FROM EXISTING GRADE TO PROPOSED SUBGRADE ONLY. THESE QUANTITIES ARE PROVIDED FOR OWNER'S REFERENCE ONLY. THE CONTRACTOR IS ENTIRELY RESPONSIBLE FOR ANY ESTIMATION QUANTITIES USED FOR CONTRACT.
IT IS ENTIRELY CONTRACTORS RESPONSIBILTY TO MEET COMPACTION REQUIREMENT FOR FILL, AND SUBGRADE PREPERATION. IT IS RECOMMENDED A SOIL REPORT BE OBTAINED AND A SOIL ENGINEER BE CONSULTED FOR SUBRADE PREPERATION AND FILL COMPACTION RECOMMENDATIONS.

SUBGRADE ASSUMPTIONS:
CALCULATIONS ARE BASED ON GRID DIFFERENCES FROM APPROX. EXISTING GRADE TO APPROX. TOP PAVEMENT

NOTES:
STORM SEWER, SANITARY SEWER, WATER MAIN, AND PARKING LOT LAYOUT AND PROPOSED GRADES SHOWN ARE APPROXIMATE. FINAL DESIGN TO BE DETERMINED WITH CONSTRUCTION DRAWINGS TO BE COMPLETED AFTER APPROVAL OF THIS SITE PLAN

KEYSTONE BLOCK RETAINING WALL INSTALLED PER MANUFACTURER'S RECOMMENDATIONS SHALL BE USED IN ALL AREAS WHERE FINAL GRADES ARE GREATER THAN 3H:1V

INTENDED FOR PLANNING
NOT INTENDED FOR CONSTRUCTION

ENGINEER / SURVEYOR:

IL. PROF. DESIGN FIRM (L/SPE/SE) 184-001027

NETEMEYER ENGINEERING ASSOCIATES, INC.
3300 Highline Road ph: 618-228-7816
Aviston, IL 62216-1018 fax: 618-228-7900

SANDRIDGE MANORS - THIRD ADDITION
COLLINSVILLE, IL

PART OF THE NORTHEAST QUARTER OF SECTION 29, T3N, R8W OF THE 3RD P.M. MADISON COUNTY, ILLINOIS

OWNER:
Sandridge Manors LLC. c/o Joe Osborn
100 Regency Ctr, Collinsville, IL 62234-4637
ph: (618) 346-7878

REVISIONS	
NO.	DATE
1	12-28-10

IRPE 062-037441
EXP. DATE: 11/30/2011

PATRICK R. NETEMEYER

JOB NO: 20100325
DWG. FILE: 20100325 OSBORN-SAND RIDGE SHEET.dwg
DRAWN BY: SRN
CHECKED BY:
ISSUED: 12-18-10

SHEET NO:
C2

Exhibit 7
SITE PHOTOS

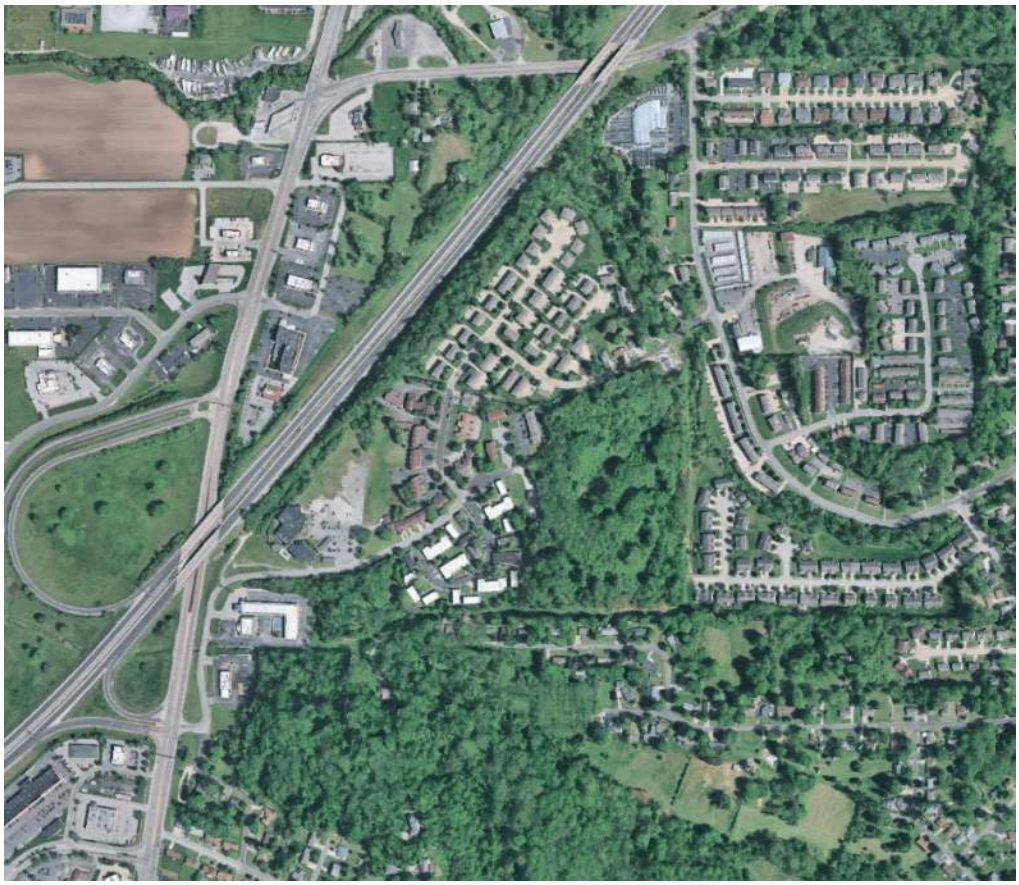


Fig: Project overview

Fig: Ramada Blvd. and Beverly Lane Intersection

Fig: Ramada Blvd. and Beverly Lane Intersection- Stop Controlled

Fig: Ramada Blvd. Roadway segment

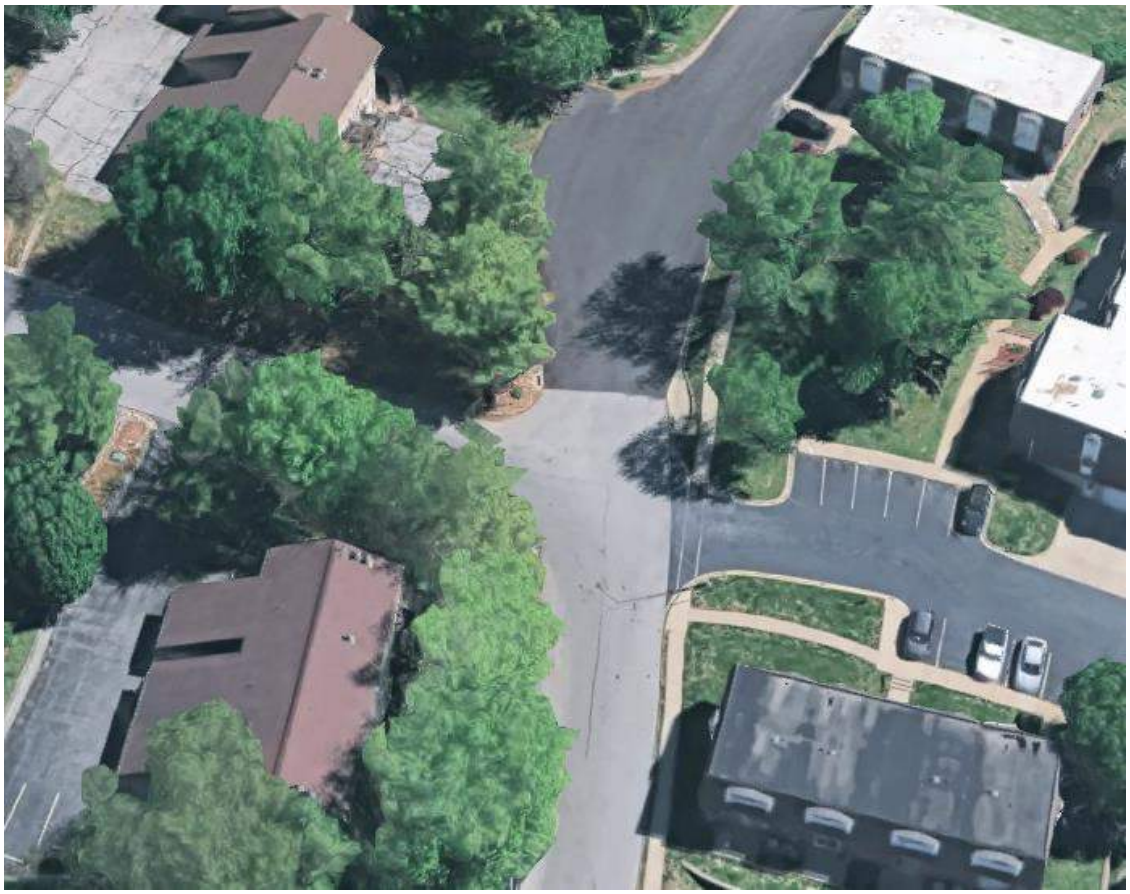


Fig: Ramada Blvd. and Sandridge Dr. Intersection

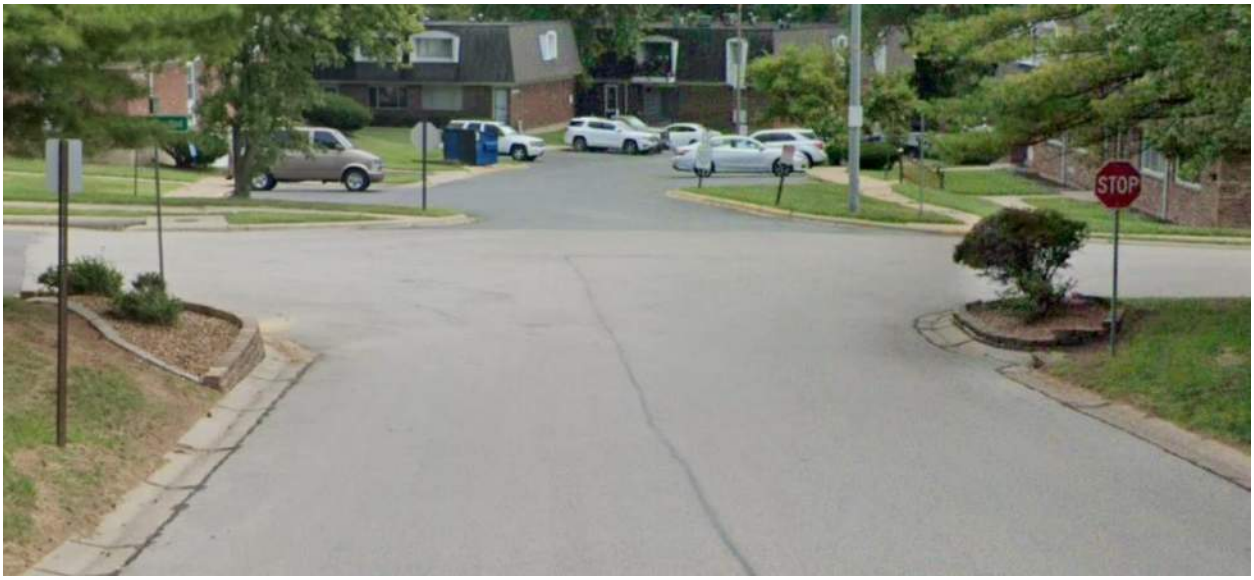


Fig: Ramada Blvd. and Sanbridge Dr. Intersection – Stop controlled

Fig: Sandridge Dr. Roadway section

Fig: Sandridge Dr. Roadway section

Fig: Sandridge Dr. Roadway section

Fig: Reese Dr. Roadway Section

Fig: Reese Dr. Roadway Section

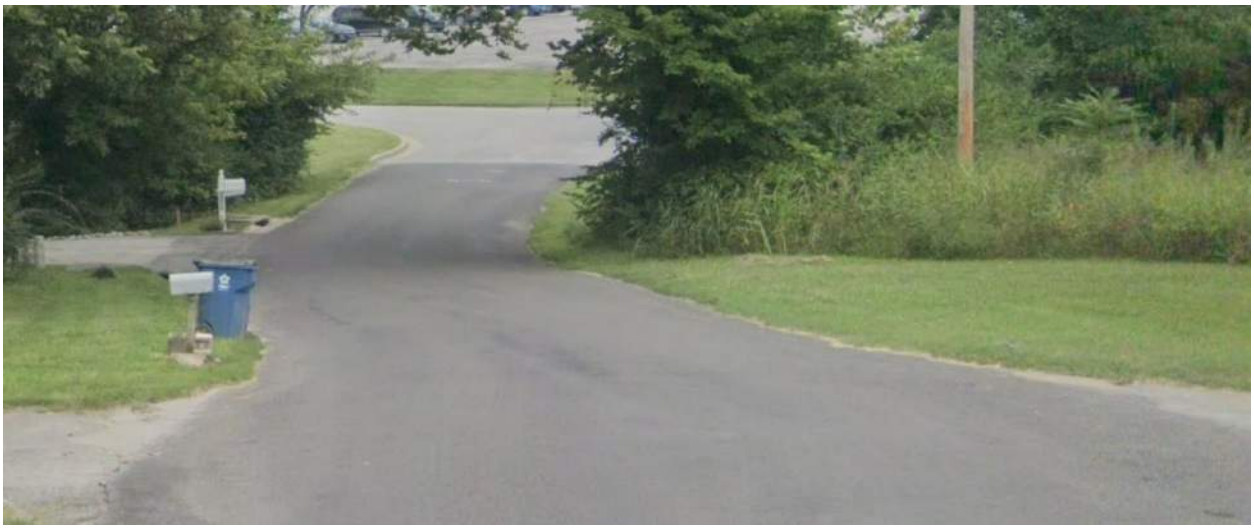


Fig: Reese Dr. Roadway Section

Fig: Reese Dr. and Johnson Hill Rd. intersection

Fig: Reese Dr. and Johnson Hill Rd.- Stop controlled

Fig: Johnson Hill Rd. roadway Section

Appendix A
Trip Generation

Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

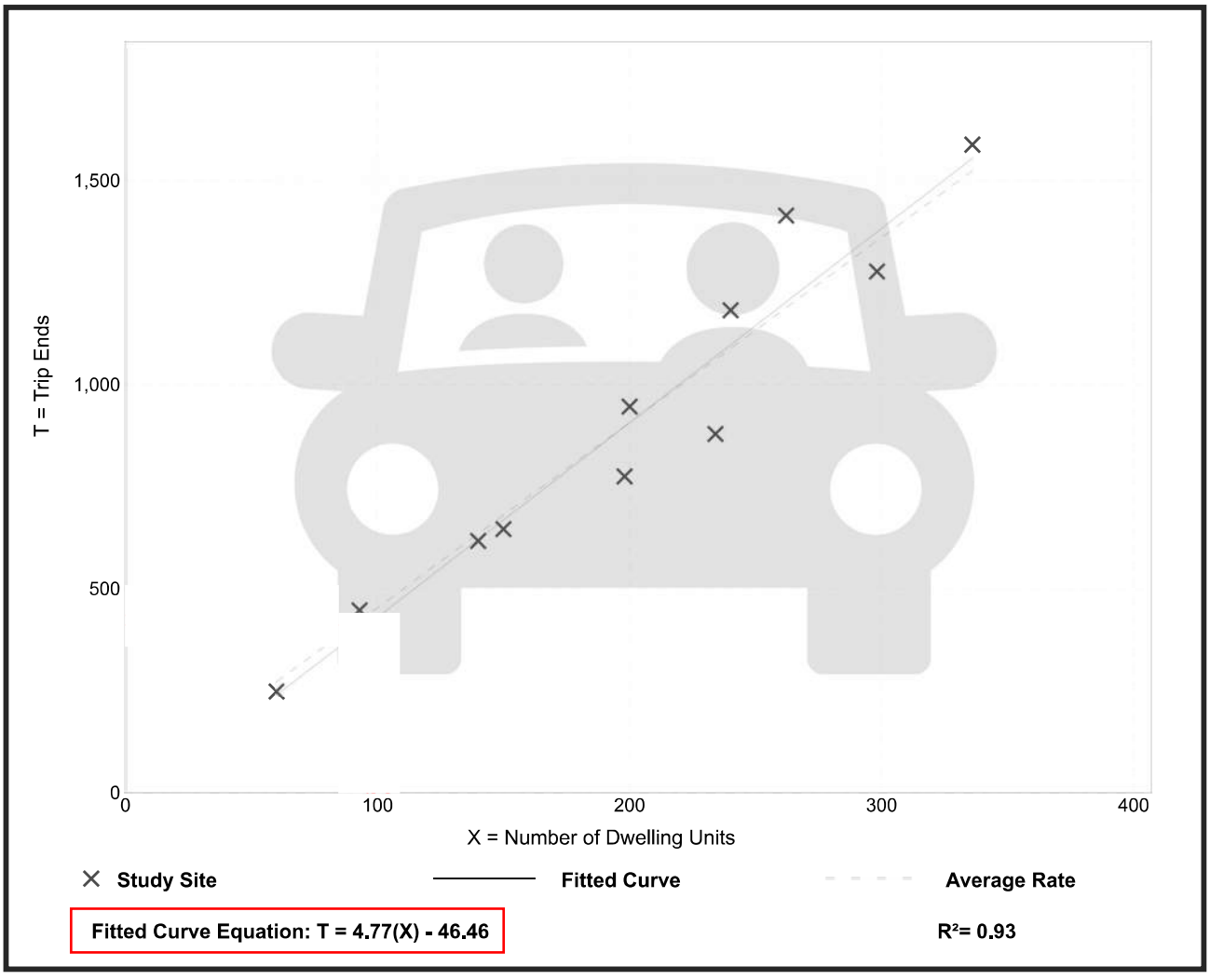
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

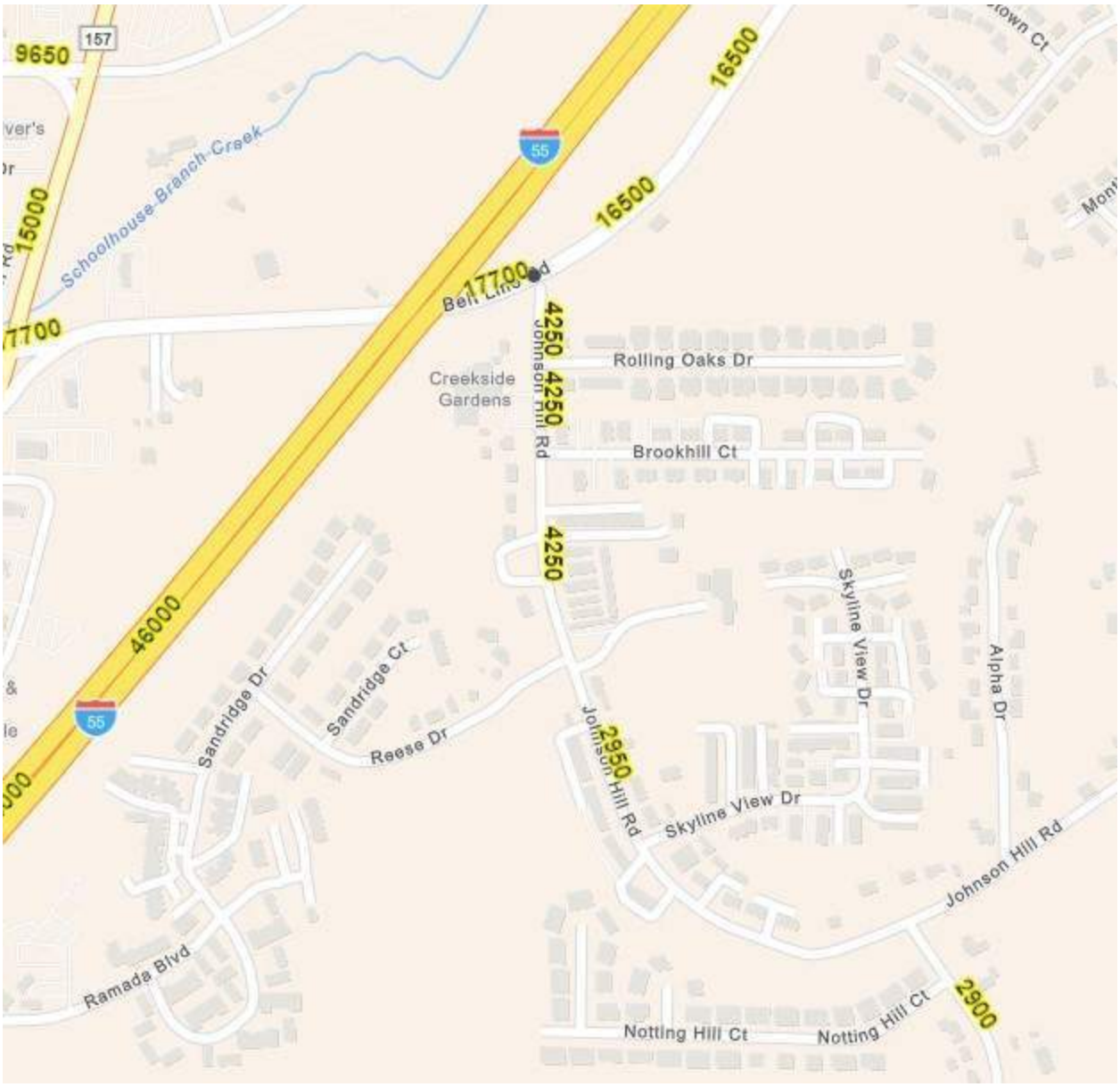
Setting/Location: **General Urban/Suburban**
Number of Studies: 11
Avg. Num. of Dwelling Units: 201
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.54	3.76 - 5.40	0.51

Data Plot and Equation





Average Annual Daily Traffic (AADT)
IDOT

Appendix B
Trip Assignment

Intersection
Ramada Blvd. and Beverly Lane

Appendix B
Generated Traffic Distribution Calculations
Ramada Blvd. and Beverly Lane

Driveway Enter/Exit

	AM				PM				Factor
Haven Hills Area #1	Enter	12	Exit	12	Enter	12	Exit	12	0.80
Traffic Generator Area #2	Enter	4	Exit	12	Enter	11	Exit	5	1

* Avg. IL 157 ADT = 17800

* Avg.Johnson Hill Rd. ADT = 3600

% distribution = 80 (towards IL 157)/20(towards Johnson Hill Rd.)

	North leg* AM		North leg* PM	
	OUT	IN	OUT	IN
	10	10	10	10
	4	12	11	5
Totals:	14	22	21	15

Vehicle entering intersection.
Vehicle exiting intersection.

Total AM Volume: 36
Total PM Volume: 36

INTERSECTION TRAFFIC SPLITS

Generated Traffic Distribution Calculations

	East Leg		South Leg		West Leg		North Leg					
AM	P(Out)	P(In)	P(Out)	P(In)	P(Out)	P(In)	P(Out)			P(In)		
	From	To	From	To	From	To	From	E	5%	To	E	5%
	From	To	From	To	From	To	From	S		To	S	
	From	To	From	To	From	To	From	W	95%	To	W	95%
PM	P(Out)	P(In)	P(Out)	P(In)	P(Out)	P(In)	P(Out)			P(In)		
	From	To	From	To	From	To	From	E	5%	To	E	5%
	From	To	From	To	From	To	From	S		To	S	
	From	To	From	To	From	To	From	W	95%	To	W	95%

	East Leg		South Leg		West Leg		North Leg					
AM	P(Out)	P(In)	P(Out)	P(In)	P(Out)	P(In)	P(Out)			P(In)		
	From	To	From	To	From	To	From	E	5%	To	E	5%
	From	To	From	To	From	To	From	S		To	S	
	From	To	From	To	From	To	From	W	95%	To	W	95%
PM	P(Out)	P(In)	P(Out)	P(In)	P(Out)	P(In)	P(Out)			P(In)		
	From	To	From	To	From	To	From	E	5%	To	E	5%
	From	To	From	To	From	To	From	S		To	S	
	From	To	From	To	From	To	From	W	95%	To	W	95%

Haven Hills

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR			1	1		0		0	10			10	1	0	10	11	22
P.M. PEAK HOUR			1	1		0		0	10			10	0	0	10	10	21

Collinsville Landing and Westview Development

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR			0	0		0		0	4			4	1	0	11	12	16
P.M. PEAK HOUR			1	1		0		0	10			10	0	0	5	5	16

Total Traffic Generation **2027**

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	0	0	1	1	0	0	0	0	14	0	0	14	2	0	21	23	38
% Heavy																	
P.M. PEAK HOUR	0	0	2	2	0	0	0	0	20	0	0	20	0	0	15	15	37
% Heavy																	

Intersection
Ramada Blvd. and Sandbridge Dr.

Appendix B
Generated Traffic Distribution Calculations
Ramada Blvd. and Sandridge Dr.

Driveway Enter/Exit

	AM				PM				Factor
Haven Hills Area Generator	Enter	12	Exit	12	Enter	12	Exit	12	0.80
Landing and Westview	Enter	0	Exit	5	Enter	3	Exit	8	1.00

* Avg. IL 157 ADT = 17800
* Avg.Johnson Hill Rd. ADT = 3600
% distribution = 80 (towards IL 157)/20(towards Johnson Hill Rd.)

	AM		PM	
	OUT	IN	OUT	IN
	10	10	10	10
	0	5	3	8
Totals:	10	15	13	18

Vehicle entering intersection.
Vehicle exiting intersection.

Total AM Volume: 25
Total PM Volume: 31

INTERSECTION TRAFFIC SPLITS
Generated Traffic Distribution Calculations
Haven Hills Area Generator

	East Leg				South Leg		West Leg				North Leg			
AM	P(Out)		P(In)		P(Out)	P(In)	P(Out)		P(In)		P(Out)		P(In)	
	From N	0%	To N	0%	From	To	From		To		From E		To E	
	From W	100%	To W	100%	From	To	From		To		From S		To S	
	From S	0%	To S	0%	From	To	From		To		From W		To W	
PM	P(Out)		P(In)		P(Out)	P(In)	P(Out)		P(In)		P(Out)		P(In)	
	From N	0%	To N	0%	From	To	From		To		From E		To E	
	From W	100%	To W	100%	From	To	From		To		From S		To S	
	From S	0%	To S	0%	From	To	From		To		From W		To W	

Landing and Westview

	East Leg				South Leg		West Leg				North Leg			
AM	P(Out)		P(In)		P(Out)	P(In)	P(Out)		P(In)		P(Out)		P(In)	
	From N		To N		From	To	From N	60%	To N	60%	From		To	
	From W		To W		From	To	From E	38%	To E	38%	From		To	
	From S		To S		From	To	From S	2%	To S	2%	From		To	
PM	P(Out)		P(In)		P(Out)	P(In)	P(Out)		P(In)		P(Out)		P(In)	
	From N		To N		From	To	From N	60%	To N	60%	From		To	
	From W		To W		From	To	From E	38%	To E	38%	From		To	
	From S		To S		From	To	From S	2%	To S	2%	From		To	

Haven Hills

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	0	10	0	10			0	0		10		10	0			0	20
P.M. PEAK HOUR	0	10	0	10			0	0		10		10	0			0	20

Collinsville Landing and Westview Development

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		0		0	0			0	3	2	0	5			0	0	5
P.M. PEAK HOUR		1		1	0			0	5	3	0	8			2	2	11

Total Traffic Generation **2027**

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	0	10	0	10	0	0	0	0	3	12	0	15	0	0	0	0	25
% Heavy																	
P.M. PEAK HOUR	0	11	0	11	0	0	0	0	5	13	0	18	0	0	2	2	31
% Heavy																	

Intersection
Reese Dr. and Ramada Blvd. (New)

Appendix B
Generated Traffic Distribution Calculations
Reese Dr. and Ramada Blvd. New

Driveway Enter/Exit

	AM				PM				Factor
Haven Hills Area Generator	Enter	12	Exit	12	Enter	12	Exit	12	0.20
Landing and Westview	Enter	0	Exit	2	Enter	1	Exit	3	1.00

* Avg. IL 157 ADT = 17800

* Avg.Johnson Hill Rd. ADT = 3600

% distribution = 80 (towards IL 157)/20(towards Johnson Hill Rd.)

	AM		PM	
	OUT	IN	OUT	IN
	3	3	3	3
	0	2	1	3
Totals:	3	5	4	6

Vehicle entering intersection.
Vehicle exiting intersection.

Total AM Volume: 8
Total PM Volume: 10

INTERSECTION TRAFFIC SPLITS

Generated Traffic Distribution Calculations

Haven Hills Area Generator

	East Leg		South Leg			West Leg		North Leg	
AM	P(Out)	P(In)	P(Out)	P(In)		P(Out)	P(In)	P(Out)	P(In)
	From N	To N	From W 0%	To W 0%		From	To	From	To
	From W	To W	From N 0%	To N 0%		From	To	From	To
	From S	To S	From E 100%	To E 100%		From	To	From	To
PM	P(Out)	P(In)	P(Out)	P(In)		P(Out)	P(In)	P(Out)	P(In)
	From N	To N	From W 0%	To W 0%		From	To	From	To
	From W	To W	From N 0%	To N 0%		From	To	From	To
	From S	To S	From E 100%	To E 100%		From	To	From	To

Landing and Westview

	East Leg		South Leg			West Leg				North Leg	
AM	P(Out)	P(In)	P(Out)	P(In)		P(Out)		P(In)		P(Out)	P(In)
	From N	To N	From W 0%	To W 0%		From N 60%		To N 60%		From E	To E
	From W	To W	From N 0%	To N 0%		From E 38%		To E 38%		From S	To S
	From S	To S	From E 100%	To E 100%		From S 2%		To S 2%		From W	To W
PM	P(Out)	P(In)	P(Out)	P(In)		P(Out)		P(In)		P(Out)	P(In)
	From N	To N	From W 0%	To W 0%		From N 60%		To N 60%		From E	To E
	From W	To W	From N 0%	To N 0%		From E 38%		To E 38%		From S	To S
	From S	To S	From E 100%	To E 100%		From S 2%		To S 2%		From W	To W

Haven Hills

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	3			3	0	0	3	3				0				0	6
P.M. PEAK HOUR	3			3	0	0	3	3				0				0	6

Collinsville Landing and Westview Development

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	0			0	0	0	2	2				0				0	2
P.M. PEAK HOUR	1			1	0	0	3	3				0				0	4

Total Traffic Generation **2027**

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	3	0	0	3	0	0	5	5	0	0	0	0	0	0	0	0	8
% Heavy																	
P.M. PEAK HOUR	4	0	0	4	0	0	6	6	0	0	0	0	0	0	0	0	10
% Heavy																	

Intersection
Johnson Hill Rd. and Reese Dr.

Appendix B

Generated Traffic Distribution Calculations

Johnson Hill Rd. and Reese Dr.

Driveway Enter/Exit

	AM				PM				Factor
Haven Hills Area Generator	Enter	12	Exit	12	Enter	12	Exit	12	0.20
Landing and Westview	Enter	0	Exit	2	Enter	1	Exit	3	1.00

* Avg. IL 157 ADT = 17800

* Avg.Johnson Hill Rd. ADT = 3600

% distribution = 80 (towards IL 157)/20(towards Johnson Hill Rd.)

	AM		PM	
	OUT	IN	OUT	IN
	3	3	3	3
	0	2	1	3
Totals:	3	5	4	6

Vehicle entering intersection.
Vehicle exiting intersection.

Total AM Volume: 8
Total PM Volume: 10

INTERSECTION TRAFFIC SPLITS

Generated Traffic Distribution Calculations

Haven Hills Area Generator

	East Leg		South Leg		West Leg			North Leg	
AM	P(Out)	P(In)	P(Out)	P(In)	P(Out)		P(In)	P(Out)	P(In)
	From N	To N	From W	To W	From N	50%	To N 50%	From	To
	From W	To W	From N	To N	From E	0%	To E 0%	From	To
	From S	To S	From E	To E	From S	50%	To S 50%	From	To
PM	P(Out)	P(In)	P(Out)	P(In)	P(Out)		P(In)	P(Out)	P(In)
	From N	To N	From W	To W	From N	50%	To N 50%	From	To
	From W	To W	From N	To N	From E	0%	To E 0%	From	To
	From S	To S	From E	To E	From S	50%	To S 50%	From	To

Landing and Westview

	East Leg		South Leg		West Leg			North Leg	
AM	P(Out)	P(In)	P(Out)	P(In)	P(Out)		P(In)	P(Out)	P(In)
	From N	To N	From W	To W	From N	50%	To N 50%	From E	To E
	From W	To W	From N	To N	From E	0%	To E 0%	From S	To S
	From S	To S	From E	To E	From S	50%	To S 50%	From W	To W
PM	P(Out)	P(In)	P(Out)	P(In)	P(Out)		P(In)	P(Out)	P(In)
	From N	To N	From W	To W	From N	50%	To N 50%	From E	To E
	From W	To W	From N	To N	From E	0%	To E 0%	From S	To S
	From S	To S	From E	To E	From S	50%	To S 50%	From W	To W

Haven Hills

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR				0	2			2	2	0	2	4			2	2	8
P.M. PEAK HOUR				0	2			2	2	0	2	4			2	2	8

Collinsville Landing and Westview Development

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR				0	0			0	1	0	1	2			0	0	2
P.M. PEAK HOUR				0	1			1	2	0	2	4			1	1	6

Total Traffic Generation **2027**

Design Hourly Volume (generated DHV from development area)	WESTBOUND (total vehicles)				NORTHBOUND (total vehicles)				EASTBOUND (total vehicles)				SOUTHBOUND (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	0	0	0	0	2	0	0	2	3	0	3	6	0	0	2	2	10
% Heavy																	
P.M. PEAK HOUR	0	0	0	0	3	0	0	3	4	0	4	8	0	0	3	3	14
% Heavy																	

Appendix C

Summary of Trips

Intersection
Ramada Blvd. and Beverly Lane

Appendix C
Proposed Turn Movement Summary

Background	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR					9			9	146		7	153			185	185	347
% Heavy																	
P.M. PEAK HOUR					7			7	265		13	278			132	132	417
% Heavy																	

Background	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR					10			10	161		8	169			204	204	383
% Heavy																	
P.M. PEAK HOUR					8			8	293		14	307			146	146	461
% Heavy																	

Generated	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR			1	1					14			14	2		21	23	38
% Heavy																	
P.M. PEAK HOUR			2	2					20			20			15	15	37
% Heavy																	

Diverted	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		9		9	-9			-9		7	-7						
% Heavy																	
P.M. PEAK HOUR		7		7	-7			-7		13	-13						
% Heavy																	

Diverted	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		10		10	-10			-10		8	-8						
% Heavy																	
P.M. PEAK HOUR		8		8	-8			-8		14	-14						
% Heavy																	

Combined (For HCS)	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		9	1	10					160	7		167	2		206	208	385
% Heavy																	
P.M. PEAK HOUR		7	2	9					285	13		298			147	147	454
% Heavy																	

Combined (For HCS)	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		10	1	11					175	8		183	2		225	227	421
% Heavy																	
P.M. PEAK HOUR		8	2	10					313	14		327			161	161	498
% Heavy																	

Intersection
Ramada Blvd. and Sandridge Dr.

Appendix C
Proposed Turn Movement Summary

Background	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		17		17	2			2	32	7	1	40			79	79	138
% Heavy																	
P.M. PEAK HOUR		14		14	2			2	97	21	2	120			62	62	198
% Heavy																	

Background	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		19		19	2			2	35	8	1	44			87	87	152
% Heavy																	
P.M. PEAK HOUR		15		15	2			2	107	23	2	132			69	69	218
% Heavy																	

Generated	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		10		10					3	12		15					25
% Heavy																	
P.M. PEAK HOUR		11		11					5	13		18			2	2	31
% Heavy																	

Diverted	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		8		8					-27	27					-8	-8	
% Heavy																	
P.M. PEAK HOUR		42		42					-82	82					-42	-42	
% Heavy																	

Diverted	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		10		10					-30	30					-10	-10	
% Heavy																	
P.M. PEAK HOUR		46		46					-90	90					-46	-46	
% Heavy																	

Combined (For HCS)	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		35		35	2			2	8	46	1	55			71	71	163
% Heavy																	
P.M. PEAK HOUR		67		67	2			2	20	116	2	138			22	22	229
% Heavy																	

Combined (For HCS)	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		39		39	2			2	8	50	1	59			77	77	177
% Heavy																	
P.M. PEAK HOUR		72		72	2			2	22	126	2	150			25	25	249
% Heavy																	

Intersection
Reese Dr. and Ramada Blvd. (New)

Appendix C
Proposed Turn Movement Summary

Background	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		12		12						41		41					53
% Heavy																	
P.M. PEAK HOUR		62		62						87		87					149
% Heavy																	

Background	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR		13		13						45		45					58
% Heavy																	
P.M. PEAK HOUR		69		69						96		96					165
% Heavy																	

Generated	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	3			3			5	5									8
% Heavy																	
P.M. PEAK HOUR	4			4			6	6									10
% Heavy																	

Diverted	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	8	-8					27	27		-27							27
% Heavy																	
P.M. PEAK HOUR	42	-42					82	82		-82		-82					
% Heavy																	

Diverted	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	10	-10					30	30		-30		-30					
% Heavy																	
P.M. PEAK HOUR	46	-46					90	90		-90		-90					
% Heavy																	

Combined (For HCS)	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	11	4		15			32	32		14		14					61
% Heavy																	
P.M. PEAK HOUR	46	20		66			88	88		5		5					159
% Heavy																	

Combined (For HCS)	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	13	3		16			35	35		15		15					66
% Heavy																	
P.M. PEAK HOUR	50	23		73			96	96		6		6					175
% Heavy																	

Intersection
Johnson Hill Rd. and Reese Dr.

Appendix C
Proposed Turn Movement Summary

Background	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	13		4	17	7	220	7	234	20		20	40	5	104	5	114	405
% Heavy																	
P.M. PEAK HOUR	12		4	16	22	176	4	202	43		43	86	39	211	7	257	561
% Heavy																	

Background	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	14		4	18	8	243	8	259	22		22	44	6	115	6	127	448
% Heavy																	
P.M. PEAK HOUR	13		4	17	24	194	4	222	48		48	96	43	233	8	284	619
% Heavy																	

Generated	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR					2			2	3		3	6			2	2	10
% Heavy																	
P.M. PEAK HOUR					3			3	4		4	8			3	3	14
% Heavy																	

Combined (For HCS)	**2027**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	13		4	17	9	220	7	236	23		23	46	5	104	7	116	415
% Heavy																	
P.M. PEAK HOUR	12		4	16	25	176	4	205	47		47	94	39	211	10	260	575
% Heavy																	

Combined (For HCS)	**2047**																
Design Hourly Volume (adjusted for PHF, Daily and Monthly Variations)	**WESTBOUND** (total vehicles)				**NORTHBOUND** (total vehicles)				**EASTBOUND** (total vehicles)				**SOUTHBOUND** (total vehicles)				TOTAL INTERSECTION VOLUME
	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	LEFT	THRU	RIGHT	TOTAL	
A.M. PEAK HOUR	14		4	18	10	243	8	261	25		25	50	6	115	8	129	458
% Heavy																	
P.M. PEAK HOUR	13		4	17	27	194	4	225	52		52	104	43	233	11	287	633
% Heavy																	

Appendix D

HCS Reports

Intersection
Ramada Blvd. and Beverly Lane

HCS Two-Way Stop-Control Report

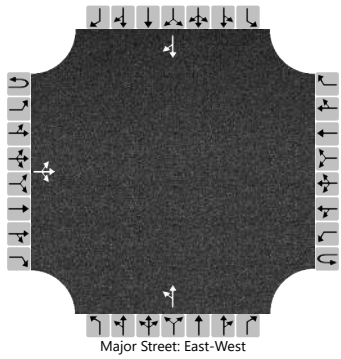
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2025
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - Existing Condition

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		145	0	7						9	0				0	183
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		153								9						193
Capacity, c (veh/h)		1155								441						919
v/c Ratio		0.13								0.02						0.21
95% Queue Length, Q_{95} (veh)		0.5								0.1						0.8
Control Delay (s/veh)		8.6	1.1	1.1						13.3						10.0
Level of Service (LOS)		A	A	A						B						A
Approach Delay (s/veh)		8.2								13.3				10.0		
Approach LOS		A								B				A		

HCS Two-Way Stop-Control Report

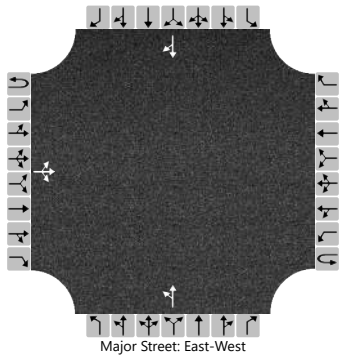
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2025
Time Analyzed	4:15 : 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - Existing Condition

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		262	0	13						7	0				0	131
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		276								7						138
Capacity, c (veh/h)		1155								284						919
v/c Ratio		0.24								0.03						0.15
95% Queue Length, Q_{95} (veh)		0.9								0.1						0.5
Control Delay (s/veh)		9.1	2.2	2.2						18.0						9.6
Level of Service (LOS)		A	A	A						C						A
Approach Delay (s/veh)	8.8								18.0				9.6			
Approach LOS	A								C				A			

HCS Two-Way Stop-Control Report

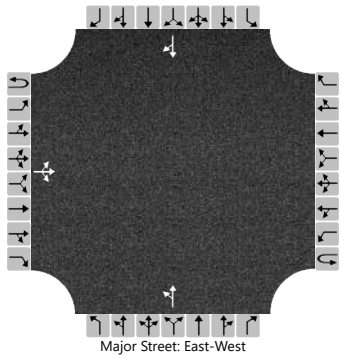
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - No Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		146	0	7						9	0				0	185
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		154								9						195
Capacity, c (veh/h)		1155								438						919
v/c Ratio		0.13								0.02						0.21
95% Queue Length, Q_{95} (veh)		0.5								0.1						0.8
Control Delay (s/veh)		8.6	1.1	1.1						13.4						10.0
Level of Service (LOS)		A	A	A						B						A
Approach Delay (s/veh)		8.3								13.4				10.0		
Approach LOS		A								B				A		

HCS Two-Way Stop-Control Report

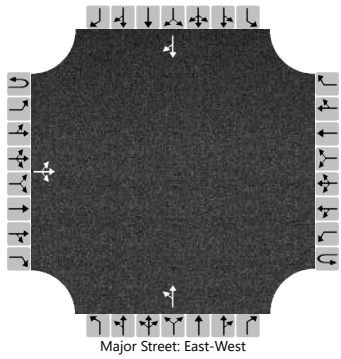
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - No Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		265	0	13						7	0				0	132
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		279								7						139
Capacity, c (veh/h)		1155								280						919
v/c Ratio		0.24								0.03						0.15
95% Queue Length, Q_{95} (veh)		0.9								0.1						0.5
Control Delay (s/veh)		9.1	2.2	2.2						18.2						9.6
Level of Service (LOS)		A	A	A						C						A
Approach Delay (s/veh)	8.8								18.2				9.6			
Approach LOS	A								C				A			

HCS Two-Way Stop-Control Report

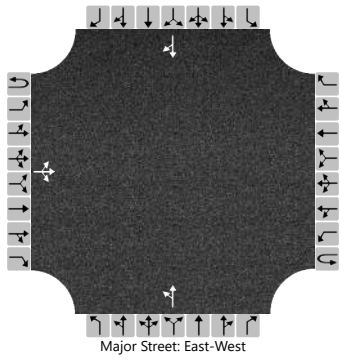
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		160	0	7						9	1				2	206
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		168								11						219
Capacity, c (veh/h)		1155								406						911
v/c Ratio		0.15								0.03						0.24
95% Queue Length, Q_{95} (veh)		0.5								0.1						0.9
Control Delay (s/veh)		8.6	1.3	1.3						14.1						10.2
Level of Service (LOS)		A	A	A						B						B
Approach Delay (s/veh)		8.3								14.1				10.2		
Approach LOS		A								B				B		

HCS Two-Way Stop-Control Report

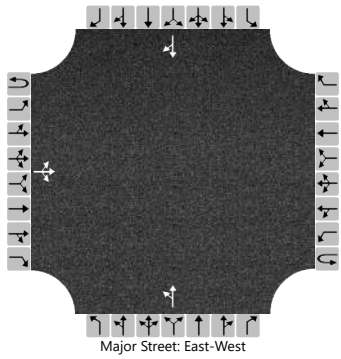
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		285	0	13						7	2				0	147
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		300								9						155
Capacity, c (veh/h)		1155								261						919
v/c Ratio		0.26								0.04						0.17
95% Queue Length, Q_{95} (veh)		1.0								0.1						0.6
Control Delay (s/veh)		9.2	2.4	2.4						19.3						9.7
Level of Service (LOS)		A	A	A						C						A
Approach Delay (s/veh)	8.9								19.3				9.7			
Approach LOS	A								C				A			

HCS Two-Way Stop-Control Report

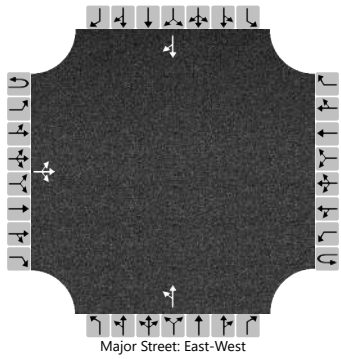
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - No Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		161	0	8						10	0				0	204
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		169								11						215
Capacity, c (veh/h)		1155								399						919
v/c Ratio		0.15								0.03						0.23
95% Queue Length, Q_{95} (veh)		0.5								0.1						0.9
Control Delay (s/veh)		8.7	1.3	1.3						14.3						10.1
Level of Service (LOS)		A	A	A						B						B
Approach Delay (s/veh)		8.3								14.3				10.1		
Approach LOS		A								B				B		

HCS Two-Way Stop-Control Report

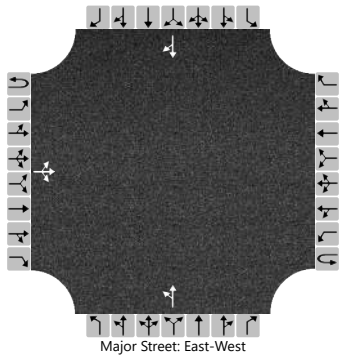
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - No Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		293	0	14						8	0				0	146
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		308								8						154
Capacity, c (veh/h)		1155								242						919
v/c Ratio		0.27								0.03						0.17
95% Queue Length, Q_{95} (veh)		1.1								0.1						0.6
Control Delay (s/veh)		9.3	2.5	2.5						20.4						9.7
Level of Service (LOS)		A	A	A						C						A
Approach Delay (s/veh)	8.9								20.4				9.7			
Approach LOS	A								C				A			

HCS Two-Way Stop-Control Report

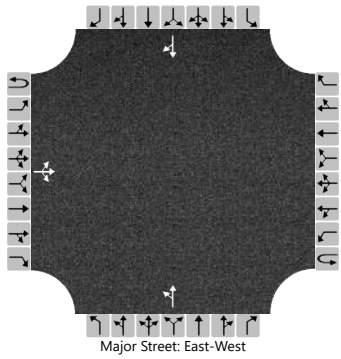
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		175	0	8						10	1				2	225
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		184								12						239
Capacity, c (veh/h)		1155								370						911
v/c Ratio		0.16								0.03						0.26
95% Queue Length, Q_{95} (veh)		0.6								0.1						1.1
Control Delay (s/veh)		8.7	1.4	1.4						15.1						10.4
Level of Service (LOS)		A	A	A						C						B
Approach Delay (s/veh)	8.4								15.1				10.4			
Approach LOS	A								C				B			

HCS Two-Way Stop-Control Report

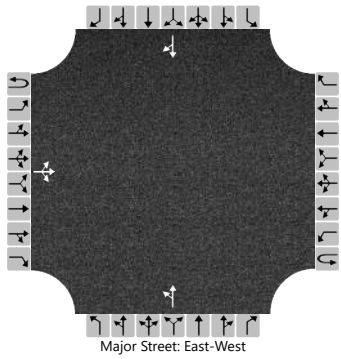
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Beverly Lane - Build

Site Information

Intersection	Ramada Blvd. and Beverly Lane
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Beverly Lane
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	0	0		0	1	0		0	1	0
Configuration			LTR							LT						TR
Volume (veh/h)		313	0	14						8	2				0	161
Percent Heavy Vehicles (%)		2								2	2				2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3								7.1	6.5				6.5	7.1
Critical Headway (sec)		5.32								7.12	6.52				6.52	7.12
Base Follow-Up Headway (sec)		3.1								3.5	4.0				4.0	3.9
Follow-Up Headway (sec)		3.12								3.52	4.02				4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		329								11						169
Capacity, c (veh/h)		1155								225						919
v/c Ratio		0.29								0.05						0.18
95% Queue Length, Q_{95} (veh)		1.2								0.1						0.7
Control Delay (s/veh)		9.4	2.7	2.7						21.8						9.8
Level of Service (LOS)		A	A	A						C						A
Approach Delay (s/veh)		9.1								21.8				9.8		
Approach LOS		A								C				A		

Intersection
Ramada Blvd. and Sandridge Dr.

HCS Two-Way Stop-Control Report

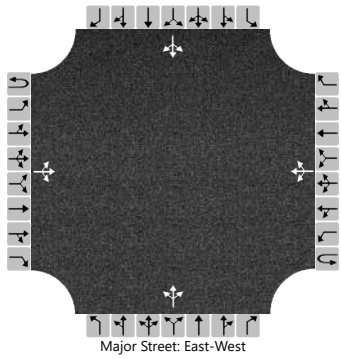
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2025
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - Existing Condition

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		32	7	1		0	17	0		2	0	0		0	0	78
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				0					2				82	
Capacity, c (veh/h)		1599				1612					804				1061	
v/c Ratio		0.02				0.00					0.00				0.08	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.0				0.3	
Control Delay (s/veh)		7.3	0.2	0.2		7.2	0.0	0.0			9.5				8.7	
Level of Service (LOS)		A	A	A		A	A	A			A				A	
Approach Delay (s/veh)	5.9				0.0				9.5				8.7			
Approach LOS	A				A				A				A			

HCS Two-Way Stop-Control Report

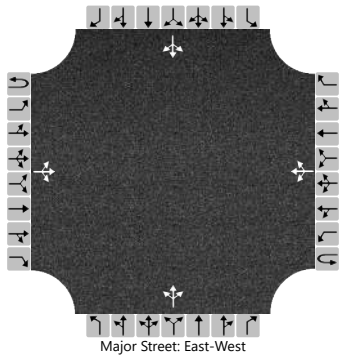
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2025
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - Existing Condition

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		96	21	2		0	14	0		2	0	0		0	0	61
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		101				0					2				64	
Capacity, c (veh/h)		1603				1591					628				1065	
v/c Ratio		0.06				0.00					0.00				0.06	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				0.2	
Control Delay (s/veh)		7.4	0.5	0.5		7.3	0.0	0.0			10.7				8.6	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	6.1				0.0				10.7				8.6			
Approach LOS	A				A				B				A			

HCS Two-Way Stop-Control Report

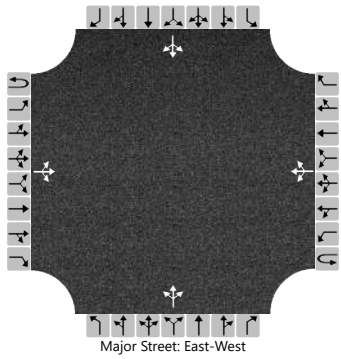
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - No Build

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		32	7	1		0	17	0		2	0	0		0	0	79
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				0					2				83	
Capacity, c (veh/h)		1599				1612					803				1061	
v/c Ratio		0.02				0.00					0.00				0.08	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.0				0.3	
Control Delay (s/veh)		7.3	0.2	0.2		7.2	0.0	0.0			9.5				8.7	
Level of Service (LOS)		A	A	A		A	A	A			A				A	
Approach Delay (s/veh)	5.9				0.0				9.5				8.7			
Approach LOS	A				A				A				A			

HCS Two-Way Stop-Control Report

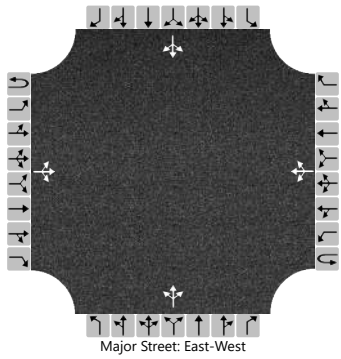
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - No Build

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		97	21	2		0	14	0		2	0	0		0	0	62
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		102				0					2				65	
Capacity, c (veh/h)		1603				1591					625				1065	
v/c Ratio		0.06				0.00					0.00				0.06	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				0.2	
Control Delay (s/veh)		7.4	0.5	0.5		7.3	0.0	0.0			10.8				8.6	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	6.1				0.0				10.8				8.6			
Approach LOS	A				A				B				A			

HCS Two-Way Stop-Control Report

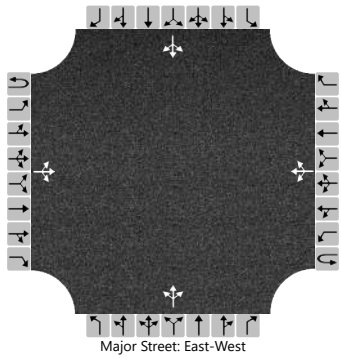
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - Build

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		8	46	1		0	35	0		2	0	0		0	0	71
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				0					2				75	
Capacity, c (veh/h)		1574				1557					810				1035	
v/c Ratio		0.01				0.00					0.00				0.07	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				0.2	
Control Delay (s/veh)		7.3	0.0	0.0		7.3	0.0	0.0			9.5				8.7	
Level of Service (LOS)		A	A	A		A	A	A			A				A	
Approach Delay (s/veh)	1.1				0.0				9.5				8.7			
Approach LOS	A				A				A				A			

HCS Two-Way Stop-Control Report

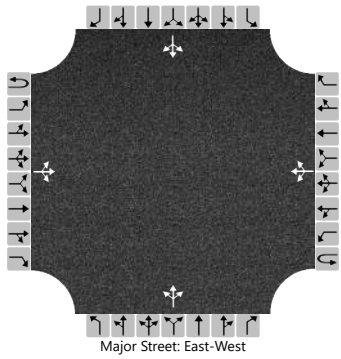
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - Build

Site Information

Intersection	Ramada Blvd. and Sanbridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		20	116	2		0	67	0		2	0	0		0	0	22
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		21				0					2				23	
Capacity, c (veh/h)		1530				1463					692				992	
v/c Ratio		0.01				0.00					0.00				0.02	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				0.1	
Control Delay (s/veh)		7.4	0.1	0.1		7.5	0.0	0.0			10.2				8.7	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	1.2				0.0				10.2				8.7			
Approach LOS	A				A				B				A			

HCS Two-Way Stop-Control Report

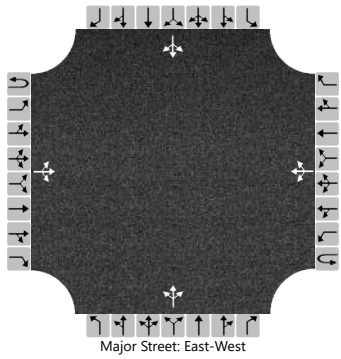
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - No Build

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		35	8	1		0	19	0		2	0	0		0	0	87
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		37				0					2				92	
Capacity, c (veh/h)		1596				1610					783				1058	
v/c Ratio		0.02				0.00					0.00				0.09	
95% Queue Length, Q_{95} (veh)		0.1				0.0					0.0				0.3	
Control Delay (s/veh)		7.3	0.2	0.2		7.2	0.0	0.0			9.6				8.7	
Level of Service (LOS)		A	A	A		A	A	A			A				A	
Approach Delay (s/veh)	5.8				0.0				9.6				8.7			
Approach LOS	A				A				A				A			

HCS Two-Way Stop-Control Report

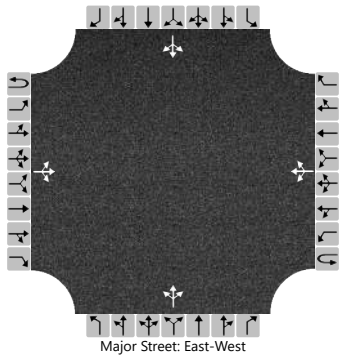
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - No Build

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		107	23	2		0	15	0		2	0	0		0	0	69
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		113				0					2				73	
Capacity, c (veh/h)		1602				1588					594				1063	
v/c Ratio		0.07				0.00					0.00				0.07	
95% Queue Length, Q_{95} (veh)		0.2				0.0					0.0				0.2	
Control Delay (s/veh)		7.4	0.5	0.5		7.3	0.0	0.0			11.1				8.6	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	6.1				0.0				11.1				8.6			
Approach LOS	A				A				B				A			

HCS Two-Way Stop-Control Report

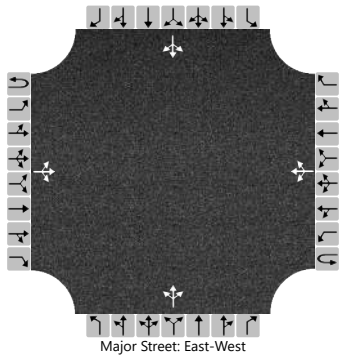
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - Build

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		8	50	1		0	39	0		2	0	0		0	0	77
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				0					2				81	
Capacity, c (veh/h)		1568				1552					794				1030	
v/c Ratio		0.01				0.00					0.00				0.08	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				0.3	
Control Delay (s/veh)		7.3	0.0	0.0		7.3	0.0	0.0			9.5				8.8	
Level of Service (LOS)		A	A	A		A	A	A			A				A	
Approach Delay (s/veh)	1.0				0.0				9.5				8.8			
Approach LOS	A				A				A				A			

HCS Two-Way Stop-Control Report

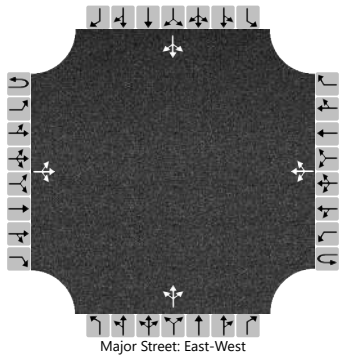
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Ramada Blvd. and Sandridge - Build

Site Information

Intersection	Ramada Blvd. and Sandridge Dr.
Jurisdiction	IDOT
East/West Street	Ramada Blvd.
North/South Street	Sandridge Dr.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		22	126	2		0	72	0		2	0	0		0	0	25
Percent Heavy Vehicles (%)		2				2				2	2	2		2	2	2
Proportion Time Blocked																
Percent Grade (%)										0				0		
Right Turn Channelized																
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.12				4.12				7.12	6.52	6.22		7.12	6.52	6.22
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.22				2.22				3.52	4.02	3.32		3.52	4.02	3.32

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		23				0					2				26	
Capacity, c (veh/h)		1523				1450					668				985	
v/c Ratio		0.02				0.00					0.00				0.03	
95% Queue Length, Q_{95} (veh)		0.0				0.0					0.0				0.1	
Control Delay (s/veh)		7.4	0.1	0.1		7.5	0.0	0.0			10.4				8.8	
Level of Service (LOS)		A	A	A		A	A	A			B				A	
Approach Delay (s/veh)	1.2				0.0				10.4				8.8			
Approach LOS	A				A				B				A			

Intersection
Reese Dr. and Ramada Blvd. (New)

HCS Two-Way Stop-Control Report

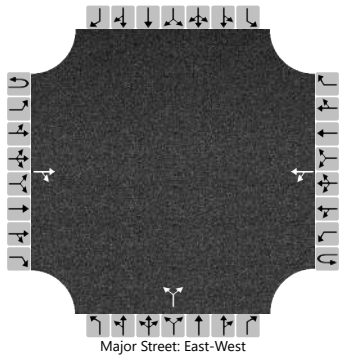
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Reese Dr. and Ramada Blvd. (New) - Build

Site Information

Intersection	Reese Dr. and Ramada Blvd. (New)
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Ramada Blvd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			14	0		11	4			0		32				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						12					34					
Capacity, c (veh/h)						1603					1065					
v/c Ratio						0.01					0.03					
95% Queue Length, Q_{95} (veh)						0.0					0.1					
Control Delay (s/veh)						7.3	0.1				8.5					
Level of Service (LOS)						A	A				A					
Approach Delay (s/veh)					5.3				8.5							
Approach LOS					A				A							

HCS Two-Way Stop-Control Report

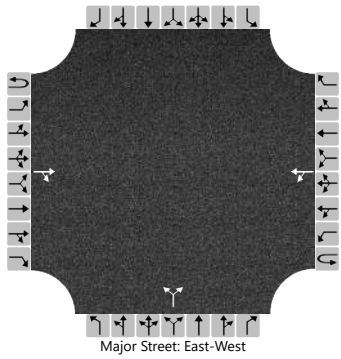
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Reese Dr. and Ramada Blvd. (New) - Build

Site Information

Intersection	Reese Dr. and Ramada Blvd. (New)
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Ramada Blvd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			5	0		46	20			0		88				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						48					93					
Capacity, c (veh/h)						1616					1078					
v/c Ratio						0.03					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.3	0.2				8.7					
Level of Service (LOS)						A	A				A					
Approach Delay (s/veh)						5.2				8.7						
Approach LOS						A				A						

HCS Two-Way Stop-Control Report

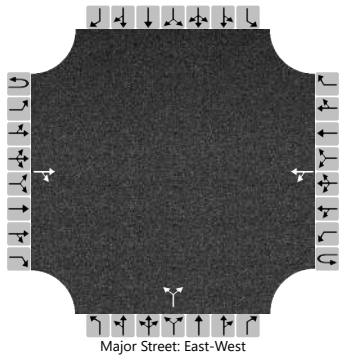
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	East-West
Project Description	Reese Dr. and Ramada Blvd. (New) - Build

Site Information

Intersection	Reese Dr. and Ramada Blvd. (New)
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Ramada Blvd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: East-West

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			15	0		13	3			0		35				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						14					37					
Capacity, c (veh/h)						1602					1063					
v/c Ratio						0.01					0.03					
95% Queue Length, Q_{95} (veh)						0.0					0.1					
Control Delay (s/veh)						7.3	0.1				8.5					
Level of Service (LOS)						A	A				A					
Approach Delay (s/veh)					5.9				8.5							
Approach LOS					A				A							

HCS Two-Way Stop-Control Report

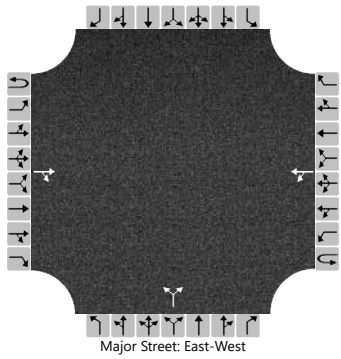
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	East-West
Project Description	Reese Dr. and Ramada Blvd. (New) - Build

Site Information

Intersection	Reese Dr. and Ramada Blvd. (New)
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Ramada Blvd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			6	0		50	23			0		96				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						53					101					
Capacity, c (veh/h)						1615					1076					
v/c Ratio						0.03					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.3	0.2				8.7					
Level of Service (LOS)						A	A				A					
Approach Delay (s/veh)						5.1				8.7						
Approach LOS						A				A						

Intersection
Johnson Hill Rd. and Reese Dr.

HCS Two-Way Stop-Control Report

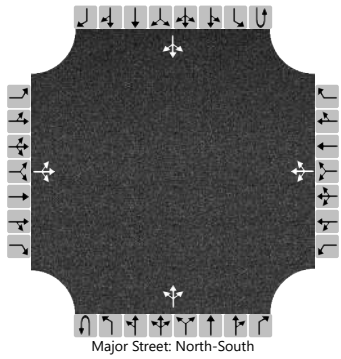
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2025
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - Existing Condition

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		20	0	20		13	0	4		7	218	7		5	103	5
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			42				18			7				5		
Capacity, c (veh/h)			719				613			1476				1330		
v/c Ratio			0.06				0.03			0.00				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.1			0.0				0.0		
Control Delay (s/veh)			10.3				11.1			7.5	0.0	0.0		7.7	0.0	0.0
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)	10.3				11.1				0.3				0.4			
Approach LOS	B				B				A				A			

HCS Two-Way Stop-Control Report

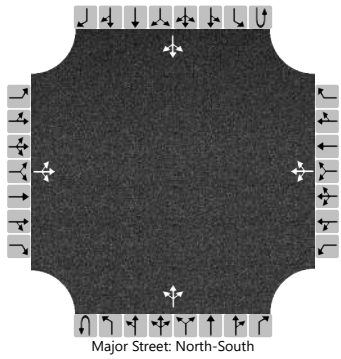
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2025
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - Existing Condition

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		43	0	43		12	0	4		22	174	4		39	209	7
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			91				17			23				41		
Capacity, c (veh/h)			563				470			1341				1387		
v/c Ratio			0.16				0.04			0.02				0.03		
95% Queue Length, Q_{95} (veh)			0.6				0.1			0.1				0.1		
Control Delay (s/veh)			12.6				12.9			7.7	0.1	0.1		7.7	0.3	0.3
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.6				12.9				1.0				1.4		
Approach LOS		B				B				A				A		

HCS Two-Way Stop-Control Report

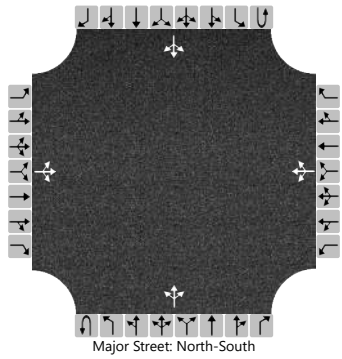
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - No Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		20	0	20		13	0	4		7	220	7		5	104	5
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			42				18			7				5		
Capacity, c (veh/h)			717				610			1474				1328		
v/c Ratio			0.06				0.03			0.00				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.1			0.0				0.0		
Control Delay (s/veh)			10.3				11.1			7.5	0.0	0.0		7.7	0.0	0.0
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		10.3				11.1				0.3				0.4		
Approach LOS		B				B				A				A		

HCS Two-Way Stop-Control Report

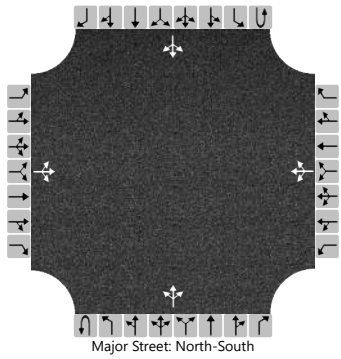
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - No Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		43	0	43		12	0	4		22	176	4		39	211	7
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			91				17			23				41		
Capacity, c (veh/h)			560				468			1339				1384		
v/c Ratio			0.16				0.04			0.02				0.03		
95% Queue Length, Q_{95} (veh)			0.6				0.1			0.1				0.1		
Control Delay (s/veh)			12.7				13.0			7.7	0.1	0.1		7.7	0.3	0.3
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.7				13.0				1.0				1.4		
Approach LOS		B				B				A				A		

HCS Two-Way Stop-Control Report

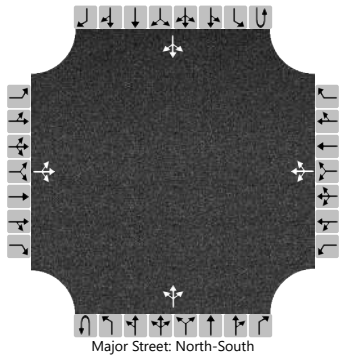
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		23	0	23		13	0	4		9	220	7		5	104	7
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			48				18			9				5		
Capacity, c (veh/h)			712				604			1472				1328		
v/c Ratio			0.07				0.03			0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.1			0.0				0.0		
Control Delay (s/veh)			10.4				11.1			7.5	0.1	0.1		7.7	0.0	0.0
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		10.4				11.1				0.3				0.4		
Approach LOS		B				B				A				A		

HCS Two-Way Stop-Control Report

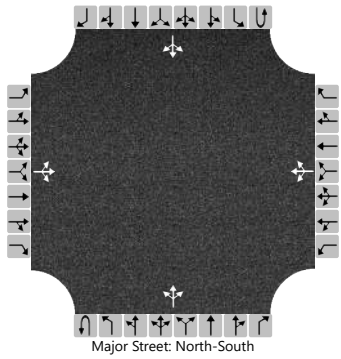
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2027
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		47	0	47		12	0	4		25	176	4		39	211	10
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			99				17			26				41		
Capacity, c (veh/h)			554				460			1335				1384		
v/c Ratio			0.18				0.04			0.02				0.03		
95% Queue Length, Q_{95} (veh)			0.6				0.1			0.1				0.1		
Control Delay (s/veh)			12.9				13.1			7.8	0.2	0.2		7.7	0.3	0.3
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		12.9				13.1				1.1				1.4		
Approach LOS		B				B				A				A		

HCS Two-Way Stop-Control Report

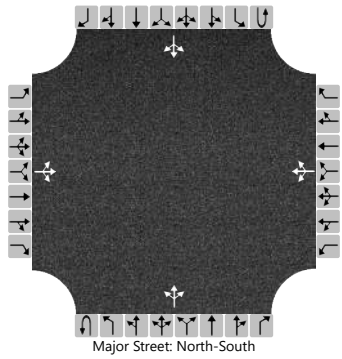
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - No Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		22	0	22		14	0	4		8	243	8		6	115	6
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			46				19			8				6		
Capacity, c (veh/h)			685				572			1459				1300		
v/c Ratio			0.07				0.03			0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.2				0.1			0.0				0.0		
Control Delay (s/veh)			10.6				11.5			7.5	0.1	0.1		7.8	0.0	0.0
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)	10.6				11.5				0.3				0.4			
Approach LOS	B				B				A				A			

HCS Two-Way Stop-Control Report

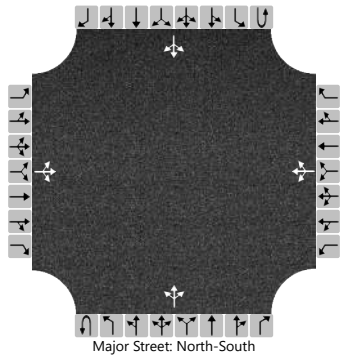
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - No Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		48	0	48		13	0	4		24	194	4		43	233	8
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			101				18			25				45		
Capacity, c (veh/h)			521				423			1311				1362		
v/c Ratio			0.19				0.04			0.02				0.03		
95% Queue Length, Q_{95} (veh)			0.7				0.1			0.1				0.1		
Control Delay (s/veh)			13.6				13.9			7.8	0.2	0.2		7.7	0.3	0.3
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		13.6				13.9				1.0				1.4		
Approach LOS		B				B				A				A		

HCS Two-Way Stop-Control Report

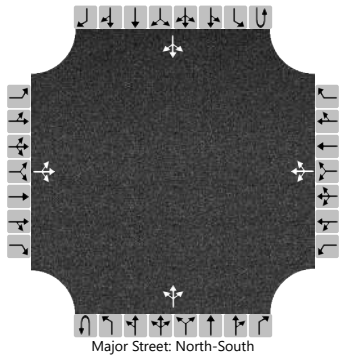
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	7:30 - 8:30 AM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		25	0	25		14	0	4		10	243	8		6	115	8
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			53				19			11				6		
Capacity, c (veh/h)			680				566			1456				1300		
v/c Ratio			0.08				0.03			0.01				0.00		
95% Queue Length, Q_{95} (veh)			0.3				0.1			0.0				0.0		
Control Delay (s/veh)			10.7				11.6			7.5	0.1	0.1		7.8	0.0	0.0
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		10.7				11.6				0.3				0.4		
Approach LOS		B				B				A				A		

HCS Two-Way Stop-Control Report

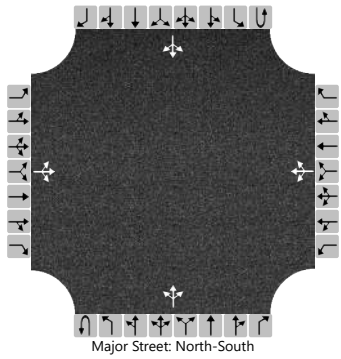
General Information

Analyst	RP
Agency/Co.	OA
Date Performed	9/11/2025
Analysis Year	2047
Time Analyzed	4:15 - 5:15 PM
Intersection Orientation	North-South
Project Description	Johnson Hill Rd. and Reese Dr - Build

Site Information

Intersection	Johnson Hill Rd. and Reese Dr
Jurisdiction	IDOT
East/West Street	Reese Dr.
North/South Street	Johnson Hill Rd.
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		52	0	52		13	0	4		27	194	4		43	233	11
Percent Heavy Vehicles (%)		2	2	2		2	2	2		2				2		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.12	6.52	6.22		7.12	6.52	6.22		4.12				4.12		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.52	4.02	3.32		3.52	4.02	3.32		2.22				2.22		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			109				18			28				45		
Capacity, c (veh/h)			516				416			1308				1362		
v/c Ratio			0.21				0.04			0.02				0.03		
95% Queue Length, Q_{95} (veh)			0.8				0.1			0.1				0.1		
Control Delay (s/veh)			13.8				14.0			7.8	0.2	0.2		7.7	0.3	0.3
Level of Service (LOS)			B				B			A	A	A		A	A	A
Approach Delay (s/veh)		13.8				14.0				1.1				1.4		
Approach LOS		B				B				A				A		

APPENDIX E
Growth Rate

TRAFFIC GROWTH RATES

Reese Dr. and Johnson Hill Rd.

EAST LEG (Reese Dr.)

YEAR	SOURCE	STREET	ADT	Annual Growth Rate	Assumed Design Growth Rate from Recent Trends
NA	IDOT	Reese Dr,	NA		**0.5%**

SOUTH LEG (Johnson Hill Rd.)

YEAR	SOURCE	STREET	ADT	Annual Growth Rate	Annual Growth Rate	Assumed Design Growth Rate from Recent Trends
2021	IDOT	Johnson Hill Rd	2,950			
2022	IDOT	Johnson Hill Rd	2,950	0.0%	4.8%	**0.5%**
2023	IDOT	Johnson Hill Rd	2,950	0.0%		
2024	IDOT	Johnson Hill Rd	3,400	15.3%		

WEST LEG (Green Park Dr.)

YEAR	SOURCE	STREET	ADT	Annual Growth Rate	Assumed Design Growth Rate from Recent Trends
NA	IDOT	Reese Dr,	NA		**0.5%**

NORTH LEG (Johnson Hill Rd.)

YEAR	SOURCE	STREET	ADT	Annual Growth Rate	Annual Growth Rate	Assumed Design Growth Rate from Recent Trends
2012	IDOT	Johnson Hill Rd	4,400			
2015	IDOT	Johnson Hill Rd	4,000	-3.1%	0.6%	**0.5%**
2018	IDOT	Johnson Hill Rd	4,550	4.4%		

$$\text{Growth Rate (r)} = (F_{ADT}/P_{ADT})^{\left(\frac{1}{YR_F - YR_P}\right)} - 1$$

APPENDIX F

Warrants Analysis

Reese Dr. and Ramada Blvd. (New) Study

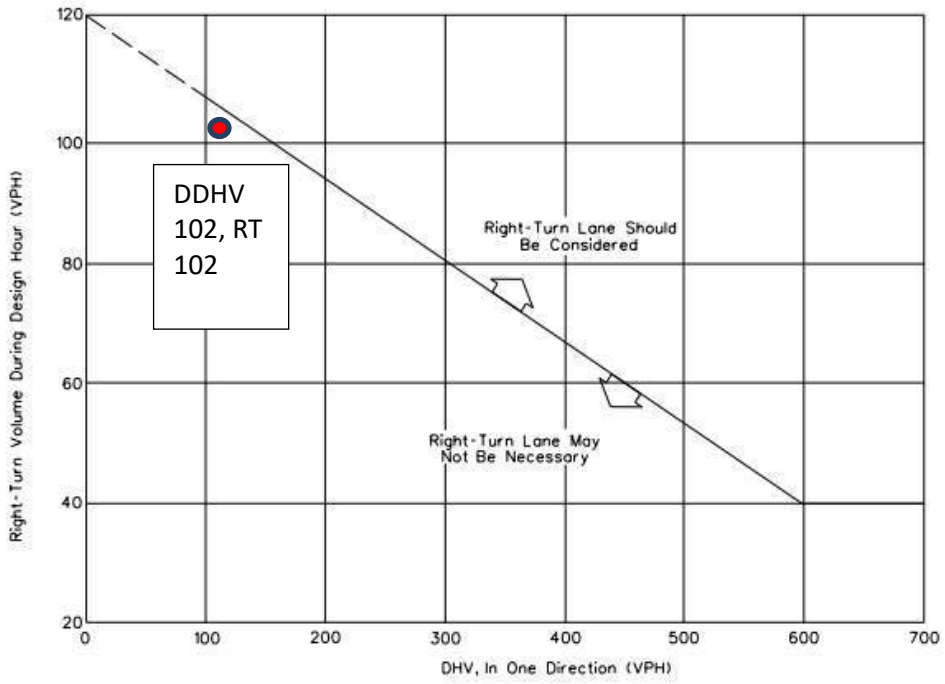
Right Turn Lane Warrants

A Two-Way Stop Controlled (TWSC) intersection along Reese Dr. and Ramada Blvd. (New) were evaluated for designated right turn lanes. Below is an evaluation of each approach.

South Leg:

- DDHV of 102 (2047 HSC Projection) with a right turn volume of 102.
- This northbound right turn movement does not meets criteria for a right turn lane per BDE Figure 36-3.A

Illinois INTERSECTIONS August 2018

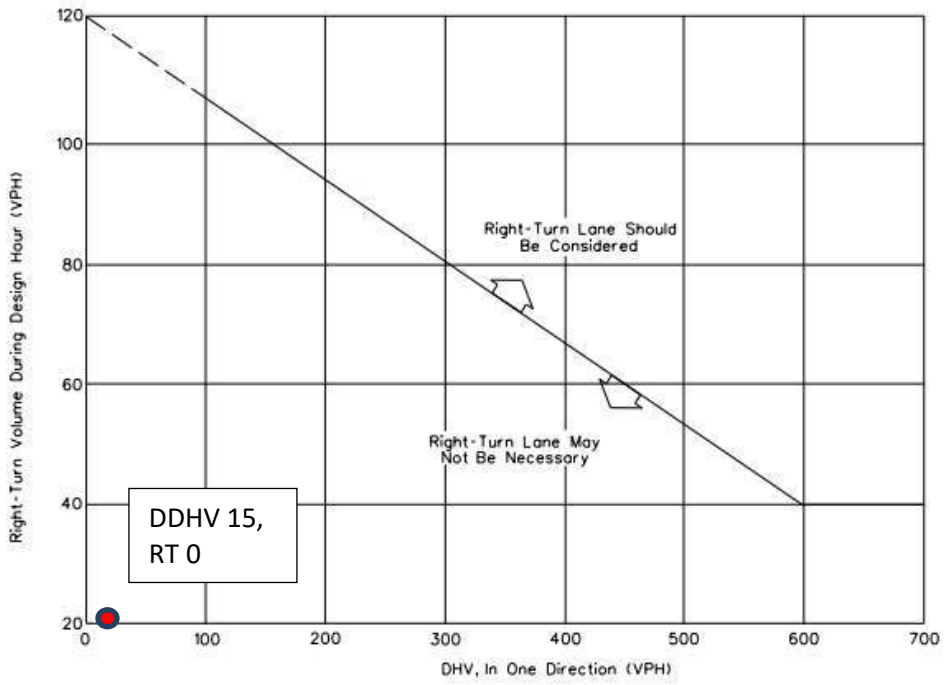


Note: For highways with a design speed below 50 mph (80 km/hr), with a DHV in one direction of less than 300, and where right turns are greater than 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

West Leg:

- EB DDHV of 15 (2047 HSC Projection) with a right turn volume of 0.
- This Eastbound right turn movement does not meets criteria for a right turn lane per BDE Figure 36-3.A

Illinois INTERSECTIONS August 2018



Note: For highways with a design speed below 50 mph (80 km/hr), with a DHV in one direction of less than 300, and where right turns are greater than 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

APPENDIX G
Crash History

Per Illinois Traffic Crash Report SR-1050 (updated 2019)

Injury Types (INJ)

K	Fatal
A	Incapacitating injury
B	Nonincapacitating injury
C	Reported, not evident
0	No indication of injury

Crash Type

A	No Injury/Drive Away
B	Injury and/or Tow Due to Crash

Lighting Condition (LGHT)

1	Daylight
2	Dawn
3	Dusk
4	Darkness
5	Darkness, lighted road
9	Unknown

Collision types (COLL)

Single-veh Crashes

1	Pedestrian crash
2	Pedalcyclist crash
3	Train crash
4	Animal crash
5	Overturned crash
6	Fixed object crash
7	Other object crash
8	Other noncollision crash

Collision types (COLL)

Multi-veh Crashes

9	Parked motor vehicle crash
10	Turning crash
11	Rear end crash
12	Sideswipe same direction crash
13	Sideswipe opposite direction cras
14	Head-on Crash
15	Angle Crash

Surface Condition Codes (RSUR)

1	Dry
2	Wet
3	Snow or slush
4	Ice
5	Sand, mud, dirt
6	Other
9	Unknown

Weather Condition (WEAT)

1	Clear
2	Rain
3	Snow
4	Fog/smoke/haze
5	Sleet/hail
6	Severe cross wind
7	Other
8	Cloudy/overcast
9	Unknown

City of Collinsville

Crash Analysis Report - Crash Data Summary

S No.	Route	Case Number	Collision Type	Injury Type	Fatal Count	Injury Count	Surface Condition	Weather Description	Lighting Conditions	Crash Date	Time of Day
1	Ramada Blvd.	202401017737	Fixed Object Crash	0	0	1	3	Snow	5	1/5/2024	9:00 AM
2	Ramada Blvd.	202401434139	Parked Motor Vehicle Crash	0	0	1	1	Unknown	9	12/4/2024	9:20 AM
3	Ramada Blvd.	202401343610	Head-on crash	0	0	2	1	Clear	1	10/19/2024	12:10 PM
4	Lafayette Ct	202301423787	Parked Motor Vehicle Crash	0	0	1	9	Clear	1	12/21/2023	11:53 AM
5	Ramada Blvd.	202301172513	Turning Crash	0	0	2	1	Clear	5	5/10/2023	9:43 AM
6	Ramada Blvd.	202301365339	Fixed Object Crash	0	0	1	1	Clear	5	11/5/2023	5:41 AM
7	Johnson Hill Rd.	202301148859	Other non-collision crash	0	0	1	1	Clear	1	5/8/2023	3:24 AM
8	Sandridge Dr.	202201188730	Fixed Object Crash	C	0	1	1	Clear	2	5/29/2022	5:18 AM
9	Ramada Blvd.	202201197271	Angle Crash	0	0	0	1	Clear	1	6/14/2022	5:15 PM
10	Ramada Blvd.	202201342278	Fixed Object Crash	0	0	0	2	Rain	4	10/24/2022	11:12 AM
11	Reese Dr.	202201174141	Pedestrain Crash	B	0	1	1	Clear	3	6/2/2022	7:21 PM
12	Reese Dr.	202201144607	Parked Motor Vehicle Crash	0	0	0	9	Unknown	9	5/7/2022	1:00 AM
13	Ramada Blvd.	202201256599	Sideswipe Opposite Direction	B	0	2	1	Clear	5	8/6/2022	11:28 PM
14	Ramada Blvd.	202101207841	Turning Crash	0	0	0	1	Clear	1	6/9/2021	7:45 AM
15	Sandridge Dr.	202001346736	Fixed Object Crash	0	0	0	2	Rain	4	12/23/2020	5:04 PM
16	Lafayette Ct	202001281181	Fixed Object Crash	0	0	0	2	Rain	1	10/27/2020	8:05 AM
17	Sandridge Dr.	202001278655	Parked Motor Vehicle Crash	0	0	0	2	DUSK	1	10/19/2020	9:00 AM
18	Reese Dr.	202001287115	Parked Motor Vehicle Crash	0	0	0	1	Clear	1	9/14/2020	6:00 AM
19	Beverly Lane	202001154007	Fixed Object Crash	0	0	0	1	Clear	1	6/18/2020	4:00 PM