TRAFFIC IMPACT STUDY

For

Proposed Warehouse Development
Block 177, Lot 8.01
Township of Howell
Monmouth County, New Jersey

Prepared For:

AAFRHW Property LLC
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Prepared By:

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1 November 2021
130176601

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EXECUTIVE SUMMARY

AAFRHW Property LLC retained Langan Engineering and Environmental Services to prepare a traffic impact study for two proposed warehouse buildings totaling 503,956 square feet (sf). The site is located along the northbound side of Fairfield Road. It is bordered on the east by undeveloped land and Landscape Nursery, on the west by Fairfield Road, on the north by undeveloped land, and on the south by Baker Road. Two full-movement driveways will provide site access along Fairfield Road.

Langan estimated the number of new trips the proposed warehouse development would generate based on data compiled for Land Use Code 150 (Warehousing) by the Institute of Transportation Engineers (ITE) as contained in the publication Trip Generation, 11th Edition. We estimated that the proposed development will generate approximately 111 trips (73 enter, 38 exit) during the weekday morning peak hour and 122 trips (29 enter, 93 exit) during the weekday evening peak hour.

We determined the directional distribution of the site-generated trips for the proposed warehouse development based on an examination of existing and expected travel patterns in the study area, demographic data, a review of traffic studies for prior and pending approvals for developments in the surrounding area, and a journey-to-work model, which is included in Appendix B.

We conducted capacity analyses at the following intersections:

- Park Avenue (NJ 33 Business) / NJ Route 33 WB Off-Ramp and Fairfield Road / Brickyard Road;
- Elton Adelphia Road (County Road 524) and Fairfield Road / School Driveway;
- Fairfield Road and NJ Route 33 EB Off-Ramp;
- Fairfield Road and Baker Road;
- Fairfield Road and Bennett Road;
- Fairfield Road and Site Driveway 1;
- Fairfield Road and Site Driveway 2.

Based on our analyses we determined the proposed development will not significantly alter overall area traffic operations during peak hours. The development's driveways will operate at acceptable levels of service (LOS) during peak traffic hours.

INTRODUCTION

AAFRHW Property LLC retained Langan Engineering and Environmental Services to prepare a traffic impact study for two proposed warehouse buildings totaling 503,956 square feet (sf). The project site is located in the Township of Howell, Monmouth County, New Jersey.

Project Description

The project proposes two warehouse buildings totaling 503,956 square feet (sf). The Howell tax maps designate the site as Block 177, Lot 8.01. Figure 1 shows the site location.

The site is located along the northbound side of Fairfield Road. It is bordered on the east by undeveloped land and Landscape Nursery, on the west by Fairfield Road, on the north by undeveloped land, and on the south by Baker Road. Two full-movement driveways will provide site access along Fairfield Road.

Study Area

We conducted capacity analyses at the following intersections:

- Park Avenue (NJ 33 Business) / NJ Route 33 WB Off-Ramp and Fairfield Road / Brickyard Road;
- Elton Adelphia Road (County Road 524) and Fairfield Road / School Driveway;
- Fairfield Road and NJ Route 33 EB Off-Ramp;
- Fairfield Road and Baker Road;
- Fairfield Road and Bennett Road;
- Fairfield Road and Site Driveway 1;
- Fairfield Road and Site Driveway 2.

The section "Description of Existing Conditions" presents an inventory of the physical road conditions.

SCOPE OF STUDY

Langan undertook the following steps to prepare this study according to standard accepted methodologies:

1. Conducted a field examination of the site and surrounding road network to inventory physical and regulatory conditions including the number of lanes, lane assignments, channelization, traffic-control devices, lateral clearances, and other factors that limit traffic capacity.

2. Conducted turning movement counts at the study intersections in October 2021, when COVID-19 restrictions were lifted and schools were in session with in-person learning. However, the 2021 traffic counts may not be representative of typical traffic conditions. We also obtained historical count data from the New Jersey Department of Transportation (NJDOT) from 2013 and 2016 to aid in establishing traffic volumes representative of typical traffic conditions. We then identified the existing weekday morning and evening peak hour traffic volumes based on the collected traffic count data.

3. We used both the 2013 and 2016 NJDOT data and adjusted the 2021 turning movement counts to establish a conservative representation of typical existing traffic conditions. We then applied the NJDOT Monmouth County growth factors of 1.00, 1.25, 1.75, and 2.50 percent per year to the respective roadway traffic data to establish 2023 Base traffic volumes.

4. Obtained information for local developments not yet built in the study area. Estimated traffic for those local developments. Added that local development traffic to the 2023 Base volumes to establish the 2023 No-Build traffic volumes.

5. Prepared trip generation estimates for the proposed development based on research data developed by the Institute of Transportation Engineers (ITE).

6. Developed trip distribution for the development based on demographic data, a review of traffic studies for prior and pending approvals for developments in the surrounding area, a journey-to-work model, and the likely travel paths of site generated traffic.

7. Assigned site-generated trips to the site driveways and the surrounding roadway network based on the likely travel routes motorists will use to travel to and from the development.

8. Established future 2023 Build traffic volumes by adding site-generated trips to the 2023 No-Build traffic volumes.

9. Performed intersection capacity analyses for the weekday morning and evening peak hours using Synchro Software.

DESCRIPTION OF EXISTING CONDITIONS

This section describes the roads and traffic volumes near the site.

Roads

NJ Route 33

NJ Route 33 is an urban principal arterial freeway/expressway under New Jersey Department of Transportation (NJDOT) jurisdiction. NJ Route 33 has a general east-west orientation and provides one travel lane in each direction in the immediate study area. The posted speed limit within the study area is 55mph.

Park Avenue (NJ Route 33 Business)

Park Avenue (NJ Route 33 Business) is an urban principal arterial under NJDOT jurisdiction. Park Avenue has a general east-west orientation and provides one travel lane in each direction in the immediate study area. The posted speed limit within the study area is 50mph.

Elton Adelphia Road (County Road (CR) 524)

Elton Adelphia Road (CR 524) is an urban major collector under Monmouth County jurisdiction. CR 524 has a general east-west orientation and provides one travel lane in each direction in the immediate study area. The posted speed limit within the study area is 45mph

Fairfield Road

Fairfield Road is a local road. The roadway has a general north-south orientation and provides one travel lane in each direction in the immediate study area. The posted speed limit within the study area is 45mph.

Brickyard Road

Brickyard Road is a local road. The roadway has a general north-south orientation and provides one travel lane in each direction in the immediate study area. The posted speed limit within the study area is 35mph.

Baker Road

Baker Road is a private driveway. The roadway has a general east-west orientation and provides one travel lane in each direction in the immediate study area. There is no posted speed limit.

Bennett Road

Bennett Road is a local road. The roadway has a general east-west orientation and provides one travel lane in each direction in the immediate study area. The posted speed limit within the study area is 40mph.

Traffic Volumes

To examine traffic conditions near the site, we arranged turning movement counts (TMC) at the study intersections on a typical weekday. The TMCs occurred after New Jersey lifted COVID-19 restrictions and schools were in session with in-person learning. Specifically, we arranged for TMCs from 6:00 AM to 10:00 AM and from 2:00 PM to 6:00 PM on Tuesday, October 5, 2021.

Due to the effects of the COVID-19 pandemic, the count data might not represent typical traffic conditions. Therefore, we obtained NJDOT automatic traffic recorder (ATR) counts conducted in January 2013 along Park Avenue (NJ Route 33 Business) and in October 2016 along the NJ Route 33 WB On-Ramp and EB Off-Ramp near the site. The 2013 NJDOT ATR counts were higher in the eastbound direction during the morning peak hour along Park Avenue and the 2016 NJDOT ATR counts were higher along both NJ Route 33 ramps during the morning and evening peak hours. Therefore, to be conservative, we increased the 2021 TMC to show conservative representative traffic volumes along the roadway network.

Additionally, McDonough & Rea Associates, Inc., conducted turning movement counts for the Rock Solid Realty-Warehouse development dated December 2019. Specifically, they collected counts along Fairfield Road in December 2018 and October 2019. Based on a comparison to the December 2018 and October 2019 traffic volumes, the 2021 Adjusted Existing traffic volumes are representative of existing traffic conditions.

The traffic counts identify distinct times during the weekday morning and evening hours when traffic experienced its highest levels. According to the traffic data, the weekday morning peak hour occurred from 7:30 AM to 8:30 AM and the weekday evening peak hour occurred from 4:30 PM to 5:30 PM.

Figure 2 illustrates the 2021 Existing weekday morning and evening peak hour traffic volumes. We then utilized the higher 2013 and 2016 NJDOT ATR volumes to increase and balance traffic volumes between intersections by adjusting specific movements upwards, where appropriate. Figure 3 shows the traffic volume adjustments. Figure 4 shows the 2021 Adjusted Existing weekday morning and evening peak hour traffic volumes. Summaries of the traffic count data are contained in Appendix C.

ESTIMATE OF FUTURE CONDITIONS

This section of the report covers background traffic growth, adjacent developments, site-generated trips, trip distribution, and future traffic volumes. We anticipate the developer will complete the project by the end of 2023. Accordingly, we projected traffic volumes to include existing traffic, new traffic created by background growth, and pending and approved adjacent developments to derive the 2023 No-Build traffic volumes. We added the site-generated trips to the 2023 No-Build traffic volumes to derive the 2023 Build traffic volumes.

Background Traffic Growth

We increased the 2021 Existing Adjusted traffic volumes by a compounded annual growth rate of 1.00, 1.25, 1.75, and 2.50 percent per year to the respective roadway traffic volumes to establish the 2023 Base traffic volumes. The NJDOT has established those Monmouth County short-term traffic growth rates. Figure 5 shows the 2023 Base traffic volumes.

No-Build Condition

In addition to general background traffic growth, there are prior and pending approvals for developments near the site that could increase traffic on the surrounding road network. In preparing the future traffic projections, we included traffic from the following other developments:

- Active 29 Howell Road – 425,000 sf warehouse;
- Black Rock Enterprises – Relocated Black Rock Enterprises;
- Rock Solid Realty-Warehouse – 368,050 sf warehouse;
- New Jersey Natural Gas Company – 30,000 sf building and outdoor training facility.

We derived traffic for these other developments based on data compiled from their respective traffic studies. Appendix D contains the volume worksheets from the respective traffic studies. Figure 6 shows the collective traffic from these other developments. We added the other development traffic to the 2023 Base traffic volumes to derive the 2023 No-Build traffic volumes, which Figure 7 shows.

Site-Generated Trips

We prepared trip generation estimates for the proposed development using data compiled for Land Use Code 150 (Warehousing) by the Institute of Transportation Engineers (ITE) as contained in the publication *Trip Generation*, 11th edition. Additionally, for the warehouse land use, ITE provides truck trip generation data in the supplement to the *Trip Generation* publication. Table 1

summarizes the trip generation estimates for the development for the weekday morning and evening peak hours.

Table 1 – Trip Generation Estimates

Use	Weekday Morning Peak Hour			Weekday Evening Peak Hour		
	In	Out	Total	In	Out	Total
Passenger Vehicles	64	31	95	19	81	100
Trucks*	5	5	10	8	7	15
Total	**69**	**36**	**105**	**27**	**88**	**115**

*Trucks percentages from the ITE Supplement – 9.5% AM peak hour and 13% PM peak hour

Trip Distribution

We determined the directional distribution of site-generated trips based on examining existing and expected travel patterns in the study area, demographic data, traffic studies for other area developments, a journey-to-work model, and the likely site-generated travel paths. Appendix B contains the journey-to-work model. We assigned the site-generated trips to the adjacent roadway system based on travel routing software. Table 2 shows the directional distributions.

Table 2 – Arrival and Departure Trip Distributions

Direction (To/From)	Arrival and Departure Distributions	
	Passenger Vehicles	Trucks
NJ Route 33 (East)	38%	50%
NJ Route 33 (West)	18%	50%
Park Avenue – NJ Route 33 Business (West)	25%	-
Elton Adelphia Road – CR 524 (East)	16%	-
Elton Adelphia Road – CR 524 (West)	1%	-
Bennett Road (West)	2%	-
Total	**100%**	**100%**

Figures 8 and 9 show the arrival and departure distributions for passenger vehicles and trucks, respectively. Figures 10 and 11 show the site-generated trips for passenger vehicles and trucks, respectively. Figure 12 shows the total site-generated trips assigned to the roadway network.

Build Traffic Volumes

We derived the 2023 Build traffic volumes by adding the site-generated trips to the 2023 No-Build traffic volumes. Figure 13 illustrates the 2023 Build weekday morning and evening peak hour traffic volumes.

ANALYSIS OF TRAFFIC OPERATIONS

This section describes the capacity analysis we conducted to assess traffic operations for the No-Build and Build conditions. Capacity analysis provides an indication of the adequacy of road facilities to serve traffic demand.

Level of Service Criteria

Level of Service (LOS) is the term used to denote different operating conditions that occur on a given road segment under various traffic-volume demands. LOS is a qualitative measure that considers a number of factors including road geometry, speed, travel delay and freedom to maneuver. LOS designations range from A to F and provide an index of operational qualities of a road segment or an intersection. LOS A represents the best operating conditions; LOS F represents the worst.

LOS designations are reported differently for signalized and unsignalized intersections. For signalized intersections, the analysis considers the operation of all traffic entering the intersection. For unsignalized intersections, the analysis considers the operation of all movements that conflict with other movements, such as main-line left turns and traffic exiting a side street. The evaluation criteria used to analyze the study area intersections are based on the Highway Capacity Manual, 6th edition, (HCM), published by the Transportation Research Board and the Synchro software.

The HCM defines LOS for signalized intersections as follows:

LOS	Control Delay per Vehicle
A	≤10 sec
B	>10 and ≤20 sec
C	>20 and ≤35 sec
D	>35 and ≤55 sec
E	>55 and ≤80 sec
F	>80 sec

The HCM defines LOS for unsignalized intersections as follows:

LOS	Delay Range (sec/veh)
A	≤10 sec
B	>10 and ≤15 sec
C	>15 and ≤25 sec
D	>25 and ≤35 sec
E	>35 and ≤50 sec
F	>50 sec

Capacity Analysis

We conducted capacity analyses for the study intersections and found that the proposed warehouse development driveways will operate acceptably during the peak hours. Moreover, site traffic impacts at the study intersections will be negligible. Table 3 summarizes the 2023 No-Build and Build levels of service (LOS) at each study intersection during the weekday morning and evening peak hours. Following are discussions pertaining to each of the study intersections. Appendix F contains the capacity analysis worksheets.

Table 3 – Intersection Capacity Analysis Summary

Location	Movement		2023 No-Build Condition		2023 Build Condition	
			AM	PM	AM	PM
Signalized Intersection						
Park Ave (NJ 33 Business) / NJ Route 33 WB Off-Ramp and Fairfield Road / Brickyard Road	EB	L	B (11.8)	A (7.5)	B (12.1)	A (8.2)
		T,R	B (20.0)	B (11.4)	C (20.9)	B (12.5)
	WB	L	B (17.1)	A (8.3)	B (19.4)	A (9.7)
		T,R	B (13.5)	A (8.1)	B (13.8)	A (8.9)
	NB	L,T	D (47.3)	D (52.0)	D (47.2)	D (51.1)
	SB	L,T,R	B (17.4)	C (21.3)	B (17.2)	C (20.2)
	Overall		**C (22.8)**	**B (17.2)**	**C (23.4)**	**B (18.2)**
Elton Adelphia Road (County Road 524) and Fairfield Road / School Driveway	EB	L	A (5.7)	A (4.0)	A (5.7)	A (4.0)
		T,R	B (11.0)	A (7.3)	B (11.0)	A (7.3)
	WB	L	A (5.5)	A (3.9)	A (5.5)	A (3.9)
		T,R	B (12.6)	A (9.2)	B (12.6)	A (9.2)
	NB	L	D (35.2)	C (29.0)	D (35.2)	C (29.0)
		T,R	D (36.7)	C (32.0)	D (36.7)	C (32.0)
	SB	L	D (37.7)	F (310.0)	D (38.2)	F (321.9)
		T,R	C (22.7)	B (16.6)	C (22.7)	B (16.4)
	Overall		**B (16.5)**	**F (125.6)**	**B (16.6)**	**F (131.8)**
Unsignalized Intersections						
Fairfield Road and NJ Route 33 EB Off-Ramp	EB	L	C (16.1)	C (15.8)	C (17.5)	C (17.7)
		R	B (10.8)	B (14.0)	B (11.4)	B (14.6)
Fairfield Road and Baker Road	WB	L,R	B (13.3)	A (9.6)	B (13.5)	A (9.6)
	SB	L	A (8.8)	A (7.7)	A (8.8)	A (7.7)
Fairfield Road and Bennett Road	EB	L,R	C (15.1)	B (14.3)	C (15.4)	B (14.5)
	NB	L	A (8.1)	A (8.6)	A (8.1)	A (8.6)
Fairfield Road and Site Driveway 1	WB	L,R	-	-	B (12.8)	B (11.1)
	SB	L	-	-	A (8.7)	A (8.0)
Fairfield Road and Site Driveway 2	WB	L,R	-	-	B (13.5)	B (12.5)
	SB	L	-	-	A (8.9)	A (8.5)

Based on Synchro Software [*Level of Service (Average vehicle delay (seconds per vehicle))]

Park Avenue (NJ 33 Business) / NJ Route 33 WB Off-Ramp and Fairfield Road / Brickyard Road

We expect this signalized intersection to operate at an overall LOS C during the weekday morning peak hour and an overall LOS B during the weekday evening peak hour under the No-Build

condition. Under the Build condition, the intersection will continue to operate at an overall LOS C during the weekday morning peak hour and an overall LOS B during the weekday evening peak hour.

Elton Adelphia Road (CR 524) and Fairfield Road / School Driveway

We expect this signalized intersection to operate at an overall LOS B during the weekday morning peak hour and an overall LOS F during the weekday evening peak hour under the No-Build condition. Under the Build condition, the intersection will continue to operate at an overall LOS B during the weekday morning peak hour and an overall LOS F during the weekday evening peak hour.

We note that the southbound Fairfield Road left-turn movement operates with delay, particularly during the weekday evening peak hour. A shift of two seconds from the Elton Adelphia (CR 524) advance phase and ten seconds from the Fairfield Road / School Driveway ROW to the Fairfield Road / School Driveway advance phase would improve operations along Fairfield Road. We conducted a supplemental analysis, which illustrates the improved operations during the weekday evening peak hour in both the No-Build and Build conditions. Table 4 summarizes the 2023 No-Build and Build conditions with the timing adjustment.

Table 4 – Supplemental Intersection Capacity Analysis Summary

Location	Movement		2023 No-Build with Timing Adjustment Condition	2023 Build with Timing Adjustment Condition
			PM	PM
Elton Adelphia Road (County Road 524) and Fairfield Road / School Driveway	EB	L	A (8.0)	A (8.0)
		T,R	B (13.4)	B (13.4)
	WB	L	A (7.8)	A (7.8)
		T,R	B (15.1)	B (15.2)
	NB	L	C (31.0)	C (31.0)
		T,R	D (39.6)	D (39.6)
	SB	L	E (73.7)	E (77.8)
		T,R	B (13.1)	B (12.9)
	Overall		**D (37.2)**	**D (39.2)**

Fairfield Road and NJ Route 33 EB Off-Ramp

We expect all movements at this stop-controlled intersection to operate at LOS C or better during both the weekday morning and evening peak hours under the No-Build conditions. Under the Build condition, all movements will continue to operate at LOS C or better during both the weekday morning and evening peak hours.

Fairfield Road and Baker Road

We expect all movements at this stop-controlled intersection to operate at LOS B or better during both the weekday morning and evening peak hours under the No-Build conditions. Under the Build condition, all movements will continue to operate at LOS B or better during both the weekday morning and evening peak hours.

Fairfield Road and Bennett Road

We expect all movements at this stop-controlled intersection to operate at LOS C or better during both the weekday morning and evening peak hours under the No-Build conditions. Under the Build condition, all movements will continue to operate at LOS C or better during both the weekday morning and evening peak hours

Fairfield Road and Site Driveway 1 (North)

Site Driveway 1 will intersect Fairfield Road to form the east leg of a T-shaped intersection under stop control. The westbound site driveway approach will provide one shared left-turn / right-turn lane and will be stop-controlled. The northbound Fairfield Road approach will provide one shared through / right-turn lane. The southbound Fairfield Road approach will provide one shared left-turn / through lane.

Under the Build condition, we expect all movements at the stop-controlled intersection to operate a LOS B or better during both the weekday morning and evening peak hours.

Fairfield Road and Site Driveway 2 (South)

Site Driveway 2 will intersect Fairfield Road to form the east leg of a T-shaped intersection under stop control. The westbound site driveway approach will provide one shared left-turn / right-turn lane and will be stop-controlled. The northbound Fairfield Road approach will provide one shared through / right-turn lane. The southbound Fairfield Road approach will provide one shared left-turn / through lane.

Under the Build condition, we expect all movements at the stop-controlled intersection to operate a LOS B or better during both the weekday morning and evening peak hours

CONCLUSIONS

Langan has concluded the proposed warehouse development will not significantly alter area traffic operations during peak hours. We expect the site's accesses to operate at acceptable levels of service during peak traffic hours.

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APPENDIX A
FIGURES

LANGAN
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Project
PROPOSED WAREHOUSE DEVELOPMENT
BLOCK No. 177, LOT No. 8.01
TOWNSHIP OF HOWELL
MONMOUTH COUNTY NEW JERSEY

Drawing Title
SITE LOCATION MAP

Project No. 130176601	Figure 1
Date 10/19/2021	
Drawn By EJV	
Submission Date OCTOBER 2021	Sheet 1 of 13

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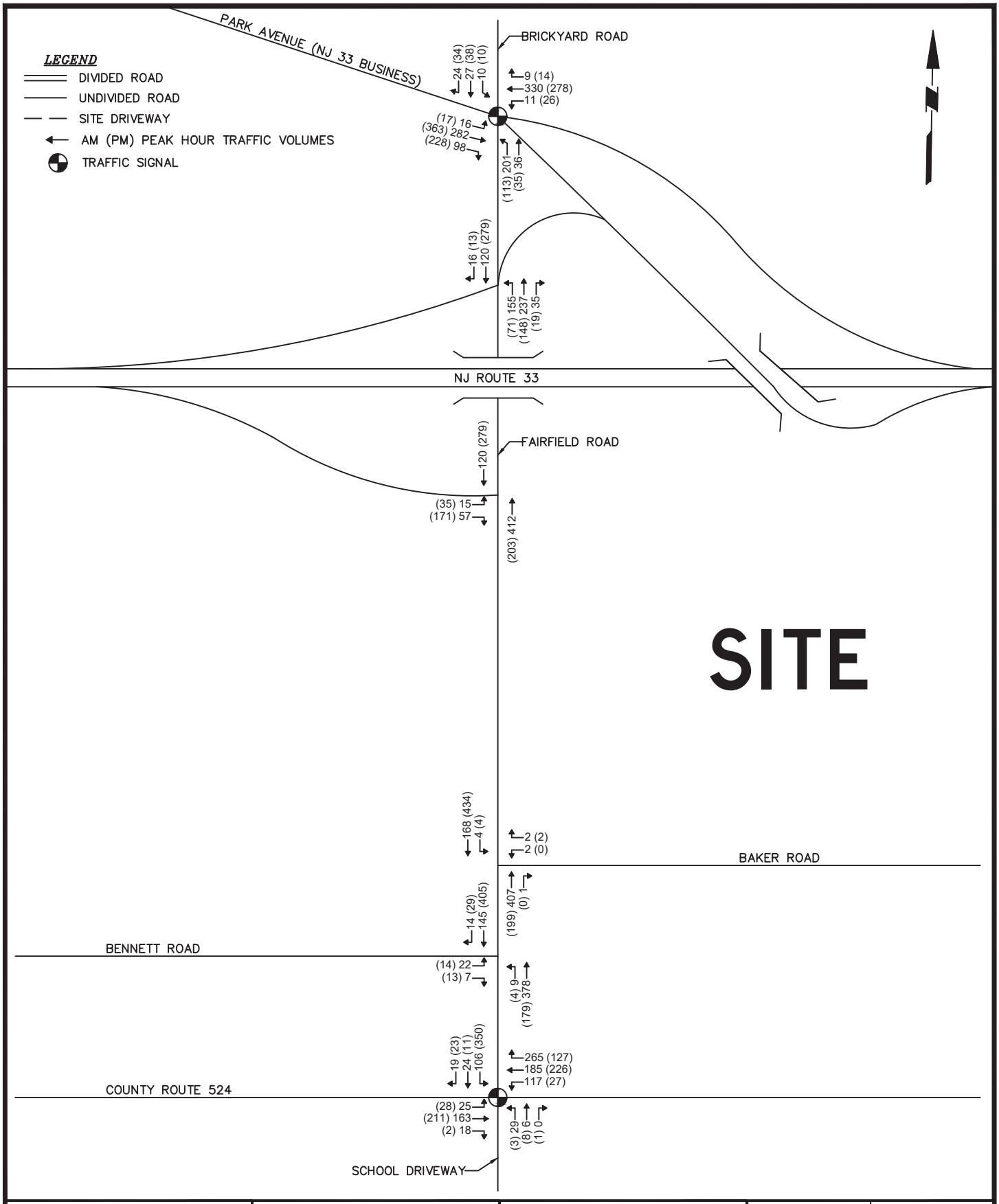

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Drawing Title
2021 EXISTING TRAFFIC VOLUMES

Project No.	130176601
Date	10/19/2021
Drawn By	EJV
Submission Date	OCTOBER 2021
Figure	2
Sheet	2 of 13

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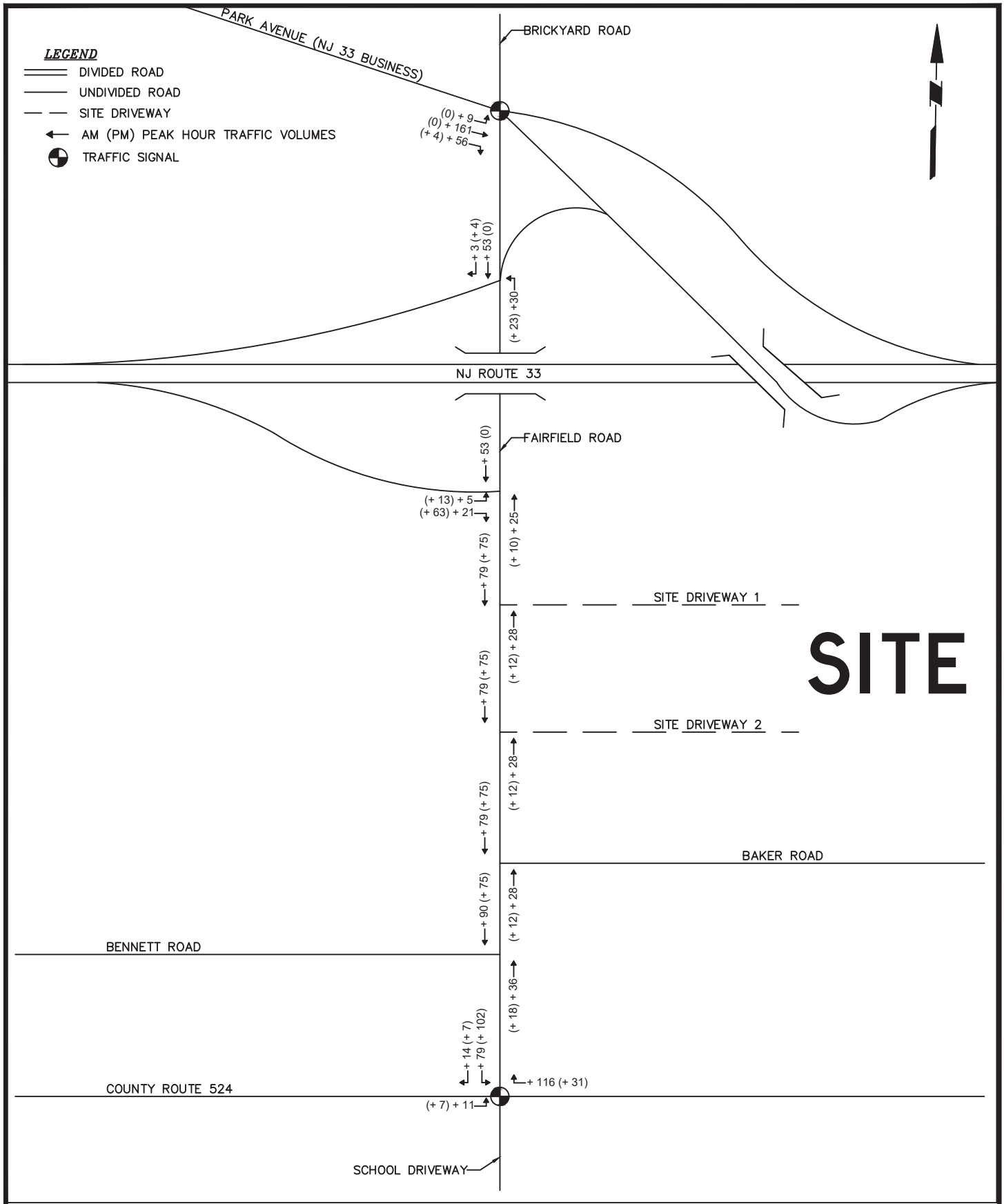

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BLOCK No. 177, LOT No. 8.01
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MONMOUTH COUNTY NEW JERSEY

Drawing Title
TRAFFIC VOLUME ADJUSTMENTS

Project No. 130176601	Figure 3
Date 10/19/2021	
Drawn By EJV	
Submission Date OCTOBER 2021	Sheet 3 of 13

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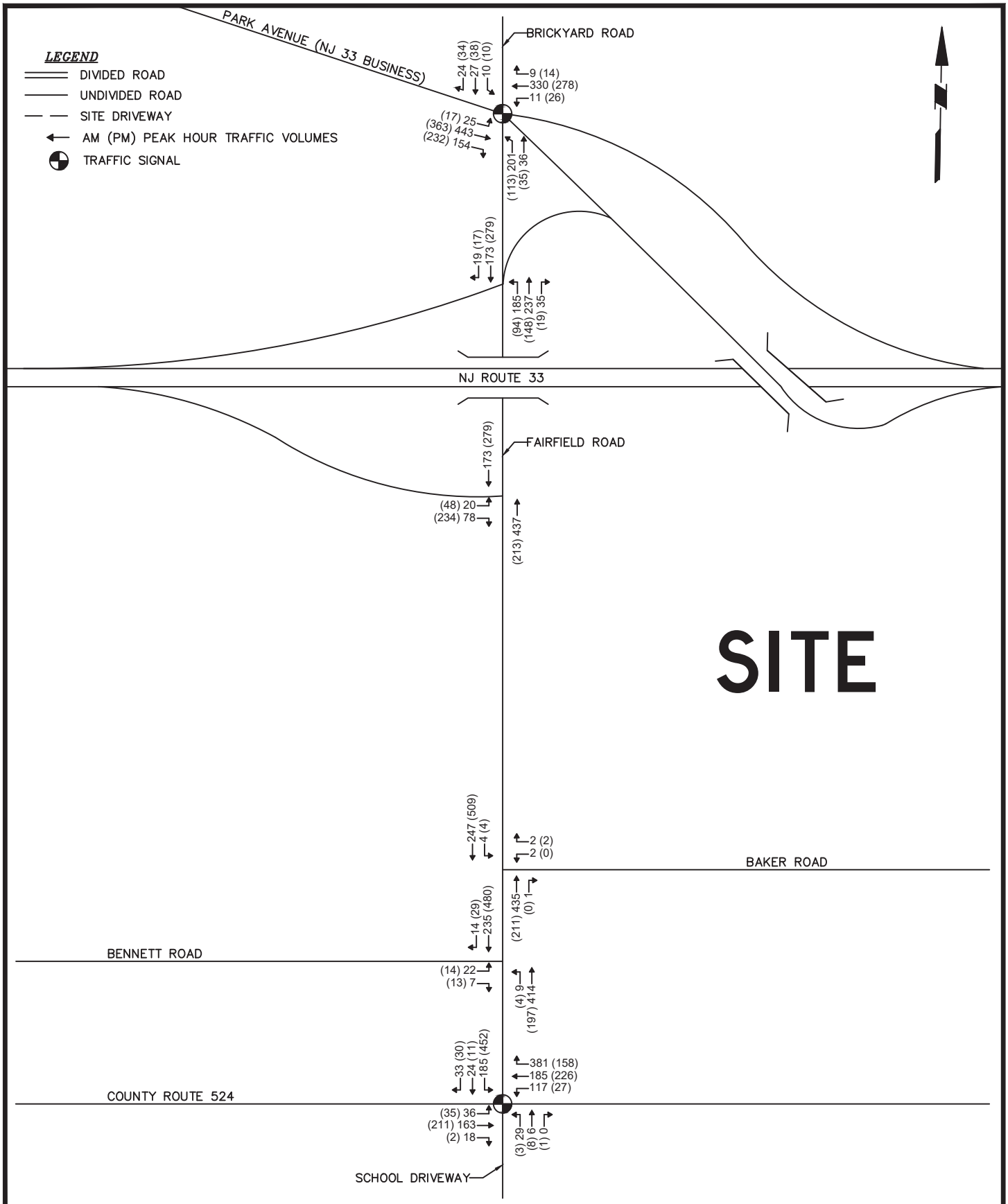

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Drawing Title
2021 ADJUSTED EXISTING TRAFFIC VOLUMES

Project No. 130176601	Figure 4
Date 10/19/2021	
Drawn By EJV	
Submission Date OCTOBER 2021	Sheet 4 of 13

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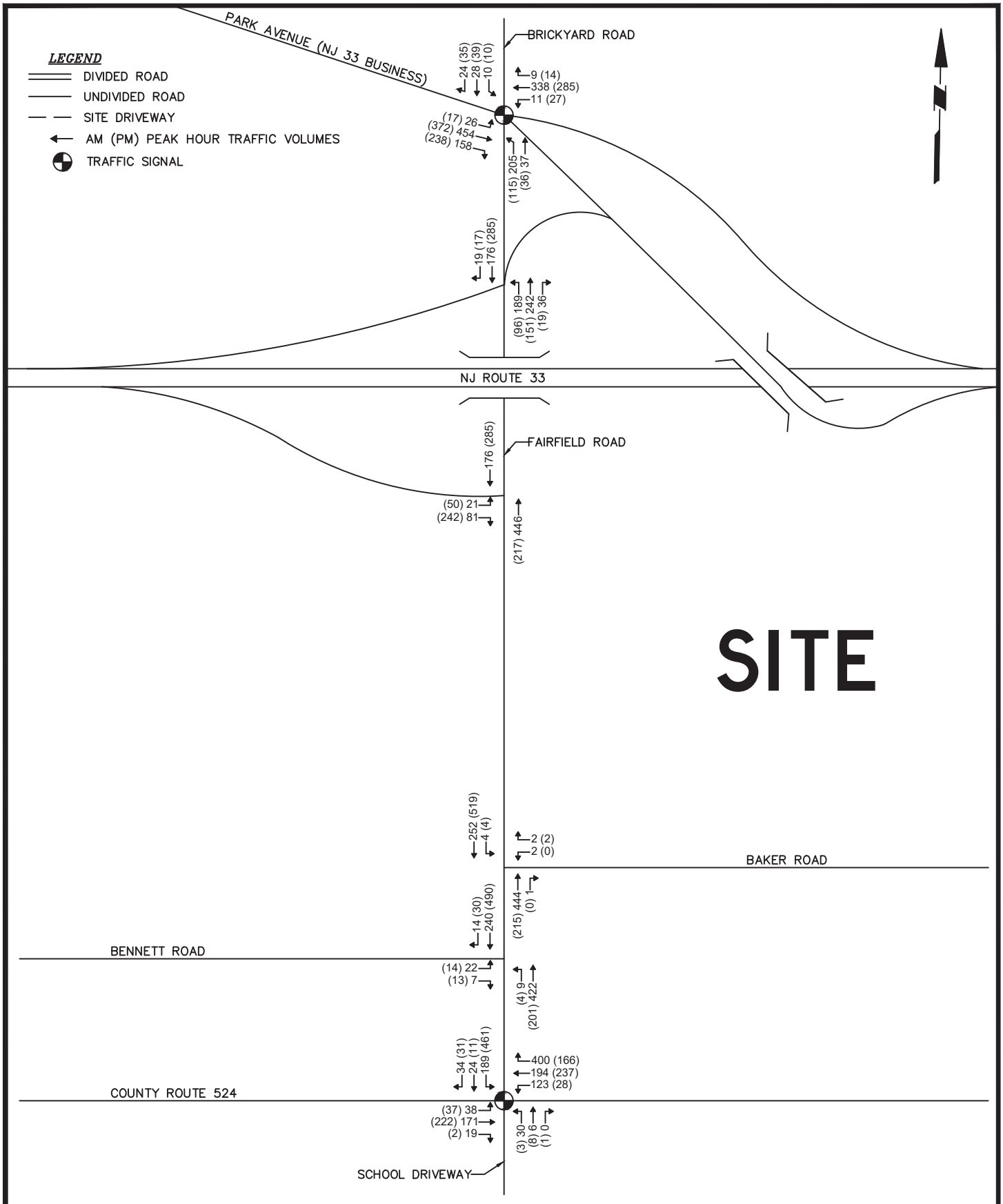

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Drawing Title
2023 BASE TRAFFIC VOLUMES

Project No.	130176601
Date	10/19/2021
Drawn By	EJV
Submission Date	OCTOBER 2021
Figure	5
Sheet	5 of 13

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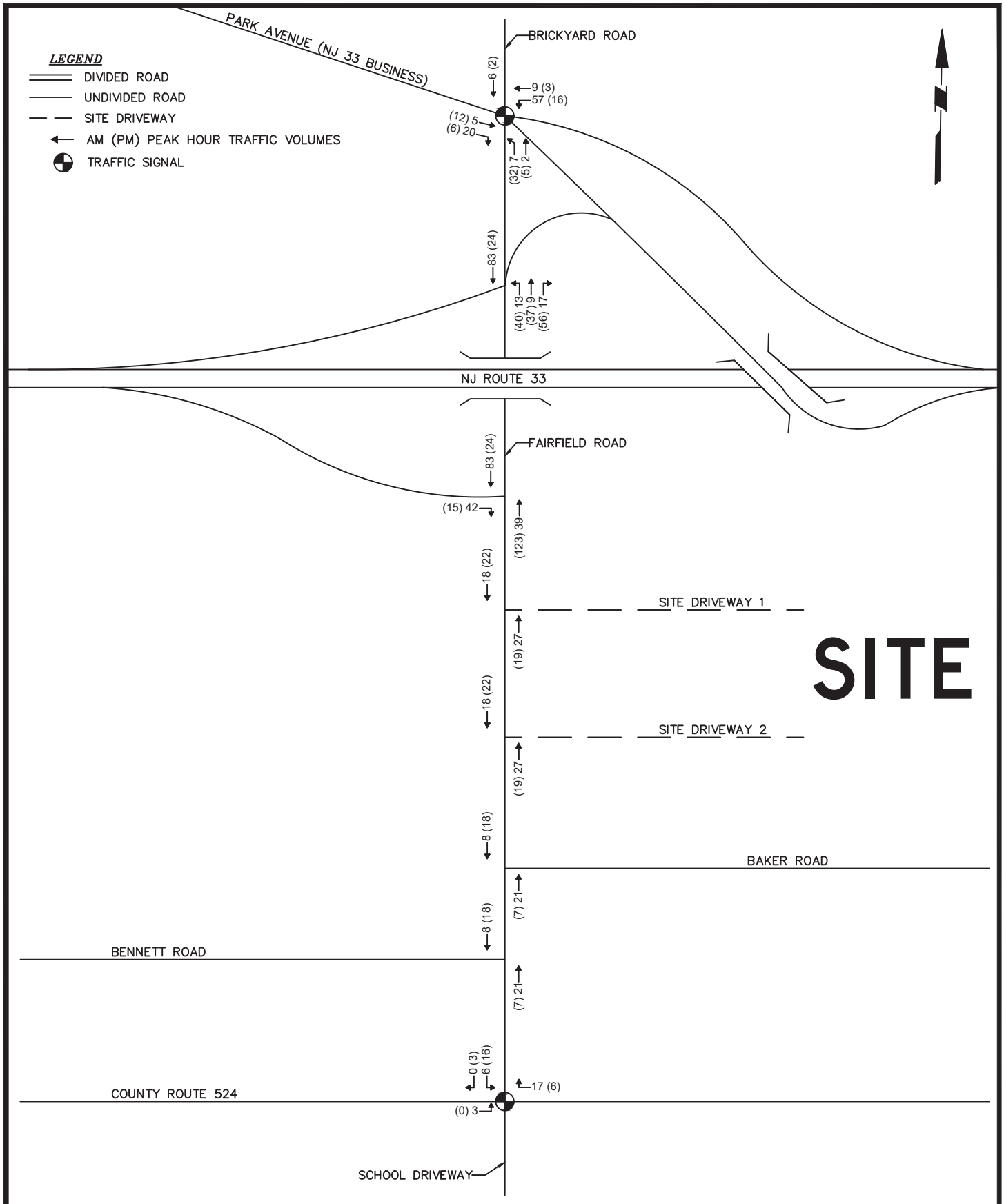

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MONMOUTH COUNTY NEW JERSEY

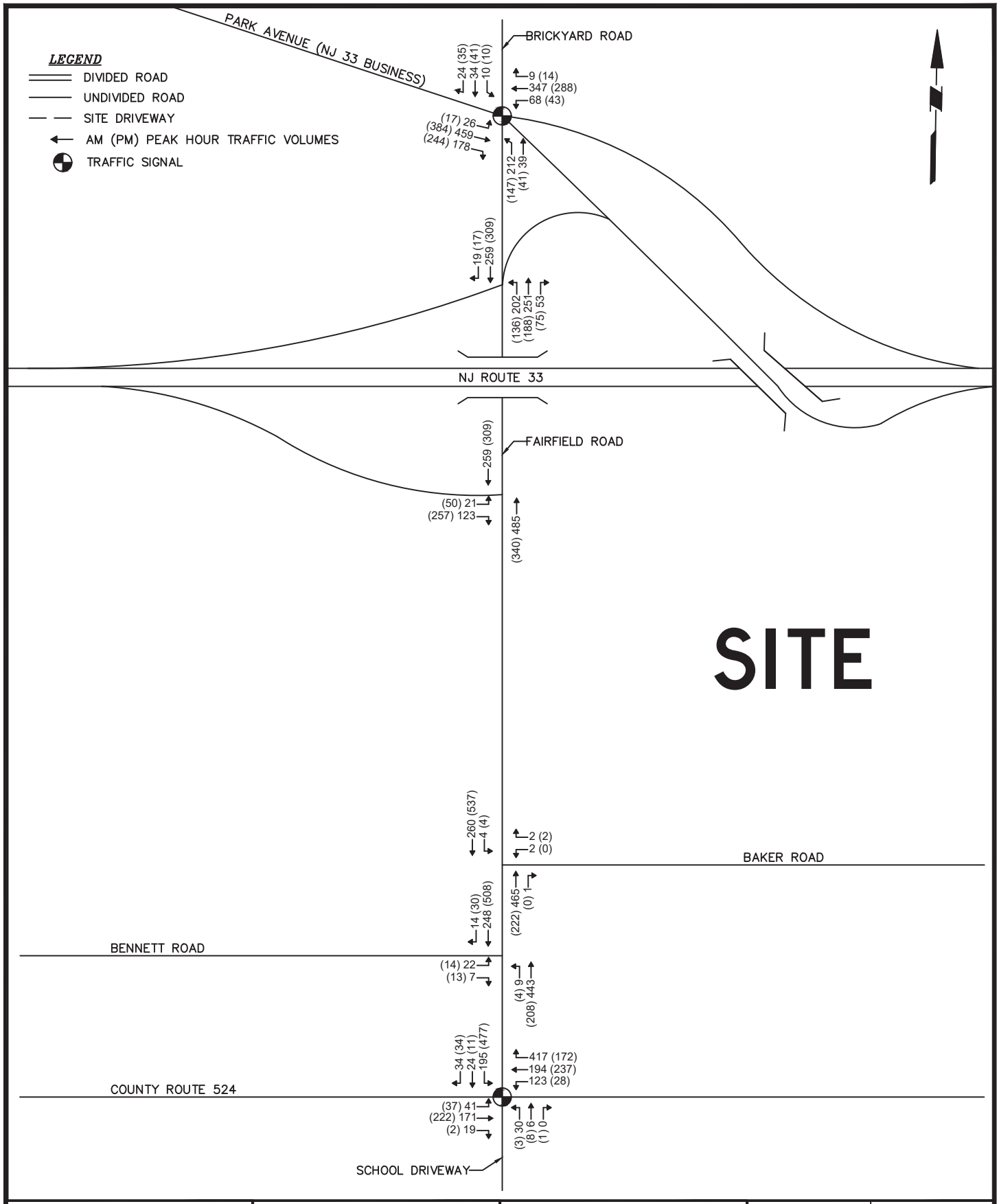
Drawing Title
TOTAL ADJACENT DEVELOPMENT TRAFFIC VOLUMES

Project No.	130176601
Date	10/19/2021
Drawn By	EJV
Submission Date	OCTOBER 2021

Figure **6**

Sheet 6 of 13

Filename: \\langan.com\data\LAW\data6\130176601\Project Data_Discipline\Traffic\Figures & Tables\2021-10 TIS Figures.dwg Date: 10/27/2021 Time: 10:10 User: eviloria Style Table: Langan.stb Layout: 5-ADJ



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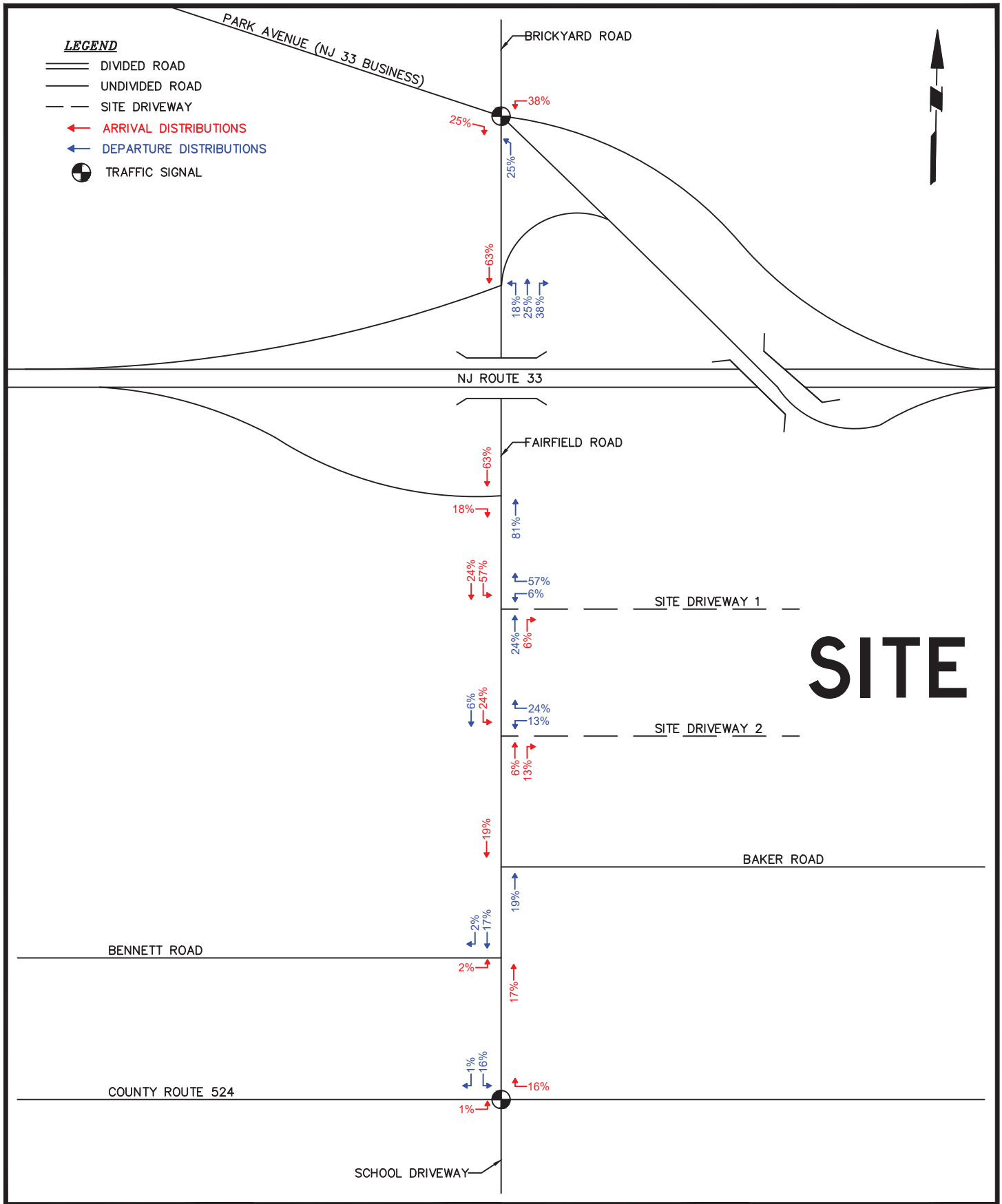
Project
PROPOSED WAREHOUSE DEVELOPMENT
BLOCK No. 177, LOT No. 8.01
TOWNSHIP OF HOWELL
MONMOUTH COUNTY NEW JERSEY

Drawing Title
2023 NO-BUILD TRAFFIC VOLUMES

Project No.	130176601
Date	10/19/2021
Drawn By	EJV
Submission Date	OCTOBER 2021
Figure	7
Sheet	7 of 13



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Project
PROPOSED WAREHOUSE DEVELOPMENT
BLOCK No. 177, LOT No. 8.01
TOWNSHIP OF HOWELL
MONMOUTH COUNTY NEW JERSEY

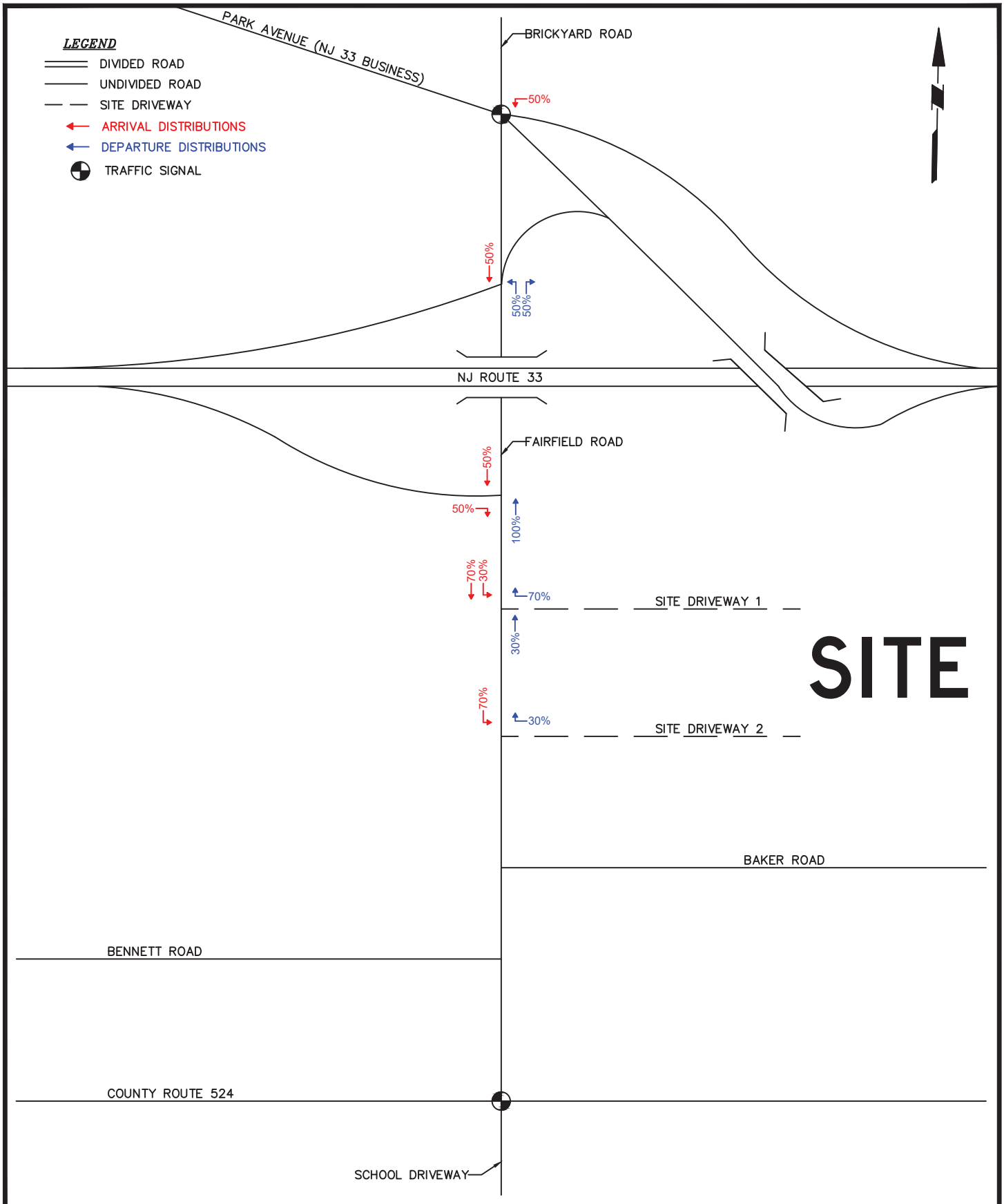
Drawing Title
PASSENGER VEHICLE ARRIVAL AND DEPARTURE DISTRIBUTIONS

Project No.	130176601
Date	10/19/2021
Drawn By	EJV
Submission Date	OCTOBER 2021

Figure 8

Sheet 8 of 13

Filename: \\langan.com\data\LAW\data6\130176601\Project Data_Discipline\Traffic\Figures & Tables\2021-10 TIS Figures.dwg Date: 10/27/2021 Time: 10:10 User: eviloria Style Table: Langan.stb Layout: 7-PASSAD



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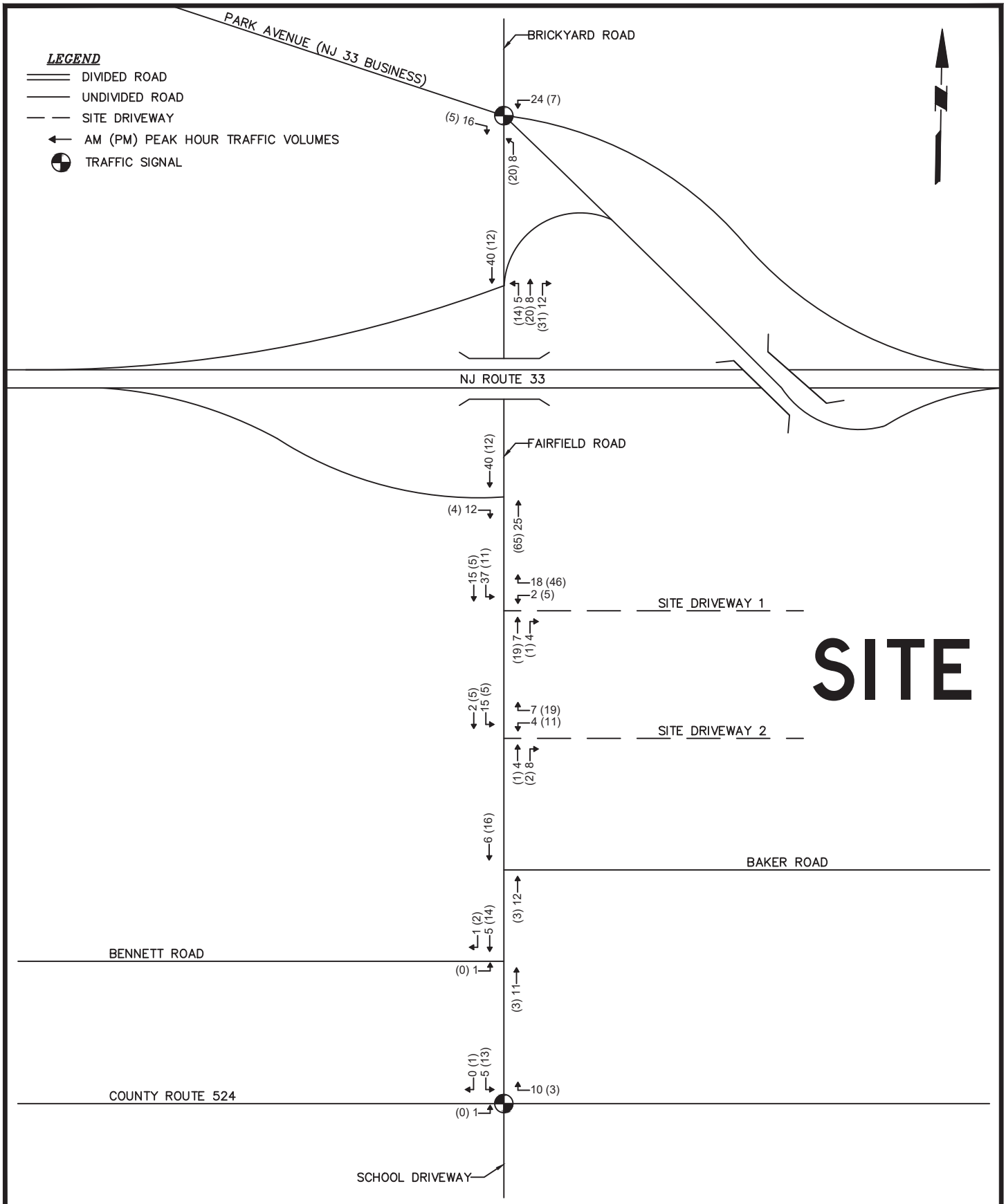
Project
PROPOSED WAREHOUSE DEVELOPMENT
BLOCK No. 177, LOT No. 8.01
TOWNSHIP OF HOWELL
MONMOUTH COUNTY NEW JERSEY

Drawing Title
TRUCK ARRIVAL AND DEPARTURE DISTRIBUTIONS

Project No.	130176601
Date	10/19/2021
Drawn By	EJV
Submission Date	OCTOBER 2021
Figure	9
Sheet	9 of 13

Filename: \\langan.com\data\LAW\data6\130176601\Project Data_Discipline\Traffic\Figures & Tables\2021-10 TIS Figures.dwg Date: 10/27/2021 Time: 10:10 User: eviloria Style Table: Langan.stb Layout: 8-TRUCKAD



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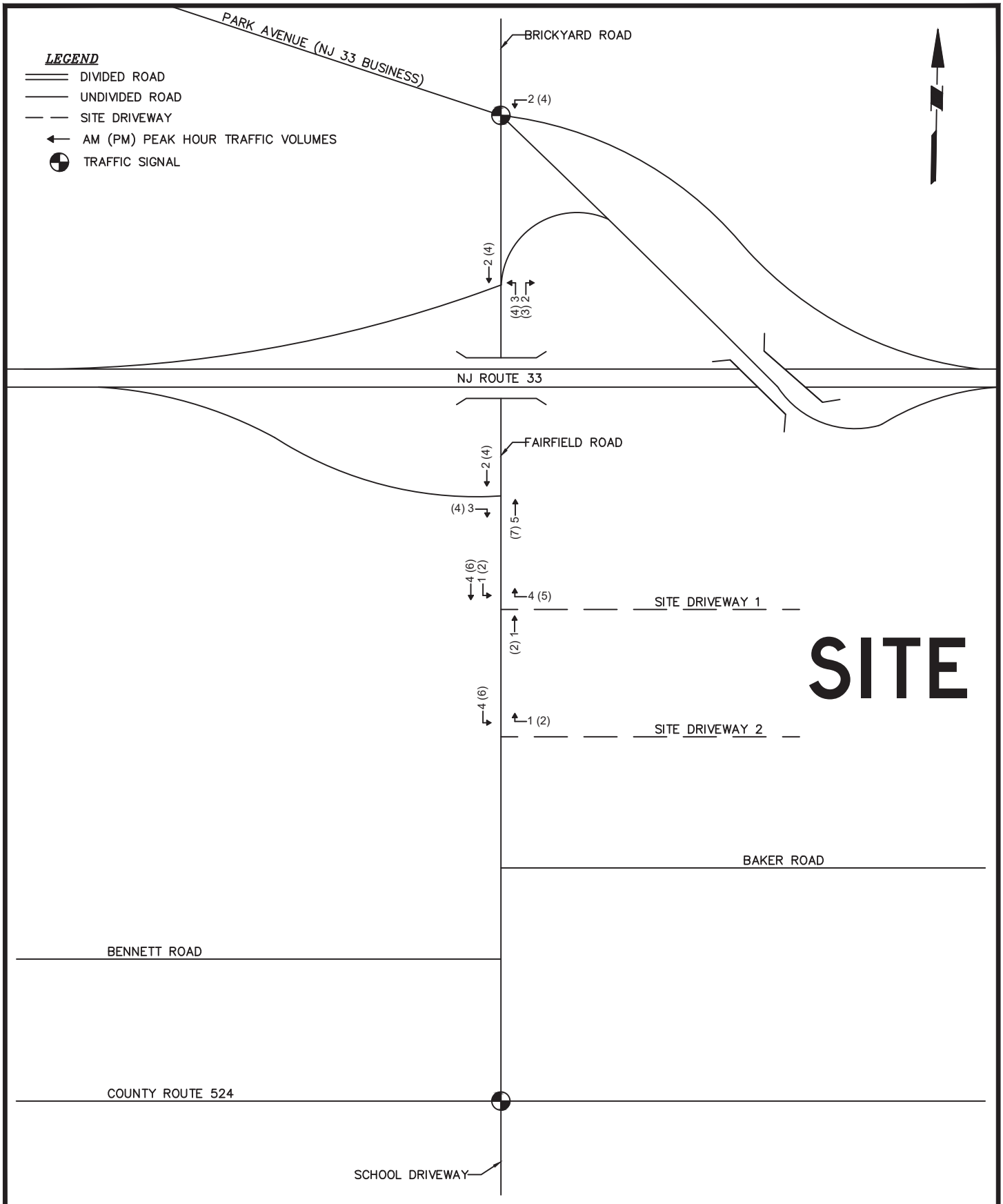
Project
PROPOSED WAREHOUSE DEVELOPMENT
BLOCK No. 177, LOT No. 8.01
TOWNSHIP OF HOWELL
MONMOUTH COUNTY NEW JERSEY

Drawing Title
PASSENGER VEHICLE SITE-GENERATED TRIPS

Project No. 130176601	Figure 10
Date 10/19/2021	
Drawn By EJV	
Submission Date OCTOBER 2021	Sheet 10 of 13

Filename: \\langan.com\data\LAW\data6\130176601\Project Data_Discipline\Traffic\Figures & Tables\2021-10 TIS Figures.dwg Date: 10/27/2021 Time: 10:10 User: eviloria Style Table: Langan.stb Layout: 9-PASST



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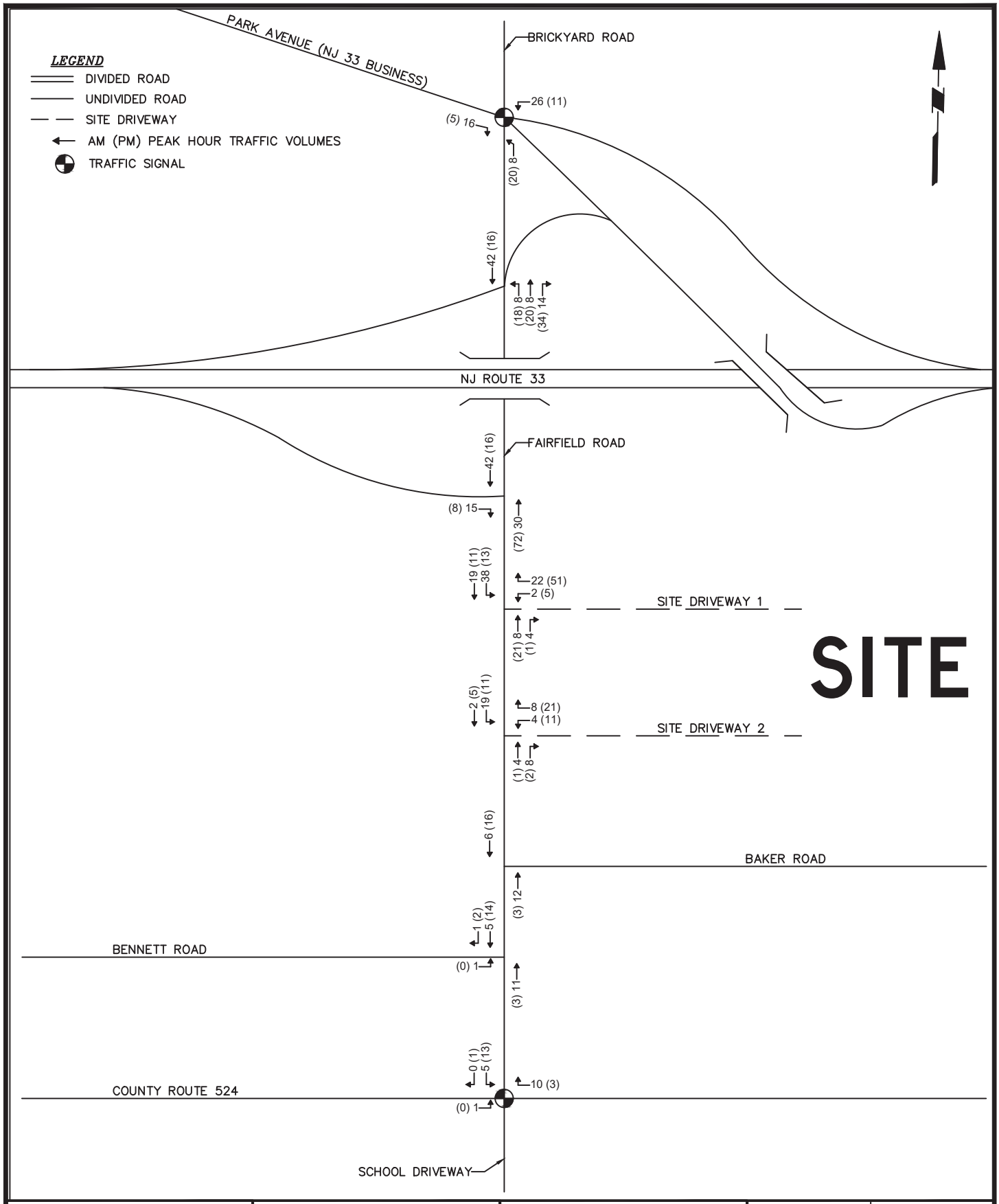
Project
PROPOSED WAREHOUSE DEVELOPMENT
BLOCK No. 177, LOT No. 8.01
TOWNSHIP OF HOWELL
MONMOUTH COUNTY NEW JERSEY

Drawing Title
TRUCK SITE-GENERATED TRIPS

Project No. 130176601	Figure 11
Date 10/19/2021	
Drawn By EJV	
Submission Date OCTOBER 2021	Sheet 11 of 13

Filename: \\langan.com\data\LAW\data6\130176601\Project Data_Discipline\Traffic\Figures & Tables\2021-10 TIS Figures.dwg Date: 10/27/2021 Time: 10:10 User: eviloria Style Table: Langan.stb Layout: 10-TRUCKT



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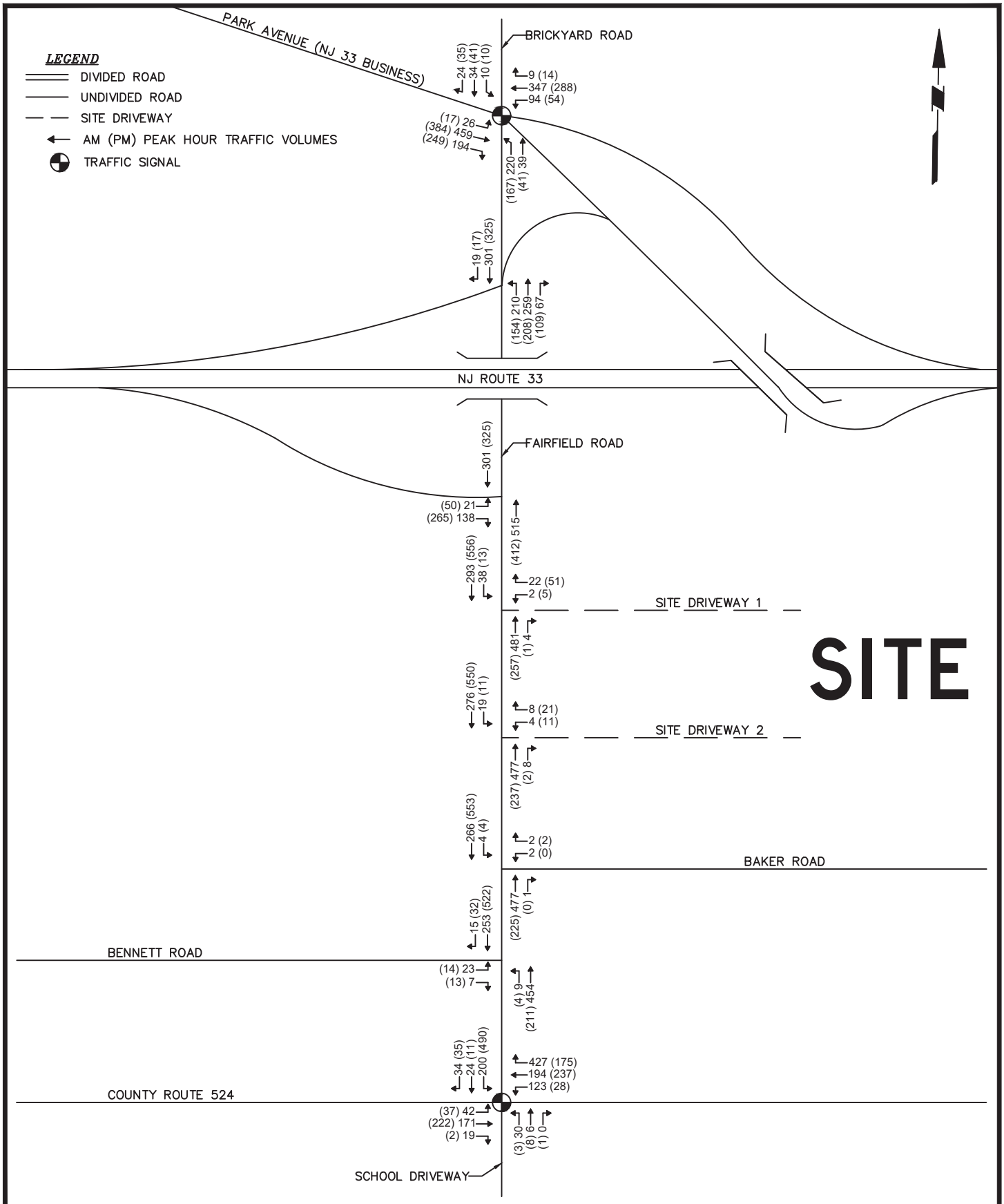
Project
PROPOSED WAREHOUSE DEVELOPMENT
BLOCK No. 177, LOT No. 8.01
TOWNSHIP OF HOWELL
MONMOUTH COUNTY NEW JERSEY

Drawing Title
TOTAL SITE-GENERATED TRIPS

Project No. 130176601	Figure 12
Date 10/19/2021	
Drawn By EJV	
Submission Date OCTOBER 2021	Sheet 12 of 13

Filename: \\langan.com\data\LAW\data6\130176601\Project Data_Discipline\Traffic\Figures & Tables\2021-10 TIS Figures.dwg Date: 10/27/2021 Time: 10:10 User: eviloria Style Table: Langan.stb Layout: 11-TOTAL



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Project
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MONMOUTH COUNTY NEW JERSEY

Drawing Title
2023 BUILD TRAFFIC VOLUMES

Project No.	130176601
Date	10/19/2021
Drawn By	EJV
Submission Date	OCTOBER 2021
Figure	13
Sheet	13 of 13

Filename: \\langan.com\data\LAW\data6\130176601\Project Data_Discipline\Traffic\Figures & Tables\2021-10 TIS Figures.dwg Date: 10/27/2021 Time: 10:10 User: eviloria Style Table: Langan.stb Layout: 12-BUILD