



Appendix C:

Nearby Development Information



Transportation Impact Study

for the

Proposed Westmount Development

Mount Joy Township
Lancaster County, Pennsylvania

prepared for

Vistablock

November 2022

prepared by



TRANSPORTATION RESOURCE GROUP, INC.

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EXECUTIVE SUMMARY

A summary of key findings is presented below followed by the recommendations.

1. Currently, the tract of land is vacant and is located to the north of Harrisburg Avenue (SR 4018) in Mount Joy Township, Lancaster County. It is proposed to develop the land and construct approximately 216 townhomes and 72 apartments for a total of 288 units. All the buildings will be 3 stories or less. The proposed development is anticipated to be fully developed by the year 2026.
2. Two (2) access points are proposed along Harrisburg Avenue (SR 4018). One access point will be to the west of Nolt Road and the other access point will be to the east of Nolt Road. Due to the size of the proposed development, two (2) access points will help in distributing the site traffic as well as provide an additional access in case there is an emergency that closes one of the access points. The site along Harrisburg Avenue (SR 4018) exceeds 2,000 feet in length. Both access points have been located to maximize the sight distance along Harrisburg Avenue (SR 4018).
3. The following intersections were selected for detailed analysis based on the approved scoping application:
 - West Main Street (SR 0230)/Cloverleaf Road & Colebrook Road (SR 4025)
 - Harrisburg Avenue (SR 4018)/Colebrook Road (SR 4025)
 - Harrisburg Avenue (SR 4018)/Proposed West Access
 - Harrisburg Avenue (SR 4018)/Nolt Road
 - Harrisburg Avenue (SR 4018)/Proposed East Access
 - West Main Street (SR 0230)/Harrisburg Avenue (SR 4017)
4. Currently, the study intersections operate at an acceptable level of service (LOS D or better) during the AM and PM peak hours.
5. There are multiple other developments in the area that will be adding traffic to the roadway network. The following other developments site traffic will be added to the background traffic growth:
 - Pennmark Properties
 - 156 Harrisburg Avenue Warehouse
 - Wisler Tract
 - Westbrooke IV Development
6. In the year 2026 without the proposed Westmount Development, the study intersections will continue to operate at an acceptable overall level of service (LOS D or better) during the AM and PM peak hours. There are a few movements at the Main Street (SR 0230)/Colebrook Road & Cloverleaf Road (SR 4025) intersection that operate below a LOS D.
7. In the year 2031 without the proposed Westmount Development, the study intersections will continue to operate at acceptable overall LOS D or better during the AM and PM peak hours. There

are a few movements at the Main Street (SR 0230)/Colebrook Road & Cloverleaf Road (SR 4025) intersection that operate below a LOS D.

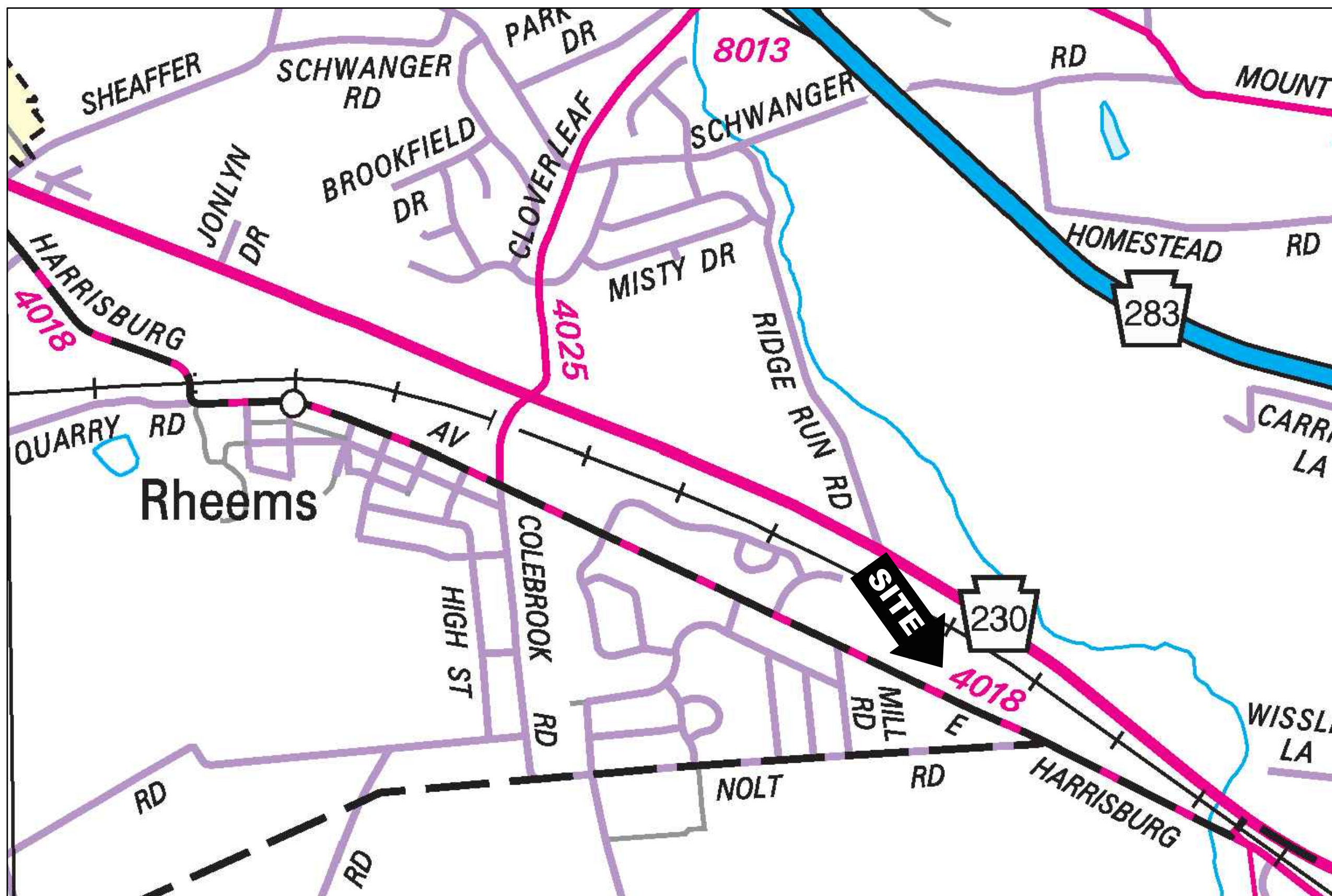
8. The proposed Westmount Development is anticipated to generate an estimated 152 AM and 178 PM peak hour site trips. On a weekday daily basis, an estimated 2,132 site trips will be generated.
9. In the year 2026 with the proposed Westmount Development, the study intersections will continue to operate at an acceptable overall level of service (LOS D or better) during the AM and PM peak hours. There are a few movements at the Main Street (SR 0230)/Colebrook Road & Cloverleaf Road (SR 4025) intersection that operate below a LOS D. The proposed site access intersections with Harrisburg Avenue (SR 4018) are anticipated to operate with acceptable levels of service.
10. In the year 2031 with the proposed Westmount Development, the study intersections will continue to operate with acceptable overall levels of service during the AM and PM peak hours. There are a few movements at the Main Street (SR 0230)/Colebrook Road & Cloverleaf Road (SR 4025) intersection that operate below a LOS D. The proposed site access intersections with Harrisburg Avenue (SR 4018) are anticipated to operate with acceptable levels of service.
11. A left and right turn lane analysis was conducted in accordance with PennDOT Publication 46 at the proposed access points to Harrisburg Avenue (SR 4018). The analysis shows that neither a left nor right turn lane is warranted at the analyzed intersections.
12. Sight distance was field measured at the proposed access points to Harrisburg Avenue (SR 4018) and it was found that the available sight distance will exceed the PennDOT minimum intersection sight distance requirements. The site access points were located to maximize the sight distance along Harrisburg Avenue (SR 4018).
13. A queue analysis found that the available storage lengths can accommodate the anticipated 2031 queues with the proposed development with the exception of the eastbound and westbound left turn lanes on West Main Street (SR 0230) at Colebrook Road & Cloverleaf Road (SR 4025). The proposed Westmount Development does not impact the queues for these movements, therefore no improvements are required to mitigate the proposed development.

RECOMMENDATIONS

A summary of the recommendations to ensure safe and efficient traffic movements is presented below. All improvements will be constructed to accommodate non-motorized access/circulation and be ADA compliant unless otherwise approved the Department.

Site Access

1. The developer will construct a local road (Proposed East Access) intersecting Harrisburg Avenue (SR 4018) to the east of Nolt Road to PennDOT and Township standards. A stop sign will be installed on the proposed access approach. Sight distance will be maintained at the intersection.
2. The developer will construct a local road (Proposed West Access) intersecting Harrisburg Avenue (SR 4018) to the west of Nolt Road to PennDOT and Township standards. A stop sign will be installed on the proposed access approach. Sight distance will be maintained at the intersection.



TRANSPORTATION IMPACT STUDY

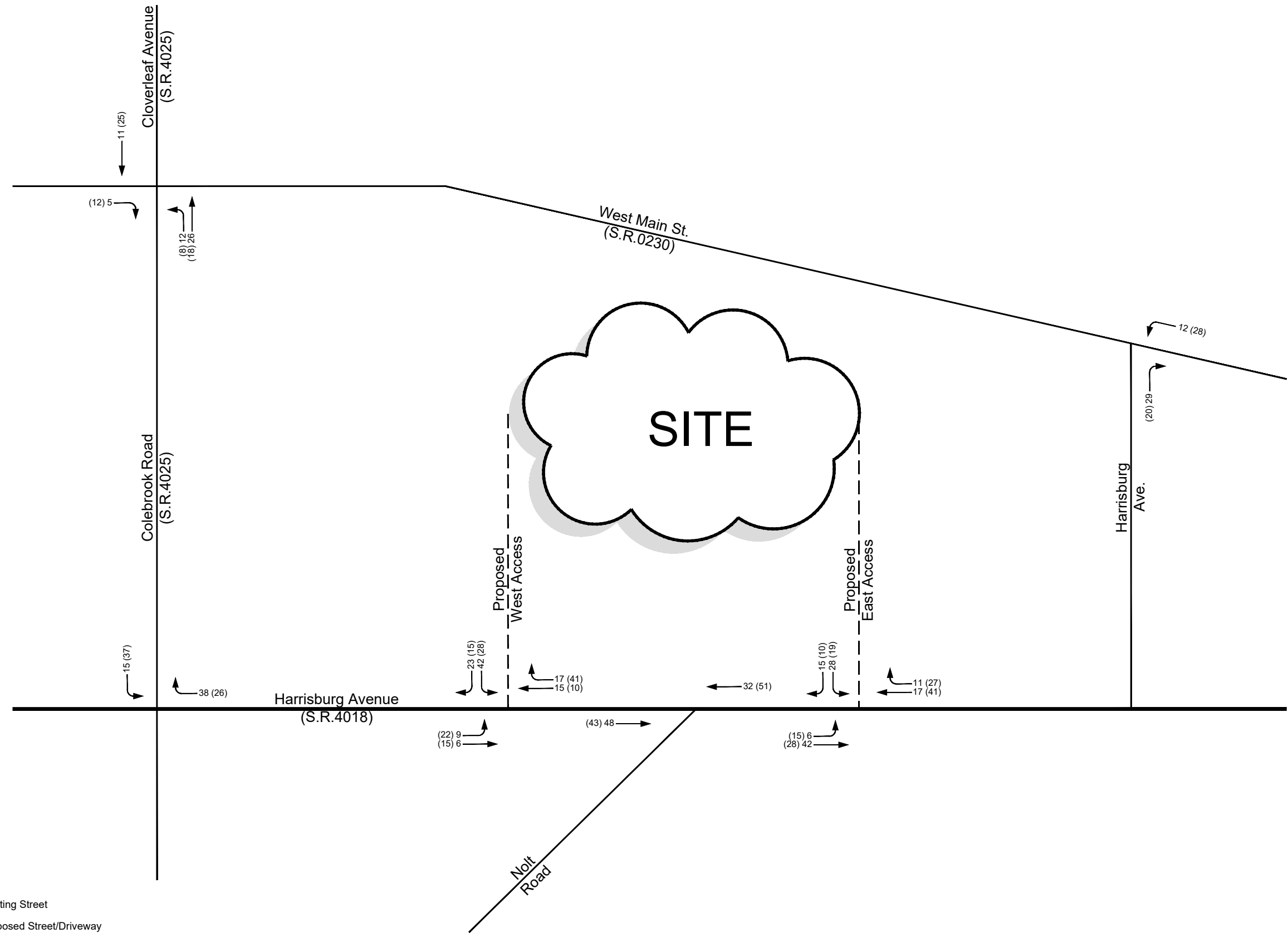
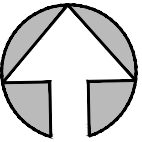
PROPOSED WESTMOUNT DEVELOPMENT

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

FIGURE 1

SITE LOCATION





LEGEND

- Existing Street
- Proposed Street/Driveway
- 000 AM Peak Hour Total Site Trips
- (000) PM Peak Hour Total Site Trips
- Vehicle Movement

Not to Scale

TRANSPORTATION IMPACT STUDY

PROPOSED WESTMOUNT DEVELOPMENT

MOUNT JOY TOWNSHIP
LANCASTER COUNTY, PA

FIGURE 11

TOTAL SITE TRIPS
AM & PM PEAK HOURS



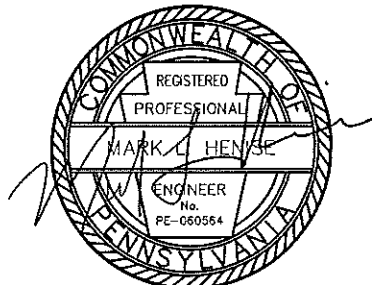
**TRAFFIC IMPACT ASSESSMENT
FOR THE
WESTBROOKE IV – PHASE 1
RESIDENTIAL DEVELOPMENT**

**MOUNT JOY TOWNSHIP
LANCASTER COUNTY**

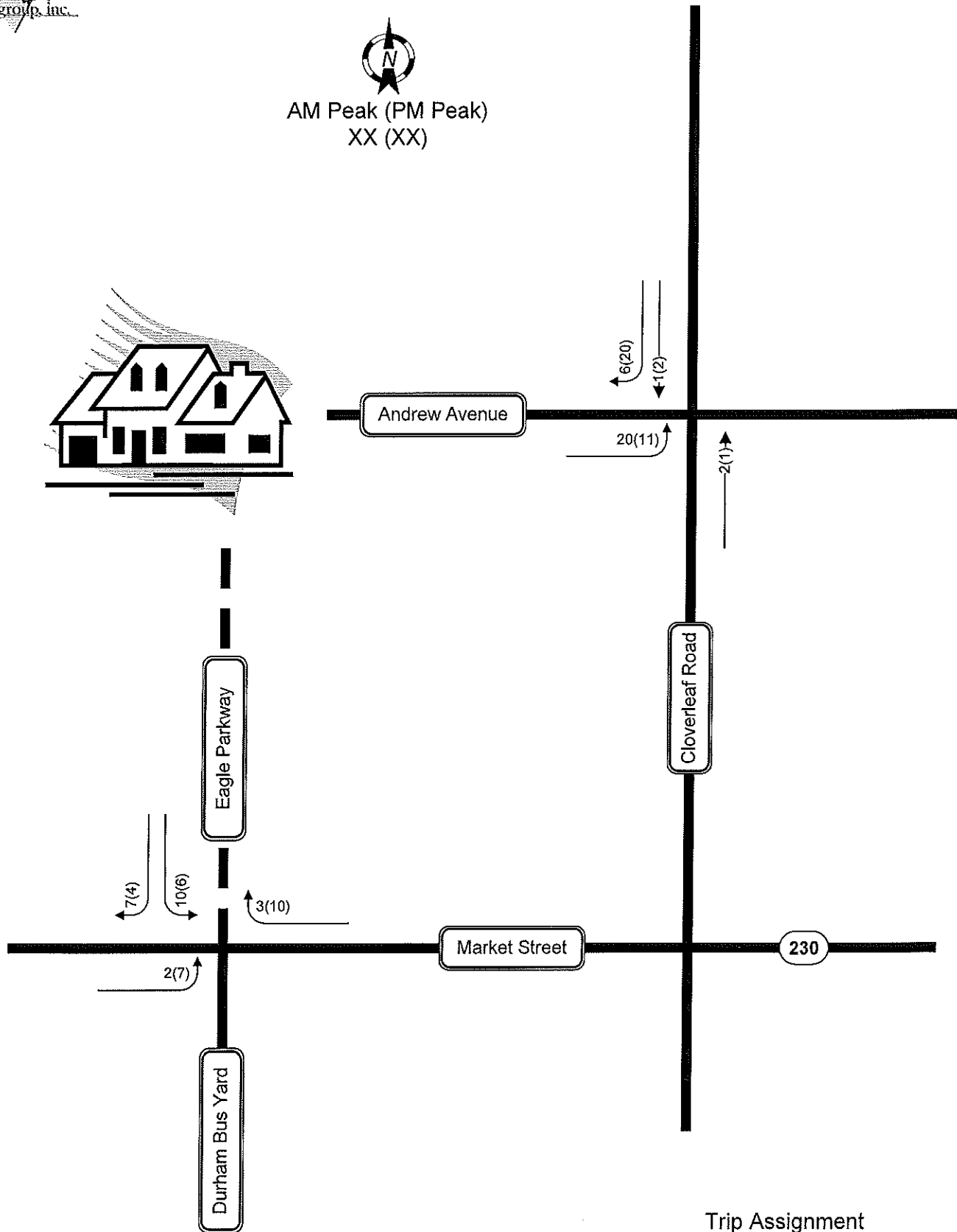
**FEBRUARY 2018
REVISED MAY 2018**

PROJECT 481-037

Prepared by: Mark L. Henise, P.E., PTOE



**ELA GROUP, INC.
LITITZ, PA
05/12/2018**



Trip Assignment
Exhibit 7



TRAFFIC PLANNING AND DESIGN, INC.



Transportation Impact Assessment

Catalyst Warehouse – 156 W. Harrisburg Ave.
West Donegal Township, Lancaster County, PA

For Submission To:

*West Donegal Township, Lancaster County, PA
PennDOT District 8-0*

CATALYST WAREHOUSE - 156 W. HARRISBURG AVENUE TRANSPORTATION IMPACT ASSESSMENT

FOR SUBMISSION TO:

West Donegal Township, Lancaster County, PA
& PennDOT District 8-0

Prepared For:

156 W Harrisburg Ave Associates, LLC

One Tower Bridge

100 Front Street, Suite 560

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610.825.1653

June 9, 2022

Last Revised September 21, 2022

TPD# CACD.00005

EPS Scope App: S0820220003

Prepared By:

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9/21/22

Craig D. Mellott, P.E., PTOE

Vice President

Pennsylvania License Number PE071485

EXECUTIVE SUMMARY

The purpose of this Transportation Impact Assessment (TIA) is to examine the potential traffic impact associated with the proposed Catalyst warehouse development at 156 W. Harrisburg Avenue on the roadway network in West Donegal Township, Lancaster County, PA. Based on this evaluation, the following conclusions were reached:

1. This report has been prepared in accordance with Appendix A - Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits of PennDOT *Publication 282*, dated July 2017 and §200-19 of the West Donegal Township Subdivision and Land Development Ordinance as applicable.
2. The project scope and the extent of the study area were based on the contents of the TIS Scoping Application and the associated feedback from representatives of PennDOT and the municipalities during a TIA Scoping Meeting held on March 16, 2022. The study area intersections included in this TIA are as follows:
 - W. Harrisburg Avenue (SR 4018) & Existing Site Driveway/Heisey Quarry Road;
 - W. Harrisburg Avenue (SR 4018) & Cloverleaf Road (SR 4025)/Colebrook Road;
 - SR 0230 & Cloverleaf Road (SR 4025);
 - Schwanger Road & Cloverleaf Road (SR 4025);
 - SR 0283 East Ramps & Cloverleaf Road (SR 4025);
 - SR 0283 West Ramps & Cloverleaf Road (SR 4025).
3. The project site is located on the southern side of W. Harrisburg Avenue (SR 4018) just east of Heisey Quarry Road. The site is currently (partially) occupied by existing warehousing/industrial uses. The proposed development will involve construction of a warehouse building approximately 392,040 s.f. in size on undeveloped land along the southern boundary of the property; the existing warehousing/industrial uses on-site are anticipated to remain.
4. Access for the development is proposed via one full-movement driveway to W. Harrisburg Avenue (SR 4018), just east of the intersection of W. Harrisburg Ave/Anchor Road/Heisey Quarry Road. The existing site is currently served by two wide, undefined driveways; the easternmost existing driveway will be removed, while the western driveway will be modified (as noted above) to comply with PennDOT standards. The proposed site driveway is to become a fifth leg to the existing all-way stop-controlled intersection.
5. Based on ITE trip generation data, the proposed warehouse is anticipated to generate 71 total trips during the weekday A.M. peak hour and 74 total trips during the weekday P.M. peak hour.
6. Capacity analyses were conducted to determine the quality of operation (LOS) at the study area intersections for the 2022 existing, 2024 base (no-build), and 2024 projected (build) conditions. The capacity analyses were conducted in accordance with the standards contained in *Appendix A - Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits of PennDOT Publication 282*, dated July 2017 and West Donegal Township Subdivision and Land Development Ordinance requirements.
7. Levels of Service (LOS) for the study area intersections have been summarized in matrix form. **Table I** details the overall intersection LOS for each study area intersection for the analyzed conditions and time periods. **Table 12** of the report detail the LOS for all approaches and movements at the study area intersections for the analyzed conditions and time periods.

TABLE I
OVERALL INTERSECTION LEVEL OF SERVICE SUMMARY

Intersection	Time Period	2021 Existing	Build-Out Year 2024		Meets LOS Requirements?
			Base	Projected	
SR 0283 West Ramps & Cloverleaf Road	AM Peak	B (14.3)	B (14.6)	B (15.2)	YES
	PM Peak	B (19.5)	C (20.0)	C (20.6)	YES
SR 0283 East Ramps & Cloverleaf Road	AM Peak	A (3.0)	A (3.1)	A (3.2)	YES
	PM Peak	B (10.4)	B (11.7)	B (12.7)	YES
Schwanger Road & Cloverleaf Road	AM Peak	B (13.9)	B (14.3)	B (14.4)	YES
	PM Peak	C (20.9)	B (19.0)	B (20.0)	YES
SR 0230 & Cloverleaf Road	AM Peak	C (21.7)	C (22.0)	C (22.4)	YES
	PM Peak	C (30.5)	C (30.7)	C (31.9)	YES
W. Harrisburg Avenue & Cloverleaf Road/Colebrook Road	AM Peak	B (12.6)	B (12.9)	B (13.8)	YES
	PM Peak	B (14.9)	C (15.5)	C (17.8)	YES
W. Harrisburg Avenue & Heisey Quarry Road/Anchor Road & Proposed Site Driveway	AM Peak	A (8.2)	A (8.1)	A (4.3) ¹	YES
	PM Peak	A (8.5)	A (8.5)	A (4.9) ¹	YES

Base = No-Build scenario; Projected = Build scenario

Unsignalized ILOS calculated in accordance with Figure 5 of Policies and Procedures for Transportation Impact Studies

¹ = SimTraffic delay reported as 5-legged intersections are not supported in HCM 6th Edition via Synchro 11

8. Under the 2024 (build) conditions with implementation of the recommended improvements, the study area intersections will operate in accordance with the standards contained in *Appendix A - Policies and Procedures for Transportation Impact Studies Related to Highway Occupancy Permits of PennDOT Publication 282*, dated July 2017.
9. Since the proposed warehousing for the development is speculative (there are no specific tenants at this stage), the Applicant will enter into an agreement with West Donegal Township to monitor trip generation of the actual warehouse tenant versus trip generation assumptions made in this TIS.
10. Traffic Planning and Design Inc. (TPD) recommends the following roadway improvements as outlined at the study area intersections:

W. Harrisburg Avenue (SR 4018) & Proposed Site Driveway

- Given the close proximity of the site driveway to the existing intersection of Harrisburg Avenue (SR 4018)/Anchor Road/Heisey Quarry Road, incorporate the proposed site driveway into the adjacent intersection as a fifth leg with a "Stop" sign on the egress driveway approach.
- Remove the "Except Right Turn" placard below the existing "Stop" sign on the westbound W. Harrisburg Avenue approach.
- Establish/re-establish stop bars on all five approach legs of the intersection.

- .. Reconstruct the existing western site access as a full-movement low-volume driveway per PennDOT standards.
- .. Provide one entering and one exiting lane for the site driveway.
- .. Provide geometry to accommodate the turning movements of a WB-67 tractor trailer to/from the east.
- .. Provide a "Stop" sign (PennDOT designation R1-1) to control exiting traffic on the proposed site driveway.
- .. Install "No Left Turn" signs with a "Trucks" placard on the egress driveway approach to prevent trucks from travelling westbound on W. Harrisburg Avenue.
- .. Provide and perpetually maintain required sight distances.

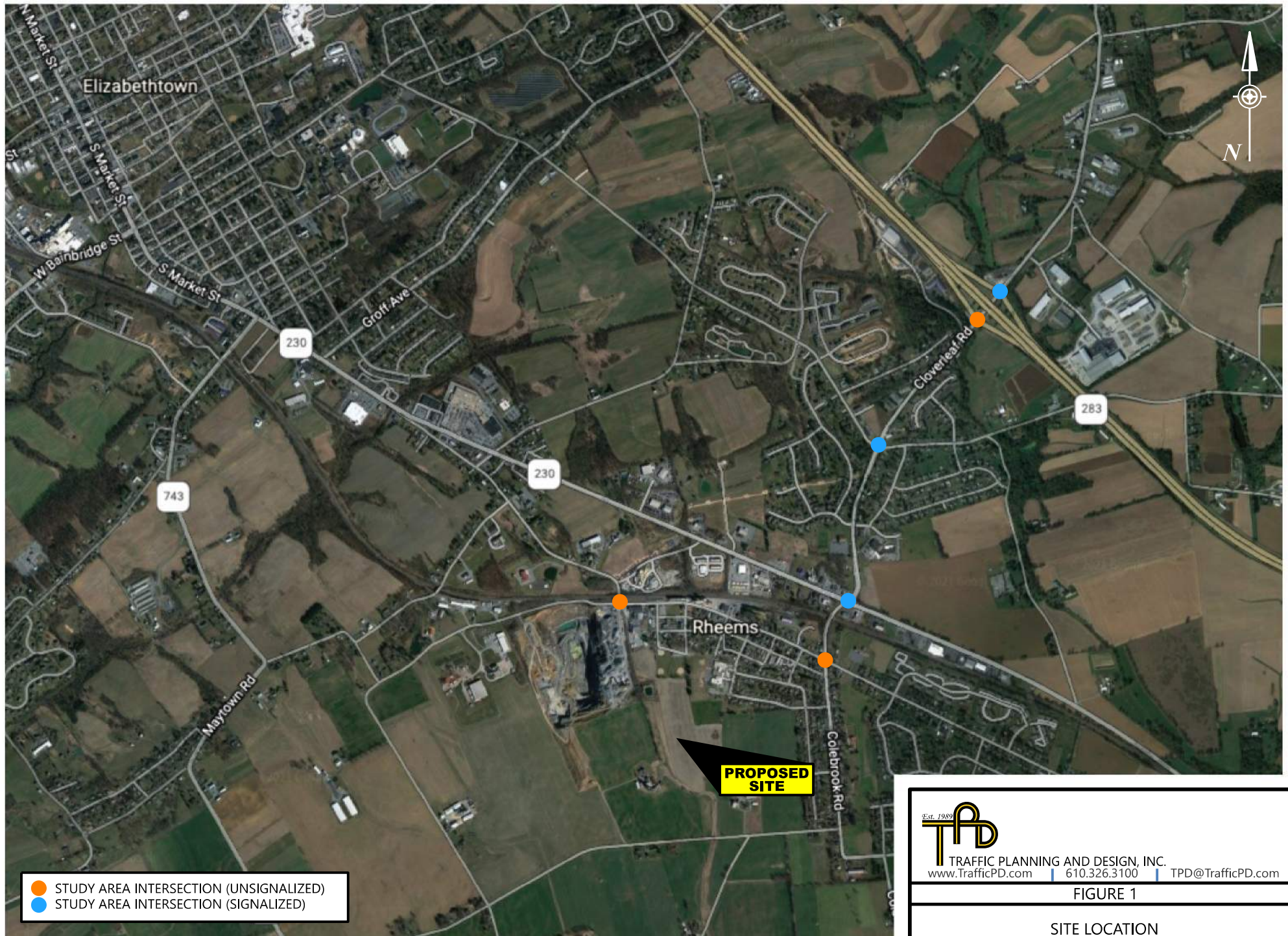
W. Harrisburg Avenue (SR 4018) & Colebrook Road/Cloverleaf Road

- .. Re-establish stop bars on the eastbound leg of the intersection to accommodate turning movements of a WB-67 from southbound Cloverleaf Road and eastbound W. Harrisburg Avenue.
- .. In conjunction with re-establishment of stop bar locations during the HOP process, coordinate with the property owner on the northwest corner of the intersection to remove/relocate the existing shrub shown below in red to provide clear sight lines. Since this shrub appears to be located on property not controlled by the Applicant, removal/relocation of the vegetation is not guaranteed, but reasonable efforts will be made and documented in cooperation with the local municipalities. It is noted that WB-67 vehicles make southbound and eastbound turning movements today, and therefore the need for the subject stop bar adjustments pre-dates the proposed development.



- .. Provide a "Stop" and an "All Way" sign (PennDOT designations R1-1 and R1-3P, respectively) to control exiting traffic on the residential driveway at 160 E. Harrisburg Avenue, if necessary. At the request of PennDOT, during the HOP process, the applicant will contact the property owner at 160 E. Harrisburg Avenue to see if this owner would be willing to eliminate their minimum use driveway to Harrisburg Avenue since they also have access to a rear alley. Since the Applicant does not control this property, removal of the subject driveway cannot be guaranteed, but reasonable efforts will be made and documented in cooperation with the local municipalities.

As part of PennDOT's HOP process, the applicant will coordinate and fund the implementation of the recommended roadway improvements. Conceptual traffic plans for the improvements proposed are provided in **Appendix F**. Additionally, all improvements will be constructed to accommodate non-motorized access/circulation and be ADA-compliant unless otherwise approved by the Department.



TRAFFIC PLANNING AND DESIGN, INC.
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FIGURE 1

SITE LOCATION

Site Data (West Donegal Township, Lancaster County)

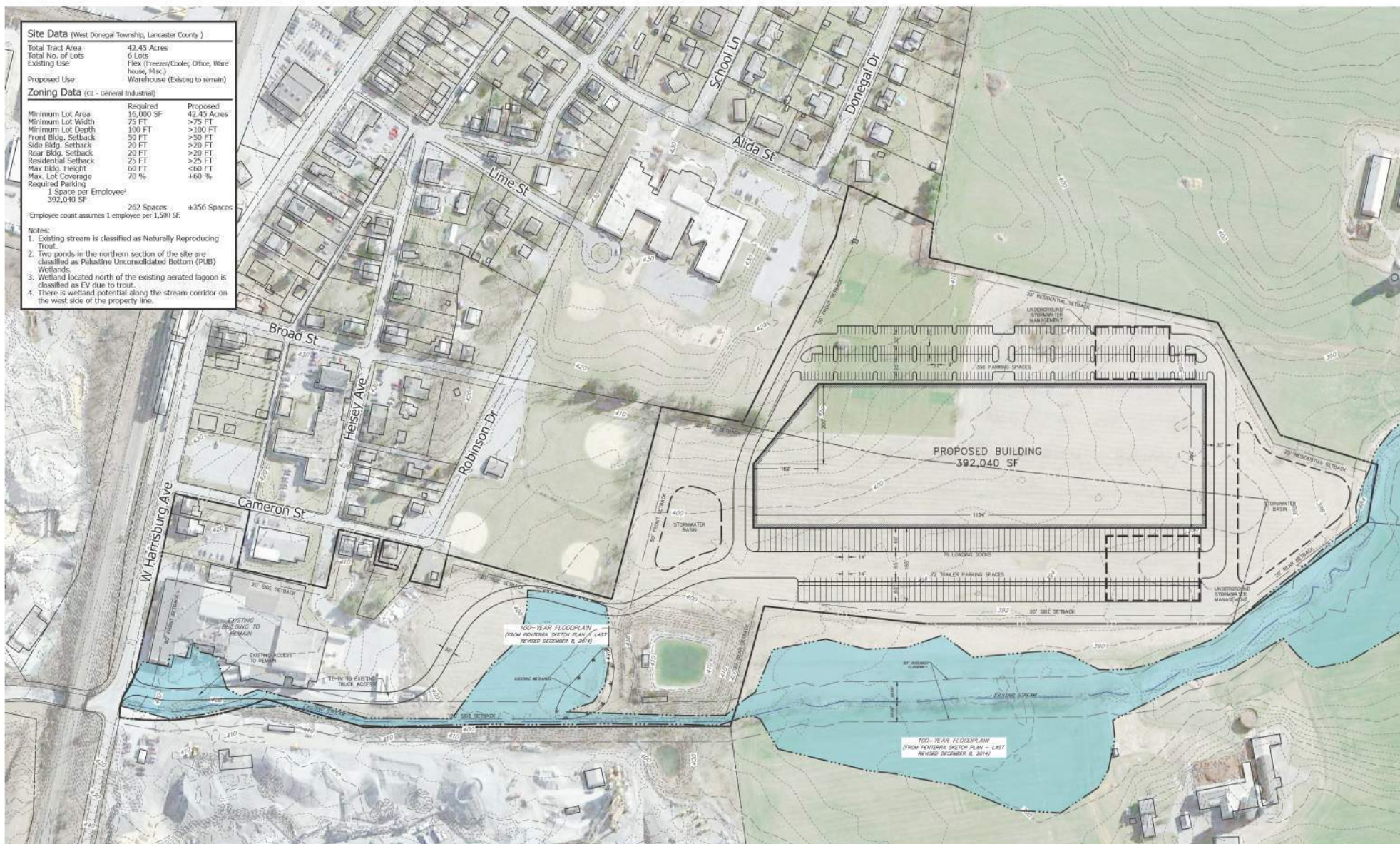
Total Tract Area 42.45 Acres
Total No. of Lots 6 Lots
Existing Use Flex (Trees/Cooper, Office, Ware house, Misc.)
Proposed Use Warehouse (Existing to remain)

Zoning Data (C1 - General Industrial)

	Required	Proposed
Minimum Lot Area	16,000 SF	42.45 Acres
Minimum Lot Width	75 FT	>75 FT
Minimum Lot Depth	100 FT	>100 FT
Front Bldg. Setback	50 FT	>50 FT
Side Bldg. Setback	20 FT	>20 FT
Rear Bldg. Setback	20 FT	>20 FT
Residential Setback	25 FT	>25 FT
Max Bldg. Height	60 FT	<60 FT
Max. Lot Coverage	70 %	460 %

Required Parking 1 Space per Employee
392,040 SF
262 Spaces ±350 Spaces
Employee count assumes 1 employee per 1,500 SF.

- Notes:
- Existing stream is classified as Naturally Reproducing Trout.
 - Two ponds in the northern section of the site are classified as Palustrine Unconsolidated Bottom (PUB) Wetlands.
 - Wetland located north of the existing aerated lagoon is classified as EV due to trout.
 - There is wetland potential along the stream corridor on the west side of the property line.



Date: September 8, 2021

Project #: 111902033

Scale: 1"=100'-0"



RETTEW

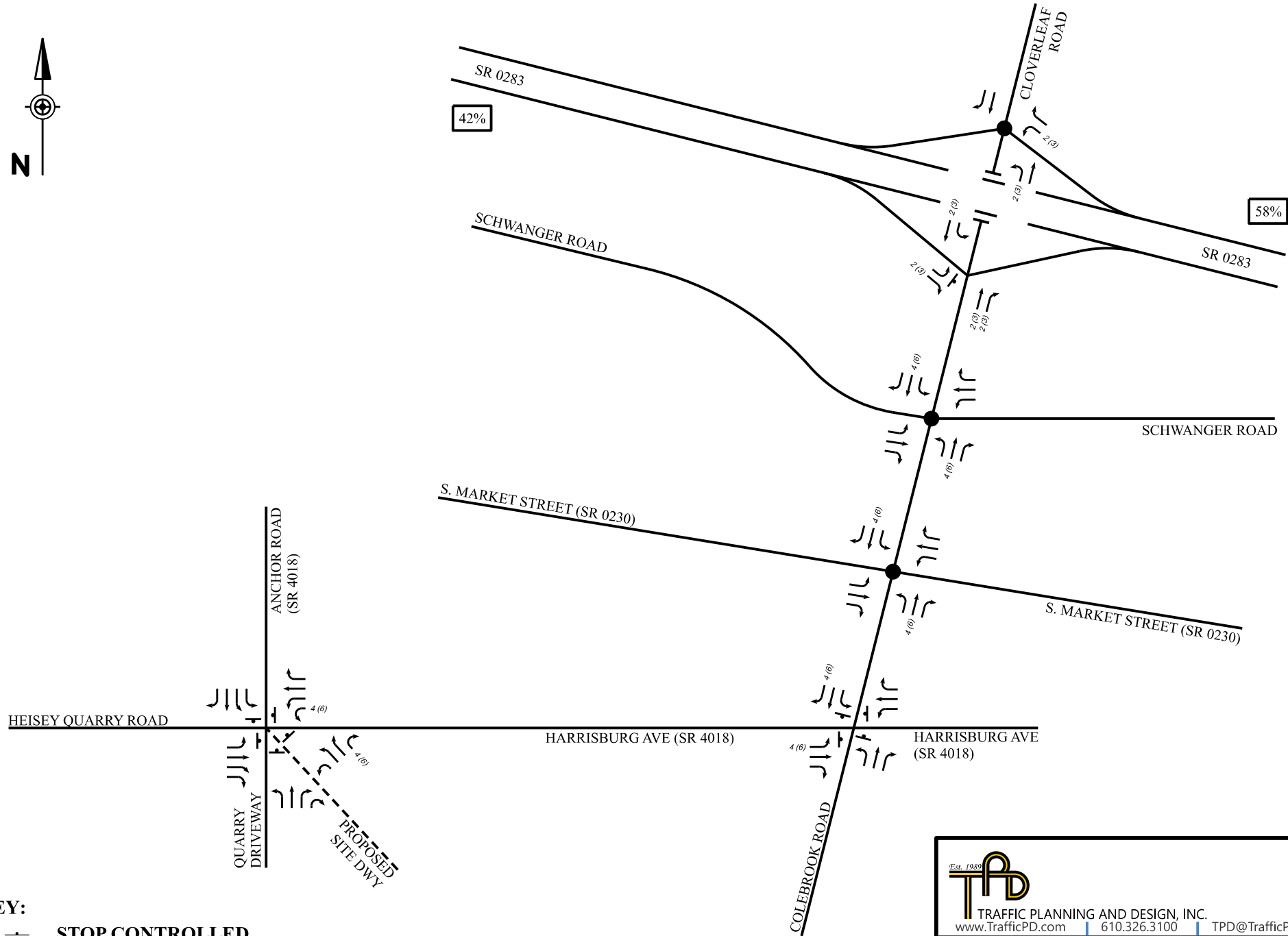
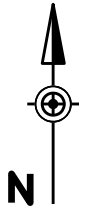
Catalyst - 156 W Harrisburg Ave
Concept Plan



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FIGURE 2

SITE PLAN



KEY:

- STOP CONTROLLED
- SIGNALIZED INTERSECTION
- PROPOSED DRIVEWAY

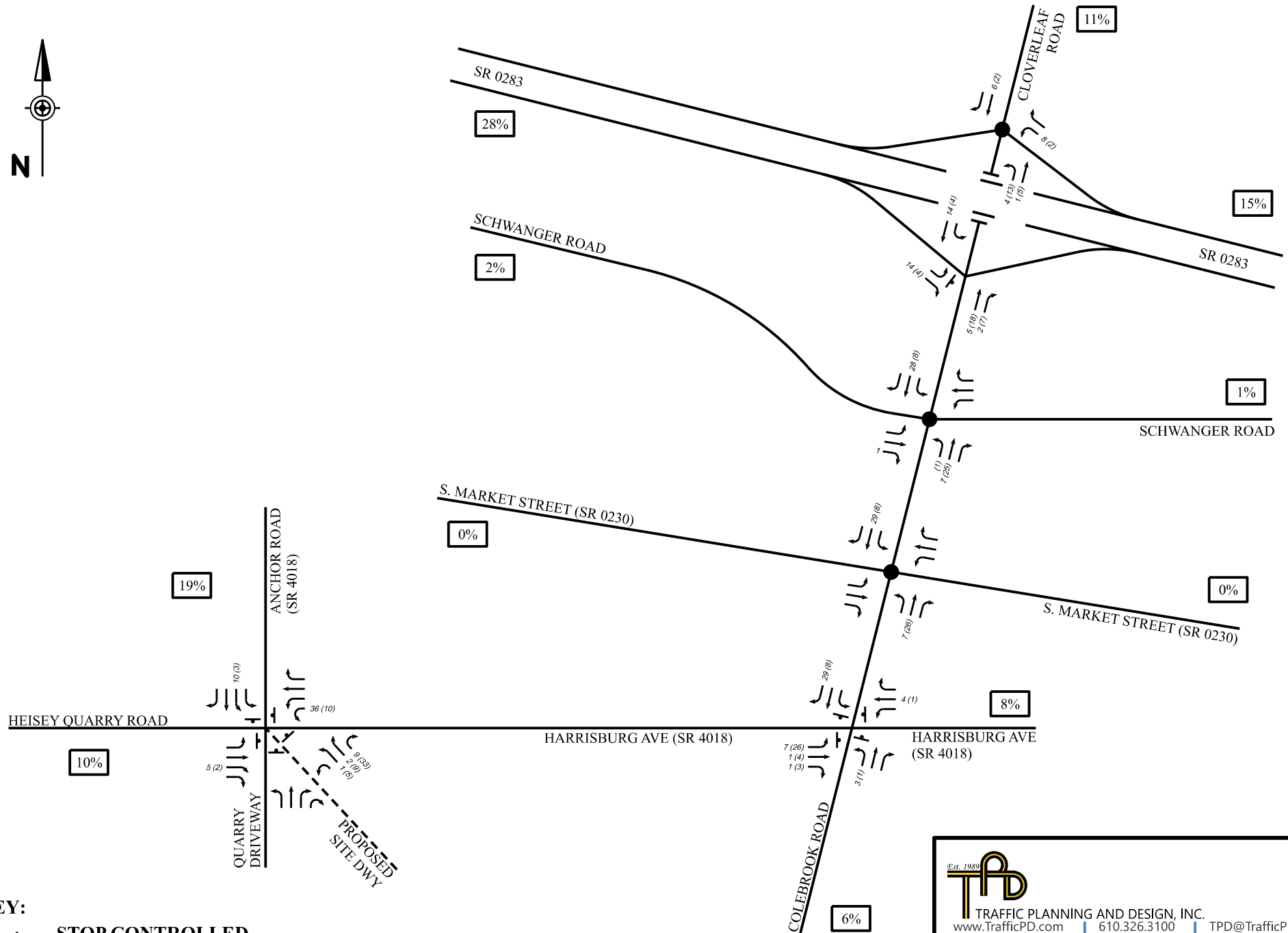
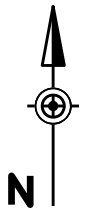
X (Y) = AM (PM)



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FIGURE 6A

SITE TRIP DISTRIBUTIONS
TRUCKS



KEY:

- STOP CONTROLLED
- SIGNALIZED INTERSECTION
- - - - PROPOSED DRIVEWAY

X (Y) = AM (PM)



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FIGURE 6B

TRIP DISTRIBUTIONS
PASSENGER CARS