



**TRANSPORTATION IMPACT STUDY (TIS)
DETERMINATION & SCOPING MEETING
APPLICATION**

Scoping Meeting Application: Submitted

Scoping Meeting Date: _____ Scoping Number: S0820220129

Tax Parcel Number: _____

Project/Development Name: Mt Joy Warehouse Park

Applicant Information:

Business Partner ID: _____

Applicant Name: Panattoni Development Company Inc

Phone: 7176499588 Email 1: jpeters@panattoni.com

Primary Contact: Joe Peters Email 2: _____

Additional Engineering Firm Information:

Business Partner ID: 000094

Engineering Firm: Traffic Planning and Design, Inc.

Phone: 717-234-1430 Email 1: jneal@trafficpd.com

Primary Contact: Jarred Neal Email 2: _____

Creator Information:

Business Partner ID: 000094 Firm Name: Traffic Planning and Design, Inc.

Phone: 717-234-1430 Email 1: jwheeler@trafficpd.com

(1) LOCATION OF PROPOSED DEVELOPMENT:

PennDOT Engineering District: 08 Email: _____

County: Lancaster Email: jonesg@co.lancaster.pa.us

Municipality: MOUNT JOY Email: justin@mtjoytwp.org;
patricia@mtjoytwp.org; sgault@pa.gov

NO.	SR	Segment	Offset	Average Daily Trips	Driveway Classification	Local Road
1	4010	0010	1300	1219	Low Volume	Yes
2	4010	0010	3478	1024	Low Volume	No

Are there any vehicle weight or size restrictions along the SR in accordance with 75 PA C.S. ss 4902? : No

(2) DESCRIPTION OF PROPOSED DEVELOPMENT (Attach site plan if available):

Proposed site access:

Access for the proposed warehouse buildings are proposed as follows: 1. One full-movement driveway to Cloverleaf Road (Twp); 2. Two full-movement driveways to Mt. Pleasant Road (SR 4010), one directly opposite Steel Way Ext. (see below); 3. One full-movement driveway and one emergency access to Schwanger Road (T-843). In addition, Steel Way will be extended to Mt Pleasant Road (SR 4010) creating a new intersection, which will accommodate truck traffic.

Proposed land uses:

Panattoni is proposing four (4) separate warehouse facilities totaling ~2,700,800 s.f. 1311 Schwanger Rd Warehouse = 322,560 s.f. 2843 Mt. Pleasant Rd Warehouse Building 1 = 1,006,880 s.f. 2843 Mt. Pleasant Rd Warehouse Building 2 = 364,560 s.f. 1322 Cloverleaf Road Warehouse = 1,006,880 s.f.

Community linkages (access to neighboring properties, cross easements, pedestrian and transit accommodations):

N/A.

(3) DEVELOPMENT SCHEDULE AND STAGING:

Anticipated Opening Date: 03-01-2025

Full Buildout Date: 03-01-2025

Describe Proposed Development Schedule/Staging:

N/A.

(4) TRIP GENERATION:

Land Use & Size	Land Use Code	Were ITE results used?	Daily Trips	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
				Enter	Exit	Enter	Exit	Enter	Exit
Warehouse (Cloverleaf Rd) - 1,006,880 s.f.	150	Yes	1629	111	33	41	106		
Warehouse (Mt. Pleasant #1) - 1,006,880 s.f.	150	Yes	1629	111	33	41	106		
Warehouse (Mt. Pleasant #2) - 364,560 s.f.	150	Yes	614	52	15	20	50		
Warehouse (Schwanger) - 322,560 s.f.	150	Yes	548	48	14	18	47		
		TOTAL:	4420	322	95	120	309	0	0

(5) TRANSPORTATION IMPACT STUDY REQUIRED?

Transportation Impact Study Required? Yes

If Yes, based on:

During any one-hour time period, 100 or more vehicle trips entering or exiting a development. 3,000 or more vehicle trips/day generated

Other considerations as described below:

(6) TRANSPORTATION IMPACT ASSESSMENT REQUIRED?

Transportation Impact Assessment Required? No

(7) STUDY AREA:

Roadway and Study Intersections:

Cloverleaf Rd (SR 4025) & Mt. Pleasant Rd (SR 4010); Cloverleaf Road (SR 4025) & Rt 283 West Ramps; Cloverleaf Rd (SR 4025) & Rt 283 East Ramps; Cloverleaf Rd (SR 4025) & Merts Dr; Cloverleaf Rd (SR 4025) & Schwanger Rd; Main St (SR 0230) & Cloverleaf Rd (SR 4025)/Colebrook Rd; Cloverleaf Rd (Twp) & Site Driveway; Mt. Pleasant Rd (SR 4010) & Site Driveways/Roadways; Schwanger Rd & Site Driveway; Cloverleaf Rd & Steel Way; Cloverleaf Rd (SR 4025) & Andrew Avenue; Mt. Pleasant Rd/Schwanger Rd.

Land use context (Refer to PennDOT Design Manual, Part 1X, Appendix B):

suburban neighborhood

Known Congestion Areas:

To be determined.

Known Safety Concerns:

None to TPD's knowledge.

Known Environmental Constraints:

None to TPD's knowledge.

Pedestrian/Bike Review (Community Centers, Parks, Schools, etc.):

Based on field observations at the study area intersections, paved shoulders and/or travel lanes currently accommodate pedestrian and bicycle traffic in the vicinity of the proposed development. Main Street (SR 0230) is designated as Bicycle Route J. The traffic signals are generally equipped with pedestrian signals and crosswalks except where pedestrian crossing are prohibited via signage.

Transit Review (Current routes/stops):

Lancaster County and Mt. Joy Township are provided with mass-transit accommodations via Red Rose Transit (RRTA)/South Central Transit Authority (SCTA). Route 18 (Elizabethtown/Mount Joy) currently operates along the study area with the nearest scheduled stop at the intersection of Main Street (SR 0230) and Cloverleaf Road (SR 4025). An unofficial Park-N-Ride lot exists on the southwestern corner of the Route 283 East Off-Ramp approach to Cloverleaf Road (SR 4025).

(8) STUDY AREA TYPE:

Study Area Type: Urban

(9) TIS ANALYSIS PERIODS AND TIMES:

Analysis period and times notes:

AM (6-9) Peak Hour; PM (3-6) Peak Hour. Existing Conditions; 2025 Base (no-build)/Projected (build)/Projected (build) with Improvements; 2030 Base (no-build)/Projected (build)/Projected (build) with Improvements.

(10) TRAFFIC ADJUSTMENT FACTORS:

(a) Seasonal Adjustment (Identify counts requiring adjustment and methodology):

N/A.

(b) Annual Base Traffic Growth: 0.60 %/yr. **Source:** PennDOT BPR statistics (August 2022 to July 2023)

(c) Pass-By Trips (Attach justification where required):

NO.	Land Use	%	Source

(d) Captured Trips for Multi-Use Sites:

N/A.

(e) Modal Split Reductions:

N/A.

(f) Other Reductions:

N/A.

(11) OTHER PROJECTS WITHIN STUDY AREA TO BE ADDED TO BASE TRAFFIC:

Notes:

156 Harrisburg Avenue Warehouse; Pennmark Management Dev, Westbrooke Expansion, Westmount Residential Dev, & General RV Center Dev. will be included as applicable. No further developments have been identified by the Township.

(12) TRIP DISTRIBUTION AND ASSIGNMENT:

Trip Distribution Notes:

See Attachment 4.

(13) APPROVAL OF DATA COLLECTION ELEMENTS AND METHODOLOGIES:

NO.	Location	Period	Type
3	Cloverleaf Rd & Route 283 East Ramps	AM (6-9), PM (3-6)	Turning Movement Counts
8	Mt. Pleasant Rd & Schwanger Road	AM (6-9), PM (3-6)	Turning Movement Counts
1	Cloverleaf Rd & Mt. Pleasant Rd	AM (6-9), PM (3-6)	Turning Movement Counts
2	Cloverleaf Rd & Route 283 West Ramps	AM (6-9), PM (3-6)	Turning Movement Counts
4	Cloverleaf Rd & Merts Dr.	AM (6-9), PM (3-6)	Turning Movement Counts
5	Cloverleaf Rd & Schwanger Rd	AM (6-9), PM (3-6)	Turning Movement Counts
6	Main St & Cloverleaf Rd/Colebrook Rd	AM (6-9), PM (3-6)	Turning Movement Counts
7	Cloverleaf Rd & Steel Way	AM (6-9), PM (3-6)	Turning Movement Counts
9	Cloverleaf Road & Andrew Avenue	AM (6-9), PM (3-6)	Turning Movement Counts

(14) CAPACITY/LOS ANALYSIS:

NO.	Location	Period	Type
1	Cloverleaf Rd & Mt Pleasant Rd	AM Peak, PM Peak	HCM 6th from Synchro 11
2	Cloverleaf Rd & Rt 283 West Ramps	AM Peak, PM Peak	HCM 6th from Synchro 11
3	Cloverleaf Rd & Rt 283 East Ramps	AM Peak, PM Peak	HCM 6th from Synchro 11
4	Cloverleaf Rd & Merts Dr	AM Peak, PM Peak	HCM 6th from Synchro 11
5	Cloverleaf Rd & Schwanger Rd	AM Peak, PM Peak	HCM 6th from Synchro 11
6	Main St & Cloverleaf Rd/Colebrook Rd	AM Peak, PM Peak	HCM 6th from Synchro 11
7	Cloverleaf Rd (Twp) & Proposed Site Dw	AM Peak, PM Peak	HCM 6th from Synchro 11
8	Mt Pleasant Rd & Proposed Site Driveways	AM Peak, PM Peak	HCM 6th from Synchro 11
9	Schwanger Rd & Proposed Site Driveway	AM Peak, PM Peak	HCM 6th from Synchro 11
10	Cloverleaf Rd & Steel Way	AM Peak, PM Peak	HCM 6th from Synchro 11
11	Mt. Pleasant Rd & Steel Way Extension	AM Peak, PM Peak	HCM 6th from Synchro 11
12	Mt Pleasant Road & Schwanger Road	AM Peak, PM Peak	HCM 6th from Synchro 11
13	Cloverleaf Road & Andrew Avenue	AM Peak, PM Peak	HCM 6th from Synchro 11

(15) ROADWAY IMPROVEMENTS/MODIFICATIONS BY OTHERS TO BE INCLUDED:

Roadway Improvements:

PennDOT Project ID: 108521 (Cloverleaf Rd Resurfacing) Resurface SR 4025 (Cloverleaf Road) from SR 4018 (Harrisburg Avenue) to SR 4010 (Mount Pleasant Road) and SR 4018 intersection with SR 4025 Mount Joy and West Donegal Townships.

(16) OTHER NEEDED ANALYSES:

(a) Sight Distance Analysis:

A sight distance analysis will be performed at the proposed site driveway locations for passenger cars and combination trucks, as applicable.

(b) Signal Warrant Analysis (Identify locations):

If necessary, TPD will complete signal warrant analyses at the unsignalized study area intersections and/or proposed site driveway locations.

(c) Required Signal Phasing/Timing Modifications (Determine for all signalized intersections; specify methodology):

If necessary, TPD will make recommendations for traffic signal timing and/or phasing modifications based on the results of the analysis.

(d) Traffic Signal Corridor/Network Analysis (Identify locations/methodology):

If necessary, TPD will make recommendations for traffic signal corridor improvements.

(e) Analysis of the Need for Turning Lanes (Identify locations/methodology):

TPD will analyze auxiliary turn lane warrants at the proposed site driveway locations and the study area intersections (as applicable) during the full build-out condition. The warrant analysis methodology contained within Chapter 11 of PennDOT's Publication 46 will be utilized for this analysis.

(f) Turning Lane Lengths (Identify methodology to be used):

TPD will analyze auxiliary turn lane lengths at the proposed site driveway locations and the study area intersections as necessary during full build-out condition. The analysis methodology contained within Chapter 11 of PennDOT's Publication 46, as well as 95th percentile queue lengths will also be considered for evaluation of turning lane lengths.

(g) Left Turn Signal Phasing Analysis (Identify locations/methodology):

TPD will analyze left turn signal phasing only where signal phasing changes are proposed (please see ♦ Required Signal Phasing/Timing Modifications for more information).

(h) Queuing Analysis (Identify locations/methodology):

TPD will provide 50th percentile (Synchro only) and 95th percentile (Synchro and HCM) queue lengths for all approaches of the proposed site driveways and study area intersections during all time periods analyzed (as applicable). This analysis will be completed using the Synchro 11 software which is based on the methodologies contained in the Highway Capacity Manual, 6th Edition (HCM). Both HCM and Synchro queue results will be summarized in tabular format.

(i) Gap Studies (Identify locations/methodology):

If necessary, a gap study will be completed.

(j) Crash Analysis (Identify locations):

TPD will conduct and submit a crash data analysis under separate cover that will contain an analysis of reportable crashes for the study area intersections and key corridors for the most recent five years, summarizing any trends in crash data. Including mitigation options if crash trends are present at an intersection or along a corridor. TPD will contact Lancaster Regional PD to obtain non-reportable crash data.

(k) Weaving Analysis (Identify locations):

N/A.

(l) Other Required Studies (Specify locations/methodology):

ICE will be completed as applicable.

(17) ADDITIONAL COMMENTS OR RECOMMENDATIONS RELATIVE TO THE SCOPE OF THE TIS:

Additional Comments:

Electronic synchro files will be provided.

PennDOT Review Comments: (Current Cycle Comments)

After review of the scoping meeting application, the Department will contact the applicant regarding the need for a scoping meeting prior to applying for a highway occupancy permit.

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