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# TRANSPORTATION IMPACT STUDY

**Bull Road Logistics  
Dover Township  
York County, Pennsylvania**

*Prepared For:*

**BULL CANAL DOVER OWNER LLC  
845 Texas Avenue, Suite 3300  
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*Prepared By:*

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A handwritten signature in black ink that reads "AnnMarie Vigilante".

**AnnMarie Vigilante, P.E.  
Professional Engineer License No. PE073281**

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# ***LANGAN***

## **EXECUTIVE SUMMARY**

Langan Engineering and Environmental Services, Inc. (Langan) has prepared this study to assess the traffic impacts associated with the proposed construction of the Bull Road Logistics development located along Bull Road (SR 4001) in Dover Township, York County, Pennsylvania. The proposed development includes the construction of three buildings totaling 1,892,510 square feet of warehousing. Warehouse 1 will be 352,670 square feet, Warehouse 2 will be 1,059,840 square feet and Warehouse 3 will be 450,000 square feet. Construction is anticipated to begin once approvals have been obtained and be completed by the end of 2024.

Access to the site will be provided via one full-access unsignalized driveway located along Bull Road (SR 4001). The potential for an emergency access driveway to Fox Run Road will be discussed with Dover Township as part of the Land Development submissions.

The project is located on an approximate 198.26 acre site bordered on the east by Bull Road (SR 4001), on the west by Fox Run Road, on the north by agricultural properties and on the south by Canal Road (SR 0921). The existing site is undeveloped and the area surrounding the site is a mixture of agricultural uses and residential properties.

Langan has estimated the number of trips the proposed development would generate based on trip generation rates provided by ITE. Based upon the trip generation data, it is estimated that the development will generate approximately 329 trips (254 enter, 75 exit) during the weekday morning peak hour and 346 trips (97 enter, 249 exit) during the weekday evening peak hour. The estimated daily 24 hour two-way trips for the overall site is 3,237 (for a typical weekday), which equates to 1,619 vehicles.

The directional distributions of site generated traffic were determined based on a journey to work census model and an analysis of the existing manual counts and knowledge of the surrounding road network, including access to major arterials. The study area scope of the Transportation Impact Study was discussed and verified with PennDOT and the surrounding municipalities as part of the preliminary scoping application coordination. As part of the Scoping Meeting, We coordinated with Dover Township, Conewago Township, and PennDOT District 8-0.

Based on such discussions, we conducted capacity analyses at the following intersections:

- Canal Road (SR 0921) and Main Street (SR 0074)
- Bull Road (SR 4001) and Canal Road (SR 0921)
- Canal Road (SR 0921) and Greenbriar Road (SR 4011)
- Canal Road (SR 0921) and Susquehanna Trail (SR 0297)

- I-83 SB and SR 0297
- I-83 NB and SR 0297
- Bull Road (SR 4001) and Hilton Avenue
- Bull Road (SR 4001) and Church Road (SR 0238)
- Loucks Road (SR 0030) and Roosevelt Avenue (SR 4001)
- Bull Road (SR 4001) and Site Driveway

With the identified improvements in place, all study area intersections will operate at overall LOS C or better, with the exception of the intersection of Loucks Road (SR 0030) and Roosevelt Avenue (SR 4001), which will operate at LOS E during the weekday morning and evening peak hours. The proposed site driveway intersection along Bull Road (SR 4001) will operate at optimal overall LOS A, with no capacity or queuing issues. The increase in overall delays at the study area intersections, when comparing the 2029 build with improvements conditions to the 2029 no-build conditions fall within an accepted 10 second variance as allowed by PennDOT. These results meet the requirements as described in the PennDOT Policies and Procedures for Transportation Impact Studies.

As part of this project, the applicant proposes the following improvements:

- The applicant will widen Bull Road (SR 4001) along the site frontage, as necessary, to provide an exclusive northbound left-turn lane at the site driveway. The left-turn lane will provide 250 feet of storage in addition to the applicable taper length.
- The applicant will install a traffic signal at the intersection of Bull Road (SR 4001) and Canal Road (SR 0921) and widen the northeast corner radius to accommodate applicable truck turns. There will be No Turn on Red (NTOR) restrictions for all approaches.
- The applicant will construct a 350' foot eastbound left-turn lane at the intersection of Canal Road (SR 0921) and Susquehanna Trail (SR 0297). As part of the signal improvements, the eastbound left-turn will include protected/permitted signal phasing with a Flashing Yellow Arrow (FYA) design.
- The applicant will install a traffic signal at the intersection of Bull Road (SR 4001) and Hilton Avenue and construct a 275' northbound left-turn lane. As part of the signal improvements, the northbound left-turn will include protected/permitted signal phasing with a FYA design. There will be No Turn on Red (NTOR) restrictions for the eastbound, westbound, and southbound approaches.
- Install Do Not Block The Intersection signage and striping at the intersection of Susquehanna Trail (SR 0297) and Cloverleaf Road.

All improvements will be constructed to accommodate non-motorized access/circulation and be ADA compliant unless otherwise approved by the Department. The improvements identified above represent a concerted effort by the developer to provide upgrades that will benefit the surrounding roadway network and mitigate the specific traffic impacts associated with the Bull Road Logistics development.