DECISION OF THE BOARD OF SUPERVISORS OF NORTH WHITEHALL TOWNSHIP, LEHIGH COUNTY, PENNSYLVANIA PURSUANT TO SECTION 508 OF THE MUNICIPALITIES PLANNING CODE

IN RE: : PROJECT NO. LOT CONSOLIDATION AND : NWT-22-013

PRELIMINARY/FINAL LAND DEVELOPMENT :

PLAN APPLICATION OF :

TCNE NORTH WHITEHALL 2, LLC :

In accordance with Section 508 of the Pennsylvania Municipalities Planning Code, as amended and codified (the "MPC"), 53 P.S. § 10508, the Board of Supervisors (the "Board") of North Whitehall Township, Lehigh County, Pennsylvania (the "Township") issues the following decision with respect to the above-referenced lot consolidation and preliminary/final land development plan application filed by TCNE North Whitehall 2, LLC (the "Developer").

- 1. Pursuant to applicable Pennsylvania law, the Township has adopted a Subdivision and Land Development Ordinance, most recently amended and effective as of July 8, 2023 (as amended and codified, the "SALDO"); a Zoning Ordinance, most recently amended and effective as of July 16, 2022 (the "Zoning Ordinance"), and an Act 167 Stormwater Management Ordinance, effective as of September 17, 2022 (as amended and codified, the "SMO").
- 2. On April 29, 2024, the Developer filed a lot consolidation and preliminary land development plan proposing a four (4) lot consolidation and the construction of a 547,500 sq. ft. warehouse, together with other site improvements including, but not limited to, access driveways to State highways, parking and loading areas, stormwater management facilities, an

on-lot sewage disposal system in the nature of a drip irrigation system, a public waterline extension, and a proposed pump house with a water main system, together with additional site improvements, and with respect to all, appurtenances thereto, on approximately +/- 72.49 consolidated acres (the "Initial Plan").

- **3.** The Developer's point of contact is identified as Barry Henry, Executive Vice President at Trammell Crow Company, and the record title owner is identified as Jeffrey F. Johnson, et. al.¹
- **4.** The design firm is Langan Engineering and Environmental Services with the contact person identified as Fidel Gonzalez ("Langan"), and legal counsel is Katherine Durso, Esq., of Fitzpatrick, Lentz, & Bubba.
- **5.** The Initial Plan as subsequently modified by the Plan (see ¶12, infra.) was prepared by Langan and includes seventy-five (75) sheets, all last revised December 13, 2024, and further includes an additional eight (8) sheets, all dated April 29, 2024, and with various revision dates, including, August 26, October 28, and December 13, 2024, and April 10, 2025.²
- **6.** The above-referenced additional eight (8) sheets were submitted to the Township for review on or about April 10, 2025.
- **7.** The subject site address is identified as 3121 PA-309, Orefield, PA 18069, and is bounded to the west, generally by Pennsylvania State Route

¹ Mailing and email addresses are omitted from this filing.

² The eight (8) additional sheets address landscaping, site details, fire truck turning templates, and an overall site plan.

309 ("Route 309"), to the east by the Pennsylvania turnpike, and to the south by Orefield Road ("Orefield Road") which is designated as Pennsylvania State Route S.R. 4003 (the subject site is referred to herein as the "Premises").

- **8.** Orefield Road intersects Route 309 near the Premises, and as such the Developer proposes low volume driveways from the Premises to access both Orefield Road and Route 309.³
- **9.** The Premises is located primarily in the Township, however a portion of the Premises is in South Whitehall Township, Lehigh County, Pennsylvania ("SWT").
- **10.** The Premises is in the Township's Light Industrial / Business ("LI/B") Zoning District, and in SWT's Low Density Residential (R-3) and Rural Residential-2 (RR-2)" Zoning Districts.
- **11.** A "Large Warehouse" (25,000 SF gross floor area or more) is classified as a permitted use in the Township's LI/B Zoning District, however it is not permitted in SWT's R-3 or RR-2 Zoning Districts.
- **12.** Following a Township Planning Commission meeting on May 29, 2024, the Developer, on August 26, 2024, filed a revised lot consolidation and preliminary land development plan for the Premises, with modifications including, among other things, a reduction in the size of the warehouse to 501,405 sq. ft. and relocation of the OR driveway (closer to Route 309) to avoid placing it in SWT (the "Plan").

³ Orefield Road intersects Route 309 from the east, and Kernsville Road ("Kernsville Road"), a continuation of Orefield, intersects Route 309 from the west.

- **13.** A transportation impact study, titled "Nexus 78 Transportation Impact Study," dated June 9, 2023, and prepared by Benjamin T. Guthrie, P.E. of Traffic Planning and Design, Inc. ("TPD"), was submitted to the Township in or about April 2024 in connection with the Initial Plan, with multiple revisions submitted thereafter (the "TIS").
- **14.** During the plan review process, the TIS underwent four (4) revisions, the last being April 11, 2025.
- **15.** The last TIS revision believed to be submitted to PennDOT for review was dated August 28, 2023.
- **16.** As depicted on the Plan, access to the Premises includes a full access, low volume driveway to be constructed onsite and connected directly to Route 309 (the "309 Driveway"), which will provide ingress to the Premises through northbound right and southbound left turns, respectively, from Route 309 and egress from the Premises through northbound right and southbound left turns, respectively, from the driveway on to Route 309.4
- **17.** The 309 Driveway will be a "full access" driveway and serve tractor-trailers and other vehicles.⁵
- **18.** The Commonwealth of Pennsylvania Department of Transportation ("PennDOT") classifies Route 309 as an "Urban Principal Arterial" road with a

⁴ A low volume driveway serves 25 to 750 vehicles per day. See TIS, Executive Summary, p. 8.

⁵ See TIS, Table 9.

predominant north-south direction, while the Township classifies it as a "Major Collector."

- **19.** Based upon data collected on May 10, 2022, Route 309 has posted speeds of 35/45 miles per hour with average daily traffic of 21,862 vehicles.⁷
- **20.** As noted above, the other access point is a low volume driveway exiting from the Premises to Orefield Road (the "OR Driveway") to be constructed entirely in the Township and to provide egress for tractor-trailers via a right turn only onto westbound Orefield Road, which will allow a through movement on to Kernsville Road and left (southbound) or right (northbound) turns onto Route 309 at the Intersection, with all other vehicles (i.e., non-tractor-trailers) permitted to exit right or left onto Orefield Road.
 - 21. The OR Driveway is classified as a low volume, exit only driveway.8
- **22.** PennDOT classifies Orefield Road/Kernsville Road as an "Urban Minor Arterial" road with an east-west orientation and average daily traffic of 5,337 vehicles, while the Township classifies Orefield Road as a "Local" road and Kernsville Road as a "Major Collector" road.⁹
- **23.** The intersection of Route 309 and Orefield Road/Kernsville Road is, unless otherwise specified, hereafter referred to as the "Intersection."

⁶ See TIS, Table 1 and Township Street Classification Map.

⁷ See TIS, Table 1.

⁸ See TIS, Table 9.

⁹ See TIS Table 1 and Township Street Classification Map.

- **24.** In other words, full access to the site (ingress and egress for vehicles of all types, in all directions) is limited to the 309 Driveway; while the OR Driveway serves as an alternate access point of egress for vehicles of all types with tractor-trailer movements limited to a right turn on Orefield Road in the direction of Route 309 and full egress (left and right turns) for all other vehicles.
- **25.** The Developer also submitted to the Township a PennDOT Highway Occupancy Plan, dated September 19, 2024, and prepared by Mr. Guthrie of TPD (the "HOP Plan"); which had not been approved by PennDOT as of June 2, 2025.¹⁰
- **26.** The HOP Plan depicts "improvements" abutting the Premises including with respect to Route 309 a northbound deceleration/right turn lane into the 309 Driveway and a northbound right turn lane exiting the Premises. ¹¹
 - 27. This Route 309 / 309 Driveway intersection will not be signalized.
- **28.** The HOP Plan also includes minor improvements to Orefield Road in the immediate vicinity of the OR Driveway.
- **29.** As for improvements to the Intersection, the Plan relies upon a proposed PennDOT project known commonly as the "Route 309 Betterment Project" (the "Betterment Project").

¹⁰ The HOP Plan cover sheet contains a note in red stating: "**UNDER DOT REVIEW** PLANS SUBJECT TO CHANGE" (capitalized and bold in original).

¹¹ The Developer would construct the improvements identified in the HOP Plan.

- **30.** Overall, the Betterment Project proposes improvements to parts of the Route 309 corridor in both the Township and SWT and, to the extent relevant to this matter, includes improvements to the Intersection in the nature of a realignment of Orefield Road/Kernsville Road, a northbound Route 309 left turn lane onto Kernsville Road, a southbound Route 309 left turn lane onto Orefield Road, and a dedicated, left turn lane on Orefield Road to allow traffic to turn south onto Route 309.
- **31.** The "stacking" distance for the Betterment Project's proposed left turn lane on Orefield Road to southbound Route 309 is only seventy-five feet (75').¹²
- **32.** The Betterment Project improvements are separate from the HOP Plan improvements, and there are unknowns with respect to the Betterment Plan, including whether all right-of-way has been obtained, start and completion dates, and the sequence of work along the corridor.
- **33.** At present the Intersection is signalized; with Route 309 having two (2) lanes (one north and one south), and Orefield Road/Kernsville Road having two (2) lanes (one east and one west)
- **34.** Because the Developer's project may be completed before the Betterment Project, the Developer prepared an "Interim Plan" to address increased traffic on Orefield Road exiting from the Premises and travelling in the direction of the Intersection (the "Interim Plan").

¹² The Developer's HOP does not include a left turn lane from Orefield Road onto southbound Route 309.

- **35.** The Interim Plan is titled "Orefield Road & Route 309 Truck Turning Plan," prepared by TPD, and is dated July 17, 2024, however it was not submitted to the Township for review until April 24, 2025, approximately five (5) weeks before the expiration of the Developer's time extension for the Board's action on the Plan.
- **36.** In addition, TPD identifies the Interim Plan as a "concept plan," which has not been formally submitted to, and reviewed and approved by, PennDOT's signal and permit departments.
- **37.** The primary intent of the Interim Plan is to address the need for temporary improvements to the Intersection to accommodate the increased traffic from tractor-trailers and other vehicles exiting from the Premises via the OR Driveway onto westbound Orefield Road, which includes tractor-trailers and other vehicles, many of which will turn left onto southbound Route 309.
- **38.** The Interim Plan includes the following Intersection adjustments and improvements:
 - a. addition of a left turn (green) arrow to the existing traffic light to allow for an advanced, left turn for Orefield Road traffic on to southbound Route 309;
 - **b.** adjustment of signal timing to allow more time for vehicles to make a left turn on to southbound Route 309 with the green arrow (which decreases the time for all other movements through the Intersection);

- c. relocation of the existing stop bar on northbound Route 309 to a point approximately forty feet (40') to the south (which extends the time for vehicles travelling northbound on Route 309 to clear the Intersection) to give tractor-trailers turning left from Orefield Road room to complete a left turn onto southbound Route 309; and
- **d.** in conjunction with subparagraph c., directly above, moving the southeastern curb further back in the right-of-way to provide additional room for a tractor- trailer to turn left onto Route 309 from Orefield Road.
- **39.** The Developer proposes that the 309 Driveway, which has an approximate length of 400 to 500 feet, will be designed as a two (2) lane, thirty feet (30') wide, driveway. 13
- **40.** Because the OR Driveway is an exit only access drive, the 309 Driveway will accommodate all vehicles (including tractor-trailers) arriving at the site and all vehicles (including tractor-trailers) which may choose to use that driveway to depart the site.
- **41.** The 309 Driveway will include one (1) pullover area on the inbound lane approximately seventy-five feet (75') in length and twelve feet (12') in width.
- **42.** Fire trucks and other emergency vehicles will, depending on the location of emergencies, be required to navigate the Intersection, and for emergencies at the Premises, enter through the 309 Driveway.

¹³ The topography of the Premises requires that the driveway be elevated.

- **43.** The Premises abuts at least two (2) residential properties, including 4423 Orefield Road—owned by Mr. and Mrs. Samuel Claudio, Jr.—and 4417 Orefield Road—owned by the Estate of Harry T. Hyrowich.
- **44.** Over the course of four (4) meetings, three (3) by the Township's Planning Commission (the "PC") and one (1) by the Board, members of the public offered comments based upon personal experience and observation, and in some instances supplied documents concerning, among other things, zoning interpretation issues and matters relating generally to tractor-trailers and warehouse operations including, without limitation, comments regarding the potential for violation of the Zoning Ordinance's environmental protection standards with respect to noise generation from tractor-trailers, especially near the above-referenced residential properties; slow acceleration of tractortrailers into traffic; the inability of tractor-trailers to navigate existing roads; the proximity of the Parkland School District's Orefield Middle School property (which at points is adjacent to the Premises along Orefield Road); school bus operations and school related traffic; existing traffic conditions on Route 309, Orefield Road, Kernsville Road, and at the Intersection; the geometry and condition of Orefield Road and Route 309; the inadequacy of the Interim Plan, the inadequacy of the Betterman Plan, Plan defects; and other matters.
- **45.** SWT retains jurisdiction over the Plan, but because the OR Driveway was moved out of SWT and closer to Route 309, no land development is proposed within SWT, so that jurisdiction is limited to the lot consolidation.
 - **46.** SWT has not acted on the proposed lot consolidation.

- **47.** The Developer has not identified a tenant or tenants for the proposed warehouse.
- **48.** The Developer submitted a single waiver request to the Township from SALDO Subsection 375-36A.(2) to forego separate preliminary and final plan submission reviews and to authorize review of the Plan as a combined preliminary / final plan land development plan (the "Waiver Request").
- **49.** The PC reviewed the Plan at three (3) special meetings held on May 29, 2024, and January 29 and May 29, 2025.¹⁴
- **50.** At its May 29, 2025, special meeting, with a quorum present, the PC voted six to zero (6-0) to recommend approval of the Waiver Request and voted six to zero (6-0) to recommend denial of the Plan application.
- **51.** In accordance with the SALDO, the Township issued a letter, dated June 11, 2025, formally advising the Developer of the recommendations made by the PC at its May 29, 2025, special meeting.
- **52.** On June 2, 2025, the Board voted unanimously (3-0) to recommend approval of the Waiver Request and voted unanimously (3-0) to deny the Plan application.

¹⁴ On April 30, 2025, the Developer requested to be removed from that evening's PC agenda and provided a time extension to June 3, 2025. To accommodate individual and meeting room schedules (the Township building is currently under construction), the PC meeting was set for May 29, 2025, with Board action on June 2, 2025. The Developer retained a stenographer to record each meeting and produced two transcripts (the "<u>Transcripts</u>").

- 53. Based upon the entire record, which includes, among other things, the Plan, the HOP Plan, the Interim Plan, the TIS prepared by TPD,, a TIS prepared by HRG,¹⁵ Township consultant and staff review letters and verbal comments, the Developer's input and written and verbal comments, citizen input and written and verbal comments, recommendations by the Township consultants and staff, the recommendations of the PC and statements of its individual members made on the record, and personal knowledge as relates to the Premises and the surrounding conditions, the Board finds that the Plan is defective in that it does not comply with applicable Township ordinances, and, accordingly, the Developer's request for Plan approval must be denied for the following reasons:
 - **a.** The proposed left turn by TTs from the 309 Driveway constitutes an unsafe condition.¹⁶

See also Zoning Ordinance Subsections 440-86C.(2) and 440-111B.-D.

See also without limitation, Keystone Consulting Engineers Traffic Review Letter and Supplement, both dated April 29, 2025, and HRG Review Letter #1, dated December 11, 2024, attached hereto and made a material part hereof as **Exhibits A** and **B** respectively, as well as oral analysis set forth in the Transcripts.

Note is made that the Developer refused a condition to create an enforceable prohibition on left turns by tractor-trailers onto southbound Route 309. In addition, the Board finds that this restriction would have been reasonable, feasible, and necessary, to improve traffic safety.

¹⁵ HRG was retained by the Township to review the TPD TIS and to conduct an independent TIS. HRG submitted its TIS to the Township in November 2024.

 $^{^{16}}$ See SALDO Section 375-2; Subsections 375-54C., D., E.; Subsections 375-57A.(1), C.(2), and K.(1); Chapter 375 Attachment 10, Appendix E, Sections E.01, E.06, and Traffic Impact Study Checklist Items 5 and 6.

- b. Orefield Road is classified by the Township as a "Local" road, and as such the use of the OR Driveway as a driveway for a warehouse violates Township Ordinances.¹⁷
 - In the alternative to subparagraph b., directly above, due to the failure to provide operational controls to regulate (stagger) the timing of tractor-trailer departures from the Premises via the OR Driveway, the use of the OR Driveway as an access point of egress presents an unsafe traffic condition both under the Interim Plan and the Betterment Project as neither plan adequately and safely addresses the inevitable, severe impediments to traffic flow which will be created by the increase in traffic caused by the warehouse operations at the Premises. The Developer's proposals to address left turns from Orefield Road on to southbound Route 309 are clearly inadequate to address the fact that most of the tractor-trailer traffic from the Premises will attempt to make that turn. The Interim Plan proposes insignificant improvements including a left turn arrow, inadequate radius changes at the southeast corner of the Intersection, and movement of the stop bar south on Route 309. While the Betterment Project widens the Intersection, it creates only a short (seventy-five feet (75')) left turn lane on Orefield Road, which will accommodate little more than one (1) tractor-trailer leaving the Premises. If two (2) or more tractor-trailers leave close in time, or if other traffic on Orefield Road occupies the left turn lane (in whole or in part), traffic leaving the Premises through the OR driveway will block Orefield Road. Based upon these and other scenarios, the Board finds

 $^{^{17}}$ See SALDO Subsection 375-54C. and SALDO Chapter 375, Attachment 10, Appendix E, Sections E.02 and E.04.

See Zoning Ordinance Section 440-30 (defining "Driveway); Subsection 440-41A.(77)(a); Chapter 440 Attachment 4 (Township Street Classification Map).

that the Interim Plan and the Betterment Project are insufficient to address the increase in traffic generated by the Plan and will create a traffic hazard and impact negatively on the Township road system. Note is made that the Township's appointed engineering firm, Keystone Consulting Engineers ("KCE"), recommended significant lengthening of the proposed left turn lane on Orefield Road to two hundred twenty-five feet (225').¹⁸

d. The failure to provide a viable plan for traffic improvements prior to the implementation of the Betterment Project, if ever, is critical to the operation of the Intersection given the increased flow and nature of traffic (including tractor-trailers) created by the Developer's proposed operations at the Premises; yet as provided, the Developer's Interim Plan is only a "concept" plan, the engineering reliability, viability, and acceptability of which to PennDOT is unknown at this time, creating an unreasonable level of uncertainty as to how, or if, the interim conditions at the Intersection, as complicated by the Developer's

¹⁸ See SALDO Section 375-2; Subsections 375-54C., D., and E.; Subsections 375-57A.(1) and K.; Chapter 375 Attachment 10, Appendix E, Sections E.01 and E.06, and Traffic Impact Study Checklist Items 5 and 6.

See also Zoning Ordinance Subsections 440-86C.(2) and 440-111B.-D.

See also without limitation, **Exhibits A** and **B** and the Gilmore & Associates Review Letter, dated April 29, 2025, attached hereto as **Exhibit C**, as well as oral analysis set forth in the Transcripts.

Note is made that the Developer refused a condition which would place operational controls on the timing of egress of tractor-trailers from the OR Driveway to avoid blocking and impeding traffic flow on Orefield Road and through the Intersection. In addition, the Developer argues that the Board lacks authority to require the construction of a longer left turn lane under Article V-A of the MPC. For these reasons, the Board finds that the traffic problems created by the inadequate left turn provisions of the Interim Plan and Betterment Plan cannot be adequately alleviated by the Developer.

operations, will be addressed by the Developer. The Plan is incomplete in this regard and cannot be effectively reviewed, especially since the Developer has rejected the condition noted in subparagraph c., above. Moreover, absent right-of-way acquisition, full funding, the letting of construction contracts, and the sequencing of the work along the Route 309 corridor by PennDOT, there is no evidence of any guarantee as to when, or if, the Betterment Project and proposed Intersection improvements will be constructed.¹⁹

e. The 309 Driveway is defective as it must be widened to forty feet (40') to accommodate emergency vehicles, including the largest firefighting vehicles which might respond to an emergency at the Premises.²⁰

¹⁹ See SALDO Section 375-2; Subsections 375-54C., D., and E.; Subsections 375-57A.(1) and B.(4); Chapter 375 Attachment 10, Appendix E, Sections E.01, E.02, E.05, and E.06, and Traffic Impact Study Checklist Items 5 and 6.

See Zoning Ordinance Subsections 440-61D.(6); Subsections 440-86C.(2); Subsection 440-41A.(77)(c); and Subsection 440-111B.-D.

See also **Exhibits A** through **C** and oral analysis set forth in the Transcripts.

²⁰ See SALDO Section 375-23 (defining "Improvements, Required"); Subsection 375-54C.; and Subsection 375-57A.(8).

See also North Whitehall Township Emergency Services Organization Review Letters, dated May 14, 2024, January 2, 2025, and March 21, 2025, collectively attached hereto as **Exhibit D** and made a part hereof, as well as oral analysis set forth in the Transcripts.

Note is made that the Developer refused a condition requiring the widening of the 309 Driveway from thirty feet (30') to forty feet (40').

- **f.** The Developer has not offered information showing that the proposed use and /or operation of the Premises will not generate sound levels exceeding the limits established by the Zoning Ordinance.²¹
- **g.** The Developer has not shown, and the Plan does not provide documentation to depict, or contain a note, to the satisfaction of the Township, that there will be sufficient off-street queueing space in connection with the 309 Driveway entrance as set forth in **Exhibit C.**²²
- **h.** The Plan does not include a Township sight triangle at the intersection of Route 309 and the 309 Driveway nor at the intersection of Orefield Road and the OR Driveway.²³
- i. In the alternative to subparagraphs a. through h.,, above, although a permitted use in the LI/B Zoning District and (assuming without admission that the proposed operation will meet the Zoning

See Zoning Ordinance Subsection 440-41A.(77)(g); Subsection 440-61A.(6).

See also **Exhibit** C and oral analysis set forth in the Transcripts.

See also **Exhibit A** and oral analysis as set forth in the Transcripts.

²¹ See SALDO Section 375-2; Subsection 375-54C.

See Zoning Ordinance Subsection 440-24H; 440-36B.(1); Subsection 440-51A.; and Chapter 440 Attachment 1, Table of Permitted Uses (pg. 12, Miscellaneous Uses).

²² See SALDO Section 375-2; Subsection 375-54C.; and Subsections 375-67.A. and C..

²³ See SALDO Section 375-23 (defining "Sight Distance Triangle"); Subsection 375.57F.

Ordinance's definition of a Large Warehouse²⁴); the Plan is defective because there exists a high degree of probability that this particular use will generate adverse impacts not typically associated with the use; and accordingly the Plan poses a substantial threat to the health, safety and welfare of the community through among other things, inadequate infrastructure, the inability to secure PennDOT warrants for a traffic signal at the 309 Driveway, enhanced tractor-trailer traffic and other vehicle traffic, enhanced noise levels created on site by tractor-trailers and warehouse operations, and the negative impact on emergency services. In addition, this specific, proposed Large Warehouse use is inconsistent with the intent of the LI/B as specified in the ZO.²⁵

In conclusion, the Board notes that if the proffered conditions noted in subparagraphs 53.a, c, and e, above had been acceptable to the Developer, it would have considered a conditional Plan approval, based upon the potential conditions set forth in **Exhibit F** attached hereto and made a material part hereof.

For convenience, relevant excerpts of Township Ordinances are attached hereto as **Exhibit G.**

[SIGNATURE PAGE FOLLOWS]

²⁴ See Zoning Ordinance Section 440-30 (defining "Large Warehouse").

²⁵ See Zoning Ordinance Subsection 440-31D.(11); Subsection 440-32B.

See also the Lehigh Valley Planning Commission review letter dated, May 29, 2024, a copy of which is attached hereto as **Exhibit E**, and **Exhibits A** through **D**, and the comments of Township consultants, PC members, and residents as set forth in the Transcripts.

[SIGNATURE PAGE TO DECISION AND ORDER] [PROJECT NO. NWT-22-013]

BY THE BOARD OF SUPERVISORS OF NORTH WHITEHALL TOWNSHIP

DENNIS KLUSARITZ, Chairman

ALFRED GEOSITS, Vice Chairman

RONALD J. HEINTZELMAN, Supervisor

Date of Written Decision:

June 16_, 2025

Date of Communication²⁶ of Written Decision:

June 16, 2025

Attachments:

Exhibit A - KCE Review Letter and Supplement Dated 04/29/25

Exhibit B - HRG Review Letter Dated 12/11/24

Exhibit C - Gilmore & Associates Review Letter Dated 04/29/25

Exhibit D – Three (3) Emergency Services Review Letters (Various Dates)

Exhibit E - LVPC Review Letter Dated 05/29/24

Exhibit F - Potential Conditions of Approval

Exhibit G - North Whitehall Township Ordinance Excerpts

 $^{^{26}}$ Via e-mail and regular mail to Barry Henry, the Developer's identified point of contact.

EXHIBIT A

(See attached)

[Insert KCE Review Letter and Supplement Dated 04/29/25]





5012 Medical Center Circle, Allentown, PA 18106 | 610-395-0971 | www.KCEinc.com Bethlehem | Allentown | Kresqeville

NWT-23-026

April 29, 2025

Randy Cope Township Manager 3256 Levans Road Coplay, PA 18037

RE:

North Whitehall Township

Nexus 78 Warehouse Development

Traffic Comments on the Transportation Impact Study and Partial Land Development Plan submission

The following comments pertain to the Transportation Impact Study (TIS) prepared by Traffic Planning and Design, Inc. revised April 11, 2025:

- 1. Section 375-57.C and Section 375-57. K.1 We recommend that the Board of Supervisors mandate that tractor-trailers be restricted from making westbound left turns at the Route 309 driveway since traffic safety would be improved by directing all southbound Route 309 truck traffic to the Orefield Road driveway. Specifically, truck egress via the Orefield Road right-out only driveway would offer a safer alternative to left-turn truck egress at the Route 309 driveway for the following reasons. A note must be provided on the plan of record indicating the above noted truck turning movement restriction at the Route 309 driveway:
 - a. <u>Driver's Judgement of Traffic Gaps</u> Tractor-trailers egressing the Orefield Road driveway would be forced to make a right-turn and therefore would only need to find a sufficient gap in traffic from one travel lane/direction prior to turning onto the roadway. This is contrasted to a truck turning left from the Route 309 driveway in that egressing tractor-trailers would need to judge gaps in traffic from two travel lanes/directions prior to turning onto the roadway. Attempting to judge traffic gaps in both (opposing) directions would result in a greater opportunity for driver error via mis-judgement of sufficient gaps, since drivers cannot watch both directions at the same time. This potential is further

EXHIBIT
A

compounded in that there is significantly more traffic volume on Route 309 as compared to the westbound travel lane of Orefield road (approximately 8 times more). Lastly, this potential is compounded again by the fact that tractor-trailers take significantly more time to accelerate from a stopped condition and therefore require larger gaps in traffic to execute a turning movement.

- b. <u>Vehicle Conflict Potential</u> Tractor-trailers egressing the Orefield Road driveway would only need to negotiate a single conflict point where the egress travel path intersects the westbound Orefield Road travel lane. However, tractor trailers making a westbound left turn at the Route 309 would need to negotiate two conflict points where the left turning vehicle's path crosses both the northbound and southbound Route 309 travel lanes (note: a "conflict point" is the point at which vehicle travel paths intersect). This potential is further compounded in that traffic-volumes on Route 309 (both directions) is approximately eight (8) times higher than the traffic volume on the westbound travel lane of Orefield Road, resulting in conflicts being eight (8) times more likely to occur at the Route 309 left turn egress than the Orefield Road driveway.
- c. <u>Vehicle Conflict Severity</u> The severity of any vehicle conflicts would be expected to be significantly less at the Orefield Road driveway than the Route 309 driveway due to the following reasons:
 - i. The natural angle of the collision would be significantly more oblique (much smaller than 90 degrees) at the Orefield Road driveway, resulting in less kinetic energy absorbed by the colliding vehicles, as contrasted to a potential conflict at the Route 309 driveway between westbound left and northbound through traffic (which would be very close to 90 degrees), resulting in more kinetic energy absorbed by the colliding vehicles.
 - ii. The posted speed limit on Route 309 is 45 mph, however, recent ATR counts conducted by TPD indicated that 85th percentile speeds for Route 309 were recorded at 53 mph for northbound traffic, and 48 mph for southbound traffic. The posted speed limit of Orefield Road is 40 mph. Due to higher speeds on Route 309 as compared to Orefield Road, the severity of a potential conflict is expected to be significantly greater at the Route 309 driveway as compared to a conflict at the Orefield Road driveway. For example, the kinetic energy absorbed by vehicles involved in a conflict between a westbound left turning vehicle and a northbound

through vehicle at the Route 309 driveway would be expected to be approximately 75% greater than a conflict experienced at the Orefield Road driveway due to the higher travel speed and exponential relationship between velocity and kinetic energy (K.E. = One-half Mass times Velocity Squared, or K.E. = ½ MV²). Note that the preceding example does not consider the angle of collision at each respective intersection.

- d. <u>Psychological Considerations</u> The Traffic Impact Study prepared by TPD indicates that during peak hours, the westbound left turn at the Route 309 driveway is operating at Level of Service E during both the AM and PM peak periods in the PennDOT approved TIS. In addition to being a non-acceptable level of service for Urban conditions, vehicle drivers may experience frustration waiting for gaps in traffic prior to making a turning maneuver which can tend to drivers taking less than sufficient gaps and increasing the potential for vehicle conflicts. While this is true for all traffic, the issue is compounded for tractor trailer traffic due to the requirement for larger gaps in traffic, resulting in higher potential for frustration and aggressive driving.
- e. <u>Traffic Signalization</u> Tractor-trailer traffic destined to southbound Route 309 would be able to make a signalized left turn at the intersection of Route 309 and Orefield Road (note that PennDOT would not accept signalization of the Route 309 driveway).
- 2. Appendix 375 E.05 and 375 E.06 Since tractor-trailers will be restricted from making a left turn at the SR 309/Route 309 driveway, the TIS must be resubmitted to the PennDOT Permitting Unit for review and approval. The TIS must address both the "interim" improvements and "final" conditions including the PennDOT Betterment Project improvements.

Regarding the "interim" conditions, please note the following TIS comments:

- a. Confirm the clearance intervals for the northbound approach will not need to be increased with the stop bar moving 41 feet further south than the current stop bar location. If so, the capacity analyses shall be updated to reflect the clearance time revisions that are necessary.
- b. The truck turning template for the westbound left turn movement is very restrictive due to the intersection geometry, both existing and proposed features.

Based on the truck turning templates, the restricted areas consist of the proposed curb on the southeast corner of the intersection, the existing curb adjacent to the southbound Route 309 lane, and the relocated stop bar on the northbound approach. With all of these pinch points throughout the left turn maneuver, this will result in slower maneuvering times and reduce the capacity at the intersection for the westbound approach, potentially causing additional queues along the westbound approach of Orefield Road that are not accounted for in the capacity analyses. Please note, the Township and our office received this plan on April 24, 2025. We performed a preliminary review of this plan only. Additional review comments may be provided once Highway Occupancy Permit plans for this work has been submitted for review in conjunction with the plan submission to Permit and Signal units at PennDOT.

- c. The trip assignment depicts a truck exiting at the Orefield Road driveway and making a westbound right turn movement onto Route 309 northbound. It is unclear if tractor trailers are able to make a westbound right turn movement at this intersection. The trip assignment shall be revised to utilize the Route 309 driveway to depict trucks exiting to northbound Route 309.
- d. As provided for the Levels of Service (LOS) table for the interim condition, a table shall be provided identifying the projected queues.
- e. The capacity analyses for the 2026 interim improvements identify the following LOS degradations:
 - i. The northbound through movement from LOS B (10.1) to LOS C (33.0) during the AM peak hour.
 - ii. The northbound through movement from LOS B (14.2) to LOS C (35.0) during the PM peak hour. The changeover from LOS C to LOS D is 35 seconds of delay. As a result, this reflects a LOS degradation of nearly two letter grades for this approach.
 - iii. Based on the LOS degradations identified above, the Design Engineer shall confirm with PennDOT if they are acceptable with the degradations on the northbound approach.

- f. The capacity analyses for the interim improvements identify the following queue degradations:
 - i. The queue for the northbound approach is anticipated to increase 108 feet from 493 feet in the no build scenario to 601 feet in the build scenario during the AM peak hour.
 - ii. The queue for the southbound approach is anticipated to increase 75 feet from 458 feet in the no build scenario to 533 feet in the build scenario during the AM peak hour.
 - iii. The queue for the westbound approach is anticipated to increase 47 feet from 225 feet in the no build scenario to 272 feet in the build scenario during the PM peak hour.
 - iv. The queue for the northbound approach is anticipated to increase 43 feet from 682 feet in the no build scenario to 725 feet in the build scenario during the PM peak hour.
 - v. The queue for the southbound approach is anticipated to increase 60 feet from 304 feet in the no build scenario to 364 feet in the build scenario during the PM peak hour.
- 3. The following comments are in regards to the "Final" conditions, please note the following TIS comments:
 - i. Section E.05 The proposed westbound left turn storage lane is 75-feet in length as part of the "final" conditions as proposed by PennDOT's Route 309 Betterment project. Since even a single tractor-trailer will consume this available storage, turn-pocket spill-over is anticipated to occur on a regular basis. Further, the build queue's of 110 feet during the AM peak hour and 85 feet during the PM peak hour will routinely block access to the westbound turn lane for all traffic. In light of this, the Applicant should coordinate with the PennDOT design unit to facilitate the extension of the westbound left turn lane to the location of the proposed right-turn egress-only driveway to mitigate this occurrence.

The following comments pertain to the Land Development Plans prepared by Langan Engineering revised April 10, 2025:

- 4. Development truck traffic destined to southbound Route 309 should be restricted from using the Route 309 driveway. In addition to provision of appropriate restriction signage onsite and at the Route 309 driveway, the Developer should complete all necessary PennDOT engineering studies, secure PennDOT approvals, and provide any other documentation required such that the movement restriction is legally enforceable. The Land Development plans should be amended to provide internal signage to direct southbound Route 309 egress truck traffic to the Orefield Road Driveway, and to direct northbound Route 309 truck traffic to the Route 309 driveway. We note, some wayfinding signing has been provided on the plan, but does not give clear direction for trucks exiting the development. We recommend signing that includes "Trucks Exiting to Route 309 South" sign(s). Last, the proposed signing depicted on the plans shall be identified specifically for each sign instead of a identified as a wayfinding sign in general.
- 5. The proposed stop sign provided to exit the loading docks on the west side of the building should be relocated for better visibility. Due to the large radius provided, the current location is far from where a driver's eyes are looking. We recommend the stop sign be relocated further south.
- 6. Depict the required and available sight distances based on both PennDOT and Township requirements for the Orefield Road driveway. The required sight distances should be depicted utilizing sight lines and labeled on the plans while the available sight distances are labeled on the plans. If any trees are within the required sight lines, then those trees should be removed or relocated to be outside the limits of the required sight triangles along with any other obstructions. Additionally, review the required and available sight distances for all internal intersections to confirm available sight distances exceed the required sight distances. We note the previous response letter said these will be provided in the future along with checking the internal intersections.
- 7. The details provided on Sheet CS-501 should be updated to reflect the line widths, colors, and gore spacing for all gore markings.
- 8. Details for all non-standard PennDOT signs should be provided. The detail should include the sign size, legend sizes, background color, and legend color.

- 9. The required sight triangles for the two proposed driveways should be identified on the Landscaping plans to ensure proposed plantings are not within the clear sight triangles.
- 10. Pedestrian crossing signing shall be provided for all on-site mid-block crosswalks.
- 11. Detailed ADA ramp designs should be provided for all ramps. The designs shall meet PennDOT requirements.
- 12. Plans shall be provided for the interim condition that includes the proposed layout at the Route 309 and Orefield Road / Kernsville Road intersection, truck turning templates for all movements (southbound left, northbound right, westbound left, and westbound right), traffic signal plan, along with any supporting calculations.

If you have any questions or require additional information, please contact us.

Sincerely,

Keystone Consulting Engineers, Inc.

Scott T. Pasterski, P.E., PTOE

PC: Steve Gitch, Keystone Consulting Engineers, via email Kevin Murphy, North Whitehall Township, via email Jeff Mouer, North Whitehall Township, via email





5012 Medical Center Circle, Allentown, PA 18106 | 610-395-0971 | www.KCEinc.com Bethlehem | Allentown | Kresgeville

NWT-23-026

April 29, 2025

Randy Cope Township Manager 3256 Levans Road Coplay, PA 18037

RE:

North Whitehall Township

Nexus 78 Warehouse Development

Supplement to the April 29, 2025 Traffic Engineer Comment Letter

The following comments are supplemental to our comment letter dated April 29, 2025 and are being provided in accordance with specific zoning Ordinances:

- 1. Section 440-111 Location Restrictions (A) The proposed driveway along Orefield Road is located approximately 850 feet east of Route 309 and Orefield Road intersection and will operate as an exit-only driveway. As identified in previous comment letters, most recently the January 23, 2025 letter (Comment No. 3 in the Land Development Plan section), required and available sight distances based on both Township and PennDOT criteria have been requested from the Design Engineer for the Orefield Road driveway. Langan's response to this comment in their response letter dated April 10, 2025 replies that they "Will Comply". To date, we have not been provided with this information to confirm if sight distance requirements are met for this driveway.
- 2. Amendment to Comment No. 3(i) in our April 29, 2025 comment letter: A 225-foot westbound left turn lane should be provided to accommodate truck traffic at the Route 309 and Orefield Road / Kernsville Road intersection. Our independent evaluation utilizing PennDOT's Publication 46 turn lane warrant and length calculations identifies a storage length of 225 feet is nearly met. By providing this turn lane storage, this will help address concerns of Orefield Road queues associated with the proposed truck traffic and extended queues along the westbound approach. The Applicant should coordinate with the PennDOT Design unit as necessary to facilitate this modification to the Betterment plans.

If you have any questions or require additional information, please contact us.

Sincerely,

Keystone Consulting Engineers, Inc.

Scott T. Pasterski, P.E., PTOE

PC: Steve Gitch, Keystone Consulting Engineers, via email Kevin Murphy, North Whitehall Township, via email

Jeff Mouer, North Whitehall Township, via email

Thomas Dinkelacker, Esq, via email

Rocco Beltrami, Esq, via email

EXHIBIT B

(See attached)

[Insert HRG Review Letter Dated 12/11/24]



Herbert, Rowland & Grubic, Inc. 369 East Park Drive Harrisburg, PA 17111 717.564.1121 www.hrg-inc.com

TRANSPORTATION IMPACT STUDY REVIEW LETTER #1

TOWNSHIP OF NORTH WHITEHALL

ATTN: RANDY COPE

NEXUS 78 TRANSPORTATION IMPACT STUDY

DECEMBER 11, 2024

As part of further review of the following information for the above-referenced project:

We offer the following comments:

TRUCK LEFT-TURN MOVEMENTS FROM DRIVEWAY ONTO PA-309

- 1. The township has requested information on how much time it would take for a truck to depart the full-access driveway and get up to the posted speed limit of 45 MPH.
 - a. There is information on this topic within the 2018 A Policy on Geometric Design of Highways and Streets, 7th Edition. In section 3.4.2 Grades, there are tables that outline criteria for trucks to go from a stop to reach a speed limit based on the grade and speed limit. According to the field view data collected for sight distance, found in Appendix K of the TIS, the grade to turn left out of the full-access driveway is -3.0%. In section 3.4.2.1.2 Trucks, there are two tables that outline trucks accelerating up to speed; Figure 3-16 shows a speed-distance curve for a typical heavy truck of 140 lb/hp and Figure 3-18 shows a speed-distance curve for a typical heavy truck of 200 lb/hp.
 - i. Figure 3-16 shows that a 140 lb/hp truck on a +3.0% grade can only reach a max speed of 45 MPH and it would take about 5000 feet to get up to that speed. Therefore, It will take a 140 lb truck approximately 66 seconds to accelerate from 0 MPH to 45 MPH in 5000 feet on a 3% grade.
 - ii. Figure 3-18 shows that a 200 lb/hp truck on a +3.0% grade can only reach a max speed of 35 MPH and it would take about 5000 feet to get up to that speed. Therefore, It will take a 200 lb truck approximately 51.33 seconds to accelerate from 0 MPH to 35 MPH in 5000 feet on a 3% grade.



Nexus 78 Transportation Impact Study North Whitehall Township December 11, 2024 Page 2

SAFETY REQUIREMENTS THE DEVELOPMENT MAY NOT MEET WITHIN ORDINANCE

2. The North Whitehall Township Ordinance has been reviewed and the following safety requirements have been found:

§ 375-2 Purpose. - This chapter is established to regulate and control the subdivision and development of land within the Township so as to provide sites suitable for human habitation, commercial and industrial operations, and other uses for which land may be developed. In so doing, to create conditions favorable to the health, safety, morals, welfare of the community, and consistent with the goals of the Comprehensive Plan and Chapter 440, Zoning, of North Whitehall Township and the Pennsylvania Municipalities Planning Code. In this case, the inability of a heavy vehicle to accelerate quickly without a traffic signal present may be perceived to be a safety issue for consideration by the board.

LOS REQUIREMENTS WITHIN ORDINANCE

- 3. The North Whitehall Township Ordinance has been reviewed and the following safety requirements have been found regarding Levels of Service (LOS) for intersections:
 - a. Within Chapter 375 Subdivision and Land Development Appendix E (Traffic Impact) of the Township of North Whitehall Ordinance there is a Traffic Impact Study Checklist. This checklist outlines the general structure and criteria of a Traffic Impact Study, including a recommendations and conclusions section. Within this section, it states that "Proposed recommended improvements: goal of LOS C or better; any proposed improvements should include transportation management strategies, where appropriate."
 - i. Mitigation improvements within the HRG transportation impact study were made for intersections with an overall intersection LOS D or worse, based on the 2031 with development scenarios. However, it could be interpreted that the LOS requirements apply to individual turning movements. If that is the case, the following movements will be considered deficient and need proposed improvements:
 - 1. PA-309 & Shankweiler Rd (SR 4006) EB Left (AM & PM both LOS D)
 - 2. PA-309 & Orefield Rd (SR 4003) EB Approach* & Westbound Approach* (AM & PM both EB & WB LOS D)
 - 3. PA-309 & Lime Kiln Rd WB Left/Through Movement (AM & PM both LOS D)
 - 4. PA-309 & Huckleberry Rd EB Approach* (AM & PM both LOS D)
 - Cedar Crest Blvd & Orefield Rd (SR 4003) EB Approach* (PM LOS D), WB Left/Through Movement (AM LOS D & PM LOS E), NB Left (AM LOS D), SB Through/Right Movement (AM LOS D)
 - 6. PA-309 & Full-Access Driveway WB Left (AM & PM both LOS E)

^{*}Indicates the approach is one lane for all movements.

Nexus 78 Transportation Impact Study North Whitehall Township December 11, 2024 Page 3

MODIFICATION TO OREFIELD RD ACCESS AND ISSUE LETTER ACCORDINGLY

§ 375-52 Purpose. - The design standards and improvements required in this article are the minimum requirements for approval of a subdivision or land development. Additional or higher type improvements may be required in specific cases where the Supervisors determine such improvements are clearly necessary to protect the public health and safety. In this case, the inability of a heavy vehicle to accelerate quickly without a traffic signal present may be perceived to be a safety issue for consideration by the board.

This review is based solely on the documents referenced above and does not relieve the design professional of any responsibility, nor does it imply any design responsibility by Herbert, Rowland & Grubic, Inc. HRG reserves the right to make additional comments in the future based on newly-supplied or revised information as provided by the applicant or their representative(s).

Sincerely,

Herbert, Rowland & Grubic, Inc.

Eric M. Kaufman, P.E. Senior Project Manager | Transportation

EMK/ABF
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Enclosures:

EXHIBIT C

(See attached)

[Insert Gilmore & Associates Review Letter Dated 04/29/25]



April 29, 2025

File No. 2024-00563

Randy Cope, Township Manager North Whitehall Township 3256 Levans Road Coplay, PA 18037

Reference: Preliminary/Final Land Development Plans

3121 PA-309 - Nexus 78 Warehouse Development

Tax Map Parcel Number: 547802315657-1, 546893400322-1, 547802057486-1, 546892310028-1

Dear Mr. Cope:

Please be advised that we have reviewed the Preliminary/Final Land Development Plans for Nexus 78 prepared by Langan Engineering and Environmental Services, Inc., dated April 29, 2024, last revised April 10, 2025.

The site consists of T.M.P. Nos. 547802315657-1 (17.30 acres, 4363 Orefield Road), 546893400322-1 (57.70 acres, 3121 PA Route 309), 547802057486-1 (3.24 acres, 4425 Orefield Road), 546892310028-1 (2.11 acres, 2945 PA Route 309). Approximately 79 acres are located within North Whitehall Township within the LI/B Light Industrial/Business District. Approximately 1.05 acres of T.M.P. No. 547802315657-1 along Orefield Road is located within South Whitehall Township in the R-3 Low Density Residential 3 Zoning District.

The site currently contains agricultural lands, a pond, stream, wetlands, woodlands, and two residential dwellings. The plans propose to remove the existing structures on the site and to construct a 501,405 s.f. warehouse. Additional improvements include parking and loading areas, and stormwater management facilities. The plan proposes two (2) accessways, one (1) accessway onto Route 309 and one (1) accessway onto Orefield Road. The site is proposed to be served by public water and on-site sewage.

The submission included Preliminary/Final Plans consisting of 8-pages. These sheets need to be incorporated into the full plan set. We offer the following comments for your consideration:

Background Information Summary

Application Title:

Nexus 78

Plan Stage:

Preliminary/Final Land Development and Lot Consolidation TCNE North Whitehall 2, LLC c/o Trammell Crow Company

Applicant: Plan Date:

April 29, 2024

Revision Date:

April 10, 2025

Received Date:

April 10, 2025 - North Whitehall Township April 10, 2025 - Gilmore & Associates, Inc.

Location:

3121 PA-309

Total Site Area:

72.459 +/- Acres

Zoning District:

LI/B Light Industrial/Business District

A. General Planning Comments

1. Existing Land Use

- a. As per the 2023 Comprehensive Plan Existing Land Use Map, the site is designated agricultural/vacant and residential. The site currently consists of agricultural land with residential dwellings and associated accessory structures.
- b. The site is bounded by residential uses to the east; institutional (Orefield Middle School), residential, and agriculture/vacant uses to the south; residential and commercial uses to the west, and residential uses to the north.

2. Consistency with Comprehensive Plan

- a. As per the 2023 Comprehensive Plan Future Land Use Map the site is designated as Industrial. The intent of this use category is to provide for "high-quality, well-planned, appropriately sized, well-landscaped industrial/business facilities while minimizing land use impacts on surrounding areas. Future development and/or redevelopment of the Industrial area should strive to satisfy regional market preferences, minimize the generation of through traffic, and be required to include substantial setbacks and buffers to mitigate the impact on existing residential uses" (pg. 71). The proposed warehouse is generally consistent with the Comprehensive Plan.
- b. The 2023 Comprehensive Plan discusses the "mega" warehouse trend in the Lehigh Valley Region, and states that the "The Township needs to continue proactively planning for these types of facilities in order to meet demand while also acting in the interest of Township residents. This includes anticipating and tackling needed infrastructure improvements, road accessibility issues, and traffic impacts" (pg. 77). Consideration should be given to the proposed increased volume in vehicle and truck traffic as a result of the proposed plan.

3. Traffic and Pedestrian Circulation

- a. The site proposes two accessways, one onto Orefield Road and one onto Route 309, with associated improvements. Internal roads provide circulation for large vehicles around the exterior of the warehouse.
- b. As per the North Whitehall Township Street Classification Map, Orefield Road is classified as a Local Road and Route 309 is classified as a Major Arterial. Per the 2023 Comprehensive Plan (pg. 54), local roads are intended to provide limited mobility, access to residential areas, businesses, farms, and other local areas. Arterial roads are intended to connect principal urbanized areas, cities and industrial centers.
- c. The plans indicate the accessway on Orefield Road will limit traffic circulation west onto Orefield Road towards Route 309.
- d. The plans have been revised to provide some pedestrian sidewalks for internal circulation, and along Orefield Road and Route 309. The proposed pedestrian sidewalks do not provide consistent connectivity throughout the site.
- e. The 2023 Comprehensive Plan recommends maximizing the interrelationship and coordination between all modes of travel, and where appropriate, transportation improvements should be designed as multiple-use facilities for pedestrians, bicycles, public transit, and motor vehicles.
 - i. The plans have been revised to provide for limited pedestrian sidewalks. However, the plans do not provide for bicycle facilities along Route 309 or Orefield Road. The plans show that a bike rack is proposed adjacent to the warehouse. No additional bicycle amenities have been provided.

ii. Additionally, we recommend coordination with LANTA regarding public transportation access to the site. A "Potential LANTA Bus Pull Off" is shown on the plans, with no detailed design of the pull off or bus stop facilities. In addition, there is no indication that the location or size of the pull off are appropriate to accommodate a LANTA bus. The applicant has indicated coordination with LANTA regarding public transportation access to the site is ongoing.

B. Zoning Ordinance Comments

1. Use Regulations

- a. As per ZO Section 440-41.A(77)(a), access to the site shall be from an arterial street as identified on the North Whitehall Township Street Classification Map. The plans propose one access drive onto Route 309 which is classified as a Major Arterial. Additionally, the plans propose an access drive onto Orefield Road which is classified as a Local Road.
 - i. The proposed access drive onto Orefield Road is an exit only from the site.
 - ii. As per a Langan Engineering response letter, dated August 26, 2024, "...primary access for the proposed development is the direct access to Route 309... PennDOT's minimum criteria for the installation of a traffic signal, the proposed site access will be unsignalized. A secondary, exit-only driveway is proposed to Orefield Road...will provide an alternative means of exiting the site for cars and trucks traveling south on Route 309. This intersection of Route 309 & Orefield Road will be improved as part of PennDOT's Route 309 Betterment Project...include widening of Route 309 to provide northbound and southbound left-turn lanes, widening of Orefield Road to provide a westbound left-turn lane, a realignment of Orefield Road to align with Kernsville Road, wider radii to allow for trucks to navigate turns efficiently, and upgrades to the existing traffic signal."
 - iii. We recommend additional information be provided demonstrating that Orefield Road is capable of supporting the increase in truck traffic for all turning movements and the proposed timeline for the PennDOT Route 309 improvements. The applicant has indicated the PennDOT project will be completed by end of 2027/early 2028. However, the applicant has not demonstrated that the intersection of Orefield Road and Route 309 can accommodate the proposed increase in truck traffic while awaiting completion of the PennDOT improvements.
- b. As per ZO Section 440-41.A.(77)(g), sufficient off-street queueing shall be required at facility entrances to prevent vehicles from queueing on public streets while waiting for access to the facility. The plans show queueing for at least fourteen trucks around the facility. The applicant has indicated adequate queuing will be provided. However, the plans should be revised to include appropriate documentation and notes ensuring that queuing will not back up onto public streets.

2. Area and Dimensional Requirements

a. As per ZO Section 440-39.A., the number of access points onto any major arterial street (such as Route 309) shall be held to an absolute minimum. The maximum feasible use shall be made of internal streets. The plan proposes one accessway onto Route 309 and one accessway onto Orefield Road. Orefield Road is not a major arterial, but a local road.

3. Environmental Protection

- a. As per ZO Section 440-46.B, all permits of the Township are issued on the condition that the applicant comply with federal and state wetlands regulations, and such permits may be revoked, delayed or suspended by the Zoning Officer until an applicant proves compliance with such regulations.
- b. ZO Section 440-47 requires setbacks and buffers from surface waters including riparian corridors. The Existing Features Plan indicates the location of a stream and several waterbodies on the site. The plans include an exhibit showing the proposed conservation area of existing forested stream-side areas, including permanent and temporary stream impact. However, additional information may be required identifying the quantity and species of vegetation located in this conservation area.
- c. ZO Section 440-50 pertains to sewage disposal requirements. All methods of wastewater disposal shall meet requirements of the State, any applicable Township Authority and the Official Township Sewage Facilities Plan, as amended, as applicable. We defer any further comment to the Township Engineer.

C. General Comments

- 1. The plans note entrance and roadway improvement design is provided by TPD. Those plans were not included as part of this submission. We defer further comment to the Township Engineer.
- 2. During a site visit conducted by our office on May 22, 2024, several items were noted, specifically related to Orefield Road.
 - a. Orefield Road is a two-lane road, with minimal shoulder area, which is in disrepair.
 - b. The signalized intersection of Route 309 and Orefield Road is not adequately designed to allow for the safe turning of large vehicles, such as tractor trailers.
 - c. As per a Langan Engineering response letter, dated August 26, 2024, "This intersection of Route 309 & Orefield Road will be improved as part of PennDOT's Route 309 Betterment Project. The proposed improvements include widening of Route 309 to provide northbound and southbound left-turn lanes, widening of Orefield Road to provide a westbound left-turn lane, a realignment of Orefield Road to align with Kernsville Road, wider radii to allow for trucks to navigate turns efficiently, and upgrades to the existing traffic signal."
 - d. We defer further comment regarding traffic improvements to the Township Engineer.
- ZO Section 440-63.C requires fire lanes be provided where required by state or federal regulations or other local ordinances. The plans should be revised to show the location of proposed fire lanes. We defer further comment to the Fire Chief.
- 4. ZO Section 440-79.A.(2) requires all uses and structures have adequate provisions for access by emergency vehicles and ladders. We defer comment to the Fire Chief.
- 5. The plans note a visual screen wall between the trailer spaces and detention basin 1. The plans should be revised to include details and specifications for this visual screen wall.
- 6. A detailed response letter addressing the above noted comments and any changes to the plan should be included with future submissions.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Judith Stern Goldstein, R.L.A., ASLA

Senior Project Manager Gilmore & Associates, Inc. //Stacy Yoder, AICI∕ Community Planner Gilmore & Associates, Inc.

JSG/sjy/sl

cc: Board of Supervisors

Planning Commission

Kate Durso, Fitzpatrick, Lentz, & Bubba (FL&B) Jason Engelhardt, P.E., Langan Engineering

Fidel Gonzalez, Langan Engineering

Barry Henry, TCNE North Whitehall 2, LLC

EXHIBIT D

(See attached)

[Insert North Whitehall Township Emergency Services Organization Review Letters Dated 05/14/24, 01/02/25, and 03/21/25]

North Whitehall Township Emergency Services Organization

January 22, 2025

Jeff Mouer North Whitehall Township 3526 Levans Road Coplay, PA 18037

RE: Nexus 78- Rt 309 Plan

Jeff,

I reviewed the Nexus 78-Route 309 final submission plans for the 1/29/2025 PC meeting. Here are my outstanding notes since my last review on 5/14/2024. The final plans did include updates from my last review except the following items should be addressed.

1) Fire Truck Plan

- a. Request the north side driveway be widened for a less restrictive pathway into/out of the facility.
 - i. Specifically, widening is recommended at the entrance to the north entrance to the facility for emergency vehicles to pass vehicles in queue to entrance.
- b. The fire truck turn plan (sheet CS-202) shows some very tight margins that encroach parking areas.
- 2) Rt 309 & Kernsville Rd Intersection Considerations

Emergency situations demand swift and unimpeded movement for fire trucks, ambulances, and law enforcement vehicles. Careful evaluation is required to ensure proper emergency vehicle access at the intersection of Route 309 and Kernsville Road in light of the proposed Nexus 78 planning. The close proximity of the Tri-Clover Volunteer fire station at 4801 Kernsville Road poses a direct need for intersection considerations based on the added vehicle traffic from the proposed warehouse facility.

Based on the total of over 300 responses from the fire station in one year, it is estimated that 280 of these responses will likely pass through the intersection of Kernsville Rd and Rt. 309, which averages to about 23 per month. This intersection creates pathways to the North, South, and East from the fire station, connecting to the most densely populated areas in the township.

This example only covers the response from this one fire station. Alarm escalations necessitate the involvement of mutual aid entities to dispatch response units from various township fire stations, in addition to EMS and police units, all converging at the same intersection. Consideration should also be given to the 97% of the volunteer responders assigned to the Tri-Clover station who are required to commute through this intersection during an emergency response.

I feel this matter needs careful consideration as this project is reviewed and hope that the responsible parties take correct action. Let me know if you have any other questions.

Laury's Station

FIRE

Neffs

Schnecksville

RESCUE



rn Valley

EMS

North Whitehall Township Emergency Services Organization

March 21, 2025

Jeff Mouer North Whitehall Township 3526 Levans Road Coplay, PA 18037

RE: Nexus 78- Rt 309 Plan

Jeff,

This is a follow-up to our meeting on March 18, 2025 regarding the discussion about the access roadway to Rt 309.

2021 INTERNATIONAL FIRE CODE

Section 503.2.1

Fire apparatus access roads shall have an unobstructed width of not less than 20 ft.

Section 503.2.2

The fire code official shall have the authority to require or permit modifications to the required access widths where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

Section 503.4

Fire apparatus access roads shall not be obstructed in any manner. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 shall be maintained at all times.

APPLICABILITY

The facility access road fails to meet the 20ft minimum considering the two-way traffic that is shown on the plan with the fire apparatus movement template. The situation is exacerbated by the steep topography along both sides of the access roadway. The roadway's physical restrictions as presented will pose response limitations to incoming emergency vehicles.

Recommendation: Widen Route 309 access roadway to 40 ft for two-way traffic.

In Community Service,

Jim Steward

President- North Whitehall Township Emergency Services Organization Assistant Twp Fire Marshal

Laury's Station

Neffs

Schnecksville

Tri-Clover

Northern Valley

FIRE

RESCUE

EMS

North Whitehall Township Emergency Services Organization

May 14, 2024

Jeff Mouer North Whitehall Township 3526 Levans Road Coplay, PA 18037

RE: Nexus 78- Rt 309 Plan

Jeff,

I completed an initial fire services plan review for the proposed 547,500 SQFT building on Route 309 that is on the agenda for the upcoming PC meeting.

There are several fire services related items to note.

1) Fire Hydrants

- a. Is there a "will serve agreement" in place for municipal water supply? The plan should not proceed without municipal water.
- Recommend an additional hydrant be placed along both the east and west perimeter trailer spaces. (shown below)
- c. Recommend an additional hydrant be placed on the north driveway prior to entering the north parking area.
 - This hydrant should be supplied from the municipal water supply to provide service in case the private supply/pump becomes disabled or inadequate. (shown below)



- d. All hydrants need parking clearances of a minimum of 20ft and must be clearly marked for "no parking".
- e. Snow poles/signage are recommended to identify hydrants and prevent snow removal from covering or obstructing the hydrant.
- f. Fire department connection (FDC) to the fire protection system must be unobstructed so hose lines can be attached without interference from nearby objects, including buildings, fences, posts, etc.
 - i. Pump house (NE Corner) should have more driveway clearance and emergency access parking around it.

2) Fire Truck Plan

- a. Request the north side driveway be widened for a less restrictive pathway into/out of the facility.
 - Specifically widening should be considered at the entrance to the north entrance to the facility.
- It is relevant to state that the template used on the plan does not completely replicate the township truck.
 - i. The fire apparatus used in this township has a 5-foot front overhanging platform that requires no obstructions along the curbs and parking islands such as light standards and signage. These obstructions cannot impede the overhang of the platform as the platform may overpass the curbs and islands. This can be applied where tight driving paths are depicted on the plan.
- All gates must have emergency services access. Siren activated gate operator is recommended.

In Community Service,

Jim Steward

President- North Whitehall Township Emergency Services Organization

Assistant Twp Fire Marshal

Laury's Station

Neffs

Schnecksville

Tri-Clover

Northern Valley

2021 International Fire Code (IFC)

CHAPTER 5 FIRE SERVICE FEATURES

SECTION 503 FIRE APPARATUS ACCESS ROADS

503.1 Where required.

Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

503.1.1 Buildings and facilities.

Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by arapproved route around the exterior of the building or facility.

Exceptions:

- 1. The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur:
 - 1.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
 - 1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.
 - 1.3. There are not more than two Group R-3 or Group U occupancies.
- 2. Where approved by the fire code official, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

503.1.2 Additional access.

The fire code official is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.1.3 High-piled storage.

Fire department vehicle access to buildings used for high-piled combustible storage shall comply with the applicable provisions of Chapter 32.

503.2 Specifications.

Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

503.2.1 Dimensions.

Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.2.2 Authority.

The fire code official shall have the authority to require or permit modifications to the required access widths where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

503.2.3 Surface.

Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

503.2.4 Turning radius.

The required turning radius of a fire apparatus access road shall be determined by the fire code official.

503.2.5 Dead ends.

Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with arapproved area for turning around fire apparatus.

503.2.6 Bridges and elevated surfaces.

Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges where required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces that are not designed for such use, approved barriers, approved signs or both shall be installed and maintained where

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required by the fire code official.

503.2.7 Grade.

The grade of the fire apparatus access road shall be within the limits established by the fire code official based on the fire department's apparatus.

503.2.8 Angles of approach and departure.

The angles of approach and departure for fire apparatus access roads shall be within the limits established by there code official based on the fire department's apparatus.

503.3 Marking.

Where required by the *fire code official*, *approved* signs or other *approved* notices or markings that include the words "NO PARKING—FIRE LANE" shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which *fire lanes* are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.4 Obstruction of fire apparatus access roads.

Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Sections 503.2.1 and 503.2.2 shall be maintained at all times.

503.4.1 Traffic calming devices.

Traffic calming devices shall be prohibited unlessapproved by the fire code official.

503.5 Required gates or barricades.

The fire code official is authorized to require the installation and maintenance of gates or otherapproved barricades across fire apparatus access roads, trails or other accessways, not including public streets, alleys or highways. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

503.5.1 Secured gates and barricades.

Where required, gates and barricades shall be secured in an approved manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not be trespassed on or used unless authorized by the owner and the fire code official.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

503.6 Security gates.

The installation of security gates across a fire apparatus access road shall be approved by the fire code official. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

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EXHIBIT E

(See attached)

[Insert Lehigh Valley Planning Commission Review Letter Dated May 29, 2024]



DR. CHRISTOPHER R. AMATO Chair

CHRISTINA V. MORGAN Vice Chair

ARMANDO MORITZ-CHAPELLIQUEN
Treasurer

BECKY A. BRADLEY, AICP Executive Director

May 29, 2024

Mr. Randy Cope North Whitehall Manager 3256 Levans Road Coplay, PA, 18037

Re: Nexus 78 – Land Use of Regional Significance North Whitehall Township Lehigh County

Dear Mr. Cope:

The application is considered a Land Use of Regional Significance under *FutureLV: The Regional Plan* in the Warehouse, Logistics and Storage Facilities, Freight Facility Local Freight Generator category. The Lehigh Valley Planning Commission (LVPC) considered the subject application at its Comprehensive Planning Committee and Full Commission meetings, pursuant to the requirements of the Pennsylvania Municipalities Planning Code (MPC). Discussion on agenda items primarily takes place during the Committee meeting. Both meetings were virtual and held on:

- LVPC Comprehensive Planning Committee Meeting
 - o May 21, 2024, at 12:00 PM
 - o https://lvpc.org/lvpc-meetings
- LVPC Full Commission Meeting
 - o May 23, 2024, at 7:00 PM
 - o https://lvpc.org/lvpc-meetings

The application proposes to construct a 547,500-square-foot warehouse at 3121 PA-309 and consolidate four parcels (parcel numbers 546893400322, 547802057486, 547802315657 and 546892310028). A portion of the property not proposed for development is also located in South Whitehall Township. The 71.1-acre site is largely undeveloped, containing an existing residence, agricultural land and woodlands.

The LVPC offers the following comments and recommendations:

Site Suitability

A portion of the site is located in the Farmland Preservation Area of the *FutureLV* General Land Use Plan, and the entire site is within the Preservation Buffer. Areas within the Preservation Buffer may have factors available to accommodate development, and while these areas are recommended to remain agriculture, additional



scrutiny is warranted in determining the appropriateness of growth. The property is zoned Light Industrial (LI), reflecting the Township's intent for development to occur in this location. However, the scale of development must be aligned with the context of the surrounding area. The stated intent of the LI District is 'to meet current and anticipated future regional needs for light industries, offices and limited types of related commercial development' (Township Zoning Ordinance Section 440-31 D. (11)).

The size of the proposed building, over 500,000 square feet and 50 feet high, greatly surpasses the scale of surrounding developments. The roadways were not built to withstand the impact of tractor-trailers, public sewer and water are not available, and overall, the site is not served by adequate infrastructure to accommodate the proposal. Additionally, the proposal is located adjacent to incompatible land uses, including residential neighborhoods and educational facilities, and the site contains High Preservation Priority Natural Resources. The subject property is better suited for smaller-scale low-impact commercial and industrial land uses that support local businesses and residents and can provide a transition between residential and industrial developments.

Due to incompatible neighboring land uses, lack of transportation and utility infrastructure, and topography concerns, the proposed development is found to be generally inconsistent with the goals and policies outlined in *FutureLV: The Regional Plan*.

Natural Features

The project site contains a variety of natural features, including woodlands, hydrographic features with riparian buffers, and steep slopes of 15%-25%. While these features are primarily located in the northern area of the property and the proposed building is situated towards the south to minimize disturbance, a more appropriate form of development would utilize smaller building footprints and increase the buffer between development and natural resourced, including avoiding developing over the hydrographic features and riparian buffers, to 'maximize preservation of woodlands, critical habitats and natural resources in the land development process' (of Policy 3.1) and 'protect the quality and quantity of surface water and groundwater' (of Policy 3.2).

Karst

Mapping provided by the Bureau of Topographic and Geologic Survey at the Pennsylvania Department of Conservation and Natural Resources indicates the presence of karsts in the form of surface mines on the site. Human influence can further lead to sinkholes through soil disturbance (Pennsylvania Department of Environmental Protection).

FutureLV: The Regional Plan discourages development in hazard-prone areas. If this project moves forward, the LVPC urges proper geotechnical testing <u>prior</u> to any land development, to 'minimize environmental impacts of development to protect the health, safety and welfare of the public' (*Policy 3.2*).

Traffic Impacts / Truck Routing

The LVPC reviewed the submitted Transportation Impact Study prepared by Traffic, Planning and Design, last revised August 28, 2023. Freight land uses can have profound impacts on the quality and operation of the transportation network. These impacts can be mitigated and improved by proper planning and being proactive during this review part of the project.

Trip generation estimates for the proposal were calculated utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th edition and Land Use Code (LUC) 150 Warehousing, defined by ITE as "a warehouse is primarily devoted to the storage of materials, but it may also include office and maintenance areas." The proposed 547,500-square-foot warehouse project is estimated to generate an average of 903 total vehicle trips per day, of which 600 are passenger vehicles and 303 are trucks.

Access of the facility by commercial trucks should be adequately prepared for by formalizing a truck routing plan by the developer, and potentially the operator of the facility, in coordination with the Pennsylvania Department of Transportation (PennDOT) and the municipality to ensure proper truck navigation to serve the site and the best possible routes to Route 22, Route 100, Route 873, Route 33, Interstate 78, and Interstate 476 (PA Turnpike). These routes can help mitigate impact to the community by proper communication of preferred truck routes.

The Lehigh Valley Transportation Study (LVTS), the Metropolitan Planning Organization (MPO), for Lehigh and Northampton Counties, has a Transportation improvement Program (TIP) project along the frontage of the project identified as Project ID 102312 "PA 309 Resurfacing". The current project and TIP project may have conflicting areas along the frontage of Route 309. Coordination is strongly recommended, if not already occurring, to ensure the impacts of the proposed warehouse and engineering that has already occurred for the Route 309 project may be able to help the warehouse to incorporate mitigation strategies that may help in the safe and efficient movements of freight and people to and from the project, as well as to the community.

The Pennsylvania Turnpike Commission should be informed and coordinated, if needed, with regard to their bridge on State Route 4003 over the Pennsylvania Turnpike, just east of the project location. Coordination and notification in the change of traffic volumes as well as commercial truck traffic utilizing the bridge would enable proper planning for routine maintenance and other activities to better prepare the bridge to accommodate the growth in traffic, including freight vehicles utilizing Orefield Road east of the project (of *FutureLV* Policies 2.2, 2.4 and 2.6).

The right-out configuration of the driveway on Orefield Road and the impacts to turning movements at Route 309 should be studied as the current and proposed improvements to Orefield Road at Route 309 may not be able to accommodate queuing of vehicles turning to proceed southbound on Route 309 from Orefield Road. Appropriate signage should be provided in the location of Route 309 and Orefield Road intersection as to indicate that commercial vehicles would not be able to access the site from Orefield Road and should utilize the entrance along the frontage Route 309.

It is also of note that Orefield Road becomes Kernville Road west of Route 309. This east west corridor is a key component of community mobility, and it also has a fire department located just west of Route 309 on Kernville Road. The impacts of possible freight vehicle queuing along Orefield and Kernsville Roads and the response of volunteers who staff the fire department should be scrutinized as to allow emergency response to not be impacted in the efforts of the fire department. With no dedicated turn lanes on Orefield and Kernsville Roads, the queuing of freight vehicles as well as the adjacent Parkland School District, school bus garages located to the south of the project at Orefield Middle School may result in unintended delays of transportation mobility of the intersection already in the phasing engineering and design of the project that may not have been studied in the TIS (of *FutureLV* Policies 1.1 and 2.4).

Site Freight and Emergency Access

Turn movements from the full access driveway area are a concern, as there is an elevation change south of the access driveway, with a posted speed limit of 45. The developer should confirm with the municipality and PennDOT the adequacy of safe and efficient turn movements of freight tractor-trailers at this location and any improvements that could be implemented to improve turn movements for tractor-trailers and passenger vehicles of employees and visitors. It is recommended that a warehouse entrance or "truck entrance ahead" sign be erected to communicate to motorists the possibility of trucks turning in contingent on PennDOT approvals.

The gate operations for the high security fenced area should be clarified to enable appropriate access when tractor-trailers need to access a secure location. One guard shack location is shown on the submitted plans, while the other three gate locations do not have a guard shack associated with them. Adequate control of these gates is critical as to not having queuing of freight vehicles in access aisles on site or along roadways in the vicinity of the project.

Gated access is always a concern as far as queuing for tractor-trailers waiting or receiving gate access. There are trailer storage and staging area spaces shown outside of the security area which would enable tractor-trailers to park while waiting for access (of *FutureLV* Policy 2.4).

Truck Parking

The LVPC appreciates the right-sized approach to the staging area parking spaces, by providing the appropriate sizing of seven tractor-trailer 'staging' spaces of 12' x 75' in dimension outside of the security fenced area. It should be made clear whether these spaces are available for tractor-trailer drivers to park overnight long-term making freight movements would be able to park their long term to comply with federal laws regulating the hours of operation for commercial driver license holders. It should be made clear whether these spaces are available for tractor-trailer drivers to park long-term to comply with federal laws regulating the hours of operation for commercial driver license holders. It is strongly recommended that onsite entry signage be provided to communicate the direction to trucks making deliveries to the facility to get authorization to wait in the provided staging parking spaces. The location of these staging area spaces should also incorporate electric hookup amenities to enable the cab portion and potentially refrigerated trailers to operate on electric power rather than diesel fueled engines, while the truck is parked (of *FutureLV* Policy 2.4).

Snow Removal Law

It is recommended that the project incorporate snow removal equipment onsite for the removal of snow and ice from the tops of trucks and trailers as required by Pennsylvania State Law. Truck drivers are required to remove snow and ice hazards but need the appropriate equipment in which to remove the hazard in a safe and efficient manner. Snow removal equipment is becoming more commonplace at freight centric facilities. Having this equipment helps ensure a safe transportation network free of snow and ice that may slide off the tops of trucks and trailers and cause disruptions on the roadway and to other vehicles and multimodal users (of *FutureLV* Policy 1.4).

Freight Facility Amenities

Freight-centric facilities are reliant on tractor-trailers and commercial vehicles to operate and should play a part in accommodating the needs of the vehicles and drivers. Inclusion of a driver lounge with an area for drivers to plan their day, route themselves to their next destination as well as have restrooms and an appropriate place to eat is strongly recommended. A driver lounge can be an area to also communicate area transportation issues such as construction or available fuel locations and repair or maintenance services for their vehicles (of *FutureLV* Policy 2.4).

Air Quality and Congestion Management

It is recommended that parking lots proposed be constructed with the necessary infrastructure to support and integrate electric vehicle charging on site. Electric vehicles are commonplace and most large vehicle manufactures will eliminate fossil fuel vehicles in the next decade or so. The air quality improvements as a result of, decarbonization efforts from the private and public sectors, such as deployment of electric vehicles, are essential to improving air quality in the Lehigh Valley. Convenient charging stations may facilitate more employees who may travel long distances to utilize electric vehicles. In

addition, heavy vehicles and equipment are increasingly electric and alternative fueled, which supports addition, of charging as well.

State Route 309 is listed in the Lehigh Valley Transportation Study (LVTS) Congestion Management Process as a current 2017 (from Walbert to Levans Roads) and future 2040 (from Walbert to Route 873) congested corridor. It is recommended that the developer and municipality engage with PennDOT on strategies to improve congestion along the corridor.

The current TIP project for the Route 309 Resurfacing project may have conflicting areas along the frontage of Route 309, coordination is strongly recommended of the impacts of the proposed warehouse and engineering that has already occurred in may be able to help improve the impacts of the warehouse address mitigation strategies that may help in the safe and efficient movements of freight and people as well as to the community (of FutureLV Policies 2.2 and 3.2).

Multimodal Transportation

Route 309 is listed as a corridor connecting the post war centers of Orefield and Schnecksville in the Transportation Plan within *FutureLV: The Regional Plan*. This corridor also contains a "Multimodal Accessibility Buffer". Post-war Centers were largely developed after the automobile became central to American culture. Designed during and after the inception of the national highway network, they are auto-oriented, generally low-density districts that are difficult to access with anything but a car. Though often near residential neighborhoods and businesses, bicycle, pedestrian and mass transit connections are often limited.

A Multimodal Accessibility boundary along the frontage of the project is an excellent opportunity to incorporate elements of multimodal accessibility transportation options. Coordination with the Lehigh and Northampton Transportation Authority (LANTA) to site or re-site bus stop locations to provide service to employees of the facility.

In the case of this proposal transit service routes are available along Route 309 and should be an important consideration for the development of this employment center and the ability for anyone working there to have access to transportation. It is also recommended that bicycle racks be located at convenient locations near employee entrances to facilitate utilization of alternative to engine powered vehicle modes of transportation (of *FutureLV* Policy 5.2).

It is strongly recommended that sidewalks be provided along the frontage of Route 309 and Orefield Road. It is also recommended that sidewalks also be constructed along both access driveways to the warehouse building itself. This infrastructure is critical to the health and wellbeing of employees and visitors to the warehouse who may wish to utilize sidewalks instead of walking or rolling in the cartways of aisles intended for

motorized vehicles. The pedestrian connectivity of employee access points to available transit at Route 309 is a critical component to providing fair and equitable transportation options for persons of all abilities (of *FutureLV* Policy 5.3).

Currently, there is proposed limited sidewalks and enhanced crosswalks proposed at Orefield/Kernville Road intersection of Route 309 as part of the TIP Project ID102312 Route 309 Resurfacing, which is a project along the Route 309 corridor from Walbert Avenue to Levans Road. The ability to install sidewalk infrastructure now during the construction of this warehouse would enable future connectivity for multimodal users of alternative transportation to have the ability to be in a safe and adequate area. Anytime you can remove vulnerable road users from the cartway of roads and put them in pedestrian infrastructure such as sidewalks is a forward-thinking planning process (of Policy 5.1).

Lehigh and Northampton Transportation Authority (LANTA)

The Lehigh and Northampton Transportation Authority (LANTA) currently provides public transportation in close proximity to the project site, with an existing northbound bus stop (Bus Stop ID 5975) located on Route 309, nearside of the Orefield Road intersection. There are no sidewalks along the project property frontage on Route 309 or Orefield Road, respectively, nor is there pedestrian connectivity proposed within the project site. Given the proposed warehouse use of the project, LANTA anticipates growing ridership at this location. LANTA recommends the property owner/developer to provide pedestrian improvements from the main entrance of the facility to the main corridors of the project site to access the existing bus stop location.

For follow up, please contact LANTA Planner/Land Use Specialist Molly Wood at mwood@lantabus-pa.gov for continued early engagement and discussion.

Sustainable Energy

The LVPC encourages the developer to consider opportunities for incorporating sustainable energy systems that reduce overhead operational costs and 'minimize environmental impacts of development' (Policy 3.1), such as geothermal energy systems, solar panels and greywater reuse for irrigation and plumbing. Incorporating sustainable practices to help to 'reduce climate change impacts' (Policy 3.4).

Stormwater Review

The project site is located within the Jordan Creek watershed. This watershed has a fully implemented Act 167 Stormwater Management Ordinance. Comments related to our review of the project's stormwater management plan are included as attachment 1.

Municipalities, when considering subdivision/land developments, should reasonably attempt to be consistent with *FutureLV: The Regional Plan*, as required by the Pennsylvania Municipalities Planning Code (MPC) [Article 1§105, Article III§303, §304 & §306(a), Article VI§603(j)]. The LVPC review does not include an in-depth

examination of plans relative to subdivision design standards or ordinance requirements since these items are covered in the municipal review.

Representatives of adjacent municipalities have been copied on this letter to 'coordinate land use decisions across municipal boundaries' (of Policy 1.4). Please feel free to reach out with any questions.

Sincerely,

Joseph Dotta

Regional Planner

Jill Seitz

Senior Community Planner

Brian Hite

Transportation Planner

cc:

Barry Henry, Applicant;

Fidel Gonzalez, Project Engineer/Surveyor;

Steve Gitch, North Whitehall Township Engineer;

Dave Manhardt, South Whitehall Township Director of Community Development;

Lee Rackus, Whitehall Township Bureau Chief of Planning, Zoning and Development;

Kal Sostarecz, Upper Macungie Township Director of Community Development;

Jill Seymour, Lowhill Township Municipal Secretary;

Dawn Didra, Heidelberg Township Administrator/Secretary;

Wade Marlatt, Washington Township Manager

ATTACHMENT 1

Act 167 Drainage Plan Review

May 28, 2024

Re: Nexus 78

Plans Dated April 29, 2024 North Whitehall Township Lehigh County

The proposed storm drainage concept presented in the plans and storm drainage calculations dated April 29, 2024 has been reviewed for consistency with the *Jordan Creek Watershed Act 167 Storm Water Management Ordinance*, May 1992. A checklist of the Act 167 review items is attached for your information. As indicated on the checklist, each item of the Drainage Plan has been reviewed for consistency with the Act 167 Ordinance. A brief narrative of the review findings is as follows:

The proposed development is located within drainage district 121 of the Jordan Creek Watershed as delineated in the Act 167 Plan. As such, the runoff criteria for the site are a 30% Release Rate for the 2-year storm and a 100% Release Rate for the 10-, 25- and 100-year return period storms. Based on review of the plans and calculations, the following deficiencies are noted. The drainage boundaries to each point of interest are not clearly shown on the drainage area maps. The overall pre- and post-development drainage area acreages and boundaries should match. Aboveground basins 2 and 3 create new concentrated discharge points at the outfall culverts for which erosion protection should be provided. The orifice elevations on the outlet structure details for aboveground basin 1 and underground basin 1 should be checked and revised. The detail for underground Basin 2 shows a 48-inch rectangular weir that is not included in the calculations. The outfall culvert lengths for underground basin 2, aboveground basin 2 and aboveground basin 3 should be checked and revised as necessary. Storm sewer calculations for the 100-year storm should be provided to assure the full 100-year flows drain to the proposed basins. Infiltration testing data should be provided to support the infiltration rates used by the spray irrigation system. The winter program of the spray irrigation system needs to be addressed to ensure release rates are met year-round. The spray irrigation system calculations and plans should be provided. The plans should provide an easement for the tributary on the site sized per the ordinance requirements. Therefore, the Drainage Plan has been found to be inconsistent with the Act 167 requirements.

Note that only those details of the Drainage Plan included on the checklist have been covered by this review. Therefore, notable portions of the Drainage Plan not reviewed include any aspect of the post-construction storm water management plan concerning water quality, the details and design of any proposed water quality BMPs, the Erosion and Sedimentation Control Plan and the details of the runoff collection system (piping). These items are reviewed by the municipal engineer and/or others, as applicable.

Once the outlined issues have been addressed, the revised plans and calculations will need to be resubmitted to our office. Please call if you have any questions regarding these comments.

Nexus 78 North Whitehall Township May 28, 2024 Page 2

Sincerely yours,

Geoffrey A. Reese, PE

Master Planner and Engineer

Denjam Khadka

Senior Civil/Environmental Engineer

Attachment

LVPC ACT 167 REVIEW CHECKLIST

Developmen Municipality:	Development Name: Nexus 78 Municipality: North Whitehall Township	Watershed:Reviewers:	Jordan Creek Denjam Khadka and Geoffrey Reese, PE
Date:		Checked by:	
Ordinance Reference	ice Item	Consistency w/Ordinance Yes No N/A	Comment
301.A-C	301.A-G. General storm water management requirements	/ X /	See Attachment 1 for details.
主	H. Consideration of volume controls	/ ×	
302.A,E	302.A,B. Applicable Storm Water Management Provisions		
	Subarea(s) Criteria Criteria Key: RR = release rate; PND = provisional no detention		
303.A. B.	Design consistency with applicable provisions from 302.A. and B Mapping of Storm Water Management District Boundaries Downstream capacity analysis	××××	See Attachment 1 for details.
2 더 ^때 . Q 프 ㅡ	Multiple discharge points within a single subarea Multiple discharge points within multiple subareas Documentation of "no harm" downstream Regional or subregional detention analysis Capacity improvements analysis		See Attachment 1 for details.
304.A.	Computation method (rational or soil-cover-complex)		Soil-cover-complex method used.
, ,	Check rational method detention volume vs. TR55 Minimum detention pond freeboard specifications		
іщої	Curve Numbers for soil-cover-complex method		
403.	Drainage Plan Contents	/ X/	See Attachment 1 for details.

EXHIBIT F

(See attached)

[Insert Potential Conditions of Approval]

Potential Conditions of Approval

A. From the KCE Traffic Review Letter and Supplement, both dated April 29, 2025.

- 1. TTs shall be precluded from making a left turn (southbound) from the 309 Driveway onto 309. A note shall be added to the record plan to that effect, said note subject to review and approval by the Township. KCE Traffic Letter 4.29.25, TIS Comments 1, 4.
- 2. The Developer shall specify and install adequate signage (in terms of size, message and location) throughout the Premises in appropriate locations notifying warehouse occupants and truck drivers of the prohibition identified in condition 1, above, and that exiting TTs must utilize the OR Driveway for egress, the wording of such signage and location thereof to be depicted on the Plan, subject to review and approval by the Township. *KCE Traffic Letter 4.29.25, TIS Comments 1, 4.*
- 3. The Developer shall establish, provide notice to employees and TT drivers (including signage) of, and enforce an operational requirement which regulates the timing of TTs exiting from the Premises on to OR in such a manner that prevents blocking or impeding, in whole or in part, the flow of westbound traffic on OR. This shall include but not be limited to the "Interim" and "Betterment Project" conditions." "Blocking or impeding" includes but is not limited to the spillover of TTs from the left turn lane into the through lane. The operational requirement shall be enforced on site at an appropriate location by verbal and physical or mechanical means. This operational requirement and the mechanism(s) of enforcement shall be subject to review and approval by the Township. A note shall be added to the record plan detailing this condition, with said note subject to Township review and approval. *KCE Traffic Letter 4.29.25, TIS Comment 3*.
- 4. The IP and any improvements or modifications included in the most recent version of the TIS and any restrictions involving egress from the Premises via the OR Driveway to 309 shall be submitted to both the PennDOT Permits and Signals departments, for review and approval. Copies of all correspondence, communications, and submissions to and from PennDOT shall be provided to the Township. *KCE Traffic Letter 4.29.25, TIS Comment 2.b.*
- 5 The TIS shall be submitted to both the PennDOT Permits and Signals departments for review and approval, and copies of all correspondence, communications, and submissions to and from PADOT shall be provided to the Township. *KCE Traffic Letter 4.29.25, Comment 2*.
- 6. Based upon condition 1, above, the TIS and HOP Plan shall be revised to address both the "Interim" and the "Final" conditions, including the PennDOT Betterment Project improvements, and both shall be submitted to PennDOT with copies to the Township. KCE Traffic Letter 4.29.25, TIS Comment 2.
- 7. The information and revisions identified and requested by the KCE traffic engineers for the "Interim" conditions shall be made and / or provided to the Township and to PennDOT, and the Developer shall provide to the Township all communications to and from PennDOT regarding the same. KCE Traffic Letter 4.29.25, Comment 2a., c., d., e., and f.



- 8. The KCE traffic review letters and memoranda shall be supplied to PennDOT for review, including the review letter and addendum, each dated 4.29.25, and the review letters dated 9.19.24 and 1. 23.25.
- 9. The following information / revisions should be made to the Langan Engineering Land Development Plan, last revised April 10, 2025; KCE Traffic Letter, 4.29.25, Comment 4 (restriction on left turn from low volume driveway on to 309, appropriate restriction signage on site (in addition to proposed "wayfinding" signs), take steps necessary to ensure that restrictions are enforceable, addition to plan internal signage directing southbound trucks to OR exit and northbound trucks to Route 309 exit, and specifically identify each sign on the Plan). Plan notes to the satisfaction of the Township shall be added concerning tractor trailer egress from low volume driveways.
 - 10. Relocate proposed stop sign. KCE Traffic Letter 4.29.25, Comment 5.
- 11. Provide required and available sight distances based upon Township and PennDOT requirements for the OR Driveway and for all internal intersections. *KCE Traffic Letter 4.29.25, Comment 6; KCE Supplemental Traffic Letter 4.29.25, Comment 1.*
- 12. Provide updated information on Langan Plan Sheet CS-501 as stated. *KCE Traffic Letter 4.29.25, TIS Comment 7.*
- 13. Update the plan to provide all non-standard sign details as stated. *KCE Traffic Letter* 4.29.25. Comment 8.
- 14. Provide required sight triangles for proposed low volume driveways on landscaping plans as stated. *KCE Traffic Letter 4.29.25, Comment 9.*
 - 15. Provide pedestrian crossing signs as stated. KCE Traffic Letter 4.29.25, Comment 10.
- 16. Provide detailed ADA ramp designs, meeting PennDOT requirements as stated. KCE Traffic Letter 4.29.25, Comment 11.
- 17. Provide details for the Interim Condition Plan as stated. KCE Traffic Letter 4.29.25, Comment 12.

From the Gilmore and Associates Review Letter, dated April 29, 2025.

- 18. Provide the additional information requested concerning the Intersection, i.e., that OR can support the increase in TT created by the Plan for all turning movements. *Section B.1.a.*
 - 19. Provide the most current timeline for the PennDOT Betterment Plan. Section B.1.a.
- 20. Demonstrate that there is adequate queueing for TTs entering the Premises, with no TTs or other vehicles permitted to park, stand, or idle on 309 or the right-of-way thereof. Developer to establish and enforce operational and enforcement requirements to avoid such activity with such

requirements subject to review and approval by the Township. A note, subject to Township review and approval, shall be added to the record plan detailing this condition. *Section B.1b.*

- 21. Environmental Protection (B.3)
- a. 440-46.B compliance with federal and state wetlands regulations
- b. 440-77 identification of quantity and species of vegetation located in the proposed conservation area to the satisfaction of the Township
- c. 440-50 sewage disposal shall meet the requirements of the Township Act 537 Plan and the requirements of other government agencies.
- 22. Revise Plan to include the details and specifications for the visual screen wall between the trailer spaces and basin 1. (C. 5).

From the KCE Review Letter (Non-Traffic), dated April 28, 2025.

- 23. Receipt of all outside agency approvals. (II.1)
- 24. Provision of potable water and fire service to the premises and compliance with all requirements of LCA. (II.2)
 - 25. Submission of waterline extension plans to Twp. for review and approval. (II.2)
- 26. Identification and note on the plan regarding responsibility for design, construction, approval, operation, and long-term maintenance of proposed stormwater facilities along Route 309 and Orefield Road to be constructed in accordance with the Plan. (II.4)
 - 27. Disposition of orphaned parcels of ROW along 309 and OR. (II.5)
- 28. Revision of / addition to the Plan to depict spray irrigation distribution piping and all potential conflicts involving other improvements and to depict the spray distribution system. (II.6).
- 29. Provision of sewage treatment for the Premises, including completion of all sewage facilities planning, permitting, design, construction, and approval, with all transmittals and correspondence to and from PADEP to be provided to the Township. (II.7)

From the Township Emergency Services Letters, dated 5.14.24, and 1.22 and 3.22.25.

30. Traffic signals shall be programmed to optimize the free flow of emergency vehicles responding to emergency situations through the Intersection. *NWT ESO Letters dated 5.14.24 and 1.22.25*.

31. Compliance with May 14, 2024, letter, Comment 1 and all subparts (fire hydrants et. al.) and Comment 3 (emergency access using siren activated gate operator). *NWT ESO Letter* 5.14.24.

From the Aubrie Miller (Zoning Officer) Review Letter, dated 4.24.25.

32. Addition of a note on the record plan as set forth in the April 24, 2025, Zoning Officer review letter appearing at the bottom pf page 3 of 5 and extending through the top of page 4 of 5 (said pages erroneously dated "April 23, 2025."

Other general conditions.

- 33. Provision of a bus stop to serve Premises, to be designed, located, and constructed to the satisfaction of LANTA and PennDOT.
- 34. Consultation in good faith consult with abutting property owner Hyrowich Estate and continue to consult with abutting property owners, Samuel and Tammi Claudio to design and install an effective buffer and screen along the Premises property line satisfactory to each party. Unless otherwise agreed by the parties, the Township Engineer shall mediate any dispute.
- 35. The Developer shall execute and the Township shall record a land development improvements agreement for the construction of the required improvements to be secured by an irrevocable stand-by letter of credit. Said agreement and security to the satisfaction of the Township Solicitor.
- 36. The Developer shall execute and the Township shall record a stormwater construction, operation and maintenance agreement to the satisfaction of the Township solicitor.
- 37. Prior to commencing work at the Premises, the Developer and its contractors shall attend a pre-construction conference with Township staff and consultants.
 - 38. The Developer shall pay all applicable fees to the Township prior to plan recording.
- 39. The Developer shall fully reimburse the Township for all review fees paid or incurred during plan review prior to plan recording.
 - 40. The Developer shall receive all necessary Plan approvals from SWT.
- 41. To the extent that any stormwater facilities required by the Plan are located in PennDOT right-of-way, and PennDOT places liability for the same on the Township, Developer shall enter into a stormwater facilities operation, maintenance, repair and indemnification agreement with the Township whereby the Developer agrees to operate, maintain, and repair said facilities and indemnify the Township against all claims, including but not limited to claims by PennDOT. Said agreement to the satisfaction of the Township Solicitor.

EXHIBIT G

(See attached)

[Insert North Whitehall Township Ordinance Excerpts]

Township of North Whitehall, PA Sunday, June 15, 2025

Chapter 375. Subdivision and Land Development

Article I. General Provisions

§ 375-1. Short title.

This chapter shall be known and may be cited as the "North Whitehall Township Subdivision and Land Development Ordinance of 1999."

§ 375-2. Purpose.

This chapter is established to regulate and control the subdivision and development of land within the Township so as to provide sites suitable for human habitation, commercial and industrial operations, and other uses for which land may be developed. In so doing, to create conditions favorable to the health, safety, morals, welfare of the community, and consistent with the goals of the Comprehensive Plan and Chapter 440, Zoning, of North Whitehall Township and the Pennsylvania Municipalities Planning Code.

§ 375-3. Application of ordinance.

- A. No subdivision or land development of any lot, tract, or parcel of land shall be made, and no street, sanitary sewer, storm sewer or water main, gas, oil or utility transmission lines, or other improvements in connection therewith, shall be constructed, initiated, or dedicated for public use or for the common use of occupants of buildings abutting thereon except in accordance with this chapter.
- B. No lot in a subdivision or land development may be sold, and no permit to erect any building or structure upon land in a subdivision or land development may be issued, unless and until a final plan has been approved and recorded and either the required improvements in connection therewith have been constructed or the Township has been guaranteed by means of financial security acceptable to the Supervisors that the improvements will subsequently be installed.
- C. Any improvement to an individual lot, whether required by this chapter or not, shall comply with the provisions of Article X, Design Standards and Required Improvements.



Township of North Whitehall, PA Sunday, June 15, 2025

Chapter 375. Subdivision and Land Development

Article II. Terminology

§ 375-23. Definitions.

The following words and phrases, when used in this chapter, shall have the meanings given to them in this section unless the context clearly indicates otherwise.

ADA

Americans with Disabilities Act.[1]

ADMINISTRATOR

The person designated by the Supervisors who receives subdivision or land development plans or otherwise acts for and on behalf of the Township; also referred to as the "Township Planning Administrator."

[Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]

ADT (AVERAGE DAILY TRAFFIC)

The average number of motor vehicles per day that pass over a given point.

AGRICULTURE

The cultivation of the soil and the raising, harvesting, storage, and sale of tree and field crops; and the raising and keeping of livestock, poultry and other animals (excluding household and farm pets) that can be fed and primarily supported by the land on which such animals are raised.

ALLEY

A vehicle right-of-way having a maximum right-of-way width of 20 feet and that usually provides secondary access to the side or rear on two or more lots.

APPLICANT

A subdivider, or his authorized agent, requesting the approval of a proposed subdivision or land development under this chapter.

APPLICATION FOR DEVELOPMENT

A written form supplied by the Township for a Township approval, decision or permit, including any accompanying site plan and additional information and materials that the Township requires the applicant to submit.

ARCHITECT

A professional architect registered by the Commonwealth of Pennsylvania.

AUTHORIZED AGENT

Any person authorized to act for the applicant, who submits a subdivision or land development plan to the Planning Commission for the purpose of obtaining review and approval thereof.

BERM

A mound or ridge of landscaped earth designed to act as a screen and buffer.

impervious based upon future compaction by vehicles. Areas of land paved for the sole purpose of noncommercial tennis courts, trails or basketball courts or closely similar active outdoor recreation may be deleted from impervious coverage under Chapter **440**, Zoning, of this Code, unless they would also be used for nonrecreational uses (such as parking). However, those areas still count as impervious coverage for the purposes of determining compliance with stormwater regulations.

IMPROVEMENT (BUILDING)

Any expansion of more than 2,000 square feet in the floor area of any nonresidential principal building; conversion of a nonresidential principal building to a new nonresidential principal use but not including routine changes between closely similar uses as determined by the Zoning Officer. Any new or expanded paved area of greater than 10,000 square feet as determined by the Zoning Officer or Township. The above 2,000 square feet shall be measured in aggregate over the entire life of the existing building. All expansions of the building(s) that occurred since the inception of the building shall count toward the above 2,000 square feet increase. Any increase beyond 2,000 square feet shall be considered a land development.

IMPROVEMENTS

Any and all physical additions, deletions, or alterations made to one or more parcels of land and/or structures situate on such land, except those due to natural causes.

IMPROVEMENTS GUARANTEE

Any security which is accepted by the Township to guarantee that certain improvements will be made within the subdivision or land development, including escrow agreements and any other collateral or surety agreements.

IMPROVEMENTS SPECIFICATION

Regulations adopted or approved by the Township pursuant to this chapter imposing minimum standards for the construction of the required improvements such as roads, curbs, sidewalks, sewers, etc.

IMPROVEMENTS, REQUIRED

Any improvement that is required by any one or more of the following:

- A. Any Township ordinance, specifically including but not limited to:
 - (1) This chapter, as amended;
 - (2) Chapter 440, Zoning, as amended;
 - (3) Any Township ordinance adopting and implementing a regional stormwater management plan that is prepared and approved pursuant to Act 167 of 1978;^[3]
 - (4) Any building or construction code or ordinance, as subsequently adopted and amended by the Township.
- B. Any permit or required approval issued by any entity or agency (including successor agencies) other than the Township, including but not limited to:
 - (1) Lehigh Valley Planning Commission;
 - (2) Lehigh County Conservation District;
 - (3) State Department of Labor and Industry;
 - (4) Pennsylvania Department of Transportation (PennDOT);
 - (5) Pennsylvania Department of Environmental Protection (DEP) (formerly "Department of Environmental Resources"), for either water supply, sewage disposal, stormwater management [including National Pollutant Discharge Elimination System (NPDES) permits], dams or stream or woodlands encroachments, and/or earth disturbance permits.

- C. Conditions of approval, and/or waivers or modifications of Township ordinances, as imposed by a final decision of either the Township's Zoning Hearing Board and/or the Township Planning Commission, as approved and/or modified by the Township's Supervisors, as the case may be.
- D. Voluntary agreements, commitments, covenants, and promises by either the applicant, the developer, the owner, or a person acting for them or on their behalf.
- E. Any other applicable law, ordinance, rule, regulation, permit, order or condition of a permit or order, whether by or of the Township or any other governmental agency or entity having jurisdiction.

LAKES AND PONDS

Natural or artificial bodies of water which retain water year-round. Artificial ponds created by dams, or which result from excavation. The shoreline of such water bodies shall be measured from the spillway crest elevation rather than the permanent pool if there is any difference. For the purpose of this chapter, "lakes" are bodies of water two or more acres in area and "ponds" are any bodies of water less than two acres in area.

LAND DEVELOPMENT

The definition in the Pennsylvania Municipalities Planning Code, as amended, shall apply, as may be lawfully adjusted by this chapter, as amended.

LANDOWNER

The owner of a legal or equitable interest in land, including the holder of a written, signed and active option or control to purchase or a person leasing the property (if authorized under the lease to exercise the right of the landowner and if such lease is for a remaining period of at least 12 months) or authorized officers of a partnership or corporation that is a landowner.

LANDSCAPE ARCHITECT

A professional landscape architect registered by the Commonwealth of Pennsylvania.

LEHIGH COUNTY CONSERVATION DISTRICT (LCCD)

The Lehigh County Conservation District.

LEHIGH VALLEY PLANNING COMMISSION (LVPC)

The Lehigh Valley Planning Commission.

LOT

A contiguous separate parcel of land that is recorded or that will be recorded after Township final subdivision approval in the office of the County Recorder of Deeds. A parcel under common ownership that is completely separated into two parts by a public street shall be considered to be one tract but two lots.

LOT AREA

The horizontal land area contained within the lot lines of a lot (measured in acres or square feet).

- A. For the purposes of determining compliance with the minimum lot area, the following shall be excluded:
 - (1) Areas within the designated "future" or "existing" legal rights-of-way of 1) any proposed or existing public streets or alleys or 2) any proposed or existing commonly maintained private streets that serve more than one lot (note: proposed streets are not required to be excluded in determining density of apartments or townhouses under § 440-41 of this Code); and
 - (2) Areas that are currently or will be required to be dedicated as common open space on a separate lot (note: proposed common open spaces are not required to be excluded in determining density of apartments or townhouses under § 440-41 of this Code).

- B. Any building setbacks shall be measured from the foundation, exterior wall or other component of a structure that is closest to the right-of-way line or lot line from which the setback is being measured. See exceptions for eaves and cornices in § 440-79B of Chapter 440, Zoning, of this Code.
- C. Unless otherwise stated, setback distances are for both accessory and principal structures.
- D. Private streets: for a building setback measured from a private street, the setback shall be measured from the existing right-of-way of such a street.

SEWAGE ENFORCEMENT OFFICER

The official of the Township who issues and reviews permit applications and conducts such investigations and inspections as are necessary to implement the Pennsylvania Sewage Facilities Act ^[5]

SIGHT DISTANCE

The length of roadway over which an object is continuously visible to the driver.

SIGHT DISTANCE (CORNER)

The length of highway along which a driver, stopped at an intersection or driveway, can continuously see another vehicle approaching on another roadway or driveway. For purposes of measuring the available corner sight distance, the height of both the driver's eye and the approaching vehicle shall be assumed to be 3.50 feet above the road surface, and the driver's eye shall be assumed to be 10 feet from the near edge of the intersecting roadway or driveway, or the nearest edge of the closest travel lane if parking is permitted on the intersecting roadway or driveway.

SIGHT DISTANCE (STOPPING)

The length of highway over which an object is continuously visible to the driver. For purposes of measuring the available stopping sight distance, the driver's eye height is assumed to be 3.50 feet above the roadway surface and the object is assumed to be six inches above the roadway surface.

NOTES:

- 6.0 feet sight object is used for s.u. design vehicle (industrial type development).
- 3.50 feet sight object is used for passenger car design vehicle.

Sight object should be on center line of driveway, 15 feet to 20 feet from edge of roadway.

SOURCE: PennDOT, Bureau of Traffic Engineering.

SIGHT DISTANCE TRIANGLE

An area required to be kept free of certain visual obstructions to traffic.

SITE

A parcel or parcels of land intended to have one or more buildings or intended to be subdivided into one or more lots.

SITE AREA

All land area within the site as defined in the deed. Area shall be calculated from an actual site survey rather than from a deed description.

SOIL PERCOLATION TEST

A field test conducted to determine the suitability of the soil for a sanitary sewage system by measuring the absorptive capacity of the soil at a given location and depth.

SOIL PROBE

An excavation done to analyze the soil profile and to determine the presence or absence of a limiting zone, in accordance with DEP regulations.

Service prior to occupancy by a water system that does not meet the definition of a "central water service" (i.e., individual well serving an individual lot).

ZONING ORDINANCE

The North Whitehall Township Zoning Ordinance, as amended; see Chapter 440, Zoning, of this Code.

[Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]

- [1] Editor's Note: See 42 U.S.C. § 12101 et seq.
- [2] Editor's Note: See 68 Pa.C.S.A. § 3101 et seq.
- [3] Editor's Note: See 32 P.S. § 680.1 et seq.
- [4] Editor's Note: See 53 Pa.C.S.A. § 5601 et seq.
- [5] Editor's Note: See 35 P.S. § 750.1 et seq.
- [6] Editor's Note: See 53 P.S. § 10509.
- [7] Editor's Note: The Municipality Authorities Act of 1945 (53 P.S. § 301 et seq.) was repealed by Act 22 of 2001 (6-19-2001, P.L. 287, No. 22). See now the Municipality Authorities Act, 53 Pa.C.S.A. § 5601 et seq.

Township of North Whitehall, PA Sunday, June 15, 2025

Chapter 375. Subdivision and Land Development

Article X. Design Standards and Required Improvements

§ 375-54. Overall requirements.

- A. Land shall be suitable for the purpose for which it is to be subdivided or developed.
- B. Hazardous conditions. Subdivisions or land developments subject to hazardous conditions (such as open quarries, hazardous or toxic site pollution, limestone solution channels, sinkholes, unconsolidated fill, floods, excessive erosion or unsafe water supply) shall not be approved until the developer has provided or has legally committed to provide adequate measures to overcome or eliminate the hazards. Floodplain requirements are set forth in Chapter 242, Floodplain Management, of this Code. However, the Township accepts no responsibility to identify hazards or to guarantee their resolution. See § 375-15, Liability, in Article I.
- C. Zoning. All aspects of a proposed subdivision or land development shall conform to Chapter **440**, Zoning, of this Code and all other Township ordinances and specifications.
- D. Nearby development. A subdivision or land development and its street pattern shall be coordinated with existing or approved nearby developments or neighborhoods to help develop the area harmoniously and to help prevent conflicts between neighboring developments.
- E. Safety. No subdivision or land development shall occur in such a way that would significantly threaten the public health and safety, including but not limited to hazards of toxic substances, traffic hazards, explosive hazards and fire hazards.

§ 375-57. Streets and roads.

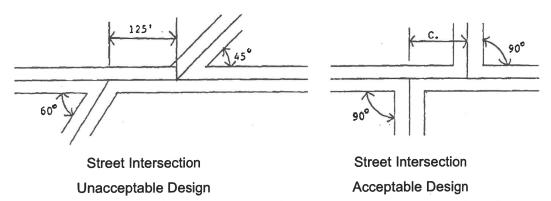
A. General.

- (1) All proposed subdivisions and land developments shall have adequate and safe access to the public street system.
- (2) Streets shall be logically related to topography so as to produce reasonable grades, satisfactory drainage and suitable building sites.
- (3) Residential streets shall be laid out so as to provide for continuation of existing or platted streets and for proper access to adjoining undeveloped tracts suitable for future subdivision.
- (4) If lots resulting from original subdivision are large enough to permit resubdivision, or if a portion of the tract is not subdivided, adequate street rights-of-way to permit further subdivision shall be provided.
- (5) All stub streets of abutting subdivisions shall be incorporated into the street system of the plan by extension or connection with proposed streets by means of a common center line. No lots shall front on stub streets. Stub streets greater in length than one lot depth shall be provided with a temporary turnaround to the standards required for culs-de-sac or shall be paved to the full width of the right-of-way for the last 75 feet of their length.

- (6) Streets that are extensions of or obviously in alignment with existing streets shall bear the names of the existing streets. Street names shall not be repeated within the Township, and all street names shall be subject to the approval of the Supervisors.
- (7) Widening. Where a subdivision or land development abuts or contains an existing street of inadequate cartway or right-of-way width, additional right-of-way and/or cartway width shall be required conforming with § 375-57E, Street standards.
- (8) Additional rights-of-way and cartway widths may be required by the Supervisors, because of unusual densities, unusual dwelling arrangements, increased usage of existing roadways or topographical conditions. Separate left turn or right turn stacking lanes may be required at intersections. A special study, which if mandated by the Supervisors shall be paid for by the developer, may be necessary to determine whether or not the requirements of these standards are applicable.

B. Intersections.

- (1) The center lines of intersecting streets shall intersect at right angles.
- (2) A seventy-five-foot leveling area shall be provided at all intersections, measured from the intersecting center lines, with a maximum grade of 4% through the leveling area.
- (3) Alignment of street intersections.
 - (a) Where a proposed street or nonresidential driveway intersects an existing cross street, such proposed street or driveway shall be aligned with any street intersecting on the other side of the cross street, unless the Supervisors or PennDOT determine that such alignment is not reasonable or feasible.
 - (b) A minimum tangent of 75 feet, measured from point of intersecting center lines, is required between a curve and an intersection for all approach roadways.
 - (c) If a proposed street cannot intersect at the same location as a street on the other side of the cross street, then the proposed street shall be offset by the following minimum distances from the nearest intersection of streets:
 - One hundred fifty feet along a local street;
 - [2] Four hundred feet along a collector street; and
 - [3] One thousand feet along an arterial street.
 - [4] Measurement. The minimum distances of this subsection shall be measured between the points where the center lines of the rights-of-way of the intersecting streets intersect with the center line of the cross street. (See the following figures.)



(d) Collector and local streets shall not intersect on the same side of an arterial street at an interval less than 800 feet.

(4) At street intersections, lot lines shall be rounded by arcs with the radii listed below. The Supervisors may require a larger radius than stated below, if recommended by the Township Engineer.

Type of Street	Minimum Radius of Arc at Intersection of Cartway Edge or Curbline (in feet)	Minimum Radius of Arc at Intersection of Right-of-Way (in feet)
Arterial	40	30
Collector	35	25
Local	35	25

- C. Arterial and collector street frontage. Where a subdivision or land development abuts or contains an existing or proposed arterial or collector street, the Supervisors shall require one or more of the following methods of layout and site design if it determines one or more of these methods will be reasonable, feasible and necessary to avoid increased traffic congestion and improve traffic safety. The Supervisor's decision to use one or more of the following methods will be based on the recommendations of the Planning Commission, the Township Engineer/consultant, any comments from PennDOT and any professional traffic studies that have been submitted. The aforesaid methods are as follows:
 - (1) The use of a marginal access or frontage street or access only onto side or interior streets, to collect traffic from numerous driveways and direct it to a select few number of entrances to the arterial or collector street; and/or
 - (2) The restriction of ingress and egress involving left-hand turns onto or off of the arterial or collector street; and/or
 - (3) The prohibition of driveways from individual dwellings entering directly onto an arterial or collector street.

D. Street access.

- (1) Where a subdivision abuts or contains an existing or proposed major arterial or minor arterial street, the Supervisors may require marginal-access streets or reverse frontage lots or such other treatment as will provide protection for abutting properties, reduction in the number of intersections with the major street, and separation of local and through-traffic.
- (2) Access to parking areas on commercial and industrial sites shall be controlled and shall be so located as to provide a minimum of 80 feet between points of access.
- (3) Private driveways, where provided, shall be located not less than that shown below from the intersecting corner of corner lots and shall provide access to the street of lower classification when a corner lot is bounded by streets of two different classifications as defined herein.
 - (a) Local streets: 30 feet.
 - (b) All other streets: 50 feet.
- (4) No private driveway shall take access to a major arterial street. Driveways shall be so located and designed as to provide required sight distance as listed in § 375-57G.
- (5) For setback distance for driveways from side property lines, see § **440-61D(9)** in Chapter **440**, Zoning, of this Code.
- E. Street standards. For street classification map and tabulation of street names see Chapter **440**, Zoning, of this Code.^[1]
 - (1) Typical roadway cross sections:

	L	ocal Streets		
Adjacent Residential Lot Size	ROW (feet)	Cartway (feet)	Curbing	Sidewalk
Larger than 1/2 acre	50	30	None	None
1/2 acre or less	50	36	Yes	Both sides
				· ·
Collector Streets	ROW (feet)	Cartway (feet)	Curbing	Sidewalk
Minor: 5,000 ADT or less	60	36	Yes	Both sides
Major: greater than 5,000 ADT	70	40	Yes	Both sides
Arterial Streets	ROW (feet)	Cartway	Curbing	Sidewalk
Minor	80	*	*	*
Major	100	*	*	*

NOTES:

- * Arterial streets shall be designed in accordance with PennDOT Design Manual 2 and Publication 70, "Guidelines for the Design of Local Roads and Streets," latest edition and amendments thereto.
 - (2) Vertical curves shall be used at changes of grade exceeding 1%.
 - (a) The minimum vertical curve design shall be:

	Stopping Sight Distance	Design Speed
Street Classification	(feet)	(mph)
Local streets	200	30
Collector streets	375	45

- (b) Speed limit signs shall be installed along proposed roadways.
- (3) Horizontal curves shall connect street lines that are deflected in excess of 2°.
 - (a) The minimum horizontal curve design shall be:

	Minimum Curve Radius	Design Speed	
Street Classification	(feet)	(mph)	
Local streets	200	30	
Collector streets	400	45	

- (b) Speed limit signs shall be installed along proposed roadways.
- (c) The minimum tangent distance between reverse curves shall be 200 feet for arterial and 100 feet for collector and local roads, measured along the road center line.
- (4) Street grades.
 - (a) Center-line grades shall not be less than 1%.
 - (b) The maximum road grades shall be as follows:
 - [1] Local streets: 10%.
 - [2] Collector streets: 8%.

- [3] Arterial streets: 6%.
- [4] Cul-de-sac circle area: 3%.
- [1] Editor's Note: Said map is an attachment to Ch. 440, Zoning, of this Code.
- F. Clear sight triangle.
 - (1) At any intersection of a street with another street(s) or a driveway, clear sight triangle shall be provided. Such triangle shall be graded, cleared and kept clear of sight obstructions (other than official street sign posts) for a height between two feet and 10 feet above the ground level.
 - (2) Such clear sight triangle shall be protected by a permanent deed restriction, covenant stated on the record plan, municipal easement or other legally binding method acceptable to the Township.
 - (3) The minimum clear sight triangle shall be as follows:
 - (a) The two shorter legs of the triangle shall be measured from the intersecting point of the street receiving the traffic and the entering street, accessway or driveway. The two shorter legs shall then be connected by a third leg to form the triangle.
 - (b) The clear sight triangle shall be established by a distance along the center line of the receiving street (established below) and a distance (measured along the center line of the entering street, accessway or driveway) 50 feet back from the existing legal right-of-way line of the receiving street. The following distances shall be used along the center line of the receiving street in each direction from the intersection to establish the clear sight triangle:
 - [1] One hundred fifty feet for any arterial or collector street.
 - [2] One hundred feet for any local street.
 - (c) For an individual driveway serving only one or two dwelling units, the point of measurement shall be 10 feet rather than the 50 feet required in Subsection **F(3)(b)**, above.
 - (4) A clear sight triangle shall be applied for each direction of approach to an intersection.
- G. Sight distance. Safe stopping sight distance (SSSD) for roads and driveways intersecting with existing Township roads.
 - (1) The minimum acceptable sight distance values shall be computed from the following formula:

$$SSSD = 1.47 \text{ Vt} + \frac{\frac{\text{V}^2}{30(\text{f+g})}}{30(\text{f+g})}$$

$$SSSD = \text{Minimum safe stopping sight distance (feet).}$$

$$V = \text{Velocity of vehicle (miles per hour).}$$

$$t = \text{Perception time of motorist (average = 2.5 seconds).}$$

$$f = \text{Wet friction of pavement (average = 0.30).}$$

$$g = \text{Percent grade of roadway divided by 100.}$$

- (2) The Formula Sight Distance Table in Appendix C was produced from the above formula. See also Formula Sight Distance Measurements, also located in Appendix C.^[2]
 - [2] Editor's Note: Said appendix is included as an attachment to this chapter.
- (3) If sight distance requirements cannot be met as specified in this chapter, the Township may:
 - (a) Prohibit left turns by an exiting vehicle;

- (b) Restrict turning movements to right turns in and out;
- (c) Require installation of a right turn acceleration lane or deceleration lane;
- (d) Require installation of a separate left turn standby lane;
- (e) Alter the horizontal or vertical geometry of the roadway; or
- (f) Deny access to the roadway.
- (4) Shoulder upgrading shall be provided where the existing shoulder on either side of the proposed roadway is not adequate to allow its use by turning vehicles.

H. Cul-de-sac streets.

- (1) Cul-de-sac streets shall not be permitted unless the applicant or developer establishes to the satisfaction of the Supervisors that no other street arrangement is feasible because of the topography or other physical conditions of the land being subdivided or developed.
- (2) Cul-de-sac streets shall have a minimum length of 250 feet and a maximum length of 1,000 feet.
- (3) Culs-de-sac shall terminate with a turnaround circle having a radius of not less than 50 feet at the right-of-way line and 40 feet at the edge of pavement.
- (4) A temporary cul-de-sac shall terminate with the cartway paving widened to 50 feet for the last 75 feet.
- (5) The maximum cross slope of the cul-de-sac shall not be more than 3%.
- (6) A snow storage easement shall be established at the end of the cul-de-sac and shall provide for proper drainage as the snow melts. The dimensions of the easement shall be determined by the Supervisors.
- (7) There shall be no more than 24 dwelling units fronting on a cul-de-sac street.

I. Private streets.

- (1) Privately owned and private residential streets shall be approved only if they are designed and constructed to meet public street standards as provided in this chapter.
- (2) Private streets shall be indicated as such on the record plan and shall be subject to contract and guaranty requirements outlined in Article VIII, Improvements Guarantees. The contract shall indicate the corporation, association, condominium, individual or other legal entity responsible for the maintenance of the private streets.

J. Street design and construction.

- (1) Streets shall be graded and constructed to the grades and dimensions shown on the approved plans, profiles and cross sections, as submitted by the developer. Plans shall be developed in accordance with the Typical Street Cross Sections, Curb Details and Drainage Details in Appendix C.[3]
 - (a) The finished street surface shall be crowned in conformance with the typical street cross sections.
 - (b) A proper super-elevation (banked curves) shall be provided on arterial and collector streets when required by the Township Engineer/consultant.
 - [3] Editor's Note: Said appendix is included as an attachment to this chapter.
- (2) Grading.

- (a) The entire right-of-way shall be graded to the approved cross section. All trees, stumps and other material deemed unsuitable by the Township Engineer/consultant shall be removed. The excavated area shall be graded and suitably compacted to the satisfaction of the Township Engineer.
- (b) The developer may be required to grade beyond the right-of-way line in order to provide continuous slope from the right-of-way line to the proposed elevation of the abutting property. Such grading beyond the right-of-way shall generally maintain the original directions of slope except where stormwater runoff designs dictate changes.
- (c) The portion of the approved plan, either preliminary or final, showing proposed grading, shall constitute a covenant running with the land, unless waived by the Supervisors.
- (d) In areas of earth excavation or earth fill, such grading shall be done to a slope not steeper than four horizontal to one vertical. In areas of rock excavation, such grading shall be done to a slope not steeper than two horizontal to one vertical, except as provided in § 440-44B of Chapter 440, Zoning, of this Code.

 [Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]
- (e) In no case shall the required street grading extend onto an adjoining property or lot with a different landowner than the developer, unless the other adjoining property owner gives a written agreement to the developer to accomplish such work.
- (f) The extent of all grading beyond the right-of-way line shall be shown on the plan and shall be covered by a grading easement which shall run with the land.
- (3) Trench excavation. All trenches excavated within the cartway of an existing or proposed public street or right-of-way shall be compacted with backfill material in accordance with Chapter 370, Article I, Openings and Obstructions, of this Code.
- (4) Subgrade. All roadways shall be built upon a properly rolled and crowned subgrade. Unstable subgrade shall be stabilized to the satisfaction of the Township Engineer/consultant before the base course is placed. Areas deemed unsuitable may require undercutting and replacement with suitable material. Subgrade drains or the use of geotextiles at the subgrade elevation may be required to insure stable foundation for the roadway.
- (5) General. All work and materials involved in the construction of these streets shall be in accordance with applicable sections of the Pennsylvania Department of Transportation Form 408 Specifications, as last revised.

K. Required traffic improvements.

- (1) Purpose. In recognition of the provisions of the state traffic impact fee amendments to the PA Municipalities Planning Code, [4] this section is primarily intended to ensure that streets bordering a subdivision or land development are coordinated and of such widths and grades and in such locations as deemed necessary to accommodate anticipated traffic, to facilitate fire protection and to ensure that the access into and out of subdivisions and land developments is sufficiently safe.
 - [4] Editor's Note: See 53 P.S. § 10101 et seq.
- (2) Process. This subsection shall be carried out through determinations of the Supervisors, after considering any recommendations of the Planning Commission, the Township Engineer/consultant, the applicant, the applicant's professional representatives, any comments from PennDOT that may be provided regarding a state road and any professional traffic studies that may have been submitted. See Appendix E, Traffic Impact. [5]
 - [5] Editor's Note: Said appendix is included as an attachment to this chapter.
- (3) Off-site/abutting traffic improvements. If, in the determination of the Supervisors, there is a relationship between the need for an on-site improvement of a street and the traffic created by a proposed subdivision or land development, then the applicant for such subdivision or land

development shall be required to complete the needed improvement or fund his/her fair share of the cost of such traffic improvement and to dedicate sufficient street right-of-way for needed improvements.

- (a) Widening of abutting roads. An applicant for any land development or major subdivision shall be required to pave any existing unpaved street and widen the cartway and any shoulders of abutting streets to Township standards.
- (b) On-site improvements may include, but are not limited to, a new or upgraded traffic signal, land dedication to improve an abutting intersection, realignment of an abutting curve in a road or the widening of the abutting cartway and right-of-way.
- (4) Funding. In place of completing a required street improvement as a condition of final approval, an applicant may enter into a legally binding improvements agreement with the Township for the applicant to fund the improvement, or his/her fair share of such improvement, as determined by the Supervisors.
- (5) Accounting. Any such funds may be placed in escrow until such time as sufficient funds are available for a more comprehensive improvement, with interest being used towards the cost of the improvement. Any such funds received under this subsection shall be accounted for separately.
- (6) Staging. Any completion or funding of a required road improvement may occur in stages in relationship to the stages of the development, if so stated in a legally binding development agreement and/or as a condition of final plan approval.

Chapter 375. Subdivision and Land Development Article X. Design Standards and Required Improvements § 375-67. Access drives and driveways.

- A. See Chapter 440, Zoning, of this Code (§ 440-61D).
- B. Separation from intersection: see § 375-57D(3) in this chapter.
- C. Clear sight triangle: see § 375-57F in this chapter.
- D. Emergency access: driveways shall be designed and constructed to be accessible to emergency vehicles.

SUBDIVISION AND LAND DEVELOPMENT

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Township of North Whitehall

Appendix E
Traffic Impact
[Amended 11-15-2000 by Ord. No. 2000-1]

E.01 TRAFFIC IMPACT REQUIREMENTS. All subdivision and land development projects shall be evaluated to determine the impact of traffic which they generate on the Township's overall highway system. This requirement shall apply to all new subdivisions or land developments proposed and to any expansion of an existing land development which is proposed after the effective date of this chapter. The level of traffic impact shall be determined based on the estimated "trip ends" generated by the proposed uses in the subdivision or land development. "Trip ends" shall be defined as the estimated total number of motor vehicle trips entering and leaving a specific land use or uses located in subdivision or land development per day. These "trip ends" will be determined based on the estimated "trip generation rates" for various types of land uses set forth in the latest edition of the publication entitled "Trip Generation, An Informational Report," published by the Institute of Transportation Engineers.

Information in the above publication such as local similar development counts may be used to estimate the ADT if the Township Engineer, or his designee, considers such information as providing a more applicable estimate of the "trip ends per day" for the specific uses proposed. In the event of disagreement between the Township Engineer and the developer, the Supervisors shall make the final determination of the specific uses in the publication which are more comparable to the proposed use or uses in the subdivision or land development for the purpose of estimating the ADT.

E.02 DETERMINATION OF MAJOR/MINOR TRAFFIC IMPACT.

- A. Major traffic impact. Any proposed subdivision which has an estimated ADT in excess of 500 (one single-family residence = 10 ADT) and all land developments and expansions of land developments, regardless of estimated ADT, shall be considered to have a "major traffic impact," and shall be treated hereafter as a "major traffic impact project." A major traffic impact study (Section E.05) shall be prepared for every major traffic impact project, unless the Supervisors determine that a study is not required. In lieu of the study, the Supervisors shall request a monetary contribution to the township Traffic Impact Study Account. The amount of the contribution will be determined by the Supervisors and will approximate the cost of the study, had it been required.
- B. Minor traffic impact. Any proposed subdivision which has estimated ADT of 500 or less shall be considered to have a "minor traffic impact," in which event the owner/developer of the proposed subdivision shall contribute \$200 per newly created lot to be used or intended to be used for a dwelling unit, to the Township Traffic Impact Study Account, prior to the recording of a subdivision plan. The Supervisors shall have the discretion to require a minor traffic impact project to comply with the requirements of a major traffic impact project, in lieu of the said contribution, if the Supervisors determine that traffic generation in the vicinity of the proposed subdivision warrants such a study.

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- E.03 PHASED PROJECT. In the event that a subdivision or land development is to be phased over a period of time, the total traffic impact for the entire subdivision or land development shall be used in determining the traffic impact. Wherever possible, the developer shall identify all subsequent phases of a subdivision or land development at the time of submission of the initial phase. If the developer fails to identify all subsequent phases of development, then the anticipated traffic impact will be based upon ADT estimated from the highest density development permitted by Chapter 440, Zoning, for the zoning district(s) in which the development is located.
- E.04 <u>REQUIREMENTS FOR PROJECTS HAVING A MAJOR TRAFFIC IMPACT</u>. All subdivisions, land developments and expansions of land developments which are determined to have a major traffic impact shall comply with the following:
- A. All such subdivisions and land developments, or expansions of land developments, shall have direct access to an arterial road or to a collector road in the Township, as identified in § 375-57E of Article X of this chapter. In lieu of such access, the developer shall upgrade the roads providing access to the subdivision or land development to the standards for a collector road for the full distance from the subdivision or land development site to the existing collector or arterial roads most likely to provide the primary means of access for the subdivision or land development.
- B. All subdivisions, which have an estimated ADT exceeding 500 vehicles per day, and all land developments, or expansions of land developments, regardless of estimated ADT, shall be required to submit a traffic impact study prepared by a professional engineer, duly registered to do business in the Commonwealth of Pennsylvania, unless the Supervisors deem otherwise.
- E.05 MAJOR TRAFFIC IMPACT STUDY. A major traffic impact study shall include at least the following:
- A. Identification of all roads, intersections, and corridors serving and substantially impacted by the subdivision or land development.
- B. An analysis of the likelihood that the users or residents of the proposed subdivision, land development or expansion of land development will use these major roads, intersections and corridors.
- C. Existing traffic conditions (without the proposed subdivision, land development or expansion of land development) including traffic volumes (ADT) and peak-hour volumes on the roadways identified as being impacted by the subdivision, land development, or expansion of land development, based on PennDOT information, surveys and trip generation rates. (In addition, land development project shall provide weekend traffic volume data at peak hours if applicable to the development).
- D. Projected traffic conditions (without the subdivision, land development or expansion of land development) based on trends in growth of traffic for ADT and peak-hour volumes.

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(In addition, land development projects shall provide weekend traffic volume data at peak hours if applicable to the development.)

- E. Estimates of traffic volumes (ADT), weekday peak-hour volumes and weekend peak-hour volumes after development of all stages of the subdivision, land development or expansion of land development.
- F. Highway and intersection traffic capacities and levels of service for the roadways identified in Subsection A above, taking into consideration the data generated pursuant to Subsections B, C, D and E above. These levels of service shall be as defined in the Highway Capacity Manual as utilized by the Pennsylvania Department of Transportation.
- G. Identification of existing and projected traffic problems on roads serving the subdivision, land development or expansion of land development, or substantially impacted by the subdivision, land development or expansion of land development, including highway capacity deficiencies for the various roads and intersections involved.
- H. Solutions proposed by the developer to alleviate the projected problems and deficiencies and the estimated cost of these solutions.
- I. Identification and analysis of high accident areas located in proximity to the subdivision, land development or expansion of land development, as identified by the Township Engineer, and the affect which the proposed subdivision, land development or expansion of land development will have on the high accident areas and locations. The study should follow the most recent regulations of the Pennsylvania Department of Transportation if the development fronts along a state highway.
- J. The study shall also include the following certifications; sealed by a professional traffic engineer or a competent professional engineer licensed in this commonwealth:
 - 1. That, in preparation of the study, the Township Comprehensive Plan, this chapter, and Chapter 440, Zoning, as amended, and any pertinent Township or other traffic or transportation plan or study as identified by the Supervisors and Planning Commission has been considered.
 - 2. In the professional opinion of the preparer, the completed major traffic impact study has given adequate consideration to all available information; including other projects being developed simultaneously in the same corridor, includes reasonable projections and analyses of the factors considered, and represents the best opinion of the preparer of the likely traffic impact of the subdivision, land development or expansion of land development.
 - 3. That, if it has not been possible to fully analyze all relevant factors, then those factors not analyzed have been identified by the study, together with the reasons for their exclusion from the study.
- E.06 <u>MAJOR TRAFFIC IMPACT STUDY REVIEW.</u> The major traffic impact study shall be reviewed by the Supervisors, Planning Commission and Township Engineer in connection

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with the preliminary stage of the subdivision and land development review process. The Supervisors, Planning Commission and Township Engineer may request additional data or information to clarify the findings set forth in such a study. The Supervisors shall not approve any proposed major or minor subdivision, land development or expansion of land development if it determines that any traffic problem to be created by the proposed subdivision, land development or expansion of land development cannot be adequately alleviated by the developer.

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Traffic Impact Study Checklist

1. Project information:

- a. Applicant and project name;
- b. Site location;
- c. Identification of transportation study area, including relevant intersections and corridors;
- d. Identification of existing and proposed site use(s) including a description of intensity of development (e.g., number of dwelling units, square footage of office space, etc.);
- e. Identification of current and proposed land uses within the study area. This information will be utilized to verify background traffic growth in the latter portion of the study.

2. Description of existing traffic conditions:

- a. Peak-hour volumes for major corridors, including vehicle mix;
- b. Turning movement counts at critical intersections;
- c. Level of service (LOS) calculations, based on the Transportation Research Board Highway Capacity Manual (latest edition);
- d. Identification of any safety concerns.
- 3. Description of future traffic conditions (without development) (note: "future" is defined as the year the development is completed):
 - a. Growth in "background" traffic ("background traffic" is that traffic passing through the study area not resultant from the proposed project);
 - b. Peak-hour volumes for major corridors, including vehicle mix;
 - c. Projected turning movement counts at critical intersections;
 - d. LOS calculations;
 - e. Identification of any safety concerns.

4. Site traffic generation characteristics:

- a. Proposed average daily trip generation and peak-hour conditions, including vehicle mix, if applicable, based on ITE Trip Generation (latest edition);
- b. Proposed trip distribution and destination patterns;
- c. Proposed effect, if applicable, of mass transit, or other strategies to reduce personal vehicle trips.

5. Description of future traffic conditions (with development):

- a. Peak-hour volumes for major corridors, including vehicle mix;
- b. Projected turning movement counts at critical intersections;
- c. LOS calculations;
- d. Identification of any safety concerns;
- e. Analysis/identification of any resultant traffic problems: LOS D or worse.

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- 6. Recommendations and conclusions:
 - a. Proposed recommended improvements: goal of LOS C or better; any proposed improvements should include transportation management strategies, where appropriate;
 - b. LOS with proposed improvements;
 - c. Improvements financing: must be consistent with PA Act 2091 impact fee legislation;
 - d. Prioritization and schedule of improvements.

NOTE: The TIS guidelines presented herewith should be utilized in conjunction with municipal and state requirements.

¹ Editor's Note: See 53 P.S. § 10501-A et seq.

Chapter 440. Zoning

Article I. General Provisions; Administration

§ 440-1. Title.

A new ordinance:

- A. Dividing North Whitehall Township into districts with varying regulations;
- B. Permitting, prohibiting, regulating and determining the uses of land, watercourses and other bodies of water, the size, height, bulk, location, erection, construction, repair, expansion, razing, removal and use of structures, the areas and dimensions of land and bodies of water to be occupied by uses and structures, as well as yards and other open areas to be left unoccupied;
- C. Establishing the maximum density and intensity of uses;
- D. Providing for the administration and enforcement of this chapter in accordance with the Pennsylvania Municipalities Planning Code, [1] including provisions for special exceptions and variances to be administered by a Zoning Hearing Board and conditional uses to be administered by the Board of Supervisors; and
 - [1] Editor's Note: See 53 P.S. § 10101 et seq.
- E. Establishing provisions for the protection of certain natural features.

§ 440-2. Short title.



This chapter shall be known and be cited as the "North Whitehall Township Zoning Ordinance" of 2002.

§ 440-24. Submission requirements for certain site plans.

The following information, as applicable, shall be submitted by the applicant for any conditional use or any use required to submit a site plan under § 440-23 or 440-25 or 440-26 except for information waived by the Zoning Officer as not applicable or necessary:

- A. A statement describing the proposed use.
- B. Layout. A site layout, drawn to suitable scale (preferably one inch equals 50 feet), showing the location, dimensions and area of each lot; the location, dimensions and height of proposed and any existing structures; the required setback areas; the proposed density of residential uses; the location and width of proposed or abutting streets; and the proposed areas to be used for different purposes within the development, including outdoor storage or display areas. If the plan involves one phase of what eventually may be a larger development, then the interrelationships of those phases shall be shown.
- C. Landscaping. The width of any buffer yard and the heights, spacing and general species of plants to be used for screening. General numbers, locations and types of landscaping to be provided in

off-street parking lots, along streets and in other areas.*

- D. Parking. The locations and numbers of parking spaces; the location and widths of aisles; the location and sizes of off-street loading areas. The method of calculating the off-street parking requirement, based upon § 440-59.*
- E. Lighting and signs. The height, location and approximate intensity of exterior lighting. The sign area, height, location and general method of lighting of signs.*
- F. Sidewalks. The location of any proposed sidewalks (with width) and curbing.
- G. Utilities. Note stating general proposed method of providing wastewater treatment and water supply (such as "on-lot well and on-lot septic services").
- H. Nuisances and safety. A description of any proposed industrial or commercial operations or storage in sufficient detail to indicate potential nuisances and hazards regarding noise, large trucks, glare, air pollution, odors, dust, fire or toxic or explosive hazards or other hazards to the public health and safety, together with a description of proposed methods to control such hazards and nuisances.
- I. Grading and stormwater. Proposed and existing contours. Identification of any slopes between 15% and 25% and greater than 25% proposed to be impacted. These slopes must be identified by different shading on the site plan. Proposed method of managing stormwater runoff. See steep slope provisions in § 440-48 and the Township's Act 167 Stormwater Ordinances. [1] Delineation of any floodplains from the Official Federal Emergency Management Agency Floodplain Maps and any wetlands must be shown on the site plan.*
 - [1] Editor's Note: See Ch. 363, Stormwater Management.
- J. Approximate lot lines of abutting lots within 50 feet of the project, with identification of abutting land uses.
- K. Zoning district and major applicable requirements.
- L. Name and address of the person who prepared the site plan, the applicant and the owner of record of the land.
- M. Such other data or information as the Zoning Officer deems is reasonably necessary to determine compliance with Township ordinances and/or that is listed on the official Township application form.
- * This information is not required on a zoning site plan if such information will be submitted on a subdivision or land development plan for the proposed use.

Article II Terminology

§ 440-29 Word usage.

For the purposes of this chapter, words and terms used herein shall be interpreted as follows:

- A. Words in the present tense shall include the future tense.
- B. "Used" or "occupied" as applied to any land or building include the words "intended, arranged, or designed to be used or occupied."
- C. "Should" means that it is strongly encouraged but is not mandatory. "Shall" is always mandatory.
- D. The singular shall also regulate the plural and vice-versa, unless stated otherwise. The masculine gender shall include the feminine and neuter, and vice-versa.
- E. If a word is not defined in this chapter, but is defined in Chapter 375, Subdivision and Land Development, as amended, the definition in that chapter shall apply. If a word is defined in both this chapter and another Township ordinance, each definition shall apply to the provisions of each applicable ordinance.
- F. Any word or term not defined in this chapter or in Chapter 375, Subdivision and Land Development, as amended, shall have its plain and ordinary meaning within the context of the section. A standard reference dictionary should be consulted.
- **G.** The words "such as," "includes," "including" and "specifically" shall provide examples. These examples shall not, by themselves, limit a provision to the examples specifically mentioned if other examples would otherwise comply with the provision.
- H. The word "person" includes a firm, company, corporation, partnership, trust, organization or association, as well as an individual.

§ 440-30 Definitions.

When used in this chapter, the following words, terms and phrases shall have the following meanings, unless expressly stated otherwise or unless the context clearly indicates otherwise:

ABUT or ABUTTING

Areas of contiguous lots that share a common lot line, except not including lots entirely separated by a street or a perennial waterway. See definition of "adjacent."

ACCESS DRIVE or ACCESSWAY

A type of driveway that serves two or more principal or accessory commercial, institutional or industrial buildings, structures or uses.

ACCESS POINT

One combined entrance/exit point, or one clearly defined entrance point separated from another clearly defined exit point. This term shall not include accessways or driveways that are strictly and clearly limited to use by only emergency vehicles; such accesses are permitted by right as needed.

ACCESSORY STRUCTURE (includes "accessory building")

A structure serving a purpose customarily incidental to and subordinate to the use of the principal use and located on the same lot as the principal use. Accessory structures include but are not limited to a household garage, household storage shed, private playhouse, detached carport, household greenhouse, a household swimming pool, or an accessory storage building to a business use. An "accessory building" is any accessory structure that meets the definition of

- (2) Provides care within a dwelling unit; and
- (3) Is registered with the applicable state agency.*
- D. Child day-care center. A type of day-care use that:
 - (1) Provides care for seven or more children at any one time who are not relatives of the primary caregiver;
 - (2) Does not meet the definition of a "group day-care home"; and
 - (3) Is registered with the applicable state agency.* See § 440-41.
 - * The Pennsylvania Department of Human Services, or its successor.

DAYS

Calendar days.

DENSITY

The total number of dwelling units proposed on a lot divided by the lot area, unless otherwise stated.

DEVELOPMENT

Construction, erection or expansion of a structure or mining, dredging, filling, grading, paving, excavation or drilling operations. The term also includes any activities defined as "land development" under the North Whitehall Township Subdivision and Land Development Ordinance in Chapter 375 of this Code.^[5]

DISTRIBUTION

The processing of materials so as to sort out which finished goods are to be transported to different locations, and the loading and unloading of such goods. This use usually involves inventory control, material handling, order administration and packaging. Specifically, a use that primarily involves either loading materials from tractor trailers onto smaller trucks or loading materials from smaller trucks onto tractor trailers shall be considered a distribution use. This term shall not include a trucking company terminal.

DISTRICT (or ZONING DISTRICT)

A land area within the Township within which certain uniform regulations and requirements apply under the provisions of this chapter.

DORMITORY

A principal or accessory building that is used primarily as living quarters and is occupied exclusively by bona fide full-time faculty or students of an accredited college or university or state-licensed teaching hospital or accredited public or private primary or secondary school.

DRIVE-THROUGH SERVICE

An establishment where at least a portion of patrons are served while the patrons remain in their motor vehicles.

DRIVEWAY

A privately owned, constructed, and maintained vehicular access from a street to one or two principal buildings, uses or structures, or accessory buildings, uses or structures, and which does not meet the definition of a street or an alley.

DWELLING

A building used as nontransient living quarters, but not including a boardinghouse, hotel, motel, hospital, nursing home or dormitory. A dwelling may include a use that meets the definition of a "sectional home." This chapter categorizes dwellings into the following types:

U.S. MAILBOX OR NEWSPAPER RECEPTACLE SUPPORT POST

A post or column made of wood, metal, plastic, PVC or like material. The footprint of said post shall not exceed 144 square inches. Stone, concrete, brick or block structures are not considered a mailbox or newspaper receptacle support post.

[Added 3-21-2007 by Ord. No. 2007-5]

USE

The purpose, activity, occupation, business or operation for which land or a structure is designed, arranged, intended, occupied or maintained. Uses specifically include, but are not limited to, the following: activity within a structure, activity outside of a structure, any structure, recreational vehicle storage or parking of commercial vehicles on a lot.

VARIANCE

The granting of specific permission by the Zoning Hearing Board to use, construct, expand or alter land or structures in such a way that compliance is not required with a specific requirement of this chapter. Any variance shall only be granted within the limitations of the Pennsylvania Municipalities Planning Code. [16] See Article I.

VETERINARIAN OFFICE

A building routinely used for the treatment of animals and related accessory housing or boarding of sick animals. Treatment of large animals includes all types of animals, including horses, cows and pigs. Housing of primarily healthy animals shall be considered a kennel and shall meet the requirements of that use.

WALL

See "fence."

WAREHOUSE

A building or group of buildings primarily used for the indoor storage, transfer and distribution of products and materials that have been manufactured, assembled, or harvested, or are being stored for manufacture, assembly or processing, by the owners of the warehouse. Office space associated with each warehouse building may be included. This chapter categorizes warehouses into the following subcategories:

[Amended 11-8-2021 by Ord. No. 2021-4]

A. SMALL WAREHOUSE

Any warehouse, as defined, with a gross floor area of less than 25,000 square feet.

B. LARGE WAREHOUSE

Any warehouse, as defined, with a gross floor area of 25,000 square feet or more.

WAREHOUSE/TRUCKING COMPANY TERMINAL

A building or group of buildings primarily used for the indoor storage of a large variety of materials, including materials owned by numerous entities, being transported to a site to be unloaded primarily from tractor trailer trucks and reloaded onto tractor trailer trucks and may or may not include storage of these materials at the facility. Office space associated with each warehouse building may be included.

WATER SERVICE

Provision of potable water to a use.

A. CENTRAL WATER SERVICE

Service prior to occupancy by a central water system that transmits water from a common source and is operated by:

- (1) A water system in municipal ownership; or
- (2) A water system that meets the applicable criteria below regarding private ownership and that already serves and/or receives municipal approval to serve 30 or more

Chapter 440. Zoning

Article III. Districts

§ 440-31. Designation of districts and purposes.

A. For the purpose of this chapter, North Whitehall Township is hereby divided into the following zoning districts:

[Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]

CR	Conservation Residential District
AR	Agricultural- Rural Residential
AR-I	Agricultural- Rural Residential- Institutional Option
AR-L	Agricultural- Rural Residential- Livestock
SR	Suburban Residential District
VR	Village Residential District
VC	Village Center District
C	Commercial District
C-2	Commercial District, Development
PC	Planned Commercial Option District
LI/B	Light Industrial/Business District
ME/I	Mineral Extraction/Industrial District

- B. For the purposes of this chapter, the zoning districts named in § 440-31A shall be of the number, size, shape and location shown on the Official Zoning Map.^[1] Any use of the abbreviations listed in § 440-31A shall mean the district name that is listed beside the abbreviation.
 - [1] Editor's Note: A copy of the Zoning Map is included as an attachment to this chapter.
- C. Floodplain. The floodplain area, as defined by Chapter 242, Floodplain Management, of this Code, shall serve as an overlay area to all of the underlying districts.
 [Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]
- D. Purposes of each district. The purposes of each zoning district are summarized below:
 - (1) CR District. To provide for development only at very low intensity within areas that are very environmentally sensitive or that have inadequate road access. To seek to preserve the water quality of important creeks. To recognize areas that include significant amounts of wetlands, high-water table soils and flood-prone areas. To direct development toward areas of the Township that are more environmentally suitable. To provide for development only at a very low intensity in areas where public water and sewer service are less likely to be able to be efficiently provided. To encourage the preservation of farmland open space areas, woodland and natural resources by directing growth to occur at higher densities in areas where central utilities can be efficiently provided. To seek to minimize conflicts between agricultural and residential uses.

- (2) AR District. To provide for development only at a low intensity in areas where public water and sewer service are less likely to be able to be efficiently provided. To encourage the preservation of farmland by directing growth to occur at higher densities in areas where central utilities can be efficiently provided. To seek to minimize conflicts between agricultural and residential uses. To also recognize that many of these areas have already developed or been approved for single-family detached houses in a semirural setting.
- (3) AR-L District. To serve the same purposes as the AR District, and also to provide appropriate locations for substantial concentrations of intense livestock uses.
- (4) AR-I District. To serve the same purposes as the AR District, and also to provide appropriate locations for significant institutional uses.
- (5) SR District. To provide for the orderly expansion of neighborhoods of single-family detached houses and other compatible housing types at a low to medium density. To carefully protect these areas from incompatible uses. To vary the density depending upon utilities. In most cases, the SR Districts are located around the VR Districts, creating a step down in density.
- (6) VR District. To provide for a full variety of carefully designed housing types at medium high densities. To make sure that varied housing types are compatible with any existing single-family detached houses. To make sure that the street system of the Township and other community facilities and services are fully able to handle moderately dense growth in an area. To work to encourage affordable housing, especially for young families, senior citizens and nontraditional types of households. To allow for flexible site layouts with common open space. To only provide for townhouses and apartments where both public water and central sewer service are available. To recognize older residential areas of the Township.
- (7) VC District. To provide for a carefully controlled selection of small, light convenience commercial uses that will be compatible with adjacent residences, areas of smaller lots and historic areas. To recognize that many of these areas include a mix of homes and businesses. To provide for a selected variety of housing types.
- (8) C District. To provide for a wide range of needed commercial uses in locations that are less likely to involve conflicts with existing residences and that have excellent access to major highways. To use special care and control on access onto arterial and collector streets to avoid traffic hazards. To avoid very large commercial developments that are likely to attract high amounts of new traffic from outside of the Township. To provide for intense commercial uses in key locations dispersed between a few different areas of the Township. To mainly provide commercial uses in areas that are already commercially oriented.
- (9) C-2 District. To provide for a specified range of needed commercial uses in locations that are suitable for the development of such businesses utilizing one or more parcels for the land development and providing infrastructure improvements in problematic areas. To improve traffic safety and to coordinate local improvements with the Township. To recognize existing traffic capacity issues and create development toward the resolution of those issues. To direct commercial uses where demand is present and compatible with existing features and uses. To direct commercial uses to areas of enhanced access and away from low-density residential areas.
- (10) PC District. To provide the same uses as are permitted in the VR District. In addition, to offer a variety of nonresidential development with carefully planned and coordinated traffic circulation as an option to the applicant if the applicant proves that the road system will be able to efficiently and safely support the development and that there will be suitable access to reach an arterial street. If an applicant is not able to comply with the traffic access and other requirements as provided in § 440-38, then the applicant shall still have opportunities for a reasonable variety of residential uses of his/her land under the VR District.
- (11) LI/B District. To provide sufficient space in appropriate locations to meet current and anticipated future regional needs for light industries, offices and limited types of related commercial development. To carefully control uses to protect the public health and safety. To

- maintain an attractive physical environment with a campus-like setting that will aid in attracting new businesses. To encourage development that follows an overall plan with common design and landscaping plans. To seek a unified and well-planned system of providing vehicular access to avoid many individual unplanned driveways entering onto arterial streets.
- (12) ME/I District. To provide for a wide variety of industrial uses in areas that are less likely to impact upon existing neighborhoods. To control the operations of these uses to prevent nuisances and to protect the public health and safety. To provide a suitable area for mineral extraction, processing of construction materials, and related uses, while protecting nearby uses and the environment from undesirable impacts.

§ 440-32. Applicability.

- A. The regulations set by this chapter shall apply uniformly to each class or kind of structure or land, except as provided for in this chapter.
- B. No structure shall hereafter be erected, used, constructed, reconstructed, structurally altered or occupied and no land shall hereafter be used, developed or occupied unless it is in conformity with the regulations herein specified for the use and district in which it is located.
- C. No yard or lot existing at the time of passage of this chapter shall be reduced in dimension or area below the minimum requirements set forth herein. Yards or lots created after the effective date of this chapter shall meet at least the minimum requirements established by this chapter.
- D. Boundary change. Any territory which may hereafter become part of the Township through annexation or a boundary adjustment shall be classified as the zoning district of North Whitehall Township that is mostly closely adjacent to such land (as determined by the Zoning Hearing Board) until or unless such territory is otherwise classified by the Board of Supervisors.

indicated by dimensions.

- D. Interpretation of boundaries. See § 440-12D.
- E. Where a municipal boundary divides a lot, the minimum lot area shall be regulated by the municipality in which the principal use(s) are located, unless otherwise provided by applicable case law.

§ 440-35 **Setbacks across municipal boundaries.**

- A. Intent. To continue the objective of compatible land uses across municipal boundaries.
- B. This chapter requires additional setbacks and the provision of buffer yards when certain uses would abut an existing dwelling or a residential zoning district.
- C. These same additional setback and buffer yard provisions shall be provided by uses proposed within North Whitehall Township regardless of whether such abutting existing dwelling or principally residential zoning district is located in an abutting municipality and/or in North Whitehall Township.

§ 440-36 Table of Permitted Uses by district.

A. For the purposes of this § 440-36 and its Table of Permitted Uses, [1] the following abbreviations shall have the following meanings:

KEY		
P	=	Permitted by right (zoning decision by Zoning Officer)
С	=	Conditional use (decision by the Board of Supervisors with review by Planning Commission)
SE	=	Special exception use (decision by Zoning Hearing Board)
N	=	Not permitted
§ 440-41	=	See additional requirements in § 440-41
§ 440-42	=	See additional requirements in § 440-42
(SW)	- =	Approved central sewer and public water service both required
(S)	=	Approved central sewer service required
(W)	=	Public water service required

[1] Editor's Note: The Table of Permitted Uses is included as an attachment to this chapter.

B. Interpretation.

- (1) Unless otherwise provided by law or specifically stated in this chapter (including § 440-12B), any land or structure shall only be used or occupied for a use specifically listed in this chapter as permitted in the zoning district where the land or structure is located. Such uses shall only be permitted if the use complies with all other requirements of this chapter, including, but not limited to, the environmental protection requirements of Article V.
- (2) See § 440-12B, which generally provides a process for approval of a use that is not listed, based upon similarity to permitted uses and other criteria. Except as provided in such § 440-12B, any other principal use that is not specifically listed as P, SE or C in the applicable district in this table is prohibited in that district.
- (3) The following Table of Permitted Uses^[2] is divided into two parts: residential districts and business districts. For uses in the PC District, see § 440-38. For temporary uses, see § 440-12.
 - [2] Editor's Note: The Table of Permitted Uses is **included as an attachment to this chapter**.

ZONING

440 Attachment 1

Township of North Whitehall

Table of Permitted Uses § 440-36

[Amended 11-8-2021 by Ord. No. 2021-4; 12-6-2021 by Ord. No. 2021-6; at time of adoption of Code (see Ch. 1, General Provisions, Art. I)]

KE	EY:		
	P	=	Permitted by right (zoning decision by Zoning Officer)
	С	=	Conditional use (zoning decision by the Board of Supervisors with review by Planning Commission)
,	ar.		
	SE		Special exception use (zoning decision by Zoning Hearing Board)
	N	=	Not permitted
	(§ 440-41)	=	See additional requirements in § 440-41
	(§ 440-42)		See additional requirements in § 440-42
	(SW)	=	Approved central sewer and public water service both required for a new use
	(S)	_	Approved central sewer service required for a new use
	` '		
	(SW)	=	Public water service required for a new use

	Residential Districts				
Types of Uses (See definitions in Ch. 440, Art. II)	CR	AR and AR-L	AR-I	SR	VR
AGRICULTURAL USES					
Agricultural industry as a principal use or sales of farm implements and farm supplies	N	SE	N	N	N
Crop farming	P	P	P	P	P
Crop storage, commercial as principal use (§ 440-41) (other than uses occurring on the same lot as a principal crop farming use)		N in ARN P in AR-L		N	N
Commercial forestry (§ 440-41) (see definition and § 440-57 for permitted by right types of tree cutting)		P	P	P	P
Composting as a principal or accessory use, see the require	rement	s of § 440-4	2		
Raising of livestock (§ 440-41)					
Intense	P	P	N	N	N
Other	P	P	P	P	P
Forestry	P	P	P	P	P
Retail sales of agricultural products as an accessory use (§ 440-42)		P	P	P	P
Sale or mixing of agricultural fertilizers, seeds or animal feed with a 10-acre minimum lot area as an accessory to a principal crop farming use (not involving bulk manufacturing for sale)		P	P	P	P

NORTH WHITEHALL CODE

Types of Uses		Business Districts				
(See definitions in Ch. 440, Art. II)	VC	C	LI/B1	ME/I	C-2	
Solid waste facility (§ 440-41), including sanitary landfill, solid waste transfer facility or solid waste to energy facility	N	N	N	С	N	
Trucking company terminal (§ 440-41)						
Involving more than 10 loading/unloading bays	N	N	N	SE	N	
Involving 10 or less loading/unloading bays	N	N	P	P	N	
Warehousing (other than truck terminal) (§ 440-41), not including storage of explosives, fireworks, ammunition or gunpowder (except within a government-owned facility)						
Small warehouse (§ 440-41)	N	P	P	P	N	
Large warehouse (§ 440-41)	N	N	P	N	N	
Wastewater treatment plant: see "sewage plant"						
Welding	N	N	P	P	N	
Wholesale sales	N	P	P	P	N	
MISCELLANEOUS USES		,				
See text in § 440-36B regarding "similar uses"						
All uses that would have a serious threat of being unable to comply with the performance standards of Ch. 440, Zoning, especially including the environmental protection requirements of Article V	N	N	N	N	N	
Parking lot as the principal use of a lot, not including or accessory to a trucking company terminal	P	P	P	P	N	
INSTITUTIONAL USES			•			
Animal cemetery (§ 440-41)	N	N	SE	SE	N	
Cemetery without crematorium	N	P	P	P	N	
Crematorium	N	N	N	SE	N	
College or university - educational and support buildings, not including a dormitory unless specifically permitted	SE	P	P	P	C	
Community center or library	P	P	P	P	C	
Cultural center or museum	P	P	P	P	C	
Day-care center, adult (§ 440-41)	P	P	P	P	C	
Day-care, child (§ 440-41) (See also as an accessory use)						
Day-care center or group day-care home	P	P	P	N	C	
Dormitory as an accessory use to an approved college, university or primary or secondary school	N	N	SE	N	N	
Hospital (§ 440-41)	N	P	P	N	N	
Institutional group home (§ 440-41)	N	SE	N	SE	Ň	
Membership club, other than an after-hours club or tavern	P	P	P	P	С	
Nursing home or personal care home (SW) (§ 440-41)	P	P	P	N	С	
Place of worship (§ 440-41)	P	P	P	P	С	

Article IV Additional Requirements for Specific Uses

§ 440-40 **Applicability.**

- A. This article establishes additional specific requirements for certain specific uses, in addition to the sign, parking, environmental and other general requirements of this chapter and the requirements of each district. Wherever two requirements conflict, the stricter requirement shall apply.
- B. For uses allowed within a specific zoning district as "special exception" or "conditional uses," see the procedures and general standards in §§ 440-25 and 440-26. These §§ 440-41 and 440-42 list a set of additional standards to be used in determining whether a proposed special exception or conditional use should be approved.
- C. No-impact home-based business shall be permitted in all residential zones of the municipality as a use permitted by right, except that such permission shall not supersede any deed restriction, covenant or agreement restricting the use of land nor any master deed, bylaw or other document applicable to a common interest ownership community.

§ 440-41 Additional requirements for specific principal uses.

- A. Each of the following uses shall meet all of the following requirements for that use:
 - (1) Adult use. (This term is limited to the following: adult bookstore, adult movie theater, massage parlor or adult live entertainment use):
 - (a) No such use shall be located within:
 - [1] Five hundred linear feet of the lot line of any library, public park, existing dwelling, or any site marked as a proposed future park location on any Township Official Map; nor
 - [2] One thousand linear feet of the lot line of any primary or secondary school, place of worship, day-care center or child nursery.
 - (b) No such use shall be located within 1,000 linear feet of any existing "adult use."
 - (c) A thirty-foot buffer yard shall be provided, regardless of zoning district, along the side and rear lot lines in accordance with § 440-79, but with plantings of an initial minimum height of five feet.
 - (d) No pornographic material, displays or words shall be placed in view of persons who are not inside of the establishment. Definite precautions shall be made to prohibit minors from entering the premises.
 - (e) No such use shall be used for any purpose that violates any federal, state or Township law.
 - (f) See § 440-72, Prohibited signs.
 - (g) No such use shall be allowed in combination with the sale of alcoholic beverages.
 - (h) The use shall not include the sale or display of "obscene" materials, as defined by state law, as may be amended by applicable court decisions.
 - (i) These uses are specifically prohibited in all districts except where specifically permitted by Article III.
 - (j) A minimum lot area of two acres is required.

- (76) Veterinarian office (includes animal hospital).
 - (a) Any structure in which animals are treated or housed shall be a minimum of 50 feet from any residential lot line. Buildings shall be adequately soundproofed so that sounds generated within the buildings cannot routinely be perceived within any adjacent dwellings.
 - (b) Outdoor animal runs may be provided for small animals for use between 8:00 a.m. and 8:00 p.m., provided the runs are at least 150 feet from any existing dwelling and provided that the runs for dogs are separated from each other by visual barriers a minimum of four feet in height, to minimize dog barking.
 - (c) Although animals may be kept as an accessory use, a commercial kennel shall only be allowed if a kennel is permitted in that district and if the applicable requirements are met.
- (77) Warehouse or wholesale sales. The following provisions shall be applicable to both small warehouses (less than 25,000 square feet gross floor area) and large warehouses (25,000 square feet gross floor area or more).

 [Amended 11-8-2021 by Ord. No. 2021-4]
 - (a) Access to the site shall be from an arterial street as identified on the North Whitehall Township Street Classification Map.^[10]

 [10] Editor's Note: A copy of the Street Classification Map is included as an attachment to this chapter.
 - (b) Maximum building height for such use shall be 50 feet.
 - (c) A traffic impact study consistent with the requirements of Appendix E of Chapter 375, Subdivision and Land Development, of this Code shall be prepared and submitted as part of the application. The traffic impact study shall be prepared by a professional traffic engineer. In addition to the requirements of Appendix E of Chapter 375, Subdivision and Land Development, of this Code, the traffic impact study shall also include a truck routing map identifying anticipated routes to and from the proposed facility to the Township boundary. The truck routing map shall be consistent with existing truck routing signage and trip distribution data presented in the traffic study, and will identify any new proposed truck routes and necessary truck routing signage.
 - (d) Buffer yards. Buffer yards shall be required between uses and along existing and proposed streets in accordance with the provisions of § 440-79D and the following requirements specific to warehouse or wholesale sales use:
 - [1] The buffer plantings are intended to be an impenetrable visual screen. However, it is not intended to be a monocultural planting. A variety of evergreen tree species in conjunction with deciduous and/or evergreen shrubs should be utilized to provide complete screening and aesthetic variety and appeal.
 - [2] A thirty-foot buffer shall be required along the frontage of all streets.
 - [3] A fifty-foot buffer shall be required between the industrial use and all other uses.
 - [4] Trees used for screen buffers shall be composed of 100% evergreen varieties. Shrubs may be a combination of evergreen and deciduous varieties. The required plant material shall be so arranged as to provide a 100% visual screen within eight years of planting. Where the screen buffer planting requires more than 50 trees, no more than 1/3 of these trees will be of a single variety.
 - [5] Where space is limited or there are other site constraints, walls, fences and/or earth berms may be used in combination with plant material subject to the approval of the Board of Supervisors.

- [6] Plant materials shall be permanently maintained and any plant material which dies shall be replaced by landowner.
- (e) The minimum yard setbacks shall be as follows:
 - [1] Front yard: 50 feet.
 - [2] Side yard (each): 50 feet.
 - [3] Rear yard: 50 feet.
 - [4] Where a property abuts a residential use, the required side and rear yards shall be increased to 100 feet.
- (f) Parking requirement. One space per 5,000 square feet of gross floor area for the first 100,000 square feet, plus one space per 10,000 square feet of gross floor area over 100,000 square feet. Of the required parking spaces, at least 10% shall be reserved as truck staging spaces measuring 12 feet by 75 feet. Loading docks/areas may not be counted towards the required truck staging spaces.
- (g) Sufficient off-street queueing space shall be required at facility entrances to prevent vehicles from queueing on public streets while waiting for access to the facility.
- (78) Warehouse/trucking company terminal. This use shall comply with § 440-41A(74), Trucking company terminal, and § 440-41A(77), Warehouse or wholesale sales. Any use that includes facilities for maintenance of a trucking company fleet shall also comply with § 440-41A(73), Truck stop. In the event of a conflict in requirements, the most restrictive shall apply.

§ 440-42 Additional requirements for accessory uses.

- A. General. Accessory buildings, structures or uses that are clearly customary and incidental to a permitted by right, special exception or conditional use are permitted by right, except as is provided for in this chapter. A business shall only be conducted as an accessory to a dwelling if specifically permitted by this chapter.
- B. Accessory setbacks. The accessory setback requirements of the applicable district shall apply to every accessory building, structure or use unless a standard that is clearly meant to be more restrictive or less restrictive is specifically stated in this article for a particular accessory use. Accessory structure setback requirements shall not apply to permitted surface parking lots, fences or permitted accessory signs.
- C. Front yard setback. No accessory structure, use or building shall be permitted in a required front yard in any district, unless specifically permitted by this chapter. See the list of essential services in § 440-36.
- D. Special standards. Each accessory use shall comply with all of the following standards listed for that use:
 - (1) Accessory apartment, one. Within an existing single-family detached dwelling or within an existing dwelling (half of a twin dwelling).
 - (a) Any on-lot septic system shall be recertified if the sewage flows will increase.
 - (b) The building shall maintain the appearance of a single-family detached dwelling or a single-family semidetached dwelling with a single front entrance. Additional entrances may be placed on the side or rear of the structure. The dwelling units may internally share the single front entrance.
 - (c) The conversion shall not be permitted if it would require the placement of an exterior stairway on the front of the building, or would require the placement of off-street

Chapter 440. Zoning

Article V. Environmental Protection

§ 440-51. Noise.

A. No principal or accessory use, or its operations, shall generate a sound level exceeding the limits established in the table below, when measured at the specified locations:

Sound	Level Limits by Receiving Land Use/District	
Land Use or Zoning District Receiving the Noise	Hours/Days	Maximum Sound Level (dBA)
At any lot line in a residential district (other than a lot occupied by a principal commercial or industrial use)	7:00 a.m. to 9:00 p.m. other than Sundays, Christmas Day, Thanksgiving Day, New Year's Day, Labor Day and Memorial Day	67
	9:00 p.m. to 7:00 a.m., plus all day Sundays, Christmas Day, Thanksgiving Day, New Year's Day, Labor Day and Memorial Day	61
At any lot line of a lot within an industrial district	All times and days	74
At any lot line not listed above	All times and days	70

NOTES:

"dBA" means "A" weighted decibel.

[For general information: The following provides a comparison of different typical dB(A) levels:

40 dB(A) = typical background noise in a residential area

50 dB(A) = a quiet automobile at 10 feet away

60 dB(A) = the inside of a large store

63 dB(A) = automobiles (other than trucks) along a nearby expressway

68 dB(A) = conversation at one foot away

72 dB(A) = train at 100 feet (other than horn)

80 dB(A) = heavy traffic

82 dB(A) = pneumatic drill at 50 feet

89 dB(A) = subway train at 20 feet]

- B. For any source of sound which emits a pure tone and/or one of continuous unvarying intensity, the maximum sound level limits set forth in the above table shall be reduced by five dBA.
- C. The maximum permissible sound level limits set forth in the above table shall not apply to any of the following noise sources:
 - (1) Sound needed to alert people about an emergency.

- (2) Repair or installation of utilities or construction of structures, sidewalks or streets between the hours of 7:00 a.m. and 8:00 p.m., except for clearly emergency repairs, which are not restricted by time.
- (3) Household power tools and lawn mowers between the hours of 8:00 a.m. and 9:00 p.m.
- (4) Agricultural activities, including permitted raising of livestock, but not exempting a commercial kennel.
- (5) Railroads and aircraft.
- (6) Public celebrations specifically authorized by the Board of Supervisors or a county, state or federal government agency or body.
- (7) Unamplified human voices, a radio, amplified, live or recorded music player being played by one household between the hours of 8:00 a.m. and 11:00 p.m. or the sounds of one or two animals.
- (8) Routine ringing of bells and chimes by a place of worship or municipal clock.
- (9) Vehicles operating on a public street, if such noise is regulated by the State Motor Vehicle Code.^[1]
 - [1] Editor's Note: See 75 Pa.C.S.A. § 101 et seq.
- (10) See state law concerning noise exemption for shooting ranges that existed prior to adoption of any Township noise regulations.

Chapter 440. Zoning

Article VI. Off-Street Parking and Loading

§ 440-61. Design standards for off-street parking.

A. General requirements.

- (1) Backing onto a street. No parking area shall be designed to require or encourage parked vehicles to back into a public street in order to leave a parking space, except for a single-family or two-family dwelling with its access onto a local street or parking court. Parking spaces may back onto an alley.
- (2) Every required parking space shall be designed so that each motor vehicle may proceed to and from the parking space provided for it without requiring the moving of any other vehicle, except for spaces serving a one-family dwelling.
- (3) Parking areas shall not be within any of the following: a required buffer yard, a future or existing street right-of-way or a required paved area setback.
- (4) Defined trafficways. All parking areas shall include clearly defined and marked traffic patterns. In any lot with more than 30 off-street parking spaces, raised curbs and landscaped areas shall be used to direct traffic within the lot. Major vehicular routes shall be separated when practical from major pedestrian routes within the lot.
- (5) Separation from street. Except for parking spaces immediately in front of individual dwellings, all areas for off-street parking, off-street loading and unloading and the storage or movement of motor vehicles shall be physically separated from the street by a continuous grass or landscaped planting strip, except for necessary and approved vehicle entrances and exits to the lot. Such planting strip shall have a minimum width of 10 feet, unless a wider width is required by § 440-61G. As part of any change in the type of nonresidential principal use or any expansion of a nonresidential principal use, the requirements of this Subsection A(5) shall be met.
 - (a) The Township and/or PennDOT may also require an approved type of curbing to be installed adjacent to the street cartway, at a location approved by the Township and/or PennDOT. Parking stops and/or curbing within a parking area may also be required by the Township where necessary to control vehicle movements.
- (6) Stacking and obstructions.
 - (a) Each lot shall provide adequate area upon the lot to prevent backup of vehicles on a public street while awaiting entry to the lot, or while waiting for service at a drive-through facility.
 - (b) Speed bumps and other traffic control devices shall not be located where they will cause traffic to back up onto a public street.
- (7) Shopping cart corrals. If shopping carts are allowed to be taken into parking areas, then appropriate enclosures shall be provided at convenient locations within the parking areas to

corral the carts.

- B. Size and marking of parking spaces. Each parking space shall be a rectangle with a minimum width of nine feet and a minimum length of 18 feet, except:
 - (1) The minimum length shall be 22 feet for parallel parking.
 - (2) If a lot includes more than 100 parking spaces, a maximum of 15% of the required spaces may be a rectangle with a minimum width of nine feet and a minimum length of 16 feet, provided that those spaces are marked as "compact cars only" and provided that those spaces are distributed in different portions of the lot and do not include the most desirable spaces in the lot. ("Compact cars" are intended to be those having a length of 15 feet or less.)
 - (3) All spaces shall be marked to indicate their location, except those of a single-family or two-family dwelling. On paved areas, lines shall be used to mark parking spaces and shall be repainted in the future as necessary. On gravel areas, the Township may require the installation of parking stops or similar measures.
 - (4) If a parking area is permitted to not be paved, then a minimum width of 10 feet per space shall be used.
- C. Parking spaces and aisles. [Amended 4-18-2007 by Ord. No. 2007-9]
 - (1) Parking lot dimensions shall be no less than those listed in the following table:

			Aisle	Width
Parking Angle	Parking Width (feet)	Stall Depth* (feet)	One-Way (feet)	Two-Way (feet)
90°	10	18	22	24
60°	10	21	18	21
45°	10	20	15	18
30°	10	18	15	18
Parallel	22	9	15	18

NOTE:

- * Measured perpendicular from the curbline, or if no curbline will exist, from the existing legal right-of-way line after development.
 - (2) Maximum length of parking aisle: 250 feet.
- D. Access drives and driveways.
 - (1) Width at access. [Amended 4-18-2007 by Ord. No. 2007-9]

Width of Driveway/Accessway at Entrance Onto Public Street (at the edge of the cartway and continuing for a length of 20 feet)*	One-Way Use (feet)	Two-Way Use (feet)
Minimum	12	25
Maximum	20	30

NOTE:

- * Unless a different standard is required by PennDOT for an entrance to a state road, or the applicant proves to the satisfaction of the Zoning Officer that a wider width is needed for tractor trailer trucks.
 - (2) Maximum grades of driveway. Grades of access drives and driveways shall not exceed 12% at any point. The initial 20 feet from the edge of the cartway of a public street shall not exceed 5%.
 - (3) Drainage. Adequate provisions shall be made to maintain uninterrupted parallel drainage along a public street at the point of driveway or access drive entry. The Township may require an applicant to install an appropriate type and size of pipe at a driveway crossing.
 - (4) Separation between access drives/driveways. In any nonresidential development, within one lot, at least 80 feet shall be provided between the center lines of any two access drives or driveways serving two-way traffic along one street.
 - (5) Separation from intersection. See Chapter 375, Subdivision and Land Development.
 - (6) State permit. Where new or intensified access is proposed to a state street or other work within the right-of-way of a state street, a state highway occupancy permit shall be obtained, as applicable.
 - (7) Sight distance for driveways. See § 440-79C(2).
 - (8) Access between parking lots. Where two abutting business lots are in common ownership, the parking lots shall include an interconnection to allow motorists to travel from one business lot to another without having to reenter a public street. Where two such abutting lots are not in common ownership, an applicant shall seek permission from the abutting property owner for such interconnection and shall provide the interconnection if such permission is granted. As part of the subdivision or land development approval or conditional use approval for any business lot, the Board of Supervisors may require that such interconnection be provided.
 - (9) Driveway setback from residential lot lines. The following minimum setbacks shall apply for a driveway from the abutting lot line of an existing or approved residential lot, unless shared or converged driveways are specifically approved by the Township:
 - (a) Zero feet if buildings are attached along the subject lot line or where the Township approves or requires shared parking lots across the subject lot line.
 - (b) Three feet on any other lot with a lot area of less than 20,000 square feet.
 - (c) Five feet on a lot not meeting Subsection **D(9)(a)** or **(b)** above.
 - (d) Not within any drainage/utility easement.
 - (e) Twenty feet from any wetland (including associated earthmoving activities).
 - (10) Angle of driveways. Driveway entrances shall be as close as perpendicular to a public street as is possible. All private driveways shall not be allowed to intersect with more than one public street. The maximum angle of intersection is 80°. See Chapter 375, Subdivision and Land Development.
 - (11) Circular driveways. Circular driveways shall utilize only one point of access upon a public street.
- E. Paving, grading and drainage.
 - (1) Parking and loading facilities, including driveways, shall be graded and adequately drained to prevent erosion or excessive water flow across streets or adjoining properties.
 - (2) Except for landscaped areas, all portions of required parking, loading facilities and driveways shall be surfaced with asphalt or concrete or paving block, except those portions or all of

parking areas may be left in grass or gravel where the applicant proves to the full satisfaction of the Zoning Officer that:

- (a) The nature, frequency and extent of the use of the parking area would not cause any need for paving; and
- (b) Dust will be adequately controlled on any gravel areas.
- F. Lighting of parking areas. Any parking area of 10 or more spaces designed for use during night hours shall be adequately illuminated for security purposes at no cost to the Township. See also § 440-54, Light, glare and heat control.
- G. Paved area setbacks (including off-street parking setbacks).
 - (1) Intent. To ensure that parked or moving vehicles within a lot do not obstruct sight distance or interfere with pedestrian traffic, to aid in stormwater management along streets and to prevent vehicles from entering or exiting a lot other than at approved driveways.
 - (2) Uses within the paved area setback.
 - (a) The paved area setback required by this section, together with any existing or established future street right-of-way area that is not used as a cartway, street shoulder or on-street parking, shall be maintained in natural ground cover (such as grass) and shall not be used for any of the following:
 - [1] Paving, except for approved driveway/access drive entrances and except any concrete sidewalks or asphalt bike paths of eight feet wide or less;
 - [2] Fences; or
 - [3] Parking, storage or display of vehicles or items for sale or rent.
 - (b) A paved area setback may include the following:
 - [1] Permitted freestanding signs;
 - [2] Stormwater facilities that are primarily vegetated;
 - [3] Concrete, brick or similar sidewalks or asphalt or other approved bike paths of eight feet wide or less; and
 - [4] Approved driveway crossings.
 - (3) Width of paved area and parking setbacks. Any commercial, industrial, institutional, townhouse or low-rise apartment use shall provide paved area setbacks as follows:
 [Amended 4-18-2007 by Ord. No. 2007-9]
 - (a) Minimum paved area setback (measured from the curbline, or if no curbline will exist from the existing legal right-of-way line after development):

If a Paved Area Abuts	Setback Requirement
Expressway, expressway ramp, arterial street:	10 feet
For a lot including 2 acres or less of impervious coverage	20 feet
For lot including more than 2 acres of impervious coverage	20 feet
Collector or local street	10 feet

- H. Paved area landscaping (parking lot trees). (See definition of "paved area" in § 440-30.)
 - (1) Intent. This section is primarily intended to reduce the thermal pollution of surface waters from parking lot runoff.

- (2) Any lot that would include more than 25 parking spaces shall be required to provide landscaped areas within the paved area. A maximum of 15 consecutive and contiguous parking spaces in a row shall be allowed without being separated by a landscaped area.
- (3) One deciduous tree shall be required for every 2,000 square feet of paved area. This number of trees shall be in addition to any trees required by any other section of this chapter or by Chapter 375, Subdivision and Land Development, of this Code.
- (4) Trees required by this section shall meet the following standards:
 - (a) Type of trees permitted. Required trees shall be chosen from the following list of approved street trees, unless the applicant proves to the satisfaction of the Zoning Officer that another type of tree would shade paved areas, be resistant to disease, road salt and air pollution, and be attractive.

Types of Deciduous Trees Peri	mitted to Meet Ordinance Requirements
Acer rubrum - American Red Maple	Quercus coccinea - Scarlet Oak
Acer saccharum - Sugar Maple	Quercus macrocarpa - Bur Oak
Celtis occidentalis - Common	Quercus imbricaria - Shingle Oak
Hackberry	Quercus montana - Chestnut Oak
Fagus sylvatica - European Beech	Quercus velutina - Black Oak
Fraxinus americana - White Ash	Quercus phellos - Willow Oak
Fraxinus pennsylvania - Green Ash	Sophora japonica - Chinese Scholar Tree
Ginko biloba fastigiata - Maiden Hair Tree (male only; female has noxious odor)	Tilia americana - American Linden
Gleditsia triacanthos - Thornless Locust	Tilia cordata - Little Leaf European
Liriodendron tulipifera - Tulip Poplar	Linden
Quercus alba - White Oak	Tilia euchlora - Crimean Linden
Quercus acutissima - Sawtooth Oak	Tilia petiolaris - Silver Linden
Quercus borealis - Red Oak	Zelkova serrata - Zelkova

NOTE:

This chapter only regulates the species of trees that are used to meet requirements of the Township. The species of trees that are not required by Township ordinances are not regulated.

- (b) Quality of trees. Required trees shall be of symmetrical growth and free of insect pests and disease.
- (c) Minimum size. The trunk diameter (measured at a height of one foot above the finished grade level) shall be a minimum of two inches or greater.
- (d) Planting and maintenance. Required trees shall be:
 - [1] Planted in conformance with good landscaping practices, with adequate unpaved surface around each for water and air;
 - [2] Properly protected by raised curbs, distance or other devices from damage from vehicles;
 - [3] Surrounded by a minimum of 16 square feet of pervious ground area;
 - [4] Properly maintained.
- (e) A required tree(s) shall not be removed without being replaced by the current landowner by another tree(s) that meets the requirements of this section. Trees which have died or

have become diseased or pest-ridden within 18 months from the time of planting shall be replaced by the developer.

- (5) A substantial proportion of the trees required by this section should be planted within the parking lot within protected islands. These protected islands should be used to direct the flow of traffic through the parking lot in a smooth and safe manner to prevent "cross-taxiing." Required trees are also encouraged to be planted in highly visible locations, especially at the edge of parking areas abutting arterial streets.
- (6) Existing trees. For every existing tree on the lot that is healthy and is protected and preserved and maintained after the completion of all construction and that would generally meet the requirements of this section:
 - (a) One fewer deciduous tree shall be required to be planted for every such preserved tree with a minimum trunk diameter of between four and 18 inches (measured one foot above the natural ground level); and
 - (b) Two fewer deciduous trees shall be required to be planted for every such preserved tree with a minimum trunk diameter of 18 inches or greater (measured one foot above the natural ground level).
- (7) Paving/parking setback from buildings.
 - (a) All paved areas shall be set back a minimum of five feet from the exterior structural walls of any commercial or industrial building. This setback shall not apply to the following: a) concrete sidewalks, b) paved walkways to reach doors, c) driveways entering a garage, interior parking, loading/unloading area, vehicle service bay or carport or d) drive-through pickup windows. This setback is intended to allow sufficient area for firefighting, sidewalks and foundation landscaping, and to provide safety against vehicles hitting walls.
 - (b) For apartments and townhouses, see § 440-41.
- I. Parking lot screening. See § 440-79.
- J. Handicapped parking.
 - (1) Number of spaces. Any lot including four or more off-street parking spaces shall include a minimum of one handicapped space. The following number of handicapped spaces shall be provided, unless a revised regulation is officially established under the Federal Americans With Disabilities Act:[1]

Total Number of Required Parking Spaces on the Lot	Required Minimum Number/Percent of Handicapped Parking Spaces
4 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2% of required number of spaces
1,001 or more	20 plus 1% of required number of spaces over 1,000

[1] Editor's Note: See 42 U.S.C. § 12101 et seq.

- (2) Location. Handicapped parking spaces shall be located where they would result in the shortest reasonable accessible distance to a handicapped accessible building entrance. Curb cuts shall be provided as needed to provide access from the handicapped spaces.
- (3) Minimum size. Each required handicapped parking space shall be eight feet by 18 feet. In addition, each space shall be adjacent to a five-foot-wide access aisle. Such access aisle may be shared by two handicapped spaces by being placed between them. However, one out of every eight required handicapped parking spaces shall have an adjacent access aisle of eight-foot width instead of five feet.
- (4) Slope. Handicapped parking spaces shall be located in areas of less than 6% slope in any direction.
- (5) Marking. All required handicapped spaces shall be well marked by clearly visible signs or pavement markings. Blue paint is recommended.
- (6) Paving. Handicapped parking spaces and adjacent areas needed to access them with a wheelchair shall be covered with a smooth surface that is usable with a wheelchair.

Chapter 440. Zoning

Article VIII. General Regulations

§ 440-86. Street access; highway frontage development.

- A. Purposes. To encourage the sound development of highway frontage; to minimize traffic congestion and hazards; and, to maximize the efficient use of the limited capacity available along major roads.
- B. Each lot with less than 250 feet of frontage on an arterial street shall have not more than one access point involving left-hand turns onto each such street, and no lot with 250 feet or more feet of total frontage on an arterial street shall have more than two access points involving left-hand turns onto any such arterial street.
 - (1) This provision shall not apply to the following:
 - (a) Construction of new streets onto an existing arterial street; or
 - (b) Access points that are clearly limited to use by only emergency vehicles.
 - (2) A separate ingress point and a separate egress point shall be considered one access point, if well-marked and clearly designed to inhibit two-way traffic at each point.
- C. Where practical, access to two or more nonresidential lots shall be combined and/or shared and/or coordinated to minimize the number of access points onto an arterial street. Shared parking lots, accessways and/or driveways connecting adjacent nonresidential lots shall be used to the maximum extent practical.
 - (1) See § 440-59B, which permits possible reduction of parking requirements when shared parking is provided.
 - (2) All uses shall be designed to maximize the safety and efficiency of ingress and egress to and from public streets, including maximizing the coordination of access between different existing, proposed and potential uses and lots. Direct vehicular access shall be avoided onto any collector or arterial street, and use of reverse frontage is strongly encouraged.
- D. See the access control provisions of Chapter 375, Subdivision and Land Development.
- E. Any new or expanded principal nonresidential use shall provide a physical separation between a street and all areas used for off-street parking, loading/unloading, and motor vehicle storage/movement. Such separation shall include a raised curb, planting strip, or other suitable barrier against unchanneled motor vehicle entrance or exit, except for necessary and approved defined vehicle entrance and exit points. Such separation shall be intended to prevent vehicles from being parked within the existing street right-of-way, except for lawful on-street parking spaces.
- F. All parking areas or lots (except parking for single-family detached or semidetached dwellings onto a local street) shall be designed to prevent vehicles from backing out on the street. The capacity of each parking area shall provide adequate storage area and distribution facilities upon the lot to prevent backup of vehicles on a public street while awaiting entry to the lot.

- G. Within any shopping center, office complex, or apartment development involving two or more buildings, all buildings shall front upon a marginal street, service road, common parking lot or common access drive, without separate vehicle access from each building onto a public street.
- H. For a nonresidential use, all points of vehicular traffic to and from an arterial or collector street shall be located not less than 200 feet from the point of intersection of any public street lines with each other, unless such a point of vehicular access would be lined up with a street entering on the other side of the arterial or collector street.
- I. Applicants/developers shall provide for adequate signalization, turn lanes and acceleration/deceleration lanes where necessary to properly manage the traffic entering or exiting the applicant's proposed development. Such improvements shall be designed based upon the maximum build-out of the applicant's land.
 - (1) For any such improvements that are not currently warranted, the Board of Supervisors may require that the applicant provide security to ensure such improvements are installed when they are warranted. If such improvements are not warranted within a specified number of years, then the security shall be released to the applicant.
- J. All institutional uses upon a lot shall have direct access to a major arterial street.

Chapter 440. Zoning

Article XII. Driveway Provisions: Design, Construction and Maintenance Requirements

§ 440-111. Location restrictions.

Access driveways shall be permitted at locations in which:

- A. Sight distance is adequate to safely allow each permitted movement to be made into or out of the access driveway;
- B. The free movement of normal roadway traffic is not impaired;
- C. The driveway will not create a hazard; and
- D. The driveway will not create an area of undue traffic congestion on the roadway.

