Lehigh Valley Planning Commission

CHRISTINA "TORI" MORGAN
Chair

ARMANDO MORITZ-CHAPELLIQUEN
Vice Chair

PHILLIPS ARMSTRONG
Treasurer

BECKY A. BRADLEY, AICP
Executive Director

Planning for the Future of Lehigh and Northampton Counties at 615 Waterfront Drive, Suite 201, Allentown, PA 18102 ■ (610) 264-4544 ■ lvpc@lvpc.org ■ www.lvpc.org

COMPREHENSIVE PLANNING COMMITTEE MEETING
Tuesday, January 20, 2026, 12:00 noon
AGENDA

THE MEETING CAN BE ACCESSED AT http://www.tinyurl.com/LVPC2026 OR VIA PHONE 610-477-5793 Conf ID: 947 550 319#

Roll Call

Courtesy of the Floor

1. New Staff Introductions
2. Beth Ritter-Guth, Director of Research & Innovation

Committee Business

1. *ACTION ITEM*: South Whitehall Township – Land Use of Regional Significance – Project Atlas Data Center Campus (JS, SMyerov)
2. *ACTION ITEM*: Upper Saucon Township – Zoning Ordinance Amendment – Data Center Ordinance (MGC)
3. *ACTION ITEM*: North Whitehall Township – Zoning Ordinance Amendment – Data Center Ordinance (MGC)
4. *INFORMATION ITEM:* Final Lehigh County Industrial Land Use Guide + Training (JS)
    a. Municipal Training ---- January 29, 12 PM OR 6 PM
        i. Register at https://www.eventbrite.com/e/new-emerging-industrial-land-use-guide-training-tickets-1975589950724?aff=oddtdtcreator

Next Comprehensive Planning Committee Meeting:
February 24, 2026, at 12:00 noon

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January 7, 2026

David Manhardt, AICP, Director of Community Development
South Whitehall Township
4444 Walbert Avenue
Allentown, Pennsylvania 18104

Re: Atlas Industrial Data Center – Land Use of Regional Significance
South Whitehall Township
Lehigh County

Dear Mr. Manhardt:

The Lehigh Valley Planning Commission (LVPC) will consider 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 largely happens during the Committee meeting. Meeting participation details are below, and we encourage your participation:

LVPC Comprehensive Planning Committee Meeting:	**LVPC Full Commission Meeting:**
January 20, 2026, at 12:00 PM (Virtual) https://lvpc.org/lvpc-meetings	January 22, 2026, at 7:00 PM (Virtual) https://lvpc.org/lvpc-meetings

Background
The project proposes to develop a vacant 410-acre site by constructing six data center buildings totaling 5,038,100 square feet. The project site is located at 2493 North Cedar Crest Boulevard, south of Orefield Road between Mauch Chunk Road and North Cedar Crest Boulevard (parcel number 548824698560).

The proposal is considered a Land Use of Regional Significance under *FutureLV: The Regional Plan* as a Major Industrial Development. The Township's designated zoning for the site is Industrial as a base zoning district, and Planned Innovation, Research and Technology (PIRT) as an overlay district. The PIRT District was established to 'provide a controlled and protected environment for the orderly growth and development of research and technology-related businesses' (Township Zoning Ordinance §350-33(b)). The Township has intentionally directed this type of development to the PIRT District and updated its zoning regulations in anticipation of interest in data center development, demonstrating proactive planning and regulatory alignment with emerging industrial land uses.

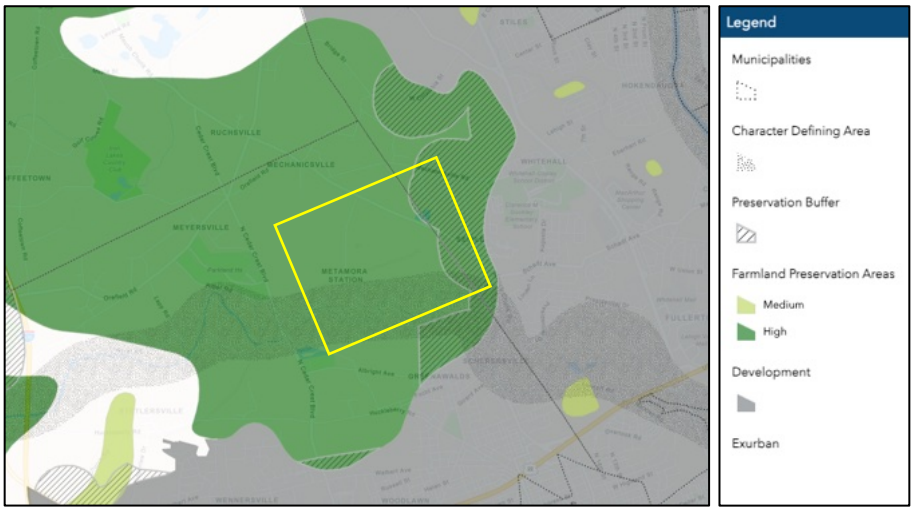
FutureLV recognizes that advances in technology and the increasing demand for real-time information and data transmission have made digital infrastructure and connectivity essential to the region's economic competitiveness (*FutureLV* Future Forces Section, page 42). Data centers play a critical role in supporting this modern digital infrastructure, however large-scale or hyperscale data center facilities can place significant demands on utility systems, particularly electric and water infrastructure, which necessitates careful evaluation and coordination.

To support this evaluation, LVPC convened a coordination meeting with external review agencies to discuss utility capacity, infrastructure considerations, and other regional impacts associated with the proposal. Continued coordination among the Township, service providers, and reviewing agencies will be essential to ensuring the project supports public health, safety, and welfare while advancing regional goals for innovation-oriented industrial development.

Site Suitability and Land Use

The project site is vacant and undeveloped agricultural land. Nearby land uses include Parkland High School to the west, heavy industrial uses to the south including chemical manufacturing, low-density residential to the north and agricultural uses surrounding the area.

The project site is identified for Farmland Preservation in the General Land Use Plan of *FutureLV: The Regional Plan*, with nearby Preservation Buffer and Exurban designations. From a regional perspective, land preservation is preferred in these areas to protect the region's existing open space, direct development to areas with existing infrastructure, and to minimize development pressures from creeping outwards from Development areas.



FutureLV General Land Use Plan

From a local perspective, the designated Industrial Zoning District and Planned Innovation, Research and Technology Overlay District were created to target development at the site, and existing infrastructure is generally accessible in the vicinity. The proposed development has the potential to align with *FutureLV* if it is designed to minimize impacts to adjacent properties; if the site configuration avoids disturbing existing natural resources on the site; and if utility infrastructure is demonstrated to be adequate to meet the facility's needs without adversely affecting service to existing users.

Data centers can pose health and quality of life impacts to neighboring residents and land uses if not appropriately mitigated. Potential impacts include:

- **Noise:** The proposed site layout orients the yards containing generator equipment away from Parkland School, and sound attenuation walls are also proposed along the generator equipment areas. These noise abatement design features support public health and welfare (of Policy 5.3). Pre-and-post-construction professional noise studies should be conducted to verify both perceived and low frequency noise levels at a maximum of 55 decibels measured at the project property line per LVPC's recommendation, or at a level acceptable to the Township.
- **Visual:** The buildings should be aesthetically designed to minimize the visual impacts of the scale of buildings on neighboring properties. While the generator equipment yards indicate they will be enclosed by the sound attenuation walls, the LVPC encourages the Township to request renderings from the applicant that illustrate what the facility will look like from different roadways and vantage points. Additional vegetation along the development areas could further reduce visual impacts and 'promote context-specific design solutions' (of Policy 5.4).
- **Lighting:** The project utilizes full cutoff and fully shielded light fixtures in compliance with the Township Zoning Ordinance, and site lighting designed to prevent glare and lighting spillover onto adjacent properties, which minimizes environmental impacts of development (of Policy 3.2).
- **Air Quality:** Because data centers rely on continuous mechanical cooling systems that exhaust significant amounts of waste heat, heat exhaust can create localized temperature increases that exacerbate heat stress in warmer months. These impacts can worsen long-term if development of additional paved surfaces continues in the area long-term. The LVPC recommends the applicant assess potential heat-exhaust impacts from mechanical systems that may affect nearby development or pedestrian areas (of Policy 3.4).

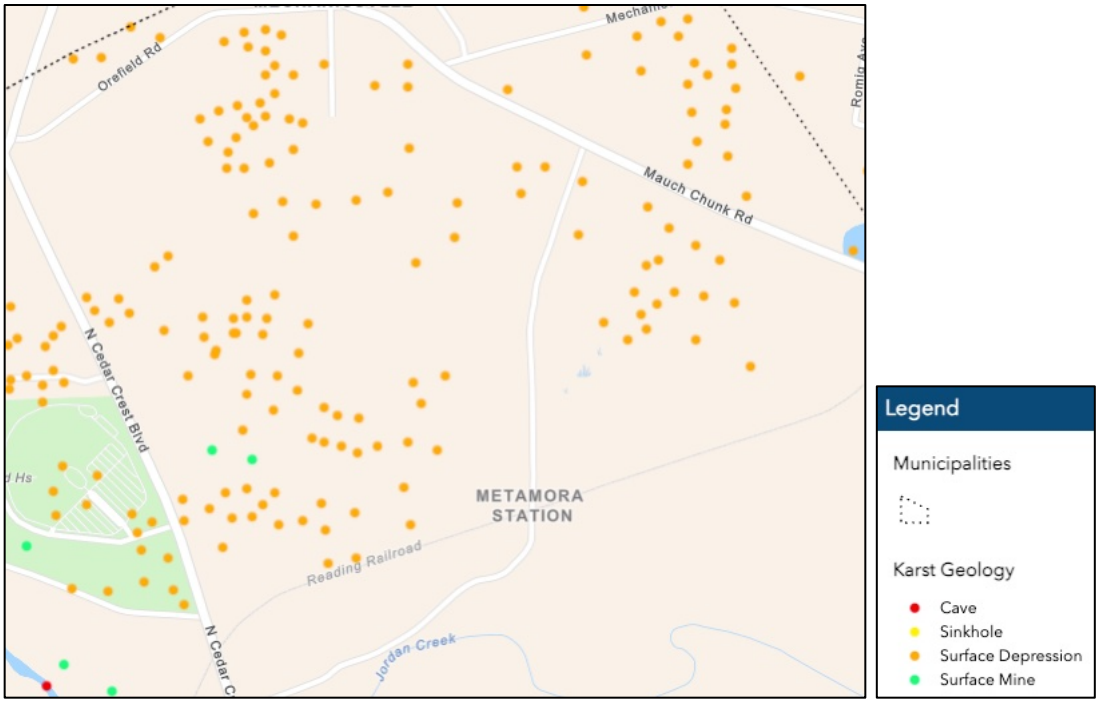
Emergency Services

During partner agency engagement in the review process, the Township noted that emergency responder training on serving the development is anticipated, given the scale of the site and proposed buildings and the unique electrical, mechanical, and security characteristics of data centers. The LVPC encourages continued coordination between the applicant, Township and local emergency service providers to ensure adequate site design that supports preparedness and response capabilities. The applicant should provide fire, Emergency Medical Services, and police departments with detailed information on site access, security protocols, hazardous materials storage, backup power systems, and any specialized equipment such as battery energy storage systems. Emergency responders should be consulted on the adequacy of access points, turning radii, hydrant placement and fire-suppression systems, and should receive appropriate training or orientation prior to occupancy. This coordination is essential to

safeguard responders, protect critical infrastructure, and ensure that the facility can be safely and effectively served during both routine incidents and large-scale emergencies (of Policy 5.1).

Environment and Utility Infrastructure
Mapping provided by the Pennsylvania Department of Conservation and Natural Resources (Bureau of Topographic and Geologic Survey) indicates the extensive presence of karsts in the form of surface depressions throughout the site, as well as surface mines towards the southwestern property boundary. Karst conditions can result in subsurface instability and warrant careful considerations for large-scale land-intensive development with heavy structural loads. Hyperscale data centers involve significant concentrations of structural and equipment loading, which has the potential to exacerbate subsurface voids or contribute to land gradually caving in throughout the area.

Additionally, karst systems are highly sensitive to stormwater management practices and utility installation. Improperly managed infiltration, altered groundwater recharge patterns, or leakage from underground utilities may further increase the risk of sinkhole formation. Given these conditions, LVPC strongly recommends comprehensive geotechnical and hydrogeologic investigation of the site to inform building placement, foundation design, stormwater management, and utility infrastructure. Consideration of these factors is critical to minimize impacts of development to support public health, safety, and welfare (of Policy 3.2).



LVPC GIS Mapping of Karst Geology

The project's full electrical demand and long-term impacts on the regional power grid is being coordinated between the Applicant and PPL Electric. The project proposes the addition of a substation to support electricity distribution to each proposed building as well as additional infrastructure upgrades. These upgrades are being funded by the Applicant, which alleviates the burden on taxpayers and other grid users and promotes fiscal health and sustainability (of Policy 4.6).

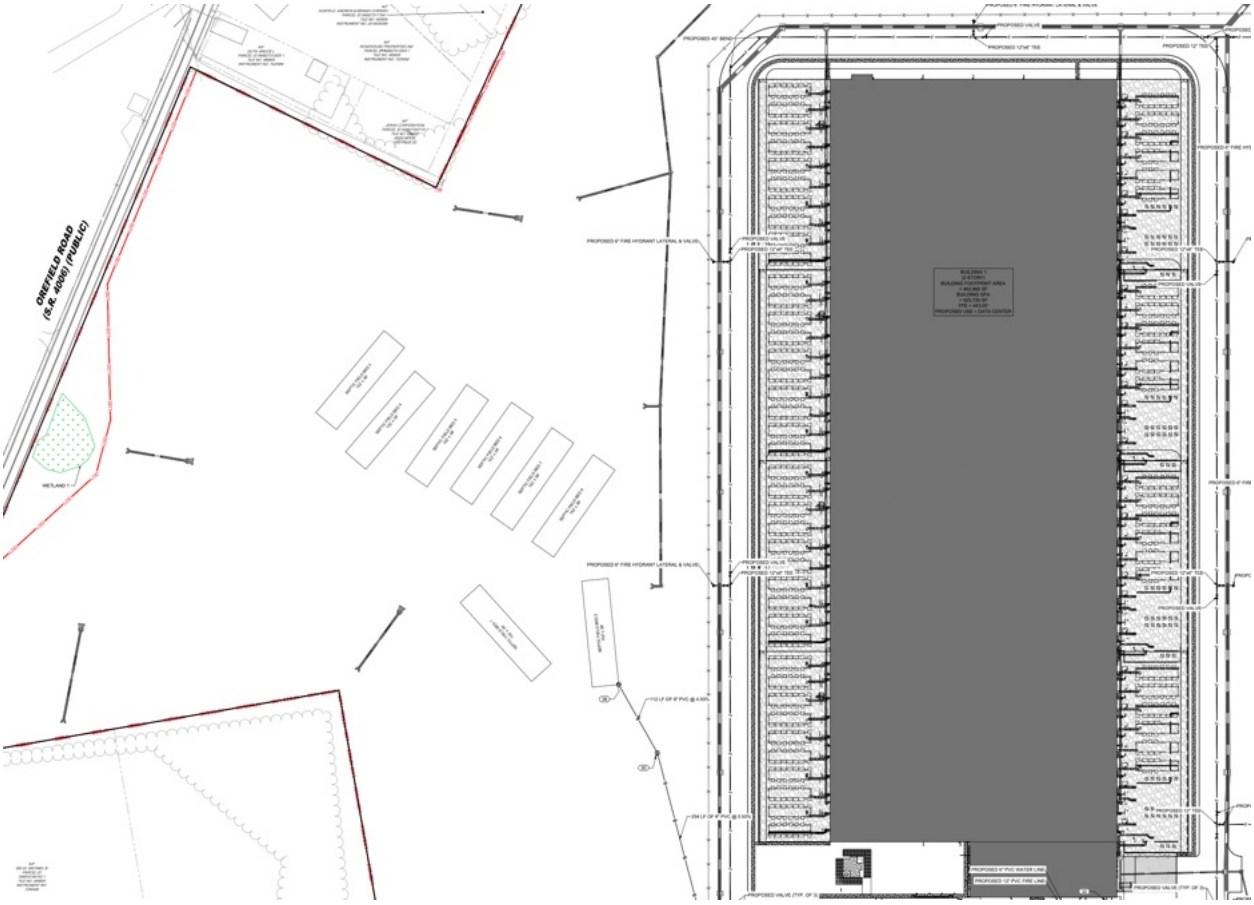
As this project progresses, the applicant should provide detail on how the facility will align with industry energy-efficiency standards, including anticipated Power Usage Effectiveness (PUE) targets, energy-management audits, and reporting practices as they are identified. Additionally, once the Applicant identifies the proportion of its energy use that will be met through renewable sources, that information should also be provided to support understanding of the project's long-term sustainability and its alignment with regional clean energy goals (of Policy 3.4).

The submitted Environmental Impact Assessment identifies that Tier 2-emission standards backup generators are proposed on site. The LVPC strongly recommends that Tier 4 backup generators be utilized instead, to minimize air quality impacts (of Policy 3.2). The Applicant should provide the Township with detailed specifications on emissions controls and fuel storage safety measures such as spill-prevention and secondary containment to ensure public health and environmental safety. The Applicant should also provide a generator-testing plan that outlines the frequency, duration, and timing of tests to be shared with surrounding property owners and tenants and the Township to adequately evaluate and/or prepare for potential noise disturbances (of Policies 5.2, 5.3, and 5.4).

The project is currently proposing an air-cooled system, which requires much less water usage and disposal on-site compared to other cooling technologies. The submission should clarify whether the system incorporates water-reuse or heat-recovery measures that could further reduce overall consumption.

Any future change to the proposed cooling system that requires greater water withdrawal or wastewater discharge would raise significant concerns. Increased water demand could place additional stress on local water supplies and would be particularly challenging to accommodate in an area with extensive karst geology. The Applicant should model water use under various scenarios, such as drought-stage, summer months, and any peak-stress conditions and demonstrate the long-term reliability of the proposed water supply based on the cooling system as described. Continued coordination with the Township as the water provider, as well as Lehigh County Authority, is recommended to evaluate potential infrastructure needs and confirm that the ultimate approach to system cooling does not result in adverse impacts to existing users or regional systems.

The plans depict eight septic field beds located in the northern portion of the project site, and sanitary sewer lines direct wastewater from each building to discharge in the septic field area. The adequacy of this design requires the proposal's discharge gallons per day to be assessed. If septic fields are to remain the method for disposal, primary and secondary fields should be identified. Due to the extensive presence of karst geology on the site, it is paramount that the project wastewater disposal system be designed to minimize impacts to groundwater resources, in order to protect the quality and quantity of surface water and groundwater (of Policy 3.2).



Landscaping is proposed to shield the building from adjacent properties and external roadways, including North Cedar Crest Boulevard north of the Parkland High School driveway, along the northern property boundary, and along a portion of Mauch Chunk Road until the project's proposed Private Road A just south of Mechanicsville Road. Additional landscaping is proposed within the parking areas.

The project site is located within the Coplay Creek and Jordan Creek Watersheds. These watersheds have fully implemented Act 167 Stormwater Management Ordinance. Comments relative to our review of the project's stormwater management plan are included as Attachment 1.

Transportation
A traffic impact study was submitted for the proposed project. The project is anticipated to generate an average of 3,865 weekday trips, calculated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th edition and Land Use Code 160 (Data Center). These average weekday trips include 371 new trips during morning peak and 265 new trips during evening peak times.

Access to the site is planned to be provided via two driveways, a full-access, secured driveway to the new township roadway, and a proposed full-access, emergency access driveway to North Cedar Crest Boulevard opposite Suncrest Drive.

A new township roadway is proposed to be constructed in concurrence with the proposed data center connecting Cedar Crest Boulevard opposite the Parkland High-School driveway and to Mauch Chunk Road just south of the existing Mechanicsville Road Intersection. The LVPC recommends coordination with the school district to minimize potential traffic interactions between students, guardians, and school buses and the traffic generated from the site.

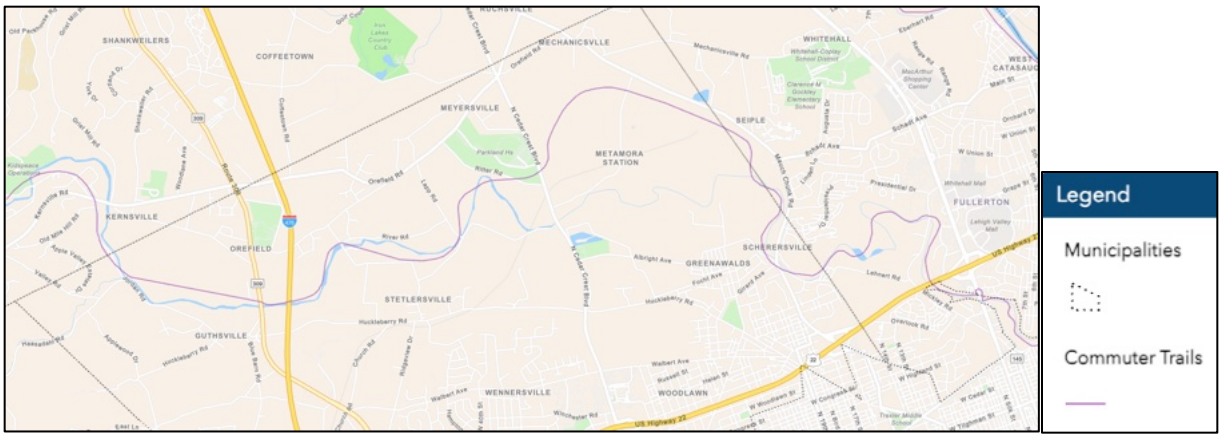
Aspects of the site plan can be improved to better ensure adequate transportation access and movement. There appears to be substantially more passenger vehicle parking spaces than typically required for data center land uses. The amount of provided parking should be re-evaluated and right-sized to minimize impervious surfaces (of Policy 2.2). Once the appropriate amount of passenger vehicle and commercial truck parking spaces is determined, any resulting changes to the site plans should clearly separate these traffic movements to minimize conflicts.

Any truck traffic generated from the site will most likely be traveling South from the site to Route 22. They will cross over Jordan Creek on North Cedar Crest Boulevard. The bridge over the Jordan Creek is in 'Fair' condition according to the Pennsylvania Department of Transportation Bridge Conditions Map. The bridge over Route 22 at the interchange of Cedar Crest Boulevard is also in 'Fair' condition. These bridges should be closely monitored to 'provide a safe, well-maintained transportation network' (of Policy 2.2) by making sure they do not fall into 'Poor' condition with the addition of the new trips generated by the development.

Sidewalks are proposed along all road frontages of the project site, which supports pedestrian safety and reducing fatalities towards zero (of Policies 5.1 and 5.3). The LVPC recommends including safe connections to proposed buildings and parking lots, with bicycle racks at each building, to support alternative transportation options and offer a seamless network for employees to safely commute to work using alternative modes (of Policies 2.2, 2.3 and 5.3). Electric vehicle charging capacity should be provided for both commercial and passenger vehicles (of Policy 2.5).

The Lehigh and Northampton Transportation Authority (LANTA) does not serve the project site or vicinity and currently has no plans to extend service to the area in the future. However, as the Lehigh Valley grows and potential for additional development in the vicinity remains, more people will need access to public transit. The developer should consider implementing the infrastructure for a future bus stop such as a concrete pad and benches along the frontage of the sidewalk on the new township road, potentially at the intersection of the Parkland High School Rd which would provide access to both the school property and the proposed site. The benches would still be able to be used even when there is no service from LANTA (of Policy 2.3).

The Parks, Recreation and Open Space plan of *FutureLV* identifies a Proposed/Conceptual Commuter Trail through the project site, which runs along Jordan Creek to the West, connects to Parkland High School and the project property, and then rejoins Jordan Creek to the East along the Whitehall Township border. The included sidewalks throughout the site support fulfilling this trail, however the LVPC strongly recommends including sidewalk along the northeastern property boundary along Mauch Chunk Road to further facilitate closing gaps in the region's trail network (of Policy 2.1).



LVPC GIS Mapping – Proposed/Conceptual Commuter Trails

North Cedar Crest Boulevard between Ritter Road and Walbert Avenue is identified as a Congested Corridor, where existing traffic conditions already present operational challenges. Given the scale of the proposed development, the construction phase is likely to generate commercial vehicle traffic at a level that would further affect corridor performance. The LVPC strongly recommends requiring construction traffic information such as anticipated truck volumes, designated routing, and hours of operation to adequately plan for and minimize traffic demand.

LVPC GIS Mapping – Congested Corridors

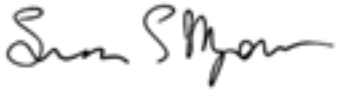
The LVPC has copied representatives from adjacent municipalities and review agencies to ‘coordinate land use decisions across municipal boundaries’ (of Policy 1.4).

Municipalities, when considering 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.

Please let me know if there are any questions about this review.

Sincerely,

Jill Seitz
Chief Community and Regional Planner



Susan Myerov
Director of Environmental Planning

Corinne Ruggiero
Environmental Planner

Evan Gardi
Transportation Planner

cc: Anthony Tallarida, Township Engineer; CDE Acquisitions LLC, Applicant; Andrew Lohr, Kimley-Horn, Project Engineer; Nate Jones, Lower Macungie Township Planning Director; North Whitehall; Lee Rackus, Whitehall Township Planning Bureau Chief; Jennifer Gomez, City of Allentown Planning Director; Meredith Keller, Upper Macungie Township Planning Director; Liesel Gross, Lehigh County Authority Chief Executive Officer; Garrett Cook, Lehigh County Conservation District Engineer; Fadia Halma, PA DCED Lehigh Valley Regional Director; Alicia Karner, PA DCED BusinessPA Lehigh Valley Regional Office Director; Dean Ritter, PA DEP Assistant Regional Director; Jane George, PPL Regional Affairs Director; Joseph Lookup, PPL Vice President of Transmission & Distribution Planning & Asset Management Brian Boyer, PennDot District 5; Chad Pindar, Delaware River Basin Commission Water Resource Planning Section Manager; Molly Wood, LANTA Planner/Land Use Specialist; Geoff Reese, LVPC Master Planner and Engineer; Denjam Khadka, LVPC Senior Civil/Environmental Engineer; Peter Lantz, Environmental Engineer.