BEI
BOGIA ENGINEERING INC.

September 13, 2024

City of Easton
Planning Commission
123 S. 3rd Street
Easton, PA 18042

Re: Response to the June 7, 2024 LVPC review letter of the Easton Commerce Park project.

On June 7, 2024, Lehigh Valley Planning Commission (LVPC) released a review letter of the project. It contained a detailed analysis of the project in relation to LVPC planning standards and the LVPC Comprehensive Plan, titled *FutureLV: The Regional Plan*. What follows is a response to the items noted in the review letter following the same subject outline as the letter provided:

Site Suitability
Natural Features
Floodplain and Tributary
Landscaping
Lighting
Sustainable Energy
Traffic Impact Study Discrepancies
Essential Freight Accommodations
Traffic Circulation and Emergency Access
Limited Local Infrastructure
Multimodal Transportation
Lehigh and Northampton Transportation Authority (LANTA)
Stormwater Review

This response will gather more details on the project, the site improvements proposed, and analyze it against the LVPC review letter with references to *FutureLV: The Regional Plan*.

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- "Encourage the reuse and redevelopment within urban areas" – the project is located on a dis-used industrial site and represents a redevelopment of the project site as encouraged by the municipalities in their zoning code that is applied to the site.
- "Increase the social, economic and environmental well-being of the region" – the LVPC letter notes that the project will generate jobs and provide economic improvements with the additional tax base. The site is also a contaminated site receiving clean up, riparian buffer installation, connectivity to multimodal transportation systems, greater access to green space, and daylighting of a deteriorated and degraded stream reach to improve the biodiversity and habitat of the stream and provide habitat connectivity with the Bushkill Creek.

The *FutureLV: The Regional Plan* also identifies increased density in areas as adding "value to neighborhoods and business districts" (page 81). It further notes:

> With its prime location, extensive road network and high quality of life, the Lehigh Valley has for decades been an attractive landing spot for new residents and developers. The result is hundreds, and in some cases, thousands of new homes and millions of square feet of commercial and industrial development every year. The downside of all that growth is that it often happens on the farm and open space lands that make the region such an attractive place to live, work and play.

> Density and infill development are powerful strat-egies to preserve those character-defining lands and add value to the business districts and neigh-borhoods where they're used, while keeping the tax base intact.

The project site is located in a Development area as is appropriate, it is not located in an Exurban area and is consistent with that point, nor is it located in a Preservation Buffer or Farmland Preservation Area. It is located in a Character-Defining Area and while it has impacts on woodlands, those were minimized during the design process and the project is providing improvments to the natural areas on the project site.

The site meets all the bullet points of the Development Criteria as found on Page 61 of *FutureLV.*

Development Criteria

Areas shown on the General Land Use Plan as Preservation Buffer areas or Exurban areas may be considered appropriate for development if the following criteria are met:

- The proposal is consistent with the conservation of high priority natural resources
- The site is contiguous to existing development
- Adequate sewage conveyance capacity is available from the site to the sewage treatment facility
- Adequate sewage allocation for the site is available in the sewage treatment facility
- Adequate sewage treatment capacity is available for the site
- The site is identified in the municipal comprehensive plan, zoning ordinance and Act 537 sewage facilities plan for development/public sewage disposal
- The site will be served by public water with adequate supply and delivery capacity
- The development will not create adverse impacts to the transportation system with respect to roads, bridges, transit facilities and bicycle/pedestrian facilities, including traffic safety or congestion, based on accepted transportation planning and engineering professional standards

Policy 1.3 notes "Mitigate the effects of climage change" as a bullet point. With the previously noted proximity to 100-million customers, a freight heavy development would reduce emisions by providing the freight within closer proximity to those customers.

Policy 2.1 notes

- Enhance The Link – the Lehigh Valley multi-use trail network.
- Connect regional trails to Centers and Corridors.
- Promote funding opportunities for mixed-transportation and recreation facilities.

- "Discourage development in hazard-prone areas." – the development works to reduce potential hazards with the installation of floodplain banks along the relocated tributary and does not proposed an development within the Bushkill Creek floodplain that represents a hazard.
- "Promote development in areas with public sewer and water capacity." – The project meets this goal.
- "Discourage use of packaged sewage treatment plants." – the project does not proposed this.

Policy 3.3 discusses the preservation of farmland, and by utilizing a degraded site and redevloping it, this goal is met.

Policy 3.4 discusses sustainable site design, and advocating "for the use of native, climate-adaptive and carbon sequestering landscaping." These items were provided for as a high-priorty portion of the design, especially with the riparian buffer, wetland design, and relocated stream.

Page 98 of *FutureLV: The Regional Plan* discusses redevelopment of brownfield sites. The project is a clear example of this goal to utilize a degraded site that has been left empty and underutilized.

Policy 4.1 is to "Enhance growth by rooting economic development strategies in the unique competitive advantages of the region" and includes a bullet point to "Leverage proximity and connection to major metropolitan regions." The project location adjacent to an arterial interchange fits this criterion.

Policy 4.2 notes:

- "Increase social, cultural and artisitic opportunities" – which is provided with the new connectivity of disparate sections of trail in the region.
- "Reduce blight to improve safety, quality of life and promote sustainable economic activity" – the proposed project is re-developing a blighted parcel.

Previous plans had greater impacts on steep slopes and would have further fractured the woodland connectivity within the project site. During the design process, the building orientation was re-evaluated multiple times to get it to balance the site cut/fill for rock and soils, thus limiting disturbance of the steep slopes, and it also maximized the site woodlands in a single larger area instead of breaking it up into smaller pieces. The developer and designer understand the need for natural habitat connectivity and the fractured nature of inappropriate site layout would affect that. The design presented was already evaluated and redesigned from earlier concepts to take those items into account.

Further to that point and to Policy 3.1, the realignment of the on-site tributary creek to the Bushkill Creek is providing necessary habitat connectivity that currently does not exist by daylighting the tributary. This is an integral part of the site design and a sought-after environmental improvement to the project site.

Policy 3.1 notes the following elements:

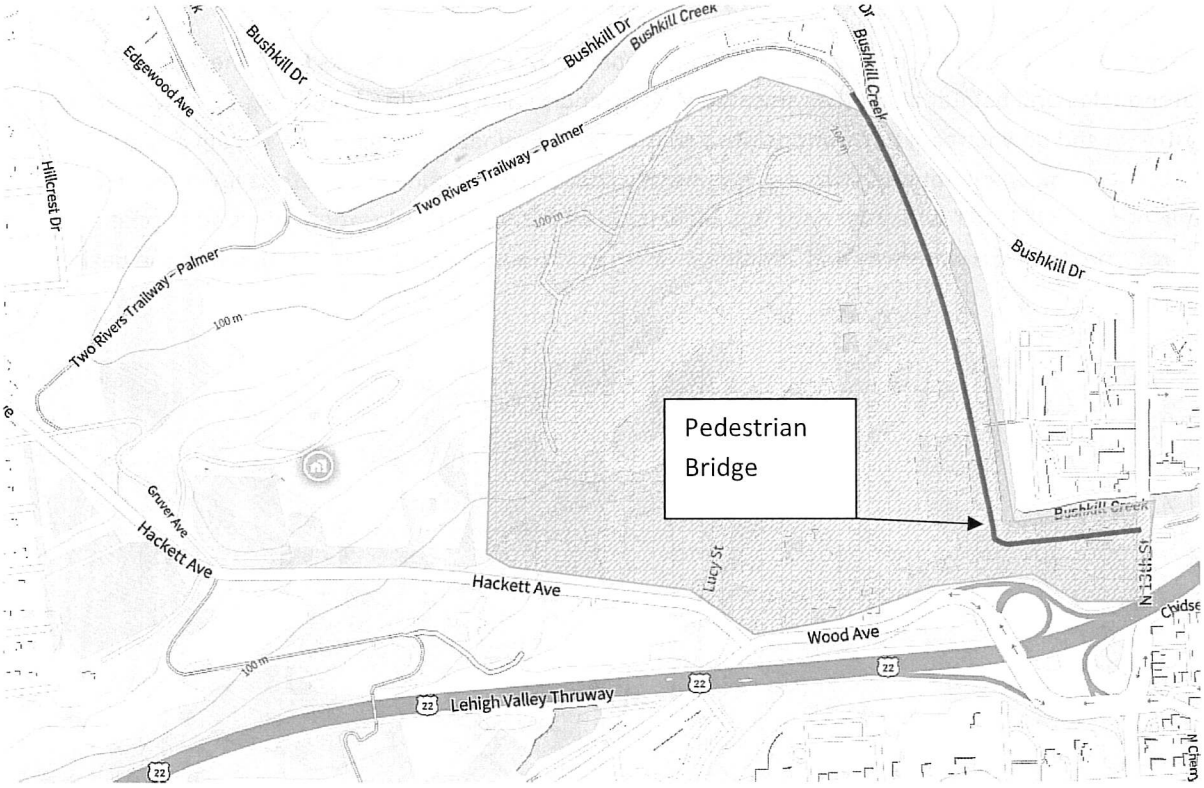
"Protect high-priority natural lands and water resources" – this is accomplished by the installation of the riparian buffers along Bushkill Creek, a Class-A Natural Trout Stream. Further, the on-site stormwater basins are specifically designed to provide filtering of pollutant runoff from the site impervious areas to ensure water quality of the high-priority water resource.

"Preserve natural, recreation, cultural, historical and scenic assets" – this was evaluated and accomplished by extending a multi-use trail connection to link up two disparate trail sections within the region, allowing for greater recreational opportunities to the area residents; by shifting the site design to leave the greatest connected areas for the existing woodlands and not fracturing it; and by reconnecting the tributary to the Bushkill Creek in a manner to enhance fish passage, habitat, and other biological uplift.

"Expand habitat connectivity" – as noted above, this was accomplished by daylighting the existing tributary stream that was previously put underground. A major environmental improvement on the project site.

"Preserve natural resources in the land development process" – this was evaluated in the conceptual phases of the project to ensure the largest portion of woodlands would remain undisturbed and contiguous instead of fracturing it further. This was also handled with the uplift of the stream relocation, installation of wetland flood banks, and installation of riparian buffers along the Bushkill Creek.

"Enhance natural resources that make our communities more resilient" – as noted above, enhancement of the existing tributary is accomplished by re-routing it and daylighting it as well as installing riparian buffers along the Bushkill Creek where existing site conditions have building foundations and paved areas up to the edge of the stream bank.

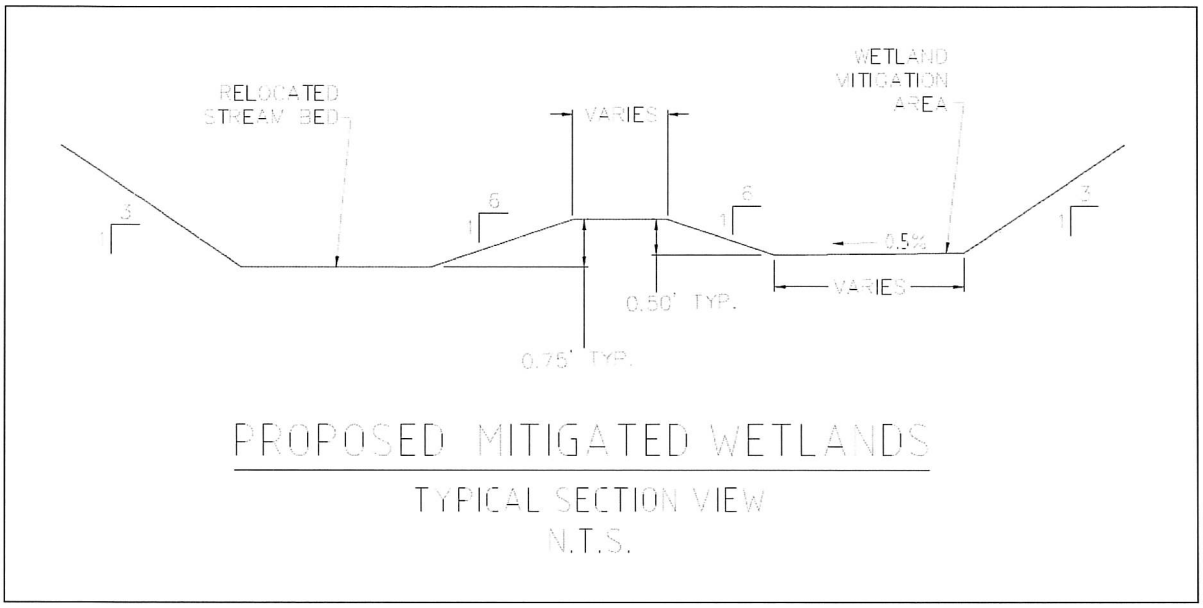


The red line shows the proposed trail connection.
The landscaping portion of the response below includes planting schedules and diagrams for the riparian buffers and wetlands landscaping plan.

Floodplain and Tributary

The review letter noted that the existing floodplain for the tributary stream to the Bushkill Creek is subject to DEP and FEMA review. This review is already in process and also includes the Army Corps of Engineers since it qualifies as a Joint Permit under DEP regulations and is not a General Permit. This process is well underway with DEP providing an Administratively Complete determination on the application and letter of Technical Comments to address. There were only four technical comments needed to be addressed for DEP to approve the Joint Permit application and the applicant team has already discussed the specific nature of the comments with DEP's review team to ensure a smooth completion on those items.

The relocated tributary is a major beneficial uplift to the existing conditions on the site. The stream will be relocated away from areas noted as contaminant hot-spots under the EPA Act 2 clean up that is on-going for the project site. It will also daylight the stream which is underground for greater than 300' and remove obstructions that restrict fish passage from Bushkill Creek up into the tributary. These uplift activities are a vital improvement to the natural trout stream watershed and will allow the habitat connection that was previously cut-off with the stream being located underground.

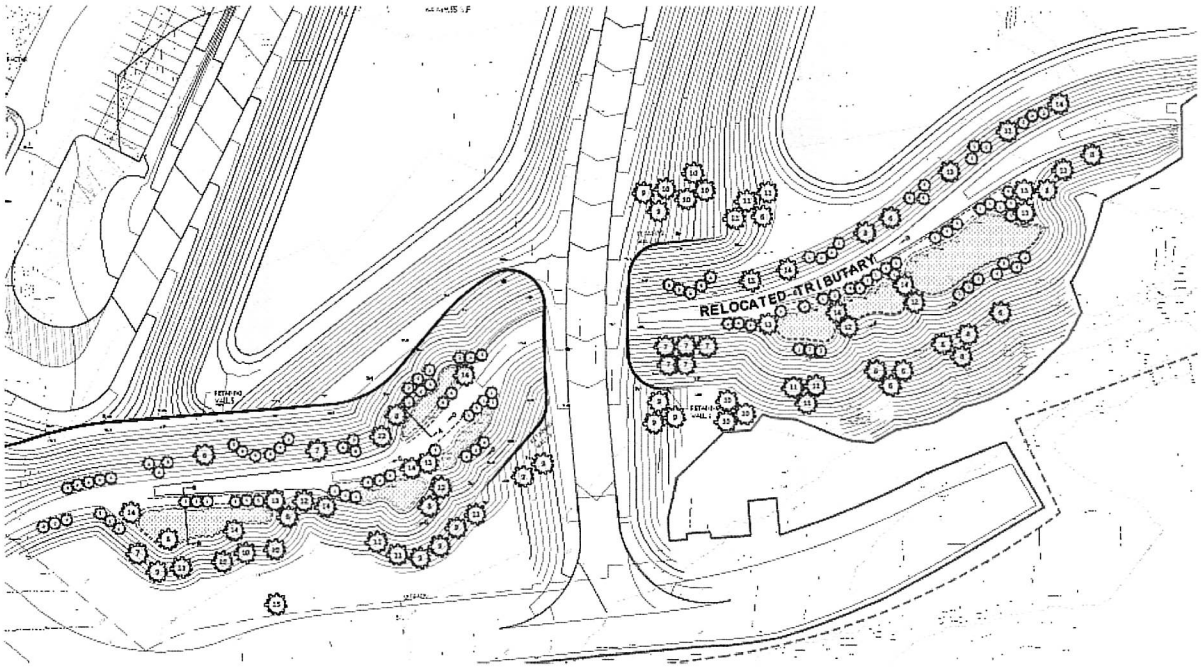


A cross-section view of the stream bed and wetland bench that is designed to receive water from a typical 2-yr storm event.

Site Plan & Location: See attached Landscaping Plan

Species	Latin Name	Size	Quantity	Pattern/Spacing
ACER RUBRUM	Red Maple	75-100 FT	69	Plant per Landscaping Plan; 9' by 9' Spacing
ACER SACCHARINUM	Silver Maple	75-100 FT	50	Plant per Landscaping Plan; 9' by 9' Spacing
POPLARLIRIODENDRON TULIPIFERA	Tuliptree	75-100 FT	50	Plant per Landscaping Plan; 9' by 9' Spacing
QUERCUS BICOLOR	Swamp White Oak	75-100 FT	50	Plant per Landscaping Plan; 9' by 9' Spacing
VIBURNUMDENTATUM	Southern Arrowwood	6-12 FT	40	Plant per Landscaping Plan; 9' by 9' Spacing
SAMBUCUSCANADENSIS	Elderberry	8-12 FT	67	Plant per Landscaping Plan; 9' by 9' Spacing
ILEX GLABRA	Inkberry	3-5 FT	40	Plant per Landscaping Plan; 9' by 9' Spacing

The above is the riparian buffer planting list provided for on the DEP permitting drawings.



The above shows the stream relocation with landscaping and wetland pockets (light blue areas) that act as flood banks along the stream.

ERNMX–232 PA Valley & Ridge Province OBL Mix

Mix Composition
32.0% Carex vulpinoidea, PA Ecotype (Fox Sedge, PA Ecotype)
18.8% Carex lurida, PA Ecotype (Lurid Sedge, PA Ecotype)
16.0% Carex scoparia, PA Ecotype (Blunt Broom Sedge, PA Ecotype)
12.2% Carex crinita, PA Ecotype (Fringed Sedge, PA Ecotype)
5.0% Elymus virginicus, PA Ecotype (Virginia Wildrye, PA Ecotype)
4.0% Verbena hastata, PA Ecotype (Blue Vervain, PA Ecotype)
3.0% Juncus effusus (Soft Rush)
2.0% Asclepias incarnata, PA Ecotype (Swamp Milkweed, PA Ecotype)
1.0% Aster puniceus, PA Ecotype (Purplestem Aster, PA Ecotype)
1.0% Bidens cernua, PA Ecotype (Nodding Bur Marigold, PA Ecotype)
1.0% Carex lupulina, PA Ecotype (Hop Sedge, PA Ecotype)
1.0% Helenium autumnale, PA Ecotype (Common Sneezeweed, PA Ecotype)
0.7% Eupatorium perfoliatum, PA Ecotype (Boneset, PA Ecotype)
0.7% Vernonia noveboracensis, PA Ecotype (New York Ironweed, PA Ecotype)
0.5% Alisma subcordatum, PA Ecotype (Mud Plantain, PA Ecotype)
0.5% Scirpus cyperinus, PA Ecotype (Woolgrass, PA Ecotype)
0.3% Eupatorium fistulosum, PA Ecotype (Joe Pye Weed, PA Ecotype)
0.3% Penthorum sedoides, PA Ecotype (Ditch Stonecrop, PA Ecotype)

Seeding Rate: 20 lb per acre with a cover crop. For a cover crop use one of the following: grain rye (1 Sep to 30 Apr; 30 lbs/acre), Japanese millet (1 May to 31 Aug; 10 lbs/acre), or barnyard grass (1 May to 31 Aug; 10 lbs/acre).

THe above is a planting mix for a seed mixture used in the wetland pockets in addition to the tree/shrub plantings which is shown on the next page.

ERNMX–233 PA Valley & Ridge Province Riparian Mix

Mix Composition
25.0% Panicum clandestinum, Tioga (Deertongue, Tioga)
12.6% Sorghastrum nutans, 'Nebraska 54' (Indiangrass, Nebraska 54')
11.0% Schizachyrium scoparium, Fort Indiantown Gap–PA Ecotype (Little Bluestem, Fort Indiantown Gap–PA Ecotype)
10.8% Andropogon gerardii, 'Niagara' (Big Bluestem, Niagara')
10.0% Elymus riparius, PA Ecotype (Riverbank Wildrye, PA Ecotype)
10.0% Elymus virginicus, 'Madison' (Virginia Wildrye, 'Madison')
5.0% Carex vulpinoidea, PA Ecotype (Fox Sedge, PA Ecotype)
3.0% Juncus effusus (Soft Rush)
2.0% Agrostis perennans, Albany Pine Bush–NY Ecotype (Autumn Bentgrass, Albany Pine Bush–NY Ecotype)
2.0% Asclepias incarnata, PA Ecotype (Swamp Milkweed, PA Ecotype)
2.0% Heliopsis helianthoides, PA Ecotype (Oxeye Sunflower, PA Ecotype)
2.0% Verbena hastata, PA Ecotype (Blue Vervain, PA Ecotype)
0.7% Vernonia noveboracensis, PA Ecotype (New York Ironweed, PA Ecotype)
0.6% Aster novae–angliae, PA Ecotype (New England Aster, PA Ecotype)
0.5% Aster prenanthoides, PA Ecotype (Zigzag Aster, PA Ecotype)
0.5% Aster puniceus, PA Ecotype (Purplestem Aster, PA Ecotype)
0.5% Aster umbellatus, PA Ecotype (Flat Topped White Aster, PA Ecotype)
0.5% Eupatorium perfoliatum, PA Ecotype (Boneset, PA Ecotype)
0.5% Helenium autumnale, PA Ecotype (Common Sneezeweed, PA Ecotype)
0.5% Monarda fistulosa, Fort Indiantown Gap–PA Ecotype (Wild Bergamot, Fort Indiantown Gap–PA Ecotype)
0.3% Eupatorium fistulosum, PA Ecotype (Joe Pye Weed, PA Ecotype)

Seeding Rate: 20 lbs/acre with 30 lbs/acre of a cover crop. For a cover crop use either grain oats (1 Jan to 31 Jul) or grain rye (1 Aug to 31 Dec).

In addition ot the wetland seed mix, the above mix is for the stream banks and upslope areas to provide a native mix of riparian plants further enhancing the stream and uplifting it from an underground channel or a channel within block or concrete walls.

Lighting

The LVPC recommendation for the site lighting was to avoid upward projected lights, and to ensure lighting fixtures are designed to minimize glare and are targeted in a manner that supports "maximizing the preservation of critical habitats" as noted in Policy 3.1. The site lighting design is fully compliant with these recommendations and has been from the initial layout. It is now the industry standard to use LED light fixtures for the lower energy costs and lower cost of use. The inherent design of LED fixtures provides full cut-off of the light and does not project unnecessary glare. The lights are targeted directly downwards or towards pedestrian safety areas and not projected upwards in any way. The lighting is the minimum needed for the appropriate safety of the site users and employees.

The use of LED lights is supported by Policy 3.1 for sustainable design and are the appropriate choice for any development.

practices and needs when finalizing the outfitting of the building. The extended roof space lends itself well to allow for solar panel installation and the solar options are continuing to be reduced in cost that make them a desirable addition to the final building design. The economic benefits of solar installation are in the developer's favor to integrate once the building design is worked out. will it happen?

The other options noted for geothermal is not as viable with the size of the building and the remaining land. A full geothermal system to handle the size building would have greater disturbance requirements and environmental impacts than is suitable or advantageous.

The LVPC letter mischaracterizes the relocation of the on-site tributary creek as required by the placement of the Managed Release Concept (MRC) basin. The tributary relocation was an element of the total site design and grading, and a necessary uplift to the streams functionality by removing it from the contaminated areas of the site and daylighting it to allow fish passage within it.

Traffic Impact Study Discrepancies

It was recognized that the Traffic Impact Study (TIS) provided was for an earlier evaluation of the project site that was for a different use scenario. That scenario was discarded and the proposed high-cube warehouse facility as shown on the latest (TIS) and plan are proposed to move forward. The updated TIS has been provided to LVPC after their initial review and they, to date, have not provided any further comment.

It is important to note that though the plans did not match the TIS provided, a cover letter noting the discrepancy between them was provided which defined the proposed use as a High-Cube fulfillment center warehouse. The TIS has been provided to the municipalities impacted by the development and they have provided comments or have had the opportunity to provide comments so that their concerns can be noted to PennDOT. As part of the review process, PennDOT does also keep the municipalities informed. The TIS is near its final approved status and only one additional submission is anticipated to PennDOT for the study as the requested improvements have been finalized and the HOP design drawings can be generated.

Essential Freight Accommodations

The first paragraph in the LVPC review notes that the site design "does not depict adequate parking for tractor-trailers." The parking shown at 62' in length is primarily trailer parking, and not necessarily full trailer with truck attached. However, the site developer is well versed in the requirements of high-cube warehouse facilities with cross-dock capabilities and the design of the truck court areas is within their design guidelines. Further, as the site designer, we have worked on multiple large warehouse facilities with truck court areas and used standard spacing for the loading docks against the building, the maneuvering area in front of the docks, and the trailer parking areas to ensure that the site would be

Traffic Circulation and Emergency Access

The project site circulation for a development of this nature is always integrated early on in the design. The access points and the internal circulation are capable of supporting WB-62 large tractor trailers and subsequently emergency responder vehicles. Safety and access for fire fighting vehicles are always part of the design practices. The plans have been reviewed by the Fire Marshal for both the City of Easton and Wilson Borough for compliance with access and emergency requirements, including placement of hydrants at desired locations. This is in line with the Policies 2.2 and 5.1 as noted by the LVPC to "enhance planning and emergency response efforts among emergency management personnel."

Limited Local Infrastructure

The Traffic Impact Study noted that the intersection of Hackett and Wood Avenues can remain as a stop-controlled intersection. The proposed improvements at that intersection include an additional right turn lane to go from Hackett Ave onto Wood Ave and some shoulder widening on Wood Ave to provide a pass-by area around cars turning left from Wood Ave onto Hackett Ave. There will be an after-development study done at that intersection to determine if the information in the traffic study is accurate and that the site is performing as expected. In the existing study, a traffic signal is not warranted at that location.

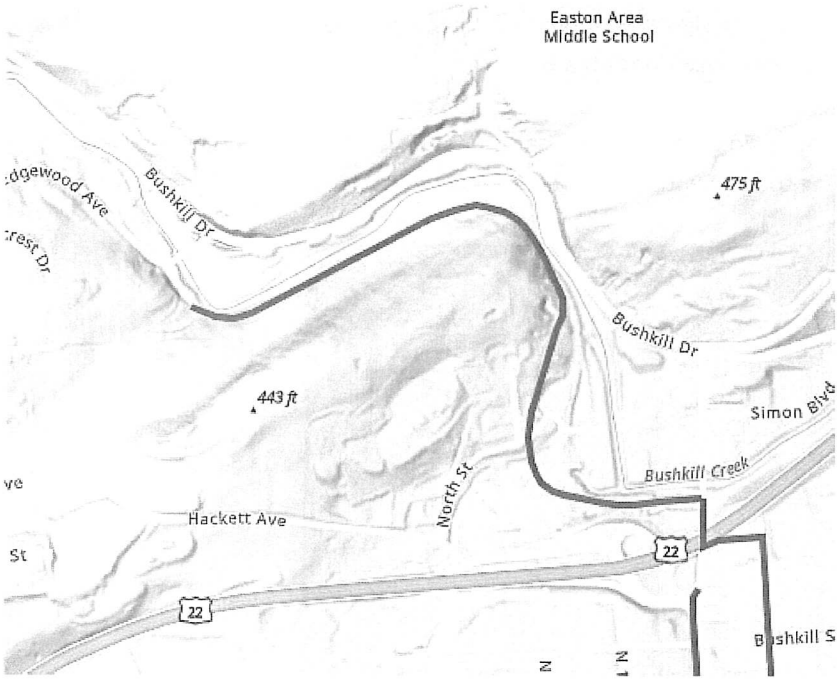
The bridge noted in the LVPC letter is in the process of being evaluated for structural stability. It was noted that the PennDOT improvements will require the extension of the structure. It is currently an 8'-9' wide stone arch structure. The structure will be extended or replaced, and will be made safe as the functionality of the development does depend on the viability of that structure.

The truck routing was included in the updated Traffic Impact Study provided to the municipalities and PennDOT that address the concerns of the letter. The developer has agreed to add signage to the project to direct trucks away from traveling up Hackett Ave and past the park.

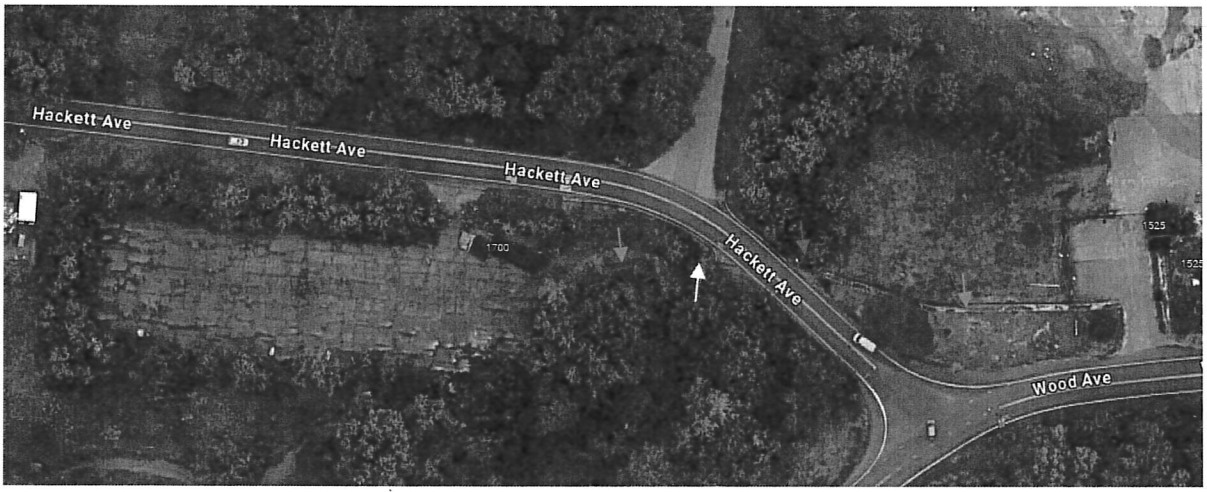
Multimodal Transportation

The developer took the recommendation from the LVPC to provide a connection from the Karl Stirner Arts Trail to the building seriously and that trail connection is provided for in the updated plans provided to the municipalities for review. It brings a connection point from the trail, up close to Wood Avenue and then along the eastern site driveway and further up into the facility. Pedestrian crossings are provided for on the internal driveways along with signage for drivers to yield to pedestrians. This will connect 13th Street to the proposed facility and allow employees alternate commuting options.

The proposed trail connection on the project site can be further connected to the Wilson Bike Trail via the Palmer Township Two-Rivers Trailway. There would be no need for further sidewalk along Hackett Avenue and off-site improvements for the sidewalk as the scenic trail will make that connection and

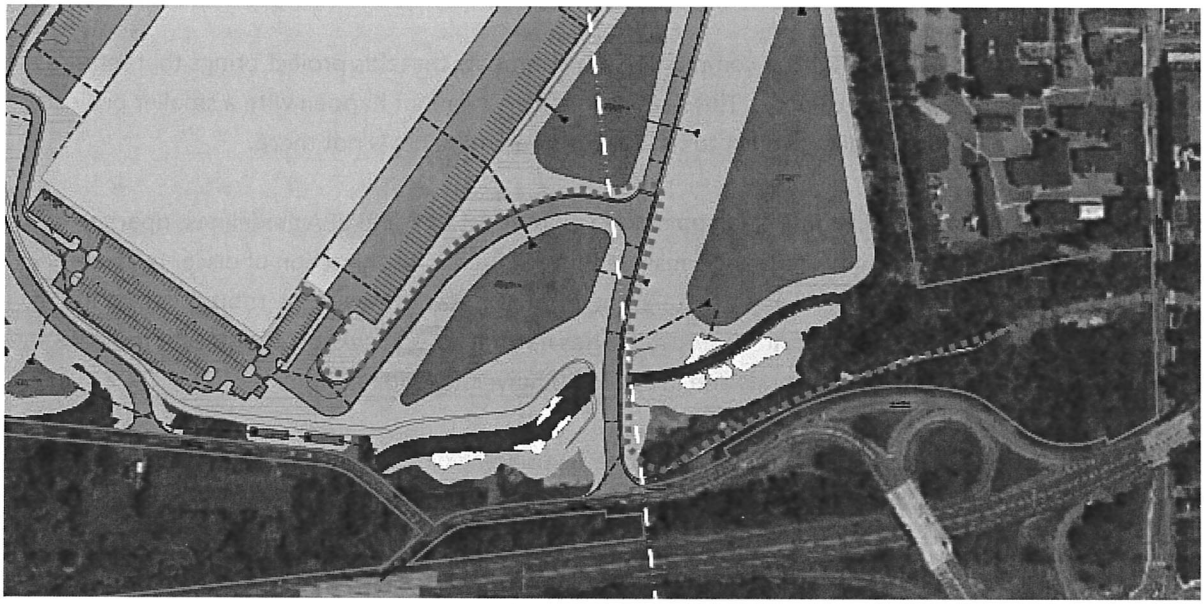


In the LVPC letter, they included a picture of a pedestrian crossing sign located near the intersection of Hackett Ave. and Wood Ave. The subject property is split by Hackett Ave and a portion, which includes a no longer used parking lot, was on the south side of Hackett with a pedestrian bridge over the tributary there, and was a connection from the previous industrial development on the site to the parking lot. This sign appears to no longer be applicable crossing from the property on the south side to the north side as there is no intention of using the south side portion of property and the pedestrian bridge over the tributary has since been removed.



Aerial showing the parking lot and path to the previous industrial development. The blue arrow points to the previous path, the red arrow to the pedestrian crossing sign, and the yellow arrow to the

Based on LVPC's letter and recommendations, an additional trail connection from 13th Street to the site access driveway and then further to the building are integrated into the latest plans provided to the City for the review process. The developer would like to encourage the addition of a bus stop at 13th Street where the project's eastern most property extends to allow for access to the trail and the proposed development. This would be in-line with Policies 2, 4, and 5 that encourage multi-modal transportation, a connected mixed-transportation region, outdoor recreation and open space access, and healthy, inclusive, and livable communities.



The red dashed line shows the path from 13th Street to the building.

Stormwater Review

The project is working through comments regarding the stormwater and balancing the review between the LVPC reviewer, the Wilson Borough Engineer, and DEP comments regarding the NPDES permit and stormwater requirements from that. The applicant is looking to comply with all comments generated and is not seeking any waivers from the Act 167 Stormwater Management Ordinance. The final review is in process at the time of this letter and we expect no further comments after it is completed.

Conclusion

While the project is a large and dense use for the project site, it does bring with it community improvements that fit with the *FutureLV* planning goals. This response to the LVPC review letter does a deeper dive into the different policies and shows that the development does fit with the comprehensive plan intents.