



# WEST WINDSOR TOWNSHIP

## DEPARTMENT OF COMMUNITY DEVELOPMENT DIVISION OF ENGINEERING

### MEMORANDUM

TO: West Windsor Township Technical Review Committee

FROM: Francis A. Guzik, PE, CME  
Director of Community Development/Township Engineer

DATE: March 9, 2022

SUBJECT: **Bridgepoint 8 Industrial Park – Second TRC Submission**  
**Preliminary & Final Major Subdivision and Site Plan – Phase I**  
**Preliminary Major Site Plan – Phase II**  
Block 8, Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, & 49  
Block 15.14, Lots 18, 19, 20, 22 & 75  
US Route 1, Quakerbridge Road (CR 533) & Clarksville Road (CR 638)  
PB21-15

This is the applicant's second submission. Previously submitted documentation is repeated below in *italic* text while new or updated information is identified with **bold** text.

### Documents Received/Reviewed:

The following documents have been submitted for review:

- A. *Set of plans entitled "Preliminary and Final Site Plan Application for Bridge Point 8 Industrial Park - Block 8, Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, & 49 and Block 15.14, Lots 18, 19, 20, 22 & 75- West Windsor Township, Mercer County, New Jersey" prepared by Langan (Christian Roche, PE), consisting of one hundred fifty-two (152) sheets dated and revised through **February 15, 2022**;*
- B. *Set of architectural drawings entitled "Proposed Elevations" prepared by Cornerstone Architects, LTD, consisting of seven (7) sheets, dated November 12, 2021;*
- C. *Set of architectural drawings entitled "Proposed Floor Plan" prepared by Cornerstone Architects, LTD, consisting of seven (7) sheets, dated November 12, 2021;*
- D. *Set of plans entitled "Preliminary and Final Major Subdivision - Bridge Point 8 Industrial Park - Block 8, Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, & 49 and Block 15.14, Lots 18, 19, 20, 22 & 75- West Windsor Township, Mercer County, New Jersey" prepared by Langan (Joseph E. Romano, PLS), consisting of five (5) sheets dated November 12, 2021, revised through **February 11, 2022**;*
- E. *Set of plans entitled "ALTA/NSPS Land Title Survey - Bridge Point 8 Industrial Park - Block 8, Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, & 49 and Block 15.14, Lots 18, 19, 20, 22, 26 & 75- West Windsor Township, Mercer County, New Jersey" prepared by Langan (Joseph E. Romano, PLS), consisting of three (3) sheets dated November 12, 2021, revised through December 3, 2021;*

- F. Report entitled “Environmental Impact Statement for Bridge Point 8 Industrial Park - Block 8, Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, & 49 and Block 15.14, Lots 18, 19, 20, 22 & 75- West Windsor Township, Mercer County, New Jersey” prepared by Langan (unattributed), dated **February 15, 2022**;
- G. Report entitled “Stormwater Management Report - Bridge Point 8 Industrial Park - West Windsor Township, Mercer County, New Jersey” prepared by Langan (William Boska, PE & Christian Roche, PE), dated November 12, 2021; revised through **February 15, 2022**;
- H. Report entitled “Traffic Impact Study - Bridge Point 8 Industrial Park - West Windsor Township, Mercer County, New Jersey” prepared by Langan (Karl A. Pehnke, PE, PTOE & Kerry A. Pehnke, PE), dated November 12, 2021; revised through December 3, 2021;
- I. Report entitled “Water System Engineer’s Report - Bridge Point 8 Industrial Park - Block 8, Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, & 49 and Block 15.14, Lots 18, 19, 20, 22 & 75- West Windsor Township, Mercer County, New Jersey” prepared by Langan (Dulce S. Miguel, PE & Christian Roche, PE), dated November 12, 2021, revised through **February 15, 2022**;
- J. Report entitled “Sanitary Sewer Engineer’s Report - Bridge Point 8 Industrial Park - Block 8, Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, & 49 and Block 15.14, Lots 18, 19, 20, 22 & 75- West Windsor Township, Mercer County, New Jersey” prepared by Langan (Dulce S. Miguel, PE & Christian Roche, PE), dated November 12, 2021, revised through **February 15, 2022**;
- K. Report entitled “Soil Logs and Permeability Test Results – Proposed Warehouse Development – Bridge Development Partners, LLC – West Windsor, Mercer County, New Jersey” prepared by Melick-Tully and Associates (Anthony G. DeZenzo, PE, Christopher P. Tansey, PE and Mark R. Denno, PE), dated November 11, 2021 (submitted as Appendix to Submission Item G);
- L. Document entitled “Stormwater Maintenance Plan - Bridge Point 8 Industrial Park - West Windsor Township, Mercer County, New Jersey” prepared by Langan (William Boska, PE & Christian Roche, PE), dated November 12, 2021; unrevised (submitted as Appendix to Submission Item G);
- M. Photo Report prepared by Langan, undated, consisting of 147 color photographs and a “Photo Map” showing the locations and view directions of the various photographs;
- N. Document entitled “Engineer’s Estimate – Bridge Point 8 Industrial Park – West Windsor Township, Mercer County, New Jersey – Overall Site Improvements” prepared by Langan dated **February 15, 2022**;
- O. Document entitled “Engineer’s Estimate – Bridge Point 8 Industrial Park – West Windsor Township, Mercer County, New Jersey – Site Improvements Within Right-of-Way” prepared by Langan dated **February 15, 2022**;
- P. Document referenced “Authorization for Freshwater Wetlands Letter of Interpretation – Extension” issued by NJDEP under File No. 1113-10-0001.1, Activity Number: FWW150001, issued to Howard Hughes Corp. dated January 22, 2016 referencing each of the Block/Lots involved in this application plus Lot 26 in Block 15.14 and indicating an expiration date of December 19, 2020;
- Q. Document referenced “Freshwater Wetlands Letter of Interpretation – Line Verification” issued by NJDEP under File No. 1113-10-0001.1, Activity Number: FWW-FWL14-100001, issued to General Growth Properties, Inc. / Former Wyeth Tract, dated December 20, 2010 referencing each of the Block/Lots involved in this application plus Lot 26 in Block 15.14 with the approved wetland delineation plans dated June 30, 2010, revised through November 12, 2010, consisting of a Key Plan and seven detailed sheets;
- R. Application documents, including:

- *Application form with Rider;*
- *Site Plan and Subdivision Checklists;*
- *Green Development Practices Checklist;*
- *Ownership Certification;*
- *Agreement to Pay for Professional Review and Inspections form and W-9;*
- *Tax Collector's Certification that taxes are current; and*
- *Title Report*

**Narrative:**

The subject property is a tract of numerous contiguous parcels located adjacent to the southeasterly interchange of Quakerbridge Road and US Route 1. Clarksville Road also bisects the tract in a generally north-south direction (similar orientation to US Route 1). The overall tract of approximately 645 acres comprises the entirety of the Planned Commercial Development (PCD) zoning district, and is the former American Cyanamid site.

The bulk of this project consists of seven (7) warehouse buildings ranging in size from 1,186,092 square feet to 334,032 square feet, with a total combined footprint of 5,563,117 square feet. These facilities are situated behind frontage development of smaller retail uses along Quakerbridge Road and US-1. No information is provided for the retail development.

The project is now proposed to be completed in two (2) phases with Phase 1 consisting of Buildings D1, E1 and C1 and associated improvements. Phase 2 consists of Buildings B1, B2-1, B2-2 and A1 and associated improvements. The applicant is seeking Preliminary and Final Subdivision approval for the entire tract, Preliminary and Final Site Plan approval for Phase 1 and Preliminary Site Plan approval for Phase 2.

This is the applicant's second submission. I have reviewed the documentation submitted and offer the following with my previous comments repeated in *italic* text and my updated or new comments in **bold** text.

**1.0 Subdivision**

*1.01 The following Subdivision checklist items have been deemed to be incomplete:*

**A. Section 200-47.A Common Requirements - Map Details**

- a. Checklist Item 2 requires the name and address of the landowner and applicant on the subdivision plans, and when a corporation, the name of the President and Secretary. This information was not provided. **Addressed for Applicant but not for landowner. Provide required information for the property owner. It is noted that the cover sheet lists Clarksville Center, LLC and Scholar's Meadow, LLC as property owners, but the Subdivision Plan CB101 only lists Clarksville Center, LLC. This discrepancy is also to be addressed.***
- b. Checklist item 6 requires the Township Subdivision Legend (checklist pages 10 and 11) to be shown on the subdivision plans. Only info from page 10 was shown. **Addressed.***

**B. Section 200-53.C Preliminary Plat Details**

- a. Checklist Item 2 requires the tax map sheets depicting the subject property to be identified. This information has not been provided. **The applicant has added a Tax Map Index to Sheet 1 that clearly identifies the various tax map sheets that cover portions of the subject tracts. Addressed.***

- b. Checklist Item 2)(a) requires the name and address of the record owner or owners. This information was not provided. **See response to 1.01A.a.**
- c. Checklist Item 2)(b) requires the name and address of the subdivider, and if a partnership or corporation, names of all individuals holding more than 10% ownership. This information was not provided. **Addressed.**
- d. Checklist Item 2)(d) requires the names of adjacent and facing owners. Owners of properties facing the tract opposite US-1 and Quakerbridge Road shall be shown on the plat. **Addressed.**
- e. Checklist Item 4)(a) requires at least 2 permanent bench marks ("BMs") to be established for each 50 acres of the tract to be subdivided. That would equate to 14 BMs for the Block 8 tract and 14 BMs for the Block 15.14 tract. None are provided for on the subdivision plat. **Applicant indicates that he is requesting a temporary waiver of this requirement and that adequate BM Monumentation will be provided prior to construction. A note is to be added to CS002 indicating how many monumentation are going to be set and when, and when a copy of the documentation will be provided to the Township.**
- f. Checklist Item 5 requires the location of all floodplains and NJ Flood Hazard Area ("FHA") Design Flood Limit with elevation be shown on the Plat. This proposed information as submitted to NJDEP for Verification per the site plan documents shall be shown on the Plat and revised in the future, as may be necessary. **The applicant indicates that this information is shown on the detailed grading plan sheets; however, this is a Subdivision checklist item and the information must be shown on the Plat as well, with reference to the source of the information.**
- g. Checklist Item 9 requires the proposed names of all new roadways be provided on the plat. A proposed name for the connector road from Avalon Way opposite Quakerbridge Road to Nassau Park Boulevard opposite US-1 has not been provided. **Applicant indicates intent to seek temporary waiver from this requirement until the time of resolution compliance. I have no objection to the request.**
- h. Checklist Items 19 and 23 require the submission of a Freshwater Wetlands Letter of Interpretation issued by NJDEP. None was located with the submission documents received. **The LOI Extension document submitted indicates an expiration date of December 19, 2021. The applicant indicates that the current, valid NJDEP Letter of Interpretation for the property expires on March 16, 2022. The applicant shall clarify the discrepancy and submit the document with the 3/16/2022 expiration date, as well as discuss the status of any extension requests.**

C. Section 200-54.C Final Plat Details

- a. Checklist Item 1 requires the name of the owner be provided on the plat. This information was not provided. **See response to 1.01A.a.**
- b. Checklist Item 2 requires right-of-way (ROW) lines of streets be shown with dimensions. The width of the connector road ROW from Quakerbridge Road to US-1 shall be identified on the plat. Also, its width appears to neck down at the US-1 intersection. Provide testimony as to why this is the case. **The connector road has been identified as having a primarily constant 74'-width. However, it necks down to 51.12' at the US-1 connection. Testimony on the design requirements are to be provided.**

- c. Checklist Items 10), 11)(a), 12), 13)(a) and (b), 14), and 18)(a) and (b) all relate to the situation where preliminary and final approvals are sought separately. Although these items are technically “incomplete” at this time, I recommend the applicant request waivers for each, to which I will have no objection. **The submission waivers have been requested and I have no objections.**

1.02 The applicant has requested waivers from the following Subdivision checklist items:

B. Section 200-53.C Preliminary Plat Details

- a. The applicant has requested a waiver from Checklist Item 1, which requires a Key Map at a scale not smaller than 1” = 1,000’ showing the relationship of the entire tract to the neighborhood at least 1,000 feet beyond its boundaries. The justification provided was “Location Map provided is 1” = 2000’ as compliant with the West Windsor Site Plan Checklist”. This is not exactly accurate.

The insets provided at 2000-scale are the subject tract only, existing and proposed. The “Project Location Map” is presented at a scale of 1” = 5,000’ and is overlain on a street map rather than an aerial photograph. The street map does not convey any adjacent development information. I don’t object to the use of 2000-scale but require that the existing developments within 1,000 feet of the tract be clearly shown on same. **The paper prints appear fine, but the digital copy provided does not depict the Nearmap imagery on the Key Map properly. This will have checked and corrected on subsequent digital versions submitted by the applicant.**

- b. The applicant has requested a partial waiver from Checklist Item 8, which requires plans and profiles of proposed roadways showing all proposed utility layouts with the justification presented as “utility profiles not provided at this time”.

I do not support this waiver request. Roadway plans/profiles and cross-sections for Clarksville Road and the Avalon Way connector road will be submitted for review, comment, and potential revisions before the application proceeds to the Planning Board. Profiles for all utilities outside of these two roadways are also required. **At the TRC meeting, the applicant requested a waiver to defer preparation to the resolution compliance stage. Road and utility profiles often identify potential design issues that aren’t evident solely from the plan view perspective. Roadway plans/profiles and cross-sections for Clarksville Road and the Avalon Way connector road remain required to be submitted for review, comment, and potential revisions before the application proceeds to the Planning Board.**

Profiles for all utilities outside of these two roadways, with the exception of the sanitary sewer mains, could be deferred to the time of resolution compliance; however, the applicant is cautioned that this could result in having to return to the Board for an amended approval if a significant conflict is discovered during resolution compliance review. **The applicant will also need to request a submission waiver from the Board with supporting testimony to the Board’s satisfaction.**

- c. The applicant has requested a partial waiver from providing a Traffic Signage Plan. I defer to the Township Traffic Consultant’s decision but believe such a large-scale project with significant traffic impacts should provide for a Traffic Signage Plan for both review purposes and future enforcement. **Status unchanged. I remain of the opinion that a Traffic Signage Plan will need to be part of any formal Planning Board application, unless the Township Traffic Engineering Consultant feels otherwise.**

- 1.03 *The subdivision plat should indicate the width of County ROW dedication along Quakerbridge Road and Clarksville Road measured from the centerline of roadway and also identify them via their County Route numbers. Applicant indicates that this will be provided once finalized with the County. The plans depict proposed information so as to establish proposed property lines, lot areas, setback lines, etc. as the basis for the Board's approval, so they should depict the dimensions of the proposed dedications. Similar to comment 1.02B.b, significant changes post-Board action would require amended approval should they proceed to the Board prior to finalizing with the County.*
- 1.04 *The subdivision plat shows the Clarksville Road dedication tapering down to zero at the southeasterly corner of Block 8, Proposed Lot 2.03. While the actual pavement widening would taper, but typically dedications provide for the full width of right-of-way along the entire frontage length for future roadway purposes continuing from this applicant's project. Applicant indicates that this will be provided once finalized with the County. See response to 1.03.*
- 1.05 *Is additional dedication required on the south side of Clarksville Road? The applicant should discuss how much of what is shown on the subdivision plans has been negotiated and agreed to by Mercer County staff, and how much is preliminary assumption. Applicant indicates that this has not been finalized and will be provided once approved by the County. See response to 1.03.*
- 1.06 *The plat should be revised to indicate a width for the private roadway identified as Block 15.14, Proposed Lot 18.05 south of Clarksville Road and Block 8, Proposed Lot 2.06 north of it. This roadway is identified in the application documents as a "Master Plan Road." Procedurally, it should be discussed whether ROW Monumentation along its length is required, even if it is to remain private. The widths have been provided, as has the monumentation. This comment has been addressed.*
- 1.07 *The applicant should discuss any input received from NJDOT regarding additional ROW dedication along the US-1 frontage, and the disposition of the Major with Planning Access Permit application. An application for Major Access with Planning was made to NJDOT on December 21, 2021 with an acknowledgment letter from NJDOT on January 12, 2022. Applicant to provide testimony to TRC regarding whether any additional correspondence with NJDOT has occurred in the interim.*
- 1.08 *Proposed Block and Lot numbers and street addresses/unit numbering shall be as approved by this office. To be provided to the applicant should the Board approve the application. No action required at this time.*
- 1.09 *Metes and bounds descriptions of all parcels and proposed easements to be created shall be submitted for review and approval of this office. Deed and easement instruments shall be submitted to the Board Attorney for review and approval. Applicant indicates these documents will be submitted as part of resolution compliance, along with closure calculations for each. I have no objection to deferring.*
- 1.10 *Complete the date of aerial topographic survey and aerial provider company name in Note #4 on CB101. Addressed.*
- 1.11 **A technical review of the previous plat version has been performed by the Township's consultant and is attached hereto. A review of the February version is ongoing, and subsequent comments will be provided directly to the applicant's consultant.**

## **2.0 Site Plan**

2.01 *The following Site Plan checklist items have been deemed to be incomplete:*

### **A. Section 200-11 A. Map Details**

- a. *Checklist Item 1) requires when either landowner or applicant are a corporation, the name of the President and Secretary shall be included. See response to 1.01A.a.*

**B. Section 200-13 C. Preliminary Site Plan Details**

- a. Checklist Item 3)(r) requires the locations of all signs, including identification signs, directional signs, etc. be shown on the plans. Wayfinding signage will be required as part of this development and the proposed locations of same are to be added to the site plan documents. A site signage plan (CS010) showing instructional, street address, monument and tenant wall sign locations has been provided. This item may be deemed complete.
- b. Checklist Item 3)(s) requires the location and size of all proposed easements to be shown on the plans. The Township Greenbelt, at a minimum, will need to be placed within a conservation easement that shall be identified on the plans, with a detail for the standard Township monument. Additional easements that are subsequently identified shall be added to the plans, as applicable. Applicant requests that this be done as part of resolution compliance. I do not support the request as there is sufficient information available to establish and depict the majority of the easements required by Township Code on the site and subdivision plans for Township review and comment. The information is required to be provided before proceeding to the Board.
- c. Checklist Item 9 requires the submission of an LOI issued by NJDEP. The applicant's cover letter indicates one was submitted but was not found in the submission documents. See response to 101B.h.

**C. Section 200-14.C.1 Final Site Plan Details**

- a. The Applicant should revise the application forms to request waivers from Final Site Plan Checklist Items 200-14.C.1.a), C.1.b)(1) & C.1.b)(5) in lieu of indicating them as complete or not applicable. These items all relate to the Applicant having obtained a preliminary approval prior to proceeding for final approval. Since the application is joint preliminary and final approval (for Phase 1) the waivers are warranted but need to be requested. The submission waivers have been requested and I have no objections.

2.02 The following Site Development Stormwater Plan checklist items at §200-104.C are deficient or missing. Emphasis added via **bold** text on the missing information:

- A. C(1) requires topographic base map of the site shall be submitted which extends a minimum of 200 feet beyond the limits of the proposed development, The map is to indicate the following, as appropriate: existing surface water drainage, **riparian zones** and steep slopes per § 200-149, soil types, perennial or intermittent streams, **greenbelt areas**, limits and normal water surface elevation of existing water bodies, wetlands and floodplains along with their appropriate buffer strips, vegetative and other pervious surfaces, existing man-made structures, roads, bearing and distances of project property lines, existing easements or property reservations, and significant natural and man-made features not otherwise shown. **Greenbelt areas and riparian zones are still not shown on the Existing Drainage Area Map provided in the SWM Report.**
- B. C(5) Stormwater management facilities map The following information, illustrated on a map of the same scale as the topographic base map, shall be provided:
  - (a) Total area to be disturbed by the project; proposed surface contours after construction; drainage area to each stormwater BMP with breakdown of land area to be occupied by each stormwater BMP, total area to be paved or otherwise built upon, and total area to remain pervious; the location of each stormwater outfall and each stormwater BMP in NAD 1983 State Plane New Jersey FIPS 2900 US feet or latitude and longitude in

*decimal degrees; and written summary tables indicating required and achieved groundwater recharge, required and achieved stormwater quality control and required and achieved stormwater quantity control achieved, listing values for each BMP and for the project as a whole.*

**The applicant indicates this will be provided as part of resolution compliance. Without this, I am unable to testify to the Board, and Board members and general public cannot easily verify, that the applicant has met their responsibilities with respect to compliance with the Township Stormwater Control Ordinance. As a result, I can't recommend that the application proceed to the Board, or should it proceed, can't recommend that the Board grant the requested submission waiver.**

- (b) *Details of all stormwater management facility designs, both during and after construction, including precautions and protections to be taken during construction, discharge provisions, discharge capacity for each outlet at different levels of detention, and emergency spillway provisions with maximum discharge capacity of each spillway.*

*The SESC plans do not identify temporary sediment basins to be utilized during construction nor specific strategies to prevent the compaction of infiltration basin subsoils. General notes to this effect have been added to the Overall SESC Plan (CE100). Detailed designs shall be provided, as well as detailed instructions in the Sequence of Construction for construction of infiltration facilities.*

- 2.03 *The site plans are missing relevant information from the proposed subdivision identifying existing and Proposed Lot numbering on the Overall Plan and on each site plan sheet. This comment has been addressed.*
- 2.04 *To the north, adjacent Warbler Way, Osprey Way and the apartment buildings fronting thereon within the Princeton Terrace development are to be added to the existing conditions information. Minimum setback dimensions from the apartments to the closest trailer storage area, warehouse building, employee parking lot and loop driveway should be provided. This information has been provided on the Overall Site Plan (Sheet CS100) and this comment has been addressed.*
- 2.05 *Provide a legend for the various environmental constraint delineations indicated on the plan sheets. Township Greenbelt, streams and riparian zones are also to be identified on all applicable sheets, not just the Existing Constraints Plan EX100. Request applicant discuss the nature and scope of environmental permitting that will be required to construct the project as currently shown. The requested legend has been provided, but it is requested that riparian zones be shown with an "RZ" line type or similar convention for clarity, rather than the dashed line provided which is difficult to follow. Also, the legend has no item for "Greenbelt" and must be revised to do so.*
- 2.06 *Sheet Legends are to be added to each Overall Plan for the various design criteria sheets (Site, Grading, Utility, etc.). Sheet legends (lightly shaded delineations of the limits of each of the detailed sheets as they relate to the overall site, i.e. depict what part of the site each detailed sheet covers) have not been provided on the various Overall Plan sheets.*
- 2.07 *Proposed right-of-way dedications along existing public roads should be called out, in width and area within. Proposed building setbacks are to be dimensioned off the proposed rights-of-way. Currently, setbacks are dimensioned to existing property lines despite apparent road widenings and ROW dedications. Building setbacks are dimensioned to the currently proposed right-of-way line but are subject to revision based upon County's approval of proposed dedication widths.*
- 2.08 *Lot 18 in Block 15.14 contains a CEA for groundwater contamination. The approximate location is vaguely identified on Sheet CD106 (Demolition Plan). Requested this information also be added to*



*Existing Constraints Plan EX100. Request applicant discuss how the location was identified and if the property remains subject to a Deed Notice or if a Remedial Action Workplan is proposed to be undertaken. This CEA should also be overlain on the Grading and Drainage Plan (both Overall and applicable enlarged sheet) to ensure that groundwater recharge isn't being proposed there. The CEA has been overlain on the Grading and Drainage Plans and is shown to be in close proximity to two different Pervious Pavement BMPs; one called out as underdrained, one not. The potential for offsite transport of the contaminants or groundwater contamination should be discussed with TRC, with specific comment from the Township's Environmental Consultant.*

- 2.09 *Updated information should be provided regarding what features have been designed to account for the potential development of the retail facilities along the border roads, and potential timeframe for same. The applicant's response, "Retail facilities are not part of this application. The utilities have accessible connection locations for future development," is not an acceptable response. At a minimum, the applicant is required to demonstrate adequate capacity of the wastewater infrastructure to satisfy the demands for full buildout of the property, as per Code section §200-89, including an indication of how remaining properties will be sewered from the improvements to be constructed by this applicant.*
- 2.10 *Some FHA lines depicted on the plans do not follow the existing contour lines. The applicant to provide testimony on how these lines were established. If they were digitized from FEMA DFIRM mapping, they need to be adjusted at this time to reflect the established Base Flood Elevation (BFE) using existing topography on the property and labelled accordingly. The applicant indicated in their response that the previously depicted FHA was taken from a prior verification issued by NJDEP, and that the currently depicted FHA limit is based on a new study that has not yet been submitted to NJDEP. All applicable plans (site and subdivision and constraints) need to reflect this by providing appropriate note with reference to the "new" delineation source. A copy of the report and its accompanying mapping is to be provided to the Township.*
- 2.11 *Applicant to address the existing dirt roads outside of the designated limits of disturbance. I recommend they be scarified, decompacted, topsoiled and revegetated wherever possible. A note to this effect was added to the Overall Demolition Plan (Sheet CD100).*
- 2.12 *The plans show a stand-alone truck parking area to the northwest of Building D1 that can accommodate 66 trucks, which requires discussion. The intended use and users of the lot, security control and enforcement, litter control, bathroom facilities, etc. At the previous TRC meeting, the applicant explained it is trailer parking for Building D1 due to lack of trailer parking on the north side of D1, and will be managed by Building D1 tenant. No lavatory facilities are proposed.*
- 2.13 *Existing features that are slated for removal on the demolition plans are to be put on layers that are turned off on the development plans so that they don't obscure proposed design information. Also, site plan drafting appears incomplete on Sheets CS104, CS106-CS114. The applicant indicates that the revisions to the demo layers will be performed during resolution compliance. With the other revisions required to address comments from the Board professionals, these changes should be made at this time.*
- 2.14 *The development is proposed to be completed in two phases with Phase 1 consisting of Buildings D1, E1, and C1 and associated improvements with Phase 2 comprising the remainder of Buildings B1, B2-1, B2-2 and A1. Phasing plans that definitively show the limits of all Phase 1 construction including grading, utility and stormwater installation, while greying out everything that is part of Phase 2 shall be provided. A Phase 1-specific Stormwater Management report will also need to be provided to demonstrate compliance with standards under Phase 1. A single sheet, overall phasing plan has been provided and is insufficient for review. Phase-1 specific stormwater management report remains*

required, as do the detailed development plans revised to clearly identify limits of what is to be built under Phase 1 and what is left for Phase 2. The Utility Plans submitted don't contemplate phasing at all and show all buildings being constructed and all utilities installed. Are driveway access curb cuts to Buildings D1, B2-1 and B2-2 to be constructed? How will the access road to Building A-1 be terminated? Where will other utilities be ended/capped?

- 2.15 *Applicant to discuss what site standards are being developed for items like directional signage, bicycle racks, exterior propane storage (for forklifts), benches, refuse bins, dumpster enclosures, etc. Updated discussion on site standards should be provided at the TRC meeting.*

*Notes on the Site Plan sheets indicate that "Building Trash/Recycling Area to be provided in loading dock area – final location to be coordinated with owner/tenant." At a minimum, a "typical" solid waste storage area should be identified and detailed with respect to materials and appearance. A Trash and Recycling Enclosure Detail has been added to Construction Details Sheet CS505. I defer to the Board Planner and/or Landscape Architect to comment on the appropriateness of the materials and appearance.*

### 3.0 Access and Circulation

- 3.01 *A Traffic Impact Study has been included in the current package as Submission Item H, above. I defer to the Township Traffic Consultant to comment on the merits of same. The applicant's Traffic Engineer should provide an overview regarding the impacts found and mitigation measures proposed to the TRC. Much of the site development issues revolve around the issues of understanding the truck traffic generated in comparison to typical employee/visitor passenger cars, understanding origin and destinations for the users of the facilities and their suppliers, truck traffic peak hour in relation to background traffic peak hour, etc. The applicant is to provide testimony regarding the recent presentation by Mercer County regarding traffic impacts and their seeming intent to divert most traffic to/from the development via Grovers Mill Road and the Quakerbridge Mall Access road to US-1/A-295.*

*Feasibility of the use of the adjacent rail line was requested to be assessed and documented as part of the project, due to the potential for a considerable reduction in truck traffic on the local and regional road network. Also requested to be discussed are means and methods of reduction of traffic generated through ride share, shuttles to/from the PJ Train Station and other public transportation opportunities. Applicant should also discuss what amenities will be provided to keep employees on campus or choosing to walk/bike (e.g. bike share, e-scooter share). It has been established that the adjacent rail line will be unsuitable for appreciable quantities of freight traffic to/from the site, but the applicant should still be prepared to discuss with the Board what amenities are being contemplated to reduce the number of mid-day entrance/exit automobile trips during the lunch rush.*

- 3.02 *Parking calculations showing the required number of spaces per ordinance (where applicable) as well as the total number proposed by the project have been provided. Calculations/tables need to be provided for passenger vehicle parking, loading zones, trailer parking, EV parking and barrier free parking. The ability to "bank" any excess areas needs to be discussed. There are also Code requirements Section 200-27.B.1 that pervious surfaces be used for all office parking in excess of one space per 250 s.f. of floor area. The applicant to discuss where and how this will be achieved. The applicant is currently proposing to bank 200 parking spaces, but only 67 of them will be located in Phase 1. The applicant shall provide Phase-1 specific parking calculations to determine what relief, if any, will be required.*
- 3.03 *Was consideration given to constructing the intersection of the Avalon Way extension and the central road extension, west of B1, as a roundabout? If so, what prevents implementation at these locations for*

*improved circulation and reduced conflicts? The roundabout was discussed and found to be infeasible for the proposed development.*

- 3.04 *The reason for use of 30-foot wide truck circulation drives needs to be indicated. The ability to reduce, even to 28 feet, will result in a significant decrease in the amount of pavement and impervious resulting from the project. Also, there is a 3-lane drive east of B2-2, the purpose of which is unclear. At the previous TRC meeting the applicant provided testimony regarding the 30'-wide drives and the bypass lane between the truck parking areas for Buildings B2-1 and B2-2. I have no further comment.*
- 3.05 *The central road provides for a 10' bikeway and 5' sidewalk. Crossings of the central road and facilities up each driveway to employee parking and building entrances need to be added. Also, there should be consideration for one or more crossing signals, like an RRFB system, between Clarksville Road and US 1 so as to create gaps for crossings to occur. Refuge islands in the road should also be considered. No crossings of the north-south portion of the Avalon Way – US-1 connector road are proposed between Clarksville Road and US-1. Discussion of suitable locations for same should be discussed at the TRC meeting.*
- 3.06 *There needs to be provided sidewalk/bikeway extension north along the Avalon Way extension to A1. Both currently stop at the aforementioned intersection. These still need to be provided, but would be situated in Phase 2 of the development.*
- 3.07 *Bicycle and pedestrian crossing accommodations need to be provided for at Avalon Way extension and intersection with Quakerbridge Road, to work with the existing improvements on the Lawrence side. Crossings have been incorporated into the referenced intersection design as shown on Sheet CS113 "Site Plan XIII".*
- 3.08 *Procedures for snow storage and removal should be discussed for the sites, Avalon Way extension and both sides of the central boulevard. Snow removal also applies to the sidewalks and bikeways. The applicant indicates that the snow removal will be handled by private hauler. Discussion is required. Does this mean that all snow will be trucked off-site? The proposed stormwater BMPs may not be used for this purpose and the snow removal contractor must also be made aware of the prohibition of using salt or sand in pavement or sidewalk areas that are tributary to Permeable Pavement BMPs.*
- 3.09 *Turnouts should be provided for in the central road for public transportation stops and bus shelters. Such facilities are to be located and designed in coordination with NJ Transit. Applicant to advise on progress of discussions with NJT. No bump-outs appear to be proposed at this time, but applicant should discuss general intent to provide for bus stops, including number of and general locations, and provide typical details for construction of same. NJ Transit must approval final stop locations as development is under construction.*
- 3.10 *Between the truck parking areas between Buildings B2-1 and B2-2, there is a third 30'-wide driveway whose necessity is questioned. The three 30'-wide driveways are within approximately 150' of each other and present strong possibilities of traffic conflicts, both at the west side as well as the east side. Testimony was provided regarding the center access being a vehicular bypass of the truck maneuvering areas to the easterly portion of the site.*
- 3.11 *Provide sufficient grade information at all barrier free ramps/parking spaces and accessible routes to building entrances to determine compliance with barrier free standards. 10-scale detailed enlargements of same should be used as necessary to provide legible information. Specific comments regarding accessibility will be provided to the applicant's engineer directly under separate cover.*

- 3.12 *Additional traffic control measures need to be applied where two 30'-wide driveways merge, e.g. at north side of Building D2, south side of Building B1 and north and south sides of Building A1. Stop signs and stop bars have been provided on the interior driveways at these locations, but the orientation and locations will make it hard for a stopped driver to see traffic coming directly behind him. I defer to the Township Traffic Consultant on the best way to control conflicting traffic movements at these intersections.*
- 3.13 *The interconnections between the Avalon Way extension and the truck and passenger car parking areas for Building C1 need to be reassessed. Perhaps the section of driveway between the passenger access and the truck access can be removed to eliminate potential conflicts? The referenced section of driveway remains as the applicant wishes to maintain flexibility should multiple tenants be sharing the space.*
- 3.14 *Several of the passenger car parking area connections to site access drives are proposed to have 5' radius curb returns, which is tighter than typically provided. Provide a turning template that shows an SUV can make a right turn without encroaching into the opposing lane of traffic or increase the radius. A turning template was provided that shows a passenger car can barely make the turn at the exit east of Building B-1. However, that access drive has curb returns of 10' radius, not 5'. The applicant shall provide a turning template at one of the proposed 5' radius return exits for a full-size SUV or pickup truck instead, and show that it can make the turn without crossing the centerline of the connecting drive before this size will be deemed acceptable.*
- 3.15 *Crosswalks are to be 24" thermoplastic transverse to the direction of pedestrian travel rather than the 4" longitudinal striping shown. Revised as requested.*
- 3.16 *The Avalon Way connector road will require wetlands general permits and is proposed to be constructed in as much as 10 feet of fill in places. A geotechnical engineer must monitor the construction to ensure that acceptable materials, at appropriate moisture content and required compacted density are being achieved per NJDOT standards. Applicant indicates that a note to this effect was added to the Overall Grading Plan but it was not found there nor on Sheet CS002.*
- 3.17 *Recommend the provision of an access easement to adjoining Lots 21 and 79 in Block 15.14 along Quakerbridge Road to the future retail along this roadway. Adjustment to the grading of the SWM berm in this area is required to accommodate a future connection. Not addressed and the berm has been pushed closer to the road to the limit of the roadside wetlands buffer area along Quakerbridge Road, prohibiting possibility of any such future connection.*
- 3.18 **At the prior TRC meeting it was requested the applicant provide an overview of the various traffic impacts and proposed mitigation measures since the plans do not provide for any off-site roadway improvements.**

#### **4.0 Stormwater Management**

- 4.01 *The applicant is to discuss how the proposed stormwater design will comply with the Township "green infrastructure" (GI) standards and meet the maximum drainage area limitations in the standards.*

*Currently, two proposed underground extended detention basins are proposed. These are not accepted GI BMPs for water quantity management. A variance would be required for this type of BMP, but the Township has no mitigation plan in effect and cannot, therefore, grant any variances. The applicant is also requesting freshwater wetlands and possibly flood hazard area permits from the NJDEP. The applicant obtaining a variance from NJDEP to utilize this BMP type would have to be made a condition of approval, unless the applicant revises the design to utilize only GI BMPs. The underground extended detention basins have been modified to be called underground infiltration basins, which would satisfy GI requirements for water quantity management. The soil testing that was*

performed within the footprint of the BMP serving Building B1 showed adequate permeability rates and depth to groundwater, but no soil testing was performed within the footprint of the infiltration basin servicing Building C1. Further testing is required to demonstrate adequate permeability for the C1 infiltration BMP. Both buildings are in excess of 2.5-acres, so these basins are not considered “small-scale” and thus cannot be used to satisfy groundwater recharge requirements.

- 4.02 *A “GI-Compliance” table shall be added to the SWM report identifying each BMP by type, the GI requirements for each type, and the status of compliance for each. Different GI BMPs have different requirements and should be put in separate tables, specifically porous pavement BMPs, where the design standard is the additional tributary pavement can be no more than 3x the pervious pavement footprint. Small-scale bioretention systems allow for 2.5-acres of tributary area, not including the BMP footprint.*
- 4.03 *Township Ordinance Section §200-101.L states that if there is more than one drainage area on site, the groundwater recharge, stormwater runoff quantity and stormwater runoff quality standards must be addressed for each drainage area. Both the Duck Pond Run and Shipetaukin Creek HUC 14s are present on-site. Quantity management has been addressed with respect to each (notwithstanding the GI non-compliance mentioned above). Separate water quality and groundwater recharge analyses within each HUC 14 must also be performed. Groundwater recharge calculations were broken down into northerly (Duck Pond Run) and southerly (Shipetaukin) drainage areas. However, the calculations assume that all of the impervious surfaces drain into one giant aggregate bioretention basin, which is neither proposed nor permitted. This methodology does not take into account the change in performance for each basin based upon impervious-area-to-BMP-area ratios. Each BMP must be modeled as a stand-alone device based upon its own unique tributary area and BMP footprint.*
- 4.04 *All BMPs shall be identified on the plans using the same identifiers as utilized in the SWM report. BMPs currently called out as “small-scale WQ basins” shall identify them as bio-retention, infiltration or sand filters. The identifiers have been added to the detailed grading and drainage plans, but must be added to the Overall Grading plan since that is the only place the soil test locations and data are identified.*
- 4.05 *The location of all test pits and associated seasonal high-water table and permeability test results shall be provided on the Grading and Drainage Plans. See Comment 4.04. If the soil tests will make the detailed sheets too cluttered, provide BMP identifiers on the overall plan.*
- 4.06 *I have reviewed the SWM Report and the Maintenance Manual and offer the following technical comments at this time:*
1. *In Table J, the total values for peak runoff rates to POA 2 do not equal the single sub-value listed. Addressed.*
  2. *A Major Development Stormwater Summary form must be completed. A Major Development Stormwater Summary Form was completed and included in the SWM Report. However, it did not provide the design data for each individual Bioretention BMP. Supplemental sheets are required.*
  3. *The Groundwater Recharge (GWR) calculations assume one large bioretention basin with all of the site impervious draining to it. The GWR calculations must be revised to perform individual BMP-specific analysis based on the designs actually proposed. As previously mentioned in 4.03, this methodology must be revised.*
  4. *The GWR calculations also assume that all impervious areas are tributary to the WQ basins when the building roof areas are not. These areas shall not be considered in those calculations.*

**The impervious area numbers used in the spreadsheet are now considerably less than the total overall impervious, but detailed calculations showing how the “Aimp” spreadsheet inputs were calculated have not been provided.**

5. *In the GWR spreadsheet, the post-developed area does not equal the pre-developed area. **Addressed.***
  6. *Hantush spreadsheets for groundwater mounding analyses must identify what BMP is being analyzed using the same identifiers in the report and on the site plans. Analysis of impacts to adjoining Lots 21 and 79 in Block 15.14 along Quakerbridge Road is also required as these properties utilize septic tanks and disposal fields. Mounding analyses were provided for Bioretention Basins B-3A through B-3I, but Bioretention Basins in POA 3 go on further from 3J to 3SS, sequentially. There are also numerous bioretention basins in POA 1 that have not been addressed. Additional calculations for these areas are required.*
  7. *The BMP Maintenance Manual must be prepared in accordance with the current Maintenance Plan guidelines on the NJDEP's NJStormwater.org website. The applicant states that the SWM O&M Manual will be updated during resolution compliance after approvals by NJDEP.*
  8. **The applicant must identify what category of constructed wetlands are being proposed for BMPs W-1A and W-1B and demonstrate that the necessary design standards are being met per the NJ BMP Manual. In no category can the basin have a flat bottom as depicted on the plans; there will be a permanent pool at the outlet structure with varying depths of inundation representing low marsh and high marsh areas, and semi-wet zones throughout the remainder of the BMP. The different zones tolerate different types of vegetation, which must be designed accordingly by a landscape architect.**
- 4.07 *The applicant will be required to demonstrate that site runoff during the 100-year design storm required to reach the stormwater management facilities actually reaches said facilities, with minimal on-site flooding, and no overflow into bypass or off-site areas. The storm sewer system was sized only for the 25-year storm and a 100-year surcharge analysis of the system must be provided. A 100-year storm analysis of the proposed storm sewer system was provided and indicates several instances, especially within the 300 series of piping, where the pipe itself becomes surcharged, but none where the surcharge elevation would exceed the height of the structure causing flooding.*
- 4.08 *The applicant is advised that current Ordinance section 200-105.1 requires it to enter into an agreement with the Township, in form satisfactory to the Planning Board Attorney, requiring the installation and maintenance by the applicant and the applicant's successors in interest, all such stormwater management improvements proposed by the applicant, and approved by the Board, for this project. **The applicant notes that they will comply.***
- 4.09 *In several locations behind truck parking areas, inlets are shown outside of the pavement within a curbed island, but pavement runoff is directed to that location. If it is intended for there to be flush curb cuts at these locations, they must be identified and a flush curb elevation provided. **This does not appear to have been addressed, notably to the north of Building D1.***
- 4.10 *Several water quality basins have grading depicted with square edges that must be rounded off, which will likely result in minor reductions to their storage volumes that must be addressed in the SWM design. **The comment has been addressed.***
- 4.11 *There is no defined separation between the two small-scale water quality basins at the south portion of the east side of building E1 on Sheet CG-108. The grade from the westerly basin rises to elevation 89 and then immediately descends into the easterly basin with no level area at all. **The grading has been***

revised to provide a 5'-wide level area between the side slopes of the two basins; this width should be increased to 10 feet for design purposes.

4.12 *Maintenance access to all SWM BMPs must be addressed. Not addressed*

4.13 *Applicant to review and refine proposed site grading designs:*

a. *Several proposed landscaping berms exceed 3:1 grading and in some cases exceed 2:1 (Sheet CG-105, south of B2-1 exit drive, for example). All computer-generated grading is to be reviewed and adjusted as necessary to meet maximum slope requirements and provide reasonable transitions to meet existing grades that can be achieved with conventional construction equipment. The proposed grading has been revised and is much better than it was. For slopes that exceed 3:1, add a note that slope stabilization matting must be provided and add a detail for same.*

b. *Several storm sewer lines and numerous outfalls have insufficient cover over the top of pipe. The proposed outfall from W-1A appears that there will be ~83' of pipe lying on existing ground with a mound of dirt piled on top of it. The applicant shall consider discharging the pipe closer to the berm in a "cut" condition with a defined swale graded into the existing terrain downstream.*

c. *Refine grading west of adjoining Lots 21 and 79 in Block 15.14 along Quakerbridge Road as proposed SWM berm cuts off sheet flow into existing fields. A stabilized drainage swale or drainage collection system may be required. Comment has not been addressed. It remains unclear where overland runoff between wetland basin W-1A and the adjoining properties will drain to.*

d. *Modify emergency spillway on Wetland Basin W-1A to avoid impacts to adjoining Lots 21 and 79 in Block 15.14. The southerly limit of the spillway has been shifted away from the developed area on the adjacent lot. Since the spillway is constructed in a fill condition, the downhill side from the spillway to the toe shall be lined with Reno Mattress per SESC standards.*

4.14 *Preliminary earthwork volumes should be provided. Environmental testing of soils imported to the site is a Township requirement. The preliminary calculations indicate 1,700,000 cubic yards of cut material and 2,600,000 cubic yards of fill material, for a net required import of 900,000 cubic yards. Applicant should provide testimony whether shrink/swell factors were considered in the calculations, and whether all cut materials will be acceptable for reuse on-site.*

#### 5.0 Utilities

5.01 *The Utility Plans are to note that all utilities are to be installed underground as required by Township Code. A note has been added to the Overall Utility Plan that "all utilities shall be underground except for the overhead electric along Clarksville Road". The Utility plans only show overhead electric on the north (west) side of Clarksville Road, when there are existing lines on both sides. The applicant should advise if the current plan is to consolidate all overhead lines on one set of poles and eliminate those on the south (east) side of the street, which is preferable.*

5.02 *Sanitary Sewer profiles and Phase I-specific Sanitary Sewer (Utility) plans must be provided. The applicant indicates that he wishes to request a submission waiver from the Board for this and address it during resolution compliance. See my previous comment 1.02B.b on the matter. I don't believe it's in anyone's best interest, particularly the applicant to defer this information.*

5.03 *It is likely the extension of the sewer line along the north edge of the property will address the Township Master Plan requirement for extension of the South Branch of the Duck Pond Sewer Interceptor. As such, a minimum 20-foot wide easement should be proposed along it, as well as extending from MH6 to the east property line with adjacent Lot 13. Also, the location of manholes MH-1 to MH-4 should be adjusted so that they are located outside of the most constrained areas, to the extent feasible. A stable*

*access way to this portion of the system will be required with the installation, for future inspection and maintenance purposes. The applicant indicates the easement will be submitted as part of resolution compliance and that a stable access way will be provided to the extent that NJDEP permits it.*

- 5.04 *A Sanitary Sewer Report has been submitted that calculates the proposed sanitary sewer demand based upon an assumption of 3% office use @ 0.10 gallons per square foot and 1 employee per 2,850 square feet of warehouse space @ 25 gpd per employee with 1,896 total employees expected. This yields a total sewer demand of 64,089 gallons per day for the industrial park development as a whole. The applicant shall justify the use of 3% office space and 2,850 sf of office space per employees assumed through testimony. It also questioned why retail use is not contemplated or addressed in the design. When and how is this to be provided? The applicant indicates that he will provide testimony to the Board related to the 2,850 sf per employee and 3% office space to the Board.*

*Any proposed industrial user within any of the proposed buildings will require disclosure of proposed wastewater discharge components and means and methods of any required pretreatment to satisfy Township, SBRSA and NJDEP standards. Status unchanged.*

- 5.05 *The proposed pump station to address wastewater conveyance for the area around Avalon Way extension shown straddling the match line between CU-115 and CU-116 will require the incorporation of measures to address and prevent hydrogen sulfide creation. Technically the proposed use of the pump station requires the consent of the Township Council. Comment has not been addressed. Applicant is required to obtain Township Council approval for private pump station per Code section §133-15.*
- 5.06 *The sewer pump station is currently depicted directly adjacent to an infiltration BMP with the force main discharge running under said BMP. The applicant should investigate alternate locations for the pump station that doesn't encroach on recharge BMPs. Otherwise the SWM assessments will have to exclude the footprint of construction of the forcemain from the effective area of groundwater recharge footprint. The pump station discharge has been routed around the infiltration basin, but the pump station remains directly adjacent to it.*
- 5.07 *A Treatment Works Approval will be required for the proposed redevelopment. Request to receive sewer allocation after any Board action on the project will need to go before Township Council and approved by Resolution. This will be made a condition of any Board action on this application. Applicant notes the obligation.*
- 5.08 *The number and location of any required fire hydrants on site is subject to the review and approval of the fire official. The applicant notes this requirement.*

## **6.0 Lighting**

- 6.01 *The proposed lighting design consists of a total 444 Lithonia LED DSX2 lighting fixtures; 331 pole-mounted and 113 wall-mounted. Proposed mounting height is consistently at 25 feet. The Lighting Plan should note where the calculated point plots are made; at proposed grade or a certain distance above. The applicant has clarified that the point plot represents intensity at-grade.*
- 6.02 *The applicant has provided calculations that indicate an average light intensity for the various parking areas that vary from 1.7 to 2.0 footcandles for passenger car parking and from 2.2 to 2.4 footcandles for truck parking. None of the values meet the 0.5 footcandle ordinance standard. Given these are relatively "static" parking areas (not serving high density residential nor high volume commercial), reductions to the 0.5-footcandle average should be strived for. Justifications for any remaining exceedances are required. The passenger parking average intensities now vary from 1.2 to 1.6 footcandles (fc) with 0.5 fc being the minimum value. Truck parking areas remain from 2.2 to 2.4 fc with 0.5 fc being the minimum. The applicant will need justifications provided for the extent of exceedances proposed in order to receive a design waiver from the Board.*



- 6.03 *Light intensity calculations at intersections were not provided. The lighting plans shall be revised to provide this calculation and demonstrate compliance with the Township standard of 3.0 footcandles average. The calculation provided identifies 3.0 footcandles average at intersections but it doesn't define what the boundary for that calculation is. Does it include only intersections with Clarksville, Quakerbridge and the Avalon Way extension or interior drive intersections as well? Applicant shall provide testimony and supplemental diagrams, as necessary. A note on Sheet LL105 indicates that "intersection lighting to be Coordinated with future roadway lighting plans for Clarksville Road." Presumably, this intersection was not included in the calculation?*
- 6.04 *The design indicates conformance with the maximum light spillage of 1 foot-candle at property lines, with a maximum of 0.3-foot-candle indicated. Exceedance are found on sheets LL102 (1.2 fc), LL105 (2.1 fc), LL112 (2.6 fc). Revisions and/or waiver requests are required. Exceedances have been eliminated, primarily by removing proposed lighting from Clarksville Road on Sheets LL105 and LL112.*
- 6.05 *Assessment of visual impacts to adjoining Lots 21 and 79 in Block 15.14 is to be performed. Proposed grading and light mounting heights result in a proposed fixture elevation at 114 feet to 117 feet, while exterior grades on the adjoining lots are in the range of 72 feet to 73 feet. The lights closest to the referenced property are proposed to be fitted with house side shields.*
- 7.0 **General Comments**
- 7.01 *Township design standards require hairpin striping for parking spaces at 18" on center. A construction detail for same shall be provided and the accessible parking stall detail modified to comply. A hairpin striping detail was added but dimensions 18" from outside edge to outside edge, rather than center to center. Also, the Accessible Parking Stall Detail was not revised to comply.*
- 7.02 *Township sanitary sewer details shall be added to the plans. Addressed.*
- 7.03 *A typical trash enclosure detail shall be added to the plans. Addressed.*
- 7.04 *All concrete sidewalk and curb details shall specify 28-day compressive strength of 4,500 psi. Addressed.*
- 7.05 *Crosswalk detail to be modified to reflect 24"-wide transverse thermoplastic stripes at 48" on center with a minimum width of 6 feet, to be increased at the direction of the Township Traffic Consultant. Addressed.*
- 7.06 *A force main installation detail shall be provided. Addressed.*
- 7.07 *An underground detention basin section detail shall be provided. It shall also show how a water-tight outlet structure connection is to be effected, given the hydraulic controls of the OCS are on the outside of the structure. A StormTrap detail is shown as well as a trash rack for outlet controls on Sheet CS503. However, it still does not show how the system will function with outlet controls on the exterior of the structure while the structure is buried in soil.*
- 7.08 *The applicant shall provide metes and bounds descriptions for each parcel to be created and all easements to be granted, with closure calculations, to the Township Engineer for review and approval. Deeds and easement instruments are subject to the review and approval of the Board Attorney. Applicant indicates these to be provided as part of resolution compliance.*
- 7.09 *The applicant shall provide two engineer's estimates of probable construction costs for this project. One will include all site improvements for the purpose of establishing the required construction inspection escrow fees, while the other will be used for the purpose of establishing the required performance guarantee amounts. The latter is to consist solely of those improvements in the Township right-of-way or*

West Windsor Township TRC

Bridgepoint 8 Industrial Park P/F Major Subdivision, P/F Site Plan Phase I, Preliminary Site Plan Phase II

March 9, 2022

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*improvements ultimately to be dedicated to the Township as well as any proposed buffer landscaping and berming. This should be made a condition of any Board action on this application. Cost estimates have been provided. Comments on the adequacy of the proposed line items and unit costs will be provided to the applicant's engineer directly under separate cover. However, I note that the estimates are for the overall project and there is no information provided for the work in Phase 1.*

7.10 *Other outside agency approvals will also be required. The following are approvals that are anticipated at this time: Applicant notes outside agency approval requirement.*

- *Mercer County Planning Board*
- *Mercer County Soil Conservation District*
- *Delaware and Raritan Canal Commission*
- *NJDEP (FHA Permit, Wetlands fill, TWA, construction discharge permit)*
- *NJ Transit (public transportation)*

This completes the review of the submission documents. Other comments may be offered based on the responses to the above issues.

FG:IH

Enclosure – survey review

cc: Ian Hill, PE  
Robert Byra, Applicant – rbyra@bridgeindustrial.com



**MEMO:**

**Date: 03/02/22**

**To: Francis Guzik, PE  
West Windsor Township**

**From: Michael J. McGuire, PLS  
GeoTrek Environmental and Surveying, LLC**

**RE: PB 21-15 Bridgepoint 8 Industrial Park  
Survey Review**

I have reviewed the above referenced Major Subdivision Plans dated 11/12/21 and last revised 12/3/21 and offer the following comments:

- The lots and blocks depicted on the subdivision plans follow the accepted state tax mapping standards. The numbers assigned to each lot are acceptable if the multiple buildings shown on each lot are all owned by one owner. They are ok also if warehouse space is not further subdivided into smaller units.
- Street names are not shown on the plans, nor do they indicate whether they will be public or private right of ways.
- There are no roadway dedications on the existing right of ways shown on the subdivision plans.
- The subdivision plans do not show sight triangle, drainage, utility, and other site related easements.
- The township line that is shown along and within Quaker Bridge Road is labeled as "Approximate Municipal Boundary Line not surveyed or certified by Langan." The Township should decide if it is necessary to have this line surveyed. There are documents that memorialize this line available from various sources.
- The consultant should submit closure calculations for all lots, dedications, easements, and encumbrances for review.



# WEST WINDSOR TOWNSHIP

## DEPARTMENT OF COMMUNITY DEVELOPMENT DIVISION OF ENGINEERING

### MEMORANDUM

Date: March 8, 2022

To: West Windsor Township Technical Review Committee

From: Dan Dobromilsky, LLA,PP,LTE  
Landscape Architect 

Subject: **BRIDGEPOINTE 8, Industrial Park**  
PB 21-15 P/F Major Site Plan & Subdivision (Phase I), and Prelim. Major Site Plan (Phase II)  
**Landscape Architectural Review #3**  
PCD Zoning District; Block 8 and 15.14, Various Lots; US Rt. 1, Quakerbridge and Clarksville Roads

A site visit has been conducted and the submitted plans (dated, last revised 2-15-22) for this application have been analyzed. The following comments regarding the landscape architectural aspects of this proposal are offered for consideration as this application is reviewed:

1. The Subdivision Plans will need to be amended to depict the line of anticipated conservation easements related to the environmentally constrained lands. These areas should be subject to conservation / Greenbelt easements to the Township and appropriate delineation (monuments) should be specified to clearly define the line. If the Planning Board hearing occurs before NJDEP feedback is received regarding the line for conservation easement, then a process whereby the Board can review and approve this aspect of the subdivision must be determined. It would seem appropriate to include a proposed conservation area with the current submission, subject to NJDEP approval and/or jurisdictional modification. The plans should also specify the means of demarcating the easement lines (e.g. Greenbelt Monuments).
2. The Demolition Plans indicate existing trees and woodland to be removed but these plans do not offer the required tree survey information (200-13.C(3)(e)). An Existing Tree Exhibit, sheet LP 503, was provided with the last submission, but the information offered was less than required by code and was incomplete. Sheet LP 503 was not included with this submission, but has been subsequently forwarded for review. A note should be added to the Demolition and Tree Exhibit Plans indicating that the final limit of disturbance and tree removal shall be reviewed by Township staff, based upon an on-site stake out, prior to the initiation of clearing, to confirm accuracy. A waiver from strict compliance with plan submission requirements will be required since the location of all existing trees is not depicted on the plans.
3. A typical landscape plan has been developed for most of the phase one buildings (E-1 and C-1) and surrounding area, to forge a consensus on the level and type of landscape architectural development required to fully address code standards. These portions of the landscape plans, along with the landscape plans for all stormwater management basins, can be used as a model to complete the landscape design and plans for other phase one building sites (B-1) and final site plan review by the Board. For the building sites that are subject of preliminary site plan review, this model plan could be utilized to create either schematic preliminary or final complete landscape plans. This Board submission should clearly indicate which portions of the landscape plans are complete for final review and which areas are depicted in a schematic or preliminary level, subject to modification at the time of final site plan submission.

**MEMORANDUM**

To: W.W. TRC  
Re: PB 21-04  
Date: March 8, 2022

4. Standard specifications for project furnishings (e.g. benches, street lights, bollards, fencing, or picnic tables), as well as monument signs are included. The detailed plans for building entrance pedestrian spaces, and parking lot islands, are not quite complete. These details should be finalized for Board review.
5. The section and elevation drawings provided to illustrate the effectiveness of landscape buffers are helpful. The Board submission of these illustrations should depict the landscape at planting size to offer a most accurate indication of the buffers at occupancy.
6. The incorporation of green building design elements into the design and construction of this new industrial park should be discussed at the Planning Board hearing. The implementation of rooftop solar seems inevitable. The applicant should be prepared to discuss expectations based upon their experience and the preparations that will be made for the introduction of solar energy generation for this park.
7. The Environmental Impact Statement has been revised but several aspects still seem insufficient and thus open to critical review and analysis as follows:
  - a. The discussion regarding impacts upon vegetation and wildlife is insufficient. The loss of habitat and woodland that will occur with this project will have an impact upon these Township resources due to the significant size of this project. Measures that will be taken to mitigate impacts and possibly enhance some of these resources during construction, with development, and through management of the properties should be discussed. A quantitative analysis of areas of existing non-farm habitat compared to the post development area of preserved non-farm habitat plus the new areas of potential habitat to be developed in association with stormwater management basins would be helpful to gain a better understanding of these impacts with this proposal. The potential to incorporate some wildlife shelter elements (e.g. bird or bat houses), to further mitigate or enhance these resources should be considered.
  - b. The chart on page #12 regarding land use is still confusing. The chart seems to suggest that 110 acres of existing woodland will be removed. Clearly significant areas of existing woodland will remain, despite the large area of disturbance for construction. The data on this chart should be clarified and to the extent appropriate corrected or expanded to provide a comprehensive analysis.
  - c. The noise analysis and mitigation discussion does not offer any data regarding the level of noise that could be expected from this type of use as experienced at the property line or near residential properties. Warehouse uses produce significant early morning, late evening or overnight noise that will be present a nuisance potential for some nearby residential areas. The EIS should discuss this aspect of the new park, with some level of magnitude expressed to offer facts to address anticipated speculation.
  - d. It seems likely that air quality impacts will occur with the introduction of truck and vehicle movements associated with the warehouse uses. The EIS offers a single line of relevant to this impact. "After the project is constructed, relatively minimal impacts are anticipated." What is the basis for this statement? Did the applicant review typical data or measure typical air quality associated with a large distribution center to make such a determination? More quantitative analysis would seem appropriate regarding air quality impacts as well.
8. The applicant should indicate if the architectural façade elevations will be presented. The range of variation and options in terms of materials and colors should be reviewed and some typical standards should be developed for the park. The architectural plans should offer standards regarding proposed or potential wall mounted light fixtures, dock lights, and signs. Standards for the incorporation of accessory structures such as guard houses, emergency generators, sheds, and outdoor material storage fencing should be addressed.

This review is based on the information received to date. Additional comments may be offered as new information is received or based upon the presentation of this application.

cc: Applicant  
Professionals



SURINDER S. ARORA, PE  
President

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**MEMORANDUM**

**DATE:** March 8, 2022

**TO:** West Windsor Township Technical Review Committee

**FROM:** Jeffrey A. L'Amoreaux, P.E., Traffic Consultant. *VA for JAL*

**SUBJECT:** Bridgepoint 8 Industrial Park  
Phase I-Preliminary/Final Major Site Plan and Subdivision  
Phase II- Preliminary Major Site Plan  
PB 21-15  
US Route 1, Quakerbridge Road, Clarksville Road  
Block 8; Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, 49  
Block 15.14: Lots 18, 19, 20, 22, 75  
West Windsor Township, Mercer County, New Jersey

We have received the following information electronically for review:

- One (1) copy of Rider for Two-Phased Development
- One (1) copy of the Subdivision Plan Checklist
- One (1) copy of the Site Plan Checklist
- One (1) copy of Environmental Impact Statement prepared by Langan Engineering and Environmental Services, Inc., dated February 15, 2022
- One (1) set of Major Subdivision Plans (5 sheets) prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021 and revised February 11, 2022
- One (1) set of ALTA/NSPS Land Title Survey Plans (3 sheets) prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021
- One (1) copy of the Stormwater Management Report prepared by Langan Engineering and Environmental Services, Inc, dated November 12, 2021, with latest revision date February 15, 2022
- One (1) copy of the Traffic Impact Study (503 pages) prepared by Langan Engineering and Environmental Services, Inc, dated November 12, 2021, with latest revision date December 3, 2021
- One (1) copy of the Water System Engineer's Report prepared by Langan Engineering and Environmental Services, Inc, dated November 12, 2021, with latest revision date February 15, 2022
- One (1) copy of the Sanitary Sewer Engineer's Report prepared by Langan Engineering and Environmental Services, Inc, dated November 12, 2021, with latest revision date February 15, 2022
- One (1) copy of the Engineer's Cost Estimate prepared by Langan Engineering and Environmental Services, Inc, dated February 15, 2022
- One (1) copy of NJDOT Freshwater Wetlands Letter of Interpretation dated January 22, 2016
- One (1) copy of Response Letters addressed to the following Township professionals:
  - Township Engineer (Mr. Guzik)
  - Environmental Consultant (Mr. Jepson)
  - Fire Chief (Mr. Lynch)
  - Landscape Architect (Mr. Dobromilsky)
  - Planning (Mr. Novak)

- Traffic
- One (1) folder containing sets of plans including:
  - Tax Map Plan
  - Setback Plan
  - Sign Plan
  - Phasing Plan
  - Existing Constraints
  - Demolition Plans
  - Site Plans
  - Grading and Drainage Plans
  - Detailed Grading
  - Utility Plans
  - Landscape Plans
  - Lighting Plans
  - Landscape Sections
  - Soil Erosion Plans
  - SESC Notes and Details
  - Truck Movement Plans
  - Emergency Vehicle Plans
  - Construction Details

The project proposes to construct a 5,563,117 square feet (sf) Logistics Center (warehouse with supplemental office) consisting of seven (7) buildings, namely, A1 (334,032 sf), B1 (800,698 sf), B2-1 (695,274 sf), B2-2 (710,077 sf), C1 (1,023,309 sf), D1 (813,635 sf), and E1 (1,186,092 sf). Future developments on the site that will be designed and constructed by others have been preliminarily projected to consist of 209,450 sf retail space, 192,000 sf office space, a 6,000 s.f. convenience market with gasoline pumps, and two hotels providing 230 rooms.

The site is divided into two tracts bifurcated by Clarksville Road along the northeast/southwest direction. The northwest tract is bounded to the northeast by undeveloped land, to the northwest by US Route 1, to the southwest by Quakerbridge Road, and Clarksville Road (CR 638) to the southeast. The southeast tract is bounded by Clarksville Road to the northwest, undeveloped land to the northeast, Quakerbridge Road to the southwest, and to the southeast by the Amtrak/NJ Transit Northeast corridor railroad line. The site was previously used for a mixture of office, laboratory space, greenhouses and farming but is currently vacant, save the farming on the southeast side of Clarksville Road.

The applicant proposes to construct a new roadway from the northwest to connect Avalon Way at Quakerbridge Road to US Route 1 northbound through the southeast tract of the site, intersecting Clarksville Road at a new proposed traffic signal, and through the northwest tract of the site. Access to and from the warehouse buildings is currently proposed through multiple driveways along the proposed new roadway and Clarksville Road, respectively. A right-in/right-out only driveway is being proposed at the intersection of the proposed new roadway and US Route 1 northbound.

We have completed our review of the above-referenced documentation and offer the following comments

for the TRC's consideration regarding the applicant's response in the same order as our original comments:

### **Traffic Impact Study**

1. The latest edition (11<sup>th</sup> Edition) of the Institute of Transportation Engineers (ITE) Trip Generation Manual is the recommended version to be used in estimating the site-generated trips, whereas the consultant utilized the 10<sup>th</sup> Edition of the ITE Trip Generation publication. For the warehouse land use proposed during the Phase 1 and 2 developments, there is no significant difference between the trips estimated using either the 10<sup>th</sup> or 11<sup>th</sup> Editions of the ITE Trip Generation Manual. However, there are significant differences in the trip generated for the Phase 3 development using the 10<sup>th</sup> Edition compared to those derived from the 11<sup>th</sup> Edition, e.g., for the retail use during the PM peak, 960 trips are estimated using the 11<sup>th</sup> Edition versus 620 trips (10<sup>th</sup> Edition). Similar differences in the number of trips are to be expected for the Convenience Store/Gas Station land use.

*Satisfied: The discrepancies in trip generation are more with the land uses in Phase 3 construction. According to the applicant the Phase 3 construction is not part of this application and was included for planning purpose. Additionally, separate Traffic Impact Study would be submitted for the Phase 3 construction at the time of application. This is acceptable.*

2. For the Convenience Store with Gas station land use, the projected number of fueling positions for vehicles is to be provided during the Phase 3 development. This information in addition to the size (gross floor area) of the convenience store is needed for an accurate estimate of the trip generation using the 11<sup>th</sup> Edition of the ITE Trip Generation Manual.

*Satisfied: The actual composition of the land uses proposed for Phase 3 would be included in the Traffic Impact Study to be submitted for the Phase 3 construction at the time of application. This is acceptable.*

3. On Table 2 in the Traffic Impact Study, it is indicated that during the Phase 1 construction, 1% of passenger vehicle traffic is anticipated to arrive from and depart to Meadow Road West (i.e., west of US Route 1). However, on Figure 7 (Arrival & Departure Distributions-Warehouse Passenger vehicles Phase 1), the arrival trip percentage along Meadow Road East is shown as 9%. Further, it is indicated in Table 2 that 12% of the passenger vehicle traffic will arrive from and depart to the north along US Route 1. Only 4% of trips are shown arriving from US Route 1 north along the site's US Route 1 frontage. This trip distribution seems to suggest that the remainder 8% arriving trips would divert to Clarksville through Meadow Road to the site.

The traffic that would divert to Clarksville Road from US Route 1 north accounts for three quarters of all the anticipated trips from the north, along US Route 1. Since this route via Meadow Road to Clarksville and to the site would be the preferred route for these vehicles, the applicant should discuss the traffic operations and/or impacts at the intersections along Meadow Road between US Route 1 and Clarksville Road.

*Satisfied: The consultant acknowledges that two-thirds of the new trips arriving from the north along Route US 1 are projected to follow Clarksville Road via Meadow Road. This would translate*



*to approximately 33 vehicles in the AM peak hour and 16 vehicles in the PM peak hour, respectively. We agree with the applicant's consultant that these traffic volumes would not constitute any significant adverse traffic operation.*

4. The Phase 1 arrival and departure distributions shown for warehouse trucks on Figure 8 indicates that there is no truck traffic projected to turn left from Clarksville Road southbound onto Quakerbridge Road East. The truck trip distribution appears to indicate that all truck traffic from Building E1 that are destined to Quakerbridge Road East, would use the proposed new roadway connection (Site Driveway 1), crossing Clarksville Road and proceeding to turn left at the proposed Site Driveway 2/Avalon Way and Quakerbridge Road intersection.

During the Phase 1 construction, 10% of the truck trips are projected to arrive from Quakerbridge Road East, out of which 4% are destined to the northwest tract (Building E1 for Phase 1). Building E1 has two loading dock areas located on the north and south sides of the building, respectively. By proportion of proposed loading docks, it seems reasonable to assume that half (2%) of these trips from Quakerbridge Road East would be destined to the southern loading docks of Building E1. For the trucks docked at the southern loading docks, it seems that using southbound Clarksville Road to turn left onto Quakerbridge Road East would be the shorter and more intuitive route choice. Explanation is to be provided to justify the trip distribution that excludes truck trips on the southbound Clarksville Road left turn at Quakerbridge Road.

*Satisfied: The consultant acknowledges that trucks exiting the southern loading docks at Building E1 would travel in a counterclockwise direction. This would direct them to the proposed new roadway connection. The trip distribution based on this premise would be acceptable.*

5. The truck arrival distribution shown in Table 2 for Phase 1 indicates that 50% of the truck traffic are projected to arrive from the south while 40% would arrive from the north along US Route 1, respectively. Figure 8 shows 7% of the arriving truck traffic on the eastbound through movement at the intersection of the proposed new roadway connection (aka Site driveway 1) and Clarksville Road. This trip percentage should be 14% based on the relative number of truck trips to be generated by the buildings on both sides of Clarksville Road. The unaccounted 7% truck percentage on the eastbound lane movement at this intersection is either from the percentage of trucks arriving from the north or the south along US Route 1, respectively. The applicant's consultant should clarify the trip distribution at the intersection of the proposed Site Driveway 1 and Clarksville Road.

*Partially Satisfied: The consultant acknowledges that the trip distribution should depict 14% instead of 7% arriving trucks on the eastbound through movement at the intersection of Clarksville Road and the proposed new Roadway connection to Avalon. We agree that the increased trip percentage would not significantly affect the results of the capacity analysis, hence a revised capacity analysis is not warranted. However, we request that an updated trip distribution (Figure 8) be provided as an addendum.*

6. On Page 7 of the Traffic Impact Study (TIS), under 'Traffic Volumes', the consultant stated that it "arranged for turning movement traffic counts to be conducted during the morning and evening

peak hours on a typical weekday at the study intersections. Specifically, turning movement counts were conducted on Tuesday, 3 May 2016, .....". The consultant is to clarify this statement. It should be noted that counts from 2016 would be 5 years old and are deemed less reliable for a study of this nature and magnitude.

*Satisfied: The consultant has clarified the statement and indicates that traffic counts from prior years conducted by several agencies/consultants were collected and used to correct the traffic volumes for the effect of the COVID pandemic. This approach is acceptable.*

7. On Page 7 of the TIS, the consultant indicated that several traffic counts conducted by different consultants between 2005 and 2018 were used to supplement the 2016 traffic data in the development of representative traffic volumes in the study area. It is further stated that a table was created that summarized the historical traffic data and the adjustments utilized to calculate the 2019 existing adjusted (balanced) traffic volumes. It appears that this exercise was done to establish a pre-COVID (2019) traffic condition. We were not able to locate the summary table within the documents submitted by the applicant for this review. The consultant is to provide information regarding the described summary table on Page 7 of the TIS.

*Partially Satisfied: The consultant indicated that the historical traffic volume summary table used in developing the pre-COVID traffic volumes was included as an attachment to their response. We could not locate this document in the set of new submittals received for this review. An emailed copy to the Traffic consultant would suffice.*

8. It appears that 2021 existing traffic counts were not conducted at any of the study locations. He consultant may have assumed that any 2021 counts would not be representative of typical conditions due to the COVID pandemic. Instead, the consultant has estimated counts for 2019 existing condition by collating and developing traffic volumes from traffic counts conducted between 2005-2018 at different locations. The derived 2019 existing traffic volumes were then projected to the 2021 year.

However, without current (2021) traffic counts at the study locations, the rationale and extent of traffic volume adjustments to be made at each study location where necessary, could not be accurately established. Further, without the actual 2021 traffic counts, there is no data available to verify the reasonableness or reliability of the derived traffic volumes from previous counts 5-16 years old. It is recommended that current real time traffic counts are scheduled and conducted at the study locations to establish baseline data from which any traffic volume adjustments could be justifiably made.

*Partially Satisfied: In general, traffic volumes along roadways were acknowledged to have decreased throughout the COVID pandemic for several reasons. As the consultant noted, it is possible that traffic volumes may never return to the pre-pandemic sizes as many employers are more and more embracing 'work from home' policies. From this standpoint, the established traffic volumes for this traffic study would be conservative for capacity estimates. However, for township-wide planning, this approach should not preclude the collection of actual existing traffic volumes at the time of the traffic study. Such existing traffic volumes would provide a baseline for*

*establishing the 'normal' traffic flow as time progresses post-pandemic. To address this issue sufficiently, the applicant is encouraged to arrange a meeting with the traffic consultant.*

9. In developing the 2026 no-build traffic volumes, the consultant indicated that traffic from adjacent developments (typically, these are approved developments, yet to be constructed) were added to the 2026 base traffic volumes. The total derived adjacent development traffic volumes are illustrated in Figure 5 in the TIS. However, the traffic volumes associated with each adjacent development prior to collation have not been shown. A list of the adjacent developments incorporated in the analysis as well as separate graphical illustrations of the traffic volumes for each one should be provided.

*Satisfied: The adjacent development included in the study is the Costco Tract in Lawrence Township, which includes future retail space that has not yet been constructed. The associated traffic volumes are adequately illustrated.*

10. The applicant's consultant indicated that the Phase 3 developments for the site would be accomplished by other developer(s) in the future. On this premise, it is assumed that the Phase 3 traffic analysis would not be a part of the current application. However, the consultant has included the traffic analyses pertaining to the Phase 3 development in the submitted TIS. Based on comments #1 and #2 above, the trip generation indicated for the Phase 3 developments is underestimated and would not be representative of the anticipated trips at the site. Accordingly, the trip generation for the site is to be revised using the 11<sup>th</sup> Edition of the ITE Trip Generation. Further, the capacity analyses provided for the Phase 3 developments are to be updated to reflect the revised trip generation.

*Satisfied: The Phase 3 developments are not the subject of this application. A separate Traffic Impact Study would be submitted at the time of Phase 3 application by the future developer, which should address the trip generation concerns.*

11. The build years for both Phase 1 and Phase 2 developments are indicated as 2026 in the TIS. This appears to suggest that both phases are anticipated to be completed in the same year - 2026. The applicant should provide the anticipated timeframe for the construction of each development phase. It is understood that such a timeline would be preliminary and strict adherence to it could be limited by several factors that may be beyond the control of the developer.

*Satisfied: The consultant anticipates that construction will commence in the coming year with buildout over several years with Phase 1 and 2 projected to be completed in 2026.*

12. The US Route 1 northbound traffic volumes used in the capacity analyses performed by the consultant at the US Route 1 northbound and Site Driveway 1 require further explanation. On Figure 12 (2026 Build Traffic Volumes Phase 1), 5219 vehicles (AM) and 3475 vehicles (PM) are shown for the US Route 1 northbound approach at the Site Driveway 1 intersection. However, in the capacity analysis for the 2026 Phase 1 build condition, 1740 vehicles (AM) and 1159 vehicles (PM) were assigned to the US Route 1 northbound approach at the site driveway intersection. Information regarding the traffic volumes used for the capacity analyses is requested.

Further, during the Phase 1 build with mitigation conditions, 838 vehicles (AM) and 900 vehicles (PM) were assigned to the US Route 1 northbound approach, respectively at the site driveway. These traffic volumes correspond to the traffic volumes indicated at the merge of the upstream auxiliary lane and the westbound Quakerbridge Road on-ramp to US Route 1 northbound. Similarly, the traffic volumes assigned to this location during the Phase 1 & 2 build, and Phase 1, 2 & 3 build conditions, respectively were also applied in the capacity analyses at the US Route 1 northbound and Site driveway 1 intersection. The application of these traffic volumes assumes that there would be no lane changes between the Quakerbridge Road interchange and the site driveway. In addition, it implies that no site-generated traffic is bound on the 'main line' US Route 1 travel lanes whereas, the traffic assignment depicts otherwise.

The consultant is asked to provide information to support the use of these traffic volumes and the reduction of the US Route 1 through traffic volumes at the site driveway from 1740 vehicles (build) to 838 vehicles (build with mitigation) during the AM peak hour and 1159 vehicles (build) to 900 vehicles (build with mitigation) during the PM peak hour. Any anticipated diversion or reduction in traffic should be supported with the appropriate documentation.

*Open: The proposed Site access intersection along Route US 1 northbound would be under the jurisdiction of NJDOT. The applicant indicated that an access application has been submitted to the NJDOT and a copy of the NJDOT Street Permit will be submitted to West Windsor Township and is to be a condition of approval of the application before the Township.*

13. US Route 1 northbound approach carries three through lanes at the location of the proposed Site Driveway 1. However, in the TIS, the US Route 1 approach has been assigned a single through lane in the capacity analyses conducted at its intersection with the proposed Site Driveway 1. The consultant is to provide the basis for assigning a single lane to the US Route 1 through movement at the proposed site driveway.

*Open: The proposed Site access intersection along Route US 1 northbound would be under the jurisdiction of NJDOT. The applicant indicated that an access application has been submitted to the NJDOT and a copy of the NJDOT Street Permit will be submitted to West Windsor Township and is to be a condition of approval of the application before the Township.*

14. The proposed mitigation of the site-generated traffic impact at the signalized intersection of Clarksville Road and Meadow Road are deemed insufficient. It is noted that no roadway improvements have been proposed by the applicant at this intersection. Aside from the modification of the signal cycle length and green time adjustments proposed during the Phases 2 and 3 build with mitigation conditions, no mitigation was proposed for the Phase 1 build condition. However, during the Phase 1 build condition, the delay on the southbound Clarksville Road through movement would increase from 48.8 sec/veh (no-build) to 69.5 sec/veh (build), which represents a 42% increase in delay.

Further, the vehicle queue length that is projected to reach 647 feet on the SB approach through lane during the no-build condition would exceed 707 feet during the build condition. It is noted that the existing SB right turn storage length is approximately 125 feet. The net effect of this condition

is that majority of the Clarksville Road southbound right turn vehicles would be unable to enter the right turn bay during the SB approach green interval. This leads to a 'starvation' condition, when for multiple signal cycles, there would be little or no vehicles in the right turn bay to utilize the allotted green time. This would exacerbate the current delay experienced by the SB motorists. This operating condition is also noted during the Phases 2 and 3 build with mitigation conditions and would be deemed unacceptable to most drivers. The applicant is to provide additional measures to address the delay and queueing issues.

*Satisfied: The consultant indicated that NJDOT is currently designing the replacement of the Clarksville Road Bridge over Amtrak, which includes the evaluation of roundabout and signalized options at the Clarksville Road and Meadow Road intersection. In the interim, the applicant has proposed a traffic signal optimization at the existing intersection. The consultant indicated that they have provided NJDOT with design traffic volumes, hence it is reasonable to assume that the intersection improvement adopted by the NJDOT as part of the bridge replacement project would mitigate or alleviate the queue concern along southbound Clarksville Road. Further discussion on this issue is recommended.*

15. The latest Circulation Element of West Windsor Township's Master Plan envisages a modern roundabout in place of the existing signalized intersection at Clarksville Road and Meadow Road. To align with the Township's vision, it is recommended that a modern roundabout be evaluated and analyzed as part of any improvements or mitigation of traffic impact at this intersection.

*Satisfied: The consultant indicated that NJDOT is currently designing the replacement of the Clarksville Road Bridge over Amtrak, which includes the evaluation of roundabout and signalized options at the Clarksville Road and Meadow Road intersection. In the interim, the applicant has proposed a traffic signal optimization at the existing intersection. The consultant indicated that they have provided NJDOT with design traffic volumes, hence it is reasonable to assume that the intersection improvement adopted by the NJDOT as part of the bridge replacement project would mitigate the site's traffic impact.*

16. There are concerns with the anticipated traffic operation at the signalized intersection of Quakerbridge Road and Village Road/Lawrence Square Blvd. During the 2026 no-build condition, it is projected that the Quakerbridge Road eastbound left turn queue length would exceed 719 feet. Since the available left turn storage length is approximately 250 feet, left turn traffic would continue to back into the through traffic lanes thereby increasing the through traffic delays. This condition would be exacerbated during the Phases 1 & 2 build condition with Phase 1 mitigation, as the queue length would exceed 811 feet. Further mitigation is required at this intersection to ensure that the Quakerbridge Road eastbound through traffic is not severely impacted to the extent that the through movement queue backs up to the upstream Lawrence Station Road intersection.

*Partially Satisfied: We agree with the consultant that Right-of-way constraints limit any geometric improvements at the intersection. The consultant indicated that Mercer County is in the early stages of planning for the replacement of Quakerbridge Road over Amtrak. The applicant should verify from the county whether any intersection improvements are being planned for Quakerbridge Road and Village Road intersection. If so, what is the nature of such planned improvements and how do*

*they help to mitigate/alleviate the queuing problem along eastbound Quakerbridge Road.*

17. As a means of reducing the through traffic queues along Quakerbridge Road especially at the intersections with Village Road West/Lawrence Square Blvd and the proposed Lawrence Station Road, respectively, the applicant should consider providing coordination between the traffic signals within the study area along Quakerbridge Road. A signal progression analysis is recommended.

*Open:* The consultant has indicated that it would work with Mercer County to optimize signal timings and coordination along Quakerbridge Road with the proposed signal at Lawrence Station Road. The approval of the proposed signal is required from Mercer County and Lawrence Township. West Windsor Township is to be updated on the status of the coordination of the signal optimization and approvals between the applicant and both agencies.

18. As noted previously, the trip generation for the Phase 3 developments is to be revised to align with the trip rates reflected in the latest edition (11<sup>th</sup> Edition) of the ITE Trip Generation Manual. Accordingly, the capacity analyses and the proposed mitigations for the Phase 3 traffic impact may be redundant and need to be updated. Based on the foregoing, the review of the Phase 3 traffic analysis is pending the applicant's resubmission of the revised and updated analysis.

*Satisfied:* The Phase 3 development is not a part of this application, and a separate Traffic Impact Study would be submitted at the time of its application.

19. There are concerns with the proposed signalization of the Quakerbridge Road and Lawrence Station Road during the build with mitigation condition for all phases of development due to its proximity to the signalized intersection of Quakerbridge Road and Village Road West/Lawrence Square Blvd and the vertical crest separating both intersections. Adequate coordination of both signals would be required. Further, the proposed signal at Lawrence Station Road would require a review from Lawrence Township and the approval of Mercer County. In case, the approval of the signal is not granted, another alternative improvement measure should be evaluated.

It is noted that the deterioration in the levels of service (LOS) at this unsignalized intersection would be mainly due to the left turns out of Lawrence Station Road. Consideration should be given to the reconfiguration of the Lawrence Station Road approach to eliminate left turns out of it. Provisions to divert these left turns to the modified signalized intersection of Avalon Way and Quakerbridge Road should be considered.

*Open:* The consultant indicates that in their recent discussions with Mercer County, it appears that in 2016, Mercer County processed an application that would reconstruct Lawrence Station Road to become right-in/right-out only road and all left turns would be directed a new signal to be located 350 feet west of this location. The applicant has indicated that it would coordinate with the County on interim improvements until such a time that the proposed new roadway and signal proposed by others is completed. The applicant is to update the Township of the status of the coordination effort with Mercer County.

20. The capacity analysis provided for the proposed right-in/right-out site driveway along US Route 1

northbound would not be representative of the anticipated traffic operations. The use of the critical gap default value in the capacity analysis does not consider that trucks would accept longer gaps than passenger vehicles. In addition, the follow-up headway for trucks queued on the site driveway would be higher than for smaller cars. Further, trucks would also turn at much lower speeds than passenger cars. Due to the high volume of truck traffic at the proposed access driveway, all these critical parameters should be accounted for in capacity analysis. More realistic critical gap and follow-up headway values are to be used in the analysis of this location. To capture a more representative traffic operation at the proposed driveway, microsimulation analysis would be desirable and is recommended.

*Open:* The proposed Site access intersection along Route US 1 northbound would be under the jurisdiction of NJDOT. The applicant indicated that an access application has been submitted to the NJDOT and a copy of the NJDOT Street Permit will be submitted to West Windsor Township and is to be a condition of approval of the application before the Township.

21. The Township's Circulation Element of the Master Plan shows a bridge over US Route 1 at the location of the through roadway bisecting the site. Based on other types of uses in New Jersey (Raritan Center at County Route 514 in Edison, the nearby Quakerbridge Mall bridge over US Route 1) it may be to the applicant's advantage to grade separate, and may be needed from a capacity standpoint, as further revisions to the traffic impact study may reveal. We would like to explore the possibility of using a diverging-diamond interchange as an extension of Nassau Park Boulevard. Many agencies' cooperation will be needed, we recognize. However, we believe it would have merit to allow for a future interchange at an absolute minimum.

*Partially Satisfied:* The consultant indicated that a right-of-way is being preserved for a future alignment with Nassau Park Boulevard with a possible overpass. The applicant should coordinate the ROW dedication with the appropriate Township department.

### Site Plan

The applicant did not provide any itemized response to our previous review comments in our January 18, 2022 memorandum. Our comments below are based on our review of the recently submitted site plan and do not reflect on any response the applicant may have intended.

22. As currently proposed, the right-in/right-out Site Driveway 1 along US Route 1 northbound may not be desirable. It is anticipated that high volumes of truck traffic would enter and exit the site at this location. Due to low turning speeds associated with truck traffic, acceleration and deceleration lanes would be needed for the anticipated trucks turning off/on the main through lanes (US Route 1 northbound) to minimize the delays/disruptions to the major roadway (US Route 1 northbound) traffic. We recognize this matter will be under NJDOT jurisdiction.

*Open:* The proposed Site access intersection along Route US 1 northbound would be under the jurisdiction of NJDOT. The applicant indicated that an access application has been submitted to the NJDOT and a copy of the NJDOT Street Permit will be submitted to West Windsor Township and is to be a condition of approval of the application before the Township.

23. On Sheet CS100, the Signage Legend in the upper right corner need to be corrected. R7-8 is the “Reserved Parking Sign” and should be labeled as 12” wide x 18” tall, the “Van Accessible Plaque” should be labeled R7-8P and is 18” wide x 9” tall and the “New Jersey Penalty Plate” should be labeled R(NJ)7-8A and be shown as 10” wide x 12” tall. They should also be shown proportionally with one another (i.e. they are not a uniform width). They are also shown and labeled incorrectly in the Site Details on Sheet CSS01.

*Satisfied: The ADA reserved parking sign and the van accessible plaque have been correctly labeled on the Signage Legend (Sheet CS 100) and have been proportionally shown relative to each other.*

24. On Sheet CS100, consider eliminating both driveways along Clarksville Road between Buildings D1 and B2-1 and also both driveways along Clarksville Road between Buildings E1 and C1. The left and right turns at both can be accommodated at the proposed signalized intersection.

*Open: The driveways are still shown on the Sheet CS 100. Further discussion is needed at the TRC meeting*

25. On Sheet CS100, the driveway connecting Building C1 to the roadway between C1 and B1 should be either eliminated or moved more to the northeast.

*Open: The driveway is still shown on the Sheet CS 100 at the same location as the previous plan submission. Further discussion on this issue is needed at the TRC meeting*

26. On Sheet CS113, the shoulder along the northeast side of Quakerbridge Road is mislabeled as Shared Path, please correct.

*Satisfied: The referenced shoulder along Quakerbridge Road on Sheet CS 113 has been labeled correctly.*

27. On Truck Movement Plan X, Sheet CP110, the southwest bound right turning truck movement clips the stop bar for the southbound approach. Consider setting the stop bar back a few feet. This same issue appears on Fire Truck Movement Plan X, Sheet KT110 with the northeast bound left turning fire truck movement clipping the stop bar.

*Satisfied: The projected encroachments into the opposite travel lane by turning truck (Sheet CP 110) and fire truck (Sheet KT 110) respectively, have been eliminated by setting back the stop bar.*

28. The “Fire Truck Movement” Plans KT101-KT114 are mislabeled on the Index Sheet as “Emergency Vehicle Movement” Plans. Please pick a name for them and be consistent.

*Satisfied: Plans KT101-KT114 have been labeled as “Emergency Vehicle Movement” Plans on the Index Sheet and is consistent with the titles on each plan sheet.*



29. Site Details Sheet CS502, please make all crosswalks a minimum of 10' in width. Also, the Township prefers "Continental Crosswalks" to the Parallel Lines shown. Please correct.

*Satisfied: Continental crosswalk is shown in the Site Detail Sheet CS 502 with a minimum 10 feet width.*

30. Site Details Sheets CSS01 and CSS02, the Sign Detail and the Sign Post Detail seem a bit redundant. The Sign Post Detail also has an error in that it shows the sign mounted not 7' maximum above finished grade but rather 7" maximum above the 6" above finished grade breakaway point. Please correct. Please also clarify which posts are proposed to be used as we noted there are subtle differences between the two details. If both are to be present, differentiate between them with labeling.

*Satisfied: The sign post detail has been revised with a notation that the bottom of the sign shall not be less than 7 feet above the pavement or ground.*

31. Site Details Sheet CSS02 has a typical section for the Bicycle Path. Will the same section apply to the "Shared Paths shown on the Site Plans (CS101, CS105, CS108, CS109, CS112)? They are also labeled as "10' Wide Concrete Path". Please clarify. If sidewalk, the sidewalk detail should indicate that it applies to the Shared Paths as well.

*Open: Clarification is requested from the applicant*

32. Comprehensive Pedestrian and Bicycle Circulation Plans should be prepared.

*Open: No bicycle/pedestrian circulation was submitted for review.*

33. Electric Vehicle Charging Stations (signs, and symbol markings) may be required per NJ PL.2019 Chapter 362.

*Open: The applicant has not addressed this comment.*

34. Please revise the parking stall markings to use West Windsor Township standard double line "hairpin" parking lines per §200-29.M.(4).

*Satisfied: The ADA parking stall detail includes a note requiring hairpin striping. The hairpin striping detail has been included in Site Detail Sheet CS 502.*

35. We do not see a Truck Turning Movement Plan for Trash Vehicles, nor do we see any designated dumpster areas for trash collection.

*Open: The applicant has not addressed this comment.*

36. Further east along Quakerbridge Road is an intersection with Village Road just across the Northeast Corridor tracks. This intersection may need to be revised to provide larger left turn queue storage

areas, please analyze.

Satisfied: *This comment has been addressed in the Traffic Impact Study section.*

37. The number of employees anticipated at the site is to be provided and the times of operations, including shift changes are to be indicated.

Open: *The projected number of employees and the anticipated times of operations including shift changes at the site should be provided.*

38. Is there a gap in the match lines between sheets CS108 & CS109?

Satisfied: *The match lines appear to be fine.*

39. The Sheet Index on the Cover Sheet CS 001 indicates that there is a sheet titled Existing Constraints which was not included in this submission.

Satisfied: *The Existing Constraints sheet has been included in the recently submitted documents.*

40. The number of Tractor Trailer Parking Spaces on the north side of Building B1 may be misrepresented as 105, we only found 101 when we counted them.

Satisfied: *We defer the issues related to the location/number of parking stalls to the planning professional.*

41. In the Parking Table on Sheet CS100, the number of Required Parking Spaces for Building C1 is misrepresented as 321, adding 123 and 199 together yields 322 (probably a rounding issue). The total number shown around Building C1 we counted as 345, but the number shown in the silhouette of the Building says 353. Please address.

Satisfied: *We defer the issues related to the rounding of fractional parking stalls based on the Township code to the planning professional.*

42. In the Parking Table on /Sheet CS100, the number of Required Parking Spaces for Building D1 may be misrepresented as 255,  $98+158 = 256$  (again, probably a rounding issue).

Satisfied: *We defer the issues related to the rounding of fractional parking stalls based on the Township code to the planning professional.*

43. For Building E1, we counted 187 Tractor Trailer Parking Spaces, the Building silhouette and the Parking Table both cite this number as 186. The circled numbers in the last spaces indicate  $63+124$  which matches our count of 187. If we to count them as on Sheet CS100, we would get 186 as the west row is only 123 spaces on Sheet CS100, not 124 as on sheets CS111-CS112.

Satisfied: *We defer the issues related to the rounding of fractional parking stalls based on the Township code to the planning professional.*

44. The Right-In/Right-Out Connection to US Route 1 shows a left turn pocket lane to a future pad site on sheet CS103. Can we show the pad sites on these plans in some way?

*Satisfied: The future pad sites are not part of this submission, and the actual size and locations may not be ascertained at this time.*

45. The Truck Backing Maneuver demonstrated on sheet CP-111 appears to have both blindside and normal backing together in one maneuver and appears to conflict with the adjacent loading dock space, i.e. if another truck is already parked in the adjacent dock, this may not work. Same maneuver is shown on sheets CP-102, CP-105 & CP-106.

*Open: The Truck Backing Maneuvers shown still include backing in a counter-clockwise direction looking through the passenger side mirrors and backing in blindly. Please eliminate blind-side backing from the truck turning maneuvers as much as possible.*

46. The Fire Truck Turning Maneuvers shown on sheet KT-102 at the east end of Building A1 and on sheet KT-106 at the west end of Building A1 have some conflicts. We defer to Chief Lynch to determine if they are acceptable.

This completes our comments. Additional comments will be provided as this project moves forward.

Lisa Komjati  
Francis Guzik, P.E., CME  
Gerald Muller, Esq.  
Tim Lynch  
David Novak, PP, AICP

Sam Surtees  
Dan Dobromilsky, LLA/PP/CTE  
Joseph Burgis, PP, AICP  
Christopher DeGrazia, Esq.

# West Windsor Township Fire & Emergency Services

## Memorandum

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**DATE:** March 10, 2022  
**TO:** West Windsor Technical Review Committee  
**FROM:** Chief Timothy M. Lynch  
**REGARDING:** PB 21-15 Bridgepoint 8 Industrial Park

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### OVERVIEW

The proposed application is for a complete redevelopment of the former American Cyanamid site located along Clarksville Road between US route 1, Quakerbridge Road, and the Northeast Corridor Train Tracks. The proposed application would include the development of nearly 5.7million square feet of warehouse space, a new roadway, unidentified commercial spaces on Quakerbridge Road, and unidentified commercial spaces along the new roadway adjacent to US Route 1.

### ACCESS

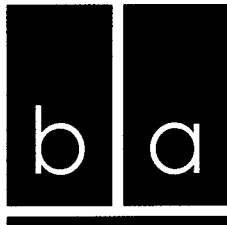
- Applicant has added an emergency vehicle access road as requested to building A1. The applicant should describe if this access roadway will be obstructed any way with removable traffic control devices or if it will be freely open and available to traffic.

### MISCELLANEOUS

- Applicant has addressed all other comments from this office and we have no additional comments based on the updated submission.



*Honor ~ Integrity ~ Loyalty*



COMMUNITY PLANNING  
LAND DEVELOPMENT AND DESIGN  
LANDSCAPE ARCHITECTURE

**B U R G I S**  
ASSOCIATES, INC.

Principals:  
*Joseph H. Burgis PP, AICP*  
*Edward Snieckus, Jr. PP, LLA, ASLA*  
*David Novak PP, AICP*

## MEMORANDUM

To: West Windsor TRC  
West Windsor Division of Land Use

From: David Novak PP, AICP

Subject: Bridge Point West Windsor LLC  
Preliminary and Final Major Site Plan and Subdivision (Phase I)  
Preliminary Major Site Plan (Phase II)  
Block 8 Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, and 49  
Block 15.14 Lots 18, 19, 20, 22, 26, and 75  
US Route 1, Quakerbridge Road, and Clarksville Road

Date: January 18, 2022

BA#: 3789.11

WWT#: PB 21-15

### Introduction

The applicant, Bridge Point West Windsor LLC, has submitted an application seeking preliminary and final major site plan and subdivision approval for the development of a warehouse distribution and commercial center on the former Howard Hughes tract. The site is identified by municipal tax records as Block 8 Lots 1, 2, 3, 12, 16, 20, 28, 32.01, 39, 40, 41, 45, 46, 47, and 49, and Block 15.14 Lots 18, 19, 20, 22, 26, and 75. It is located at the corner of US Route 1, Quakerbridge Road, and Clarksville Road in the PCD Planned Commercial District.

The following has been submitted for review:

1. Preliminary and Final Site Plan prepared by Langan Engineering and Environmental Services, Inc., dated December 3, 2021 (last revised February 15, 2022).
2. Preliminary and Final Major Subdivision Plan prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021 (last revised February 11, 2022).
3. Survey prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021 (last revised December 3, 2021).
4. Environmental Impact Statement prepared by Langan Engineering and Environmental Services, Inc., dated February 15, 2022 (no revision date).
5. Stormwater Management Report prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021 (last revised February 15, 2022).
6. Traffic Impact Study prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021 (last revised December 3, 2021).
7. Water System Engineer's Report prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021 (last revised February 15, 2022).
8. Sanitary Sewer Engineer's Report prepared by Langan Engineering and Environmental Services, Inc., dated November 12, 2021 (last revised December 3, 2021).
9. Cost estimates.
10. LOI letters and extensions.
11. Response letters.

## Zoning

The site is located in the PCD Planned Commercial District, which was adopted by Ordinance No. 2020-25 on December 14, 2020. As noted in Section 200-207.2A., the intent of this district is to:

*"...support a wide variety of nonresidential uses to facilitate the redevelopment of the tract, while also ensuring that any such development will be complementary to the surrounding area, protect existing environmental constraints, minimize undue strain on the Township's community facilities, and avoid any substantial adverse impacts to the existing traffic and circulation patterns of Clarksville Road, Quakerbridge Road, and the US Route 1 corridor. Retail, service commercial, entertainment and hospitality uses are to be located along Quakerbridge Road and US Route 1 in order to maintain the commercial character of those corridors. Warehouse and distribution uses are encouraged within the remainder of the district. The PCD is also intended to promote an attractive comprehensive integrated design and encourage a high level of investment."*

The following table summarizes the bulk standards of the district:

Table 1: PCD District Standards

Regulations	Required	Proposed Lot 18.01	Proposed Lot 18.02	Proposed Lot 2.03	Proposed Lot 2.04	Code
Min. Lot Area (ac)	None	225.48	56.83	188.99	67.99	200-207.4A.
Min. Lot Frontage (ft)	300	> 300.00	> 300.00	> 300.00	> 300.00	200-207.4B.
Min. Lot Width (ft)	300	> 300.00	> 300.00	> 300.00	> 300.00	200-207.4C.
Min. Lot Depth (ft)	None	N/A	N/A	N/A	N/A	200-207.4D.
Min. Yards (ft)						200-207.4E.
Quakerbridge Rd.	300	N/A	N/A	N/A	304.00	200-207.4I
Clarksville Rd.	100	243.00	236.00	263.00	234.00	200-207.4E.(2)
US Route 1	300	N/A	N/A	N/A	300.00	200-207.4I
Master Plan Roads	100	159.00	174.00	175.00	209.00	200-207.4E.(4)
All Other Roads	50	N/A	N/A	N/A	N/A	200-207.4E.(5)
Min. Rear Yard (ft)	40	91.00	273.00	N/A	N/A	200-207.4F
Min. Side Yard (ft)	40	155.00	N/A	913.00	229.00	200-207.4G.(2)
Abutting Res. Yards (ft)	+25	155.00	N/A	N/A	N/A	200-207.4H.
Min. Dist. Between Buildings (ft)	25	328.00	N/A	N/A	N/A	200-207.4J.
Max. Imp. Cov. (%)	70	51.00	69.00	18.00	70.00	200-207.4K.
Max. Bldg. Height (st/ft)	2/60	N/S	N/S	N/S	N/S	200-207.4L.

N/S: Not Specified; N/A: Not Applicable; TBD: To Be Discussed.

## Planning Review

We offer the following comments on the proposed development:

### 1. Zoning Table

We offer the following comments regarding the applicant's zoning table.

- a. Recommended Subdivision and Setback Exhibit. Our prior memorandum dated January 18, 2022, requested a subdivision and setback exhibit. The applicant has subsequently provided such a sheet in the site plan. We find this satisfactory.
- b. Building Heights. The applicant has provided height calculations for each warehouse building. We also recommend that the applicant specify the number of stories for each building.

### 2. Warehouse and Distribution Proposed Uses

At the prior TRC meeting on January 25, 2022, the applicant and the TRC discussed the proposed uses of the warehouse and distribution facilities. Specifically, the following items were discussed. The applicant should provide any relevant updates.

- a. Prospective Tenants. The applicant previously indicated that no prospective tenants had yet been identified, and that the buildings are to be constructed on spec. Testimony should be provided as to whether any prospective tenants have since been identified.
- b. Hours of Operation. The applicant previously indicated that hours of operation will depend on the prospective tenant. However, it's anticipated that the facilities will generally operate six to seven days a week and will typically begin at 7:00 am.
- c. Staff. The applicant previously noted that the anticipated number of staff members is relatively commensurate to the required parking ratios.
- d. Deliveries. The applicant has indicated that the frequency of deliveries will be based on the requirements of the future tenants. The applicant also notes that the site layout is designed to accommodate NJ Title 39 Trucks.
- e. Refuse and Recycling. The applicant should discuss the anticipated refuse and recycling operations of the site. The plans note that the building/trash/recycling areas are to be provided in the loading dock area, and that the final location of such will be coordinated with future owners and tenants.

Pursuant to the request of our prior memorandum dated January 18, 2022, the applicant has provided a detail of the dumpster enclosures.

### 3. Warehouse and Distribution Facility Layout and Design

The following is noted regarding the proposed warehouse and distribution facility layout and design:

- a. Sections. The applicant and the TRC should continue to discuss the overall layout of the warehouse and distribution facilities. The applicant has provided section details for Clarksville Road, an internal roadway, and Quakerbridge Road.
- b. Architectural Design. Both the 2020 Land Use Plan and the intent of the PCD District promote an attractive unified design while also encouraging a high level of investment. Thus far, the proposed architectural façade plans indicate that the designs of the buildings will match one another. Consistent design themes are also reflected in signage, including both identification and wayfinding. Signage is discussed in greater detail later in this memorandum.
- c. Rooftop Solar. The applicant has provided a note indicating that all of the proposed warehouses will be "solar-ready." This is consistent with P.L.2021, c.290, (ACS for A-3352/S-3504) which was approved on November 8, 2021. This new legislation requires that any newly constructed warehouse for which an application for a construction permit has not been deemed complete by the enforcing agency before July 1, 2022 shall be a solar-ready building. A "solar-ready building" is defined as a "building that includes a solar-ready zone." In turn, a "solar-ready zone" is a section of a:

*"Roof or building overhang designated and reserved for the future installation of a solar photovoltaic or solar thermal system, which is at less 40 percent of the roof area calculated as the horizontally projected areas minus the area covered by skylights, occupied roof decks, vegetative roof areas, and mandatory access or set back areas required by the State Uniform Construction Code, or as otherwise provided in the 2018 International Energy Conservation Code, Appendix CA, and any successor model code, concerning solar-ready zones."*

This legislation applies to any building, room, structure, or facility of at least 100,000 square feet used primarily for the storage of goods intended for sale.



#### 4. Commercial Development

The applicant indicates that the commercial uses to be located along Quakerbridge Road and US Route 1 will be constructed by others at a later phase. Testimony should be provided on this matter, including information on the prospective timing of this phasing as well as whether any prospective tenants and/or developers have been approached. At the prior TRC meeting on January 25, 2022, the applicant noted that preliminary conceptual ideas and plans had been commenced, but that nothing has been finalized as of yet.

We reiterate that one of the intents of the PCD District is to place commercial uses along Quakerbridge Road and US Route 1 in order to maintain the commercial character of those corridors. The PCD District also seeks to limit the size of the commercial uses along those aforementioned corridors. Big box retail and strip retail developments are strongly discouraged by the 2020 Land Use Plan. This is reflected in Sections 200-207.4M(1) and (2), which respectively limit the maximum size of a retail building to 25,000 square feet and limits the total combined retail area of the district to 150,000 square feet, not including restaurants and/or shops associated with any hotel use.

#### 5. Traffic, Parking, and Circulation

While we defer to the Township's traffic consultant regarding parking and circulation, we nevertheless offer the following general comments.

- a. Anticipated Traffic Generation. Our prior memorandum dated January 18, 2022 recommended the applicant provide a list of those approved but not yet constructed developments which were incorporated into the anticipated traffic generation in the Traffic Impact Study. The applicant has subsequently indicated that "the traffic associated with the development of the Costco Tract in Lawrence which includes future retail space that has not yet been constructed."

We question whether the various multifamily developments which have been approved in the Township within the vicinity of the subject site be included in this analysis. However, we defer to the Township traffic consultant regarding this matter.

- b. Required and Proposed Parking. The applicant has proposed a total of 2,228 vehicular parking spaces and 912 loading docks. A breakdown of the parking calculations and proposed parking has been provided for building, and is summarized on the following table. Every building will be provided more parking spaces than what is otherwise required by code. Thus, the applicant will require waiver relief from Section 200-28D.(2)(b) for exceeding the minimum off-street parking requirements. Testimony should be provided as to the need for these additional spaces.

Table 2: Parking Summary

Proposed Lot	Building	Parking Spaces Required	Initial Parking Spaces Proposed	Banked Parking Spaces Proposed	Total Parking Spaces	Proposed Loading Docks
18.01	A1	105	124	29	153	52
	B-1	251	288	0	288	135
	B2-1	218	258	7	265	134
	B2-2	223	263	51	314	137
18.02	C-1	322	353	0	353	154
2.03	D-1	256	302	46	348	128
2.04	E-1	372	440	67	507	172
Total		1,747	2,028	200	2,228	912

- c. Required and Proposed Loading. Section 200-27D. establishes the required number of loading berths for warehouse uses. Based upon the provided information, our office has estimated the required number of loading spaces for each building. As shown, waiver relief will be required from Section 200-27D.(2)(b) for exceeding the minimum off-street loading requirements.

Table 3: Loading Calculations

Proposed Lot	Building	Loading Spaces Required	Loading Spaces Proposed
18.01	A1	12	62
	B-1	21	292
	B2-1	19	265
	B2-2	19	314
18.02	C-1	26	145
2.03	D-1	21	352
2.04	E-1	29	186
Total		147	910

- d. Electric Vehicle (EV) Parking Spaces. The following table identifies the Make-Ready space requirements for each building. As shown, the applicant is deficient for Buildings A-1, B2-2, D-1, and E-1. This is likely because the applicant is applying the 4% requirement to the initial number of parking spaces proposed, and not to the total number of parking spaces (inclusive of banked spaces). This should be discussed by the applicant and the TRC.

The applicant should also provide the proposed number of ADA Make-Ready parking spaces in its table. The locations of Make-Ready spaces should also be clearly delineated on the site plan.

Table 4: Make-Ready Spaces

Proposed Lot	Building	Proposed Parking Spaces	Required Make-Ready Spaces	Required ADA Make-Ready Spaces	Proposed Make-Ready Spaces
18.01	A1	153	7	1	4
	B-1	288	12	1	12
	B2-1	265	11	1	11
	B2-2	314	13	1	11
18.02	C-1	353	15	1	15
2.03	D-1	348	14	1	13
2.04	E-1	507	21	2	18

- e. Bicycle and Pedestrian Circulation. The 2020 Land Use Plan encourages that the tract incorporate a bicycle and pedestrian path that could be part of a connector link between Mercer County Park to the south and the D&R Canal to the north. A bicycle lane and a sidewalk are shown along the proposed master plan road. Testimony should be provided as to the ultimately destinations and connectivity of these lanes.

In addition to the above, the applicant and the TRC should discuss the bicycle and pedestrian connection discussed in the 2021 Circulation Plan Element of the Master Plan.

6. Performance Standards

Section 200-207.4P. establishes several modifications of the performance standards for the PCD District. These are summarized below.

- a. Section 200-207.4P.(1). *The provisions of § 200-36.1 shall not apply to warehouse and distribution facilities. The provisions of § 200-36.1 shall apply to all other uses, except that sidewalks in the PCD District may be constructed of impervious materials.*

Comment. While not required, the applicant has proposed pervious pavement in certain parking areas.

- b. Section 200-207.4P.(2). *The provisions of § 200-28D(1) shall not apply.*

Comment. Section 200-28D.(1) pertain to shared parking calculations. We have no additional comment on this matter.

- c. Section 200-207.4P.(3). *Parking and loading is permitted between the fronts of buildings and the street line. No parking is permitted within any landscaped buffer as required herein.*

Comment. Parking and loading is proposed between the fronts of buildings and the street line. No parking is located within any landscaped buffer.

- d. Section 200-207.4P.(4). *Aisles for the movement and circulation of vehicles shall be permitted in all yard setback areas. No aisle, except those required for access into and out of the site, shall be permitted within any landscaped buffer as required herein.*

Comment. Aisles are proposed in setback areas. No aisle, except those required for access, are proposed within the landscape buffers.

- e. Section 200-207.4P.(5). *Trailer parking spaces and loading docks shall be permitted within building yard setbacks for warehouse and distribution facilities.*

Comment. Trailer parking spaces and loading docks are located within the building yard setbacks.

- f. Section 200-207.4P.(6). *Acceleration and deceleration lanes shall not be required at warehouse and distribution facility entrances along the master plan road located between US Route 1 and Quakerbridge Road.*

Comment. Such lanes are not proposed.

- g. Section 200-207.4P.(7). *Impervious cover, including but not limited to buildings, sidewalks, or other constructed surface, shall be permitted within 200 feet of the centerline of any stream, ditch, or watercourse not identified on Attachment A. The construction of any such impervious cover shall be in accordance with all outside agency regulations as applicable.*

Comment. This information was provided on the Existing Constraints Page.

- h. Section 200-207.4P.(8). *Existing trees may be removed in accordance with all outside agency regulations and pursuant to site plan approval.*

Comment. We defer to the Township Landscape Architect regarding this matter.

- i. Section 200-207.4P.(9). *Bicycle parking shall not be required for warehouse distribution facilities.*

Comment. Bicycle parking is proposed.

## 7. Landscaping

While we defer to the Township's landscape architect regarding the proposed landscaping, we note the following landscaping requirements which are established in Section 200-207.4U. of the Township's zoning regulations.

- a. Section 200-207.4U.(1). *A landscape transition buffer of not less than 25 feet in width shall be provided and maintained by the owner or lessee of a property between any nonresidential use and contiguous residentially zoned districts.*

Comment. The applicant has identified these landscape buffers for those portions of the subject site adjacent to the adjoining R-5C District, R-4B District, and RR/C District.

- b. Section 200-207.4U.(2). *A landscape buffer of 50 feet in width shall be provided along US Route 1 and Quakerbridge Road.*

Comment. The applicant has identified this landscape buffer.

- c. Section 200-207.4U.(3). A landscape buffer of 75 feet shall be provided along Clarksville Road.

Comment. The applicant has identified this landscape buffer.

- d. Section 200-207.4U.(4). A landscape buffer of 25 feet shall be provided along the master plan road located between US Route 1 and Quakerbridge Road.

Comment. The applicant has identified this landscape buffer.

- e. Section 200-207.4U.(5). No parking or loading shall be permitted in a landscape buffer.

Comment. No parking or loading is located within a landscape buffer.

- f. Section 200-207.4U.(6). Yard requirements shall be deemed to be counted as part of the landscape buffer area. Where yard areas are less than the required buffer area, they shall be increased accordingly.

Comment. No yard requirements are less than the landscape buffer.

- g. Section 200-207.4U.(7). Suitably landscaped and bermed stormwater basins in the PCD may be located within any yard setbacks or landscaped buffers required by this chapter, provided that a maximum of 50% of the basin may be located within the buffer area.

Comment. The applicant has provided a table identifying the proposed basins and their percentages within the required buffer areas. Seven basins are located entirely within a buffer area. The applicant notes that these are required for the proposed roadway widening. These buffers will require waiver relief.

## 8. Signage

The applicant has provided an initial sign package. The following is noted.

- a. Wall Signage. The applicant has provided a generic wall sign template. Once tenants have been identified, their specific signage will need to be provided in order to ensure compliance with Section 200-32B.(2).
- b. Monument Signage. Additional clarification is required regarding the proposed monument signs. While the signage table notes they will have an area of 48 square feet and a height of 4 feet (both of which conform to the standards of section 200-32B.(3)), the detail suggests that they will actually have an area of 60 square feet and a height of 12 feet. Testimony should also be provided as to how the areas were calculated.
- c. Instructional Signage. The applicant requires waiver relief for the proposed size of the instructional signage, wherein 2 feet is permitted and 12 feet is proposed.
- d. Address Signs. The applicant requires waiver relief for the proposed size of the address signage, wherein 8 inches is permitted and 24 inches are proposed.


Map 1: Subject Site (scale: 1" = 1,600')



[https://burgis.sharepoint.com/sites/BurgisData/Shared Documents/W-DOCS/PUBLIC/Pb-3700series/Pb-3789.11/TRC - Site Plan/TRC 02/3789.11 Bridgepoint 8 Industrial Park Concept Plan \(PB 21-15\) - TRC Review 01.docx](https://burgis.sharepoint.com/sites/BurgisData/Shared Documents/W-DOCS/PUBLIC/Pb-3700series/Pb-3789.11/TRC - Site Plan/TRC 02/3789.11 Bridgepoint 8 Industrial Park Concept Plan (PB 21-15) - TRC Review 01.docx)

**MEMORANDUM**

**TO:** TRC  
West Windsor Township

**FROM:** Christopher B. Jepson, P.E.   
Environmental Consultant

**DATE:** March 8, 2022

**SUBJECT:** Bridgepoint 8 Industrial Park (PB 21-~~08~~)  
P/F Major Site Plan & Subdivision (Phase 1)  
Preliminary Major Site Plan (Phase 2)  
Block 8, Lots 1,2,3,12,16,20,28,32,01,39,40,41,45,46,47,49  
Block 15.14 Lots 18,19,20,22,75  
VCEA Project No. 21-08-WW

As West Windsor Township's environmental consultant, Van Cleef Engineering Associates (VCEA), has reviewed the most recent submittal of site plans and accompanying information for the above referenced application for a preliminary and final site for Phase 1 and Phase 2 plan and offers the following comments for the Board's consideration:

**I. Overview**

The applicant is seeking a review of the preliminary and final site plan for construction of a major warehouse and distribution center. The site is located at the intersection of Quakerbridge Road, Clarksville Road and U.S. Route 1 and is approximately 645 acres in size. There is no residential development proposed for this site. It is located in the Planned Commercial District (PCD) zoning district for non-residential uses and that designation includes warehousing. There are seven warehouses proposed ranging in size from 1.186 million square feet to 334,000 square feet. Accessory office space will be three percent (3%) of the total floor area. There are 910 loading docks, 1072 trailer spaces and 2,435 parking spaces proposed. There are future commercial areas proposed along Route One and

**OFFICE LOCATIONS**

[www.vancleefengineering.com](http://www.vancleefengineering.com)

Lebanon, NJ  
908-735-9500

Hamilton, NJ  
609-689-1100

Toms River, NJ  
732-573-0490

Freehold, NJ  
732-303-8700

Bethlehem, PA  
610-332-1772

Hillsborough, NJ  
908-359-8291

Mt. Arlington, NJ  
862-284-1100

Phillipsburg, NJ  
908-454-3080

Doylestown, PA  
215-345-1876

Leesport, PA  
610-670-6630

Quakerbridge Road, however that part of the overall development is not part of this application. There will also be two wastewater pumping stations to be constructed on site.

## **II. Comments/Recommendations on Pertinent Issues**

### **A. Wetlands**

Wetlands are present on the subject site and are located in several areas, primarily in the northern section. Several isolated wetland areas also exist on site. There is a wetland conflict with Building D1 in the northeastern quadrant. The applicant has provided NJDEP LOI documentation for the project. However, the extensions provided expire in March 2022 and an extension of these permits should be required and remain valid during the course of this proposed development. There are some isolated wetlands that appear to be filled during this proposed development. These areas will require NJDEP permits for filling them. The applicant has indicated that wetland and flood hazard permits will be submitted to the Township when they are received.

### **B. Greenbelt**

There is a small area of proposed Greenbelt that coincides with the small area that is floodprone in the northeast section along the property line. No development is planned in that area. The applicant is showing all of the Greenbelt in future submissions. The Greenbelt area discrepancy previously shown in the EIS has been corrected.

### **C. Water Quality**

This site drains to the Duck Pond Run in the northern portion of the site and drains to the Assunpink basin in the southern portion of the site. This site is located in DRCC Zone B. A DRCC permit is required since more than 1 acre of impervious surfaces is proposed. There is preliminary storm water management proposed for this project with many basins shown. Since there is a huge amount of impervious surface proposed – all stormwater facilities must be robust and have water quality devices installed on discharge piping. Due to the recent rash of 100-year storms these stormwater facilities must be – to any extent possible – be oversized. The newly promulgated stormwater regulations must also be followed for design. The Stormwater Report was robust and covers the stormwater issues that face this project with its huge amount of impervious surfaces. The project must comply with



the newest DEP regulations and the Township's standards. We defer further comment to the Township Engineer.

We are somewhat critical of the comment that a minimum of 95% removal of TSS will be accomplished. Please forward some design data showing this and especially some real data from stormwater basins in operation.

The applicant has indicated that flood hazard area permits from DEP and the DRCC approval will be forwarded when received.

#### **D. Environmentally Sensitive Areas**

The proposed project site is underlain by both the Wissahicken Schist and Stockton Sandstone geological formations. Overall the site has moderate recharge potential. There is one small area of steep slopes on the site. There is a very small area of flood hazard and flood plains that are located on the site (northeast corner). There is no development planned for that area. This site has a low to moderate erosion hazard.

#### **E. Historic Resources**

The Dr. Clark House was located on the east side of Quakerbridge Road between Clarksville Road and Route 1. Archeological excavations there in 1985 uncovered the foundation of this eighteenth century farmhouse. The applicant has retained Richard Grubb & Associates to prepare a Phase 1A cultural assessment as part of the NJDEP application process. Please forward that report when it becomes available.

#### **F. Other Environmental Concerns/Comments**

The West Windsor Green Development Practices Checklist was completed and many of those design points are going to be utilized during the course of construction. There appears to be electric vehicle charging stations to be included. However, there will be no irrigation system installed and no solar energy with this project. The applicant has shown pervious pavement areas in the truck courts. The applicant should assess other areas that will be conducive to installing pervious to assist in stormwater management for the project.

The applicant has now indicated that low flow bathroom or other fixtures for this project will be considered.

The applicant has submitted documentation for threatened and endangered species from both the NJDEP and USFWS. They identified Coopers Hawk and Great Blue Heron as two species of concern. I have seen both species – multiple times in the project area. There are a pair of bald eagles that could use this site for foraging and they also utilize car-struck deer as another food source at times. Several other species are mentioned that are also of concern – Barred Owl and Red-headed Woodpecker. Decades ago none of these species except the Bald eagle were of concern.

There is one documented vernal habitat and another potential one located on the site. They are utilized by local amphibian populations. Please show them in future plans. There are several other potential vernal habitats within one mile of the project site.

In the submitted EIS – 24c mentions wells. The applicant has indicated that no wells are proposed as part of this project. Please provide proper NJDEP closure/decommissioning on those wells not in use.

The wastewater treatment plant (WWTP) is located on site but not in use and needs to be decommissioned and that approval needs to be obtained from NJDEP and follow their closure requirements. There are many pieces of equipment and items (grating, control boxes, etc.) that can be recycled to other treatment facilities rather than being put in a dumpster for disposal. Sustainability in this case means repurposing these items where they can be reused. We have reached out to several local wastewater entities and there is no interest in any recycling of those items at this time. The WWTP is being demolished by the current property owner.

The previous owner had an incinerator on site and was in use for quite some time. The incinerator is being demolished and removed by the current property owner. Please provide the closure documentation for that unit and associated equipment. The Township is also concerned regarding any remedial activities associated with the incinerator. Please provide any documentation regarding that process.

### **III. ITEMS PROVIDED FOR REVIEW**

- Preliminary and Final Site Plan Application (42 sheets), prepared by Langan Engineering, dated November 11, 2021.
- Development Application, Site Plan Checklist and Subdivision Checklist prepared by Bridge Point West Windsor, LLC, dated November, 11, 2021.
- Certificate of Ownership and ALTA owners policy.

- Response to 11/29/2021 letter, prepared by Langan Engineering, dated December 3, 2021.
- Photo Map Key, prepared by Langan Engineering, dated November 12, 2021.
- Sanitary Sewer Engineer's Report, prepared by Langan Engineering, dated November 12, 2021 and revised December 3, 2021.
- Water System Engineer's Report, prepared by Langan Engineering, dated November 12, 2021 and revised December 3, 2021.
- Environmental Impact Statement, prepared by Langan Engineering, dated November 12, 2021, December 3, 2021 and February 15, 2022.
- WWT Green Development Practices Checklist, prepared by Langan Engineering, dated November 12, 2021.
- Overall Landscape Plan (20 sheets), prepared by Langan Engineering, dated November 12, 2021 and revised December 3, 2022..
- Overall Lighting Plan (16 sheets), prepared by Langan Engineering, dated November 12, 2022 and revised December 3, 2022 and revised December 3, 2022.
- Overall Soil and Sediment Control Plan and Details (17 sheets), prepared by Langan Engineering, dated November 12, 2021 and revised December 3, 2022.
- Truck Movement Plan (15 sheets), prepared by Langan Engineering, dated November 12, 2021 and revised December 3, 2022.
- Fire Truck Movement Plan (14 sheets), prepared by Langan Engineering, dated November 12, 2021 and revised December 3, 2022.
- Site Details (5 sheets), prepared by Langan Engineering, dated November 12, 2021 and revised December 3, 2022..
- Proposed Floor Plans (7 sheets), prepared by Langan Engineering, dated November 30, 2021.
- Cover Letter (Environmental), prepared by Langan Engineering, dated February 15, 2022.
- Stormwater Management Report, prepared by Langan Engineering, dated February 15, 2022.
- Overall Utility Plan (16 sheets), prepared by Langan Engineering, dated December 3, 2022.
- Overall Grading & Drainage Plan (16 sheets), prepared by Langan Engineering, dated December 3, 2022.
- Subdivision and Demolition Plans, prepared by Langan Engineering, dated December 3, 2022.

If you should have any questions or concerns regarding these comments please contact me at this office.

cc: Applicant	TRC
S. Surtees, WWT CD	Gerald Muller Esq., Gerald Muller Law
D. Novak, Burgis Associates	J. L'Amoreaux, Traffic Consultant
D. Dobromilsky, Landscape Architect	F. Guzik, Township Engineer