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April 6, 2023

Howell Township Planning Board 4567 Route 9 North PO Box 580 Howell, NJ 07731

Re: 271 Adelphia, LLC (SP-1113) P&F Major Site Plan and Minor Subdivision - Engineering Review #1 Block 157 Lots 1, 2, 3, 4 and 5 Location: 271 Adelphia-Farmingdale Road (CR 524) And Squankum Yellowbrook Road (CR 524A) Zone: SED OV / ARE-2 Zone Our File: HHWP0157.03

Dear Planning Board Members:

Our office received the following information in support of the above-referenced application for Preliminary and Final Major Site Plan and Minor Subdivision approval:

- Preliminary and Final Major Site Plan and Minor Subdivision (20 sheets) prepared by InSite Engineering, LLC, dated January 13, 2023, unrevised;
- Boundary & Topographic Survey (1 sheet) prepared by InSite Survey, dated June 17, 2022, last revised January 5, 2023;
- Architectural Floor Plans and Elevations (7 sheets) prepared by Parallel Architectural Group, dated January 27, 2023, unrevised;
- Stormwater Management Report prepared by InSite Engineering, LLC, dated January 13, 2023, unrevised;
- Stormwater Management Operation & Maintenance Manual prepared by InSite Engineering, LLC, dated January 13, 2023, unrevised;
- Traffic Impact Analysis prepared by McDonough & Rea Associates, Inc., dated February 6, 2023, unrevised;
- Environmental Impact Report & Natural Resource Inventory prepared by InSite Engineering, LLC, dated January 24, 2023, unrevised;
- Checklist Waiver Requests prepared by Insite Engineering, LLC, dated February 9, 2023;
- Certified List of Property Owners, dated January 23, 2023;



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- Deed of Easement and ROW;
- Freehold Soil Conservation District Application, dated January 24, 2023;
- Monmouth County Planning Board Application, dated January 25, 2023;
- Prior Resolution (SP-50), dated February 12, 1970;
- Prior Resolution (BA-401), dated June 11, 1970;
- Prior Resolution (Case No. 619), dated September 9, 1975;
- Prior Resolution (SP-298), dated October 27, 1975;
- Prior Resolution (Case No. 401);
- A development application and checklist.

In accordance with your authorization, we have reviewed this application for Preliminary and Final Major Site Plan and Minor Subdivision approval and offer the following comments:

1. Project Description

The subject properties combine for 17.49 acres in size and have frontage along Adelphia-Farmingdale Road (CR 524) and Squankum Yellowbrook Road (CR 524A), where the two roads intersect. Currently, the tract contains an industrial use and a two-story residential dwelling within the western portion of the properties. Driveway access is provided to both uses via Adelphia-Farmingdale Road. The eastern portion of the tract is primarily cleared but is undeveloped.

The Applicant proposes to subdivide the five existing lots into two new lots. The western lot is proposed to be 6.62 acres in size and would contain the existing industrial use and driveway which are both to remain. The eastern lot is proposed to be 10.70 acres in size and would remove the existing dwelling and construct a 135,276 square foot warehouse building with office space. The facility will provide 39 loading dock spaces, one drive in ramp, and 106 passenger vehicle parking spaces. Access to the eastern lot is provided via two (2) new full movement driveways along Adelphia-Farmingdale Road and two (2) new full movement driveways along Squankum Yellowbrook Road. Other improvements include concrete sidewalks within the site, curbing, aboveground and underground stormwater management basins, landscaping and lighting. A private septic system is proposed to service the new building on the eastern lot as well as public water service from Adelphia-Farmingdale Road.



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Both proposed lots will provide a vegetated buffer and berm along the entirety of the Adelphia-Farmingdale Road and Squankum Yellowbrook Road frontages.

2. Zoning Compliance

The subject site is located within a SED Overlay of the Agricultural Rural Estate 2 zone. The table below summarizes the bulk measures and zone requirements of the SED zone, following the right-of-way dedications to Monmouth County:

DESCRIPTION	REQUIRED	PROPOSED LOT A	PROPOSED LOT B
Minimum Lot Area	120,000 s.f.	288,305 s.f.	466,235 s.f
Minimum Lot Frontage	200 feet	329.5 feet (Adelphia- Farmingdale Road) 784.9 feet Squankum Yellowbrook Road)	721.5 feet (Adelphia- Farmingdale Road) 764.9 feet (Squankum Yellowbrook Road)
Minimum Front Yard Setback	60 feet	132.3 feet	60.0 feet (Adelphia- Farmingdale Road)
Minimum Side Yard Setback	Greater of 50 feet or height of building (49 feet)	50 feet	50 feet
Minimum Rear Yard Setback	50 feet	N/A	N/A
Maximum Impervious Coverage	70%	46.4%	50.4%
Maximum Building Height	45 feet	No Change	49 feet (V)
Location of Accessory Buildings	Side or rear yard only set back twice their height	N/A	N/A



Howell Township Planning BoardApril 6, 2023Re: 271 Adelphia, LLC (SP-1113)Our File: HHWP0157.03P&F Major Site Plan and Minor Subdivision - Engineering Review #1Page 4

	Office: 1 space/300 s.f. (12,500 s.f.) = 41.6 spaces		
Minimum Number of Parking Spaces (Lot B)	Warehouse: 1/5,000 s.f. (122,776 s.f.) = 24.6 spaces	No Change	106 spaces
	Total: 67 spaces		

(EC) – Existing Condition, (V) – Variance Required

The Applicant has not requested any variances; however, the following variances appear necessary:

- a. **Section 188-79 (Schedule II)** The maximum building height is 45 feet; whereas the proposed warehouse is 49 feet high.
- b. **Section 188-63D** No structure, disturbance, storage of materials or parking of vehicles shall be permitted in a buffer area. Access points from public roadways and utility infrastructure as well as fences along the rear property lines, as the case may be, shall be excluded from this subsection of this section. Utility infrastructure does not include stormwater management facilities. Stormwater retention/detention basins are not permitted within a buffer area. Whereas disturbance associated with grading is located with the eastern buffer area, parking is located within the southern buffer (following County dedication), and stormwater basins are located in the southern and eastern buffers.

The Applicant has not requested any design waivers; however, the following design waivers appear necessary:

a. **Section 188-106A** – Driveways with widths exceeding 24 feet shall be approved by the Planning Board giving consideration to the width, curbing, traffic flow, radii of curves, and traffic lane divider; whereas the proposed driveways are 25 feet for the parking lot driveways and 40 feet for the truck driveways.



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- b. **Section 188-106G** All areas between the parking area and the building shall be landscaped; whereas no landscaping is proposed along the west side of the proposed building due to the loading areas.
- c. **Section 188-106I(4)** Parking spaces for commercial/industrial uses shall be within 300 feet of the entrance of the building being served; whereas there are parking spaces exceeding 300 feet in distance from the entrances.
- d. Section 188-225G(1) All lots shall have private walkway access to a public sidewalk in the right-of-way. All Site Plan applications shall provide public sidewalks along the entire frontage of the subject property; whereas no sidewalk is existing or proposed along the frontage of Adelphia-Farmingdale Road or Squankum Yellowbrook Road, nor is a private sidewalk access provided from the right-of-way to the buildings. If the Board grants a waiver from providing sidewalk along the frontage of the property, the Applicant shall be responsible to pay into the Howell Township Sidewalk Trust Fund in the amount of \$72,800.00. (2,600 LF x 4 FT wide = 10,400 SF x \$7/SF = \$72,800.00.)
- e. **Section 188-22** The light intensity provided at ground level shall be a minimum of 0.3 footcandle anywhere and shall average a maximum of 0.5 footcandle over the entire area; whereas proposed lighting levels exceed this, with an average of 1.5 footcandles but meet the minimum of 0.3 footcandle within the pavement area.
- f. **Section 188-32C(6)** Landscaping shall be provided around any outdoor recycling storage area; whereas additional landscaping shall be provided around the trash enclosures.
- 3. The Applicant has requested waivers from providing the following required checklist submission items:
 - a. **Checklist Item #51c** A future statement on the anticipated number of shifts and number of employees per shift.
 - b. *Checklist Item #65* Location of existing and proposed wells and septic systems.
 - c. Checklist Item #86 Maintenance & Protection of Traffic Plan.
 - d. **Checklist Item #87** Profiles and cross sections of all streets, common driveways or private roads.
 - e. **Checklist Item #88** Profiles of utility layouts.



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Additionally, the following required checklist submission items should be provided or waivers requested:

- f. **Checklist Item #17** Proposed written descriptions for all easements.
- g. **Checklist Item #51a** A description of any proposed machinery operations, products, and processes contained on site.
- 4. Based on our review of the subject application, we estimate that the following fees are required:

a. Nonrefundable Application Fees:

Preliminary Site Plan: \$100 per each 1,000 s.f. (135,276 s.f.)	\$13,527.60
Final Site Plan: 1/2 Preliminary	\$6,763.80
Minor Subdivision	\$300.00
Bulk Variance: \$500 plus \$50 per variance (2)	\$600.00
Subtotal:	\$21,191.40
b. Professional Services Escrow Fees:	
b. <u>Professional Services Escrow Fees</u> : Preliminary Site Plan: In excess of 100,000 s.f	\$25,000.00
	\$25,000.00 \$8,333.33
Preliminary Site Plan: In excess of 100,000 s.f	
Preliminary Site Plan: In excess of 100,000 s.f Final Site Plan: 1/3 preliminary	\$8,333.33

We recommend the Township collect \$21,191.40 in nonrefundable application fees and \$39,533.33 in professional services escrow fees from the Applicant prior to deeming the application complete. In addition, the Applicant will be required to pay all applicable revision fees as stipulated in the Township Ordinances.

- 5. The Applicant should be prepared to discuss the following issues with the Board:
 - a. Whether the Application would constitute a Major Subdivision as the project contains more than 3 existing lots. Our office defers to the Board attorney for the final



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determination as to the type of Application in accordance with the Major and Minor Subdivision definitions.

- b. Anticipated operations associated with the proposed use and overall site, including but not limited to: hours of operation; number of employees and employees per shift; truck/trailer traffic, loading/unloading and overall site circulation; refuse management, including mandatory recyclables; buffering/screening and overall site aesthetics; etc.
- c. The architectural plans indicate building canopies that are not depicted on the Site Plans. The canopies shall be shown on the Site Plan and the Applicant shall evaluate any impacts to the building setbacks.
- d. Summary of the proposed traffic impacts to the surrounding streets and the anticipated routes trucks will take to the site.
- e. Whether any monument signs, wall façade signs, pylon signs, directional signs, etc. are to be proposed.
- f. Demonstrate compliance with the EV parking ordinance. 106 parking spaces would require four (4) EV parking space, at least one of which shall be ADA accessible.
- g. If any green building practices will be provided in accordance with Section 188-224H.
- h. If any generators are proposed for the warehouse building.
- i. Hours of operation as it relates to the parking lot illumination.
- j. Compliance with Section 188-79B(6) which states that the minimum tenant space shall not be less than 5,000 square feet.
- k. Compliance with Section 188-228I regarding screening the view of air-conditioning units, HVAC systems, etc. from the public right-of-way.
- I. Compliance with Ordinance Article IV, Standards of Performance, relative to but not limited to: noise; glare; pollutants; flammable/hazardous materials; solid/liquid waste; refuse management; etc.
- m. The proposed stormwater management of the property, including compliance with quantity, quality, groundwater recharge, and green infrastructure.
- n. The location of the southern bioretention basins and whether the County will permit them within the easement for future right-of-way dedication.



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- The proposed improvements (curb, sidewalk, widening, right-of-way dedication, etc.) along the Adelphia-Farmingdale Road and Squankum Yellowbrook Road frontages. We defer comment to the Monmouth County Planning Board as both roadways are County roads.
- 6. This application may be subject to the following outside agency approvals:
 - a. Monmouth County Planning Board
 - b. Monmouth County Health Department
 - c. Freehold Soil Conservation District
 - d. NJDEP
 - e. Howell Township Municipal Utilities Department
 - f. Howell Township Shade Tree Commission
 - g. Howell Township Environmental Commission
 - h. Howell Township Police Department
 - i. Howell Township Bureau of Fire Prevention
 - j. All other outside agency approvals as may be required. The Applicant shall address the Board regarding the status of all outside agency approvals for the project. In addition, copies of all outside agency approvals shall be forwarded to our office.

Prior to the application being deemed complete, the Board must act on the Applicant's request for the submission waivers outlined in Item #3 of our report. We recommend the Applicant comply with all applicable notification requirements as set forth in the Howell Township Land Use Ordinance and the Municipal Land Use Law.

Our office has prepared the attached Technical Engineering Review #1. The items contained therein should be addressed by the Applicant's professionals.

The right is reserved to present additional comments pending the receipt of revised plans and/or testimony of the Applicant before the Board.



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If you have any questions with regard to the above matter, please do not hesitate to call.

Very truly yours, **CME Associates**

Jordon Riggo

Jordan A. Rizzo, PE Office of the *Planning Board Engineer*

JAR/ROM

 cc: Howell Township Environmental Commission Ronald Cucchiaro, Esq., Board Attorney Jennifer Beahm – Board Planner
271 Adelphia, LLC – Applicant (roman@stone-quest.com) InSite Engineering, LLC – Applicant's Engineer (patrick@insiteeng.net) Todd A. Cohen, Esq. – Applicant's Attorney (mail@toddacohenesq.com)



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HOWELL TOWNSHIP PLANNING BOARD

271 Adelphia, LLC (SP-1113)

Preliminary and Final Major Site Plan and Minor Subdivision

April 6, 2023

TECHNICAL ENGINEERING REVIEW #1

A. General

- 1. Provide a description for the proposed right-of-way easements.
- 2. Revise the approval signature blocks on the Title Sheet and Subdivision Plat to read township engineer instead of board engineer.
- 3. Revise the setback dimension and front yard setback line from Squankum Yellowbrook Road to be from the easement line instead of the current property line.
- 4. Revise the proposed lot designations (1.01 and 1.02) to correspond with the zoning compliance chart (A and B).
- 5. The Subdivision Plat shall be revised as follows:
 - a. Provide approval from the Township Tax Assessor as to the approved lot numbers.
 - b. Depict a minimum of 3 corners around the tract with computed values.
 - c. Provide a certification block by the land surveyor.
 - d. Provide a clerk's affidavit for the future setting of monuments. The clerk's affidavit that was provided on the plat shall be revised as the text appears to be appropriate for the municipal engineer.
 - e. Revise the municipal engineer signature block to include conformance to the map filing law.
 - f. Revise General Note #7 to provide the error of closure for the overall tract and the subdivided lots.
- 6. Label the height of the chain link fence on the detail.
- 7. Provide details for the sliding gate, lift gate, and the water hot box.



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- 8. Identify the 50-foot buffer line around all sides of the subject lots in accordance with Section 188-63A.
- 9. Revise the heavy duty pavement section detail to indicate at least 4 inches of base course in accordance with Section 188-106F(1) of the ordinance.
- 10. Revise the parking lots pavement section detail to indicate at least 3 inches of base course in accordance with Section 188-106F(2) of the ordinance.
- 11. The two different pavement sections shall be differentiated on the Site Layout Plan.
- 12. All details containing concrete shall be revised to note a minimum of 4,500 psi concrete strength after 28 days.
- 13. Revise the concrete sidewalk detail to indicate at least 6 inches of compacted porous subgrade in accordance with Section 188-225G(2).
- 14. Revise the parking striping detail to indicate 19 feet length instead of 18 feet.
- 15. Revise the two trash enclosures to be drawn to 30 feet in length, whereas they appear to be 26 feet in length.

B. Site Grading

- 1. In accordance with the "Building Height" definition, calculate the average grade elevation five feet from the building, surrounding the entire building. This elevation shall then be indicated on the architectural plans and used to determine the building height.
- 2. We recommend turning off the sight triangles or using a different line type/hatch on the grading plan to avoid confusion with the proposed contours.
- 3. Depict the 79, 80, and 81 contours at the ADA ramp in the southwestern corner of the building.
- 4. Provide a high point grade along the curb between the type 'B' and the 42" x 102" type 'B' inlet, just south of infiltration basin #3.
- 5. Revise the proposed southwestern driveway grade so that it is not covered by the match line.



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- 6. Provide a minimum 2% grade for the swale to stormwater basin #4 along the east side of the building.
- 7. The northern basin access shall indicate a depressed curb.
- 8. It appears a retaining wall may be required at the southern end of the loading stalls, next to the ADA ramp.
- 9. Provide a retaining wall detail. A safety railing must be provided for walls greater than 30 inches in height. Provide retaining wall design plans/calculations for all walls greater than 30 inches in height toward approval prior to obtaining resolution compliance.

C. Stormwater Management

- 1. Additional soil profile pits need to be assessed for the proposed stormwater management facilities. The quantity, depth and location of the soil profile pits need to be in accordance with Township and NJDEP requirements. We note that the submitted soil logs include the depth to ground water but do not indicate the elevation of the seasonal high water table; this information needs to be included in the new logs and on the Grading and Drainage Plan. At least one permeability test is required in the location of each proposed basin as well. Ensure that the depth of the permeability test is completed at the most hydraulically restrictive level below the elevation of the proposed systems.
- 2. Drainage Area #3 and #4 shall be increased to account for the runoff onto the site from Adelphia-Farmingdale Road.
- 3. All stormwater basins shall be designed with an emergency outlet, whether a spillway through the berm or an OCS grate that pipes runoff downstream. It is unclear what will happen if any of the basins were to fail and not infiltrate.
- 4. Provide a detail for the 42"x102" type 'B' inlet.
- 5. Indicate the pipe material, size and slope of the roof leaders on the grading and drainage plan.
- 6. Revise the aboveground basin labels on the grading and drainage plan to note the bottom of basin (top of sand) elevation.
- 7. Provide separate details for the aboveground infiltration basin and bioretention basin. Both details, as well as the subsurface basin detail, shall provide peak elevations for the 2-, 10-, 100-yr and water quality storm events, seasonal high water table with note that



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a minimum 2 foot separation to the bottom of the system (sand/stone) is required, bottom of system (pipe/top of sand), inverts, top of basin, emergency spillway/OCS grate, etc.

- 8. Revise the stormwater basin designs to turn off any exfiltration. The design shall be completed assuming no infiltration.
- 9. Verify the impervious and pervious areas for drainage area #4 and unattenuated drainage area between the post-development conditions section in the report, the post-development flow calculations, and the post-development drainage area map.
- 10. In the water quality calculations and groundwater recharge calculations sections in the report, revise the Summary for Subcatchment 11S should be revised to 13S.
- 11. The maximum water quality storm elevation must not be greater than two feet above the basin bottom; whereas the water quality storm elevation exceeds two feet in infiltration basin #3.
- 12. Verify the 10-yr storm peak elevation indicated in the grading and drainage plan for bioretention basin #1 with the post development flow calculations.
- 13. Verify the water quality peak elevation indicated on the grading and drainage plan for all basins with the water quality calculations.
- 14. Verify the design flows provided in the conduit outlet protection calculations/rip-rap apron detail is consistent with the 25-year post-development calculations. Verify the pipe diameter indicated for FES #4 with the grading and drainage plan.
- 15. Verify the TP-2 information indicated in the grading and drainage plan with the soil logs in the report as the plan indicates groundwater not encountered while the soil log indicates groundwater encountered 11 feet below ground surface.
- 16. Revise the Outlet Structure detail as follows:
 - a. Indicate the basin number it is associated with.
 - b. The trash rack shall cover all orifices and weirs.
 - c. The trash rack shall be indicated to be able to withstand a perpendicular live loading of 300 pounds per square foot.



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- d. Provide a note that the 2" maintenance plug shall be closed during normal operation and shall only be used in emergencies should the basin fail.
- e. Verify that the size and elevation of all orifices/weirs are both labeled and consistent between the stormwater report, detail, and Grading and Drainage plan.
- 17. Verify the two 18 inch stormwater pipes crossing just south of basin #3. The two inverts are provided, but the label should be revised to provide the bottom of the top pipe and the top of the bottom pipe. Ensure pipe thickness is included as well in addition to just the pipe diameter.
- 18. Provide an inlet area map and stormwater pipe sizing calculation table.
- 19. Verify the upstream inlet/trench drain from infiltration basin #3 and bioretention basin #2 as the grate elevation is lower than the 100-year storm.
- 20. Revise the basin access detail to provide something that is more effective for vehicular traffic than top soil and seed.
- 21. Provide a groundwater mounding analysis for each basin.
- 22. In accordance with NJAC 7:8-5.2(m) a deed notice for the stormwater management systems shall be submitted for review prior to recording with Monmouth County.

D. Utilities

- 1. Clarify the intent for the existing gas service from Adelphia-Farmingdale Road that would run through proposed infiltration basin #1.
- 2. Verify the need for the utility pole and electric service near the southern row of 24 parking spaces. The utility pole and service shall be removed if not needed, or installed underground if required for use on the proposed development.
- 3. Identify the pipe crossings between the sanitary sewer and roof leaders within the loading dock area.

E. Landscaping

1. Revise the plans to provide additional landscaping to buffer views of the proposed hot box. Also, indicate the proposed paint color, for further review.



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- 2. Revise the plans to provide foundation landscaping at the northwestern and southwestern corners of the proposed building, to enhance site aesthetics.
- 3. Revise the plans to reduce the quantity of proposed PO (Serbian Spruce) within close proximity to the building and loading areas, due to spatially constrained areas.
- 4. Provide one (1) additional CF (Eastern Redbud) within the open corner of the parking lot at the entrance drive from Squankum Yellowbrook Road.
- 5. Revise the plans to provide a greater quantity of species for the site. Our office recommends including Eastern Red Cedar, Swamp White Oak, Tulip and River Birch within the proposed buffer. MS (Crabapple) and QP (Pin Oak) should be reduced in quantity to better balance the site.
- 6. Our office recommends providing accent landscaping at the entrance drives to the site, such as ornamental grasses and/or perennial plantings, to enhance site aesthetics.
- 7. It appears some of the proposed graphics are too close to proposed curbing. Revise the plans to shift all proposed trees to be approximately ten (10) feet away from hardscape, where space allows.
- 8. Revise the plant schedule quantities, to ensure plan accuracy. It does not appear all graphics correspond to the proposed quantities.
- 9. Revise the 'Plant Schedule', sheet C600, to indicate if proposed MS (Crabapple) and CF (Redbud) are to be single stem specimens. If trees are proposed as single stem, indicate the installation size by caliper inch. For proposed trees to qualify as replacement trees, the minimum installation size is 2.5" caliper or 10-12 feet in height for deciduous trees.
- 10. Revise the plans to indicate the disposition for all open areas, such as lawn, meadow area, mulch, stone, etc., to prevent confusion during construction. Our office recommends utilizing a no mow/low mow native pollinator friendly seed mix for basin side slopes and open areas that do not require a convention lawn, to reduce the use of chemical treatments and weekly lawn mowing operations. Maintenance notes for same should also be included.
- 11. Revise the plans to include native perennials on the site, such as Asclepias species, Goldenrod, Beebalm, etc. Many of these native flowering perennials are lost when farms revert to other uses and Asclepias, in particular, is the only species the Federally Endangered Monarch butterfly can complete its life cycle on.



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12. Revise the plans to provide mulch limits on the plans, to prevent confusion during construction.

F. Lighting

- 1. Revise the plans to provide the proposed light pole manufacturer's catalog cut and full ordering information, to prevent confusion during construction.
- 2. Revise the 'Light Pole with Pedestal' detail, sheet C602, to indicate a concrete strength of 4,500 PSI. Currently, the detail indicates 3,500 PSI.
- 3. The plans indicate light fixtures are to be on from dusk until dawn. Our office recommends dimming light fixtures during non-operational hours, to reduce light pollution.
- 4. Revise the plans to provide isolux pattern details, for further review.

G. Woodlands Management

- 1. Revise the plans to graphically depict tree protection fencing for all individual trees to remain.
- 2. It appears street trees were previously installed along Squankum Yellowbrook Road. Some of these have established and are in good condition. These trees should be located on the plan and preserved in the field.
- 3. It appears two (2) existing trees, a Sweetgum and a Blue Atlas Cedar, located in front of the existing dwelling along Adelphia-Farmingdale Road might be able to be preserved with the proposed improvements. These trees should be located on the site plans for further review.

H. ADA (Americans with Disability Act)

We defer compliance with ADA requirements to the Construction Code Official. At a minimum, our office offers the following comments:

1. Provide proposed grade elevations at the corners of the ADA parking space/access aisle, as well as at the top and bottom of the curb ramps, to ensure ADA compliance.



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- 2. Provide additional proposed grades along proposed concrete sidewalks to ensure ADA compliance. Ensure running slopes along sidewalks do not exceed 5%, whereas contours are spaced closer together than 20 feet apart.
- 3. Provide a detail for the ADA ramp, including information regarding the railings.
- 4. ADA access does not appear to be provided to each refuse/recyclable storage area. Same should be reviewed and provided.

I. Traffic

- 1. It is indicated that the background growth traffic rate for County Route 524 (Adelphia-Farmingdale Road) and County Route 524A (Squankum-Yellowbrook Road) are 1% for minor arterial roadways and that the project design year was 2027. The no-build volume figure in the Appendix appears to calculate the background growth rate as 2.5% over 2 years. Our independent review of the NJDOT Background Growth Rate Table and the NJDOT Straight Line Diagram indicated that CR 524 and CR 524A are both Urban Major Collectors and that the background growth rate is 2.5% for urban major collectors in Monmouth County. The Applicant's Engineer should revise the no-build volume Figure 6 to reflect 2.5% as per the background growth rate table for urban major collectors and the appropriate number of years of background growth as the project design year is 2027. Any subsequent figures, analyses, and conclusions that are based on this no-build volume figure should be updated as necessary.
- 2. It is indicated that the site driveways are expected to operate at a Level of Service B during the AM and PM Peak Hours. The Applicant's Engineer should update the analyses as indicated above and provide testimony on the expected levels of service.
- 3. The design and placement of all traffic signs and striping shall follow the requirements specified in "Manual on Uniform Traffic Control Devices for Streets and Highways," published by the U.S. Department of Transportation and adopted by the N.J. Department of Transportation. On Sheet C101, Site Layout Notes, #1, the Applicant's Engineer should include striping in this note so that it reads, "All Signage and Striping..."
- 4. Provide the dimension for the drive aisle widths in the northern parking lot.
- 5. Revise the southernmost parking row to indicate 23 parking spaces instead of 24. Revise the total number of parking spaces for the overall site as well.
- 6. Revise the number of loading docks from 41 to 39.



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- 7. Our office recommends "No Truck" signage be provided at the passenger vehicle parking lot entrances.
- 8. Provide a 50-foot dimension for the double yellow centerlines proposed at the stop bars leaving the site.
- 9. In the fire truck turning template, provide left turns into the south site truck driveway, left turns out of the north site truck driveway, entrance turns into the north site truck driveway, and exit turns out of the south site truck driveway.
- 10. In the WB-67 truck turning template, provide left turns into the north site truck driveway, as this driveway is one of the anticipated routes for trucks to access the site as per the Traffic Impact Analysis.
- 11. In the truck turning template, provide the turning movements out of the north and south site truck driveway that correspond to the anticipated routes for trucks to exit the site as per the Traffic Impact Analysis for our review. The TIA indicated 1/3 of the trucks west on County Route 524 (Adelphia-Farmingdale Road), 1/3 of the trucks east on County Route 524 (Adelphia-Farmingdale Road), and 1/3 of the trucks east on County Route 524 (Adelphia-Farmingdale Road), and 1/3 of the trucks east on County Route 524 (Squankum-Yellowbrook Road).
- 12. Provide a truck turning template for the garbage truck.
- 13. Provide intersection sight distance triangles whose lengths conform to the latest AASHTO (American Association of State Highway and Transportation Officials) guidelines as published in the current edition of A Policy on Geometric Design of Highways and Streets for each driveway. The Applicant's Engineer should review the sight triangles to verify that no existing or proposed objects will obstruct the sight triangles. For the Intersection Sight Distance Triangles, the Applicant's Engineer provided a design speed of 45 miles per hour for the sight triangles. As County Route 524 (Adelphia-Farmingdale Road) and County Route 524A (Squankum-Yellowbrook Road) both have a posted speed limit sign of 45 miles per hour, the design speed is incorrect. The design speed for the intersection sight distance triangles should be revised to the appropriate speed, typically 5 miles per hour above the posted speed limit for existing roadways. The length proposed for the Intersection Sight Distance Triangles should be labeled on the plan and conform to the latest AASHTO (American Association of State Highway and Transportation Officials) guidelines as published in the current edition of A Policy on Geometric Design of Highways and Streets for each driveway.



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J. Environmental

- 1. Applicant shall conduct soil sampling and analysis for pesticides, arsenic and lead in accordance with Section 188-26.1 Historic pesticide site sampling procedures, as the portion of the Site in question has been historically farmed.
- 2. A note needs to be added to the plans indicating that any imported fill meet the definition of clean fill as stated within the NJDEP's Technical Requirements for Site Remediation (as found at NJAC 7:26E-1.8)