JOHN H. ALLGAIR, PE, PP, LS (1983-2001)
DAVID J. SAMUEL, PE, PP, CME
JOHN J. STEFANI, PE, LS, PP, CME
JAY B. CORNELL, PE, PP, CME
MICHAEL J. McCLELLAND, PE, PP, CME
GREGORY R. VALESI, PE, PP, CME



TIM W. GILLEN, PE, PP, CME (1991-2019)
BRUCE M. KOCH, PE, PP, CME
LOUIS J. PLOSKONKA, PE, CME
TREVOR J. TAYLOR, PE, PP, CME
BEHRAM TURAN, PE, LSRP
LAURA J. NEUMANN, PE, PP
DOUGLAS ROHMEYER, PE, CFM, CME
ROBERT J. RUSSO, PE, PP, CME
JOHN J. HESS, PE, PP, CME

MEMO TO:

North Brunswick Township Planning Board

FROM:

James C. Watson, P.E., PTOE

Township Planning Board Engineer's Office

DATE:

October 6, 2022 March 1, 2023

SUBJECT:

Preliminary & Final Major Site Plan

511-517 Milltown Road - Dunkin' Donuts

Technical Review No. 1 Block 203, Lots 36 & 37 (Application No. 2630)

North Brunswick, New Jersey Our File No.: PNOP0203.05

Pursuant to our authorization, we have reviewed the Preliminary & Final Major Site Plan application for the proposed Dunkin' Donuts at the 511-517 Milltown Road site situated on Block 203, Lots 36 & 37 located at the northwestern corner of the unsignalized intersection of Milltown Road (Middlesex County Route 606) and Chrome Street in North Brunswick Township, as submitted by Brunswick Estates — PNS Donuts, LLC Brunswick Estates, LLC. The following information has been submitted to this office:

- A. Architectural Plans entitled: "Proposed Plan Dunkin' Denuts" prepared by Frank Truilo Architect, LLC, dated May 24, 2022 February 20, 2023, consisting of three (3) sheets;
- B. Site Plans entitled: "Preliminary and Final Major Site Plan Tax Map, Lots 36 and 37 Block 203, North Brunswick Township, Middlesex County, New Jersey" prepared by Sharif H. Aly, P.E., of Amertech Engineering, LLC, Rev. 3 Rev. 4, dated June 7, 2021, last revised August 12, 2022 February 20, 2023, consisting of seven (7) sheets;
- C. Township of North Brunswick Site Plan/Conditional Use Application Form A and Appendix A Site Plan Completeness Checklist, signed by Owner and Applicant, dated May 27, 2022, consisting of fourteen (14) pages;
- Township of North Brunswick Tax and Assessment Payment Report, Request for Certified List of Property Owners, signed by Owner and Applicant dated May 27, 2022, consisting of four (4) pages;
- E. Township of North Brunswick Variance Application Form C signed by Owner and Applicant, dated May 27, 2022, consisting of eleven (11) pages;



Our File No. PNOP0203.05 Page 2

- F. Document entitled: "Stormwater Narrative" prepared by Sharif H. Aly, P.E., P.P., C.M.E., of Amertech Engineering, LLC, dated April 18, 2022, consisting of fourteen (14) pages;
- G. Document entitled: "Traffic Impact Study for Dunkin', Brunswick Estates, LLC, Proposed Dunkin' with Drive-Thru/Retail Development" prepared by Joseph J. Staigar, P.E., P.P. Connor G. Hughes, P.E., and Craig W. Peregoy, P.E., of Dynamic Traffic, LLC, dated June 2, 2021, last revised February 11, 2022 February 17, 2023, consisting of thirty-nine (39) forty-two (42) pages;
- H. Document titled, "Revised Memorandum" "Memorandum", prepared by Andrei Alexeev Sal Profaci, Zoning Officer, dated June 7, 2022 February 24, 2023 consisting of seven (7) six (6) pages;

I. GENERAL DESCRIPTION

The subject property is located on Lots 36 and 37 of Block 203 in the Township of North Brunswick. The Applicant is proposing to demolish the structures to construct a new single structure to contain a Dunkin' Denuts with a drive-through lanesand a proposed retail area with parking lot and associated site improvements on the 20,660 SF property which is located in the C-1 Neighborhood Commercial District.

Existing Conditions

The 20,660 SF property in question is located along a portion of Milltown Road (Middlesex County Route 606) at the northwestern corner of the unsignalized intersection of Milltown Road (Middlesex County Route 606) and Chrome Street. Currently, the site contains four existing structures. The site is bounded by Milltown Road on its southerly border, by Chrome Street on its eastern border, a single-family dwelling on its northern border, and a commercial building on its western border.

Milltown Road (Middlesex County Route 606) is an undivided roadway with two lanes in each direction with a 85-foot wide Right-of-Way under the jurisdiction of Middlesex County, spanning from NJ Route 171 (Georges Road) to the municipal border between the Borough of Milltown and the Township of North Brunswick. Chrome Street is a municipal roadway with a 50-foot wide Right-of-Way starting from Milltown Road and ending at its dead-end terminus 2,000 feet to the north. The existing site is accessed by a full movement driveway on Milltown Road and a full movement driveway on Chrome Street. The uses to the west and south of the site along Milltown Road are commercial, while the uses to the east and north of the site along Milltown Road and Chrome Street are commercial and residential respectively.



Our File No. PNOP0203.05 Page 3

Proposed Conditions

The Applicant is proposing to demolish the existing structures to construct a new structure containing a 2,100 sq. ft. Dunkin' Donuts restaurant with a drive-through lanes, and a 1,012 sq. ft. retail use with a paved parking lot, landscaping, lighting, refuse enclosure, and associated site improvements. The Applicant is proposing to remove the existing site driveways along Milltown Road and Chrome Street and construct a new a full movement driveway on Milltown Road.

Concerning our review of the Plans for compliance with the Zoning and Site Plan Ordinance, we offer the following comments:

II. ZONING AND CHECKLIST COMMENTS

A. <u>Items of Conformance and Non-Conformance with Ordinance</u>

- This subject property is located in the C-1 Neighborhood Commercial Zoning District. Restaurants and Retail uses are permitted in the zone with drive-through windows being a permitted accessory use.
- 2. This application requires does not require a variance from Township Ordinance § 205-4.1, Table 1, C-1 Zone where the maximum impervious coverage allowed is 80% and the Applicant proposes 82.9% 74.22%. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 3. This application requires a variance from Township Ordinance § 205-66 B., where the minimum residential buffer required is 30 feet and the Applicant proposes 9 12.5 feet. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 4. This application requires a variance from Township Ordinance § 205-100 B. (6) & (7), Township Ordinance § 205-33 B., and the State's Model Electric Vehicle Ordinance, where the site plan requires 27 (21 2 EV Credit = 19) parking spaces and the Applicant's Engineer proposes 22 14 parking spaces including a credit for 2 electric vehicle parking spaces in accordance with Section (E)(2) of the DCA Model Statewide Municipal EV Ordinance. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 5. This application requires does not require a variance from Township Ordinance § 205-98 A., where the parallel parking spaces are required to be 9 feet by 23 feet and the Applicant proposes parallel parking spaces 9



Our File No. PNOP0203.05 Page 4

feet by 22 23 feet. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.

- 6. This application requires a variance from Township Ordinance § 205-66 D., where the parking front yard setback is a required minimum of 10 feet and the Applicant proposes 3.3 feet on Chrome Street and 0.8 0.7 foot on Milltown Road. It should be noted that the C-1 Zone front yards may be utilized for parking, however no parking shall be closer than 10 feet to the roadway. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 7. This application requires does not require a variance from Township Ordinance § 205-98 B. (4), where driveways shall not be less than twenty-five (25) feet wide for two-way traffic. The site plan proposes a twenty-four (24) twenty-five (25) feet wide two-way drive aisle. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 8. This application requires does not require a variance from Township Ordinance § 205-98 B. (4), where driveways shall not be less than twelve (12) feet wide for one-way traffic. The site plan proposes a nine (9) fifteen (15) feet wide one-way drive aisle. The Applicant's Engineer should justify this variance and provide testimeny to satisfy the variance criteria.
- 9. This application requires a variance from Township Ordinance § 205-102 C., where no freestanding sign shall be closer than 20 feet to any lot line, except traffic signs and other signs installed by governmental agencies where the Applicant proposes a freestanding sign 10 feet from the front property line. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 10. This application requires a variance from Township Ordinance § 205-105 H. (1), where no freestanding sign larger than 40 sq. ft. is allowed for a building less 10,000 sq. ft. of gross floor area and the Applicant proposes a 50.54 sq. ft. free standing sign for a 3,112 2,100 sq. ft. one-story building. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 11. This application requires a variance from Township Ordinance § 205-93 A. (1) (a), where no open fences exceeding 4 feet in height above ground level when located in a front yard setback are permitted and the Applicant proposes a solid fence 8 feet high in the front yard setback on Chrome



Our File No. PNOP0203.05 Page 5

Street. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.

- 12. This application requires a variance from Township Ordinance § 205-93 B. (1) (b), where open fences up to 8 ft. high or solid fences up to 6 ft. high are permitted in a rear or side yard and the Applicant proposes a solid fence 8 ft. high. The Applicant's Engineer should justify this variance and provide testimony to satisfy the variance criteria.
- 13. In addition to the variances noted by the Zoning Officer, this application requires a variance from Township Ordinance § 205-102 D., no sign shall exceed 20 feet in height above ground level, except signs erected against the side of a building, which signs shall not extend above the height of the vertical wall or cornice to which they are attached. According to the architectural plans this sign extends to a height of 21 feet 10 inches above the ground, accordingly the front entrance sign for Dunkin' does not comply with the ordinance.

B. Considerations and/or Recommendations

1. The Applicant shall provide Testimony to justify the proposed Variances and Waivers requested and/or required. The Board shall consider the positive and negative criteria for any variances, if needed.

II. SITE PLAN COMMENTS

- The Applicant should discuss if they intend to consolidate the lots. If so, deeds for the consolidation shall be submitted to the Board Attorney for review and metes and bounds descriptions for the existing lots and consolidated lot shall be submitted to the Township Engineer's Office for review prior to filing of the deeds with the Middlesex County Clerk's Office.
- Pursuant to Township Ordinance § 205-98.B.(5)(a), aisles from which cars directly enter or leave parking spaces shall not be less than twenty-five feet wide for perpendicular parking. The current dimension listed on the site plan is 24 ft. The Applicant's Engineer should consider revising the plan to comply with the ordinance and provide testimony on this matter which requires a variance.



Our File No. PNOP0203.05 Page 6

- 3. Pursuant to Township Ordinance § 205-102 C., no sign shall exceed 20 feet in height above ground level, except signs erected against the side of a building, which signs shall not extend above the height of the vertical wall or cornice to which they are attached. According to the architectural plans, the front entrance sign for Dunkin Donuts does not comply with the ordinance. The Applicant's Engineer should consider revising the plan to comply with the ordinance and provide testimony on this matter which requires a variance.
- The plans indicate the dedication of Right-of-Way to Middlesex County.
 The Right-of-Way dedication is subject to the review and approval of Middlesex County.
- The Applicant should discuss staffing, hours of operation, anticipated truck deliveries, etc. for the proposed Dunkin' Donuts and the proposed retail store.
- The Dunkin Donuts pole sign detail should be revised to show dimensions
 of entire sign including the portion for the future tenant in order to confirm
 compliance.
- 7. The fence section elevation detail should be revised to show nominal height to be utilized and the type of post cap should be indicated on the details.
- 8. The concrete sidewalk detail should be revised to indicate 4" instead of 4' in the thick dense graded aggregate note.
- 9. A detail should be provided for the following items:
 - a. Bollard for Dumpster Enclosure
 - b. Bollard at the rear of retail space:
 - c. Security Rails;
 - d. Guiderail:
 - e. Loading Area Striping;
 - f. 8' High Solid White Vinyl Fence;



Our File No. PNOP0203.05 Page 7

III. TRAFFIC CIRCULATION AND PARKING COMMENTS

- 1. The Applicant's Engineer indicated that COVID Adjustment factors of 1.45 during the AM Peak Hour and 1.35 during the PM Peak Hour were utilized for the existing traffic volumes. The Applicant's Engineer indicated that the adjustment factors were developed by comparing other traffic count data collected within Middlesex County to pre-pandemic traffic volumes. The Applicant's Engineer should provide these calculations. The Applicant's Engineer collected updated Manual Turning Movement Traffic Count data on Wednesday October 19, 2022 and utilized the October data for all the analyses. We take no exception to this approach.
- The Applicant's Engineer indicated that they utilized the transaction data from the existing Dunkin Donuts at 561 Milltown Road approximately 700 feet to the west to generate trips for the proposed Dunkin Donuts, indicating that they intend to close that Dunkin Donuts once this Dunkin Donuts is built. It should be noted that the existing Dunkin Donuts does not have a drive-through lane and the proposed Dunkin' Donuts includes a drive-through lane, which could be a significant source of trip generation. The Applicant's Engineer should generate trips for the proposed Dunkin Donuts according to the most current edition of the ITE's Trip Generation Manual. The Applicant's Engineer should review and revise any figures, capacity and Level of Service calculations, and conclusions that are affected. The Applicant's Engineer performed trip generation calculations according to the current edition of the ITE's Trip Generation Manual. We take no exception to the trip generation provided.
- 3. The Applicant's Engineer indicated that they utilized pass-by rates of 34% for the retail use during the PM peak hour, 63% for the Dunkin Donuts during the AM Peak Hour, and 66% for the Dunkin Donuts during the PM Peak Hour. The Applicant's Engineer indicated that these pass-by traffic percentages are accepted by the NJDOT, as these percentages are listed on the NJDOT's website and the document is titled, "Pass-by Rates Approved for Use in Traffic Analysis for Major Access Permits". The Applicant's Engineer should provide testimony on the pass-by rates utilized. We take no exception to the pass-by rate percentages utilized.
- 4. The Applicant's Engineer indicated the delays and levels of service are expected to be 23 seconds, LOS C, or better, for the Chrome Street Southbound Approach to the unsignalized intersection of Milltown Road



October 6, 2022 March 1, 2023 Our File No. PNOP0203.05 Page 8

and Chrome Street under both the no-build and build conditions for the AM and PM Peak Hours, and this is the largest delay anticipated by the Applicant's Engineer for both intersections in the traffic report. The Applicant's Engineer should provide testimony on this issue. We take no exception to the delays and Levels of Service projected by the Applicant's Engineer.

The Applicant's Engineer indicated that the levels of service under both the No-Build and Build Conditions for all the other movements studied under the no-build conditions and build conditions in the AM and PM Peak Hours are anticipated to be LOS D or better. We take no exception to these anticipated results.

5. The Applicant's Engineer performed a sensitivity analysis where the trips generated by the transaction data was increased by 50%. The Applicant's Engineer should compare the trip generation of this sensitivity analysis to the trip generation according to the most current edition of the ITE's Trip Generation Manual. The Applicant's Engineer should review and revise any figures, capacity and Level of Service calculations, and conclusions that are affected.

The Applicant's Engineer performed capacity analyses on the volumes generated by the sensitivity analysis. The Applicant's Engineer indicated that the delay of the Chrome Street southbound approach to the unsignalized T-intersection is expected to be 37 seconds (LOS E) under the PM Peak Hour Build Conditions. The Applicant's Engineer indicated that the delay of the Site Driveway Southbound approach is anticipated to be 26 seconds (LOS D) under both the AM and PM Peak Hour Build Conditions. The Applicant's Engineer indicated that the other delay and level of service calculations are not affected by the sensitivity analysis. The Applicant's Engineer should review the traffic volumes from the sensitivity analysis versus the traffic volumes that are generated when the proposed Dunkin Donuts trips are calculated according to the ITE's trip generation manual and revise any figures, capacity and Level of Service calculations, and conclusions that are affected.

6. Per ADA Requirements, the site will require one accessible parking space and this one accessible parking space must be van accessible. The Applicant's Engineer proposes two accessible parking spaces, with both being van accessible. We take no exception to the proposed ADA parking spaces.



October 6, 2022 March 1, 2023 Our File No. PNOP0203.05 Page 9

- Per the State's Model Electric Vehicle Ordinance, at least one Make-Ready Parking Space is required for a proposed parking lot with 50 or fewer off-street parking spaces. Per Township Ordinance § 205-33. B. (3), two (2) electric vehicle parking spaces are required for this application. The Applicant's Engineer proposes two electric vehicle parking spaces, with one of them being accessible. We take no exception to the proposed electric vehicle parking spaces.
- 8. The Applicant's Engineer indicated on the site plan that the proposed retail and proposed Dunkin Donuts require 27—21 parking spaces per the Ordinance before any credit for Electric Vehicle Parking Spaces are taken.

Per the State's Model Electric Vehicle Ordinance, an electric vehicle parking space or a make-ready parking space shall count as two parking spaces for purpose of complying with a minimum parking space requirement, and that this shall result in a reduction of no more than 10% of the total required parking. The two proposed electric vehicle parking spaces would count as four parking spaces. With the additional 2 parking spaces being applied toward the minimum parking requirement, the amount of required parking would be 25 19 parking spaces (27 - 2 = 25) (21 - 2 = 19). The Applicant's Engineer took credit for four (4) parking spaces and listed 23–17 parking spaces required on the plan. The Applicant's Engineer should revise the parking space requirement noted on the plans.

The Applicant's Engineer proposes 20 14 parking spaces, two (2) of which are proposed to be EV spaces for a total of 22 parking spaces including the EV parking space credit. The Applicant's Engineer should provide testimony on this matter which requires a variance.

- 9. The Applicant's Engineer proposes parking spaces that are 9' x 22' 23' on the plan as parallel parking spaces for employees only. The Township Ordinance § 205-98 A. requires 9 feet by 23 feet. The Applicant's Engineer should consider revising the plan to comply with the ordinance and provide testimony on this matter which requires a variance.
- 10. The design and placement of all traffic signs and striping and markings 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. The notes in the Regulatory Signage Details below the



October 6, 2022 March 1, 2023 Our File No. PNOP0203.05 Page 10

Stop Sign and the Pavement Marking Arrow should be updated accordingly to include striping and markings.

- 11. The Applicant's Engineer proposes counterclockwise traffic flow in the north and west areas of the drive through with no opposing clockwise traffic flow. The Applicant's Engineer should consider proposing a Do Not Enter Sign to discourage traffic from entering these areas from the wrong direction.
- 12. The Applicant's Engineer should design the proposed curb ramps, sidewalks, and crosswalks, to meet the latest ADA requirements. The Applicant's Engineer should provide turning spaces before and after proposed ramps as necessary at the required slopes and the locations of proposed detectable warning surfaces should be clearly indicated. This ADA compliance issue should be reviewed relative to all curb ramps, sidewalks, and crosswalks currently proposed under this project.
- 13. The Applicant's Engineer should provide a site circulation plan showing the travel paths of the design vehicles (delivery trucks / garbage trucks / fire trucks / rescue squad vehicles) to verify that the on-site circulation is adequate for the required service and emergency vehicle access. Of particular interest is access to the proposed refuse enclosure and the proposed loading zone. It should be noted that the refuse enclosure orientation has been revised for improved access via a counter clockwise site circulation.
- 14. The Applicant's Engineer proposes 9 12 feet of space between the loading area and the drive through lane. The Applicant's Engineer proposes 2 employee only parking spaces between the proposed dumpster and the proposed loading area. The Applicant's Engineer should provide testimony on the expected operations of this area and the expected operations of the site. There may be conflicts between the loading area, the circulation of the drive through lane, the circulation of bypassing vehicles, the employee parking spaces and access to the refuse enclosure by vehicles and employees. The Applicant's Engineer should address these conflicts.
- 15. The Applicant's Engineer proposes a striped line separating two-way traffic and drive through traffic. The Applicant's Engineer should indicate the proposed color of this striped line and proposed thickness of this striped line. This striping should be in accordance with the current MUTCD. In addition, this striping may not be sufficient to separate drive through traffic



Our File No. PNOP0203.05 Page 11

from the traffic circulating the site. The Applicant's Engineer should address this conflict.

- 16. The Applicant's Engineer should 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. The intersection sight distances should be based on the design speed of the roadway, not the posted speed. The posted speed limit is 35 miles per hour, the intersection sight distance triangles should be based on 40 mph. Also, the lengths of these intersection sight distance triangles should be provided.
- 17. Fire lanes and striping are subject to the approval of the Fire Subcode Official.
- 18. It should be noted that the proposed left turn movement out of the site is a concern as the exiting vehicles would be required to cross two lanes of oncoming traffic in close proximity to the full movement Chrome Street unsignalized intersection with Milltown Road. With regard to egress from the site, consideration should be given to allowing right out only turning movements. The Applicant's Engineer should address this concern.
- 19. It should be noted that Milltown Road (Middlesex County Route 606) is under the jurisdiction of Middlesex County and that this application will require approval from the Middlesex County Planning Board.
- 20. It should be noted that a second order board lane has been added to the drive through configuration to reduce the concerns associated with excessive queue lengths.
- 21. It should be noted that the proposed mountable curb along the eastern curb line of the site driveway entrance has been eliminated along with one parking space for improved site access.



Our File No. PNOP0203.05 Page 12

IV. GRADING, DRAINAGE AND STORMWATER MANAGEMENT COMMENTS

- 1. The Applicant shall provide a copy of the Soil Conservation District Plan Certification to the Township upon approval.
- Time of concentration calculations should be included with the pre- and post-development hydrographs. Please be reminded that there is no minimum Tc value that can be used in the calculations. Refer to Chapter Five of the NJ Stormwater BMP Manual for guidance.
- Pervious and impervious area hydrographs should be analyzed separately before compiling same into single hydrographs for both pre- and postdeveloped site runoff calculations.
- 4. The NOAA Region D rainfall distribution should be utilized in all hydrograph calculations.
- 5. Due to the unknown conditions of the existing inlet located near the site on Milltown Road, it is recommended that the site plan be reevaluated in order to reduce the de minimis increases in stormwater runoff to zero
- The Grading & Utility Plan should be modified as follows:
 - Provide additional spot grades near the proposed drive thru monitor to demonstrate minimum 0.75% slopes for impervious surfaces, and 2.00% slopes for pervious surfaces are provided away from the proposed building;
 - Provide additional spot grades in the grass area east of the proposed refuse enclosure to demonstrate 2.00% minimum slopes are provided; and
 - iii. Provide additional spot grades in the paved area east of the proposed building to demonstrate 0.50% minimum slopes are provided.



Our File No. PNOP0203.05 Page 13

V. <u>SANITARY SEWER SYSTEM COMMENTS</u>

- 1. All sanitary sewer piping and appurtenances shall be installed in accordance with the requirements of the Plumbing Subcode Official.
- A report prepared by a currently licensed NJ Professional Engineer should be provided including a calculation of the anticipated sanitary flows to be generated by the proposed development in accordance with N.J.A.C. 7:14A-23.3. The Applicant should submit information to confirm the adequacy of the downstream conveyance system to accept the proposed flows and the availability of facilities to accept and treat the flow.
- 3. The Applicant is responsible for obtaining Treatment Works Approval from NJDEP, if applicable.
- 4. Confirm a grease trap is not required for the proposed facility.
- 5. The utility plan should be revised to identify the size and pipe material of the proposed sanitary sewer lateral.
- 6. The proposed sanitary lateral is to be connected to the existing sewer main.
- 7. The existing lateral is to be removed to the connection to the existing sewer manhole/sewer main and properly abandoned.
- 8. The existing sanitary manhole located on the site is to be removed and replaced with a new precast sanitary manhole. The existing sanitary sewer main is to be replaced to the property line.
- 9. Provide a connection detail for the proposed sanitary sewer connection to the existing sanitary sewer main.
- 10. Provide a cleanout detail for the proposed sanitary sewer cleanout.



October 6, 2022 March 1, 2023 Our File No. PNOP0203.05 Page 14

VI. WATER SYSTEM COMMENTS

A. <u>Consideration and/or Recommendations</u>

- 1. A report prepared by a currently licensed N.J. Professional Engineer should be provided including calculations of the anticipated water demands in accordance with N.J.A.C. 5:21-5.2.
- All water distribution system improvements shall be installed in accordance with the requirements of the water utility and the Plumbing Subcode Official.
- 3. The design of the on-site water distribution system shall be adequate to provide fire protection as per ISO standard, Fire Suppression Rating Schedule, or per AWWA M31, Manual of Water Supply Practices.
- 4. The Applicant is responsible for obtaining a permit from the NJDEP BWSE, if applicable.
- 5. Provide test data and calculations demonstrating that the required domestic and fire demands and pressures can be provided from the existing system.
- 6. The design and adequacy of fire suppression systems and the delineation of fire lanes are subject to the review of the Fire Subcode Official.
- 7. The utility plan should be revised to identify the location, size, and pipe material of the existing water service.
- 8. The existing water service is to be removed to the existing water main and a new water service installed.
- 9. Provide a connection detail for the proposed water connection to the existing water main.

VII. LANDSCAPING & LIGHTING COMMENTS

A. <u>Consideration and/or Recommendations</u>

 In accordance with Township Ordinance § 205-66.B., where a proposed commercial development abuts a residential zone or a lot developed for residential uses, a buffer shall be established; an additional thirty-foot



Our File No. PNOP0203.05 Page 15

buffer strip, designed in accordance with the requirements of Article XXVI, shall be added to any required rear or side yard which abuts said residential use; whereas only twelve (12) feet has been provided from the north property line with the existing residential dwelling to the proposed parking lot curb and the proposed refuse enclosure fully encroaches into this area providing (0) feet buffer area to the existing residential lot as noted by the Zoning Officer. An eight (8) foot high vinyl fence is proposed along the shared property line. The Applicant's Engineer should consider revising the plan to comply with the ordinance and provide testimony on this matter which requires a variance.

- 2. Revise the Plans to provide Tree Replacement Calculations, in accordance with Township Ordinance § 205-40.5 and Township Ordinance § 205-40.6. Also, provide a Note on the Plans to indicate a Tree Removal Permit shall be obtained prior to any site disturbance.
- 3. Revise the Plans to graphically depict and specifically label tree protection fencing to be installed at the limits of clearing, in accordance with Township Ordinance § 205-40.9 A. It appears three (3) trees are proposed to remain. These should be accounted for with the proposed landscaping in this area.
- 4. Revise the plans to provide foundation plantings along the north side of the proposed building to provide landscaping for all non-parking areas, in accordance with Township Ordinance § 205-66 D. This will enhance site aesthetics as well as reduce lawn maintenance.
- 5. Revise both of the tree planting details, sheet 5 of 7, to remove trunk wrap, as current research does not endorse the use of such. However, if deer are present in the area, rigid, plastic, open mesh trunk guards should be provided, to prevent from the irreparable damage from buck rub. Also, provide a note that the central leader shall not be cut or damaged.
- 6. Revise the plans to graphically depict mulch bed lines on the plans, to prevent confusion during construction.
- 7. Revise the plans to indicate proposed disposition for all open areas, such as lawn, mulch, stone, etc., to prevent confusion during construction.



Our File No. PNOP0203.05 Page 16

- 8. Revise the plans to provide full manufacturer's catalog cuts and ordering information for the proposed light poles. Also, provide isolux patterns and details, to include a scale and graph.
- 9. Revise the plans to indicate the proposed color and finish for all light fixtures and poles.
- 10. The 'Light Schedule', sheet 5 of 7, indicates lighting temperature of 4,000/5,000 Kelvins. Light color temperatures over 4,000 Kelvins are not considered acceptable, due to the unnatural bluish light.
- 11. Revise the plans to indicate the proposed timers and hours of operation for light fixtures. Consideration should be given to lights being dimmed during non-operational hours, to reduce light pollution.

VIII. ENVIRONMENTAL COMMENTS

A. <u>Consideration and/or Recommendations</u>

- 1. A note should be added to the plans that states any imported fill needs to meet the definition of Clean Fill, pursuant to the Technical Requirements for Site Remediation (NJAC 7:26E-1.8).
- The Applicant's Engineer shall provide testimony to the extent possible regarding existing environmental conditions on the site including and existing areas of concern.

IX. ADA ACCESSIBILITY

A. Consideration and/or Recommendations

We defer the review of ADA requirements to the Construction Code Official.
 All handicap ramps must be designed to demonstrate compliance with current ADA requirements.



Our File No. PNOP0203.05 Page 17

2. The Applicant's Engineer shall provide testimony to the extent possible regarding the existing environmental conditions on the site including any areas of concern.

X. OTHER AGENCY APPROVALS & MISCELLANEOUS COMMENTS

- 1. The Applicant should discuss Letters of No Interest and/or approvals by all other agencies having jurisdiction including the following:
 - a. Delaware and Raritan Canal Commission
 - b. New Jersey Department of Transportation
 - NJDEP Wetlands Buffers, General Permits etc.
 - d. NJDEP BWSE Water Permit and Treatment Works Approval
 - e. Freehold Soil Conservation District
 - f. Middlesex County Planning Board
 - g. Veolia Water
 - h. North Brunswick Township Sewer (DPW)
 - Bureau of Fire Safety
 - j. Traffic Safety
- Copies of applications and approvals or certifications by other agencies, as may be required, should be provided as a condition of final approval and prior to the site disturbance.
- 3. Should new utility services or connections be required a Final As-built Plan shall be provided by the Applicant to the Township Planning Staff as both a hard copy (paper or mylar) and as a digital/electronic document(s). The digital data used for such documents shall be in vector format and contain coordinate values for at least (3) identifiable boundary corners (preferably



Our File No. PNOP0203.05 Page 18

in the 1983 New Jersey State Plane Coordinate System) prior to occupancy.

- 4. Construction on the site is subject to the review and approval of the Township Construction Code Official prior to any site disturbance.
- 5. All applicable details in accordance with Township Standards should be added to the plans.

We reserve the right to present additional comments pending the Testimony of the Applicant before the Board and the receipt of revised plans.

XI. RECOMMENDED CONDITIONS OF APPROVAL, FAIR SHARE CONTRIBUTIONS, IF ANY, AND PERFORMANCE GUARANTEES

Any approval by the Board should be conditioned upon the submission of revised Engineer's Reports and Plans in accordance with the above comments, proof of approval or waivers from all other agencies having jurisdiction, the construction of off-tract improvements if deemed necessary, the payment of outstanding escrow fees and the Applicant's Engineer providing an estimate for the cost of improvements, in order that performance guarantees and inspection fees can be calculated if deemed necessary.

Should you have any questions concerning this matter, please do not hesitate to contact this office.

JCW/KEC

CC: Planning Board Members
Planning Board Attorney
Applicant
Applicant's Engineer
Applicant's Attorney