

April 11, 2025

VIA E-MAIL

Planningbrd@sayreville.com

Beth Magnani Board Secretary Sayreville Borough Planning Board Borough of Sayreville 167 Main Street Sayreville, NJ 08872

Re: Masjid Sadar – Community Center / House of Worship Site Plan Block 444.04, Lots 23, 24, 25 & 28 216 Ernston Road Sayreville Borough, Middlesex County, New Jersey BVE Project No.: 241046

Dear Ms. Magnani:

As requested, Bright View Engineering (*BVE herewith*) has had an opportunity to review the following documentation with regard to the above referenced application. For ease of reference, updated documentation is provided in **bold** text:

- Site Plans entitled "Preliminary and Final Site Plan, 212, 214 & 216 Ernston Road" prepared by AWZ Engineering, Inc. revised April 7, 2025, 19 sheets
- Architectural Plans entitled "New Places of Worship Building Mosque, 216 Ernston Road, Sayreville, NJ 08859" prepared by Vision Consultants, last revised April 16,2025, 8 sheets
- "Traffic Impact Analysis for Shameer Properties, LLC" prepared by Stimmel Engineering, revised October 2, 2024
- Update to the August 3, 2023 Traffic Impact Analysis entitled "Masjid Sadar & Community Center" prepared by Stimmel Engineering, dated March 12, 2024
- "Traffic Letter Report, Re: Masjid Sadar & Community Center," prepared by Stimmel Engineering, dated April 1, 2025
- Parking Demand Table (untitled) prepared by Vision Design & Development, undated, 1 sheet
- "A Day in the Life of a Masjid: A Quarterly Breakdown" prepared by Masjid Sadar & Community Center" undated, 5 pages
- "Detailed Report on Room and Space Usage" prepared by Masjid Sadar & Community Center" undated, 5 pages

With regard to the above referenced materials, BVE offers the following comments for consideration by the Board. For ease of reference, original comments are provided in *italics* and additional commentary in regular text:

70 South Orange Avenue, Suite 109 Livingston, New Jersey 07039



Project Summary

The proposed project consists of razing the existing buildings on site and constructing an approximately 44,391 sf mosque including ancillary meeting and recreation space on the north side of Ernston Road between Parkway Place and Center Avenue. Access to the site is now proposed via two driveways to Ernston Road, one full movement and one with left turns out restricted. A total of 107 parking spaces are proposed including 43 surface spaces, 64 ground level spaces under the building.

Traffic Impact Study

Existing Traffic Conditions

 The March, 2024 update to the Traffic Impact Analysis (TIA) includes counts conducted on Friday, March 1st from 12:00 PM to 4:00 PM to supplement counts completed on Sunday, June 18th, 2023 from 9:30 AM to 1:30 PM. While the counts provided are generally consistent with historical traffic count data available in the area, we recommend traffic count data be collected to determine the traditional weekday morning, weekday late afternoon (to capture school traffic from the adjacent elementary school), weekday evening, and Saturday mid-day peak hours on Ernston Road. A 7 day ATR style count by direction is likely the most appropriate way to determine these values.

The October, 2024 update to the TIA includes a 7-day ATR count conducted from Friday, May 17th, 2024 to Friday, May 24th, 2024. We note that ATR data presented indicates that volumes on Ernston Road are highest during the weekday evening commuter peak hour. We recommend a capacity analysis be conducted for the weekday morning and evening peak hours in addition to the Friday mid-day analysis to determine how the driveway will operate when existing <u>roadway volumes</u> are at their highest.

Addressed. The April 1, 2025 analysis prepared by Stimmel Engineering provides the requested capacity analysis of the weekday commuter peak hours at the site driveways in addition to the Friday mid-day and Saturday peak time periods when the site is anticipated to generate the most traffic. We recommend the applicant provide testimony regarding the results of the revised analysis for the benefit of the board.



2) Based on a recent site visit conducted by this office on the afternoon of Friday, March 22nd, 2024, the westbound approach to the traffic signal at Ernston Road & Bordentown Road routinely backs up past the site frontage. Additional information / testimony should be provided regarding how these backups affect the data collection and the results presented in the TIA.

Comment remains. We recommend testimony be provided regarding the impact of existing queuing on Ernston Road and how it affects the conclusions in the TIA.

Comment partially addressed. We note that the applicant has agreed to a condition of approval to provide police traffic control to assist with traffic exiting the site at peak times. We recommend the applicant clarify for the board when police traffic control of the site driveways is proposed based on the most recent parking and operational plans provided.

Peak Hour Selection

3) The TIA includes an analysis of the intersection of Ernston Road & Bordentown Road for Friday between 1:00 PM and 2:00 PM. Based on our review of the Ernston Road & Bordentown Road data provided, the peak hour for the intersection is from 2:30 PM to 3:30 PM. The data provided for similar Mosque sites in New Jersey peaks from 12:45 PM to 1:45 PM and 12:30 to 1:30. The site trips provided for the existing site in April of 2022 peak from 1:15 PM to 2:15 PM when considering the site traffic only. Please clarify / provide justification for the use of the 1PM to 2PM Friday mid-day peak hour as it is not readily apparent why this time period was chosen for analysis given the variety of site and roadway traffic peaks presented.

Consistent with comment #2 above, we recommend analysis of the weekday morning and weekday evening commuter peak hours be conducted to determine the operation of the site driveways when commuter traffic is the highest. Additional commentary on the Friday mid-day analysis is provided in subsequent comments below.

Addressed. The revised analysis considers the weekday morning and evening commuter peak hours as requested.

Anticipated Background Growth

4) In December of 2023, NJDOT published an updated Annual Background Growth Rate Table, which increased the background traffic growth for urban minor arterials in Middlesex County to 2.75% per year. The analysis in the TIA should be updated accordingly.

70 South Orange Avenue, Suite 109 Livingston, New Jersey 07039

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904 BrightViewEngineering.com



Addressed. The TIA was revised to include the most recent NJDOT growth rate as requested.

No further comment required.

5) Additional information / testimony should be provided regarding if any other planned developments within the vicinity of the project were considered in developing background traffic volumes.

Addressed. The October, 2024 TIA states that both Old Bridge Township and Sayreville Borough were contacted and confirmed there were no other pending developments in the area.

Trip Generation

6) The August, 2023 TIA includes count data at the existing Ernston Road driveways that was collected on April 29, 2022. According to the TIA, 150 vehicles enter the site for Friday prayers on a holiday period. Additional information / clarification is required regarding the assumption of 150 vehicles entering the site for high holy days, as the count data provided indicates 170 vehicles entering between 12:45 PM and 1:45 PM and 198 vehicles entering overall during the 4 hours counted.

The October, 2024 TIA utilizes counts conducted at the nearby firehouse where prayer services are currently being conducted to estimate the Friday mid-day prayer service volumes, resulting in 145 inbound trips and 121 outbound trips during the highest hour. These volumes include a 10% increase over the observed volumes. While the methodology provided is generally acceptable to this office to determine anticipated trip generation for the site, information on the number of people present during service at the firehouse should be provided and compared to the anticipated occupancy of the proposed development.

We note that based on the May 17, 2024 firehouse counts, a maximum of 121 vehicles are on site during the period studied (without the 10% increase stated above). Additional information / testimony should be provided regarding how this compares to the parking provided at the proposed site, including a projection of the maximum number of vehicles anticipated to be on site at any given time.

Partially addressed. The updated parking and traffic analyses are based on a maximum parking demand of 107 spaces, with a proposed parking supply of 107 spaces. We recommend testimony be provided to the board regarding how the 107 space demand was determined, as well as any contingency plans (such as off site parking agreements) should parking demand exceed the supply on site.



7) Since ITE has very limited data for Mosques, the TIA conducted traffic counts at two other facilities in New Jersey to determine an average vehicle occupancy of 1.82 and 1.88 persons per vehicle. Additional information / testimony should be provided regarding how the facilities counted compare to the proposed site, including building size, membership, parking capacity and type / size of amenity spaces.

Comment remains. Testimony regarding how the facilities in East Brunswick and Somerset compare to the proposed facility should be provided. Information on the vehicle occupancy of the counts conducted at the firehouse should also be provided for comparison.

Comment remains. The updated parking information utilizes a vehicle occupancy of 3.0 (3 persons per vehicle) whereas prior testimony indicated a range of observed vehicle occupancies, all less than 2. Testimony in support of the use of a vehicle occupancy rate of 3.0 should be provided in lieu of the observed rates previously provided in testimony.

8) The TIA states that a maximum of 90 vehicles are anticipated to enter / leave the site for a typical Friday mid-day prayer service. Additional information regarding how the 90 vehicle value was determined should be provided, as it is not readily apparent from the TIA.

No longer applicable. The TIA has been revised based on counts conducted at the firehouse.

No longer applicable. The current traffic analysis is based on the updated parking projections referenced above.

9) At the April 3rd, 2024 Planning Board hearing, testimony was provided that none of the amenity space would be utilized during scheduled prayers. Additional information / testimony should be provided regarding the schedule for use of the classroom, multipurpose, and athletic spaces; including the hours when these facilities will be available and when they will closed due to scheduled prayers.

Partially addressed. While the requested information has been provided, we recommend additional testimony explaining the anticipated operation of the site be provided to the board.

10) We recommend trip generation estimates for the entire facility be provided that include weekday morning, weekday evening, and Saturday mid-day time periods compared to the schedule of activities requested above. This should include estimates for the classroom space, multipurpose hall, exercise areas, and basketball court. Traffic counts at similar facilities in New Jersey should be conducted if industry accepted trip generation estimates are not available.



Comment remains. While we acknowledge that the various amenity spaces will not be used during prayer services, it is not clear when these spaces will be used and what effect they will have on the adjacent roadway network.

Partially addressed. The additional information provided indicates when various areas of the facility will be utilized. We recommend testimony be provided regarding this information, including information on when the facility is not anticipated to be utilized at all (i.e. weekdays between morning and noon prayers).

Trip Distribution

11) It appears from the information provided that the trip distribution for the site is based on the count data collected in April, 2022. Additional information / testimony should be provided regarding the applicability of using a peak event distribution for a typical prayer service. In particular, this office has concerns that more than 17% of the exiting traffic will be oriented towards US Route 9 and the regional roadway network. A zip code study or similar inventory of the existing patrons may be appropriate to justify the distribution utilized.

Comment remains. Testimony regarding the anticipated trip distribution should be provided.

Addressed. The requested testimony has been provided.

Capacity Analysis

12) This office recommends analysis be conducted for the typical weekday morning, weekday evening, and Saturday mid-day peak hour periods including traffic associated with the site during each of these peak periods.

Comment remains. Level of Service analysis for the commuter peak hours on Ernston Road should be provided to determine the impact of the project when roadway volumes are at their highest. This analysis should include any anticipated trips from the amenity space as well as morning and evening prayer services which overlap with commuter peak hours.

Comment addressed. The requested commuter peak hour analysis has been provided based on the updated parking and operational information.



13) As indicated above, recent site visits indicate that traffic on Ernston Road routinely queues past the proposed site driveways. Additional information / testimony should be provided regarding how such queueing affects the capacity analysis presented in the studies provided and any future analysis associated with the project.

Comment partially addressed. Consistent with comment #2 above, we recommend the applicant clarify for the board when police traffic control of the site driveways is proposed based on the most recent parking and operational plans provided.

Additional Commentary on the October, 2024 TIA

14) The analysis contained in the TIA is based on full use of both driveways (accounting for the left turn out restriction for the western driveway). Testimony regarding the applicability of this configuration should be provided to address operations when valet parking is being used, including if the driveways will be restricted to one way in/out during valet operations.

Comment no longer applicable. The valet parking operation has been eliminated.

15) The Level of Service analysis for the site driveways utilizes a 0.98 peak hour factor (PHF). Additional information / testimony is recommended to justify the PHF utilized, as a 0.98 PHF indicates traffic is very uniformly spread throughout the hour. This is inconsistent with the count data provided for the existing services conducted at the firehouse.

Addressed. The April, 2025 analysis utilizes a 0.90 peak hour factor.

Parking

1) The plans provided indicate a parking requirement of 377 spaces calculated using one space per three occupants based on room occupancy. With 109 spaces proposed, this results in a parking shortfall of 268 spaces. Information / testimony regarding the justification for the required parking variance should be provided, including any other parking standards the applicant believes are appropriate.

Comment remains. Testimony in support of the requested parking variance considering the addition of the proposed car stackers and valet parking operation should be provided.

Comment remains. While we acknowledge that the car stackers / valet operation have been eliminated, testimony regarding the requested parking variance should be provided.



2) We note that the 6th Edition ITE Parking Generation Manual has very limited parking data for Mosques (LU Code 562), with an average parking rate of 20.38 spaces per 1,000 sf. This results in a requirement of 905 parking spaces for the proposed 44,391 sf facility. While we recognize the available ITE data is based on significantly smaller facilities than the proposed, information / testimony should be provided regarding whether or not the available ITE data is appropriate for the proposed use. Parking counts at similar facilities in New Jersey may be appropriate to determine the actual parking demand for the site.

Based on the information provided for the firehouse where existing services occur, the existing service requires a minimum of 121 parking spaces plus additional spaces for valet operations, weekly variability in attendance and future expansion. Testimony regarding the anticipated parking required for the site as proposed should be provided. Also, information regarding the capacity of the existing parking lots at the firehouse should be provided to confirm the trip generation and parking demand observed for the services conducted at the firehouse is not capacity constrained by the existing parking lots.

We recommend updated testimony based on the most recent parking and operational information be provided, including any provisions for off-site parking.

3) Based on this office's analysis of the April, 2022 data, 180 vehicles were on site between 1:30 PM and 1:45 PM. Additional information / testimony should be provided on how parking will be accommodated during peak events such as the one counted in April, 2022 as only 109 parking spaces are proposed.

No longer applicable. The parking demand and supply have been revised based on additional information.

4) The TIA indicates that there will be two Friday prayer sessions that are expected to have 60-90 vehicles each. Testimony at the April 3rd hearing indicated a Friday attendance of 80-120 patrons. Please clarify the anticipated number of patrons and vehicles anticipated and how the conversion from patrons to vehicles was determined.

Please provide testimony regarding how the conversion from patrons to parked vehicles is determined.

Consistent with comments above, we recommend updated testimony regarding the vehicle occupancies utilized.



5) The TIS assumes 90 vehicles in and 90 vehicles out during the Friday mid-day peak. Since two services are proposed, please provide justification on how the proposed 109 space parking lot will accommodate both Friday prayer sessions, especially during the 30 minute period between sessions where one session is exiting the site and another entering.

Notwithstanding the changes to the parking supply and operation, please provide testimony regarding the current proposed scheduling of Friday mid-day services and the ability of the parking facility to accommodate the anticipated turn over between services.

Comment remains. Testimony should be provided on the updated information submitted, including how the parking lot is intended to function during the time period between Friday midday services.

6) Additional information / testimony should be provided regarding the tandem parking spaces proposed under the building. How will these spaces be managed / assigned?

Comment remains. Testimony should also include how the interaction between the tandem spaces and the proposed car stackers will be managed.

It is our understanding that the inner tandem spaces will be assigned to staff, and the car stackers have been eliminated.

Site Plan / Internal Circulation

7) Sheets 9 & 10 of the site plans include vehicle turning templates for the site, including for a passenger car, garbage truck, SU-30 delivery truck and fire truck. We recommend that the turning plans be revised to eliminate overlapping vehicle paths as it is difficult to review the information as currently presented.

Comment remains. The vehicle circulation plans (sheets 9 & 10) of the April, 2025 plan set show movements in and out of the site driveways but do not depict how these vehicles will circulate within the site.

8) Based on the information provided, it appears the garbage truck and SU-30 delivery truck cross the driveway centerline to complete their maneuvers. We recommend the site driveways be modified to accommodate these movements without crossing into oncoming traffic.

Comment remains.

70 South Orange Avenue, Suite 109 Livingston, New Jersey 07039



9) Additional information / testimony should be provided regarding the likelihood of either school buses or charter buses to be on site and the site layout redesigned accordingly to accommodate buses. Even if buses are not currently contemplated, we recommend provisions for bus access be included in the site design to accommodate shuttle services and/or future events.

Comment remains.

10) The passenger car circulation plan should be based on a typical AASHTO passenger car and should include vehicle paths both into and out of the subsurface parking area occurring concurrently. This office has concerns that, as designed, two passenger vehicles cannot successfully navigate in and out of the garage area at the same time.

Comment remains. Vehicle turning paths internal to the site have been omitted from the site plans.

11) The site plans should be revised to accommodate the left turn prohibition cited in the March 12th TIA update. A concrete island is recommended to discourage left turns out of the site at this location.

Comment partially addressed. While a No Left Turn sign (R3-2) has been added to the western driveway, we maintain a concrete island should be provided to further limit left turns out of the western driveway.

12) Justification for the need for 2 two-way driveways should be provided. A pair of one-way driveways may be more appropriate for the proposed use.

Comment remains.

13) During the April 3rd hearing for the project, testimony was provided regarding a pedestrian connection between the existing sidewalk along Ernston Road and the front of the site. The testimony included that Middlesex County specifically requested the connection not be provided to limit pedestrian traffic along Ernston Road. We wholehearted disagree with this position and strongly recommend the applicant provide a pedestrian connection from the main entrance of the building to the existing sidewalk along the site frontage. Any correspondence between the applicant and Middlesex County regarding this issue should also be provided to the board, as it is unclear to this office why the County would seek to minimize pedestrian access.

Partially addressed. While the requested sidewalk connection has been added to the plans, we recommend pedestrian warning signage (W11-2 and W16-7Pl) signs be added where appropriate.



14) Testimony was also provided at the April 3rd hearing that 'monitors' would be provided during Friday services to direct traffic on site. Please clarify the role and qualifications of said 'monitors.' Is the applicant proposing to provide police traffic control at the site driveways / on-site every Friday or are 'monitors' members of the mosque? If the latter, will any special training be provided?

The October, 2024 TIA states that off duty police will be utilized to control access to the site driveways during Friday prayer services and special events. The use of police traffic control will likely mitigate any level of service concerns for exiting the site driveway(s), but may result in additional congestion on Ernston Road. We recommend a supplemental Level of Service analysis be provided which considers police traffic control at the site driveway(s) to estimate the impact of this operation on Ernston Road.

Addressed. The requested analysis in which the driveway operations are modeled with police traffic control has been provided to this office.

I trust this information assists the Board as they are considering this application. If you have any questions or require any additional information, please feel free to contact me at 908-421-4674 or via email at JFishinger@BVEngr.com.

Sincerely, Bright View Engineerin Joseph A. Fishinger, Jr., PE, PP, PT Director of Traffic Engineering

Https://bvengr.sharepoint.com/sites/bvengr/proj/241046-SRB-MasjidSadar-Review/3-Correspondence/241046 Review 3.docx

C: (732) 236-7557 T: (973) 228-0999 F: (201) 753-3904 BrightViewEngineering.com