

JOHN H. ALLGAIER, 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. VALES, 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: Township of Franklin
Zoning Board of Adjustment

FROM: Robert J. Russo, PE, PP, CME
Township Engineer

DATE: September 2, 2020

RE: **Sai Datta Mandir, Inc.**
Preliminary & Final Site Plan
Report #2
Engineering
Block 36.01; Lot 6.03
583 South Middlebush Road
Franklin, New Jersey
Our File: PFRZ0036.01/600.01
Application # ZBA-19-00037

As per your request, this office has reviewed the following documents relative to the above referenced amended preliminary and final site plan application:

- Preliminary & Final Major Site Plan, as prepared by Crest Engineering Associates, Inc., dated September 10, 2019, with a latest revision date of July 20, 2020;
- Boundary & Topographic Survey, as prepared by Crest Engineering Associates, Inc., dated August 11, 2017, with no revisions;
- Architectural Plan, as prepared by Kishor Y. Joshi, A.I.A., N.C.A.R.B., P.P., dated September 24, 2019, with no revisions;
- Stormwater Management Plan, as prepared by Crest Engineering Associates, Inc., dated September 10, 2019, with a latest revision date of July 20, 2020;
- Manual for the Operation and Maintenance of the Stormwater Management Best Management Practices, as prepared by Crest Engineering Associates, Inc., dated September 10, 2019, with a latest revision date of July 20, 2020;
- Environmental Impact and Assessment, as prepared by Crest Engineering Associates, Inc., dated September 10, 2019, with no revisions;
- EIS Addendum, Section 4. Required Approvals, as prepared by Crest Engineering Associates, Inc., dated July 7, 2020, with no revisions;
- Tree Sampling Report, as prepared by Crest Engineering Associates, Inc., dated November 2019, with no revisions;
- Traffic Impact Study, as prepared by Dolan & Dolan Consulting Engineers, LLC, dated November 5, 2019, with no revisions;
- Application forms.

The following comments are offered with regard to same:



Memo to Franklin Zoning Board of Adjustment
Our File: PFRZ0036.01
September 2, 2020
Page 2 of 7

A. PROJECT OVERVIEW

The site is located on the west side of South Middlebush Road (C.R. 615) approximately four hundred feet south of its intersection of Cortelyous Lane. The property is approximately 24.83 acres and is located in the Agricultural Zone. Churches and other similar places of worship are a conditional use in this zone and subject to the requirements of §112-37 of the Ordinance. The project is also located within the Township's Scenic Corridor and the Six Mile Run Historic District. The applicant is proposing to construct a new two (2)-story, 28,400 sf house of worship with 203 parking spaces. The applicant is also proposing site improvements including but not limited to, construction of concrete curb, sidewalk, hot mix asphalt driveway and parking lot, stormwater facilities, utilities, septic system, potable water well, fire suppression utilizing the stormwater facilities, grading, lighting and landscaping.

We defer the review of the zoning related issues to the Board Planner except where they may pertain to engineering issues.

B. GENERAL SITE IMPROVEMENTS

1. Official street address shall be obtained from the Franklin Township 911 Coordinator.
2. An Engineering Cost Estimate will be required once final plans are signed-off on by the Board. Upon approval, applicant shall provide appropriate bonds and Engineering inspection fees and attend a pre-construction meeting, prior to any site work.
3. All fees shall be paid by the applicant at the time of adoption of a resolution of site plan approval for the cost of making upgrades and modifications to the geographic information system (GIS) (§112-329).
4. At the time the final plans are submitted for signature of the municipal officials, the applicant shall submit CAD-generated data files, prepared by a New Jersey licensed land surveyor, directly translatable into an identical image of the plan per the requirements of Ordinance §112-329.
5. In accordance with Ordinance §112-192.A.3, the site plan shall be no greater than 24 inches by 36 inches in size. The applicant should request a waiver from the checklist requirement and has provided a larger plan sheet size. This office finds this request acceptable.
6. A variance is required for Parking Location. The majority of the parking shall be located to the rear of the main structure, with no more than 10% located at the front entrance, as noted in Ordinance §112-37.D.2. The applicant is proposing to locate 100% of the total parking in the front of the main structure.
7. A variance is required for minimum lot frontage. A minimum 400 ft. lot frontage is required in the Agricultural Zone; the applicant is proposing a 357.92 ft. lot frontage, a non-conforming existing condition.
8. In accordance with Ordinance §112-88 for the off-site parking lot interior driveways shall be at least 26 feet wide for two-way traffic movements when ninety-degree angle parking is proposed in the A zone. The applicant is proposing 25-foot wide driveway aisles. The applicant should request a variance for same.
9. A 200 ft. setback is required in the Agricultural Zone. The site plan should be revised to indicate same.



Memo to Franklin Zoning Board of Adjustment
Our File: PFRZ0036.01
September 2, 2020
Page 3 of 7

10. Either fifteen feet (15') or twenty-five feet (25') of heavily landscaped buffers are required, as noted in Ordinance §112-37.K.1 or 2. This office defers to the Board Planner regarding the need for a variance.
11. In accordance with Ordinance §112-37.D1, parking shall be provided at one parking space for every three persons at the largest anticipated gathering or a minimum of one parking space for every 15 square feet of worship area. The proposed sitting area for prayer is indicated to be 2,226 sf, which would require 149 parking spaces while 203 parking spaces are proposed. The traffic report indicates the maximum activity will occur on Thursday evenings, anticipating 30 people visiting the site. The report should also discuss weekend activity, if any. The traffic report and site engineer utilize the maximum temple occupancy of 587 to evaluate the traffic and calculate the parking. Testimony should be provided to the Board Planner's satisfaction regarding how this occupancy figure was calculated. If the applicant is not intending on occupying this facility at full capacity, the applicant should consider land banking portions of the parking area. In addition, the applicant should provide testimony regarding the number of anticipated special occasions that may occur at the site and how same will impact parking.
12. The proposed improvements will be over 5,000 square feet and a Soil Erosion Plan has been prepared. The Soil Erosion and Sediment Control Plans are subject to review and approval by the Somerset – Union Soil Conservation District.
13. Copies of any easements, exceptions, deviations, or liens on the property should be presented to the Board.
14. This office defers to the Fire Prevention Officer as to the appropriate number of Fire Hydrants, Fire Department Connections, and their location. We defer to the Fire Prevention Officer regarding the need of 'No Parking' fire lane signage and striping.
15. The applicant should provide testimony on how the Loading/Unload Dock area along the western building line will function. There is no direct vehicle access to the Dock area.
16. The brick paver walkway finish is listed as optional. The applicant should provide testimony regarding other anticipated options.

C. GRADING AND UTILITY COMMENTS

1. The applicant is proposing to install a septic disposal system to service the site. We defer review to the Somerset County Health Department.
2. The applicant is proposing to seal the existing well and remove the well house. We defer review to the Somerset County Health Department and the Township Building Department.
3. The applicant is proposing to install a well to supply domestic water for the site. We defer review to the Somerset County Health Department and the Township Fire Prevention Director and/or the Township Plumbing Sub-code Official.
4. The applicant is proposing a 30,000-gallon underground tank, feed from a water well. We defer review to the Township Fire Prevention Director and/or the Township Plumbing Sub-code Official. The architectural plans indicate that the entire building will be sprinklered as per NFPA. The applicant should identify the source of the water utilized for the sprinkler system.



Memo to Franklin Zoning Board of Adjustment
Our File: PFRZ0036.01
September 2, 2020
Page 4 of 7

5. The applicant should address the following general grading comments:
 - The applicant should provide a spot elevation at the emergency access driveway exit, demonstrating positive pitch between the two proposed 103 foot contours;
 - The applicant should clarify if a retaining wall is proposed for the loading/unloading dock area. It is unclear due to the break in the proposed grading contour. Spot elevations should be provided along the loading dock area;
 - The parallel ramps servicing the handicap parking area exceed 1:12 and should be revised. We recommend the applicant's revise the walkway directly in front of the handicap parking area so that the entire area is depressed, removing the central parallel ramp.
 - Provide additional spot elevations demonstrating ADA compliance along the ADA access route from the handicap parking area to the main building access. The proposed TC 102.00/ BC 101.50 elevation in the drop-off is affecting ADA compliance;
 - The proposed 108-foot contour at the driveway entrance along South Middlebush Road does not tie into the existing 108-foot contour.

The grading will be reviewed further when the above has been addressed.

D. LANDSCAPING AND LIGHTING

1. Applicant provided a tree sampling report that indicates in accordance with Ordinance §222-5.B(9) no trees will need to be preserved or replaced within the wooded area of disturbance associated with the proposed ingress/egress driveway to the site from South Middlebush Road. The applicant's engineer should provide the Board with testimony regarding same. Please note, the applicant is proposing to install 92 evergreens and 166 shade trees.
2. We defer to the Fire Prevention Director; however, the access to the building will be blocked from the emergency access driveway behind the building due to the proposed landscaping.

F. ENVIRONMENTAL IMPACT COMMENTS

1. A Conservation/Preservation Area shall be created in accordance with Ordinance §112-147 of the Franklin Township Land Development regulations. The Township preservation area boundary line shall be established using the most restrictive of the Stream Preservation Corridor and Wetlands Buffer. A map shall be supplied delineating the limits of the Conservation/Preservation Area with bearings and distances and proposed Preservation Area Marker locations.
2. Provide a Conservation/Preservation Area Easement Deed, with a metes and bounds description, of the Township preservation area boundary line created by satisfying Comment #2. The deed shall be submitted for review and approval prior to filing with the Somerset County Clerk's Office.
3. Preservation Area Markers shall either be set or bonded for prior to application sign-off.

G. STORM WATER MANAGEMENT

1. The property in question; Block 36.01, Lot 6.03, consists of approximately 24.83 acres and is currently wooded undeveloped land. The entire property drains to Cross Brook a tributary to Sixmile Run and the Delaware and Raritan Canal.



Memo to Franklin Zoning Board of Adjustment
Our File: PFRZ0036.01
September 2, 2020
Page 5 of 7

2. The project site is located within the review zone of the Delaware and Raritan Canal Commission and the applicant should obtain a certificate of approval or exception from the Commission. A copy of the permit should be provided to this office.
3. NJDEP freshwater wetlands Letter of Interpretation (LOI) #1808-05-0028.1 was issued for this property. A copy of the approved wetlands plan should be provided to this office. In addition, the Applicant's engineer should obtain a Freshwater Wetlands General Permit for the construction of Wet Pond outfall. A copy of the permit must be provided to this office.
4. The proposed development will disturb approximately 8.8 acres of land and will create 3.61 acres of additional impervious surface. The project exceeds the threshold of 1 acre of disturbance and creates more than $\frac{1}{4}$ acre of impervious surface, therefore, it is classified as a major development for stormwater management purposes. In accordance with the Township Ordinance, major projects must comply with water quantity control, water quality and groundwater recharge standards.
5. The proposed development proposes more than 1 acre of land disturbance and must obtain a General Permit for Construction Activities from the NJDEP. A copy of the permit must be provided to this office.
6. The proposed development proposes disturbance of more than 5,000 sf of land and the Applicant must obtain Soil Erosion and Sediment Control Plan Certification from the Somerset-Union Soil Conservation District. A copy of the permit must be provided to this office.
7. Outflow devices for the wet pond consists of a 1-ft rectangular weir at elevation 96.50 and a 2-ft rectangular weir at elevation 97.50 for a combined width of 3 ft. above elevation 97.50. Revise the construction detail for the outlet structure for consistency.
8. In accordance with N.J.A.C. 7:8-5.6 for the purpose of calculating runoff coefficients, there is the presumption that the pre-construction condition of a site is in good hydrologic condition. The existing drainage area map should be revised to identify the areas to be disturbed and undisturbed. In addition, the map should show the limits of areas covered with gravel and filter fabric and areas that remain covered with brush. Runoff hydrographs for watershed 1S, 2S, 3S, and 4S should be recomputed using the appropriate runoff curve number. Revise drainage report accordingly.
9. According to the drainage report under existing conditions for watershed 4S (UNDISTURBED area to NW corner) consists of 5.43 ac of brush and 4.01 ac of woods. Under proposed conditions, Watershed 11S (UNDISTURBED area to NW corner) consists of 9.24 ac of grass cover but if it is undisturbed the same type of cover under existing conditions should remain. Revise runoff calculations for Watershed 11S accordingly.
10. A construction detail for the proposed 30 ft. long concrete spillway between the infiltration basin and the wet pond should be provided. Revise plans and report accordingly.
11. The drainage report should be revised to include a stability analysis of the side slope downstream of the proposed 55 ft. spillway in the infiltration basin. The proposed slope is 25% and it appears that the flow velocity along the slope exceeds 2 fps. Revise plans and report accordingly.
12. The construction detail for proposed outlet structure OS 17 should be revised to show the required wing walls as shown on the Grading and Drainage Plan.



Memo to Franklin Zoning Board of Adjustment
Our File: PFRZ0036.01
September 2, 2020
Page 6 of 7

13. The drainage report should be revised to include routing calculations for the 2-yr, 10-yr and 100-yr storm event through the proposed infiltration basin to determine the maximum water elevation in the basin.
14. The Applicant's engineer conducted required testing to demonstrate that the seasonal high water table is 2 ft. below the bottom of the sand layer. However, the permanent water elevation of the adjacent wet pond is located 0.25 feet below the bottom of the sand layer. It is expected that the seasonal high water elevation in the surrounding vicinity of the wet pond will raise to the permanent water elevation, making the infiltration basin non-compliant. Applicant's engineer should further review this issue.
15. As required by N.J.A.C. 7:8-5.4(a).iv, the design engineer shall assess groundwater mounding impacts as to avoid adverse hydraulic impacts, exacerbating the seasonal high water table and causing ponding, flooding of basements, or interference with the operation of a subsurface sewage disposal system or reducing the permeability rate. The mounding analysis assumes that the bottom of the infiltration basin is 2.06 ft. above the seasonal high water table but due to the permanent water elevation in the wet pond the bottom of the infiltration basin will be only 0.25 ft. above the water table. Revise the mounding analysis accordingly.
16. Section A-A of the Wet Basin/Infiltration Basin in sheet 11 should be revised to show the maximum water elevation for the water quality, 2-yr, 10-yr, 100-yr and emergency conditions for the infiltration basins.
17. The drainage report should be revised to include calculations to determine the detention time achieved by the proposed wet pond for the water quality storm.
18. The trash rack detail provided on sheet 12 should be revised to have the height of the rack consistent with information provided in the outlet control structure OCS#17 detail.
19. The emergency spillway detail provided on sheet 12 should be revised to include the correct maximum water surface elevation in the emergency spillway and the freeboard provided for the infiltration basin.
20. The Major Development Stormwater Summary (Attachment D of the Tier A MS4 NJPDES Permit) should be revised to include the existing extended detention basin.
21. Stormwater Maintenance Agreement for the stormwater system should be provided to insure future maintenance. A sample agreement is available from the Engineering Department.
22. The Stormwater Maintenance Manual (SMM) should be revised as follows:
 - a. The SMM should be revised to include basic design information for the proposed infiltration basin such as design subsoil permeability rate, design detention time, design drain time, elevation of the seasonal high water table, elevation of the bottom of the basin, the TSS removal rate achieved by the basin and a summary of the rainfall depth, runoff volume, peak outflow rate, and water surface elevation for the water quality, 2-yr, 10-yr, 100-yr and emergency spillway storm events. The SMM should also include the size, type (orifice, weir, spillway, etc.) and invert elevation for each outlet provided.
 - b. The SMM should be revised to include basic design information for the modified existing detention basin such as design detention time, design drain time, elevation of the seasonal high water table, elevation of the bottom of the basin, the TSS removal rate achieved by the basin and a summary of the rainfall depth, runoff volume, peak outflow rate, and water surface elevation for the water



Memo to Franklin Zoning Board of Adjustment
Our File: PFRZ0036.01
September 2, 2020
Page 7 of 7

quality, 2-yr, 10-yr, 100-yr and emergency spillway storm events. The SMM should also include the size, type (orifice, weir, spillway, etc.) and invert elevation for outlet structure.

23. Proposed F.E.S. structures 2A & 9A should be converted to inlets.

H. MISCELLANEOUS

1. Revise/Add the following details based on Franklin Township standard details:

- a. The applicant has supplied a Paver Sidewalk Detail and an alternate Concrete Sidewalk Detail. A note should be added to both details indicating that a maximum cross slope of 2%;
- b. Provide a Hot Mix Asphalt Emergency Driveway Access Detail;
- c. Typical Conduit Outlet Protection detail, to be utilized, in conjunction with the Conduit Outlet Protection table shown on sheet no. 12;
- d. All sanitary sewer details shall be submitted directly to the Franklin Township Sewerage Authority for review and approval, as required.

The Applicant is required to obtain either approvals or letter of no interest from the following agencies:

Outside Agencies:

- Delaware Raritan Canal Commission
- Somerset County Planning Board
- Somerset-Union Soil Conservation District
- New Jersey Department of Environmental Protection

Township Departments:

- Franklin Township Water Department
- Franklin Township Fire Department
- Franklin Township Police Department
- Franklin Township Health Department
- Franklin Township Sewerage Authority

The Engineering Department reserves the right to make additional comments based upon the submission of revised plans or testimony presented to the Board.

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

RJR/DM

cc: Zoning Board Secretary