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MEMO TO: Township of Franklin
Planning Board

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

DATE: February 23, 2022

RE: **Harbor Group
Preliminary & Final Major Site Plan
Report #1
Engineering
Block 528.04, Lots 19.31 & 19.32
110-120 & 130 Belmont Drive
Franklin, New Jersey
Our File: PFRP0528.02/600.01
Application # PLN-21-00020**

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

- Preliminary and Final Site Plan, as prepared by Dynamic Engineering, dated October 7, 2021, with a latest revision date of January 18, 2022;
- ALTA/NSPS Land Title Survey, as prepared by Stires Associates, P.A., dated June 3, 2021, with no revisions;
- Minor Subdivision Plat, as prepared by American National, dated June 3, 2021, with no revisions;
- Architectural Plan, as prepared by John Saracco Architect, LLC, dated November 10, 2021, with a latest revision date of December 6, 2021;
- Stormwater Management Analysis, as prepared by Dynamic Engineering, dated October 2021, with no revisions;
- Environmental Impact Assessment Report, as prepared by Dynamic Engineering, dated October 2021, with no revisions;
- Traffic Impact Study, as prepared by Dynamic Traffic, dated October 6, 2021, with no revisions;
- Application Forms.

The following comments are offered with regard to same:

A. PROJECT OVERVIEW

The site is located along the western side of Belmont Drive, approximately 150' north of its intersection with Ethel Street. The property is approximately 12.86 acres and the applicant is proposing to subdivide the property into Proposed Lot 19.31 (5.022 acres) and Proposed Lot 19.32 (7.837 acres). The site currently 110 Belmont (1-story office; 50,299 sf building), 120 Belmont Drive (1-story office; 60,134 sf building) both to be removed and 130 Belmont Drive (1-story office; 50,262 sf building) to remain. The applicant is proposing to install a 151,756 SF warehouse building in place of the two (2) offices to be demolished. 202 Parking spaces are proposed for the existing building and 117 spaces and 31 loading dock spaces are proposed for the proposed warehouse. The applicant is proposing the following site improvements including but not limited to hot mix asphalt parking lots, concrete curb, sidewalk, utilities, 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.



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B. GENERAL SITE IMPROVEMENTS

1. Official street addresses 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 Tax Maps and 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 §112-104.A, the length of the loading berth shall be at least 48 feet or shall be a length such that the horizontal distance from the front of a dock for back-in parking to the limiting boundary of the loading and unloading area shall not be less than twice the overall length of the longest vehicle expected to use the facility. The applicant's engineer indicated a Tractor Trailer WB-67, which has a length of 73.5 feet, is proposed for use at the facility; therefore, the length of the loading berth shall be 147 feet. The applicant is proposing a length of 130 feet; the applicant is requesting a variance.
6. 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.
7. 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 B-I zone. The applicant is requesting a variance and proposing 25-foot wide driveway aisles.
8. A variance is required for the minimum lot frontage. A minimum lot frontage of 150' is required in the B-I zone; the applicant is proposing a lot frontage of 50' for proposed lot 19.32.
9. A variance is required for maximum impervious coverage. A maximum percentage of impervious coverage of 60% is allowable in the B-I zone; the applicant is proposing 66.2% (144,896 sf) of coverage on proposed lot 19.31 and 88.0% (300,513 sf) on proposed lots 19.32, respectively.
10. Should the Board act favorably on the application, the applicant shall need to obtain new lot numbers from the Engineering Department. Subdivision deeds, with metes & bounds descriptions, shall be provided for review and approval *prior* to filing with Somerset County Clerk's Office.
11. In accordance with Ordinance §112 – Schedule 4, 202 parking spaces are required for the existing building (proposed lot 19.31) and 92 are required for the proposed warehouse (proposed lot 19.32); the applicant's engineer indicated that 319 parking spaces are proposed on sheet no. 4. Our review of the plans reveals that there are 202 parking spaces on proposed lot 19.31, and 117 parking spaces on proposed lot 19.32, respectively. The parking demand for each proposed lot has been met.
12. Based on the 202 total parking spaces, seven (7) barrier free parking stalls are required for proposed lot 19.31, two (2) of which are required to be van accessible. The applicant is proposing seven (7) barrier free parking stalls, two (2) of which are van accessible spaces. Based on 117 total parking spaces, five (5) barrier parking stalls, one (1) of which is van accessible space are required. The applicant is proposing five (5) barrier free spaces, two (2) of which are van accessible spaces; therefore, the ADA parking demand is met for the project.
13. 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.



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14. In accordance with Ordinance §112-192.D.20, the applicant should indicate methods and placement of solid waste disposal and storage facilities. A 10' x 20' dumpster enclosure area is proposed for lot 19.31. No dumpster enclosure area is proposed for lot 19.32. Testimony should be provided.
15. No Truck signage should be added in the southwest corner of proposed lot 19.32.
16. Should the Board act favorably on this application, our office recommends that the Board impose a condition of approval that the site plan be revised to provide a construction phasing plan, for review by Township Staff. The construction staging plan should demonstrate sufficient parking in each phase for the existing building to remain.
17. Per the recently passed and signed S-3223 (P.L. 2021, c. 171), a minimum of four percent of the total parking spaces shall be Make-Ready parking spaces, at least five percent of which shall be accessible for people with disabilities, if there will be more than 150 off-street parking spaces. Applicant shall discuss compliance with this regulation and the site plan should be revised accordingly.

Please note, a parking space prepared with EVSE or Make-Ready equipment shall count as two (2) parking spaces for the purposes of complying with a minimum parking space requirement. This shall result in a reduction of no more than 10 percent of the total required parking.

18. Revise the site plan to show the proposed bearing and distances on all site plan sheets.
19. There are numerous existing easements located shown on the Title Survey that are not shown on the Site Plan. The site plan should clearly show all existing easements and identify any existing easement which should be abandoned, as part of this site plan application. For example, there are buried cable easements along the property line to public service electric and gas, and New Jersey bell telephone co. that services 110 Belmont Drive which will be demolished.
20. The applicant shall install either concrete bumper stops or signs mounted in steel bollards to protect the ADA accessible signs and prevent vehicles from entering the flush curb/ sidewalk. The construction details show both finishes so the design intent is unclear.
21. Detectable warning surfaces are proposed in the ADA Parallel Curb Ramp detail. Detectable warning surfaces are not shown on the site plan. Clarification/coordination is required.
22. Add a 'Stop' sign and pavement marking at the existing driveway for 130 Belmont Drive.
23. Vehicle Circulation Plan (WB-67) sheet no. 22 shows that a WB-67 vehicle cannot access the site while traveling southbound along Belmont Avenue unless it crosses completely over the exit lane of the driveway. This is not acceptable and should be further reviewed by the design engineer.
24. This office recommends shifting southern curblin of proposed lot 19.32 driveway off of the proposed subdivision line or proposed lot 19.31 provide an easement for same. As proposed it is possible that the curblin may be installed on both lots.
25. This office recommends shifting the proposed sidewalk along Belmont Avenue east, as the edge of sidewalk is proposed on the right-of-way line. As proposed it is possible that the sidewalk may be installed both onsite and within the public right-of-way.

C. GRADING AND UTILITY COMMENTS

1. One tap will be permitted on the water main located along Belmont Avenue, for each proposed lot respectively. A meter pit will be required for each lot (located in a non-vehicular traffic area). The proposed connection from the existing main should feed through the meter pipe. All piping through the meter pit should be ductile iron pipe. A tee should be installed downstream of the meter pit, splitting the domestic and fire water line, including a valve right after the tee for each water service.



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2. Provide a water meter pit detail to comply with Township Standards.
3. If existing building water meter pit needs to be upgraded, repaired and meter replaced, it shall be done as part of the application. The existing water meter pit is delineated on the Minor Subdivision Plat and Title Survey; however same is not shown on the site plan. Same should be delineated on the utility plan.
4. A utility easement is required for the proposed sanitary sewer lateral from proposed lot 19.32 that discharges into the existing sanitary sewer line located on proposed lot 19.31. Provide deeds with metes and bounds descriptions for the proposed utility easement for review and approval prior to filing with the Somerset County Clerk's Office.
5. The demolition plan indicates that an underground fuel tank that services 110 Belmont Drive will be removed. The removal shall be performed in accordance with all Local, State and Federal codes and regulations.
6. The applicant should address the following general grading comments:
 - The applicant is proposing parallel ADA accessible ramps for proposed lot 19.31; provide additional spot elevations within the parking lot ADA accessible parking spaces to demonstrate the proposed running and cross slopes in this area do not exceed 2%, respectively;
 - Provide spot elevations within the concrete walkways to demonstrate ADA compliance for the requested parallel ramps. Spot elevations should delineate the proposed ramp slope and ADA compliant landings (maximum cross and running slopes of 2%, respectively);
 - Provide top and bottom of curb elevations at all curb pc's and pt's, curb islands, 90 degree bends and high/low points;
 - The applicant should provide the existing curb and pavement tie-in elevations the two (2) northern most driveways at their intersection with Belmont Avenue;
 - There are two (2) separate proposed 74' contours in the southwest of the proposed lot 19.31 near proposed type 'B' inlet #31;
 - A maximum slope of 1:3 is permitted. The applicant is transitioning the slopes exceeding 1:3 at the ends of the proposed walls on proposed lot 19.31;
 - A minimum of 0.50% slope is required in all paving areas:
 - There is less than 0.50% slope between proposed doghouse type 'B' Inlet #35, grate elevation 72.00 and the flush curb corner at elevation 72.00;
 - The grate elevation for type 'B' inlet #22 appears to need to be lowered in order to maintain the minimum 0.50% slope;
 - The applicant's engineer should note the elevations along the ridge lines that travel east to west demonstrating sufficient pitch to the proposed inlets in the concrete of the truck dock pad.

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

E. LANDSCAPING AND LIGHTING COMMENTS

1. Applicant provided tree replacement calculations to satisfy the requirements of Ordinance §222- Trees. This office defers to the Township Planner as to the adequacy of the tree replacement plan.
2. In accordance with Ordinance §112-33.6.B, there should be an emphasis on providing a portion of the required landing required in Schedule 6 (i.e., 1 tree/ 2,000 square feet of pavement) within the interior of the site plan in the form of landscape islands – i.e., this requirement should not be met solely by placing trees around the perimeter of the site. We recommend the applicant's engineer revise the plan to attempt to meet this requirement to the maximum extent feasible. The applicant's engineer has not provided a calculation demonstrating compliance with this requirement of the ordinance.
3. The center island within the parking lot for proposed 19.31 has two (2) single fixture light poles proposed. The lighting pattern seems to indicate that double headed light fixtures are proposed on the light poles. The applicant's engineer should clarify.



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F. ENVIRONMENTAL IMPACT COMMENTS

1. EIS should be updated to include the following documents in the appendix:
 - a. A copy of the Existing Conditions plan;
 - b. A copy of the overall proposed conditions plan.

G. STORM WATER MANAGEMENT

1. The reference project has been reviewed in accordance with the Stormwater Management Rules NJAC 7:8 as amended March 2, 2020.
2. The property in question is located within the Delaware and Raritan Canal Commission Review zone and is subject to DRCC regulations. A copy of the DRCC approval, or letter of no interest, must be provided to this office.
3. 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.
4. An executed Major Development Stormwater Summary (Attachment D of the Tier A MS4 NJPDES Permit) shall be submitted to this office for review and approval.
5. Provide a Stormwater Maintenance Agreement for the stormwater system to ensure future maintenance. A sample agreement is available from the Engineering Department.
6. Stormwater calculations must be updated to use the current NOAA rainfall depths for the design storms (<http://hdsc.nws.noaa.gov/hdsc/pfds/index.html>) that correctly reflect the project location. The stormwater calculations use a rainfall depth of 8.21 inches for the 100-year event. Current NOAA charts show a depth of 8.34 inches for this event.
7. According to the NJDEP BMP manual, there is no longer a minimum or default value that may be used for the time of concentration (Tc). Tc for pre-and post-construction conditions must be calculated based on guidance provided in NJDEP BMP Manual Chapter 5 (updated April 2021) Section 8. The calculations in the drainage report must be updated using calculated Tc's.
8. The drainage report suggests that the project meets the stormwater quantity standard since it does not increase site runoff. In accordance with NJAC 7:8-5.6.(b).1, "Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the two-, 10-, and 100-year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events". Drainage report must document no increase by providing hydrograph tables that show a point-by-point comparison of flows at each discharge point for 2yr, 10yr, and 100yr storm events.
9. According to the drainage report information, the existing impervious area is 10.31 acres, and the proposed impervious area is 10.25. The project is reducing impervious areas by 0.06 acres. Since the project will not increase impervious areas, water quality improvement requirements at NJAC 7:8-5.5 do not apply.
10. The drainage report suggests that the site meets the groundwater recharge standard since overall impervious coverage is reduced. NJDEP annual average recharge worksheets must be completed for existing and proposed conditions to document compliance or non-compliance with the recharge standard at NJAC 7:8-5.4.
11. The pipe conveyance system uses a manning's coefficient value of 0.10 for pipe roughness, and it should be revised to 0.012 as recommended by HDPE pipe manufacturers.
12. The node names in pipe conveyance calculation should be revised to match the node names on the Drainage plan (sheet 6 of 23).



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13. A pipe capacity analysis must be provided for the 36-inch pipe in Belmont Avenue to verify that the pipe can accept flows from the site.
14. Flow velocity exiting the site stormwater collection and entering townships stormwater system is very high (12.27 ft/sec) and must be reduced to a non-corrosive velocity (less than 8 ft/sec).
15. Provide a cleanout or drainage structure for all roof leader drains.
16. Add another type 'B' opposite proposed type 'B' inlet #27 to prevent a majority of the driveway drainage from sheet flowing onto Belmont Avenue.

H. MISCELLANEOUS

1. Revise/Add the following details based on Franklin Township standard details:
 - a. Add the following note on all of the detail sheets, "In case of discrepancy, Township Standard Details shall hold";
 - b. Revise the water meter pit to conform to the Township Standard Detail;
 - c. Add expansion joints along both edges on the concrete walk on "Curb and Walk Detail at Building";
 - d. Revise the Storm Manhole Frame Detail to note, 'Township of Franklin';
 - e. Review the Depressed Curb & Concrete Apron at Driveway Detail, the maximum cross slope of 2% appears to be labeled in the incorrect location;
 - f. All site concrete shall be 4,500 psi;
 - g. 'No Truck' signage;
 - h. All sanitary sewer details shall be submitted directly to the Franklin Township Sewerage Authority for review and approval – Comment Only

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

Township Departments:

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

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: Planning Board Secretary