

April 7, 2022

Mr. Gregory Rondeau, Chairman Town of Franklin Planning Board 355 East Central Street Franklin, MA 02038

Re: 120 Constitution Blvd Site Plan Peer Review

Dear Mr. Padula:

BETA Group, Inc. has reviewed the 3rd set of revised documents for the project located at 120 Constitution Blvd. in Franklin, Massachusetts. This letter is provided to outline findings, comments, and recommendations.

BASIS OF REVIEW

The following revised documents were received by BETA and will form the basis of the review:

- Plans (10 sheets) entitled: *Site Plan for Parking Lot Expansion* dated August 20, 2021, revised April 06,2022, prepared by Howard Stein Hudson of Chelmsford, MA.
- Supplemental Data Report entitled: *Proposed Parking Lot Expansion* dated September 2021, revise April 2022, prepared by Howard Stein Hudson, Chelmsford, MA.
- **Response to Comments** memorandum from Kristen LaBrie-Howard Stein Hudson to Franklin Planning Board, dated April 06, 2022

Review by BETA will include the above items along with the following, as applicable:

- Zoning Chapter 185 From the Code of the Town of Franklin, current through July 2021
- Zoning Map of the Town of Franklin, Massachusetts, attested to October 7, 2020
- Stormwater Management Chapter 153 From the Code of the Town of Franklin, Adopted May 2, 2007
- Subdivision Regulations Chapter 300 From the Code of the Town of Franklin, current through March 8, 2021
- Wetlands Protection Chapter 181 From the Code of the Town of Franklin, dated August 20, 1997
- Town of Franklin Best Development Practices Guidebook, dated September 2016

INTRODUCTION

The project site includes a 3.25± acre parcel (#319-016) located at 120 Constitution Blvd in the Town of Franklin (the "Site"). The Site and surrounding lots are located within the Industrial zoning district.

The existing Site is the location of a 29,886 +/- sq. ft., one-story industrial building. Associated parking areas and driveways are located along the western side of the building. Access is provided via Constitution Blvd at the southwest corner of the Site. Additional existing site features include landscaping, lighting, signage, walkways, and utilities (water, sewer, gas, electric). Stormwater management for the existing parking area is provided via an on-site closed drainage system consisting of catch basins, which discharge

BETA GROUP, INC. www.BETA-Inc.com Mr. Gregory Rondeau, Chairman April 7, 2022 Page 2 of 11

to a 12" RCP pipe to the southwest into an existing 36" RCP located in an existing 30' wide utility easement that straddles the westerly property line. An additional closed drainage system is located around the north, east, and south sides of the building, which primarily carries roof and pervious area drainage which connects with a 36" culvert in an easement along the west edge of the site at an unknown location. Each of these outfalls from the site drain to the same 36" culvert which then flows west along Constitution Road to an unspecified location.

Topography at the Site is generally directed to the west. The eastern side of the Site is sloped with a height of 15' +/-. No wetland resource areas are known to be in the vicinity of the Site. The Site is not located within a FEMA mapped 100-year floodplain, a wellhead protection area, an NHESP-mapped estimated habitat of rare or endangered species, or any other critical area. NRCS soil maps indicate the presence of Woodbridge Fine Sandy Loam with a Hydrologic Soil Group (HSG) rating of C/D (very low infiltration potential).

The project proposes to construct an additional parking area on the southern side of the Site with 21 new spaces. The parking lot will be placed on fill to raise the elevation sufficiently to allow a subsurface infiltration structure and allow a subsurface chamber system to act as a detention basin. The far northerly edge of the parking lot will also be modified to provide an additional 9 parking spaces. As noted, stormwater management is proposed via 2 subsurface chamber systems located in the new parking lot south of the building. The existing drainage system will also be equipped with a water quality unit. Additional site modifications include a retaining wall, tree clearing, tree plantings, area lighting, and landscaping.

FINDINGS, COMMENTS, AND RECOMMENDATIONS

The site plan has changed from the previous filing enough that the comments to be presented will be new comments rather than a response to the revisions. The response form Howard Stein Hudson to each of the comments will be presented in *italics* directly below the comment with a **BETA** response.

GENERAL

G1. Provide the bearing and distances of the property line along Constitution Boulevard and the building setback measurements from the property line.

HSH: Bearing and distances have been added to the front property line and building setback measurements have been added to the layout and material plan. BETA: Comment addressed

G2. Revise wall detail to depict a railing or fence for fall protection where the wall heights exceed 30" below the parking area.

HSH: A guardrail has been added on the parking lot side of the wall, approximately 2 feet in front of the wall, and along the north edge of the parking lot. BETA: Comment Addressed

G3. The existing curbing around the pavement is Cape Cod berm. Normally the Board prefers to see vertical curbing along the edge of pavement on commercial and industrial sites.

HSH: The existing site is cape cod berm, in those areas for continuity cape cod berm will remain. The curbing around the new parking lot is proposed to be vertical granite, as depicted on the plan.

BETA: BETA will defer this issue to the Board



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G4. There are 2-4" PVC discharges emanating from the building. One is the sewer connection which comes from the south side of the building and flows southwest to a sewer manhole inside the utility easement along the west edge of the parcel. The second is near the midpoint of the building at the northerly edge which flows into a drain manhole. Confirm that the floor drains are not connected to the 4" PVC discharge along the north side of the building. Flow from a floor drain is not allowed in a stormwater collection system.

HSH: We do not have the original design of this site and are unaware of the original design intent. We assume the 4 and 12" RCP that discharge to the manhole in the north are part of the roof drain system. These items shall be confirmed during construction. If what is found in the field differs from our assumptions, HSH will inform the Engineering department of our findings and determine course of action.

BETA: The possibility that the floor drain system connects into the stormwater system remains an issue. If the plan is approved, BETA recommends that the Board condition the issuance of the Certificate of Compliance upon the determination that the floor drain connection is investigated and if found to be connected to the stormwater system, that it be connected to the sewer system as required by the plumbing code.

ZONING

The Site is located within the Industrial (I) Zoning District. The proposed Site will retain the existing use as a Factory building.

SCHEDULE OF LOT, AREA, FRONTAGE, YARD AND HEIGHT REQUIREMENTS (§185 ATTACHMENT 9)

The Site meets the requirements for lot area, depth, frontage, width; front, side, and rear yards; impervious coverage and building height. No modifications are proposed to the building.

SCH1. Provide the Zoning Summary table located in the Supplemental Data Report on the plans.

HSH: Zoning table from the Supplemental Data report has been added to the Cover sheet of the plan set.

BETA: The Zoning Table is not on the sheet as noted. Comment remains

PARKING, LOADING AND DRIVEWAY REQUIREMENTS (§185-21)

Access to the Site is proposed via a 24' +/- wide driveway connected to Constitution Blvd. The driveway connects to an existing parking lot with 22 spaces. North of the parking lot is a paved area which is unstriped except for 2 loading dock spaces.

The proposed Site design includes a new parking area located south of the building which will connect to the existing driveway. The project will increase the number of spaces on site from 22 to 50. This will include 21 new spaces south of the building, 9 new spaces at the northwest corner of the building and restriping the existing parking area and adjusting curbing to provide access to the new parking area. Three existing parking spaces will be lost as part of the redevelopment and the total post-development number of parking spaces is 50.

Parking requirements for the Industrial Zoning District are defined by the Zoning Bylaw. For industrial buildings, 1 space is required per 400 sq. ft. of gross floor area; therefore, the total required parking is 75



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spaces. The proposed 50 parking spaces will not satisfy this requirement and the applicant has requested a waiver to allow the reduced number of spaces under the justification that the amount is adequate for the facility's needs.

Proposed parking spaces are 9' wide and 19' long, with 24' min. access aisles. Restriping of the western lot will provide 3 accessible parking spaces, 1 of which will be van accessible, meeting the required number of accessible spaces.

P1. Clarify if there are any proposed changes in use or tenants for the building. If so, the proponent should provide information to support that the proposed parking is adequate for the existing and future needs of the facility.

HSH: Proposed parking meets the needs and requirements of the building owner and tenant per out client. There is no proposed changes in tenants for the building to our best knowledge.

BETA: BETA recommends that a condition be set relative to the use for later review.

P2. BETA recommends that sidewalk access from the new parking along the south side of the building directly down to the entrance be provided.

HSH: A sidewalk and stairs have been added from the front parking lot to the door. The ADA walkway is located at the entrance of the new parking lot, using the existing sidewalk to the door.

BETA: Comment addressed

P3. Graphically, show the largest anticipated delivery truck parked at the loading dock and how much space is outside the vehicle for access to and from the northerly parking area.

HSH: HSH has verified that a WB-62 can adequately maneuver into the site and back up to the loading dock closest to the proposed parking. If a WB-62 is the size of the truck, during deliveries vehicles have approximately a 26' aisle in front of the truck to be able to access the remainder of the parking lot and exit. The parking to the north of the dock is approximately 9.5' away from the dock, and there is a staircase located between the dock and the parking area. A smaller delivery truck would create a larger driving access aisle while parked and require less room to maneuver into the loading dock. Please see "Vehicle Tracking Plan" attached here as an Appendix.

BETA: As shown if a truck is parked at the loading dock access to the rear parking area will be through the lined "No Parking" area. With only the 48' trailer at the dock, there remains a 24' wide access aisle around the trailer outside the no parking zone. The board may wish to consider this since there are no spaces beyond the loading docks currently so it is not relevant currently.

INDUSTRIAL DISTRICT PERFORMANCE CONTROLS (§185-22)

The project is in the Industrial District and must conform to this section. The proposed scope of work is not anticipated to create any disturbances (sound, noise, vibration, odor, or flashing) that are not present in the existing Site.



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SIDEWALKS (§185-28)

An existing 5' wide sidewalk is present along Constitution Blvd. No connection is provided to this sidewalk and no new sidewalks or walkways are proposed under this project.

SI1. The detail for the access ramp shows vertical granite curbing. The plan view should also identify the granite curbing.

HSH: The detail has been updated to be concrete curb. The existing curbing is integrated concrete curbing, as this is a modification to an existing site the designs intent is to reuse and preserve as many aspects of the site as possible, while expanding the parking available on site.

BETA: Detail has been revised and the curbing is now labeled on the site plan (Sheet 3) also. Comment addressed

CURBING (§185-29)

The project proposes vertical granite curbing along the perimeter of the proposed parking area. Existing curbing is asphalt berm, with vertical granite curb at the driveway entrance.

SITE PLAN AND DESIGN REVIEW (§185-31)

The project has been submitted for Site Plan Review and is required to conform to the requirements of this section.

SP1. Indicate abutting land uses and zoning data on the locus or vicinity map (§185-31.1.C(3)(d)).

HSH: A vicinity map with zoning data has been attached to the end of this letter. This from the town's GIS system. The property lies within a planned industrial subdivision and is surrounded by such.

BETA: There are multiple uses allowed within the Industrial Zone. It is BETA's opinion that the use description should be more specific (i.e. Manufacturing, office-warehouse, distribution...). It should also be shown on the plan rather than an attachment.

SP2. Indicate proposed snow storage areas (§185-31.1.C(3)(i)).

HSH: Proposed snow storage locations have been added to the layout and materials plans as well as a note regarding snow removal for larger storms.

BETA: Snow storage areas are now shown on sheet 3. All areas are acceptable as snow melt from these areas will flow through the stormwater treatment train as proposed. Comment Addressed

SCREENING (§185-35)

The project proposes outdoor parking for 10 or more cars which must be screened in accordance with this section; however, no residential uses or districts are located nearby from which the Site would need to be screened.

UTILITIES

The project proposes to retain existing utilities. No water, sanitary sewer, gas, or electric services are proposed.



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STORMWATER MANAGEMENT

The project proposes the use of several treatment options to meet the standards, they include

- Subsurface infiltration structure in the proposed pavement area along the southerly edge of the building that will infiltrate runoff collected by 2 new catch basins.
- A lined subsurface chamber field that will act as a detention basin for runoff collected by 2 catch basins in the front parking area south of the building.
- A new water quality unit on the 12" RCP outlet from the catch basins in the pavement area west of the building.

GENERAL

SW1. The existing area drain at the southwest corner of the building adjacent to the entrance sidewalk will not collect any runoff if the rim is raised to elevation 80.5. The new parking lot has made this basin redundant, and BETA recommends that it either be removed or repurposed.

HSH: Area drain has been removed and area added to SC3 in revised plans and HydroCAD. Pipe configuration has been revised as well, see response to SW3.

BETA: Comment addressed

SW2. The invert elevations and bottom of structure elevations on the existing catch basins indicate that there is no deep sump on any of the existing catch basins. The catch basins in the parking lot should be cleaned and inspected to determine the depth of the sump. If there are no sumps then discuss what other measures will be used to replicate the 25% TSS removal provided by the catch basins.

HSH: Existing catch basins in parking lot will be replaced with CDS treatment inlet units. These units will remove 80% TSS removal. The treatment train in the supplemental data report and water quality treatment calculations have been updated.

BETA: Comment addressed

SW3. The outlets from the 2 subsurface structures in the proposed front parking area connect into the same drain manhole as the catch basins in the existing parking lot. This connection will be the 5th connection into this structure, which is normally not a normal practice for a 4' diameter structure. BETA recommends that this connection be provided down gradient of the proposed water quality unit. This flow has already been through a treatment train that provides the required 80% TSS removal. Forcing this flow through the water quality unit will only minimize the efficiency of the unit based upon the increased flow.

HSH: The plans have been revised to replace the 4' structure with a 6' structure. There are currently 5 connections to the manhole. We are removing the area drain connection and replacing it with a 12" RCP from DMH-6. The CDS water quality unit has been removed from this location and replaced with two inlet CDS units at the locations of the existing catch basins. The treatment train calculations have been updated in the supplemental data report.



BETA: the manhole will be replaced, and water quality inlets have been added in lieu of the previous in line unit. Comment addressed

SW4. Correct the label for DMH-6 on Sheet 4. The first invert is from DMH 5 not 3.

HSH: Label has been corrected.

BETA: Comment addressed

SW5. The inverts at the DMH north of the middle of the structure appear incorrect. In addition, the catch basin east of the manhole has 4 inlets and no apparent outlets. Please review each of these structures and explain how this system works. Based upon the calculations, the outlet from CB-7 by passes the manhole and flows directly to CB-8. If this is true provide a detail as to the piping alignment in this area.

HSH: The site was surveyed, and this is the information that was provided to us from what was able to be observed. This is an existing and currently used site, confirmatory excavation was not possible at time of survey. We do not have the original design of this site and are unaware of the original design intent. There are no current drainage issues on site that we have been made aware of, and so we must assume that the pipe system to the north is working. We are not proposing any change to this system and are not proposing new structures to be added to that network. These items shall be confirmed during construction. If what is found in the field differs from our assumptions, HSH will inform the Engineering department of our findings and determine course of action.

BETA: BETA recommends that a condition be set that this will be confirmed prior to issuance of the Certificate of Compliance.

SW6. Provide calculations to demonstrate that the project complies with the Town's recently revised Stormwater Bylaw (i.e. retaining one inch of runoff from new development areas), which has been attached for reference.

HSH: This calculation is provided in the Supplemental Data Report on Sheet 6, under the title of MS4 Requirement.

BETA:

MASSACHUSETTS STORMWATER MANAGEMENT STANDARDS:

The proposed development will disturb less than one acre, however, it is part of a larger common plan of development that has/will ultimately disturb greater than one acre of land; therefore, the project is subject to Chapter 153: Stormwater Management of the Town of Franklin Bylaws. Compliance with the MassDEP Stormwater Management Standards is outlined in the following sections.

No untreated stormwater (Standard Number 1): *No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.*

The project does not propose any new untreated stormwater discharges to wetlands – **complies with standard.**



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Post-development peak discharge rates (Standard Number 2): Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates.

The project proposes an increase in in overall impervious area via an expanded parking lot. Runoff from this area is directed to pervious pavement for infiltration. The provided calculations indicate a decrease in post-development peak discharge rates and total runoff volumes compared to pre-development conditions.

SW7. Revise time of concentration used for watershed SC4 to 6 minutes.

HSH: SC4 has been eliminated and included into SC3 in the post-construction calculations.

BETA: Comment resolved

SW8. Review impervious area used for post development watersheds SC5 and SC6. The retaining wall must also be modelled as impervious.

HSH: The retaining wall was modeled as impervious; it is the 89 sf listed as "paved parking" with a CN of 98 in SC5. SC6 remains the same in the pre and post with no impervious located in the area.

BETA: Comment resolved

SW9. Clarify pipe routing of northern drain network. It is unclear from the base plan if this network will be conveyed to or bypass DMH-1. Specifically, the connection from CB-8 to the 36" culvert in the easement along the west edge of the site should be found.

HSH: The assumption included in the plan set is that the 24" RCP from CB8 ties into the 36" RCP through the DMH in the easement along the west edge of the site. The site was surveyed, and this is the information that was provided to us from historic plans and what was able to be observed. This is an existing and currently used site confirmatory excavation was not possible at time of survey. These items, as noted on the plan, shall be confirmed during construction. If what is found in the field differs from our assumptions, HSH will inform the Engineering department of our findings and determine course of action.

BETA: BETA recommends that a condition be set that this will be confirmed prior to issuance of the Certificate of Compliance.

Recharge to groundwater (Standard Number 3): Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to maximum extent practicable.

NRCS soil maps indicate the presence of Woodbridge Fine Sandy Loam with a Hydrologic Soil Group (HSG) rating of C/D (very low infiltration potential). Four test pits were conducted within the limits of proposed work and indicate the presence of sandy loam. A corresponding exfiltration rate of 1.02 in/hr, associated with soils in HSG B, has been used in the recharge calculations.

SW9A. In accordance with Volume 3, Chapter 1 of the stormwater standards, a minimum of 65% of the impervious surfaces on must be routed through an infiltration structure. The supplemental calculations indicate that it is not being designed as a Redevelopment. In addition, the roof area



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is not included in the analysis and should be included in the calculations and a determination of the required recharge volume.

HSH: Standard 3 states: "The annual recharge from the post-development site should approximate the annual recharge from the pre-development or existing site conditions, based on soil types." This would mean the "pre-development" annual recharge would come from the existing pervious areas. In the post-construction, in order to match the pre-construction annual recharge our calculation would be the amount of pervious we are converting to impervious multiplied by 0.35 inches (for B soil types). This calculation will remain the same if we include the roof or not, as the roof area is not changing and does not contribute to the increase of impervious area. We do not meet the requirement of 65% of impervious going to an infiltration BMP, however we still meet the adjusted required recharge of 715 CF, providing 1,832 CF of total recharge volume to the site. This is an overall improvement as there is currently no infiltration on site for impervious area. Due to existing site elevations, features and groundwater elevation, this amount of recharge is the maximum extent practicable.

BETA: There is no exemption from this standard which requires that a minimum of 65% of the impervious surfaces discharge to an infiltration structure. BETA agrees that the Maximum Extent Possible standard will apply to the existing impervious surfaces, however, the proposed impervious surfaces are not exempt. If necessary, you can route existing impervious surfaces to an infiltration structure to make up the difference. Regardless, you must meet this requirement for the increase in the impervious surfaces to comply with the standard. The elimination of the in-line water quality unit eliminates the need to include the roof area in the calculations since it will not impact any of the standards.

80% TSS Removal (Standard Number 4): For new development, stormwater management systems must be designed to remove 80% of the annual load of Total Suspended Solids.

The project proposes two treatment trains for the expanded parking area. Treatment train 1 will direct runoff through pervious pavement. Treatment train 2 will direct runoff through catch basins and a water quality unit. These treatment trains are anticipated to provide the required TSS removal and water quality volume.

SW10. Provide long term pollution prevention plan, addressing the items identified on Volume 1, Chapter 1, Page 9 of the MA Stormwater Handbook.

HSH: Long term pollution prevention plan has been included in Appendix A of the Supplemental Data Report.

BETA: Comment addressed

SW11. Since the Water quality Unit is in line, in accordance with the standards, provide manufacturers analysis of the TSS removal capacity of the Unit

HSH: The CDS TSS Removal Study Brief has been included in Appendix A of the Supplemental Data Report.

BETA: In line unit has been eliminated comment no longer applicable.

Higher Potential Pollutant Loads (Standard Number 5): *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads require the use of specific stormwater management BMPs.*



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The project is not a Land Use with Higher Potential Pollutant Load (LUHPPL).

Critical Areas (Standard Number 6): Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.

The project does not propose discharges to critical areas.

Redevelopment (Standard Number 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.*

SW12. Revise project narrative to indicate that the project is a mix of new development and redevelopment. BETA notes the proposed expanded parking area must fully comply with all standards. Identify the additional pavement area along the north edge of the existing parking area so it can be determined if the proposed infiltration structure will accept runoff from a sufficient area to meet Standard 3.

HSH: This project is not considered a redevelopment as the post-construction total impervious is greater than the pre-development conditions by 9,329 sf through entire site (including the pavement for the northern parking lot). We do not meet the requirement of 65% of impervious going to an infiltration BMP, however we still meet the adjusted required recharge of 715 CF, providing 1,832 CF of total recharge volume to the site. This is an overall improvement as there is currently no infiltration on site for impervious area. Due to existing site elevations, features and groundwater elevation, this amount of recharge is the maximum extent practicable.

BETA: The site is a mix of new development and redevelopment as defined in the standards. Only under the redevelopment guideline would you be able to utilize the Maximum Extent Possible definition for both Standards 3 & 4. Accordingly, modify the project description as noted and submit a redevelopment checklist. It is important to note also that the roof runoff is part of your water quality volume so treatment of this runoff would be required for new construction.

Construction Period Erosion and Sediment Controls (Standard Number 8): *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.*

The project will disturb less than one acre of land; therefore, a Notice of Intent with EPA and a Stormwater Pollution Prevention Plan (SWPPP) are not required. The project proposes the use of erosion control barrier (straw wattle), catch basin inlet protection, and stabilized construction entrance.

SW13. Revise erosion control narrative (Appendix B) bullet #9: hay bales and filter fabric are not permitted for use in the Town of Franklin.

HSH: The verbiage has been updated to "straw wattles" to match the plans and details

BETA: Comment addressed

Operations/maintenance plan (Standard Number 9): A Long-Term Operation and Maintenance Plan shall be developed and implemented to ensure that stormwater management systems function as designed.

A Long-Term Operation and Maintenance (O&M) Plan has been provided.

SW14. Per the MA Stormwater Handbook, provide the following:

a. Party or parties responsible for maintenance. HSH: Verbiage has been revised from "system owner" to "system owner responsible"



for maintenance"

b. Estimated operations and maintenance budget.

HSH: Operations and Maintenance budget has been added to each item in Appendix A.

BETA: Comments addressed

SW15. Provide inspection and maintenance procedures for deep-sump catch basins.

HSH: This is provided in appendix A, first item is maintenance for Deep Sump Hooded Catch Basins.

BETA: Comment addressed

SW16. Attach manufacturer's maintenance guidance for the water quality unit to the plan.

Illicit Discharges (Standard Number 10): All illicit discharges to the stormwater management systems are prohibited.

No Illicit Discharge Compliance Statement has included in the Stormwater Management Report.

SW17. Provide signed illicit discharge compliance statement.

HSH: We are currently working with our client to get owner to provide signed illicit discharge statement. This will be submitted prior to construction.

BETA: If acceptable to the Board, BETA recommends that this be set as a condition of approval. If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours, BETA Group, Inc.

Gary D. James, PE Senior Project Manager

cc: Amy Love, Planner



Town of Franklin

355 East Central Street Franklin, Massachusetts 02038-1352



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DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

MEMORANDUM

DATE: April 6, 2022 TO: Franklin Planning Board

FROM: Department of Planning and Community Development

RE: 120 Constitution Blvd Site Plan Modification

The DPCD has reviewed the above referenced Site Plan application for the Monday, April 11, 2022 Planning Board meeting and offers the following commentary:

General:

- 1. The site is located at 120 Constitution Blvd in the Industrial Zoning District (Assessors Map 319 Lot 016).
- 2. The applicant is proposing to increase the parking area from 23 spaces to 50 spaces.
- 3. The Applicant has requested a parking waiver, as 75 parking spaces are required.
- 4. The Applicant is not required to file with the Conservation Commission.

Comments:

- *1.* The existing curbing is shown as Cape Cod berm, and the new curbing proposed is vertical granite curbing.
- 2. Applicant has provided a landscape plan.
- 3. Applicant should show where the snow storage will be located. Provided on Plan
- *4.* Will there be any additional sidewalks within the parking area leading to the front door? *Applicant has added steps up to the sidewalk.*
- 5. DPCD defers to DPW/Engineering and BETA Group, Inc. to address drainage issues.



TO:	Franklin Planning Board	DATE:	April 6, 2022
FROM:	Kristen LaBrie – Howard Stein Hudson	HSH PROJECT NO .:	21123.00
SUBJECT:	120 Constitution Blvd, Site Plan Review		

Dear Mr. Chairman and Members:

Howard Stein Hudson has reviewed the comment letters from the departments below and have compiled our responses and revisions below. The original comment is reiterated, with our response in bold below.

Engineering Department Comments

1. We note that while the new parking area is called out with vertical granite curb, the existing parking area has cape cod berm. There are some proposed modifications within the existing parking area that will reconstruct section of cape cod berm to be consistent with the remain of that area.

Agreed.

2. The plan identifies several pipes with unknown connections that are called out to be confirmed prior to construction. Once determined, the actual pipe connections should be updated and identified on the as-built plans.

HSH agrees to ensure locations of unknown pipes are placed on the as-built plan.

- All proposed drain pipes should be reinforced concrete pipe. HDPE is allowed for manifolds and header connections to underground infiltration systems.
 All non-header/manifold pipes have been updated on the plans to be RCP.
- 4. While post construction runoff volumes are not to exceed pre-construction conditions, we not that there is a small increase for the post construction condition. The designer should evaluate to see if this can be accommodated by modifying the system.

The small increase in the post construction condition cannot be eliminated due to topography and groundwater constraints on site.

5. There are two proposed underground ponds, one is an infiltration basin (IB1), and the other is detention pond (DB1). While the infiltration basin has the required 2 feet of clearance between the bottom of the system and estimated high ground water, the underground detention basin is designed to sit 4 inches below estimated high ground water level and be wrapped in poly-barrier material to provide separation. I don't believe the poly-barrier material will be able to provide a water-tight separation from ground-water, given seams in the material and potential for puncture during construction.

These liners are manufactured with methods to seal the seams to be installed water tight. Further literature can be provided upon request.

114 TURNPIKE ROAD, SUITE 2C | CHELMSFORD, MASSACHUSETTS 01824 | 978.844.5250



- 6. For pond DB1, the detail indicated no stone foundation under the chambers, whereas the manufacturer's detail call out a minimum of 6" of stone below the chambers. The detail has been updated to show 6" of stone base. This base will be wrapped in the impervious barrier. The outlet control system for DB1 has been updated so the 6" of stone is drawn down through perforated pipes to the manifold.
- 7. The proposed weirs called out for DMH2 and DMH4 should be detailed on the plans. A detail has been added to Detail sheet 1.

Planning Department Comments

1. The existing curbing is shown as Cape Cod berm, and the new curbing proposed is vertical granite curbing.

See Engineering Department Comment #1.

- Applicant has provided landscape plan.
 Yes, landscape plan has been provided.
- Applicant should show where the snow storage will be located.
 Proposed snow storage locations have been added to the layout and materials plans as well as a note regarding snow removal for larger storms.
- 4. Will there be any additional sidewalks within the parking area leading to the front door? A sidewalk and stairs have been added from the front parking lot to the door. The ADA walkway is located at the entrance of the new parking lot, using the existing sidewalk to the door.

BETA Peer Review Comments

General

- G1. Provide the bearing and distances of the property line along Constitution Boulevard and the building setback measurements from the property line.
 Bearing and distances have been added to the front property line and building setback measurements have been added to the layout and material plan.
- G2. Revise wall detail to depict a railing or fence for fall protection where the wall heights exceed 30" below the parking area.A guardrail has been added on the parking lot side of the wall, approximately 2 feet

A guardrail has been added on the parking lot side of the wall, approximately 2 feet in front of the wall, and along the north edge of the parking lot.



- G3. The existing curbing around the pavement is Cape Cod berm. Normally the Board prefers to see vertical curbing along the edge of pavement on commercial and industrial sites.
 The existing site is cape cod berm, in those areas for continuity cape cod berm will remain. The curbing around the new parking lot is proposed to be vertical granite, as depicted on the plan.
- G4. There are 2-4" PVC discharges emanating from the building. One is the sewer connection which comes from the south side of the building and flows southwest to a sewer manhole inside the utility easement along the west edge of the parcel. The second is near the midpoint of the building at the northerly edge which flows into a drain manhole. Confirm that the floor drains are not connected to the 4" PVC discharge along the north side of the building. Flow from a floor drain is not allowed in a stormwater collection system.

We do not have the original design of this site and are unaware of the original design intent. We assume the 4 and 12" RCP that discharge to the manhole in the north are part of the roof drain system. These items shall be confirmed during construction. If what is found in the field differs from our assumptions, HSH will inform the Engineering department of our findings and determine course of action.

Schedule of Lot, Area, Frontage, Yard and Height Requirements

SCH1. Provide the Zoning Summary table located in the Supplemental Data Report on the plans. Zoning table from the Supplemental Data report has been added to the Cover sheet of the plan set.

Parking, Loading and Driveway Requirements

P1. Clarify if there are any proposed changes in use or tenants for the building. If so, the proponent should provide information to support that the proposed parking is adequate for the existing and future needs of the facility.

Proposed parking meets the needs and requirements of the building owner and tenant per out client. There is no proposed changes in tenants for the building to our best knowledge.

- P2. BETA recommends that sidewalk access from the new parking along the south side of the building directly down to the entrance be provided.
 A sidewalk and stairs have been added from the front parking lot to the door. The ADA walkway is located at the entrance of the new parking lot, using the existing sidewalk to the door.
- P3. Graphically, show the largest anticipated delivery truck parked at the loading dock and how much space is outside the vehicle for access to and from the northerly parking area.
 HSH has verified that a WB-62 can adequately maneuver into the site and back up to the loading dock closest to the proposed parking. If a WB-62 is the size of the truck, during deliveries vehicles have approximately a 26' aisle in front of the truck to be



able to access the remainder of the parking lot and exit. The parking to the north of the dock is approximately 9.5' away from the dock, and there is a staircase located between the dock and the parking area. A smaller delivery truck would create a larger driving access aisle while parked and require less room to maneuver into the loading dock. Please see "Vehicle Tracking Plan" attached here as an Appendix.

Sidewalks

SI1. The detail for the access ramp shows vertical granite curbing. The plan view should also identify the granite curbing.

The detail has been updated to be concrete curb. The existing curbing is integrated concrete curbing, as this is a modification to an existing site the designs intent is to reuse and preserve as many aspects of the site as possible, while expanding the parking available on site.

Site Plan and Design Review

- SP1. Indicate abutting land uses and zoning data on the locus or vicinity map (§185-31.1.C(3)(d)). A vicinity map with zoning data has been attached to the end of this letter. This is from the town's GIS system. The property lies within a planned industrial subdivision, and is surrounded by such.
- SP2. Indicate proposed snow storage areas (§185-31.1.C(3)(i)).

Proposed snow storage locations have been added to the layout and materials plans as well as a note regarding snow removal for larger storms.

Stormwater Management

SW1. The existing area drain at the southwest corner of the building adjacent to the entrance sidewalk will not collect any runoff if the rim is raised to elevation 80.5. The new parking lot has made this basin redundant, and BETA recommends that it either be removed or repurposed.

Area drain has been removed and area added to SC3 in revised plans and HydroCAD. Pipe configuration has been revised as well, see response to SW3.

SW2. The invert elevations and bottom of structure elevations on the existing catch basins indicate that there is no deep sump on any of the existing catch basins. The catch basins in the parking lot should be cleaned and inspected to determine the depth of the sump. If there are no sumps then discuss what other measures will be used to replicate the 25% TSS removal provided by the catch basins.

Existing catch basins in parking lot will be replaced with CDS treatment inlet units. These units will remove 80% TSS removal. The treatment train in the supplemental data report and water quality treatment calculations have been updated.

- SW3. The outlets from the 2 subsurface structures in the proposed front parking area connect into the same drain manhole as the catch basins in the existing parking lot. This connection will be the 5th connection into this structure, which is normally not a normal practice for a 4' diameter structure. BETA recommends that this connection be provided down gradient of the proposed water quality unit. This flow has already been through a treatment train that provides the required 80% TSS removal. Forcing this flow through the water quality unit will only minimize the efficiency of the unit based upon the increased flow.
 The plans have been revised to replace the 4' structure with a 6' structure. There are currently 5 connections to the manhole. We are removing the area drain connection and replacing it with a 12" RCP from DMH-6. The CDS water quality unit has been removed from this location and replaced with two inlet CDS units at the locations of the existing catch basins. The treatment train calculations have been updated in the supplemental data report.
- SW4. Correct the label for DMH-6 on Sheet 4. The first invert is from DMH 5 not 3. Label has been corrected.
- SW5. The inverts at the DMH north of the middle of the structure appear incorrect. In addition, the catch basin east of the manhole has 4 inlets and no apparent outlets. Please review each of these structures and explain how this system works. Based upon the calculations, the outlet from CB-7 by passes the manhole and flows directly to CB-8. If this is true provide a detail as to the piping alignment in this area.

The site was surveyed, and this is the information that was provided to us from what was able to be observed. This is an existing and currently used site, confirmatory excavation was not possible at time of survey. We do not have the original design of this site and are unaware of the original design intent. There are no current drainage issues on site that we have been made aware of, and so we must assume that the pipe system to the north is working. We are not proposing any change to this system and are not proposing new structures to be added to that network. These items shall be confirmed during construction. If what is found in the field differs from our assumptions, HSH will inform the Engineering department of our findings and determine course of action.

- SW6. Provide calculations to demonstrate that the project complies with the Town's recently revised Stormwater Bylaw (i.e. retaining one inch of runoff from new development areas), which has been attached for reference. This calculation is provided in the Supplemental Data Report on Sheet 6, under the title of MS4 Requirement.
- SW7. Revise time of concentration used for watershed SC4 to 6 minutes.



SC4 has been eliminated and included into SC3 in the post-construction calculations.

- SW8. Review impervious area used for post development watersheds SC5 and SC6. The retaining wall must also be modelled as impervious. The retaining wall was modeled as impervious, it is the 89 sf listed as "paved parking" with a CN of 98 in SC5. SC6 remains the same in the pre and post with no impervious located in the area.
- SW9. Clarify pipe routing of northern drain network. It is unclear from the base plan if this network will be conveyed to or bypass DMH-1. Specifically, the connection from CB-8 to the 36" culvert in the easement along the west edge of the site should be found. The assumption included in the plan set is that the 24" RCP from CB8 ties into the 36" RCP through the DMH in the easement along the west edge of the site. The site was surveyed, and this is the information that was provided to us from historic plans and what was able to be observed. This is an existing and currently used site, confirmatory excavation was not possible at time of survey. These items, as noted on the plan, shall be confirmed during construction. If what is found in the field differs from our assumptions, HSH will inform the Engineering department of our findings and determine course of action.
- SW9A. In accordance with Volume 3, Chapter 1 of the stormwater standards, a minimum of 65% of the impervious surfaces on must be routed through an infiltration structure. The supplemental calculations indicate that it is not being designed as a Redevelopment. In addition, the roof area is not included in the analysis and should be included in the calculations and a determination of the required recharge volume. Standard 3 states: "The annual recharge from the post-development site should approximate the annual recharge from the pre-development or existing site conditions, based on soil types." This would mean the "pre-development" annual recharge would come from the existing pervious areas. In the post-construction, in order to match the pre-construction annual recharge our calculation would be the amount of pervious we are converting to impervious multiplied by 0.35 inches (for B soil types). This calculation will remain the same if we include the roof or not, as the roof area is not changing and does not contribute to the increase of impervious area. We do not meet the requirement of 65% of impervious going to an infiltration BMP, however we still meet the adjusted required recharge of 715 CF, providing 1,832 CF of total recharge volume to the site. This is an overall improvement as there is currently no infiltration on site for impervious area. Due to existing site elevations, features and groundwater elevation, this amount of recharge is the maximum extent practicable.

- SW10. Provide long term pollution prevention plan, addressing the items identified on Volume 1, Chapter 1, Page 9 of the MA Stormwater Handbook.
 Long term pollution prevention plan has been included in Appendix A of the Supplemental Data Report.
- SW11. Since the Water quality Unit is in line, in accordance with the standards, provide manufacturers analysis of the TSS removal capacity of the Unit The CDS TSS Removal Study Brief has been included in Appendix A of the Supplemental Data Report.
- SW12. Revise project narrative to indicate that the project is a mix of new development and redevelopment. BETA notes the proposed expanded parking area must fully comply with all standards. Identify the additional pavement area along the north edge of the existing parking area so it can be determined if the proposed infiltration structure will accept runoff from a sufficient area to meet Standard 3.

This project is not considered a redevelopment as the post-construction total impervious is greater than the pre-development conditions by 9,329 sf through the entire site (including the pavement for the northern parking lot). We do not meet the requirement of 65% of impervious going to an infiltration BMP, however we still meet the adjusted required recharge of 715 CF, providing 1,832 CF of total recharge volume to the site. This is an overall improvement as there is currently no infiltration on site for impervious area. Due to existing site elevations, features and groundwater elevation, this amount of recharge is the maximum extent practicable.

- SW13. Revise erosion control narrative (Appendix B) bullet #9: hay bales and filter fabric are not permitted for use in the Town of Franklin.The verbiage has been updated to "straw wattles" to match the plans and details.
- SW14. Per the MA Stormwater Handbook, provide the following:
 - a) Party or parties responsible for maintenance.

Verbiage has been revised from "system owner" to "system owner responsible for maintenance"

b) Estimated operations and maintenance budget.

Operations and Maintenance budget has been added to each item in Appendix A.

SW15. Provide inspection and maintenance procedures for deep-sump catch basins. This is provided in appendix A, first item is maintenance for Deep Sump Hooded Catch Basins.



- SW16. Attach manufacturer's maintenance guidance for the water quality unit to the plan. Operation and maintenance of the CDS units and the Stormtech systems have been included in the supplemental data report under Appendix A.
- SW17. Provide signed illicit discharge compliance statement.
 We are currently working with our client to get owner to provide signed illicit discharge statement. This will be submitted prior to construction.

If you have any questions please feel free to reach out to me at <u>klabrie@hshassoc.com</u>.

Sincerely,

Kusten LaBrie

Kristen LaBrie, EIT



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HOWARD STEIN HUDSON 11 Beacon Street, Suite 1010 Boston, MA 02108 www.hshassoc.com		
OWNER: LRF2 BOS CONSTITUTION BLVD, LCC 50 TICE BOULEVARD - SUITE A28 WOODCLIFF LAKE, NJ 07677 APPLICANT: ahp ARCHITECHS, INC. THE OFFICES AT BOOT MILLS 116 JOHN STREET SUITE 115 LOWELL, MA 01852		
PARKING LOT EXPANSION 120 CONSTITUTION BLVD FRANKLIN, MA, 02038		
REVISIONS: NO BY DATE DESCRIPTION 1 KL 2/1/22 REV. PARKING LAYOUT 2 KL 4/6/22 REV. PER BOARD & BETA		
SITE PLAN		
VEHICLE TRACKING PLAN		
DATE: 08/20/21 PROJECT NUMBER: 21123 DESIGNED BY: KL DRAWN BY: KL CHECKED BY: KE 1.0		

SHEET 1 OF 1