IMPROVING COMMUNITIES TOGETHER

September 14, 2023

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

Re: Warehouse/Industrial Development
100 Financial Park
Site Plan Application

Dear Mr. Rondeau:

BETA Group, Inc. is pleased to continue our engineering peer review services for the proposed project entitled **"Warehouse / Industrial Development"** located at 100 Financial Park in Franklin, Massachusetts. This letter is provided to outline findings, comments, and recommendations.

BASIS OF REVIEW

The following documents were received by BETA and formed the basis of the review:

- BETA Letter dated May 25,2023, with redline comments identified as ***Highpoint Engineering. Inc. Response to Comments #3-08/15/2023***
- Letter from Highpoint Engineering to Gregory Rondeau, Chairman, Franklin Planning Board, dated July 17,2023 ***RE: 100/200 Financial Way Redevelopment Peer Review Response to Comments.*** Signed by Douglas Hartnett, P.E.
- ***Form R: Subdivision Waiver Request,*** by Highpoint Engineering, Inc. dated August 15,2023 and signed by Douglas Hartnett.

- Exhibit entitled "***Banked Parking Plan",*** prepared by Highpoint Engineering, Inc., dated 05/11/2023, revised 08-25-2023.
- Exhibit entitled ***"Snow Storage Plan"*** prepared by Highpoint, dated 08/25/2023.
- Updated Form R – Franklin Planning Board Subdivision Waiver Request completed by Highpoint,
- dated 08/25/2023.
- Draft Approval Not Required Plan entitled ***"ANR Plan of Land in Franklin, MA"*** prepared by Hancock Associates.
- Plans (46 sheets) entitled: ***Warehouse Industrial Development Site Development Plans 100/200 Financial Park Franklin Massachusetts,*** dated May 11, 2023, revised August 14,2023 prepared by Highpoint.
- ***Stormwater Management Analysis*** dated March 11, 2023, revised August 14,2023 prepared by Highpoint.
- ***Stormwater Operations & Maintenance Budget ,***

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 two parcels, Lots 312-020-000 and 312-020-001, with a total area of 51.045 acres, located at 100 Financial Park in the Town of Franklin (the "Site"). The Site and all the surrounding lots are located within the Industrial zoning district. The Site is located within a Water Resource District.

The existing Site is the location of a 1-story office building with a footprint area of 183,306± sq. ft. and a 2-story warehouse building with a footprint area of 57,570± sq. ft. Paved parking areas are located to the north and south of the buildings. Access to the Site is provided within Financial Park, a private roadway which connects to Washington Street to the east. The northernmost and westernmost portions of the Site are generally woodlands with flagged wetland resources areas present. A wetland resource area is also present to the north of the existing office building.

Topography at the Site generally slopes to the north and west towards the wetland resource areas. The Site is partially located within a Zone II wellhead protection area. Portions of the Site to the north and west are within a FEMA-mapped 100-year flood zone (Zone AE). The Site is not located within an NHESP-mapped estimated habitat of rare or endangered species, or any other critical area. NRCS soil maps indicate the presence of Merrimac fine sandy loam, Merrimac-Urban land, Hinckley loamy sand, and Udorthents, sandy, all with a Hydrologic Soil Group (HSG) rating of A (high infiltration potential).

The project proposes to construct two new warehouse buildings with footprints areas of 224,300± sq. ft and 70,500 ± sq. ft. The existing office building will be demolished, and the existing warehouse building will be retained. The existing parking layout will be replaced with new areas of paved parking proposed and existing areas either retained, removed, or reconfigured. A new loading area with heavy duty pavement is proposed in the central area of the Site between the two new buildings. Additional proposed site features include retaining walls, sidewalks, repairs to Financial Park and driveways, and new water, electric, telecommunication, sewer, and gas utilities. Stormwater management is proposed via new closed drainage systems which will convey stormwater runoff to several new subsurface infiltration systems and rain gardens.

FIELD VISIT

BETA conducted a site visit on 5/26/2023 to review existing site features. BETA observed that Site conditions are generally consistent with the plans. Findings associated with site observations are as noted throughout this report.

FINDINGS, COMMENTS, AND RECOMMENDATIONS

To assist with the review, the response to comments from Highpoint Engineering, Inc. to the 2nd round of BETA comments are highlighted in yellow ***(HEI2***: ….) and the response by BETA will be ***BETA2.*** Those comments that were addressed in prior reviews and require no further consideration by the Planning Board will be removed.

ZONING

The Site is located within the industrial (I) Zoning District. The proposed use is a warehouse which is permitted within this district.

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

The Site meets the requirements for lot area, depth, frontage, width, yard widths, building height, and impervious area coverage.

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

The project proposes to retain the existing "Financial Park" private roadway, which connects to Washington Street to the east and Grove St to the west. Several driveways are proposed which will connect to the Financial Park ring road and provide access to various parking areas. Proposed driveways are 24' in width.

Three warehouse buildings are proposed with approximate floor areas of 220,000 ± Sq. ft., 65,000 ± Sq. Ft., and 65,000 ± Sq. Ft. Required parking for warehouses is calculated as 1 space per 1,000 Sq. Ft., resulting in required parking quantities of 220, 65, and 65 spaces respectively. Provided parking is approximately 191 spaces for Building 1, 69 spaces for Building 2, and 24 spaces for Building 3.

The Applicant has requested a waiver from the need to provide the required parking on the grounds that actual demand is significantly lower than that required by the regulations.

Accessible parking spaces are required in accordance with the Americans with Disabilities Act (ADA) and Massachusetts Architectural Access Board (MAAB). Required/Provided accessible parking is as follows:

	Required	Required (Van)	Provided	Provided (Van)
Building 1	7	2	8	4
Building 2	3	1	3	2
Building 3	1	1	0	0

P1. BETA defers to the Town regarding approval of the requested waiver.

HEI RESPONSE: *Acknowledged.*

P2. The Parking Summary on Sheet C100 does not include the parking requirements for the proposed office space in Buildings 1 or 2. Sheet C300 indicates that there is 12,000 square feet of office proposed in Building 1 and another 6,000 square feet proposed in Building 2. Revise the parking summary table appropriately.

HEI RESPONSE: *The drawing sheet has been revised to include separate off street parking demand requirements by use. The revised parking demand for the Project is 413 spaces, with the request waiver to allow 216 spaces to be constructed.*

BETA: The Parking Summary on Sheet C-100 has been modified as requested. Total provided as shown on sheets C-300 & C-301 will be 256 spaces which will require a waiver for 157 spaces. It is important to note that in accordance with §185-21.(4)

> (4) The number of spaces may be reduced below that determined under §185-21B by the Planning Board ….. upon determination that a lesser provision would be adequate for all parking because of special circumstances "

The applicant should provide an explanation of the special circumstances at the site that will allow the Planning Board to make the determination needed to grant the reduction.

HEI2: *The Applicant requests the parking waiver as current warehouse market leasing trends within the region indicate that actual parking demand is less than what the offsite parking ratios defined in the Bylaws require. Constructing more parking than regional leasing trends require results in unnecessary impervious cover and the associated stormwater mitigation. A banked parking layout plan demonstrating locations for additional surface parking, if required, will be provided to the Planning Board under separate cover as requested by the Board at the last public hearing.*

BETA3: The Banked Parking Plan was submitted on August 25th, and it shows an additional 132 spaces. 96 spaces are contained inside the limits of the proposed pavement in areas currently designated as trailer parking areas. The remaining 36 spaces would require additional pavement. That would bring the total on site to 392 spaces which would be 20 spaces below the 413 required in accordance with zoning. BETA agrees that additional unneeded spaces will increase the impervious cover on the parcel unnecessarily. Since the pavement area would provide an additional 96 spaces, BETA recommends that the "regional leasing trends" be presented to the Board for their consideration with the 56-space shortfall.

INDUSTRIAL DISTRICT PERFORMANCE CONTROLS (§185-22)

The project is located within an Industrial District and therefore must conform to these requirements.

I1. Provide data quantifying anticipated sound, noise, vibrations, odor, and flashing to determine conformity with these requirements (§185-22.A).

HEI RESPONSE: *The proposed use is allowed by right within the Industrial District. A tenant has not been identified for either of the proposed buildings. When a tenant is identified, the Applicant will consult with the tenant regarding the requirements §185-22 and their obligation. to demonstrate compliance with §185-22 during design of the tenant improvements and building permit application/review. Enforcement of §185-22.A will be at the discretion of the Zoning Enforcement Officer (ZEO).*

BETA: BETA recommends that a condition of approval be added to cover this issue when a tenant is chosen.

HEI2: *Highpoint defers to the Planning Board regarding this recommendation.*

BETA2: BETA Defers to the Planning Board on this issue.

FLOODPLAIN DISTRICT (§185-24)

A FEMA-mapped 100-year floodzone (Zone AE) is located along the northern and western limits of the Site (Approx. elevation 241.4'). No work is proposed within this area and all proposed grading is above this elevation.

SIDEWALKS (§185-28) AND CURBING (§185-29)

No sidewalks are proposed along Financial Park under this project. Several pedestrian walkways are proposed throughout the Site, generally along parking areas with connections to building entrances.

Proposed curbing includes precast concrete curb, sloped granite curb, vertical granite curb, and cape cod berm along the limits of new parking areas.

C1. Provide detail for precast concrete curb and cape cod berm.
HEI RESPONSE: *Curb layout and materials specification is revised to include only vertical granite curb, precast concrete curb, or monolithic concrete curb/sidewalk in accordance with the Planning Board's requirements.*
BETA: Detail for vertical concrete curbing has not been provided. Comment remains.

HEI2: *A detail for vertical concrete curbing has been provided.*

BETA2: Detail provided, no further comments.

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. The submitted plan set has been brought into compliance with the requirements of the bylaws.

LANDSCAPING AND SCREENING (§185-35)

The project proposes outdoor parking for 10 or more cars and loading and service areas which must be screened in accordance with this section. Abutting residential districts are located across Washington Street to the East. Existing vegetation along the western side of Washington Street will be retained to provide required screening.

Proposed landscaping includes tree, shrub, and grass plantings proposed within landscaping islands, around the parking lot perimeter, and along Financial Park. Grassed areas throughout the Site will be seeded with native seed mix.

LA1. Provide required tree and shrub plantings for bioretention basin in accordance with V2C2 Page 27 of the MA Stormwater Handbook. Good practice is to include at least one tree or shrub per 50 square feet of bioretention area, and at least 3 species each of herbaceous perennials and shrubs. Acceptable plant species are identified in the handbook.

HEI RESPONSE: *Tree and shrub planting details for the bioretention basins / rain gardens in accordance with the Handbook will be included in the final construction document Plans and submitted for record prior to the Pre-Construction Meeting.*

BETA: BETA recommends that a plant list with numbers and species be provided with a condition that the final planting scheme be provided prior to the pre-construction meeting.

HEI2: *The landscape plans have been revised to include a plant species schedule. A final planting scheme will be prepared upon completion of Project construction documents and presented to BETA at the pre-construction meeting for determination of substantial conformance with the approved design.*

BETA2: BETA agrees with the condition that final planting scheme shall be presented prior to pre-construction meeting.

UTILITIES

Proposed utility include domestic water, water for fire protection, sanitary sewer, underground electric, gas, and telecommunications. Each utility will connect to an existing service within the Financial Park development. Existing utilities will generally be retained for Building 3.

WATER RESOURCES DISTRICT (§185-40)

The Site is located within the Town of Franklin Water Resources District and a Zone II Wellhead Protection Area. The project does not include any use that would be prohibited in this district.

W1. Confirm that the warehouse uses will not include any storage of toxic or hazardous materials (§185-40.D.1(a)).

HEI RESPONSE: *The proposed use is allowed by right within the Industrial District and no prohibitions for warehouse use are defined in the Water Resource District regulations. A tenant has not been identified for either of the proposed buildings. When a tenant is identified, the Applicant will consult with the tenant regarding the requirements of the Water Resources District, §185-40.D.1(a), and the Tenant's obligation to demonstrate compliance with §185-40.D.1(a) during design of the tenant improvements and building permit application/review. Enforcement of §185-40.D.1(a) will be at the discretion of the Zoning Enforcement Officer (ZEO).*

BETA: BETA recommends that a condition of approval be added to cover this issue.

HEI2: *Acknowledged.*

BETA2: BETA defers to the Planning Board on this issue.

STORMWATER MANAGEMENT

The stormwater management design proposes two rain gardens and seven subsurface infiltration systems to capture, store, and infiltrate stormwater. Conveyance to these BMPs will be achieved via new closed drainage systems consisting of catch basins, manholes, water quality units, and roof leaders. Portions of the existing closed drainage system in the southern area of the Site will also be retained. Stormwater BMPs are proposed to connect to each other in series; overflow from these systems will ultimately discharge to the L-series wetlands in the northern portion of the Site through an existing culvert.

SW4. BETA observed that the western detention basin was filled with water and overgrown with vegetation, suggesting it may not function as originally designed. BETA defers to the Town whether restoration and maintenance of this basin should be required under this application.

HEI RESPONSE: *The western detention basin serves stormwater discharges from multiple parcels within the Financial Way campus. The basin is operated and managed under a Reciprocal Easement Agreement (REA) that provides for rights and responsibilities of maintenance between the three parties identified within the REA including the BFCCPS, 300 Financial Way, and the Project site. The Applicant will coordinate with the other entities listed in the REA regarding*

required cleaning and maintenance of the western detention basin in accordance with obligations summarized in the REA.

BETA: *BETA will defer this issue to the Town of Franklin DPW to be addressed at the time of the stormwater permit application. As noted, it is identified as routine maintenance in the Stormwater Management O & M Plan.*

HEI2: *Acknowledged.*

BETA2: No response required.

STORMWATER MANAGEMENT REGULATIONS (CHAPTER 153)

The project proposes to disturb land in excess of one acre within the Town of Franklin. It is therefore subject to the Stormwater Management Regulations. The project is also required to comply with the Town of Franklin Best Development Practices Guidebook (BDPG). Compliance with these regulations is outlined below and throughout the following sections.

SW5. Indicate any existing or proposed easements for the conveyance of stormwater across property lines. The proposed stormwater management system is dependent on conveying stormwater from Lot 5B to Lot 5A which must be maintained in perpetuity (§153-15.A(11) & §300-11.A(6)).

HEI RESPONSE: *Stormwater management for the campus is managed under a Reciprocal Easement Agreement, and rights to generate, manage, and discharge stormwater across parcels is summarized in the REA. The REA allows for a mutual easement for the natural runoff of surface water between lot owners, but no drainage using a stormwater management apparatus may be used to drain on another lot without prior written consent of the lot owner.*

BETA: *BETA recommends that the REA be submitted to the Planning Board and incorporated into the submission to document compliance with this section of the bylaw.*

HEI2: Highpoint defers to the Planning Board regarding this recommendation.

BETA2: BETA defers to the Planning Board on this issue.

SUBDIVISION REGULATIONS - STORMWATER MANAGEMENT REGULATIONS (§300-11)

Additional requirements for stormwater management are outlined in §300-11 of the Town of Franklin Subdivision Regulations.

SW6. Revise proposed drainage pipe to be reinforced concrete or request waiver (§300-11.B(2.a)).

HEI RESPONSE: *Drainage pipe is specified as Reinforced Concrete Pipe (RCP) throughout the Project site, except for the header/roof drain leader collector pipe and drain-pipe manifolds and inlet/outlet pipes associated with the HDPE subsurface detention/infiltration system. The Applicant requests a waiver of the specified RCP pipe material and allow HDPE pipe for the roof drain collector due to the multiple entrance locations, and the subsurface HDPE stormwater chamber system to allow for use of standard pipes and fittings.*

BETA: *The roof leaders in this section all connect to manholes, thus the header reference is incorrect. Since this pipe will be under the pavement with less than 2' of cover, BETA recommends that this section be converted to RCP also.*

HEI2: The roof leader layout has been revised in consultation with the Design-Build contractor to apply roof leader locations in coordination with anticipated roof drain collection points. Roof drain leaders exiting the building are proposed to be HDPE pipe with wye connections to a single HDPE roof drain header pipe that connects to the subsurface infiltration system. Where the subsurface infiltration system is located along the buildings, direct connection of the roof leaders to the infiltration system is proposed.

Use of similar HDPE pipe materials and fittings for the roof drain collection system allows for a more standard design and avoids pipe couplings to join dissimilar pipe materials, which could result in premature pipe joint failure.

The header pipe diameters have been adjusted to account for the varying pipe capacity requirements for the roof drain leaders. A minimum of 2' of cover is now provided for all roof leader and header pipes.

Highpoint notes that both HDPE corrugated, and RCP pipes are designed to withstand AASHTO H-20, H-25, and/or HL-93 loads under minimum cover requirements. ADS, a popular manufacturer of corrugated HDPE pipe, issued a Technical Note, TN 2.01 "Minimum and Maximum Burial Depth for Corrugated HDPE Pipe", which includes a table providing the minimum cover depths required for corrugated HPDE pipe to withstand AASHTO H-20, H-25, and/or HL-93 loads. Additionally, the Plastics Pipe Institute states on their website that properly installed HDPE corrugated pipe can withstand AASHTO HS-25 loads with a minimum 1 ft cover for pipes up to 48-inch diameter.

In conclusion, the choice of material between HDPE and RCP would therefore not make a functional difference for supporting vehicle loading when installed with the recommended minimum cover. A waiver request for the use of three HDPE collector pipes is included in this submission.

BETA2: BETA notes that the issue with the HDPE pipe is that the performance of the material is dependent upon the quality of the backfill process. RCP is not. BETA will defer this issue to the Board.

MASSDEP REPORTABLE RELASES

The MassDEP Waste Site / Reportable Release database identified the Stie as the location of a reportable release under Release Tracking Number (RTN) 2-4017015. Available documentation indicates that the release originated from the discovery of Methyl Tert-butyl Ether (MTBE) in groundwater circa 2001. Response actions included the installation of monitoring wells to sample contaminant levels. Sampling conducted circa 2003 did no detect MTBE concentration above reportable limits. A Response Action Outcome (RAO) Statement was submitted to MassDEP supporting a condition of "No Significant Risk." The RTN has since been closed.

MASSDEP STORMWATER STANDARDS

The project is subject to the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

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 proposes to connect new closed drainage systems to existing outfalls located within wetland resource areas. Existing splashpads are located at each outfall for erosion control.

SW9. Verify condition of existing outfalls at DB, J, and L-series wetlands. BETA could not locate the existing outfalls associated with the north "detention pond" in the field nor their respective splashpads. Confirm that inverts for these outfalls is above the typical water elevation for these ponds.

HEI RESPONSE: *Existing Splashpad #1 and #2, as referenced on the Grading and Drainage Plan should be labeled as existing pipe inverts. Pipe inverts and associated splashpads are set below the average water elevation per the original design by CE Maguire, Inc. in October of 1980. HEI is proposing to reuse all existing outfalls of the existing drainage discharging to the North Pond.*

BETA: *The condition where the outfalls are submerged is not ideal. However, these outfalls as noted have been in place since 1980. The O & M Plan specifically notes the maintenance requirements for these 2 outfalls. Based upon this continued maintenance, BETA agrees with the designer that these outfalls can be maintained and used in conjunction with the new stormwater management system. This will minimize the disturbance in the area and the potential environmental issues associated with the removal and replacement of the outfalls.*

The existing conditions plans note that these 2 outfalls are steel conduit. However, the grading and drainage plans indicate that they are RCP. Resolve the material and if they are steel report on their condition.

HEI2: *Based on Hancock Associates additional site visit on August 9, 2023, the two (2) existing outfall pipes are steel conduit. Both outfalls were submerged at the time of the site visit and the condition of the pipes was undetermined. The Applicant will coordinate with the site contractor to determine the condition of these outfalls prior to beginning of construction and will report to BETA on their condition.*

BETA2: BETA recommends that a condition of approval be added that notes that these outfalls should be inspected prior to the start of construction and a determination made if they should be replaced.

SW10. BETA recommends relocating existing splashpads 1 and 2 to outside of the L-series wetland boundaries.

HEI RESPONSE: *The Project design proposes to retain and utilize the existing discharge pipes and associated splashpads to the North Pond in their current location. This is proposed to avoid disturbance of the bordering vegetated wetland and pond in the interest of environmental resource area protection.*

BETA: *See response above.*

HEI2: *See HEI's response to SW9.*

BETA2: See response above.

SW11. Provide sizing calculations for existing splash pads to remain to confirm they are adequately sized to convey anticipated stormwater runoff.

HEI RESPONSE: *The Project design proposes to retain and utilize the existing pipe inverts and splashpads.*

BETA: See SW 9 above.

HEI2: *See HEI's response to SW9.*

BETA2: See response to SW9.

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 changes to site hydrology and ground cover which will impact stormwater flow to the analyzed design points. Stormwater runoff will be mitigated via capture, storage, and infiltration within nine new stormwater BMPs.

Calculations indicate a net increase in peak discharge rate for the 2-, 10-, and 25-year storm events for POA A and the 2-year storm event for POA C. These design points represent the wetlands located to the west of the Site for which no new BMPs are proposed. The stormwater mitigation narrative notes that POA A is a previously constructed detention basin sized for a larger inflow capacity.

Calculations indicate a new decrease in peak discharge rate for all other storm events and points of analysis.

SW14. Review existing watershed plans:

a. Adjust southern boundary of Watershed EX-D. An existing catch basin is located along the eastern wall of 200 Financial Park which conveys stormwater runoff to EX-D, but has not been included in the watershed.

HEI RESPONSE: *Watershed EX-D has been revised to include the existing catch basin located along the eastern wall of 200 Financial Park.*

BETA: Comment addressed.

b. Model areas of dense tree vegetation as "woodlands," rather than grass.

HEI RESPONSE: *The hydrology has been revised to account for the dense tree land use areas within EX-D and EX-E and are modeled as woodlands.*

BETA: *The woodlands have been added; however, they have been assumed to be a poor condition. BETA recommends that the CN value for this use be 32 which assumes a fair condition. In addition, a portion of this woodland area will remain in proposed watershed area D7 but has not been accounted for in the proposed conditions analysis.*

HEI2: Highpoint has revised the HydroCAD model to include woodlands in both

the pre-development and post-development models. However, based upon a review of TR-55, a CN value of 36 is assigned to a land use of "woodland in fair condition". The hydrology model has been revised accordingly.

BETA2: Comment addressed.

SW17. Review pipe sizing calculation for DMH-16 to WQU-4 and DMH-7 to Splashpad-1. The peak flow is greater than the design flow.

HEI RESPONSE: *The pipe capacity analysis has been revised for the stormwater collection system at the discharge locations to the North Pond. The pipe segments connecting DMH-24, DMH-30, DMH-7, and invert/splashpad #1; and the pipe segment DMH-9 to invert/splashpad #2 operate under surcharge conditions similar to existing conditions. We note that the proposed surcharge condition occurs in less pipe length than what is assumed exists today based upon the original drainage system design, resulting in an improvement in surcharge condition.*

Based upon the pipe capacity analysis, the surcharge condition does not backwater into any water quality inlet devices, the subsurface infiltration facilities, rain gardens, nor catch basin inlets. Refer to the revised pipe capacity analysis included in the revised Stormwater Report.

BETA: *BETA agrees that the condition from DMH-9 to the splashpad #2 is identical to existing conditions and the surcharge impact will not extend upgradient of DMH-9. However, at splashpad #1 the surcharge impacts extend further upgradient than existing and should be reviewed. BETA recommends that the water surface elevations for the design storm from the basin upgradient to DMH-24 be determined to ensure that the surcharge does not impact any of the infiltration structures that are tied into this discharge point.*

HEI2: Highpoint has conducted a pipe capacity analysis utilizing Civil 3D's "Storm and Sanitary Analysis (SSA)" engineering software and HydroCAD for the modeling of the North Pond to assess drainage system surcharge. A fixed tailwater elevation (El.=245.71) is assigned to the inlet pipe to the North Pond, which represents the peak flood elevation in the North Pond for the 25-yr storm event. The SSA model was run to verify which pipe segments operate under surcharge conditions when assigning the peak pond flood elevation as a fixed tailwater elevation for the duration of the storm.

The Pipe Capacity Analysis identifies three pipe segments up to DMH-24 that operate under surcharge conditions during the design storm. The remaining upstream pipe segments and infiltration facilities operate in free-flow conditions during the design storm event. See Appendix B in the Stormwater Report for Pipe Capacity Analysis and operations.

We note that the Hydrology Model assumes the static surface water level in the North Pond is at the outlet weir elevation/grate (El.=243.95). The North Pond is used for irrigation and supplemental fire protection and was originally designed with a working water level between El. 240.2± and El. 244.0±, which fluctuates based upon

demand.

BETA2: The analysis for the 36" culvert from DMH 3- DMH 24 is missing from the table. The analysis provided looks only at the barrel capacity of the culvert and does not consider the tailwater elevation. Based upon the inverts, with the pond level at Elevation 244.0, the still water level will reach back to WQU 6. To insure that it will not impact beyond WQU 6, perform the hydraulic analysis necessary to determine water surface elevations in each of the structures from DMH 30-WQU 6.

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 soils at the site are Merrimac-Urban Land, Udorthents, sandy, Hinckley loamy sand, and Merrimac fine sandy loam, all rated in Hydrologic Soil Group (HSG) A (high infiltration potential).

A Geotechnical Report prepared by McArdle Gannon Associates, Inc., has been included in the submission. Geotechnical analysis included eight test pits conducted throughout the Site. Underlying soil in the area of proposed infiltration was generally identified as Sand or Sandy Loam and groundwater was identified between 4.6' to 9' below grade.

The project design has been revised and now proposes two rain gardens and four subsurface infiltration systems to provide groundwater recharge. The project is anticipated to provide a recharge volume in excess of what is required. Calculations have been provided indicating that all BMPs will drawdown within 72 hours.

SW18. Review model for Rain Gardens 1 and 2:

a. Revise top elevation for "Custom Stage Data" model to match rain garden schedule.

   HEI RESPONSE: *The rain garden schedule has been revised to match the HydroCad model.*

b. Revise bottom elevation for "Subsoil" portion of the model to match rain garden schedule. Revise to utilize a consistent Voids % for all elevations.

   HEI RESPONSE: *The bottom elevation of the subsoil has been revised to match both the HydroCAD model and the rain garden schedule. The varying void ratios shown below the rain garden bottom elevation account for the different soil materials. The first 3-inches is mulch having a void ratio of 25%, then 3-feet of 'engineered planting soil' with a void ratio of 25%, then 2.75-feet of gravel with a void ratio of 40%.*

c. Provide min. 3-inch freeboard above ponding elevation for rain gardens, in accordance with MA Stormwater Handbook V2C2 Page 27.

   HEI RESPONSE: *The two (2) rain garden designs are revised to provide 3-inches of freeboard from the 100-year ponding elevation to the top of the rain gardens. Both rain gardens are designed with a top of berm elevation of 250.50. Rain garden #1 has a 100-year peak elevation of 250.21, which provides 0.29' of separation and rain garden #2 has a 100-year peak eleva3on of 250.19 providing 0.31' of separation.*

d. Review peak elevation for rain gardens, which are above top of pond elevations.

   HEI RESPONSE: *The two (2) rain gardens are redesigned to prevent the 100-year storm peak elevation from exceeding the top of rain garden berm elevation of 250.50.*

e. Provide spot grades and labels for contours around proposed rain gardens to clarify intended berm height.

HEI RESPONSE: *Spot grades and contour labels have been added to the Plans.*

BETA: *The redesign of the rain gardens has eliminated most of the issues associated with the drawings. However, there are issues with the HYDRO-CAD model for these 2 structures, which include.*

1) *The storage volume calculations are incorrect. The bottom layer of aggregate is 2.75' thick not 1.5'.*
2) *The void ratio for the 3/4" aggregate should be limited to 35%. A 40% void ratio is fine for 1-1/2" aggregate. In addition, the void ratio for the media soil should be limited to 15%.*
3) *The surface area in the model is overstated. The infiltration rate should be applied to the bottom area of the aggregate, which should not be greater than the area of the 150.5 contour. BETA recommends that you develop a constant flow rate rather than use a constant velocity.*
4) *The surface areas associated with the different layers in the storage volume calculations does not match the actual conditions. BETA recommends that the designer review the program and use another method to develop the overall storage volume.*

HEI2: Highpoint has reviewed the rain garden models and revised the necessary items noted in items 1-4 above. The rain garden detail has been revised to specify ¾" to 1-1/2" stone. The infiltration rate applicable surface area is limited to the footprint of the bottom area of the rain garden. The Rawl's Rate of 2.41 in/hr has been applied to both rain gardens. See the Stormwater Report.

BETA: The redesign of the rain gardens has eliminated most of the issues associated with the drawings. However, there are issues with the HYDRO-CAD model for these 2 structures, which include.

1. ***The area drains as shown on the drawings (Sheet C-601) are not consistent with the calculations. They are shown as round beehive grates and modeled as 15" square grates.***
2. ***The infiltration rate from the Hydro-CAD analysis is still variable and should be constant as noted in the 2nd review.***
3. ***The construction detail on sheet C-601 of the set indicates that the discharge is to the subsurface infiltration system. However, the discharge for both rain gardens are combined into a single 18" outlet.***

BETA recommends that.

1. ***The exfiltration rate should be converted to a constant flow rate rather than a constant velocity.***

2. ***The outlet configuration for each rain garden should be modified to a single outlet point. For RG 1 it should be located at the far south end of the garden and discharge into SWM-4. For RG 2 it should be located at the middle of the garden near the island and discharge into WQU 6.***

3. ***Modify the construction detail on sheet C-601 to match the drainage analysis.***

Modifying the Rain Garden outlet configuration will eliminate the maintenance issues associated with a lengthy discharge pipe set flat and the issues with potential damage to the risers during routine maintenance of the vegetation in the garden. In addition, although not related to the Rain Gardens, WQU 6 is not needed to meet the treatment requirements of either the standards or the bylaw. In addition, based upon the flow rate and volume through this unit, it is questionable how effective the treatment will be.

SW24. Conduct test pits in the area of Rain Garden #1, SWM-1, SWM-2, SWM-4, and SWM-7.

HEI RESPONSE: *As explained at the first Planning Board hearing, the current tenant's lease requirements limited the locations that test pits could be excavated and witnessed due to sensitivity with their operations. The Applicant agrees that additional test pits should be witnessed within these areas prior to construction to verify soil and groundwater conditions. The test pit logs will be reviewed with the Peer Reviewer to demonstrate compliance with the design requirements and assumptions prior to construction.*

BETA: *BETA recommends that a condition that additional test pits be conducted at each proposed stormwater infiltration structure in accordance with the standards at the time of construction.*

HEI2: Highpoint will coordinate excavation and witnessing of additional test pits to verify the stormwater design assumptions at time of construction and review with BETA for design conformance.

BETA2: Comment addressed; condition of approval has been accepted.

SW25. Review separation to groundwater for the following:

a. SWM-1 & 7: The groundwater elevation in nearby TP-1 is 250.38' ±, which is well above the system bottom of 243.5'.

HEI RESPONSE: *SWM 1 & SWM 7 have been removed from the design.*

BETA: No further comment

b. SWM-2: The groundwater elevation in nearby TP-1 is 250.38' ±, which is above the system bottom elevation of 250.0'.

HEI RESPONSE: *HEI has revised the proposed drainage design and reduced the number of subsurface stormwater systems. Refer to the Subsurface Infiltration System Schedule on Sheets C400 and C401 which shows the relative ESHGW elevations with respect to the system design elevations. An exhibit entitled "Estimated Groundwater Map" is included in the Figures portion of the revised Stormwater Report to demonstrate how ESHWG is*

established based upon monitor well readings. A Frimpter GW correction factor of 1.3' is applied in addition to the ESHGW values measured in the field.

BETA: BETA agrees that the methodology used to determine ESHGW is acceptable to establish the design elevations of the proposed infiltration structures. The map showing the monitoring well locations should be included with the report including adjusted groundwater contours across the site.

HEI2: The Estimated Groundwater Map is included in the revised Stormwater Report in the list of figures. The Frimpter correction factor has been assigned to the ESHGW elevations depicted on the revised Grading and Drainage Plan. See note at bottom for subsurface infiltration system schedule Sheets C400 & C401.

BETA2: Comment addressed.

c. SWM-3: The groundwater elevation in nearby TP-1 is 250.38' ±, which is above the system bottom elevation of 244.0'.

HEI RESPONSE: *Refer to HEI's response to SW25(b).*

BETA: See SW25b above.

d. SWM-4: The groundwater elevation in nearby TP-1 is 250.38' ±, which is above the system bottom elevation of 243.0'.

HEI RESPONSE: *Refer to HEI's response to SW25(b).*

BETA: See SW25b above.

e. Inspection ports should be provided at all the subsurface infiltration structures. Including a construction detail. Based on the size of the chambers, BETA recommends that an observation manhole be provided at the inlet to view the inside of the chamber row for maintenance access.

HEI2: Inspection ports have been added to the plans in accordance with BETA's recommendations. A construction detail has been added to the detail sheet.

BETA2: Comment addressed.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): *For new development, stormwater management systems must be designed to remove 80% (90% per Town Bylaw) of the annual load of Total Suspended Solids (TSS)*. The project proposes treatment trains generally consisting of deep sump catch basins, water quality units, and subsurface infiltration systems or rain gardens. The project is anticipated to provide TSS removal in excess of what is required.

The project proposes to provide the 1.0-inch water quality volume via four new infiltration BMPs and 2 exfiltrating rain gardens. However, the provided volume is less than what is required.

As a project which discharges to a critical area (See Standard 6), the project is required to provide 44% pretreatment prior to discharge to all infiltration BMPs. Pretreatment is generally provided via deep sump catch basins and water quality units but has not been achieved for the proposed rain gardens.

SW26. For a new Site, meet one of the following criteria (§153-16.B(1))

a. Retain the volume of runoff equivalent to, or greater than, 1.0 inch multiplied by the total post-construction impervious surface area on the Site; and/or

b. Remove 90% of the average annual post-construction load of TSS and 60% of the average annual load of total phosphorus.

HEI RESPONSE: *The revised design meets both listed criteria. Refer to the calculations included in Appendix B of this Revised Stormwater Report.*

BETA: *The calculations indicate that the proposed design will meet the second criteria. However, the storage volume provided is not sufficient to meet the first criteria. The phosphorous reduction analysis must include the entirety of the impervious surfaces on site. See SW31 below*

HEI2: Highpoint has revised the proposed design to include an additional Contech Cascade CS-6 water quality unit downstream of the infiltration systems sized to treat the remaining 1.0" water quality volume equivalent flow rate. Therefore, the revised design satisfies both listed criteria. See Stormwater Report for revised calculations.

As for the phosphorus reduction analysis, the total proposed impervious area has been included in the revised calculation included in Appendix C.

BETA2: It is important to note that the performance of the proposed stormwater measures for conformance with the bylaw is based upon the Massachusetts MS4 permit. All the TSS Removal rates shown are from the Massachusetts stormwater handbook. The addition of WQU 6 will help with the treatment provided by that single treatment train however, because of the amount of untreated runoff from the site currently, meeting the 90% TSS removal requirement is not possible without major improvements around the perimeter road. BETA recommends that the designer modify the storage volume in the proposed infiltration measures to provide the 1" storage volume. Otherwise, document the TSS Removal for each of the discharge points and provide a weighted average for the total site.

SW27. Revise calculations for required water quality volume to include all impervious areas, including roofs. Per V1C1 Page 9 of the MA Stormwater Handbook, the required water quality volume includes the total impervious area of the Site.

HEI RESPONSE: *The design is revised to account for the required water quality volume (WQV) for all impervious areas, including roofs. The required WQV for ground surface runoff is calculated by converting the required water quality volume to an equivalent water quality flow rate (Q). The Q value and catchment plans were provided to the vendor, Contech, to assist with design of the four (4) water quality units proposed throughout the site. In addition, two (2) rain gardens proposed provide the required WQV for ground surface discharges. For the building roofs, four (4) subsurface infiltration systems provide the required WQV. See the revised Stormwater Report.*

BETA: *The Water Quality Volume calculations for the 4 proposed subsurface infiltration structures have not been provided. In addition, based upon the TSS calculations provided, the design is*

dependent upon the proprietary separators to meet the overall treatment. In accordance with Volume 1 Chapter 1 of the handbook and as discussed at our meeting, these proprietary separators cannot be used as the terminal treatment process in a critical area unless they are the only option available to meet the Maximum Extent Possible definition for redevelopment. As discussed at the meeting, BETA considers the use of proprietary separators acceptable at POA-C and for CB Nos. 2,5.11,12 & 18 at the northwest corner of the development which flow to WQU-1, specifically because there are no other options based upon the constraints imposed by the adjacent wetland resource areas. However, for the remainder of the site, the infiltration structures must be designed in accordance with the handbook to provide the TSS Removal rate which includes the pretreatment and the storage volume. In addition, the TSS Removal rate calculations should be corrected to

1) *The pretreatment percentage is not part of the total provided and should not be included.*
2) *The pretreatment TSS Removal rate should have its own calculation sheet.*
3) *Catch basins with a tributary watershed with greater than 0.25 acre of impervious surfaces are not entitled to a 25% TSS Removal credit. (See Volume 2, Chapter 2, page 4)*

HEI RESPONSE #2: Highpoint has revised the Stormwater Report to include the following:

1. ***The TSS removal calculations are revised to eliminate the inclusion of additional pre-treatment BMP's upstream of the terminal BMP. In the case of the infiltration BMP's, the TSS removal rate is assumed to be 80% at the terminal BMP with the water quality unit serving as pre-treatment.***

   BETA2: As noted earlier, the proprietary separators will qualify as pretreatment for the subsurface infiltration systems only for new construction but will satisfy the "maximum extent possible" redevelopment definition for those areas where there are no other treatment options.

2. ***Separate pretreatment TSS Removal Rate calculation sheets are provided to demonstrate 44% TSS removal is achieved prior to infiltration/recharge by adding the water quality units prior to recharge.***

   BETA2: The treatment trains need additional labels to understand where they apply

3. ***A review of Volume 2, Chapter 2, Page 4 | Design Considerations state that tributary watershed areas should not exceed 10,000 sf of impervious area. Highpoint did not find language that specifically states the 25% TSS removal credit is not allowed if this tributary watershed area is exceeded. Given the size of the shared truck court and other areas of the site it is not practical to add a significant number of additional catch basins, especially within the truck court. The Applicant requests that BETA consider allowing more frequent inspections and monitoring of the catch basins to evaluate sediment loading, and if warranted establish a more frequent cleaning schedule if documented sediment loading warrants. This will be***

memorialized in a revised Long-Term Operation and Maintenance Plan upon agreement with BETA.

BETA2: the design has added a proprietary separator in line after the catch basins, thus, the point is moot, and the separator will provide the pretreatment necessary for the infiltration system.

BETA2: In addition to the above, BETA has added the following.

- ***Like the Rain Garden calculations, the Water Quality Volume calculation for each individual infiltration system should be provided separately. SWM 6 does not provide the 1" Water Quality Volume required to meet the standards.***
- ***As stated earlier, the proprietary separators cannot be used exclusively to meet the treatment requirements for discharges to a critical area. In the absence of the STEP and TARP program, BETA has normally allowed a TSS removal rate of 44% for proprietary separators which is sufficient to meet the pretreatment requirements for an infiltration SCM.***

SW31. Revise stormwater management system to remove at least 60% of nitrogen loading from post-development stormwater (BDPG Pg. 8)

HEI RESPONSE: *A nitrogen loading reduction analysis is summarized in the exhibit entitled, "Downstream Receiving Waterbody Impairment Analysis" located in Appendix C of the revised Stormwater Report.*

BETA: *Based upon the Zoning Summary on sheet C100, the total impervious surface area on the combined 2 lots is approximately 1.1 million square feet. The phosphorous loading analysis is based upon a total impervious surface area of 869,885 sq. ft. The applicant should explain the difference between the two totals and calculate the phosphorous removal accordingly.*

HEI2: Noted. Highpoint has reviewed and corrected the differences in areas. The total impervious area used for phosphorous loading is 924,105 SF. The impervious coverage percentages in the Zoning Summary are based on impervious areas of 642,357 SF for Lot 5A and 271,314 SF for Lot 5B. The sum of the impervious areas for Lot 5A and 5B is 913,671 SF, which is less than the total impervious area used for phosphorous loading because the Financial Park cul-de-sac area is not included in the Zoning Summary. The Financial Park cul-de-sac is a right-of-way excluded from the area calculations for Lots 5A and 5B.

The Zoning Compliance Table has been revised to reflect the adjusted impervious cover and upland areas based upon wetland flag revisions requested by BETA.

BETA2: Comment addressed

SW32. Identify discharge points in each of the TSS Removal charts.

HEI RESPONSE: *Discharge points are added to the TSS Removal Charts located in Appendix B of the revised Stormwater Report. Highpoint conducted an informal review of the BETA peer review report with Gary James. Mr. James suggested that the Applicant provides additional water quality improvements for the existing watershed discharging into the J-Series Wetlands (POA C –*

Wetlands -WEST). This is requested to improve existing stormwater discharges from the access road where feasible to meet the Maximum Extent Practicable standard for the redevelopment portion of the Project site.

The proposed drainage design is revised to replace the existing catch basin which receives surface runoff from the ring road and discharges directly to the J-Series Wetlands with a Contech CDS2105-4-C Water Quality Unit with a catch basin grate. Highpoint intends to conduct a follow-up site visit to verify the existing catch basin receives adequate runoff to warrant a water quality unit at this location.

***BETA:** As noted by the surveyor, this catch basin is not being cleaned and was full of sand. It is in the middle of the intersection and there are 2 catch basins located at each corner of the intersection. With minor grade changes, this basin could easily be eliminated, and the runoff collected by the adjacent basins, which is the current pattern. BETA will reserve comment until the designer decides on a course of action regarding this structure.*

HEI2: The referenced catch basin was observed by Highpoint during a rain event on August 15, 2023, to assess function. No sediment buildup was observed, and the catch basin appeared to collect flows from a significant length of the east side of the ring road. Highpoint did observe the other referenced drainage structures on the curb radii and visually confirmed their elevations and the adjacent pavement appears higher than the gutter line of the ring road.

The 300 Financial Park drainage collection system, which includes the two catch basins and trench drain on the intersection curb radii, was designed independent of the ring road drainage system and the referenced catch basin. Adding flow to this system from the referenced catch basin is not recommended.

Highpoint therefore recommends continuing with the original BETA recommendation; replace the catch basin with a Contech CDS 2015-4-C water quality inlet/grate and connect to the existing drainpipe that discharges to the west wetland. This will provide improved water quality discharge in accordance with the Maximum Extent Practicable standard in the Stormwater Regulations.

BETA2: Comment addressed, no further comments.

HIGHER POTENTIAL POLLUTANT LOADS (STANDARD NUMBER 5): *Stormwater discharges from Land Uses with Higher Potential Pollutant Loads (LUHPPLs) require the use of specific stormwater management BMPs.* The project includes a parking lot with a high-intensity use (1,000 vehicle trips per day or more) which is considered a LUHPPL. The project is required to conform to this section. Deep sump catch basins, proprietary separators, rain gardens, and subsurface structures are considered recommended BMPs for LUHPPLs. A Spill Prevention, Containment, and Countermeasure Plan has been included with the Stormwater Report.

CRITICAL AREAS (STANDARD NUMBER 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.* The project includes stormwater discharges to a Zone II Wellhead protection area which is a critical area. Deep sump catch basins, proprietary separators, rain gardens, and subsurface structures are considered recommended BMPs for this type of

critical area. The project has been designed to provide 44% pretreatment and the 1.0-inch water quality volume, except as noted under the Standard 4 section above.

REDEVELOPMENT (STANDARD NUMBER 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.* The project will result in an increase in impervious surfaces on site thus it will not meet the definition of a redevelopment. However, it is a combination of redevelopment and new development – The applicant has considered the site as new development and has not reviewed the development under redevelopment criteria.

EROSION AND SEDIMENT CONTROLS (STANDARD NUMBER 8): *Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities.* As the project proposes to disturb greater than one acre of land, it will be required to file a Notice of Intent with EPA and develop a Stormwater Pollution Prevention Plan (SWPPP). Erosion control measures are depicted on the plans include straw wattle, inlet protection, and stabilized construction entrance. A Construction-Period Operation and Maintenance Plan is included in the Stormwater Report including waste disposal, dust monitoring, spill prevention, and monitoring.

SW42. Provide means of protecting proposed stormwater BMPs from construction-period sediment.

HEI RESPONSE: *Stormwater BMP's will be protected with standard catch basin inlet silt sack protection, compost-filled filter socks around perimeter of rain garden areas, and diversion swales directing runoff to temporary sediment basins prior to discharge. Final construction phase erosion control management sequencing and device locations will be coordinated with the General Contractor and included in the CSP for review prior to construction.*

BETA: *Erosion control measures are identified on the demolition plans for this phase. The site disturbance will be greater than 1.0 acre and therefore will require an NOI Filing with the EPA, which will also be reviewed by the DPW in conjunction with the stormwater permit. BETA will defer this issue to the DPW for the later phases of construction.*

HEI2: Acknowledged. An NOI will be filed under the EPA – NPDES program in accordance with the time requirements to ensure full coverage prior commencement of construction activities. A SWPPP will be prepared by the Engineer and provided to the site contractor prior to excavation activities commence.

BETA2: No further comments

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 Stormwater Operation and Maintenance Manual was provided with the Stormwater Management Report.

SW47. Indicate how future property owners will be notified of the presence of the stormwater management system and the need for maintenance.

HEI RESPONSE: *The Applicant will include a summary of the existing stormwater management components and locations identified on a BMP location map in future tenant lease documents. The lease documents will refer to the future property owners and tenants being required to execute and manage the Operation and Maintenance Plan.*

BETA: *BETA will defer this issue to the Board, however we recommend that this be included as a condition of approval*

HEI2: Highpoint defers to the Planning Board regarding this recommendation.

BETA2: No further comments.

SW48. Provide estimated operations and maintenance budget.

HEI RESPONSE: *A summary of the BMP inspection requirements and related budgets is being prepared by the Applicant and will be submitted to the Peer Reviewer under separate cover for review.*

BETA*: Comments pending receipt of information.*

HEI2: The estimated operations and maintenance budget has been provided as an attachment.

BETA2: No further comments

SW49. Include operation and maintenance measures for EX WQI-22, 24, and 25.

HEI RESPONSE: *The operation and maintenance measures for EX WQI-22, EX WQI-24, and EX WQI-25 are included in the Long-Term O&M Plan for 300 Financial Way.*

BETA: *These measures flow to the fire pond onto the site and should be maintained by the owners/applicant of 100 Financial Way. It is important that each owner understand their operations and maintenance responsibility on site. BETA will defer this issue to the DPW to be addressed in the stormwater permit. Based upon the condition of the catch basin at WQU-5 (Filled with sand) as reported by the surveyor overall maintenance of the existing stormwater features is suspect.*

HEI2: The Applicant has been made aware of the surveyor's note regarding sediment accumulation in the catch basin structure and BETA's concerns for routine maintenance of existing BMP's. An inspection of the noted catch basin was made on August 15, 2023, and there was no observed sediment buildup. The Applicant will continue to work with the DPW and Town Engineer regarding existing drainage system maintenance and ongoing compliance with the Town's Stormwater Regulations and Bylaws.

BETA2: No further comments

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.* An Illicit Discharge Compliance Statement has not been provided.

WETLANDS PROTECTION

The Project proposes work within Areas Subject to Protection and Jurisdiction of the Franklin Conservation Commission, including the 100-foot Buffer Zones to a vegetated wetland. The Applicant has submitted an

NOI to the Town of Franklin Conservation Commission and must obtain an Order of Conditions to complete the proposed work.

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, P.E.
Senior Project Engineer

cc: Amy Love, Town Planner

TOWN OF FRANKLIN
DEPARTMENT OF PUBLIC WORKS
Franklin Municipal Building
257 Fisher Street
Franklin, MA 02038-3026

September 13, 2023

Mr. Greg Rondeau, Chairman
Members of the Franklin Planning Board
355 East Central Street
Franklin, MA 02038

RE: Site Plan Modification – New Warehouses, #100 Financial Park

Dear Mr. Chairman and Members:

We have reviewed the revised materials for the subject project and note that our previous comments related to the site design have been addressed.

We will review the latest traffic related materials and prepare a separate comment letter accordingly.

Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Michael Maglio, P.E.
Town Engineer

Town of Franklin

355 East Central Street
Franklin, Massachusetts 02038-1352

Phone: (508) 520-4907
www.franklinma.gov

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

DATE: **September 11, 2023**

TO: **Franklin Planning Board**

FROM: **Department of Planning and Community Development**

RE: **100-200 Financial Way**
Site Plan Modification

The DPCD has reviewed the above referenced Site Plan Modification application for the Monday, September 18, 2023 Planning Board meeting and offers the following commentary:

General:

1. The site is located at 100-200 Financial Way, and located in the Industrial Zoning District.
2. The proposed project includes the construction of a 220,000 sq/ft warehouse and a 65,000 sq/ft warehouse.
3. The Applicant has filed a NOI with the Conservation Commission.

Waivers:

- §185-21 – Parking, reduce from the required amount of 413 spaces to 262 spaces.

Comments from August 21, 2023 Meeting:

1. The Planning Board requested the applicant submit a waiver request for HDPE.
2. Submit a draft ANR plan for the site.
3. Provide additional snow storage.
4. Provide waiver for the change in parking spaces.

SCALE: 1" = 100'

0 100 200 400

N/F THE UNITED STATES OF AMERICA DEED BOOK 5912 PAGE 595 PID: 305-011-000-000

(210±(C)) BY THE BROOK "MINE BROOK"

N60°11'37"E 205.09' (TIE LINE)

N29°37'15"E 290.25' (TIE LINE)

N/F CHENT REALTY INC DEED BOOK 14037 PAGE 432 PID: 305-003-000-000

POND

EDGE OF WETLAND

USA EASEMENT 2110-E-3 AREA = 4.2± ACRES DEED BOOK 5779 PAGE 406

SEWER EASEMENT TOWN OF FRANKLIN PLAN 111 OF 1981

SEE DETAIL "B"

IR(F)

(PUBLIC)

SEWER EASEMENT TOWN OF FRANKLIN PLAN 57 OF 1989

SLOPE EASEMENT DB 2002, PG 441 PB 117, PL 388

ACCESS & UTILITY EASEMENT DEED BOOK 36503, PAGE 303 PLAN BOOK 678, PLANS 8 &9

DEED BOOK 36503, PAGE 303 PLAN BOOK 678, PLANS 8-9

56' WIDE ACCESS & UTILITY EASEMENT DEED BOOK 35711, PAGE 497 PLAN BOOK 665, PLANS 73-75

SIGN

DRAINAGE BASIN

RESCUE LADDER

RESCUE BUOY

HELIPAD

SHELTER

CP

BIT. CONC.

CONC.

FINANCIAL PARK (80' WIDE PRIVATE WAY) (SEE DETAIL A)

ELECTRIC EASEMENT DEED BOOK 32911, PAGE 354

40' WIDE ACCESS EASEMENT DEED BOOK 36503 PAGE 303 PLAN BOOK 678, PLANS 8-9

CONC. PAD W/ELEC TRANSFORMER

0.65' P BACK DHSB(F)

ENTRANCE

SIGN EASEMENT SEE DETAIL A DB 36923, PG 202

WASHINGTON STREET (S.R. 53) (VARIABLE WIDTH)

IVY LA.

DHSB(F)

DETAIL "A": 1"=40'

FINANCIAL PARK

SIGN EASEMENT APPROXIMATE LOCATION

NORTH AMERICAN DATUM OF 1983

L=301.48' R=70.00'

L=18.69' R=15.00'

L=38.41' R=25.00'

L=28.06' R=135.85'

N74°10'22"W 4.22'

ENTRANCE

L=8.50' R=70.00'

L=29.00' R=70.00'

L=3.12.16 R=70.00'

L=20.33' R=40.00'

L=38.45' R=25.00'

L=82.37' R=215.85'

L=104.16' R=1554.30'

S74°12'02"E 4.93'

24.20'

82.51'

108.41' S13°57'08"W

760.18'

IR(F)

2.76'

1.21'

84.01'

DETAIL "B": NTS

N.T.S

S13°57'08"W 270.28'

L=151.70' R=1450.00' =5°59'40"

N70°52'50"E 287.04'

I.PIN(S)

DHSB(F)

POB

EDGE OF WETLAND

N41°24'14"W 344'±

971.55' TO IR(F) N48°35'46"E 305.65'

971.17'

THE TOWN OF FRANKLIN DEED BOOK 5288 PAGE 236 TAX MAP 312 PARCEL 21

278.82' N49°14'04"W

655.52'

529.28'±

S29°42'57"W 228.84'

56' WIDE ACCESS & UTILITY EASEMENT

S61°10'10"E 480.35'

USA EASEMENT 2110-E-2 AREA = 2.38± ACRES DB 5779 PG 406

S40°43'40"E 663.06'

282.5'±

524.2'±

183.6'±

693.8'±

WOOD LANDING LOADING DOCK

100 FINANCIAL PARK 1 STORY EXISTING OFFICE BUILDING

GARAGE

RIP-RAP

SG

CPB

66.8'±

CPG

COOLING TOWER CPT

75.9'±

34.8'±

50.8'±

200 FINANCIAL PARK BUILDING FOOTPRINT= 57,570±S.F. 2 STORY EXISTING WAREHOUSE BUILDING

270.54' S28°49'50"W

LOT 5C

AREA=1,486,460± S.F.

34.1244± ACRES

UPLAND AREA

1,235,940±S.F.

WETLAND AREA

250,520±S.F.

LOT 5D

AREA=737,109± S.F.

16.9217 ACRES

UPLAND AREA

595,434,172± S.F.

WETLAND AREA

141,675± S.F.

SEWER EASEMENT DB 35711, PG 497 PB 665, PL 73-75

N18°35'21"E 592.69'

S61°10'10"E 464.55'

PARKING EASEMENT DEED BOOK 36503 PAGE 303 PLAN BOOK 678, PLANS 8-9

150.5'±

168.31'

S66°23'09"E

MAG(S)

I.PIN(S)

S63°42'35"E 7.43'

544.92'

S61°10'24"E

S78°43'48"E 133.08'

35' WIDE ACCESS EASEMENT DEED BOOK 36503, PAGE 303 PLAN BOOK 678, PLANS 8-9

EXISTING LOT 4A

S85°51'13"E 314.85'

35' WIDE ACCESS EASEMENT DEED BOOK 36503 PAGE 303 PLAN BOOK 678, PLANS 8-9

BIT. CONC.

CONC.

I CERTIFY THAT THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

PROFESSIONAL LAND SURVEYOR DATE

FOR REGISTRY USE

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED.

FRANKLIN PLANNING BOARD

DATE:

NOTE: PLANNING BOARD ENDORSEMENT DOES NOT IMPLY CONFORMANCE WITH ZONING BYLAWS.

LEGEND

	STONE WALL	I.ROD	IRON ROD
	METAL GUARDRAIL	BIT.	BITUMINOUS
	EDGE OF PAVEMENT	(C)	CALCULATED
	WIRE FENCE	CONC.	CONCRETE
	EDGE OF GRAVEL ROAD	(F)	FOUND
DH	DRILL HOLE	(R)	RECORD
DHCB	DRILL HOLE IN CONCRETE BOUND	CP	CONCRETE PAD
DHSB	DRILL HOLE IN STONE BOUND	CPG	CONCRETE PAD W/GENERATOR
		BIT. CONC.	BITUMINOUS CONCRETE

NOTES:

1) THE PURPOSE OF THIS PLAN IS TO RE-DIVIDE LOTS 5A AND 5B AS SHOWN ON A PLAN ENTITLED "ANR PLAN OF LAND FRANKLIN, MA" DATED 7/30/20, REVISED 8/31/20 AND RECORDED IN PLAN BOOK 701, PLAN 31. SAID LOTS 5A AND 5B ARE BEING RECONFIGURED INTO LOTS 5C AND LOT 5D.

2) PORTIONS OF THE AT&T EASEMENT CROSSING LOTS 2A CROSSING SOUTH OF LOCUS ENTER THE WESTERN SHOULDER OF WASHINGTON STREET (SOUTH OF LOCUS) AND THEN CROSS WASHINGTON STREET AND FOLLOW ALONG A PORTION OF THE OLD RAILROAD LAYOUT. EXACT LOCATION OF THE EASEMENT WITHIN WASHINGTON STREET IS NOT KNOWN DUE TO MISSING MARKERS.

3) (INTENTIONALLY OMITTED)

4) ELECTRIC EASEMENT CROSSING LOCUS IS DEPICTED APPROXIMATELY PER 2-19-2015 ALTA PLAN PREPARED FOR CRE MANAGEMENT, LLC. AND PLAN BOOK 56, PLAN #2653. WIDTH IS CORRECTED TO 8' PER DEED BOOK 1094 PAGE 31, DATED 10-1-1908.

5) THE SURVEYED PROPERTY IS SUBJECT TO AN EASEMENT AND RESTRICTIONS TO UNITED STATES OF AMERICA, FOR FLOOD MANAGEMENT PURPOSES, DATED APRIL 24, 1980, RECORDED WITH SAID DEEDS IN BOOK 5728, PAGE 281, AS AFFECTED BY CORRECTIVE DEED RECORDED WITH SAID DEEDS IN BOOK 5779, PAGE 406.

6) A TWO LOT DEFINITIVE SUBDIVISION PLAN WAS APPROVED FOR A PREVIOUS OWNER CREATING THE "FINANCIAL PARK" RIGHT OF WAY CUL-DE-SAC. THE COVER SHEET (ONLY) WAS RECORDED IN PLAN BOOK 428, PLAN 163 OF 1995 AT THE NORFOLK COUNTY REGISTRY OF DEEDS. THE LOTTING SHEETS, NOT RECORDED, ARE ON FILE AT THE FRANKLIN PLANNING BOARD.

7) THE SURVEYED PROPERTY IS SUBJECT TO AND HAS THE BENEFIT OF EASEMENTS AND RIGHTS GRANTED BY THE TOWN OF FRANKLIN TO DIGITAL EQUIPMENT CORPORATION DATED MAY 20, 1981, RECORDED WITH SAID DEEDS IN BOOK 5878, PAGE 135.

8) PORTIONS OF EDGE OF WATER ON ABUTTING PROPERTY HAVE BEEN SCALED FROM MASSGIS 2013-2014 ORTHO IMAGERY FOR REFERENCE PURPOSES ONLY AND ARE APPROXIMATE.

9) WETLANDS SHOWN HEREON ARE SHOWN IN MORE DETAIL ON A PLAN ENTITLED "LIMITED/COMPILED EXISTING CONDITIONS PLAN OF LAND IN FRANKLIN, MA" REVISED THROUGH JULY 19, 2023 BY THIS OFFICE AND ON FILE WITH THE TOWN OF FRANKLIN.

LOCUS MAP SCALE: 1" = 1500'

SITE ADDRESS:

#100 & #200
FINANCIAL PARK
(F/K/A 431 WASHINGTON ST.)

Franklin, Massachusetts

PREPARED FOR:

ICBP IV REIT
ACQUISITIONS, LLC

RECORD OWNERS:
ICBP IV HOLDINGS 34, LLC
C/O BERKELEY PARTERS
1 SANSOME STREET, SUITE 1500
SAN FRANCISCO, CALIFORNIA

ASSESSORS:
PARCEL ID: 312-020-000-000

REFERENCES:
DEED BOOK 36923, PAGE 217
PLAN 322 OF 1980, PLAN BOOK 281
PLAN 262 OF 1977, PLAN BOOK 259
PLAN BOOK 672, PAGE 97 & 98
PLAN BOOK 675, PAGE 39
PLAN BOOK 676, PAGE 49
PLAN BOOK 678, PAGES 8 & 9
PLAN 323 OF 1980

HANCOCK ASSOCIATES

Civil Engineers

Land Surveyors

Environmental Consultants

315 Elm Street, Marlborough, MA 01752
Voice (508) 460-1111, Fax (508) 460-1121
www.hancockassociates.com

NO.	BY	APP	DATE	ISSUE/REVISION DESCRIPTION

DATE: 8/21/23 DRAWN BY: JDB/CMC
SCALE: 1" = 100' CHECK BY: JDB

ANR PLAN OF LAND IN FRANKLIN, MA

PLOT DATE: Aug 24, 2023 1:12 pm

DWG: 26609-ANR- LOT-5C&D-2023.dwg
LAYOUT: ANR-1
SHEET: 1 OF 1

ANR-1

PROJECT NO.: 26609

PATH: \\ham02\Vol1\HSA\Civil 3D Projects\19675\Source Drawings\

Form R:
Franklin Planning Board
Subdivision Waiver Request

Prepared by: Highpoint Engineering, Inc. **Signed:** Douglas Hartnett, P.E.

Subdivision: 100/200 Financial Park - Warehouse/Industrial Development

Date: August 25, 2023

Nature of Waiver:

Request reduction of required parking from 413 spaces to 262 spaces.

This waiver request replaces the request submitted on 05/11/2023 which requested reduction of required parking from 350 spaces to 262 spaces. The required parking was increased from 350 spaces to 413 spaces to account for Office use of portions of the buildings. Refer to Parking Summary on C100.

Subdivision Rules and Regulation Reference:

Franklin Zoning By-Law Section 185-21(A)(4)

Reason the waiver is requested:

Waiver is requested as existing building tenant use and proposed warehouse parking demand is significantly lower than what off-street parking regulations require.

Alternatives to granting the waiver:

Construct additional parking that has no actual demand based upon existing and proposed tenant uses.

Impact of waiver denial on the project:

Construction of additional impervious area with associated stormwater improvements displaces existing landscape and natural wooded areas when it is not necessary to support the project.

Reasons this waiver is in the best interests of the Town and consistent with the intent and purpose of the Subdivision Control Law:

Granting of waiver reduces impervious area and related stormwater improvements within the Water Resources District retaining existing landscape and naturally wooded open space.