



February 10, 2025

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

**Re: Self Storage Facility
151 Grove Street
Site Plan Application**

Dear Mr. Rondeau:

BETA Group, Inc. (BETA) has reviewed documents for the project entitled “Guardian Self Storage II” located at 151 Grove Street in Franklin, Massachusetts. This letter is provided to outline BETA’s findings, comments, and recommendations.

Basis of Review

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

- Application for Approval of a Site Plan and Special Permit, dated January 09, 2025, including the following attachments:
 - Application for Approval of a Site Plan and Special Permits
 - Certificate of Ownership with Deed
 - Memorandum in support of application for Special Permit to allow storage facility within the Industrial Zone
 - Certified Abutters List
- Plans (10 sheets) entitled: **Site Plan and Special Permit for Guardian Self Storage II**, dated January 08, 2025, prepared by Guerriere & Halnon, Inc. of Franklin, MA.
- Memorandum to Mr. Mark Yadisernia, Guardian Self Storage RE: Traffic Generation Assessment, Proposed Self Storage Facility-151 Grove Street, prepared by Mr. Jeffery S. Dirk, PE, Vanasse & Associates Inc., Andover, MA dated January 09, 2025.
- Architectural plans for proposed building (4 sheets) prepared by Designhaus Architecture, Auburn Hills, MI, undated.
- Color renderings (4 sheets) of proposed site development
- **Stormwater Management Report** dated January 09, 2025, prepared by Guerriere & Halnon, Inc. of Franklin, MA.

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

- **Zoning Chapter 185 From the Code of the Town of Franklin**, current through November 03, 2021
- **Zoning Map of the Town of Franklin, Massachusetts**, amended November 24, 2020
- **Massachusetts Wetlands Protection Act 310 CMR 10.00** effective October 24, 2014
- **Massachusetts Stormwater Handbook** effective January 2, 2008 by MassDEP
- **Stormwater Management Chapter 153 From the Code of the Town of Franklin**, Adopted May 2, 2007
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, dated August 20, 1997
- **Town of Franklin Best Development Practices Guidebook**, dated February 2021

1.0 SITE AND PROJECT DESCRIPTION

The project site includes one parcel no. 294-001, with a total area of 3.65 acres located along the westerly side of Grove Street in the Town of Franklin (the "Site"). The Site is located within the Industrial zoning district. All the surrounding lots are also located within the Industrial Zone. Kenwood circle is located on the opposite side of Grove Street at the northerly corner of the parcel. The parcel to the north, which abuts the northerly and westerly property line, is Owned by the Commonwealth of Massachusetts and is part of the Franklin State Forest.

The existing Site is an undeveloped parcel of land which consists primarily of woodlands. Topography at the Site is generally directed southeast towards a flagged bordering vegetated wetland along Grove Street. The Site is not located within a FEMA mapped 100-year floodplain, an NHESP-mapped estimated habitat of rare or endangered species, or any other critical area. NRCS soil maps indicate the presence of Charlton-Hollis-Rock Outcrop Complex and Merrimac fine sandy Loam each with a Hydrologic Soil Group (HSG) rating of A (high infiltration potential).

The project proposes to construct a two-story climate controlled 36,100+ square foot building with a paved access driveway around the entire building. Access to the Site will be through a new 24.0' wide paved driveway from the northeast corner of the frontage along Grove Street. The driveway will be slightly north of the intersection with Kenwood Circle. Six parking spaces will be provided at the northeast corner of the building, including two accessible spaces. A 6' high chain link fence will be provided around the entirety of the developed portions of the site. In addition, two locked sliding gates will be provided across the driveway at each end of the building along the east face.

Sewer and water connections for the building will be provided at the proposed driveway connection with Grove Street. The sewer connection will be a 6" PVC which will tie into an existing 8" gravity sewer in Grove Street. Two water services will be provided, a 1-1/2" domestic water service and an 8" fire service. Each will be tapped directly into the existing main along the west side of Grove Street. The existing fire hydrant on Grove Street opposite Kenwood Circle will also be relocated to allow the driveway to be constructed. Stormwater management is proposed via a new subsurface infiltration structure along the southerly edge of the building and an infiltration basin at the northeast corner of the parcel adjacent to the entrance driveway. The current runoff pattern through the site towards the existing wetlands at the southeast corner of the parcel will be maintained.

2.0 TOWN OF FRANKLIN ZONING REQUIREMENTS

The project is subject to the Town of Franklin zoning regulations outlined under Chapter 185. Review comments related to the zoning bylaw are provided in the following sections.

The project proposes a controlled climate self-storage facility, which is an allowed use subject to a Special Permit from the Planning Board within the Industrial zoning district. All the abutting parcels are located within the same zoning district.

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

The project will comply with dimensional requirements for lot area, frontage, lot depth, lot width, front yard, side yard, rear yard, building coverage, and maximum impervious coverage.

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

As noted in the application, the applicant is asking the Board for a determination that the parking spaces required for the proposed warehouse use be waived in their entirety. As shown, a 6-space parking lot at

the front right corner of the building is proposed to satisfy the parking requirements for the proposed office use. Since the proposed facility is a self-storage unit with no proposed outside storage, and gated vehicular access into the building, BETA has no issues with the request.

- Z1. Identify sight distances at the proposed entrance (§185-21.C.(7)(c) and demonstrate compliance with MASSDOT 2006 Design Guide requirements.

EARTH REMOVAL (§185-23)

The project is primarily a fill situation. The perimeter roadway along the south side of the building will require approximately 7' of fill to meet the proposed grade.

- Z2. Identify the proposed slab elevation for the structure.
- Z3. Summarize the net cuts and fill on site.

INDUSTRIAL DISTRICT PERFORMANCE CONTROLS ((§185-22)

In accordance with this section of the bylaw, no sound, noise, vibration, odor or flashing lights shall be perceptible within 400' from the boundaries of the parcel. Based upon the proposed use, it is not anticipated that there will be any objectionable conditions created by the use, however, the applicant should address the same. (See Z3 below)

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 submission is in compliance with this section except as noted below:

- Z4. Provide data quantifying on-site generation of noise and odors (§185-31.C.(3).(r)).
- Z5. Provide a photometric plan (§185-31.C.(3).(k)).

3.0 TRAFFIC IMPACT AND ASSESSMENT

The Applicant has provided a Trip Generation Assessment for the proposed self-storage facility, prepared by Vanasse & Associates, Inc. BETA offers the following:

GENERAL TRAFFIC COMMENTS

- T1. The Trip Generation Assessment was conducted in accordance with industry standards and practices, and MassDOT policies. The use of Land Use Code (LUC) 151 (Mini-Warehouse) is appropriate for the estimation of new trips.

SITE ACCESS AND CIRCULATION

Access to the Site is proposed via a new curb cut and driveway entrance connecting to Grove Street. The site entrance will connect to a new driveway with one-way circulation, counter-clockwise around the building. The driveway will direct incoming traffic to the office at the left front of the building. Access around the Building will be provided by a 30' wide paved driveway that will also allow users to temporarily park while using the site. At the rear of the building the driveway will widen to 40' which will allow users to back into the proposed exterior drive-up units along this face of the building. The 6 parking spaces proposed, which include 2-HP spaces, will be located at the front of the office at the left front corner of the building. Access around the building will be controlled by locking sliding gates at each end of the building. Pedestrian access into the building will be provided by doorways on the north and south ends of the buildings, while the storage at the rear of the building will be direct at grade access to 13 drive-up

units. The truck turning plan provided with the traffic assessment indicates that the Franklin Fire truck will easily maneuver around the site.

PARKING AND LOADING

Required parking is defined by §185-21 of the Town Zoning Bylaw. The proposed development includes warehouse use (62,584 s.f.) and an associated office use (1,050 s.f.). Required parking is calculated as follows:

| Use Designation | Criteria | Building Area | Required Parking |
|------------------------|------------------------------------|----------------|------------------|
| Other Office and Banks | 1 space per 250 SF of floor area | 1,050 Sq. Ft. | 6 Spaces |
| Warehouse | 1 Space per 1,000 SF of floor area | 62,584 Sq. Ft. | 63 Spaces |
| Total | | | 69 Spaces |

The project proposes 6 total parking spaces. Two (2) of the parking spaces are designed to be accessible, and each will be van accessible, in accordance with 521 CMR 23.2.1. The applicant has requested a parking determination from the Board to waive the requirement to install any of the required spaces for the proposed warehouse use.

All maneuvering aisles are at least 24 feet wide. Parking spaces are 9 feet wide and 19 feet long.

- T2. Clarify why the office component of the proposed development was not incorporated into the parking assessment. Furthermore, six (6) parking spaces results in a ratio of 0.10 parking spaces per 1,000 sf based on the square feet of the proposed self-storage facility.
- T3. The proposed driveway is located opposite Kenwood Circle and the centerline is offset approximately 9’ to the north of the roadway. Recommend shifting the driveway to the south to provide a better alignment that is consistent with a conventional four-legged intersection.
- T4. Vertical Granite Curbing is proposed at the entrance from Grove Street and the remainder of the site will utilize a modified Cape Cod berm. BETA will defer to the Board regarding the requirements of §185-29.
- T5. Provide vehicle turning diagrams to illustrate that the proposed driveway and site circulation can accommodate the largest vehicle expected to access the site.
- T6. Provide the accessibility parking space marking for the two parking spaces designated as HC should. Also, show the location of the proposed signage associated with these spaces on the plan.
- T7. Clarify the color of the proposed parking space pavement markings.

4.0 SIGNAGE AND LIGHTING

The project proposes a “business sign” at the site entrance as well as a stop sign to control egress from the Site. Accessible parking signs are proposed at applicable parking spaces.

- SL1. Provide details and dimensions for proposed “business” sign (§185-31.C.(3)(j))

A photometric plan has not been provided nor are there any proposed lights indicated on the site plans.

The Illuminating Engineers Society of North America (IESNA) recommends the following illuminance for parking lots:



| Level | Horizontal Illuminance (Min) | Vertical Illuminance (Min.) | Uniformity Ratio (Max/Min) |
|-------------------------------|------------------------------|-----------------------------|----------------------------|
| Basic Maintained Illuminance | 0.2 | 0.1 | 20/1 |
| Enhanced Security Illuminance | 0.5 | 0.25 | 15/1 |

SL2. Provide a photometric plan for the site which documents the intensities required for the site (§185-31.C.(3)(l)).

5.0 UTILITIES

Proposed utilities depicted on the plans include domestic water, fire service, and sanitary sewer. Domestic water and fire service are proposed via new 1.5" and 8" services, respectively, connecting to the existing main at Grove Street. Sanitary sewer service is proposed via a new 6" PVC service which will connect to an existing sewer service in Grove Street just north of an existing sewer manhole which accepts flows from force mains both from Grove Street and Kenwood Circle. In addition to the new services, the existing fire hydrant at the front of the site will be relocated to the northerly property line along Grove Street.

- U1. The hatch lines for the existing foundation are shown on sheet 6 of 10 just below the drain line from DMH 8 to FES 3 and should be removed for clarity.
- U2. Coordinate with the DPW to determine if the existing fire hydrant should be relocated or replaced with new.
- U3. Clarify if vehicles will be able to enter the drive-up units and evaluate if floor drains and a gas trap are required.

6.0 LANDSCAPE TREATMENT & GRADING

The project proposes 17 trees and 12 shrubs around the proposed business sign at the entrance. New trees are generally proposed along driveways, around the site perimeter.

Based upon the required parking, per §185-21.C.(5), the project is required to provide 1 tree per 10 parking spaces. For 68 spaces, 7 trees are required. Although the applicant has requested a determination to reduce the parking to 6 spaces, the planting plan includes 17 trees to satisfy this requirement.

There are no abutting residential uses to the site and based upon aerial imagery, the areas to the north and west of the site are the State Forest which is heavily wooded. All the proposed loading will be at the sides and/or rear of the building where the security fencing will help to obscure the view from the street.

LA1. Indicate proposed seed mix and loam depth (§185-31.C.(3)(j)) for landscaped areas; use of native seeding is encouraged especially in areas which are not required to be a fine lawn.

The project includes substantial grading throughout the project area. Most of the test pits encountered ledge at or less than 48" with a few encountering refusal up to 72". At the northwest corner of the parcel, the proposed grade will be approximately 9' below grade, thus, blasting for the removal of ledge can be anticipated. It can also be anticipated that ledge removal will be required for the construction of the northerly third of the proposed building slab. Although the site may be a net fill site, it may be questionable whether the blasted ledge could be reused which may necessitate a greater amount of construction traffic associated with the movement of construction materials. There are 2 retaining walls

proposed on site. These walls are located at the northwest and southeast corners of the building and are needed to deal with the grade changes at these points. A proposed drainage swale will be shaped along the outside edges of the site around the building to direct runoff entering the site from the abutting property around the proposed development area.

- LA2. Recommend providing a construction detail for the proposed swale to be shaped around the perimeter of the parcel.
- LA3. The proposed trees along the southerly property line will be located within the proposed swale in this area. BETA recommends that these trees be relocated to another area on the site.

7.0 STORMWATER MANAGEMENT

The proposed stormwater management design consists of a new subsurface infiltration system proposed on the south side of the building and an infiltration basin at the front of the building. The Stormwater runoff will be conveyed to this system via a new closed drainage system consisting of catch basins, manholes, and roof drains. Ultimately, all the runoff from the site will discharge into the existing wetlands located along Grove Street at the southerly front corner of the parcel. Runoff entering this wetland area will be conveyed through the existing municipal system in Grove Street to the east.

GENERAL

- SW1. Clarify the size of the culvert from the wetlands in Grove Street. It is labeled as both 15" RCP and 18" RCP on the site plans
- SW2. Most of the site development area is identified by NRCS-WSS as Charlton-Hollis-Rock Complex, 3-8% slope. Unfortunately, the soils map does not classify the layer. Rather it classifies each of the underlying soil types. Charlton is HSG A and Hollis is HSG C/D. For this site, the test pits conducted on site all indicated that the underlying mineral soil is SAND. In addition, only 3 of the 24 test pits encountered any redoximorphic features. Based upon these soil conditions, BETA does not consider the soils on site as HSG D (clay), rather they should be considered as HSG A which is the classification of the Charlton Soil Class. Accordingly, the analysis should be revised to reflect this soil classification.
- SW3. On the watershed plans, correct the HSG Rating for the Merrimac Soil group. It should be HSG A not D.
- SW4. The HydroCAD results for existing conditions is not included in the report.
- SW5. The detail on sheet 9 of 10 shows a 30 Mil PVC liner to be placed at the bottom of the sediment forebay. The liner is not needed, nor can it be protected from damage during maintenance. BETA recommends that it Be removed.

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. Compliance with these regulations is outlined below and throughout the following sections.

- SW6. Provide a description of construction and stockpile and/or excess materials removed from the Site expected to be stored on-site, including description of controls to reduce pollutants from these materials and other wastes (§153-12.L).

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

SW7. The proposed roof drain connection with the infiltration basin is a proposed HDPE culvert. BETA will defer to the Board if this should be RCP in accordance with the regulations. (§300-11.B(2.a)).

BEST DEVELOPMENT PRACTICES GUIDEBOOK

The project is required to comply with the requirements of the Town of Franklin 2021 Best Development Practices Guidebook (BDPG).

SW8. Indicate if proposed seed mix and plantings will reflect native vegetation, particularly outside the proposed perimeter fencing (BDPG Page 7).

MASSDEP STORMWATER STANDARDS

The project is subject to the Wetlands Protection Act and Town regulation §153-13 and therefore must comply with the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

LOW IMPACT DEVELOPMENT (LID) TECHNIQUES

Proposed LID measures include

- No disturbance to any wetland resource area
- Minimizing disturbance to existing trees and shrubs
- Use of Country Drainage
- Grass channel

SW9. Applicant should clarify why “minimizing disturbance to existing trees and shrubs, and use of country drainage are LID measures applicable to the Site.

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 3 new outfalls to the wetlands. Each will be provided with outlet protection and will be setback more than 25’ from the resource.

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 to mitigate increases to runoff rates with the use of a subsurface infiltration system and a subsurface detention system. Calculations indicate a decrease in peak discharge rate and peak runoff volume to all points of analysis.

SW10. Correct the HSG Rating for both existing and proposed hydro-cad analysis. (See SW2&3 above)

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.*

The site is in an area which is shallow to bedrock, and the NRCS soil maps indicate the presence of Charlton-Hollis-Rock Outcrop complex over most of the development area. The test pit results also confirm the presence that soils on site are generally a shallow layer of sand overlying the ledge. Although the site is shallow to bedrock, the soils do lend themselves to recharge.

Groundwater recharge is proposed via a new subsurface infiltration system and an infiltration basin just upgradient of the wetlands at the front of the site. The project is expected to provide a recharge volume in excess of what is required.

SW11. The required recharge volume should be revised to reflect the correct HSG rating. However, the Water Quality volume will control the static storage volume required in the basins. Thus, the change in soil rating will not impact the overall results.

SW12. In accordance with the standards, the infiltration basin must be setback a minimum of 50' from the waters of the commonwealth. In accordance with the interpretation of DEP, this setback measurement should be measured from the downstream slope level with the bottom of the basin. Based upon this requirement, the infiltration basin should be moved approximately 8' north to achieve this setback.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): *For new development, stormwater management systems must be designed to remove 80% of the annual load of Total Suspended Solids (TSS).*

The project is also subject to §153-16.B of the Town of Franklin Stormwater Management Regulations. As a new development, the project is required to meet the performance standards outlined in §153-16.B. The project will meet this requirement by retaining the volume of runoff equivalent to 1.0" multiplied by the total post-construction impervious surface area within the proposed infiltration systems.

The project includes the following treatment trains:

| Treatment Train | SCM 1 | SCM 2 | Infiltration SCM | TSS Removal % |
|-----------------|-----------------------|------------------|--------------------------------|---------------|
| A | Deep Sump Catch Basin | Isolator Row | Subsurface Infiltration System | 85% |
| B | Deep Sump Catch Basin | Sediment forebay | Infiltration Basin | 85% |

The project has been designed to provide at least 80% TSS removal for treated impervious areas. The proposed infiltration SCM has been sized to treat the required 1-inch water quality volume.

A Long-Term Pollution Prevention Plan is included in the O&M Plan.

SW13. The isolator row meets the pretreatment requirements for the subsurface system; therefore, the deep sump catch basin should not be listed in the pretreatment analysis for the subsurface system.

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 is not a LUHPPL – **standard not applicable.**

CRITICAL AREAS (STANDARD NUMBER 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.*

The project is not located in a critical area – **standard not applicable.**

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

The project does not qualify as a redevelopment – **standard not applicable.**

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, a Notice of Intent will be required to file with EPA including development of a Stormwater Pollution Prevention Plan (SWPPP). A SWPPP was not provided with the submission; the narrative indicates a SWPPP will be issued prior to construction. Erosion control measures are depicted on the plans including compost filter tubes, stabilized construction entrance, inlet protection, and designated stockpile areas.

SW14. The use of the proposed infiltration basin as a temporary sediment basin is not allowed in accordance with the standards. As noted earlier, a significant portion of the westerly portion of the site will be exposed and blasted ledge with very little erosion potential. BETA recommends that the applicant use a second layer of 12" silt sock between the basin and the building area once the basin is shaped to protect the basin from any potential sediment from the development upgradient around the building.

SW15. Provide measures to protect open excavations for the subsurface infiltration structure during construction.

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 Plan was provided with the Stormwater Management Report.

SW16. O & M plan should be developed as a stand-alone document which can accompany the deed and signed by the Owner.

SW17. Incorporate maintenance manual for cul tec system and Contech separators into the manual.

SW18. Provide map, drawn to scale, that shows the location of all stormwater BMPs in each treatment train and snow storage areas.

SW19. Provide a budget and inspection form.

SW20. Include provision requiring a documentation submittal to the DPW confirming when maintenance has been satisfactorily completed (§153-18.B(6)).

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.* A signed Illicit Discharge Compliance Statement was provided with the submission.

8.0 SUMMARY

Based on our review of the Project documents and plans, the Applicant is required to provide additional information to the Planning Board to demonstrate compliance with the MassDEP Stormwater Management Standards, the Town of Franklin Regulations, and generally accepted engineering practices.

BETA has specifically noted the following concerns regarding the project submittal:

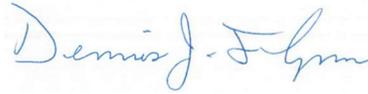
- No lighting plan or photometric plan has been submitted.
- The soil conditions on site have not been properly represented in the drainage analysis.
- The existing conditions drainage analysis is missing,

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 Manager



Dennis Flynn, PE PTOE
Associate