



BOARD OF APPEALS
Jesse Geller, Chairperson

*Town of Brookline
Massachusetts*

**BOARD OF APPEALS DECISION
MODIFICATION TO BOARD OF APPEALS CASE NO. 2016-0036
COMPREHENSIVE PERMIT
1180 BOYLSTON STREET**

Town Clerk Stamp Received ^^^

TOWN CLERK'S OFFICE
JUN 1 '22 AM 9:03

Date: June 1, 2022

Location: Assessor's Atlas Map Sheet 122B, Block 433, Lot 12 known and numbered as 1180 Boylston Street, Brookline, Massachusetts, (parcel "433-12-00") and Assessor's Atlas Map Sheet 122B, Block 433, Lot 11-00 known and numbered as 612-614 Hammond Street, Brookline, Massachusetts (parcel "433-11-00"). On August 5, 2020, an Approval Not Required plan endorsed by the Brookline Planning Board on July 16, 2020, combining the two aforementioned lots was filed with the Registry of Deeds Norfolk County. The Assessor stated that the lots would be combined effective July 1, 2022.

PROCEDURAL HISTORY

1. A Comprehensive Permit was granted in 2017 ("2017 Decision"), modified in 2019 ("2019 Decision"), and modified again in 2020 ("2020 Decision") to construct a 6-story mixed-use building with 50 age-restricted residential rental units, ground floor retail, and 70 underground garage parking spaces on two levels ("Modified Comprehensive Permit").
2. Blasting was prohibited in the 2017 Decision.
3. On February 24, 2022, Chestnut Hill Investments LLC (the "Applicant") submitted a Project Change Letter requesting a lift of the blasting prohibition ("Project Change") to the Brookline Board of Appeals (the "Board").
4. On March 3, 2022, the Board determined that the Project Change is Substantial pursuant to 760 CMR 56.07(04).
5. The Board opened a duly advertised public hearing on April 6, 2022, with the written permission of the Applicant to open the hearing beyond the 30-day statutory deadline. The Board continued the hearing and heard and/or deliberated on testimony on the following dates: April 6, 2022 (continued), April 19, 2022 (continued), April 21, 2022 (continued), May 4, 2022, May 11, 2022 (continued), and May 23, 2022.
6. The materials submitted by the Applicant in its Project Change Letter and during the public hearing include:

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- a. Maine Drilling and Blasting Controlled Blast Plan dated April 14, 2022
 - b. Site Safety Plan for Controlled Blast Operations dated May 9, 2022 updated May 23, 2022 ["Blast Plan"]
 - c. Rock Excavation Work Plan Summary dated May 18, 2022 updated May 23, 2022 ["Excavation Work Plan"]
 - d. Communication Plan dated May 9, 2022 ["Communication Plan"]
 - e. Exhibit A: Plan of Blasting Area ["Blast Map"]
 - f. Exhibit A-1: Vibration Monitoring Created April 5, 2022 ["Vibration Monitoring Report"]
 - g. Exhibit B: Traffic Management Plan ["Traffic Management Plan"]
 - h. Exhibit C: Site Security Plan and Sentry Locations ["Security Plan"]
 - i. Letter to the Board: Environmental Conditions Regarding Low-Impact Blasting - GEI Consultants dated March 24, 2022
 - j. Method 3 Risk Characterization, Permanent Solution with Conditions Statement, and Phase V Completion Statement RTN 3-19813 - March 2020
 - k. National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) - March 2022 Correspondence
7. On May 23, 2022, the Board closed the hearing.
 8. The Board deliberated on the Project Change at a public hearing held on May 23, 2022, and voted to grant a Modified Comprehensive Permit subject to the conditions listed below, which supplement, modify, amend the existing Conditions of the Comprehensive Permit.
 9. During the course of the public hearing, the Brookline Fire Department, Town staff, and local residents submitted oral and written testimony with respect to the Project Change.
 10. The following technical experts and independent peer reviewers assisted the Board in its review of the Project Change:

Blasting and Geotechnical Engineering
Jay Perkins, P.E., Geotechnical Engineer
Brierley Associates
Cambridge, Massachusetts

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Site Remediation and Geotechnical Engineering
Daniel LaFrance, P.E., Licensed Site Professional
Fuss & O'Neill, Inc.
Quincy, Massachusetts

Mass Housing Partnership Fund
Chapter 40B Technical Assistance
Judith Barrett, Principal
Barrett Planning Group LLC
Hingham, Massachusetts

SUPPLEMENTAL FINDINGS

1. Blasting permits are issued under the jurisdiction of the Brookline Fire Department.
2. Upon the analysis of the recommended conditions of the Town's blasting consultant, Todd Cantor (Brookline Deputy Chief of Fire Prevention) has determined that the issuance of a blasting permit would be safe, provided that these Conditions are met in the performance of the blasting work.
3. The Site is the location of a former gas station and is listed as a disposal site under Release Tracking Number 3-19813 and is subject to the requirements of the Massachusetts Contingency Plan pursuant to 310 CMR 40.0000.
4. The Applicant is the party responsible for environmental compliance and long-term remediation of the Site.
5. Blasting was prohibited in the 2017 Decision upon the recommendation of the Town's Licensed Site Professional to prevent any hazardous contaminants from entering into cracks in the bedrock that might be newly introduced by blasting and potentially migrate into and contaminate the groundwater.
6. According to the March 24, 2022, letter from the Applicant's Licensed Site Professional, Ileen S. Gladstone of GEI Consultants:

"Dewatering has been necessary to manage groundwater during construction. Dewatering has been ongoing since October 2021 ... The influent and effluent of the onsite treatment system will continue to be sampled and tested. Chestnut Hill Investments recently submitted a six-month recertification to the Environmental Protection Agency (EPA) for the RGP [Remediation General Permit]. No changes to the ongoing management of excavated soil and rock or dewatering treatment are needed due to the proposed changes to the rock removal methods. No changes to the RAM [Release Abatement Measure] Plan or NPDES [National Pollutant Discharge Elimination Systems] RFP are required due to the proposed changes to the rock removal method."

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7. Daniel LaFrance, the Town's Licensed Site Professional reviewed the following geotechnical reports submitted by the Applicant for the public hearing:
 - a. Letter to the Board: Environmental Conditions Regarding Low-Impact Blasting - GEI Consultants dated March 24, 2022
 - b. Method 3 Risk Characterization, Permanent Solution with Conditions Statement, and Phase V Completion Statement RTN 3-19813 - March 2020
 - c. National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) - March 2022 Correspondence

8. In his testimony at the May 4, 2022, public hearing, Mr. LaFrance no longer has reservations about permitting blasting at the Site:

"Fuss & O'Neill's opinion is that having several additional years' worth of data and having shown that the groundwater is attenuated, the contamination risks no longer are present, that groundwater migration is not unto itself a concern, and so given that the groundwater quality has been restored, we don't have the same concern about [if] you open up pathways in the bedrock and groundwater migrates. That doesn't raise a specter of concern for public health and environmental conditions on neighboring properties because the environmental quality of the water has already been restored to a level that is and has been asserted to represent a condition of no significant risk under the state standards."

9. The Applicant's Geotechnical Consultant testified that due diligence had included borings to identify below grade conditions to determine acceptable excavation methods.
10. According to the Applicant's General Contractor, the first 15 feet successfully excavated of the 29 feet to be excavated consisted of approximately equal parts soil and bedrock. Hoe-ramming was successful in excavating the portion identified as bedrock because the shallower rock had more fissures to facilitate excavation. The deeper rock has proven to be denser and more challenging to hoe-ram.
11. Approximately 8,000 cubic yards (CY) remains to be excavated. Only 3,400 CY of that 8,000 CY total can be removed by low-impact blasting. The remainder will need to be excavated by hoe-ramming because areas in the blast buffer and the areas supporting construction equipment cannot be blasted.
12. The Applicant's General Contractor testified to the Board that after the proposed blasting a rock face will be revealed that will facilitate the remaining excavation by hoe-ramming.
13. Though outside the scope of the hearing, at the request of the Town's Blasting Consultant, the Applicant submitted an Excavation Work Plan that indicates that blasting would decrease the duration of the excavation work by approximately ten months, thereby shortening the duration of impacts on the community.

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14. Mr. Perkins reviewed the Blast Plan, Safety and Security Plans, Communications Plan, and Excavation Work Plan and determined in his testimony to the Board that blasting would be feasible, is recommended, and is safe to proceed at the Site.
15. According to Mr. Perkins's April 15, 2022, report to the Board, ground vibration at buildings, elastic ground displacement, and air blast overpressure levels proposed in the Blast Plan are well below the minimum allowed by the United States Bureau of Mines (USBM) for blasting events.
16. The Board acknowledges the concerns raised by abutters and other interested parties.
17. The Board finds that the conditions imposed in this Decision are necessary to address Local Concerns as that term is defined in 750 CMR 56.02. The Board finds that these conditions will not render the Project uneconomic.
18. The Applicant has had the opportunity to review the conditions and has no objections.

DECISION

At a duly noticed public hearing held on May 23, 2022, the Board considered the request of the Applicant and voted 3-0 to approve the requested Project Change as Substantial pursuant to 760 CMR 56, subject to the following Conditions, which supplement, modify, or amend the existing Conditions in the Comprehensive Permit.

AMENDED AND NEW CONDITIONS

The following condition in Schedule 3A in the Decision modified November 22, 2019 and modified November 11, 2020, is amended as follows:

1. The following text shall be struck to lift the blasting prohibition and shall be superseded by all of the new conditions listed under **Schedule 1 (2022)**:

Condition 25: ~~There shall be no blasting during the construction of the Project.~~

2. Except as noted herein, the terms of the Comprehensive Permit shall remain in full force and effect.

Attachments: Schedule 1 (2022)

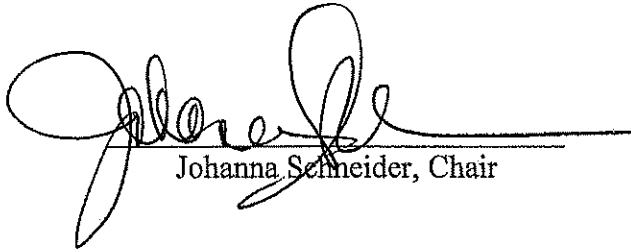
References: November 11, 2020, Modified Decision and November 22, 2019, Modified Decision for the Comprehensive Permit **CASE NO. 2016-0036**

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RECORD OF VOTE

The following members of the Board vote to approve the foregoing as a Substantial change to the Development and the Comprehensive Permit:

Signed June 1, 2022



Johanna Schneider, Chair

(signature)

By:
Johanna Schneider, Acting Chair
Randolph Micklejohn
Neil Wishinsky

[Schedule 1 follows]

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SCHEDULE 1 (2022)

1. Prior to the issuance of a Blasting Permit, the Applicant shall consult with the Fire Chief or his designee and deposit sufficient funds in a segregated Town account for use by the Town to pay fees of the Town Blasting Consultant to: review and approve blasting/drilling and associated safety plans; to oversee blasting and drilling performed by the applicant; to be on site for all test blasts; and to review seismograph, noise, and dust monitoring logs related to blasting. In consultation with the Fire Chief or his designee, the Applicant shall deposit additional funds as needed in the segregated Town account to cover all fees for the Town Blasting Consultant. Any funds not used by the Town will be returned to the Applicant.
2. The Applicant shall demonstrate to the satisfaction of the Town that proactive measures will be in place before, during, and after (as the result of) blasting events to avoid harm to human life; to prevent damage to neighboring properties; to protect State, municipal, and third-party utilities and infrastructure; and to minimize environmental contamination of air and groundwater.
3. Prior to the issuance of a Blasting Permit, the Town Blasting Consultant in conjunction with the Fire Chief shall review and approve:
 - a. Plan of blasting area;
 - b. Detailed blast design and procedures;
 - c. Detailed test blast program; and
 - d. Detailed blast site security plan (how site will be secured during blast events), signage, sentry location, traffic management, and community communication plans.
4. The Applicant's Blasting Consultant shall submit post-blast reports, including seismograph event reports, to the Town Blasting Consultant within 24 hours after each blast event.
5. The Applicant shall maintain an up-to-date Excavation Work Plan for the periodic review of the Town Blasting Consultant, the Fire Chief, and the Building Commissioner that shows how blasting and hammering (of remaining rock) will be coordinated and scheduled to reduce duration and limit adverse impacts on community quality of life.
6. Any damage to structures and parking areas including but not limited to infrastructure owned by the Commonwealth of Massachusetts, the Town of Brookline, and/or private utility companies causally connected to blasting at the Site shall be the financial responsibility for the Applicant to repair, and the Applicant shall indemnify and hold harmless the Town from and against any and all loss, liability, claim, cost, or expense related to said damage.

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7. The Applicant's Blasting Contractor shall carry a minimum of \$5 million in Comprehensive Liability Insurance in additional insurance coverage against damage to structures caused by underground explosion and collapse hazard, which coverage shall be in force for the duration of the blasting at the Site and shall be documented by the Applicant.
8. The Applicant shall conduct pre-blast surveys which shall include interior and exterior of structures of properties within a 250-foot radius of the Site. The Applicant shall notify owners of properties between the aforementioned 250-foot radius and a 500-foot radius of the Site that those property owners may opt into the pre-blast survey.
9. Only Fume Class 1 explosives shall be used.
10. The Applicant shall install settlement monitoring points on all abutting structures of the lateral support system. A minimum of three points shall be installed on the foundation system and monitored by optical methods a minimum of once every two weeks until excavation is fully backfilled. Results shall be plotted and submitted to the Town every two weeks.
11. The Applicant shall provide its seismograph monitoring data and lateral support system monitoring data to the Town for review as requested by the Town Blasting Consultant.
12. Detonation of blast rounds shall be limited to the hours between 10 am and 2 pm, Monday through Friday, to minimize the disturbance to abutters to the Site.
13. The Applicant's Blasting Contractor shall use a system of warning signals to warn personnel at the site and nearby residents and businesses prior to each blast. The warning signals shall be audible at least 500 feet from the blasting area.
14. To monitor vibrations, the Applicant shall:
 - a. Provide a minimum of three seismographs to monitor ground and air vibrations from each blast round;
 - b. Ensure that Peak Particle Velocity (PPV) shall not exceed a maximum of 2.0 in/sec as per USBM RI 8507 Appendix B, Figure B-1;
 - c. Show the number and location of seismographs on Site in each post-blast report;
 - d. Blast monitoring shall be performed and reported for each blast round using their approved post-blast form under contract to the Applicant or the Applicant's Blasting Contractor;
 - e. Monitoring reports shall be kept on file at the Site for the review and approval of the Fire Department and the Town Blasting Consultant.

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15. Air blast overpressure levels shall not exceed 133 dBL, or 0.014 psi, as measured at abutting properties.
16. The following controls shall be in place to reduce the potential for flyrock:
 - a. Blasting mats shall be used to fully cover the blast area for every blast;
 - b. Drilling logs shall be kept for all blast holes drilled, documenting open joints, seams and other anomalies, and the logs shall be reviewed by the Applicant's and the Town Blasting Consultant prior to each blast;
 - c. A video shall be taken of each blast round detonated to detect and correct any problems before proceeding with additional blast rounds.
17. All exposed post-blast rock faces shall be evaluated for stability by the Applicant's Geotechnical Consultant. Results shall be reviewed and approved by the Town Blasting Consultant.
18. The Applicant shall have its Geotechnical Consultant on Site to ensure the stability of the rock face and to prevent potential collapse of the rock face after each blast event.
19. Prior to issuance of a Blasting Permit by the Brookline Fire Department, the Applicant shall provide to the Town (a) evidence that Massachusetts Department of Transportation permits blasting and (b) all correspondence with gas and other utility companies prior to blast events.
20. To reduce potential noise and dust, the crushing of excavated rock on Site is prohibited.

Dust levels at property limits shall be set to a maximum level of 150 micrograms per cubic meter of air (PM 10, breathable particulate matter), based on National Ambient Air Quality Standards set by the Environmental Protection Agency (EPA). Levels shall be measured and recorded continuously during construction at the property line near the residences and businesses closest to construction activities. If dust levels exceed the maximum allowed, dust producing construction activities shall be temporarily stopped. The Applicant shall notify the Brookline Public Health Department in the event that dust levels exceed the maximum allowed to modify construction activities to reduce dust generation to safe levels.
21. The Applicant shall take steps to minimize dust generated during drilling of blast holes and other excavation and construction operations including but not limited to:
 - a. wetting down materials;
 - b. installing dust collectors on all drill rigs;
 - c. placing blast mats; and

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- d. covering debris hauled away from the site or fill delivered to the site in open trucks.
22. Noise levels of all construction activities and equipment shall not exceed the Town's Noise regulations under General By-Laws Article 8.15, Section 8.15.6(c). Drilling operations shall be minimized through the use of appropriate mufflers and other measures. Noise levels due to drilling and other equipment shall be measured using Type I or Type II A-weighted sound level meter. Records of readings that exceed those specified in the Town By-Laws shall be reported to Town Departments and to the Town Blasting Consultant and steps shall be taken to reduce noise levels to comply with Town regulations.
23. The Applicant shall coordinate with the Town Police Department with respect to the duration and location of traffic interruptions and street closures.
24. From the time the Blasting Permit is issued through the end of blasting activities, the Applicant shall maintain a community outreach and communication program as follows:
- a. At the expense of the Applicant, the Town shall hire a Community Liaison to:
 - i. coordinate communication among the Town Blasting Consultant and Town Departments;
 - ii. serve as a liaison between Town, residents, and the Applicant; and
 - iii. serve as a resource for residents and businesses who have complaints, concerns, and questions.
 - b. Prior to the issuance of a Blasting Permit, in consultation with the Fire Chief or his designee the Applicant shall deposit sufficient funds in a segregated Town account for use by the Town to pay for fees for the Town Community Liaison. In consultation with the Fire Chief or his designee, the Applicant shall deposit additional funds as needed in the segregated Town account to cover all fees for the Town Community Liaison. Any funds not used by the Town will be returned to the Applicant.
 - c. The Applicant shall create a website for communicating blasting and construction activities to the public.
 - d. The Applicant shall maintain a communications list of residents and businesses with preferred contact information including property addresses.
 - e. The Applicant shall notify residents and property owners within 500 feet and others who request such notification about blasting, including:

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- i. Distribute introductory educational material about blasting and frequently asked questions (such as when it is advised to stay indoors or close windows);
 - ii. Notify the public 24 hours in advance of blast events including test blasts;
 - iii. Notify the public one hour in advance of blast events.
- f. The Applicant shall identify what warning signals sound like in sample video/audio and written description on its website.
- g. The Applicant shall post signage at the Site with the contact information of the Town Community Liaison and the website address of the Applicant's informational website as a resource for the public during blasting.

1 - Filed with Town Clerk (Town Clerk Stamp)

A handwritten signature in black ink, appearing to be 'D. J. [unclear]', written in a cursive style.

2 - Twenty-Day Appeals Period Concluded (Town Clerk Stamp)

APPLICANT

When twenty-day appeals period ends, provide Planning Department with evidence that 2022 Decision was filed with the Registry of Deeds.