## **DECISION**

NORTHBOROUGH TOWN CLERK RCUD 2021 AUG 12 PM1:49

PLANNING BOARD SPECIAL PERMIT PURSUANT TO GROUNDWATER PROTECTION OVERLAY DISTRICT 3, AND SPECIAL PERMIT WITH SITE PLAN APPROVAL

PROPERTY LOCATION: 425 Whitney Street, Map 15 Parcel 8

PETITIONER: Steris A.S.T., 425 Whitney Street, Northborough MA 01532

PROPERTY OWNER: Isomedix Operations Inc., C/O Steris Corporation, 5960 Heisley Road,

Mentor OH 44060

**RECORDED WITH WORCESTER DISTRICT REGISTRY OF DEEDS**: Book 60722 Page 300

This document is the DECISION of the Northborough Planning Board on the petition of Steris A.S.T. for a Special Permit for light manufacturing in the Groundwater Protection Overlay District, Area 3, and a Special Permit with Site Plan Approval to allow the construction of two additions, of approximately 20,100 square feet and 3,375 square feet, onto an existing industrial building located in the Industrial zoning district with associated on-site surface parking, stormwater management system, access drive, utility infrastructure and associated grading and landscaping on the property located at 425 Whitney Street.

Pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, G.L. c. 30A section 18, and the Governor's March 15, 2020 Order imposing strict limitations on the number of people that may gather in one place, the majority of the meetings of the Northborough Planning Board on this application were conducted via remote participation.

# **APPLICATION**

- 1. On September 17, 2019, the Applicant filed with the Town Clerk an Application for Hearing before the Planning Board for:
  - a. Site Plan Approval under Zoning Bylaw section 7-03-050; and
  - b. Groundwater Protection Overlay District Special Permit under Zoning Bylaw section 7-07-010
- 2. Notice of the October 17, 2019 public hearing was duly published in "THE WORCESTER TELEGRAM & GAZETTE" on October 2, 2019 and October 9, 2019; and was mailed to abutters and other parties on October 3, 2019;

- 3. Due to the COVID-19 pandemic and the State of Emergency declared by the Governor, resulting in an approximate three months of suspended public meetings, the public hearing was readvertised for June 16, 2020.
- 4. Notice of the June 16, 2020 public hearing was duly published in "THE WORCESTER TELEGRAM & GAZETTE" on June 1, 2020 and June 8, 2020; and was mailed to abutters and other parties on May 27, 2020.

#### **EXHIBITS**

Submitted for the Board's consideration were the following exhibits:

- 1. Application for Hearing before the Planning Board, including:
  - a. Northborough Planning Board Application for Site Plan Approval and Special Permit per Groundwater Protection Overlay District Bylaw;
  - b. Quitclaim Deed for 425 Whitney Street, Northborough MA recorded in Worcester South District Registry of Deeds, Book 60722 Page 300;
  - c. Easement document recorded in Worcester County Registry of Deeds, Book 5356 Page 480;
  - d. Zoning Interpretation Request Form for 425 Whitney Street from Robert J. Frederico, Inspector of Buildings/Zoning Enforcement Officer, dated September 18, 2019;
  - e. A certified abutters list for parcels 300 feet from 425 Whitney Street, Northborough MA, prepared by Julie Brownlee and Sue Reagan for the Board of Assessors, and a GIS Viewer map of the site, both dated September 10, 2019;
  - f. A certified abutters list for parcels 300 feet from 425 Whitney Street, Northborough MA, prepared by Julie Brownlee and Megan Hennessy for the Board of Assessors, and a GIS Viewer map of the site, both dated May 26, 2020;
  - g. Site Plans entitled Facility Expansion Project, 425 Whitney Street, Northborough MA, prepared for Isomedix Corporations Inc, C/O STERIS Corporation, 5960 Heisley Road, Mentor OH 44060, prepared by VHB, dated September 13, 2019 and revised October 17, 2019. Plan set includes the following sheets: C-1 Legend and General Notes, C-2 Layout and Materials Plan, C-3 Utility Plan; C-4 Grading, Drainage and Erosion Control Plan, C-5 Site Details 1, C-6 Sie Details 2, L-1 Planting Plan, L-2 Planting Details;
  - h. Leachfield Layout & Details As-Built plan dated May 3, 2002, prepared for RREED Management Company, 425 Whitney Street, Northborough MA, prepared by Rizzo Associates; and
  - i. Title 5 Official Inspection Form for 425 Whitney Street, Northborough, prepared December 28, 2016 and received January 3, 2017.

- 2. Facility Expansion Project Stormwater Report, dated September 2019, prepared for Isomedix Operations Inc, 425 Whitney Street, Northborough MA 01532, prepared by VHB, 120 Front Street, Suite 500, Worcester MA 01608;
- 3. October 15, 2019 letter from VHB to Fred Litchfield, Town Engineer RE: Responses to Northborough Town Engineer's Comments on the Groundwater Advisory Committee's Application for 425 Whitney Street;
- 4. November 5, 2019 letter from Michel C. Carelli, Plant Manager, STERIS to Planning Board Chair RE: Invitation to Visit STERIS Chester NY;
- 5. Memorandum entitled Transportation Impact Assessment, Proposed Laboratory/Manufacturing Facility 425 Whitney Street, Northborough Massachusetts, dated January 21, 2020 prepared by Vanasse & Associates Inc;
- 6. January 22, 2020 letter to Fred Litchfield, Town Engineer from VHB RE: 425 Whitney Street Site Plan Review and Groundwater Special Permit Application Chemical Storage Information;
- 7. August 18, 2020 letter to Kerri Martinek, Planning Board Chair from Attorney Stephen F. Madaus, Mirick O'Connell RE: 425 Whitney Street Objection to Continued Delay in Rendering Site Plan Decision Related to the Use of the Property;
- 8. April 29, 2021 letter to Michael C. Carelli, Isomedix Operations Inc from Marc C. Wallace, Vice President, Tech Environmental RE: 425 Whitney Street Redevelopment, Northborough MA Conceptual Design Sound Study; and
- 9. Report to the Borough of Northborough Zoning Board entitled Temporary Batch Plant Facility dated May 14, 2021 prepared by V. Paulius & Associates.

## ADDITIONAL DOCUMENTS:

- 1. November 15, 2019 memo to STERIS A.S.T. from Planning Board Chair Martinek RE: Request for Additional 425 Whitney Street Site Plan Information;
- 2. January 28, 2020 memorandum to Planning Board Chair Martinek from Stephen F. Madaus on behalf of STERIS A.S.T. RE: Response to Request for Additional Information;
- 3. March 11, 2020 memo to STERIS A.S.T. from Planning Board Chair Martinek RE: Request for Additional 425 Whitney Street Site Plan Information;
- 4. May 27, 2020 memorandum to Planning Board Chair Martinek from Stephen F. Madaus on behalf of STERIS A.S.T. RE: Response to Northborough Planning Board's Second Request for Additional Information, Site Plan Approval 425 Whitney Street;
- 5. February 25, 2021 memorandum to the Town from Environmental Partners RE: 425 Whitney Street Transportation Impact Assessment Peer Review;
- 6. February 25, 2021 memorandum to the Town from Environmental Partners RE: Peer Review Letter Facility Expansion Project, 425 Whitney Street, Northborough MA;

- 7. February 25, 2021 letter to the Town from CN Associates RE: Peer Review Letter Facility Expansion Project, 425 Whitney Street, Northborough MA;
- 8. March 3, 2021 letter to the Town from Vanasse & Associates Inc. RE: Response to Transportation Impact Assessment Peer Review Proposed Laboratory/Manufacturing Facility 425 Whitney Street, Northborough MA;
- 9. March 22, 2021 letter to the Town from VHB RE: Response to Peer Review Comment Letter, 425 Whitney Street;
- 10. April 30, 2021 letter to the Town from Environmental Partners RE: Transportation Impact Assessment Peer Review, 425 Whitney Street, Northborough MA;
- 11. April 30, 2021 memorandum to the Town from Environmental Partners RE: Peer Review Letter Facility Expansion Project, 425 Whitney Street, Northborough MA; and
- 12. April 30, 2021 letter to the Town from CN Associates RE: Peer Review Letter Facility Expansion Project, 425 Whitney Street, Northborough MA.

#### **BOARD AND STAFF CORRESPONDENCE:**

- 1. September 24, 2019 letter from Fire Chief David L. Parenti to the Planning Board RE: Site Plan Approval, 425 Whitney Street;
- 2. October 17, 2019 letter from Fred Litchfield, Town Engineer on behalf of the Groundwater Advisory Committee to the Planning Board RE: 425 Whitney Street, Map 15 Parcel 8;
- 3. October 23, 2019 letter from Mia McDonald, Conservation Agent to Michael Carelli, Isomedix C/O Steris Corporation RE: Order of Conditions DEP #247-1172, 425 Whitney Street, Northborough MA;
- 4. March 11, 2020 memo from the Planning Board to STERIS A.S.T. RE: Request for Additional 425 Whitney Street Site Plan Information; and
- 5. March 10, 2020 letter from Fred Litchfield, Town Engineer on behalf of the Groundwater Advisory Committee to the Planning Board RE: 425 Whitney Street, Map 15 Parcel 8.

# LETTERS AND EMAILS RECEIVED IN OPPOSITION TO THE APPLICATION:

- 1. May 18, 2021 email from John and Leona Zawacki, 26 Coolidge Circle;
- 2. May 18, 2021 emails from Scott Stocklin, 12 Patrick Drive;
- 3. May 18, 2021 email from Russ Lang, 21 Coolidge Circle;
- 4. May 18, 2021 email from Bob and Rhonda Van Buren, 150 Maynard Street;
- 5. May 18, 2021 email from Jodie Martinson, 50 Coolidge Circle;
- 6. May 17, 2021 email from Brian and Cathy Harris, 416 Whitney Street;

- 7. May 17, 2021 email from Kerry McMullen, 91 Coolidge Circle; and
- 8. May 17, 2021 emails from Lisa Stone, 17 Coolidge Circle.

# LETTERS AND EMAILS RECEIVED IN SUPPORT OF THE APPLICATION:

1. February 6, 2020 letter to Northborough Planning Board from Brian Johnson, President, MassMEDIC RE: Support of STERIS AST's expansion.

## **HEARING**

A public hearing, after proper notice was given, was opened on October 17, 2019 and continued to the subsequent dates of November 5, 2019; December 3, 2019; December 12, 2019; January 16, 2020; February 4, 2020; February 18, 2020; March 10, 2020; April 7, 2020; June 16, 2020; August 4, 2020; September 15, 2020; December 1, 2020; January 5, 2021; February 2, 2021; March 2, 2021, April 6, 2021; April 20, 2021; May 4, 2021; and the hearing was closed on May 18, 2021.

Deliberations and a vote on a decision occurred at the June 1, 2021 Planning Board meeting.

Presentation of materials by the Applicant, peer review presentations, discussions by the Board members, staff, and all other interested parties occurred at the October 17, 2019; November 5, 2019; February 4, 2020; February 18, 2020; March 10, 2020; June 16, 2020; August 4, 2020; September 15, 2020; March 2, 2021, April 6, 2021; May 4, 2021; and May 18, 2021 sessions of the public hearing.

The application was accompanied by Site Plans entitled Facility Expansion Project, 425 Whitney Street, Northborough MA, prepared for Isomedix Corporation Inc, C/O STERIS Corporation, 5960 Heisley Road, Mentor OH 44060, prepared by VHB, dated September 13, 2019 and revised October 17, 2019. Plan set includes the following sheets: C-1 Legend and General Notes, C-2 Layout and Materials Plan, C-3 Utility Plan; C-4 Grading, Drainage and Erosion Control Plan, C-5 Site Details 1, C-6 Site Details 2, L-1 Planting Plan, L-2 Planting Details.

The Board reviewed the application, the plan(s), and all other materials and information submitted prior to the close of the public hearing. The Board received and gave due consideration to the testimony given at the public hearing.

The following Board members attended the public hearing: Kerri Martinek, Amy Poretsky, Anthony Ziton, Millie Milton, and Michelle Gillespie.

## **FINDINGS OF FACT**

#### **GENERAL FINDINGS:**

## APPLICABLE LAW AND DECISION CRITERIA:

Under Bylaw § 7-03-050(A)(2), "A special permit with site plan approval shall be required for any use requiring a special permit." The Applicant has applied for a Groundwater Protection Overlay

District Special Permit under the By-law and, thus, the Special Permit with Site Plan Approval for which it applied is required.

Bylaw § 7-03-050(D) (Special Permit with Site Plan Approval), states, in pertinent part, that:

"The procedures ... for a special permit with site plan approval shall be the same as any other special permit and shall conform to the requirements of MGL C. 40A, § 9, as amended, and the provisions of Section 7-03-040. (§ 7-03-050(D)(1), Procedures); and

"The decision criteria for a special permit with site plan approval shall be as set forth in Section 7-03-040 and the site plan approval criteria under subsection (C)(2) of this section." (§ 7-03-050(D)(3), Decision criteria).

# Section 7-03-040 Special Permit Criteria

As set forth in § 7-03-040(C), the Planning Board may only approve a special permit upon its written determination that the adverse effects of the proposed use will not outweigh the beneficial impacts to the town or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to the site. In addition to any specific factors that may be set forth elsewhere in the Zoning Bylaw, the determination shall include consideration of each of the following:

- (1) The proposal is in substantial harmony with the Northborough Master Plan and other plans approved or amended from time to time by the Northborough Planning Board, and with the purposes of this bylaw;
- (2) The proposed site is an appropriate location for such use;
- (3) The use as developed will not adversely affect the neighborhood;
- (4) There will be no nuisance or serious hazard to vehicles or pedestrians;
- (5) Adequate and appropriate facilities will be provided for the proper operation of the proposed use;
- (6) The proposed use will conform to any special requirements of the special permit granting authority as stated in its written decision; and
- (7) The proposal could not reasonably be altered to reduce adverse impacts on the natural environment, to be compatible with historic development patterns of the town, or to preserve historically significant buildings.

## Section 7-07-010 Special Permit Criteria

The Planning Board may only approve a special permit upon its written determination that the adverse effects of the proposed use will not be deleterious to the water supply, in view of the particular characteristics of the site, and of the proposal in relation to the site. These special permits are governed specifically by the three (3) criteria set forth under § 7-07-010(D)(4)(e) of the Zoning Bylaw. These approval standards require that the proposed use:

[1] meet the purpose and intent of this chapter and will not derogate from the purpose of the Groundwater Protection Overlay Districts;

- [2] will not, during construction or thereafter, impair ambient groundwater quality or reduce existing recharge capacity beyond that allowed per this chapter; and
- [3] will not adversely affect the quality or the yield of an existing or potential water supply.

The purpose of the Groundwater Protection Overlay District is set forth under § 7-07-010 (A):

- 1. To protect, preserve and maintain the existing and potential groundwater supply and groundwater recharge areas within the known aquifers of the town.
- 2. To preserve and protect present and potential sources of water supply for the public health and safety.
- 3. To conserve the natural resources of the town.

Additionally, under § 7-07-010 (D)(4)(b), such special permit shall be granted if the Planning Board determines that the intent of this chapter as well as its specific criteria are met. In making such determination, the Planning Board shall consider the simplicity, reliability and feasibility of the control measures proposed and the degree of threat to water quality which would result if the control measures failed.

#### **SPECIFIC FINDINGS:**

- 1. The Board finds that the Special Permit application failed to comply with the above criteria, including, without limitation, Zoning Bylaw Sections 7-03-040(C)(1)-(7), in that the project, given its intensity and scale, is located in an inappropriate setting for its use; that the project will adversely affect the neighborhood in which it is situated; that it will create nuisance and hazard to pedestrians and vehicles in the area within and surrounding the site; that inadequate facilities are provided; and that the proposal is not in substantial harmony with the Northborough Master Plan and other plans approved or amended from time to time by the Planning Board, and with the purposes of the Zoning Bylaw. Supporting this finding, the Board further makes the following additional findings:
  - a. Per the definition of Special Permit in the Zoning Bylaw, § 7-02-040, a special permit may be issued if it "would not be injurious to the public health, safety, welfare, order, appearance, prosperity, or general welfare." It was the Board's determination that the application did not provide sufficient evidence that the proposed use would not be injurious to public health, safety, and welfare.
    - i. During the public hearings, the Applicant offered testimony numerous times that the radiation technology for the x-ray sterilization process to be conducted in the building would be the first of its kind in the United States, with two other proposed U.S. sites in process. No information was provided on other facilities, including their proximity to residential neighborhoods. Data, facts, and evidence as to the safety of this type of radiation facility, when operating within 50 feet of the nearest property line within a residential neighborhood, was not provided.
    - ii. The Applicant proposes to expand on its current operations. An extensive history of violations on the current Northborough facility was provided as

evidence by a residential abutter. The violations included non-compliance with state regulations as recently as March 2021; 15 OSHA violations; previous Nuclear Regulatory Commission fines; and an Atomic Energy Commission fine. A letter from the Northborough Fire Department was also submitted as evidence of a "pattern of lack of regard for safety." An article from the Worcester Telegram & Gazette on the company's previous toxic gas leak at the subject property was also provided. Board members also questioned the lack of evidence that the Applicant had consistently submitted required reports to regulatory agencies.

- iii. MassDEP issued the Applicant a Notice of Noncompliance dated March 4, 2021 which cited in part a violation during a remote inspection beginning on December 16, 2020 stating in part "failure to maintain the required records" in violation of 310 CMR 7.26(42)(f).
- iv. Representatives of the peer reviewers engaged by the Planning Board, Environmental Partners and CN Associates, testified that local checks and balances would be difficult to achieve. Any information on reporting and monitoring would require that the Town proactively request information from the state.
- v. The Applicant declined to agree to add external monitors to the perimeter of the facility to ensure radiation was not leaking from the facility and adversely impacting the abutting residential neighborhood.
- vi. Safety plans in the event of an accident or disaster were not provided to the Board. Thus, the peer reviewers were unable to comment regarding automatic or manual shutoffs of the x-ray equipment. Additionally, the Applicant did not submit for the peer reviewers technical information to confirm automatic shutdown capabilities of the chillers, nor did the Applicant submit for the peer reviewers the technical information regarding a malfunction alarm, nor did the Applicant submit for the peer reviewers technical design information on manual emergency shut down for the x-ray processing system, and further had no details regarding the safety interlocks to provide comments on how the interlocks would shut down the machine in the event of an accident.
- b. That the traffic study submitted by the Applicant did not adequately or accurately cover the impact of 2,000 concrete trucks on the roadways of the Town during the construction period. The Applicant opted to not provide additional information to the Board regarding the merits of an on-site vs. off-site concrete plant and did not provide consistent information on the number of trucks to be expected in either scenario.
- c. That the noise generated by the proposed use would adversely affect the neighborhood as it did not meet the Environmental Performance Standards in § 7-05-040(C) of the Zoning Bylaw, which requires, for industrial uses having an impact on residential uses, that the sound from the operations of the facility, measured at the property line of the facility, not be increased over the ambient sound level by more than five (5) decibels weighted for the "A" scale [dB(A)].

- d. That the toxic gases generated as a hazardous byproduct of the x-ray operations would adversely affect the neighborhood as they did not meet the Environmental Performance Standards in § 7-05-040 E(1) ("fumes, toxic gases, . . . or other waste materials shall be effectively confined to the premises and treated or disposed of in accordance with state and federal regulations governing air, water, and soil pollution").
- e. That no data or facts were provided by the Applicant, nor were the peer reviewers able to sufficiently comment, on the impact on the neighborhood regarding ozone emissions, electromagnetic interference, non-ionizing EM radiation (EMFs), carbon dioxide emission, or impact on the power grid as it relates to power outages caused by high voltage electrical requirements of the facility operations.
- f. That the Town of Northborough does not have the resources to offset the impact to the surrounding neighborhood or the Town for decommissioning a site with 12-foot concrete walls and ceilings.
- g. That the granting of the Special Permit would constitute a substantial detriment to the public good and the approval requested could not be given without nullifying or substantially derogating from the intent and/or purpose of the Northborough Zoning Bylaw.
- h. That the adverse effects of the proposed use will outweigh its beneficial impacts to the Town and/or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to the site.
- 2. The Board finds that the Special Permit application failed to comply with the above criteria, including, without limitation, Zoning Bylaw Sections 7-07-010(D)(4)(e), in that the project will derogate from the purpose of the Groundwater Protection Overlay District by impairing ambient groundwater quality and reducing existing recharge capacity, and will adversely affect the quality or yield of an existing or potential water supply. Supporting this finding, the Board further makes the following additional findings:
  - a. That in light of the nature of the project and its intensity and scale, which includes a 24,700 square foot addition to an existing industrial building requiring 12-foot concrete walls and ceilings, an on-site concrete plant, and/or 2,000 concrete trucks during construction, as described in the report provided by V. Paulius & Associates, the Applicant did not sufficiently provide data or facts that demonstrated that the proposed operations would meet the special permit criterion that the proposed use "Will not, during construction or thereafter, impair ambient groundwater quality or reduce existing recharge capacity beyond that allowed per this chapter" in that insufficient data was provided on:
    - i. Sedimentation/washout basin and other sedimentation protection measures during construction;
    - ii. Erosion and sedimentation protection measures related to the proposed concrete plant during construction;
    - iii. Infiltration and catch basin protection measures to withstand the volume of 2,000 concrete trucks;

- iv. Protection measures to ensure stockpiles of sand and concrete mix held in open air containers would not leak into the ground or nearby wetlands;
- v. Protection measures to ensure concrete, during creation or pouring, would not leak into the ground or nearby wetlands;
- vi. Adequate plan for protecting the groundwater during concrete washout of the 2,000 trucks;
- vii. Truck operations during construction, in particular consistent estimates on number of trucks, timing, process, and impact were not reliably provided, either in the testimony or presentation by Lawrence "Kip Kramer, Senior Vice President/General Counsel, of V. Paulius & Associates, throughout the public hearing. It was the Board's determination that it could not reasonably rely on the information provided by the report or testimony given by the concrete plant representative to ensure the safety and protection of the groundwater and to meet the purpose and intent of the Groundwater Protection Overlay Districts.
- b. The Applicant did not sufficiently prove that the on-site concrete plant proposed as a temporary structure could operate within the twelve-month period allowable under the Zoning Bylaw's definition of a Temporary Structure: "A structure without any foundation or footings to be removed within a twelve-month time period." (Section 7-02-040)
- c. That based on the unprecedented construction process and time period of 12-18 months and the high level of inspections that would be required as part of the Stormwater Pollution Prevention Plan (SWPPP) that would be necessary, including updated and proactive reporting after every heavy rainfall for that extensive period of time, it is the Board's determination that the degree of threat to water quality if control measures fail, coupled with the complexity of the control measures proposed, and the high level of inspection and monitoring required, that the application failed to meet the standard of simplicity, reliability and feasibility under § 7-07-010 (D)(4)(b).
- d. That due to the size and scale of the project, which includes a 24,700 square foot addition to an existing industrial building requiring 12-foot concrete walls and ceilings, an on-site concrete plant, and/or 2,000 concrete trucks during construction, the project is not capable of operating without negatively impacting the groundwater supply and natural resources, regardless of control measures.
- e. That the adverse effects of the proposed use will outweigh its beneficial impacts to the Town and/or the neighborhood, in view of the particular characteristics of the site, and of the proposal in relation to its setting within the Groundwater Protection Overlay District.
- f. That due to the high level of operations, inspection and maintenance activities that are required to avoid negative impact to groundwater, coupled with the level of Town resources available to monitor and enforce such a high level of inspection at the intervals required, the proposal fails to meet the purpose and intent of the

Zoning Bylaw: to protect, preserve and maintain the existing and potential groundwater supply and groundwater recharge areas; to preserve and protect present and potential sources of water supply for public health and safety; and to conserve the natural resources of the Town.

- 3. Without a special permit as requested, the proposed use is not a permitted use under the Zoning Bylaw; and, therefore, site plan approval cannot be granted.
- 4. In addition, the Board finds that the Site Plan application is fatally deficient as the proposed use would be prohibited per Section 7-05-010 G(1)-(2) of the Zoning Bylaw in that "no use shall be permitted which would be offensive because of injurious or noxious noise, vibration, smoke, gas, fumes, odors, dust, debris, glare, radiation, or electrical interference;" and further the proposed operations do not meet the Environmental Performance Standards in Sections 7-05-040 C and 7-05-040 E(1). Supporting this finding, the Board further makes the following additional findings:
  - a. The proposed use of the building expansion will include the installation of a M4-H X-Ray Pallet Bunker using particle accelerators containing two (2) X-Ray systems, each with electron energy up to 7.5 MeV and beam power up to 500 kW. The peer reviewers at C.N. Associates provided written and oral testimony that the Code of Massachusetts Regulations (CMR) Title 105 (Department of Public Health), sections 120.020 through 120.040 (The Control of Radiation), provides for the registration of radiation machine facilities and for the registration of persons providing radiation machine installation, servicing, and/or services to Department registrants or registrable facilities. For the purposes of 105 CMR 120.020, particle accelerators, whether used primarily for x-ray production or other purposes, shall be considered a radiation machine facility (emphasis added). It is the Board's determination that the proposed use is a Radiation Machine Facility. Under section 7-05-010 G(2) of the Zoning Bylaw a use which is offensive because of radiation is a prohibited use.
    - i. Further, in addition to the requirements of 105 CMR 120.020 through 120.040, all registrants are subject to the applicable provisions of other parts of 105 CMR 120.000. The Applicant did not provide evidence of any applicable state and federal permits, approvals, certifications, or registrations for the proposed facility to operate.
  - b. The Applicant was not able to sufficiently prove, through either data and facts or testimony from the peer reviewer, that the use of high intensity radiation would not result in electrical interference for wireless communications, medical devices, television, and radio; and could not prove through either data and facts or testimony by the peer reviewers that the requirement for high voltage electricity to power the electron beams would not lead to interference with electrical power in the abutting residential neighborhood. Under section 7-05-010 G(2) of the Zoning Bylaw a use which is offensive because of electrical interference is a prohibited use.
  - c. Based on materials submitted by the Applicant, and as further described in the testimony of the peer reviewers the proposed use, which requires two (2) linear particle accelerators/electron beams, does not meet the definition of a light manufacturing industrial use under Zoning Bylaw section 7-05-020 I(1). The

equipment for the sterilization process includes a radiation shield, a pallet conveyor, a modulator room, a control room, and an accelerator system. The equipment required for the sterilization process is explained in a document entitled "X-Ray Overview — Summary of the Technology and Application," prepared by Mevex, attached as Exhibit F in the January 28, 2020 Memorandum from Stephen F. Madaus, on behalf of STERIS, A.S.T. to Ms. Kerri Martinek, Chair, Northborough Planning Board RE: Response to Request for Additional Information. After careful review of the materials provided by the Applicant and written and oral testimony of the peer reviewers, it is the Board's determination that accelerator-based radiation processing is not limited to employing "only electric or other substantially noiseless and inoffensive motor power" (the standard stated in section 7-05-020 I(1)) as it emits both gas and radiation, and further is not a process "utilizing hand labor or quiet machinery and processes, and free from neighborhood disturbing agents such as...gas [and] electromagnetic radiation," as described in section 7-05-020 I(1). It is the Board's determination that the proposed use is a Radiation Machine Facility, and not Light Manufacturing. Per section 7-05-010 G(1) "Any building, use or structure not specifically permitted shall be deemed prohibited."

- d. The proposed operations, as described in the acoustic study performed by Tech Environmental of Waltham, MA and submitted on behalf of the Applicant, do not meet the Environmental Performance Standards related to the development and use of land as set out in section 7-05-040 C of the Zoning Bylaw, because they were not shown to meet the following noise standard: "the sound due to the operations of the facility, measured at the property line of the facility, shall not be increased over the ambient sound level by more than five (5) decibels weighted for the "A" scale [dB(A)]." The Board determined that the mitigation measures proposed were not sufficient, nor conclusive, nor included in the Applicant's site plan.
  - i. The Board further questioned the credibility of the data provided in the Tech Environmental report in that the ambient (L90) short-term monitoring was 36 dBA at each of the three primary intersecting locations in the abutting neighborhood, however, the lowest one-hour L90 level of 38 dBA collected at the property line was determined to be appropriate for representing the lowest existing ambient sound levels at all locations. Although the proposed operations did not meet the noise standard at either decibel level, the use of 38dBA as the lowest data point potentially skewed the data.
- e. The proposed operations do not meet the Environmental Performance Standards in section 7-05-040 E(1) of the Zoning Bylaw in that the Applicant did not provide sufficient data and facts, nor could the peer review team corroborate, that the toxic gases created as a hazardous byproduct of the operations, including carbon dioxide and ozone, could be effectively confined to the premises and treated or disposed of in accordance with state and federal regulations.

#### **DECISION**

1. On June 1, 2021, after due consideration of the Application, and following the Planning Board's deliberative session in which all members gave input, the Board unanimously voted to DENY the application for a SPECIAL PERMIT under Section 7-07-010D(3)(c)[4].

Amy Poretsky moved to deny the application. The motion was seconded by Millie Milton. There was no further discussion by the Board.

The following Planning Board members voted unanimously to deny the application in a roll call vote: Kerri Martinek, Amy Poretsky, Anthony Ziton, Millie Milton, and Michelle Gillespie.

2. On June 1, 2021, after due consideration of the Application, and following the Planning Board's deliberative session in which all members gave input, the Board unanimously voted to DENY the application for a SPECIAL PERMIT WITH SITE PLAN APPROVAL under Section 7-03-050A(2), for the proposed use of medical product warehouse/x-ray sterilization/distribution/office.

Millie Milton moved to deny the application. The motion was seconded by Anthony Ziton. There was no further discussion by the Board.

The following Planning Board members voted unanimously to deny the application in a roll call vote: Kerri Martinek, Amy Poretsky, Anthony Ziton, Millie Milton, and Michelle Gillespie.

Appeals, if any from this decision shall be made pursuant to Massachusetts General Laws, Ch. 40A, Sec. 17 and shall be filed within twenty (20) days after the date of filing of this decision in the office of the Town Clerk.

#### NORTHBOROUGH PLANNING BOARD

Kerri Martinek, Chairperson