

TOWN OF WELLESLEY



MASSACHUSETTS

ZONING BOARD OF APPEALS

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ZBA 2018-07

Petition of Wellesley College
106 Central Street
Global Flora Greenhouse

Pursuant to due notice, the Special Permit Granting Authority held a Public Hearing on Thursday, January 11, 2018, at 7:30 p.m. in the Juliani Meeting Room, 525 Washington Street, Wellesley, on the petition of Wellesley College requesting Site Plan Approval pursuant to the provisions of Section XVIA and Section XXV of the Zoning Bylaw for a major construction project that will include construction of approximately 7,000 square feet of new building area, consisting of a new greenhouse, mezzanine space, and a pavilion to protect a historic tree. A link to the existing visitors center building will remain. Site work associated with the project includes regrading to enable building construction, minor pedestrian path improvements to support access and egress, and site utility improvements, at 106 Central Street, in an Educational District. The Petitioner is requesting a Special Permit pursuant to Section XIVE and Section XXV of the Zoning Bylaw for a major construction project in a Water Supply Protection District. The proposed project is part of a larger plan to modernize the Science Center.

On December 7, 2017, the Petitioner filed a request for a hearing before this Authority, and thereafter, due notice of the hearing was given by mailing and publication.

Presenting the case at the hearing were Justin Mosca, VHB, Dave Conway, Nitsch Engineering, Tim Singleton, Wellesley College and Ben Widger, KVA Architects.

Mr. Mosca said that there will be approximately 5,500 square feet of new greenhouse for the Margaret Ferguson global collection of plants, which is open to the public during non-teaching times. He said that the existing greenhouse will be coming down and a nicer, more modern facility will be built along with supporting utilities and pedestrian pathways. He said that a 1,200 square foot pavilion will connect the existing Visitors Center to the new greenhouse. He said that all of the existing plumbing will remain in the Visitors Center. He said that they will construct a pavilion around a historic tree. He said that the project will not be very visible from the street.

Mr. Mosca said that this project is part of the overall Science Center modernization that has been broken down into components. He said that the Board has already permitted temporary trailers for swing space at the Science Center.

Mr. Mosca said that the greenhouse will have a curved footprint to maximize exposure to the sun. He said that the structure will consist of glass, aluminum, ETFE windows, and white cedar board to

incorporate the existing buildings that are around it. He said that the interior will allow for visitor engagement with ramps and a mezzanine that looks out to other trees on the campus.

Mr. Mosca said that the site design will be minimal to enable this portion of the construction. He said that the hill that they will be building on will need to be pushed out a little bit. He said that they will be grading the slope adjacent to the building. He said that the walkways will be minimal for access and egress. He said that when they do the Science Center Project, they will look at the grade and revamping pedestrian walkways, as well as more landscaping.

Mr. Mosca discussed rainwater harvesting. He said that they will take roof runoff from the E Wing in the Science Center. He said that there will be two 25,000 gallon tanks at the base of the hill that will collect stormwater from the roofs. He said that it will all be pumped back up into the greenhouse. He said that the greenhouse will not have a domestic water connection. He said that all of the irrigation for the plants will be from the rainwater harvesting tanks. He said that there will be no sanitary discharges. He said that there is a pipe shown on the plans that has since been removed. He said that they originally thought that there would be floor drains in the mechanical room that is not in use any more. He said that it will just be a water spill, mop it up kit in the mechanical room, if necessary. He said that all of the bathrooms will be in the existing Visitors Center.

Mr. Mosca said that an existing electrical line that comes through the footprint of the building will be routed around at the base of the hill.

Mr. Mosca said that Global Flora will not have any hazardous materials. He said that all of the fertilizer will be organic and the pesticides will be biological, not chemical. He said that they will use non-toxic cleaners. He said that any imported fill, if it is necessary for grading, will be clean fill in accordance with the bylaws and DEP requirements. He said that there is a Stormwater O & M Plan in place for the existing system. He said that refueling will be in upland areas. He said that there are prevention and controls planned by the College's Environmental Health and Safety Department.

Mr. Mosca said that construction is anticipated from March 2018 to June 2019, on Mondays through Fridays from 7 am to 6 pm, and Sundays will be reserved for contingency only and will require Police approval. He said that there will be about 35 workers during maximum operation. He said that deliveries will be from Route 135. He said that there will be a wheel wash so that they do not track anything out onto the street.

The Chairman asked about the geo-thermal wells. Mr. Mosca said that geo-thermal wells were something that the College was considering but are not proposing now. He said that the wells should have been removed from the plans.

A Board member asked if there is any new lighting proposed. Mr. Conway said that there will just be task lighting and lights by the exit doors per Code. He said that when they come back for the Science Center Master Plan landscaping there may be some bollards in the courtyard between the Global Flora building and the new Science Center. He said that no lighting is proposed as part of this project.

The Chairman said that the plans show an electrical line that appears to be under the road that goes along the south side. He asked if the plan is to tear up the road to put the electrical line in. Mr. Conway said that the gear is just off the road. He said that they will run the new electrical line just inside the road so that they do not have to tear it up. He said that it will be a new primary line with two to three inch conduits 30 inches below the ground.

Mr. Mosca said that, as part of this, additional utility lines will be permitted for a telescope at the observatory with utility lines that will run down to the Science Center. He said that work needs to happen before they permit the addition. He said that the Building Inspector said that it should be shown on the plans now so that he can see that it is approved. Mr. Conway said that small flexible pipes for hot water, hot water return and telecom will cross the road along the grass and tie into existing lines.

The Chairman asked about the two 25,000 gallon tanks. He asked about conditions when there is drought versus when there is too much rainfall. Mr. Conway said that they developed demand for irrigation for the Global Flora Greenhouse and for the teaching greenhouses that will be coming down the road at a later date. He said that they know how much they will need on day to day basis. He said that demand will be 2,500 gallons per day. He said that they will be watering by hand. He said that historical rainfall data is for 30 to 40 year models. He said that they came up with 90 percent being available on a daily basis. He said that they are fairly confident that water will be available for this collection. He said that if they do get to extreme drought conditions, the other greenhouses will throttle back their use. He said that rainwater is of the highest quality for the plants. He said that there is a small overflow pipe that connects back into the College's drainage system. He said that they are finalizing the details for the tanks, how they sit and the inter-connections. Mr. Mosca said that the stormwater analysis that was submitted with the application does not factor in the tanks, as a conservative approach. He said that he was comfortable in saying that in all storm cases the flows off the site will be decreased. He said that there is a huge need for the water to go back into collection.

A Board member asked about testing the water. Mr. Conway said that they will test the water but there are no plans to augment it in any way. He said that they want to have a good understanding of what they are applying to their plants, how much water they are collecting and how much water is going out. He said that from the tanks themselves, the water will get pumped up into the building and pushed through a filter. He said that there will be no chemical treatment.

The Chairman asked if there are any hazardous materials involved in the demolition of the existing greenhouse. Mr. Singleton said that there is hazardous material and the complete process will be treated as an abatement. He said that the Abatement Plan will be submitted to the Town. He said that the caulking is stuck to the glass and cannot be removed.

The Chairman asked what types of equipment will be used for demolition. Mr. Conway said that demolition will be more of a disassembling process. Mr. Mosca said that there will probably be some larger equipment to take the greenhouse down because it is a tall building.

The Chairman asked about the height of the new building versus the old building. Mr. Widger said that the existing building is 25 feet high. He said that the new building will be at the same elevation at the top but the building will move down a small slope and will be 30 feet in height.

The Chairman asked if anything would be missed if the Board looked at the whole project together rather than looking at each piece. Mr. Mosca said that the permit applications were set up as stand alone because some of the permits have to be done earlier. He said that the whole piece will be the Science Center addition, which is when they will tie everything together with the walkways and landscaping. Mr. Conway said that they will start construction for the greenhouse and the L & E Wing in the spring and construction will take a year. He said that the hope is to come in the late summer, early fall of 2018 for permitting the Science Center. He said that Site Plan Approval for the entire project will dovetail back into construction at the L & E Wing and Global Flora so that they can continue the construction in an orderly fashion. He said that the idea is to have these things march in, minimize any temporary work, and have an integrated, completed whole. Mr. Mosca said that site work associated with the L & E Wing will likely not be done until the second portion. He said that there will be a lot of interior work there and they need to have a permit in place for the egresses. He said that they do not want to put down walkways only to have to tear them up again.

The Chairman asked if any heavy equipment will be operating at the greenhouse when the public is there. He said that knowing what types of equipment will be used is helpful to the Board in determining whether there is a hazard to the public. He said that the Board wants to know if there will be construction activity going on in close proximity to pedestrian accesses.

A Board member asked if there will be separate occupancy permits. He said that the College will have to demonstrate to the Building Inspector that the public is safe in using the facilities. He said that they will have to re-describe the limits of work lines. Mr. Singleton said that the Trailer Project has its own footprint. He said that Global Flora will have walkways that access L & E after construction is completed. The Chairman said that the materials that were submitted do not show the whole vision and how these projects relate to each other. Mr. Conway said that the two pieces before the Board tonight have been artificially divided for the permitting process. He said that he has an integrated file for the whole site. Mr. Singleton said that Turner Construction has Site Logistic Plans that show access to different parts at different times. Mr. Mosca said that they cannot get a Certificate of Occupancy unless they show that it is safe for the public. He said that it will be up to the Contractor to make sure that the areas are fenced off and there are clear, safe routes to the building.

Mr. Mosca said that he spoke with the Assistant Executive Director of the Town about the complete project and she suggested that a condition that allows work on Sundays with prior Police approval be added so that the College does not have to come back before the Board to modify the Site Plan Approval if it does need to do some work on Sundays. He said that it will be primarily interior work but will involve more construction vehicles on the road accessing the site. He said that deliveries could be limited to later in the day on Sundays. He said that they have committed to deliveries coming from the west and the trucks will only be in Wellesley for a mile. He said that if there are schedule problems, they will not have time to come back before the Board to modify the permit.

There was no one present at the public hearing who wished to speak to the petition.

Submittals from the Applicant

- Project Description, dated 12/6/17, from Justin Mosca, PE, Project Manager, VHB
- Application for Site Plan Approval
- Site Plan Approval Review Plans and Submittal Checklist
- Development Prospectus
- Site Locus Maps
- Abutters List
- Fire Access Accommodations – Letter to Zoning Board of Appeals, dated 12/1/17, stamped by John M. Swift, Jr., PE, Buro Happold Consult Engineers P.C., re: Fire Flow
- Construction Management Plans – Phase 1 – Existing Conditions until 12/31/17, Phase 3 – Global Flora 04/01/18-06/30/19, Site Logistics – Truck Traffic Plan
- Site and Subsurface Exploration Location Plan, December, 2014, prepared by Haley & Aldrich
- Appendix – Logs of Haley & Aldrich Geoprobe
- Municipal Systems Impact Analyses
 - Electrical System – Memorandum, dated 12/6/17, from VHB, re: Electrical Systems Impact Analysis
 - Building Occupant Life Safety – Memorandum, dated 12/6/17, from VHB, re: Building Occupant Life Safety
 - Refuse Disposal System - Memorandum, dated 12/6/17, from VHB, re: Refuse Disposal and Recycling
 - Water System - Memorandum, dated 12/6/17, from VHB, re: Water Distribution System Impact Analysis
 - Sanitary Sewer - Memorandum, dated 12/6/17, from VHB, re: Sanitary Sewer System Impact Analysis
 - Storm Drainage Systems - Memorandum, dated 12/1/17, from Dave Conway, Nitsch Engineering, re: Stormwater Analysis and Project Description
 - Long-Term Pollution Prevention Plan and Stormwater Operation and Maintenance Plan
 - Traffic Impact
 - Memorandum, dated 12/6/17, from VHB, re: Traffic Analysis
 - Memorandum dated 6/15/17, from VHB, re: Transportation Evaluation
- Memorandum to Zoning Board of Appeals, dated 1/25/18, from VHB, re: Response to DPW Comments of SPR Application

Plan Number	Drawing Title	Date of Issue	Prepared By	Date of Revision
	Cover Sheet			
EX-1	Topographic & Utility Survey	2/3/17	Nitsch Engineering	12/1/17 & 1/22/18
EX-2	Topographic & Utility Survey	2/3/17	Nitsch Engineering	12/1/17 & 1/22/18
C-1.00	Site Erosion and Sedimentation Control Plan	12/6/17	David Conway, P.E.	1/25/18
C-2.10	Site Layout Plan	12/6/17	David Conway, P.E.	1/25/18

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C-2.20	Civil Grading & Drainage Plan	12/6/17	David Conway, P.E.	1/25/18
C-2.30	Civil Site Utility Plan	12/6/17	David Conway, P.E.	1/25/18
C-2.31	Civil Site Utility Plan – Campus Utilities	12/6/17	David Conway, P.E.	1/25/18
C-3.00	Civil Utility and Site Details	12/6/17	David Conway, P.E.	1/25/18
C-3.01	Civil Rainwater Reuse Details	12/6/17	David Conway, P.E.	1/25/18
C-3.02	Civil Rainwater Reuse Details	12/6/17	David Conway, P.E.	1/25/18
C-3.03	Site Erosion and Sedimentation Control Details	12/6/17	David Conway, P.E.	1/25/18
C-3.04	Site Erosion and Sedimentation Control Details	12/6/17	David Conway, P.E.	1/25/18
C-3.10	Civil Utility Profiles	12/6/17	David Conway, P.E.	1/25/18
A-0.01	Site Plan	12/1/17	J. Frano Viouoh, R.A.	
A-1.01	Ground Level Plan	12/1/17	J. Frano Viouoh, R.A.	
A-1.02	Mezzanine Level Plan	12/1/17	J. Frano Viouoh, R.A.	
A-1.03	Roof Plan	12/1/17	J. Frano Viouoh, R.A.	
A-1.12	RCP Upper Roof	12/1/17	J. Frano Viouoh, R.A.	
A-2.00	North & South Elevations	12/1/17	J. Frano Viouoh, R.A.	
A-2.01	East & West Elevations	12/1/17	J. Frano Viouoh, R.A.	
A3.00	Long Section – Wet Biome	12/1/17	J. Frano Viouoh, R.A.	
A3.01	Long Section – Dry Biome	12/1/17	J. Frano Viouoh, R.A.	
A3.02	Cross Sections	12/1/17	J. Frano Viouoh, R.A.	
A3.03	Cross Sections	12/1/17	J. Frano Viouoh, R.A.	
P0.0	Plumbing Symbols and Abbreviations	11/15/17	John M. Swift, Jr., P.E.	1/25/18
P1.0	Level 1 –Plumbing	12/1/17	John M. Swift, Jr., P.E.	1/25/18
P6.0	Schedules & Details	12/1/17	John M. Swift, Jr., P.E.	1/25/18
E1.0	Electrical Site Plan	12/1/17	William Cox, P.E.	
E5.1	Enlarged Plans and Details	12/1/17	William Cox, P.E.	
FP1.1	Level 1 – Fire Protection Mech Room	12/1/17	John M. Swift, Jr., P.E.	
M1.0	HVAC Site Plan	12/1/17	John M. Swift, Jr., P.E.	
BM-1	Benchmark Plan	12/1/17	David Conway, P.E.	
C-1	Fire Access Plan	12/1/17	David Conway, P.E.	

On January 9, 2018, George Saraceno, Senior Civil Engineer, DPW Engineering Division submitted comments regarding the proposed project.

DECISION

The Board's approval of the Site Plan for the Project is premised on the Applicant's and Project's compliance with the following conditions (the "Conditions"). All requirements imposed by the Conditions or this Site Plan Approval shall be applicable to the entity responsible for the administration of the Project regardless of whether the condition specifically identifies the Applicant, the responsible entity, or no entity as having responsibility for a particular condition. By accepting this Site Plan Approval, the Applicant agrees to the terms, covenants, conditions, and agreements contained herein.

The Board found that the Project meets the requirements of Section XIVE of the Zoning Bylaws for Water Supply Protection Districts. The Board voted unanimously to grant a Special Permit for a Major Construction Project in a Water Supply Protection District.

CONDITIONS

1. By accepting this Site Plan Approval the Applicant agrees to the terms, covenants and conditions and agreements contained herein. This Site Plan Approval shall expire one year from the date hereof unless construction has begun by that date. The Applicant may apply to the Board for reasonable extensions to this Site Plan Approval for good and sufficient reason.
2. Except for the relief granted by the Board as listed in these Conditions, the Applicant shall comply with all provisions of the Zoning Bylaw and general bylaws generally applicable to a project approved on February 1, 2018. No fees are waived in connection with the Project. Fees shall be those then in effect at the time of application for the permit or approval subject to the fee.
3. Contract documents, including working drawings and specifications for the Project shall undergo the usual and customary review and approvals of the Building Inspector, the Town Engineer, or any other applicable local inspector or board.
4. The Applicant will establish a website, or use an existing website during the duration of site construction activities, to provide Town officials and residents access to the most current scheduled activities and to notification of upcoming Project events that reasonably have the potential to impact the surrounding neighborhood.

Design Conditions

5. Design and construction of the Project shall fully comply with all applicable federal and state laws and regulations, including, but not limited to, the requirements of the Massachusetts State Building Code (780 CMR) and the Massachusetts Architectural Access Board (521 CMR). The

Project shall be designed and constructed on the Site in accordance with the Plans, except as provided in this Site Plan Approval, including these Conditions. Any requirement of consistency with the Plans means as those Plans are modified by the Conditions.

- 6 The Applicant shall establish, apply, and maintain a reasonable procedure under which appropriate members of the Wellesley College faculty, with the Director of Environmental Health and Safety, shall review and approve a program for the delivery, use, storage, and disposal of any Toxic or Hazardous Materials (as defined in Section XIVE of the Zoning ByLaw) in any part of the Project. The procedure shall, as a minimum, meet the applicable requirements of Section XIVE(F) of the Zoning ByLaw.

Construction Conditions

7. The Applicant shall implement its Traffic Management Plan as specified in its VHB memorandum dated December 12, 2017 and supplemented by the VHB memorandum dated January 8, 2018, as modified by these Conditions.
8. During the period of construction, all construction equipment and materials deliveries shall utilize: (1) Route 9 to Route 27 to Route 135 to the Wellesley College main entrance; or (2) any other such route as the Applicant shall agree with the Wellesley Police Department prior to its use.
9. During the period of construction, all deliveries of construction materials and equipment shall be made only on Monday through Friday no earlier than 7:00 a.m. and no later than 6:00 p.m. Construction work may be performed on the Site Monday through Friday commencing not earlier than 7:00 a.m. and completing not later than 6:00 p.m. Exterior and site work may be performed on Saturday commencing not earlier than 8:00 a.m. and completing not later than 4:00 p.m. Exterior and site work on Sunday or on a holiday in the Town is prohibited. For purposes of clarity, interior work on Sunday is specifically allowed, subject to the consent of the Police Chief, and provided that the Applicant provides prior written notice to the Police Chief, with a copy to the Board.
10. During the period of construction, on-site parking for construction workers and for construction equipment is specifically permitted, and no vehicles of construction workers and no construction equipment shall be parked on any public way of the Town. In the event that parking requirements for the Project exceed the available on-site and on-campus parking capacity, the Applicant shall arrange for off-site parking, including transportation to the

site, sufficient to meet all parking needs. Trucks and construction vehicles on-site shall shut off engines when not in use, or when idling time exceeds five minutes.

11. All construction and delivery vehicles entering the site shall stop at an established construction exit for a wheel wash to prevent the entrance of materials deleterious to the Water Supply Protection District onto the streets of the Town. The Applicant shall cause connecting streets to be swept as frequently as required in the event that dust, dirt and debris not completely removed by the truck wash are deposited on the street.
12. Insofar as practicable, refueling of construction equipment on the site shall be prohibited. In the event that on-site refueling cannot be avoided, such refueling shall be performed with due consideration to spill prevention and control measures that should reasonably be applied in a Water Supply Protection District, and in accordance with the Applicant's established Spill Prevention, Control and Countermeasure Plan.

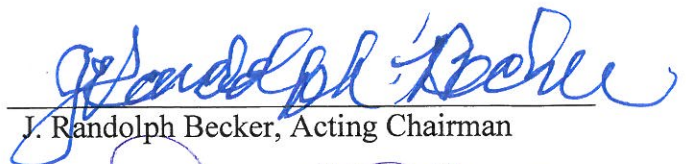
Use Conditions

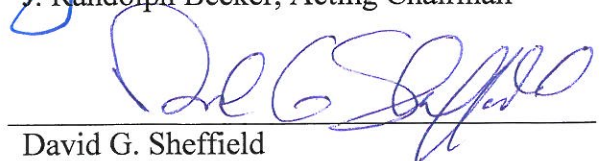
13. Operation and maintenance of the stormwater run-off and drainage system shall comply with the requirements of the Town's "Municipal Stormwater Drainage System Rules and Regulations" in effect as of February 1, 2018.
14. There shall be no storage of prohibited chemicals, in accordance with Section XIVE of the Zoning Bylaw.

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APPEALS FROM THIS DECISION,
IF ANY, SHALL BE MADE PURSUANT
TO GENERAL LAWS, CHAPTER 40A,
SECTION 17, AND SHALL BE FILED
WITHIN 20 DAYS AFTER THE DATE
OF FILING OF THIS DECISION IN THE
OFFICE OF THE TOWN CLERK.


J. Randolph Becker, Acting Chairman


David G. Sheffield


Robert W. Levy

cc: Planning Board
Inspector of Buildings
lrm