EcoTec, Inc.

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November 1, 2019

Emily Sullivan Environmental Planner & Conservation Agent Arlington Conservation Commission 730 Massachusetts Ave Arlington, MA 02476 via e

via email: esullivan@town.arlington.ma.us

Re: 1167-R Massachusetts Avenue

Subject: Supplemental Notice of Intent Materials

Dear Ms. Sullivan and Commission Members:

EcoTec Inc. has been retained to provide supplemental information in support of the Notice of Intent ("NOI") materials filed for the 1167-R Mass Ave. property. The following details have been developed by Paul J. McManus, PWS of EcoTec, the project engineer, and the property owner/ applicant.

Revised deck plan:

A revised deck plan dated 10-30-2019 by Foley Buhl Roberts & Associates, Inc., David P. Martin, P.E. is enclosed. The revised plan includes provisions for preservation of the Norway maple at that location. Access to the proposed work area will be through the existing building and possibly from the nearby paved parking lot. Personnel and supplies will be transported over the concrete-lined brook on foot over a temporary plank bridge placed on the concrete walls, or by use of an aerial lift such as the one in the example below:



As noted in the NOI materials, the deck is proposed to be supported on sonno-tube supports. Straw wattles (minimum 6-inch diameter) will be staked in place in close contact to the ground surface prior to any soil disturbance. The small volume of excavated soil generated during the November 1, 2019 Re: 1167-R Massachusetts Avenue - Supplemental NOI Materials Page 2 of 5

installation of the sonno-tubes will be immediately placed into buckets or wheelbarrows and removed from the site for reuse off site.

Reconstruction of the utility box – construction methodology:

The utility (water line) box proposed to be reconstructed spans the concrete-lined channel that contains the brook:



It is proposed to reconstruct the protective wooden box in place, using similar materials and standard carpentry techniques. The area will be accessed by workers on foot, with no alteration to the brook. Access and work will not occur during high flow periods. Prior to removal of the existing structure, a protective netting will be installed below the existing wooden box, by suspending from the overhead structure and/or temporary screws in the building wall. The netting will have a 1/8-inch or smaller mesh size and be manufactured for the purpose of containing construction debris. A photo and specification of a sample net is attached. After the net is installed securely under the existing/ proposed utility box, the box will be dismantled with hand tools, and the materials removed from the work area by hand. A temporary plank bridge may be placed on the vertical walls bounding the brook to aid construction workers. All materials removed will be reused and recycled if possible or disposed in an appropriate manner. Immediately following removal of the existing protective box, a new protective wooden box will be constructed of approximately the same dimensions in the same location. Most cutting of materials will occur within the nearby parking lot, with pieces hand carried to the work area. The work area will be swept and cleaned of any debris at the close of each work day. Following completion of the work, the netting will be picked clean in place, with any captured materials removed by hand in buckets, and the netting carefully removed to prevent spillage of any remaining debris.

Proposed Fence:

As described in the NOI, it is proposed to install a chain link fence on the landward (north) side of the concrete wall which contains the brook flows, to prevent pedestrians from falling over the wall into the brook. The fence installation work will occur entirely within the existing parking lot. The work will consist of the creation of post holes utilizing hand tools and a mechanical November 1, 2019 Re: 1167-R Massachusetts Avenue - Supplemental NOI Materials Page **3** of **5**

auger mounted on a small tractor. Posts will be secured in the holes with concrete. All excavated soils will be collected for removal and reuse off site. The work area will be swept clean at the end of each work day, and any waste materials collected for reuse or proper disposal, as necessary.

Proposed Planting Plan:

The area where the deck is proposed consist of a largely isolated earthen patch surrounded by building on two sides. The area has a very sparse understory and a canopy dominated by Norway maple (*Acer platanoides*). Gary Spence, the property manager, reports that no vegetation maintenance occurs in this area, and that the sparse existing growth is due to other causes. Norway maples have been described as being allelopathic (producing compounds that retard the growth of other plants), although there is some disagreement about whether allelopathy or the dense shade and extensive shallow rooting associated with this species are responsible for the typical associated sparse understory. At this site, shading from the surrounding building combined with the canopy closure allows little sunlight to penetrate from the northern exposure.



In order to promote revegetation of the area, especially along the bank of the brook, it is proposed to plant nine (9) clusters of shade tolerant ferns. Alternating clusters of the selected species consisting of three 1-gallon containers of native ferns are proposed (each cluster to consist of 3 containers of the same species). The species proposed were selected due to their ability to grow in shady conditions and tendency to spread and provide broad cover. Within each cluster, 1-gallon containers will be planted 2-feet on center, with the clusters planted approximately 6-feet on center over the approximately 70-foot wide area. Proposed fern species and numbers are listed in Table 1, below.

November 1, 2019 Re: 1167-R Massachusetts Avenue - Supplemental NOI Materials Page **4** of **5**

Table 1: Proposed Plantings

Species (descriptions from New England Wetland Plants)	Wetland Status	Size	Number
Dennstaedtia punctilobula (Hay-Scented Fern) Common woodland fern. Lacy texture, similar in appearance to New York Fern. Forms large colonies.	UPL	1-gal	9
Polystichum acrostichoides (Christmas Fern) A robust, leathery fern that forms clumps and stays green year-round. Easily established in cool, moist well-drained soils under shade.	FACU-	#1	9
Thelypteris novaboracensis (New York Fern) Spreads rapidly from shallow, black roots to form a dense ground cover. Lacy fronds from 1-2 ft.	FAC	#1	9

Please note that the planting proposed is within an area with difficult growing conditions, and that success of the proposed plantings may be negatively impacted by conditions beyond the control of the property owner.

I hope that this information is helpful to the Commission. Please contact me if you have any questions concerning this or other matters.

Sincerely,

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Paul J. McManus, LSP, PWS President

Enclosures

- Netting specification
- Deck plan (rev 10/30/2019)

c: Applicant

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November 1, 2019 Re: 1167-R Massachusetts Avenue - Supplemental NOI Materials Page **5** of **5**

Sample specification for proposed netting:

Roc-Bloc 2K Debris Net with WS70 1/8" Debris Liner - 10' x 15'



Description

Constitutions

SKU: ROCBLOC2K-1015

Net Sizes:

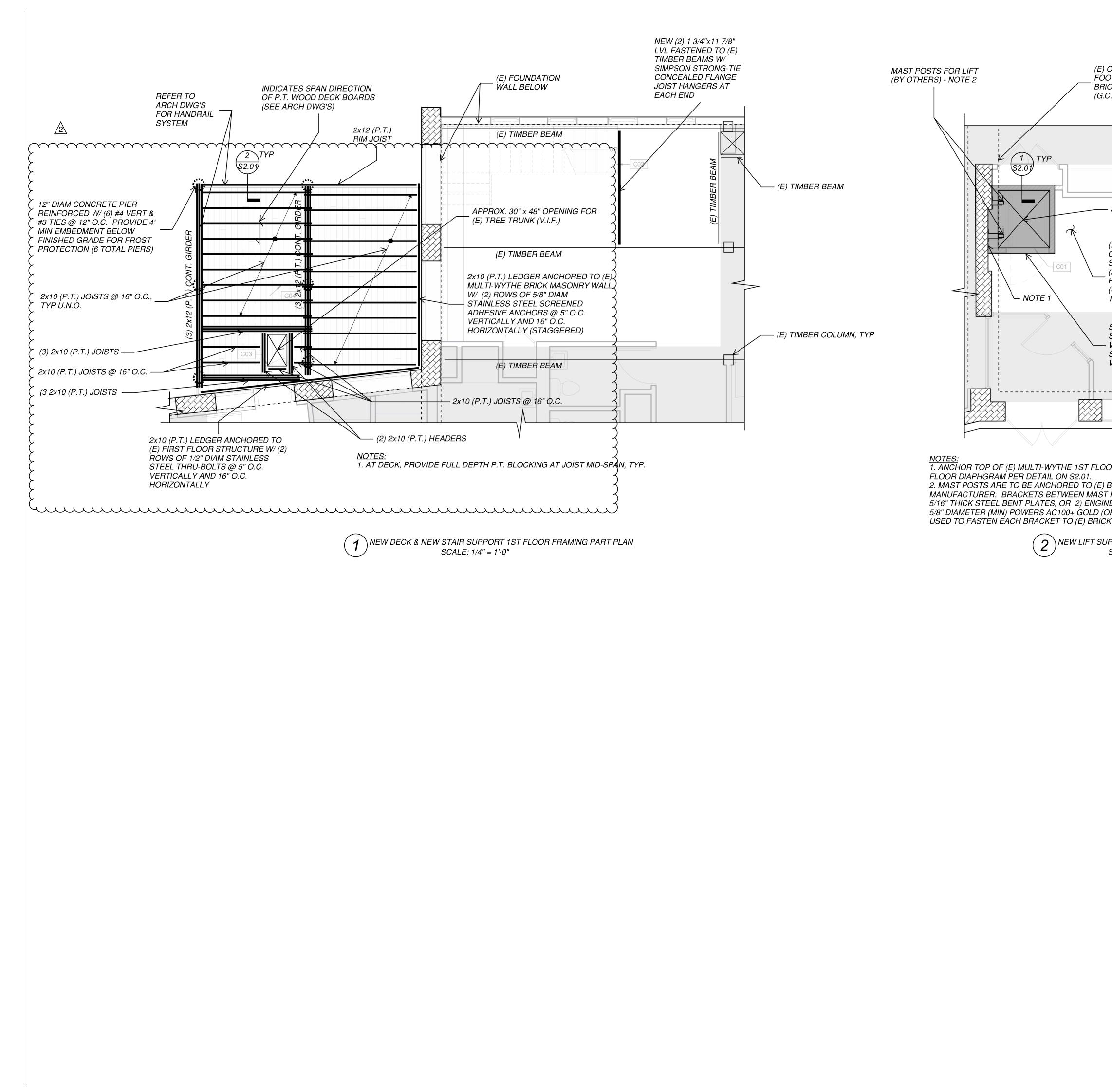
10'x15'	10'x20'	15'x15'	15'x20'	15
15'x40'	20'x20'	20'x25'	20'x30'	20
25'x50'	30'x40'			

Length:10'Width:15'Product Weight:10Load Capacity:2,000 lbs.Material:PolypropyleneNet Tenacity:HighShipping AndThis item cannot be returned due to safety risks associated with usedReturns:materials.Debris Liner Size:1/8"Mesh Size:2"Net Size:10'x15'	Specifications	Description	Description	
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Net Size: 10'x15'	Mesh Size:	2"	2"	
	Net Size:	10'x15'	10'x15	

RocBloc[™] construction debris net from InCord provides complete debris containment with a combination of a 2-1/2" structural net and an attached fine mesh fabric debris liner. This all-in-one solution is designed for protecting public areas and pedestrians from construction debris, as well as catching smaller items such as dust and dropped tools.

Nets can be linked together, wrapped, or suspended, depending on your specific needs. Also available in single or stacked configurations. Please call our Sales team to discuss all customizable features.

Complies with OSHA regulations for debris net installations and meets CPAI-84, Section 6, Tent Walls and Tops. Also meets conformity standard ANSI A10.37 for Debris Net Systems for Construction and Demolition.



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- 3" SLAB DEPRESSION			
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