

Lynx Parking Expansion  
55 International Drive  
Portsmouth, New Hampshire

## **Wetland Impact Permit Application**

Prepared For:

**Lonza Biologics, Inc.**  
**101 International Drive**  
**Portsmouth, NH 03801**

June 21, 2021



L-0700-021  
June 21, 2021

NH Department of Environmental Services  
Wetlands Bureau  
29 Hazen Drive  
PO Box 95  
Concord, NH 03302-0095

Re: **Minor Impact Permit Application**  
**Lynx Parking Expansion**  
**Lonza Biologics, Inc.**  
**Portsmouth, New Hampshire**

Dear NHDES Analyst:

Tighe & Bond is pleased to submit this Minor Impact Permit application package on behalf of Lonza Biologics, Inc. for a proposed 200 paved parking space project known as the Lynx Parking Expansion.

The proposed project is located at 55 & 101 International Drive in Portsmouth, New Hampshire. The parcels are identified as Tax Map 305, Lots 6 and 7. The majority of the proposed project is located on an undeveloped portion of Lot 7 and a small portion of Lot 6. Lot 7, a 9.6 acre parcel, once consisted of row housing and streets for Pease Air Force Base. The houses and roads were removed in the mid to late 1990's as part of the Civil Redevelopment Plan for Pease after the closure of the Air Force Base. Currently, The Pease Development Authority is located on the developed portion of the lot along International Drive.

## Jurisdictional Wetlands

### Methods

Jurisdictional wetlands delineated at the project site on April 9, 2021 by Leonard A. Lord, PhD, NHCWS #14, NHCSS #19 of Tighe & Bond. Wetland criteria used included the following:

- *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1* (January 1987)
- *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (January 2012).
- *Field Indicators for Identifying Hydric Soils in New England, Version 4* (2018)
- *U.S. Army Corps of Engineers Northcentral and Northeast 2016 Regional Wetland Plant List* (Lichvar et al., 2016).
- NHDES Wetlands Bureau Administrative Rules (2020)

Wetlands were classified based on *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979). Functional analysis of the wetlands was based on *The Highway Methodology Workbook Supplement—Wetland Functions and Values: A Descriptive Approach*, (NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999), except that the Ecological Integrity function was based on the *Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire* (UNH Cooperative Extension, 2015).

## Wetland Description and Functions

One wetland was delineated within the project area running parallel to Goose Bay Drive and was marked in the field with wetland flags 1A-1 to 1A-28. This area is an old rock lined drainage ditch at the base of a steep cut slope that has partly filled in with sediment and leaf litter. Herbaceous vegetation in the ditch is dominated by purple loosestrife (*Lythrum salicaria*) and sensitive fern (*Onoclea sensibilis*) with lesser amounts of species such as curled dock (*Rumex crispus*), and cf. New York Aster (*Symphyotrichum novi-belgii*). Common woody species include multiflora rose (*Rosa multiflora*), speckled alder (*Alnus rugosa*), poison ivy (*Toxicodendron radicans*), and black willow (*Salix nigra*). The wetland was classified as palustrine, emergent, persistent/palustrine, broad-leaved, deciduous, and seasonally flooded/saturated, excavated (PEM1/PSS1Ex). No signs of wetland associated wildlife were observed during the delineation.

This linear wetland is a stone lined swale that falls at the toe of an old hillside cut slope. The excavated slope and swale appear to have been created when the area along Goose Bay Road was leveled for the construction of Air Force housing. The swale likely originally functioned as a conveyance ditch but has filled in with sediment and leaf litter and taken on wetland features over time. As such, the ditch meets current State of New Hampshire wetland criteria. However, since this ditch/swale was created in an upland area, the wetlands do not meet the recent Navigable Waters Protection Rule definition of Waters of the United States (Federal Register Vol. 85, No. 77, April 21, 2020), and therefore, is not subject to federal jurisdiction or Army Corps of Engineers review.

There are no State Designated Rivers located within a quarter mile of the project area.

This application has not yet been reviewed by any state or federal agencies and was submitted concurrently to the City of Portsmouth. No agency comments on the project have been received.

## Wetland Functions

This small, highly disturbed, manmade wetland has low ecological integrity and minimal wetland functions. The wetland has a small watershed and does not retain any standing water. However, it also has a relatively low grade and dense vegetation, providing minimal floodflow alteration, sediment trapping, and nutrient attenuation. Additional notes are provided on the attached Functional Assessment Worksheet.

## Proposed Activities

The proposed project is to expand Lonza Biologics parking to support its growing product development services to the pharmaceutical and biologic industries. Lonza's existing facilities are located at 101 International Drive. The project involves a lot line adjustment that will merge 2.66 acres from 55 International Drive with 101 International Drive to create a 46-acre parcel for Lonza's campus. The proposed project includes the construction of a new 200 space parking lot and will include associated site improvements such as lighting, landscaping, and stormwater management. Stormwater management will include underground detention, three (3) proprietary flow through treatment filtration devices, and a small detention basin.

## Avoidance & Minimization Measures

The parking expansion will result in 4,087 SF of wetland impact, filling the entire manmade wetland. However, given the location of existing parking lot, the layout of the Lonza campus, and limited available land, this is the only practicable option for a parking expansion. Actual impacts to wetland functions will be negligible because the wetland has very low ecological



integrity and functions. What minimal functions it has (floodflow alteration, sediment trapping, and nutrient attenuation) will be offset with engineered solutions.

The Lonza Biologics parcel on the opposite (northeast) side of Goose Bay Drive (Map 305/Lot 1) is unavailable for the project because this parcel is already approved for the construction of another facility that includes a seven-story, 700 space parking lot (see Sheet C-102 of attached project plans) and over 1.25 acres of wetland impacts (NHDES File #2018-01731).

## **Rare Species**

A rare species review was completed by the NH Natural Heritage Bureau (NHB) on April 27, 2021 (NHB21-1455), and it was determined that there were no recorded occurrences for sensitive species near the project area.

## **Relationship of Applicant**

The applicant, Lonza Biologics, Inc., is an abutter (Map 305, Lot 6) to the project site (Map 305, Lot 7, which is owned by Pease Development Authority. The applicant and owner are in the process of preparing a lot line adjustment, which will make the project area part of the Lonza Biologics parcel. See the attached Tax Map figure in Appendix C.

## **Supplements**

The following supporting documents can be found appended to this submittal:

- Appendix A –Forms
  - Wetland Application
  - Attachment A
  - Copy of Fee
  - Residential, Commercial, and Industrial Development Worksheet
  - Avoidance and Minimization Checklist/Narrative
  - Functional Assessment Worksheet
  - Wetland Data Plot Forms
- Appendix B – Reports
  - IPaC Species List
  - IPaC Consistency Letter
  - NHB File #21-1455
- Appendix C –Maps and Figures
  - USGS Location Map
  - Wetland Permit Planning Tool
  - Tax Map
  - Historical Imagery
- Appendix D – Abutter Information
  - Abutters List
  - Abutter Notice
- Appendix E – Site Photographs
- Appendix F – Site Plans

We trust the enclosed information addresses the requirements for a Wetland Application – Minor Impact. If you have any questions or require any additional information, please feel free to contact me.

Sincerely,  
**TIGHE & BOND, INC.**



Neil A. Hansen, PE  
Project Engineer



Patrick M. Crimmins, PE  
Senior Project Manager

Enclosures

Copy: Lonza Biologics, Inc.  
Pease Development Authority  
Portsmouth City Clerk  
Portsmouth Conservation Commission  
Portsmouth Planning Board

J:\L\L0700 Lonza Biologics Expansion was 1576F\021\_Lynx Project\Report\_Evaluation\Applications\NHDES\NHDES Wetlands\1.0 - Cover Letter- LLeDits.docx

**Tighe&Bond**

## **APPENDIX A**







# STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION

Water Division/Land Resources Management  
Wetlands Bureau



[Check the Status of your Application](#)

**RSA/Rule:** RSA 482-A/Env-Wt 100-900

**APPLICANT'S NAME:** Lonza Biologics, Inc.

**TOWN NAME:** Portsmouth

Administrative Use Only	Administrative Use Only	Administrative Use Only	File No.:
			Check No.:
			Amount:
			Initials:

A person may request a waiver of the requirements in Rules Env-Wt 100-900 to accommodate situations where strict adherence to the requirements would not be in the best interest of the public or the environment but is still in compliance with RSA 482-A. A person may also request a waiver of the standards for existing dwellings over water pursuant to RSA 482-A:26, III(b). For more information, please consult the [Waiver Request Form](#).

## SECTION 1 - REQUIRED PLANNING FOR ALL PROJECTS (Env-Wt 306.05; RSA 482-A:3, I(d)(2))

Please use the [Wetland Permit Planning Tool \(WPPT\)](#), the Natural Heritage Bureau (NHB) [DataCheck Tool](#), the [Aquatic Restoration Mapper](#), or other sources to assist in identifying key features such as: [priority resource areas \(PRAs\)](#), [protected species or habitats](#), coastal areas, designated rivers, or designated prime wetlands.

Has the required planning been completed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the property contain a PRA? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Does the project qualify for an Impact Classification Adjustment (e.g. NH Fish and Game Department (NHF&amp;G) and NHB agreement for a classification downgrade) or a Project-Type Exception (e.g. Maintenance or Statutory Permit-by-Notification (SPN) project)? See Env-Wt 407.02 and Env-Wt 407.04.</li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Protected species or habitat?               <ul style="list-style-type: none"> <li>○ If yes, species or habitat name(s): <input style="width: 100px;" type="text"/></li> <li>○ NHB Project ID #: <u>21-1455</u></li> </ul> </li> </ul>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Bog?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Floodplain wetland contiguous to a tier 3 or higher watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Designated prime wetland or duly-established 100-foot buffer?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
• Sand dune, tidal wetland, tidal water, or undeveloped tidal buffer zone?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the property within a Designated River corridor? If yes, provide the following information:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• Name of Local River Management Advisory Committee (LAC): <input style="width: 100px;" type="text"/></li> <li>• A copy of the application was sent to the LAC on Month: <input style="width: 30px;" type="text"/> Day: <input style="width: 30px;" type="text"/> Year: <input style="width: 30px;" type="text"/></li> </ul>	

[lrn@des.nh.gov](mailto:lrn@des.nh.gov) or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

[www.des.nh.gov](http://www.des.nh.gov)

For dredging projects, is the subject property contaminated? • If yes, list contaminant: <input type="text"/>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is there potential to impact impaired waters, class A waters, or outstanding resource waters?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
For stream crossing projects, provide watershed size (see <a href="#">WPPT</a> or Stream Stats): <input type="text"/>	
<b>SECTION 2 - PROJECT DESCRIPTION (Env-Wt 311.04(i))</b>	
Provide a <b>brief</b> description of the project and the purpose of the project, outlining the scope of work to be performed and whether impacts are temporary or permanent. DO NOT reply "See attached"; please use the space provided below.	
<p>The proposed project is located at 55 &amp; 101 International Drive in Portsmouth, New Hampshire. The parcels are identified as Tax Map 305 Lots 6 and 7. The majority of the proposed project is located on an undeveloped portion of Lot 7 and a small portion of Lot 6. Lot 7, a 9.6 acre parcel, once consisted of row housing and streets for Pease Air Force Base. The houses and roads were removed in the mid to late 1990's as part of the Civil Redevelopment Plan for Pease after the closure of the Air Force Base. Currently, The Pease Development Authority is located on the developed portion of the lot along International Drive.</p> <p>The proposed project is to expand Lonza Biologics parking to support its growing product development services to the pharmaceutical and biologic industries. Lonza's existing facilities are located at 101 International Drive. The project will merge 2.66 acres of 55 International Drive with 101 International Drive to create a 46-acre parcel for Lonza's campus. The proposed project includes the construction of a new 200 space parking lot and associated site improvements such as lighting, landscaping and stormwater management. Stormwater management will include underground detention, three (3) proprietary flow through treatment filtration devices, and a small detention basin. The project proposes 4,087 sf of permanent wetland disturbance.</p>	
<b>SECTION 3 - PROJECT LOCATION</b>	
Separate wetland permit applications must be submitted for each municipality within which wetland impacts occur.	
ADDRESS: <input type="text" value="55 International Drive"/>	
TOWN/CITY: <input type="text" value="Portsmouth"/>	
TAX MAP/BLOCK/LOT/UNIT: <input type="text" value="305/00/06/00 &amp; 305/00/07/00"/>	
US GEOLOGICAL SURVEY (USGS) TOPO MAP WATERBODY NAME: <input type="text"/>	
<input checked="" type="checkbox"/> N/A	
(Optional) LATITUDE/LONGITUDE in decimal degrees (to five decimal places):	
	<input type="text" value="43.08556° North"/>
	<input type="text" value="70.80513° West"/>

**SECTION 4 - APPLICANT (DESIRED PERMIT HOLDER) INFORMATION (Env-Wt 311.04(a))**

If the applicant is a trust or a company, then complete with the trust or company information.

NAME: Lonza Biologics, Inc. Attn: Ricardo Santana

MAILING ADDRESS: 101 International Drive

TOWN/CITY: Portsmouth

STATE: NH

ZIP CODE: 03801

EMAIL ADDRESS: ricardo.santana@lonza.com

FAX:

PHONE: 603-570-3625

ELECTRONIC COMMUNICATION: By initialing here: RS, I hereby authorize NHDES to communicate all matters relative to this application electronically.

**SECTION 5 - AUTHORIZED AGENT INFORMATION (Env-Wt 311.04(c))**

☐ N/A

LAST NAME, FIRST NAME, M.I.: Crimmins, Patrick, M.

COMPANY NAME: Tighe & Bond

MAILING ADDRESS: 177 Corporate Drive

TOWN/CITY: Portsmouth

STATE: NH

ZIP CODE: 03801

EMAIL ADDRESS: pmcrimmins@tighebond.com

FAX:

PHONE: 603-433-8818

ELECTRONIC COMMUNICATION: By initialing here PC, I hereby authorize NHDES to communicate all matters relative to this application electronically.

**SECTION 6 - PROPERTY OWNER INFORMATION (IF DIFFERENT THAN APPLICANT) (Env-Wt 311.04(b))**

If the owner is a trust or a company, then complete with the trust or company information.

☐ Same as applicant

NAME: Pease Development Authority - Paul Brean (contact)

MAILING ADDRESS: 55 International Drive

TOWN/CITY: Portsmouth

STATE: NH

ZIP CODE: 03801

EMAIL ADDRESS: p.brean@peasedev.org

FAX:

PHONE: 603-433-6088

ELECTRONIC COMMUNICATION: By initialing here PB, I hereby authorize NHDES to communicate all matters relative to this application electronically.

## SECTION 7 - RESOURCE-SPECIFIC CRITERIA ESTABLISHED IN Env-Wt 400, Env-Wt 500, Env-Wt 600, Env-Wt 700, OR Env-Wt 900 HAVE BEEN MET (Env-Wt 313.01(a)(3))

Describe how the resource-specific criteria have been met for each chapter listed above (please attach information about stream crossings, coastal resources, prime wetlands, or non-tidal wetlands and surface waters):

Env-Wt 400: Wetlands have been properly delineated and classified by a NH Certified Wetland Scientist.

Env-Wt 500: See the Residential, Commercial, and Industrial Development Worksheet attached (Appendix A)

Env-Wt 600, Env-Wt 700, and Env-Wt 900 are not applicable.

The proposed project will provide 200 additional parking to the existing Lonza Biologics campus. The proposed project will have no adverse impact on public commerce, navigation or recreation. The proposed project will have a positive effect on stormwater as the proposed impervious area will be treated. Additionally, existing impervious areas that currently discharging untreated stormwater will be treated. There will be no impact to abutting owners. This project has been designed to avoid resource areas and minimize adverse impacts as it is located within a previously disturbed area where row housing and roads were once located. (see Historical Aerial Imagery, Appendix C).

## SECTION 8 - AVOIDANCE AND MINIMIZATION

Impacts within wetland jurisdiction must be avoided to the maximum extent practicable (Env-Wt 313.03(a)).\* Any project with unavoidable jurisdictional impacts must then be minimized as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#) and the [Wetlands Permitting: Avoidance, Minimization and Mitigation Fact Sheet](#). For minor or major projects, a functional assessment of all wetlands on the project site is required (Env-Wt 311.03(b)(10)).\*

Please refer to the application checklist to ensure you have attached all documents related to avoidance and minimization, as well as functional assessment (where applicable). Use the [Avoidance and Minimization Checklist](#), the [Avoidance and Minimization Narrative](#), or your own avoidance and minimization narrative.

*\*See Env-Wt 311.03(b)(6) and Env-Wt 311.03(b)(10) for shoreline structure exemptions.*

## SECTION 9 - MITIGATION REQUIREMENT (Env-Wt 311.02)

If unavoidable jurisdictional impacts require mitigation, a mitigation [pre-application meeting](#) must occur at least 30 days but not more than 90 days prior to submitting this Standard Dredge and Fill Permit Application.

Mitigation Pre-Application Meeting Date: Month:  Day:  Year:

☒ N/A - Mitigation is not required

## SECTION 10 - THE PROJECT MEETS COMPENSATORY MITIGATION REQUIREMENTS (Env-Wt 313.01(a)(1)c)

Confirm that you have submitted a compensatory mitigation proposal that meets the requirements of Env-Wt 800 for all permanent unavoidable impacts that will remain after avoidance and minimization techniques have been exercised to the maximum extent practicable: ☐ I confirm submittal.

☒ N/A – Compensatory mitigation is not required



**SECTION 11 - IMPACT AREA (Env-Wt 311.04(g))**

For each jurisdictional area that will be/has been impacted, provide square feet (SF) and, if applicable, linear feet (LF) of impact, and note whether the impact is after-the-fact (ATF; i.e., work was started or completed without a permit).

For intermittent and ephemeral streams, the linear footage of impact is measured along the thread of the channel. *Please note, installation of a stream crossing in an ephemeral stream may be undertaken without a permit per Rule Env-Wt 309.02(d), however other dredge or fill impacts should be included below.*

For perennial streams/ivers, the linear footage of impact is calculated by summing the lengths of disturbances to the channel and banks.

Permanent impacts are impacts that will remain after the project is complete (e.g., changes in grade or surface materials).

Temporary impacts are impacts not intended to remain (and will be restored to pre-construction conditions) after the project is completed.

JURISDICTIONAL AREA		PERMANENT			TEMPORARY		
		SF	LF	ATF	SF	LF	ATF
Wetlands	Forested Wetland	0		<input type="checkbox"/>	0		<input type="checkbox"/>
	Scrub-shrub Wetland	2044		<input type="checkbox"/>	0		<input type="checkbox"/>
	Emergent Wetland	2043		<input type="checkbox"/>	0		<input type="checkbox"/>
	Wet Meadow	0		<input type="checkbox"/>	0		<input type="checkbox"/>
	Vernal Pool	0		<input type="checkbox"/>	0		<input type="checkbox"/>
	Designated Prime Wetland	0		<input type="checkbox"/>	0		<input type="checkbox"/>
	Duly-established 100-foot Prime Wetland Buffer	0		<input type="checkbox"/>	0		<input type="checkbox"/>
Surface Water	Intermittent / Ephemeral Stream	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Perennial Stream or River	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Lake / Pond	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Docking - Lake / Pond	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Docking - River	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
Banks	Bank - Intermittent Stream	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Bank - Perennial Stream / River	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Bank / Shoreline - Lake / Pond	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
Tidal	Tidal Waters	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Tidal Marsh	0	0	<input type="checkbox"/>	0	0	<input type="checkbox"/>
	Sand Dune	0		<input type="checkbox"/>	0		<input type="checkbox"/>
	Undeveloped Tidal Buffer Zone (TBZ)	0		<input type="checkbox"/>	0		<input type="checkbox"/>
	Previously-developed TBZ	0		<input type="checkbox"/>	0		<input type="checkbox"/>
	Docking - Tidal Water	0		<input type="checkbox"/>	0		<input type="checkbox"/>
<b>TOTAL</b>		<b>4,087</b>	<b>0</b>		<b>0</b>	<b>0</b>	

**SECTION 12 - APPLICATION FEE (RSA 482-A:3, I)**

☐ **MINIMUM IMPACT FEE:** Flat fee of \$400.

☐ **NON-ENFORCEMENT RELATED, PUBLICLY-FUNDED AND SUPERVISED RESTORATION PROJECTS, REGARDLESS OF IMPACT CLASSIFICATION:** Flat fee of \$400 (refer to RSA 482-A:3, 1(c) for restrictions).

☒ **MINOR OR MAJOR IMPACT FEE:** Calculate using the table below:

Permanent and temporary (non-docking): 4,087 SF × \$0.40 = \$ 1,635

Seasonal docking structure: 0 SF × \$2.00 = \$ 0

Permanent docking structure: 0 SF × \$4.00 = \$ 0

Projects proposing shoreline structures (including docks) add \$400 = \$ 0

Total = \$ 1,635

**The application fee for minor or major impact is the above calculated total or \$400, whichever is greater = \$ 1,635**

[lrn@des.nh.gov](mailto:lrn@des.nh.gov) or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

[www.des.nh.gov](http://www.des.nh.gov)

**SECTION 13 - PROJECT CLASSIFICATION (Env-Wt 306.05)**

Indicate the project classification.

☐ Minimum Impact Project☒ Minor Project☐ Major Project**SECTION 14 - REQUIRED CERTIFICATIONS (Env-Wt 311.11)**

Initial each box below to certify:

Initials:

PMC

To the best of the signer's knowledge and belief, all required notifications have been provided.

Initials:

PMC

The information submitted on or with the application is true, complete, and not misleading to the best of the signer's knowledge and belief.

Initials:

PMC

The signer understands that:

- The submission of false, incomplete, or misleading information constitutes grounds for NHDES to:
  - Deny the application.
  - Revoke any approval that is granted based on the information.
  - If the signer is a certified wetland scientist, licensed surveyor, or professional engineer licensed to practice in New Hampshire, refer the matter to the joint board of licensure and certification established by RSA 310-A:1.
- The signer is subject to the penalties specified in New Hampshire law for falsification in official matters, currently RSA 641.
- The signature shall constitute authorization for the municipal conservation commission and the Department to inspect the site of the proposed project, except for minimum impact forestry SPN projects and minimum impact trail projects, where the signature shall authorize only the Department to inspect the site pursuant to RSA 482-A:6, II.

Initials:

PMC

If the applicant is not the owner of the property, each property owner signature shall constitute certification by the signer that he or she is aware of the application being filed and does not object to the filing.

**SECTION 15 - REQUIRED SIGNATURES (Env-Wt 311.04(d); Env-Wt 311.11)**

SIGNATURE (OWNER):

PRINT NAME LEGIBLY:

DATE:

SIGNATURE (APPLICANT, IF DIFFERENT FROM OWNER):

PRINT NAME LEGIBLY:

DATE:

SIGNATURE (AGENT, IF APPLICABLE):

PRINT NAME LEGIBLY:

DATE:

Patrick M. Crimmins

6/24/21

**SECTION 16 - TOWN / CITY CLERK SIGNATURE (Env-Wt 311.04(f))**

As required by RSA 482-A:3, I(a)(1), I hereby certify that the applicant has filed four application forms, four detailed plans, and four USGS location maps with the town/city indicated below.

TOWN/CITY CLERK SIGNATURE:

PRINT NAME LEGIBLY:

TOWN/CITY:

DATE:

Kelli L. Barnaby

Kelli L. Barnaby

Portsmouth

June 24, 2021

[lrn@des.nh.gov](mailto:lrn@des.nh.gov) or (603) 271-2147

NHDES Wetlands Bureau, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095

[www.des.nh.gov](http://www.des.nh.gov)

**DIRECTIONS FOR TOWN/CITY CLERK:**

Per RSA 482-A:3, I(a)(1)

1. IMMEDIATELY sign the original application form and four copies in the signature space provided above.
2. Return the signed original application form and attachments to the applicant so that the applicant may submit the application form and attachments to NHDES by mail or hand delivery.
3. IMMEDIATELY distribute a copy of the application with one complete set of attachments to each of the following bodies: the municipal Conservation Commission, the local governing body (Board of Selectmen or Town/City Council), and the Planning Board.
4. Retain one copy of the application form and one complete set of attachments and make them reasonably accessible for public review.

**DIRECTIONS FOR APPLICANT:**

Submit the original permit application form bearing the signature of the Town/City Clerk, additional materials, and the application fee to NHDES by mail or hand delivery at the address at the bottom of this page. Make check or money order payable to "Treasurer – State of NH".



Keep this checklist for your reference; do not submit with your application.

### APPLICATION CHECKLIST

Unless specified, all items below are required. Failure to provide the required items will delay a decision on your project and may result in denial of your application. Please reference statute RSA 482-A, Fill and Dredge in Wetlands, and the [Wetland Rules Env-Wt 100-900](#).

- ☒ The completed, dated, signed, and certified application (Env-Wt 311.03(b)(1)).
- ☒ Correct fee as determined in RSA 482-A:3, I(b) or (c), subject to any cap established by RSA 482-A:3, X (Env-Wt 311.03(b)(2)). Make check or money order payable to "Treasurer – State of NH".
- ☒ The Required Planning actions required by Env-Wt 311.01(a)-(c) and Env-Wt 311.03(b)(3).
- ☐ [US Army Corps of Engineers \(ACE\) "Appendix B, New Hampshire General Permits \(GPs\), Required Information and Corps Secondary Impacts Checklist"](#) and its required attachments (Env-Wt 307.02). This includes the [US Fish and Wildlife Service IPAC review](#) and [Section 106 Historic/Archaeological Resource review](#).
- ☒ Project plans described in Env-Wt 311.05 (Env-Wt 311.03(b)(4)).
- ☒ Maps, or electronic shape files and meta data, and other attachments specified in Env-Wt 311.06 (Env-Wt 311.03(b)(5)).
- ☒ Explanation of the methods, timing, and manner as to how the project will meet standard permit conditions required in Env-Wt 307 (Env-Wt 311.03(b)(7)).
- ☐ If applicable, the information regarding proposed compensatory mitigation specified in Env-Wt 311.08 and Chapter Env-Wt 800 - [Permittee Responsible Mitigation Project Worksheet](#), unless not required under Env-Wt 313.04 (Env-Wt 311.03(b)(8); Env-Wt 311.08; Env-Wt 313.04).
- ☐ Any additional information specific to the **type of resource** as specified in Env-Wt 311.09 (Env-Wt 311.03(b)(9); Env-Wt 311.04(j)).
- ☒ Project specific information required by Env-Wt 500, Env-Wt 600, and Env-Wt 900 (Env-Wt 311.03(b)(11)).
- ☒ A list containing the name, mailing address and tax map/lot number of each abutter to the subject property (Env-Wt 311.03(b)(12)).
- ☒ Copies of certified postal receipts or other proof of receipt of the notices that are required by RSA 482-A:3, I(d) (Env-Wt 311.03(b)(13)).
- ☒ Project design considerations required by Env-Wt 313 (Env-Wt 311.04(j)).
- ☒ Town tax map showing the subject property, the location of the project on the property, and the location of properties of abutters with each lot labeled with the name and mailing address of the abutter (Env-Wt 311.06(a)).
- ☒ Dated and labeled color photographs that:
  - (1) Clearly depict:
    - a. All jurisdictional areas, including but not limited to portions of wetland, shoreline, or surface water where impacts have or are proposed to occur.
    - b. All existing shoreline structures.
  - (2) Are mounted or printed no more than 2 per sheet on 8.5 x 11 inch sheets (Env-Wt 311.06(b)).
- ☒ A copy of the appropriate US Geological Survey map or updated data based on LiDAR at a scale of one inch equals 2,000 feet showing the location of the subject property and proposed project (Env-Wt 311.06(c)).
- ☒ A narrative that describes the work sequence, including pre-construction through post-construction, and the relative timing and progression of all work (Env-Wt 311.06(d)).



- ☐ For all projects in the protected tidal zone, a copy of the recorded deed with book and page numbers for the property (Env-Wt 311.06(e)).
- ☒ If the applicant is not the owner in fee of the subject property, documentation of the applicant's legal interest in the subject property, provided that for utility projects in a utility corridor, such documentation may comprise a list that:
  - (1) Identifies the county registry of deeds and book and page numbers of all of the easements or other recorded instruments that provide the necessary legal interest; and
  - (2) Has been certified as complete and accurate by a knowledgeable representative of the applicant (Env-Wt 311.06(f)).
- ☒ The NHB memo containing the NHB identification number and results as well as any written follow-up communications such as additional memos or email communications with either NHB or NHF&G (Env-Wt 311.06(g)). See [Wetlands Permitting: Protected Species and Habitat Fact Sheet](#).
- ☒ A statement of whether the applicant has received comments from the local conservation commission and, if so, how the applicant has addressed the comments (Env-Wt 311.06(h)).
- ☐ For projects in LAC jurisdiction, a statement of whether the applicant has received comments from the LAC and, if so, how the applicant has addressed the comments (Env-Wt 311.06(i)).
- ☐ If the applicant is also seeking to be covered by the state general permits, a statement of whether comments have been received from any federal agency and, if so, how the applicant has addressed the comments (Env-Wt 311.06(j)).
- ☒ [Avoidance and Minimization Written Narrative](#) or the [Avoidance and Minimization Checklist](#), or your own avoidance and minimization narrative (Env-Wt 311.07).
- ☐ For after-the-fact applications: information required by Env-Wt 311.12.
- ☐ [Coastal Resource Worksheet](#) for coastal projects as required under Env-Wt 600.
- ☐ Prime Wetlands information required under Env-Wt 700. See [WPPT](#) for prime wetland mapping.

#### Required Attachments for Minor and Major Projects

- ☒ [Attachment A: Minor and Major Projects](#) (Env-Wt 313.03).
- ☒ [Functional Assessment Worksheet](#) or others means of documenting the results of actions required by Env-Wt 311.10 as part of an application preparation for a standard permit (Env-Wt 311.03(b)(3); Env-Wt 311.03(b)(10)). See [Functional Assessments for Wetlands and Other Aquatic Resources Fact Sheet](#). For shoreline structures, see shoreline structures exemption in Env-Wt 311.03(b)(10)).

#### Optional Materials

- ☐ [Stream Crossing Worksheet](#) which summarizes the requirements for stream crossings under Env-Wt 900.
- ☐ Request for [concurrent processing of related shoreland / wetlands permit applications](#) (Env-Wt 313.05).





# STANDARD DREDGE AND FILL WETLANDS PERMIT APPLICATION ATTACHMENT A: MINOR AND MAJOR PROJECTS



Water Division/Land Resources Management

Wetlands Bureau

[Check the Status of your Application](#)

**RSA/ Rule:** RSA 482-A/ Env-Wt 311.10; Env-Wt 313.01(a)(1); Env-Wt 313.03

**APPLICANT'S NAME:** Lonza Biologics, Inc.

**TOWN NAME:** Portsmouth

Attachment A is required for *all minor and major projects*, and must be completed *in addition* to the [Avoidance and Minimization Narrative](#) or [Checklist](#) that is required by Env-Wt 307.11.

For projects involving construction or modification of non-tidal shoreline structures over areas of surface waters having an absence of wetland vegetation, only Sections I.X through I.XV are required to be completed.

## PART I: AVOIDANCE AND MINIMIZATION

In accordance with Env-Wt 313.03(a), the Department shall not approve any alteration of any jurisdictional area unless the applicant demonstrates that the potential impacts to jurisdictional areas have been avoided to the maximum extent practicable and that any unavoidable impacts have been minimized, as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#).

### SECTION I.I - ALTERNATIVES (Env-Wt 313.03(b)(1))

Describe how there is no practicable alternative that would have a less adverse impact on the area and environments under the Department's jurisdiction.

THE NEEDED PARKING EXPANSION WILL RESULT IN 4,087 SF OF WETLAND IMPACT, FILLING THE ENTIRE MANMADE WETLAND. HOWEVER, GIVEN THE LOCATION OF EXISTING PARKING LOT, THE LAYOUT OF THE LONZA CAMPUS, AND LIMITED AVAILABLE LAND, THIS IS THE ONLY PRACTICABLE OPTION FOR A PARKING EXPANSION. ACTUAL IMPACTS TO WETLAND FUNCTIONS WILL BE NEGLIGIBLE BECAUSE THE WETLAND HAS VERY LOW ECOLOGICAL INTEGRITY AND FUNCTIONS. WHAT MINIMAL FUNCTIONS IT HAS (FLOODFLOW ALTERATION, SEDIMENT TRAPPING, AND NUTRIENT ATTENUATION) WILL BE OFFSET WITH ENGINEERED SOLUTIONS.

TO MINIMIZE ENVIRONMENTAL IMPACTS TO THE GREATEST EXTENT PRACTICABLE, THIS PROJECT INCLUDES STORMWATER TREATMENT FOR PROPOSED IMPERVIOUS AREAS AS WELL AS EXISTING IMPERVIOUS AREAS THAT ARE CURRENTLY UNTREATED. THE CURRENT UNTREATED IMPERVIOUS SURFACE THAT WILL BE TREATED AS A RESULT OF THIS PROJECT.

THE LONZA BIOLOGICS PARCEL ON THE OPPOSITE (NORTHEAST) SIDE OF GOOSE BAY DRIVE (MAP 305/LOT 1) IS UNAVAILABLE FOR THE PROJECT BECAUSE THIS PARCEL IS ALREADY APPROVED FOR THE CONSTRUCTION OF ANOTHER FACILITY THAT INCLUDES A SEVEN-STORY, 700 SPACE PARKING LOT (SEE SHEET C-102 OF ATTACHED PROJECT PLANS) AND OVER 1.25 ACRES OF WETLAND IMPACTS (NHDES FILE #2018-01731).

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**SECTION I.II - MARSHES (Env-Wt 313.03(b)(2))**

Describe how the project avoids and minimizes impacts to tidal marshes and non-tidal marshes where documented to provide sources of nutrients for finfish, crustacean, shellfish, and wildlife of significant value.

As indicated in the wetland report, the impacted wetland does not consist of a marsh.

**SECTION I.III - HYDROLOGIC CONNECTION (Env-Wt 313.03(b)(3))**

Describe how the project maintains hydrologic connections between adjacent wetland or stream systems.

The proposed project maintains the continuity between adjacent wetlands by rerouting the stormwater runoff directed to the wetland, by providing a conveyance swale to a detention pond and then providing treatment processes before rejoining the wetland system. All stormwater practices have been adequately sized to accommodate the hydrologic loading to maintain adequate capacities.



**SECTION I.IV - JURISDICTIONAL IMPACTS (Env-Wt 313.03(b)(4))**

Describe how the project avoids and minimizes impacts to wetlands and other areas of jurisdiction under RSA 482-A, especially those in which there are exemplary natural communities, vernal pools, protected species and habitat, documented fisheries, and habitat and reproduction areas for species of concern, or any combination thereof.

The impacted wetland does not qualify as an exemplary natural community, vernal pool. It is not comprised of documented protected species and habitats, fisheries and habitat and reproduction areas of species of concern that will be impacted as part of this site.

The linear wetland is a rip rap lined swale that falls at the toe of an old hillside cut slope. The excavated slope and swale appear to have been created when the area along Goose Bay Road was leveled for the construction of Air Force housing. The swale likely originally functioned as a conveyance ditch but has filled in with sediment and leaf litter and taken on wetland features over time. As such, the ditch meets current State of New Hampshire wetland criteria. However, since this ditch/swale was created in an upland area, the wetlands do not meet the recent Navigable Waters Protection Rule definition of Waters of the United States (Federal Register Vol. 85, No. 77, April 21, 2020), and therefore, is not subject to federal jurisdiction or Army Corps of Engineers review.

**SECTION I.V - PUBLIC COMMERCE, NAVIGATION, OR RECREATION (Env-Wt 313.03(b)(5))**

Describe how the project avoids and minimizes impacts that eliminate, depreciate or obstruct public commerce, navigation, or recreation.

There will be no impact on public commerce, navigation, and recreation as a result of the proposed project.

**SECTION I.VI - FLOODPLAIN WETLANDS (Env-Wt 313.03(b)(6))**

Describe how the project avoids and minimizes impacts to floodplain wetlands that provide flood storage.

N/A

**SECTION I.VII - RIVERINE FORESTED WETLAND SYSTEMS AND SCRUB-SHRUB – MARSH COMPLEXES (Env-Wt 313.03(b)(7))**

Describe how the project avoids and minimizes impacts to natural riverine forested wetland systems and scrub-shrub – marsh complexes of high ecological integrity.

N/A

**SECTION I.VIII - DRINKING WATER SUPPLY AND GROUNDWATER AQUIFER LEVELS (Env-Wt 313.03(b)(8))**

Describe how the project avoids and minimizes impacts to wetlands that would be detrimental to adjacent drinking water supply and groundwater aquifer levels.

The proposed project will not impact the quality of surface and groundwater. The increase in impervious as well as existing impervious will be treated prior to discharging as part of the proposed work. Three (3) proprietary flow through treatment filtration devices are proposed as the treatment practices.

**SECTION I.IX - STREAM CHANNELS (Env-Wt 313.03(b)(9))**

Describe how the project avoids and minimizes adverse impacts to stream channels and the ability of such channels to handle runoff of waters.

N/A

**SECTION I.X - SHORELINE STRUCTURES - CONSTRUCTION SURFACE AREA (Env-Wt 313.03(c)(1))**

Describe how the project has been designed to use the minimum construction surface area over surface waters necessary to meet the stated purpose of the structures.

n/a

**SECTION I.XI - SHORELINE STRUCTURES - LEAST INTRUSIVE UPON PUBLIC TRUST (Env-Wt 313.03(c)(2))**

Describe how the type of construction proposed is the least intrusive upon the public trust that will ensure safe docking on the frontage.

The impacts to the existing wetland will not interfere with docking on the frontage.

**SECTION I.XII - SHORELINE STRUCTURES – ABUTTING PROPERTIES (Env-Wt 313.03(c)(3))**

Describe how the structures have been designed to avoid and minimize impacts on ability of abutting owners to use and enjoy their properties.

n/a

**SECTION I.XIII - SHORELINE STRUCTURES – COMMERCE AND RECREATION (Env-Wt 313.03(c)(4))**

Describe how the structures have been designed to avoid and minimize impacts to the public's right to navigation, passage, and use of the resource for commerce and recreation.

n/a

**SECTION I.XIV - SHORELINE STRUCTURES – WATER QUALITY, AQUATIC VEGETATION, WILDLIFE AND FINFISH HABITAT (Env-Wt 313.03(c)(5))**

Describe how the structures have been designed, located, and configured to avoid impacts to water quality, aquatic vegetation, and wildlife and finfish habitat.

n/a

**SECTION I.XV - SHORELINE STRUCTURES – VEGETATION REMOVAL, ACCESS POINTS, AND SHORELINE STABILITY (Env-Wt 313.03(c)(6))**

Describe how the structures have been designed to avoid and minimize the removal of vegetation, the number of access points through wetlands or over the bank, and activities that may have an adverse effect on shoreline stability.

n/a

**PART II: FUNCTIONAL ASSESSMENT****REQUIREMENTS**

Ensure that project meets the requirements of Env-Wt 311.10 regarding functional assessment (Env-Wt 311.04(j); Env-Wt 311.10).

**FUNCTIONAL ASSESSMENT METHOD USED:**

Functional analyses of the wetlands were based on The Highway Methodology Workbook Supplement—Wetland Functions and Values: A Descriptive Approach, (NAEEP-360-1-30a, US Army Corps of Engineers, New England Division, September 1999), except that the Ecological Integrity function was based on the Method for Inventorying and Evaluating Freshwater Wetlands in New Hampshire (UNH Cooperative Extension, 2016). The Functional Assessment Narrative is included in the cover letter with this application.

NAME OF CERTIFIED WETLAND SCIENTIST (FOR NON-TIDAL PROJECTS) OR QUALIFIED COASTAL PROFESSIONAL (FOR TIDAL PROJECTS) WHO COMPLETED THE ASSESSMENT: **LEONARD A. LORD, PHD, CSS, CWS**

DATE OF ASSESSMENT: **APRIL 9, 2021**

Check this box to confirm that the application includes a NARRATIVE ON FUNCTIONAL ASSESSMENT:



For minor or major projects requiring a standard permit without mitigation, the applicant shall submit a wetland evaluation report that includes completed checklists and information demonstrating the RELATIVE FUNCTIONS AND VALUES OF EACH WETLAND EVALUATED. Check this box to confirm that the application includes this information, if applicable:



Note: The Wetlands Functional Assessment worksheet can be used to compile the information needed to meet functional assessment requirements.





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**RESIDENTIAL, COMMERCIAL, AND  
INDUSTRIAL DEVELOPMENT  
PROJECT-SPECIFIC WORKSHEET  
FOR STANDARD APPLICATION**

Water Division/Land Resources Management  
Wetlands Bureau  
[Check the Status of your Application](#)



**RSA/Rule:** RSA 482/ Env-Wt 524

**APPLICANT LAST NAME, FIRST NAME, M.I.:** Lonza Biologics, Inc.

This worksheet summarizes the criteria and requirements for a Standard Permit for “Residential, Commercial, and Industrial Development”, one of the 18 specific project types in Chapter Env-Wt 500. In addition to the project-specific criteria and requirements on this worksheet, all Standard Dredge and Fill Applications must meet the criteria and requirements listed in the Standard Dredge and Fill Application form (NHDES-W-06-012).

**SECTION 1 - APPLICABILITY (Env-Wt 509.02(b); Env-Wt 524.01)**

The information in this worksheet applies to residential, commercial, and industrial development projects, including associated roadways, in non-tidal wetlands.

Do **not** use this worksheet if the project is located in a coastal (tidal) area.

**SECTION 2 - APPROVAL CRITERIA FOR RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENT PROJECTS (Env-Wt 524.02)**

An application for a residential, commercial or industrial development project must meet the following criteria:

- ☒ The project must meet the applicable criteria established in Env-Wt 300;
- ☐ An off-site alternatives analysis is conducted for any project that will result in more than one acre of permanent wetland impacts;
- ☒ The project avoids and minimizes impacts to wetlands, watercourses, and sensitive and valuable wetlands in accordance with Env-Wt 313.03;
- ☒ The project complies with the design criteria specified in Env-Wt 524.04 and the construction criteria specified in Env-Wt 524.05; and
- ☐ Compensatory mitigation is provided for any new residential, commercial, or industrial development in a Priority Resource Area.

**SECTION 3 - APPLICATION REQUIREMENTS FOR RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENT PROJECTS (Env-Wt 524.03)**

- ☐ For all projects requiring subdivision approval, a plan prepared and stamped by a land surveyor licensed in the State of New Hampshire pursuant to RSA 310-A showing existing and proposed topography and the location of all proposed lot lines;
- ☐ For all projects requiring subdivision approval, the following clearly delineated on the plan required above: the boundaries of all wetlands and surface waters and the footprint of all proposed impacts;

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- ☐ For minor and major projects requiring subdivision approval, wetlands classifications clearly indicated in accordance with Env-Wt 400 on the plan required above; and
- ☐ For a project that is associated with one or more phases of a multi-phase subdivision, a project impact plan that also shows all wetlands on remaining property proposed for future phases of development.

Please note that permits for subdivisions of 4 or more lots shall not be effective until the permittee records the permit with the appropriate registry of deeds and a copy of the registered permit has been received by the department.

An application for a residential, commercial or industrial development project must include the following information:

- ☐ If the project includes components that are subject to multiple project-specific requirements in Chapter Env-Wt 500, a narrative statement and plan that describes how each project-specific component meets the requirements of the applicable part in Chapter Env-Wt 500 and how the project as a whole impacts jurisdictional areas.

#### **SECTION 4 - DESIGN REQUIREMENTS FOR RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENT PROJECTS (Env-Wt 524.04)**

In addition to meeting the applicable design requirements established in Env-Wt 300, a residential, commercial, or industrial development project must be designed to meet the following criteria:

- ☒ The project complies with all applicable requirements of Env-Wt 400, Env-Wt 700, Env-Wt 800, Env-Wt 900, and other applicable project-specific criteria in Chapter Env-Wt 500;
- ☒ The project does not use wetlands or surface waters to serve as stormwater or water quality treatment to mitigate impacts;
- ☒ The project provides setbacks and water quality protection measures sufficient to protect private and public drinking water supplies, source water protection areas, and fisheries;
- ☒ The project maintains or restores hydrologic connections to maintain flows necessary to preserve adjacent wetland and riparian functions;
- ☐ The project maintains existing fishery spawning, feeding, or cover habitat and fish passage necessary to maintain fishery or habitat or populations; and
- ☐ The project maintains existing wetland-dependent wildlife habitat and its associated migratory pathways, reproductive sites, and associated wetland complex or wetland community system.

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## SECTION 5 - CONSTRUCTION REQUIREMENTS FOR RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENT PROJECTS (Env-Wt 525.05)

In addition to meeting all applicable construction standards specified in Env-Wt 307 and other applicable project-specific standards in Chapter Env-Wt 500, the following requirements apply to residential, commercial, or industrial development projects:

- ☒ A construction notice shall be filed with the department at least 48 hours prior to commencing work; and
- ☒ All work shall be conducted in accordance with the approved plan.

## SECTION 6 - CLASSIFICATION OF RESIDENTIAL AND COMMERCIAL OR INDUSTRIAL DEVELOPMENT PROJECTS (Env-Wt 524.06)

Residential and commercial or industrial development projects shall be classified under Env-Wt 407 and as follows:

***(a) A project shall be a minimum impact project only if:***

- (1) All stream-crossing components of the project meet the requirements for minimum impact classification specified in Env-Wt 903;
- (2) All other components of the project meet the requirements for minimum impact classification specified in Env-Wt 407 and this chapter;
- (3) The project is not part of a new subdivision of 4 or more lots; and
- (4) The project does not meet the criteria listed in (d) below.

***(b) A project shall be an expedited minimum impact project only if:***

- (1) It is a minimum impact project to construct a new subdivision of 3 lots or less;
- (2) The applicant has attended a pre-design submission meeting with the department at least 7 days prior to application submission and included department feedback in the design plan; and
- (3) The project does not meet the criteria listed in (d) below.

***(c) A project shall be a minor impact project if the project does not meet the criteria listed in (d) below and if any of the following apply:***

- (1) Any single stream-crossing component of the project meets the requirements for minor impact classification specified in Env-Wt 903;
- (2) The project is part of a new subdivision of 4 or more lots;
- (3) Any single component of the project meets the requirements for minor impact classification specified in Env-Wt 407, Env-Wt 903, or Chapter Env-Wt 500; or
- (4) No component of the project meets the requirements for major impact classification specified in Env-Wt 407, Env-Wt 903, or Chapter Env-Wt 500.

***(d) A project shall be a major impact project if:***

- (1) The project exceeds the minor impact criteria;
- (2) The project requires mitigation or meets the requirements for major impact classification specified in Env-Wt 407, Env-Wt 903, or any other associated project classification that is part of the overall project; or
- (3) The project is elevated based on an aggregation undertaken by a developer or is part of a series of developments under Env-Wt 400.





**AVOIDANCE AND MINIMIZATION  
WRITTEN NARRATIVE**  
Water Division/Land Resources Management  
Wetlands Bureau  
[Check the Status of your Application](#)



**RSA/ Rule:** RSA 482-A/ Env-Wt 311.04(j); Env-Wt 311.07; Env-Wt 313.01(a)(1)b; Env-Wt 313.01(c)

**APPLICANT'S NAME:** Lonza Biologics, Inc.

**TOWN NAME:** Portsmouth

An applicant for a standard permit shall submit with the permit application a written narrative that explains how all impacts to functions and values of all jurisdictional areas have been avoided and minimized to the maximum extent practicable. This attachment can be used to guide the narrative (attach additional pages if needed). Alternatively, the applicant may attach a completed [Avoidance and Minimization Checklist \(NHDES-W-06-050\)](#) to the permit application.

**SECTION 1 - WATER ACCESS STRUCTURES (Env-Wt 311.07(b)(1))**

Is the primary purpose of the proposed project to construct a water access structure?

No, the proposed project does not include construction a water access structure.

**SECTION 2 - BUILDABLE LOT (Env-Wt 311.07(b)(1))**

Does the proposed project require access through wetlands to reach a buildable lot or portion thereof?

No, wetland impact is not required to reach a buildable lot or a portion of a buildable lot.

**SECTION 3 - AVAILABLE PROPERTY (Env-Wt 311.07(b)(2))\***

For any project that proposes permanent impacts of more than one acre, or that proposes permanent impacts to a PRA, or both, are any other properties reasonably available to the applicant, whether already owned or controlled by the applicant or not, that could be used to achieve the project's purpose without altering the functions and values of any jurisdictional area, in particular wetlands, streams, and PRAs?

*\*Except as provided in any project-specific criteria and except for NH Department of Transportation projects that qualify for a categorical exclusion under the National Environmental Policy Act.*

The proposed project includes permanent wetland impacts of less than one (1) acre and does not propose impacts to a Priority Resource Area.



**SECTION 4 - ALTERNATIVES (Env-Wt 311.07(b)(3))**

Could alternative designs or techniques, such as different layouts, different construction sequencing, or alternative technologies be used to avoid impacts to jurisdictional areas or their functions and values as described in the [Wetlands Best Management Practice Techniques For Avoidance and Minimization](#)?

The parking expansion will result in 4,087 SF of wetland impact, filling the entire manmade wetland. However, given the location of existing parking lot, the layout of the Lonza campus, and limited available land, this is the only practicable option for a parking expansion. Actual impacts to wetland functions will be negligible because the wetland has very low ecological integrity and functions. What minimal functions it has (floodflow alteration, sediment trapping, and nutrient attenuation) will be offset with engineered solutions.

The Lonza Biologics parcel on the opposite (northeast) side of Goose Bay Drive (Map 305/Lot 1) is unavailable for the project because this parcel is already approved for the construction of another facility that includes a seven-story, 700 space parking lot (see Sheet C-102 of current project plans) and over 1.25 acres of wetland impacts NHDES File #2018-01731)

**SECTION 5 - CONFORMANCE WITH Env-Wt 311.10(c) (Env-Wt 311.07(b)(4))\*\***

How does the project conform to Env-Wt 311.10(c)?

*\*\*Except for projects solely limited to construction or modification of non-tidal shoreline structures only need to complete relevant sections of Attachment A.*

As discussed in Section 4, there are no practicable alternatives and what minimal wetland functions are present will be replaced with engineered solutions.



# WETLANDS FUNCTIONAL ASSESSMENT WORKSHEET

Water Division/Land Resource Management  
Wetlands Bureau



[Check the Status of your Application](#)

**RSA/Rule:** RSA 482-A / Env-Wt 311.03(b)(10); Env-Wt 311.10

**APPLICANT LAST NAME, FIRST NAME, M.I.:** **Lonza Biologics, Inc**

As required by Env-Wt 311.03(b)(10), an application for a standard permit for minor and major projects must include a functional assessment of all wetlands on the project site as specified in Env-Wt 311.10. This worksheet will help you compile data for the functional assessment needed to meet federal (US Army Corps of Engineers (USACE); if applicable) and NHDES requirements. Additional requirements are needed for projects in tidal area; please refer to the [Coastal Area Worksheet \(NHDES-W-06-079\)](#) for more information.

Both a desktop review and a field examination are needed to accurately determine surrounding land use, hydrology, hydroperiod, hydric soils, vegetation, structural complexity of wetland classes, hydrologic connections between wetlands or stream systems or wetland complex, position in the landscape, and physical characteristics of wetlands and associated surface waters. The results of the evaluation are to be used to select the location of the proposed project having the least impact to wetland functions and values (Env-Wt 311.10). This worksheet can be used in conjunction with the [Avoidance and Minimization Written Narrative \(NHDES-W-06-089\)](#) and the [Avoidance and Minimization Checklist \(NHDES-W-06-050\)](#) to address Env-Wt 313.03 (Avoidance and Minimization). If more than one wetland/ stream resource is identified, multiple worksheets can be attached to the application. All wetland, vernal pools, and stream identification (ID) numbers are to be displayed and located on the wetlands delineation of the subject property.

## SECTION 1 - LOCATION (USACE HIGHWAY METHODOLOGY)

ADJACENT LAND USE: **Commercial Development**

CONTIGUOUS UNDEVELOPED BUFFER ZONE PRESENT? ☐ Yes ☒ No

DISTANCE TO NEAREST ROADWAY OR OTHER DEVELOPMENT (in feet): **30 ft**

## SECTION 2 - DELINEATION (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)

CERTIFIED WETLAND SCIENTIST (if in a non-tidal area) or QUALIFIED COASTAL PROFESSIONAL (if in a tidal area) who prepared this assessment: **Leonard Lord, PhD, CWS, CSS**

DATE(S) OF SITE VISIT(S): **April 9, 2021** DELINEATION PER ENV-WT 406 COMPLETED? ☒ Yes ☐ No

CONFIRM THAT THE EVALUATION IS BASED ON:

- ☒ Office and  
☒ Field examination.

METHOD USED FOR FUNCTIONAL ASSESSMENT (check one and fill in blank if "other"):

- ☒ USACE Highway Methodology.  
☒ Other scientifically supported method (enter name/ title): **NH Method, 2015("NHM" for Ecological Integrity Eval)**

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SECTION 3 - WETLAND RESOURCE SUMMARY (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
WETLAND ID: 1A	LOCATION: (LAT/ LONG) 43°05'07.7"N /70°48'18.7"W
WETLAND AREA: 4,087 sf	DOMINANT WETLAND SYSTEMS PRESENT: Wet meadow
HOW MANY TRIBUTARIES CONTRIBUTE TO THE WETLAND? 0	COWARDIN CLASS: PEM1/PSS1Ex
IS THE WETLAND A SEPARATE HYDRAULIC SYSTEM? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No if not, where does the wetland lie in the drainage basin? Upper	IS THE WETLAND PART OF: <input type="checkbox"/> A wildlife corridor or <input type="checkbox"/> A habitat island?  IS THE WETLAND HUMAN-MADE? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
IS THE WETLAND IN A 100-YEAR FLOODPLAIN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE VERNAL POOLS PRESENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (If yes, complete the Vernal Pool Table)
ARE ANY WETLANDS PART OF A STREAM OR OPEN-WATER SYSTEM? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	ARE ANY PUBLIC OR PRIVATE WELLS DOWNSTREAM/ DOWNGRADIENT? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
PROPOSED WETLAND IMPACT TYPE: Fill	PROPOSED WETLAND IMPACT AREA: 4,087 sf
SECTION 4 - WETLANDS FUNCTIONS AND VALUES (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)	
<p>The following table can be used to compile data on wetlands functions and values. The reference numbers indicated in the "Functions/ Values" column refer to the following functions and values:</p> <ol style="list-style-type: none"> <li>1. Ecological Integrity (from RSA 482-A:2, XI)</li> <li>2. Educational Potential (from USACE Highway Methodology: Educational/Scientific Value)</li> <li>3. Fish &amp; Aquatic Life Habitat (from USACE Highway Methodology: Fish &amp; Shellfish Habitat)</li> <li>4. Flood Storage (from USACE Highway Methodology: Floodflow Alteration)</li> <li>5. Groundwater Recharge (from USACE Highway Methodology: Groundwater Recharge/Discharge)</li> <li>6. Noteworthiness (from USACE Highway Methodology: Threatened or Endangered Species Habitat)</li> <li>7. Nutrient Trapping/Retention &amp; Transformation (from USACE Highway Methodology: Nutrient Removal)</li> <li>8. Production Export (Nutrient) (from USACE Highway Methodology)</li> <li>9. Scenic Quality (from USACE Highway Methodology: Visual Quality/Aesthetics)</li> <li>10. Sediment Trapping (from USACE Highway Methodology: Sediment /Toxicant Retention)</li> <li>11. Shoreline Anchoring (from USACE Highway Methodology: Sediment/Shoreline Stabilization)</li> <li>12. Uniqueness/Heritage (from USACE Highway Methodology)</li> <li>13. Wetland-based Recreation (from USACE Highway Methodology: Recreation)</li> <li>14. Wetland-dependent Wildlife Habitat (from USACE Highway Methodology: Wildlife Habitat)</li> </ol> <p>First, determine if a wetland is suitable for a particular function and value ("Suitability" column) and indicate the rationale behind your determination ("Rationale" column). Please use the rationale reference numbers listed in Appendix A of USACE <i>The Highway Methodology Workbook Supplement</i>. Second, indicate which functions and values are principal ("Principal Function/value?" column). As described in <i>The Highway Methodology Workbook Supplement</i>, "functions and values can be principal if they are an important physical component of a wetland ecosystem (function only) and/or are considered of special value to society, from a local, regional, and/or national perspective". "Important Notes" are to include characteristics the evaluator used to determine the principal function and value of the wetland.</p>	

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FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE (Reference #)	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES
1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Ecological Integrity (from NHM, a = better): 1c,2c,3a,4a,5b,6c,7c,8c,9c,10a	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Low EI- rock lined ditch in commercial development dominated by invasive species
2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Education Potential:13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Low Ecological Integrity, no access
3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fish & Aquatic Life: None	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No watercourse
4	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Flood Storage: 3,4,6,9,15,16,18	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Ditch/swale has a low grade and high density vegetation but has a small watershed and no ponding.
5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Groundwater Recharge (only): None	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Rock-lined ditch underlain by densipan. Outlet but no inlet.
6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Noteworthiness (RTE):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No rare species present
7	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Nutrient Trapping/Retention: 3,4,8,10,	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Minimal--some nutrient attenuation from lawns and impervious, but small watershed
8	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Production Export:2,7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No detritis flushing or valuable wildlife food exported
9	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Scenic Quality: 11	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Highly disturbed, no vistas or scenic interest
10	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sediment Trapping: 1,3,7,	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Minimal--some sediment in from impervious surfaces and adjacent cut slope, but mostly vegetated
11	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Shoreline Anchoring: None	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No watercourse
12	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Uniqueness/Heritage: 2,	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No unique features present
13	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wetland Based Recreation: None	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No watercourse, no public access
14	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Dependent Wildlife: None	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No watercourse, highly disturbed

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**SECTION 5 - VERNAL POOL SUMMARY (Env-Wt 311.10)**

Delineations of vernal pools shall be based on the characteristics listed in the definition of “vernal pool” in Env-Wt 104.44. To assist in the delineation, individuals may use either of the following references:

- *Identifying and Documenting Vernal Pools in New Hampshire 3<sup>rd</sup> Ed.*, 2016, published by the New Hampshire Fish and Game Department; or
- The USACE *Vernal Pool Assessment* draft guidance dated 9-10-2013 and form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

All vernal pool ID numbers are to be displayed and located on the wetland delineation of the subject property.

“Important Notes” are to include documented reproductive and wildlife values, landscape context, and relationship to other vernal pools/wetlands.

Note: For projects seeking federal approval from the USACE, please attach a completed copy of The USACE “Vernal Pool Assessment” form dated 9-6-2016, Appendix L of the USACE New England District *Compensatory Mitigation Guidance*.

VERNAL POOL ID NUMBER	DATE(S) OBSERVED	PRIMARY INDICATORS PRESENT (LIST)	SECONDARY INDICATORS PRESENT (LIST)	LENGTH OF HYDROPERIOD	IMPORTANT NOTES
1					NO VERNAL POOLS
2					
3					
4					
5					

**SECTION 6 - STREAM RESOURCES SUMMARY**

DESCRIPTION OF STREAM: NO STREAMS		STREAM TYPE (ROSGEN):	
HAVE FISHERIES BEEN DOCUMENTED? <input type="checkbox"/> Yes <input type="checkbox"/> No		DOES THE STREAM SYSTEM APPEAR STABLE? <input type="checkbox"/> Yes <input type="checkbox"/> No	
OTHER KEY ON-SITE FUNCTIONS OF NOTE:			
The following table can be used to compile data on stream resources. “Important Notes” are to include characteristics the evaluator used to determine principal function and value of each stream. The functions and values reference number are defined in Section 4.			

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FUNCTIONS/ VALUES	SUITABILITY (Y/N)	RATIONALE	PRINCIPAL FUNCTION/VALUE? (Y/N)	IMPORTANT NOTES
1	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	

**SECTION 7 - ATTACHMENTS (USACE HIGHWAY METHODOLOGY; Env-Wt 311.10)**

- ☒ Wildlife and vegetation diversity/abundance list.
- ☒ Photograph of wetland.
- ☒ Wetland delineation plans showing wetlands, vernal pools, and streams in relation to the impact area and surrounding landscape. Wetland IDs, vernal pool IDs, and stream IDs must be indicated on the plans.
- ☐ For projects in tidal areas only: additional information required by Env-Wt 603.03/603.04. Please refer to the [Coastal Area Worksheet \(NHDES-W-06-079\)](#) for more information.



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lonza - Lynx Parking Expansion City/County: Portsmouth/Rockingham Sampling Date 4/9/21 & 6/18/21  
 Applicant/Owner: Lonza Biologics/Pease Development Authority State: NH Sampling Point: 1A-9: Wet  
 Investigator(s): Leonard Lord, PhD, CWS #14, CSS #19 Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Excavated swale Local relief (concave, convex, none): Concave Slope (%): 2  
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.08556 Long: 70.80513 Datum: \_\_\_\_\_  
 Soil Map Unit Name: SSSM: Endoaquents, loamy NWI classification: PEM1/PSS1Ex

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No X  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Soils and hydrology sampled 4/9/21. Vegetation sampled 6/18/21. Conditions drier than normal. Wetland is an excavated and rock lined drainage swale at the base of an excavated slope. Soils, vegetation, and hydrology were disturbed by excavation many years ago but wetland indicators have had time to develop. The area was originally moderately well drained glacial till (Woodbridge series) but the slope was cut to level the area along Goose Bay Road for Air Force housing that has since been removed.	

## HYDROLOGY Soils and hydrology sampled 4/9/21

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) <u>X</u> High Water Table (A2) ___ Aquatic Fauna (B13) <u>X</u> Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) <u>X</u> Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes <u>X</u> No _____ Depth (inches): <u>2</u> Saturation Present? (includes capillary fringe) Yes <u>X</u> No _____ Depth (inches): <u>0</u>		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



**VEGETATION – Use scientific names of plants.**

Vegetation sampled 6/18/21.

 Sampling Point: 1A-9: Wet

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>4</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>10' x 71'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer rubrum</u>	<u>5%</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Rosa multiflora</u>	<u>0.5</u>	<u>N</u>	<u>FACU</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ 5.5% = Total Cover 50%				<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: <u>3.3' x 3.3'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Onoclea sensibilis</u>	<u>50%</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Lythrum salicaria</u>	<u>30%</u>	<u>Y</u>	<u>OBL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
_____ 80% = Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: <u>10' x 283'</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Toxicodendron radicans</u>	<u>7%</u>	<u>Y</u>	<u>FAC</u>	
2. <u>Celastrus orbiculatus</u>	<u>1%</u>	<u>N</u>	<u>UPL</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____	<u>8%</u>	_____	_____	
_____ = Total Cover				
<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____				
Remarks: (Include photo numbers here or on a separate sheet.)  Vegetation in this swale appears to have been cut and possibly regularly maintained up until about 10 years ago.				

## SOIL

Soils and hydrology sampled 4/9/21

Sampling Point: 1A-9: Wet

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

### Hydric Soil Indicators:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR R,</b>
<input type="checkbox"/> Histic Epipedon (A2)	<b>MLRA 149B)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR R, MLRA 149B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR K, L)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input checked="" type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7) ( <b>LRR R, MLRA 149B)</b>	

### Indicators for Problematic Hydric Soils<sup>3</sup>:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)  
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)  
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)  
☐ Dark Surface (S7) (**LRR K, L**)  
☐ Polyvalue Below Surface (S8) (**LRR K, L**)  
☐ Thin Dark Surface (S9) (**LRR K, L**)  
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)  
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)  
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)  
☐ Red Parent Material (F21)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches):

Hydric Soil Present? Yes X No       

## Remarks:

Old excavated rock lined swale that has partly filled in with sediment over time. Numerous auger probes confirmed the consistent present of rock at consistent depth throughout the swale that was not found outside the swale.



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Lonza - Lynx Parking Expansion City/County: Portsmouth/Rockingham Sampling Date 4/9/21 & 6/18/21  
 Applicant/Owner: Lonza Biologics/Pease Development Authority State: NH Sampling Point: 1A-21: Upl  
 Investigator(s): Leonard Lord, PhD, CWS #14, CSS #19 Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Excavated slope Local relief (concave, convex, none): None Slope (%): 35%  
 Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 43.08556 Long: 70.80513 Datum: \_\_\_\_\_  
 Soil Map Unit Name: SSSM: Udorthents, loamy NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No X (If no, explain in Remarks.)  
 Are Vegetation X, Soil X, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No X  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Conditions are drier than normal for this time of year. Soils and vegetation were disturbed by excavation many years ago but have become relatively stable with reference to wetland indicators. The area was upland prior to excavation (Woodbridge soil series), and continues to remain in an upland condition.	

## HYDROLOGY

Soils and hydrology sampled 4/9/21

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <u>X</u> Depth (inches): _____		<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION – Use scientific names of plants.**

 Sampling Point 1A-21: Upl

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>20%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus rubra</u>	<u>50%</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Elaeagnus umbellata</u>	<u>30%</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Frangula alnus</u>	<u>20%</u>	<u>N</u>	<u>FAC</u>	
4. <u>Rosa multiflora</u>	<u>5%</u>	<u>N</u>	<u>UPL</u>	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
_____ 105% = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> ___ 1 - Rapid Test for Hydrophytic Vegetation ___ 2 - Dominance Test is >50% ___ 3 - Prevalence Index is ≤3.0 <sup>1</sup> ___ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Herb Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Quercus rubra</u>	<u>20%</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Eurybia divaricata</u>	<u>10%</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Apocynum cannabinum</u>	<u>0.5%</u>	<u>N</u>	<u>FAC</u>	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
12. _____	_____	_____	_____	
_____ 30.5% = Total Cover				<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Toxicodendron radicans</u>	<u>40%</u>	<u>Y</u>	<u>FAC</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____ 40% = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.) Vegetation on this slope appears to have been cut and possibly regularly maintained up until about 10 years ago.				

## SOIL

Soils and hydrology sampled 4/9/21

Sampling Point 1A-21: Upl

**Profile Description:** (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) ( <b>LRR R,</b>
<input type="checkbox"/> Histic Epipedon (A2)	<b>MLRA 149B)</b>
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Thin Dark Surface (S9) ( <b>LRR R, MLRA 149B)</b>
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) ( <b>LRR K, L)</b>
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Redox (S5)	
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7) ( <b>LRR R, MLRA 149B)</b>	

### Indicators for Problematic Hydric Soils<sup>3</sup>:

☐ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)  
☐ Coast Prairie Redox (A16) (**LRR K, L, R**)  
☐ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)  
☐ Dark Surface (S7) (**LRR K, L**)  
☐ Polyvalue Below Surface (S8) (**LRR K, L**)  
☐ Thin Dark Surface (S9) (**LRR K, L**)  
☐ Iron-Manganese Masses (F12) (**LRR K, L, R**)  
☐ Piedmont Floodplain Soils (F19) (**MLRA 149B**)  
☐ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)  
☐ Red Parent Material (F21)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches):

Hydric Soil Present? Yes \_\_\_\_\_ No X

Remarks:

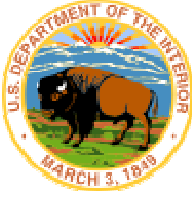
Densipan likely occurs deeper in the profile











## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>



In Reply Refer To:

May 24, 2021

Consultation Code: 05E1NE00-2021-SLI-3466

Event Code: 05E1NE00-2021-E-10434

Project Name: Lynx Parking Expansion

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

[www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html).

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
-

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**New England Ecological Services Field Office**

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

---

## Project Summary

Consultation Code: 05E1NE00-2021-SLI-3466

Event Code: 05E1NE00-2021-E-10434

Project Name: Lynx Parking Expansion

Project Type: DEVELOPMENT

Project Description: The proposed project is located at 55 & 101 International Drive in Portsmouth, New Hampshire. The parcels are identified as Tax Map 305 Lots 6 and 7. The majority of the proposed project is located on an undeveloped portion of Lot 7 and a small portion of Lot 6. Lot 7, a 9.6 acre parcel, once consisted of row housing and streets for Pease Air Force Base. The houses and roads were removed in the mid to late 1990's as part of the Civil Redevelopment Plan for Pease after the closure of the Air Force Base. Currently, The Pease Development Authority is located on the developed portion of the lot along International Drive. The proposed project is to expand Lonza Biologics parking to support its growing product development services to the pharmaceutical and biologic industries. Lonza's existing facilities are located at 101 International Drive. The project will merge 2.66 acres of 55 International Drive with 101 International Drive to create a 46-acre parcel for Lonza's campus. The proposed project includes the construction of a new 200 space parking lot. The project will consist of associated site improvements such as lighting, landscaping and stormwater management that will include underground detention, three (3) proprietary flow through treatment filtration devices and a small detention basin.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.08535565,-70.80524054275196,14z>



Counties: Rockingham County, New Hampshire

---



## Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Mammals

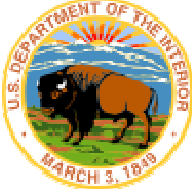
NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

---





## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New England Ecological Services Field Office  
70 Commercial Street, Suite 300  
Concord, NH 03301-5094  
Phone: (603) 223-2541 Fax: (603) 223-0104  
<http://www.fws.gov/newengland>

IPaC Record Locator: 987-102373478

May 24, 2021

Subject: Consistency letter for the 'Lynx Parking Expansion' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Jessica Winston:

The U.S. Fish and Wildlife Service (Service) received on May 24, 2021 your effects determination for the 'Lynx Parking Expansion' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause “take”<sup>[1]</sup> of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action’s effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

Lynx Parking Expansion

**2. Description**

The following description was provided for the project 'Lynx Parking Expansion':

The proposed project is located at 55 & 101 International Drive in Portsmouth, New Hampshire. The parcels are identified as Tax Map 305 Lots 6 and 7. The majority of the proposed project is located on an undeveloped portion of Lot 7 and a small portion of Lot 6. Lot 7, a 9.6 acre parcel, once consisted of row housing and streets for Pease Air Force Base. The houses and roads were removed in the mid to late 1990's as part of the Civil Redevelopment Plan for Pease after the closure of the Air Force Base. Currently, The Pease Development Authority is located on the developed portion of the lot along International Drive.

The proposed project is to expand Lonza Biologics parking to support its growing product development services to the pharmaceutical and biologic industries.

Lonza's existing facilities are located at 101 International Drive. The project will merge 2.66 acres of 55 International Drive with 101 International Drive to create a 46-acre parcel for Lonza's campus. The proposed project includes the construction of a new 200 space parking lot. The project will consist of associated site improvements such as lighting, landscaping and stormwater management that will include underground detention, three (3) proprietary flow through treatment filtration devices and a small detention basin.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.08535565,-70.80524054275196,14z>

**Determination Key Result**

---

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

**Determination Key Description: Northern Long-eared Bat 4(d) Rule**

This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

---

## Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

## Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

No

2. Will your activity purposefully **Take** northern long-eared bats?

No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

**Automatically answered**

No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at [www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html](http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html).

Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

6. Will the action involve Tree Removal?

Yes

7. Will the action only remove hazardous trees for the protection of human life or property?

No

8. Will the action remove trees within 0.25 miles of a known northern long-eared bat hibernaculum at any time of year?

No

---

9. Will the action remove a known occupied northern long-eared bat maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31?

*No*

---

## Project Questionnaire

**If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.**

1. Estimated total acres of forest conversion:

2.0

2. If known, estimated acres of forest conversion from April 1 to October 31

2.0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

**If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.**

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

**If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.**

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

**If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.**

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

---



# New Hampshire Natural Heritage Bureau

## NHB DataCheck Results Letter

---

**To:** Jeremy Degler, Tighe & Bond Inc.  
177 Corporate Drive

Portsmouth, NH 03801

**From:** NH Natural Heritage Bureau

**Date:** 5/12/2021 (valid until 5/12/2022)

**Re:** Review by NH Natural Heritage Bureau of request submitted 4/27/2021

**Permits:** NHDES - Alteration of Terrain Permit, NHDES - Wetland Standard Dredge & Fill  
- Minor, USACE - General Permit

**NHB ID:** NHB21-1455

**Applicant:** Jeremy Degler

**Location:** Portsmouth  
71 International Drive

**Project Description:** The proposed project includes the construction of a 200-space parking lot for a biotechnology company within an adjacent forested lot.

The NH Natural Heritage database has been checked by staff of the NH Natural Heritage Bureau and/or the NH Nongame and Endangered Species Program for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government.

It was determined that, although there was a NHB record (e.g., rare wildlife, plant, and/or natural community) present in the vicinity, we do not expect that it will be impacted by the proposed project. This determination was made based on the project information submitted via the NHB Datacheck Tool on 4/27/2021 5:13:15 PM, and cannot be used for any other project.

# New Hampshire Natural Heritage Bureau NHB DataCheck Results Letter

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## MAP OF PROJECT BOUNDARIES FOR: **NHB21-1455**

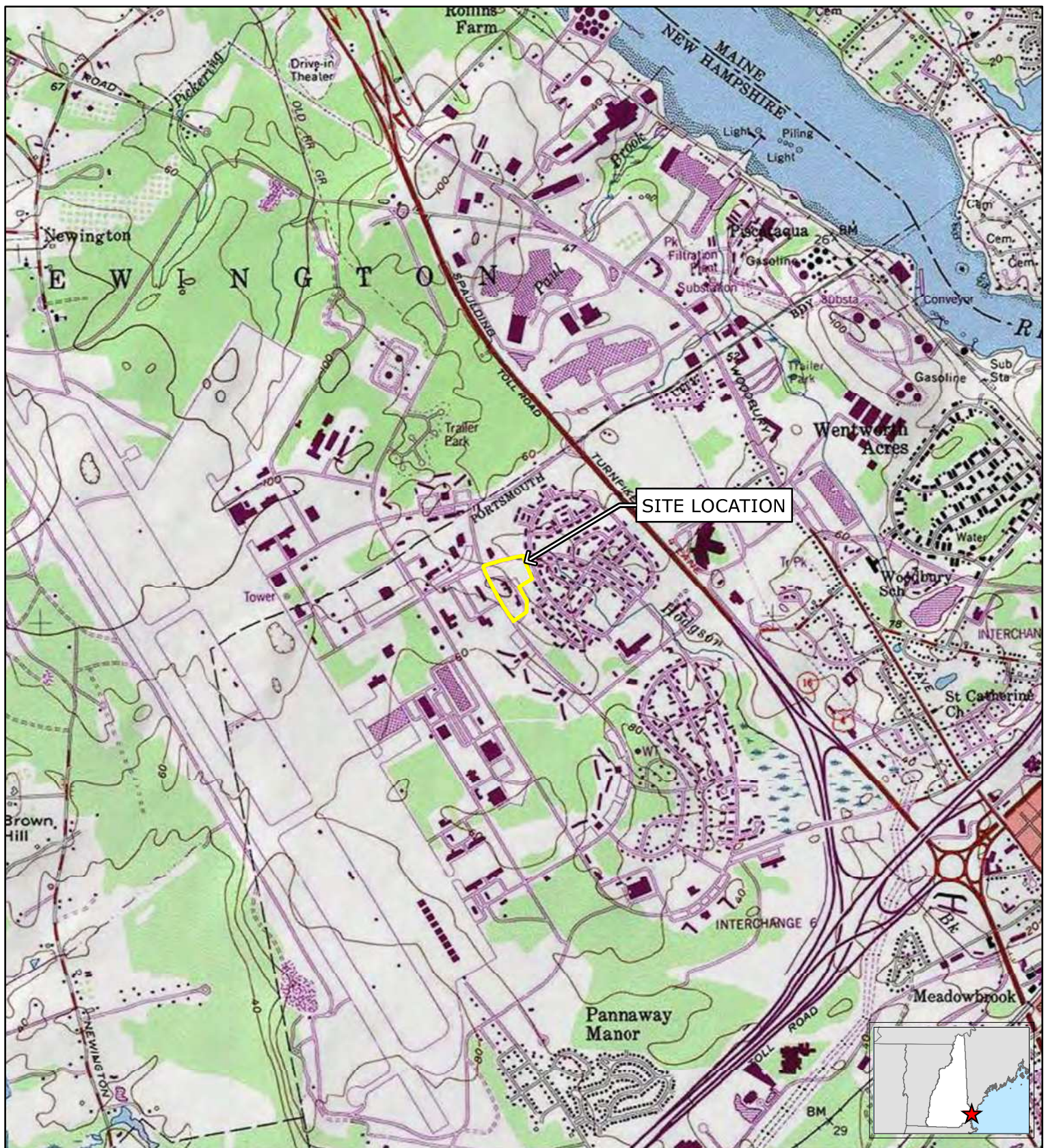
**NHB21-1455**



**APPENDIX C**







## Legend

Site Parcel

**Tighe&Bond**

Based on USGS Topographic Map for  
Salem Lake, New Hampshire [Site Quad]

1:24,000  
0 1,000 2,000  
Feet

## FIGURE 1 SITE LOCUS MAP

Lonza Biologics  
Portsmouth, New Hampshire

April 2021

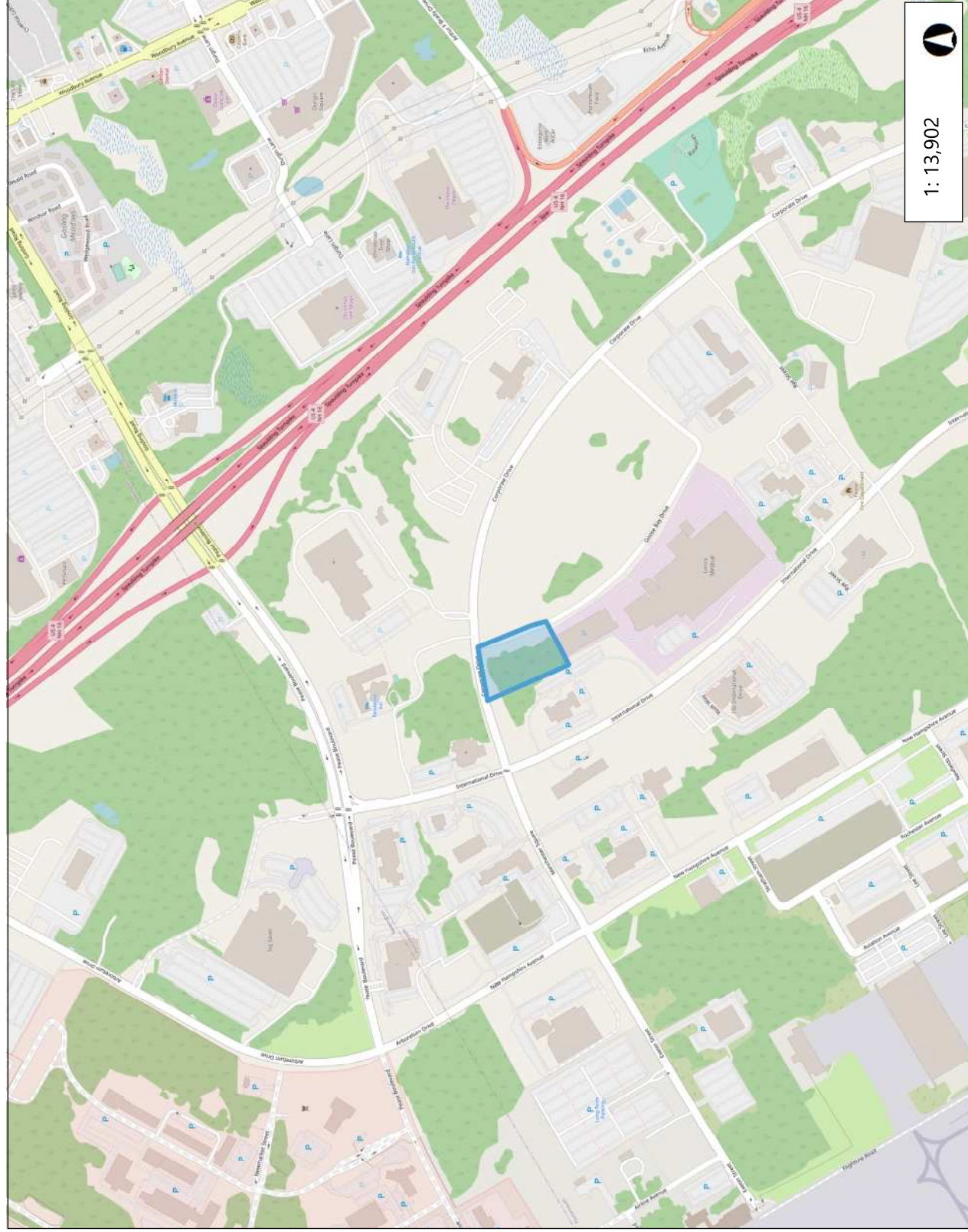






Your Organization

Wetland Permit Planning Tool - Lynx Parking Expansion



1: 13,902



Notes

Legend

World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations

USA Topo Maps

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

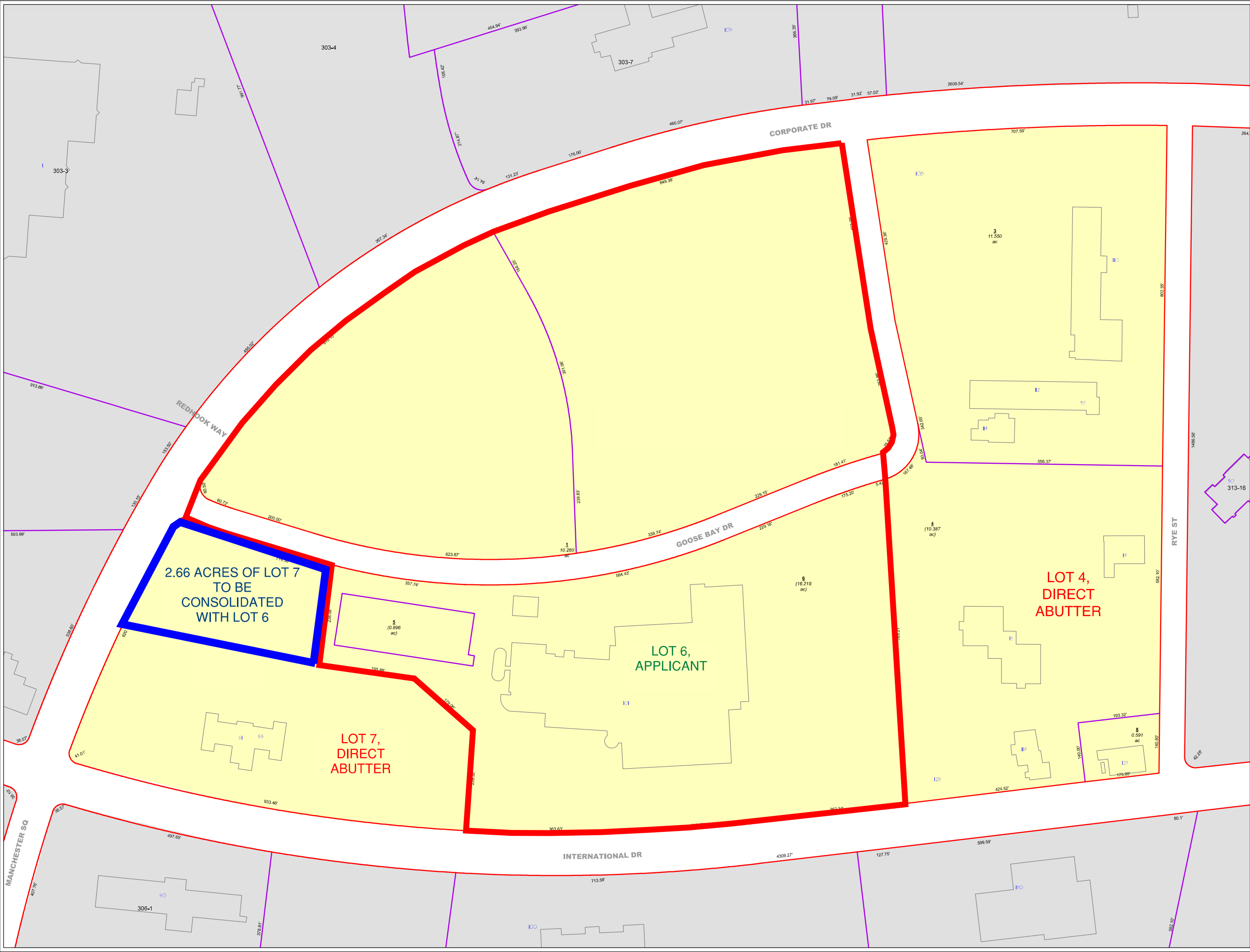
THIS MAP IS NOT TO BE USED FOR NAVIGATION

0.4 0 0.22 0.4 Miles

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
© Latitude Geographics Group Ltd.





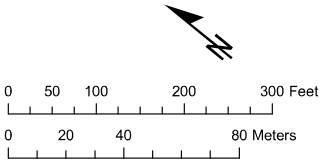


**Partial Legend**  
See the cover sheet for the complete legend.

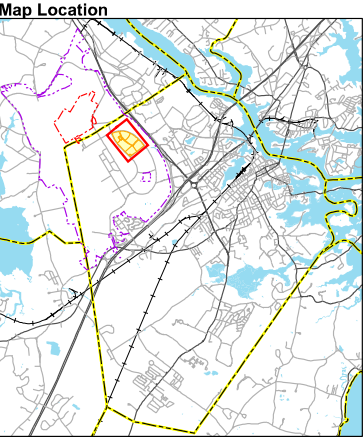
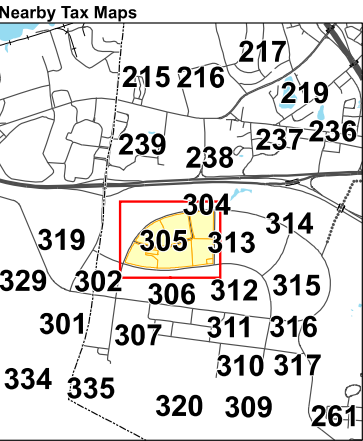
<b>7-5A</b>	Lot or lot-unit number
2.56 ac	Parcel area in acres (ac) or square feet (sf)
<b>25</b>	Address number
233-137	Parcel number from a neighboring map
68'	Parcel line dimension
<b>SIMS AVE</b>	Street name

Parcel/Parcel boundary  
Parcel/ROW boundary  
Water boundary  
Structure (1994 data)

Parcel covered by this map  
Parcel from a neighboring map (see other map for current status)



*This map is for assessment purposes only. It is not intended for legal description or conveyance. Parcels are mapped as of April 1. Building footprints are 2006 data and may not represent current structures. Streets appearing on this map may be paper (unbuilt) streets. Lot numbers take precedence over address numbers. Address numbers shown on this map may not represent posted or legal addresses.*



Portsmouth, New Hampshire  
2015

**Tax Map 305**















**Abutters List**  
Lynx Parking Expansion  
Portsmouth, New Hampshire

**LOCUS**

55 International Drive  
Portsmouth, NH 03801

**MAP #**

305

**LOT #**

7

**ABUTTERS**

119 International Drive, LLC  
C/O CP Management Inc.  
11 Court Street Suite 100  
Exeter, NH 03833

**MAP #**

305

**LOT #**

4

Lonza Biologics, Inc.  
101 International Drive  
Portsmouth, NH 03801

305

6

Pease Development Authority  
55 International Drive  
Portsmouth, NH 03801

305

7

**OWNER**

Pease Development Authority  
55 International Drive  
Portsmouth, NH 03801

305

7

**APPLICANT**

Lonza Biologics, Inc.  
101 International Drive  
Portsmouth, NH 03801

**ENGINEER**

Tighe & Bond, Inc.  
177 Corporate Drive  
Portsmouth, NH 03801





**PUBLIC NOTICE**  
**NOTICE OF INTENT TO FILE**

Please take notice that Lonza Biologics, applicant, is intending to file a Minor Impact Wetland Permit Application with the New Hampshire Department of Environmental Services (NHDES) for a proposed development at 55 International Drive located on Pease International Tradeport in Portsmouth, New Hampshire.

Under state law RSA 482-A:3 I (d)(1), via certified mail, we are required to notify you about these permit applications which propose work abutting your property.

The proposed project includes the construction of a proposed parking lot of 200 spaces. The project will consist of associated site improvements such as lighting, landscaping and stormwater management that will include underground detention, three (3) proprietary flow through treatment filtration devices and a small detention basin. The proposed project will result in 4,087 SF of wetland impact.

Plans and details of this application are on file, for your review, at the City of Portsmouth Clerk's Office, 1 Junkins Avenue, Portsmouth, New Hampshire (8:00am - 4:30pm) or at the NHDES Wetlands Bureau, 29 Hazen Drive, Concord, New Hampshire (8:00am - 4:00pm).



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# Photographic Log

**Client:** Lonza Biologics Inc.

**Job Number:** L0700-021

**Site:** Proposed Parking Expansion, 40 Goose Bay Drive, Portsmouth, New Hampshire





# Photographic Log

**Client:** Lonza Biologics Inc.

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Photographic Log

**Client:** Lonza Biologics Inc. **Job Number:** L0700-021  
**Site:** Proposed Parking Expansion, 40 Goose Bay Drive, Portsmouth, New Hampshire

Photograph No.: 5	Date: 04/09/2021	Direction Taken: North
Description: Wetland data plot locations on old excavated slope (left) and in created wetland (right).		
		







11 x 17 Site Plans  
Bound Separately