From: Dhima, Elvis <edhima@hudsonnh.gov> on behalf of Dhima, Elvis

Sent: Wednesday, March 23, 2022 7:55 AM

To: Jim Petropulos
Cc: Groth, Brian
Subject: Re: Integra

Attachments: NHDES AoT Permit.pdf

I did , thank you Jim

Engineering Dep is all set Brian

Ε

Elvis Dhima P.E. Town Engineer 12 School Street Hudson, NH 03051 Sent from my iPhone

On Mar 23, 2022, at 7:31 AM, Jim Petropulos jpetropulos@hayner-swanson.comwrote:

EXTERNAL: Do not open attachments or click links unless you recognize and trust the sender.

Elvis:

Good morning. Just checking in on the Integra project to make sure you received the additional soil testing results and the riprap sizing calculations we submitted last week. In reading the staff report in advance of tonight's meeting (Department Comments – NEW) it reads as if you have yet to review this info. If so, will you have a chance to look at it in advance of tonight? Also, as an FYI, please see the attached for our copy of the NHDES AoT Permit.

Thanks and please do not hesitate to contact me if questions. In advance, thanks for your continued assistance.

JIM

James N. Petropulos, P.E., LEED AP President / Principal Engineer Hayner/Swanson, Inc. Civil Engineers & Land Surveyors 3 Congress Street Nashua, NH 03062

Nashua, NH 03062 Phone: 603.883.2057 x129 Cell: 603.897.9009

ipetropulos@hayner-swanson.com



The State of New Hampshire

Department of Environmental Services



Permit: AoT-2109

Robert R. Scott, Commissioner

March 21, 2022

Integra Biosciences Corp. Attn: Robert Fougere 2 Wentworth Drive Hudson, New Hampshire 03051

RE: Building Additions 22 Friars Drive Tax Map 209, Lot 4, Hudson, NH

Dear Applicant:

Based upon the plans and application, approved on March 21, 2022, we are hereby issuing RSA 485-A:17 Alteration of Terrain Permit AoT-2109. The permit is subject to the following conditions:

PROJECT SPECIFIC CONDITIONS:

- 1. Plans by Hayner/Swanson, Inc., entitled "Proposed Building Additions", dated January 27, 2022, latest revisions dated March 18, 2022, and supporting documentation in the permit file are a part of this approval.
- 2. **This permit expires on March 21, 2027.** No earth moving activities shall occur on the project after this expiration date unless the permit has been extended by the Department. If an extension is required, the request must be received by the department <u>before the permit expires</u>. The Amendment Request form is available at: https://www.des.nh.gov/land/land-development

GENERAL CONDITIONS:

- 1. Activities shall not cause or contribute to any violations of the surface water quality standards established in Administrative Rule Env-Wq 1700.
- 2. You must submit revised plans for permit amendment prior to any changes in construction details or sequences. You must notify the Department in writing within ten days of a change in ownership.
- 3. You must notify the Department in writing prior to the start of construction and upon completion of construction. Forms can be submitted electronically at: https://www.des.nh.gov/land/land-development. Paper forms are available at the referenced web address.
- 4. This project includes underground detention/infiltration systems. A letter signed by a qualified engineer must be provided to DES stating that the individual observed any underground detention, infiltration, or filtering systems prior to backfilling, and whether, in his or her professional opinion, the system(s) conform to the approved plans and specifications. Representative photographs of the system prior to being backfilled must be submitted with the letter.
- 5. Upon completion of construction, a written notice signed by the permit holder and a qualified engineer shall be submitted to the Department, in accordance with Env-Wq 1503.21(c)(1), stating that the project was completed in accordance with the approved plans and specifications. If deviations were made, the permit holder shall review the requirements in Env-Wq 1503.21(c)(2).
- 6. All stormwater practices shall be inspected and maintained in accordance with Env-Wq 1507.08 and the project Inspection and Maintenance (I&M) Manual. All record keeping required by the I&M Manual shall be maintained by the identified responsible party, and be made available to the department upon request.

Alteration of Terrain Permit AoT-2109 Building Additions 22 Friars Drive Tax Map 209, Lot 4, Hudson, NH Page 2 of 2

- 7. This permit does not relieve the applicant from the obligation to obtain other local, state, or federal permits that may be required (e.g., from US EPA, US Army Corps of Engineers, etc.). <u>Projects disturbing over 1 acre may require a federal stormwater permit from EPA</u>. Information regarding this permitting process can be obtained at: https://www.epa.gov/npdes/epas-2017-construction-general-permit-cgp-and-related-documents
- 8. If applicable, no activity shall occur in wetland areas until a Wetlands Permit is obtained from the Department. Issuance of this permit does not obligate the Department to approve a Wetlands Permit for this project.
- 9. This project has been screened for potential impact to known occurrences of protected species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or only cursory surveys have been performed, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species. This permit does not authorize in any way the take of threatened or endangered species, as defined by RSA 212-A:2, or of any protected species or exemplary natural communities, as defined in RSA 217-A:3

Sincerely,

Ridgely Mauck, P.E.

Redgely Whank

Alteration of Terrain Bureau

cc: Hudson Planning Board ec: Hayner/Swanson, Inc.

Hayner/Swanson, Inc. Civil Engineers/Land Surveyors

LETTER OF TRANSMITTAL

Civil Engineers/Land Surveyors
Three Congress Street, Nashua, NH 03062-3399

To:	
	Elvis Dhima, P.E.
	Town of Hudson Engineering Dept.
	12 School Street
	Hudson, NH
1	Secretary Management (Secretary Conference on Conference o

Date:	March 17, 2022	Job #5734
Attn:		
Re:	PROPOSED BUIL	DING ADDITIONS - SITE PLAN
	22 Friars Drive	
	Hudson, NH	

WE ARE S	ENDING YOU	₹	Attached	Unde	er separate co	ver via		the fo	ollowing items:	
	Shop drawings		Prints	\square	Plans		Samples		Specifications	
	Copy of letter		Change order		Fed Ex Stand	dard Delivery				

Scope:

COPIES	DATE	NO.	DESCRIPTION
15			11 x17 Plan – Please replace previously submitted plans
1			Resubmittal Letter to Messrs. Groth and Dhima
1			Sidewalk Connection Sketch
1			Set of Supplemental Stormwater Information
1			Waiver Request Letter
			Re-submittal for March 23, 2022 Hudson Planning Board meeting
			Electronic (PDF) Set – Submitted via Email to Brian Groth

James N. Petropulos, P.E. President/Principal Engineer

Civil Engineers/Land Surveyors

March 17, 2022 Job# 5734

Mr. Brian Groth, AICP – Town Planner Mr. Elvis Dhima, P.E. – Town Engineer **TOWN OF HUDSON** 12 School Street Hudson, NH 03051

RE: PROPOSED BUILDING ADDITIONS 22 FRIARS DRIVE HUDSON, NEW HAMPSHIRE

Dear Messrs. Groth and Dhima:

Pursuant to our recent telephone conversation regarding the above referenced project please note our responses to the additional plan review comments that you both provided during the call.

- 1. Estimated domestic water and sewage flow estimates were provided to Mr. Dhima, P.E. in a letter dated March 14, 2022, a copy of which is attached herewith.
- 2. Please find enclosed additional support material (test pit logs, infiltration testing results, sketch plans, riprap outlet protection calculations) that addresses the stormwater design comments provided by Mr. Dhima. This information will be added to our final plans. Additionally, as can be seen on the infiltration testing results, the soils under the proposed subsurface basins have an infiltration rate that exceed the maximum allowed per NHDES regulations. The final plans will include an amended soil layer under each basin in accordance with NHDES standards.
- Please find attached a sketch plan showing the sidewalk connection from Friars Drive to the on-site sidewalk network that leads to the building entrances. If acceptable we will add this information to our final plan set.
- 4. Please find enclosed a revised waiver request letter that seeks approval to have 9-foot wide parking spaces in lieu of 10-footers.

We look forward to our Planning Board hearing on March 23, 2022 to discuss these and any other outstanding items for this project. As always, please do not hesitate to contact our office if you have any questions regarding this project or if you need any need additional information.

James N. Petropulos, P.E. President/Principal Engineer

Respectfully

Hayner/Swanson, Inc.

Civil Engineers/Land Surveyors

March 16, 2022 Job# 5734

Mr. Elvis, Dhima, P.E., Town Engineer Town of Hudson 12 School Street Hudson, NH 03051

RE:

PROPOSED BUILDING ADDITIONS

22 FRIARS DRIVE

HUDSON, NEW HAMPSHIRE

Dear Elvis:

Pursuant to the above referenced project we wish to respond to your recent request to provide estimated domestic water usage and average daily sewer flow needs for this facility once the proposed additions have been constructed. It is our understanding, based on discussions with our client, that this manufacturing facility does not discharge any industrial wastewater into the municipal sewerage system and therefore the domestic water usage is for employee consumption and sanitary purposes only. The current and proposed estimated flows, using the New Hampshire Department of Environmental Services (NHDES) unit design flow estimates in gallons per day (GPD) are as follows:

EXISTING FLOW ESTIMATE:

80 employees x 15 GPD/Person

= 1,200 GPD

PROPOSED FLOW ESTIMATE:

135 employees x 15 GPD/Person

= 2,025 GPD

NET INCREASE:

= 825 GPD

As always, please do not hesitate to contact our office if you have any questions regarding this project or if you need any need additional information.

Respectfully,

James N. Petropulos, P.E.

President/Principal Engineer

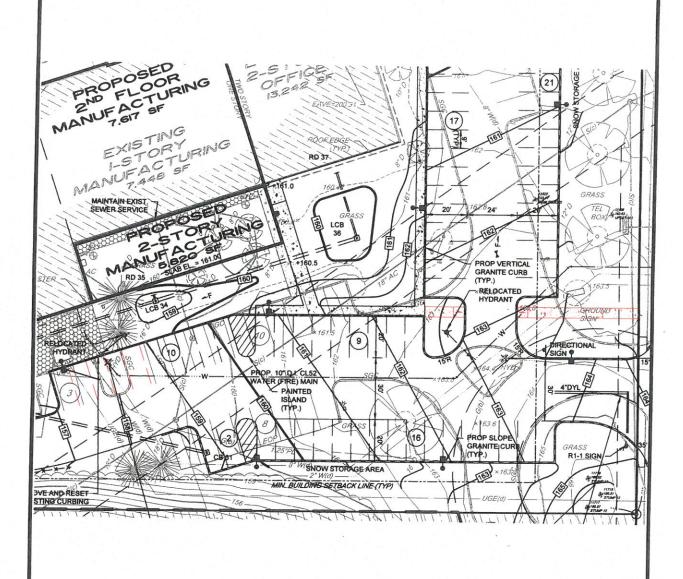
Hayner/Swanson, Inc.

cc: Brian Groth, AICP - Town Planner

SIDEWALK SKETCH PLAN MAP 209, LOT 4 22 FRIARS DRIVE HUDSON, NH 03/16/22

HISI Heyner/Swenson, Inc.

Civil Engineers/Lend Surveyors 3 Congrew Street Nachus, NH 03062 131 Middlesex Turnpike Burlington, MA 01803



WAIVER REQUEST MEMORANDUM (Revised 17 March 2022)

WAIVER REQUEST #1:

Site Plan Regulation: Hudson Site Plan Regulation Chapter 275-8 C (2) – Required number of Parking Spaces.

Waiver Request: A waiver is requested from **Chapter 275-8 C (2)** in order to allow 93 parking spaces on a lot where 134 spaces are required per the regulation.

Basis of Waiver:

For Industrial lots, the Hudson Site Plan regulations parking requirement is: *one for each 600 square feet of gross floor space or 0.75 space per employee of the combined employment of the two largest consecutive shifts, whichever is larger.* Currently, Integra Biosciences building measures 32,210 square feet and the site contains 101 parking spaces. The total number of employees at this facility is 80, spread over two shifts that operate 16 hours per day for 5 days per week (Monday thru Friday). The proposed additions, which measure 48,177 square feet and will displace the existing parking lot on the east side of the site. It is being proposed to replace these spaces by expanding the parking areas on the south and west sides of the property along with adding parking behind the proposed warehouse addition. When complete, the post-construction number of employees will be 135, again over two shifts. In calculating the required number of spaces, the larger amount per the Hudson Code is the 1 space per 600 square feet criteria which yields a requirement of 134 spaces. The proposed site plan shows a total of 93 spaces being provided, which meets the needs of Integra.

Integra Biosciences has occupied this site since the 1990's. Based on their past experience with this site and with the "flexible arrival/departure" times they afford their employees, they feel strongly that they have ample parking today and upon completion of the proposed building expansions.

Waiver Request Form Standards

The hardship reason for granting this waiver is that there is no reasonable way to add forty-one (41) more parking spaces on this property in order to comply with the Site Plan Regulation. As stated above, the combination of two shifts using 'flexible arrival and departure' times allows this site to function properly without needing the required number of spaces.

Granting this waiver will not be contrary to the spirit and intent of the Town's Land Use Regulations because the spirit and intent of Chapter 275-8 C (2) is that adequate parking is provided for the intended use. As has been stated above, given the past history of this site and the way this business uses two working shifts, adequate parking is provided.

Chapter 276-7 Waivers

The requirements of Chapter 275-8 C (2) are unnecessary.

The purpose of Chapter 275-8 C (2) is to ensure adequate number of parking spaces are provided for a particular use. Given the above stated reasons, it is Integra's opinion that ample parking is provided for this business operation.

Granting the waiver will not violate the purposes or general standards of the Land Use Regulations.

This waiver will not violate the public safety purposes of Chapter 275-8 C (2), in that the plan represents good planning principles and is balanced with regard to parking, building and open spaces.

Granting the waiver shall result in a general benefit to the Town and surrounding properties.

Granting the waiver will support the Integra Biosciences building addition which will create approximately 55 new jobs, increase annual tax revenue and is the type of development specifically contemplated by the Town's Master Plan. As a result, the waiver will result in a general benefit to the Town.

WAIVER REQUEST #2:

Site Plan Regulation: Hudson Site Plan Regulation Chapter 275-8 C (4) – Required width of parking spaces.

Waiver Request: A waiver is requested from **Chapter 275-8 C (4)** in order to allow $9' \times 20'$ parking spaces where $10' \times 20'$ spaces are required.

Basis of Waiver:

The Hudson Site Plan regulations parking space dimension requirement is: 10 feet by 20 feet, except that the PLANNING BOARD may vote to allow dimensions of 9 feet by 18 feet. It is fairly standard practice to have 9 foot wide parking spaces for a commercial building. Typically a 10-foot stall is required for retail projects. Currently the Integra parking lot has 9 foot by 20 foot parking stalls and they have been working fine.

Waiver Request Form Standards

The hardship reason for granting this waiver is that providing 10-foot wide spaces would reduce the number of spaces that could be constructed on this site. Strict enforcement of the parking dimensions would pose a hardship to the applicant since it would mean that the building additions, as envisioned, could not be constructed.

Integra believes that the above request is reasonable and meets the spirit and intent of the Town of Hudson Site Plan Regulations since proposed parking space dimensions meet industry standards.

Chapter 276-7 Waivers

The requirements of Chapter 275-8 C (4) are unnecessary.

As indicated above, Chapter 275-8 C (4) gives the Planning Board the authority to approve 9-foot wide parking spaces, which is an industry standard for commercial uses.

Granting the waiver will not violate the purposes or general standards of the Land Use Regulations.

The general standards of the Hudson Site Plan regulations are to address public safety concerns related to the building and site expansion of this property. The reduction of the proposed parking space width by 1-foot does not create a public safety concern.

Granting the waiver shall result in a general benefit to the Town and surrounding properties.

Granting the waiver will allow Integra to grow their business at their current location.

WAIVER REQUEST #3:

Site Plan Regulation: Hudson Site Plan Regulation Chapter 275-8 C (6) – Required number of Loading Spaces.

Waiver Request: A waiver is requested from **Chapter 275-8 C (6)** in order to allow 5 loading spaces on a lot where 9 spaces are required per this code.

Basis of Waiver:

The Hudson Site Plan regulations loading requirement is: one for each 5000 square feet of gross floor space plus 1 space for every additional 10,000 square feet of gross floor area. Currently there are two loading docks to the existing building. It is being proposed to expand this structure in the back part of the site and building thereby displacing the existing loading docks and maneuver area. The proposed addition will include four (4) recessed loading dock doors to service the entire operation on the east side of the building and one (1) new dock door on the west side of the existing warehouse.

Waiver Request Form Standards

The hardship reason for granting this waiver is that providing 9 loading spaces is entirely unnecessary for this use. As stated above, Integra has operated upon this property since the 1990's. They know and understand their loading needs. Strict enforcement of the loading requirement would pose a hardship to the applicant since it would mean that the building addition could not be constructed as envisioned and the business would need to look elsewhere for a facility.

Integra believes that the above request is reasonable and meets the spirit and intent of the Town of Hudson Site Plan Regulations since the number loading docks and their intended location is sufficient for this business.

Chapter 276-7 Waivers

The requirements of Chapter 275-8 C (6) are unnecessary.

As indicated above, the purpose of Chapter 275-8 C (6) is to ensure that the correct number of loading spaces is provided for the intended use. The subject site will be served by five (5) docks as described above.

Granting the waiver will not violate the purposes or general standards of the Land Use Regulations.

The general standards of the Hudson Site Plan regulations are to address public safety concerns related to the building and site expansion of this property. The reduction of 9 loading dock spaces to 5 spaces does not create a public safety concern.

Granting the waiver shall result in a general benefit to the Town and surrounding properties.

Granting the waiver will allow Integra to grow their business at their current location.

WAIVER REQUEST #4:

Driveway Regulation: Driveway Regulation 193-10.G – One driveway per parcel.

Waiver Request: A waiver is requested from **Driveway Regulation 193-10.G** in order to allow 2 driveways for this subject site.

Basis of Waiver:

The Hudson Driveway Regulation is one driveway per parcel. Currently there are two driveway servicing this property, both off a temporary cul-de-sac along Friars Drive. It is being proposed to eliminate the cul-de-sac and access the re-vamped site with 2 driveways; an in/out on the west side of the property and an exit only (right turn only) driveway on the east side.

Waiver Request Form Standards

The hardship reason for granting this waiver is that limiting this property to 1 driveway would eliminate the trucking pattern for this manufacturing facility. Strict enforcement of the driveway requirement would pose a hardship to the applicant since it would mean that the building additions could not be constructed as envisioned and the business would need to look elsewhere for a facility.

Integra believes that the above request is reasonable and meets the spirit and intent of the Town of Hudson Site Plan Regulations since the number driveways is the same as what they currently have used for the past 25 years.

Chapter 276-7 Waivers

The requirements of Driveway Regulation 193-10.G are unnecessary.

It is unreasonable to request a manufacturing facility to operate their business using only 1 driveway in this well-established industrial park.

Granting the waiver will not violate the purposes or general standards of the Land Use Regulations.

The general standards of the Hudson Site Plan regulations are to address public safety concerns related to the building and site expansion of this property. Allowing 2 driveways for this use does not create a public safety concern.

Granting the waiver shall result in a general benefit to the Town and surrounding properties.

Granting the waiver will allow Integra to grow their business at their current location.

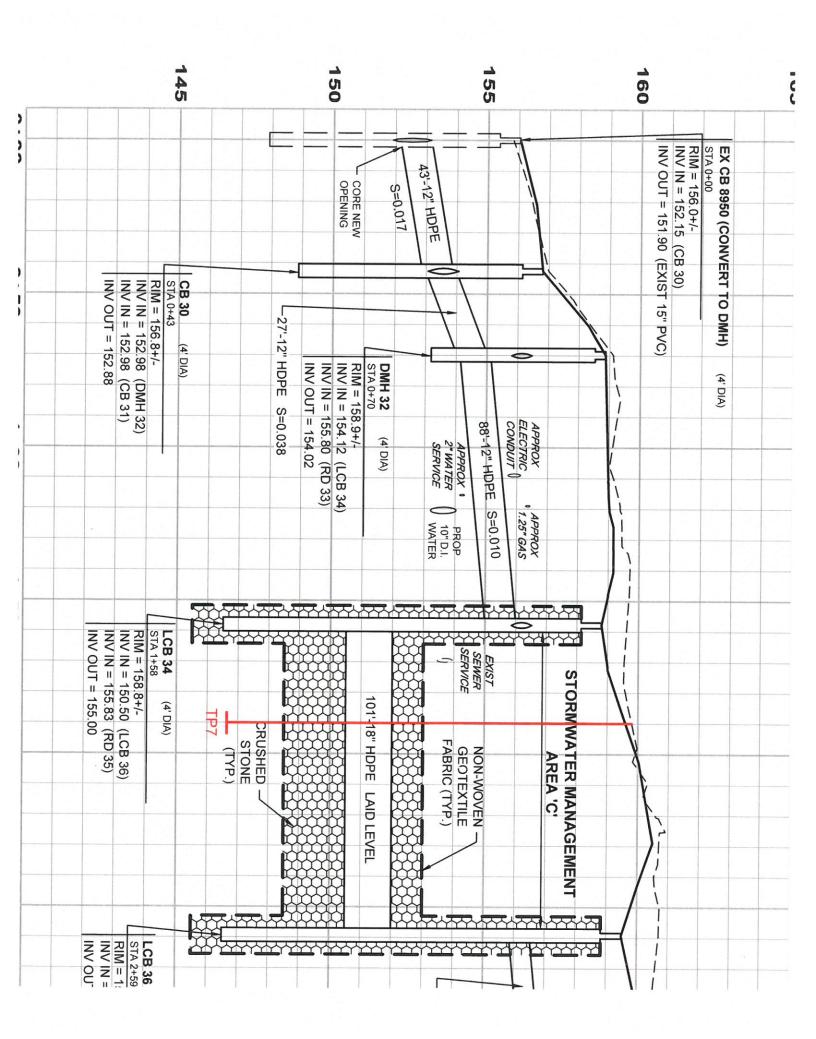
Conclusion:

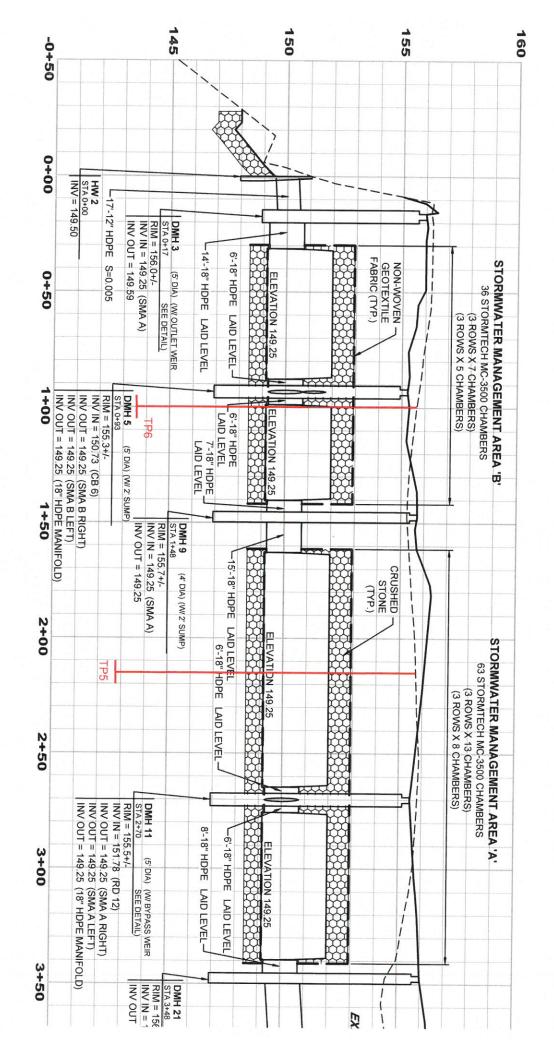
When the Site Plan regulations are applied to this particular property, they impose unreasonable requirements with no benefit to the public. The property is a manufacturing site with few visitors. The applicant knows their parking, loading and access demands. Because the site plan calculations require two alternative calculations, there is an unnecessarily large parking requirement by one calculation. The existing site is currently overparked. The same argument can be made for the required number of loading spaces.

Strict application of these rules does not benefit the public. However, requiring strict compliance may prevent the proposed additions. Rules are established to address all possible scenarios. Here, the use is known. Strict application of the rules is not necessary to accomplish reasonable planning goals. Even after the addition, the site will be safe, accessible and aesthetically consistent with other properties in the park. To require strict compliance would not advance any planning principles. Rather it would go against good planning for industrial parks – i.e. enabling reasonable expansion and use of existing infrastructure in a way that is consistent with the existing area.

This proposed site plan balances the needs of the community to enable growth and expansion in a safe and reasonable manner without imposing requirements that have no benefit under the circumstances.







Civil Engineering & Land Surveying

HSI #5734

MAP 209 LOT 4

INTEGRA BIOSCIENCES CORP. 22 FRIARS DRIVE

HUDSON, NH

TEST PITS:

FOR DRAINAGE

WEATHER:

40° OVERCAST

EQUIPMENT:

KUBOTA KX161-3 MINI EXCAVATOR

LOGGED BY:

PAUL CARIDEO, NHDES PERMIT #68

TEST PIT # 5 DATE: 3/17/22

0-12" 10YR 3/3, DARK BROWN, SANDY LOAM FILL, FINE GRANULAR, VERY FRIABLE WITH NO ROOTS

8-20" 10YR 5/4, YELLOWISH BROWN, LOAMY SAND, FINE GRANULAR, VERY FRIABLE

20-46" 10YR 5/8, YELLOWISH BROWN, MEDIUM SAND, SINGLE GRAIN, LOOSE

46-80" 10YR 5/4, YELLOWISH BROWN, MEDIUM SAND, SINGLE GRAIN, LOOSE

80-156"10YR 6/3, LIGHT YELLOWISH BROWN, GRAVELLY SAND, 15% ROUNDED COBBLES, 10% GRAVEL. SINGLE GRAIN, LOOSE WITH 7.5YR 5/8, STRONG BROWN, COMMON, DISTINCT REDOXIMORPHIC FEATURES AT 148"+

ESHWT: 148" OWT: NONE

ROOTS: NONE

LEDGE: NONE

TEST PIT # 6 DATE: 3/17/22 (SAME LOCATION AS TP #1)

10YR 3/3, DARK BROWN, SANDY LOAM FILL, FINE GRANULAR, VERY FRIABLE WITH FEW 0-14"

ROOTS

14-96" 10YR 5/4, YELLOWISH BROWN, MEDIUM SAND, SINGLE GRAIN, LOOSE WITH FEW ROOTS

TO 38"

96-150" 10YR 6/3, LIGHT YELLOWISH BROWN, GRAVELLY SAND, 15% ROUNDED COBBLES,

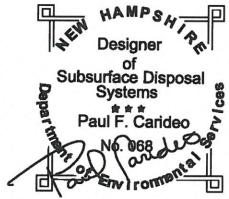
10% GRAVEL, SINGLE GRAIN AND LOOSE

ESHWT: NONE OBSERVED

OWT: NONE

ROOTS: 38"

LEDGE: NONE



3 Congress St. Nashua, NH 03062 · (603) 883-2057 131 Middlesex Turnpike, Burlington, MA 01830 · (781) 203-1501 www.hayner-swanson.com

Civil Engineering & Land Surveying

TEST PIT # 7 DATE: 3/17/22

0-7" 10YR 3/3, DARK BROWN, SANDY LOAM FILL, GRANULAR, VERY FRIABLE WITH MANY ROOTS

7-63" 10YR 7/4, VERY PALE BROWN, MEDIUM SAND FILL, SINGLE GRAIN, LOOSE WITH FEW ROOTS TO 24"

63-66" 10YR 3/2, VERY DARK GRAYISH BROWN, FINE SANDY LOAM, MASSIVE AND FIRM

66-72" 10YR 5/4, YELLOWISH BROWN, MEDIUM SAND, SINGLE GRAIN AND LOOSE

42-76" 2.5Y 6/4, LIGHT YELLOWISH BROWN, GRAVELLY SAND, 15% ROUNDED COBBLES, 10% GRAVEL, SINGLE GRAIN AND LOOSE

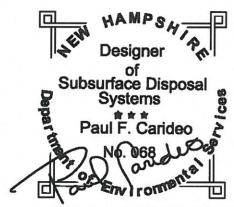
76-156"2.5Y 6/4, LIGHT YELLOWISH BROWN, GRAVELLY SAND, 25% ROUNDED COBBLES, 10% GRAVEL, SINGLE GRAIN AND LOOSE

ESHWT: NONE OBSERVED

OWT: NONE

ROOTS: 24"

LEDGE: NONE



3 Congress St. Nashua, NH 03062 · (603) 883-2057 131 Middlesex Turnpike, Burlington, MA 01830 · (781) 203-1501 www.hayner-swanson.com



<u>Hayner/Swanson, Inc.</u> Civil Engineering Land Surveying

	Am	oozeme	ter Dat	a Shee			
User(s):					arideo		
Date:		3/17/2022					E
Location:		Hudson, Nh		Permeameter #: Air Temperature (F) initial:			5
Soil Survey Area/Special Project:		Bioscience					40+/-
Con Cartoy rucaropediari roject.	Integra	Dioscience	s Corp.	Air Temperature (F) final:			40+
Series or Map Unit Component:		Windsor		¹ Soil Moisture Content (%):			Dry
Horizon Tested:		С			own dive a re-	lativa sail maia	ture content. i.e.
Total Depth of Test:		94"		dry, moist		alive soil mois	ture content. i.e.
Set-up Calculation		1					
Hole Depth (cm):	88.0		H =	² Actual	water level	in hole (cm)	15.0
Distance from Bottom of Bubble Tube to soil surface (cm):	10			t this value		Initial:	15.3
Desired Water Depth in Hole (cm):	15	-	close to 15	5 cm. nearest m	:#:	4-02717-0-0005-0-077	
CHT Tube setting (cm):	-15 83					Final:	14.9
offi Tube setting (cm).	03	1		Auger H	ole Radius (d	cm)	2.5
Outflow Chamber (s) used: [Associated <u>C</u> onversion <u>F</u> actor:]				5.0		Set on 1 (La	orge Tank only) Both Tanks)
⁴Drop in Water	Outflow Chamber	Clock Time		d Time readings)	Outflow (Q)	Hydraulic Co	onductivity (Ksat)
(cm)	(C.F.)	(hr:min)		(min/60)	(cm ³ /hr)	(cm/hr)	(in/hr)
Ex 4.9	105	10:15			392	0.4139	0.1629
Start		12:00	XXX	XXXX	xxxx	xxxxx	XXXXXX
2.75	105.0		0.25	0.004	69300.0	80.62042	31.74032
2.60	105.0		0.25	0.004	65520.0	76.22294	30.00903
2.55	105.0		0.25	0.004	64260.0	74.75712	29.43194
2.50	105.0	12:01	0.25	0.004	63000.0	73.29129	28.85484
2.45	105.0		0.25	0.004	61740.0	71.82547	28.27774
2.45	105.0		0.25	0.004	61740.0	71.82547	28.27774
2.40	105.0	40.00	0.25	0.004	60480.0	70.35964	27.70065
2.40	105.0	12:02	0.25	0.004	60480.0	70.35964	27.70065
Yellow fields are required and need	to be filled in	by the rec	order.		Mean K:	71.09255	27.98919
Tan fields are calculated. Do not cha	inge!			*4	St. Dev:	0.8463	0.3332
Red fields are your mean, standard	deviation and	d Hydraulio			Hydraulic C	onductivity	High
Conductivity Class							
³ Lt green - if non standard Amoozen	neter kit aug	er used ch	ange				
⁴ Only use stabilized or steady state i required).	readings (pe	rsonal judg	ment				



<u>Hayner/Swanson, Inc.</u> Civil Engineering Land Surveying

Hu Integra E	3/17/2022 udson, NF Biosciences Windsor C 96"	H = ² You want close to 15	Permear Air Temp Air Temp 1 Soil Mo 1 If not known on the second of the	perature (F) in perature (F) for peratur	ent (%): lative soil moist in hole (cm):	6 40+/- 40+/- Dry ture content. i.e. 15.0 15.2 15.0 2.5
92.0 10 -15	Bioscience: Windsor C	H = ² You want close to 15 (Record to	Air Temp 1 Soil Mo 1 If not known dry, moist 2 Actual 2 this value 3 cm. nearest mi 3 Auger H Standard	visture Control own, give a rest, or wet. water level in the beautiful to be very fillimeter.) ole Radius (ole kit (6 cm) distributions and the beautiful to beautiful to beautiful to be kit (6 cm) distributions and the beautiful to beautif	ent (%): lative soil moist in hole (cm):	40+/- 40+/- Dry ture content. i.e. 15.0 15.2
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<u>Hayner/Swanson, Inc.</u> Civil Engineering Land Surveying

	Am	oozeme	ter Data	a Shee				
User(s):				Paul C	Carideo			
Date:		3/17/2022		Permear	neter#:		7	
Location:	H	ludson, NF	1	Air Temperature (F) initial:			40+/-	
Soil Survey Area/Special Project:	Integra	Bioscience	s Corp.	Air Temp	perature (F) f	inal:	40+	
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Total Depth of Test:		96"		dry, moist		ative soil mois	ture content. i.e.	
Set-up Calculation		1						
Hole Depth (cm):	90.0		H =	² Actual	water level	in hole (cm	15.0	
Tube to soil surface (cm):	10]	² You want	t this value	to be very	Initial:	15.1	
Desired Water Depth in Hole (cm):	-15		close to 15			Final:	15.1	
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Outlet Protection		
Reference: NH Stormwater Manual: Volume 2 Revision 1.0		
Job #:	5	734
Project:	THE RESIDENCE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.	ilding Addition
Design by:	The state of the s	MB
Date:	3.1	16.22
Structure:		UTLET
Invert:	15	1.32
A. Conditions:		
Pipe D _o =	1.25	ft
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Q _F =	10.16	cfs
$Q_{25}/Q_F =$	34	%
d/D =	40	%
Tw =	0.50	ft
	Tw < Do/2	
B. Design Parameters		
Apron Length =	12	ft
Apron Width at Culvert Outlet =	4	ft
Apron Width at End of Apron =	16	ft
Median Stone =	1	in
Maximum Size of Stone =	2	in
Minimum Depth of Stone =		in

Existing Riprap Apron: Length = 13' +/- Width = 56' +/-

The existing riprap apron exceeds minimum design parameter shown above.

HSI is not aware of any erosion or sedimentation issues at this outlet. Post construction peak rates of runoff to this outlet are less than the pre-development rates.



Transportation: Engineering • Planning • Design

MEMORANDUM

Ref: 2173A

To: James Petropulos, P.E.

Hayner/Swanson, Inc.

From: Stephen G. Pernaw, P.E., PTOE

Subject: 22 Friars Drive Expansion

Hudson, New Hampshire

Date: April 13, 2022

As requested, Pernaw & Company, Inc. has conducted a supplemental trip generation analysis for the proposed expansion of the INTEGRA Biosciences Corporation facility based on the number of employees per work shift, and the shift hours provided. The table below summarizes the anticipated trip increases using this supplemental methodology, and it shows that our previous memorandum overstated the changes during the ITE AM and PM peak hours of the adjacent street system.

Analysis of a new supplemental case for the "generator" peak hour, which occurs from 3:00 to 4:00 PM, pertains to the shift change that occurs in the warehouse. In this case there is no shift overlap: the first shift ends at 3:00 PM and the second shift starts at 3:30 PM. The table below shows that +79 additional trips are anticipated during the generator peak hour.

Table 1S	Trip Generation Derivation Increases (Average Weekday Conditions)						
		ITE Estimate (Gross Floor Area)	Supplemental Manual Estimate (Employees)				
Weekday (24 hours)	Entering	+60 veh	+79 veh				
	Exiting	<u>+60</u> <u>veh</u>	<u>+79</u> <u>veh</u>				
	Total	+120 trips	+158 trips				
AM Peak Hour (betw ee	n 7 & 9) Entering	+10 veh	0 veh				
	Exiting	<u>+3</u> <u>veh</u>	<u>0</u> <u>veh</u>				
	Total	+13 trips	0 trips				
PM Peak Hour (betw eer	n 4 & 6) Entering	+3 veh	0 veh				
	Exiting	<u>+10</u> <u>veh</u>	<u>0</u> <u>veh</u>				
	Total	+13 trips	0 trips				
Generator Peak Hour (3	-4 PM) ¹ Entering	+13 veh ²	+27 veh				
	Exiting	+21 veh 2	+52 veh				
	Total	+34 trips ²	+79 trips				

¹ Supplemental Case: Warehouse shift change (1st shift ends at 3:00 PM, 2nd shift starts at 3:30 PM; no overlap)

 $^{^2\,\}text{Supplemental}$ Case not included in the previous memorandum dated 1/28/22



March 24, 2022

Mr. Brian Groth Town Planner Town of Hudson 12 School Street Hudson, NH 03051

Re: Town of Hudson Planning Board Review

22 Friars Drive Site Plan, 22 Friars Drive Tax Map 209 Lot 4; Acct. #1350-993 Reference No. 20030249.2130

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the second submission of the materials received on March 8, 2022, related to the above-referenced project. Authorization to proceed was received on March 11, 2022. A list of items reviewed is enclosed. The scope of our review is based on the Site Plan Review Codes, Stormwater Codes, Driveway Review Codes, Sewer Use Ordinance 77, Zoning Regulations, and criteria outlined in the CLD Consulting Engineers Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, September 3, 2008, and October 2015.

The project appears to consist of a warehouse building addition on a previously developed industrial building site. Proposed improvements to the site also include the construction of a driveway, parking areas, drainage improvements, landscaping, lighting, and other associated site improvements. The proposed building will continue be serviced by public water and sewer.

The following items have outstanding issues:

4. Traffic (HR 275-9.B)

Former Fuss & O'Neill Comment: We have reviewed the trip generation analysis memo prepared by Stephen G. Pernaw & Company, Inc. (SGP) dated January 28, 2022, for the proposed expansion of the existing INTEGRA Biosciences Corporation building at 22 Friars Drive (Tax Map 209, Lot 4) in Hudson, New Hampshire. This analysis includes an estimate of the expected traffic to be generated by the additional 34,740 sf of warehouse space and 13,437 sf of manufacturing space to be added to the building. Access to the site will be improved by the removal of the existing offset cul-de-sac on Friars drive and the realignment of the driveway to intersect the road at a 90-degree angle. A new exit-only driveway will also be constructed approximately 250 feet east of the main driveway.

The procedures that the SGP report uses are reasonable, with appropriate ITE trip generation information used for the scenario provided. This trip generation information shows that the estimated magnitude of the increase in peak hour traffic volumes related to the site expansion are of the order of 120 trips during the weekday, 13 trips during the weekday morning peak hour and 13 trips during the weekday evening peak hour. Overall, including the existing warehouse, manufacturing and office spaces, the site is expected to

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Mr. Brian Groth March 24, 2022 Page 2 of 9

generate 386 trips during the weekday, 67 trips during the weekday morning peak hour and 70 trips during the weekday evening peak hour.

We concur with Stephen G. Pernaw & Company, Inc.'s overall conclusion that, given the relatively low number of trips per day to be generated by the site's proposed expansion compared to volumes on the adjacent roadway network in this area, there should be minimal increased impacts on traffic operations on the roadway network adjacent to the 22 Friars Drive site. Since this is an existing site, it would have been helpful to see how the existing sites traffic compares to the ITE trip generation calculation. With the Integra facility operating on a shift basis there could be a larger volume of trips entering or exiting the site during shift changes than what the ITE trip generation calculation provides, particularly during peak hours. That said, even if the existing site generates more traffic than the ITE trip generation calculation, and that increased percentage is added to the site expansion, it is unlikely that the overall conclusion would change.

Current Fuss & O'Neill Comment: The applicant has provided further detail about second shift work hours for the facility. The traffic memorandum used ITE trip generation data. We recommend that the applicant review the memorandum findings with the actual trip data for those shift hours as they appear to coincide with afternoon peak hours at Lowell Road, and the volume of trips is higher than the increase to peak hour trips noted in the original traffic memorandum when included with first shift trip counts.

- Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)
 - a. Former Fuss & O'Neill Comment: HR 275-9.A.3. & 290-5.A.4. The applicant should provide additional information on the perc rate utilized within the stormwater calculations, i.e. Field observation, Ksat conversion, etc.
 - Current Fuss & O'Neill Comment: The applicant has not noted that a perc test was performed for the implementation of a Ksat value. The applicant should review the use of an assumed infiltration rate with both the Town as well as NHDES AoT.
 - b. Former Fuss & O'Neill Comment: HR 290-5.A.9. The applicant should provide additional information on the depth to ESHWT on all three BMP worksheets provided within Appendix D of the AoT Permit, in respect to intended stormwater treatment. We note the depth to SHWT does not meet the minimum separation for SMA A, while a separation is not listed for SMA B and C. The applicant should update the BMP sheets appropriately to meet treatment criteria.
 - Current Fuss & O'Neill Comment: The applicant is proposing an additional test pit after design approval. The applicant should review this approach with both the Town and NHDES AoT.
 - Former Fuss & O'Neill Comment: HR 290-7.B.13. The applicant should provide a HISS soils report with mapping as this is required for an NHDES AoT permit and revise all drainage calculations appropriately.
 - Current Fuss & O'Neill Comment: The applicant has requested a waiver from NHDES. The applicant should provide an update as to whether the waiver is approved or provide the revised drainage calculations.
 - m. Former/Current Fuss & O'Neill Comment: HR 290-8.A.10.A. The applicant should keep the Town informed of all communication with NHDES in relation to the required



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- Alteration of Terrain Permit being requested to ensure NHDES comments do not alter drainage design/calculations.
- s. Former Fuss & O'Neill Comment: ETGTD 920.4.1. & 2. The applicant should provide stockpile and equipment storage locations on the plan set.
 - Current Fuss & O'Neill Comment: The applicant has stated it is shown on the plan set, however, we were unable to locate it.
- 9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))
 - b. Former Fuss & O'Neill Comment: HR 276-11.1.B.(14). The applicant has not noted that the hours of operation for the facility. The applicant should provide information regarding hours of operation and whether the lights are intended to be in operation during non-working hours.
 - Current Fuss & O'Neill Comment: The applicant has added hours of operation to the plan set. The applicant should clarify whether the lights are intended to be in operation during non-working hours.

The following items require Town evaluation or input:

- 1. Site Plan Review Codes (HR 275)
 - a. Former Fuss & O'Neill Comment: Hudson Regulation (HR) 275-6.C. The site currently contains an existing sidewalk, and the applicant has proposed to reconstruct the sidewalks in the areas that the new driveways will disturb. The applicant has proposed construction of a four-foot-wide bituminous sidewalk where the Town requires a five-foot-wide sidewalk.
 - Current Fuss & O'Neill Comment: The applicant has stated that they have proposed to match the existing sidewalk width of 4 feet. The Town should confirm that this is acceptable and review if a waiver is required.
- 7. Zoning (ZO 334)
 - a. Former Fuss & O'Neill Comment: ZO 334-14.A. The applicant has not provided any architectural plans that show the height of the proposed building. There are notes within the plan that state the roof elevation of the proposed warehouse is 50 feet, however we are unable to verify if the overall height of the building addition meets the 50 foot maximum required by the Ordinance without architectural plans showing roof grades in relation to finished grade within five feet of the structure.
 - Current Fuss & O'Neill Comment: The applicant has noted that the architect and construction manager are coordinating with the Town. Fuss & O'Neill can review architectural details regarding building height if needed by the Town.

The following items are resolved or have no further Fuss & O'Neill input:

- 1. Site Plan Review Codes (HR 275)
 - b. Former Fuss & O'Neill Comment: HR 275-6.1. The scope of this review does not include the adequacy of any fire protection provisions for the proposed building. The applicant has proposed to replace the existing fire service with a larger pipe and relocate an existing on-site hydrant.
 - c. Former Fuss & O'Neill Comment: HR 275-6.T. The applicant is proposing to remove the temporary



Mr. Brian Groth March 24, 2022 Page 4 of 9

- turnaround and connect the sidewalks and curbing along the old curb cuts. The applicant has also proposed to seed and landscape the old turnaround area.
- d. Former Fuss & O'Neill Comment: HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has provided parking calculations on the plan set and noted that 134 parking are required for the industrial use and that 93 spaces are provided. The applicant has requested a waiver from the Regulation and noted that the parking provided meets the needs of the site. We note that based on the information provided the facility will have 83 employees on 1st shift and 52 employees on 2nd shift. This could cause a conflict for employees not have a parking space when they arrive for 2nd shift unless half of 1st shift has already left for the day. The applicant should provide additional information about departure and arrival times and how the proposed parking layout will be able to accommodate the expected volume. We note that the Integra building located at 2 Wentworth Drive in Hudson has problems with providing adequate parking causing vehicles to park on the sides of the roadway and parking lot.
 - Current Fuss & O'Neill Comment: The applicant has provided a more detailed breakdown of employee numbers and hours showing that based on the numbers provided, the proposed parking spaces appear adequate. No further Fuss & O'Neill comment.
- e. Former Fuss & O'Neill Comment: HR 275-8.C.(4). The applicant has proposed parking space dimensions of nine feet by 20 feet. The reduced width will require approval of the Planning Board.
- f. Former Fuss & O'Neill Comment: HR 275-8.C.(6). The applicant has provided five off-street loading spaces on the plan set and has requested a waiver from the requirement to have nine spaces.
- g. Former Fuss & O'Neill Comment: HR 275-9.C.(11). The applicant has provided four handicap accessible parking spaces for the site which meets the minimum requirement.
- h. Former Fuss & O'Neill Comment: HR 275-9.F. The applicant provided copies of easements and deeds as part of the package received for review. For the 30 foot wide sewer easement in the southwest corner of the site the applicant should confirm that the installation of permanent features such as light poles is not prohibited by the language within that easement.
 - Current Fuss & O'Neill Comment: The applicant has removed the light poles from the easement area. No further Fuss & O'Neill comment.

2. Administrative Review Codes (HR 276)

- a. Former Fuss & O'Neill Comment: HR 276-11.1.B.(13). The applicant should revise the sign note on Sheet 1 of 15 to match the note required in the Regulation.
 - Current Fuss & O'Neill Comment: The applicant has revised the required note. No further Fuss & O'Neill comment.
- b. Former Fuss & O'Neill Comment: HR 276-11.1.B.(23). The applicant has not noted any pertinent highway projects on the plan set.
- 3. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)
 - a. Former Fuss & O'Neill Comment: HR 193.10.G. The applicant has proposed two driveway locations for the site. We note that the existing site currently has two curb cuts as part of the Friars Drive turnaround that is proposed to be removed. The applicant is proposing to consolidate that turnaround to one driveway at the southwest end of the site and adding a new curb cut at the northeast end of the site to facilitate site circulation and truck traffic. The applicant should review with the Town the need to request a waiver from the Regulation for the number of driveways allowed.



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- Current Fuss & O'Neill Comment: The applicant has stated that they have not been advised a waiver is necessary. No further Fuss & O'Neill comment.
- b. Former Fuss & O'Neill Comment: The applicant should review and adjust the proposed location of the stop bar at the eastern driveway to be in line with the stop sign.
 - Current Fuss & O'Neill Comment: The applicant has revised the stop bar location. No further Fuss & O'Neill comment.

5. Utility Design/Conflicts

- a. Former Fuss & O'Neill Comment: HR 275-9.E. The applicant has not proposed any changes to the existing sewer connection or domestic water connection.
- b. Former Fuss & O'Neill Comment: The applicant should confirm that there is adequate separation between the existing sewer service and the proposed fire service water connection on the southwest side of the building, and provide a water/sewer crossing detail within the plans for this location.
 - Current Fuss & O'Neill Comment: The applicant has added the required detail to the plan set. No further Fuss & O'Neill comment.
- c. Former Fuss & O'Neill Comment: Engineering Technical Guideline & Typical Details (ETGTD)

 Section 801. The applicant should verify with the Town that the existing water main in Friars Drive has adequate flow and pressure to meet both domestic and fire suppression requirements of the proposed expansion for this site.
 - Current Fuss & O'Neill Comment: The applicant has added a note to the plan requiring calculations be provided to the Town before issuance of a building permit. No further Fuss & O'Neill comment.
- 6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)
 - c. Former Fuss & O'Neill Comment: HR 290-5.A.10. The applicant should review if a waiver is required to allow erosion and sediment control practices within the wetland buffer.
 - Current Fuss & O'Neill Comment: The applicant has stated that the work was submitted as part of the Conditional Use Permit. No further Fuss & O'Neill comment.
 - d. Former Fuss & O'Neill Comment: HR 290-5.A.12. & 290-7.A.9. The applicant should provide additional Inspection and Maintenance forms in addition to the ones provided for the SMECP. The current forms are vague and non-project specific, additional direction should include, but not be limited to the following: party responsible, specific BMPS, timing, locations, depth of sediment cleaning requirements, recommended maintenance criteria, etc. Due to the location in respect to the onsite wetlands and the abutting brook, the applicant should also prepare a winter maintenance and salt minimization plan.
 - Current Fuss & O'Neill Comment: The applicant had provided a Inspection & Maintenance plan with a salt reduction plan. No further Fuss & O'Neill comment.
 - e. Former Fuss & O'Neill Comment: HR 290-6.A.8. The applicant should add a note detailing the requirement to coordinate a pre-construction meeting with the Town Engineer.
 - Current Fuss & O'Neill Comment: The applicant has added a note to the plan set. No further Fuss & O'Neill comment.
 - f. Former Fuss & O'Neill Comment: HR 290-6.A.9. The applicant should add the required note to the plan set.



Mr. Brian Groth March 24, 2022 Page 6 of 9

- Current Fuss & O'Neill Comment: The applicant has added the required note to the plan set. No further Fuss & O'Neill comment.
- g. Former Fuss & O'Neill Comment: HR 290-7.A.6. The applicant should provide information as to how the stormwater system is designed to account for frozen ground conditions.
 - Current Fuss & O'Neill Comment: The applicant has added the requested information. No further Fuss & O'Neill comment.
- h. Former Fuss & O'Neill Comment: HR 290-7.A.7. The applicant should confirm with the Town if any additional coordination is required due to the close proximity of the brook.
 - Current Fuss & O'Neill Comment: The applicant has submitted the information as part of the Conditional Use Permit. No further Fuss & O'Neill comment.
- j. Former Fuss & O'Neill Comment: HR 290-7.B.16. The applicant should provide snow storage areas upon the plan set. The applicant has noted that they are shown on Sheet 4 but we were unable to locate the areas on the plan.
 - Current Fuss & O'Neill Comment: The applicant has added the snow storage to the plan set. No further Fuss & O'Neill comment.
- k. Former Fuss & O'Neill Comment: HR 290-7.B.16. The applicant should update note #22 on plan sheet 1. The note references an incorrect plan sheet and sheet count.
 - Current Fuss & O'Neill Comment: The applicant has updated the note. No further Fuss & O'Neill comment.
- 1. Former Fuss & O'Neill Comment: HR 290-8.A.4. & 5. We note the requirement of the applicant to coordinate the need for a Bond or Escrow with the Town Engineer.
 - Current Fuss & O'Neill Comment: The applicant has noted that they will coordinate with the Town. No further Fuss & O'Neill comment.
- n. Former Fuss & O'Neill Comment: HR 290-8.A.10.A. We note that additional items will be required for the NHDES AoT Permit, which could potentially affect the stormwater calculations and/or construction of the site. Please provide additional detail on the following items:
 - We request the applicant review typical NHDES screening layers as well as the NHDES PFAS sampling maps.
 - ii. We note the phasing of the site will be required to meet or request a waiver from the 1-acre winter disturbed area limit from NHDES Env-1505.06(b)(1).
 - iii. We also note that NHDES typically requires a full-size pre-development watershed plan.
 - Current Fuss & O'Neill Comment: The applicant has provided print outs, added the note and provided the plan. No further Fuss & O'Neill comment.
- o. Former Fuss & O'Neill Comment: HR 290-8.A.10.B. The current plan referces the 2017 GCP, while this is currently adequate, there is currently a 2022 GCP in current development. It would be in the applicant's best interest to review the 2022 GCP to ensure it does not vary from the 2017 GCP requirements.
 - Current Fuss & O'Neill Comment: The applicant has updated to the state 2022 GCP. No further Fuss & O'Neill comment.
- p. Former Fuss & O'Neill Comment: HR 290-8.A.10.B. The applicant should update the "applicant comment" within the Chapter 290-7A checklist of the AoT report. Note #9 (I&S manual) references SMECP Appendix E, which incorrectly directs the reader to Endangered Species.



Mr. Brian Groth March 24, 2022 Page 7 of 9

- Current Fuss & O'Neill Comment: The applicant has updated the Appendix. No further Fuss & O'Neill comment.
- q. Former Fuss & O'Neill Comment: Engineering Technical Guideline & Typical Details (ETGTD) 920.3.1. The applicant should coordinate the outlet protection calculations provided within Appendix E of the AoT permit with the rip rap outlet detail provided upon Sheet 10 of 15.
 - Current Fuss & O'Neill Comment: The dimensions provided are larger than the minimum. No further Fuss & O'Neill comment.
- r. Former Fuss & O'Neill Comment: ETGTD 920.3.1. The applicant should provide rip rap calculations from CB 8949 to ensure the existing rip rap is adequate and functions properly as it currently exists.

 Current Fuss & O'Neill Comment: The applicant has performed a field inspection and it
- t. Former Fuss & O'Neill Comment: ETGTD 930.4. We note that the proposed stormwater pipes utilize a pipe slope less than the required 2.0%. The applicant should illustrate that drain line velocities are self-cleaning.

appears adequate. No further Fuss & O'Neill comment.

- Current Fuss & O'Neill Comment: The applicant provided a pipe chart. No further Fuss & O'Neill comment.
- u. Former Fuss & O'Neill Comment: The applicant will be required to comply with all provisions of the Town of Hudson's MS4 permit, including but not limited to annual reporting requirements, construction site stormwater runoff control, and record keeping requirements.
- V. Former Fuss & O'Neill Comment: Please note that this review was carried out in accordance with applicable regulations and standards in place in New Hampshire at this time. Note that conditions at the site, including average weather conditions, patterns and trends, and design storm characteristics, may change in the future. In addition, future changes in federal, state or local laws, rules or regulations, or in generally accepted scientific or industry information concerning environmental, atmospheric and geotechnical conditions and developments may affect the information and conclusions set forth in this review. In no way shall Fuss & O'Neill be liable for any of these changed conditions that may impact the review, regardless of the source of or reason for such changed conditions. Other than as described herein, no other investigation or analysis has been requested by the Client or performed by Fuss & O'Neill in preparing this review.

7. Zoning (ZO 334)

- a. Former Fuss & O'Neill Comment: ZO 334-14.A. The applicant has not provided any architectural plans that show the height of the proposed building. There are notes within the plan that state the roof elevation of the proposed warehouse is 50 feet, however we are unable to verify if the overall height of the building addition meets the 50 foot maximum required by the Ordinance without architectural plans showing roof grades in relation to finished grade within five feet of the structure.
 - Current Fuss & O'Neill Comment: The applicant has noted that the architect and construction manager are coordinating with the Town. No further Fuss & O'Neill comment.
- b. Former Fuss & O'Neill Comment: ZO 334-17 & 334-21. The applicant has noted that the subject parcel is located within the Industrial (I) zoning district. The existing/proposed use is permitted by the Ordinance within this district.
- c. Former Fuss & O'Neill Comment: ZO 334-33. The applicant has proposed a wetlands buffer impact on the site. It appears that the applicant will require a Conditional Use Permit by the Planning Board.



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- Current Fuss & O'Neill Comment: The applicant has stated that the Conditional Use Permit has been submitted to the Planning Board. No further Fuss & O'Neill comment.
- d. Former Fuss & O'Neill Comment: ZO 334-60. The applicant does not appear to be adding any new signs to the plan set. It appears the existing ground sign is to remain unaltered.
 - Current Fuss & O'Neill Comment: The applicant has confirmed that no signage will be added. No further Fuss & O'Neill comment.
- e. Former Fuss & O'Neill Comment: ZO 334-83 and HR 218-4.E. The applicant has noted that the site is located within a designated flood hazard area X.

8. Erosion Control/Wetland Impacts

- a. Former Fuss & O'Neill Comment: The Town of Hudson should reserve the right to require any additional erosion control measures as needed. The applicant has noted this on the plans.
- 9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))
 - a. Former Fuss & O'Neill Comment: HR 276-11.1.B.(14). The applicant has shown lighting fixture locations on the plans with details and photometric information.

10. State and Local Permits (HR 275-9.G.)

- a. Former Fuss & O'Neill Comment: HR 275-9.G. The applicant has not listed required permits and their status on the plan set.
 - Current Fuss & O'Neill Comment: The applicant had added a list of permits to the plan set. No further Fuss & O'Neill comment.
- b. Former Fuss & O'Neill Comment: HR 275-9.G. The applicant did not provide copies of any applicable Town, State or Federal approvals or permits in the review package.
 - Current Fuss & O'Neill Comment: The applicant has stated that the approvals are pending. No further Fuss & O'Neill comment.
- c. Former Fuss & O'Neill Comment: HR 275-9.G. The applicant will be required to complete an Industrial Pretreatment Permit Modification Application for the site. The industry is a current permit holder and will need a modification for the additional employee count and any additional manufacturing processes.
 - Current Fuss & O'Neill Comment: The applicant has stated that this is understood. No further Fuss & O'Neill comment.
- d. Former Fuss & O'Neill Comment: Additional local and state permitting may be required.

11. Other

a. Former Fuss & O'Neill Comment: ETGTD Section 565.1.1. The applicant is reminded that the Town of Hudson has specific requirements for the importing of off-site fill materials for use in constructing this project. We recommended that these requirements be stated on the plans for the Contractors attention.

Current Fuss & O'Neill Comment: The applicant has added notes to this requirement on the plan set.



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Please feel free to call if you have any questions.

Very truly yours,

Steven W. Reichert, P.E.

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File

Hayner/Swanson, Inc. – jpetropulos@hayner-swanson.com

Forward to: Town Planner Brian Groth and Planning Board Chairman Tim Malley

3 Nathaniel Drive Site Walk: 2 Car Garage Extension and Driveway Expansion CUP Site Walk Observations and Conclusions

On April 07, 2022 members of the Hudson Conservation Commission conducted a site walk of property owned by Chris and Sephera Michailides, 3 Nathaniel Drive, Map 242, Lot 28. The purpose of the site walk was to determine whether or not a proposed garage extension and driveway expansion would have any significant impact on the adjacent Wetland Buffer or Wetlands located on the property. Note these proposed uses if aloud will have an estimated permanent buffer impact of approximately 900 square feet. No wetland impacts are proposed. While on site commission members observed the following. The wetland buffer is no longer naturalized and is being maintained by the homeowner as a continuation of their front lawn. To the front of the property is a buried propane tank located just outside the 50 foot wetland buffer area. Commission members concur with the Wetland Scientist report that the wetlands are of a forested type with a combination of hydric and poorly drained soils. There is no evidence of standing water and according to the homeowner no ponding has ever been observed. Commission members did note that there is an easement for a drainage culvert under Nathaniel Drive into this wetland feature that is used for conveyance of an unknown water source and a street catch basin that empties directly into the complex. In addition, at the outflow of the culvert it was noted to be only marginally wet around the outlet pipe which suggests only intermittent water flow even with the appreciable amount of rain. No free flowing water sources or other contributors to this wetland complex were observed. It was noted while on site that the homeowner had begun removing trees around an existing garage and had placed the cut trees into the wetlands. The commission members were told that this was temporary and that the pile would be removed.

As for the wetlands, they appear to function as a storm water collection point and ground water recharge area only. Major contributors to this complex are from the under road culvert, catch basin and storm water sheet flow from abutting properties. With no evidence of pooling water, it is highly unlikely aquatic and wetland dependent species would be using this area for nesting or breeding purposes.

HCC Recommendations to the Planning board as part any condition of approval

Note; as called out in Article IX 334-36 C (1) the applicant was able to show that the proposed project could not be constructed on another portion of the property due to town setback requirements and location of the properties septic system.

After review of the site it was determined that the garage expansion project will have only a minimal impact on the wetland buffer and no impact to the wetland themselves. With that in mind the commission members would like to recommend that following conditions be imposed as condition of approval by the Planning Board.

- 1) If the propane tank is relocated it shall not placed in the wetland buffer per 334-36 B (11) which refers to underground storage tanks
- 2) During construction and restoration erosion control barriers shall be installed and maintained to the satisfaction of the Town Engineer.
- 3) The applicant should incorporate a dripline infiltration strip or if gutters are used a drywell system to attenuate Stormwater runoff produced by the new structure to prevent erosion of the wetland buffer area.
- 4) The applicant shall remove tree debris pile that was placed in the wetlands.
- 5) The applicant was looking to add a paved driveway alongside the proposed garage addition for access the rear yard area. The plan presented to the commission shows a gravel access way 10 foot wide in that area. It is recommended by the commission that to reduce further impacts and degradation to the WOCD buffer (per 334-37 paragraph A), that no asphalt or other non-permeable materials be used alongside the garage addition as it will reduce storm water infiltration and pollutant attenuation and possibly cause slope erosion within the wetland buffer area.
- 6) There was no post construction restoration or landscaping plan presented and with a slope of approximately 2 to 1 leading down to the wetlands the commission recommends that the applicant relocated shrubs that are currently located in the area of the proposed gravel driveway further down the slope to increase stabilization. It would also be desirable that some re-naturalization of the wetland buffer be a loud to occur around the wetland. This would help attenuate nutrients from lawn fertilizers and other sources of non-point pollutants.
- 7) The commission recommends that a stipulation and or note be added to the final plan set that states "Stockpiling of construction materials is not allowed in the wetland areas during construction.
- 8) This motion is based on the plan(s) submitted by the applicant. It is recommended that if additional impacts are required the plan be returned to the Conservation Commission for further review.

Mrs. Rumbaugh moved to forward recommendations 1 through 8 above to the Planning Board for their consideration as Conditions of Approval for the Conditional Use Permit application submitted by Chris and Sephera Michailides, 3 Nathaniel Drive, Hudson.

Motion Second Mr. Pinsonneault Motion Carried 5/0/0

William Collins

William Collins, HCC Chairman

Revised Draft Motion to Approve based on input from Conservation Commission

APPROVE the conditional use permit application:

I move to approve the conditional use permit for Proposed Plot Plan, Tax Map 242 / Lot 028; prepared by: M. J. Grainger Engineering, Inc., 220 Derry Road, Hudson, NH 03051; prepared for: Christopher Michailides, 3 Nathaniel Drive, Hudson, NH 03051; consisting of a single sheet without notes; dated January 6, 2022; subject to, and revised per, the following stipulations:

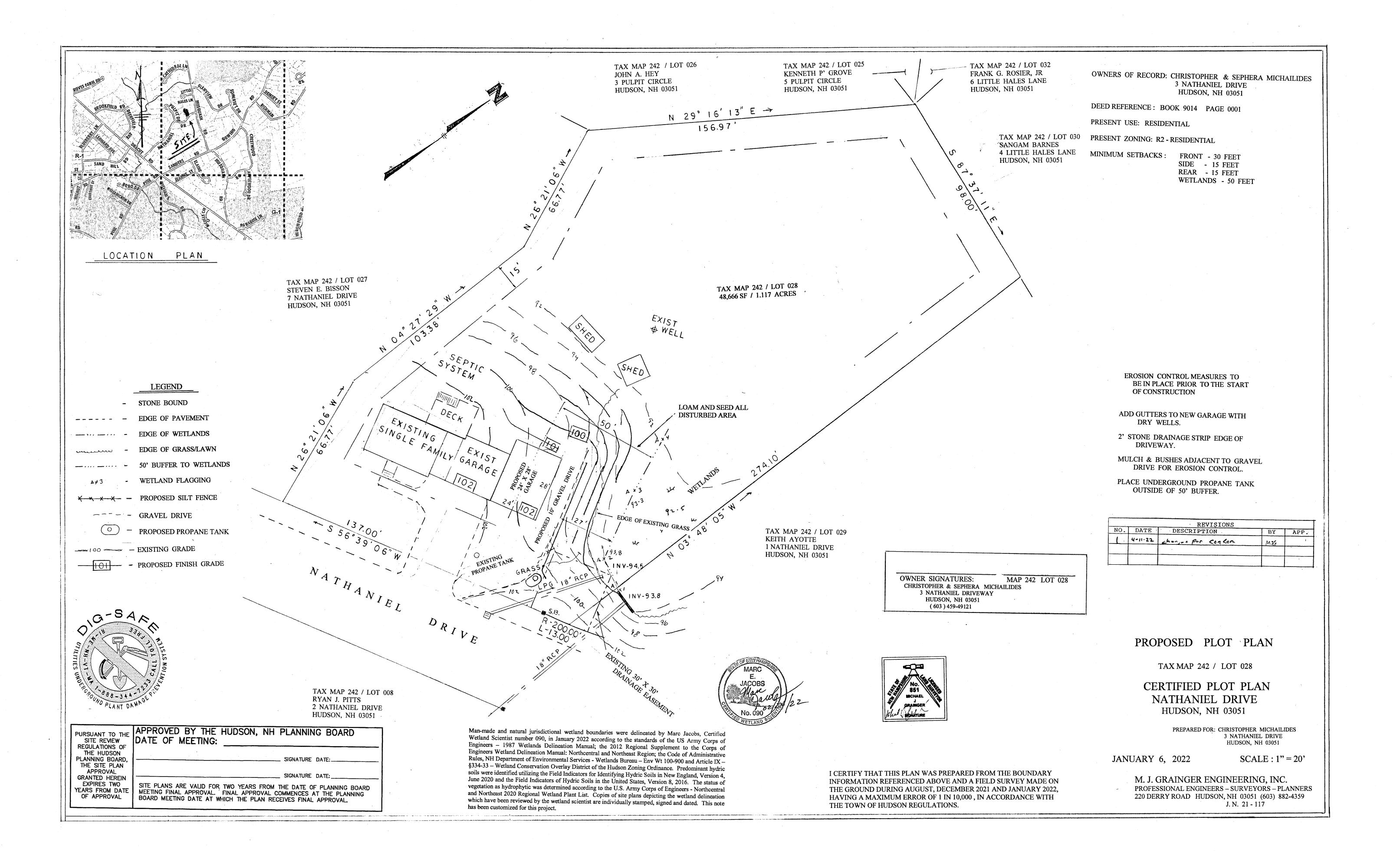
- 1. All stipulations of approval shall be incorporated into the Notice of Decision, which shall be recorded at the HCRD, together with the Plan.
- 2. Prior to the Planning Board endorsement of the Plan, it shall be subject to final administrative review by Town Planner and Town Engineer.
- 3. Prior to application for a building permit, the Applicant shall schedule a preconstruction meeting with the Town Engineer.

Conditions Recommended by the Conservation Commission

- 4. If the propane tank is relocated it shall not placed in the wetland buffer per 334-36 B (11) which refers to underground storage tanks.
- 5. During construction and restoration erosion control barriers shall be installed and maintained to the satisfaction of the Town Engineer.
- 6. The applicant should incorporate a dripline infiltration strip or if gutters are used a drywell system to attenuate Stormwater runoff produced by the new structure to prevent erosion of the wetland buffer area.
- 7. The applicant shall remove tree debris pile that was placed in the wetlands.
- 8. The applicant was looking to add a paved driveway alongside the proposed garage addition for access the rear yard area. The plan presented to the commission shows a gravel access way 10 foot wide in that area. It is recommended by the commission that to reduce further impacts and degradation to the WOCD buffer (per 334-37 paragraph A), that no asphalt or other non-permeable materials be used alongside the garage addition as it will reduce storm water infiltration and pollutant attenuation and possibly cause slope erosion within the wetland buffer area.
- 9. There was no post construction restoration or landscaping plan presented and with a slope of approximately 2 to 1 leading down to the wetlands the commission recommends that the applicant relocated shrubs that are currently located in the area of the proposed gravel driveway further down the slope to increase stabilization. It would also be desirable that some re-naturalization of the wetland buffer be a loud to occur around the wetland. This would help attenuate nutrients from lawn fertilizers and other sources of non-point pollutants.

- 10. The commission recommends that a stipulation and or note be added to the final plan set that states "Stockpiling of construction materials is not allowed in the wetland areas during construction.
- 11. This motion is based on the plan(s) submitted by the applicant. It is recommended that if additional impacts are required the plan be returned to the Conservation Commission for further review.

Motion by:	Second:	Carried/Failed:



SP #04-22 Barclay Medical Office Supplement

Since the time packets were mailed out, the applicant submitted two additional waiver requests.

- Location of all buildings within 50-feet of tract
- Off-street loading space

To **GRANT** a waiver:

I move to grant a waiver from § 276-11.1.B(15), which requires the plan to show all buildings within 50-feet of the tract, based on the Board's discussion, the testimony of the Applicant's representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver. Motion by: ____ Second: ____ Carried/Failed: ____

To **GRANT** a waiver:

I move to grant a waiver from § 275-8.C.(6), which requires an off-street loading space, based on the Board's discussion, the testimony of the Applicant's representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by:Second:Carried/Failed:

WAIVER REQUEST FORM

Name of Subdivision/Site Plan: BARCLAY Sins Plan
Street Address: RIVER ROAD / STONEMILL DRIVE
I RICHARD MAYNARD (AUTH REP) hereby request that the Planning Board
waive the requirements of item <u>176-11.136(15)</u> of the Hudson Land Use Regulations
in reference to a plan presented by MAYNARD of PHOUNTE BOUNCENIM
(name of surveyor and engineer) dated 12/29/2021 for
property tax map(s) and lot(s) in the Town of Hudson, NH.
As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Land Use Regulations.
Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):
ONLY THE END OF STONEMUL DR 15 DAOWN DUE
TO LACK OF SPACE ON DWG. STONEMILL DRIVE IS
ON OTHER SIDE OF POND/BROOK AND ISOLATED
FROM DEVELOPHENT
Reason(s) for granting this waiver, relative to not being contrary to the spirit and intent of the Land Use Regulations: (if additional space is needed please attach the appropriate documentation hereto):
STONE MILL DRIVE IS ON OTHER SIDE OF POND/ BROOK AND
13 ISOLATED FROM DEVELOPED PREA. LOCATION
OF DRIVE HAS NO BEAILING ON OFFICE PULDING
DEVELOPEN AREA
Signed: Signed: May n as b Applicant or Authorized Agent

WAIVER REQUEST FORM

Name of Subdivision/Site Plan: BARCURY SITE HAN
Street Address: Read STOME MILL DR
I RICHARD MUTYNING (AUTY 1289) hereby request that the Planning Board
waive the requirements of item 275-2, c(6) of the Hudson Land Use Regulations
in reference to a plan presented by MAYNARD & PAOURIE EUGI'NHERING
(name of surveyor and engineer) dated \[\langle \frac{12/29}{202} \] for
(name of surveyor and engineer) dated for property tax map(s) and lot(s) in the Town of Hudson, NH.
As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Land Use Regulations.
Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):
A MEDICAL OFFICE
Reason(s) for granting this waiver, relative to not being contrary to the spirit and intent of the Land Use Regulations: (if additional space is needed please attach the appropriate documentation hereto): Design this waiver, relative to not being contrary to the spirit and intent of the Land Use Regulations: (if additional space is needed please attach the appropriate documentation hereto):
LOADING SPACE NOT NOT NOT NOT
Signed: Signed May an A Applicant or Authorized Agent