

TOWN OF HUDSON

Planning Board



Roger Coutu, Selectmen Liaison



12 School Street • Hudson, New Hampshire 03051 • Tel: 603-886-6008 • Fax: 603-594-1142

PUBLIC MEETING TOWN OF HUDSON, NH JULY 24, 2019

The Town of Hudson Planning Board will hold a regularly scheduled meeting on Wednesday, July 24, 2019 at 7:00 p.m. in the "Buxton Community Development Conference Room" at Town Hall. The following items will be on the agenda:

- I. CALL TO ORDER BY CHAIRPERSON AT 7:00 P.M.
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. SEATING OF ALTERNATES
- V. MINUTES OF PREVIOUS MEETING(S)
 - 10 JULY 2019 Meeting Minutes Decisions
- VI. CORRESPONDENCE
- VII. OLD BUSINESS
 - A. Granite Subaru Amended Site Plan SP# 05-19

193 Lowell Road Map 216/Lot 011

Purpose of Plan: to propose the removal of the second building on-site and to expand the existing Subaru building with supporting infrastructure, while maintaining the same impervious footprint. Application Acceptance & Hearing.

- VIII. DESIGN REVIEW PHASE
 - IX. NEW BUSINESS/PUBLIC HEARINGS
 - A. Roosevelt Ave Self-Storage Site Plan SP# 06-19

23 & 27 Roosevelt Ave Map 191/Lots 116 & 115

Purpose of Plan: the purpose of the plan is to show a proposed 3-story storage facility and parking improvements. Application Acceptance & Hearing.

- X. OTHER BUSINESS
- XI. ADJOURNMENT

All plans and applications are available for review in the Planning Office. Comments may be submitted in writing until 10:00 a.m. on the Tuesday prior to the day of the meeting. The public is invited to attend.

Brian Groth, Town Planner

POSTED: Town Hall, Library & Post Office – 7-12-19

MINUTES/DECISIONS OF THE PLANNING BOARD MEETING DATE: JULY 10, 2019

In attendance $= X;$	Alternates Seated = S;	Partial Attendance = P	; Excused Absence = E
Timothy Malley Chairman X	Jordan Ulery Vice-Chair <u>X</u>	William Collins Secretary <u>E</u>	Charlie Brackett Member X
Dillon Dumont Member <u>X</u>	Ed Van der Veen Member <u>X</u>	Elliott Veloso Alternate <u>S</u>	
Roger Coutu Select. Rep. X	David Morin Alt. Select. Rep. <u>E</u>	Brian Groth Town Rep. <u>X</u>	

- I. CALL TO ORDER BY CHAIRPERSON AT 7:01 P.M.
- II. PLEDGE OF ALLEGIANCE
- III. ROLL CALL
- IV. SEATING OF ALTERNATES

Mr. Veloso seated for Mr. Brackett.

- V. MINUTES OF PREVIOUS MEETING(S)
 - 12 JUNE 19 Meeting Minutes Decisions

Mr. Coutu moved to approve the 12 JUNE 19 Meeting Minutes (as written/amended).

Motion seconded by Mr. Ulery. Motion carried 6/0/1 (Brackett abstained).

• 26 JUNE 19 Meeting Minutes – Decisions

Mr. Ulery moved to approve the 26 JUNE 19 Meeting Minutes (as written/amended).

Motion seconded by Mr. Coutu. Motion carried 6/0/1 (Brackett abstained).

- VI. CORRESPONDENCE
- VII. OLD BUSINESS

VIII. DESIGN REVIEW PHASE

IX. NEW BUSINESS/PUBLIC HEARING

A. Granite Subaru Amended Site Plan SP# 05-19

193 Lowell Road Map 216/Lot 011

Purpose of Plan: to propose the removal of the second building on-site and to expand the existing Subaru building with supporting infrastructure, while maintaining the same impervious footprint. Application Acceptance & Hearing.

Mr. Ulery moved to defer the amended site plan for Granite Subaru, located at 193 Lowell Road, Map 216/Lot 011, per the request of the applicant, date specific, to the July 24, 2019 meeting.

Motion seconded by Mr. Veloso. All in favor – motion carried.

X. OTHER BUSINESS

A. Regulation Amendment Proposal - §276 Administrative Requirements & Definitions – Plan Expiration.

Purpose of proposal: to change the regulation language that says plans expire one year from the date of Planning Board approval if substantial development has not occurred, to two years, or twenty-four months.

Mr. Coutu moved to schedule a public hearing on August 7, 2019, for amendments regarding plan validity in accordance with RSA 674:39 to §276 of the Hudson Land Use Regulations.

Motion seconded by Mr. Brackett. All in favor – motion carried.

XI. ADJOURNMENT

Motion to adjourn by Mr. Veloso. Seconded by Mr. Dumont. All in favor – motion carried.

Meeting adjourned at 7:07 p.m.		
	Brian Groth	
	Town Planner	

ROOSEVELT AVE SELF-STORAGE SITE PLAN APPLICATION #06-19

STAFF REPORT July 24, 2019

SITE: 23 Roosevelt Avenue – Map 191 Lots 115 & 116

ZONING: Business & Town Residential (split-zoned)

PURPOSE OF PLANS: to construct a 3-story storage facility and associated parking.

Plans Under Review: Roosevelt Ave Self-Storage; prepared by Keach-Nordstrom Associates, Inc., 10 Commerce Park North, Suite 3, Bedford, NH, 03110; prepared for James D. Allard, 26 Cherokee Ave, Nashua, NH 03062; consisting of 10 Sheets, Notes 1-32 on Sheet 1, and architectural elevations prepared by HL Turner Group, Concord, NH.

ATTACHMENTS:

- A. Site Plan Application & Project Narrative
- B. Lot Merger Application
- C. ZBA Notice of Decision for 23 Roosevelt Ave.
- D. Parking Study Letter from Paul Chisholm, P.E.
- E. Waiver Request Forms
- F. Fuss & O'Neill Peer Review Comments
- G. Department Review Comments (Fire, Engineering)
- H. CAP Fee worksheet

APPLICATION TRACKING:

- May 2019 Variance granted by the ZBA to permit self-storage.
- July 2, 2019 Site Plan application received.
- July 17, 2019 Fuss & O'Neill review comments received.
- July 24, 2019 Public Hearing scheduled.

WAIVER REQUESTS:

- 1. §276.11.1 (12) (b) Buffer between non-residential and residential uses.
- 2. §275-8.C(2) Parking calculations.

STAFF COMMENTS:

Lot Merger

The application concerns two lot under common ownership. Without merging the lots, the plan would not conform to the Zoning Ordinance. Prior to taking any action on this application, the Board should address the Application to Merge Lots (*Attachment B*). A draft motion for this action is in the Draft Motions section later in this report.

SP# 06-19 Staff Report Page 1 of 5

Use

The applicant was granted a variance to permit the proposed use on the site on April 11, 2019 (Attachment C). Still, in order to execute the proposed site plan, the applicant needs to secure a waiver from §276.11.1 (12) (b) which requires a 100-foot buffer between a residential use or zoning district and any improved part of a nonresidential development (Attachment E). The site directly abuts five (5) residential lots. With respect to the abutting residential lot at the corner of Roosevelt Avenue and F Street, the proposed parking area is 15-feet from the lot-line and the proposed building is about 50-feet from the lot-line. With respect to the abutting residential lot that is at the rear lot-line of the subject parcel, the proposed access way is 25-feet from the lot-line and the proposed building comes within 50-feet of the lot-line.

It is worth noting that there is a significant grade change between the site (\sim 169' elevation) and the residential lots to the rear (\sim 180'+ elevation). This elevation change offers some mitigation of sight and sound between uses.

The Landscape Plan (Sheet 6) shows landscape buffering along the corner residential lot. It shows existing landscape to remain along the other lot-lines.

The proposed use is expected to be low-impact (sight, sound, smell) relative to other commercial uses.

Parking

Hudson's site plan regulations do not address self-storage facilities. The applicant's engineer has submitted a parking study of a comparable site in Bedford, NH to demonstrate the parking usage of such facilities (*Attachment D*). They have submitted a waiver request in accordance with their proposal (*Attachment E*). Fuss & O'Neill noted that the study was conducted mid-month and opined that these facilities might be busier at month's end when leases begin/end.

Architecture

As noted in Fuss & O'Neill's comments (*Attachment F*), the elevations do not match the site plan, specifically in regards to building entrances. The applicant should revise accordingly.

The plan set states that the permitted building height per Zoning is 50-feet which is incorrect. The maximum building height is 38-feet. The building height should be noted on the elevations

While not required, it is recommended that the applicant show signage they may intend to install on the building.

It is recommended that the applicant provide the Planning Board with additional detail on the materials and colors to be used on the exterior of the building.

Stormwater Management

The applicant will need to address the comments related to Stormwater Management provided in Fuss & O'Neill's review letter (*Attachment F*). The plan must also state that it meets the new MS4 requirements.

Exterior Lighting

More detail on the exterior lighting plan should be provided to ensure light pollution will not affect the abutting residential properties, especially given the grade change. This discussion should include hours of operation.

Trash Removal

The proposal does not show any dumpsters or trash removal areas. The applicant should verify this is not needed.

Loading

As noted in Fuss & O'Neill's review letter (1.e,f g page 2), the proposal does not meet the loading spaces requirements of the Site Plan Regulations in terms of number and size. The plan shows what appears to be a loading area, but there are no doors shown at that location. The loading design will likely require a waiver.

Vehicular Circulation

See Attachment G for the Town Engineer's comments #5 and #6. Mr. Dhima recommends one-way circulation around the building instead of two-way. A stop bar and stop sign is also required at the entrance.

As recommended in Fuss & O'Neill's review letter (3.c page 3), the applicant should consider signage, mirrors, or other strategies to ensure the safety of vehicles travelling around the "blind corners" of the building.

Fire Safety

Fire Chief Buxton has issued a letter with his comments (*Attachment G*). Chief Buxton has also discussed his comments with the applicant's engineer, who intends to revise the plans in accordance with Fire Safety concerns.

Other

There are several other comments contained in Fuss & O'Neill's letter that will need to be addressed in a revised plan. Some of these revisions might be delivered after the issuance of this report but prior to the hearing.

WAIVER MOTIONS/REQUESTS:

1.	§276.11.1(23)(c) – 100-foot Residential Buffer.					
	based on the Bo	ard's discussion, the testimo	77.11.1(23)(c) – 100-foot Residential Buffer, ony of the Applicant's representative, and in the submitted Waiver Request Form for said			
	Motion by:	Second:	Carried/Failed:			
2.	§275.8.C(2) – Pa	arking Requirements				
	19 spaces, based	on the Board's discussion, th	5.8.C(2) – Parking Requirements, to allow for the testimony of the Applicant's representative, and in the submitted Waiver Request Form for			
	Motion by:	Second:	Carried/Failed:			
To me	T MOTIONS: erge the lots: e to approve the ap	oplication to merge lots by J	ames Allard for Tax Map 191, Lots 115 and			
	n by:	Second:	Carried/Failed:			
To acc	cept the applicati	on:				
I move	e to accept the site	plan application for 23 Roo	sevelt Ave, Map 191 Lot 115 & 116.			
Motion	n by:	Second:	Carried/Failed:			
То сог	ntinue the public	hearing to a date certain:				
	e to continue the p	ublic hearing for 23 Roosev	elt Ave, Map 191 Lot 115 & 116, date			
Motion	n by:	Second:	Carried/Failed:			

To approve:

I move to approve the subdivision & site plan applications for the Plan Set entitled: Roosevelt Ave Self-Storage; prepared by Keach-Nordstrom Associates, Inc., 10 Commerce Park North, Suite 3, Bedford, NH, 03110; prepared for James D. Allard, 26 Cherokee Ave, Nashua, NH 03062; consisting of 10 Sheets, Notes 1-32 on Sheet 1, and architectural elevations prepared by HL Turner Group, Concord, NH and as revised per, and subject to the, following stipulations:

- 1. All waivers and stipulations of approval shall be incorporated into the Notice of Decision, which shall be recorded at the HCRD, together with the Plan.
- 2. A traffic impact fee amount of \$26,100.00 shall be paid prior to the issuance of a Certificate of Occupancy in accordance with the cost allocation procedure (CAP).
- 3. All monumentation shall be set or bonded for prior to the issuance of building permits.
- 4. The applicant shall have an approved NHDES Alteration of Terrain permit prior to starting construction.
- 5. The applicant shall be responsible for scheduling a pre-construction meeting with town staff prior to starting construction.
- 6. The applicant shall not bury stumps within the site.
- 7. The applicant shall not bring off-site, non-feasible material, such as ledge or byproduct of ledge blasting, for backfill material.
- 8. Approval of this plan shall be subject to final review by the Town Engineer.
- 9. Construction activities involving the proposed undeveloped lots shall be limited to the hours between 7:00 A.M. and 7:00 P.M., Monday through Saturday. No exterior construction activities shall occur on Sunday.
- 10. Active and substantial development will have occurred when the following activities have been completed:
 - A. Tree clearing
 - B. Stump removal
 - C. Top soil removal
 - D. Construction entrance installation
 - E. Erosion control in place
 - F. Rough grading of the proposed site envelope

Motion by:	Second:	Carried/Failed:
J		

RECEIVED

JUL 02 2019

PRELIMINARY & FINAL SITE PLAN APPLICATION FOR PLAN REVIEW (Also for Wireless) TOWN OF HUDSON, NEW HAMPSHIRE

TOWN OF HUDSON
PLANNING DEPARTMENT

Date of Application: July 2, 2019	Tax Map # 191 Lot # 115 & 116
Name of Project: Roosevelt Ave Self-Stor	rage
Zoning District: Ge (For Town Use)	()
ZBA Action: #19-021	
PROPERTY OWNER:	DEVELOPER:
Name: James D. Allard	James D. Allard
Address: 26 Cherokee Avenue	26 Cherokee Avenue
Address: Nashua NH, 03062	Nashua NH, 03062
Telephone # 603-880-6664	603-880-6664
Fax #	
Email: jim@allardcontracting.com	jim@allardcontracting.com
PROJECT ENGINEER	SURVEYOR
Name: Keach & Nordstrom Associates	Peter Stoddard
Address: 10 Commerce Park North, Suite 3	1600 Candia Rd Suite 5
Address: Bedford, NH 03110	Manchester, NH 03104
Telephone #_(603) 627-2881	(603) 628-8500
Fax # (603) 627-2915	
Email: tmccarthy@keachnordstrom.com	petes@shlandservices.com
To show proposed 3-story storage	E OF PLAN: facility and parking improvements
For 1	Town Use
Plan Routing Date: 739	Sub/Site Date:
XX I have no comments I have	comments (attach to form)
DaB <u>Title:</u> Lieutenant	Date: 07/17/19
(Initials)	
DEPT: Zoning Engineering Assume Assum	essor XX Police Fire Planning rtment

SITE DATA SHEET

PLAN NAME: Roosevelt Ave S	elf-Storage
PLAN TYPE: <u>SITE PLAN</u>	
LEGAL DESCRIPTION: MAP_	191 LOT 115 & 116
DATE: July 1, 2019	
Location by Street	23 Roosevelt Avenue
Zoning:	Town Residence (TR) & Business (B)
Proposed Land Use:	Self-storage Facility
Existing Use:	Industrial Warehouse
Surrounding Land Use(s):	Residential/Multi-family
Number of Lots Occupied:	1
Existing Area Covered by Building:	4,990
Existing Buildings to be removed:	1
Proposed Area Covered by Building:	30,300 sf
Open Space Proposed:	52.2%
Open Space Required:	35%
Total Area:	S.F.: 132,400 Acres: 3.014
Area in Wetland:	7,600 sf Area Steep Slopes: 14,500 sf
Required Lot Size:	10,000 sf (TC)/30,000 sf (B)
Existing Frontage:	246.44' (Roosevelt)/170.04' (F Street)
Required Frontage:	90' (TR)/150' (B)
Building Setbacks:	Required* Proposed
Front: Side: Rear;	30' (TC)/50' (B) 94' 15' (TC)/15' (B) 55.8' 15' (TC)/15' (B) 177'

SITE PLAN DATA SHEET (Continued)

Flood Zone Reference:	Map No. 330	Map No. 33011C0518D PANEL 518 OF 701 24'			
Width of Driveways:	24'				
Number of Curb Cuts:	1				
Proposed Parking Spaces:	19				
Required Parking Spaces:	152				
Basis of Required Parking (Use):	1 SPACE/600 S	F OFFICE x 90,900 SF = 151.5 SPACES			
Dates/Case #/Description/Stipulation of ZBA, Conservation Commission, NH Wetlands Board Actions: (Attach stipulations on separate sheet)	4/11/19 - Ca to allow a se and (B) zone	4/11/19 - Case No. #19-021 to allow a self-storage use in (TC) and (B) zones			
	son Town Code				
Waivers Requested: Refe	<u>rence</u> 1(12)(C)	Regulation Description 100 ft distance between residential use and any Improved part of the nonresidential development			
2. 275-8.C	(2)	Parking Calculations			
3. 4.		MATERIAL PROPERTY AND ASSESSMENT OF THE PROPERTY AND ASSESSMENT OF THE PROPERTY AND ASSESSMENT OF THE PROPERTY ASSESSMENT OF THE			
5.	79.464.26.18.00.00.00.48.00.00.00.00.00.00.00.00.00.00.00.00.00				
6					
7		1996 WAS CONTROL OF THE CONTROL OF T			
(Left column for Town Use)	***************************************				
Impact Fees: C.A.P Fee:					
Development Agreement Proposed:					
has han had an are had had an man aim had	For Town Use				
Data Sheet Checked By:	Gineal Light (1974 ann) à dramh-làin mhomhann millimeann ann mheann ann ann an t-	Date:			

APPLICATION FOR SITE PLAN REVIEW TOWN OF HUDSON, NEW HAMPSHIRE

I hereby apply for Site Plan Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the Site Plan specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s) by the filing of this application as indicated above, hereby given permission for any member of the Hudson Planning Board, the Town Engineer, the Conservation Commission and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim to or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and/or inspections conducted on his/her (their) property in connection with this applications.

	Signature of Owner:	Javes	ÜÜ	land	
*	If other than an individual, partners, or corporate office		of orga	nization and its princip	oal owner,
	Signature of Developer	:J_ah	es	allard	

The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The Code Enforcement Officer/Building Inspector must be notified within two (2) working days of any change by the individual in charge of the project.

APPLICATION IS DUE AT NOON 21 days prior to the Planning Board Meeting. (The date the Agenda is <u>CLOSED</u>.) Any applications received after that time will be deferred until the next available meeting.

APPLICATION FOR SITE PLAN REVIEW TOWN OF HUDSON, NEW HAMPSHIRE

SCHEDULE OF FEES

Review Fees A.

1.	Site Plan Use	Project Size/Fee	
	Multi-Family	\$105/unit for 3-50 units \$78.50/unit for each additional unit over 50	\$
	Commercial/Semi Public/	Civic or Recreational \$157/1,000 sq. ft. for first 100,000 sq.ft. (bldg area): \$78.50/1,000 sq.ft. thereafter.	\$
	Industrial	x 90,900 sf \$150/1,000 sq.ft for first 100,000 sq.ft. (bldg. area);\$78.50/1,000 sq.ft thereafter	\$ 13,635.00
	No Buildings	\$30.00 per 1,000 sq.ft. of proposed developed area	\$
	Plus Consultant Review	Fee:	
	Total acres @ per acre or \$1,250.00, whi		\$_1,250.00
	is expected to cover the an	t of consultant review. The fee nount. A complex project may a simple project may result in a	
		rged attorney costs billed to the Town folication plan set documents.	for the Town's
2.	Conceptual Review Only \$100.00		\$
3.	ZBA Input Only \$100.00		\$

APPLICATION FOR SITE PLAN REVIEW TOWN OF HUDSON, NEW HAMPSHIRE

SCHEDULE OF FEES (Continued)

В.	<u>Postage</u>						
	Current "certified mail" postage rate per abutter to proposed Site Plan and current first class postage rate per property Owner within 200 feet of proposed site plan.						
	23	Abutters @\$6.	74 (Certifie	d Mail)	\$	155.02	
	10	Property owner @.49 (First cla	rs within 20	•	\$	4.90	
C.	On Si	te Signs			\$_	15.00	
D.	Adver	rtising (PUBLIC	NOTICE)	For all site plans	\$_	40.00	
E.	Tax M	Iap Updating F	ee SHISLING	(FLAT FEE)	\$_	275.00	
				TOTAL	\$_	15,374.92	
AMC	OUNT DU	JE		or Town Use DATE RECH	EIVI	ED	
AMC	OUNT RE	ECEIVED	\$	RECEIPT N	0.		
				RECEIVED E	Y:	I.	
F.	Recor	ding Fees			••••••	Programment (1985) (1986) (1986) (1986) (1986) (1986) (1986) (1986) (1986) (1986) (1986) (1986) (1986) (1986)	
	•			f recording the fina vith fees establishe		te plan layout prior to final the County.	
	Record	ding of Plan	<u> </u>	524.00/sheet 2.00/surcharge plar	\$_ \$		
	Land &	k Community Heri	itage Investm	ent Program	Ψ		
	(LCHIP) fee +25.			•	\$		
	Easements/Agreements @\$10.00/first sheet		\$_				
	(if applicable) @\$ 4.00/each sheet			\$	NO.		
		after +\$2.00/surc			\$_		
	+First	Class return pos	tage rate				
	TOTA	AT,			\$		
					٠		



July 1, 2019

Project Narrative:

Roosevelt Avenue Self-Storage 23 Roosevelt Avenue

The property located at 23 Roosevelt Avenue is owned by James D. Allard and currently contains an existing industrial single-story concrete building. The property also includes a paved parking lot and driveway, as well as an additional gravel drive. The paved driveway runs east to west and connects to Roosevelt Avenue. The gravel drive runs northeast to southwest and connects to F Street. Additionally, the site is comprised of two separate lots, which are to be combined per a variance from the Town of Hudson.

Two existing lots must be combined in order to complete this project. Map 191; Lots 115 and 116 must be combined. Both lots are zoned Business to the north and partially zoned town residential to the south. On April 11, 2019, the Hudson Zoning Board of Adjustment granted a variance to allow construction of a self-storage facility in both lots.

Several items must be removed in order to properly prepare the site for construction. The existing 4,990 square foot building must be razed, the paved driveway and parking lot must be removed, the existing gravel drive must be removed, and an existing overhead utility line and pole must be removed.

The proposed site will include a three-story self-storage building with a paved driveway and parking lot. The proposed building will have a 30,300 square foot footprint and 90,900 square foot in gross area. The parking lot will contain 19 total spaces, with two spaces being handicap accessible.

In addition to the building and parking lot, a series of drainage pipes and detention ponds must be added to the site. Three detention ponds will help prevent excess runoff into the bordering streets or the surrounding properties. One pond will lie in the southwest side of the lot directly adjacent to F Street. The other two ponds will lie in the northwest side of the lot bordering the proposed driveway connecting to Roosevelt Avenue.

APPLICATION TO MERGE LOTS FOR TAX ASSESSMENT AND LAND USE **PURPOSES**

TOWN OF HUDSON, NEW HAMPSHIRE

The undersigned	, James	Allard	(type or print name here)
is / are the owner	(s) of lots or parcels	s shown on	the Town Tax Maps as follows:
m > 6 101	v . 11E		
Tax Map191	Lot 115		
Tax Map191	Lot 116 Lot	_	
Tax Map	_ Lot		
parcels or lots int			son Planning Board combine the above described own as, Tax Map <u>191</u> , Lot <u>116</u> for tax
single lot or sing	le parcel on the Tow	vn Tax map	the merged lots or parcels shall be shown as a and shall be one lot or one parcel for land use nerged lots or merged parcels as a single lot or a
wish to subdivide	e the merged lot or r	merged parc	ees, successors and assigns of the undersigned cel, subdivision approval must be obtained from Fown of Hudson Subdivision of Land
undersigned in th	ne Hillsborough Cou	ınty Registr	
]	Dated this 18 day	y of	July , 20 19 . (SIGN HERE)
000) 60 m = d		
Junes W.	Section(sr	GN HERE)	(SIGN HERE)
LANDOWNER			LANDOWNER
James Allard			
(TYPE OR PRINT NA	νŒ)		(TYPE OR PRINT NAME)
approved by act		f Hudson 1	ax assessment and land use purposes is Planning Board. This application shall be ry of Deeds.
J	Dated this day	y of	, 20
			Town of Hudson, NH Planning Board
			Chairperson

Doc # 9018364 May 14, 2019 11:16 AM

Register of Deeds, Hillsborough County

Page 1 of 1

Book 9168 Page 0037

For Registry of Deed use only:

SURCHARGE: CASH!

Send recorded copy to:

TOWN OF HUDSON ZONING BOARD OF ADJUSTMENT

NOTICE OF DECISION

12 School Street, Hudson, New Hampshire 03051

Map 191, Lot 115 & 116, Zone TR (Town Residential) & B (Business), Case # 191-116 & 115 **ZBA Decision 04/11/2019**

Property Owner & Address: James Allard, 26 Cherokee Ave, Nashua, NH 03062

Property Location: 23 & 27 Roosevelt Ave., Hudson, NH 03051

Authorized Representative: Brad Westgate, Esq., Winer and Bennett, PA 111 Concord Street, Nashua NH 03063

Action sought: Variance to permit a climate-controlled self-storage facility located partially in the B Zone and partially in the TR Zone, which is a Use not permitted in either Zone.

Zoning Ordinance Articles: V §334-20, Allowed Uses provided in Tables V §334-21, Table of Permitted Principal Uses (E8)

Action granted: After review of the criteria for the granting of a Variance and having determined that each criteria has been met, the motion was made, duly seconded, and unanimously voted (5:0) to approve the request in Case #191-116 & 115 submitted by James Allard for a Variance to permit use of the site for a climate-controlled self-storage facility.

NOTE: All representations of fact or intention made by the applicant or any applicant's representative during testimony before the Zoning Board of Adjustment relative to the obtaining of this Variance shall be considered conditions of this Variance, regardless of the fact that such facts or intentions may not have been specifically stated as stipulations of the motion.

Charles J. Brackett, ZBA Chairman, Town of Hudson Signature

Bruce Buttrick, Zoning Administrator, Town of Hudson Signature

March 19, 2019

Brian Groth, Town Planner Town of Hudson – Community Development Department 12 School Street Hudson, New Hampshire 03051

Subject: Self-Storage Facility

Map 191 Lots 115 & 116 23 Roosevelt Avenue

Hudson, New Hampshire 03051 KNA Project No. 18-1210-1

Mr. Groth:

Keach-Nordstrom Associates, Inc. (KNA) performed a parking study of an indoor self-storage facility located in Bedford, New Hampshire, which is similar in size to the development proposed at 23 Roosevelt Avenue. The parking study was conducted over the course of three days; Monday March 11th, Wednesday March 13th and Saturday March 15th at various times during each day. Our goal was to create a representative sample of the overall parking demand at any given time for an indoor climate controlled self-storage use in southern New Hampshire.

The study site selected features an existing 115,000-sf indoor climate controlled self-storage facility, which is larger than the proposed 90,900-sf facility but similar in style. It is located in Bedford, which has a total population of approximately 21,200 people and is similar in population to Hudson (24,500 residents).

The study was performed by conducting several site visits over the course of each day to identify the total parking demand for the facility. The time of day, weather and vehicle counts were recorded for each visit. Site visits lasted approximately three to five minutes and all vehicles within the parking lot were counted, regardless of whether they were parked, actively loading or unloading, or entering or leaving the site. The total number of vehicles onsite ranged from zero at a minimum to seven at a maximum. The attached document details each site visit as noted herein.

We trust that the contents of this letter will provide insight into the proposed development and highlight that self-storage uses are an inherently low intensity use in terms of parking demand and total site visits.

Respectfully,

Paul Chisholm, P.E., LEED AP ND

Project Manager

fl Uni

Keach-Nordstrom Associates, Inc.

Civil Engineering Land Surveying

Landscape Architecture



March 11, 2019

8:00 A.M. 37°F Overcast: 0 vehicles

10:00 A.M. 41°F Partly Cloudy: 1 vehicle

12:00 P.M. 46°F Partly Cloudy: 1 vehicle

5:00 P.M. 44°F Clear Skies: 4 vehicles

March 13, 2019

8:00 A.M. 24°F Clear Skies: 0 vehicles

10:00 A.M. 34°F Partly Cloudy: 4 vehicles

12:00 P.M. 43°F Overcast: 3 vehicles

3:00 P.M. 44°F Overcast: 1 vehicle

5:00 P.M. 46°F Clear Skies: 2 vehicles

March 16, 2019

9:55 A.M. 42°F Clear Skies: 5 vehicles

11:55 A.M. 45°F Partly Cloudy: 7 vehicles

2:00 P.M. 43°F Partly Cloudy: 4 vehicles

SUBDIVISION/SITE PLAN WAIVER REQUEST FORM

Name of Subdivision/Site Plan: Roosevelt Ave Self-Sto	rage
Street Address: 23 Roosevelt Avenue	
I James D. Allard	hereby request that the Planning Board
waive the requirements of item 275-8.C(2) Parking Re	quirements of the Subdivision/Site Plan
Checklist in reference to a plan presented byKeach & Nor	dstrom Associates & S&H Land Services
(name	e of surveyor and engineer) dated
July 1, 2019 for property tax map(s)	191 and lot(s)
115 & 116	n the Town of Hudson, NH.
As the aforementioned applicant, I, herein, acknowledge with the provisions set forth in RSA 674:36, II (n), i.e., waiver, it would pose an unnecessary hardship upon m waiver would not be contrary to the spirit and intent of the Hardship reason(s) for granting this waiver (if additional s documentation hereto): The required parking ratio is not specific to the actual us	without the Planning Board granting said e (the applicant), and the granting of this Subdivision/Site Plan regulations. pace is needed please attach the appropriate
are sufficient based on case studies and experience wit	
regulations would require many more spaces than nece	ssary.
Reason(s) for granting this waiver, relative to not bein Subdivision/Site Plan regulations: (if additional space	
documentation hereto):	
The spirit and intent is met as the actual number of spa	
regulations do not provide specific requirements for this	use. These facilities are very light industrial uses
and do not demand a large volume of traffic.	
Signed: Applicar	all allard at or Authorized Agent
1	
Planning Board Action:	
Waiver Granted:	
Waiver Not Granted:	

Page 11 of 16 Rev Aug 2015

SUBDIVISION/SITE PLAN WAIVER REQUEST FORM

Name of Subdivision/Site Plan: Rooseve	It Ave Self-Storage
Street Address: 23 Roosevelt Avenue	
I James D. Allard	hereby request that the Planning Board
waive the requirements of item 276.11.1	(12)(C) 100' Residential Buffer of the Subdivision/Site Plan
Checklist in reference to a plan presented by	Keach & Nordstrom Associates & S&H Land Services
	(name of surveyor and engineer) dated
July 1, 2019 for property	tax map(s) 191 and lot(s)
115 & 116	in the Town of Hudson, NH.
with the provisions set forth in RSA 674:3 waiver, it would pose an unnecessary hard	acknowledge that this waiver is requested in accordance 36, II (n), i.e., without the Planning Board granting said dship upon me (the applicant), and the granting of this d intent of the Subdivision/Site Plan regulations.
documentation hereto):	(if additional space is needed please attach the appropriate d not allow the development to move forward for the use in
which the variance was granted and the si	te would have constraints preventing development on the site
There is currently an industrial building on	the property. Self-storage is a soft use and does not create a
lot of traffic or activity.	
Subdivision/Site Plan regulations: (if add documentation hereto):	re to not being contrary to the Spirit and Intent of the ditional space is needed please attach the appropriate
	ovide a buffer from abutting residential uses. The use is a sof
	or activity. Most of the activity will be contained within the
building. Granting the waiver will meet the	spirit and intent of the ordinance.
	Signed: Applicant or Authorized Agent
Planning Board Action:	
Waiver Granted:	
Waiver Not Granted:	

Page 11 of 16 Rev Aug 2015



July 17, 2019

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

Re: Town of Hudson Planning Board Review

23 Roosevelt Ave Self Storage Site Plan, 23 Roosevelt Avenue

Tax Map 191, Lots 115 & 116; Acct. #1350-932

Reference No. 03-0249.1820

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the first submission of the materials received on July 2, 2019, related to the above-referenced project. Authorization to proceed was received on July 3, 2018. 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.

We have included a copy of Fuss & O'Neill's evaluation of the checklist for your reference. We note that several items could not be verified by Fuss & O'Neill and require action by the Town.

The project appears to consist of the redevelopment of a two lot site into a self-storage facility. Proposed improvements to the site also include the construction of a driveway, parking areas, drainage improvements, landscaping, and other associated site improvements. The proposed building will be serviced by a private septic system and Municipal water.

The following items are noted:

- Site Plan Review Codes and Administrative Requirements and Definitions
 - a. Hudson Regulation (HR) 275-6.1. The scope of this review does not include the adequacy of any fire protection provisions for the site. No proposed measures were included in Fuss & O'Neill's review package.
 - b. HR 275-6.T.(1) The applicant has not proposed installation of any off-site improvements.
 - c. HR 275-8.C.(2) and ZO 334-15.A. The applicant has provided a parking study memo for the proposed self-storage use. The study was performed on a similarly sized site in Bedford, and notes that self-storage uses are inherently low intensity uses in terms of parking demand and total site visits. The plans and study do not note how many internal storage units are proposed for the Hudson facility or how that compares to the Bedford site that was evaluated. Our other concern with the parking study is that it was performed over several days in the middle of the month. We suspect that site visits and parking demands increase at the end of the month when leases expire, renters move, etc., and

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New Hampshire

Rhode Island

Vermont



Mr. Brian Groth July 17, 2019 Page 2 of 5

- would be a more accurate demonstration of the parking demand for such a facility.
- d. HR 275-8.C.(2) and ZO 334-15.A. Parking calculations provided by the applicant indicate that the proposed site does not provide the minimum number of spaces required. The applicant has requested a waiver from this Regulation. Also, the applicant should confirm with the Town that the proposed use is an industrial use, not a retail use or other use category required by the Planning Board.
- e. HR 275-8.C.(6). The applicant has not labeled any specific loading spaces on the plan set. There is an area west of the parking spaces in front of the building that may be intended to be a vehicle loading area, but there are no doors/overhead doors shown in this area on the site plan. The applicant should provide additional information on the proposed loading spaces for the site.
- f. HR 275-8.C.(6)(a). The applicant has not shown an adequate number of loading spaces based on the building's gross floor area.
- g. HR 275-8.C.(6)(b). For the loading area noted in comment 1.e. above, the dimensions of the loading area do not meet the required 12 feet by 60 feet and no information was provided about the type of trucks expected to use the space.
- h. HR 275-8.C.(8). The subject lot abuts a residential zone to the east. The applicant should review the proposed clearing, landscaping, and existing vegetation to confirm that adequate screening will exist upon completion of the project. It appears that most of the existing buffer vegetation is located on abutting properties.
- i. HR 275-8.C.(11). The applicant should provide a tipdown detail for construction of the sidewalk at the accessible parking spaces.
- j. HR 276-11.1.B.(9). A licensed land surveyor has not certified the Existing Conditions plan.
- k. HR 276-11.1.B.(12)(c). The applicant has proposed improvements within 100 feet of a residential use/zoning district. The applicant has requested a waiver from this Regulation.
- I. HR 276-11.1.B.(13). The applicant has not proposed any signs other than traffic signs and handicapped parking signs within the site.
- m. HR 276-11.1.B.(13). The applicant has not included details for any proposed business signage or provided the required note on the plan set stating that, "All signs are subject to approval by the Hudson PLANNING BOARD prior to installation thereof."
- n. HR 276-11.1.B.(16). The applicant has not shown all roadways, driveways, travel or parking areas within 200 feet of the tract.
- o. HR 276-11.1.B.(17). We were unable to locate any benchmarks within the plan.
- p. HR 276-11.1.B.(20). The applicant has not shown any existing or proposed easements on the plans.
- p. HR 276-11.1.B.(23). The applicant has not noted any pertinent highway projects on the plan set.
- 2. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)
 - a. HR 193.10.E. The applicant has not shown sight distances for the proposed driveway on the plan set.
 - b. HR 193.10.J. The applicant has not provided a tie-in detail for the connection of the proposed driveways to the existing pavement on Roosevelt Avenue.



Mr. Brian Groth July 17, 2019 Page 3 of 5

3. Traffic

- a. HR 275-9.B. The applicant has not provided a Traffic Study for this project. Given the nature of the proposed project and configuration of driveways/road access, Fuss & O'Neill believes the preparation of a Traffic Study is not warranted at this time.
- b. It appears that WB-50 or larger trucks or vehicles with trailers will have difficulty traversing the entire driveway without encroaching on parking or landscape areas. The applicant should review and verify that all anticipated trucks can safely navigate the site.
- c. The applicant has not noted the intent for traffic flow around the proposed building, i.e. two-way traffic throughout; one way traffic in some areas; etc. If two-way traffic is proposed the applicant should consider the installation of some type of warning signs for traffic approaching the blind corner at the southeast corner of the building. If one-way traffic is proposed then appropriate signage and pavement markings should be provided.

4. Utility Design/Conflicts

- a. HR 275-9.E and 276-13. The applicant has not provided a utility crossing detail for the water main and drainage pipe.
- b. HR 275-9.E and 276-13. The applicant has shown a proposed fire service connection to the subject building. Fuss & O'Neill did not review this element of work for fire protection adequacy or code conformance.
- c. HR 275-9.E and 276.13. The applicant has noted that the proposed size of the domestic service and fire alarm shall be confirmed by the project fire suppression engineer prior to the start of construction. The applicant has also noted that any adjustments to the design must be approved by the Town of Hudson.
- d. HR 275-9.E and 276-13. The applicant has not provided any details for the tapping sleeve or domestic service connection for the proposed water service to the building.
- e. HR 275-9.E. and 276-13. The applicant has not shown nor provided any installation details for underground utilities (electric, telephone, gas, etc.) proposed for the site.
- f. HR 275-9.E and 276-13. The applicant has not provided any information regarding the proposed septic system on the plan set (inverts, grades, details, etc.).

5. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- a. HR 275-9.A.(2). The applicant has not shown the direction of flow through the use of arrows for all areas.
- b. HR 275-9.A.(3). The applicant has not provided the size of various proposed drainage structures such as spillways, forebays, etc.
- c. HR 275-9.A.(3). The HydroCAD analysis illustrates that the existing depression and the proposed infiltration basins utilize a 3.0 inches per hour infiltration rate. The applicant should provide additional conversion calculations for the percolation rates illustrated on Plan Sheet 10 to support the use of the infiltration rate.



Mr. Brian Groth July 17, 2019 Page 4 of 5

- d. HR 275-9.A.(4)(b). The applicant should provide twenty-five year storm event calculations for the proposed culvert, swale and detention pond.
- e. HR 290-4.C. The applicant should provide sediment forebay sizing calculations for proper pretreatment of the stormwater.
- f. HR 290-4.C. The applicant should provide scour hole sizing calculations within the sediment forebays.
- g. HR 290-4.C. The applicant should provide additional construction information for the infiltration basins to ensure their long term functionality. Information such as, but not limited to, inundation of grass seed, tilling of soil, restrictions on compacting soil, etc. should be noted on the plans.
- h. HR 290-5.K.(22). The applicant has not shown proposed snow storage areas on the plans.
- i. HR 290-5.L(1). It is uncertain if the total disturbed area for this project exceeds 100,000 square feet, requiring a New Hampshire Department of Environmental Services (NHDES) Alteration of Terrain (AoT) permit. The applicant should note the total disturbed area on the plans and the need for an AoT permit. If the permit is required the applicant should keep the Town informed of all communication with NHDES in relation to the AoT permit discussions to ensure NHDES comments do not alter drainage design/calculations.

6. Zoning (ZO 334)

- a. ZO 334-21. The applicant has noted that the subject parcel is located within the Town Residence (TR) and Business (B) zoning districts. The applicant has also noted that the Hudson Zoning Board of Adjustment granted a variance to allow a self-storage facility in the Town Residence and Business zones.
- b. ZO 334-33. The applicant has shown wetlands within a portion of the subject site. There are no improvements proposed within these wetland areas.
- c. ZO 334-60. The applicant has not proposed any signs other than handicapped parking and traffic signs within the subject lot.
- d. ZO 334-83. The applicant has noted that the subject parcel does not fall within a special flood hazard area.

7. Erosion Control/Wetland Impacts

- a. HR 290-5.K.(14). The applicant has not indicated the proposed areas for earth stockpiles.
- b. HR 290-5.K.(15). The applicant has not indicated the proposed areas for equipment storage and staging.
- c. HR 290-5.K.(16). The applicant has not indicated the proposed method of stump disposal, instead just noting that stumps will be disposed of in an approved method.

8. Landscaping (HR 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))

- a. HR 275-8.C.(7). The applicant has proposed landscaped areas that meet the minimum required by the Regulation.
- b. HR 276-11.1.B.(14). The applicant has not provided information detailing the proposed hours of operation for the site lighting (i.e. will the lights operate only during the



Mr. Brian Groth July 17, 2019 Page 5 of 5

prescribed hours of operation for the facility; will they operate during all night time hours; etc.).

c. HR 276-11.1.B.(14). and (21). The applicant should coordinate proposed tree and lighting installations to determine if there will be any conflicts between these features. Several trees are shown immediately adjacent to proposed lighting.

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

- a. HR 275-9.G. The applicant has not noted whether a New Hampshire Department of Environmental Services (NHDES) Alteration of Terrain Permit or Septic System Permit are required. The applicant should forward all relevant NHDES permit documentation to the Town for their records.
- HR 275-9.G. The applicant has noted that a NPDES permit and preparation of a SWPPP will be required for this project.
- c. HR 275-9.G. The applicant did not provide copies of any applicable Town, State or Federal approvals or permits in the review package.
- d. Additional local permitting may be required.

10. Other

- a. The applicant has not included any provisions for a dumpster on the plans. The applicant should verify that a dumpster is not needed for the proposed use.
- b. The applicant has provided an architectural rendering of the proposed building that doesn't appear to match the site plan drawings. On the north side of the building the architectural plans show the building entrance near the northwest corner while the site plans show the building entrance in front of the parking spaces near the center of the building. The applicant should review and coordinate these plans.
- c. The applicant is proposing retaining walls on the site that are three feet tall, and has included a Redi-Rock wall detail for a 7.5' tall gravity wall. The applicant should coordinate the retaining wall detail with the plans.

Please feel free to call if you have any questions.

Very truly yours,

Steven W. Reichert, P.E.

Paul Konjeczka, AICP

SWR:PK:

Enclosure

cc: Town of Hudson Engineering Division – File Keach-Nordstrom Associates, Inc. Commerce Park North

Commerce Park North Bedford, NH 03110 tmccarthy@keachnordstrom.com



TOWN OF HUDSON

FIRE DEPARTMENT

39 FERRY STREET, HUDSON, NEW HAMPSHIRE 03051



Robert M. Buxton Chief of Department

Emergency Business 911

603-886-6021

Fax

603-594-1164

TO:

Brian Groth

Town Planner

FR:

Robert M. Buxton

Fire Chief

DT:

July 12, 2019

RE:

Roosevelt Avenue Self-Storage Map 191, Lot 115 &116

The following is a list of site plan concerns for this project. This review was completed utilizing plans submitted by Paul Chisholm from KNA dated July 1, 2019.

- 1. The trash receptacle should be placed not less than 20 feet (preferably 50 feet) from a building and at least 50 feet from a public roadway and sources of ignition. It should also be enclosed with a secure noncombustible fence of adequate height. This is a nationally accepted fire prevention practice found in the **National Fire Protection Association's** (NFPA) Fire Protection Handbook, 18 Edition, Section 3, Chapter 33.
- 2. Please provide the markings for fire apparatus access in accordance with NFPA 1-2015 Edition, Uniform Fire Code, Section 18.2.2.5.7.
- 3. Two fire hydrants shall be added to the site. One shall be located to support the fire sprinkler system and the other shall be located on the F Street end of the facility.
- 4. Please provide three (3) hydrant maps signed by the Hudson Fire Department, the Hudson Water Company and the property owner. There shall be a hydrant flag acceptable to the current Town of Hudson Engineering Department's specifications provided for all water supply appurtenances.
- 5. Please make sure that the proposed snow storage area shown on the plan in the area of the cistern is cut back to make sure access is maintained.

**The following life safety and fire protection concerns provided are for informational purposes to the applicant and Planning Board for this project. Final determinations on these issues occur after further review of the project.

A. Any fire protection system shall be monitored by an approved fire alarm system. The fire alarm system shall be connected to the Hudson Fire Department's municipal fire alarm system or a substantially equivalent system in accordance with the **Code of the Town of Hudson**, **Chapter 210**. A site plan detailing the aerial or underground layout to the

municipal fire alarm connection must be provided before the utilities are completed for this project. Any required fire alarm system component must remain accessible and visible at all times.

- B. Will there be inside or outside storage above the exempt amounts of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in **International Building Code**, Sections 307, 414 or 415?
- C. A blasting permit will be required for any blasting on the site in accordance with the Code of the Town of Hudson, Chapter 202.
- D. All storage either inside or outside of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in **NFPA 1**, **Section 20.15.2.2** shall be in accordance with the applicable portions of the following:

NFPA 13, Standard for the Installation of Sprinkler Systems

NFPA 30, Flammable and Combustible Liquids Code

NFPA 30B, Code for the Manufacture and Storage of Aerosol Products

NFPA 230, Standard for the Fire Protection of Storage

NFPA 430, Code for the Storage of Liquid and Solid Oxidizers

NFPA 432, Code for the Storage of Organic Peroxide Formulations

NFPA 434, Code for the Storage of Pesticides

These are all of the Hudson Fire Department's concerns as of this time. If you have any further questions, please call me directly and thank you for your continued cooperation.

cc: Project Engineer File

Groth, Brian

From: Dhima, Elvis

Sent: Thursday, July 18, 2019 3:55 PM

To: Groth, Brian
Cc: Dubowik, Brooke

Subject: RE: Department Sign Off - Planning

Brian

I have the following comments:

- 1. Applicant shall state that they meet the new MS4 requirements
- 2. Applicant shall have the approved NHDES AOT permit prior to starting construction
- 3. Applicant shall be responsible for scheduling a preconstruction meeting prior to construction
- 4. Insulation shall be added between the proposed water line and the proposed drainage pipe at the entrance
- 5. Directional pavement markings need to be added. It appears unrealistic a two way traffic movement in the back of the building. One way direction around the building is recommended.
- 6. Stop bar and stop sign is required at the entrance.

E

Elvis Dhima, P.E. Town Engineer

Town of Hudson, NH 12 School Street Hudson, NH 03051 Phone: (603) 886-6008 Mobile: (603) 318-8286



From: Dhima, Elvis

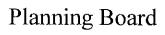
Sent: Thursday, July 18, 2019 3:32 PM
To: Dhima, Elvis <edhima@hudsonnh.gov>
Subject: FW: Department Sign Off - Planning

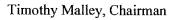
Elvis Dhima, P.E. Town Engineer

Town of Hudson, NH 12 School Street Hudson, NH 03051 Phone: (603) 886-6008 Mobile: (603) 318-8286



TOWN OF HUDSON







12 School Street · Hudson, New Hampshire 03051 · Tel: 603-886-6008 · Fax: 603-594-1142

CAP FEE WORKSHEET - 2019

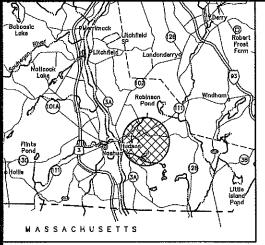
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Check should be made payable to the **Town of Hudson**.

Thank you,
Buin Yut

Brian Groth

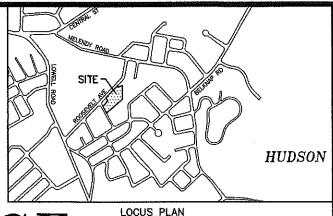
Town Planner



NON-RESIDENTIAL SITE PLAN

ROOSEVELT AVE SELF-STORAGE

MAP 191 LOTS 115 & 116 23 ROOSEVELT AVENUE HUDSON, NEW HAMPSHIRE



LOCUS PLAN

RECEIVED

JUL 02 2019

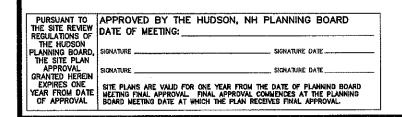
TOWN OF HUDSON PLANNING DEPARTMENT

OWNER/APPLICANT: JAMES D. ALLARD 26 CHEROKEE AVE NASHUA, NH 03062

(603) 627-2881

PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3
BEDFORD, NEW HAMPSHIRE 03110

SURVEY PREPARED BY:
S&H LAND SERVICES, LLC
1600 CANDIA ROAD, SUITE #5
MANCHESTER NEW HAMPSHIRE 03109
(603) 628-8500





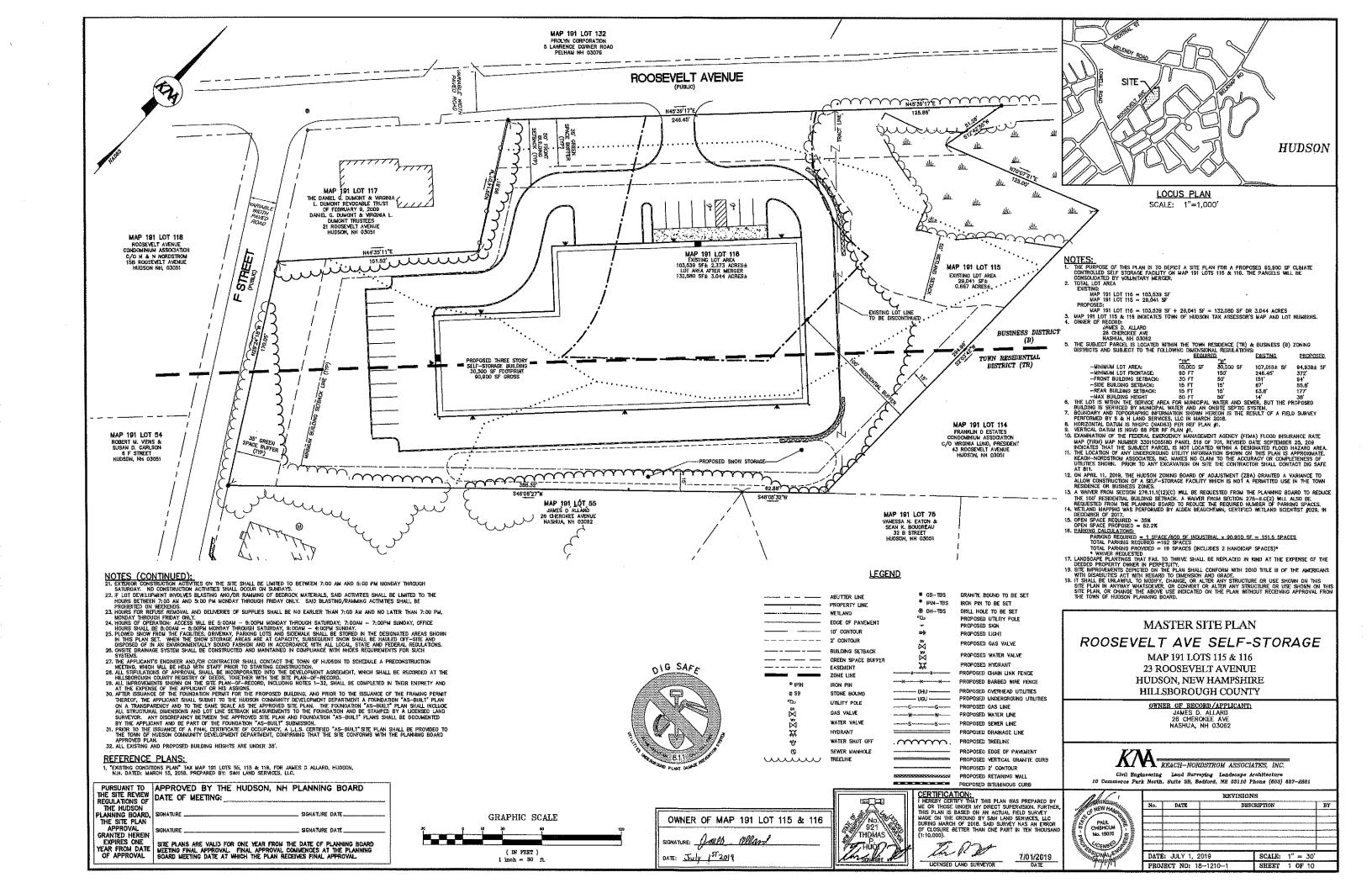


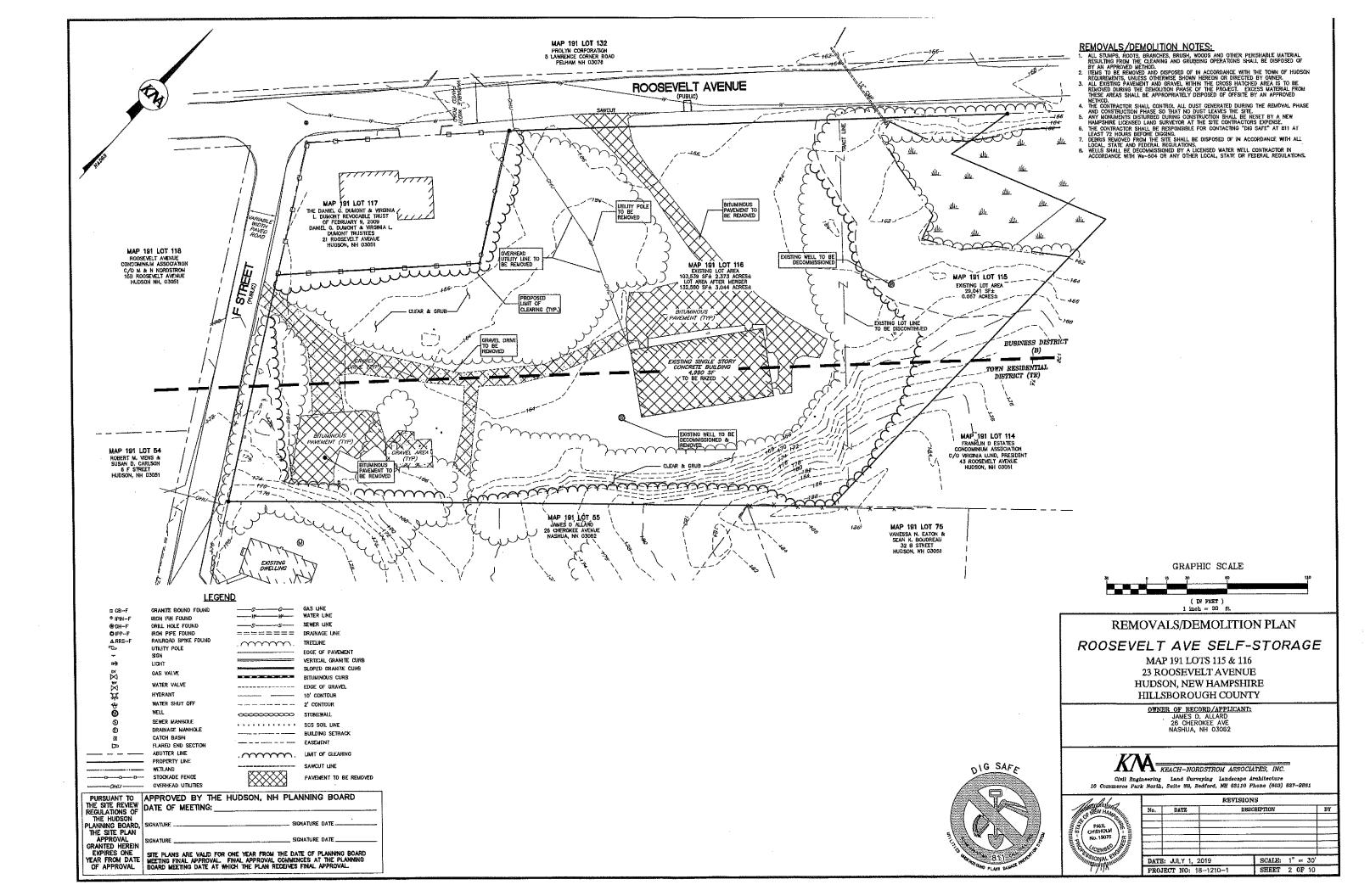


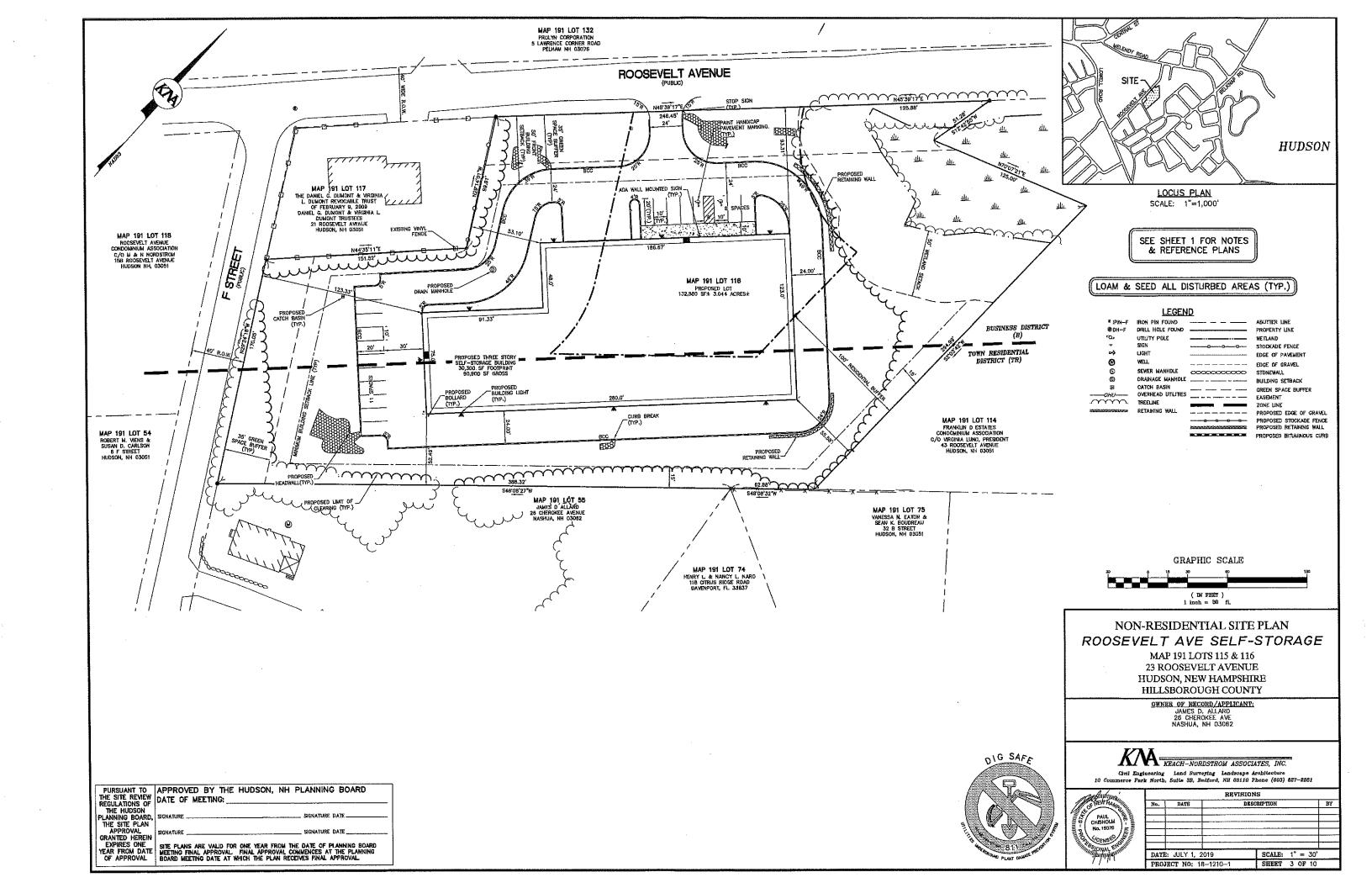


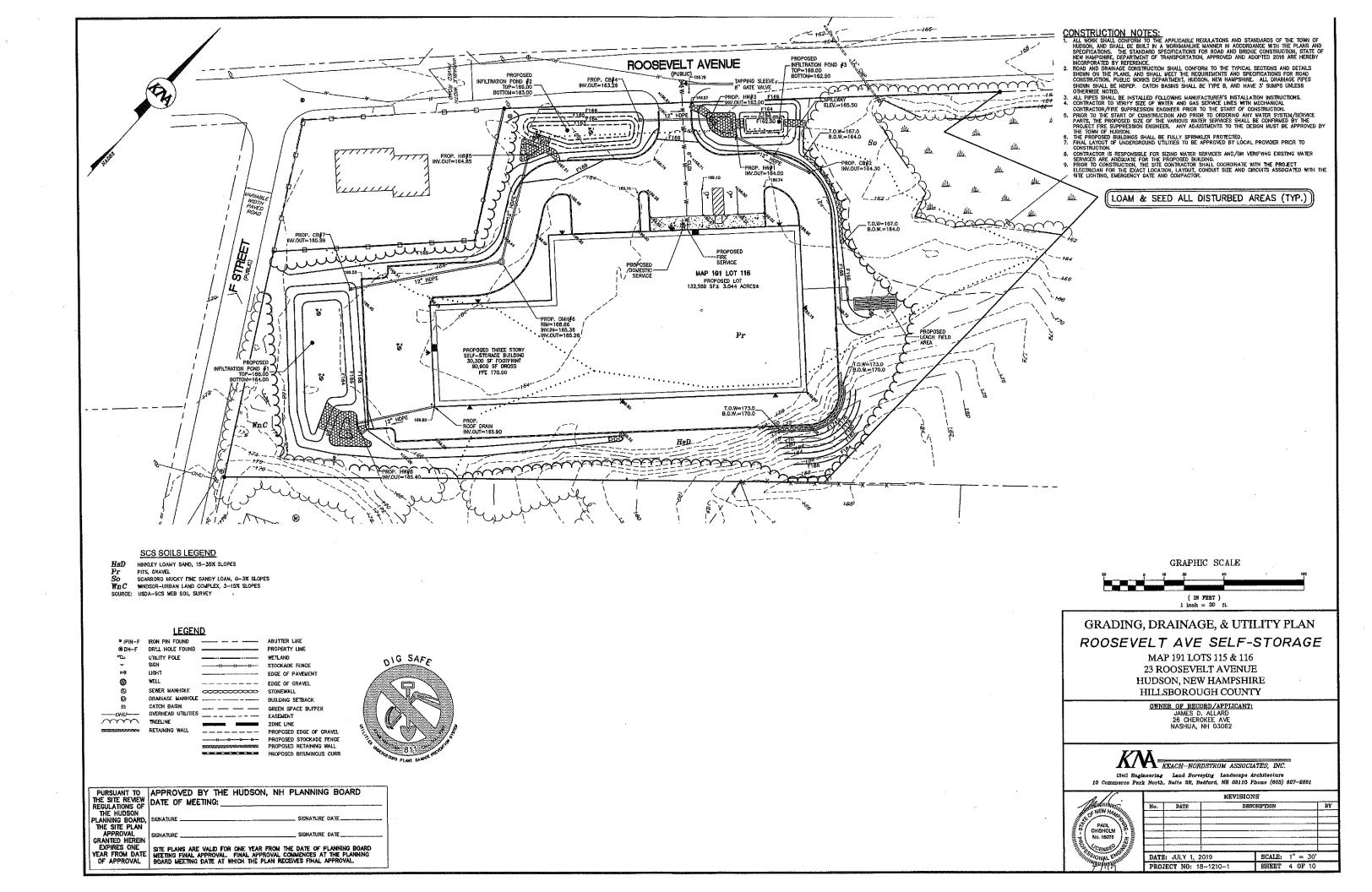
JULY 1, 2019 PROJECT NO. 18-1210-1

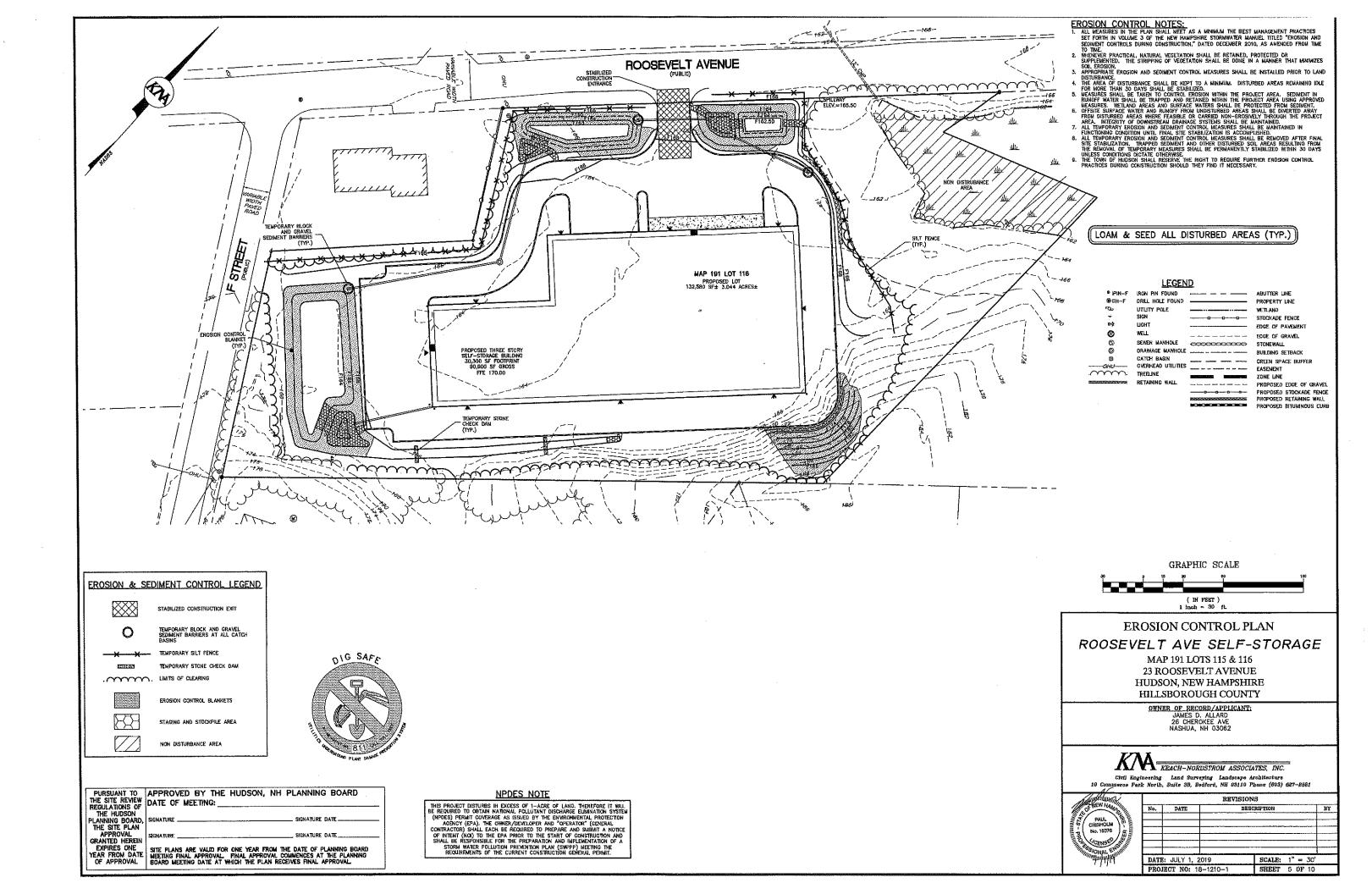
SHEET TITLE	SHEET No.
MASTER SITE PLAN	1
REMOVALS/DEMOLITION PLAN	2
NON-RESIDENTIAL SITE LAYOUT PLAN	3
GRADING, DRAINAGE, AND UTILITY PLAN	4
EROSION CONTROL PLAN	5
LANDSCAPE PLAN	6
LIGHTING PLAN	7
CONSTRUCTION DETAILS	8-10
EXISTING CONDITIONS PLAN (BY S&H LAND SERVICES,	LLC)

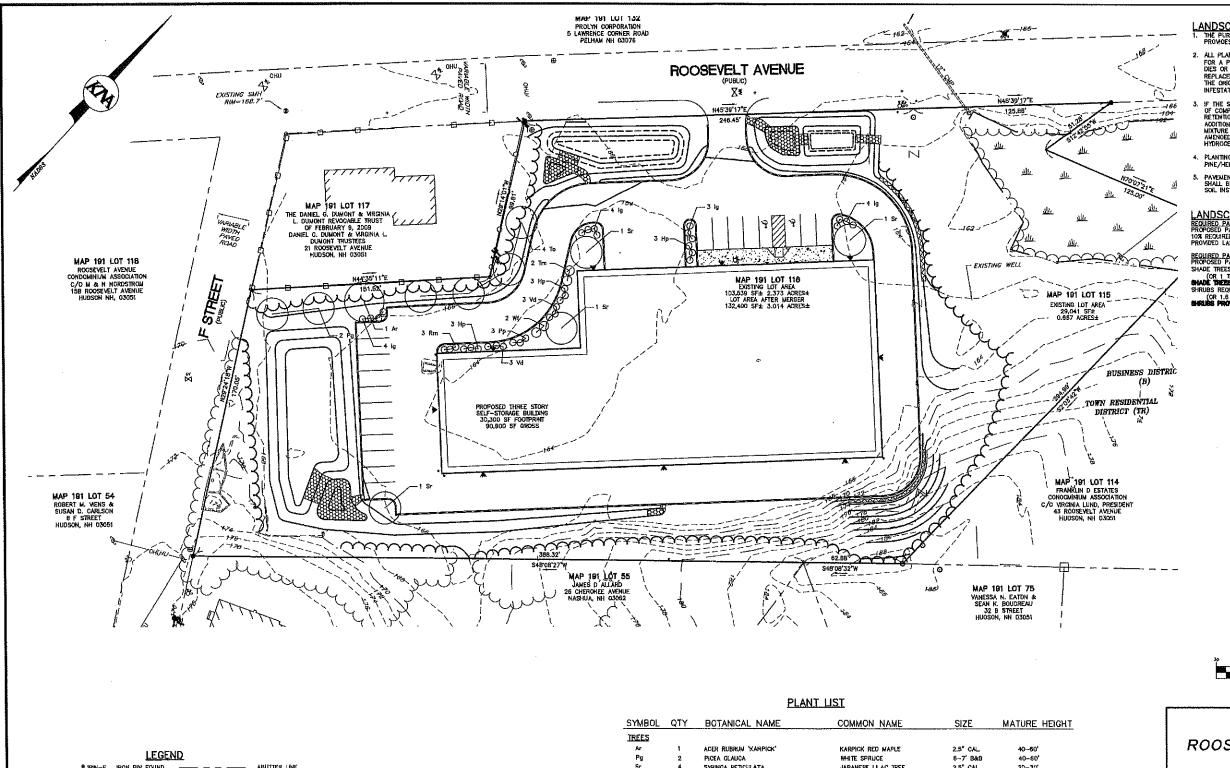












LANDSCAPE NOTES:

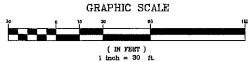
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE LANDSCAPE WHICH PROVICES CLIMATIC RELIEF AND AESTHETIC APPEAL.

- 2. ALL PLANT MATERIALS USED SHALL BE NURSERY STOCK AND SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) "YEAR FROM DATE OF INSTALLATION. ANY MATERIAL WHICH DES OR DOES NOT SHOWN HEALTHY APPEARANCE WITHIN THIS TIME SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE; WITH SAME WARRANTY REQUIREMENTS AS THE ORIGINAL. WARRANTES TYPICALLY DO NOT COVER LOSS DUE TO INSECT INFESTATION OR MECHANICAL DAMAGE (J.E. SNOW STORAGE).
- IF THE SOR CONDITIONS ARE EXTREMELY SANDY, ALL TREES SHALL HAVE A 6" LAYER OF COMPACTED TOPSOIL PLACED IN THE BASE OF THE PLANT PIT AS A MOISTURE RETENTION LAYER. THE PLANT PIT SIDEWALLS SHALL BE OVER EXCAVATED BY AN ADDITIONAL 72" BEYOND THE NORMAL OUTSIDE RADIUS OF THE HOLE. A TOPSOIL MIXTURE SHALL BE USED TO BACKFILL THE HOLE AS FOLLOWED; CROANIC TOPSOIL, AMENOED WITH 10M WOOD ASH, 10M WANUE, 30M PEATMOSS AND A GRANULAR HYDROCEL TO ABSCRB AND RETAIN WATER.
- PLANTING BEDS AND SAUCERS SHALL RECEIVE A 4" MINIMUM THICKNESS OF PINE/HEMLOCK BARK MULCH OVER A 50z, POLYPROPYLENE WEED CONTROL FABRIC.
- PAVEMENT AND ROAD BASE MATERIAL ENCOUNTERED IN ANY LAWN OR PLANTING BED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SUITABLE AMENDED SOL INSTALLED AS SPECIFIED IN THE TUTRE ESTABLISHMENT SCHEDULE.

LANDSCAPE CALCULATIONS
BEQUIRED PARKING LOT INTERIOR LANDSCAPE AREA
PROPOSED PARKING AFEA PAVED:
0904 SP
PROVIDED LANDSCAPE AREA:
0914 SP
PROVIDED LANDSCAPE AREA:
0918 SF

REQUIRED PARKING LOT SHADE TREES AND SHRUBS
PROPOSED PAYED AREA:
9,037 S
SHADE TREES REQUIRED (9,037/1,600):
6 TREES REQUIRED
(CR 1 TREE/5 PROP. PARKING SPACES)
4 TREES REQUIRED
SHRUBS REQUIRED (9,037/200):
45 SHRUBS, CR
(CR 1.6 × 19 PROP. PARKING SPACES)
30 SHRUBS, REQUIRED
46 SHRUBS, CR
(CR 1.6 × 19 PROP. PARKING SPACES)
47 SHRUBS, CR
(CR 1.6 × 19 PROP. PARKING SPACES)
48 SHRUBS, CR
(CR 1.6 × 19 PROP. PARKING SPACES)
49 SHRUBS, CR
(CR 1.6 × 19 PROP. PARKING SPACES)

DIG SAFE



SYMBUL	QIY	BUTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT
TREES					
Ar	1	ACER RUBRUM 'KARIPICK'	KARPICK RED MAPLE	2.5" CAL	40~60'
Pg	2	PICEA GLAUCA	WHITE SPRUCE	57' B&B	40-60"
Sr	4	SYRINGA RETICULATA	JAPANESE LILAC TREE	2.5" CAL.	20-30'
To	4	THUJA OCCIDENTALIS 'NIGRA'	DARK AMERICAN ARBORVITAE	6~7' B&9	20-30
SHRUBS					
Hp	9	HYDRANGEA PANICULATA 'LITTLE LAMB'	LITTLE LAMB PANICLE HYDRANCEA	24	5-6'
lg	15	ILEX OLABRA "SHAMROCK"	SHAMROCK INKBERRY	24"	4-5'
Pρ	3	PICEA PUNCENS 'GLAUCA GLOBOSA'	GLOBAL BLUE SPRUCE	2.5-3' B&B	5-6'
Ron	3	RHODODENDRON MAXIMUM 'ROSEUM'	PINK ROSEBAY RHODODENDRON	2.5-3' 8&8	5-6'
₹m	2	TAXUS MEDIA 'LC BIDBBINK'	BOBBINK YEW	2.5-3 B&B	6-8'
Vd	6	VIBURNUM DENTATUM 'BLUE MUFFIN'	BLUE MUFFIN VIBURNUM	2.5-3' 8&8	6-8'
Wf	2	WEIGELA FLORIDA "WINE & ROSES"	WINE & ROSES WEIGELA	24"	4-5'

LANDSCAPE PLAN ROOSEVELT AVE SELF-STORAGE

MAP 191 LOTS 115 & 116 23 ROOSEVELT AVENUE HUDSON, NEW HAMPSHIRE HILLSBOROUGH COUNTY

OWNER OF RECORD/APPLICANT: JAMES D. ALLARD 26 CHEROKEE AVE NASHUA, NH 03062



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Civil Engineering Land Surveying Landscape Architecture 10 Cogungroe Park North, Suite 3B, Bedford, NH 03110 Phone (603) 027-2831



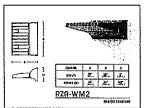
	REVISIONS						
No.	DATE		DESCRIPTION		BY		
							
DATE:	JULY 1, 201	9	SCALE:	1" = 30'			
PROJI	ECT NO: 18-	1210-1	SHERT	6 OF 10			

IRON PIN FOUND ABUTTER LINE PROPERTY LINE UTILITY POLE WETLAND STOCKADE FENCE EDGE OF PAVEMENT WELL. ---- EDGE OF GRAVEL SEWER MANHOLE CCCCCCCCCCC STONEWALL DRAINAGE MANHOLE ---- BUILDING SETBACK CATCH BASIN CREEN SPACE BUFFER OVERHEAD UTILITIES — — — — EASEMENT . TREELINE ZONE LINE PROPOSED EDGE OF CRAVEL RETAINING WALL PROPOSED STOCKADE FENCE

PURSUANT TO THE SITE REVIEW REQUILATIONS OF THE HUDSON OF

LIGHTING NOTES:

- 1. ALL LIGHTS/TIXTURES SHALL BE AS SPECIFIED BY CHARRON LIGHTIME.
- 2. ALL PROPOSED LIGHTS/FIXTURES ARE TO BE FULL CUTOFF.
- FIXTURES SHALL BE MOUNTED AS HEIGHTS AS SPECIFIED IN TABLE.



RAZAR WALL LUMINAIRE LED NOT TO SCALE

PAVED AREAS AROUND BUILDING Illuminance (Fc) Average = 1,20 Maximum = 2.0 Minimum = 0.3Avg/Min Ratio = 4.00

Max/Min Ratio = 6.67

Luminaire Sch	edule			
Symbol	Qty	Label	Arrangement	Description
€	4	10	SINGLE	RZR-WM2-IV-FT-40PLED-700mA-NW-HS/ WALL MTD 20' AFG
€	5	W1	SINGLE	RZR-WM2-III-40PLED-525mA-NW-HS/ WALL MTD 20' AFG

LEGEND ⊜DH-F DRHI HOLF FOUND PROPERTY LINE UTILITY POLE STOCKADE FENCE RIGHT 0 WELL ----- EDGE OF GRAVEL SEWER MANHOLE COCCCCCCCCC STONEWALL DRAINAGE MANHOLE __ BUILDING SETBACK CATCH BASIN GREEN SPACE BUFFER OVERHEAD UTILITIES ____ _ EASEMENT TREELINE ZONE LINE ----- PROPOSED EDGE OF GRAVEL PROPOSED STOCKADE FENCE

ABUTTER LINE

EDGE OF PAVENENT

DIG SAFE

WETLAND

CHARRON

P.O, BOX 4950 MANCHESTER, MH 03108 (B03) 524-4627 FAX (B03) 824-8764 BALES@CHARRONINC,COM

LIGHTING PLAN

ROOSEVELT AVE SELF-STORAGE

BRIGHTER

MAP 191 LOTS 115 & 116 23 ROOSEVELT AVENUE HUDSON, NEW HAMPSHIRE HILLSBOROUGH COUNTY

OWNER OF RECORD/APPLICANT: JAMES D. ALLARD 26 CHEROKEE AVE NASHUA, NH 03062



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		REVISIONS	
No.	DATE	DESCRIPTION	BY
\dashv			
			_
			_
DATE	JULY 1, 2019	SCALE: 1" = 30'	
PROJ	ECT NO: 18-12	10-1 SHEET 7 OF 10	

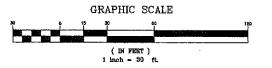
PURSUANT TO THE SITE REVIEW REQUILATIONS OF THE HUDSON, NH PLANNING BOARD DATE OF MEETING:

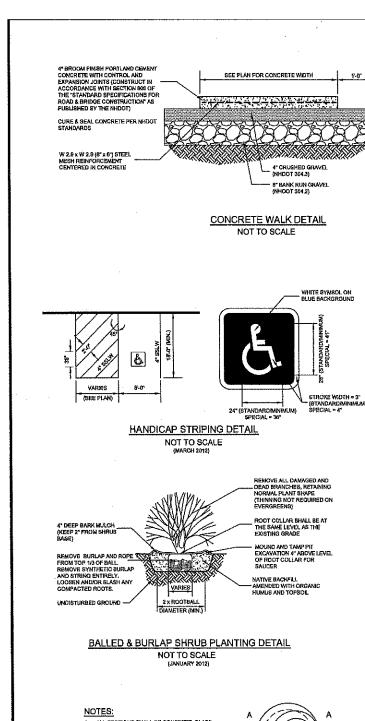
THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HERBIN EXPRES ONE YEAR FROM DATE

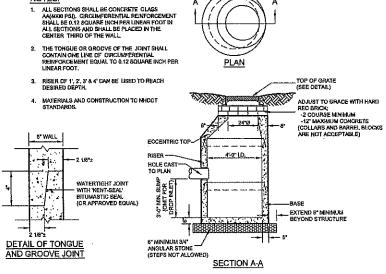
OF APPROVAL BOARD SIGNATURE DATE

SIGNATURE SIGNATURE DATE

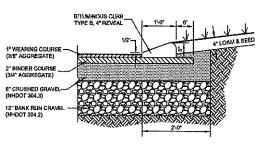
SIGNATURE THE PLANS ARE VALID FOR ONE YEAR FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING FINAL APPROVAL.







PRECAST REINFORCED CATCH BASIN



4" DEEP BARK MULCH

CUT AWAY BURLAP AND ROPE FROM TOP OF BALL, REMOVE SYNTHETIC BURLAP AND STRING ENTIRELY.

LOGSEN AND/OR SLARH ANY

STAKE TO BE 18" BELOW . TREE PIT IN UNDISTURBED GROUND

VARIES 2 x ROOTBAL

EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

CURB BREAK DETAIL

NOT TO SCALE

GEOTEXTILE FABRIC (OF APPROVED EQUAL)

HUB STAKE -

BITUMINOUS CURB TYPE B DETAIL NOT TO SCALE

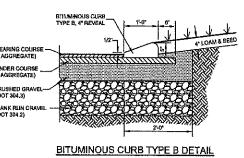
NOTE: GUYING AND STAKING TO BE DETERMINED IN THE FISLO BY THE LANDSCAPE ARCHITECT, LOCAL FIELD CONDITIONS AS WELL AS PLANT CHARACTERISTICS MIL DETERMINE THE NECESSITY OF GLYING AND STAKING.

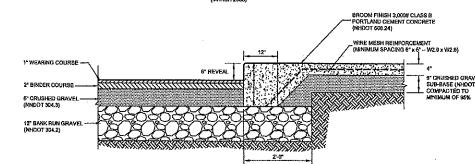
4'x12" PLASTIC FLAG SECURED

ROOT COLLAR SHALL BE AT THE BAME LEVEL AS THE EXISTING GRADE

MOUND AND TAMP PIT

OF ROOT COLLAR FOR SAUCER





DRIVEWAY AND PARKING LOT SECTION

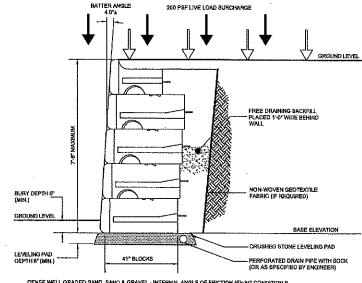
NOT TO SCALE

3" HOT BITUMINOUS PAVEMENT (NHPOT 403.11) 1" THICK 318" AGGREGATE WEARING COURSE 2" THICK 3/4" AGGREGATE BINDER COURSE

6" CRUBHED GRAVEL COMPACTED TO MINIMUM OF 85% (NHDOT 304.3)

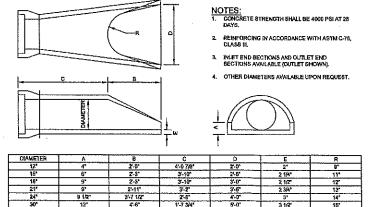
12" GRAVEL COMPACTED TO MINIMUM OF 65% (HHDOT 304.2)

INTEGRAL CURB AND WALK DETAIL NOT TO SCALE



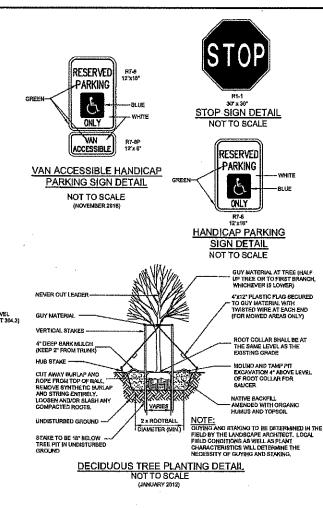
DENSE WELL GRADED SAND, SAND & GRAVEL - INTERNAL ANGLE OF FRICTION (F)=34° COMUNTON B - NO BACK SLOPE, 250 PSF LIVE LOAD SURCHARDE 7'-8" GRAVITY WALL 41" GRAVITY BLOCKS

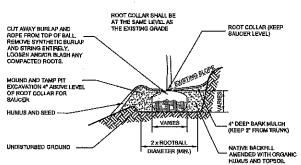
> REDI-ROCK WALL NOT TO SCALE



- 4" LOAM & SEED

RCP FLARED END SECTION DETAIL NOT TO SCALE





TYPICAL PLANTING PIT ON SLOPE 4:1 OR GREATER NOT TO SCALE (JANUARY 2012)

CONSTRUCTION DETAIL ROOSEVELT AVE SELF-STORAGE

MAP 191 LOTS 115 & 116 23 ROOSEVELT AVENUE HUDSON, NEW HAMPSHIRE HILLSBOROUGH COUNTY

> OWNER OF RECORD/APPLICANT: JAMES D. ALLARD 26 CHEROKEE AVE NASHUA, NH 03062

KEACH-NORDSTROM ASSOCIATES, INC. Civil Engineering Land Surveying Landscape Architecture nmercs Park North, Suits 35, Bedford, NH 05110 Phone (603) 527–2861



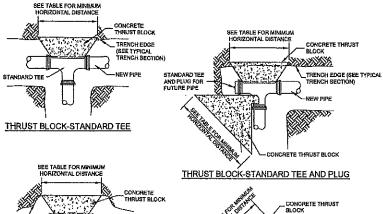
REVISIONS DATE DESCRIPTIO DATE: JULY 1, 2019 SCALE: PROJECT NO: 18-1210-

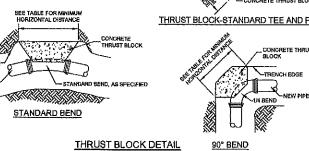
CONSTRUCTION SPECIFICATIONS:

- THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- 2. THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC,
- WOVEN YIRE FENCE SHALL BE FASTENED BECURELY TO THE FENCE POSTS WITH WIRE TIE OR STAPLES WHERE NOTED OR AS DIRECTED BY DESIGN ENGINEER.
- WHEH TWO BECTIONS OF FILTER GLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPEO BY 8 INCHES, FOLDED AND STAPLED.
- 6. FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 15 INCHES 8 ATO THE GROUND, WOOD POSTS SHALL BE OF SOUND QUALITY HATDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

MAINTENANCE:

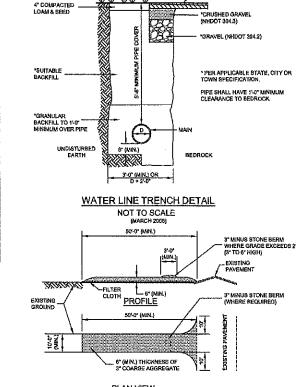
- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY CURINO PROLONDED RAINFALL ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- If the Pabric oh a silt fence should decompose or become ineffective during the expected life of the fence, the Pabric shall be replaced promptly.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT, THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE
- SEDIMENT DEPOSITS THAT ARE REMOVED ON LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND





NOT TO SCALE

THRUST BLOCK TABLE HORIZONTAL DISTANCE IN SAND OR IN ROCK SPLAVEL IN HOUR 2-0" 2-0" 2-0" 2-0" 22 1/2" BEND OR LESS 45" BEND 4:6" 3:0" 2:0" 2:0"



PLAN VIEW

STABILIZED CONSTRUCTION EXIT DETAIL NOT TO SCALE

MAINTENANCE:

AND AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE CRUSHED STONE AND THE EFFECTIVENESS OF THE CRUSHED STONE PAD WILL NOT BE SATISFACTORY. WHEN THIS COCURS, THE PAD SKOULD BE TROPECESSED WITH THE CRUSHED STONE OF COMPACTED FROM THE PAD BECOMES COMPLETELY.

IF WASHING FACILITIES ARE USED, THE SEOIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIOCROUS STAIND OF VEGETATION AT ALL TIMES.

CONSTRUCTION SPECIFICATIONS:

- STONE FOR A STABILIZED CONSTRUCTION EXIT SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE OR RECYCLED CONCRETE EQUIVALENT.
- THE LENGTH OF THE STABILIZED EXIT SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.
- 3. THE THICKNESS OF THE STONE FOR THE STABILIZED EXIT SHALL NOT SELESS THAN 6 INCHES.
- 4. THE WIDTH OF THE EXIT SHALL NOT BE LESS THAN THE FULL WIDTH OF THE AREA WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER CLOTH SMALL, BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SWIGLE FAMILY RESIDENCE LOT.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION EXIT SHALL BE PIPED BENEATH THE EXIT. IF PIPIND IS IMPRACTICAL, A BERM WITH 6:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY SE SUBSTITUTED FOR THE PIPE.
- 7. THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR PLOWING OF GEDINALT ONTO THE BIT STREET BY ANY THE MAY RECURRED FROM THE PREVIOUS TRANSPORT OF THE ADDITIONAL STONE AS CONDITIONAL OF THE BIT STONE AS
- WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RICHTS-OF-WAY, WHEN WASHING IS RECUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPINO DEVICE.

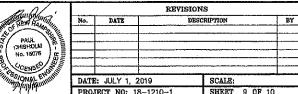
CONSTRUCTION DETAIL ROOSEVELT AVE SELF-STORAGE

MAP 191 LOTS 115 & 116 23 ROOSEVELT AVENUE HUDSON, NEW HAMPSHIRE HILLSBOROUGH COUNTY

OWNER OF RECORD/APPLICANT: JAMES D. ALLARD 26 CHEROKEE AVE NASHUA, NH 03062

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Civil Engineering Land Surveying Landscape Architecture 10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 027-P881



TURF ESTABLISHMENT SCHEDULE

PURPOSE:
TO ESTABLISH AND MAINTAIN PERMANENT AND TEMPORARY TURF AREAS, RESTURE
GROWTH TO EXISTING TURF AREAS DISTURBED DURING CONSTRUCTION AND CONTROL SOIL
EROSIDM.

- PREPARATION AND EXECUTION:

 1. RAKE THE SUBGRADE OF ALL AREAS TO BE LOAMED AND SEEDED TO REMOVE RUBBISH, STICKS, ROOTS AND STOKES LARGES THAN 1 INCH.

 2. PLACE LOAM OVER AREAS TO BE SEEDED AND SPREAD.

 3. PIRK ORDER SUBGRADE AND SUPPLIEMENT WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNDER SUBGRADE IN SUBJECT HIS WITH SUITABLE LOAM WHERE NEEDED TO CREATE A UNDER SUBGRADE IN SURFACE ACCORDING TO THE FINISH GRADES INDICATED; TOP AND BOTTOM OF SLOPES SHALL BE ROUNDED. NO LOAM SHALL BE SPREAD IF THE SUBGRADE IS DECESOIVELY WIT TO REPOZEN.

 4. IF THE BY HO FTHE SOIL MEEDS TO BE RUSSED, APPLY LIKE EVENLY OVER LOAM SURFACE AND HOT THE OBSTITUTE HEADER. AND THE LOAM SURFACE AND HAVE THE DEPTH OF THE SUBJECT TO BE SEEDED BASED ON EXAMINATION DO FROM THE DEPTH OF THE SUBJECT THE SUBJECT TO BE SEEDED BASED ON EXAMINATION OF PROJECT THANS. UNITED BASED THE SEED BY BROADCASTING OR HYDROSEEDING, IF BROADCASTING, LIGHTLY RAKE INTO THE FREPARED SURFACE AND HOLL. IF, HYDROSE SUBJECT USES THE RECOMMENDER PARE OF INDICATANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITHIN FINE SPRAY.

 7. SEEDING AND INTUIT, FERTILIZING SHALL BE DONE BURNEDED RATE OF INDICATANT. AFTER SEED IS SPREAD, WATER THOROUGHLY WITHIN FINE SPRAY.

 7. SEEDING AND INTUIT, FERTILIZING SHALL BE DONE BURNEDED RATE OF INDICATANT. AFTER SEED IN STREAM WATER THE RECOMMENDER PARE OF INDICATANT. AFTER SEED IN STREAM WATER THE RECOMMENDER PARE OF INDICATANT AFTER SEED IN THE SEED IN SET WERE AND INTOREST THE SEED IN STALL BY HOURS SHALL BE DONE BURNING MACCHINETING THAN AND HOT DEED AND EXCELLED THE SEED IN SECRED SHALL NOT BE DONE BURNING WHAT HE RESON OF SERVICE ON OTHERWISE UNTILLABLE.

 8. WITHIN 31 HOURS AND SERVED ON RESSEEDED.

 9. PROTECT AND PREVENT AGAINST WASHOUTS, ANY WASHOUTS WHICH OCCUR SHALL BE PROMPTLY REGARDED ON RESSEEDED.

 10. WHEN IT IS IMPRACTICAL TO STABLISH PERMANENT GROWTH ON DISTURBED EARTH BY OUTDING THE TRAN CANDON SEED WHEN THE PROMPTLY REGARDED ON RESSEEDED.

 10. WHEN IT IS IMPRACTICAL TO STABLISH PERMANENT GROWTH ON DISTURBED EARTH BY OUTDING

MAINTENANCE:
ALL SEEDED AREAS SHALL BE KEPT WATERED AND IN GOOD CONDITION. RESEED AS NECESSARY TO ESTABLISH NEALTHY UNFORM GROWTH OVER THE ENTIRE SEEDED AREA MAINTAIN SEEDED AREAS IN AN APPROVED CONDITION UNTIL RINAL ACCEPTANCE. MAINTENANCE SHALL INCLUDE KERARS FOR CHAMAGE CAUSED BY EROSION.

APPLICATION RATES:

1. LOAM SHALL BE APPLIED AT A MINIARAL COMPACTED THICKNESS OF 4 INCHES.

2. LINE SHALL BE USED WHEN NECESSARY TO RAISE THE 6H OF THE SOIL AND APPLIED AT DIVE OF THE FOLLOWING RATES:

EXISTING SOIL Ph	TONS/AGRE	POUNDS/CUBIC YARD
4.0 - 4.4	3	12
4.5 - 4.9	2	8
5.0 - 5.4	1	4

INITIAL APPLICATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-10-10	20.0	1.0
15-16-15	13.4	1.5
19-19-19	10.5	1.9
REFERTILIZATION	POUNDS/1,000 SF	MEASUREMENT FACTOR
10-3-0	20.0	1.0
12-2-8	16.7	1.2
12-4-8	16.7	1,2

- VALUE BHALL BE FROM 5.5 TO 7.6.
- VALUE SHALL BE FIGH SO TO 7.6.

 2. LIME SHALL BE FIGH S. TO 7.6.

 2. LIME SHALL BE FIGH S. TO 7.6.

 2. LIME SHALL BE FIGH S. TO 7.6.

 3. LIME SHALL BE FIGH S. TO 7.6.

 3. LIME SHALL BE FIGH S. TO 7.6.

 3. LIME SHALL BE STANDARD SO THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND SHALL CONFORM TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS AND SHALL COMPLY WITH ALL STATE AND FEDERAR RULES AND REGULATIONS.

 3. FERTILIZER SHALL BE STANDARD COMMERCIAL GROUP FERTILIZER CONFORMING TO ALL STATE AND FEDERAR RULES AND REGULATIONS AND TO THE STANDARDS OF THE ASSOCIATION OF OFFICIAL AGRICULTURAL CHEMISTS. EXCEPT AS PERMITTED, THE ANALYSIS RATIO SHALL BE 11:1 FOR INITIAL APPLICATION AND 91:2 FOR REPERTILIZER ON APPLICATION.

 4. GRASS SEED BHALL MEET THE REQUIREMENTS OF THE NEW HAMPSHIRE AGRICULTURAL AND VECETABLE SEED LIMES AND SHALL LOUDEN OF PRIMARY NOXIOUS WHEED SEEDS.

 5. SRED MIXTURE FOR LAWN AREAS SHALL CONSIST OF THE FOLLOWING:

	KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMANATION (%)	POUNDS/ACRE (TOTAL 120 POUNDS)
	CREEPING RED FESCUE	96	85	40
	PERENNIAL RYEGRASS	98	90	50
	KENTUCKY BLUEGRASS	97	86	25
	REDTOP	95	BC .	5
Dλ	IXTURE FOR SLOPE AREA	S SHALL CONSIST OF TH	IE FOLLOWING:	
	KIND OF SEED	MINIMUM PURITY (%)	MINIMUM	POUNDS/ACRE

KIND OF SEED	MINIMUM PURITY (%)	MINIMUM GERMANATION (%)	POUNDS/ACRE (TOTAL 95 POUNDS
CREEPING RED FESCUE	96	85	35
PERENNIAL RYEGRASS	98	90	30
REDTOP	95	08	5
ALSIKE CLOVER	E77	90	5
BIRDSFOOT TREFOIL	89	80	В
ANCE-LEAVED COREOPSIS	96	80	4
OXEYE DAISY	95	80	3
BLACKEYED SUSAN	95	80	4
WILD LUPINE	95	80	4

EMPORARY SEEDING NIXTURE SHALL BE APPLIED AT A RATE OF 2 POUNDS PER 1,000 SF AND SHALL E AN APPROVED CONSERVATION MIX OR CONSIST OF THE FOLLOWING: 15% BLACKWELL OR SHELTER SWITCHGRASS 30% MAGRA OR KAW BIG BLUESTEM

- 30% CAMPER OR BLAZE LITTLESTEM
 15% NE-27 OR BLAZE SAND LOVEGRASS
 10% VIKING BIRGSFOOT TREFOL.
 INCOLLIM SPECIFIC TO BIRDSFOOT TREFOL MUST BE USED WITH THIS MIXTURE. IF BEEDING
 BY HAND, A STICKING AGENT SHALL BE USED. IF SEEDING WITH A HYDROSEEDER, USE FOUR
 TIMES THE RECOMMENDED ANOUNT OF INCOLUM.
 8. SEED MIXTURE FOR STORMWATER MANAGEMENT ANEAS, INCLUDING DETENTION BASINS AND
 VEGITATED TREATMENT SWALES, SHALL BE APPLIED AT A PATE OF 70 POUNDS PER AGRE OR 1.9
 POUNDS PER 1,003 SF, AND SHALL CONSIST OF THE FOLLOWING:
 15% SWITCH GRASS
 15% FOX SEDICE
 15% CREEPING BENTGRASS
 15% FOX SEDICE
 15% CREEPING BENTGRASS
 10% FLATPEA
- 197. UNCETHING DENTANCES
 10% FLATTER
 20% WILDOFLOWER VARIETY
 9. STRAW USED FOR MULCH SHALL CONSIST OF MOWED AND PROPERLY CURED GRASS OR LEGUME
 MOWINGS, FREE FROM WEEDS, TWIGS, DEBRIS, INVASIVE SPECIES DR OTHER DELETERIOUS
 MATERIAL AND ROT OR MOLD.

- SOD SPECIFICATIONS:

 BOD SHALL BE PROVIDED WITH A STRONG ROOT SYSTEM, NOT LESS THAN TWO YEARS OLD AND SHALL BE FREE OF ANY UNDESPABILE NATIVE GRASSES OR WEEDS.

 SOD SHALL BE MACHINE OUT TO A THICKNESS HOT LESS THAN 3K°, EXCLUDING THATCH, AND SHALL BE CAPABLE OF VIGAROUS GROWTH WHEN PLANTED.

 SHOP ADD SHALL BE OF VIGAROUS GROWTH WHEN PLANTED.
- VARIETIES.

 4. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS, DO NOT OVERLAP. STAGGER STRYS TO OFFSET JOINTS IN ADJACENT COURSES. TAMP SOD TO ENSURE CONTACT WITH WITH SOIL.

 5. WATER WITHIN ONE HOUR OF PLANTING WITH A FINE SPRAY.

PIPE OUTLET TO FLAT AREA WITH NO DEFINED CHANNEL NOT TO SCALE

SECTION A-A

GEOTEXTILE FABRIC O

PLAN

LOCATION	La	W1	W2	d50	нтчва
SEXPLENT FOREBAYS	SGE PLAN	SEE PLAN	SEE PLAN	3*	8,

(MAHCH 2008)						IMMEDIATELY, THE CHANNEL IMME SHOULD BE CHECKED TO SEE THA
101	La	W1	W/2	₫50	DEPTH	DOWNSTREAM CHANNEL SHOULD ! SUCH AS FALLEN TREES, DEBRIS, A
REBAYS	SGE PLAN	SEE PLAN	SEE PLAN	3*	8,	FLOW PATTERNS AND/OR TAILWATE

90° BEND

MAINTENANCE;

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY
AND AFTER EVERY MAJOR RAIN EVENT. IF THE RIP RAP HAS BEEN
DISPLACED, UNDERMINED, OR DAMAGED, IT SHOULD BE REPAIRED
(MANEDIATELY, THE CHANNEL IMMEDIATELY BELOW THE OUTLET
SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE
DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS
SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULO CHANGE
FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES, REPAIRS
NUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE
TO THE OUTLET PROTECTION APRON.

TABLE 7-24 -- RECOMMENDED RIP RAP GRADATION RANGES

THE ROCK OR GRAVEL USED FOR FILTER OR RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.

3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP RAP. DAMAGED ARPAS BY THE FABRICS HALL BE REPAIRED BY PLACIFID A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVER ILA'S REQUIRED FOR REPAIRS OR JONING TWO PIECES OF FABRIC SHALL BE A MINIMAM OF 12 INCHES.

4. BYONE FOR THE RIP RAP MAY BE PLACED BY EDUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THOMRESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION

CONSTRUCTION SPECIFICATIONS:

SIZE OF STONE

1.5 TO 2.0 dSB

CONSTRUCTION SEQUENCE

- CONSTRUCTION SEQUENCE

 CONTAGOR TO NOTIFY DIG-SAFE 72-HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

 PRIOR TO GRUSSING OF GLEAVED AREAS, ALL SILTATION BARRIERS DESIGNED FOR USE AS TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED AS CALLE DE FOR ON PROLECT FLAMS, INSTALL STABILIZED CONSTRUCTION EXT AT LOCATION OF INTERSECTION WITH EXISTING PAVENERY.

 CUIT AND CLEAR TREES AND BRUSH FROM CONSTRUCTION AREAS TO THE EXTERN NECESSARY. ALL BRANCHES, TOPS AND BRUSH TO BE PROPERLY DISPOSED OF BY CONTRACTOR. THIS PROJECT IS MANAGED TO MEET THE REGUREMENTS AND INTERT OF RAS A9053 AND ASS 380 RELATIVE TO INVASIVE SPECIES.

 COMPLETE GRUSSING OPERATIONS UNDER THE ROADWAY AND SLOPE SECTIONS. ALL STRUPS AND SINILAR DEBRIS SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR. ORGANIC MATERIAL SUTHABLE FOR USE AS TOOLS, SHALL BE STOCKPILED IN UPLAND AREAS. ALL STOCKPILES SHALL BE SEEDED WITH WINTER RYE AND, IF NECESSARY, SURROUNDED WITH AY BALES IN ORDER TO PREVENT LOSS DUE TO EPOSION.

 CROSSINGS SHALL BE PROTECTED WITH HAY BALE BRAPIERS TO LIMIT EROSION.

 STABILIZE ALL DITCHLINES AND FONDS PRIOR TO DIRECTING FLOW INTO THEM, CONSTRUCT DRAINAGE SYSTEM SEVERS AND OTHER SUSSURFACE MUITHER.

- CROSSINGS SHALL BE PROTECTED WITH HAY BALE BARRIERS TO LIMIT EROSICIO.

 STABILEZ ALL GITCH LINES AND PONDS PRIOR TO DIRECTING FLOW INTO THEM, CONSTRUCT DRAINAGE SYSTEM SEWER AND OTHER SUBSURFACE UTILITIES.

 COMMENCE CONSTRUCTION OF ROADWAY, PERFORA EXCANATION ACTIVITES REQUIRED TO ACHIEVE BUBGRADE ELEVATION. ALL EXCANATED BERANNEMENTS, DITCHES, SWALES AND ROADWAY CROSS CULVERTS SHALL BE INSTALLED AND STRAILEZIO. ALL SWALES AND INTOHINES SHALL BE PROTECTED FROM EROSION BY IMPLEMENTATION OF HAY BALE SILTATION FENCES AS SHOWN ON PROJECT PLANS. DIVERT STORMWATER RUNOFF THROUGHT HE USE OF TEMPORARY CULVERTS, OR OTHER MEANS INCESSARY PRIOR TO THE COMPTIONS OF A FUNCTIONAL STORM DRAINAGE SYSTEM. SLOPES AND EMBANDASINTS SHALL BE STABILIZED BY TRACKING AND TEMPORARY SECONIC WITH WITH RIFY PRIOR TO TUTHE BYTABLISHMENT. ALL DITCHES AND SWALES SHALL BE STABILIZED FROM THE WITH WITH RIFY PRIOR TO TUTHE BYTABLISHMENT. ALL DITCHES AND SWALES SHALL BE STABILIZED CONSTRUCTION OF PROJECTED TO THEM.

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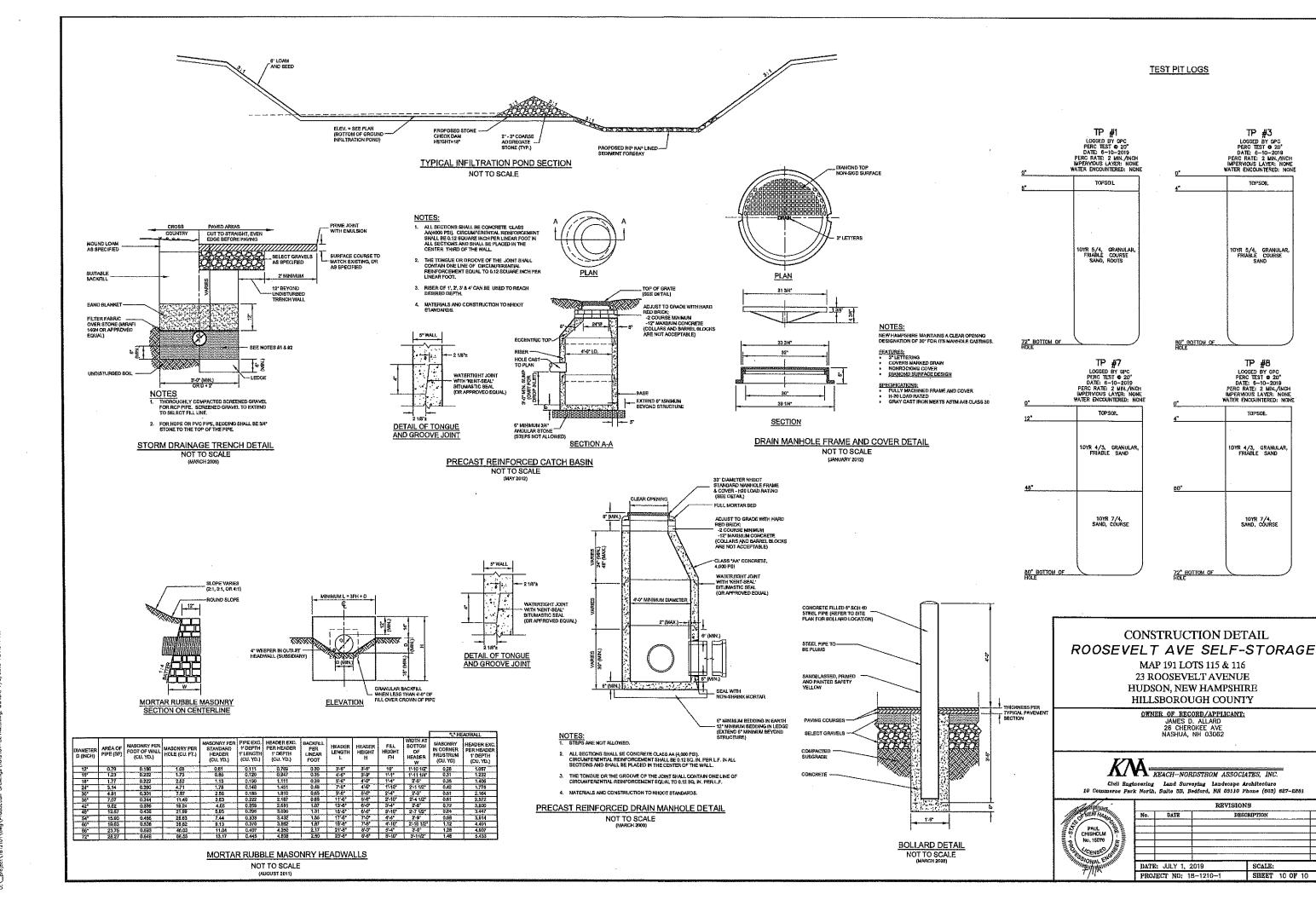
 APPLY TOPSOIL TO ROADWAY SLOPES AND OTHER REAS DISTURBED BY CONSTRUCTION. TOPSOIL IDEED MAY BE NATIVE ORGANIC MATERIALS CREENED SO AS TO BE FREE OF ROOTS, BRANCHES, STONES AND OTHER DELETERIOUS MATERIALS. TOPSOIL IGNALL SE PRIVED SO AS TO PROVIDE A MINIMALM OF A A-ROCK COMPACTED THEMSELS. UNDER CHARLES OF THE PROPERT OF THE SECTIONS OF WORK ON A REGULAR RASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BECOME ESTABLISHED.

 19. PRAPORM FINE GRADING PROJOWAY BASE BATERIALS.

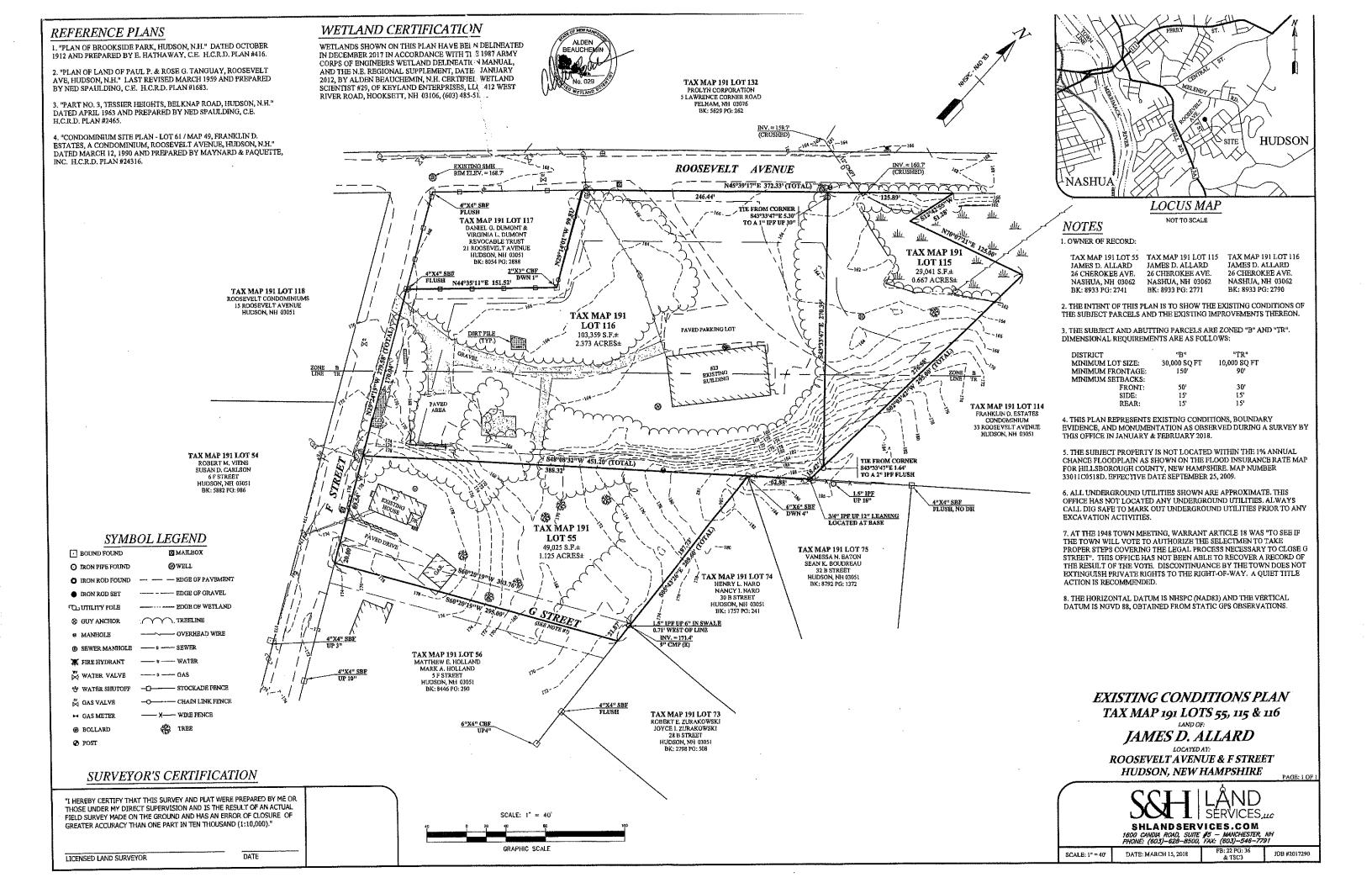
 11. MANTAIN, REPAIR AND REPLACE AS RECESSARY TEMPORARY BROSON CONTROL MEASURES UNTIL A HEALTHY STAND OF GRASS HAS BEEN OF WORK ON A REGULAR RASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BEEN OF WORK ON A REGULAR RASIS AND REMEDY ANY PROBLEM AREAS UNTIL A HEALTHY STAND OF GRASS HAS BEEN OF WORK ON A GROUNAY EMBANDAMENTS, SUCH TIME AS THE ENTIRE CONSTRUCTION AREAS HAS BEEN STABLISHED.

 19. PRAPORM FINE GRADING OF ROADWAY BASE BATERIALS

- STSTEMS AND DITLITIES. ALL DIVEWAYS ALROSS DITLITIES SHALL HAVE COLVERTS INSTALLED IN ALCORMANCE.
 WITH LOCAL REQUIREMENT HAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE
 ROADWAY HAS THE ASEC COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE

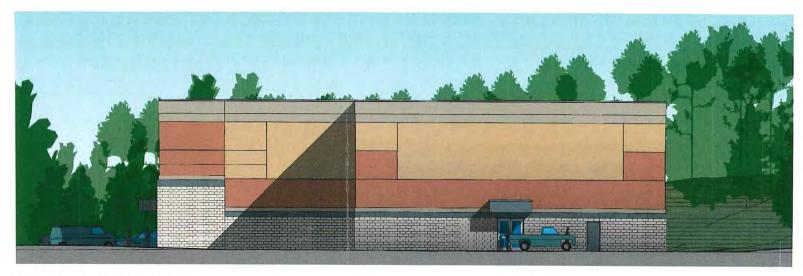


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Conceptual North Elevation



Conceptual West Elevation



Conceptual Northwest Perspective

Jim Allard Contracting, LLC