

NONRESIDENTIAL SITE PLAN APPLICATION
City of Rochester, New Hampshire

Date: 05/07/19 Is a conditional use needed? Yes: No: x Unclear:
(If so, we encourage you to submit an application as soon as possible.)

Property information

Tax map #: 0106; Lot #(s): 0003; Zoning district: NMU

Property address/location: 201 Highland Street, Rochester, NH

Name of project (if applicable): BlueBird Storage

Size of site: 5.81 acres; overlay zoning district(s)?

Property owner

Name (include name of individual): Bill Goodison, 201 Storage, LLC

Mailing address: 125 Ocean Road, Greenland, NH 03840-2409
bill.goodison@

Telephone #: 203-988-5247 Email: bluebirdstorage.com

Applicant/developer (if different from property owner)

Name (include name of individual): Fuss & O'Neill, Inc., Rick Lundborn, PE

Mailing address: 5 Fletcher St., Ste 1, Kennebunk, ME 04043

Telephone #: 207-363-0669 x2314 Email: rlundborn@fando.com

Engineer/designer

Fuss & O'Neill, Inc.
Name (include name of individual): Rick Lundborn, PE

Mailing address: 5 Fletcher Street, Ste 1, Kennebunk, ME 04043

Telephone #: 207-363-0669 x2314 Fax #:

Email address: rlundborn@fando.com Professional license #: 10943

Proposed activity (check all that apply)

New building(s): x Site development (other structures, parking, utilities, etc.):

Addition(s) onto existing building(s): Demolition: Change of use:

Removal of 1 story 2,800 sf storage
Describe proposed activity/use: building and 600-sf section of another.
Construction of 171x106, 18,126 sf, 2-story climate
controlled building.

Describe existing conditions/use (vacant land?): Currently used as self
storage and paved access areas.

Utility information

City water? yes X no ; How far is City water from the site? On site

City sewer? yes no X; How far is City sewer from the site?

If City water, what are the estimated total daily needs? gallons per day

If City water, is it proposed for anything other than domestic purposes? yes no X

If City sewer, do you plan to discharge anything other than domestic waste? yes no

Where will stormwater be discharged? Porous pavement & an existing swale

Building information

Type of building(s): Metal Frame

Building height: <35 ft Finished floor elevation: 248.00

Other information

parking spaces: existing: total proposed: ; Are there pertinent covenants?

Number of cubic yards of earth being removed from the site N/A

Number of existing employees: ; number of proposed employees total:

Check any that are proposed: variance ; special exception ; conditional use

Wetlands: Is any fill proposed? No; area to be filled: ; buffer impact? No

Proposed <i>post-development</i> disposition of site (should total 100%)		
	Square footage	% overall site
Building footprint(s) – give for each building	Bld(1) 27,782sf, Bld(2) 24,128sf Bld 3) 1,800sf, Bld(4) 2,800sf Bld(5) 18,126 sf	29.5
Parking and vehicle circulation	60,604	24.0
Planted/landscaped areas (excluding drainage)	19,163	7.6
Natural/undisturbed areas (excluding wetlands)	78,941	31
Wetlands	19,441	77
Other – drainage structures, outside storage, etc.		

Comments

Please feel free to add any comments, additional information, or requests for waivers here:

Submission of application

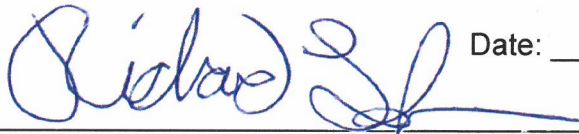
This application must be signed by the property owner, applicant/developer (if different from property owner), and/or the agent.

I(we) hereby submit this Site Plan application to the City of Rochester Planning Board pursuant to the City of Rochester Site Plan Regulations and attest that to the best of my knowledge all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As applicant/developer (if different from property owner)/as agent, I attest that I am duly authorized to act in this capacity.

Signature of property owner: _____

Date: _____

Signature of applicant/developer: _____



Date: _____

Signature of agent: _____

Date: 05/07/19

Authorization to enter subject property

I hereby authorize members of the Rochester Planning Board, Zoning Board of Adjustment, Conservation Commission, Planning Department, and other pertinent City departments, boards and agencies to enter my property for the purpose of evaluating this application including performing any appropriate inspections during the application phase, review phase, post-approval phase, construction phase, and occupancy phase. This authorization applies specifically to those particular individuals legitimately involved in evaluating, reviewing, or inspecting this specific application/project. It is understood that these individuals must use all reasonable care, courtesy, and diligence when entering the property.

Signature of property owner: _____

Date: _____



May 7, 2019

Seth Creighton, City Planner
Planning Department
City Hall Annex
33 Wakefield Street
Rochester, NH 03867

RE: Narrative; Site Plan Application, 201 Storage, LLC (Bluebird Storage)
201 Highland Street / Route 202
Fuss & O'Neill Reference No. 20181369.A10

Dear Mr. Creighton:

Fuss & O'Neill is assisting 201 Storage, LLC with preparation of site plan and permitting materials for an expansion to the Bluebird Self-storage facility located at 201 Highland Street, owned by 201 Storage, LLC. The following is a narrative of what currently exists and what is being proposed.

Existing

Today the Bluebird Self-storage facility consists of 5 storage buildings.

- Building 1 has a 27,782-sf footprint, is 1 story and climate controlled
- Building 2 has a 24,128-sf footprint, is 1 story and climate controlled
- Building 3 has a 1,800-sf footprint and is 1 story
- Building 4 has a 2,800-sf footprint and is 1 story
- Building 5 has a 2,800-sf footprint and is 1 story

These buildings are provided access by a porous pavement driveway area. The porous pavement also acts as the stormwater treatment and control for the property.

Utilities

- Water; The site is serviced by City Water from Highland Street
- Sewer; Building 1 is serviced by a septic system
- Electric, Telecommunications; the site is serviced by underground electric and telecommunications that enter the site via easement from the Woodland Green Condominiums site
- Gas; the Site is serviced by Natural Gas that enter the site via easement from the Woodland Green Condominiums site

5 Fletcher Street, Suite 1
Kennebunk, ME 04043
207.363.0669

www.fando.com

California

Connecticut

Maine

Massachusetts

New Hampshire

Rhode Island

Vermont

Mr. Seth Creighton

May 7, 2019

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Previous Conditions To Be Respected

Previously the Zoning Board imposed a 50-ft rear setback against Woodland Green. This is to stay in effect.

Proposed Expansion

The proposal for expansion to the Bluebird Self-storage facility consists of 5 storage buildings. Building 5 is being replaced and a small section 600-sf of building 4 is being removed. The new building 5 is being constructed over the area of the existing Building 5 and some of the porous pavement area.

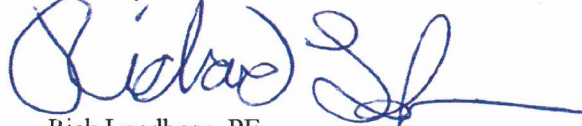
- Building 1 has a 27,782-sf footprint, is 1 story and climate controlled
- Building 2 has a 24,128-sf footprint, is 1 story and climate controlled
- Building 3 has a 1,800-sf footprint and is 1 story
- Building 4 has a 2,200-sf footprint and is 1 story
- Building 5 has a 18,126-sf footprint is 2 story and climate controlled

These buildings will continue to be provided access by a porous pavement driveway area. The porous pavement also acts as the stormwater treatment and control for the property. Area of excavation for the foundations will be repaired with porous pavement.

Utilities

Utilities will continue to be provided as discussed in Existing above. Gas and Electric will be re-rerouted around the front of the proposed Building 5.

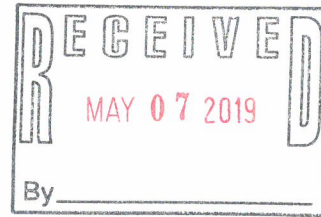
Sincerely,



Rick Lundborn, PE
Project Manager

/bh

c: file



May 7, 2019

Seth Creighton, City Planner
Planning Department
City Hall Annex
33 Wakefield Street
Rochester, NH 03867

RE: Waiver Requests; Site Plan Application, 201 Storage, LLC (Bluebird Storage)
201 Highland Street / Route 202
Fuss & O'Neill Reference No. 20181369.A10

Dear Mr. Creighton:

Fuss & O'Neill is requesting the following waivers on behalf of 201 Storage, LLC for the site plan expansion to the Bluebird Self-storage facility located at 201 Highland Street.

Article II, Section 5(c) Buidling Elevations

A waiver is sought to the requirement for building elevations. The building will be similar in construction to Building 1, the existing 2 story climate controlled building and all materials and colors used will be the same.

Article III, Section 5 Landscaping

A waiver is sought to the requirement for the preparation of a landscaping plan. The expansion of the facility will take place entirely within the footprint of the existing buildings and paved area. The existing landscaping is established and there is no intention to disturb it.

Article III Section 6 Lighting

A waiver is sought to the requirement for the preparation of a lighting plan. No pole mounted lighting is proposed, any lighting added will be to the building and will be for security purposes and no lighting will be proposed on the read of the building where it would impact the abutters. No other changes to lighting are sought.

Article III, Section 13 Stormwater Management

A waiver is sought to the requirement of a full drainage analysis and report. The site is designed using porous pavement and the proposed building will be over existing developed areas and not reduce vegetated cover. The site currently operates better than the pre-development condition with regard to stormwater runoff and will continue to do so.

F:\P2018\1369\A10\Civil3\Rochester Site Plan App\Word Files\02_20181369 Waivers.docx
Corres.

5 Fletcher Street, Suite 1
Kennebunk, ME 04043
207.363.0669

www.fando.com

California

Connecticut

Maine

Massachusetts

New Hampshire

Rhode Island

Vermont

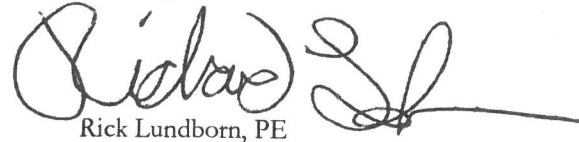
Mr. Seth Creighton

May 7, 2019

Page 2

Thank you for your consideration of this project and these waivers.

Sincerely,

A handwritten signature in black ink, appearing to read "Rick Lundborn", followed by a long horizontal flourish.

Rick Lundborn, PE
Project Manager

/bh

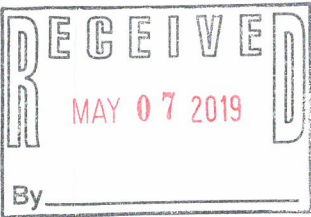
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201 STORAGE, LLC

201 HIGHLAND STREET · ROCHESTER · NEW HAMPSHIRE

SITE PLANS

MAY, 2019

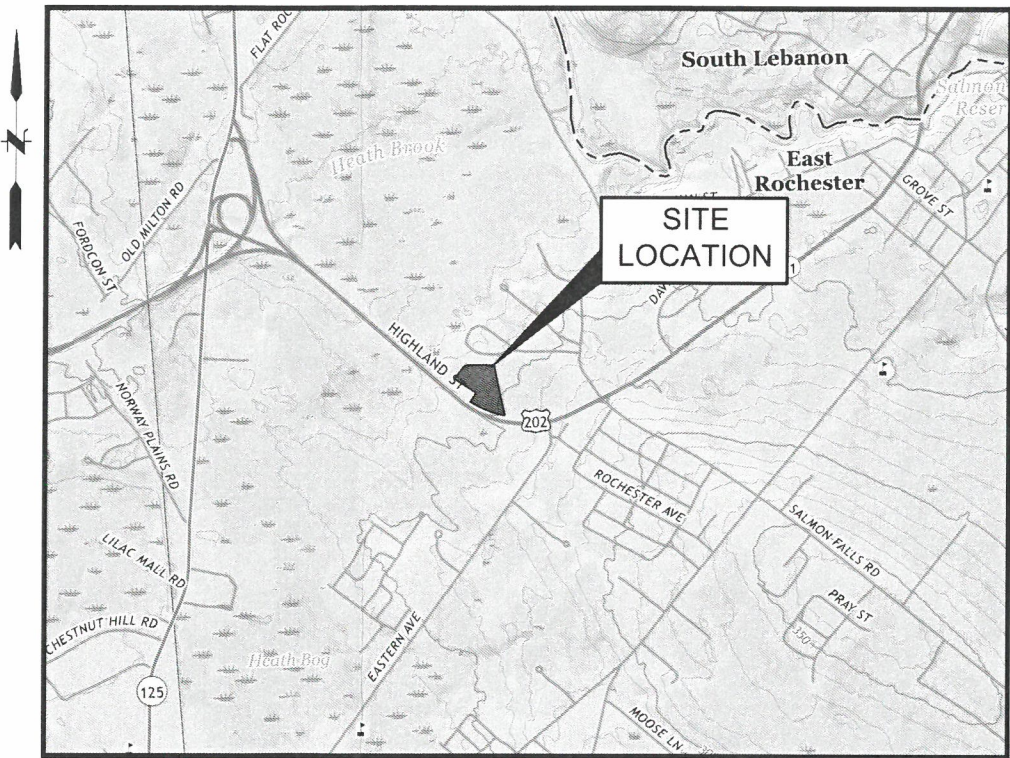


PREPARED FOR
201 STORAGE, LLC
125 OCEAN ROAD
GREENLAND, NH 03840

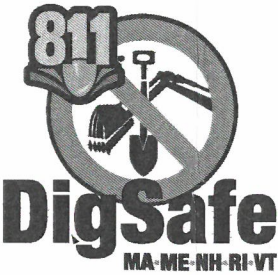
PREPARED BY
FUSS & O'NEILL
UPPER SQUARE BUSINESS CENTER
5 FLETCHER STREET, SUITE 1
KENNEBUNK, MAINE 04043
207.363.0669
www.fando.com

SHEET INDEX

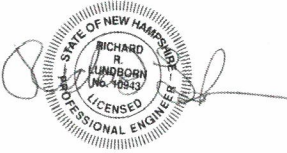
SHEET No.	SHEET TITLE
GI-001	COVER SHEET
CN-001	LEGEND
C-100	AS-BUILT EXISTING CONDITIONS PLAN
CS-101	SITE PLAN
CG-101	GRADING, DRAINAGE & EROSION CONTROL PLAN
CU-101	UTILITY PLAN
CD-501	POROUS PAVEMENT DETAILS
CD-502	UTILITY DETAILS
CD-503	EROSION CONTROL DETAILS



LOCATION MAP
SCALE: 1" = 1200'



CONTACT DIG SAFE 72 HOURS
PRIOR TO CONSTRUCTION.
THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON
THIS PLAN IS APPROXIMATE. OLD CONSULTING ENG.
INC. MAKES NO CLAIM TO THE ACCURACY OR
COMPLETENESS OF UTILITIES SHOWN. 72 HOURS PRIOR
TO ANY EXCAVATION ON SITE, THE CONTRACTOR SHALL
CONTACT DIG-SAFE AT 1-888-DIG-SAFE.



PROJ. No.: 20181369.A10
DATE: MAY 2019

GI-001

CN-001



1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE EXISTING FEATURES FOR TAX MAP 106 LOT 3.
2. PARCEL OWNER PER TAX CARD:

201 STORAGE, LLC
125 OCEAN ROAD
GREENLAND, NH 03840
3. TOTAL PARCEL AREA: MAP 06, LOT 3 253,168-SF (5.81 ACRES)
4. PARCEL IS ZONED: NEIGHBORHOOD MIXED USE (NMU)
5. JURISDICTIONAL WETLANDS DELINEATED BY: RANDY R. ORVIS, CWS OF GEOMETRES BLUE HILLS, LLC DURING MAY 2011; IN ACCORDANCE WITH THE 1987 CORPS OF ENGINEERS WETLAND DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1.
6. THE PROPOSED LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD ZONE AS SHOWN ON THE FLOOD INSURANCE RATE MAP DATED 05/17/05 COMMUNITY PANEL 3301700203D, PANEL 203 OF 405.
7. THE LOT IS SERVED BY THE MUNICIPAL WATER SYSTEM AND A SEPTIC SYSTEM. THE SEPTIC WILL BE REQUIRED FOR SEWAGE DISPOSAL.
8. THE NEAREST FIRE HYDRANT IS LOCATED AT THE INTERSECTION OF HIGHLAND STREET AND EASTERN AVENUE, 1,000-FT+/- AWAY TO THE NORTH. PER CONFIRMATION WITH THE FIRE MARSHAL ON 7/9/13, DUE TO USE NO HYDRANT IS NECESSARY.

REQUIRED

MINIMUM LOT SIZE	=	8,000-SF
MINIMUM FRONTAGE	=	60-FT
MAXIMUM LOT COVERAGE*	=	90%

BUILDING SETBACKS:

FRONT YARD	=	MAXIMUM 25-FT
SIDE YARD	=	5-FT
REAR YARD	=	20-FT

PARKING LOT SETBACKS:

FRONT YARD	=	15-FT
SIDE YARD	=	10-FT
REAR YARD	=	50-FT**

*COVERAGE IS DEFINED AS THE PERCENTAGE OF THE LOT AREA COVERED BY BUILDINGS.
**PER VARIANCE DATED 01/09/2013.

10. ALL SIDES OF THE STRUCTURES WHICH FACE THE WOODLAND GREEN CONDOMINIUMS SHALL BE A NEUTRAL TAN, BROWN, OR GREEN COLOR.

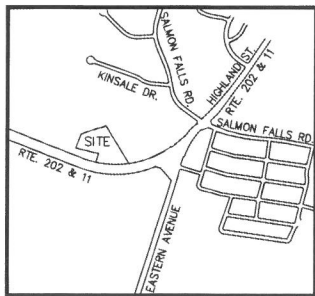
201 HIGHLAND STREET
ROCHESTER, NH

2017.563.00659
www.fando.com

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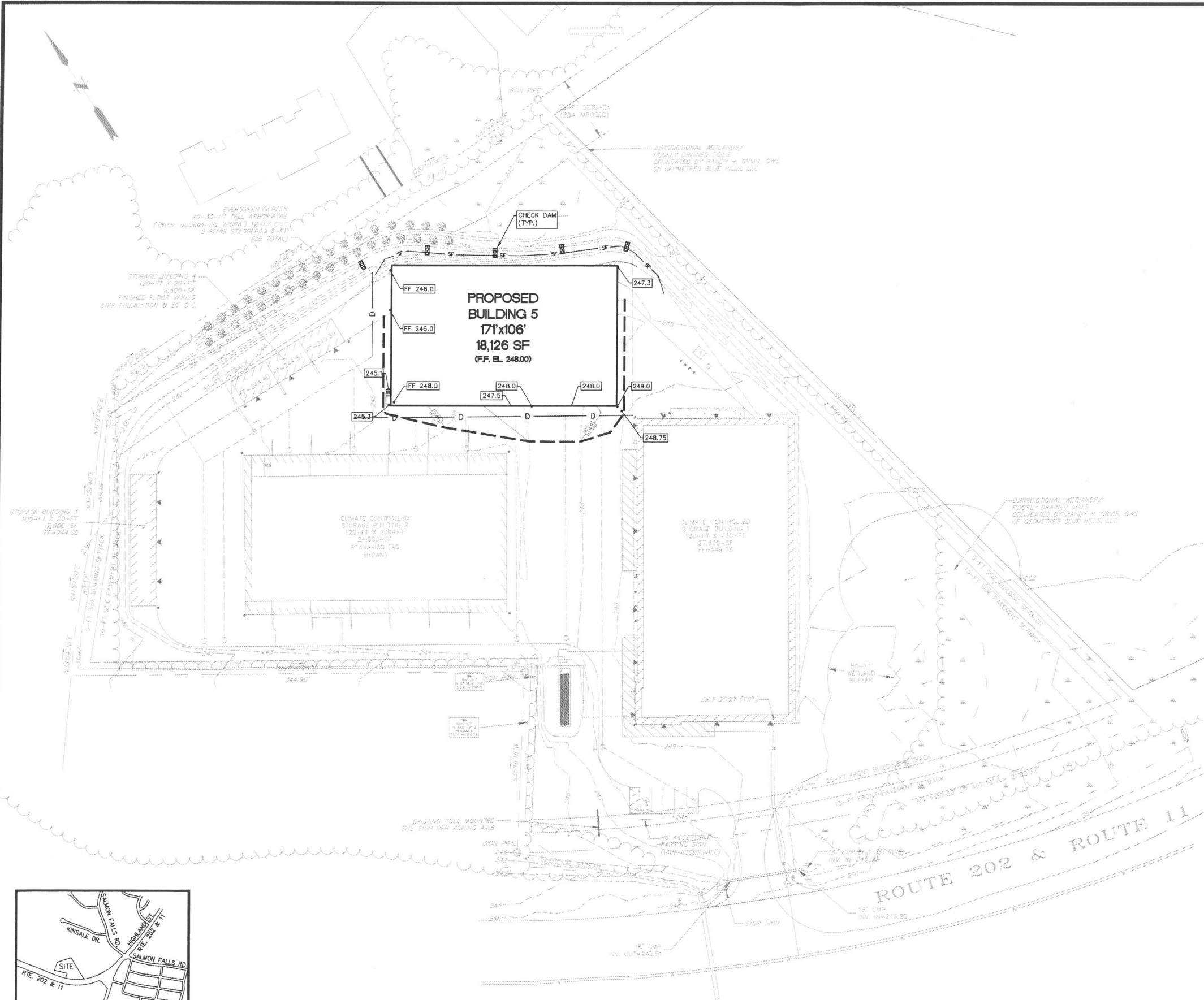
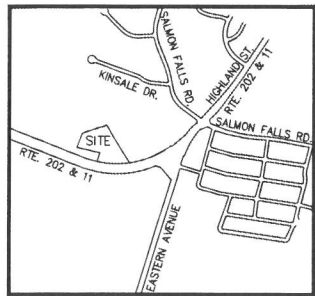
GRAPHIC SCALE

NO.	DATE	DESCRIPTION	DESIGNER	REVIEWER
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CERTIFIED BY _____ DATE _____





CONTACT DIG SAFE 72 HOURS
PRIOR TO CONSTRUCTION
THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS
PLAN IS APPROXIMATE. OLD CONSULTING ENG. INC. MAKES
NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES
SHOWN. 72 HOURS PRIOR TO ANY EXCAVATION ON SITE, THE
CONTRACTOR SHALL CONTACT DIG-SAFE AT 1-888-DIG-SAFE.

201 STORAGE, LLC
GRADING, DRAINAGE &
EROSION CONTROL PLAN
TAX MAP 106 LOT 3

201 HIGHLAND STREET ROCHESTER, NH

PROJ. No.: 20181369.A10
DATE: 05/07/19

CG-101

SHEET 1 OF 1

SCALE: 1" = 40'

HORIZ.: 1" = 40'

VERT.: 1" = 40'

DATUM: NAD83

VERT.: NAVD83

40 20 0 40

GRAPHIC SCALE

STATE OF NEW HAMPSHIRE

REGISTERED PROFESSIONAL ENGINEER

RICHARD LUNDGREN

No. 09843

EXPIRES 12/31/2021

DATE

DESIGNER

REVIEWER

201 STORAGE, LLC

GRADING, DRAINAGE &
EROSION CONTROL PLAN

TAX MAP 106 LOT 3

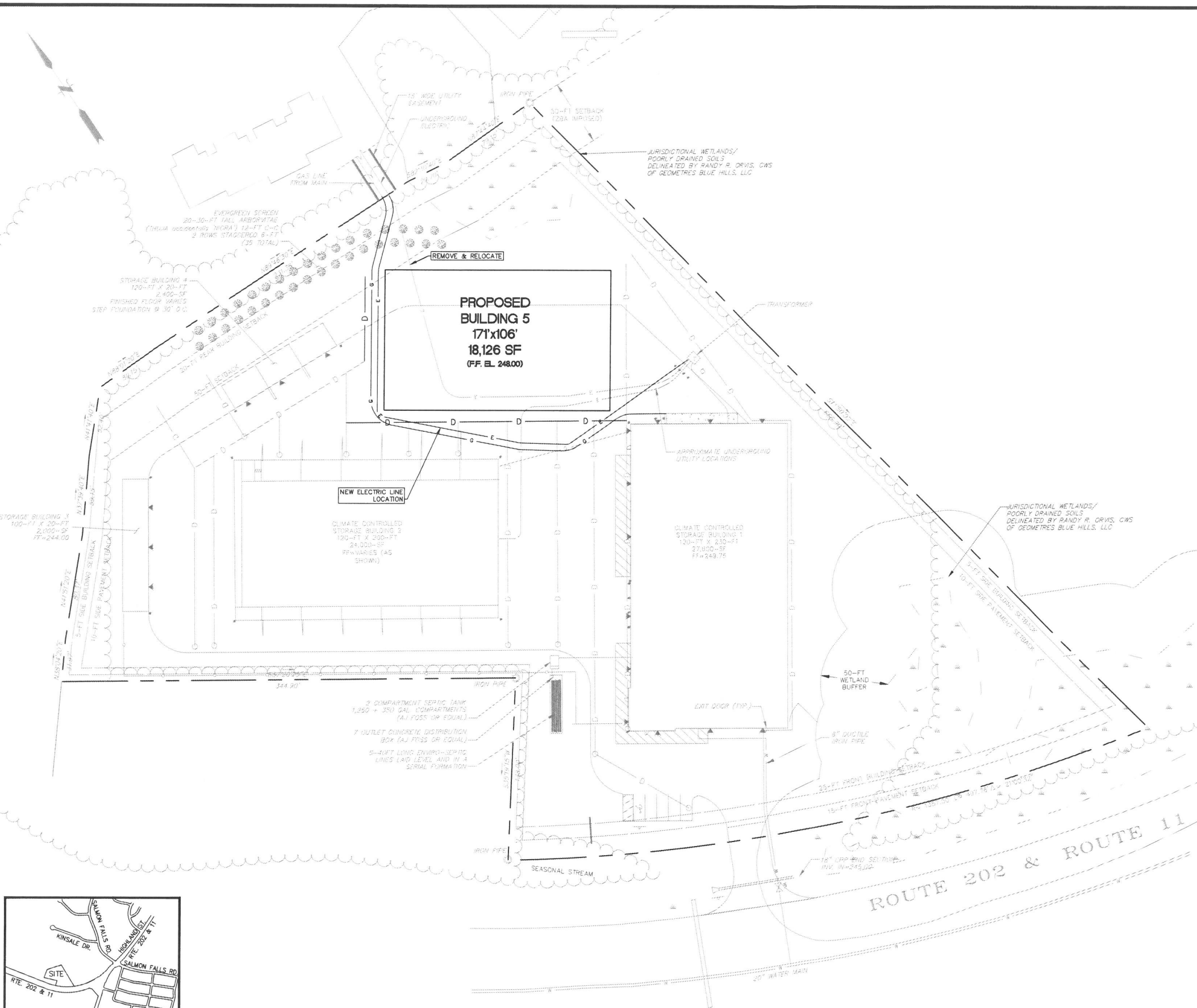
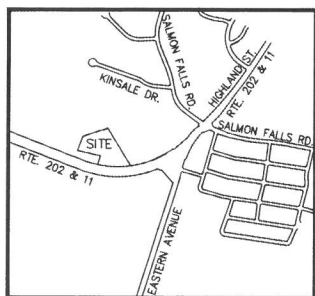
201 HIGHLAND STREET ROCHESTER, NH

PROJ. No.: 20181369.A10

DATE: 05/07/19



CG-101

SHEET 1 OF 1

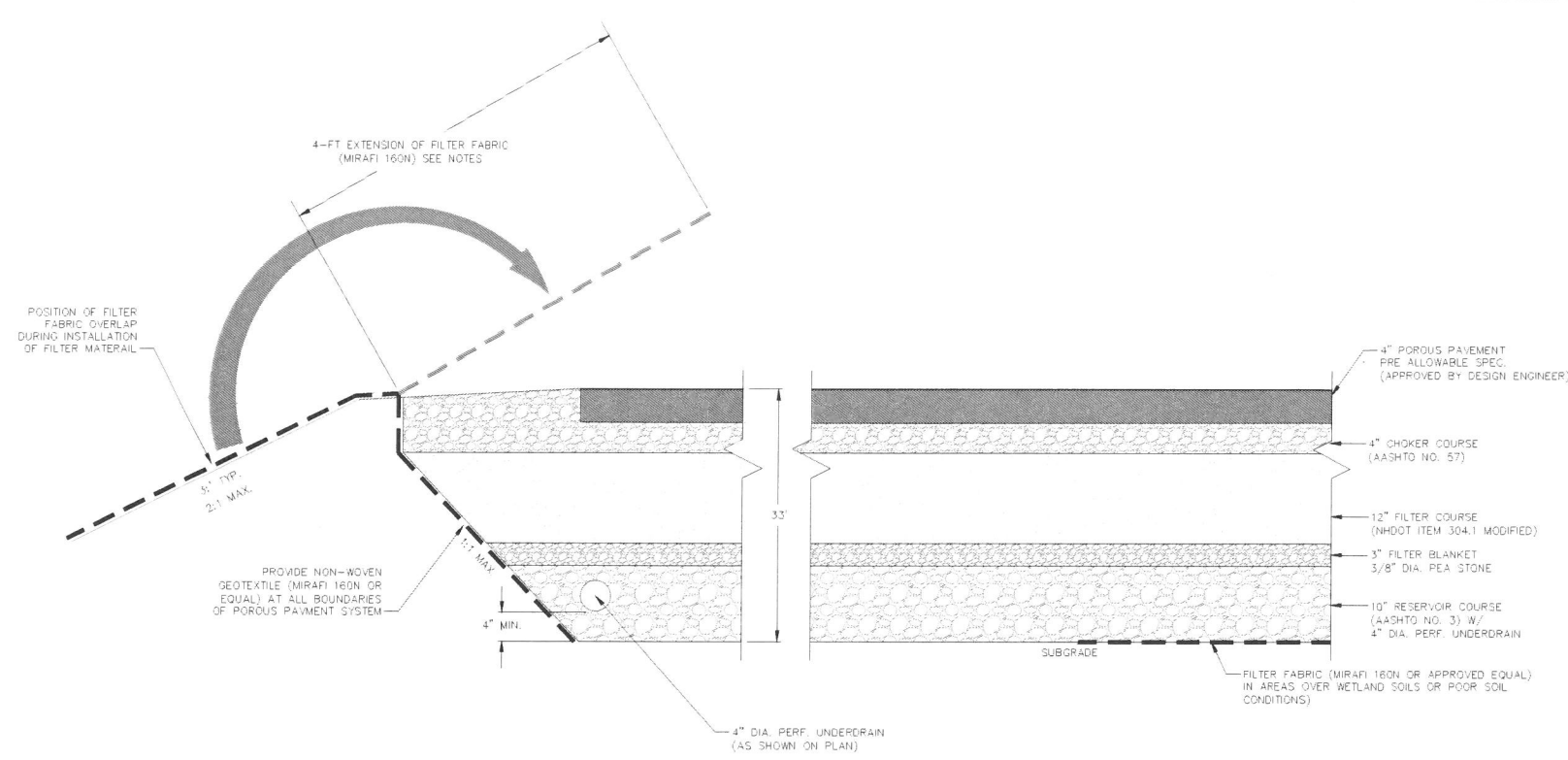


CONTACT DIG SAFE 72 HOURS
PRIOR TO CONSTRUCTION

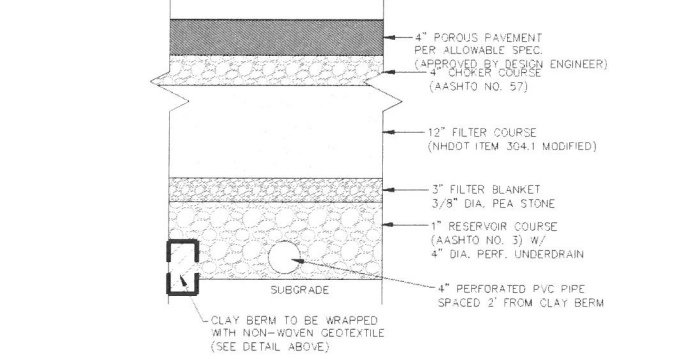
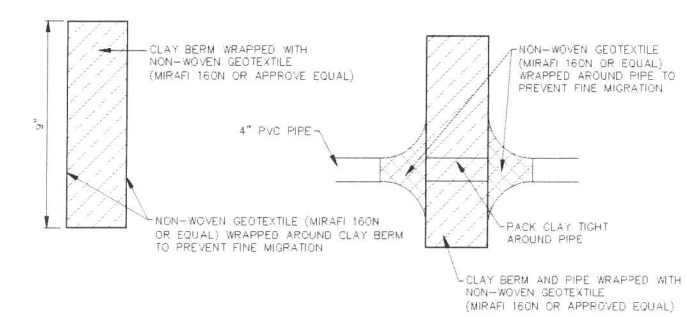
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PLAN IS APPROXIMATE. CLD CONSULTING ENG. INC. MAKES
NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES
SHOWN. 72 HOURS PRIOR TO ANY EXCAVATION ON SITE, THE
CONTRACTOR SHALL CONTACT DIG-SAFE AT 1-888-DIG-SAFE.

201 STORAGE, LLC UTILITIES PLAN TAX MAP 106 LOT 3 201 HIGHLAND STREET ROCHESTER, NH	 <div>FUSS & O'NEILL UPPER SQUARE BUSINESS CENTER 5 FLETCHER STREET, SUITE 1 KENNESHAW, MAINE 04043 207.363.0669 www.fandoo.com</div>	SCALE: HORIZ.: 1" = 40' VERT.: DATUM: HORIZ.: NAD83 VERT.: NAVD85 40 20 0 GRAPHIC SCALE			No.	DATE	DESCRIPTION	DESIGNER	REVIEWER

PROJ. No.: 20181369.A10
DATE: 05/07/19
CU-101
SHEET 1 OF 1



POROUS PAVEMENT DRIVEWAY CROSS-SECTION
NOT TO SCALE

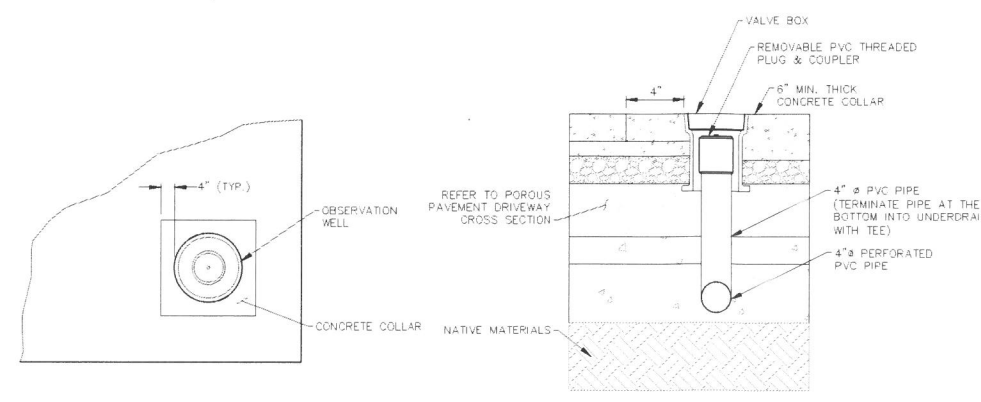


NOTES:
CLAY BERM: TILL, SILTS, CLAY SOIL, OR ANY COMBINATIONS (SILTY CLAY, CLAYEY SILT) CAPABLE OF ACHIEVING A HYDRAULIC CONDUCTIVITY OF 1.0X10⁻⁷ CM/SEC OR LESS. SIEVE ANALYSIS BY WEIGHT:

SIEVE SIZE	PERCENT PASSING
1"	100
1/2"	90-100
NO. 200	35-100

MOISTURE CONTENT OF THE MATERIAL AFFECTS DENSITY AND HYDRAULIC CONDUCTIVITY. THE MOISTURE CONTENT OF THE MATERIAL AT THE TIME OF PLACEMENT SHALL BE SUFFICIENT TO ACHIEVE SPECIFIED PROPERTIES.

CLAY BERM
NOT TO SCALE



OBSERVATION WELL
NOT TO SCALE

POROUS PAVEMENT NOTES:

- THE MOST CURRENT SPECIFICATION FOR POROUS ASPHALT PAVEMENT AND INFILTRATION BEDS FOUND AT THE LANE STORMWATER CENTER WEBSITE: [HTTP://WWW.UNH.EDU/ERC/CSTEV/PUBS_SPECS_INFO.HTML](http://www.unh.edu/erc/cstev/pubs_specs_info.html) SHALL BE CONSIDERED PART OF THIS DESIGN. DEVIATIONS FROM THAT SPECIFICATION OTHER THAN THOSE PRESENT IN THE DETAILS ON THIS SHEET SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.
- ALL MATERIAL TO BE INSTALLED SHALL MEET THE SPECIFICATIONS DISCUSSED IN THE LANE STORMWATER SPECIFICATIONS FOUND IN THE ABOVE WEB ADDRESS AND BE FREE OF UNSUITABLE MATERIALS SUCH AS SILT, CLAY, ORGANIC MATERIAL, ROCKS LARGER THAN THE AGGREGATE SPECIFIED IN THE GRADATIONS, ETC.
- ONCE THE AREA FOR THE POROUS PAVEMENT HAS BEEN PREPARED TO SUBGRADE, LINE THE SIDES OF THE EXCAVATION THAT WILL BE EXPOSED TO NATIVE MATERIALS OR MATERIALS USED FOR SLOPE FILL WITH FILTER FABRIC (MIRAFI 160N) (AS SHOWN IN THE DETAIL).
- INSTALL FILTER FABRIC OVER THE AREA OF WETLAND SOILS OR POOR SOIL CONDITIONS ONLY. DO NOT USE THE REMAINING BOTTOM OF THE POROUS PAVEMENT AREA. SUCH CONDITIONS SHALL BE DETERMINED BY THE CONTRACTOR AND DESIGN ENGINEER.
- INSTALL FILTER FABRIC ON SEEDS OF POROUS PAVEMENT AREA AS SHOWN IN THE DETAIL. OVERLAP FILTER FABRIC 18-INCHES WHERE JOINTS ARE NECESSARY.
- FOLD 4-FT OF FABRIC OUT OVER FILL SLOPES DURING CONSTRUCTION OF THE POROUS MEDIA BED TO LIMIT INTRODUCTION OF SEDIMENT AND IMPURITIES TO THE FILTER. ONCE THE FILTER MATERIAL IS PLACED THROUGH THE CHOKER COURSE FOLD THE 4-FT OVER THE FILTER MATERIAL TO PROTECT IT FROM SEDIMENT AND IMPURITIES UNTIL THE PAVEMENT IS PLACED.
- DO NOT PAVE OVER THE FILTER FABRIC. FOLD OVERLAP OVER PAVEMENT UNTIL VEGETATION IS ESTABLISHED ON ADJACENT SLOPE AREAS. REMOVE OVERLAPPING FABRIC ONCE VEGETATION IS ESTABLISHED, ELIMINATING THE THREAT OF DIRT AND OTHER MATERIALS MIGRATING ONTO THE PAVEMENT FROM THE LOADED AREAS.
- INSTALL RESERVOIR COURSE MATERIAL (AASHTO NO.3 OR AASHTO NO.5) IN AREAS WHERE CALLED FOR IN MAXIMUM 3 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

RESERVOIR COURSE (AASHTO NO. 3) GRADING REQUIREMENTS:

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT
2-1/2" INCH	100%
2" INCH	90-100%
1-1/2" INCH	35-70%
1" INCH	0-10%
1/2" INCH	0-5%

RESERVOIR COURSE (AASHTO NO. 5) GRADING REQUIREMENTS:

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT
1-1/2" INCH	100%
1" INCH	90-100%
3/4" INCH	20-55%
1/2" INCH	0-10%
3/8" INCH	0-5%

- INSTALL FILTER BLANKET MATERIAL (3/8" PEA STONE, D50 = 1/8") IN AREAS WHERE CALLED FOR IN MAXIMUM 3 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.
- INSTALL FILTER COURSE MATERIAL (ITEM 304.1 SAND) IN AREAS WHERE CALLED FOR IN MAXIMUM 3 INCH LIFTS AND COMPACT TO 95% MAXIMUM PROCTOR DENSITY TO THE DEPTHS SPECIFIED IN THE TYPICAL CROSS SECTIONS.

CHOKER COURSE (AASHTO NO. 57) GRADING REQUIREMENTS:

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT
6" INCH	100%
NO. 4	70-100%
NO. 200	0-1%

- INSTALL CHOKER COURSE (AASHTO NO.57) IN AREAS OF POROUS PAVEMENT AS SHOWN IN THE CROSS-SECTION. COMPACT TO 95% MAXIMUM PROCTOR DENSITY.

CHOKER COURSE (AASHTO NO. 57) GRADING REQUIREMENTS:

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT
1-1/2" INCH	100%
1" INCH	35-100%
1/2" INCH	25-60%
NO. 4	0-10%
NO. 8	0-5%

CHOKER COURSE COMMONLY REFERRED TO AS WASHED 3/4" STONE.

POROUS ASPHALT MIX SPECIFICATION:

- THE MOST CURRENT SPECIFICATION FOR POROUS ASPHALT PRODUCED BY THE LANE STORMWATER CENTER SHALL BE USED FOR THE POROUS PAVEMENT.
- ALTERNATIVE SPECIFICATIONS ARE ACCEPTABLE, MOST NOTABLY A NUMBER OF LOCAL MIX PLANTS PRODUCE POROUS ASPHALT WITH FIBER REINFORCEMENT IN LIEU OF THE LIQUID ADDITIVES SPECIFIED BY THE STORMWATER CENTER. IN THE EVENT AN ALTERNATIVE SPECIFICATION IS TO BE USED IT SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.
- ALL POROUS ASPHALT SPECIFICATIONS SHALL MEET THE AIR VOID CONTENT BY CORELOK (ASTM D4752). AIR VOID SHALL BE BETWEEN 16-19%.

CURRENT UNH POROUS ASPHALT MIX DESIGN CRITERIA:

SIEVE DESIGNATION	PERCENTAGE BY WEIGHT
3/4" INCH	100%
1/2" INCH	35-100%
3/8" INCH	25-60%
NO. 4	10-25%
NO. 8	55-10%
NO. 200	2-1%

ASPHALT CRITERIA:

CRITERIA	VALUE
BINDER CONTENT (AASHTO T164)	6-8.5%
AIR VOID CONTENT BY CORELOK (ASTM D4752)*	16-20%
AIR VOID CONTENT BY PARAFFIN WAX (AASHTO T275)*	18-22%
DRAINDOWN (ASTM D6390)**	<0.05%
RETAINED TENSILE STRENGTH (AASHTO T283)**	>=80%

*OTHER METHOD IS ACCEPTABLE.
**CELLULOSE OR MINERAL FIBERS MAY BE USED TO REDUCE DRAINDOWN.
***TSR (RETAINED TENSILE STRENGTH) VALUES FALL BELOW 80% WHEN TESTED BY NAPA IS 131 (WITH A SINGLE FREEZE THAW CYCLE RATHER THAN 5). THE CONTRACTOR SHALL EMPLOY AN ANY STRIP ADDITIVE, SUCH AS HYDRATED LIME (ASTM C877) OR A FATTY AMINE, TO RAISE THE TSR VALUE ABOVE 80%.

TRANSFER OF OWNERSHIP:

- IN THE EVENT THE SITE IS SOLD TO ANOTHER PARTY, THAT NEW PARTY SHOULD BE MADE AWARE OF THE POROUS PAVEMENT, ITS PURPOSE AND SPECIAL MAINTENANCE REQUIREMENTS. THIS NOTIFICATION SHOULD BE DONE BOTH IN WRITING WITH THE INCLUSION OF A COPY OF THESE DESIGN MATERIALS AND ORALLY.
- PLAN SETS AND OTHER INFORMATION ON THIS DESIGN CAN BE ACQUIRED FROM:

FUSS & O'NEILL
SUITE 1 - LOBBY HOUSE
5 FLETCHER STREET
ROCHESTER, NY 14603
PHONE: 507-363-1063
EMAIL: BLUNDE@FUSO.COM

EQUIPMENT NOTES:

HAULING EQUIPMENT:

- THE OPEN GRADED MIX SHALL BE TRANSPORTED IN CLEAN VEHICLES WITH TIGHT, SMOOTH CHUMP BEDS THAT HAVE BEEN SPRAYED WITH A NON-PETROLEUM RELEASE AGENT OR SOAP SOLUTION TO PREVENT THE MIX FROM ADHERING TO THE DUMP BODIES.
- MINERAL FILLER, FINE AGGREGATE, SLASH DUST, ETC. SHALL NOT BE USED TO DUST TRUCK BEDS.
- THE OPEN GRADED MIX SHALL BE COVERED DURING TRANSPORT WITH A SUITABLE MATERIAL OF SUCH SIZE SUFFICIENT TO PROTECT THE MIX FROM THE WEATHER AND ALSO TO MINIMIZE COOLING AND PREVENT LUMPS.
- WHEN NECESSARY, TO ENSURE THE DELIVERY OF MATERIAL AT THE SPECIFIED TEMPERATURE, THE TRUCK BODIES SHALL BE INSULATED AND COVERS SHALL BE FASTENED SECURELY.
- LONG HAULS, ESPECIALLY THOSE IN EXCESS OF 25 MILES MAY RESULT IN SEPARATION OF THE MIX AND ITS REJECTION.

PLACING EQUIPMENT:

- THE PAVER SHALL BE A SELF-PROPELLED UNIT WITH AN ACTIVATED SCREED OR STRIKE-OFF ASSEMBLY, CAPABLE OF BEING HEATED IF NECESSARY, AND CAPABLE OF SPREADING AND FINISHING THE MIX WITHOUT SEGREGATION FOR THE WIDTHS AND THICKNESSES REQUIRED.
- IN GENERAL, TRACKED PAVERS HAVE PROVED SUPERIOR FOR POROUS ASPHALT PLACEMENT.
- THE SCREED SHALL BE ADJUSTABLE TO PROVIDE THE DESIRED CROSS-SECTIONAL SHAPE.
- THE FINISHED SURFACE SHALL BE OF UNIFORM TEXTURE AND EVENNESS AND SHALL NOT SHOW ANY INDICATION OF TEARING, SHOWING, OR PULLING OF THE MIX.
- THE MACHINE SHALL, AT ALL TIMES, BE IN GOOD MECHANICAL CONDITION AND OPERATED BY COMPETENT PERSONNEL.
- PAVERS SHALL BE EQUIPPED WITH THE NECESSARY ATTACHMENTS, DESIGNED TO OPERATE ELECTRONICALLY, FOR CONTROLLING THE GRADE OF THE FINISHED SURFACE.
- THE ADJUSTMENTS AND ATTACHMENTS OF THE PAVER WILL BE CHECKED AND APPROVED BY THE ENGINEER BEFORE PLACEMENT OF ASPHALT MATERIAL.
- PAVERS SHALL BE EQUIPPED WITH A SLOPED PLATE TO PRODUCE A TAPERED EDGE AT LONGITUDINAL JOINTS. THE SLOPED PLATE SHALL BE ATTACHED TO THE PAVER SCREED EXTENSION.
- THE SLOPED PLATE SHALL PRODUCE A TAPERED EDGE HAVING A FACE SLOPE OF 3:1 (HORIZONTAL VERTICALLY). THE PLATE SHALL BE SO CONSTRUCTED AS TO ACCOMMODATE COMPACTED MAT THICKNESS FROM 35 TO 100 MM (1 1/4 TO 4 INCHES). THE BOTTOM OF THE SLOPED PLATE SHALL BE MOUNTED 10 TO 15 MM (3/8 TO 1/2 INCH) ABOVE THE EXISTING PAVEMENT. THE PLATE SHALL BE INTERCHANGEABLE ON EITHER SIDE OF THE SCREED.
- PAVERS SHALL BE EQUIPPED WITH A JOINT HEATER CAPABLE OF HEATING THE LONGITUDINAL EDGE OF THE PREVIOUSLY PLACED MAT TO 14 SURFACE TEMPERATURE OF 85 TO 100 °F, OR HIGHER IF NECESSARY, TO ACHIEVE BONDING OF THE NEWLY PLACED MAT WITH THE PREVIOUSLY PLACED MAT. THIS SHALL BE DONE WITHOUT UNNECESSARY BREAKING OF FRACTURING OF THE AGGREGATE AT THE INTERFACE. THE TEMPERATURE SHALL BE MEASURED IMMEDIATELY BEHIND THE JOINT HEATER.
- THE JOINT HEATER SHALL BE EQUIPPED WITH AUTOMATED CONTROLS THAT SHUTOFF THE BURNERS WHEN THE PAVEMENT MAKING STOPS AND RESTARTS WHEN THE FORWARD MOVEMENT OF THE PAVER.
- THE JOINT HEATER SHALL HEAT THE ENTIRE AREA OF THE PREVIOUSLY PLACED MIDDLE TO THE REQUIRED TEMPERATURE.
- HEATING SHALL IMMEDIATELY PRECEDE PLACEMENT OF THE ASPHALT MATERIAL.

ROLLING EQUIPMENT:

- ROLLERS SHALL BE IN GOOD MECHANICAL CONDITION, OPERATED BY COMPETENT PERSONNEL, CAPABLE OF REVERSING WITHOUT BACKLASH, AND OPERATED AT SPEEDS SLOW ENOUGH TO AVOID DISPLACEMENT OF THE ASPHALT MIXTURE.
- ROLLERS SHALL BE TWO-AXLE TANDEM ROLLERS WITH A GROSS WEIGHT OF NOT LESS THAN 7 METRIC TONS (8 TONS) AND NOT MORE THAN 10 METRIC TONS (12 TONS) AND SHALL BE CAPABLE OF PROVIDING A MINIMUM COMPACTIVE EFFORT OF 44 KJ/M (250 POUNDS PER INCH) OF WIDTH OF THE DRIVE ROLLER. ALL ROLLERS SHALL BE AT LEAST 1 M (42 INCHES) IN DIAMETER.
- ROLLERS SHALL BE EQUIPPED WITH TANKS AND SPRINKLING BARS FOR WETTING THE ROLLS.
- A RUBBER TIRE ROLLER WILL NOT BE REQUIRED ON THE OPENGRADED POROUS PAVEMENT COURSE SURFACE.

POROUS PAVEMENT PARKING AREA MAINTENANCE:

- THE POROUS PAVEMENT PARKING AREA SHALL BE VACUUM SWEEP WITH A SWEEPER TRUCK THAT HAS A VACUUM CAPABILITY. BI-ANNUALLY, ONCE IN THE SPRING (THE APRIL 15 - APRIL 30), AND ONCE IN THE FALL (OCTOBER 15 - OCTOBER 30), THIS IS NECESSARY TO INSURE THE PROLONGED FUNCTION OF THE PAVEMENTS INFILTRATIVE CAPACITY.
- IT IS RECOMMENDED THAT PLOWING BE PERFORMED BY A PLOW VEHICLE WITH A PLOW THAT HAS RUBBER BLADE EDGE. THIS WILL LIMIT THE SCARRING OF THE PAVEMENT. HOWEVER, THIS IS NOT NECESSARY AND IS OPTIONAL.
- SANDING FOR WINTER TRACTION IS PROHIBITED. SALTING WITH NaCl IS PROHIBITED. DE-ICINGS AGENTS ARE PROHIBITED DUE TO THE PROXIMITY TO THE WETLANDS AND THE USE OF METAL STORAGE BUILDINGS THAT WOULD BE ADVERSELY AFFECTED.
- SNOW SHALL NOT BE STORED ON AREAS OF POROUS PAVEMENT. IT SHALL BE STORED OFF OF THE PAVED AREAS TO MINIMIZE FAILURE DUE TO FREEZING WITHIN THE PAVEMENT.
- REFER TO THE UNHSC WINTER MAINTENANCE FACT SHEET: [HTTP://WWW.UNH.EDU/ERC/CSTEV/PUBS_SPECS_INFO/WINTER_MAINTENANCE_FACT_SHEET.PDF](http://www.unh.edu/erc/cstev/pubs_specs_info/winter_maintenance_fact_sheet.pdf)

ASPHALT SEAL COATING IS COMPLETELY FORBIDDEN. SURFACE SEAL COATING UNNECESSARILY CLOSING THE PAVEMENT PORES.

- PLANTED AREAS (INCLUDING LAWN) ADJACENT TO THE POROUS PAVEMENT SHOULD BE WELL MAINTAINED TO PREVENT SOIL WASHOUT ONTO THE PAVEMENT. ANY OBSERVED BARE SPOTS OR ERODED AREAS SHOULD BE REPLANTED AND STABILIZED AT ONCE.
- IMMEDIATELY CLEAN ANY SOIL DEPOSITED ON PAVEMENT DIRT GROUND INTO THE PORES OF THE ASPHALT CLOSING IT. THIS IS WHY TRACTOR TIRES AND HEAVY LOAD FIXED REAR DIFFERENTIAL VEHICLES ARE PROHIBITED AT THE SITE.
- CONSTRUCTION STAGING, SOLID MULCH STORAGE, ETC. ON UNPROTECTED PAVEMENT SURFACES IS PROHIBITED.

POROUS PAVEMENT DETAILS:

- POTHOLES/DAMAGED AREAS OF THE POROUS ASPHALT PAVEMENT LESS THAN 50-100 FT. IN SIZE CAN BE PATCHED BY ANY MEANS SUITABLE WITH STANDARD HOT MIX ASPHALT OR POROUS ASPHALT (PREFERRED).
- REPAIR OF DAMAGE GREATER THAN 50-100 FT. IN AREA REQUIRES THE DESIGN OF A PATCH TYPE DESIGNED BY A QUALIFIED PROFESSIONAL ENGINEER.
- ANY REPAIR OF DRAINAGE STRUCTURES REQUIRED SHOULD BE PERFORMED IMMEDIATELY TO ENSURE PROPER FUNCTIONING OF THE SYSTEM.

201 STORAGE, LLC

POROUS PAVEMENT DETAILS

TAX MAP 106 LOT 3

201 HIGHLAND STREET

PROJ. No.: 20181369A10

DATE: 05/07/19

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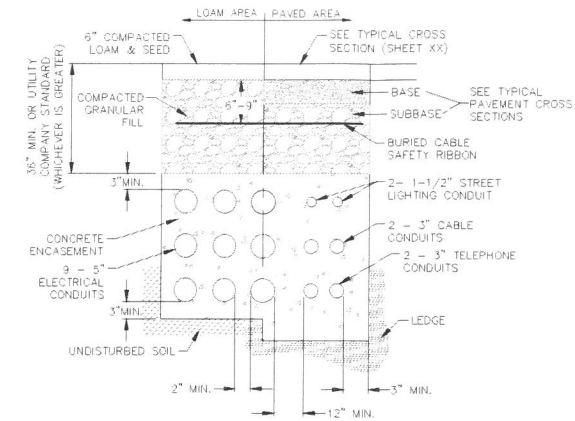
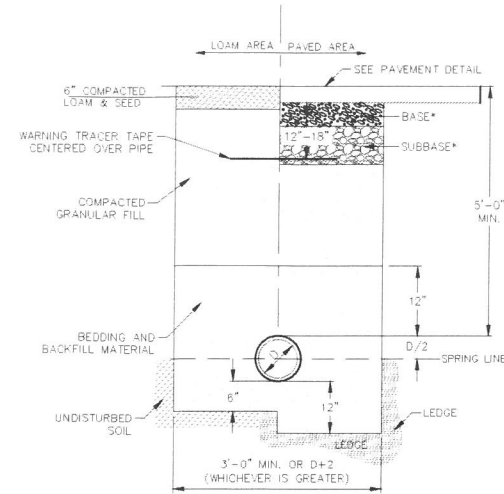
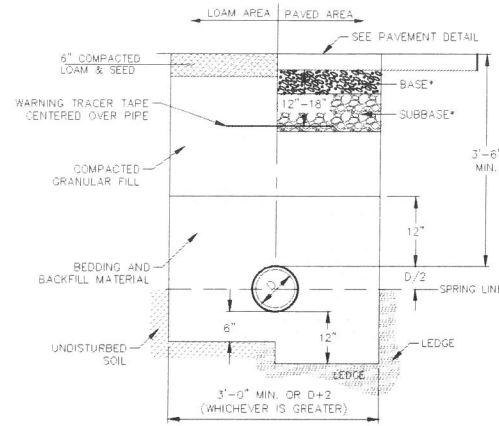
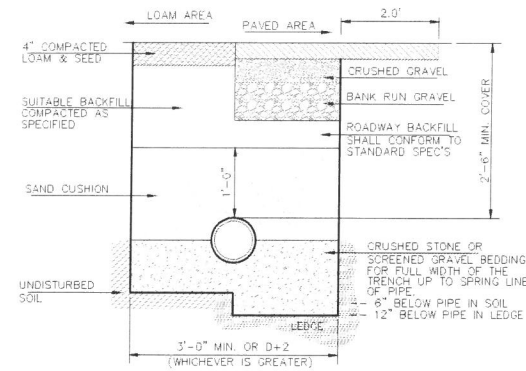
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1. NUMBER, MATERIAL, AND SIZE OF UTILITY CONDUITS TO BE DETERMINED BY LOCAL OR AS SHOWN ON CONDUIT PLAN.
2. DIMENSIONS SHOWN REPRESENTS OWNER'S MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS MAY BE GREATER BASED ON UTILITY COMPANY STANDARDS, BUT MAY NOT BE LESS THAN SHOWN.
3. NO CONDUIT SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
4. A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL MUST BE INSTALLED IN THE CONDUIT BEFORE THE UTILITY COMPANY IS NOTIFIED TO INSTALL CABLE. THE STRING SHOULD BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BENDING THE STRING TO THE CONDUIT.
5. UTILITY COMPANY MUST BE GIVEN THE OPPORTUNITY TO INSPECT THE CONDUIT PRIOR TO INSTALL THE CABLE. IF THE UTILITY COMPANY IS NOT AVAILABLE TO INSPECT, THE UTILITY COMPANY BE UNABLE TO INSTALL ITS CABLE IN A SUITABLE MANNER.
6. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND ANY OTHER APPLICABLE ELECTRICAL REGULATIONS.
7. ALL 90° SWEEPS WILL BE MADE USING RIGID GALVANIZED STEEL SWEEPS WITH A 35° TO 45° RADIUS.?????

