



City of Keene Planning Board

AGENDA – AMENDED

Monday, February 27, 2023

6:30 PM

City Hall, 2nd Floor Council Chambers

- I. **Call to Order** – Roll Call
- II. **Minutes of Previous Meeting** – January 23, 2023
- III. **Final Vote on Conditional Approvals**
- IV. **Extension Requests**

EXP-01-22 & CUHP-01-22 – Earth Excavation Permit – 0 Route 9 – Applicant Granite Engineering LLC, on behalf of owner G2 Holdings LLC, requests an extension to the deadline to satisfy the conditions of approval for the Earth Excavation Permit & Hillside Protection Conditional Use Permit, EXP-01-22 & CUHP-1-22, for the proposed operation of a gravel pit on the property at 0 Route 9 (TMP #215-007-000). The parcel is 84.71 acres in size and is located in the Rural District.

S-08-22 – 2-lot Subdivision – 284-288 Hurricane Rd – Property owner Cory Graves requests an extension to the deadline to satisfy the conditions of approval for the 2-lot subdivision, S-08-22, of the property at 284-288 Hurricane Rd (TMP #106-010-000). The parcel is 13.04 acres in size and is located in the Rural District.

- V. **Public Hearings**

SPR-01-23 – Site Plan – Granite State Car Wash, 364 West St & 12 Pearl St - Applicant Aaron Wiswell, on behalf of owner Sandri Realty Inc., proposes to demolish the existing structures on the properties located at 364 West St (TMP #577-026-000) and 12 Pearl St (TMP #577-027-000), merge the lots, and construct a 2-bay car wash that is ~2,000 sf in size. Waivers are requested from Sec. 20.7.3.F.1.c of the Land Development Code regarding the requirement to reduce lighting levels by 50% overnight and Sec. 20.6.2.B.1 regarding the requirement that drive-through windows and lanes shall not be located along the building frontage. The combined parcels are 0.60 acres and are located in the Commerce District.

SPR-02-23 & SWP-CUP-01-23 – Site Plan & Surface Water Conditional Use Permit – Contractor Bays, 0 Black Brook Rd - Applicant Patriot Holdings LLC, on behalf of owner New England Interconnect Systems Inc., proposes to construct two buildings ~36,000 sf and ~25,200 sf in size for use as rental units for contractors and make associated site modifications on the properties at 0 Black Brook Rd (TMP #s 221-023-000 & 221-024-000). Waivers are requested from Sections 20.14.1.B, 20.14.2.A, and 20.14.2.B of the Land Development Code regarding the massing/scale and visual appearance of the proposed buildings. The combined parcels are 12.57 acres and are located in the Corporate Park District.

- VI. **Continued Public Hearing**

Amendments to the Planning Board Subdivision Regulations – The Planning Board proposes to amend its Subdivision Regulations in Article 19 of the City of Keene Land Development Code by amending Section 19.2.4 of Article 19, “preservation of existing features” to include additional information about the type of features that should be protected and possible requirements to protect those features; Section 19.2.8, “Utilities” to include additional requirements for lots that would not have access to City sewer; and

Section 19.3.2.B, “Perimeter Building Setback” of the Conservation Residential Development Subdivision Regulations to require that existing tree canopy within the perimeter setback along external roads shall be preserved.

VII. **Nomination of City Representative to SWRPC Board of Directors**

VIII. **Master Plan Update Discussion**

IX. **Staff Updates**

X. **New Business**

XI. **Upcoming Dates of Interest**

- Joint Committee of the Planning Board and PLD – March 13, 6:30 PM
- Planning Board Steering Committee – March 14, 11:00 AM
- Planning Board Site Visit – March 22, 8:00 AM – To Be Confirmed
- Planning Board Meeting – March 27, 6:30 PM

1 City of Keene
2 New Hampshire

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4
5 PLANNING BOARD
6 MEETING MINUTES
7

8 **Monday, January 23, 2023**

6:30 PM

**Council Chambers,
City Hall**

Members Present:

Pamela Russell-Slack, Chair
David Orgaz, Vice Chair
Mayor George S. Hansel
Councilor Michael Remy
Roberta Mastrogiovanni
Armando Rangel
Harold Farrington

Staff Present:

Mari Brunner, Senior Planner
Jesse Rounds, Community Development
Director

Members Not Present:

Emily Lavigne-Bernier
Randyn Markelon, Alternate
Kenneth Kost, Alternate
Gail Somers, Alternate
Tammy Adams, Alternate

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10 **I) Call to Order - Roll Call**
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12 Chair Russell-Slack called the meeting to order at 6:30 PM and a roll call was taken.
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14 **II) Election of Chair, Vice Chair and Steering Committee**
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16 Vice-Chair Orgaz nominated Pamela Russell-Slack as Chair, himself as Vice-Chair and Harold
17 Farrington as the third member of the Steering Committee. The nomination was seconded by
18 Mayor George Hansel and was unanimously approved.
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20 **III) Minutes of Previous Meeting – December 19, 2022**
21

22 Mr. Farrington noted his name is spelled incorrectly on Line 61 – should say Farrington not
23 Harrington.
24

25 A motion was made by Mayor Hansel to approve the December 19, 2022 minutes as amended.
26 The motion was seconded by David Orgaz and was unanimously approved.
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IV) **Final Vote on Conditional Approvals**

There were no applications that were ready for a final vote by the Planning Board.

V) **Public Hearings**

SPR-790, Modification #1 – Site Plan – Summit Packaging Addition, 7 Krif Ct - Applicant Keach Nordstrom Associates Inc., on behalf of owner Summit Packaging Systems LLC, proposes to construct a ~6,400 sf addition to the existing 6,250 sf Summit Packaging Systems building and modify the parking lot, landscaping, utilities, and stormwater management systems on the property at 7 Krif Ct (TMP #118-002- 000). The parcel is 1.98 acres and is located in the Industrial District.

A. **Board Determination of Completeness**

Ms. Brunner stated the applicant requests exemptions from submitting a lighting plan, traffic analysis, soils analysis, historic evaluation, screening analysis, and architectural & visual appearance analysis. After reviewing each request, staff has determined that exempting the applicant from submitting this information would have no bearing on the merits of the application and recommends that the Planning Board grant these exemptions and accept the application as complete.

A motion was made by Mayor George Hansel to accept SPR-790, Modification #1 as complete. The motion was seconded by Councilor Michael Remy and was unanimously approved.

B. **Public Hearing**

Mr. Chris Gallo of Summit Packaging stated this company has been in Keene for the past nine years but on Krif Road for the past four years. He noted that they are the largest aerosol manufacturer in the country. He stated the proposal before the Board today is to double their building footprint. This expansion will allow Summit Packaging to construct customized product lines of its own for a global operation. Mr. Gallo indicated currently they have staff setting up global operation in Europe.

Staff comments were next. Community Development Director, Jesse Rounds, stated this a 1.98-acre property located at the end of Krif Road. This proposal consists of the construction of a new 6,400 square foot single story metal building. This site is surrounded by woods and wetlands to the west and south and industrial uses to the north.

The proposal is for the construction a 6,400 square foot addition to the existing building as well as site improvements. The site improvements include replacing the existing driveway, formalizing the parking area, landscaping, and the expansion of the stormwater management system on the site. An above-ground propane tank is proposed to be relocated along the western side of the parking area and will be protected by concrete bollards.

Mr. Rounds then addressed the Development Standards

Drainage - The existing stormwater management system on the site consists of a swale with culverts that drain into a sediment forebay before flowing into above-ground infiltration basin located on

the southeastern portion of the property. In order to accommodate the proposed addition, the existing infiltration basin and sediment forebay will be modified and increased in size. Two additional above ground infiltration basins will also be installed, one along the westerly portion of the property and the second located in the southwest portion of the property will serve as compensatory flood storage in addition to stormwater management.

Sediment & Erosion Control: An erosion control plan has been submitted with this proposal. The plan depicts a stabilized construction entrance to be installed where the proposed primary entrance to the new parking area will be located. Silt fence and silt socks are proposed for perimeter erosion control around areas of disturbance. Slopes will be stabilized with erosion control blankets and turf as needed. It appears that this standard has been met.

Snow Storage & Removal: The proposed site plan has snow storage areas located in several areas around the proposed driveway and parking areas. These areas are located away from surface waters and the applicant states in their narrative that the areas are intended to allow for parking and site access to remain clear for safe passage. A note has been included on the plan regarding the removal of snow from the site when storage capacity has been exceeded. It appears that this standard has been met.

Landscaping: The property currently contains 13 trees. The proposal includes the removal of one tree to make room for the redesigned parking area. The proposal also includes the installation six shrub varieties and four ornamental grasses along the walkway to the main entrance. The planting schedule indicates that all species were chosen based on the appropriate climate conditions for the region and no invasive species are proposed to be installed. The landscape plan shows that temporary fencing will be installed around the existing trees at the drip line to protect the root system from damage during construction. It appears that this standard has been met.

Screening: A dumpster enclosure is proposed to be installed on the northern edge of the proposed hammerhead turn around. The dumpster enclosure is proposed to be six-foot-tall vinyl plank fencing with matching vinyl plank gates. The Zoning Administrator has determined that the parking area is existing and does not meet the threshold for new screening, therefore no screening of the parking area is required. It appears that this standard has been met.

Lighting: The existing site does not have any pole lights for the parking area and the proposal does not include the installation of any new pole lights for the site. The only lighting for the exterior of the site consists of wall packs that are located above building entrances. The proposed wall packs are full cut-off fixtures. It appears that this standard has been met.

Sewer & Water: The applicant states in their narrative that the site is currently serviced by municipal water and sewer and there are no proposed changes to the service lines as part of this application. This standard is not applicable.

Traffic & Access Management: A Trip Generation Memo was submitted as part of this application. The memo states that the proposed addition will not increase the total number of employees at the business or deliveries the site will receive. The memo estimates 60 total weekday trips with eight trips during weekday A.M. peak and nine trips during weekday P.M. peak. The memo further states

that there are only 10 employees at any given time and that tractor trailers do not visit the site often. The analysis made a conservative estimation of 1 tractor trailer trip per day. Van deliveries are more common and visit the site approximately 2-5 times per day. The site utilizes two existing site access points off of the Krif Court cul-de-sac. The proposal intends to continue using both access points and plans to resurface the access point that leads to the parking area and proposed addition as part of proposed overall site improvements. It appears that this standard has been met.

Filling & Excavation: The applicant states in their narrative the proposed addition and site work intends to utilize material on site as much as possible. They are anticipating minimal truck activity leaving or entering the site. Krif Court and Krif Road lead directly to Route 10 so any truck activity related to delivery or removal of earth material will have minimal impact on traffic and the area. It appears that this standard has been met.

Surface Waters & Wetlands: The site has wetlands located along the southern and western property lines with 30-foot wetland buffers located within the site. The applicant has stated in their narrative that the proposal does not include any impact to surface waters or their buffers as part of this proposal. Erosion control measures are proposed to be placed between the edge of the buffers and the proposed limit of earth work to provide both siltation protection and a visual guide to prevent accidental grading within the buffer area. The Board may wish to include a condition of approval related to the inspection of the required erosion control measures prior to the start of site work. It appears that this standard has been met.

Hazardous & Toxic Materials: The applicant has stated in their narrative that that Summit Packaging Systems manufactures and distributes aerosol valves and actuators and that the facility is not intended or expected to receive, handle, or process any hazardous or toxic substances. It appears that this standard has been met.

Noise: The applicant states in their narrative that the current use of the property will remain the same. The property is located at the end of a cul-de-sac with no adjacent residential uses. It appears that this standard has been met.

Architecture & Visual Appearance: The applicant states in their narrative that the proposed metal addition was designed to be cohesive with the existing facility. It also states that the addition will be compatible with the industrial character of the site and surrounding area. Color elevations have been submitted with the application. The Board will need to determine if this standard has been met.

This concluded staff comments.

Chair Russell-Slack clarified the rendering of the Architecture & Visual Appearance is what the applicant is intending the addition would look like. Mr. Gallo agreed.

The Chair asked for public comment. With no public comment, the Chair closed public hearing.

The Mayor thanked the applicant for continuing to invest in Keene and noted this site is located in an area that contains much industry and not an area that consists residential dwellings.

C. Board Discussion and Action

A motion was made by Mayor George Hansel that the Planning Board approve SPR-790, Mod. 1 as shown on the plan identified as “Summit Packaging Systems, LLC. Map 118 Lot 2, 7 Krif Court Keene, New Hampshire” prepared by Keach-Nordstrom Associates, Inc. at a scale of 1 in. = 20 ft. dated December 15, 2022 and last revised January 9, 2023 and the architectural elevations prepared by Lauer Architects, P.A. at a scale of 1/8 in. = 1 ft. dated January 4, 2023 with the following conditions:

A. Prior to final approval and signature by the Planning Board Chair, the following conditions precedent shall be met:

- 1. Submittal of security for sedimentation and erosion control and “as built” plans in a form and amount acceptable to the City Engineer.”*
- 2. Submittal of five full sized paper copies and one digital copy of the final plan.*

B. Subsequent to final approval and signature by the Planning Board Chair, the following conditions shall be met:

- 1. Prior to the commencement of site work, the Community Development Department shall be notified when all erosion control measures are installed and the Community Development Director, or their designee, shall inspect the erosion control measures to ensure compliance with this site plan and all City of Keene regulations.”*

The motion was seconded by Vice-Chair Orgaz.

Mr. Farrington stated he echoes what the Mayor said and based on testimony from staff and the applicant he is in favor of approving this application. The motion made by the Mayor carried on a unanimous vote.

Amendments to the Planning Board Subdivision Regulations – The Planning Board proposes to amend its Subdivision Regulations in Article 19 of the City of Keene Land Development Code by amending Section 19.2.4 of Article 19, “preservation of existing features” to include additional information about the type of features that should be protected and possible requirements to protect those features; Section 19.2.8, “Utilities” to include additional requirements for lots that would not have access to City sewer; and Section 19.3.2.B, “Perimeter Building Setback” of the Conservation Residential Development Subdivision Regulations to require that existing tree canopy within the perimeter setback along external roads shall be preserved.

Senior Planner, Mari Brunner, addressed the Board. Ms. Brunner stated these amendments are being proposed to address concerns raised by the public initially to change the minimum lot size in the rural district as well as changes to the Conservation Residential Development Subdivision Regulations. The lot size change has been separated out and will be introduced as a separate ordinance.

The first proposed change is to Section 19.2.4 – Preservation of Existing Features – Currently the language reads – “Wherever feasible, suitable steps shall be taken to preserve and protect significant existing features, such as surface waters, steep slopes, rare and/or unique scenic points, stone walls, rock out-croppings, and historic landmarks.”

The proposed changes will give the Board more guidance and add to the list of features that should be protected (which include any of the attributes outlined in Section 19.3.4, which list all the primary and secondary conservation areas). Ms. Brunner stated this was a comment from a member of the public who felt it was great that the City has these primary and secondary conservation areas included in the Conservation Residential Development Subdivision Regulations, but who noted that they are not explicitly mentioned in Subdivision Regulations for all subdivisions.

The language goes on to say the following: “In order to ensure that the objectives of this section are met, the Planning Board may require additional studies or mitigation, including but not limited to the following:

1. The Board may require the submittal of a screening analysis, visual impact study, wildlife habitat study, historical evaluation, or other technical report prepared by a qualified professional.” Ms. Brunner stated the Board is likely to require this only if it feels there is highest ranked habitat in New Hampshire on this site or if it is known to be a historical site.
2. “The Board may require the designation of a “no-cut buffer” along public rights-of-way to preserve existing vegetation and provide a visual screen for new development. Any property that has been clear-cut within the preceding ten (10) year period, or any property that will be clear-cut as a result of any proposed or future development, may be required to conduct revegetation or other mitigation to provide a visual buffer along the public rights-of-way.” Ms. Brunner stated this again is an option in response to concerns raised by members of the public about the visual characteristics of roads in the Rural District.
3. “The Board may require that the proposed development be designed and located to fit into the landscape in order to minimize significant landscape alterations and mitigate or avoid impacts to significant existing features or views/vistas”.

Mayor Hansel clarified where these items are listed currently. Ms. Brunner stated item 1 came directly from the application procedure section (Article 25). The reason staff felt it would be helpful to list it here is when a developer hires a firm to go through the application process, they don’t often look at the application procedures. Items 2 and 3 are not specifically listed under the general Subdivision Regulations section.

Ms. Brunner went on to say that the next change is to the *Utility Section* – Section 19.2.8. The current language states that when required by City Code, applicants have to connect to City water and sewer, except for in the Rural District and Low Density 1 District. Properties in the Low Density 1 District have to connect City sewer and potentially to City water if they are located next to a water line.

- A. An item C has been added which states, “In areas not currently served by City sewer, it shall be the responsibility of the applicant or their agent to provide:

- a. *Adequate information (from test pits and percolation tests) to prove that the land and area of each lot is adequate to permit the installation and operation of an individual sewage disposal system.*
- b. *For subdivisions with lots smaller than 5 acres, subdivision approval from the New Hampshire Department of Environmental Services shall be required. (Required by State)”*

Councilor Remy asked whether language should instead say, “*must comply with NH DES Regulations on Subdivisions.*”

The Mayor asked with reference to percolation tests and test pits what standards they are measuring; what do they have to prove to the City. Ms. Brunner stated what the applicant is being asked to demonstrate is that the soil is suitable to site a septic system. She indicated this information is currently something the City requires for sites that don’t have City water and sewer. The Mayor did not feel this language was required as it would be a point of contention for people who want to fight a project. The Mayor went on to say with reference to a wildlife habitat study – what is Board going to measure that against. The Chair referred to Section 19.2.8 and felt the reference to New Hampshire Department of Environmental Services should probably be retained in the language but did not see a reason for the rest. The Mayor felt perhaps the initial test pits and soils analysis that are completed for structural integrity should be sufficient. He added he did not want the City to require an applicant to complete a full septic design. Ms. Brunner stated that is not what is being requested; what is being requested is preliminary data to show that a septic system can be sited. The Mayor felt the Planning Board did not need to get involved in this requirement. He felt that if an applicant did not have a septic system, there is not going to be a building at that location. Installation of a septic system is going to need a permit and a contractor would have to sign off on it and questioned why the Board would have to stamp that as well.

Ms. Brunner stated the role of the Planning Board is to make sure that each new lot is buildable; this is where the requirement is coming from. She added if the Board were to permit the creation of a new lot and it turns out a septic system could not be sited on that lot, the Board would have created a situation where there is hardship for the owner. Ms. Brunner added that New Hampshire is notorious for having bad soils and felt it was important to evaluate the site; it is the hope that anyone who is making the proposal would verify that a septic can be sited, but she noted that she felt it was also the Board’s responsibility to make sure the property is an appropriate site for a septic system. She added that it is common for Planning Board’s to require this information. Mr. Rounds added that there could be a letter added to the application that says a septic system could be located on a site and stamped by an engineer that would be sufficient for the Board. Ms. Brunner stated that would be acceptable.

Mayor Hansel referred to Section 19.2.4 and stated he is struggling with the requirement for the submittal of a wildlife study; as a Board member what would he measure that against. Ms. Brunner stated this is already in the Board requirements under Article 25. She added this is to determine if there are any endangered species in the area and how they can be preserved. She added there are instances in the Rural District where there are endangered species of the highest tier and if a project impacts that highest tier, then the Board could require a wildlife study and noted that it might need

to be a case-by-case determination. The Mayor stated in that case the requirement should not be included here because it could then become a standard for every controversial project.

Ms. Brunner next referred to Sec. 19.3.2.B of the LDC, which states that the existing Perimeter Building Setback has no requirement that it be vegetated or that they maintain existing vegetation. For a CRD there is the existing external road, then there is the tract of land, (50 % of the land needs to be placed in open space) and the remaining area could be divided into lots. There is also the perimeter area which has an increased setback, so the development has a buffer around the surrounding area and external road. Mayor Hansel asked even with the setback buffer, it does not change the calculation for impervious surface etc. Ms. Brunner clarified, today the language refers to building setback - what is proposed is if there is already a mature tree line along the road, that would have to be maintained and if it is cut down, then it would need to be revegetated. This area could count towards the open space calculation.

This concluded staff comments.

The Chair asked for public comment next. With no comments from the public the Chair closed the public hearing.

The Chair asked whether there was a motion required for this item. Ms. Brunner explained because there were some suggested amendments, the Board should continue this item so that staff could bring back language for the Board to review at its next meeting.

A motion was made by Mayor George Hansel that the Planning Board continue this item to the Board's next meeting on February 27 at 6:30 pm. The motion was seconded by Councilor Remy and was unanimously approved.

VI) Extension Request SPR-04-20 – Group Home – 169 Church St - Applicant and owner Christopher Farris, proposes to construct a 5,690-sf two-story, duplex-style group home with a habitable attic and a maximum occupancy of 24 people on the vacant lot located at 169 Church Street (TMP# 574-027-000). The site is 0.58 acres in size and is located in the High Density District.

Board Discussion and Action

A motion was made by Mayor George Hansel that the Planning Board table SPR-04-20, request for extension to the February 27TH Planning Board meeting. The motion was seconded by Councilor Michael Remy. The Councilor asked if the public hearing needs to be opened before it is continued and will it need to be re-noticed if it is tabled.

Ms. Brunner stated this is an extension request as their approval will expire this month. For a first extension applicants are encouraged to attend the meeting, but it is not required. She went on to say this project was initially approved two years ago and received conditional approval from the Planning Board to construct a two-story duplex style group home (one half for men and the other half for women). There was a structure on the site that burned down. The applicant was able to get their plan signed within the time frame. What is being requested is an extension to achieve active and substantial development. Since the application was approved, the property has changed

ownership and the new owner is trying to figure out whether they want to move forward with the group home idea or a different development proposal. This will give them time to figure out what they want to do and prevent them from losing the prior approval.

The Mayor made a second motion that the Planning Board grant a one year extension for SPR-04-20. The motion was seconded by Councilor Michael Remy and was unanimously approved.

VI. Master Plan Update Discussion

The item was tabled to the February meeting.

VII. Staff Updates

a. Overview of Administrative & Minor Project approvals issued in 2022.

The Chair referred to #7 – roof top array for 310- Marlboro Street and asked which building this was for. Ms. Brunner stated the array has already been installed on the lower portion of the roof closest to the road.

The Chair referred to #14 and asked whether staff was keeping a close eye on this project. Ms. Brunner answered in the affirmative.

The Chair referred to the items that still need to be addressed for the 100 Nights building. Ms. Brunner agreed the list does appear to be long but stated they are minor changes. When they applied for administrative approval, the only change was to the windows. The applicant also realized the walkway needed modification to meet ADA requirements.

VIII. New Business

There was no new business to be introduced.

IX. Upcoming Dates of Interest

- Joint Committee of the Planning Board and PLD – February 13, 6:30 PM
- Planning Board Steering Committee – February 14, 11:00 AM
- Planning Board Site Visit – February 22, 8:00 AM – To Be Confirmed
- Planning Board Meeting – February 27, 6:30 PM

There being no further business, Chair Russell-Slack adjourned the meeting at 7:30 PM.

Respectfully submitted by,
Krishni Pahl, Minute Taker

Reviewed and edited by,
Megan Fortson, Planning Technician



GRANITE ENGINEERING, LLC

civil engineering • land planning • municipal services

February 9, 2023

City of Keene
Planning Board
3 Washington Street
Keene, New Hampshire 03431

RE: **Earth Excavation Permit Extension – EXP-01-22**
Tax Map 215 Lot 7
Route 9
Keene/Sullivan/Roxbury, New Hampshire
GE Project No. 2302011

Dear Ms. Brunner,

On behalf of the applicants, G2 Holdings, LLC, we are requesting a 180-day extension on the conditional approval for an Earth Excavation Permit from the February 19, 2023, deadline. The extension request will allow an adequate timeframe to meet the conditions of approval set by the Planning Board on August 22, 2022.

Condition 3 of the “Notification of Conditional Planning Board approval”, dated August 23, 2022, provided a deadline of February 19, 2023. The extension request will allow an adequate timeline for G2 Holding, LLC to prepare and submit the “Security for landscaping, sedimentation, and erosion control, As-Built plans, and restoration in a form and amount acceptable to the Community Development Director and the City Engineer.” It is our understanding the City and applicant are working on final amounts for the security.

Condition 8 of the “Notification of Conditional Planning Board approval”, dated August 23, 2022, provided a deadline of February 19, 2023. G2 Holdings has hired Granite Engineering, LLC to perform the wetland buffer certification and inspections. Due to weather conditions, the wetland buffer certification cannot be completed until spring time to accurately access the site and provide a report including findings and required actions. The 180-day extension will allow for sufficient weather to accurately meet the condition.

All other conditions of approval have been completed and verified by City Staff. All work on the premise, including processing of stockpiled material, has been ceased since a site inspection by a City Official on January 5, 2023.

We trust you will find the extension request complete and ready for the Board's consideration on February 27, 2023. Should you have any questions or require further information, please do not hesitate to contact me directly.

Best Regards,

A handwritten signature in black ink, appearing to read 'Brenton Cole', with a long, sweeping horizontal line extending to the right.

Brenton Cole, P.E.
Principal Engineer

Megan Fortson

From: Cory Graves <cory.graves.cg@gmail.com>
Sent: Friday, February 17, 2023 10:09 AM
To: Megan Fortson
Subject: Subdivision Extension Request

Regarding S-08-22

Dear Megan,

Per our conversation this morning, I would request a formal extension to the above subdivision. The purpose for this extension is solely to coordinate signatures for the right away affidavit from the owners as of the right away, as well as the owners of the property. The difficulty that I have had is coordinating everybody to be available due to traveling schedules. My hopes are to be able to accomplish this in order to fulfill the notarized affidavit from all involved parts.

Thank you for the consideration.

Cory Graves.

STAFF REPORT

SPR-01-23 – Site Plan Review – Granite State Car Wash – 364 West Street & 12 Pearl Street

Request:

Applicant Aaron Wiswell, on behalf of owner Sandri Realty Inc., proposes to demolish the existing structures on the properties located at 364 West St (TMP #577-026-000) and 12 Pearl St (TMP #577-027-000), merge the lots, and construct a 2-bay car wash that is ~2,000 sf in size. Waivers are requested from Sec. 20.7.3.F.1.c of the Land Development Code regarding the requirement to reduce lighting levels by 50% overnight and Sec. 20.6.2.B.1 regarding the requirement that drive-through windows and lanes shall not be located along the building frontage. The combined parcels are 0.60 acres and are located in the Commerce District.

Background:

The two subject parcels for this application are 0.48 acres and 0.13 acres in size for a total area of 0.61 acres. The 0.48-acre parcel currently contains a former gas station that is currently being used as an auto detailing business. The 0.13-acre parcel currently contains a single-family residence. Both buildings will be demolished, and the parcels merged as part of this proposal. The new lot will be 0.61 acres in size.

The applicant is proposing to construct a 2,000 sq. ft. building to accommodate an automated car wash operation. The building will contain two automatic car wash tunnels, a small office, and a mechanical room. Four car vacuum stations are proposed on the west side of the property, adjacent to Pearl Street. The carwash is intended to operate 24 hours a day; however, the applicant states that the vacuum stations would operate between 7:00 am and 8:00 pm.



Fig 1: 364 West Street & 12 Pearl Street

The application includes two waiver requests. The first request seeks relief from the Board's Lighting standard, Section 20.7.3.F.1.c of the Land Development Code regarding the requirements to reduce light levels to 50% overnight. The second request seeks relief from the Screening standard, Section 20.6.2.B.1 of the Land Development Code regarding the requirement that drive-thru windows and lanes shall not be located along the building frontage or a façade with a primary entrance.

Completeness:

The applicant requests exemptions from submitting a historic evaluation, screening analysis, and soils analysis. After reviewing each request, staff has determined that exempting the applicant from submitting this information would have no bearing on the merits of the application and recommends that the Planning Board grant these exemptions and accept the application as "complete."

STAFF REPORT

Application Analysis: The following is a review of the Planning Board development standards relevant to this application.

- 20.2 **Drainage:** The applicant states in their narrative that both subject parcels are fully developed and that their drainage patterns are well established. The properties currently allow water to flow across pavement and lawn into the City's stormwater drains on both Pearl Street and West Street. The proposal will reduce lot coverage and incorporate on-site infiltration of stormwater runoff.

Stormwater from the northern half of the site will be directed into a grass swale parallel with West Street that drains into a shallow infiltration area at the northeast corner of the property. For the southern half of the site, catch basins will collect stormwater flow and discharge to an infiltration basin located in the southeast corner of the property. The submitted stormwater report states that the post development conditions will have no adverse impacts to downstream abutters due to stormwater runoff from the proposal. There is no significant change in the stormwater pattern, with a slight decrease in stormwater runoff from the site. It appears that this standard has been met.

- 20.3 **Sediment & Erosion Control:** The Grading and Drainage Plan, sheet C-2 proposes to install silt fencing around the perimeter of the site and includes a stabilized construction entrance at the location of the permanent site access point on Pearl Street. Silt sock is proposed to protect the catch basins on site during construction. It appears that this standard has been met.

- 20.4 **Snow Storage & Removal:** The Site Plan, sheet C-1 shows snow storage areas along the eastern property line and to the north the of the proposed drive-thru lanes. The applicant states in their narrative that there is room for snow storage along the perimeter of the paved area. Excess snow will be removed the site after each snowstorm as needed. It appears that this standard has been met.

- 20.5 **Landscaping:** The Landscaping Plan, sheet LA-1 shows a selection of perennials, evergreens, and shrubs to be installed on the site. Most of the landscaping will serve as screening from the public right-of-way. An internal landscaping area is proposed along the southern façade of the building. This area will include Blue Rug Juniper, Happy Rose Daylily, and Heuchera. Rhododendron and Arborvitaes will be used for screening along the Pearl Street and West Street frontages. The proposed landscaping also includes the installation of 6 ornamental trees, 4 red leaf maples and two snowdrift crab apple trees. No invasive species are proposed. It appears that this standard has been met.

- 20.6 **Screening:** The Site Plan, sheet C-1 shows a 6 ft. solid wood fence to be proposed along the southern and eastern property lines to screen the adjacent residential uses. Additionally, Rhododendron and Arborvitaes are proposed to be installed along the Pearl Street and West Street frontage to screen the parking and drive-thru facilities from the public right-of-way. The proposed dumpster enclosure will be a 6 ft. solid wood fence.

The applicant has submitted a waiver request to provide relief from Section 20.6.2.B.1 of the Land Development Code, which states, "*Drive-through windows and lanes shall not be located along the building frontage or along a building facade with a primary entrance.*" The applicant states in their waiver request that the proposed site design is required in order to accommodate the decision to abandon the West Street curb cuts and force the building orientation to face Pearl Street.

The Planning Board may grant a waiver from strict compliance with provisions of the Site Development Standards in Article 20 or site plan review standards in Section 25.12, on a case by-case basis, so long as the Board finds, by majority vote, that:

STAFF REPORT

1. *Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or*
2. *Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.*

The Board will need to determine if the waiver request meets the above criteria.

- 20.7 Lighting: The Lighting Plan, sheet LT-1 shows 4 pole-mounted lights in the parking and drive-thru area and 5 wall-mounted lights on the proposed building. The poll lights will be full cutoff LED lights mounted 15 ft. from grade. The wall-mounted lights will be full cutoff LED lights mounted 10 ft. from grade. The average light levels will be 1.32 footcandles at the vacuum stations and 1.12 at the parking spaces. The uniformity ratios are 1.89:1 and 2.24:1 where the standard requires the ratios to not exceed 5:1.

The applicant has submitted a waiver request to provide relief from Section 20.7.3.F.1.c of the Land Development Code, which states, “For 24-hour businesses, lighting levels shall be reduced by a minimum of 50% between the hours of 10:00 pm and 6:00 am.” The applicant states in their waiver request that reducing the light levels below 1 footcandle would create a potentially hazardous condition as the carwash will operate 24-hours and they expect customers after 10 PM.

The Planning Board may grant a waiver from strict compliance with provisions of the Site Development Standards in Article 20 or site plan review standards in Section 25.12, on a case by-case basis, so long as the Board finds, by majority vote, that:

1. *Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or*
2. *Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.*

The Board will need to determine if the waiver request meets the above criteria.

- 20.8 Sewer & Water: The applicant intends to use City water and sewer for the site. The 16 in. water main that runs under Pearl Street will be used. The existing 1 in. water service will be used for the carwash and a second water service line that extends from West Street will be used for irrigation.

A 1,500 gal. oil/water separator will be utilized for the carwash wastewater pre-treatment prior to discharge to the sewer line under West Street utilizing a 6 in. service line. Wastewater from the bathroom will bypass the separator with a 4 in. line that will connect to the 6 in. sewer service line that discharges to the sewer main.

The applicant states in their narrative that each carwash utilizes 35 gal. of water. The water is collected by floor drains in each tunnel then directed to the oil/water separator. With an expected average usage of 100 carwashes per day, the applicant estimates that 3,500 gal. of water will be used and discharged into the city sewer system. It appears that this standard has been met.

- 20.9 Traffic & Access Management: The applicant states in their narrative that the site is a former gas station that has been used as an auto detailing shop. The existing traffic for the property has been very low. The proposed use will be a 24-hour carwash with approximately 200 trips per day. A traffic analysis prepared by Stephen G. Pernaw, P.E., PTOE was submitted which concludes that the trip generation during the PM peak hour period is expected to be 28 vehicle-trips, and the

STAFF REPORT

Saturday peak hour is expected to generate 61 vehicle-trips. Based on this expected increase in traffic volume, the analysis concludes the following:

- “The Pearl Street approach to West Street will continue to operate below capacity during the weekday PM peak hour period with the car wash in full operation.
- Car wash traffic is expected to increase the delays on the Pearl Street approach to West Street by approximately +3 seconds during the weekday PM peak hour period.
- Car wash traffic is not expected to alter the prevailing Levels of Service during the weekday PM peak hour period (LOS D without the car wash, LOS D with the car wash).
- Car wash traffic is expected to increase the 95th percentile queue on the Pearl Street approach to West Street by approximately 0.4 vehicles.
- Applying the Saturday trip generation estimates to the weekday PM peak hour volumes (comparable to the Saturday peak hour volumes) confirms that the Pearl Street approach will continue to operate below capacity and at LOS E. The 95th percentile queue is expected to increase by approximately 1.0 vehicle during the Saturday peak hour.”

Current site access includes two curb cuts along West Street and one curb cut along Pearl Street. The proposal includes the abandonment of the two curb cuts on West Street. New curbing will be installed at the former curb cuts and the sidewalk will be repaired with new concrete. The Pearl Street curb cut will be shifted 125 ft. away from the West Street intersection and improved to be used as the only site access point.

The traffic analysis notes that there is sufficient queue storage for 4 vehicles on the Pearl Street approach to West Street without interfering with the proposed site driveway, and that this is more than sufficient because the 95th percentile queue is expected to be 2 vehicles during the worst-case peak hour period.

Site circulation allows for two-way travel from the site access point then one way travel around the building to the carwash tunnels on the eastern façade of the proposed building. Vehicles will exit the carwash tunnels from the western façade of the proposed building, then travel past the vacuum stations to leave the site at the same access point. The drive aisle by the vacuum stations is two-way travel.

A Fire Truck Maneuvering Exhibit has been submitted with the application. The exhibit shows that a Fire Department ladder truck would be able to enter the site and perform a three-point turn in order to turn around and leave the site. In most cases, fire equipment would remain on either Pearl Street or West Street instead of entering the site. It appears that this standard has been met.

- 20.10 Filling & Excavation: The applicant states in their narrative that minor filling and excavation will be required for this proposal. Trucks will haul material from NH route 12 to West Street to the building site. The applicant estimates that 300 cu. Yd. of material will travel to and from the site. It appears that this standard has been met.
- 20.11 Surface Waters & Wetlands: There are no surface waters or wetlands located on the subject properties. The applicant states in their narrative that the Ashuelot River is located 400 ft. east of the proposal and will not be affected by the development. It appears that this standard has been met.
- 20.12 Hazardous & Toxic Materials: The applicant states in their narrative that they have no knowledge of hazardous or toxic materials at the site. It appears that this standard has been met.

STAFF REPORT

- 20.13 Noise: This standard requires all proposed uses or development to comply with the City's Noise Ordinance and the Noise Limits in Article 17 of the LDC, and further states that development shall be sited or designed to minimize sound or noise impacts with consideration for surrounding land uses.

The applicant states that they located the car vacuums next to Pearl Street to maximize the distance between the residential uses to the south and east and the vacuum stations. A 6 ft. tall solid fence and landscaping is proposed to both screen and dampen the noise of the carwash operation from the adjacent residential uses to the east and south; however, it should be noted that the 6-ft fence is not expected to have a minimal impact on the noise levels for the second story of adjacent buildings. To further mitigate noise levels, the applicant is proposing to limit the hours that the vacuums can be used. The vacuums will only operate from 7AM to 8 PM. The Board will need to determine if additional information is required to determine whether this standard has been met. A condition of approval related to hours of operation for the vacuums is proposed with the recommended motion language.

- 20.14 Architecture & Visual Appearance:

The applicant states in their narrative that the proposed carwash will be a small, 2,000 sq. ft. single story building with a pitched roof. The eastern and western facade of the building will contain two overhead doors providing access to the wash tunnels. A single passage door will provide access to the small office and mechanical room. The building walls will be made of a Nuform polymer-based block material that is waterproof. The building will be 14 ft. from the top of the foundation to the peak of the roof.

The color will be light gray. The roof will be an 8:12 pitch with asphalt shingles, also in gray. The doors and trim will be dark gray in color. A small cupola will be placed on the roof to give the building a traditional New England design that the applicant feels is appropriate for the area. The Planning Board will need to determine if this standard has been met.



Fig 2: Front elevation (Pearl Street façade).

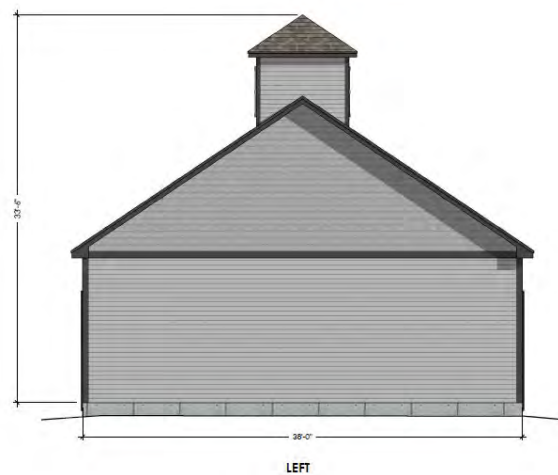


Fig 3: Side elevation (West Street façade).

STAFF REPORT

Recommended Motions for Waivers:

If the Board is inclined to grant the requested waivers, the following language is recommended for a motion:

Waiver Request #1: “Grant a waiver from Section 20.7.3.F.1.c of the Land Development Code regarding the requirement to reduce lighting levels by 50% overnight.”

Waiver Request #2: “Grant a waiver from Section 20.6.2.B.1 of the Land Development Code regarding the requirement that drive-through windows and lanes shall not be located along the building frontage.”

Recommended Motion for Application:

If the Board is inclined to approve this request, the following language is recommended for a motion:

“Approve SPR-01-23 as shown on the plan identified as “Granite State Car Wash 364 West Street & 12 Pearl Street Keene, New Hampshire” prepared by SVE Associates and Brickstone Land Use Consultants. at a scale of 1 in. = 20 ft. dated January 17, 2023 and last revised February 7, 2023 and the architectural elevations prepared by J.W.H. Drafting & Design at a scale of 1/4 in. = 1 ft. dated December 7, 2022 with the following conditions:

1. Prior to final approval and signature by the Planning Board Chair, the following conditions precedent shall be met:
 - A. Submittal of security for sedimentation and erosion control and “as built” plans in a form and amount acceptable to the City Engineer.”
 - B. Addition of a note on the plan stating “The hours of operation for the Vacuum Stations shall be 7:00 AM to 8:00 PM”
 - C. Submittal of five full size paper copies and one digital copy of the final plan.
2. Subsequent to final approval and signature by the Planning Board Chair, the following conditions shall be met:
 - A. Prior to the commencement of site work, the Community Development Department shall be notified when all erosion control measures are installed and the Community Development Director, or their designee, shall inspect the erosion control measures to ensure compliance with this site plan and all City of Keene regulations.”



City of Keene, NH Site Plan Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

SECTION 1: PROJECT INFORMATION

PROJECT NAME:

Granite State Car Wash

TYPE OF APPLICATION BEING SUBMITTED:

- ☒ MAJOR PROJECT APPLICATION
☐ MINOR PROJECT APPLICATION

PROJECT ADDRESS(ES):

364 West St **12 Pearl St.**

EXISTING OR PREVIOUS USE:

Gas Station / Auto Detailing + Residence

PROPOSED USE:

CAR WASH

GROSS FLOOR AREA OF

NEW CONSTRUCTION (in square feet) 2,000 SF

GROSS FLOOR AREA OF EXISTING

BUILDINGS/STRUCTURES (in square feet) 2,396 SF

AREA OF PROPOSED NEW

IMPERVIOUS SURFACES (in square feet) 14,000 SF

TOTAL AREA OF LAND DISTURBANCE (in square feet)

20,000 SF +/-

SECTION 2: CONTACT INFORMATION

NAME/COMPANY:

SANDRI Realty Inc.

NAME/COMPANY:

Aaron Wiswell

MAILING ADDRESS:

400 Chapman St Greenfield MA 01301

MAILING ADDRESS:

9 White Pine Way Berwick ME 03906

PHONE:

413 834 7029

PHONE:

207-252-5145

EMAIL:

m.behn@sandri.com

EMAIL:

aaron.wiswell@gmail.com

SIGNATURE:

Michael V. Behn

SIGNATURE:

Aaron Wiswell

PRINTED NAME:

Michael V. Behn

PRINTED NAME:

Aaron Wiswell

ADDITIONAL AGENT
(If different from Owner/Applicant)

NAME/COMPANY:

James Phippard / Brickstone Land Use Consultants

TAX MAP PARCEL #(s):

577-026-000-000-000-364 West St.

MAILING ADDRESS:

185 Winchester St Keene NH 03431

577-027-000-000-000-12 Pearl St.

PHONE:

603-357-0114

PARCEL SIZE:

0.48 Acres - 364 West St.
0.13 Acres - 12 Pearl St.

EMAIL:

jphippard@nc.rr.com

ZONING DISTRICT:

Commerce

SIGNATURE:

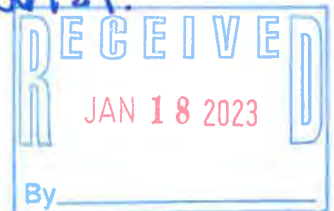
James P. Phippard

PRINTED NAME:

James P. Phippard

PROJECT #:

SPR-01-23



Site Plan Review Project Narrative

**Granite Sate Carwash
364 West Street
Keene, NH**

January 19, 2023

Aaron Wiswell has an option to purchase the former gas station property at 364 West Street and the adjacent residential buildings at 12 and 18 Pearl Street. They are planning to remove the existing buildings at 364 West Street and 12 Pearl Street and to construct a new automated carwash. The multifamily residence at 18 Pearl Street will remain. The lots at 364 West Street and 12 Pearl Street will be merged to form a 0.60 acre lot in the Commerce district.

The applicant is proposing to construct a 2000 sf building containing two automated wash tunnels, a small office, and a mechanical room. Four vacuum stations will be located on the west side of the site adjacent to Pearl Street. Five parking spaces will be located on the south side of the site. The carwash will operate 24 hours per day.

City water and city sewer serve this site with a 16" water main and a 12" sewer main on Pearl Street. The existing 1" water service line at the site will be utilized for the carwash. A second water service line extends into the site from West Street and will be utilized for a site irrigation service.

They expect to average 100 carwashes per day using an average of 35 gallons of water per wash. The maximum capacity of the wash tunnels is 12 cars per hour per tunnel. This equates to 840 gph or 14 gpm peak water usage. Adequate capacity exists for this proposal.

Screening on the site will be provided by adding six foot solid fencing at the dumpster location and along the south property line. A row of arbor vitae along the Pearl Street frontage will screen the vacuum stations. An existing solid 6 foot fence provides screening along the east side of the site.

On-site lighting will be provided with full cutoff LED fixtures. Light levels will be 1.32 footcandles at the vacuums and 1.12 footcandles at the parking spaces. Since the carwash will operate 24 hours per day, a waiver is requested to allow full light levels overnight.

A waiver is requested from section 20.7.3.F.1.c to allow full light levels overnight.

Waiver Criteria:

Strict conformity results in an unnecessary hardship for the Owner. The proposed lighting plan calls for average light levels at 1.32 footcandles at the vacuum stations and 1.12 footcandles at the parking spaces. These are very low levels and reducing the levels by 50% would result in unsafe lighting conditions on the site. The carwash operates 24 hours per day and will have customers after 10:00 PM. Reducing light levels below 1 footcandle would create a potentially hazardous condition. This is an unnecessary hardship for the owner.

Specific circumstances of the site plan will meet the spirit and intent of the standard. The proposed light levels are very low at 1.32 and 1.12 footcandles, just slightly exceeding the recommended security level lighting of 1 footcandle. These are full cutoff LED fixtures and will provide uniformity ratios between 1.89:1 and 2.24:1 where a maximum of 5:1 is permitted. The intent of the standard is to provide safe lighting without excessive light into the night sky or onto abutting properties. This proposal meets the intent of the standard.

Site Plan Review Narrative

**Granite State Carwash
364 West Street
Keene, NH**

January 19, 2023

Site Development Standards

20.2 Drainage & Stormwater Management- The existing sites are fully developed and the drainage patterns are well established. The properties currently sheet drain across pavement and lawn areas and into the city storm drains in West Street and Pearl Street. The proposed plan will reduce lot coverage and will change the drainage to onsite infiltration. Stormwater from the northern half of the site will be directed to a grass lined swale parallel to West Street and into a shallow infiltration area at the northeast corner of the site. The south half of the site will be collected into storm drains and discharged to an infiltration area at the southeast corner of the site. The infiltration areas are designed to retain and infiltrate a 25 year design storm. There will be no increase in runoff leaving the site as a result of this proposal. See attached Hydrocad report from SVE Associates.

20.3 Sediment/Erosion Control – Sediment and erosion control will be provided using silt fencing during construction at the disturbed areas and use of a stone construction entrance during construction.

20.4 Snow Storage & Removal – Snow will be stored around the perimeter of the paved area and in the parking spaces at the rear of the site. Excess snow will be removed from the site after each snowstorm as needed.

20.5 Landscaping – New trees, shrubs, and perennials will be planted to provide screening and to enhance the appearance of the property. Four new maple trees will be planted along the West Street frontage and two flowering crabs will be planted adjacent to the new building. A row of arborvitae will be planted along the Pearl Street frontage which will screen the vacuum stations. Along the south boundary a six foot solid fence will be constructed, and a row of arborvitae mixed with rhododendron will be planted. On the south side of the new building a planting bed containing a mix of shrubs and perennials will be installed.

20.6 Screening – The dumpster will be screened with six foot high solid fencing.

A six foot high solid fence will be installed along the south property line to provide screening between the carwash and the existing multi-family building at 18 Pearl Street. The vacuum stations will be screened with a row of arborvitae along the Pearl Street frontage. A six foot high solid fence exists along the east boundary between Aroma Joe's and this site.

20.7 Lighting – Site lighting will be provided with 4 pole lights in the parking and circulation areas and five wall mounted lights on the building. Each pole light will have full cutoff LED fixtures at a 15' foot mounting height. The wall mounted fixtures will be full cutoff LED fixtures at a 10 foot mounting height. Average light levels will be 1.32 footcandles at the vacuum stations and 1.12 footcandles at the parking spaces. The uniformity ratios are 1.89:1 and 2.24:1.

This business will operate 24 hours per day. A waiver is requested from section 20.7.F.1.c to allow the lights to remain on at full light levels overnight. The standard requires lighting to be reduced by at least 50% between 10PM and 6AM. Since the proposed light levels are already so low (1.12 and 1.32 footcandles) it would be unsafe to drop the light levels below 1 footcandle. See waiver request.

20.8 Sewer & Water – The existing water services at 12 Pearl Street and 364 West Street will be utilized for the new building. The Pearl Street water service is a 16" main with a 1" CTS service line into the site that was replaced in 2016 and will be used as the service for the carwash. The West Street water service is a ¾" copper line installed in 1966. It will be used for an on-site irrigation system. The existing sewer services will be disconnected at the mains and a new sewer service will be installed at Pearl Street.

The carwash is expected to average approximately 100 washes per day and average 35 gallons per wash. Total average water usage will be approximately 3500 gpd.

20.9 Traffic & Access Management – This site is a former gasoline service station. It is now used as an automobile detailing shop. The existing traffic at the site is very low. The proposed use will be a new automated carwash with two tunnels and four vacuum stations. The new carwash will be open 24 hours and is expected to average approximately 100 washes per day. This equates to 200 vehicle trips per day over the 24 hours the carwash is open. The peak is expected to be 14 cars (28 vte) during the PM peak hour. The proposed change in use will not significantly affect the safety or capacity of West Street and Pearl Street.

Current access to the site is via two curb cuts on West Street and one curb cut on Pearl Street. This proposal will close the curb cuts on West Street

and shift the Pearl Street curb cut to be 125 feet from the intersection at West Street. The old curb cuts will be closed and new granite curbing will be installed. The sidewalks will be repaired with new concrete providing safer access for both vehicles and pedestrians.

20.10 Filling & Excavation – Minor filling and excavation will be necessary to add the proposed building and parking area to the site. Trucks will haul materials from NH Rt. 12 to West Street to the building site. Approximately 300 CY of material will be hauled to or from the site.

20.11 Surface Waters & Wetlands – The Ashuelot River is located approximately 400 feet east of the development site. There will be no impacts to the Ashuelot River resulting from this proposal.

20.12 Hazardous or Toxic Materials – The applicant has no knowledge of hazardous or toxic materials at this site.

20.13 Noise – No excessive noise will result from this proposal.

20.14 Architecture & Visual Appearance - The proposed carwash will be a small, 2000 sf, single story building with a pitched roof. The front and back of the building will contain two overhead doors providing access to the wash tunnels. A single passage door will provide access to a small office and a mechanical room. The walls of the building will be constructed using Nuform blocks made of a polymer based material. This provides a waterproof wall system ideal for carwash buildings. The color will be a light gray.

The roof will be an 8:12 pitch with asphalt shingles, also gray in color. The doors and trim on the building will be a dark gray color.

The building will be topped with a small cupola resulting in a traditional New England design appropriate for this area.

February 08, 2023

Evan Clements, Planner
City of Keene
3 Washington Street
Keene, NH 03431

Re: Site Plan Review for Granite State Carwash, 12 Pearl Street, Keene, NH
Request for Waiver of Standard 20.6.2.B.1. Location of Drive Thru Lanes

Dear Evan:

On behalf of Aaron Wiswell, I am requesting a waiver of Standard 20.6.2.B.1. Location of Drive Thru Lanes to allow the exiting lanes to pass in front of the building and exit to Pearl Street.

Strict conformity results in an unnecessary hardship to the Owner. The owner chose to close the existing curb cuts at West Street in order to reduce turning movements in West Street and improve traffic safety. We also are moving the Pearl Street curb cut to be further back from West Street, again improving traffic safety by avoiding queues at the intersection. This dictates the orientation of the building and results in the front façade facing Pearl Street. It is necessary for the exit lanes to pass across the front of the building to allow cars to exit to Pearl Street. If a waiver cannot be granted it will be necessary to turn the building to face West Street and add a curb cut on West Street for cars to exit the site. This causes a safety concern and creates an unnecessary hardship for the owner.

Specific circumstances of the site plan will meet the spirit and intent of the standard. The spirit and intent of the standard is to provide screening of drive thru lanes and to provide safe access and circulation at commercial sites. Screening of the drive thru lanes is provided by landscaping and solid fencing. Closing the West Street curb cuts and moving the Pearl Street curb cut back from the intersection provides the safest possible layout for access and circulation at the site. This meets the spirit and intent of the standard.

Granting the waiver will result in no adverse impacts in this case.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'James P. Phippard', with a stylized, looping flourish at the end.

James P. Phippard, agent



February 08, 2023

Evan Clements, Planner
Keene Community Development Department
3 Washington Street
Keene, NH 03431

Re: Response to Staff Comments, SPR-01-23, Granite State Carwash

Dear Evan,

In response to your letter dated February 03, 2023, I offer the following additional information:

1. **Vacuum Noise Levels** – We located the vacuums next to Pearl Street to maximize the distance from the residences to the south and east of the site. We also added plantings along the south side in addition to the six foot high solid fence and are adding additional fencing along the east side of the site. To further mitigate for any excess noise after hours, the vacuums will only operate from 7:00 AM to 8:00 PM, and be shut off each night after 8:00 PM.
2. **Screening of Drive-Thru Lanes** – We are adding additional plantings along Pearl Street and West Street to better screen the drive-thru lanes. See revised Landscape Plan.
3. **Waiver for Drive-Thru lanes at Building Front** – A waiver is requested to allow the drive-thru lanes to extend across the front of the proposed building. A separate waiver request is attached.
4. **Lighting Fixtures** – The light fixture specified has been revised to call for a CRI of 80. See revised Lighting Plan.
5. **Traffic** - Stephen Pernaw, PE, PTOE is setting out cameras to perform traffic counts at the intersection of Pearl Street and West Street. This information will be collected and used to address the staff concerns about queueing in Pearl Street and on the site. The information will be submitted to staff by Wednesday 2-15-23 for use at the Planning Board meeting.
6. **Legend** - The legend has been revised to include all symbology used on the plans.
7. **Traffic** - See number 5. Above.
8. **Infiltration Test Pits** – We are using the test pit data from the adjacent Aroma Joe's property. Those test pits are within 40 feet of the proposed infiltration area and the soils are identical.

9. **Water Services** – We will be abandoning the 3/4" water service and utilizing the newer 1" service from Pearl Street.
10. **Industrial Pretreatment Wastewater Discharge Coordinator** – SVE Associates is working with the IPWD Coordinator for the handling of the wash water discharge into the City sewer system. Wash water is collected inside the tunnels by floor drains which discharge to the 1500 gallon oil/water separator located on site. Water passing through the separator then discharges to the City sewer system through a 6" line to West Street. Wastewater from the bathroom in the building discharges through a 4" line into the 6" line below the separator and then to West Street.
11. **Water Usage** - Each wash averages 35 gallons of water. The water is collected by floor drains within each tunnel and discharged to the 1500 gallon oil/water separator located outside the building. The water passing through the separator is then discharged to the City sewer in West Street. They expect to average 100 car washes per day which equates to 3500 gallons of water into the sewer system.
12. **Building Location** – A licensed land surveyor will stake out the building location on site and certify compliance with the building setback.
13. **Screening at Residential Uses** – Additional 6' solid fencing has been added to the southeast side of the site to screen the residential use to the east.
14. **Building Dimensions** – The plan has been revised to agree with the building dimensions as shown on the building elevation sheet. This includes the overhangs at the eaves.
15. **Fire Department Access** – We have attached a plan which depicts fire truck circulation on the site.
16. **Knox Box** – If required by the Fire Dept. a Knox Box will be added.

Please review the attached plan sheets and let me know if any additional information is required.
Thank you for your consideration.

Sincerely,



James P. Phippard, agent

Granite State Car Wash

364 West Street & 12 Pearl Street, KEENE, NEW HAMPSHIRE

OWNER:

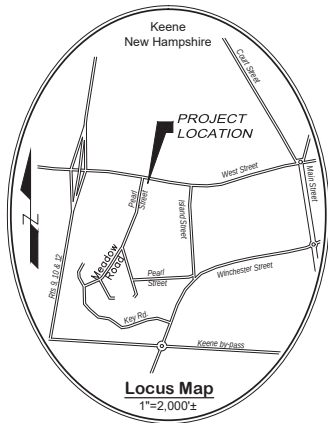
Sandri Realty Inc.

400 CHAPMAN STREET
GREENFIELD, MA 01301

APPLICANT:

Aaron Wiswell

9 WHITE PINE WAY
BERWICK, ME 03906



INDEX OF PLANS

N-1	NOTES
D-1	DEMOLITION PLAN
C-1	SITE PLAN
C-2	GRADING & DRAINAGE PLAN
C-3	CONSTRUCTION DETAILS
C-4	CONSTRUCTION DETAILS
LA-1	LANDSCAPING PLAN
LT-1	LIGHTING PLAN

Project K2752 PREPARED BY

Civil Engineer:

SVE Associates

439 WEST RIVER ROAD
BRATTLEBORO, VT 05302

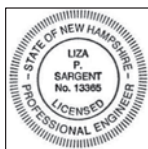
PHONE (802) 257-0561

Development Consultant:

Brickstone Land Use Consultants

185 WINCHESTER ST.
KEENE, NH 03431

PHONE (603) 357-0116



Liza Sargent 2/7/23

LIZA P. SARGENT
R.C.E. NUMBER: 13365

DATE

January 17, 2023
revised thru February 7, 2023

APPROVED BY THE APPLICANT:

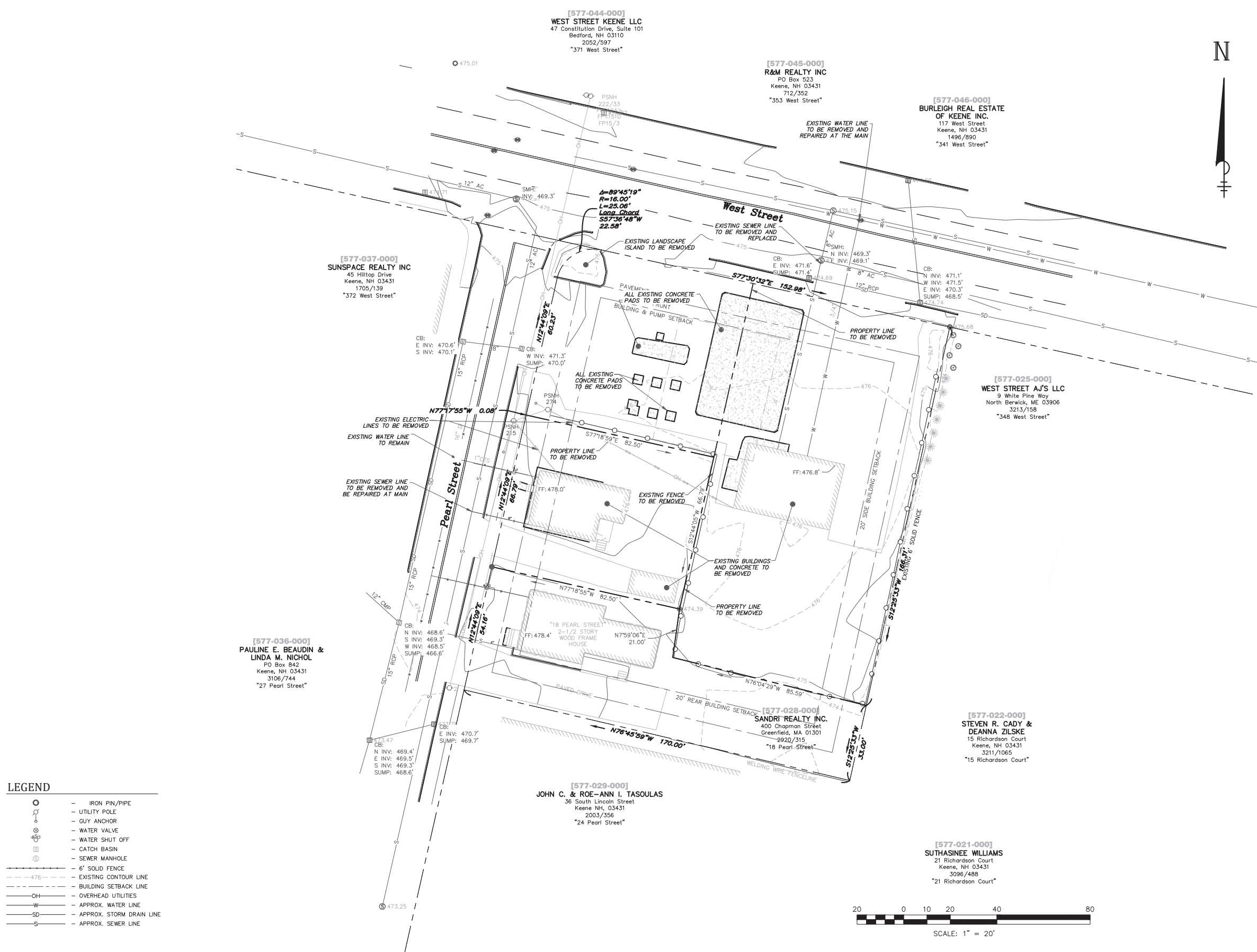
ON _____

INSPECTION PERMISSION: UPON APPROVAL OF THIS
SITE PLAN, THE OWNER GRANTS PERMISSION FOR THE
MEMBERS OR AGENTS OF THE KEENE PLANNING
BOARD TO INSPECT THIS SITE AS NECESSARY.

APPROVED BY THE KEENE PLANNING BOARD

ON _____

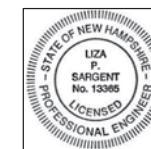
CERTIFIED BY CHAIRMAN _____



LEGEND

- | | |
|---|----------------------------|
|  | - IRON PIN/PIPE |
|  | - UTILITY POLE |
|  | - GUY ANCHOR |
|  | - WATER VALVE |
|  | - WATER SHUT OFF |
|  | - CATCH BASIN |
|  | - SEWER MANHOLE |
|  | - 6' SOLID FENCE |
|  | - EXISTING CONTOUR LINE |
|  | - BUILDING SETBACK LINE |
|  | - OVERHEAD UTILITIES |
|  | - APPROX. WATER LINE |
|  | - APPROX. STORM DRAIN LINE |
|  | - APPROX. SEWER LINE |

REVISIONS:
REV. 1, 2-7-23
3" WATER SERVICE TO BE REMOVED



Liza Sargent 2/7/23

LIZA P. SARGENT
R.C.E. NUMBER: 13365

ENGINEER:

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APPLICANT:

AARON WISWELL
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PLANNER:

Brickstone
Land Use Consultants, LLC

Site Planning, Permitting and Development Consulting
185 Winchester Street, Keene, NH 03431
Phone: (603) 357-0116

**GRANITE STATE
CAR WASH**
364 WEST STREET &
12 PEARL STREET
KEENE, NH

TAX MAP NUMBERS
577-026-000 & 577-027-000

DEMOLITION PLAN

SCALE: 1"=20'

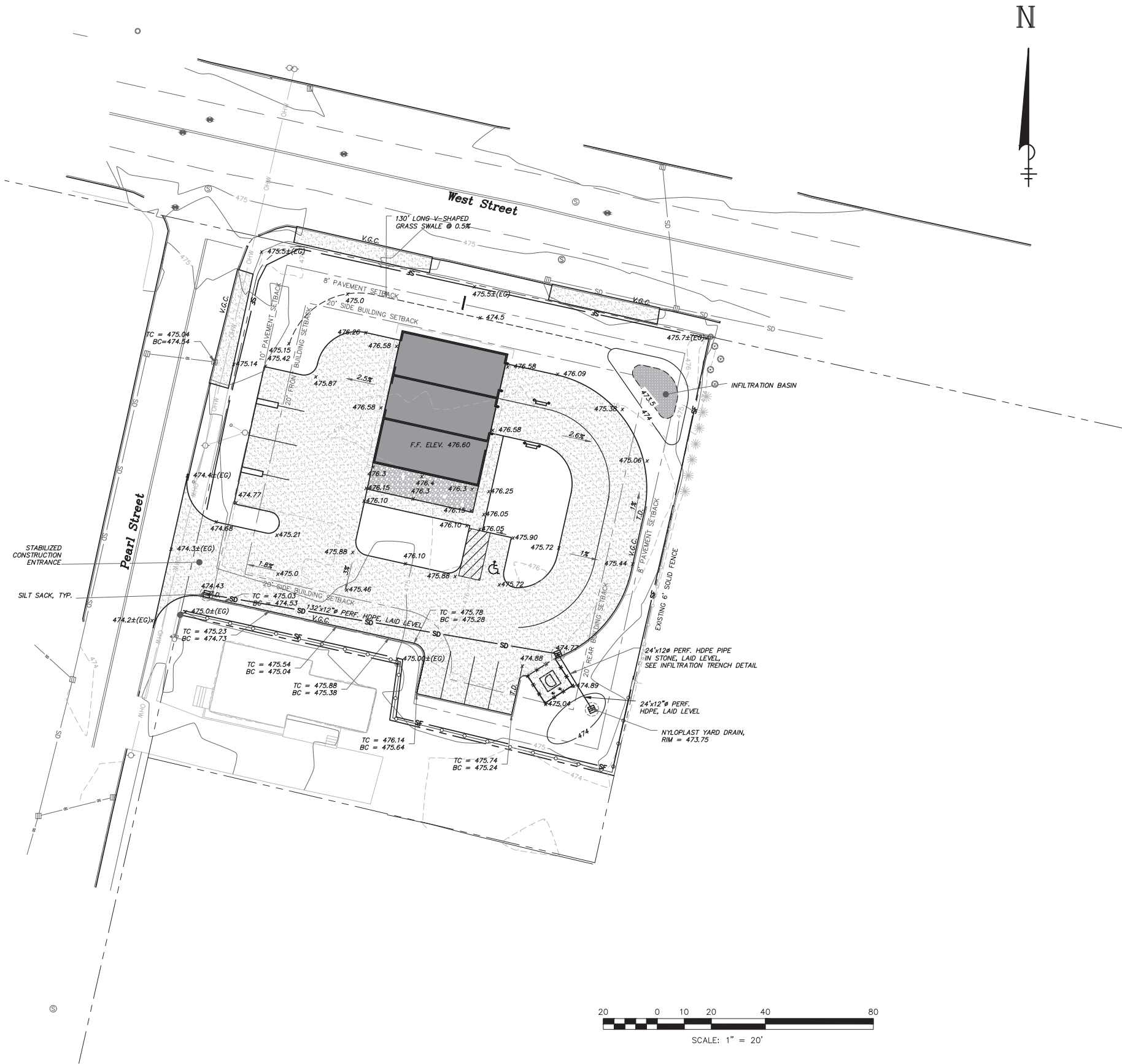
DATE: JANUARY 17, 2023

SHEET D-1

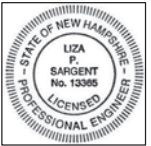


LEGEND

- IRON PIN/PIPE
- UTILITY POLE
- GUY ANCHOR
- WATER VALVE
- WATER SHUT OFF
- CATCH BASIN
- SEWER MANHOLE
- 6" SOLID FENCE
- - - 476 - - - EXISTING CONTOUR LINE
- - - BUILDING SETBACK LINE
- OH — OVERHEAD UTILITIES
- W — APPROX. WATER LINE
- SD — APPROX. STORM DRAIN LINE
- S — APPROX. SEWER LINE
- SF — SILT FENCE
- — SOLID FENCE



REVISIONS:
REV. 1-
2/7/23 PB STAFF COMMENTS



Liza Sargent 2/7/23

LIZA P. SARGENT
R.C.E. NUMBER: 13365
DATE

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**GRANITE STATE
CAR WASH**
364 WEST STREET &
12 PEARL STREET
KEENE, NH

TAX MAP NUMBERS
577-026-000 & 577-027-000

**GRADING &
DRAINAGE PLAN**

SCALE: 1"=20'

DATE: JANUARY 17, 2023

SHEET C-2

LANDSCAPE LEGEND

TYPE	QUANTITY	PLANTING SIZE	MATURE HEIGHT
● HW WILTON HORZ. JUNIPER (BLUE RUG)	6	3 GAL.	4'
● MS MISCANTHUS GRACILLUS	3	1 GAL.	4'
● DL DAYLILY (HAPPY ROSE)	2	1 GAL.	PERENNIAL
● HE HEUCHERA	2	1 GAL.	PERENNIAL
● RH RHODODENDRON	21	2 GAL.	6'-8'
● AR ARBORVITAE	35	4"-5'	20'

	AC ACER X CELEBRATION	4	3"	40'
	SD MALUS "SNOW DRIFT"	2	1"-1.5"	15'

REMOVE ALL WIRERS, NYLON ROPE, STRING, TREATED BURLAP AND PLASTIC BURLAP ENTIRELY.

PLANT SHRUBS 2-4 INCHES HIGHER THAN THE EXISTING GROUND LINE.

CUT AND REMOVE BURLAP FROM TOP THIRD OF BALL
3" LAYER OF MULCH
TEMPORARY SAUCER



DETAIL OF SHRUB PLANTING

NOT TO SCALE

1. PRUNE 1/5 OF EXISTING LEAF AREA WHILE RETAINING THE NATURAL FORM. NEVER CUT LEADER.
2. REMOVE ALL WIRERS, NYLON ROPE, OR STRING FROM TOP QUARTER OF TREE BALL. REMOVE TREATED BURLAP AND PLASTIC BURLAP ENTIRELY.
3. DO NOT USE TREE WRAP
4. GROUND LINE TO BE SAME AS GROWN AT NURSERY. KEEP NATURAL FLARE OF THE TRUNK ABOVE THE GROUND LINE.

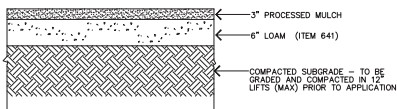
CUT AND REMOVE BURLAP FROM TOP THIRD OF BALL
3" LAYER OF MULCH
TEMPORARY SAUCER

STEEL ANCHOR
24" DOWN



DETAIL OF TREE PLANTING AND GUYING

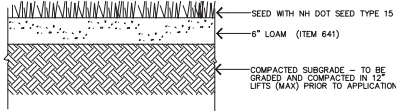
NOT TO SCALE



1. SPREAD LOAM TO SPECIFIED DEPTH AND RAKE TO REMOVE ALL UNSUITABLE MATERIALS. ROLL LOAM TO COMPACT.
2. SPREAD LIMESTONE AT A RATE OF 80 LBS/1000 SF OF SURFACE AREA
3. FERTILIZE WITH 10-10-10 FERTILIZER AT A RATE OF 20 LBS/1000 SF
4. SPREAD MULCH IN AREAS SHOWN ON PLAN.

LOAM AND MULCH DETAIL

NOT TO SCALE

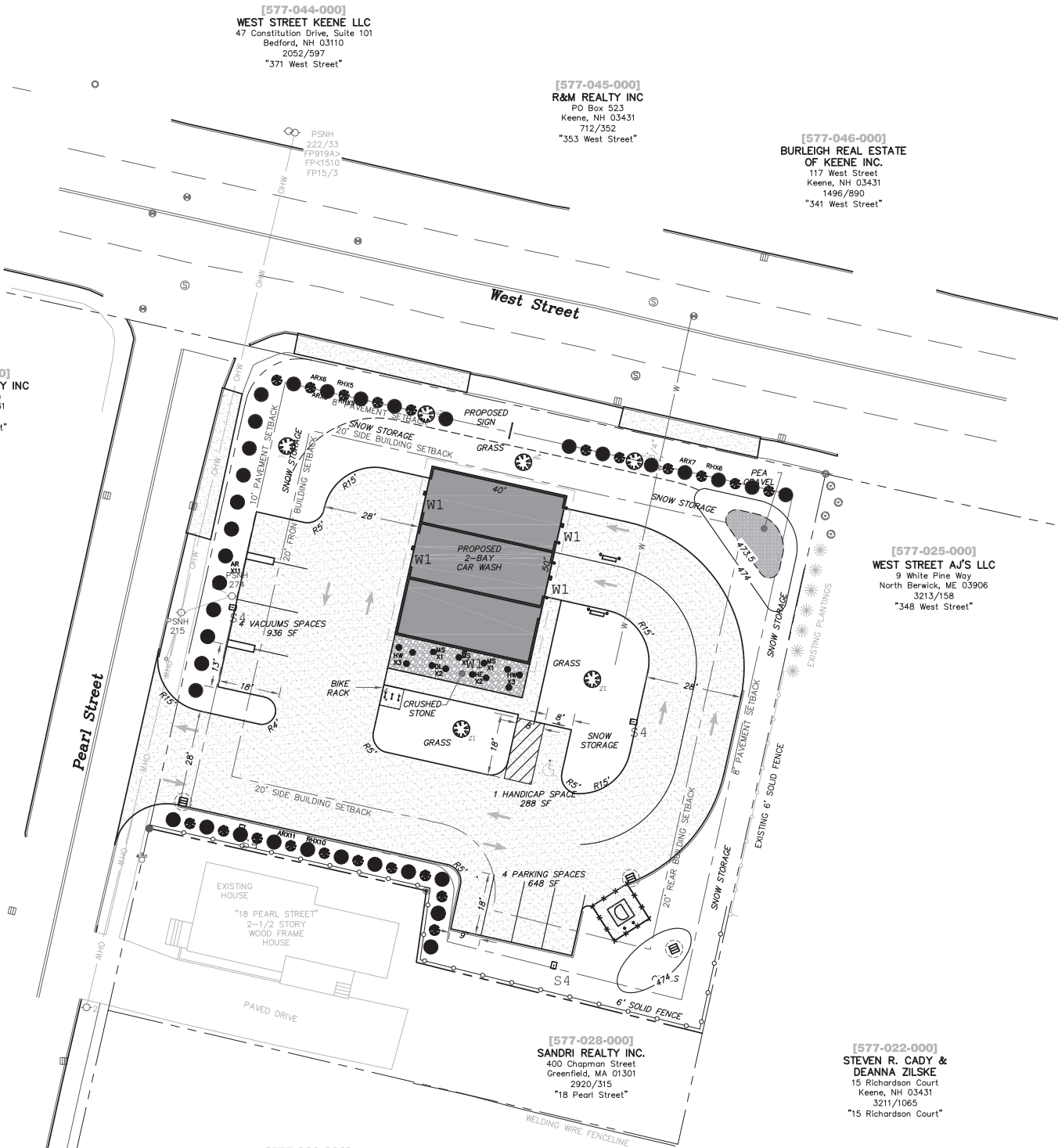


1. SPREAD LOAM TO SPECIFIED DEPTH AND RAKE TO REMOVE ALL UNSUITABLE MATERIALS. ROLL LOAM TO COMPACT.
2. SPREAD LIMESTONE AT A RATE OF 80 LBS/1000 SF OF SURFACE AREA
3. FERTILIZE WITH 10-10-10 FERTILIZER AT A RATE OF 20 LBS/1000 SF
4. SEED AT 2.75 LBS/1000 SF

LOAM AND SEED DETAIL

NOT TO SCALE

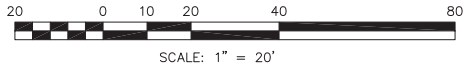
NH DOT SEED TYPE 15			
KIND OF SEED	MINIMUM PURITY	GERMINATION %	LBS/ACRE
CREEPING RED FESCUE	96	85	40
PERENNIAL RYEGRASS	98	90	50
KENTUCKY BLUEGRASS	97	85	25
REDTOP	95	80	5
TOTAL			120



LANDSCAPING:

REQUIRED:
1 TREE PER 10 PARKING SPACES
1 TREE REQUIRED

PROPOSED:
9 PARKING SPACES
6 TREES PROVIDED



REVISIONS:

- △ FEBRUARY 7, 2023
SCREENING AND RELOCATE BUILDING
- △ FEBRUARY 14, 2023
RELOCATED LANDSCAPING OUT OF SWALE

OWNER:

SANDRI REALTY INC
400 CHAPMAN STREET
GREENFIELD, MA 01301

APPLICANT:

AARON WISWELL
9 WHITE PINE WAY
BERWICK, ME 03906

PLANNER:

Brickstone
Land Use Consultants LLC
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185 Winchester Street, Keene, NH 03431
Phone: (603) 357-0116

GRANITE STATE
CAR WASH
364 WEST STREET &
12 PEARL STREET
KEENE, NH

TAX MAP NUMBERS
577-026-000 & 577-027-000

LANDSCAPING PLAN

SCALE: 1"=20'

DATE: JANUARY 17, 2023

SHEET LA-1

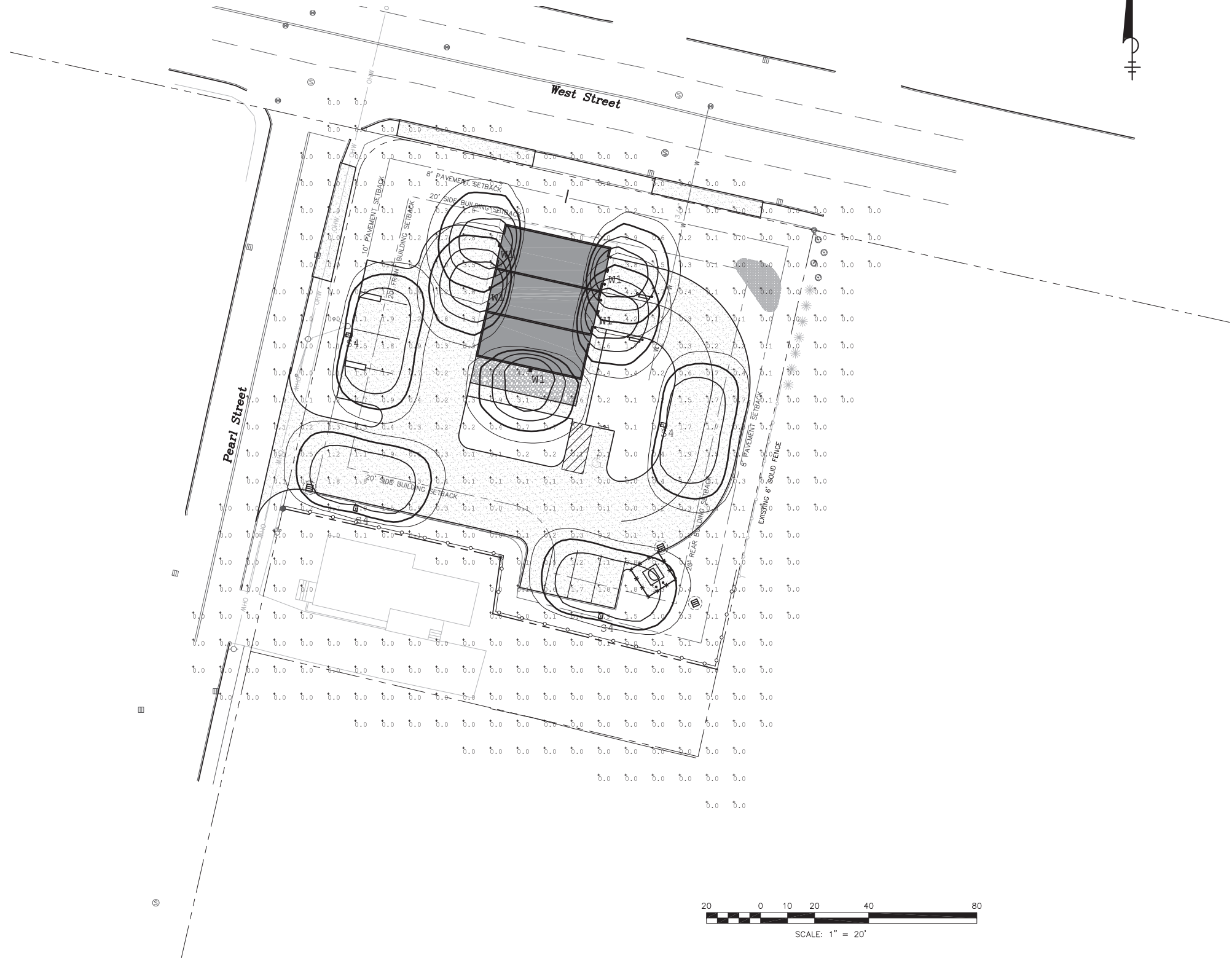
Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Description	[MANUFAC]
	4	S4	Single	MRS-LED-03L-SIL-FT-UNV-DIM-35-80CRI-CXX-IL / 4SQ-B3-S11G-15-S-CXX-GA (15' AFG)	LSI INDUSTRIES, INC.
	5	W1	Single	XWS-LED-02L-FTW-UNV-DIM-35-80CRI-CXX / WALL MTD 10' AFG	LSI INDUSTRIES, INC.

VACUMN PARKING SPACES

Illuminance (Fc)
Average = 1.32
Maximum = 1.9
Minimum = 0.7
Avg/Min Ratio = 1.89
Max/Min Ratio = 2.71

PARKING SPACES

Illuminance (Fc)
Average = 1.12
Maximum = 1.8
Minimum = 0.5
Avg/Min Ratio = 2.24
Max/Min Ratio = 3.60



REVISIONS:
REV. 1 2/7/23
PB STAFF COMMENTS

OWNER:
SANDRI REALTY INC
400 CHAPMAN STREET
GREENFIELD, MA 01301

APPLICANT:
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BERWICK, ME 03906

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**GRANITE STATE
CAR WASH**
364 WEST STREET &
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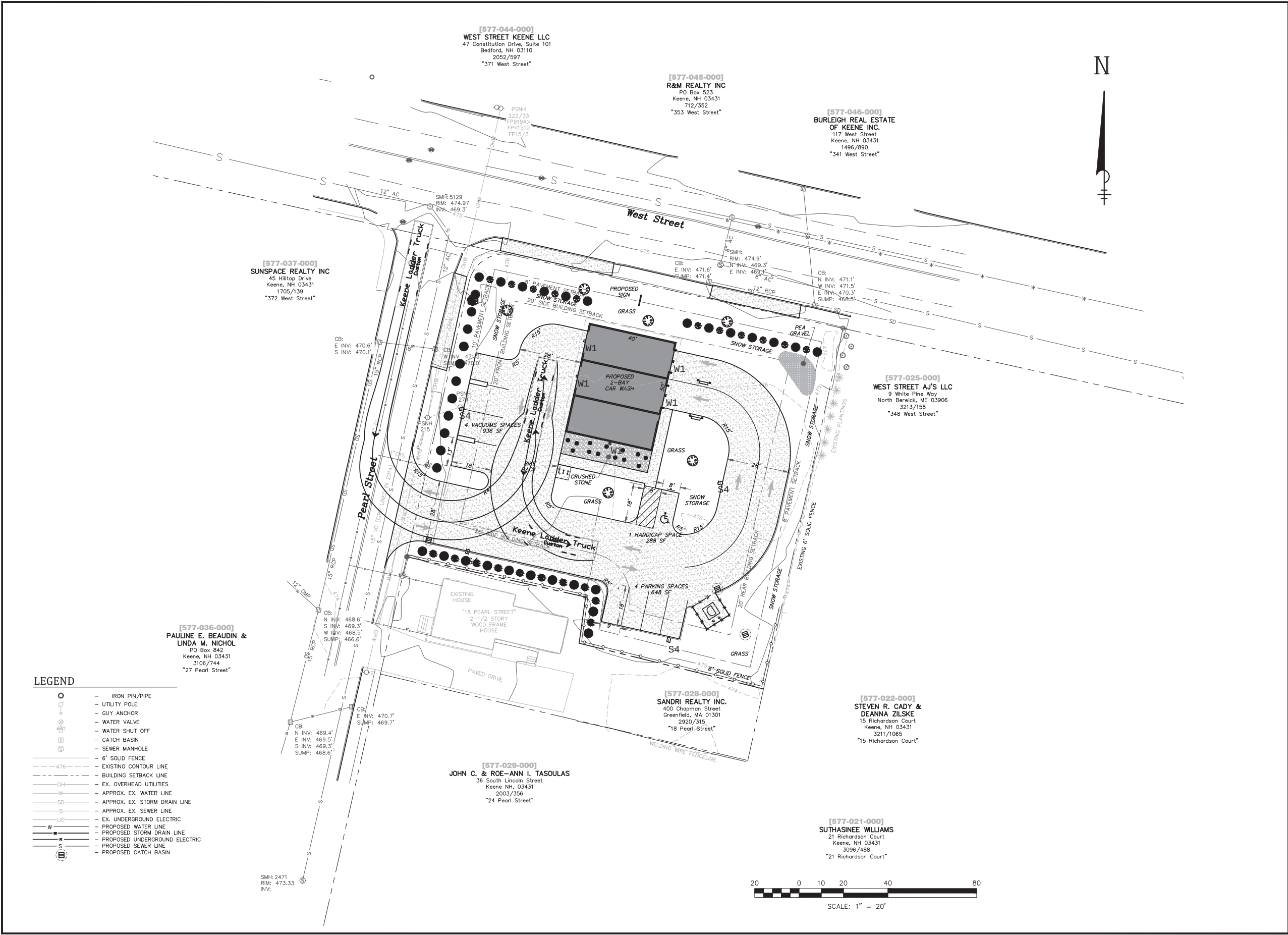
TAX MAP NUMBERS
577-026-000 & 577-027-000

**LIGHTING
PLAN**

SCALE: 1"=20'

DATE: JANUARY 17, 2023

SHEET LT-1



REVISIONS:

Liza Sargent2/7/23

LIZA P. SARGENT
R.C.E. NUMBER: 13365DATE

ENGINEER:

SVE

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Planning
Landscape Architecture
Surveying

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GRANITE STATE
CAR WASH
364 WEST STREET &
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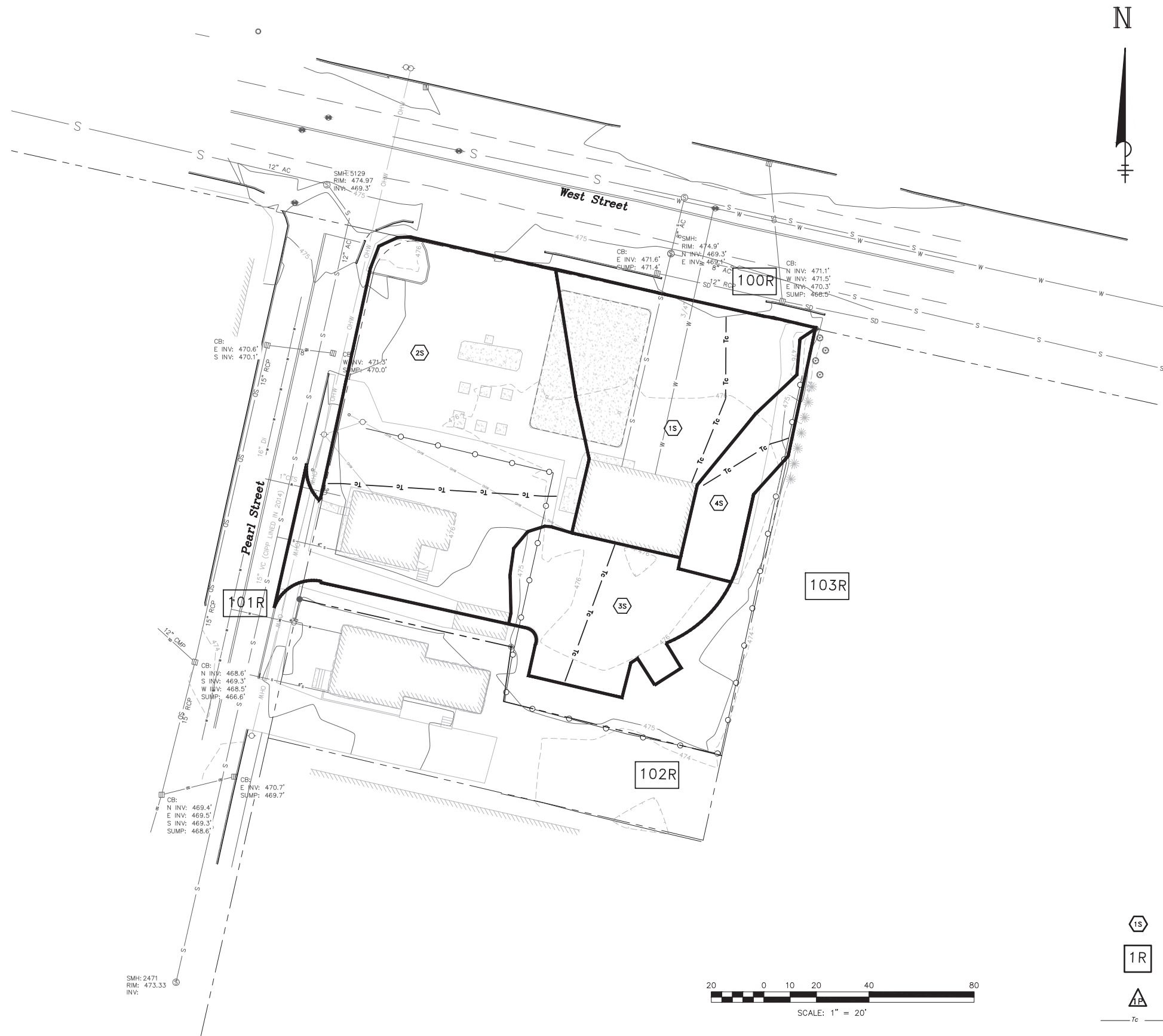
TAX MAP NUMBERS
577-026-000 & 577-027-000

FIRE TRUCK
MANEUVERING
EXHIBIT

SCALE: 1"=20'

DATE: FEBRUARY 7, 2023

EXHIBIT A

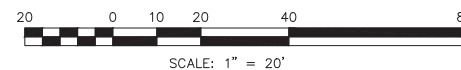


LEGEND

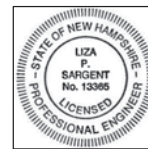
- IRON PIN/PIPE
- UTILITY POLE
- GUY ANCHOR
- WATER VALVE
- WATER SHUT OFF
- CATCH BASIN
- SEWER MANHOLE
- 6" SOLID FENCE
- 476 --- EXISTING CONTOUR LINE
- BUILDING SETBACK LINE
- OH — OVERHEAD UTILITIES
- W — APPROX. WATER LINE
- SD — APPROX. STORM DRAIN LINE
- S — APPROX. SEWER LINE

DRAINAGE LEGEND

- 1S SUBCATCHMENT
- 1R REACH
- 1P POND
- Tc — TIME OF CONCENTRATION PATH



REVISIONS:



Liza Sargent 1/17/23

LIZA P. SARGENT R.C.E. NUMBER: 13365 DATE

ENGINEER:

SVE

Engineering
Planning
Landscape Architecture
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GRANITE STATE
CAR WASH
364 WEST STREET &
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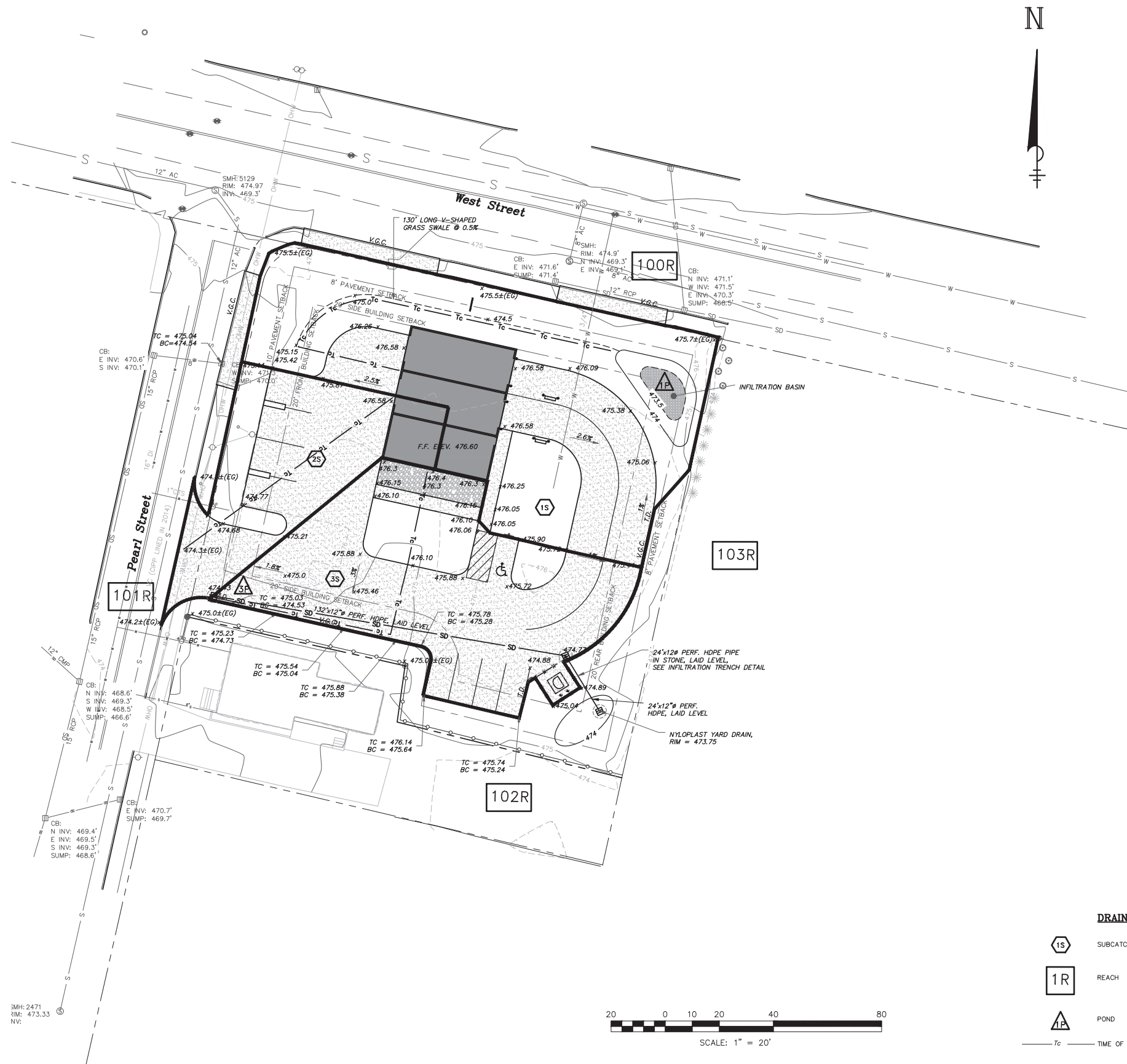
TAX MAP NUMBERS
577-026-000 & 577-027-000

**PRE
DEVELOPMENT
DRAINAGE PLAN**

SCALE: 1"=20'

DATE: JANUARY 17, 2023

SHEET D-1



- LEGEND
- IRON PIN/PIPE
 - UTILITY POLE
 - GUY ANCHOR
 - WATER VALVE
 - WATER SHUT OFF
 - CATCH BASIN
 - SEWER MANHOLE
 - 6" SOLID FENCE
 - EXISTING CONTOUR LINE
 - BUILDING SETBACK LINE
 - OVERHEAD UTILITIES
 - APPROX. WATER LINE
 - APPROX. STORM DRAIN LINE
 - APPROX. SEWER LINE

DRAINAGE LEGEND

1S

SUBCATCHMENT

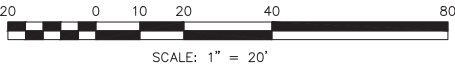
1R

REACH

1P

POND

Tc TIME OF CONCENTRATION PATH



N

REVISIONS:



Liza Sargent 1/17/23

LIZA P. SARGENT R.C.E. NUMBER: 13365 DATE

ENGINEER:

SVE

Engineering
Planning
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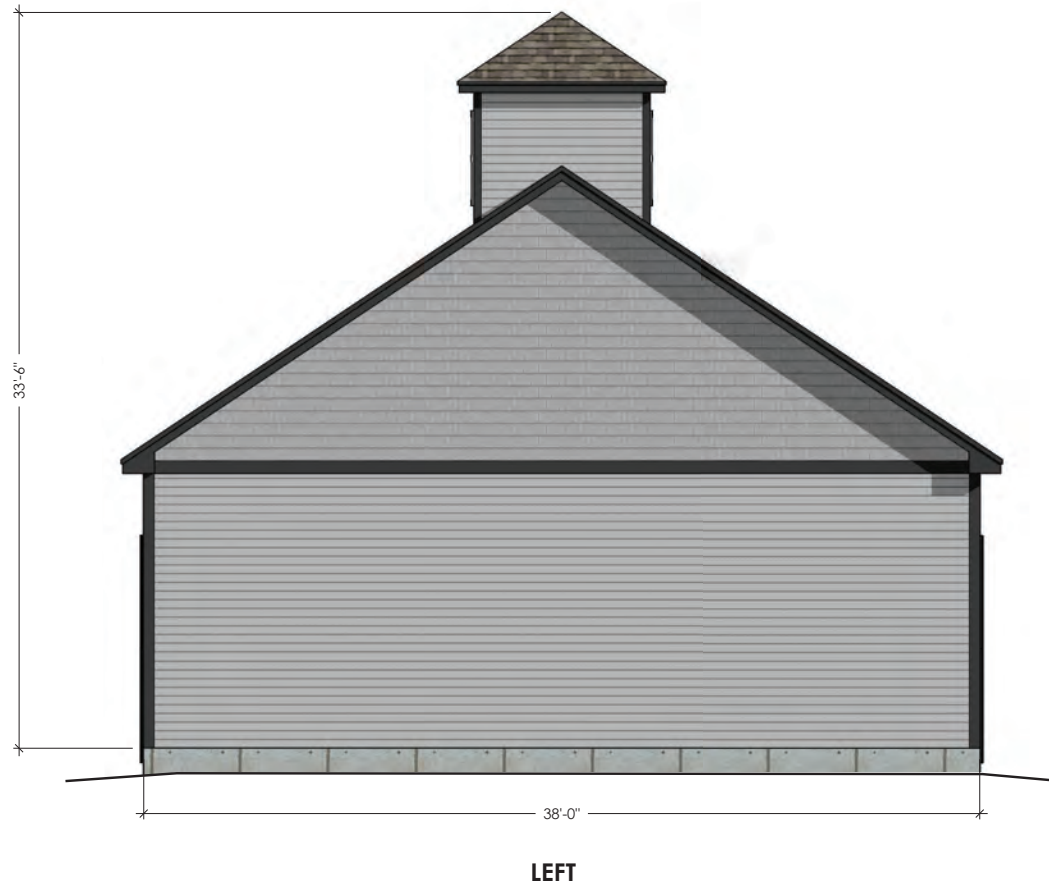
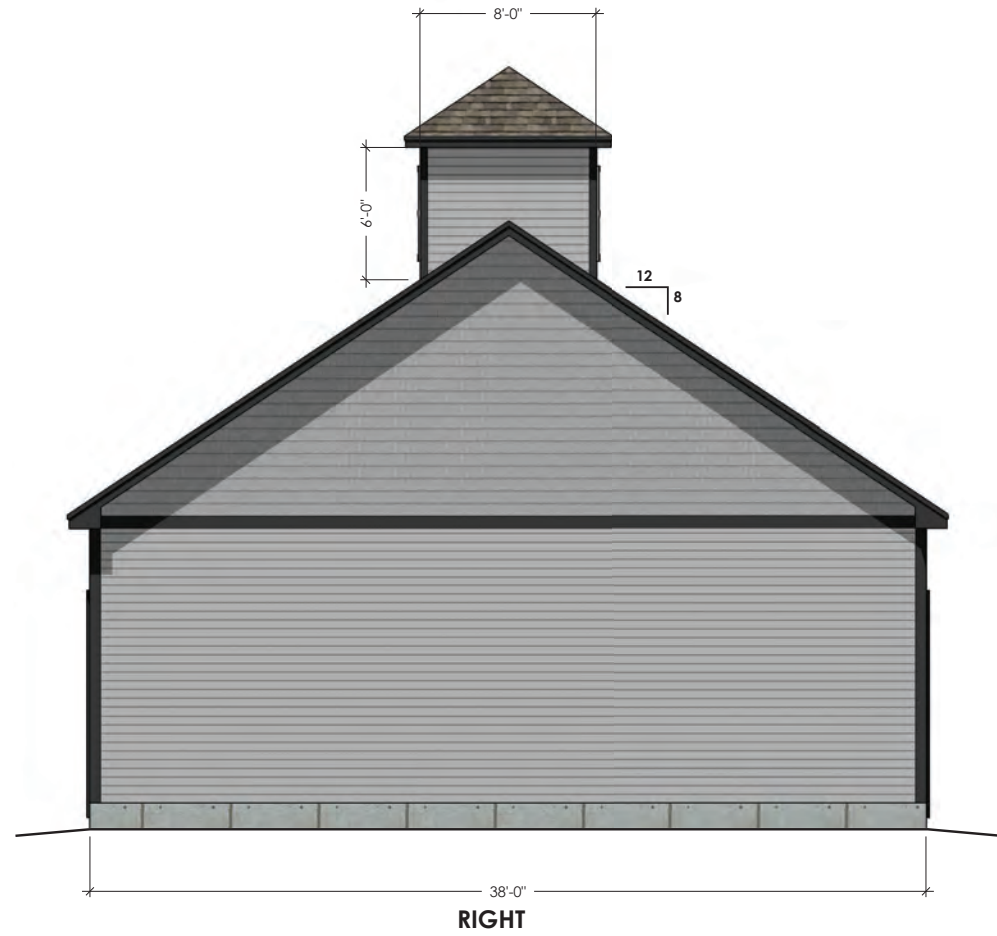
TAX MAP NUMBERS
577-026-000 & 577-027-000

POST
DEVELOPMENT
DRAINAGE PLAN

SCALE: 1"=20'

DATE: JANUARY 17, 2023

SHEET D-2



MEMORANDUM

Ref: 2251A

To: Jim Phippard, Member
Brickstone Land Use Consultants, LLC

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

Subject: Proposed Granite State Car Wash
Keene, New Hampshire

Date: February 13, 2023



Thank you for forwarding the site plan for the proposed car wash facility on West Street, along with your request for us to provide a response to the Engineering Department's traffic comments. More specifically, Comment #7 reads: *"Engineering recommends that a traffic count be performed, particularly a count of the number of vehicles waiting to complete a left turn maneuver and a determination of the average queue length, maximum queue length and maximum back of queue at the intersection of Pearl Street and West Street. The traffic study must address how the onsite traffic circulation will operate."*

To that end, our office conducted an intersection turning movement count on Wednesday, February 8, 2023 to monitor the turning movements to/from Pearl Street and to observe vehicle queuing on the Pearl Street approach to West Street. Our office also prepared trip generation estimates for the proposed car wash site, and evaluated intersection capacity, and Level of Service and evaluated vehicle queuing in order to *"demonstrate that the project will not diminish the capacity or safety of existing city streets ..."* as mentioned in the Departments Comment #5.

Proposed Development – According to the plan entitled "Site Plan" prepared by SVE Engineering, dated January 17, 2023 (no revisions) the proposed building has a gross floor area of 2,000 sf and it will provide two automated wash tunnels (see Attachment 1). The site was formerly occupied by an auto detailing business, and previously as a gasoline service station.

In terms of vehicular access, the two existing site driveways on West Street will be closed, and the existing site driveway on Pearl Street will be relocated at the southerly limits of the site in order to maximize its separation from West Street.

Existing Conditions – West Street provides two travel lanes in each direction, and Pearl Street intersects it at a 90-degree approach angle with one travel lane in each direction. The Pearl Street approach to West Street operates under stop sign control. The speed limit on West Street is posted at 30 mph in both directions.

Existing Traffic Volumes - According to NHDOT data, this section of West Street (at Ashuelot River Bridge) carried an Annual Average Weekday Traffic volume of 15,082 vehicles per day (vpd) in 2021, down from 19,323 vpd in 2019 (pre-pandemic). This current location is located 0.1 miles east of the subject site (see Attachment 2).

In August 2020 the peak hour period on weekdays occurred during the midday (12-1 PM typical) and again from 3-4 PM or 4-5 PM. The two-way traffic volume on West Street averaged 1,331 vehicles per hour (vph) during the midday peak hour, and 1,287 vph during the evening peak hour. The Saturday daily volume was lower at 13,994 vpd, but the Saturday midday peak hour (from 12-1 PM) was comparable to the weekday evening peak hour with a total of 1,359 vehicles traveling in both directions. The diagrams on Page 3 summarize the daily and hourly variations in traffic flow on West Street (see Attachments 3-4).

The turning movement counts were conducted in February 2023 are summarized on Figure 1. West Street (west of Pearl Street) carried 1,416 vehicles during the midday peak hour (12-1 PM) and 1,743 vehicles during the PM peak hour (3:45 to 4:45 PM). Pearl Street accommodated 124 (Midday) and 181 (PM) vehicles during the peak hour periods. The majority of vehicles using Pearl Street travel to/from points west on West Street. This means right-turn arrivals and left-turn departures at Pearl Street are the predominant turning movement patterns (see Attachment 5).

Vehicle Delays - Vehicles on the Pearl Street approach to West Street operate under stop sign control. The delay associated with each approaching vehicle was monitored during the 12:00 to 1:00 PM and 3:45 to 4:45 PM peak hour periods (see Attachments 6-10). The results are summarized below:

Midday Peak Hour:

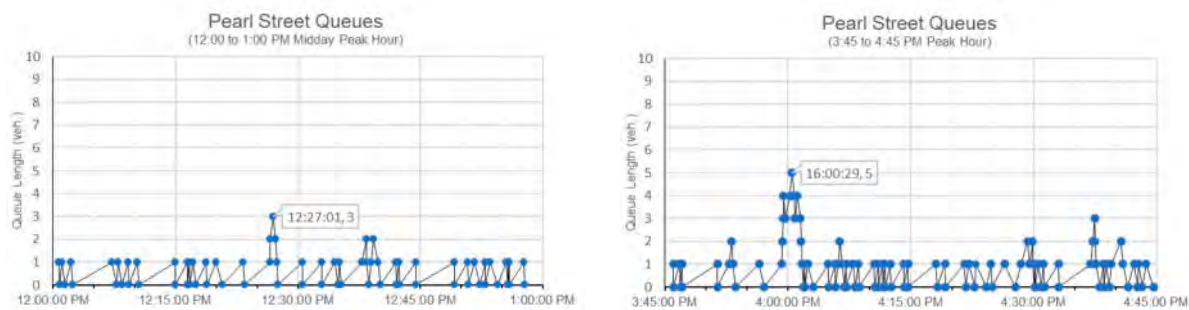
Left-Turn Departures		Right-Turn Departures	
Min Delay	0:00:01	Min Delay	0:00:01
Max Delay	0:00:55	Max Delay	0:00:34
Avg Delay	0:00:23	Avg Delay	0:00:10

Evening Peak Hour:

Left-Turn Departures		Right-Turn Departures	
Min Delay	0:00:02	Min Delay	0:00:01
Max Delay	0:02:05	Max Delay	0:01:23
Avg Delay	0:00:33	Avg Delay	0:00:20

It should be noted that these delay measurements are all inclusive in that they were measured from the time of arrival at the back of queue (if present) to the departure time from the stop line.

Vehicle Queuing – Vehicle queues on the Pearl Street approach to West Street ranged from 0-3 vehicles during the midday peak hour, and from 0-5 vehicles during the evening peak hour. In all cases, the most frequent queue length was 0 vehicles. The next most common queue length was 1 vehicle (see Attachments 11-15).



In the cases where a maximum queue of 3 vehicles (midday) and 5 vehicles (evening) were observed, it should be noted that these instances were of short duration. Both graphs show that the maximum queues dissipated quickly, back to 0 vehicles. Attachment 22 shows that a queue of 4 vehicles does not block the proposed site driveway.

Trip Generation – To estimate the quantity of vehicle-trips that are expected to be generated by the proposed car wash building, Pernaw & Company, Inc. considered the standard trip generation rates published by the Institute of Transportation Engineers (ITE)¹. Table 1 summarizes the results of this analysis and the derivation of these estimates is attached (see Attachment 16-18).

This analysis demonstrates that the proposed car wash is expected to generate approximately 28 vehicle-trips (14 arrivals, 14 departures) during the weekday PM peak hour period. On Saturdays, approximately 61 vehicle-trips are expected. It should be noted that traffic demand at a car wash facility is highly dependent upon weather conditions.

Table 1	Trip Generation Summary
	Automated Car Wash ¹
Weekday PM Peak Hour ²	
Entering	14 veh
Exiting	14 veh
Total	28 trips
PM Generator Peak Hour	
Entering	12 veh
Exiting	11 veh
Total	23 trips
Saturday Peak Hour	
Entering	30 veh
Exiting	31 veh
Total	61 trips

¹ LUC 948 - Automated Car Wash - trip rate method (2,000 sf)
² One hour between 4 - 6 P M

Traffic Operations - Traffic operations on the Pearl Street approach to West Street were evaluated using a “before-after” comparison based on the site generated traffic volumes from Table 1, and a worst-case situation where all site customers travel to/from the site via West Street (none via Pearl Street). The Pearl Street approach was analyzed in terms of its: 1) volume-to-capacity ratio, 2) control delay, 3) Level of Service and 4) 95th percentile queues based on Highway Capacity Manual methodologies (see Attachments 19-21).

Table 2	STOP-Controlled Intersection Capacity Analysis (Pearl Street Approach to West Street)		
	Weekday PM No-Build ¹	Weekday PM Build ²	Weekday PM w/Saturday Gen ³
Volume to Capacity Ratio	0.28	0.36	0.45
Control Delay	30.1	33.3	38.3
Level of Service	D	D	E
95 th Percentile Queue	1.1	1.5	2.1

¹ 2/8/23 Volumes ² 2/8/23 Volumes with 28 trips ³ 2/8/23 Volumes with 61trips

¹ Institute of Transportation Engineers, *Trip Generation*, 11th edition (Washington, D.C., 2021).

From the analyses summarized in Table 2 it is reasonable to conclude that:

- The Pearl Street approach to West Street will continue to operate below capacity during the weekday PM peak hour period with the car wash in full operation.
- Car wash traffic is expected to increase the delays on the Pearl Street approach to West Street by approximately +3 seconds during the weekday PM peak hour period.
- Car wash traffic is not expected to alter the prevailing Levels of Service during the weekday PM peak hour period (LOS D without the car wash, LOS D with the car wash).
- Car wash traffic is expected to increase the 95th percentile queue on the Pearl Street approach to West Street by approximately 0.4 vehicles.
- Applying the Saturday trip generation estimates to the weekday PM peak hour volumes (comparable to the Saturday peak hour volumes) confirms that the Pearl Street approach will continue to operate below capacity and at LOS E. The 95th percentile queue is expected to increase by approximately 1.0 vehicle during the Saturday peak hour.

Attachment 22 shows that there is sufficient queue storage for 4 vehicles on the Pearl Street approach to West Street without interfering with the proposed site driveway. This is considered more than sufficient as the HCM analyses demonstrate that the 95th percentile queue is projected to be approximately 2 vehicles during the worst-case peak hour period.

Recommendations: Recognizing that the maximum queue length observed on Pearl Street (5 vehicles once; very short duration) does have the potential to temporarily interfere with vehicles entering/exiting the site driveway, consideration should be given to:

1. Installation of a “STOP” sign (MUTCD #R1-1) on the site driveway approach to Pearl Street.
2. Installation of a “DO NOT BLOCK INTERSECTION” sign (MUTCD # R10-7) on the southeast corner of the Pearl Street/Proposed Site Driveway intersection, facing northbound vehicles on Pearl Street.
3. Installation of “Do Not Block” intersection markings on Pearl Street (MUTCD Option B), per Attachment 22.

Conclusions:

1. Elimination of the two existing site driveways on West Street and providing site access via the minor street (Pearl Street) is a beneficial and appropriate access management technique that will eliminate several conflict points and reduce “side friction” along the West Street corridor.
2. The proposed relocation of the existing site driveway on Pearl Street is ideal from an access management standpoint as it maximizes its separation from West Street.
3. Storage for vehicle queues at the Pearl Street stop sign increases to 4 vehicles with the proposed driveway location; this exceeds the estimated 95th percentile queue of 2 vehicles.

Drainage Summary

for

Granite State Car Wash 364 West Street & 12 Pearl Street, Keene, NH

**Prepared by SVE Associates
January 9, 2023**

A comparison of peak stormwater runoff for the 25-year rainfall events in the post-development conditions was completed by SVE Associates using HydroCad 10.0 software. The storm event used in the model was Type III, 24-hour storm with the following rainfall depths for Keene, NH:

25 Year Event: 4.92 inches

OVERVIEW:

This project will consist of redeveloping the 364 West Street & 12 Pearl Street properties, removing the existing curb cuts, former gas station buildings, canopy, residence and water and sewer services, and the construction of the Granite State 2 bay car wash facility that includes a one-story building, associated parking, and travel isles.

EXISTING CONDITIONS:

The existing conditions of these properties to be merged include the former gas station and a residence. Currently a portion of the stormwater runoff sheet flows to the catch basins in West Street, sheet flows to the east property line, sheet flows to the south property line and sheet flows to Pearl Street.

PROPOSED CONDITIONS:

The proposed conditions, modeled in the "Post-Development" drainage model, consist of the proposed car wash building, parking areas and travel isles. With the redevelopment, stormwater runoff will sheet flow away from the proposed car wash building to the north and be collected in the shallow v-shaped grass swale and infiltrate in the northeast corner of the lot. Stormwater will sheet flow from south of the carwash to a infiltration trench (perforated pipe and stone) under the pavement. The portion of stormwater runoff that sheet flows to the west of the car wash building will sheet flow to Pearl Street. The infiltration rate used for the infiltration basin and infiltration trench (3 in/hr) is half of the published Ksat value (6 in/hr).

SVE Associates

Engineering	*	Surveying	*	Landscape Architecture	*	Planning
P.O. Box 1818, Brattleboro, VT 05302 Phone: (802) 257-0561 Fax (802) 257-0721 E-mail svek@sveassoc.com						
P:\Project\NH PROJECTS\K2752 Granite State Car Wash\Hydrocad\K2752 Drainage Summary PB.doc						

	25 year	
	<i>Existing</i>	<i>Proposed</i>
	<i>Runoff (cfs)</i>	<i>Runoff (cfs)</i>
<i>Summary Node 100R</i>	0.82	0.21
<i>Summary Node 101R</i>	0.78	0.57
<i>Summary Node 102R</i>	0.03	0
<i>Summary Node 103R</i>	0.17	0

CONCLUSION:

There will be no adverse impact to downstream abutters due to stormwater runoff from the facility. Overall, there is no significant change in stormwater runoff post development, just a slight decrease in stormwater runoff.



SVE Associates

STAFF REPORT

SPR-02-23& SWP-CUP-01-23 – Site Plan Review – Contractor Storage Development – 0 Black Brook Road

Request:

Applicant Patriot Holdings LLC, on behalf of owner New England Interconnect Systems Inc., proposes to construct two buildings ~36,000 sf and ~25,200 sf in size for use as rental units for contractors and make associated site modifications on the properties at 0 Black Brook Rd (TMP #s 221-023-000 & 221-024-000). Waivers are requested from Sections 20.14.1.B, 20.14.2.A, and 20.14.2.B of the Land Development Code regarding the massing/scale and visual appearance of the proposed buildings. The combined parcels are 12.57 acres and are located in the Corporate Park District.

Background:

The two subject parcels for this application are 5.33 acres and 7.24 acres in size for a total area of 12.57 acres. The parcels are undeveloped and located on the southeastern side of the Black Brook Road cul-de-sac, adjacent to Black Brook to the south and Janos Technology Inc. located at 55 Black Brook Road to the north.

The proposal consists of merging the two building lots and constructing two new buildings with a driveway and associated parking. The proposed buildings are intended to be used as modular contractor storage units. Each unit is 30'x60' in size and will include a small office area and restroom facilities. The northern building will be 36,000 sq. ft. with 20 units and the southern building will be 25,200 sq. ft. with 14 units.



Fig 1: The subject properties located at 0 Black Brook Road

The development of this proposal will consist of approximately 250,000 sq. ft. of land disturbance and 128,022 sq. ft. of new impervious surface. An Alteration of Terrain permit reviewed and issued by the NH Department of Environmental Services (NHDES) will be required.

Two waiver requests have been submitted with this proposal from Sections 20.14.1.B, 20.14.2.A, and 20.14.2.B of the Land Development Code regarding the massing/scale and visual appearance of the proposed buildings.

The application includes a request for a Conditional Use Permit to allow the construction of a driveway within the 30-foot Surface Water Protection buffer. Per Section 11.6.3.A of the LDC, the CUP Application has been referred to the Conservation Commission and will be reviewed at their meeting on February 21. Staff will share any recommendations from the Conservation Commission at the Planning Board meeting.

STAFF REPORT

Completeness:

The applicant requests exemptions from submitting an historic evaluation, screening analysis, and architectural & visual appearance analysis. After reviewing each request, staff has determined that exempting the applicant from submitting this information would have no bearing on the merits of the application and recommends that the Planning Board grant these exemptions and accept the application as “complete.”

Application Analysis: The following is a review of the Planning Board development standards relevant to this application.

- 20.2 **Drainage:** The applicant states in their narrative that the stormwater will be managed according to NHDES Alteration of Terrain standards. The Grading & Drainage Plan, sheet GR-1 shows the proposed stormwater management area located to the southeast of the building site. Three catch basins are proposed to collect stormwater from the parking area and drive aisles and outfall into two grass swales proposed on the site. The first grass swale will collect runoff from the parking area and guide it into the stormwater management area. A stone check dam is proposed to reduce the velocity of the flow before entering the area. The second grass swale is proposed to the east of the parking area to direct runoff to the same management area.

Along the proposed driveway entrance to the site a grass swale will collect runoff from the driveway and direct it southerly to the flood compensation area. This swale is located between the driveway and the wetland finger that runs parallel with Black Brook Road. The submitted drainage report states that the post development conditions will result in qualitative treatment of all new impervious areas and that there will be a reduction in peak rates of runoff leaving the site for all storm events. It appears that this standard has been met.

- 20.3 **Sediment & Erosion Control:** The Grading & Drainage Plan, sheet GR-1 shows the proposed installation of silt fence around the work site. This includes double silt fencing along the Black Brook. Additional measures include erosion control matting, stone check dams, rip-rap stone aprons, and a stabilized construction entrance. The proposed sediment and erosion control measures will also be reviewed by NHDES as part of the Alteration of Terrain permit. A condition of approval relating to inspections of erosion control measures is proposed as part of the suggested motion. It appears that this standard has been met.

- 20.4 **Snow Storage & Removal:** The Site Plan, sheet SP-1 shows the proposed location of a snow storage area along the eastern side of the truck turn-around area. The applicant states in their narrative that this area is large enough to provide snow storage for the site. Run off from the snow storage area will be accepted into the stormwater management area. A note on the plan states that any snow that will not be accommodated by the on-site snow storage will be trucked off-site. It appears that this standard has been met.

- 20.5 **Landscaping:** The parking lot landscape islands will have a mix of perennial daylily's, hostas, and echinacea coneflowers in addition to the required parking lot trees. The proposed trees include 4 red maples, 4 weeping willows, and 4 hawthorns. Rhododendrons, silky dogwood, and winterberry shrubs are proposed along the driveway. The flood compensation area will be seeded with a native pollinator wildflower mix. Native and non-invasive species are proposed. It appears that this standard has been met.

- 20.6 **Screening:** The proposed dumpster enclosure will be a 6 ft. solid fence. The proposed location is not visible from adjacent properties or the public right-of-way. HVAC mechanicals are not currently proposed since each tenant will have different requirements for the use of their unit. The

STAFF REPORT

plan set notes that all mechanicals will meet the Site Development Standards for screening once installed.

The proposed parking lot is not visible from the public right-of-way and the subject property is not adjacent to any residential zoning districts. There is not any perimeter parking lot screening proposed for this project as it is not required. It appears that this standard has been met.

- 20.7 Lighting: The Lighting Plan, sheet LT-1 proposes the installation of 2 pole lights and 38 wall mounted lights. The pole lights will be mounted 29.5 ft. above grade. The wall lights will be mounted 11 ft. above the finished building grade. All light fixtures will be full cutoff LEDs. Both proposed fixtures will have a color rendering index (CRI) of 80 and a color temperature of 3,500 kelvin or less. The parking lot will have an average lighting level of 3 footcandles and a uniformity ratio of 3.6:1. It appears that this standard has been met.
- 20.8 Sewer & Water: The applicant states in their narrative that the development will be serviced by municipal water and sewer. Each building will be fully sprinkled. A City sewer connection permit and an NHDES sewer connection permit will be required. The Utility Plan, sheet UT-1 notes that the water capacity above the nearest pump station has adequate supply for the fire suppression system. Two underground propane storage tanks are proposed behind the dumpster enclosure area. Propane lines will serve the units in the building. It appears that this standard has been met.
- 20.9 Traffic & Access Management: The proposed driveway will connect to the cul-de-sac at the end of Black Brook Road to provide access to the site and will be 24 ft. in width. The drive aisle in between the two buildings will continue to be 24 ft. in width. The applicant states in their narrative that this width is designed to easily accommodate traffic flow entering and exiting as well as navigating the site internally.

A truck turn-around area has been provided at the eastern end of the parking area. The Truck Turning Exhibit Plan, sheet EH-1 shows that a WB-62 size truck, commonly described as an “Interstate Semitrailer” with a length of 68.5 ft., would be able to navigate and turn around on the site. The plan notes that the Keene Fire ladder truck is smaller than a WB-62 size truck and will be able to navigate and turn around on the site.

The applicant has informed staff that a traffic study is pending and will be submitted prior to the Planning Board meeting.

- 20.10 Filling & Excavation: The applicant states in their narrative that based on the anticipated volume of material to be removed to provide the necessary flood compensation, the project will generate more than 50 trucks entering or leaving the site. The proposed truck route is from Black Brook Road to NH route 12. It appears that this standard has been met.
- 20.11 Surface Waters & Wetlands: The application includes a Surface Water Protection Conditional Use Permit as part of the proposal. The proposed driveway will travel through the 30’ wetland buffer to connect the site to Black Brook Road. The wetland buffer is from a wetland finger that travels north-south, roughly parallel with Black Brook Road. The finger connects with a larger wetland area located in the southwest corner of the property. The proposed street access and driveway location minimizes the impact to both the wetland system itself as well as the buffer. A differing location would require an impact to the wetland system.

A second wetland buffer impact is proposed in the southeast corner of the property near Black Brook. A stone spillway is proposed to be installed within the buffer as part of the proposed

STAFF REPORT

stormwater detention area. The applicant states in their narrative that this impact is required to provide a connection point of the stormwater and flood waters to the flooding source, which is Black Brook.

The Planning Board shall issue a surface water protection conditional use permit for the activities described in Section 11.6.1, if it finds that all of the following criteria have been met:

1. The proposed use and/or activity cannot be located in a manner to avoid encroachment into the Surface Water Protection Overlay District.

The applicant states in their narrative that due to the proximity of the wetland to the existing road, the buffer will have to be crossed in order to access the site. Any alternative location would impact the wetland directly.

2. Encroachment into the buffer area has been minimized to the maximum extent possible, including reasonable modification of the scale or design of the proposed use.

The applicant states in their narrative that the driveway will only cross the buffer and not impact the actual wetland. It appears that the wetland was created by the drainage from Black brook Road.

3. The nature, design, siting, and scale of the proposed use and the characteristics of the site, including but not limited to topography, soils, vegetation, and habitat, are such that when taken as a whole, will avoid the potential for adverse impacts to the surface water resource.

The applicant states in their narrative that the paved driveway will be graded to collect stormwater runoff and direct it away from the wetland finger and into a grass treatment swale. The water will flow into the large flood/detention basin, which will ultimately become jurisdictional wetlands over time.

4. The surface water buffer area shall be left in a natural state to the maximum extent possible. The Planning Board may establish conditions of approval regarding the preservation of the buffer, including the extent to which trees, saplings and ground cover shall be preserved.

The applicant states in their narrative that the encroachment area will be permanently altered as the access drive will cross the buffer. The wetland resource will not be impacted and will ultimately become much larger as the flood compensation basin develops into a wetland.

Per Section 11.6.3.A of the LDC, the Surface Water Protection CUP Application has been referred to the Conservation Commission and will be reviewed at their meeting on February 21. Staff will share any recommendations from the Conservation Commission at the Planning Board meeting.

A significant portion of the property is located with the 100-year floodplain associated with Black Brook, which makes up the southern property boundary of the subject parcels. This is labeled as the AE zone on the plan set. The proposed southern building and associated parking area will impact the flood plain. The proposed development will require a Floodplain Development Permit and FEMA approval. The proposed buildings will have a finished floor elevation (FFE) of at least 1 ft. above the floodplain elevation. The minimum FFE is 519.5 ft. The Board will need to determine if the criteria for the Conditional Use Permit has been met.

STAFF REPORT

- 20.12 Hazardous & Toxic Materials: The applicant states in their narrative that the management company will oversee the tenants and ensure that no hazardous or toxic materials are stored outside or in an inappropriate manner. This standard appears to be met.
- 20.13 Noise: The applicant states in their narrative that there could be noise associated with certain businesses, depending on the contractor renting the space. The units will be fully enclosed and any business that may be louder, such as a machining or workshop use could be monitored by management to ensure that it does not impact adjacent tenants. The site is located far from adjacent properties and is not located near any residential uses. It appears that this standard has been met.
- 20.14 Architecture & Visual Appearance: The applicant states in their narrative that the proposed buildings will be metal panel construction with each unit having a large garage door and entrance. The roof will be a shallow gable pitch with metal roofing panels. The proposed colors are a mix of gray shades.

The applicant has submitted two waiver requests. The first waiver request is to provide relief from Section

20.14.1.B

“Massing/Scale,” sub-section B, which states *“For buildings of 150-ft in length of more, facades shall be divided into multiple “modules,” expressed through significant architectural changes such as a change in materials, a change in pattern elements (e.g. fenestration, columns, pilasters, etc.), or a change in building setback through recesses or projections. Such modules shall be no wider than 50-ft.”* The applicant states in their waiver request that the proposed buildings are prefabricated metal buildings, and the architecture and design of the buildings is determined by the manufacturer and there is a substantial cost to changing the linear design.



Fig 2: Rendering of the proposed site interior.



Fig 3: Rendering of aerial view of the site.

The second waiver request is to provide relief from Section 20.14.2 “Visual Interest,” sub-section A, which states *“Front facades and exterior walls shall be articulated to express an architectural identity to avoid a uniform appearance, and architectural details shall give the impression of being integral to and compatible with the overall design.”* In addition, sub-section B states *“Structures shall have architectural features (e.g. dominant gable ends, cornices, granite sills, arched openings, large windows framed with architecturally consistent trim, etc.) and patterns that provide visual interest at the pedestrian scale, reduce massive aesthetic effects, and harmonize with the City’s distinctive architectural identity, unique character, and prevailing scale.”* The applicant

STAFF REPORT

states in their waiver request that there is substantial efficiency in creating a linear building and having each building unit identical to the other units.

The Planning Board may grant a waiver from strict compliance with provisions of the Site Development Standards in Article 20 or site plan review standards in Section 25.12, on a case by-case basis, so long as the Board finds, by majority vote, that:

1. *Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulations; or*
2. *Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.*

The Board will need to determine if the waiver requests meet the above criteria.

Recommended Motions for Waiver Requests:

If the Board is inclined to grant the requested waivers, the following language is recommended for motions:

Waiver Request #1: “Grant a waiver from Section 20.14.1.B of the Land Development Code regarding the requirement that buildings of 150-ft in length or more be divided into multiple modules.”

Waiver Request #2: “Grant a waiver from Section 20.14.2.A of the Land Development Code regarding the requirement that front facades and exterior walls shall be articulated to express an architectural identity to avoid a uniform appearance.”

Waiver Request #3: “Grant a waiver from Section 20.14.2.B of the Land Development Code regarding the requirement that structures shall have architectural features that provide interest at the pedestrian scale and reduce massive aesthetic effects.”

Recommended Motion for Application

If the Board is inclined to approve this request, the following language is recommended for a motion:

“Approve SPR-02-23 & CUP-01-23 as shown on the plan identified as “All Purpose Keene Business Park Light Industrial Facility Tax Map 221, Lots 23&24 – (Black Brook Road) Keene, New Hampshire” prepared by Fieldstone Land Consultants, PLLC at a scale of various dated January 20, 2023 and last revised February 13, 2023 with the following conditions:

1. Prior to final approval and signature by the Planning Board Chair, the following conditions precedent shall be met:
 - A. Submittal of security for sedimentation and erosion control, landscaping, and “as built” plans in a form and amount acceptable to the Community Development Director and the City Engineer.”
 - B. Owner’s signature appear on the plan set.
 - C. Submittal of five full sized paper copies and one digital copy of the final plan set.
2. Subsequent to final approval and signature by the Planning Board Chair, the following conditions shall be met:
 - A. Prior to the commencement of site work, the Community Development Department shall be notified when all erosion control measure are installed and the Community Development Director, or their designee, shall inspect the erosion control measures to ensure compliance with this site plan and all City of Keene regulations.”



City of Keene, NH Site Plan Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

SECTION 1: PROJECT INFORMATION

PROJECT NAME: All Purpose Keene Business Park		TYPE OF APPLICATION BEING SUBMITTED: ☒ MAJOR PROJECT APPLICATION ☐ MINOR PROJECT APPLICATION
PROJECT ADDRESS(ES): Black Brook Road		
EXISTING OR PREVIOUS USE: Undeveloped Lot	PROPOSED USE: Light Industrial - Contractor Bays	
GROSS FLOOR AREA OF NEW CONSTRUCTION (in square feet) 61,200 S.F.	GROSS FLOOR AREA OF EXISTING BUILDINGS/STRUCTURES (in square feet) 0 S.F.	
AREA OF PROPOSED NEW IMPERVIOUS SURFACES (in square feet) 128,022 S.F.	TOTAL AREA OF LAND DISTURBANCE (in square feet) 250,000 +/- SF	

SECTION 2: CONTACT INFORMATION

PROPERTY OWNER	APPLICANT
NAME/COMPANY: New England Interconnect Systems, Inc.	NAME/COMPANY: Patriot Holdings, LLC
MAILING ADDRESS: 130 North Main Street, Lisbon, NH 03585	MAILING ADDRESS: 4007 Dean Martin Dr., Las Vegas, NV 89103
PHONE:	PHONE: 702-550-3808
EMAIL:	EMAIL: jeremiah@patriotholdings.com
SIGNATURE: <i>John Noonan c/o</i> FIELDSTONE LAND CONSULTANTS	SIGNATURE: <i>John Noonan c/o</i> FIELDSTONE LAND CONSULTANTS
PRINTED NAME: Richard S. Jesseman	PRINTED NAME: Jeremiah Boucher

AUTHORIZED AGENT (if different than Owner/Applicant)	FOR OFFICE USE ONLY:	
NAME/COMPANY: Fieldstone Land Consultants, PLLC	TAX MAP PARCEL #(s): 221-023-000000-000-5.33 acres 221-024-000-000-000-7.24 acres	
MAILING ADDRESS: 45 Roxbury St., Keene, NH 03431		
PHONE: 603-672-5456	PARCEL SIZE: see above	DATE STAMP: By _____
EMAIL: jenoonan@fieldstonelandconsultants.com	ZONING DISTRICT: Corporate Park	
SIGNATURE: <i>John Noonan</i>	PROJECT #: SPR-02-23+ SWP-CUP-01-23	
PRINTED NAME: John Noonan		



City of Keene, NH

Surface Water Protection Conditional Use Permit (CUP) Application

If you have questions about how to complete this form, please call: (603) 352-5440 or email: communitydevelopment@keenenh.gov

SECTION 1: PROJECT INFORMATION

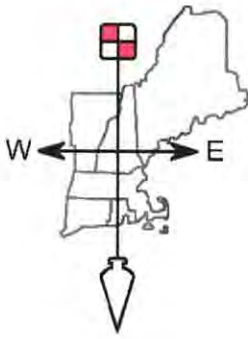
PROJECT NAME: All Purpose Keene Business Park

PROJECT ADDRESS(ES): Black Brook Road

SECTION 2: CONTACT INFORMATION

PROPERTY OWNER	APPLICANT
NAME/COMPANY: New England Interconnect Systems, Inc.	NAME/COMPANY: Patriot Holdings, LLC
MAILING ADDRESS: 130 North Main Street, Lisbon, NH 03585	MAILING ADDRESS: 4007 Dean Martin Dr., Las Vegas, NV 89103
PHONE:	PHONE: 702-550-3808
EMAIL:	EMAIL: jeremiah@patriotholdings.com
SIGNATURE: 	SIGNATURE:
PRINTED NAME: Richard S. Jesseman	PRINTED NAME: Jeremiah Boucher

AUTHORIZED AGENT (if different than Owner/Applicant)	FOR OFFICE USE ONLY:	
NAME/COMPANY: Fieldstone Land Consultants, PLLC	TAX MAP PARCEL #(s): 221-023-000-000-5.33 acres	
MAILING ADDRESS: 45 Roxbury St. Keene, NH 03431	221-024000-000-0007.24 acres	
PHONE: 603-672-5456	PARCEL SIZE: see above	DATE STAMP: By _____
EMAIL: jenoonan@fieldstonelandconsultants.com	ZONING DISTRICT: Corporate Park	
SIGNATURE: 	PROJECT #: SPR-02-23+ SWP-CUP-01-23	
PRINTED NAME: John Noonan		



FIELDSTONE

LAND CONSULTANTS, PLLC

Surveying ♦ Engineering
Land Planning ♦ Septic Designs

206 Elm Street, Milford, NH 03055 - Phone: 603-672-5456 - Fax: 603-413-5456
www.FieldstoneLandConsultants.com

Site Plan Application Narrative

All Purpose Keene – Business Park
Light Industrial Facility
Tax Map Parcels 221-023 & 024
Black Brook Road
Keene, New Hampshire

January 20, 2023

Project Narrative:

Fieldstone Land Consultants, on behalf of Patriot Holdings, is submitting this narrative as part of the Planning Board Site Plan review application. The proposal consists of merging two building lots, constructing two buildings, driveway and associated parking. One building would be 36,000 square feet with 20 rentable units and the second building would be 25,200 square feet with 14 rentable units, where each unit is 30' x 60' in size.

The site is located on Tax Map Parcels 221-023 and 221-024 with the street access from Black Brook Road. The lot size of parcel 221-023 is 5.33 Acres, and parcel 221-024 is 7.24 Acres, creating a merged lot size of 12.57 Acres. The zoning district of both lots is Industrial: Corporate Park (CP). The site is currently owned by New England Interconnect Systems, Inc. and the applicant, Patriot Holdings, is looking to purchase the properties to develop a business park, targeted toward contractor businesses. The proposed use would be considered light industrial and allow contractor businesses to rent space to have workshops, offices, and store building materials. Each building unit will have a small office and restroom, with the remaining space customized by the lessee. The buildings will be fully sprinklered and provide ADA access into each building unit. In front of each unit are two large parking spaces and a shared parking lot is provided to the rear of the lot.

The southern border of the property is defined by the Black Brook. A large portion of the site is located within the 100-year flood plain, Zone AE, following the Black Brook water course. The site is also in the City's Surface Water Overlay Protection District with a 30' buffer requirement from the Black Brook and the delineated wetlands. The proposed buildings and parking lot will encroach the 100-year floodplain and require a Floodplain Development Permit along with FEMA approval. Any fill that is proposed will be offset by a flood compensation basin that will be based on total volume calculations. The finish floor elevations of the buildings will be a minimum of 1 foot above the 100 Year floodplain elevation (Minimum Finish Floor Elevation = 519.5'). The proposed driveway will cross the wetland 30' buffer to access the cul-de-sac on Black Brook Road.

Below is an outline of the Site Development Standards on the application and how each is addressed.

20.2 Drainage & Stormwater Management:

The stormwater is managed according to NHDES Alteration of Terrain standards and will require this permit, as the project impacts more than 100,000 square feet of land. The storm runoff will be treated according to the state standards and detained in a large basin to ensure the post development runoff matches or less than the pre development runoff.

20.3 Sediment and Erosion Control:

Sediment and erosion control measures are outlined and detailed on the site plans. There will be a combination of silt fence, erosion control matting, stone check dams, rip-rap stone aprons, and a stabilized construction entrance as part of the construction plans. These measures are also reviewed under the NHDES Alteration of Terrain permit.

20.4 Snow Storage & Removal

The site is large enough to store snow on site and areas are shown on the plan.

20.5 Landscaping

The site will have landscaping installed per the landscaping plan. The shared parking lot to the rear will have parking islands to provide internal green space and trees have been provided to shade the parking lot. The flood compensation basin will be seeded with pollinator friendly seed mix.

20.6 Screening

There is a double dumpster enclosure to the rear of the site. This location is not visible from the public way and the dumpsters will be enclosed in a fence enclosure to keep the area looking neat. HVAC equipment is not designed at this time, but it is noted that it must meet the City screening standards once installed.

20.7 Lighting

The lighting is shown on the lighting plan and meets the City standards. Wall mounted lights will be used at each unit and two pole mounted lights in the parking lot. All fixtures are energy efficient LEDs that are full-cutoff. It is noted for hours of operation and 50% of the lights will be on motion sensors to provide security lighting. There are no lights proposed near property lines or public ways.

20.8 Sewer & Water

The site will be serviced by municipal water and sewer. Each building will be fully sprinklered and have a restroom connected to sewer on Black Brook Road. The sewer connection will require a City sewer connection permit and an NHDES Sewer Connection Permit. We will work with City Engineering staff to verify inverts and connection methods.

20.9 Traffic & Access Management

All traffic and access to the site will be off the Black Brook Road. This road was designed to handle traffic from the Corporate Park. The proposed driveway will be 24 feet wide and easily accommodate traffic in and out of the site onto the City road.

20.10 Filling & Excavation

This site falls within the 100 year floodplain and will require fill within the floodplain. The fill will be offset by excavation to provide compensatory storage on site for the floodwaters. The northern building will be approximately at existing grade and the southern building will be in fill scenario.

20.11 Surface Water & Wetlands

The property is adjacent to the Black Brook, which defines the southern border. There are delineated wetlands following the brook and along the Black Brook Road. There are no associated impacts to the delineated wetlands. In order to install the driveway and outlet the drainage basin/flood basin, there will be a minor impact to the 30' buffer.

20.12 Hazardous & Toxic Materials

The management company will oversee the tenants and ensure no hazardous or toxic materials are not

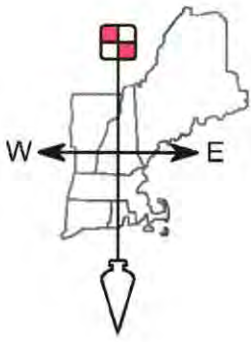
stored outside or in an approved manner.

20.13 Noise

There could be noise associated with certain businesses, depending on the type of contractor renting the space. The units are fully enclosed and any business that may be louder, such as machining, cutting, or workshop spaces could be monitored by management to ensure it does not impact the operations of adjacent tenants. The site is located far enough from other properties and businesses, that noise would not impact other properties.

20.14 Architecture & Visual Appearance

The buildings will be metal panel buildings with each unit having a large garage door and a man-door. The roofs will be a shallow gable pitched roof with metal roofing panels. The colors will be a mixture of gray shades. Examples of the type of construction have been provided, as architectural drawings are not yet complete for the project.



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CUP Application Review Narrative Surface Water Protection

All Purpose Keene – Business Park
Light Industrial Facility
Tax Map Parcels 221-023 & 024
Black Brook Road
Keene, New Hampshire

January 20, 2023

Project Narrative:

Fieldstone Land Consultants, on behalf of Patriot Holdings, is submitting this narrative as part of the Conditional Use Permit (CUP) application. The proposal consists of merging two building lots, constructing two buildings, driveway and associated parking. One building would be 36,000 square feet with 20 rentable units and the second building would be 25,200 square feet with 14 rentable units, where each unit is 30' x 60' in size.

The site is located on Tax Map Parcels 221-023 and 221-024 with the street access from Black Brook Road. The lot size of parcel 221-023 is 5.33 Acres, and parcel 221-024 is 7.24 Acres, creating a merged lot size of 12.57 Acres. The zoning district of both lots is Industrial: Corporate Park (CP). The site is currently owned by New England Interconnect Systems, Inc. and the applicant, Patriot Holdings, is looking to purchase the properties to develop a business park, targeted toward contractor businesses. The proposed use would be considered light industrial and allow contractor businesses to rent space to have workshops, offices, and store building materials. Each building unit will have a small office and restroom, with the remaining space customized by the lessee. The buildings will be fully sprinklered and provide ADA access into each building unit. In front of each unit are two large parking spaces and a shared parking lot is provided to the rear of the lot.

The southern border of the property is defined by the Black Brook. A large portion of the site is located within the 100-year flood plain, Zone AE, following the Black Brook water course. The site is also in the City's Surface Water Overlay Protection District with a 30' buffer requirement from the Black Brook and the delineated wetlands. The proposed buildings and parking lot will encroach the 100-year floodplain and require a Floodplain Development Permit along with FEMA approval. Any fill that is proposed will be offset by a flood compensation basin that will be based on total volume calculations. The finish floor elevations of the buildings will be a minimum of 1 foot above the 100 Year floodplain elevation (Minimum Finish Floor Elevation = 519.5'). The proposed driveway will cross the wetland 30' buffer to access the cul-de-sac on Black Brook Road. A second area of buffer encroachment is where the proposed stone spillway for the detention/floodplain basin is proposed. This impact is required to provide a connection point of the stormwater and flood waters to the flooding source, Black Brook.

Below is an outline of the Site Development Standards on the application and how each is addressed.

20.2 Drainage & Stormwater Management:

The stormwater is managed according to NHDES Alteration of Terrain standards and will require this permit, as the project impacts more than 100,000 square feet of land. The storm runoff will be treated according to the state standards and detained in a large basin to ensure the post development runoff matches or less than the pre development runoff.

20.3 Sediment and Erosion Control:

Sediment and erosion control measures are outlined and detailed on the site plans. There will be a combination of silt fence, erosion control matting, stone check dams, rip-rap stone aprons, and a stabilized construction entrance as part of the construction plans. These measures are also reviewed under the NHDES Alteration of Terrain permit.

20.4 Snow Storage & Removal

The site is large enough to store snow on site and areas are shown on the plan.

20.5 Landscaping

The site will have landscaping installed per the landscaping plan. The shared parking lot to the rear will have parking islands to provide internal green space and trees have been provided to shade the parking lot. The flood compensation basin will be seeded with pollinator friendly seed mix.

20.6 Screening

There is a double dumpster enclosure to the rear of the site. This location is not visible from the public way and the dumpsters will be enclosed in a fence enclosure to keep the area looking neat. HVAC equipment is not designed at this time, but it is noted that it must meet the City screening standards once installed.

20.7 Lighting

The lighting is shown on the lighting plan and meets the City standards. Wall mounted lights will be used at each unit and two pole mounted lights in the parking lot. All fixtures are energy efficient LEDs that are full-cutoff. It is noted for hours of operation and 50% of the lights will be on motion sensors to provide security lighting. There are no lights proposed near property lines or public ways.

20.8 Sewer & Water

The site will be serviced by municipal water and sewer. Each building will be fully sprinklered and have a restroom connected to sewer on Black Brook Road. The sewer connection will require a City sewer connection permit and an NHDES Sewer Connection Permit. We will work with City Engineering staff to verify inverts and connection methods.

20.9 Traffic & Access Management

All traffic and access to the site will be off the Black Brook Road. This road was designed to handle traffic from the Corporate Park. The proposed driveway will be 24 feet wide and easily accommodate traffic in and out of the site onto the City road.

20.10 Filling & Excavation

This site falls within the 100 year floodplain and will require fill within the floodplain. The fill will be offset by excavation to provide compensatory storage on site for the floodwaters. The northern building will be approximately at existing grade and the southern building will be in fill scenario.

20.11 Surface Water & Wetlands

The property is adjacent to the Black Brook, which defines the southern border. There are delineated wetlands following the brook and along the Black Brook Road. There are no associated impacts to the delineated wetlands. In order to install the driveway and outlet the drainage basin/flood basin, there

will be a minor impact to the 30' buffer.

20.12 Hazardous & Toxic Materials

The management company will oversee the tenants and ensure no hazardous or toxic materials are not stored outside or in an approved manner.

20.13 Noise

There could be noise associated with certain businesses, depending on the type of contractor renting the space. The units are fully enclosed and any business that may be louder, such as machining, cutting, or workshop spaces could be monitored by management to ensure it does not impact the operations of adjacent tenants. The site is located far enough from other properties and businesses, that noise would not impact other properties.

20.14 Architecture & Visual Appearance

The buildings will be metal panel buildings with each unit having a large garage door and a man-door. The roofs will be a shallow gable pitched roof with metal roofing panels. The colors will be a mixture of gray shades. Examples of the type of construction have been provided, as architectural drawings are not yet complete for the project.

Below is an outline of the CUP Standards per the LDC and how each is addressed.

LDC Section 11.6.2: Conditional Use Permit Standards:

A. The proposed use cannot be located in a manner to avoid encroachment:

Due to the proximity of the wetland to the existing road, the buffer will have to be crossed to access the site. There will not be any impact to the wetland resource itself.

B. Encroachment into the buffer area has been minimized: The driveway will only cross the buffer and not impact the actual wetland, which seems to be created by the drainage from Black Brook Road.

C. The nature, design, siting, and scale of the proposed use will avoid the potential for adverse impacts to the surface water resource: The paved driveway will be graded to collect stormwater runoff and direct it away from the wetland finger and into a grass treatment swale. The water will flow into the large flood/detention basin, which will ultimately become jurisdictional wetlands over time.

D. The surface water buffer area shall be left in a natural state: The encroachment area will be permanently altered as the access drive will cross the buffer. The wetland resource will not be impacted and will ultimately become much larger as the flood compensation basin develops into a wetland.

E. The Planning Board may consider the following:

- 1. The size, character, and quality of the surface water being encroached upon:** The surface water resources on the site are jurisdictional wetlands and the Black Brook. There are no proposed impacts to the wetlands or brook, only the crossing of the buffer by the driveway and stone spillway.
- 2. The location and connectivity of the surface water in relation to other surface waters:** The area of encroachment for the stone spillway is to ensure that the flood basin has connectivity to the brook. This connection will be a small excavation and placement of stone to control the inflow/outflow of water.
- 3. The nature of the ecological and hydrological functions served by the surface water:** The proposed project will not have an adverse impact on the ecological or hydrological function of Black Brook. The floodplain compensation will offset any fill within the floodplain and

allow floodwaters to back up in a similar fashion as the existing condition, with no increase to flood elevation. The floodplain area will provide wildlife habitat to maintain the ecological balance around the site. The drainage systems have been designed to reduce the stormwater runoff volumes and velocities during the 2, 10, and 50 year storm events.

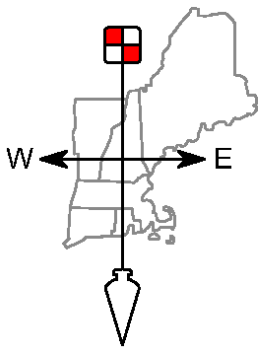
4. **The nature of the topography, slopes, soils and vegetation in the buffer:** The slopes, soils and vegetation within the buffer area will not change, only the where the pavement encroaches the buffer. The flood compensation grading will lower the grades on the site; however, this excavation does not encroach the surface water buffer.
5. **The role of the surface water buffer in mitigating soil erosion, sediment and nutrient transport, groundwater recharge, flood storage and flow dispersion:** The drainage systems will support groundwater recharge and the flood storage will be larger than the volume of the current storage on site. The soil erosion, sediment and nutrient transport will be mitigated by using proper erosion control measures and the installation of the proposed stormwater drainage system.
6. **The extent to which the surface water buffer serves as wildlife habitat or travel corridor:** The buffer area along the perimeter of the site will not be changed or impact the travel corridor of wildlife.
7. **The rate, timing and volume of stormwater runoff and its potential to influence water quality:** The rate, timing and volume of stormwater will be mitigated by the use of deep sump catch basins, oil/debris hoods, grass treatment swales, and a detention basin. There will be no adverse influence to the water quality from the site development.
8. **The sensitivity of the surface water and the surface water buffer to disruption from changes in grade, or plant and animal habitat in the buffer zone:** The grades within the buffer will not change from the existing condition. The floodplain compensation will provide habitat for native plants and animals, which will be planted with pollinator friendly conservation mix.

SWP CUP Application Section Four: Conditional Use Permit Criteria (per application form):

1. **Proposed mitigation measures** – The majority of the wetland buffer will be left in a natural state, which consists of mixed brush and field grasses. The floodplain compensation area will be allowed to return to a natural state, following grading and stabilization practices. This area will ultimately become a habitat for natural flora and fauna to propagate. The area will serve as an upland buffer to the Black Brook.
2. **Disclosure of State & Federal Permits** – The overall impact of the project will require an Alteration of Terrain Permit from NHDES and a General Construction Permit with a Notice of Intent with the EPA. Upon completion of floodplain compensation grading, a Letter of Map Revision (LOMR) will be filed with FEMA for revising the floodplain line.
3. **Why proposed use cannot be placed outside of the Overlay District** – Due to the proximity of the wetland to the City road the driveway access will cross buffer, but will not impact the wetland itself. It appears that the wetland in this area is man-made by the drainage from the roadway.
4. **How encroachment has been minimized** – The encroachment has been minimized by crossing at the end of the buffer to connect to the cul-de-sac.
5. **How proposed use was designed to avoid adverse impacts to surface water resources** – The proposed driveway was designed to avoid the water resource and runoff will be directed away

from the resource by providing a grass treatment swale.

6. **How the buffer will be maintained in a natural state** – The floodplain compensation grading was designed to avoid the majority of the buffer. The buffer will be left in a natural state in this area and the wetland will not be impacted.
7. **Location and connectivity of surface water in relation to surrounding watershed** – The Black Brook flows southeast and connects to the Ash Swamp Brook which connects to the Ashuelot River near the Keene State College ball fields.
8. **Extent to which buffer serves as wildlife habitat** – The buffer serves as wildlife habitat in this area, and will continue to serve as a wildlife habitat. The buffer will continue to serve as wildlife habitat and the floodplain compensation basin will provide further habitat, especially for pollinator species.



FIELDSTONE

LAND CONSULTANTS, PLLC

Surveying ♦ Engineering
Land Planning ♦ Septic Designs

206 Elm Street, Milford, NH 03055 - Phone: 603-672-5456 - Fax: 603-413-5456
www.FieldstoneLandConsultants.com

City of Keene Planning Board

Attn: Evan J. Clements, AICP
Community Dev. Planner
City of Keene
3 Washington St – 4th Floor
Keene, NH 03431

February 13, 2023

RE: WAIVER REQUEST SPR-02-23 and SWP-CUP-01-23 Contractor Storage Development

Mr. Clements:

On behalf of our client, Patriot Holdings, LLC, we are hereby submitting these waiver requests for Planning Board approval. Based on the Community Development review letter, dated February 3, 2023, we are hereby seeking waivers for following standards in the Land Development Code (LDC):

Waiver #1: Section 20.14.1 “Massing/Scale,” sub-section B states “For buildings of 150-ft in length of more, facades shall be divided into multiple “modules,” expressed through significant architectural changes such as a change in materials, a change in pattern elements (e.g. fenestration, columns, pilasters, etc.), or a change in building setback through recesses or projections. Such modules shall be no wider than 50-ft.”.:

1. Strict conformity would pose an unnecessary hardship to the applicant and the waiver would not be contrary to the spirit and intent of the regulation.: The buildings that are proposed are pre-fabricated metal buildings. The architecture and design of these buildings is determined by the manufacturer and there is a substantial cost to changing the linear design. The use and type of buildings are well suited to the location in the Corporate Park, and the massing or scale of the buildings will not adversely impact the neighborhood. The strict conformity would impose an unnecessary monetary hardship on the applicant to have a custom designed building to meet this standard.
2. Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations.: A large portion of the property is within the 100 year floodplain, and this limits the footprint of the building and site plan layout. In order to change the building setback via recesses and projections, the building footprint would be larger for the same amount of square footage. The projects’ footprint to the south is very restrictive based on the floodplain, the compensation required, and the river. The 100 year floodplain is very restrictive and this is a specific circumstance that is relative to the site plan.
3. In granting a waiver, the Planning Board may require any mitigation that is reasonable and necessary to ensure that the spirit and intent of the standard being waived will be preserved and to ensure that no increase in adverse impacts associated with granting the waiver will occur.: Based on the use of light industrial and the location of the project in the corporate park zone, we believe that the building styles are in harmony with the neighborhood. The buildings are not located in the center of Keene or in a highly visible location from public City streets. The existing and proposed

landscaping will break up the mass of the buildings, as viewed from the City street – Black Brook Road.

Waiver #2: Section 20.14.2 “Visual Interest,” sub-section A states “Front facades and exterior walls shall be articulated to express an architectural identity to avoid a uniform appearance, and architectural details shall give the impression of being integral to and compatible with the overall design.” In addition, sub-section B states “Structures shall have architectural features (e.g. dominant gable ends, cornices, granite sills, arched openings, large windows framed with architecturally consistent trim, etc.) and patterns that provide visual interest at the pedestrian scale, reduce massive aesthetic effects, and harmonize with the City’s distinctive architectural identity, unique character, and prevailing scale.”:

1. **Strict conformity...**: As described in Waiver #1, the architectural design and layout is pre-determined by the building manufacture. There is substantial efficiency in creating a linear building and having each building unit identical to the other units. These types of buildings cannot be ordered with cornices, granite sills, arched openings, or large windows, as the function of the buildings is for light industrial and contractor business operations.
2. **Specific circumstances ...**: The limiting functions of the 100-year floodplain on the property is a specific circumstance, along with the property being located on the outskirts of the city. The requirement for articulated walls would require that the building footprint be larger, which require additional fill in the floodplain. The use of light industrial and contractor business park, should be considered for the type of architecture warranted in this location. The site development is already hindered by the floodplain, which brings a substantial cost to development as a hardship. The added cost of custom designing a building for this use would add to that hardship to develop this particular building lot.
3. **In granting a waiver ...**: The spirit and intent of the ordinance would be upheld, as the style of buildings would fit the harmony of the corporate park. The landscaping proposed and existing trees to remain, will break up the buildings, as viewed from the public roads. The buildings are also oriented so that the narrowest portion of the building is visible from the street.

Thank you for your consideration in granting the waivers outlined above.

Best Regards,
Fieldstone Land Consultants, PLLC



John Noonan
Project Manager

SITE DEVELOPMENT PLANS

All Purpose Keene Business Park

LIGHT INDUSTRIAL FACILITY

- TAX MAP 221, LOTS 23 & 24 -
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE
JANUARY 20, 2023
LAST REVISED: FEBRUARY 13, 2023



SCALE: 1"=400'

SHEET INDEX		
PAGE	SHEET	TITLE
1	CV-1	COVER SHEET
2	EX-1	EXISTING CONDITIONS PLAN (ALTA)
3	SP-1	SITE PLAN
4	GR-1	GRADING & DRAINAGE PLAN
5	UT-1	UTILITY PLAN
6	LT-1	LIGHTING PLAN
7	LS-1	LANDSCAPING PLAN
8	DT-1	EROSION CONTROL DETAILS
9	DT-2	CONSTRUCTION DETAILS
10	DT-3	CONSTRUCTION DETAILS
11	DT-4	CONSTRUCTION DETAILS (SEWER)
1 of 1	EH-1	TRUCK TURNING EXHIBIT PLAN

PREPARED FOR:
PATRIOT HOLDINGS LLC
4007 DEAN MARTIN DRIVE, LAS VEGAS, NV 89103

LAND OF:
NEW ENGLAND INTERCONNECT SYSTEMS LLC
130 NORTH MAIN STREET, LISBON, NH 03585

1. THE LOCATION OF THE UTILITIES SHOWN ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PRESERVE ALL UTILITY SERVICES.

2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL JURISDICTIONAL AGENCIES AND UTILITY COMPANIES PRIOR TO AND DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND PROPOSED WORK PRIOR TO CONSTRUCTION.

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION
DIGSAFE.COM
OR DIAL **811**
KNOW WHAT'S BELOW

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

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LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
Phone: (603)-672-5456 Fax: (603)-413-5456
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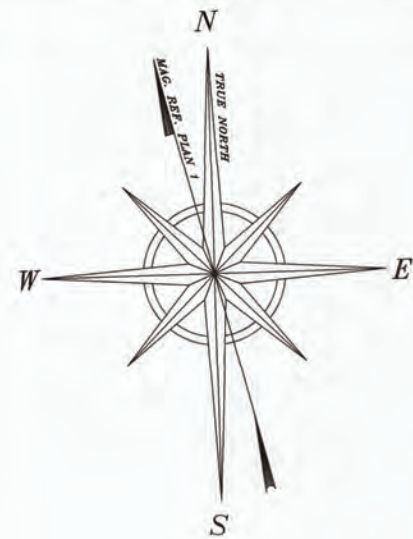
OWNER'S SIGNATURE: _____ DATE: _____

APPROVED BY THE KEENE, NH PLANNING BOARD FOR PHASE _____

ON DATE: _____

CERTIFIED BY: _____

A	2/13/23	REVS PER CITY STAFF COMMENTS		JEN	CEB				
REV.	DATE	DESCRIPTION		C/O	DR	CK			
FILE: 3459C000A.dwg	PROJ. NO. 3459.00	SHEET: CV-1	PAGE NO. 65 of 92	OF 11					



NH BLACK BROOK LLC
5620 OLD MILE HILL RD
OREFIELD, PA 18069
PARCEL ID: 221022
BOOK 3005 PAGE 486

MUTUAL DRIVEWAY AGREEMENT
SEE BOOK 1822 PAGE 2

NH BLACK BROOK LLC
5620 OLD MILE HILL RD
OREFIELD, PA 18069
PARCEL ID: 221021
BOOK 3005 PAGE 486

SLOPE & DRAINAGE EASEMENT
RESERVED TO THE CITY OF KEENE
SEE REFERENCE PLAN 2 & BOOK
1824 PAGE 98

PARCEL #221-023-000-000
5.33 ACRES ±

ZONE AE

DRAINAGE RIGHT OF WAY SEE
PLAN BOOK 32 PAGE 10

DRAINAGE EASEMENT
SEE BOOK 676 PAGE 563

CAITLIN WHITEHEAD
7 LED CHASSE WAY
FRAMINGHAM, MA 01701-3070
PARCEL ID: 221025
BOOK 2862 PAGE 540

CAITLIN WHITEHEAD
7 LED CHASSE WAY
FRAMINGHAM, MA 01701-3070
PARCEL ID: 221028
BOOK 2860 PAGE 540

~ REFERENCE PLANS ~

1. PLAN ENTITLED "6 LOT SUBDIVISION OF LAND DESCRIBED IN BOOK 1530 PAGE 512 PREPARED FOR KEENE ECONOMIC DEVELOPMENT & REVITALIZATION CORPORATION 20 CENTRAL SQUARE, SUITE 1, KEENE, NEW HAMPSHIRE 03431", DATED SEPTEMBER 1997, PROJ. NO. 6754, RECORDED IN CAB. 12 DR. 3 NO. 90, PREPARED BY CLOUGH, HARBOUR & ASSOCIATES LLP.
2. PLAN ENTITLED "PROPOSED SLOPE & DRAINAGE EASEMENTS PLAN BLACK BROOK ROAD PREPARED FOR KEENE ECONOMIC DEVELOPMENT & REVITALIZATION CORPORATION 20 CENTRAL SQUARE, SUITE 1, KEENE, NEW HAMPSHIRE 03431", DATED NOVEMBER 1997, PROJ. NO. 6764, RECORDED IN CAB. 12 DR. 3 NO. 91, PREPARED BY CLOUGH, HARBOUR & ASSOCIATES LLP.
3. PLAN ENTITLED "TWO LOT SUBDIVISION LOCATED AT TAX MAP 919-09, LOT 26.03 KEENE, NEW HAMPSHIRE PREPARED FOR MONADNOCK ECONOMIC DEVELOPMENT CORPORATION 39 CENTRAL SQUARE, SUITE 201, KEENE, NEW HAMPSHIRE 03431", DATED APRIL 2, 2001, PROJ. NO. 10432, RECORDED IN CAB. 12 DR. 6 NO. 150, PREPARED BY CLOUGH, HARBOUR & ASSOCIATES LLP.
4. PLAN ENTITLED "PLAN ASH SWAMP WATERSHED CHESHIRE COUNTY N.H. 1960 PREPARED BY CITY OF KEENE ENG. DEPT.", RECORDED IN PLAN BOOK 32 PAGE 10.

~ REFERENCE DEEDS ~

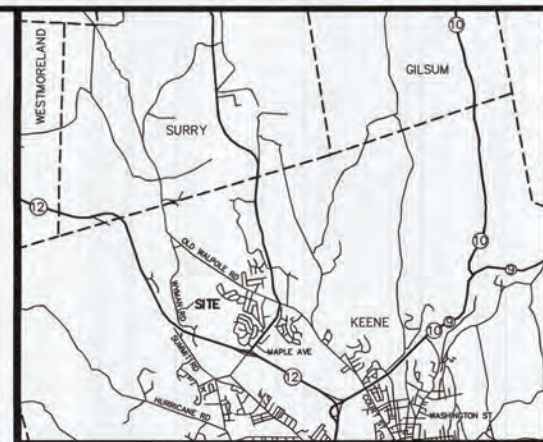
1. DEED FROM MONADNOCK ECONOMIC DEVELOPMENT CORPORATION TO NEW ENGLAND INTERCONNECT SYSTEMS, INC. RECORDED IN BOOK 1824 PAGE 98 ON AUGUST 1, 2001.

~ CHAPTER 676:18 SECTION III CERTIFICATION ~

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.

JOSEPH A. DIBERNARDO, N.H. L.L.S. #963

8/24/22
DATE



~ LOCATION MAP ~

~ LEGEND ~

- PROPERTY LINE
- RIGHT OF WAY LINE
- TIE LINE, NOT PROPERTY LINE
- IRON PIN FOUND
- IRON PIN TO BE SET
- UTILITY POLE
- BROOK
- SEWER MANHOLE
- GATE VALVE
- CURB STOP
- CATCH BASIN
- FIRE HYDRANT
- BOLLARD
- LIGHT POLE
- LPG TANK RISER
- WATER LINE
- SEWER LINE
- UNDERGROUND POWER LINE
- DELINEATED WETLANDS
- BUILDING SETBACKS

GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.

~ NOTES ~

1. METHOD OF SURVEY: LEICA ROBOTIC TOTAL STATION.
2. BEARINGS ARE REFERENCED TO REFERENCE PLAN 1. CONTOURS ARE IN 2' INTERVALS AND WERE TAKEN FROM THE GRANIT LIDAR FILES AND ARE TIED TO NAVD88.
3. DIBERNARDO ASSOCIATES IS NOT RESPONSIBLE FOR PROPERTY DESCRIPTIONS PREPARED BY OTHER PERSONS FOR CONVEYANCE OF THE PROPERTY SHOWN HEREON.
4. THE PROPERTY IS LOCATED PARTIALLY IN ZONE AE AND ZONE X (SHADED). THE BASE FLOOD ELEVATION FOR THE ENTIRE PARCEL IS 518.5' NAVD88. THE BASE FLOOD ELEVATION WAS CALCULATED FROM THE FLOOD INSURANCE STUDY VOLUME 1 CHESHIRE COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS) DATED MAY 23, 2006 BLACK BROOK PROFILE FOUND ON PAGE 71.
5. THE WETLANDS WERE DELINEATED AND LOCATED BY JONATHAN SISSON AT BEAVER TRACKS, LLC. (603.313.4925).
6. ALL UTILITY LINES ARE SHOWN AS APPROXIMATE. NO UNDERGROUND EXPLORATION WAS CONDUCTED BY THIS FIRM. CALL 1-800-DIG-SAFE PRIOR TO CONSTRUCTION. LINES ARE PRESUMED TO RUN IN A STRAIGHT LINE FROM SURFACE STRUCTURE TO SURFACE STRUCTURE.
7. THE PROPERTY IS LOCATED IN THE CORPORATE PARK (CP) ZONE. SEE SHEET TWO FOR DETAILS.
8. GROSS LAND AREA = 12.57 ACRES ± OR 547,549.20 S.F. ±.
9. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WAS OBSERVED DURING THE COURSE OF THE SURVEY.

© COPYRIGHT 2022
DIBERNARDO ASSOCIATES, LLC.

EXISTING CONDITIONS PLAN
PROPERTY OF

NEW ENGLAND INTERCONNECT SYSTEMS INC

130 NORTH MAIN ST.
LISBON, NH 03585
PARCEL ID: 221023
BOOK 1824 PAGE 98

BLACKBROOK ROAD ~ CHESHIRE COUNTY ~ KEENE, NEW HAMPSHIRE

DIBERNARDO ASSOCIATES, LLC

VT NH
LICENSED LAND SURVEYORS

113 CHURCH STREET
NORTH WALPOLE, NH 03609
802-463-9091 ~ 603-358-9509

DATE AUGUST 24, 2022 SCALE 1" = 50'

DRAWN BY JAD CK'D BY JTW

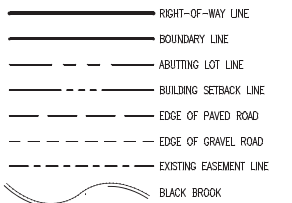
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DWG. NO. 3474-1 SHEET: EX-1

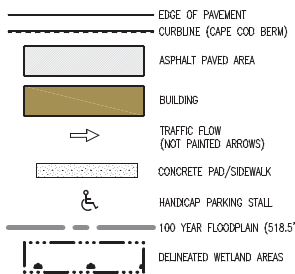


LEGEND:

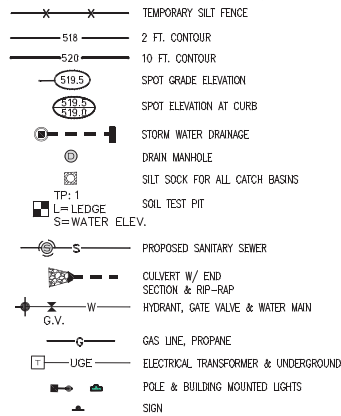
EXISTING FEATURES



PROPOSED FEATURES



PROPOSED FEATURES



221021
NH BLACK BROOK LLC
5620 OLD MILE HILL RD
DREFFIELD, PA 18069
BK 3005 PG 486

221021
NH BLACK BROOK LLC
5620 OLD MILE HILL RD
DREFFIELD, PA 18069
BK 3005 PG 486

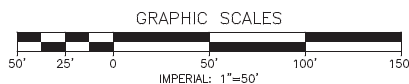
BLACK BROOK ROAD

221025
CAITLIN WHITHEAD
7 LEO CHASSE WAY
FRAMINGHAM, MA 01701-3070
BK 2862 PG 540

FOUND IRON ROD
5/8" FLUSH

DRAINAGE RIGHT OF WAY SEE PLAN
BOOK 32 PAGE 10
DRAINAGE EASEMENT
SEE BOOK 676 PAGE 563

221028
CAITLIN WHITHEAD
7 LEO CHASSE WAY
FRAMINGHAM, MA 01701-3070
BK 2860 PG 540



PERMITS/APPROVALS REQUIRED:

1. CITY OF KEENE PLANNING BOARD: SITE PLAN APPROVAL
2. CITY OF KEENE PLANNING BOARD: CONDITIONAL USE FOR PAVEMENT IN 30' WETLAND BUFFER
3. CITY OF KEENE FLOODPLAIN DEVELOPMENT PERMIT
4. CITY OF KEENE BUILDING PERMIT
5. CITY OF KEENE VOLUNTARY LOT MERGER
6. NHDES SEWER CONNECTION PERMIT
7. NHDES ALTERATION OF TERRAIN PERMIT
8. FEMA LETTER OF MAP REVISION (LOMR-F) AND ELEVATION CERTIFICATE

LAND-OWNER SIGNATURE

OWNER: _____ DATE: _____

APPROVED BY THE KEENE PLANNING BOARD

ON: _____ CERTIFIED BY: _____
CHAIRMAN: _____ AND
SECRETARY: _____

NOTES:

1. THE OWNER OF RECORD FOR PARCEL 221-023 & 024 IS NEW ENGLAND INTERCONNECT SYSTEMS, INC. OF 130 NORTH MAIN ST., LISBON, NH 03585.
2. THE PURPOSE OF THIS PLAN IS TO DEPICT A SITE LAYOUT FOR A LIGHT INDUSTRIAL DEVELOPMENT ON TAX MAP 221 PARCELS 023 & 024 AS SHOWN. THE PROPOSAL IS BASED ON BOTH LOTS BEING MERGED INTO ONE LOT AND USED AS LIGHT INDUSTRIAL. EACH BUILDING UNIT WILL HAVE A SMALL OFFICE, RESTROOM, AND LEASED TO CONTRACTOR BUSINESSES.
3. ZONING FOR THE PARCEL IS CORPORATE PARK (CP). REQUIREMENTS INCLUDE:
MINIMUM LOT AREA: 2 ACRES (AFTER MERGER LOT = 12.57 ACRES)
MINIMUM LOT WIDTH: 200 FT.
MINIMUM FRONTAGE: 100 FT. (AFTER MERGER FRONTAGE = 509.02')
MINIMUM FRONT SETBACK: 40 FT.
MINIMUM SETBACKS: 50 FT. REAR AND SIDE (40' FOR ONE SIDE W/OUT PARKING)
MAXIMUM BUILDINGS & IMPERVIOUS COVERAGE: 80%
MIN. GREEN/OPEN SPACE: 20%
MAX. BUILDING HEIGHT: 60 FT.
4. THE BOUNDARY AND BASE PLAN INFORMATION SHOWN IS FROM SURVEY DATA PREPARED BY DIBERNARDO ASSOCIATES, LLC.
5. THE TOPOGRAPHIC ELEVATIONS ARE BASED ON GRANIT LIDAR CONTOURS AND NAVD88 DATUM.
6. WETLANDS SHOWN WERE DELINEATED BY JONATHAN SISSON, CWS, CSS, OF BEAVER TRACKS, LLC. WETLANDS WERE VERIFIED BY CHRISTOPHER A. GUIDA BY FIELDSTONE LAND CONSULTANTS, PLLC.
7. THE PROPERTY IS LOCATED PARTIALLY IN ZONE AE AND ZONE X. THE BASE FLOOD ELEVATION FOR THE ENTIRE PARCEL IS 518.5' NAVD88. THE BASE FLOOD ELEVATION WAS CALCULATED FROM THE FLOOD INSURANCE STUDY VOLUME 1 CHESHIRE COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS) DATED MAY 23, 2006 BLACK BROOK PROFILE FOUND ON PAGE 71.
8. MAXIMUM LOT COVERAGE: 80% (12.57 x 0.8 = 10.06 AC, 438,039 SF)
PROPOSED LOT COVERAGE:
BUILDINGS = 61,200 S.F., PAVEMENT = 66,822 S.F.
TOTAL IMPERVIOUS = 128,022 S.F. (128,022 ±S.F. / 547,549 ±S.F.) = 23.4%±
9. PARKING REQUIRED (PER LDC TABLE 9-1, INDUSTRIAL, LIGHT):
0.5 SPACE/1000 SF: 0.5 x 61.2 = 31 SPACES
4 SP/1000 SF OFFICE: 4 x (10'x30'x34 UNITS)/1000 = 41 SPACES
TOTAL = 31 + 41 = 52 SPACES REQUIRED (119 PROVIDED)
ADA SPACES: 5 SPACES REQUIRED FOR 119 TOTAL (1 VAN ADA) => 5 PROVIDED
10. SNOW STORAGE SHALL BE DONE ON SITE. IN THE EVENT OF EXCESSIVE SNOW, SNOW WILL BE TRUCKED OFF SITE, AS NECESSARY.
11. BUILDING CORNERS ARE TO BE PINNED BY A SURVEYOR PRIOR TO FOUNDATION CONSTRUCTION.

REV.	DATE	REVS PER CITY STAFF COMMENTS	DESCRIPTION	C/O	DR	JEN	CEB
A	2/13/23						

SITE PLAN

TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE

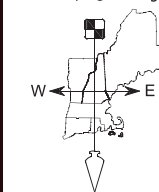
PREPARED FOR:

PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50'

JANUARY 20, 2023

Surveying + Engineering + Land Planning + Permitting + Septic Designs



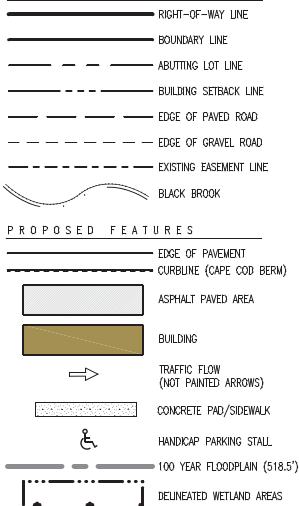
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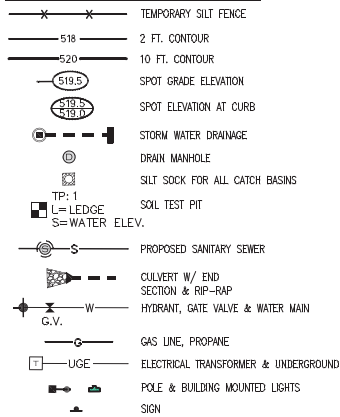
FILE: 3459SP00A.dwg PROJ. NO. 3459.00 SHEET: SP-1 PAGE NO. 11

LEGEND:

EXISTING FEATURES



PROPOSED FEATURES



221021
NH BLACK BROOK LLC
5620 OLD MILE HILL RD
OREFIELD, PA 18069
BK 3005 PG 486

221025
CAITLIN WHITHEAD
7 LEO CHASSE WAY
FRAMINGHAM, MA 01701-3070
BK 2862 PG 540

221021
NH BLACK BROOK LLC
5620 OLD MILE HILL RD
OREFIELD, PA 18069
BK 3005 PG 486

221028
CAITLIN WHITHEAD
7 LEO CHASSE WAY
FRAMINGHAM, MA 01701-3070
BK 2860 PG 540

PROPOSED DRAINAGE STRUCTURES:

CB#1	RIM=518.9	INV O=516.4	
CB#2	RIM=518.9	INV IN=515.4	INV O=515.4
CB#3	RIM=518.9	INV IN=514.4	INV O=514.4

GRADING & DRAINAGE NOTES:

1. THE PROPOSED DRIVEWAY IS A PRIVATE DRIVEWAY AND IS GRADED TO NOT DIRECT WATER INTO THE CITY STREET.
2. DRIVEWAY MAXIMUM GRADES ARE 15% PER CITY REGS. THE GRADES PROPOSED ARE WELL BELOW THIS LIMIT AND RELATIVELY FLAT IN SLOPE.
3. ALL ROAD DITCHES OVER 5% GRADE SHALL HAVE STONE CHECK DAMS AND LINED WITH 4" MINUS RIP RAP STONE WHERE APPLICABLE.
4. DUE TO THE CLOSE PROXIMITY OF THE WETLANDS TO THE SITE, THE WETLAND BUFFER MUST BE FLAGGED PRIOR TO INSTALLING SILT FENCE AND STARTING THE SITE GRADING.
5. ALL UNITS ARE ADA COMPLIANT WHERE THE EXTERIOR GRADES MEET ADA REGULATIONS AND PARKING SPACES DIRECTLY IN FRONT OF UNITS ARE ADA COMPLIANT SPACES.
6. GRADING PROVIDES FOR FLOOD COMPENSATION OF ANY FILL WITHIN THE 100 YEAR FLOODPLAIN. BUILDING FINISH FLOOR ELEVATIONS MUST BE AT ELEVATION 419.5' OR HIGHER TO MEET CITY FLOODPLAIN REGULATIONS.

FLOODPLAIN - COMPENSATORY STORAGE:

1. FLOODPLAIN ELEVATION = 518.5' AND ANY FILL AT THIS ELEVATION OR LOWER ELEVATION IS CONSIDERED FILL IN THE FLOODPLAIN.
2. FLOOD COMPENSATION IS PROVIDED BY A TOTAL VOLUME AMOUNT, AS ELEVATIONS ON SITE WILL NOT ALLOW FOR COMPENSATION AT EACH FOOT OF ELEVATION CHANGE (FOOT BY FOOT ANALYSIS).
3. BUILDING FINISH FLOOR ELEVATIONS (FFE) MUST BE 1 FOOT ABOVE THE FLOODPLAIN ELEVATION (518.5'), REQUIRING A FFE AT/ABOVE 519.5'. BOTH BUILDINGS FFE = 520.0'

TOTAL CUT (COMP): 372,062.3 C.F., 13,780.09 C.Y. (COMP. IN FLOODPLAIN)
TOTAL FILL: 133,047.6 C.F., 4,927.69 C.Y. (FILL IN FLOODPLAIN)

Area in Cut : 202,429.4 S.F., 4.65 Acres
Area in Fill: 117,827.6 S.F., 2.70 Acres
Area exactly in daylight: 18,653.7 S.F., 0.43 Acres
Total inclusion area: 338,910.6 S.F., 7.78 Acres

FOOT-BY-FOOT VOLUMES:

Zone: 514.0 to 515.0
Cut Volume : 144,493.56 C.F., 5,351.61 C.Y.
Fill Volume : 47.95 C.F., 1.78 C.Y.

Zone: 515.0 to 516.0
Cut Volume : 130,696.31 C.F., 4,840.60 C.Y.
Fill Volume : 677.21 C.F., 25.08 C.Y.
Running Totals:
Cut Volume : 275,189.87 C.F., 10,192.22 C.Y.
Fill Volume : 725.16 C.F., 26.86 C.Y.

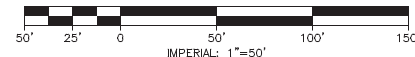
Zone: 516.0 to 517.0
Cut Volume : 45,436.46 C.F., 1,682.83 C.Y.
Fill Volume : 14,779.32 C.F., 547.38 C.Y.
Running Totals:
Cut Volume : 320,626.33 C.F., 11,875.05 C.Y.
Fill Volume : 15,504.48 C.F., 574.24 C.Y.

Zone: 517.0 to 518.0
Cut Volume : 36,739.53 C.F., 1,360.72 C.Y.
Fill Volume : 20,576.76 C.F., 762.10 C.Y.
Running Totals:
Cut Volume : 357,365.86 C.F., 13,235.77 C.Y.
Fill Volume : 36,081.24 C.F., 1,336.34 C.Y.

Zone: 518.0 to 519.0 (FLOOD ELEV = 518.5')
Cut Volume : 4,304.08 C.F., 159.41 C.Y.
Fill Volume : 52,061.69 C.F., 1,928.21 C.Y.
Running Totals:
Cut Volume : 361,669.94 C.F., 13,395.18 C.Y.
Fill Volume : 88,142.94 C.F., 3,264.55 C.Y.

Zone: 519.0 to 520.0
Cut Volume : 13,190.34 C.F., 488.53 C.Y.
Fill Volume : 47,709.10 C.F., 1,767.00 C.Y.
Running Totals:
Cut Volume : 374,860.28 C.F., 13,883.71 C.Y.
Fill Volume : 135,852.03 C.F., 5,031.56 C.Y.

GRAPHIC SCALES



REV.	DATE	DESCRIPTION	C/O	DR	CK
A	2/13/23	REVS PER CITY STAFF COMMENTS		JEN	CEB

GRANDING AND DRAINAGE PLAN
TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50'

JANUARY 20, 2023

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

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Phone: (603) 672-5456 Fax: (603) 413-5456
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LEGEND:

EXISTING FEATURES

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- EXISTING EASEMENT LINE
- BLACK BROOK

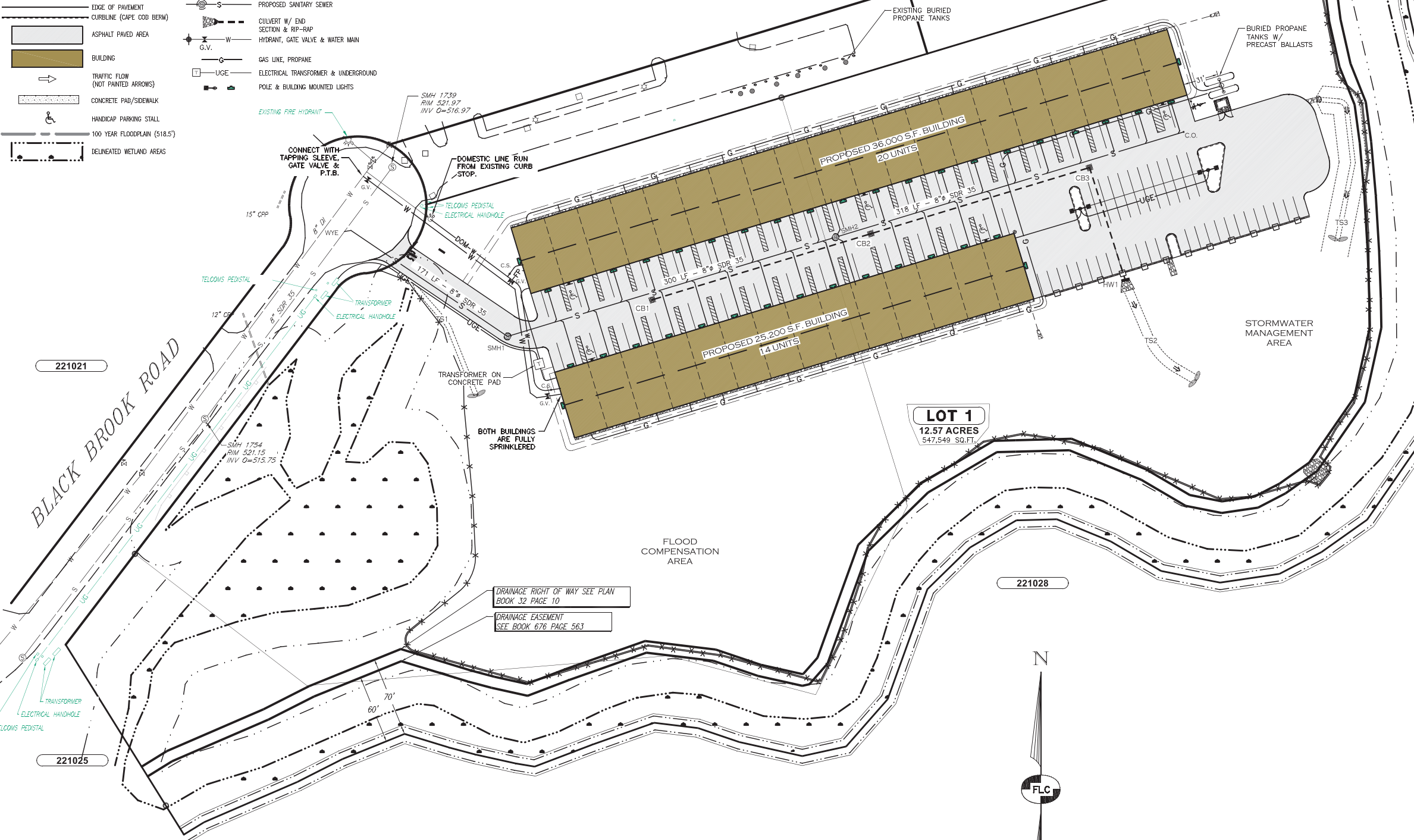
PROPOSED FEATURES

- EDGE OF PAVEMENT
- CURBLINE (CAPE COD BERM)
- ASPHALT PAVED AREA
- BUILDING
- TRAFFIC FLOW (NOT PAINTED ARROWS)
- CONCRETE PAD/SIDEWALK
- HANDICAP PARKING STALL
- 100 YEAR FLOODPLAIN (518.5')
- DELINEATED WETLAND AREAS

PROPOSED FEATURES

- TEMPORARY SILT FENCE
- 2 FT. CONTOUR
- 10 FT. CONTOUR
- SPOT GRADE ELEVATION
- SPOT ELEVATION AT CURB
- STORM WATER DRAINAGE
- DRAIN MANHOLE
- SILT SOCK FOR ALL CATCH BASINS
- SOIL TEST PIT
- TP-1
- L=LEDGE
- S=SEWER ELEV.
- PROPOSED SANITARY SEWER
- CULVERT W/ END SECTION & RIP-RAP
- HYDRANT, GATE VALVE & WATER MAIN
- G.V.
- GAS LINE, PROPANE
- UGE
- ELECTRICAL TRANSFORMER & UNDERGROUND
- POLE & BUILDING MOUNTED LIGHTS

221021



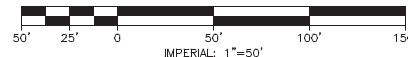
UTILITY NOTES:

- ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF KEENE AND SHALL BE BUILT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE CITY OF KEENE DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR ROAD CONSTRUCTION AND DRAINS AND THE NADIST STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION APPROVED AND ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
- ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND THE SPECIFICATIONS NOTED ABOVE. ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS CITY BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND ENGINEER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE CONSTRUCTED PRIOR TO AND/OR DURING CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR EXISTING UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACT "DISSAFE" AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1-888-344-7233)
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE TOWN DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS. THE WATER AND SEWER CONNECTIONS IN BLACK BROOK ROAD WILL REQUIRE AN EXCAVATION PERMIT AND COORDINATION WITH KEENE PUBLIC WORKS.
- BLASTING, IF REQUIRED, SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF KEENE FIRE DEPARTMENT REGULATIONS. BASED ON TEST PITS, THIS IS UNLIKELY TO BE PRESENT.
- ALL DISTURBED NON-PAVED AREAS SHALL BE LOAMED AND SEEDED IMMEDIATELY UPON BEING CONSTRUCTED. THE RETAINING WALLS SHOWN SHALL BE DESIGNED BY OTHERS UNLESS OTHERWISE NOTED.
- ALL TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- EXISTING PAVEMENT SHALL BE SAW-CUT AS NECESSARY. THE CONTRACTOR SHALL ENSURE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW PAVEMENT.
- ALL POWER WORK SHALL CONFORM TO EVERSOURCE STANDARDS. THE POWER SERVICE SIZES SHALL BE VERIFIED BY AN ELECTRICAL ENGINEER AND EVERSOURCE.
- ALL TELEPHONE WORK SHALL CONFORM TO CONSOLIDATED COMMUNICATIONS SPECIFICATIONS.
- ALL PROPANE GAS WORK SHALL CONFORM TO THE SUPPLIER'S GAS SPECIFICATIONS. PROVIDE SHUTOFF VALVE AND REGULATOR FOR EACH BUILDING. THE PROPANE TANKS SHALL BE INSTALLED BELOW GRADE & HAVE ANTI-FLOTATION BLOCKS INSTALLED.
- WATER AND SEWER SERVICES TO TIE INTO THE KEENE MUNICIPAL SERVICE IN BLACK BROOK ROAD. CONTRACTOR TO CONFIRM SIZE AND LOCATION OF EXISTING STUB TO THE PROPERTY.
- SEWER SERVICES AT EACH UNIT SHALL HAVE INDIVIDUAL CLEAN-OUTS INSIDE THE BUILDING.
- CONTRACTOR TO COORDINATE WITH CITY DPW ON SEWER TIE-IN ON BLACK BROOK RD. THE EXISTING SEWER FLOW MUST BE MAINTAINED AND PUMP AROUND MANHOLE DURING TIE IN.
- CONTRACTOR SHALL OBTAIN STRUCTURAL DESIGN PLANS, DETAILS AND SPECIFICATIONS FOR ANY RETAINING WALLS SHOWN ON THIS PLAN PRIOR TO CONSTRUCTION.
- ALL BUILDINGS WILL HAVE FIRE SUPPRESSION SPRINKLER SYSTEMS AND EXISTING FIRE HYDRANTS ARE LOCATED ON BLACK BROOK ROAD.
- ALL HVAC EQUIPMENT SHALL MEET THE SCREENING STANDARDS OF THE L.D.C.: ROOF MOUNTED EQUIPMENT SHALL BE SETBACK 10' FROM EDGE. GROUND-MOUNTED EQUIPMENT TO BE LOCATED SO AS NOT TO BE VISIBLE FROM THE PUBLIC WAY - SCREEN IF VISIBLE.
- FIRE ALARM SYSTEM TO BE HANDLED AS PART OF THE BUILDING PERMIT.

SANITARY SEWER CALCULATIONS:

- DAILY FLOW RATE: 10 GPD/EMPLOYEE X 2 EMPLOYEES/UNIT X 34 UNITS = 680 GPD
- INFILTRATION: 789 LF 8" SDR 35 (0.15 MILE) [(8"x0.15 MI)] x 300 GPD/INCH-MILE = 359 GPD
- AVERAGE DAILY FLOW: 680 + 359 = 1,039 GPD
- PEAK DESIGN FLOW: PEAKING FACTOR = 6 (< 100,000 GPD) 6 x 1039 GPD = 6,234 GPD

GRAPHIC SCALES



REV.	DATE	REVS PER CITY STAFF COMMENTS DESCRIPTION	C/O	DR	CEB	CK
A	2/13/23			JEN		

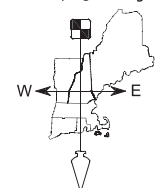
UTILITY PLAN
TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50'

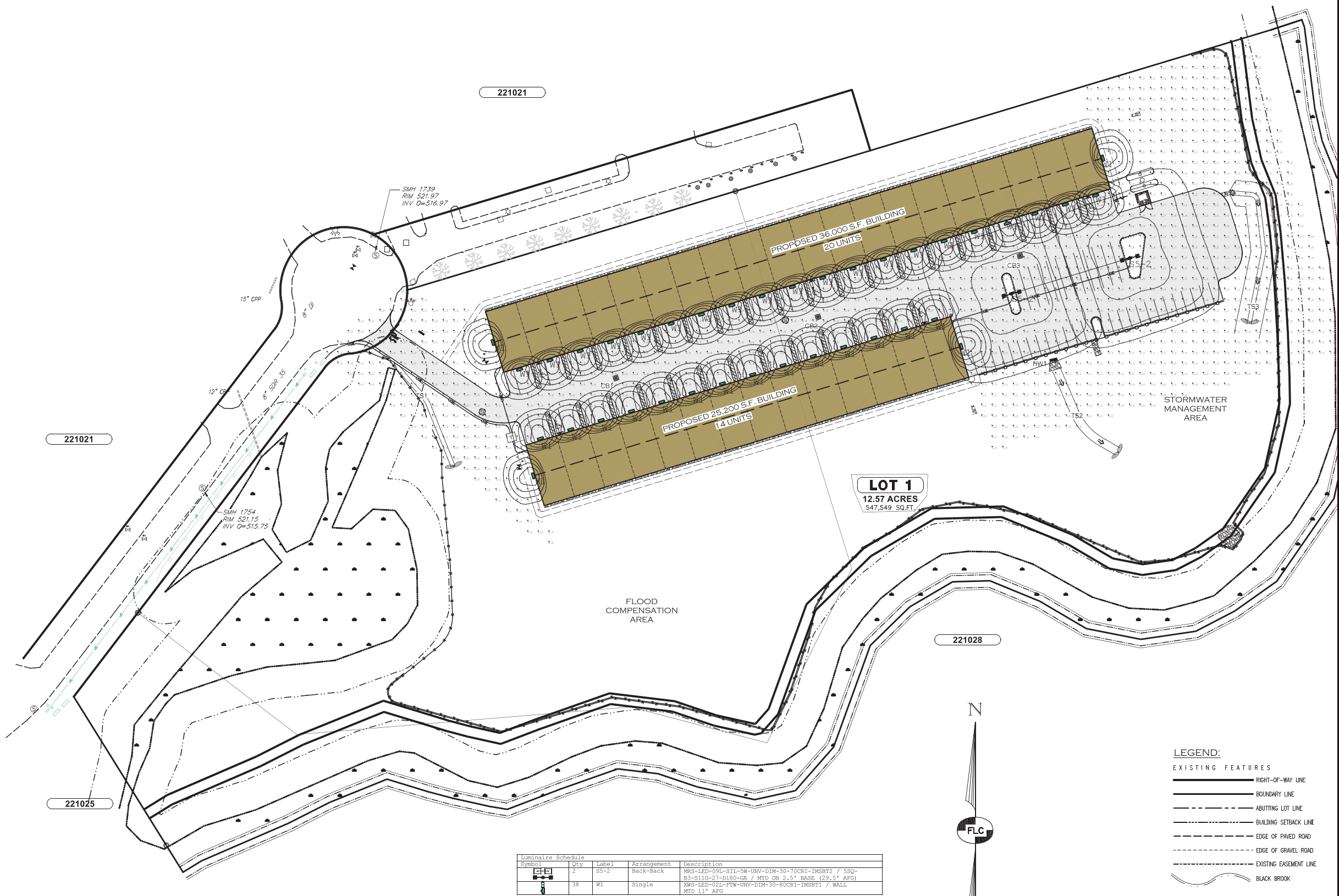
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Luminaire Schedule				
Symbol	Qty	Label	Arrangement	Description
	2	SS-2	Back-Back	MRS-LED-09L-SIL-SW-UNV-DIM-30-70CRI-IMSST2 / SSQ-B3-S11G-27-D180-GA / MTD ON 2.5' BASE (29.5' AFS)
	38	W1	Single	XWS-LED-02L-FW-GRV-DIM-30-80CRI-IMSST1 / WALL MTD 11' AFS

PARKING LOT AREA
Illuminance (Fc)
Average = 1.08
Maximum = 3.0
Minimum = 0.3
Avg/Min Ratio = 3.60
Max/Min Ratio = 10.00

PARKING & DRIVE BETWEEN BLDGS
Illuminance (Fc)
Average = 1.27
Maximum = 3.1
Minimum = 0.3
Avg/Min Ratio = 4.23
Max/Min Ratio = 10.33

DESIGN NOTES:

1. LIGHTING REQUIREMENTS:

PARKING LOTS AVERAGE MINIMUM U. RATIO (AVG/MIN) MAX AT PROP. LINE MAX. AT R.O.W. SIDEWALKS MINIMUM MAXIMUM LUMENS	REQUIRED 3.5 Fc MAX 0.33 Fc 5:1 0.1 Fc 1.0 Fc 0.5 Fc 5.0 Fc 1200 L MAX	PROPOSED 3.0 Fc AVG. 0.3 Fc 3:6 0.0 Fc 0.0 Fc N.A. N.A. N.A.
--	--	--

2. ALL PROPOSED LIGHTING MUST BE GREATER THAN 70 (CRI) COLOR RENDERING INDEX.
3. ALL PROPOSED LIGHTING MUST BE 3500 KELVIN COLOR-TEMPERATURE OR LESS.

LIGHTING NOTES:

1. LIGHTING SHALL BE INSTALLED AND ARRANGED SO AS NOT TO REFLECT OR CAUSE GLARE UPON ABUTTING LAND, HIGHWAYS AND ROADS.
2. ALL FIXTURES ARE FULL CUTOFF, LED FIXTURES, FLOOD LIGHTING AND UP-LIGHTING ARE PROHIBITED.
3. LIGHTING IS PROVIDED VIA BUILDING MOUNTED LIGHTS AND POLE MOUNTED LIGHTS.
4. MOUNTING HEIGHT OF ALL PROPOSED WALL MOUNT LIGHTING FIXTURES SHALL BE 11 FEET ABOVE FINISH GRADE ON THE BUILDINGS. LOCATED AT EACH BUILDING UNIT.
5. POLE MOUNTED LIGHTS ARE TO BE MOUNTED 29.5 FEET ABOVE FINISH GRADE.
6. ALL LIGHTS ARE TO BE SETUP ON PHOTOCELLS TO AUTOMATICALLY TURN OFF DURING DAYLIGHT HOURS. TIMER SHALL BE INSTALLED TO LIMIT HOURS FROM 6 AM - 10 PM. IF OPERATING 24/7 THE LIGHTING MUST REDUCE BY 50% FOR SECURITY LIGHTING, HALF OF THE WALLPACKS SHALL BE INSTALLED WITH MOTION SENSORS.
7. ALL FIXTURES AND HARDWARE ARE TO BE DARK BRONZE IN COLOR TO MATCH.
8. LIGHT FIXTURES ARE AVAILABLE THROUGH EXPOSURE 2 LIGHTING, ANY CHANGE IN FIXTURE MUST BE APPROVED BY THE OWNER, DESIGN ENGINEER, AND CITY OF KEENE.



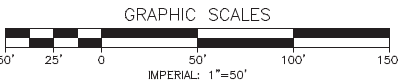
Mirada Small Area (MRS)
Outdoor LED Area Light

POLE MOUNTED LIGHTS:



Mirada Small Wall Sconce (XWS)
Outdoor LED Wall Light

BUILDING MOUNTED LIGHTS:



REV.	DATE	DESCRIPTION	C/O	DR	CK
A	2/13/23	REVS PER CITY STAFF COMMENTS		JEN	CEB

LIGHTING PLAN
TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50' JANUARY 20, 2023

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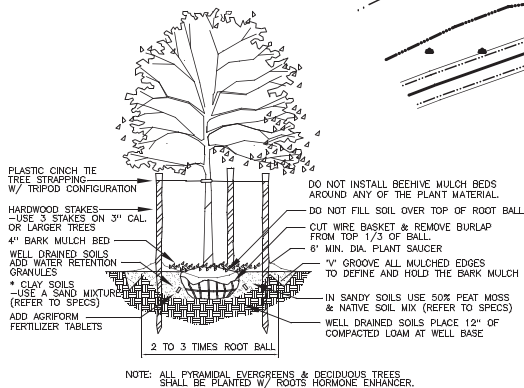
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PLANT SYMBOLS	PLANT LIST & NAME	QTY.
	ACER RUBRUM (RED MAPLE TREE)	(4) 3" CAL., 12' TALL, 6' DRIP LINE 50'H, 40' DRIP LINE AT MATURITY
	ILEX VERTICILLATA (WEEPING WILLOW)	(4) 3" CAL., 12' TALL, 6' DRIP LINE 40'H, 50' DRIP LINE AT MATURITY
	CRATAEGUS MACROCARPA (HAWTHORN)	(4) 3" CAL., 10' TALL, 5' DRIP LINE 25'H, 20' DRIP LINE AT MATURITY
	NORTHEAST NATIVE SEED MIX POLLINATOR SERIES WILDFLOWER MIX	FLOOD COMPENSATION AREA, SEED APPLIED AT RATE PER MANUFACTURER'S LABEL. ERNST CONSERVATION SEEDS O.A.E.
	P.J.M. RHODODENDRON SHRUB	(2) 2 GALLON CONTAINER, 1.5' - 2'H (4'H MATURE)
	CORNUS AMOMUM (SILKY DOGWOOD SHRUB)	(3) 3 GALLON CONTAINER, 2.5' - 3'H (8'H MATURE)
	ILEX VERTICILLATA (WINTERBERRY SHRUB)	(2) 2 GALLON CONTAINER, 1.5' - 2'H (4'H MATURE)
*PARKING LOT ISLANDS TO BE PLANTED WITH A MIX OF PERENNIAL FLOWERS: DAYLILY'S, HOSTAS, AND ECHINACEA (CONEFLOWERS)		



- INSTALL 1/2" STAINLESS BOLTS INTO DROP-IN ANCHORS BY HLT.
- SET TWO 6" SONOTUBES FILLED WITH CONCRETE TO CONNECT BASE PLATES TO.

5 - BIKE WAVE BIKE RACK

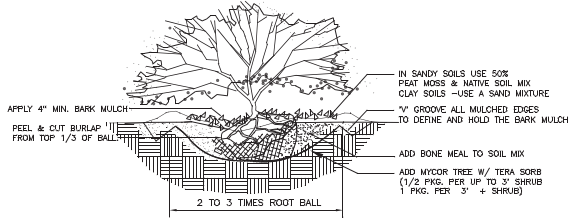


DECIDUOUS TREE PLANTING DETAIL

DO NOT INSTALL BEEHIVE MULCH BEDS
AROUND ANY OF THE PLANT MATERIAL.
DO NOT FILL SOIL OVER TOP OF ROOT BALL.
CUT WIRE BASKET & REMOVE BURLAP
FROM TOP 1/3 OF BALL.
6" MIN. DIA. PLANT SAUCER
1" GROOVE ALL MULCHED EDGES
TO DEFINE AND HOLD THE BARK MULCH
IN SANDY SOILS USE 50% PEAT MOSS
& NATIVE SOIL MIX (REFER TO SPECS)
WELL DRAINED SOILS PLACE 12" OF
COMPACTED LOAM AT WELL BASE

NOTE: ALL PYRAMIDAL EVERGREENS & DECIDUOUS TREES
SHALL BE PLANTED W/ ROOTS HORMONE ENHANCER.

1
LS-1



B & B SHRUB PLANTING DETAIL

2
LS-1

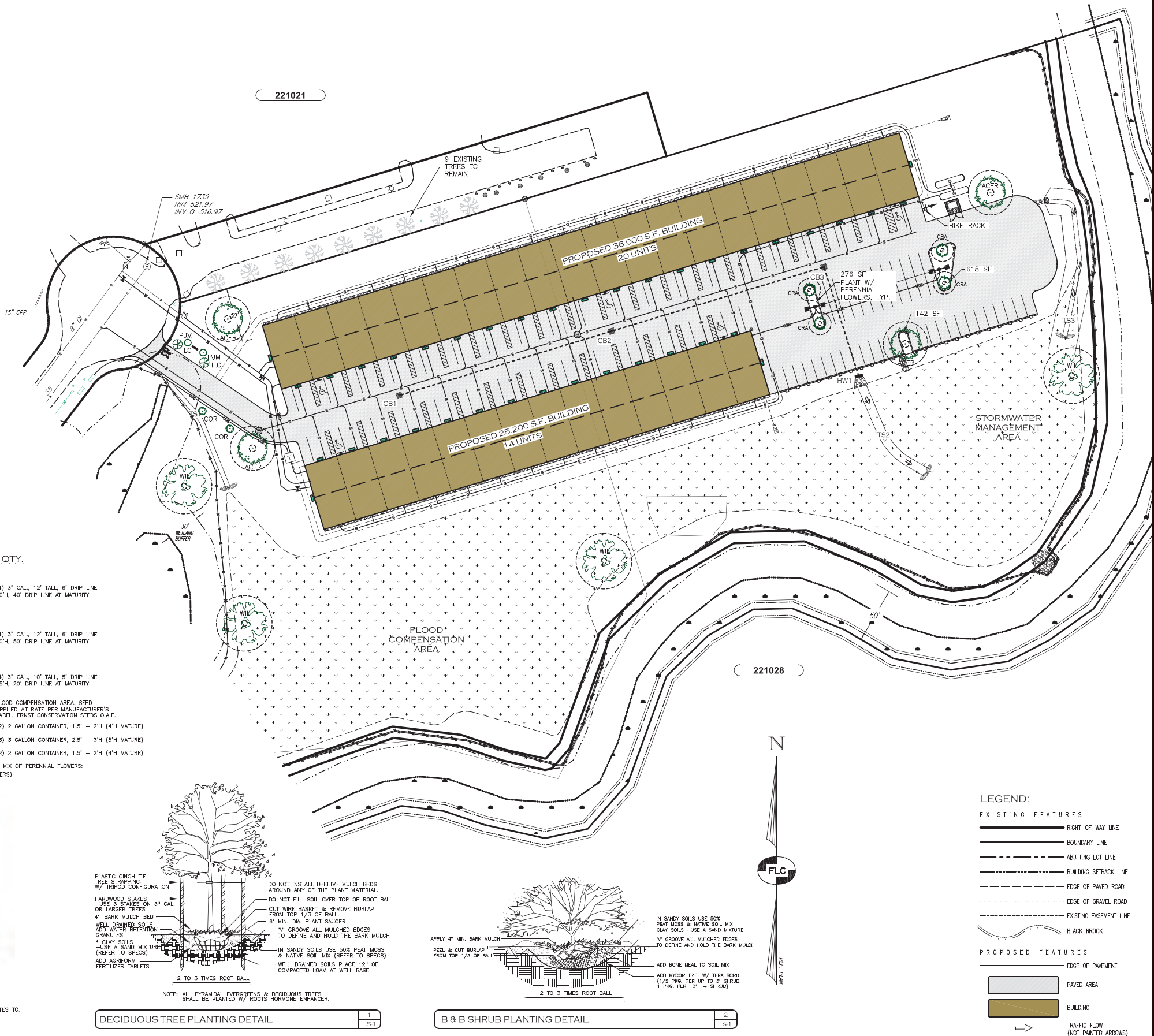
LEGEND:

EXISTING FEATURES

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- EXISTING EASEMENT LINE
- BLACK BROOK

PROPOSED FEATURES

- EDGE OF PAVEMENT
- PAVED AREA
- BUILDING
- TRAFFIC FLOW
(NOT PAINTED ARROWS)



DESIGN NOTES:

1. LANDSCAPING REQUIREMENTS:

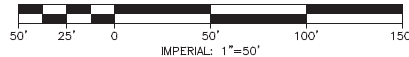
TREES (SITE)	REQUIRED	PROPOSED
1/10 PARKING SPACE (119 SP)	12 TREES	12 TREES
PARKING PERIMETER TREES	N/A	
SHRUBS:	REQUIRED	PROPOSED
EVERGREENS	SCREENING	0
NON-EVERGREEN	N/A	6
PARKING OVER 50 SPACES:	REQUIRED	PROPOSED
1 TREE PER 10 SPACES	5	6
10% PARKING AREA LANDSCAPED	918 SF	1036 SF
PARKING ISLAND SIZE MIN.	95 SF	142 SF

*THE PARKING LOT IS NOT VISIBLE FROM A PUBLIC WAY.

LANDSCAPING NOTES:

- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG-SAFE AND FOR VERIFICATION OF ALL UTILITIES AND SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS PRIOR TO COMMENCING.
- EXISTING TREES TO REMAIN SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION. TEMPORARY FENCING SHALL BE INSTALLED PRIOR TO THE START OF SITE WORK TO PROTECT ROOT MASSES.
- EXISTING TREES THAT ARE TO BE REMOVED, SHALL BE REMOVED ENTIRELY FROM THE SITE, INCLUDING STUMPS. NO STUMP-DUMPS ARE ALLOWED ON SITE.
- UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED WITHIN THE IMMEDIATE AREA NO PLANT MATERIAL SHALL BE INSTALLED.
- UNLESS OTHERWISE NOTED OR APPROVED, ALL TREES MUST BE BALLED AND BURLAPPED.
- ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF "THE AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ANY PROPOSED PLANT MATERIAL SUBSTITUTIONS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE.
- ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE INSTALLER FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE. ANY PLANT MATERIAL THAT IS SIGNIFICANTLY DAMAGED, MISSING, DISEASE RIDDEN, OR DEAD SHALL BE ABATED WITHIN 1-YEAR OR BEFORE THE END OF THE FOLLOWING PLANTING SEASON, WHICHEVER OCCURS FIRST.
- IN AREAS OF STONE MULCH LAY 6 MIL SHEETS OF "VISQUEEN" TYPE POLYETHYLENE ON COMPACTED SUBGRADE BEFORE PLACING STONE, MINIMUM 6" OVERLAP. PERFORATE SHEETING IN PLANTING BEDS BEFORE PLACING STONE.
- UNLESS OTHERWISE NOTED LOAM AND SEED ALL DISTURBED AREAS WITH A MINIMUM 4" OF SUITABLE LOAM. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. SEE SITE PLAN.
- WHERE APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
- PLANTS SHALL BE INSTALLED WITHIN ONE YEAR OF COMMENCEMENT OF CONSTRUCTION
- ALL LANDSCAPING SHALL BE LOCATED AND MAINTAINED SO AS NOT TO IMPACT THE LINES OF SIGHT AT THE ENTRANCE AND INTERNAL INTERSECTIONS TO PROVIDE SAFE PASSAGE OF PEDESTRIANS, BICYCLISTS, AND MOTORISTS.
- ALL LANDSCAPED AREAS WILL BE MAINTAINED TO HAVE A SUFFICIENT AMOUNT OF WATER TO MAINTAIN VIABILITY EITHER BY IRRIGATION OR BY OTHER MEANS.
- PROPOSED PLANTINGS SHALL NOT CONFLICT WITH SNOW STORAGE AREAS, LIGHT FIXTURES OR UNDERGROUND UTILITIES.
- ALL LANDSCAPING APPROVED AS PART OF THE SITE PLAN SHALL BE CONSIDERED AS ELEMENTS OF THE SITE, IN THE SAME MANNER AS PARKING, BUILDING MATERIALS, AND OTHER SITE DETAILS. ANY CHANGES WILL REQUIRE APPROVAL BY THE OWNER AND CITY COMMUNITY DEVELOPMENT DIRECTOR.
- BIKE RACKS ARE PROPOSED AT EACH BUILDING AND EACH UNIT HAS A GARAGE TO ALLOW FOR STORAGE.
- ALL HVAC EQUIPMENT SHALL BE ROOF MOUNTED OR NOT BE VISIBLE FROM THE PUBLIC RIGHT OF WAY.

GRAPHIC SCALES



REV.	DATE	DESCRIPTION	C/O	DR	CK
A	2/13/23	REVS PER CITY STAFF COMMENTS		JEN	CEB

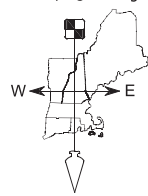
LANDSCAPING PLAN
TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50'

JANUARY 20, 2023

Surveying + Engineering + Land Planning + Permitting + Septic Designs



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LEGEND:

EXISTING FEATURES

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- EXISTING EASEMENT LINE
- BLACK BROOK

PROPOSED FEATURES

- EDGE OF PAVEMENT
- PAVED AREA
- BUILDING
- TRAFFIC FLOW (NOT PAINTED ARROWS)

221021

221021

221025

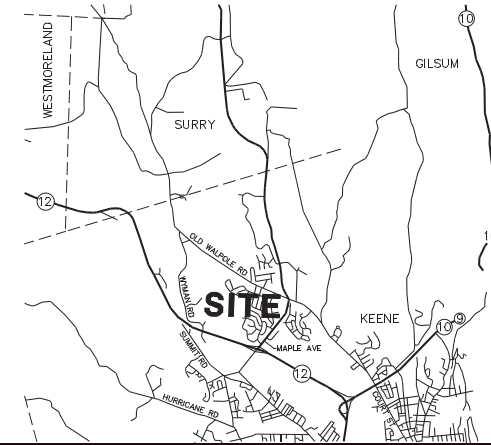
LOT 1
12.57 ACRES
547,549 SQ.FT.

FLOOD
COMPENSATION
AREA

STORMWATER
MANAGEMENT
AREA

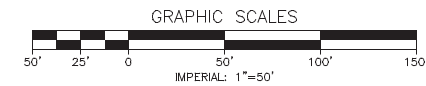
TOTAL PROPOSED
CONTRACTOR YARD
61,200 S.F.

221028



NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THAT A WB-62 TRUCK CAN ACCESS AND TURN AROUND ON THE SITE.
2. THE KEENE LADDER FIRE TRUCK IS SMALLER THAN THE WB-62 AND CAN ACCESS AND TURN AROUND ON SITE. SMALLER EMERGENCY VEHICLES WILL BE ABLE TO EASILY MANEUVER WITHIN THE SITE PARKING LOT.
3. THE EXTENDED PAVEMENT AREA ALLOWS FOR TRUCK TURNAROUND SPACE, TRUCK DELIVERIES, AND WASTE TRUCK PICK-UP SPACE TO ACCESS THE DUMPSTERS.



REV.	DATE	DESCRIPTION	C/O	DR	CK

TRUCK TURNING EXHIBIT PLAN
TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE

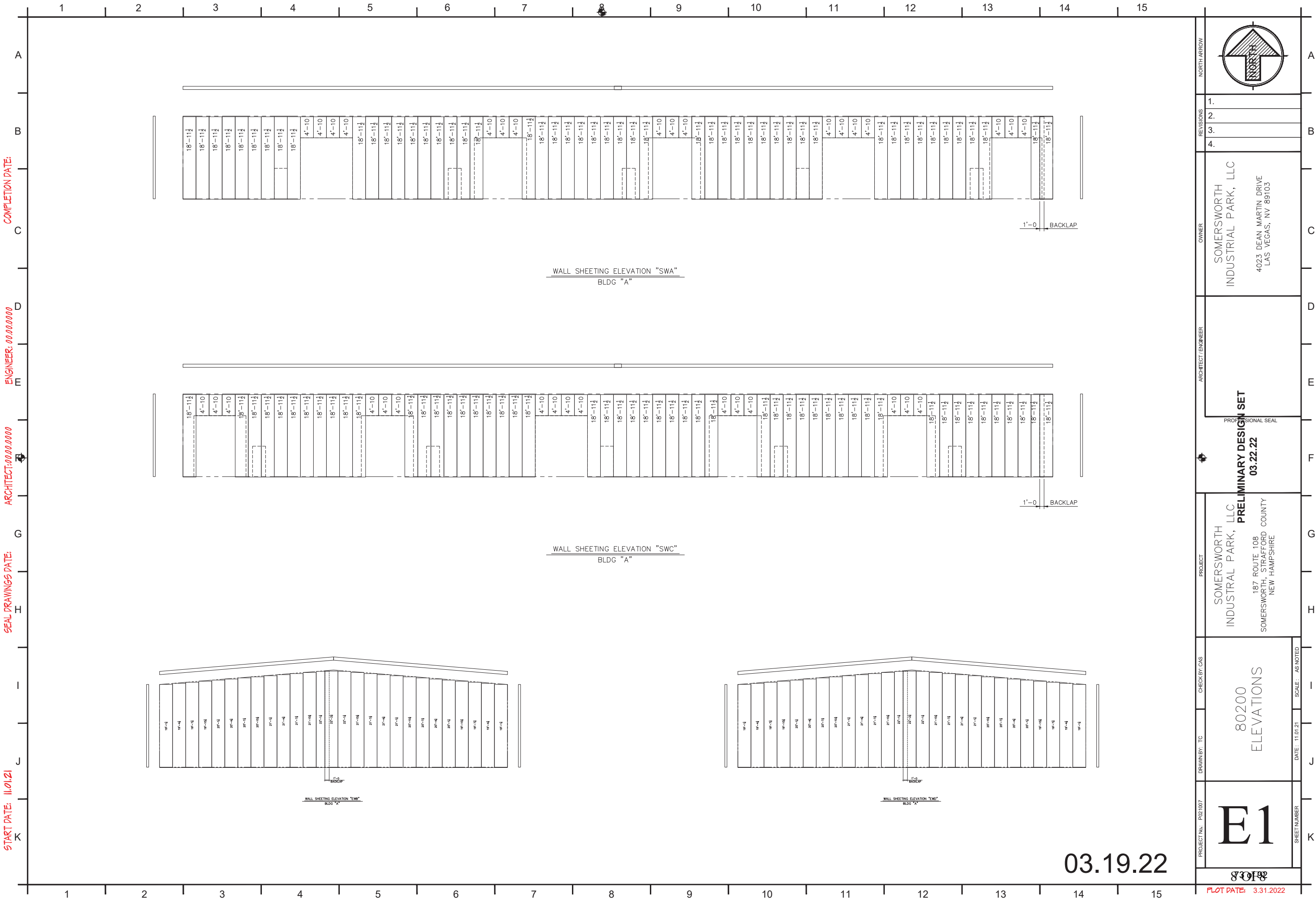
PREPARED FOR:
PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50' JANUARY 20, 2023

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COMPLETION DATE:

ENGINEER: 00.00.0000

ARCHITECT: 00.00.0000

SEAL DRAWINGS DATE:

START DATE: 11.01.21



1.
2.
3.
4.

OWNER
SOMERSWORTH INDUSTRIAL PARK, LLC
4023 DEAN MARTIN DRIVE
LAS VEGAS, NV 89103

ARCHITECT/ENGINEER

PROFESSIONAL SEAL
PRELIMINARY DESIGN SET
03.22.22

PROJECT
SOMERSWORTH INDUSTRIAL PARK, LLC
187 ROUTE 108
SOMERSWORTH, STRAFFORD COUNTY
NEW HAMPSHIRE

CHECK BY: CAS
DRAWN BY: TC
80200 ELEVATIONS

PROJECT No.: P021007
E1
SHEET NUMBER

DATE: 11.01.21
SCALE: AS NOTED
830192
PLOT DATE: 3.31.2022

03.19.22

Storm Water Management Report

ALL PURPOSE KEENE BUSINESS PARK

Project Location:

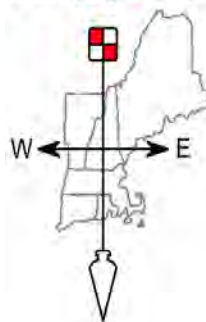
Tax Map Parcels 221-023 & 024
Black Brook Road
Keene, NH 03431

Prepared for:

Patriot Holdings, LLC
4007 Dean Martin Drive
Las Vegas, NV 89103

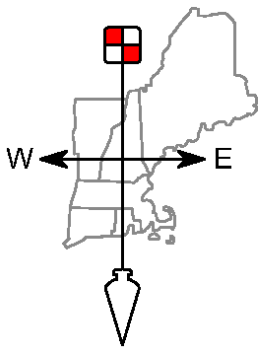
Date: January 20, 2023

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206 Elm Street, Milford NH 03055
Phone: (603)-672-5456 Fax: (603)-413-5456
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206 Elm Street, Milford, NH 03055 - Phone: 603-672-5456 - Fax: 603-413-5456
www.FieldstoneLandConsultants.com

STORM WATER MANAGEMENT REPORT ALL PURPOSE KEENE BUSINESS PARK KEENE, NEW HAMPSHIRE

Prepared for:
PATRIOT HOLDINGS, LLC

January 20, 2023

I) INTRODUCTION

This storm-water management report was conducted for a proposed site development for a Business Park – Light Industrial Facility in Keene, NH. The property is located on Black Brook Road, specifically on City of Keene Assessor's Map 221, Parcels 023 and 024. The site is currently undeveloped and both lots were intended for the corporate park development. The applicant is proposing to develop the site and construct a business park facility with two separate buildings and paved drive aisles. The purpose of the facility is to provide rentable units to contractor businesses to be used for mixed use of small office, workshops, store-front, warehousing and distribution.

The proposed plan is to merge the two lots, and construct the two buildings with site amenities. A substantial portion of the site lies within the 100 year floodplain of the Black Brook, which defines the southern boundary of the property. The finish floor elevations of the buildings must be a minimum of 1 foot above the base flood elevation of 518.5' to meet City Floodplain standards. The building elevations drive the site design and require fill within the floodplain of the Black Brook. This fill in the floodplain is offset by excavating the same volume to provide compensation for the floodwaters.

The purpose of this report is to analyze the qualitative and quantitative impacts of the proposed development on stormwater runoff. The objective of the proposed stormwater management system for this project is to mitigate any increases resulting from the proposed development and to meet the drainage guidelines set forth in the City of Keene's Site Plan Review and the NHDES Alteration of Terrain (AOT) regulations. The overall area of disturbance is above the NHDES Alteration of Terrain permit threshold of 100,000 square feet of disturbance; therefore an AOT permit is required for the project, along with approval from FEMA for the work within the floodplain.

II) SITE DESCRIPTION (EXISTING)

The subject property consists of two lots, 5.33 acres and 7.24 acres in size, with frontage along Black Brook Road and the lots are undeveloped. The lots are mostly open farm field, with heavy brush and woods along the perimeter of the brook. There is a portion of wetland that is parallel to the Black Brook Road.

The NRCS websoil survey indicates that the dominant soils present on the site are Croghan loamy fine sand (613B), Rippowam fine sandy loam (5) and Greenwood mucky peat (295). These soils are respectively Hydrologic Group (HSG) "B" soils, HSG "C" soils and HSG "D" along the brook. Test pits have been conducted on the property, and a Site-Specific Soils Map will be completed as part of the AOT permit (pending at this time).

III) METHODOLOGY

The quantity of runoff and the conveyance of that flow through the site are determined using the software package HydroCAD r 10.0 by HydroCAD Software Solutions, LLC. HydroCAD is a computer aided design program for modeling storm water hydrology based on the Soil Conservation Service (SCS) TR-20 method combined with standard hydraulics calculations used to model stormwater systems, such as detention basins, culverts, swales, and catch basins.

The stormwater management systems are designed in accordance with the methodology for the "Best Management Practices" (BMP's), as outlined in the New Hampshire Storm Water Manual, Volume 2.

IV) DRAINAGE DESIGN

In accordance with the NHDES Alteration of Terrain, there will be no increase in the peak flow of surface runoff. In order to demonstrate this the two (2), ten (10), and fifty (50) year frequency storm events have been evaluated. The values for each storm modeled match the Extreme Precipitation Estimates, as listed by the Northeast Regional Climate Center, specifically for Keene NH. These design storms have been analyzed to compare the Pre and Post-development peak flow rates for the site (see attached comparison tables below).

Pre-Development Drainage Conditions:

The Pre-Development Drainage Area Plan outlines the area where water flows across the property. The high point of the property is along the northern boundary, along the roadway. The property is relatively flat and drains to the southeast corner of the property, where it drains to the Black Brook.

Post-Development Drainage Conditions:

The proposed drainage systems were designed to capture runoff from the buildings and paved areas, and direct the flow to stormwater management systems. The existing condition has all water flowing to the Black Brook. Therefore, the post-development condition will require mitigating the runoff velocities and out flowing to the Black Brook. There are 6 Subcatchments modeled in the post-development condition, in addition to one existing Subcatchment (E1S) to model the unaltered portion of the site flowing to Black Brook.

The net result is that virtually all of the new impervious areas will receive qualitative treatment and there will be a reduction of peak rates of runoff leaving this site for all storm events.

V) SUMMARY

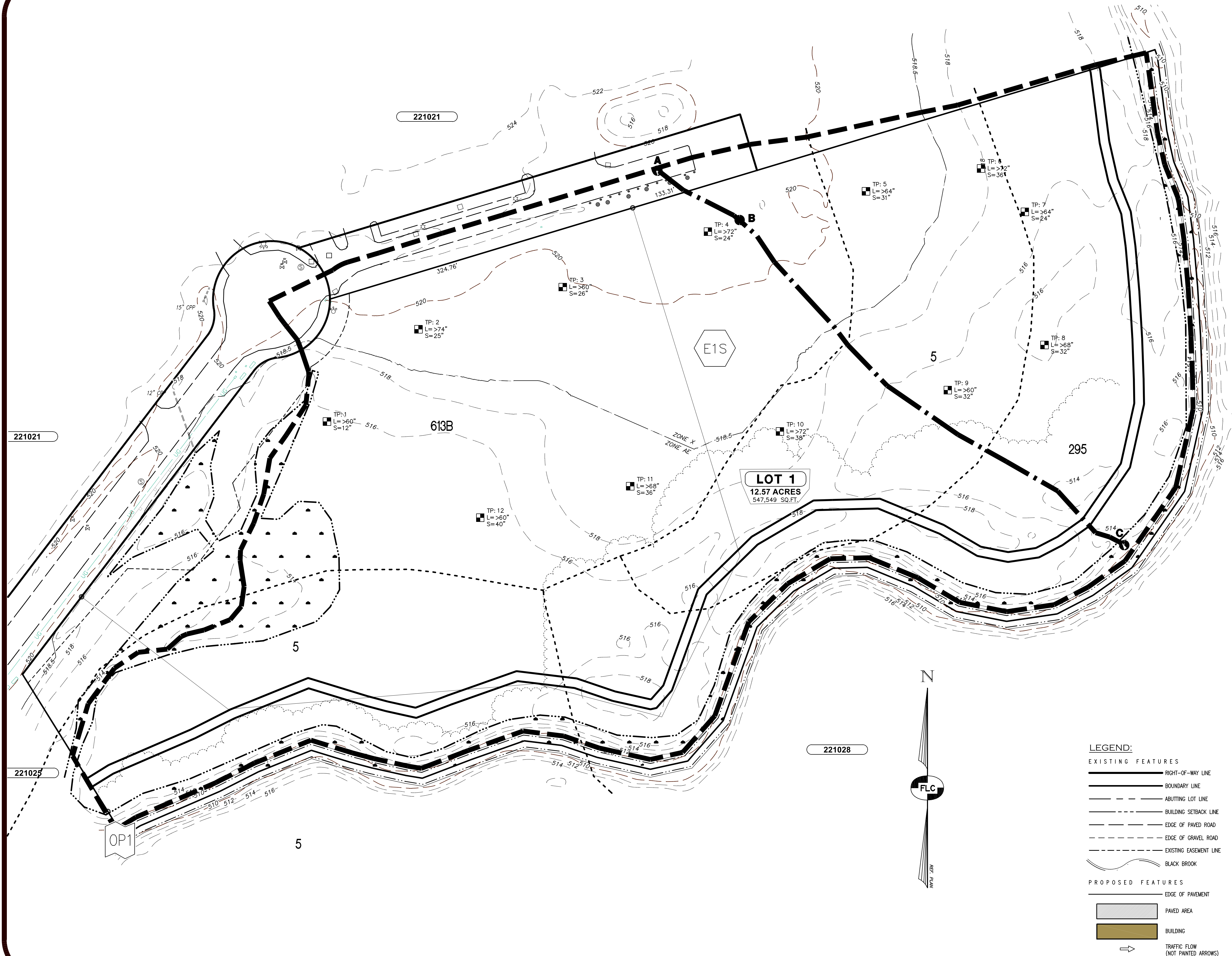
The intent of the stormwater management system for this project is to address the qualitative and quantitative aspects of the stormwater runoff so that there are no downstream adverse impacts created by the project. To mitigate the resulting increases in runoff peak rates due to the development of Lots 221-023 and 221-024, this project proposes that a stormwater management system consisting of three (3) catch basins, two (2) stone drip strips, three (3) treatment swales and one (1) detention basin to be constructed. The net result is that new buildings and paved areas will receive qualitative treatment and there will be no increase in the peak rates of runoff leaving the site.

The stormwater management design for this project therefore complies with the standards set forth in the City of Keene's Site Plan Review Regulations and meets the NHDES Alteration of Terrain regulations.

The following table is a summary of the attached calculations and shows a comparison of the peak flow rates at the summary point for the site. The values presented are based on Pre- and Post-development conditions.

Table 1.1: Peak Flow Rates (CFS)/Volume (AF) to Observation Point 1 (OP1) – PRE VS. POST DEVELOPMENT

STORM FREQUENCY	PRE-DEV. RUNOFF (CFS/AF)	POST-DEV. RUNOFF (CFS/AF)	CHANGE (CFS/AF)
2-YEAR	4.08/0.564	1.06/0.510	-3.02/-0.054
10-YEAR	10.46/1.268	3.99/1.296	-6.47/0.028
50-YEAR	21.67/2.518	10.14/2.617	-11.53/0.099



DRAINAGE SYMBOLS:

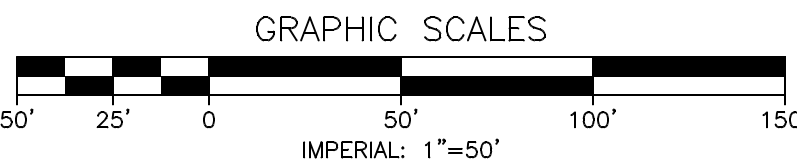
- 1P POND (PIPE OR BASIN)
- 1S SUBCATCHMENT
- 1R REACH
- OP1 OBSERVATION POINT
- WATERSHED BOUNDARY
- .-.- TIME OF CONCENTRATION
- => SURFACE WATER FLOW

NRCS SOILS LEGEND:

SOURCE: USDA NRCS WEB SOIL SURVEY

--- SOIL BOUNDARY

- 613B CROGHAN LOAMY FINE SAND
0 TO 8% SLOPES, HSG "C"
- 5 RIPPONAM FINE SANDY LOAM
HSG "B"
- 295 GREENWOOD MUCKY PEAT
HSG "D"



REV.	DATE	DESCRIPTION	C/O	DR	CK

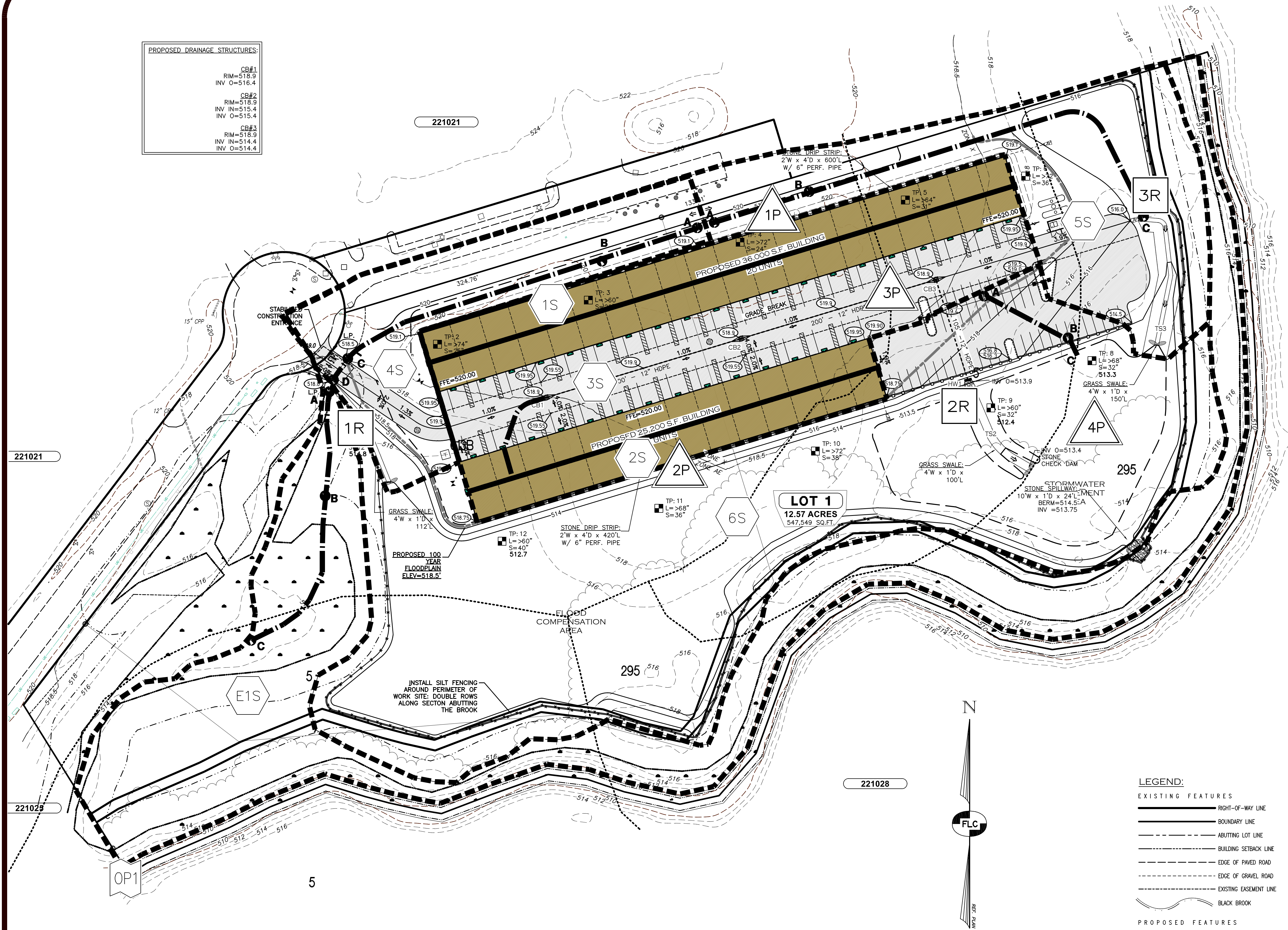
PRE-DEVELOPMENT DRAINAGE MAP
TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE
PREPARED FOR:
PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50' JANUARY 20, 2023

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PROPOSED DRAINAGE STRUCTURES:	
CB#1	RIM=518.9 INV O=516.4
CB#2	RIM=518.9 INV IN=515.4 INV O=515.4
CB#3	RIM=518.9 INV IN=514.4 INV O=514.4

DRAINAGE SYMBOLS:

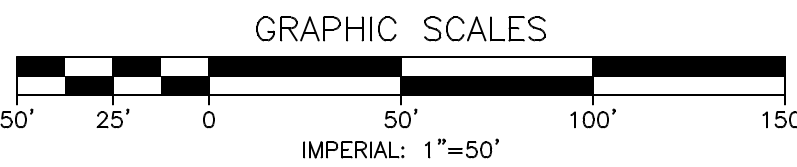
- 1P POND (PIPE OR BASIN)
- 1S SUBCATCHMENT
- 1R REACH
- OP1 OBSERVATION POINT
- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- => SURFACE WATER FLOW

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SOURCE: USDA NRCS WEB SOIL SURVEY

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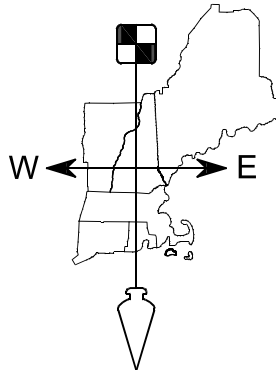
REV.	DATE	DESCRIPTION	C/O	DR	CK

POST-DEVELOPMENT DRAINAGE MAP
TAX MAP PARCEL 221-023 & 221-024
(BLACK BROOK ROAD)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
PATRIOT HOLDINGS, LLC
4007 DEAN MARTIN DRIVE LAS VEGAS, NV 89103

SCALE: 1" = 50' JANUARY 20, 2023

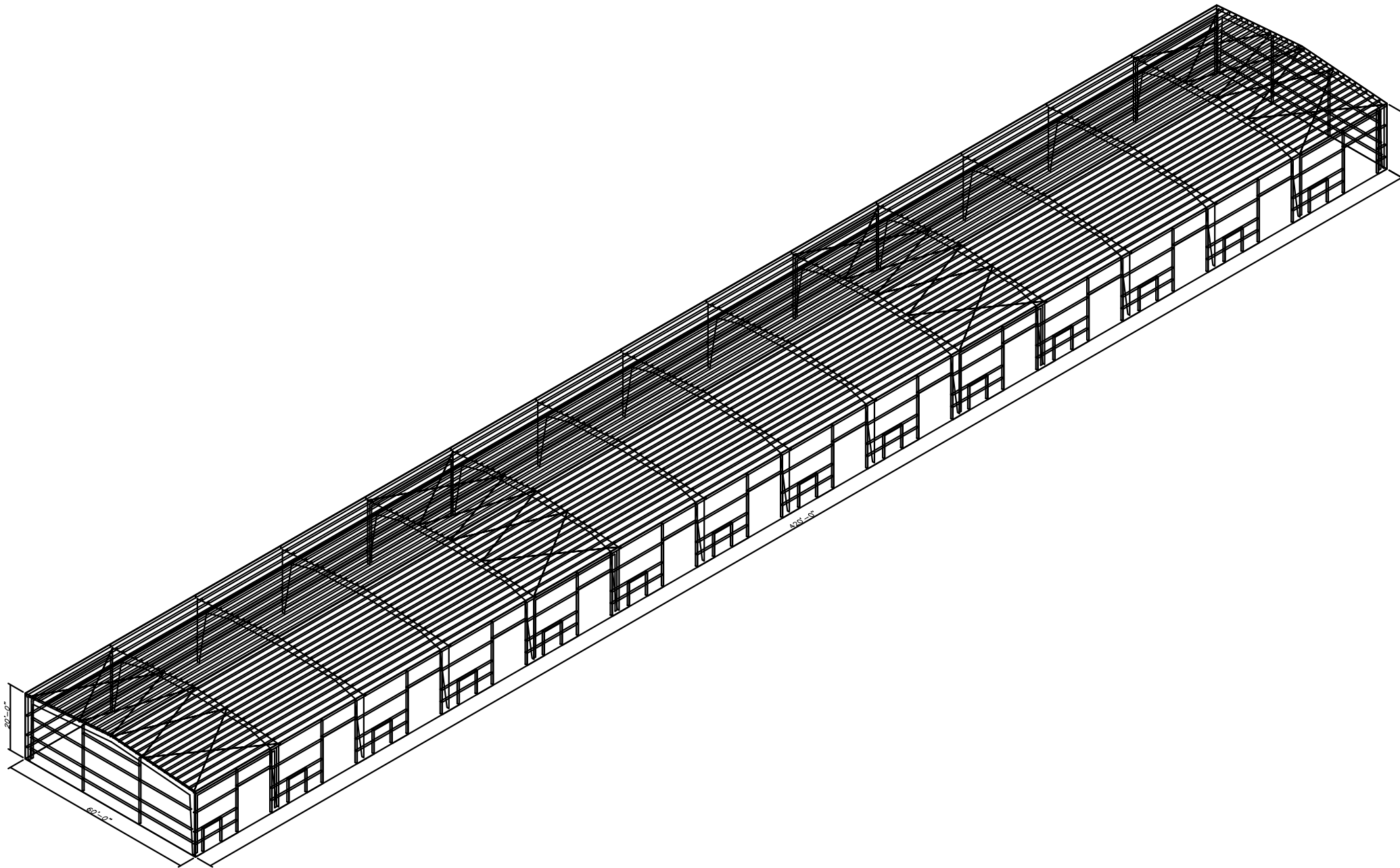
Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs



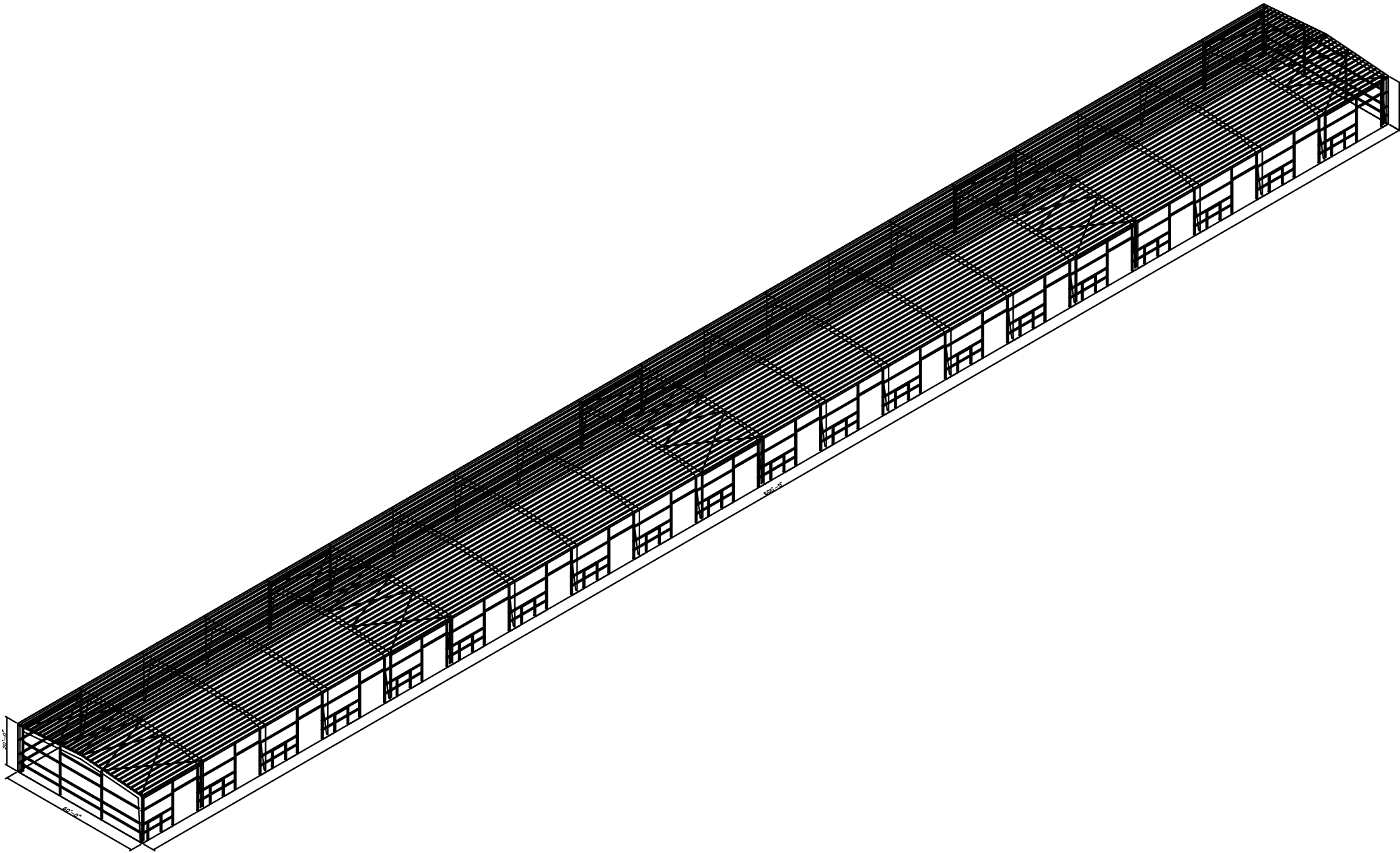
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Rendering of Proposed Building Measuring 60' wide x 420' long



Rendering of Proposed Building Measuring 60' wide x 660' long



Sample Renderings of Proposed Buildings









CITY OF KEENE
NEW HAMPSHIRE

MEMORANDUM

Date: February 17, 2023

To: Planning Board

From: Mari Brunner, Senior Planner

Re: Proposed Amendments to the Planning Board Subdivision Regulations

Background

At the January 23, 2023 Planning Board meeting, the Board opened a public hearing to discuss proposed amendments to the Subdivision Regulations in Article 19 of the Land Development Code. During the public hearing, the Board discussed the following items:

1. Section 19.2.4 “Preservation of Existing Features” – The Board discussed and came to a consensus to remove sub-section 1, which included additional submittal items that may be required by the Board. This sub-section has been removed from the proposed subdivision amendments.
2. Section 19.2.8 “Utilities”
 - a. The Board discussed modifying sub-section C.1 of this standard to make it clear that the intent is for the applicant to submit information that demonstrates it would be possible to site a septic system on the proposed new lot(s), and that a full-length technical study or a septic design would not be required to meet this standard. The language in this section has been modified to clarify this intent.
 - b. The Board agreed with proposed sub-section C.2 generally; however, there was a suggestion to reference the specific rule that requires NH Department of Environmental Services approval of subdivisions that create new lots that are less than 5 acres in size. This reference has been added to the proposed subdivision amendments.

Following Board deliberation, the Board decided to continue the public hearing to the February 27, 2023 Planning Board meeting. Attached to this memorandum are the specific sections of the Planning Board Regulations within the Land Development Code affected by this proposed change that show the text that is proposed to be added in bold and highlighted, and the text that is proposed to be removed with strike through.

Overview of Proposed Amendments

The Planning Board Subdivision Regulations are located in Article 19 of the City of Keene Land Development Code (Chapter 100 of the City Code of Ordinances). The following amendments are proposed to these regulations:

1. Amend Section 19.2.4 of Article 19, “Preservation of Existing Features” to include additional information about the type of features that should be protected and possible mechanisms the Planning Board could require to protect those features;
2. Amend Section 19.2.8, “Utilities” to include additional submittal requirements for proposals that would create a new lot(s) not served by City sewer; and
3. Amend Section 19.3.2.B, “Perimeter Building Setback” of the Conservation Residential Development Subdivision Regulations to require that existing tree canopy within the perimeter setback along external roads be preserved.

The intent of these proposed amendments is to address some of the concerns expressed during the public workshops and public hearings that were held in connection with Ordinance O-2022-09, which initially included a proposal to reduce the minimum lot size in the Rural District. These included concerns about negative impacts to the rural character of the district, the suitability of soils in this district for siting septic systems, and the need to protect important natural and scenic features such as surface waters, steep slopes, and important wildlife habitat. The proposed amendments provide additional guidance for the Planning Board when reviewing subdivision applications to address these concerns.

A continued public hearing will be held at the Planning Board meeting on February 27, 2023 on these proposed amendments. The full text of the Land Development Code is available online at www.keenenh.gov/land-development-code.

ARTICLE 19. SUBDIVISION REGULATIONS

19.1 GENERAL PROVISIONS 19-2

19.2 REVIEW STANDARDS..... 19-3

19.3 CONSERVATION RESIDENTIAL
DEVELOPMENT SUBDIVISIONS..... 19-4

19.1 GENERAL PROVISIONS

19.1.1 Authority

In accordance with the authority vested by the City Council and with the provisions of NH RSA 674:35-42, the Planning Board shall have the authority to regulate the subdivision of land in the City of Keene.

19.1.2 Applicability

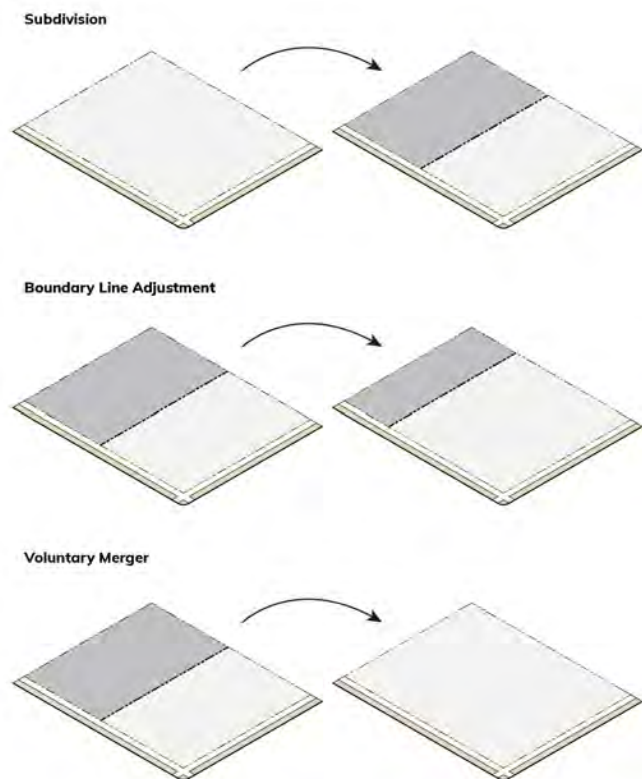
The standards included in this Article shall apply to all subdivisions of land, including the division or consolidation of lots and the alteration or adjustment of lot boundary lines.

19.1.3 Subdivision Review

Subdivision review by the Planning Board shall be required for the following types of subdivisions. The application, review and approval processes for subdivision review are included in Article 25 of this LDC.

- A. Subdivision.** Subdivision means the division of a lot, tract or parcel of land into 2 or more lots, plats, sites, units or other divisions of land for the purpose, whether immediate or future, of sale, rent, lease or building development.
- B. Boundary Line Adjustment.** A boundary line adjustment, also referred to as a lot line adjustment, is the alteration or adjustment of boundary lines between 1 or more contiguous, preexisting approved or subdivided lots.
- C. Voluntary Merger.** A voluntary merger is the consolidation of 2 or more contiguous pre-existing approved or subdivided lots owned by the same property owner.
- D. Conservation Residential Development Subdivision.** A type of subdivision that is intended to encourage the beneficial consolidation of land development and the preservation of open space by applying less restrictive lot dimensional requirements than the underlying zoning district in exchange for placing an undeveloped portion of land into permanent open space. Subdivisions proposing the creation of 3 or more lots and the layout and

construction of a new road, where the parcel to be subdivided is located in either the Rural, Low Density, or Low Density-1 zoning district and meets the minimum lot size requirements for a conservation residential development specified in this Article, shall be reviewed as a conservation residential development.



19.1.4 Five-Year Exemption

Approved subdivisions shall be protected from future amendments to regulations for a 5-year period, provided that active and substantial development has occurred on the site, in accordance with NH RSA 674:39.

19.2 REVIEW STANDARDS

The Planning Board shall apply the following standards in its review of subdivision applications.

19.2.1 Lots

- A. Lot size and configurations shall meet all requirements of the Zoning Regulations.
- B. All lots shall have frontage on a state highway (excluding limited access highways), a Class V road, or a street within an approved subdivision plan.
 - 1. Road frontage shall not be less than 50-ft, unless expressly allowed in this LDC.
- C. Subdivisions shall not be approved on roads shown on city records and plans as discontinued, discontinued subject to gates and bars, or Class VI roads.

19.2.2 Character of Land for Subdivision

All land proposed for subdivision shall be of such a character that it can be safely used for building development purposes and would not pose a danger to health or peril from fire, flood, poor drainage, excessive slope, or other hazardous conditions.

19.2.3 Scattered or Premature Development

Subdivisions shall not promote scattered or premature development of land as would involve danger or injury to health, safety, or necessitate the excessive expenditure of public funds for the supply of associated services. In making such a determination, the Planning Board will take into account the capacity of the school system, adequacy of access streets, adequacy of water supply for fire-fighting purposes, distance from emergency services, and availability of other public services.

19.2.4 Preservation of Existing Features

Wherever feasible, suitable steps shall be taken to preserve and protect significant existing features, such as surface waters, steep slopes, rare and/or unique scenic points, stone walls, rock out-croppings, and historic landmarks, **or any of the attributes listed in Section 19.3.4 "Primary and Secondary**

Conservation Areas" of this Article. In order to ensure that the objectives of this section are met, the Planning Board may require additional studies or mitigation, including but not limited to the following:

- 2. **The Board may require the designation of a "no-cut buffer" along public rights-of-way to preserve existing vegetation and provide a visual screen for new development. Any property that has been clear-cut within the preceding ten (10) year period, or any property that will be clear-cut as a result of any proposed or future development, may be required to conduct revegetation or other mitigation to provide a visual buffer along the public rights-of-way.**
- 3. **The Board may require that the proposed development be designed and located to fit into the landscape in order to minimize significant landscape alterations and mitigate or avoid impacts to significant existing features or views/vistas.**

19.2.5 Monumentation

The owner or developer shall provide permanent reference monuments in accordance with Article 22 of this LDC.

19.2.6 Special Flood Hazard Areas

All subdivision proposals having lands identified as Special Flood Hazard Areas on current Flood Insurance Rate Maps (FIRM) shall be located and configured to be consistent with the need to minimize potential impacts from flooding. In addition, any public utilities and facilities associated with such proposals shall be located and constructed to minimize or eliminate flood damage.

19.2.7 Fire Protection & Water Supply

All subdivisions shall be provided with an adequate supply of water for fire protection purposes at the owner's expense. This requirement may be met by any of the following options, subject to the approval of the Fire Chief.

- A. Fire hydrants connected to a public water main with adequate fire flows and pressures appropriate to the type and scale of the proposed use that meets the requirements of the National Fire Protection Association (NFPA) and the Keene Fire Department.
- B. Private fire protection water supply systems when it is infeasible or economically unreasonable to connect a fire hydrant to a public water main as determined by the Planning Board. Private fire protection water supply systems may include the following.
 - 1. For non-residential, institutional, and multi-family dwellings, storage and distribution systems appropriate to the type and scale of the proposed use that comply with the standards of the National Fire Protection Association (NFPA) and the Keene Fire Department.
 - 2. For single-family dwellings, underground cisterns and associated dry hydrants that meet the standards of NFPA 1142. The location, design, and provisions for ownership, maintenance, and all season access to the cistern and supporting facilities shall conform to the Keene Fire Department hydrant specifications.
 - 3. Individual residential sprinkler systems meeting the standards of NFPA 13D or NFPA 13R may be installed; however, in no case may the installation of such a system be made a requirement of approval.
 - 4. Any other public or private fire protection water supply system approved by the Fire Chief and determined by the Planning Board to provide a similar or greater level of fire protection than the options provided in (1) and (2) above.

19.2.8 Utilities

- A. When required by City Code, all subdivisions will be serviced by City water and sewer. All necessary water and sewer lines shall be installed to the required specifications of the Public Works Department and shall include

service lines running from the water and sewer mains to the property line to service each lot. In addition, utility rights-of-way shall be provided in accordance with Article 22 of this LDC.

- B. All lots smaller than 1-acre in size shall be connected to City sewer service, unless otherwise expressly allowed in this LDC.
- C. **In areas not currently served by City sewer, it shall be the responsibility of the applicant or their agent to provide:**
 - a. **Adequate information (e.g. test pits and percolation tests) to demonstrate that the land and area of each lot is adequate to permit the installation and operation of an individual sewage disposal system.**
 - b. **In accordance with Env-Wq 1000, for subdivisions with lots smaller than 5 acres, subdivision approval from the New Hampshire Department of Environmental Services shall be required.**

19.3 CONSERVATION RESIDENTIAL DEVELOPMENT SUBDIVISIONS

19.3.1 Purpose

The purpose of a conservation residential development subdivision is to promote the conservation of natural resources while providing greater flexibility and creativity in the design of residential development than would be possible using conventional zoning and subdivision practices.

This purpose is accomplished by allowing for clustering of dwelling units at a higher density than would be allowed by the underlying zoning district, provided a portion of the existing tract of land to be subdivided is permanently designated as open space.

19.3.2 Dimensional Standards

- A. **Minimum Dimensional Requirements.**
All conservation residential development subdivisions shall meet the minimum

Table 19-1: Dimensional Requirements for Conservation Residential Development Subdivisions

			Rural District ¹	Low Density-1 District (without city water)	Low Density-1 District (with city water)	Low Density District
TRACT	Min tract size		10 acres	5 acres	5 acres	5 acres
	Min tract frontage		100 ft	100 ft	100 ft	50 ft
	Perimeter Building Setback	From external roads	100 ft	30 ft	30 ft	30 ft
		From other tract boundaries	50 ft	20 ft	20 ft	20 ft
LOT	Min Lot Area		32,000 sf	16,000 sf	8,000 sf	6,000 sf
	Min Road Frontage		40 ft	40 ft	40 ft	40 ft
	Min Lot Width at Building Line		75 ft	75 ft	60 ft	60 ft
	Min Front Setback		15 ft	15 ft	15 ft	15 ft
	Min Rear Setback		20 ft	20 ft	15 ft	15 ft
	Min Side Setback		10 ft	10 ft	10 ft	10 ft
	Max Building Coverage		30%	35%	40%	45%
	Max Impervious Coverage		35%	40%	45%	60%

¹ New lots in the Rural District that are created as part of a CRD that are less than 1 acre in size may utilize an approved Subsurface Disposal System

dimensional requirements specified in Table 19-1. If not specified in Table 19-1 or elsewhere in this Article, the dimensional requirements of the underlying zoning district shall apply.

- B. Perimeter Building Setback.** A building setback shall be required around the perimeter of the existing tract proposed for subdivision (excluding access points) as specified in Table 19-1. The land area included in the perimeter setback may be counted toward the calculation of open space. **The area within the perimeter setback along external roads shall be designated as a “no cut” area in order to preserve existing tree canopy.**

C. Density.

- The number of dwelling units allowed within a conservation residential development subdivision shall be determined by dividing the total area of the existing tract by the density factor per dwelling unit specified in Table 19-2.

- A density bonus may be granted to developments that meet the criteria for one or more of the density incentives detailed in Section 19.3.6. In no instance shall a density of more than 30% above the standard allowable density be granted to any single development. This section shall not be waivable.

Table 19-2: Density & Open Space Requirements

Zoning District	Density Factor per Dwelling Unit ¹	Min Open Space
Rural	2 acres	50%
Low Density-1 (without city water)	1 acre	50%
Low Density-1 (with city water)	20,000 sf	50%
Low Density	10,000 sf	50%

¹ Density bonus(es) may be granted as specified in Section 19.3.6