KEENE PLANNING BOARD
Council Chambers, Keene City Hall
May 26, 2026
6:30 PM

A. CALL TO ORDER & ROLL CALL

B. MINUTES FROM PRECEDING MEETING

1. April 27, 2026

C. EXTENSION REQUESTS

D. FINAL VOTE ON CONDITIONAL APPROVALS

1. Applications Ready for Final Approval

E. BOUNDARY LINE ADJUSTMENT

F. CONTINUED PUBLIC HEARINGS:

G. PUBLIC HEARINGS

1. **PB-26-10 - Habitat for Humanity Duplex, Cottage Court Conditional Use Permit** — Applicant SVE Associates, on behalf of owner Monadnock Habitat for Humanity, proposes to construct a 1,364 sq-ft duplex at the property located at 0 Grove St. (TMP# 585-057-000). The parcel is ~.11 ac and is located in the Residential Preservation District.
2. **PB-26-9 - Froling Energy Site Modifications, Major Site Plan** – Applicant and owner 560 Main Street LLC proposes to create two curb cuts on Manchester St., demolish an existing ~590-sf building, replace the siding on the principal building, and improve an existing gravel area at 20 & 37 Manchester St. (TMP#s 114-012-000 & 114-003-000). The parcels are located in the Commerce & Industrial Districts.
3. **PB-26-11 - GMS Parking Lot Expansion - Major Site Plan & Surface Water Protection Conditional Use Permit** - Applicant Fieldstone Land Consultants, on behalf of owner GMS Realty LLP, proposes to expand the

rear parking lot and install stormwater management infrastructure within the 30-ft surface water buffer on the lot at 30 Production Ave. The property is ~3.1 ac and is in the Industrial District.

4. **PB-26-12 - Elm-Carroll Cottage Court - Major Site Plan & Cottage Court Conditional Use Permit** - Applicant Fieldstone Land Consultants, on behalf of owner Nuevo Transfers LLC, proposes to construct four townhouse-style multifamily buildings with a total of 14 units. The property is ~.75 ac and is in the Medium Density District.

5. **PB-26-13 - George St. Cottage Court Conditional Use Permit** - Applicant A. Eli Leno, on behalf of owner NH Home Buyers LLC, proposes to convert a detached garage into a dwelling unit on the single-family property located at 135 George St. (TMP# 534-002-000). The property is ~.26 ac and is in the Low Density District.

H. OTHER BUSINESS

I. STAFF UPDATES

J. NEW BUSINESS

UPCOMING DATES OF INTEREST

- Joint Committee of the Planning Board and PLD - June 8, 6:30 PM
- Planning Board Steering Committee - June 9, 12:00 PM
- Planning Board Site Visit - June 17, 8:00 AM - To be confirmed
- Planning Board Meeting — June 22, 6:30 PM

K. MORE TIME ITEMS

ADJOURNMENT

City of Keene
New Hampshire

PLANNING BOARD
MEETING MINUTES

Monday, April 25, 2026 **6:30 PM** **Council Chambers, City Hall**

Members Present:
Kenneth Kost, Chair Pro Tem
David Bergeron
Andrew Madison
Mayor Jay V. Kahn
Joseph Cocivera, Alternate

Staff Present:
Mari Brunner, Senior Planner
Evan Clements, Planner / Zoning Administrator

Members Not Present:
Harold Farrington, Chair
Roberta Mastrogiovanni, Vice Chair
Michael Hoefer
Councilor Molly Ellis
Stephon Mehu, Alternate
Tammy Adams, Alternate

1) CALL TO ORDER & ROLL CALL

Senior Planner Mari Brunner asked for Kenneth Kost to be appointed as Chair Pro-Tem. Joseph Cocivera was asked to join the session as a voting member.
A motion was made by Andrew Madison to nominate Kenneth Kost as Chair Pro-Tem. The motion was seconded by Mayor Kahn and was unanimously approved.

Chair Kost called the meeting to order at 6:30 pm and a roll call was taken.

2) MINUTES FROM PRECEDING MEETING - March 23, 2026

A motion was made by Mayor Kahn to approve the meeting minutes of March 23, 2026. The motion was seconded by Andrew Madison and was unanimously approved.

3) EXTENSION REQUESTS

1. PB-2025-06 – Cottage Court Conditional Use Permit, Major Site Plan, & Surface Water Protection Conditional Use Permit – Guitard Homes, Court St – Applicant Fieldstone Land Consultants PLLC, on behalf of owner Guitard Homes LLC, requests a second extension to the deadline to satisfy the precedent conditions of approval for the proposed 29-unit single-family Cottage Court Development on the undeveloped lot at 0 St (TMP #228-016-000). The parcel is ~9.7-ac in size and is located in the Low Density District.

Ms. Brunner stated the applicant is not present tonight for this extension request. This extension request was filed at the request of staff because there was a lapse between when the application would have expired and this evening. She explained the extension request is to make sure that the application would not expire prior to the granting of final approval this evening. She noted the applicant met all conditions for final approval prior to the expiration, but had to wait for this Planning Board meeting date; this was the reason for the extension request. Staff advised the applicant that they did not need to be present this evening for the extension request - the project is ready to get started.

Mayor Kahn felt the public is interested in this project and asked for added clarification as to how the project would be moving forward. He also noted that clearing of the site was going to be in phases but that does not seem to be the case and felt the project has evolved since the time it was approved.

Ms. Brunner responded to the Mayor and stated that she believes this project received one extension previously. They have been working on meeting their conditions of approval for quite some time. They were able to meet their conditions of approval, but because they met the conditions of approval a few days after the expiry date, they submitted the extension request to keep their approval valid. The project is still moving forward.

Clearing has happened on the site, and they have started to install some of the erosion control measures to make sure there is no sedimentation leaving the site. However, no site work can begin until after they receive final approval from the Board this evening.

The project is still planned to occur in phases. Phase one is the phase that is closest to the street. In order to get the transmission lines in due to the location of the pole, additional tree clearing is required which wasn't shown on the original plan. The applicant is proposing to replant that area after the clearing has taken place.

Ms. Brunner noted this was the only change from when the plan was approved by the Board.

The Mayor clarified the electrical lines are being fed from the back of the property to the front of the site. Ms. Brunner answered in the negative and noted they are coming from the street. There was supposed to be a buffer of mature trees that was to remain between the road and the site but some of these had to be removed, in order to get the transmission lines through.

As far as the rear of the site, the applicant ended up clearing that area at the same time as the front of the site. Tree clearing was done a few months ago and agreed it was very visible.

A motion was made by Mayor Kahn that the Planning Board grant a second 6 month, 180-day extension to the timeframe to satisfy the precedent conditions of approval for PB-2025-06. The motion was seconded by Andrew Madison and was unanimously approved.

4) <u>FINAL VOTE ON CONDITIONAL APPROVALS</u>

Chair Kost stated this is this is a standing agenda item. As a matter of practice, the Board will issue a final vote on all conditionally approved plans after all of the "conditions precedent" have been met. The Chair asked whether there were any applications that are ready for final vote.

Ms. Brunner stated there were two applications tonight that are ready for final approval, one of which was listed in the agenda packet; PB-2025-06 Cottage Court Conditional Use Permit, Major Site Plan and Surface Water Protection Conditional Use Permit for Guitard Homes located at 0 Court Street, Tax map parcel number 228-016-000. There were six conditions precedent, including: 1) Owner signature appears on the plans; 2) Submittal of five full size paper copies and a digital copy of the final plan set, including renderings; 3) Submittal of an updated plan set that addresses all outstanding comments from the City Engineer and shows the proposed name for the private driveway; 4) Submittal of security and in a form and an amount acceptable to the Community Development Director to cover the cost of landscaping, sediment and erosion control measures and as built plans; 5) Submittal of draft written documentation of the required utility easements and any other necessary legal instruments required for this application, which shall be subject to review by the City Attorney; and 6) Approved permit numbers for the Shoreline Protection Alteration of Terrain and Wetlands Permits, as well as any other required state permits, shall be added to the proposed conditions plan of the plan set.

All conditions have been met.

A motion was made by Mayor Kahn that the Planning Board issue final approval for PB-2025-06. The motion was seconded by Andrew Madison and carried on a unanimous vote.

The second item is PB-2025-20, Cottage Court Conditional Use Permit, Surface Water Protection CUP and Major Site Plan, for property at 454 Elm Street. This application had four conditions precedent to final approval, including: 1) Owner's signature appears on the plan; 2) Submittal of five paper copies and a digital copy of the final plan; 3) Submittal of a security in a form and an amount acceptable to the Community Development Director. The fourth condition precedent was submittal of draft written documentation of the required utility easements and any other necessary legal instruments required for this application, subject to review by the City Attorney. Staff is recommending to make that a condition subsequent to final approval. Ms. Brunner noted this was at the request of the City Attorney, who felt that it would be better to include a condition that also required that the easement would be executed. She noted the first three conditions have been met and then if the Board decides to issue final approval this evening and make the fourth condition a condition subsequent then that would be met after the client's plans are finalized and signed.

Mr. Madison stated he is not seeing any supporting documents included in the packet for this item. Ms. Brunner explained this application met its final condition of approval today. She noted the agenda packet comes out ten days before the meeting. Applications that meet their conditions for approval between the timeframe when the agenda packet goes out and the meeting date, is brought to the Board the night of the meeting. She added the complete folder is available including plans should the Board wish to review them. This is for the 18-unit Cottage Court on Elm Street.

The Mayor asked whether this requires a subsequent action of the Board. Ms. Brunner answered in the negative and stated if the Board issues final approval this evening, then that would be the final approval. However, staff would follow up on all subsequent conditions. If the applicant were to not comply with those conditions subsequent, the application would go through an enforcement process which could ultimately end up coming back to the Board to revoke the approval, which she noted was very rare.

The Mayor clarified the subsequent review is for the utility easement. Ms. Brunner stated there are a number of conditions subsequent they would be held to and referred to that language:
Subsequent to final approval –
1) *Prior to the commencement of site work, the Community Development Department shall be notified when all erosion control measures have been installed and the 30-foot surface water buffer is flagged by a surveyor licensed in the State of New Hampshire.*
2) *Community Development staff shall inspect the erosion control measures and wetland flagging to ensure compliance with the approved plans in all City of Keene regulations.*
3) *Submittal of recorded utility easements and any other legal instruments necessary for this application to the Community Development Department.*
4) *The applicant shall obtain final acceptance of the new utilities from the Keene City Council, following the completion of all infrastructure construction.*
5) *Following the initial installation of plantings, the Community Development Department shall be contacted to perform an initial landscaping inspection.*
6) *Final landscaping inspection happens one year later.*

These are the conditions subsequent that they would have to meet and they would not get their security back until the landscaping has survived for a full year in good health and they submit as-built plans.

Mr. Clements noted staff are also proposing a subsequent condition #7, which is staff review of the utility easement. He added the applicant did submit draft documents in time, but staff has not been able to review them, and staff felt delaying final approval for this application by a month would not be prudent. Staff are also working on easement language to the benefit of the City. By making it subsequent, it is tied to the issuance of a building permit for the first new unit for this project.

A motion was made by Andrew Madison that the Planning Board issue final approval for PB-2025-29 with the following condition subsequent: 7) Prior to the issuance of a building permit for new dwelling unit construction, the utility easement shall be reviewed to the satisfaction of the City Attorney and City Engineer and executed and recorded by the applicant. Proof of recording shall be delivered to the Community Development Department.

The motion was seconded by Joseph Cocivera and carried on a unanimous vote.

5) PUBLIC HEARINGS

1. PB-2025-21 – Subdivision & Surface Water Protection Conditional Use Permit – Applicant Cardinal Surveying & Land Planning and applicants/owners Fernando & Marguerite Cyr propose to subdivide the ~10.6-ac lot at 315 Old Walpole Rd (TMP# 210-027-000) into a

~7.9-ac lot and a ~2.7-ac lot. About 7,815 sf of impact to the surface water buffer is Page 1 of 53 requested for a proposed driveway and grading for a leach field. The parcel is in the Rural district.

A. Board Determination of Completeness

Mr. Clements stated the applicant has requested exemptions from submitting a separate existing and proposed conditions plan, landscaping plan, lighting plan, elevations, traffic analysis, soils analysis, historic evaluation, architectural and visual appearance analysis, and any other technical reports. Planning Staff have made the preliminary determination that granting the requested exemptions would have no bearing on the merits of this application and recommend that the Board accept the application as "complete."

A motion was made by Mayor Kahn that the Planning Board accept this Application as complete. The motion was seconded by Andrew Madison and was unanimously approved.

B. Public Hearing

Ms. Wendy Pelletier from Cardinal Surveying, representing owners Fred and Marguerite Cyr, addressed the Board. She was joined by Josh Joslin of Graz Engineering.

Ms. Pelletier stated this is a 10.6-acre parcel at 315 Old Walpole Road. There is a single-family home on the lot, and the applicant is proposing to subdivide the lot into two parcels. The site is surrounded by other single-family homes on smaller lots and she felt it was a great use of the property. The rear of the lot has prohibitive slopes, and no construction would happen in that area. The front of the lot is encumbered by a wetland. She referred to an orange line on the plan that shows the wetland buffer and stated that no building is proposed within that area. The only building area is highlighted in yellow (one half acre).

Mr. Josh Joslin of Graz Engineering addressed the Board next and stated he completed the Conditional Use Permit for work proposed within the Surface Water Protection Overlay District. He stated there are wetlands to the south and the north, and there is an existing culvert that was recently replaced by the property owner. The driveway is proposed to come in as far to the north as possible, essentially hugging the property line, maintaining the three-foot setback requirement for the driveway off the property line and matching it back up to one of the existing paths where it crosses the culvert. It would be a 300-foot driveway and they are proposing to keep it 10-feet wide to minimize the disturbance in that area. They are also proposing to cross pitch the driveway to the south where runoff will be caught by a drainage ditch which flows towards Old Walpole Road into a stone level spreader and then into a roadside ditch. On the other side of the driveway, a curb or berm is being proposed which would capture water from the top section of the driveway, which would ultimately enter the stone level spreader. He referred to the bold lines around the driveway which is the silt fence. Replacement of the culvert needs NHDES approval and has been submitted to DES for review.

This concluded the applicant's presentation.

Chair Kost asked for the distance from the wetland to the edge of the driveway. Mr. Joslin stated it is between 30 and 35 feet along the length up to the crossing point. The low point at the stone

level spreader would be about 45 feet from the wetlands. He added that the seeding being proposed within the 75-foot buffer is a New England buffer zone mix; a mixture of wildflowers, items that will be good for slope restoration and to enhance buffer zones.

Chair Kost asked whether there is any difference if the driveway is paved or not. Mr. Joslin stated they treat gravel as impervious only because once it gets compacted and driven on, there is no real infiltration. However, if it is a paved driveway, the berm would be a modified Cape Cod berm. If it is gravel, it would be an embankment which would be higher and it will be loamed and seeded.

Staff comments were next. Mr. Clements stated as the applicant described, this is an existing roughly 10-acre parcel with the proposal to subdivide approximately 2.7 acres and create a new building lot. The purpose of the conditional use permit is proof of concept that the proposed lot to be subdivided is actually feasible to build on for residential development.

Mr. Clements began with the review of the subdivision regulations:

Lots: The proposed lots appear to meet all dimensional requirements for the Rural District. The new lot will have 80 feet of frontage along Old Walpole Rd, which is a class V roadway. The remaining lot will have approximately 159 feet of frontage on Old Walpole Rd. It appears that this standard has been met.

Character for the land for subdivision: The applicant has described the front half of the parent parcel as sloping between 3% and 8%, with the rear half being prohibitively steep. Wetland systems are present at the front of the parcel with the prohibitive slopes to the rear and about a half-acre of buildable land in between them. Mr. Clements noted the Board would ultimately need to decide this evening whether the Board believes that this land is appropriate to be subdivided.

Scattered or Premature Development: The proposed lot is located on an existing City road in a developed residential area. This proposed subdivision is not premature. This standard is met.

Preservation of Existing Features: The applicant proposes to minimize impacts to the existing wetland system by designing the driveway to cross at the narrowest point of the wetland. The prohibitive slopes are not proposed to be impacted in any way. The stone wall along the road will be altered to create the driveway entrance. With reference to the interior stonewalls, as far as this application is concerned, they are not proposed to be altered in any way. The Board will need to determine if this is sufficient for the preservation of existing features.

Monumentation: 5/8-inch cap steel rebar is proposed to be set at each new corner and angle point. A condition of approval related to the monuments being set or submittal financial security given to ensure the monumentation is recommended and is in the suggested motion language.

The lots are not in a special flood hazard area – this is not applicable.

Fire Protection and Water Supply: There is a fire hydrant located .8 miles from Old Walpole Road, and the site is .71 miles from a hydrant on Wyman Road. The Fire Department did not raise any concerns about serving this building lot – this standard has been met.

Utilities: The proposed new building lot will be served by private well and septic. NHDES subdivision approval will be required for the new lot as it is less than five acres in size.

Surface Water Protection.
1. Relocation of the Proposed Use and activity – Mr. Clements explained the question is whether the applicant has done everything that they can to limit the amount of proposed impact, i.e., Could the driveway be located somewhere else that would further reduce the impact on the wetland? Mr. Clements stated after reviewing the application, staff believe the applicant has made a real effort to minimize impact to the wetland. For example, crossing the wetland at the narrowest point, keeping the proposed driveway as far away from the wetland as possible with the proposed new lot lines, while also utilizing the existing topography of the site.

Buffer encroachment is proposed to be 7,815 square feet. The driveway is designed to meet the long driveway standards in Section 9.3.5 of the land development code. These standards include the requirement for the driveway be no wider than 10 feet; this reduces the impact to the buffer. The design includes the installation of two stone level spreaders, a drainage swale, and berm to control stormwater runoff to both the wetland and the public rights of way. The impact for the leach field is related to the grading to install the system. The leach field itself will not be located within the buffer, which is a requirement of the regulation.

As far as adverse impacts are concerned. The applicant has shown that most of the future residential development on the property is proposed to be located outside the wetland buffer.

Stormwater management systems are proposed with the driveway and take advantage of the existing soils on the site, which percolate well and have good infiltration.

The amount of clearing proposed is limited to what is necessary to install the driveway and associated infrastructure.

For preservation of the buffer, they are limiting cutting to what is necessary. They are proposing a native wetland buffer seed mix to restore impacted areas. The applicant did note that the existing condition of the buffer is minimal, low-growth vegetation.

Additional criteria - The applicant notes that the existing wetland system is small and was created by a minor watershed that drains into already developed land. The system is not connected to a larger wetland system in any meaningful way. No potential potentially endangered species were observed, and the NHDES data check tool provided a negative response with respect to the presence of endangered species. The applicant also notes that, due to the condition of the wetland system, it is unlikely to be used as a wildlife corridor.

Mr. Clements reviewed the proposed motion as outlined in the Board's packet.

Mr. Clements noted there were some discrepancies between the City Engineer and the applicant's engineer. As a result, staff is giving the applicant time to resolve some of the methodologies with the stormwater simulation and report; if it is deemed to need to be altered. This is not an uncommon occurrence.

Mr. Clements referred to the following language proposed in the motion:
Subsequent to final approval, the following conditions shall be met: prior to the issuance of a building permit for new residential construction, a plan showing the proposed building envelope. Driveway grading and erosion control measures shall be submitted to the Community Development Department for review by the city engineer.

He explained this language is the conditional use permit effectively in action. The applicant this evening is providing proof of concept that this lot is buildable. The future end user may be interested in potentially changing the driveway layout and/or relocating where the house is going to be located, which could trigger a new requirement to either amend the surface water conditional use permit, or some other mechanism that we really can't anticipate at this moment. If something different to what is being proposed is presented, that new applicant will be required to come before this Board. This concluded staff comments.

Mayor Kahn clarified in the remaining seven acres there is currently a house. Mr. Clements answered in the affirmative and added there is an existing single-family residence and a couple of outbuildings located northwesterly off Old Walpole Road – away from the wetland system. The Mayor asked for the length of the driveway. Mr. Clements stated it is 300 feet.

Mr. Clements went on to say this item went before the Conservation Commission who conducted a site visit and are proposing a few recommendations, ultimately, it would be the Board's decision as to whether to include these recommendations into the final approval. The three recommendations are: 1. Utilization of Road Salt Best Management Practices on the driveway to reduce the amount of salt contamination into the wetland; 2. Invasive species management during construction; 3. Monitoring the silt dam weekly with repairs as needed by the developer.

Mr. Clements reminded the Board this is going to be a single-family residential building lot and the City is limited in the amount of enforcement of very specific conditions for a development at this scale. The Conservation Commission noting best management practices for both erosion control and salt usage into the record for this application is productive. However, he felt invasive species management would be harder but felt it is good advice for any builder to be aware of any invasive species within their working area and any opportunity to address that issue during construction certainly will be appreciated by the city.

Ms. Brunner stated she was present at the Conservation Commission's discussion and noted most of these recommendations are suggestions for the owner. The Commission did have concerns about any fill that is being brought onto the property as it is getting more and more difficult to make sure that fill is clean and won't have invasive species growing in it. They are trying to raise awareness about that issue because the spread of things like Japanese Knotweed and Burning Bush are becoming a problem around the City. These concerns were shared with the State as well to be submitted with the wetlands permit application.

Chair Kost referred to what Mr. Clements stated earlier; if this site was to be changed significantly, it comes back through the Planning Board process. He indicated the house depicted looks like a square on the proposed plan and asked if this was to change whether that too could be something that would come before this Board. Mr. Clements stated as long as the house is not proposed to be built in the wetland buffer, it does not necessarily need to come back.

The Chair asked for public comment, with no comments from the public the Chair closed the public hearing.

The Chair stated he does not see that there is any potential for regional impact.

C. Board Discussion and Action

A motion was made by Andrew Madison that the Planning Board approve PB-2025-21 as shown on the plan set prepared by Cardinal Surveying & Land Planning at a scale of 1"=50' on September 17, 2025 and last revised on April 14, 2026 and on the plan set prepared by Graz Engineering with a variable scale on March 22, 2026 with the following conditions:

1. Prior to the final approval and signature of the plans by the Planning Board Chair, the following conditions precedent shall be met:
   a. Owners' signatures appear on the plans.
   b. The wetland scientist stamp shall be put on the subdivision plans.
   c. Submittal of four (4) full sized paper copies, 2 mylar copies, and a flattened PDF version of the final plan set.
   d. Submittal of a check in the amount of $51.00 made out to the City of Keene to cover the cost of recording fees.
   e. Inspection of lot monuments by the Public Works Director, or in lieu of this, the submittal of a security in a form and amount acceptable to the Public Works Director to cover the cost of monumentation.
   f. Submittal of documentation demonstrating that subdivision approval has been granted by the New Hampshire Department of Environmental Services.
   g. A revised stormwater management report to be reviewed and approved by the City Engineer.
2. Subsequent to final approval and signature of the plans by the Planning Board Chair, the following conditions shall be met:
   a. Prior to the issuance of a building permit for new residential construction, a plan showing the proposed building envelope, driveway, grading, and erosion control measures shall be submitted to the Community Development Department for review by the City Engineer.
   b. Prior to the commencement of site work, the Community Development Department shall be notified when all erosion control measures have been installed and the 75-ft surface water buffer is flagged by a surveyor licensed in the State of NH. Community Development Staff shall inspect the erosion control measures and wetland flagging to ensure compliance with the approved plans and all City of Keene regulations."
   c. Submittal of an approved wetland permit from the New Hampshire Department of Environmental Services to the Community Development Department.

The motion was seconded by Joseph Cocivera and was unanimously approved.

7) **OTHER BUSINESS**

None

8) **STAFF UPDATES**

1. Bicycle and Pedestrian Master Plan Update

Ms. Brunner stated the City has started an update to the Bicycle and Pedestrian Master Plan. She stated the City was an early adopter of bicycle pedestrian plans. The first one was adopted in 1999 and was added as an appendix to the last master plan and indicated this is an update that is long overdue. The project started around Earth Day and there is a survey out right now for anyone interested. If the plan does get adopted by City Council, it will come back to the Board to be added as an appendix to the master plan. She stated there is information about this item in the Board's packet. There is also information available on the Bicycle Pedestrian Path Advisory Committee page.

9) **UPCOMING DATES OF INTEREST**

Joint Committee of the Planning Board and PLD – May 11, 6:30 PM
Planning Board Steering Committee – May 12, 12:00 PM
Planning Board Site Visit – May 20 – To Be Confirmed
Planning Board Meeting – May 26, 6:30 PM

10) **MORE TIME ITEMS**

1. Training on Site Development Standards

The Chair suggested completing some of the proposed training. The Mayor felt the Board is not well represented tonight to complete a training. The Chair felt the sessions are recorded for members who are not present tonight. Mr. Madison stated after next meeting, it might be easier to get these trainings completed.

Ms. Brunner stated there are training videos available on the City's You Tube channel.

11) **ADJOURNMENT**

There being no further business, Chair Kost adjourned the meeting at 7:45 PM.

Respectfully submitted by,
Krishni Pahl, Minute Taker

Reviewed and edited by,
Mari Brunner, Senior Planner

CITY OF KEENE
NEW HAMPSHIRE

Meeting Date: May 26, 2026

To: Planning Board

From: Mari Brunner, Senior Planner

Through: Paul Andrus, Community Development Director

Subject: **Applications Ready for Final Approval**

Recommendation:
To grant final approval for any projects that have met all their "conditions precedent to final approval."

Attachments:
None

Background:
This is a standing agenda item in response to the "George Stergiou v. City of Dover" opinion issued by the NH Supreme Court on July 21, 2022. As a matter of practice, the Planning Board issues a final vote on all conditionally approved projects after the "conditions precedent to final approval" have been met. This final vote will be the final approval and will start the 30-day appeal clock.

As of the date of this packet, no applications were ready for final approval.

If any projects meet their conditions precedent between date of this packet and the meeting, they will be identified and discussed during this agenda item.

All Planning Board actions, including final approvals, are posted on the City of Keene website the day after the meeting at KeeneNH.gov/planning-board.

CITY OF KEENE
NEW HAMPSHIRE

Meeting Date: May 26, 2026

To: Planning Board

From: Megan Fortson, Planner

Through: Mari Brunner, Senior Planner

Subject: **PB-26-10 - Habitat for Humanity Duplex, Cottage Court Conditional Use Permit — Applicant SVE Associates, on behalf of owner Monadnock Habitat for Humanity, proposes to construct a 1,364 sq-ft duplex at the property located at 0 Grove St. (TMP# 585-057-000). The parcel is ~.11 ac and is located in the Residential Preservation District.**

Recommendation:

To review the attached staff report and application materials in preparation for the public hearing.

Attachments:

1. Staff Report
2. Application
3. Narrative
4. Plan Set
5. Average Building Setback Line Exhibit
6. Elevations

Background:

The ~0.11-ac subject parcel is located at the southwest corner of the Grove St and Water St intersection. Historically, this parcel was used as a parking lot for the former Lancaster Shoe Company, which was located across Water Street at the site of the current Cityside housing development. The site is almost entirely paved and has been vacant / unused since the 1980s. The applicant proposes to construct a duplex with an interior gross floor area of ~1,152-sf per unit. Per Table 17-1 in the Land Development Code (LDC), a duplex is allowed in the Residential Preservation District subject to the issuance of a Cottage Court Conditional Use Permit by the Planning Board.

STAFF REPORT

PB-26-10 – COTTAGE COURT CONDITIONAL USE PERMIT – HABITAT FOR HUMANITY, GROVE ST

Request:

Applicant and owner, Monadnock Habitat for Humanity, proposes to construct an ~1,364-sf duplex on the ~0.11-acre lot at 0 Grove St (TMP #585-057-000). The property is located in the Residential Preservation District.

Background:

The ~0.11-ac subject parcel is located at the southwest corner of the Grove St and Water St intersection (Figure 1). Adjacent uses include the Cityside apartment building to the north; the Hundred Nights Shelter to the northeast; duplexes to the east; and multi-family units to the south and west. Historically, this parcel was used as a parking lot for the former Lancaster Shoe Company, which was located across Water Street at the site of the current Cityside housing development. The site is almost entirely paved and has been vacant / unused since the 1980s.

Figure 1. Aerial imagery from 2025 showing the subject parcel at 0 Grove St (TMP #585-057-000).

The applicant proposes to construct a duplex with an interior gross floor area of ~1,152-sf per unit. Each unit will be accessed by a separate curb cut and a covered entryway. A shed will be added to the southwestern corner of the site to serve as garden storage for tenants as well as a mechanical room. Per Table 17-1 in the Land Development Code (LDC), a duplex is allowed in the Residential Preservation District subject to the issuance of a Cottage Court Conditional Use Permit by the Planning Board.

Determination of Regional Impact:

Staff have made a preliminary evaluation that the proposal does not appear to have the potential for "regional impact" as defined in RSA 36:55. The Board should make a final determination as to whether the proposal could have the potential for regional impact.

Completeness:

The applicant has requested exemptions from submitting a drainage report, traffic analysis, and soil analysis. Planning Staff have made the preliminary determination that granting the requested exemptions would have no bearing on the merits of the application and recommend that the Board accept the application as "complete."

Departmental Comments:

- **Zoning:** Project as proposed requires a Variance from the rear setback requirement of the Residential Preservation Zoning District per Section 3.2.2 of the LDC. This project is

scheduled to be heard by the ZBA on May 11, 2026 as ZBA-26-3. If approved, the ZBA Variance should be noted on the site plan. *(Please note that this variance was granted.)*

- **Engineering:**
  - The plans show the proposed water service curb stop on private property in profile view; this must be revised to show the curb stop in the Grove Street ROW.
  - In lieu of the pavement patch / saw cut extending diagonally west to east from the limit of the water service installation, please square off the road trench patch for a consistent width
  - Specify a cast iron cleanout box and cap for the proposed sewer service cleanout.
  - Prior to construction, the developer shall submit for and obtain an Excavation Permit and Utility Connection permit.
  - Upon the installation of the building's foundation, the owner shall submit a request to the City Engineer for a street address to be assigned and registered in accordance with E-911 standards.
  - Prior to the issuance of a CO, the developer and/or property owner shall submit a request to the City Engineer for a water meter and backflow preventor installation and operation of the water service curb stop to turn on the water.

APPLICATION ANALYSIS:

ARTICLE 17 – COTTAGE COURT CONDITIONAL USE PERMIT CRITERIA:

17.4 **Permitted Uses:** The proposed duplex is allowed in the Residential Preservation District with a Cottage Court Conditional Use Permit. An accessory shed is proposed in the southwest corner of the site to house mechanical equipment and provide storage areas for tenants (Figure 2). This standard appears to be met.

17.5.1 **Development Types Allowed:** The duplex will be constructed on a single parcel of land with a condominium association serving as the property management entity. Planning Staff recommend that the Board include conditions of approval related to the submittal of draft and recorded condominium documents as well as any other legal instruments necessary for this project. This standard appears to be met.

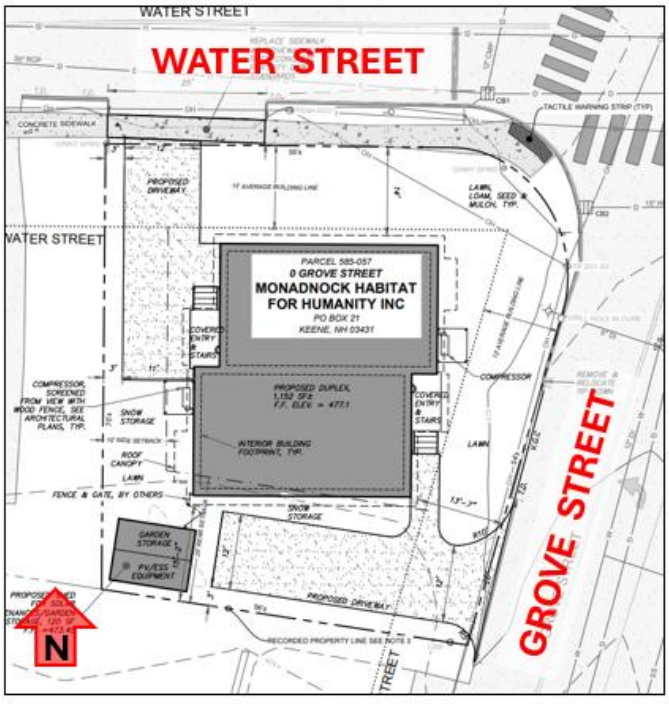


Figure 2. A snippet of the proposed conditions plan showing the proposed layout of the duplex at Grove St.

17.5.2 Dimensional Standards: The applicant proposes to construct a 2-story duplex on a corner lot with frontage on Water St and Grove St. The proposed front setback is just over 13-ft and the corner side setback is just over 12-ft. Although this does not comply with the 15-ft front setback and the 20-ft corner side setback required in the Residential Preservation District, Table 17-2 in the LDC allows Cottage Court Developments additional flexibility with setbacks from external roads, stating that, "*Setbacks from existing roads external to the development may be less than the underlying zoning district in order to match an established building line along the road.*" The applicant submitted an exhibit showing the average building setback distances along both Water St and Grove St which shows that, based on the existing development pattern in the neighborhood, the front setback could be reduced to ~13-ft and the corner side setback could be reduced to ~12-ft.

The applicant obtained a variance for a 15-ft rear building setback from the ZBA on May 11. The building setback line exhibit and ZBA Notice of Decision are included as attachments to this staff report. This standard appears to be met.

Table 2: Required vs. proposed dimensional standards.

	Required	***Existing***	***Proposed***
Minimum tract size	None	~0.11-ac (~4,959-sf)	~0.11-ac (~4,959-sf)
Minimum tract frontage	30-ft	58.41-sf	58.41-ft
Front Setback	15-ft (or existing building line)	N/A	~13-ft*
Rear Setback	20-ft	N/A	15-ft**
Side Setback	20-ft	N/A	10-ft*
Max Building Coverage	35%	0%	32%
Max Impervious Coverage	45%	95%	60%
Max Stories Above Grade	2	N/A	2
Max Building Height	35-ft	N/A	~35-ft

* *Setbacks reduced to match existing building lines per Table 17-2*
** *Variance for 15-ft rear setback granted on May 11, 2026*

17.5.3 Conditional Use Permit Standards:

A. **Dwelling Unit Size:** This section of the LDC requires that all new units created as part of a Cottage Court Development have an average gross floor area less than 1,250-sf per unit and a building footprint less than 900-sf per unit. The applicant proposes to construct a duplex with an interior average gross floor area of ~1,152-sf per unit and an interior building footprint of ~576-sf per unit. This standard appears to be met.

B. **Parking:** This section requires a minimum of one parking spaces per unit and allows for a maximum of one parking spaces per bedroom. The proposed conditions plan shows that each of the proposed curb cuts will be able to accommodate 1-2 parked vehicles. This standard appears to be met.

C. **Building Separation:** The internal separation between units will be reviewed by the Plans Examiner as part of the building permit application process to ensure that all necessary building code and life-safety requirements are satisfied.

D. **Driveways:** The applicant proposes two curb cuts – one along Water St and one along Grove St. The curb cut along Water St will be ~12'-wide at the property line and 38'-deep. The second curb cut along Grove St will be ~26'-wide at the curb line, 19'-wide

at the property line, and ~41'-deep. Each of these driveways complies with the requirements for single- and two-families homes outlined under the Street Access Permit standards in Section 23.5.4 of the LDC.

E. **Screening:** The project narrative states that the proposed 2-story duplex is not more intense than adjacent building types, so no screening is proposed. Google Street View imagery shows that adjacent buildings are two or more stories in height. This standard appears to be met.

F. **Architectural Guidelines:** The submitted elevations show that the proposed duplex will have one unit with access from the west side of the site and the second unit will have access from the east side of the property facing Grove St. During conversations with staff, the applicant's team stated that this layout was chosen to provide privacy to each of the families residing in the building.

Sheet A200 of the elevations shows three different potential exterior color schemes, all of which are finished with horizontal siding on the first and second floors and vertical siding from the top of the second floor to the peak of the gable roof. During the deliberation of this application, the Board will need to determine if the proposed architecture and visual appearance of the building is harmonious with the fabric of the existing neighborhood. Figure 3 shows the proposed elevations for the two different designs of the building facades.

Figure 3. A snippet from the proposed elevations showing the front entry for each unit as well as a side view of the building.

ARTICLE 21 – SITE DEVELOPMENT STANDARDS:

21.2 **Drainage:** Impervious cover on the site will be reduced from about 95% to 60%. Currently, stormwater runoff sheet flows to catchbasins along Water St & Grove St. Following the redevelopment of the site, stormwater will either infiltrate into the lawn spaces or sheet flow to the existing catch basins. This standard appears to be met.

21.3 **Sediment & Erosion Control:** During construction, the contractor will install catch basin grate inlet filters and straw wattle or silt fencing around the perimeter of the parcel. This standard appears to be met.

21.4 **Snow Storage & Removal:** Snow storage areas are proposed to the south and west of the building. The narrative states that excess snow will be removed from the site, if necessary. This standard appears to be met.

21.5 **Landscaping:** No landscaping is proposed to be installed, with the exception of lawn areas, which will be seeded to grow grass. This standard is not applicable.

21.6 **Screening:** A compressor will be installed adjacent to the entry stairs for each unit and will be screened from view of adjacent properties and the public right-of-way using wooden fencing, as shown on the proposed elevations. This standard appears to be met.

21.7 **Lighting:** Wall-mounted light fixtures are proposed at the entry to each unit. Given that this will be a two-family residence, the proposed light fixtures do not need to comply with the requirements outlined under this section of the LDC. This standard is not applicable.

21.8 **Sewer & Water:** Each unit in the duplex will have 3 bedrooms and will be connected to City water and sewer services. During the review of this application, the City Engineer include a few comments regarding the proposed utilities. At the time of this staff report, Planning Staff were waiting to hear back from the City Engineer regarding whether the updated plan set sufficiently addresses these comments. An update will be shared with the Board during the public hearing for this application on Tuesday, May 26th.

21.9 **Traffic & Access Management:** The narrative states that the proposed duplex will not cause a significant increase in vehicle traffic to and from the site. A note has been added to the plan set which states that any future modifications to the driveways shall be reviewed by the City Engineer. This standard appears to be met.

21.10 **Filling & Excavation:** The narrative states that the existing grade of the site currently lies between 472-473-ft above sea level and is proposed to be slightly raised to 473.35-ft above sea level at its highest point following the completion of construction. The remainder of the site around the duplex will be graded to match existing elevations. This standard appears to be met,

21.11 **Surface Waters & Wetlands:** The narrative states that there are no surface water or wetlands present on the site. This standard is not applicable.

21.12 **Hazardous & Toxic Materials:** The narrative states that there are no hazardous or toxic chemicals involved with this proposal. This standard is not applicable.

21.13 **Noise:** The narrative states that the proposed use will generate noise levels typical for a residential use. This standard appears to be met.

21.14 **Architecture & Visual Appearance:** See item F under Section 17.5.3, above.

Draft Motion Language:

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

"Approve PB-26-10 as shown on the plan set identified as "Proposed Duplex; 0 Grove, St Keene, NH" prepared by SVE Associates at a scale of 1 inch = 10 feet on May 31, 2026 and last revised on May 4, 2026, and in the elevations identified as "Monadnock Habitat for Humanity; 0 Grove St, Keene, NH" prepared by Bensonwood Unity Homes at varying scales on March 23, 2026 and last revised on May 6, 2026 with the following conditions:

1. **Prior to the final approval and signature of the plans by the Planning Board Chair, the following conditions precedent shall be met:**
    a. **Owner's signature appears on the plans.**
    b. **Submittal of five (5) full sized paper copies and a flattened PDF version of the final plan set and elevations.**
    c. **Submittal of an updated proposed conditions plan with the ZBA approval number listed.**
    d. **Submittal of draft written documentation of any easements and/or other necessary legal instruments required for this application, which shall be subject to review by the City Attorney.**
2. **Subsequent to final approval and signature of the plans by the Planning Board Chair, the submittal of recorded easements and/or any other legal instruments necessary for this application to the Community Development Department."**

CITY OF KEENE
NEW HAMPSHIRE

Planning Application

Project Number:	PB-26-10	**Date Submitted:**	April 15, 2026
Project Name:	Habitat for Humanity Duplex	**Zoning:**	RP
Project Address:	0 GROVE ST.	**Parcel Size:**	0
Parcel Number:	585057000000000		

Owner Information

MONADNOCK HABITAT FOR HUMANITY INC	PO BOX 21	KEENE NH 03431
Name	*Address*	*City/State/Zip*

Applicant Name
Liza Sargent

Applicant Phone #
802-257-0561 ext. 202

Authorized Agent Name
Liza Sargent

Authorized Agent Phone #
8022570561

Project Description
SVE Associates, on behalf of the applicant, Monadnock Habitat for Humanity, is submitting this Cottage Court Conditional User Permit Application to construct a duplex at 0 Grove Street. The project consists of the construction of a 1,364 square foot duplex, off street parking for both units, water and sewer connections, and shared shed.

Attachments

Narrative & Plan Set		***Technical Reports***	
Narrative	Submitted	Drainage Report	Exemption Requested
Location Map	Submitted	Traffic Report / Analysis	Exemption Requested
Existing Conditions Plan		Soil Analysis	Exemption Requested
Proposed Conditions Plan		Historic Evaluation	
Grading Plan		Screening Analysis	
Landscaping Plan		Architectural Analysis	
Lighting Plan		Other Reports / Analyses	N/A
Elevations / Renderings	Submitted		

Project Narrative

Monadnock Habitat for Humanity Duplex

0 Grove Street

Owner/Applicant: Monadnock Habitat for Humanity

April 2, 2026
Revised May 4, 2026

SVE Associates, on behalf of the applicant, Monadnock Habitat for Humanity, is submitting this *revised* Cottage Court Conditional Use Permit Application to construct a duplex at 0 Grove Street. The project consists of the construction of a 1,3*78* square foot *exterior area/ 1,152 sf interior area* duplex, *two spaces of* off-street parking for both units, water and sewer connections, and shared shed. *The footprint for the interior of each unit, per floor is 576 sf.*

The proposed plan complies with all City Development Standards:

1. Drainage & Stormwater Management:
   There will be a decrease in impervious surface area. The existing site is a paved parking lot, with 95% of the parcel impervious. Proposed will be a duplex with lawn space, with 60% of the parcel impervious. In existing conditions, stormwater runoff sheet flows to the catch basins in Water and Grove Streets. Post Development, stormwater will have an opportunity to infiltrate into the lawn spaces before sheet flowing to the existing catch basins in the street.

2. Sediment/Erosion Control:
   The site is relatively flat, minimizing the potential for erosion problems. Regardless the Contractor is to install, monitor, and repair erosion control measures on a regular basis. These instructions are included in the notes on the Sheet N-1 and details on Sheet C-3. Catch basin grate inlet filters shall be used in the catch basins. Straw wattle or silt fence shall be used at the perimeter of the parcel.

3. Snow Storage and Removal:
   Snow storage is proposed on site, if snowfall exceeds available snow storage, snow will be trucked offsite.

4. Landscaping:
   No landscaping is proposed, except for lawn.

5. Screening:
   Screening is proposed for each of the unit's compressors.

6. Lighting:
   The only lighting proposed are the wall mounted fixtures at each duplex covered entry.

7. Sewer and Water:
   The duplex with 3 bedrooms in each unit, will connect to the municipal water and sewer. Sewer service is a 6" diameter SDR35 and domestic water is a 1½" diameter CTS service.

8. Traffic and Access Management:
   No significant increase to vehicle traffic. The existing site was a paved parking area with entrances on both Water and Grove Street.

9. Filling and Excavation:
   The existing elevation of the site is generally between 473 and 472. Proposed grading will raise the site to 473.35 at the highest point (with the exception of the finish floor of the duplex) and will be graded to match existing grades at all sides of the parcel.

10. Surface Waters and Wetlands:
    There is no surface water or wetlands on this property.

11. Hazardous and Toxic Materials:
    Not applicable.

12. Noise:
    The proposed use will generate noise typical to a residential residence.

13. Architecture and Visual Appearance:
    The new duplex's style and visual appearance compliments the surrounding residential units. See elevations for more detail.

Cottage Court Development Standards

1. *The proposed use is a duplex which is a permitted use in the district.*
2. *The project is proposed on a single parcel of land with a Condominium Association.*
3. *Condominium Association will comply with all applicable state statutes regulating the condominium form of ownership.*
4. *The CC Development will meet the minimum dimensional standards in Table 17-2.*
5. *The building height is less than 35 feet.*
6. *The dwelling size is 1,152 sf, and the building footprint per unit is 576 sf.*
7. *There are two parking spaces proposed per unit.*
8. *Driveways are 12' wide.*
9. *No internal roads proposed.*
10. *The proposed building type is not more intense than the adjacent building types, therefore no screening fence is proposed.*

PROPOSED DUPLEX

0 GROVE STREET, KEENE NEW HAMPSHIRE

PROPERTY OWNER & APPLICANT:

MONADNOCK HABITAT FOR HUMANITY, INC.

P.O. BOX 21
KEENE, NEW HAMPSHIRE 03431

STATE OF NEW HAMPSHIRE - LIZA P. SARGENT No. 13365 LICENSED PROFESSIONAL ENGINEER

Liza Sargent 5/8/26

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

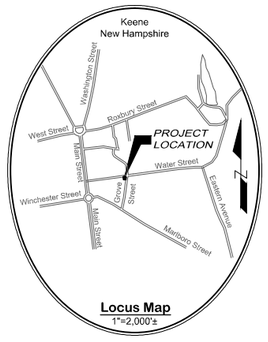
APPROVED BY THE OWNER OR APPLICANT

_____ DATE _____

APPROVED BY THE KEENE PLANNING BOARD

ON _____

CERTIFIED BY CHAIRMAN_____



Locus Map
1"=2,000'±

INDEX OF PLANS

N–1	NOTES & LEGEND
	RIGHT OF WAY AMENDMENT PLAN
S–1	EXISTING CONDITIONS
C–1	SITE PLAN
C–2	GRADING & UTILITIES PLAN
C–3	CONSTRUCTION DETAILS

SVE PROJECT #: K2813
PREPARED BY

Architect:
Unity Homes
6 Blackjack Crossing
Walpole, NH 03608
PHONE (603) 756-3600

Civil Engineer:
SVE Associates
439 West River Road
P.O. Box 1818
Brattleboro, VT 05302
PHONE (802) 257-0561

Land Surveyor:
David A. Mann Survey
40 Gulf Road
Chesterfield, NH 03443
PHONE (603) 903-7259

March 31, 2026
revised thru May 4, 2026

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL CALL DIG-SAFE, AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE THE START OF EXCAVATION.
2. THE CONTRACTOR IS EXPECTED TO BE AWARE OF AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS.
3. ALL TRENCHING, EXCAVATION, SHEETING, SHORING, ETC. SHALL COMPLY WITH THE MOST CURRENT OSHA REGULATIONS.
4. THE CONTRACTOR SHALL NOTIFY SVE ASSOCIATES IF FIELD CONDITIONS VARY FROM THAT SHOWN ON THE PLAN(S). THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLAN(S) UNLESS SO AUTHORIZED BY SVE ASSOCIATES.
5. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH SITE PLANS AND SPECIFICATIONS PROVIDED OR IN ACCORDANCE WITH NH DEP'T OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
6. IN CASE OF CONFLICTS, THE MOST STRINGENT INTERPRETATION OF THE PLANS, SPECIFICATIONS, LOCAL OR STATE REGULATIONS, OR PERMIT CONDITIONS SHALL APPLY. THE ENGINEER SHALL BE THE DETERMINANT AS TO WHAT APPLIES.
7. ALL KNOWN SUBSURFACE UTILITIES AND STRUCTURES HAVE BEEN INDICATED ON THE PLAN(S) AS ACCURATELY AS POSSIBLE. THE EXACT LOCATION MAY VARY AND THE CONTRACTOR IS CAUTIONED TO PROCEED WITH CARE.
8. CONTRACTOR SHALL VERIFY ALL BENCH MARKS, INVERTS, PIPES AND STRUCTURES ELEVATIONS PRIOR TO START OF WORK. IMMEDIATELY NOTIFY SVE ASSOCIATES IF THE FIELD INFORMATION DOES NOT MATCH PLAN INFORMATION.
9. THE OWNER WILL PROVIDE BENCH MARKS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL OTHER LAYOUT AND FOR REPLACEMENT OF LAYOUT COMPLETED BY THE OWNER.
10. CONTRACTOR SHALL PROVIDE A FULL SET OF AS-BUILT DRAWINGS TO THE OWNER WITH SWING TIES OR COORDINATES, LOCATING ALL VALVES, FITTINGS, CORPORATIONS, STRUCTURES, PIPES, ETC. THE AS-BUILTS SHALL INDICATE MATERIALS, PIPE LENGTHS INSTALLED, ALL INVERTS, AND ALL STRUCTURE ELEVATIONS. ACCEPTANCE OF THE WORK IS SUBJECT TO ACCEPTANCE OF THE AS-BUILTS BY THE ENGINEER AND OWNER.
11. MONUMENTATION THAT HAS BEEN DISTURBED SHALL BE RESET BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR AT NO COST TO THE OWNER.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DE-WATERING AT NO ADDITIONAL COST TO THE OWNER.
13. ALL CASTINGS AND VALVE BOXES SHALL BE SET FLUSH IN PAVEMENT AND WALKS, UP 0.1 FEET IN VEGETATED SURFACES.
14. ALL SURFACES SHALL BE GRADED TO DRAIN.
15. THE CONTRACTOR SHALL RESTORE ALL DISTURBED SURFACES TO THEIR ORIGINAL CONDITION OR BETTER. ALL NEW AND EXISTING PIPES AND STRUCTURES SHALL BE CLEANED. ALL SIGNS SHALL BE REPLACED. ALL DAMAGED VEGETATION SHALL BE REPLACED.
16. ALL CURB SHALL BE SET SO THAT ENDS ABUT OR ARE TIPPED DOWN, 6' MINIMUM LENGTH, FLUSH WITH PAVEMENT.
17. UNLESS OTHERWISE NOTED, ALL CURB RADII TO BE FACE OF CURB.

SEDIMENT AND EROSION CONTROL

1. INSTALL ALL SEDIMENT & EROSION CONTROL MEASURES IN ACCORDANCE WITH MANUFACTURER'S DIRECTION OR DETAILS PROVIDED. PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL. THEY SHALL TAKE ALL MEASURES NEEDED TO MINIMIZE EROSION TO THE GREATEST EXTENT POSSIBLE, AT NO ADDITIONAL COST TO THE OWNER, REGARDLESS OF DETAIL SHOWN ON THESE PLANS.
3. CONTRACTOR SHALL INSPECT AND REPAIR ALL SEDIMENT AND EROSION CONTROL MEASURES DAILY WHILE UNDER CONSTRUCTION, THEN AFTER EACH RAINFALL OF 0.5" IN 24 HOURS AND NOT LESS THAN ONCE A WEEK THEREAFTER UNTIL ALL UPHILL SOILS ARE WELL STABILIZED.
4. SEED, FERTILIZE & MULCH ALL FINISH GRADED AREAS WITHIN 72 HOURS OF FINISH GRADING.
5. SEDIMENT CONTROLS AND/OR SILT FENCES SHALL BE REPLACED WHEN CLOGGED AND NO LONGER FUNCTIONAL.
6. SEDIMENT CONTROLS AND/OR SILT FENCES SHALL REMAIN IN PLACE UNTIL ALL UPHILL VEGETATED AREAS ARE STABILIZED.
7. ALL SOIL STOCKPILES SHALL BE SEEDED AND MULCHED IF LEFT IN PLACE MORE THAN 21 DAYS.
8. SEEDING OF ALL DISTURBED AREAS SHALL BE COMPLETED NOT LATER THAN OCTOBER 15TH.
9. STABILIZATION OF ALL WORK AREAS SHALL BE COMPLETED NOT MORE THAN 45 DAYS FOLLOWING THE START OF WORK.
10. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE SEDIMENT AND EROSION CONTROLS AS REQUESTED BY THE ENGINEER.

WINTER CONSTRUCTION REQUIREMENTS:

1. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND 1) INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, or 2) PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF SPRING THAW OR SPRING MELT EVENTS.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15th, INCOMPLETE ROAD OR PARKING SURFACES WHERE WORK HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL MEETING NHDOT ITEM 304.3 SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1. ALL STORM DRAIN TO BE HIGH DENSITY SMOOTH BORE POLYETHYLENE, HANCOR OR APPROVED EQUAL, U.N.O.
2. ALL AREAS TO BE VEGETATED SHALL RECEIVE A MINIMUM OF 6" OF LOAM, SEED AND MULCH. IF PLANS OR SPECIFICATIONS HAVE CONFLICTING DEPTHS OF LOAM, 6" OF LOAM SHALL BE THE PREVAILING DEPTH USED.
3. SEEDING OF ALL DISTURBED AREAS SHALL BE COMPLETED NOT LATER THAN OCTOBER 15TH.
4. SEEDING OF ALL FINISHED AREAS SHALL BE COMPLETED NOT MORE THAN 72 HOURS AFTER FINISH GRADING.
5. STABILIZATION OF ALL WORK AREAS SHALL BE COMPLETED NOT MORE THAN 45 DAYS FOLLOWING THE START OF WORK.
6. BROOM, WASH AND APPLY TACK COAT TO BASE PAVEMENT PRIOR TO WEAR COURSE PLACEMENT.
7. ALL NEW EXTERIOR LIGHTS SHALL BE SHIELDED TO PROTECT AGAINST ADDED LIGHT POLLUTION.

SEQUENCE OF WORK

THE SEQUENCE OF WORK SHALL BE FOLLOWED WITHIN EACH PHASE OF THE PROJECT. AT NO TIME OR PLACE SHALL PROJECT PHASING SUPERCEDE SOUND SEDIMENT AND EROSION CONTROL PLANNING.

1. INSTALL SILT FENCE & SILT SACKS IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS, IN LOCATIONS DETAILED ON THIS PLAN OR AS ORDERED BY THE ENGINEER.
2. CLEAR & GRUB BUILDING/DRIVEWAYS. CONSTRUCT RESIDENCE & DRIVEWAYS.
3. LOAM AND SEED DISTURBED AREAS.
4. REMOVE SILT FENCE AFTER ALL UPHILL SOILS ARE STABILIZED.

STABILIZATION DEFINITION:

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED;
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

A.D.A. ACCESSIBILITY NOTES:

ALL CONSTRUCTION SHALL COMPLY WITH DEPARTMENT OF JUSTICE 28 CFR PART 36, A.D.A. STANDARDS FOR ACCESSIBLE DESIGN. THIS INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING REQUIREMENTS:

PARKING SPACES AND ACCESS AISLES:

1. PARKING SPACES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT EXCEEDING 1:50 (2%) IN ANY DIRECTION.
2. MINIMUM PARKING SPACE WIDTH SHALL BE 8 FT.
3. MINIMUM ACCESS AISLE WIDTH SHALL BE 5 FT (8 FT. FOR VAN ACCESSIBLE SPACES).
4. ACCESSIBLE SPACES SHALL BE DESIGNATED AS RESERVED BY A SIGN SHOWING THE SYMBOL OF ACCESSIBILITY. VAN ACCESSIBLE SPACES SHALL BE FURTHER DESIGNATED AS SUCH BY APPROPRIATE SIGNAGE.

ACCESSIBLE ROUTES:

5. AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED FROM PUBLIC TRANSPORTATION STOPS, A.D.A. PARKING, PASSENGER LOADING ZONES, AND PUBLIC STREETS OR SIDEWALKS, TO AN A.D.A. BUILDING ENTRANCE.
6. AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT A.D.A. ACCESSIBLE BUILDINGS, ACCESSIBLE ELEMENTS AND FACILITIES (MAILBOXES, TRASH RECEPTACLES, COMMON AREAS), AND A.D.A. PARKING THAT ARE ON THE SAME SITE.
7. MAXIMUM SLOPE OF SURFACES ADJACENT TO AN ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20 (5%).
8. CURB RAMP FLARES SHALL NOT EXCEED A SLOPE OF 1:12 (8.33%).
9. MAXIMUM CROSS-SLOPE ALONG ANY PORTION OF THE ACCESSIBLE ROUTE SHALL NOT EXCEED 1:50 (2%).
10. TRANSITIONS FROM RAMPS AND WALKS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

RAMPS:

11. ANY PART OF AN ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 (5%) SHALL BE CONSIDERED A RAMP.
12. THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP.
13. MAXIMUM SLOPE OF ANY RAMP SHALL BE 1:12 (8.33%).
14. MAXIMUM RISE OF ANY RAMP SHALL BE 30 IN. ANY RAMP HAVING A RISE GREATER THAN OR EQUAL TO 6 IN. SHALL HAVE AT LEAST ONE HANDRAIL.
15. RAMPS SHALL HAVE LEVEL LANDINGS AT BOTTOM AND TOP. LANDINGS SHALL BE AS WIDE AS THE RAMP AND AT LEAST 60 IN. LONG.
16. OUTDOOR RAMPS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

IN THE EVENT THAT THESE REQUIREMENTS CONFLICT WITH DESIGN PLANS, OR IF FIELD CONDITIONS RENDER THESE UNATTAINABLE, CONTACT THE ARCHITECT AND/OR ENGINEER PRIOR TO BEGINNING WORK.

SEED SPECIFICATIONS

TEMPORARY SEED

PERENNIAL RYE GRASS

PERMANENT SEED:

ALL MOWABLE AREAS: PARK SEED NHDOT TYPE 15 (CONSERVATION MIX ACCEPTABLE, AS APPROVED BY ENGINEER)

CREEPING RED FESCUE	40 LB/AC
PERENNIAL RYEGRASS	50 LB/AC
KENTUCKY BLUEGRASS	25 LB/AC
REDTOP	5 LB/AC
TOTAL:	120 LB/AC

ALL SLOPES 5:1 OR STEEPER: SLOPE SEED NHDOT TYPE 45 (OR OTHER WILDFLOWER MIX APPROVED BY ENGINEER)

CREEPING RED FESCUE	35 LB/AC
PERENNIAL RYEGRASS	30 LB/AC
REDTOP	5 LB/AC
ALSIKE CLOVER	5 LB/AC
LANCE-LEAVED COREOPSIS	5 LB/AC
OXEYE DAISY	3 LB/AC
BUTTERFLY WEED	3 LB/AC
BLACKEYED SUSAN	3 LB/AC
WILD LUPINE	3 LB/AC
TOTAL:	95 LB/AC

DUST CONTROL:

DUST CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION.

1. PHASE CONSTRUCTION AND SEQUENCE EARTH DISTURBANCE ACTIVITIES TO REDUCE THE AREA OF LAND DISTURBED AT ANY ONE TIME.
2. MAINTAIN AS MUCH NATURAL VEGETATION AS IS PRACTICABLE.
3. USE TRAFFIC CONTROL TO RESTRICT TRAFFIC TO PREDETERMINED ROUTES.
4. USE TEMPORARY MULCHING, PERMANENT MULCHING, TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER TO REDUCE THE NEED FOR DUST CONTROL.
5. APPLY WATER, OR OTHER DUST INHIBITING AGENTS OR TACKIFIERS, AS APPROVED BY THE NHDES.

SITE DATA TABLE:

TAX MAP #: 585-057,
4,959 SQ. FT. ± 0.11 ACRES

ZONE: RESIDENTIAL PRESERVATION (RP)
COTTAGE COURT OVERLAY (CCO)

	AVAILABLE:	(RP) REQUIRED:	(CCO) REQUIRED:
LOT SIZE:	4,959± SF	8,000± SF	NONE
FRONTAGE:	58.41 FEET	50 FEET	30 FEET
LOT WIDTH:	60.18 FEET	60 FEET	NONE
	ALLOWED:	PROPOSED:	
BLDG. HEIGHT:	35 FEET	LESS THAN 35 FEET	

BUILDING SETBACKS:
FRONT: 15'*
REAR: 20'
SIDES: 10'*
*20' SIDE SETBACK ADJACENT TO THE STREET FOR A CORNER LOT(RP), BUT MATCHING ESTABLISHED BUILDING LINE IN CCO FROM EXTERNAL ROADS

LOT COVERAGE:	MAXIMUM:	EXISTING:	PROPOSED:
BUILDINGS:	35% (1,735 S.F./ 0.04 AC)	0% (0 S.F./0.00 AC)	32% (1,604 S.F./ 0.04 AC)
TOTAL IMPERMEABLE:	45% (2,232 S.F./ 0.05 AC)	95% (4,690 S.F./ 0.11 AC)	60% (2,953 S.F./ 0.07 AC)

FLOOD ELEVATION:
100 YEAR FLOOD ELEVATION: 475.0'

PERMITS REQUIRED:

1. CITY OF KEENE, ZONING BOARD OF ADJUSTMENT VARIANCE
2. CITY OF KEENE, CONDITIONAL USE PERMIT-COTTAGE COURT
3. CITY OF KEENE, EXCAVATION PERMIT.
4. CITY OF KEENE, UTILITY CONNECTION PERMIT.

DESIGN FLOW:

DUPLEX WITH 3 BEDROOMS EACH UNIT

PROPERTY OWNER & APPLICANT:

MONADNOCK HABITAT FOR HUMANITY INC.
P.O. BOX 21
KEENE, NH 03431

SYMBOL LEGEND

LINE TYPES
EXISTING MAJOR CONTOUR 320
EXISTING MINOR CONTOUR
PROPERTY LINE
ABUTTER LINE
PROPERTY LINE SETBACK
WATER MAIN W
ELECTRIC POWER LINE E
OVERHEAD UTILITIES OH
SANITARY SEWER LINE SS
UNDERGROUND GAS LINE G

POINTS
IRON PIN/PIPE/ROD
DRILL HOLE
GINNY SPIKE
SEWER MANHOLE
DRAINAGE MANHOLE
CATCH BASIN
WATER VALVE
CURB STOP
FIRE HYDRANT
UTILITY POLE
GUY POLE/WIRE
SIGN
SHRUB

MISCELLANEOUS
BUILDING
PAVEMENT
CONCRETE
LIGHT FIXTURE

LIZA P. SARGENT No. 13365 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE

Liza Sargent 5/8/26

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

NO.	REVISION	DATE	DWN	CHK
1	REVISED PER CITY STAFF COMMENTS	04-MAY-26	LPS	LPS

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NOTES AND LEGEND

MONADNOCK HABITAT FOR HUMANITY DUPLEX
0 GROVE STREET
KEENE, NEW HAMPSHIRE 03431

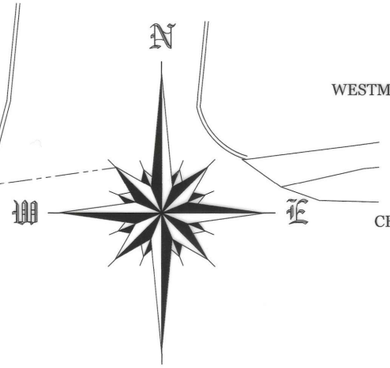
MONADNOCK HABITAT FOR HUMANITY

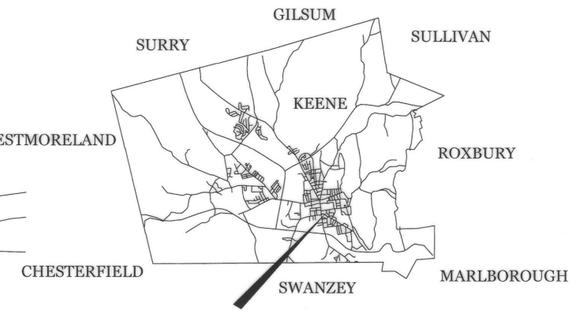
PROJ. #: K2813
DATE: 31-MAR-26
DESIGN: LPS
DRAWN: AJG
CHECKED: LPS
SHEET N-1

Drawing name: P:\Project\NH PROJECTS\K2813 Habitat Grove StreetDwg\Design\K2813 SITE 5-4-26.dwg May 08, 2026 - 12:22pm

92 WATER STREET

WATER STREET





CROSS WALK

CONCRETE WALK

(VOL 408 PG 315 "80.3')
80.30' TO ORIGINAL DEED CORNER
N 82°26'24" E 58.41'

DRILL HOLE IN CONCRETE WALK

A10.21'
R16.00'
D36°34'06"

P.O.B.
GINNY SPIKE

A27.17'
R21.00'
D74°07'46"

A18.69'
R16.00'
D66°54'51"

GINNY SPIKE IN PAVEMENT

GINNY SPIKE DOWN 2"

IRON PIPE FOUND DISTURBED AND BENT OVER AND 1.45'± EAST OF DEED LOCATION

N 82°11'44" E 80.30'
(VOL 408 PG 315 "80.3')

IRON PIPE FOUND
BENT OVER

FIRE HYDRANT EASEMENT

4.18'

10.00'

10.00'

5.00'

D.H. TOP OF CURB

LAND CONVEYED TO THE CITY OF KEENE IN BOOK 2894 PG 53.

REVISED LOT 585-057

TAX MAP PARCEL #585-057-000-000-000
MONADNOCK HABITAT FOR HUMANITY, INC.
PO BOX 21
KEENE, NH 03431
VOL. 3307 PAGE 1311

PARCEL #585-057

0.10 Acres±
4702 Sq. Feet
+257 Sq. Feet
4959 Sq. Feet±

0.11 Acres±

257 Sq. Feet

FORMERLY
CITY OF KEENE
3 WASHINGTON STREET
KEENE, NH 03431
3088/751

BOUNDARY TO BE ELIMINATED

59.81'
60.18'
S 05°44'54" W
S 07°49'28" W

R.O.W. LIMIT AS LAID OUT ON 12/18/14

PROPOSED BOUNDARY

GROVE STREET

N 07°40'49" W 70.11'

SIGN

EDGE OF PAVEMENT

SIGN

REBAR & CAP

IRON PIPE FOUND
1" O.D. DOWN 4"
NEAR ANGLE IRON

N 89°31'08" W 55.57'

2.73'

40.00'

IRON PIPE FOUND
PER PLAN IN
NOTE # 2A.
(GONE)

TAX MAP 585-058-000-000-000
HILARY SOLDATI & LACI VIDEMSKY
91 WATER STREET
KEENE, NH 03431
3271/183

TAX MAP 585-056-000-000-000
210 HOLDINGS LLC
PO BOX 164
MARLOW, NH 03456
2637/34

TAX MAP 585-031-000-000-000
PEMI PROPERTIES NH LLC
186 FOX FARM ROAD
NEW IPSWICH, NH 03071
3276/1348

TAX MAP 585-032-000-000-000
LANDON REALTY TRUST
SUSAN MAZZONE TRUSTEE
98 OVERVIEW DRIVE
JAFFREY, NH 03452
3188/392

NOTES

1. BEARINGS ARE BASED ON GPS OBSERVATION AS PROVIDED. AND THE PLAN IN NOTE 2A.
2. PLAN REFERENCES:
   A. GROVE STREET WIDENING PLAN, PREPARED BY SVE ASSOCIATES DATED 3-11-2013, ON FILE AT KEENE PUBLIC WORKS.
3. ASSESSOR INFORMATION BASED ON TOWN RECORDS:
   TAX MAP PARCEL #585-057-000-000-000
   MONADNOCK HABITAT FOR HUMANITY, INC.
   PO BOX 21
   KEENE, NH 03431
   VOL. 3307 PAGE 1311
4. ZONING DISTRICT: RP
5. THE RIGHT OF WAY OF WATER STREET AND GROVE STREET ARE AS SHOWN ON CITY MAPPING AS PROVIDED, SEE NOTE 2A ABOVE.

LEGEND

- WATER VALVE
- UTILITY POLE
- MAN HOLE
- SHRUB
- MONUMENT FOUND
- IRON PIN FOUND
- FIRE HYDRANT
- GUY ANCHOR
- DRILL HOLE
- DECIDUOUS TREE
- CATCH BASIN
- UTILITY EASEMENT
- PROPERTY LINE
- FORMER P/L

RIGHT OF WAY AMENDMENT PLAN
OF
REVISED LOT 585-057
PREPARED FOR
CITY OF KEENE
AND
MONADNOCK HABITAT FOR HUMANITY, INC.

ZERO GROVE STREET
CITY OF KEENE
COUNTY OF CHESHIRE
STATE OF NEW HAMPSHIRE
SCALE: 1 INCH = 10 FEET
MAY 27, 2025

0 10 20 30

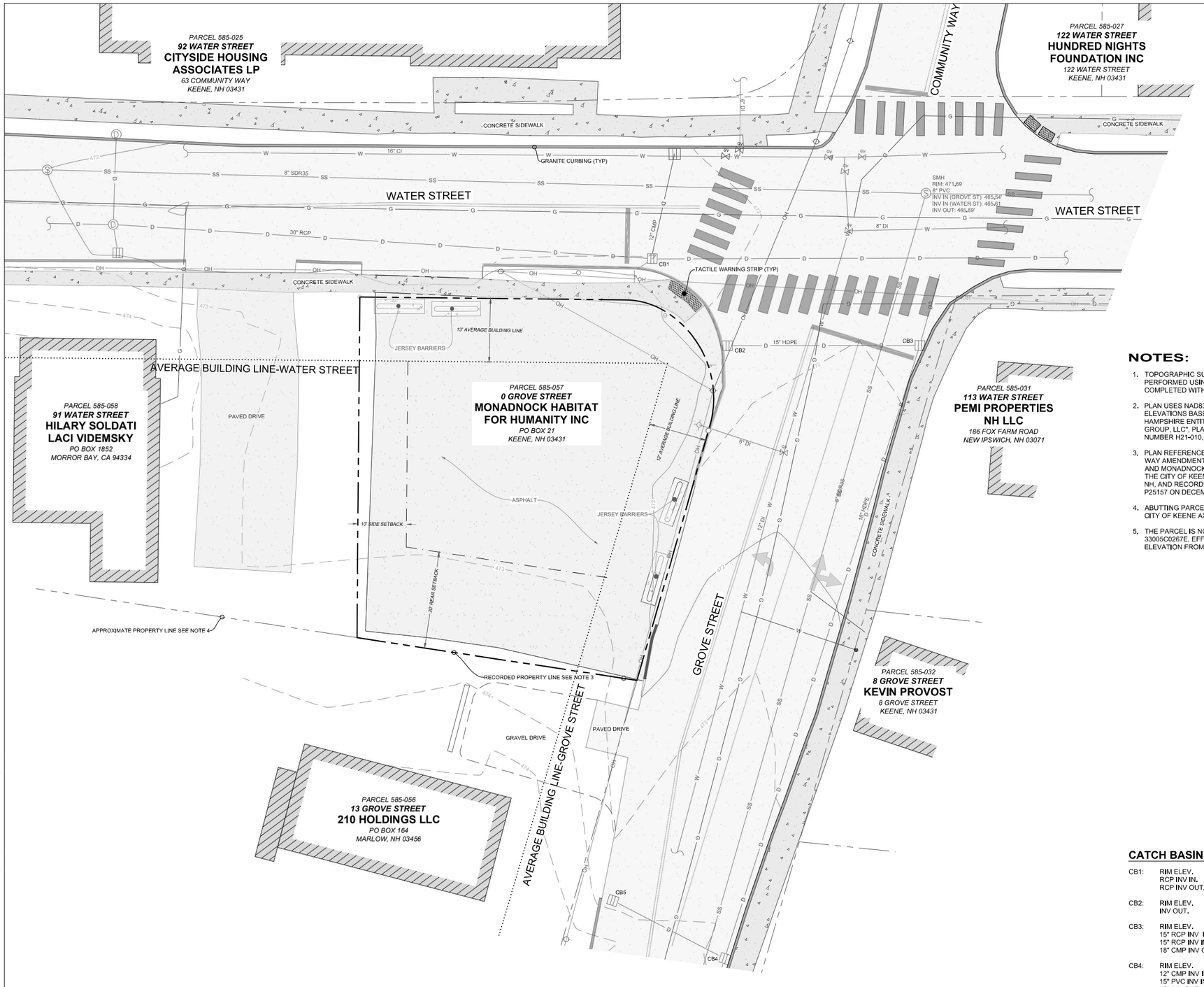
THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION FROM A TOTAL STATION RANDOM OFFSET CONTROL TRAVERSE. THIS IS A RURAL STANDARD PROPERTY SURVEY. DIMENSIONS SHOWN HEREON ARE SUBJECT TO THE CLOSURE WITH RESPECT TO THE SURVEY CLASSIFICATION. THIS SURVEY AND PLAT ARE INVALID WITHOUT AN ORIGINAL SIGNATURE AND SEAL. THIS SURVEY AND PLAT ARE SUBJECT TO ANY ITEMS THAT A TRUE AND ACCURATE TITLE ABSTRACT AND OPINION MAY REVEAL, CONSULT LEGAL COUNSEL FOR ALL MATTERS REGARDING TITLE.

DAVID A. MANN LLS 641

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No 641 DAVID A MANN — SIGNATURE

DAVID A MANN SURVEY
40 GULF ROAD
CHESTERFIELD, N.H. 03443
603 903 7239

REVISION BLOCK:
11-07-2025, NOTATIONS
6-25-2025, EAST BOUNDARY
6-9-2025, ADDRESS



SYMBOL LEGEND

LINE TYPES

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPERTY LINE
- ABUTTER LINE
- PROPERTY LINE SETBACK
- WATER MAIN
- ELECTRIC POWER LINE
- OVERHEAD UTILITIES
- SANITARY SEWER LINE
- UNDERGROUND GAS LINE

POINTS

- IRON PIN/PIPE/ROD
- DRILL HOLE
- GINNY SPIKE
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- WATER VALVE
- CURB STOP
- FIRE HYDRANT
- UTILITY POLE
- GUY POLE/WIRE
- SIGN
- SHRUB

MISCELLANEOUS

- BUILDING
- PAVEMENT
- CONCRETE

NOTES:

1. TOPOGRAPHIC SURVEY CONDUCTED JANUARY 19, 2026 BY SVE ASSOCIATES PERFORMED USING A TRIMLE S6 ROBOTIC INSTRUMENT. TOPOGRAPHICAL SURVEY COMPLETED WITH SIGNIFICANT SNOW COVER.
2. PLAN USES NAD83 NEW HAMPSHIRE STATE PLAN COORDINATE SYSTEM AND NAVD88 ELEVATIONS BASED ON PLAN BY HUNTLEY SURVEY & DESIGN OF TEMPLE NEW HAMPSHIRE ENTITLED "EXISTING CONDITION PLAN LAND OF GREEN DIAMOND GROUP, LLC", PLAN DATED 03/17/2021, HUNTLEY SURVEY & DESIGN PROJECT NUMBER H21-010, AND NGS PID#MZ0020 USGS SURVEY DISK SET IN CONCRETE POST.
3. PLAN REFERENCES PROPERTY LINES FROM RECORDED PLAN ENTITLED "RIGHT OF WAY AMENDMENT PLAN OF REVISED LOT 585-057 PREPARED FOR CITY OF KEENE AND MONADNOCK HABITAT FOR HUMANITY, INC" LOCATED AT 0 GROVE STREET IN THE CITY OF KEENE BY DAVID A. MANN SURVEY OF 40 GULF ROAD CHESTERFIELD, NH, AND RECORDED IN THE CHESHIRE REGISTRY OF DEEDS UNDER PLAN NUMBER P25157 ON DECEMBER 18, 2025.
4. ABUTTING PARCEL'S PROPERTY LINES ARE APPROXIMATE AND ARE SOURCED FROM CITY OF KEENE AXISGIS SITE.
5. THE PARCEL IS NOT LOCATED IN A MAPPED FLOOD HAZARD AREA PER FEMA PANEL 33005C0267E, EFFECTIVELY DATED MAY 23,2006, THE CLOSEST FLOOD HAZARD ELEVATION FROM CROSS SECTIONS N & O IS 475.0.

CATCH BASIN DATA

CB1:	RIM ELEV.	471.99'
	RCP INV IN.	467.39'
	RCP INV OUT.	467.29'
CB2:	RIM ELEV.	471.79'
	INV OUT.	467.79'
CB3:	RIM ELEV.	471.81'
	15" RCP INV IN. (CB4)	468.81'
	15" RCP INV IN.	467.81'
	18" CMP INV OUT.	467.81
CB4:	RIM ELEV.	473.33'
	12" CMP INV IN. (CB5)	468.73'
	15" PVC INV IN.	467.63'
	18" INV OUT.	467.53'
CB5	RIM ELEV.	473.31'
	INV OUT (CB4)	467.11'

DISCLAIMER:

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DIG SAFE 1-888-344-7233

STATE OF NEW HAMPSHIRE – LIZA P. SARGENT No. 13365 LICENSED PROFESSIONAL ENGINEER

Liza Sargent 5/8/26

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

NO.	REVISION	DATE	DWN	CHK

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SVE Associates
P.O. Box 1818
439 West River Road
Brattleboro, VT 05302
T 802.257.0561
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EXISTING CONDITIONS

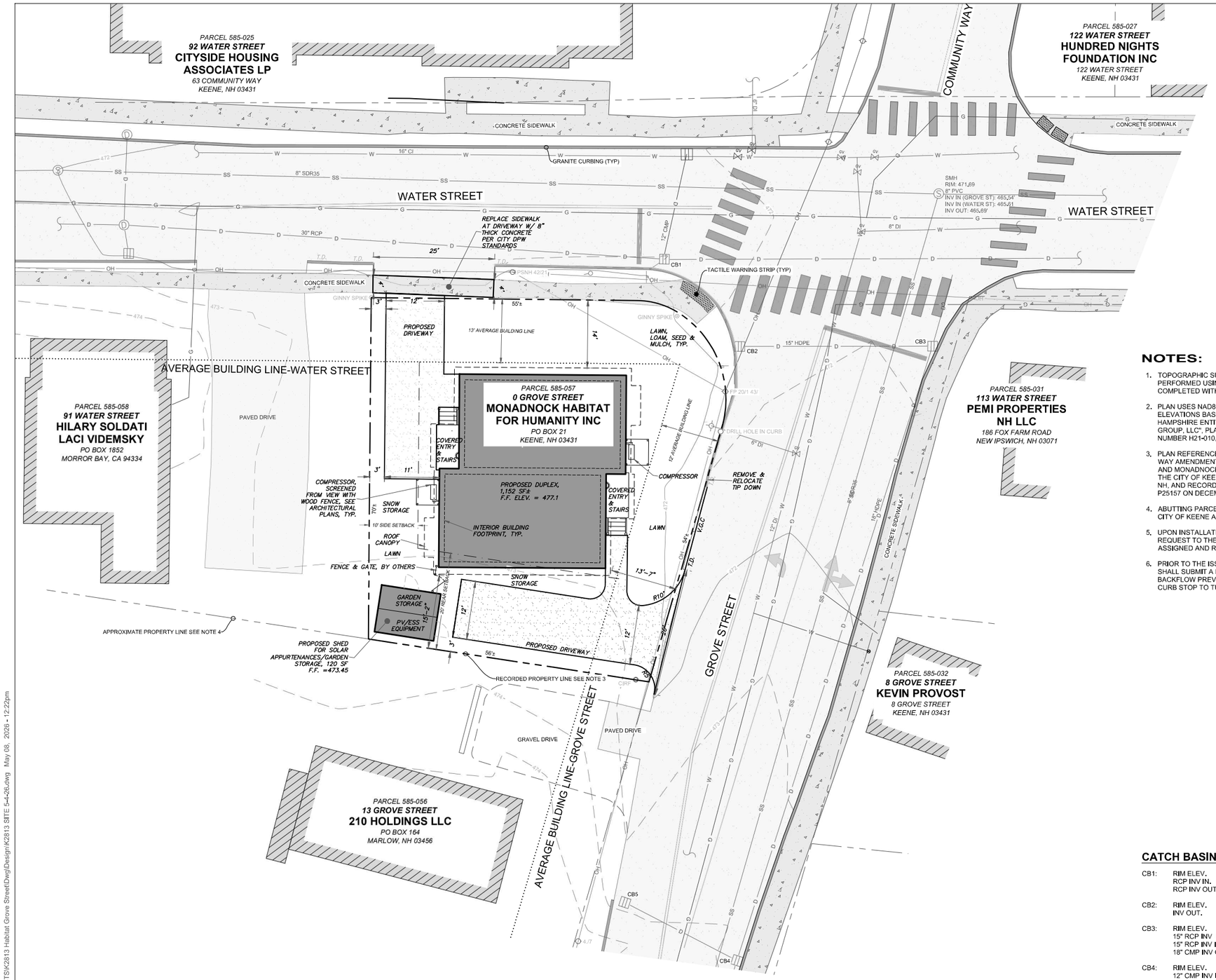
MONADNOCK HABITAT FOR HUMANITY DUPLEX
0 GROVE STREET
KEENE, NEW HAMPSHIRE 03431

MONADNOCK HABITAT FOR HUMANITY

0 5 10 20
GRAPHIC SCALE 1" = 10'

N

PROJ. #: K2813
DATE: 31-MAR-26
DESIGN: LPS
DRAWN: AJG
CHECKED: LPS
SHEET S-1



SYMBOL LEGEND

LINE TYPES

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- EXISTING MINOR CONTOUR
- PROPERTY LINE
- ABUTTER LINE
- PROPERTY LINE SETBACK
- WATER MAIN
- ELECTRIC POWER LINE
- OVERHEAD UTILITIES
- SANITARY SEWER LINE
- UNDERGROUND GAS LINE

POINTS

- IRON PIN/PIPE/ROD
- DRILL HOLE
- GINNY SPIKE
- SEWER MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- WATER VALVE
- CURB STOP
- FIRE HYDRANT
- UTILITY POLE
- GUY POLE/WIRE
- SIGN
- SHRUB

MISCELLANEOUS

- BUILDING
- PAVEMENT
- CONCRETE

NOTES:

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4. ABUTTING PARCEL'S PROPERTY LINES ARE APPROXIMATE AND ARE SOURCED FROM CITY OF KEENE AXISGIS SITE.
5. UPON INSTALLATION OF BUILDING FOUNDATION, THE OWNER SHALL SUBMIT A REQUEST TO THE CITY ENGINEER FOR A STREET ADDRESS ASSIGNMENT TO BE ASSIGNED AND REGISTERED IN ACCORDANCE WITH E-911 STANDARDS.
6. PRIOR TO THE ISSUANCE OF A CO, THE DEVELOPER AND/OR PROPERTY OWNER SHALL SUBMIT A REQUEST TO THE CITY ENGINEER FOR A WATER METER AND BACKFLOW PREVENTOR INSTALLATION AND OPERATION OF THE WATER SERVICE CURB STOP TO TURN ON THE WATER.

CATCH BASIN DATA

CB1:	RIM ELEV.	471.99'
	RCP INV IN.	467.39'
	RCP INV OUT.	467.29'
CB2:	RIM ELEV.	471.79'
	INV OUT.	467.79'
CB3:	RIM ELEV.	471.81'
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	15" RCP INV IN.	467.81'
	18" CMP INV OUT.	467.81
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	12" CMP INV IN. (CB5)	468.73'
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	18" INV OUT.	467.53'
CB5	RIM ELEV.	473.31'
	INV OUT (CB4)	467.11'

DISCLAIMER:

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DIG SAFE 1-888-344-7233

LIZA P. SARGENT – STATE OF NEW HAMPSHIRE – No. 13365 – LICENSED PROFESSIONAL ENGINEER

Liza Sargent 5/8/26

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

NO.	REVISION	DATE	DWN	CHK
1	REVISED PER CITY STAFF COMMENTS	04-MAY-26	LPS	LPS

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SITE PLAN

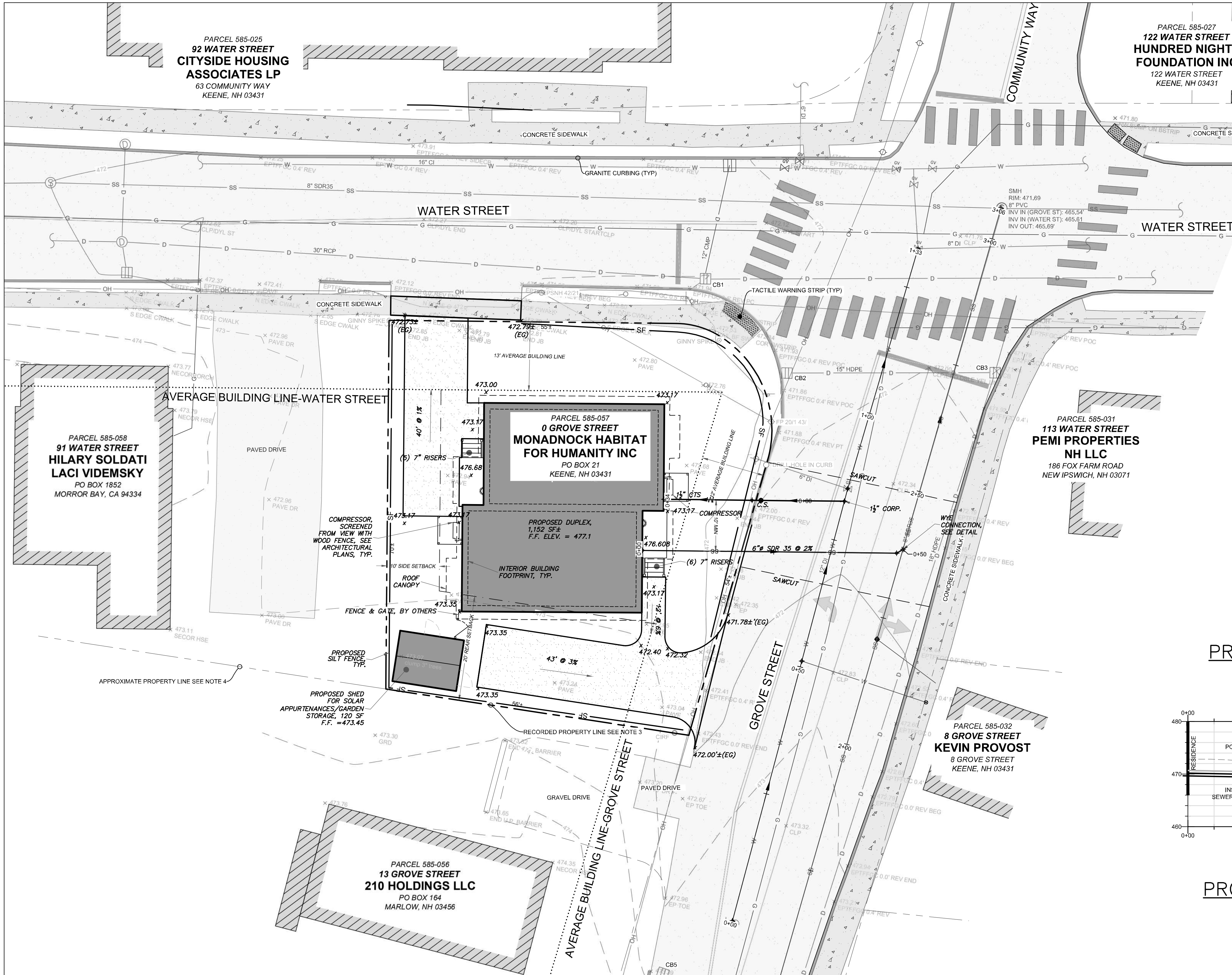
MONADNOCK HABITAT FOR HUMANITY DUPLEX
0 GROVE STREET
KEENE, NEW HAMPSHIRE 03431

MONADNOCK HABITAT FOR HUMANITY

0 5 10 20
GRAPHIC SCALE 1" = 10'

N

PROJ. #: K2813
DATE: 31-MAR-26
DESIGN: LPS
DRAWN: AJG
CHECKED: LPS
SHEET C-1



SYMBOL LEGEND

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- PROPERTY LINE SETBACK
- WATER MAIN
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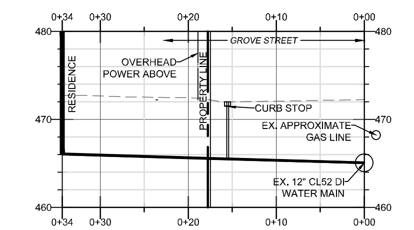
- UTILITY POLE
- GUY POLE/WIRE
- SIGN
- SHRUB

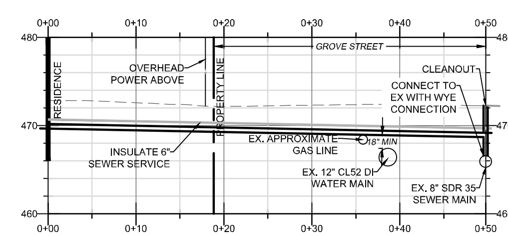
MISCELLANEOUS

- BUILDING
- PAVEMENT
- CONCRETE



PROPOSED WATER SERVICE

0 5' 10' 20'
GRAPHIC SCALE 1" = 10'



PROPOSED SEWER SERVICE

0 5' 10' 20'
GRAPHIC SCALE 1" = 10'

NOTES:

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4. ABUTTING PARCEL'S PROPERTY LINES ARE APPROXIMATE AND ARE SOURCED FROM CITY OF KEENE AXISGIS SITE.

KEENE DPW NOTES:

1. UPON COMPLETION OF THE INSTALLATION OF THE BUILDING FOUNDATION AND PRIOR TO ISSUANCE OF A UTILITY CONNECTION PERMIT THE PROPERTY OWNER SHALL SUBMIT A REQUEST FOR A STREET NUMBER ADDRESS FROM THE CITY ENGINEER IN ACCORDANCE WITH E-911 AND CITY STANDARDS.
2. PRIOR TO EXCAVATION IN THE RIGHT OF WAY AND THE INSTALLATION OF THE WATER AND SEWER UTILITIES THE CONTRACTOR SHALL SUBMIT FOR AND OBTAIN AN EXCAVATION AND UTILITY CONNECTION PERMIT WITH THE PUBLIC WORKS DEPARTMENT.
3. THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER AT THE PUBLIC WORKS DEPARTMENT, TO REQUEST WATER METER(S) AND BACKFLOW PREVENTOR INSTALLATION FOR THE BUILDING.
4. ANY FUTURE MODIFICATION TO THE DRIVEWAYS SHALL BE REVIEWED AND APPROVED BY THE CITY ENGINEER.

CATCH BASIN DATA

CB1:	RIM ELEV.	471.99'
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	RCP INV OUT.	467.29'
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DIG SAFE
1-888-344-7233

STATE OF NEW HAMPSHIRE – LIZA P. SARGENT No. 13365 LICENSED – PROFESSIONAL ENGINEER

Liza Sargent 5/7/26

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

NO.	REVISION	DATE	DWN	CHK
1	REVISED PER CITY STAFF COMMENTS	04-MAY-26	LPS	LPS

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GRADING & UTILITIES PLAN

MONADNOCK HABITAT FOR HUMANITY DUPLEX
0 GROVE STREET
KEENE, NEW HAMPSHIRE 03431

MONADNOCK HABITAT FOR HUMANITY

0 5 10 20
GRAPHIC SCALE 1" = 10'

N

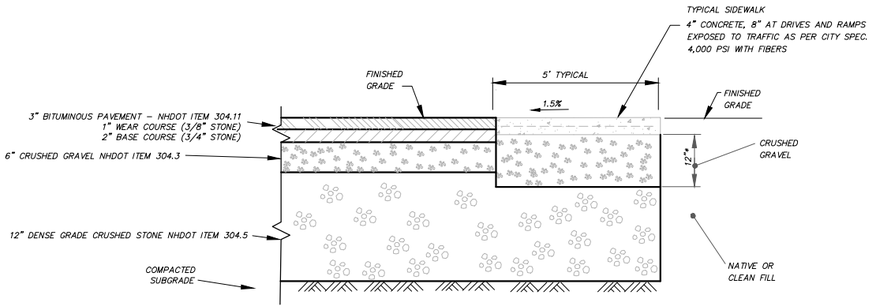
PROJ. #: K2813

DATE: 31-MAR-26

DESIGN: LPS
DRAWN: AJG
CHECKED: LPS

SHEET C-2

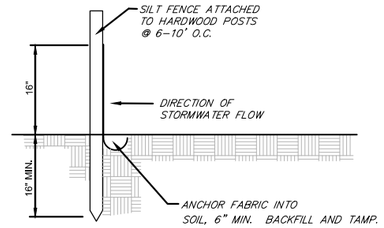
Drawing name: P:\Project\NH PROJECTS\K2813 Habitat Grove Street\Dwg\Design\K2813 SITE 5-4-26.dwg May 08, 2026 - 12:22pm



1. SUB BASE SHALL BE A MINIMUM THICKNESS OF 12" OF CLEAN GRANULAR MATERIAL OR SUITABLE NATIVE/EXISTING MATERIAL COMPACTED TO 95%
2. BASE SHALL BE A MINIMUM THICKNESS OF 6" OF CRUSHED GRAVEL COMPACTED TO 95%
3. SIDEWALKS SHALL BE GRADED TO DRAIN, CROSS SLOPE NOT TO EXCEED 2%
4. MAXIMUM LONGITUDINAL GRADE SHALL BE 8.3%
5. MINIMUM LONGITUDINAL GRADE SHALL BE 0.5%
6. CONCRETE SHALL BE 4000 PSI CLASS AA CONCRETE WITH 1.5 LBS OF SYNTHETIC FIBER REINFORCEMENT PER CUBIC YARD,
7. CONCRETE SHALL HAVE 5-9% AIR ENTRAINMENT.
8. SLUMP SHALL BE BETWEEN 3" AND 5".
9. MAXIMUM SPACING OF EXPANSION JOINTS SHALL BE 30 FEET, AT CURB RAMPS, AND EXTEND FULL WIDTH OF SIDEWALK.
10. CONTROL JOINTS SHALL BE A UNIFORM DISTANCE APART, TYPICALLY SPACED FIVE FEET, AND 3/4" DEEP.
15. ALL EDGES AND JOINTS SHALL BE FINISHED WITH A HAND EDGING TOOL.
16. THE SURFACE OF THE SIDEWALK SHALL BE MAG-FLOATED AND TROWELED, AND GIVEN A FINE GRAINED BROOM FINISH.
17. AS SOON AS THE CONCRETE HAS ATTAINED ITS INITIAL SET, IT SHALL BE COVERED WITH PLASTIC, BURLAP, OR OTHER APPROVED MATERIAL AND KEPT MOIST FOR A MINIMUM OF 7 DAYS TO CURE, AND SHALL NOT BE ALLOWED TO FREEZE. NO TRAFFIC SHALL BE ALLOWED ON THE SIDEWALK DURING THE CURING PERIOD.
18. CONCRETE SHALL BE SEALED WITH THE FOLLOWING METHOD, OR AS APPROVED BY THE ENGINEER: WATER REPELLANT TREATMENT OF SILANE-SILOXANE APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

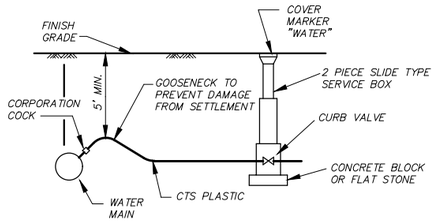
DRIVEWAY WITH CONCRETE SIDEWALK

NOT TO SCALE



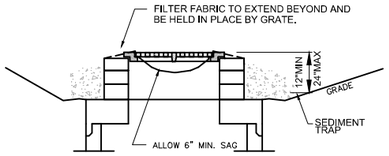
SILT FENCE

NOT TO SCALE

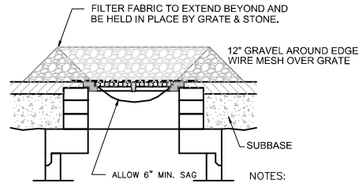


SERVICE CONNECTION DETAIL

NOT TO SCALE



LANDSCAPED AREAS



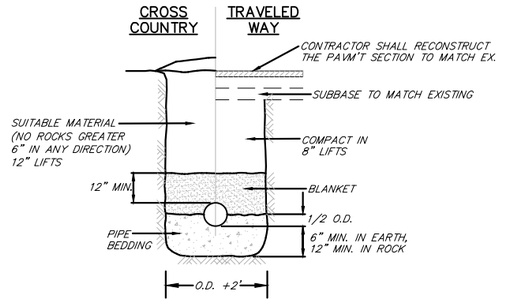
PAVED AREAS

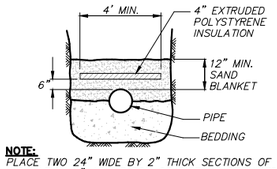
NOTES:
1. TEMPORARY DURING CONSTRUCTION.
2. REMOVE AND REPLACE WHEN CLOGGED.

REGULAR MAINTENANCE, INCLUDING REPLACEMENT OF SEDIMENT & EROSION CONTROLS SHALL BE CONDUCTED IN ACCORDANCE WITH ALL PERMIT CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER.

CATCH BASIN GRATE INLET FILTER

NOT TO SCALE





NOTE:
PLACE TWO 24" WIDE BY 2" THICK SECTIONS OF INSULATION 6" ABOVE TOP OF PIPE AS REQUIRED WHEN MIN. COVER IS LESS THAN SPECIFIED.

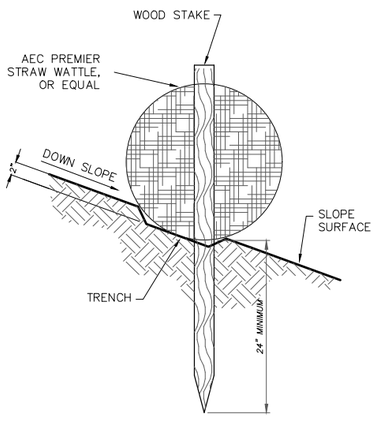
INSULATION OVER PIPE DETAIL

NOT TO SCALE

PIPE MATERIAL	BEDDING	BLANKET
DUCTILE IRON	6" SAND	12" SAND
PVC	6" SAND	12" SAND
HDPE	6" SAND	12" SAND
PLASTIC	6" SAND	12" SAND
COPPER	6" SAND	12" SAND
SDR 35	6" STONE	STONE HALF WAY UP PIPE & 12" SAND ABOVE

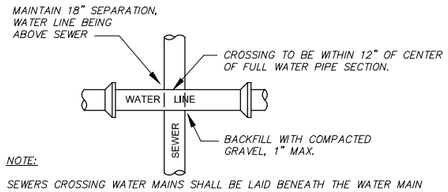
PIPE IN TRENCH DETAIL

NOT TO SCALE



STRAW WATTLE

NOT TO SCALE



NOTE:

SEWERS CROSSING WATER MAINS SHALL BE LAID BENEATH THE WATER MAIN WITH AT LEAST 18 INCHES OF VERTICAL CLEARANCE BETWEEN THE OUTSIDE OF THE SEWER AND THE OUTSIDE OF THE WATER MAIN. WHEN IT IS IMPOSSIBLE TO MAINTAIN THE 18 INCH VERTICAL SEPARATION OR WHERE THE SEWER MUST BE LAID ABOVE THE WATER MAIN:

A. THE CROSSING SHALL BE ARRANGED SO THAT ONE FULL LENGTH OF SEWER IS CENTERED ABOVE OR BELOW THE WATER LINE WITH SEWER JOINTS AS FAR AS POSSIBLE FROM THE WATER JOINTS.

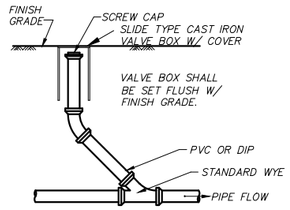
B. THE SEWER PIPE MUST BE CONSTRUCTED TO WATER MAIN STANDARDS FOR A MINIMUM DISTANCE OF 20 FEET EITHER SIDE OF THE CROSSING OR A TOTAL OF THREE PIPE LENGTHS, WHICHEVER IS GREATER.

C. THE SECTION CONSTRUCTED TO WATER MAIN STANDARDS MUST BE PRESSURE TESTED TO MAINTAIN 50 PSI FOR 15 MINUTES WITHOUT LEAKAGE PRIOR TO BACKFILLING BEYOND ONE FOOT ABOVE THE PIPE TO ASSURE WATER TIGHTNESS.

D. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO PREVENT DAMAGE TO THE WATER MAIN.

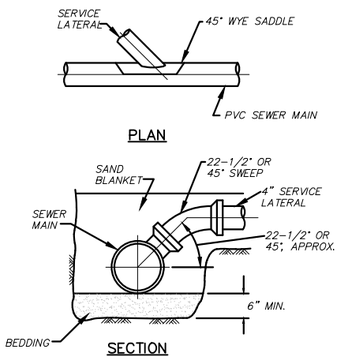
SEWER/WATER LINE CROSSING DETAIL

NOT TO SCALE



CLEANOUT DETAIL

NOT TO SCALE



SEWER LATERAL WYE CONNECTION DETAIL

NOT TO SCALE

LIZA P. SARGENT No. 13365 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE

5/8/26
Liza Sargent
LIZA P. SARGENT DATE
R.C.E. NUMBER: 13365

NO.	REVISION	DATE	DWN	CHK
1	REVISED PER CITY STAFF COMMENTS	04-MAY-26	LPS	LPS

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Engineering
Planning
Landscape Architecture
Surveying

SVE Associates
P.O. Box 1818
439 West River Road
Brattleboro, VT 05302
T 802.257.0561
www.sveassoc.com

CONSTRUCTION DETAILS

MONADNOCK HABITAT FOR HUMANITY DUPLEX
0 GROVE STREET
KEENE, NEW HAMPSHIRE 03431

MONADNOCK HABITAT FOR HUMANITY

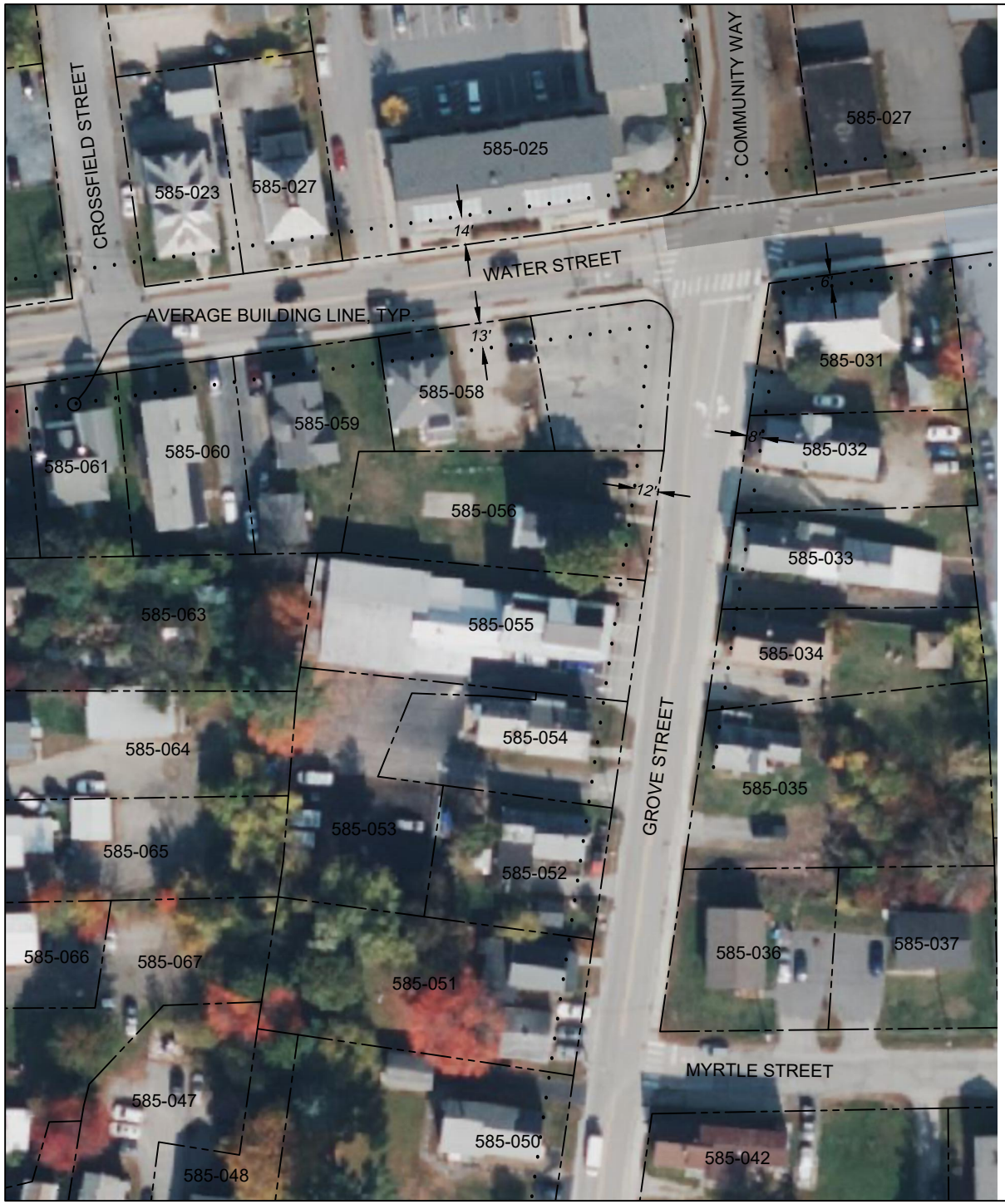
GRAPHIC SCALE: AS SHOWN

PROJ.#: K2813

DATE: 31-MAR-26

DESIGN: LPS
DRAWN: AJG
CHECKED: LPS

SHEET C-3



SYMBOL LEGEND

LINE TYPES

- PROPERTY LINE
- AVERAGE BUILDING LINE
- PROPOSED BUILDING
- PROPOSED BUILDING OVERHANG

ZONING DISTRICT

- RESIDENTIAL PRESERVATION DISTRICT
- DOWNTOWN DEVELOPMENT DISTRICT

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Engineering
Planning
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Surveying

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439 West River Road
Brattleboro, VT 05302
T 802.257.0561
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NO.	REVISION	DATE	DWN	CHK

AVERAGE BUILDING LINE

MONADNOCK HABITAT FOR HUMANITY DUPLEX
0 GROVE STREET
KEENE, NEW HAMPSHIRE 03431

MONADNOCK HABITAT FOR HUMANITY

0 40 80

GRAPHIC SCALE: 1" = 80'

N

PROJ. #: K2813

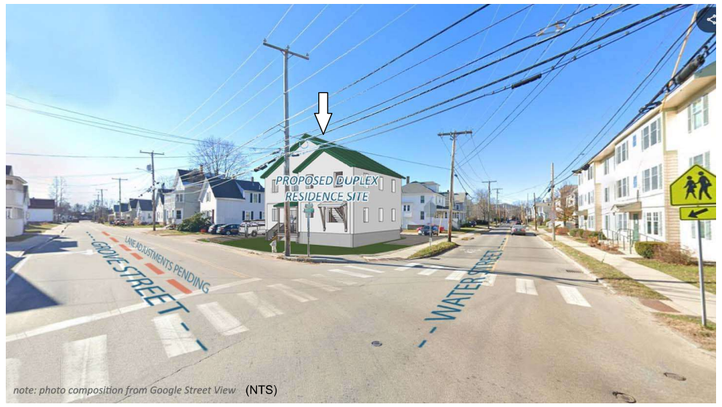
DATE: 31-MAR-26

DESIGN: LPS
DRAWN: AJG
CHECKED: LPS

SHEET B

MONADNOCK HABITAT FOR HUMANITY

0 GROVE STREET, KEENE, NH



	EXTERIOR AREA	INTERIOR AREA
FIRST FLOOR AREA (UNIT A):	689 SF	576 SF
SECOND FLOOR AREA (UNIT A):	689 SF	576 SF
TOTAL AREA (UNIT A):	1,378 SF	1,152 SF
FIRST FLOOR AREA (UNIT B):	689 SF	576 SF
SECOND FLOOR AREA (UNIT B):	689 SF	576 SF
TOTAL AREA (UNIT B):	1,378 SF	1,152 SF
PORCH AREA (PER UNIT):	45 SF	

PROPOSED USE:	DWELLING. TWO-FAMILY
PROPOSED BUILDING HEIGHT:	2 STORIES / LESS THAN 35 FT.
PROPOSED GROSS FLOOR AREA:	2,756 SF

PLAN LIST

ARCHITECTURAL DRAWINGS

A000	COVER SHEET
A101	FIRST FLOOR PLAN
A102	SECOND FLOOR PLAN
A103	ROOF PLAN
A200	EXTERIOR ELEVATIONS
A201	EXTERIOR ELEVATIONS
A202	EXTERIOR ELEVATIONS
A203	EXTERIOR ELEVATIONS
A300	BUILDING SECTIONS
A301	BUILDING SECTIONS & GARDEN / ESS SHED

ZBA / PLANNING APPLICATION - 06MAY2026

Bensonwood unity homes
6 BLACKJACK CROSSING
WALPOLE, NH 03608
(603) 756-3600
bensonwood.com

REVISION SCHEDULE

No.	Description	Date
	DEPT COMMENTS	5/06/2026

Stamp

LICENSED ARCHITECT
WILLIAM P. HOETZ
No. 2189
STATE OF NEW HAMPSHIRE
5/4/2026
Monadnock Habitat for Humanity

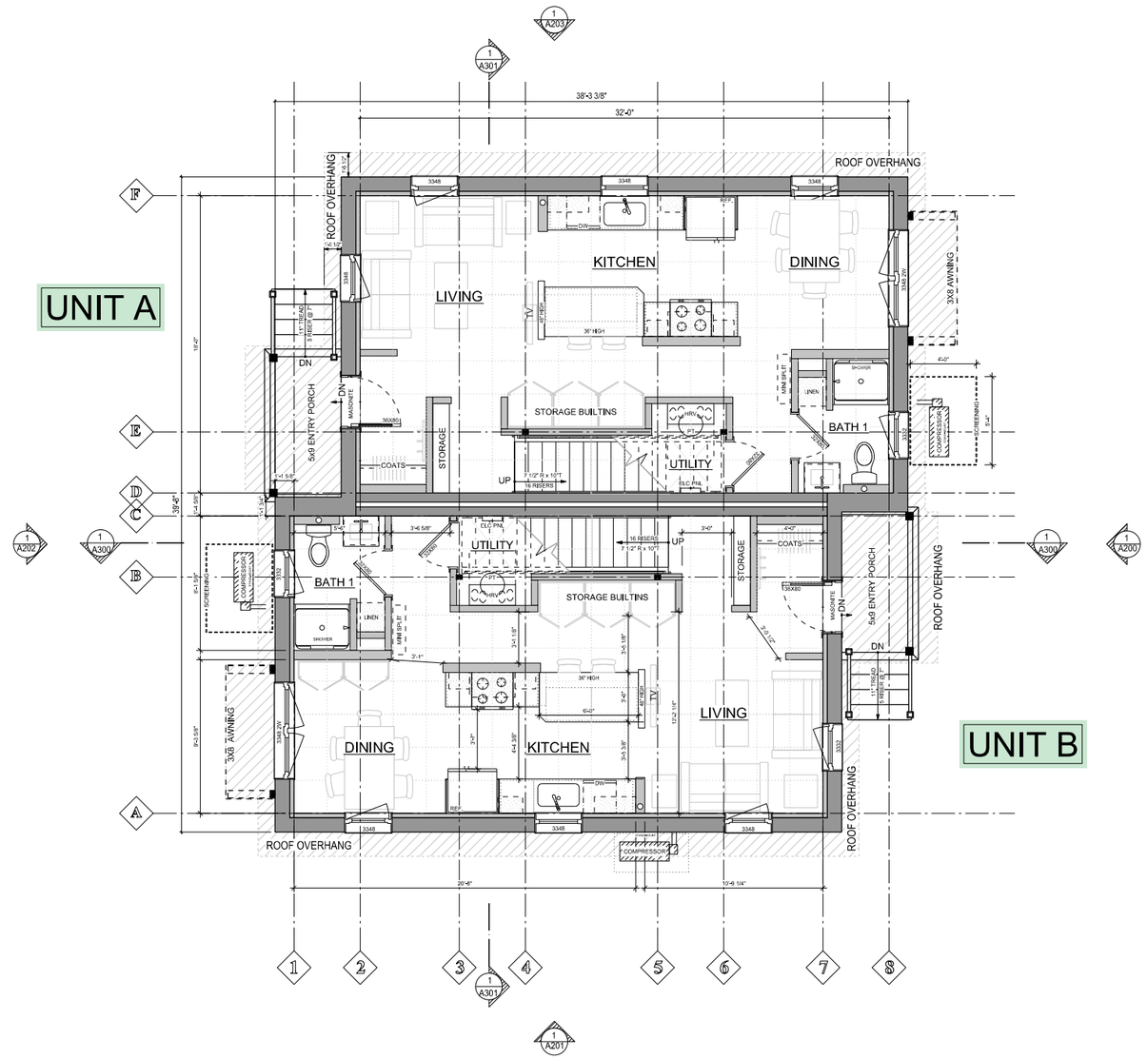
Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

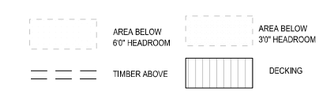
COVER SHEET

A000

Scale AS NOTED

FOR REVIEW





WALL TYPE LEGEND	
INSULATED WALL PANEL WITH 2 1/2" OPEN-BUILT CHASE	
2x4 AT 24" O.C. PARTITION 5/8" GWB BOTH SIDES	
2x6 PARTITION (OR AS INDICATED) 5/8" GWB BOTH SIDES	2x6
SITE INSULATED PANEL	
TIMBER POSTS	
2x6 AT 24" O.C. EXTERIOR WALL 5/8" SHEATHING	

GENERAL FLOOR PLAN NOTES:
1. SEE A001 FOR SPECIFICATIONS AND ENERGY CODE INFORMATION.
2. REFER TO FOUNDATION AND FRAMING PLANS, DETAILS, AND SPECIFICATIONS FOR STRUCTURAL INFORMATION.
3. INTERIOR WALLS DIMENSIONED TO FINISH. (FINISH 5/8" THICK)
4. ALL INTERIOR WALLS ARE 2x4 UNLESS OTHERWISE INDICATED.

0 2' 4' 8'
1/4" = 1'-0"

ZBA / PLANNING APPLICATION - 06MAY2026

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(603) 756-3600
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REVISION SCHEDULE

No.	Description	Date
	DEPT COMMENTS	5/06/2026

Stamp

LICENSED ARCHITECT WILLIAM H. HOLTZ No. 2199 STATE OF NEW HAMPSHIRE 06MAY2026

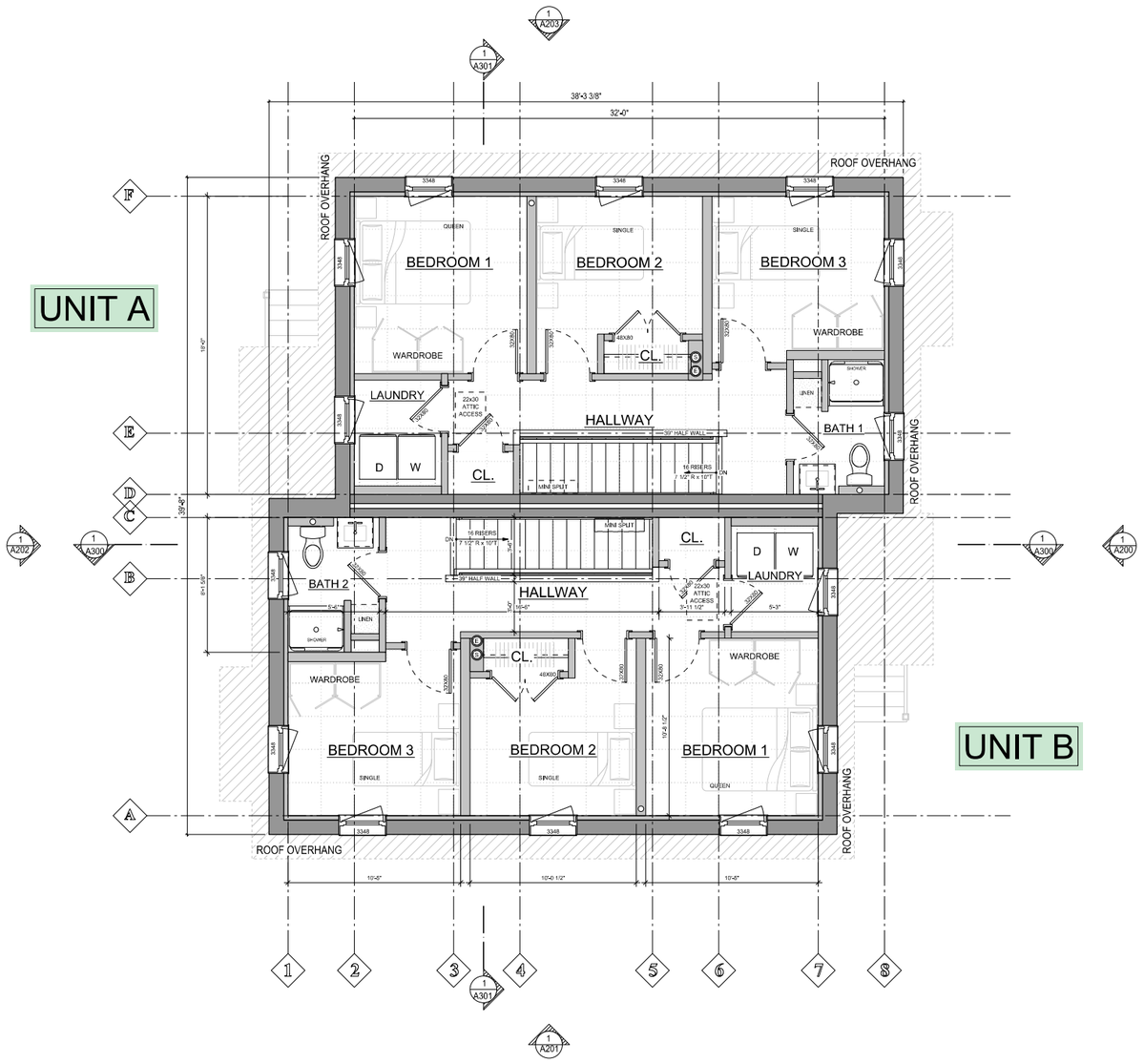
Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

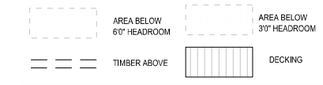
FIRST FLOOR PLAN

A101

Scale AS NOTED

FOR REVIEW





WALL TYPE LEGEND	
INSULATED WALL PANEL WITH 2 1/2" OPEN-BUILT CHASE	
2x4 AT 24" O.C. PARTITION 5/8" GWB BOTH SIDES	
2x6 PARTITION (OR AS INDICATED) 5/8" GWB BOTH SIDES	2x6
SITE INSULATED PANEL	
TIMBER POSTS	
2x6 AT 24" O.C. EXTERIOR WALL 5/8" SHEATHING	

GENERAL FLOOR PLAN NOTES:
1. SEE A001 FOR SPECIFICATIONS AND ENERGY CODE INFORMATION.
2. REFER TO FOUNDATION AND FRAMING PLANS, DETAILS, AND SPECIFICATIONS FOR STRUCTURAL INFORMATION.
3. INTERIOR WALLS DIMENSIONED TO FINISH. (FINISH 5/8" THICK)
4. ALL INTERIOR WALLS ARE 2x4 UNLESS OTHERWISE INDICATED.

0 2' 4' 8'
1/4" = 1'-0"

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REVISION SCHEDULE

No.	Description	Date
	DEPT COMMENTS	5/06/2026

Stamp

LICENSED ARCHITECT
WILLIAM H. HOLTZ
No. 2169
STATE OF NEW HAMPSHIRE
Monadnock Design Community

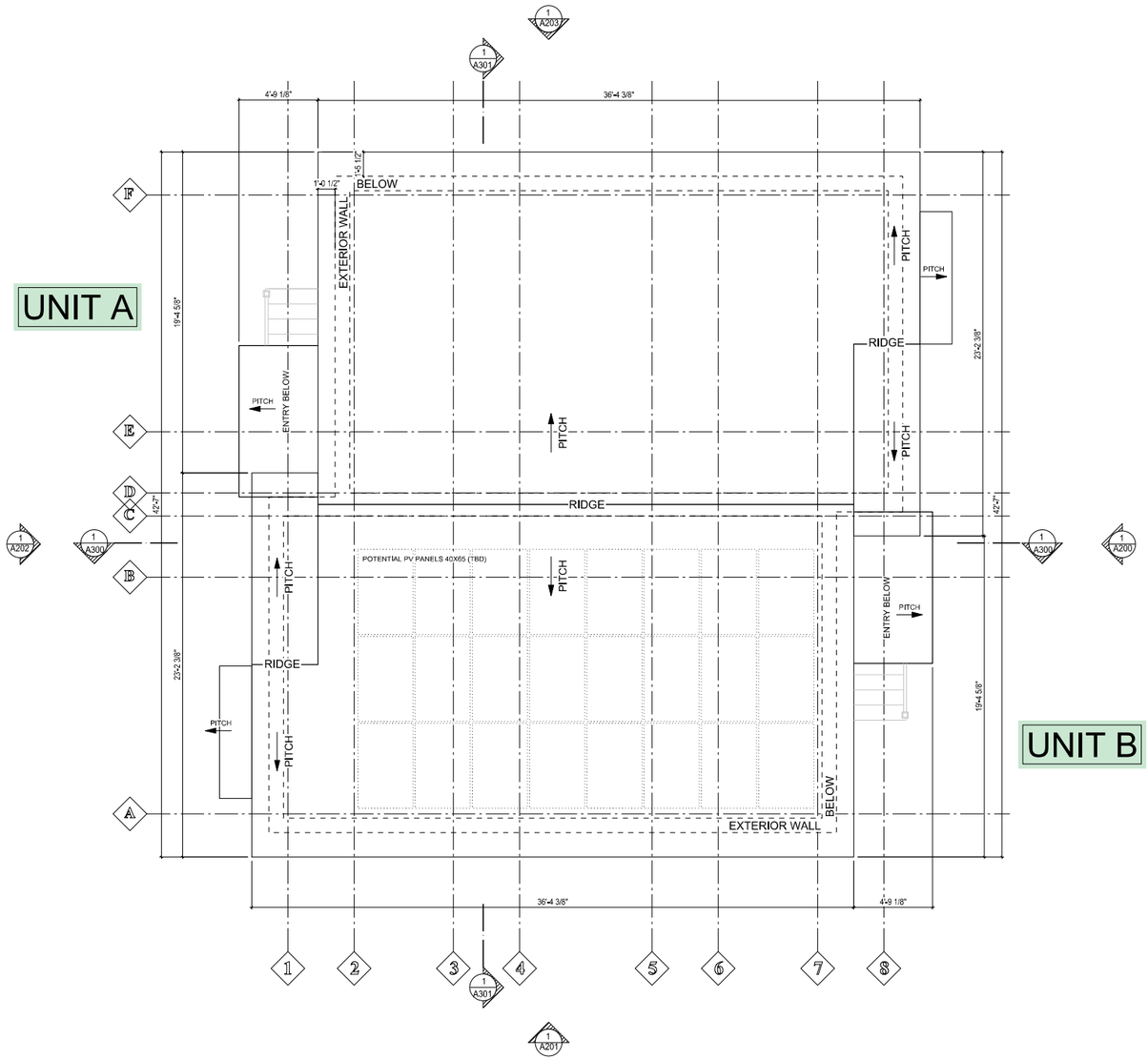
Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

SECOND FLOOR PLAN

A102

Scale AS NOTED

FOR REVIEW



0 2' 4' 8'

1/4" = 1'-0"

AREA BELOW 6'0" HEADROOM

AREA BELOW 3'0" HEADROOM

TIMBER ABOVE

DECKING

WALL TYPE LEGEND	
INSULATED WALL PANEL WITH 2 1/2" OPEN-BUILT CHASE	
2x4 AT 24" O.C. PARTITION 5/8" GWB BOTH SIDES	
2x6 PARTITION (OR AS INDICATED) 5/8" GWB BOTH SIDES	2x6
SITE INSULATED PANEL	
TIMBER POSTS	
2x6 AT 24" O.C. EXTERIOR WALL 5/8" SHEATHING	

GENERAL FLOOR PLAN NOTES:
1. SEE A001 FOR SPECIFICATIONS AND ENERGY CODE INFORMATION.
2. REFER TO FOUNDATION AND FRAMING PLANS, DETAILS, AND SPECIFICATIONS FOR STRUCTURAL INFORMATION.
3. INTERIOR WALLS DIMENSIONED TO FINISH. (FINISH 5/8" THICK)
4. ALL INTERIOR WALLS ARE 2x4 UNLESS OTHERWISE INDICATED.

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REVISION SCHEDULE

No.	Description	Date
	DEPT COMMENTS	5/06/2026

Stamp

Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

ROOF PLAN

A103

Scale AS NOTED

FOR REVIEW

1 EXTERIOR ELEVATION STUDY

1 EXTERIOR ELEVATION STUDY

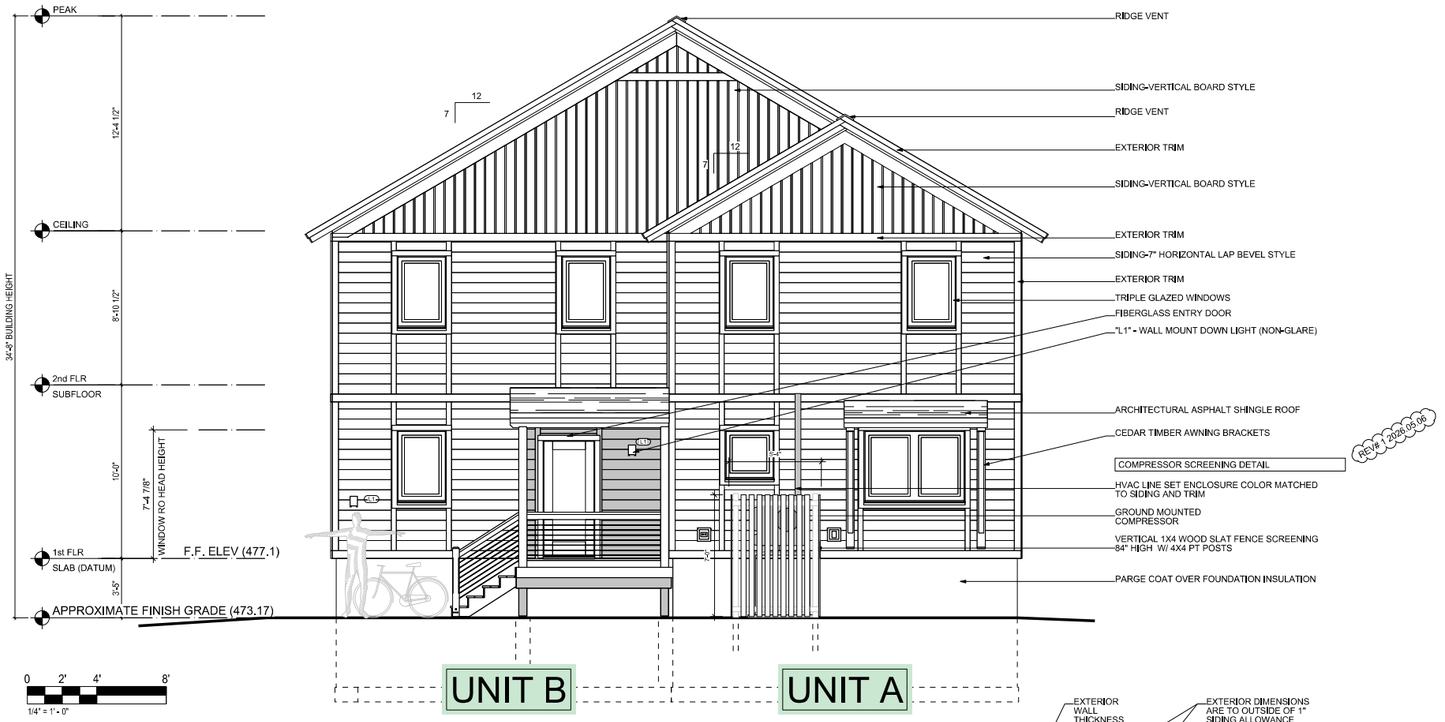
1 EXTERIOR ELEVATION STUDY

EXTERIOR COLOR / RENDERING STUDY

REV# 1 2026.05.06

SIDING, TRIM, EXTERIOR FINISHES, AND COLOR PALETTES SHOWN ARE APPROXIMATE PLACEHOLDERS WITH THE INTENT THAT FINAL MATERIAL SELECTIONS AND METHODS WILL EMBRACE AFFORDABILITY, LOW MAINTENANCE, EASE OF INSTALLATION, VOLUNTEER LABOR PARTICIPATION, MAXIMUM OFF-SITE PREFABRICATION, AND AN AESTHETIC COMPATIBLE, COMPLIMENTARY, AND APPROPRIATE TO THE EXISTING NEIGHBORHOOD CONTEXT.

0 4' 8' 16'
1/8" = 1'-0"

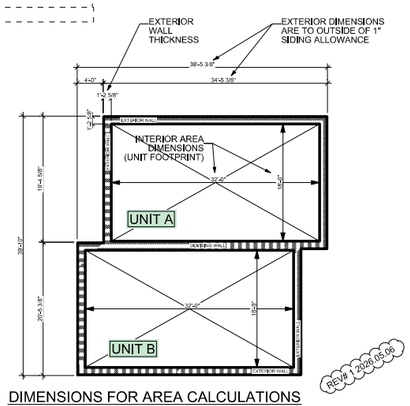


REV# 1 2026.05.06

REV# 1 2026.05.06

1 EXTERIOR ELEVATION - EAST
(SIDE YARD, GROVE STREET)

	EXTERIOR AREA	INTERIOR AREA
FIRST FLOOR AREA (UNIT A):	689 SF	576 SF
SECOND FLOOR AREA (UNIT A):	689 SF	576 SF
TOTAL AREA (UNIT A):	1,378 SF	1,152 SF
FIRST FLOOR AREA (UNIT B):	689 SF	576 SF
SECOND FLOOR AREA (UNIT B):	689 SF	576 SF
TOTAL AREA (UNIT B):	1,378 SF	1,152 SF



DIMENSIONS FOR AREA CALCULATIONS

REV# 1 2026.05.06

ZBA / PLANNING APPLICATION - 06MAY2026

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REVISION SCHEDULE

No.	Description	Date
1	DEPT. COMMENTS	5/06/2026

Stamp

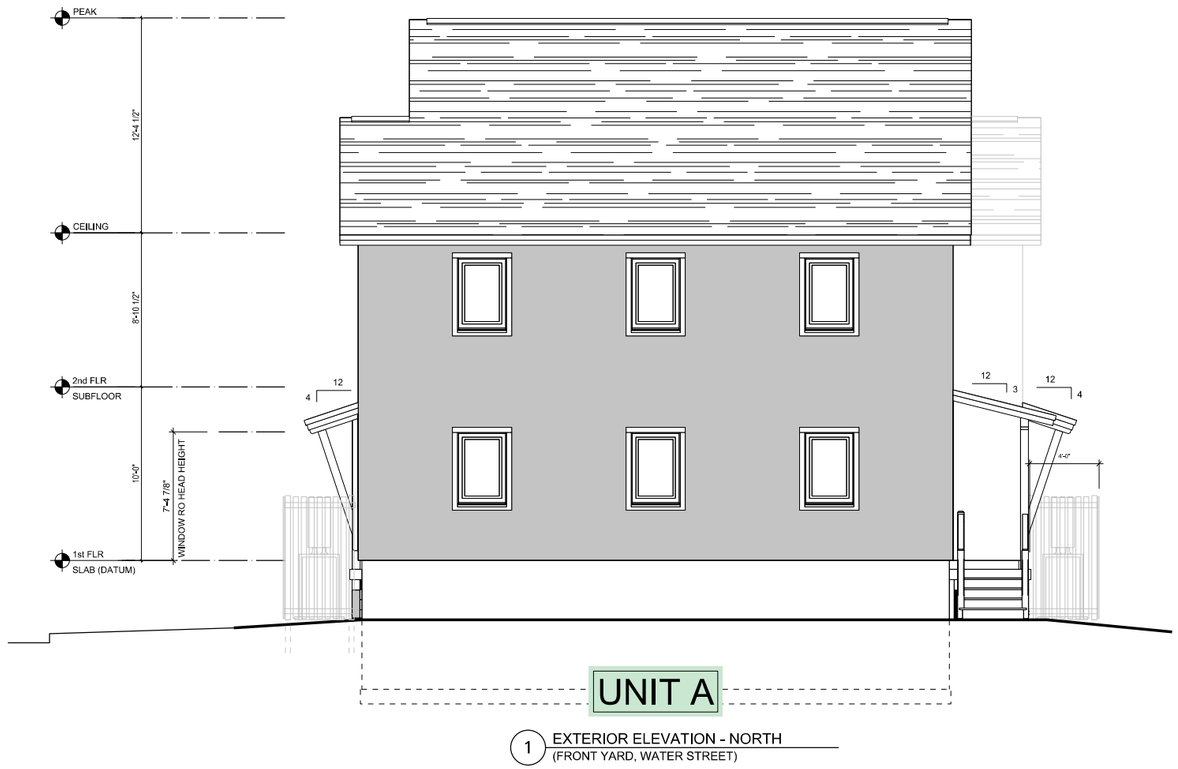
Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

EXTERIOR ELEVATIONS

A200

Scale AS NOTED

FOR REVIEW



1 EXTERIOR ELEVATION - NORTH
(FRONT YARD, WATER STREET)

0 2' 4' 8'
1/4" = 1'-0"

NOTES:

1. FOUNDATIONS AND FOOTINGS SHOWN ARE APPROXIMATE. ALL FOOTINGS TO BE BELOW FROST LEVEL PER LOCAL CODE REQUIREMENTS.

2. REFER TO FOUNDATION AND FRAMING PLANS, DETAILS AND SPECIFICATIONS FOR STRUCTURAL INFORMATION.

ZBA / PLANNING APPLICATION - 06MAY2026

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unity homes
6 BLACKJACK CROSSING
WALPOLE, NH 03608

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REVISION SCHEDULE

No.	Description	Date
1	DEPT COMMENTS	5/06/2026

Stamp

LICENSED ARCHITECT
WILLIAM H. HOETZ
No. 2169
STATE OF NEW HAMPSHIRE
Monadnock Home for Humanity

Project Name
MONADNOCK H4H

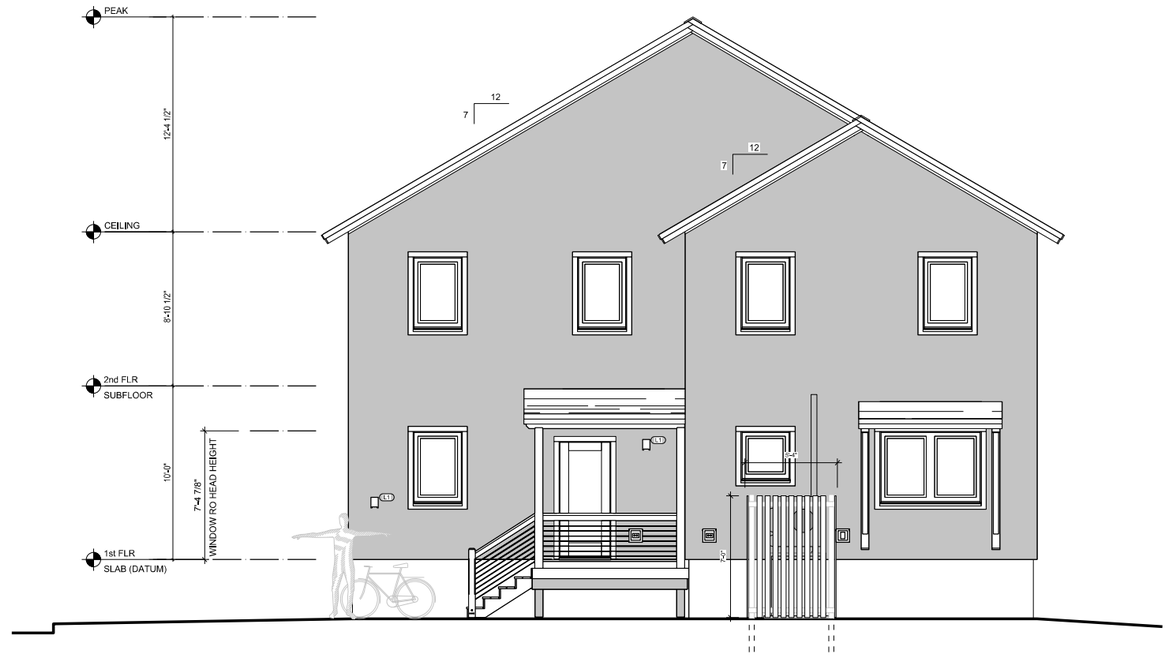
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

EXTERIOR ELEVATIONS

A201

Scale AS NOTED

FOR REVIEW



UNIT A UNIT B

1 EXTERIOR ELEVATION - WEST
(SIDE YARD)

0 2' 4' 8'
1/4" = 1'-0"

NOTES:

1. FOUNDATIONS AND FOOTINGS SHOWN ARE APPROXIMATE. ALL FOOTINGS TO BE BELOW FROST LEVEL PER LOCAL CODE REQUIREMENTS.

2. REFER TO FOUNDATION AND FRAMING PLANS. DETAILS AND SPECIFICATIONS FOR STRUCTURAL INFORMATION.

ZBA / PLANNING APPLICATION - 06MAY2026

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6 BLACKJACK CROSSING
WALPOLE, NH 03608

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REVISION SCHEDULE

No.	Description	Date
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Stamp

Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

EXTERIOR ELEVATIONS

A202

Scale AS NOTED

FOR REVIEW

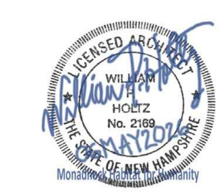
Bensonwood
unity homes
6 BLACKJACK CROSSING
WALPOLE, NH 03608

(603) 756-3600
bensonwood.com

REVISION SCHEDULE

No.	Description	Date
1	DEMPRCOMMENTSDETAIL	5/06/2026

Stamp



Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

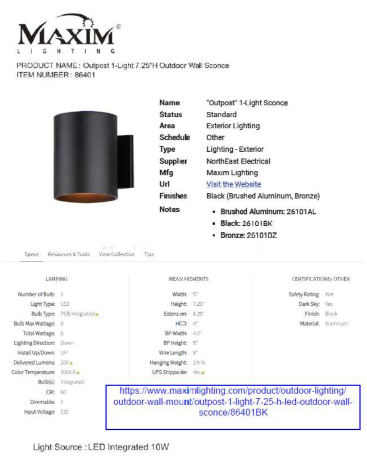
EXTERIOR ELEVATIONS

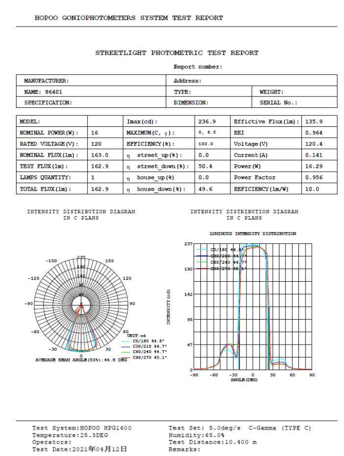
A203

Scale AS NOTED

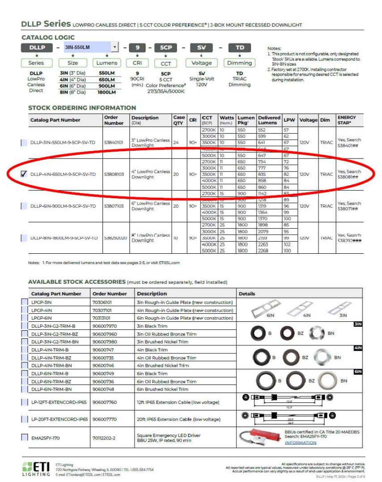
FOR REVIEW

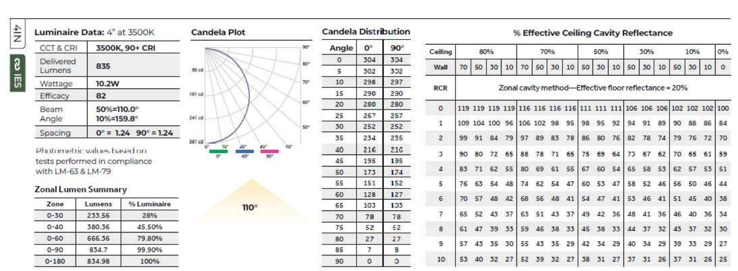
L1 WALL MOUNT DOWNLIGHT AT ENTRY PORCH / WALK





L2 RECESSED DOWNLIGHT AT ENTRY PORCH CEILING

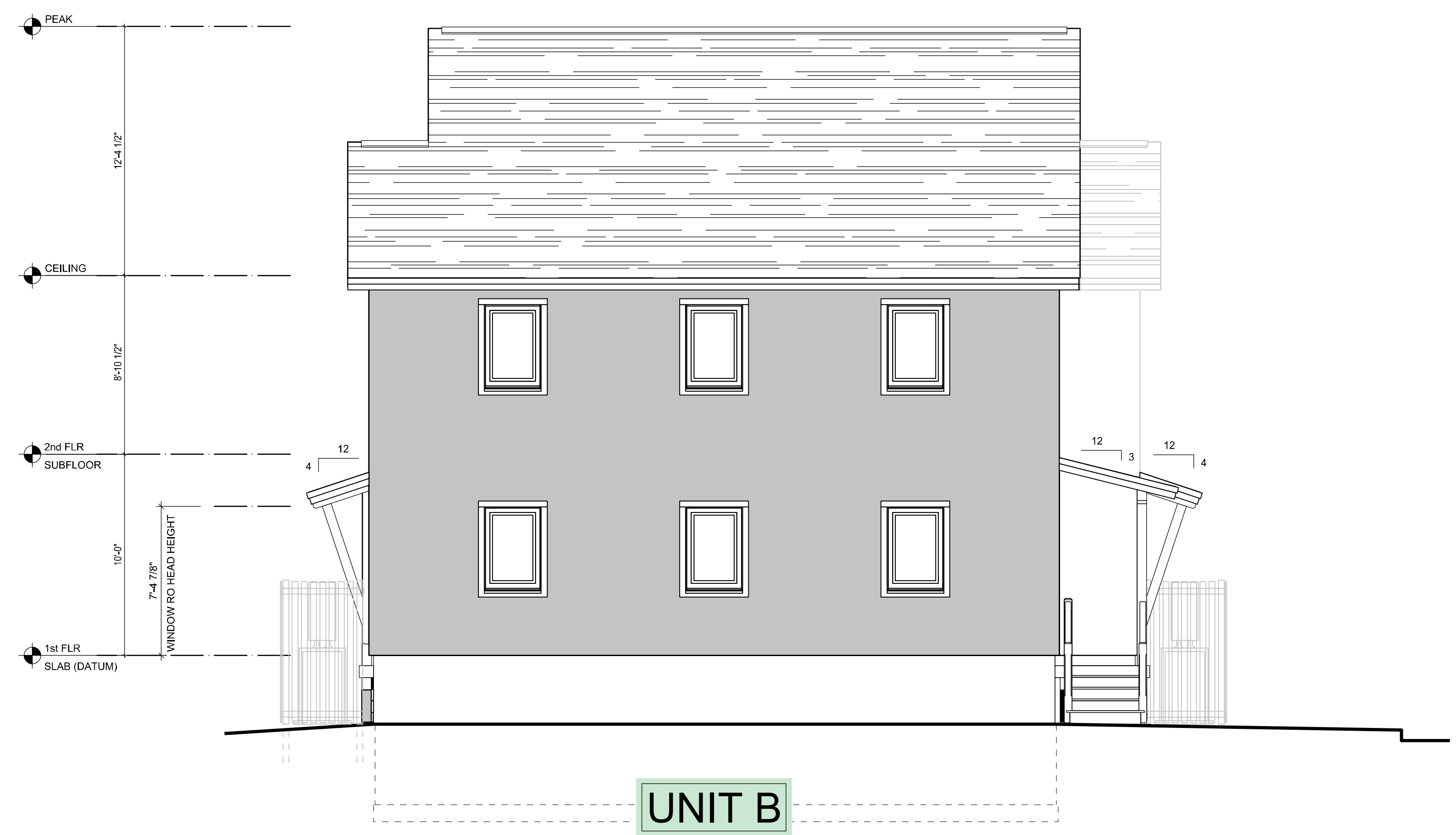




EXTERIOR LIGHTING

REV# 1 2026.05.06

SIDING, TRIM, EXTERIOR FINISHES, AND COLOR PALETTES SHOWN ARE APPROXIMATE PLACEHOLDERS WITH THE INTENT THAT FINAL MATERIAL SELECTIONS AND METHODS WILL EMBRACE AFFORDABILITY, LOW MAINTENANCE, EASE OF INSTALLATION, VOLUNTEER LABOR PARTICIPATION, MAXIMUM OFF-SITE PREFABRICATION, AND AN AESTHETIC COMPATIBLE, COMPLIMENTARY, AND APPROPRIATE TO THE EXISTING NEIGHBORHOOD CONTEXT.



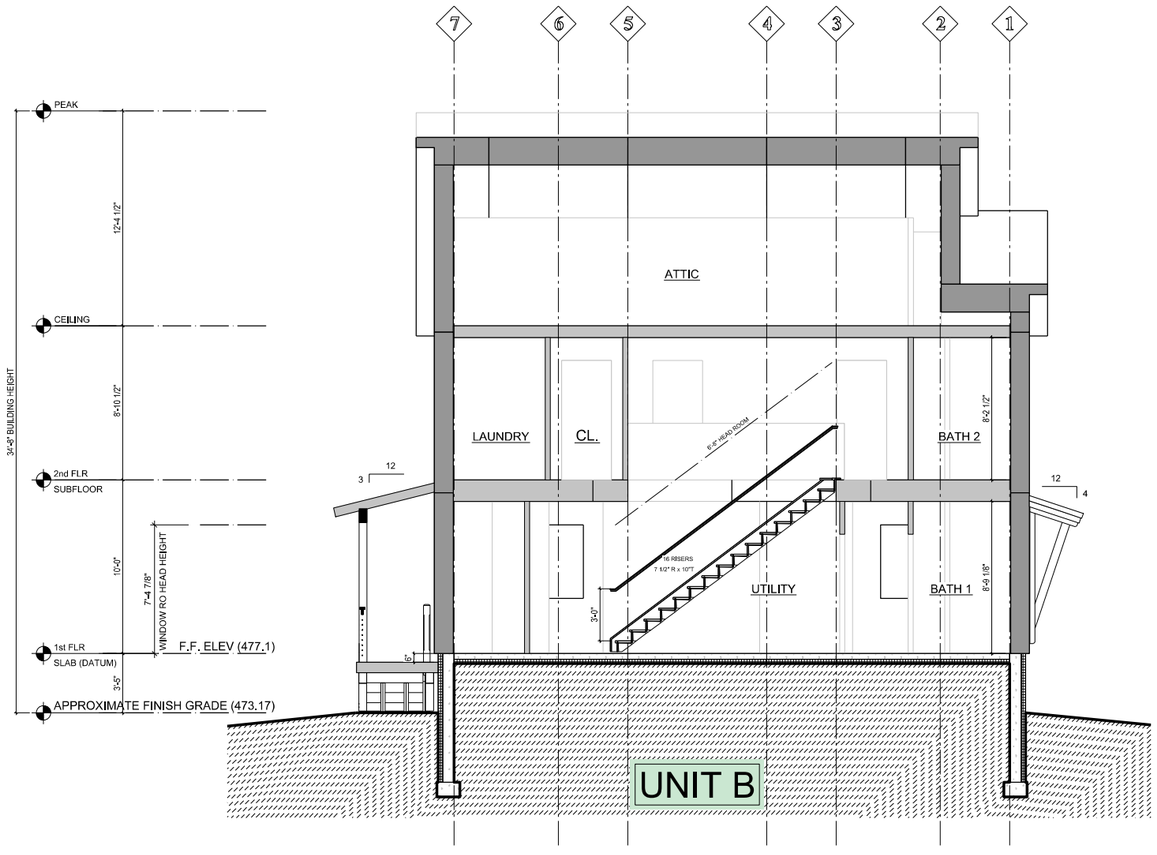
1 EXTERIOR ELEVATION - SOUTH
(REAR YARD)

NOTES:

1. FOUNDATIONS AND FOOTINGS SHOWN ARE APPROXIMATE. ALL FOOTINGS TO BE BELOW FROST LEVEL PER LOCAL CODE REQUIREMENTS.

2. REFER TO FOUNDATION AND FRAMING PLANS, DETAILS AND SPECIFICATIONS FOR STRUCTURAL INFORMATION.

ZBA / PLANNING APPLICATION - 06MAY2026



1 BUILDING SECTION @ STAIRS

SECTION WALL TYPE LEGEND	
INSULATED PANEL	
UNINSULATED CAVITY PANEL	
INSULATED CONCRETE WALL	
UNINSULATED CONCRETE WALL	

NOTES:

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0 2' 4' 8'
1/4" = 1'-0"

ZBA / PLANNING APPLICATION - 06MAY2026

Bensonwood
unity homes
6 BLACKJACK CROSSING
WALPOLE, NH 03608

(603) 756-3600
bensonwood.com

REVISION SCHEDULE

No.	Description	Date
1	DEPT COMMENTS	5/06/2026

Stamp

Project Name
MONADNOCK
H4H

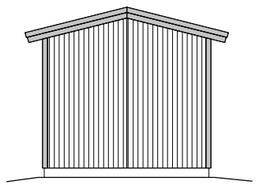
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

BUILDING SECTIONS

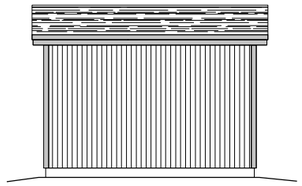
A300

Scale AS NOTED

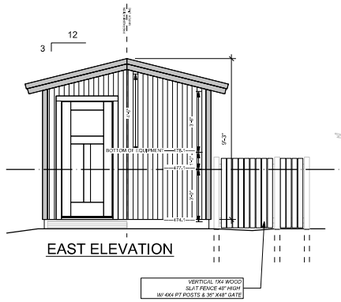
FOR REVIEW



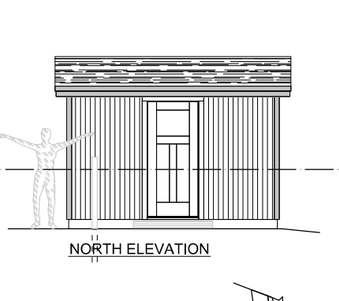
WEST ELEVATION



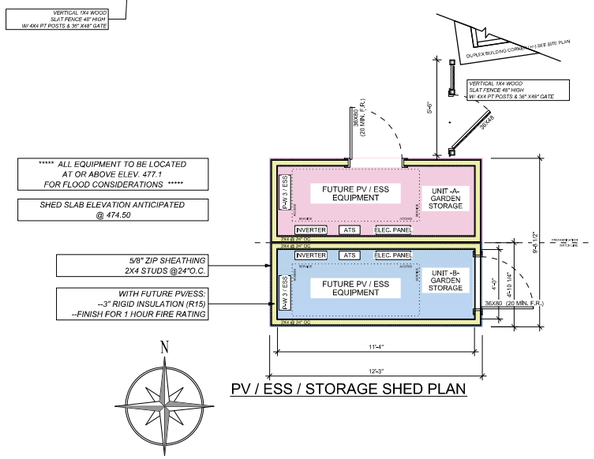
SOUTH ELEVATION



EAST ELEVATION

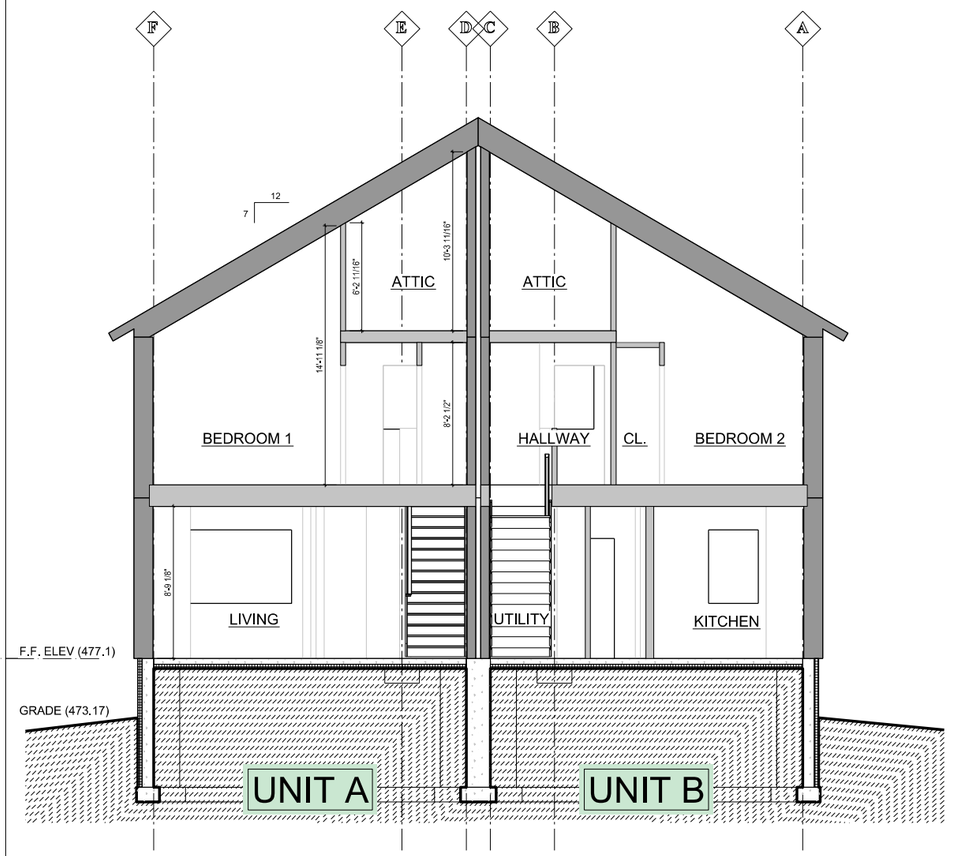


NORTH ELEVATION



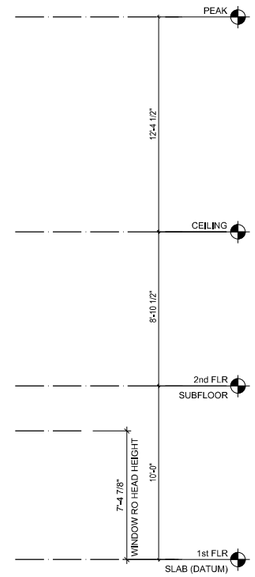
PV / ESS / STORAGE SHED PLAN

0 2' 4' 8'
1/4" = 1'-0"



1 BUILDING SECTION

0 2' 4' 8'
1/4" = 1'-0"



SECTION WALL TYPE LEGEND	
INSULATED PANEL	
UNINSULATED CAVITY PANEL	
INSULATED CONCRETE WALL	
UNINSULATED CONCRETE WALL	

NOTES:

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ZBA / PLANNING APPLICATION - 06MAY2026

Bensonwood unity homes
6 BLACKJACK CROSSING
WALPOLE, NH 03608

(603) 756-3600
bensonwood.com

REVISION SCHEDULE

No.	Description	Date
	DEPT COMMENTS	5/06/2026

Stamp

Project Name	MONADNOCK H4H
Address	GROVE STREET
City	KEENE
State	NH
Project Number	PROJECT #
Date	03-23-2026
Drawn by	SM
Project Team	WH, SM, TE, EC

BUILDING SECTIONS

A301

Scale AS NOTED

FOR REVIEW

CITY OF KEENE
NEW HAMPSHIRE

Meeting Date: May 26, 2026

To: Planning Board

From: Evan Clements, Planner

Through: Mari Brunner, Senior Planner

Subject: **PB-26-9 - Froling Energy Site Modifications, Major Site Plan – Applicant and owner 560 Main Street LLC proposes to create two curb cuts on Manchester St., demolish an existing ~590-sf building, replace the siding on the principal building, and improve an existing gravel area at 20 & 37 Manchester St. (TMP#s 114-012-000 & 114-003-000). The parcels are located in the Commerce & Industrial Districts.**

Recommendation:

To review the attached staff report and application materials in preparation for the public hearing.

Attachments:

1. Staff Report
2. Application Materials
3. Narrative
4. Plan Set
5. Proposed Facade Changes
6. Access Easement Deed

Background:

The first subject parcel at 20 Manchester St is ~9.9 ac. in size and contains an existing biomass boiler installer and fuel provider. The second subject parcel at 37 Manchester St. is ~2 ac. in size and contains two existing warehouse buildings. This parcel was recently merged with 53 Manchester St. and abuts the 20 Manchester St parcel to the southeast. Both parcels are owned and operated by Froling Energy and utilized as part of their operation. Additionally, portions of the 20 Manchester St site will be offered to tenants for outdoor storage purposes. The purpose of this application is to update the site plan for Froling Energy by formalizing the operation over both parcels. This includes approval for a one-way cross site access drive, new street access for 37 Manchester St. with parking area, building façade refresh, and identified rental storage areas for 20 Manchester St. Lastly, the phase 2 site plan for 20 Manchester St. will be abandoned by the applicant as it is no longer needed.

STAFF REPORT

PB-26-9 – SITE PLAN REVIEW– FROLING ENERGY SITE MODIFICATIONS, 37 & 20 MANCHESTER ST

Request:

Applicant & owner 560 Main Street LLC proposes modifications to the ~11.88-ac Froling site at 20 & 37 Manchester St (TMP#s 114-012-000 & 114-003-000), including a new street access on Manchester St, vehicular cross-access between the parcels, new siding on an existing structure, and minor site changes. The parcels are in the Commerce & Industrial Districts.

Background:

The first subject parcel at 20 Manchester St is ~9.9 ac. in size and contains an existing biomass boiler installer and fuel provider. The parcel is located directly south of NH 101 at the end of Manchester St. and is in the Industrial District. Access to the site is from Main Street via a 40-ft wide easement that connects to the west end of Manchester St.

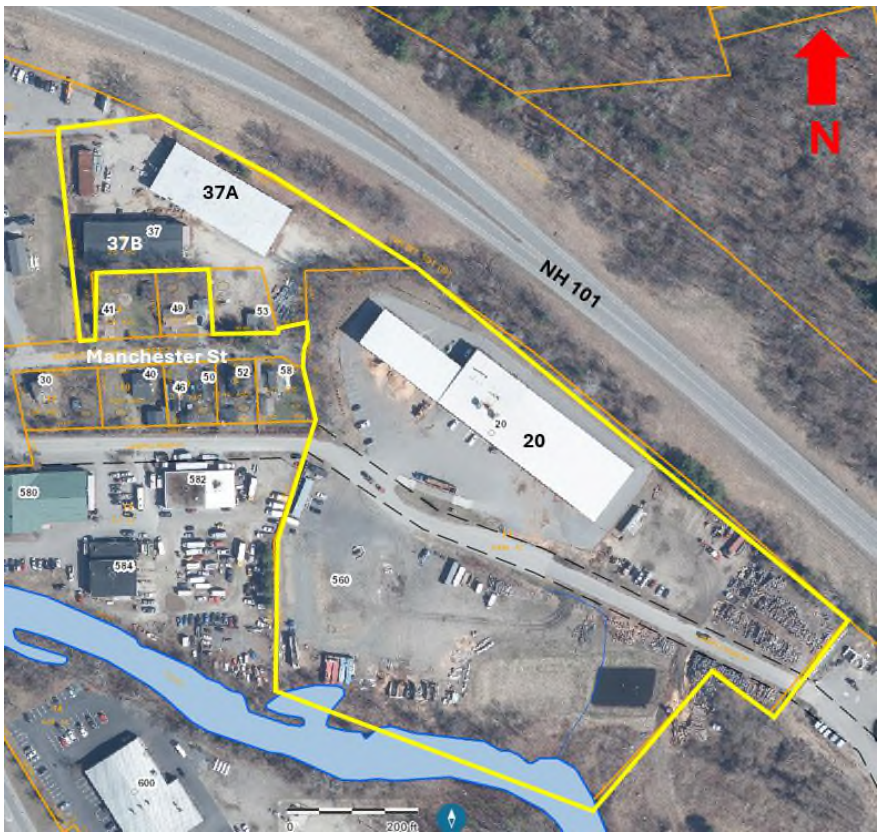


Fig 1: Aerial of 37 & 20 Manchester St outlined in yellow

The second subject parcel at 37 Manchester St. is ~2 ac. in size and contains two existing warehouse buildings. This parcel was recently merged with 53 Manchester St. and abuts the 20 Manchester St parcel to the southeast. Access to the lot is from Main Street via an access easement that crosses over the adjacent property at 492 Main Street.

Both parcels are owned and operated by Froling Energy and utilized as part of their operation. Additionally, portions of the 20 Manchester St site will be offered to tenants for outdoor storage purposes.

The purpose of this application is to update the site plan for Froling Energy by formalizing the operation over both parcels. This includes approval for a one-way cross site access drive, new street access for 37 Manchester St. with parking area, building façade refresh, and identified rental storage areas for 20 Manchester St. Lastly, the phase 2 site plan for 20 Manchester St. will be abandoned by the applicant as it is no longer needed.

Determination of Regional Impact:

Staff have made a preliminary evaluation that the proposal does not appear to have the potential for "regional impact" as defined in RSA 36:55. The Board should determine whether the proposal could have the potential for regional impact.

Completeness:

The applicant has requested an exemption from submitting a lighting plan, elevations, and all technical reports. After reviewing the exemption requests, staff have determined that granting these exemptions will have no bearing on the merits of the application and recommend that the Board accept the application as complete.

Application Analysis:

21.2 Drainage: The applicant states that the existing drainage pattern will not be altered by the proposed changes to the property at 37 Manchester St. The proposed changes will result in a reduction in impervious surface and will allow more water on the site to infiltrate. No changes are proposed to 20 Manchester St. It appears this standard has been met.

21.3 Sediment & Erosion Control: Proposed erosion control measures include silt fencing and straw wattles installed according to best management practices. This standard appears to be met.

21.4 Snow Storage & Removal: There appears to be adequate locations on both properties for snow storage. The applicant notes that any excess snow will be trucked off site. This standard appears to be met.

21.5 Landscaping: Section 9.4.4 of the LDC requires that any parking area visible from the public ROW be screened with a perimeter landscape area (Figure 2). In addition, Section 9.4.5 requires one tree for every ten parking spaces. The applicant proposes to install five (5) American Sycamore trees around the new parking area on 37 Manchester St. with a 6-ft wooden stockade fence around the perimeter. The applicant requests that the Planning Board approve an alternative screening design for the proposed parking area per Section 9.4.4 of the LDC.

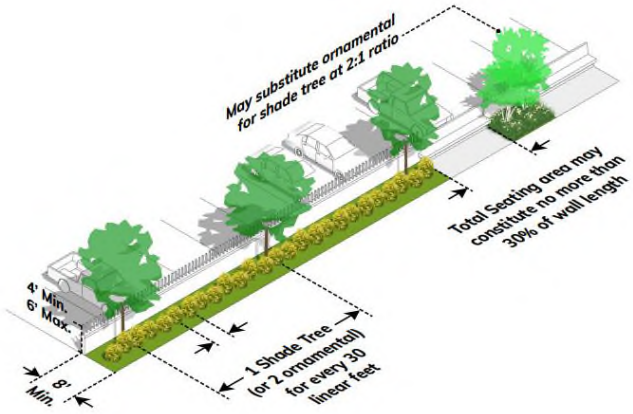


Figure 2. Graphic that illustrates the perimeter landscape requirements detailed in Section 9.4.4 of the Land Development Code.

The Board should consider the location of the parking area in relation to the neighborhood to determine if a wooden stockade fence, as proposed, provides sufficient screening. The Board will need to determine if this standard has been met.

21.6 Screening: The plan shows a 6 ft tall wooden fence around the southern perimeter of 37 Manchester St. This fence will screen the new parking area from the public right-of-way and abutting residential uses at 41 and 49 Manchester St. Existing vegetation will be maintained where practical to provide additional screening. A dumpster enclosure area is proposed adjacent to the warehouse at 37B Manchester St. and will be screened by the same wooden stockade fence material. This standard appears to be met.

21.7 Lighting: No new lighting is proposed with this application. This standard is not applicable.

21.8 Sewer & Water: No new water or sewer connections are proposed. This standard is not applicable.

21.9 Traffic & Access Management: The applicant proposes to install a 24-ft wide street access on Manchester St. where the former 53 Manchester St. house was located. The applicant states that this street access will be used for passenger vehicles and occasional box truck deliveries. Due to the narrow width of Manchester St., larger trucks will continue to use the easement over 492 Main St. to access the 37 Manchester St. property. A truck turning exhibit shows that the Keene Fire ladder truck can navigate the site.

A 12-ft wide connector between both subject properties is proposed to provide one-way access between the sites (Figure 3). The accessway is designed to conform with the requirements of section 9.4.2.A.1 of the LDC. The applicant states that this internal access should reduce the traffic on Manchester St associated with the Froling Energy operation transiting between the subject properties. This standard appears to be met.

Figure 3. Snippet taken from Exhibit A of the plan set that shows the proposed street access on Manchester St. and the 12-ft, one-way cross access between the 37 & 20 Manchester Street properties.

21.10 Filling & Excavation: The applicant states that minimal earthwork will be conduced for the new parking area on 37 Manchester St. No significant filling or excavation is proposed on either subject parcel. This standard appears to be met.

21.11 Surface Waters & Wetlands: There are no wetlands on 37 Manchester St. and no proposed work on 20 Manchester St. This standard is not applicable.

21.12 Hazardous & Toxic Materials: No hazardous or toxic materials are proposed with this application. This standard is not applicable.

21.13 Noise: There are no proposed changes to the operation of either subject parcel that would alter the existing noise pattern. The applicant notes that all surrounding parcels are zoned either Industrial or Commerce. This standard is not applicable.

21.14 Architecture & Visual Appearance: The applicant is proposing some minor façade changes for the 37A building by replacing the existing painted steel siding with vertical wood siding, as show in the submitted renderings. No additional changes are proposed.

Draft Motion Language:

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

"Approve PB-26-9 as shown on the plan set prepared by SVE Associates at variable scales prepared on March 30, 2026 and last revised on May 7, 2026 with the following conditions:

1. **Prior to the final approval and signature of the plans by the Planning Board Chair, the following conditions precedent shall be met:**
    a. **Owner's signature appears on the plans.**
    b. **Submittal of five (5) full sized paper copies and a flattened PDF version of the final plan set.**
    c. **Submittal of a security to cover the cost of landscaping and erosion/ sedimentation control in a form and amount acceptable to the Community Development Director.**
2. **Subsequent to final approval and signature of the plans by the Planning Board Chair, the following conditions shall be met:**
    a. **Prior to the commencement of site work, all sediment and erosion control measures shall be installed and inspected by the Community Development Director or their designee.**
    b. **Following the installation of landscaping, the Community Development Department shall be contacted to perform an initial landscaping inspection.**
    c. **One year following the installation of all landscaping, the Community Development Department shall be contacted to perform a final landscaping inspection.**
    d. **Prior to the release of any financial security, the construction trailer located in the side yard setback of rental area #2 shall be moved out of the setback and verified by Community Development staff."**

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: 20 & 37 Manchester Street Improvements

PROJECT ADDRESS(ES): 20 & 37 Manchester Street

TYPE OF APPLICATION BEING SUBMITTED:

■ MAJOR PROJECT APPLICATION
□ MINOR PROJECT APPLICATION

EXISTING OR PREVIOUS USE: Tire Warehouse office & storage	**PROPOSED USE:** rental space, office & warehouse for Froling Energy
GROSS FLOOR AREA OF NEW CONSTRUCTION (in square feet): 0	**GROSS FLOOR AREA OF EXISTING BUILDINGS/STRUCTURES** (in square feet): 26,920
AREA OF PROPOSED NEW IMPERVIOUS SURFACES (in square feet): -5,000+/-	**TOTAL AREA OF LAND DISTURBANCE** (in square feet): 19,000+/-

SECTION 2: CONTACT INFORMATION

PROPERTY OWNER	APPLICANT
NAME/COMPANY: Mark Froling/560 Main Street LLC	**NAME/COMPANY:** same as owner
MAILING ADDRESS: 37A Manchester Street, Keene NH 03431	**MAILING ADDRESS:** 37A Manchester Street, Keene, NH 03431
PHONE: [redacted]	**PHONE:** [redacted]
EMAIL: [redacted]	**EMAIL:** [redacted]
SIGNATURE:	**SIGNATURE:**
PRINTED NAME: Mark Froling	**PRINTED NAME:** Mark Froling

AUTHORIZED AGENT (if different than Owner/Applicant)	FOR OFFICE USE ONLY:
NAME/COMPANY: Liza Sargent, PE/SVE Associates	**TAX MAP PARCEL #(s):** ___-___-___-___ / ___-___-___-___
MAILING ADDRESS: 439 West River Road Brattleboro VT 05302	
PHONE: [redacted]	**PARCEL SIZE:** / **DATE STAMP:**
EMAIL: [redacted]	**ZONING DISTRICT:**
SIGNATURE: Liza Sargent Digitally signed by Liza Sargent Date: 2026.03.30 13:44:17 -04'00'	
PRINTED NAME: Liza Sargent, PE	**PROJECT #:**

SECTION 3: APPLICATION SUBMISSION REQUIREMENTS

A COMPLETE APPLICATION MUST INCLUDE THE FOLLOWING ITEMS. APPLICATION MATERIALS MUST BE SUBMITTED BOTH PHYSICALLY & DIGITALLY AS OUTLINED IN THE ATTACHED DOCUMENTS.

- **Email:** communitydevelopment@keenenh.gov, with "Planning Board Application" in the subject line
- **Mail / Hand Deliver:** Community Development (4th Floor), Keene City Hall, 3 Washington St, Keene, NH 03431

The submittal requirements for Planning Board applications are outlined further in **Article 21** and **Article 26.12** of the Land Development Code (LDC). You may request an exemption from providing any of the items below, except the application fee, notice list, narrative, and mailing labels. The Community Development Director may grant an exemption, if it is determined that the scope of the project does not warrant the submittal.

Note: Additional information may be requested by the respective decision-making authority during the review process.

GENERAL SUBMITTAL REQUIREMENTS

CERTIFIED NOTICE LIST (See **Attachment A** for more information.)

2 SETS OF MAILING LABELS (See **Attachment A** for more information.)

PROJECT NARRATIVE (See **Section 1 of Attachment B** for more information.)

FEES: Fill in the information below to calculate the total fee.

■ $250 base fee
■ $0.05 per-sf of new construction x 0 sf of new construction
■ $62 legal ad fee
☑ 34.56 current USPS certificate of mailing rate x 19 abutters

= 346.56 **(TOTAL FEE)**

NOTE: Please call the Community Development Department for the current certificate of mailing rate. Checks should be made payable to the *City of Keene*. Credit card payments are accepted in-person or by calling 603-352-5440.

WAIVERS (See **Section 2 of Attachment B** for additional information.)

□ **WAIVER(S) REQUESTED**
■ **NO WAIVER(S) REQUESTED**

PLAN SETS (See Attachment C for additional information.)	SUBMITTED	EXEMPTION REQUESTED
LOCATION MAP OF PROPOSED IMPROVEMENTS	✔	
EXISTING CONDITIONS PLAN	✔	
PROPOSED CONDITIONS PLAN	✔	
GRADING PLAN	✔	
LANDSCAPING PLAN	✔	
LIGHTING PLAN		✔
ELEVATIONS		✔

TECHNICAL REPORTS (See Attachment C for additional information.)	SUBMITTED	EXEMPTION REQUESTED
DRAINAGE REPORT		✔
TRAFFIC ANALYSIS		✔
SOIL ANALYSIS		✔
HISTORIC EVALUATION		✔
SCREENING ANALYSIS		✔
ARCHITECTURAL & VISUAL APPEARANCE ANALYSIS		✔
OTHER REPORTS / ANALYSES		✔

ATTACHMENT A: CERTIFIED NOTICE LIST INSTRUCTIONS

City of Keene, NH

Community Development Department
Certified Notice List

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

Per Article 26.2.4 of the Land Development Code (LDC) and in accordance with state law, certain Zoning Board of Adjustment (ZBA), Planning Board, and Historic District Commission (HDC) applications require mailed notice.

The following parties are required to be noticed as part of the application process:

-Property owner
-Project applicant
-Authorized agent (if applicable)
-All direct property abutters (including those across water bodies and roads), as well as all properties within 200-ft of the subject parcel
-Every engineer, architect, land surveyor, or soil scientist whose professional seal appears on any plan
-Holders of conservation, preservation, or agricultural preservation restrictions on the property

**Note: Only direct abutters must be noticed as part of HDC applications.*

For these applications, the following items must be submitted:

-A list of all persons entitled to notice
-2 sets of mailing labels
-Notice certification form
-Mailing fee (current USPS certificate of mailing rate* x number of abutters)

**Please call the Community Development Department for the current certificate of mailing rate.*

The notice list shall include the following information:

-Property owner's name
-Property owner's mailing address
-Property owner's street address,
-The tax map parcel (TMP) number(s) (15-digit number)

The mailing labels shall include the following information:

-Property owner's name
-Property owner's mailing address
-The tax map parcel (TMP) number(s)

The City of Keene's GIS Database (axisgis.com/keenenh/) can be used to generate an abutters list and mailing labels.

PLEASE MAKE SURE THAT ALL PARTIES INCLUDED ON THE NOTICE LIST ARE ALSO INCLUDED ON THE MAILING LABELS.

CERTIFICATION OF ACCURACY

By signing below, you are certifying that the submitted notice list is accurate and true to the best of your ability and that per **Article 26.2.4.A.3** of the LDC, the notice list is current to within 10 days of the application submittal.

Liza Sargent
Print Name

3/30/26
Date

Liza Sargent
Digitally signed by Liza Sargent
Date: 2026.03.30 13:44:42 -04'00'
Signature

NOTICE LIST

This template can be used to record the name, mailing address, street address, and tax map parcel (TMP) # for each party that is required to be noticed as part of an application.

OWNER NAME	MAILING ADDRESS	STREET ADDRESS (If different from mailing address)	TAX MAP PARCEL (TMP) #
MONRO MUFFLER BRAKE INC C/O BADEN TAX MANAGEMENT LL	6920 POINTE INVERNESS WAY STE. 301 FORT WAYNE, IN 46804	492 MAIN ST.	112-007-000
522 MAIN STREET KEENE LLC	24 HARRIMAN DR. AUBURN, ME 04210	522 MAIN ST. & 526 MAIN ST.	112-008-000,114-001-000
CARSEL INC	540 MAIN ST. KEENE, NH 03431		114-002-000
ELLITHI MELISSA ELLITHI TAREK	41 MANCHESTER ST KEENE, NH 03431		114-004-000
HIE SYLVIA N YAP YOPI H	49 MANCHESTER ST KEENE, NH 03431	53 MANCHESTER ST.	114-005-000
560 MAIN STREET LLC	37A MANCHESTER ST KEENE, NH 03431	37A MANCHESTER ST, 20 MANCHESTER ST	114-006-000, 114-012-000
AMER DAWN M	58 MANCHESTER ST KEENE, NH 03431		114-007-000
TINKER DIANE E. TINKER TARA M.	52 MANCHESTER ST. KEENE, NH 03431		114-008-000
ELLIS, TODD W. ELLIS IRENE J.	617 WEST SWANZEY RD. SWANZEY, NH 03446	46-50 MANCHESTER ST.	114-009-000
LABELLE OLIVIA LABELLE KYLE	40 MANCHESTER ST KEENE, NH 03431		114-010-000
MACKEY FRANCIS W. MACKEY PATRICIA J.	30 MANCHESTER ST. KEENE, NH 03431		114-011-000
580 MAIN STREET LLC	PO BOX 177 CHESTERFIELD, NH 03443	580-584 MAIN ST.	114-013-000
Suzanne C. Burbank	41 Boston Pl. Keene, NH 03431		112-002-000
City of Keene	3 Washington St, Keene, NH 03431		112-006-000 & 113-007-000
Markem Corp.	150 Congress St, Keene, NH 03431		598-002-000
Amalgamated Squash C & D Corp.	68 Timberlane Dr., Keene, NH 03431	80 Martin Street	598-002-000
Northern NE Telephone Operations LLC	attn: Tax Dept., 770 Elm St, Manchester, NH 03101	150 Congress Street	598-002-000
Liza Sargent/SVE Associates	439 West River Rd, Brattleboro, VT 05302		engineer
Huntley Survey & Design, PLLC	659 West Road, Temple, NH 03084		land surveyor

Project Narrative

20 & 37 Manchester Street Improvements

20 & 37 Manchester Street

Owner/Applicant: 560 Main Street LLC

March 17, 2026
Revised May 7, 2026

SVE Associates, on behalf of the applicant, 560 Main Street LLC, is submitting this *revised* Major Site Plan Application to create access to the site from both Manchester Street, and parcel l14-012, owned by 560 Main Street LLC, to improve the existing gravel areas on site, and remove an existing single story 590 sf building.
The new access from Manchester Street will function for passenger vehicles and residential delivery service vehicles (USPS, UPS, FedEx, etc.) All deliveries using large over the road tractor trailers or specialized vehicles will continue to use the existing entrance off Route 12/Main Street.

The second proposed access is strictly for movement between this parcel (114-003) and the abutting parcel (114-012), both parcels are owned by 560 Main Street LLC.

The other reason for the site plan application is to remove phase II from 20 Manchester Street's approved site plan and include the rental areas. *The office on rental space #2 will be relocated to outside the front setback.*

The proposed plan complies with all City Development Standards:

1. Drainage & Stormwater Management:
   No proposed changes to drainage or stormwater. 37 Manchester will have a reduction in impervious surfaces. Stormwater will maintain existing drainage patterns.

2. Sediment/Erosion Control:
   The site is relatively flat, minimizing the potential for erosion problems. Regardless the Contractor is to install, monitor, and repair erosion control measures on a regular basis. These instructions are included in the notes on the Sheet N-1 and details on Sheet C-2.

3. Snow Storage and Removal:
   Snow storage is proposed on site, if snowfall exceeds available snow storage, snow will be trucked offsite.

4. Landscaping:
   Five trees are proposed to be installed for the additional parking spaces. *A waiver request is being requested for landscaping of the new parking lot (Section 9.4.4 of the LDC). No shrubs are proposed.*

5. Screening:
   Existing vegetation, *proposed trees* and the *proposed wooden* fence will be maintained for screening. *Perimeter of parking lot adjacent to a residential zoning district and/or a public right of way, is 36 feet, and 1 shade tree is required per 30 lf of perimeter parking lot landscape area, therefore two trees are required.*

6. Lighting:
   No additional lighting is proposed.

7. Sewer and Water:
   The site is supplied with City water and sewer connect, no change in the current use is proposed.

8. Traffic and Access Management:
   No additional traffic is expected. The access between 20 and 37 Manchester Street will be for Froling Energy's use, to help alleviate traffic between the two properties on Manchester Street. Large Truck traffic to 37 Manchester Street will continue to use the right-of-way from Main Street. Passenger vehicles will be able to access 37 Manchester Street directly from Manchester Street.

9. Filling and Excavation:
   Minimal grade changes proposed.

10. Surface Waters and Wetlands:
    There are no water or wetlands on the parcel.

11. Hazardous and Toxic Materials:
    Not applicable.

12. Noise:
    There will be no additional noise, the parcel is zoned commerce and surrounding parcels are commerce, and industrial.

13. Architecture and Visual Appearance:
    No proposed buildings, however, the owner would like to improve the siding on building 37A. See attached exhibit showing existing painted steel siding and proposed wood siding vertical board and batten.

Waiver Request:
A waiver is requested under section 9.4.4. of the Land Development Code from providing landscaping for the new 37 Manchester Street parking area along the south side near the public right-of-way.

a) Granting the waiver is not contrary to the spirit and intent of the regulations because the parking area will not be visible from Manchester Street because of the proposed 6-foot-tall wooden fence.
b) Granting the waiver will not increase the potential for creating adverse impacts to abutters, the community or the environment. This parking area will not be visible to the community or to abutters and will be well screened with the proposed wooden fence.
c) Granting the waiver has not been shown to diminish property values of abutting properties. The properties to the south of the 37 Manchester Street proposed parking area are residential buildings on Manchester Street. The proposed wooden fence will provide a year-round screen and buffer of the proposed parking area. To the east of the proposed parking area is land owned by the applicant. The area to the west is zoned commerce but will also be screened by the proposed wooden fence. The area to the north will be blocked from the general publics view by the existing building and existing vegetation. There are no adjacent properties adversely affected by this proposal.
d) Strict conformity with the regulations or the Development Standards will pose an unnecessary hardship to the owner. There is no reason to plant trees and shrubs in areas where they will not be visible to the public or to adjacent properties.

20 & 37 MANCHESTER STREET IMPROVEMENTS

20 & 37 MANCHESTER STREET, KEENE, NEW HAMPSHIRE

LIZA P. SARGENT No. 13365 LICENSED PROFESSIONAL ENGINEER – STATE OF NEW HAMPSHIRE

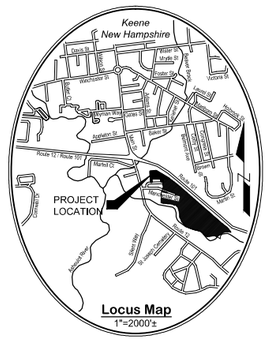
Liza Sargent 5/7/26

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

OWNER & APPLICANT:

560 MAIN STREET, LLC

20 & 37 MANCHESTER STREET
KEENE, NEW HAMPSHIRE 03431
(603) 520-6272



INDEX OF PLANS

N–1	NOTES & LEGEND
1 of 1	EXISTING CONDITIONS PLAN
C–1	SITE PLAN
C–2	CONSTRUCTION DETAILS
A	RENTAL AREA EXHIBIT
B	TURNING MOVEMENT–KEENE LADDER TRUCK
C	TURNING MOVEMENT–BOX TRUCK

SVE PROJECT #: K2665-01

PREPARED BY

Land Surveyor:

Huntley Survey & Design, PLLC
659 West Road
Temple, NH 03084
PHONE (603) 924-1669

Civil Engineer:

SVE Associates
439 West River Road
P.O. Box 1818
Brattleboro, VT 05302
PHONE (802) 257-0561

March 30, 2026
revised thru May 7, 2026

APPROVED BY THE OWNER OR APPLICANT

_____ DATE _____

APPROVED BY THE KEENE PLANNING BOARD

ON _____

CERTIFIED BY CHAIRMAN_____

CHECKED: LPS

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL CALL DIG-SAFE, AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE THE START OF EXCAVATION.
2. THE CONTRACTOR IS EXPECTED TO BE AWARE OF AND COMPLY WITH ALL PERMITS AND PERMIT CONDITIONS.
3. ALL TRENCHING, EXCAVATION, SHEETING, SHORING, ETC. SHALL COMPLY WITH THE MOST CURRENT OSHA REGULATIONS.
4. THE CONTRACTOR SHALL NOTIFY SVE ASSOCIATES IF FIELD CONDITIONS VARY FROM THAT SHOWN ON THE PLAN(S). THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLAN(S) UNLESS SO AUTHORIZED BY SVE ASSOCIATES.
5. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH SITE PLANS AND SPECIFICATIONS PROVIDED OR IN ACCORDANCE WITH NH DEP'T OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
6. IN CASE OF CONFLICTS, THE MOST STRINGENT INTERPRETATION OF THE PLANS, SPECIFICATIONS, LOCAL OR STATE REGULATIONS, OR PERMIT CONDITIONS SHALL APPLY. THE ENGINEER SHALL BE THE DETERMINANT AS TO WHAT APPLIES.
7. ALL KNOWN SUBSURFACE UTILITIES AND STRUCTURES HAVE BEEN INDICATED ON THE PLAN(S) AS ACCURATELY AS POSSIBLE. THE EXACT LOCATION MAY VARY AND THE CONTRACTOR IS CAUTIONED TO PROCEED WITH CARE.
8. CONTRACTOR SHALL VERIFY ALL BENCH MARKS, INVERTS, PIPES AND STRUCTURES ELEVATIONS PRIOR TO START OF WORK. IMMEDIATELY NOTIFY SVE ASSOCIATES IF THE FIELD INFORMATION DOES NOT MATCH PLAN INFORMATION.
9. ALL SURFACES SHALL BE GRADED TO DRAIN.

SEDIMENT AND EROSION CONTROL

1. INSTALL ALL SEDIMENT & EROSION CONTROL MEASURES IN ACCORDANCE WITH MANUFACTURER'S DIRECTION OR DETAILS PROVIDED. PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL. THEY SHALL TAKE ALL MEASURES NEEDED TO MINIMIZE EROSION TO THE GREATEST EXTENT POSSIBLE, AT NO ADDITIONAL COST TO THE OWNER, REGARDLESS OF DETAIL SHOWN ON THESE PLANS.
3. CONTRACTOR SHALL INSPECT AND REPAIR ALL SEDIMENT AND EROSION CONTROL MEASURES DAILY WHILE UNDER CONSTRUCTION, THEN AFTER EACH RAINFALL OF 0.5" IN 24 HOURS AND NOT LESS THAN ONCE A WEEK THEREAFTER UNTIL ALL UPHILL SOILS ARE WELL STABILIZED.
4. SEED, FERTILIZE & MULCH ALL FINISH GRADED AREAS WITHIN 72 HOURS OF FINISH GRADING. ROADWAY STABILIZED W/IN 72 HOURS OF ACHIEVING FINISH GRADE.
5. SEDIMENT CONTROLS AND/OR SILT FENCES SHALL BE REPLACED WHEN CLOGGED AND NO LONGER FUNCTIONAL.
6. SEDIMENT CONTROLS AND/OR SILT FENCES SHALL REMAIN IN PLACE UNTIL ALL UPHILL VEGETATED AREAS ARE STABILIZED.
7. ALL SOIL STOCKPILES SHALL BE SEEDED AND MULCHED IF LEFT IN PLACE MORE THAN 21 DAYS.
8. SEEDING OF ALL DISTURBED AREAS SHALL BE COMPLETED NOT LATER THAN OCTOBER 15TH.
9. STABILIZATION OF ALL WORK AREAS SHALL BE COMPLETED NOT MORE THAN 45 DAYS FOLLOWING THE START OF WORK.
10. ALL SOIL SLOPES STEEPER THAN 3:1 SHALL BE COVERED WITH EROSION CONTROL FABRIC, S150 FROM NORTH AMERICAN GREEN OR APPROVED EQUAL.
11. STABILIZE ALL DRAINAGE SWALES, BASINS, BERMS, AND DITCHES PRIOR TO DIRECTING RUNOFF TO THEM.
12. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE SEDIMENT AND EROSION CONTROLS AS REQUESTED BY THE ENGINEER.
13. LIMIT THE AREA OF DISTURBANCE TO SMALLEST PRACTICAL AREA.

WINTER CONSTRUCTION REQUIREMENTS:

1. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND 1) INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, or 2) PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING. THE INSTALLATION OF EROSION CONTROL BLANKETS AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF SPRING THAW OR SPRING MELT EVENTS.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15th, INCOMPLETE ROAD OR PARKING SURFACES WHERE WORK HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL MEETING NHDOT ITEM 304.3 SPECIFICATIONS.

PROJECT SPECIFIC NOTES:

1. ALL STORM DRAIN TO BE HIGH DENSITY SMOOTH BORE POLYETHYLENE, HANCOR OR APPROVED EQUAL, U.N.O.
2. ALL AREAS TO BE VEGETATED SHALL RECEIVE A MINIMUM OF 6" OF LOAM, SEED AND MULCH. IF PLANS OR SPECIFICATIONS HAVE CONFLICTING DEPTHS OF LOAM, 6" OF LOAM SHALL BE THE PREVAILING DEPTH USED.
3. SEEDING OF ALL DISTURBED AREAS SHALL BE COMPLETED NOT LATER THAN OCTOBER 15Th.
4. SEEDING OF ALL FINISHED AREAS SHALL BE COMPLETED NOT MORE THAN 72 HOURS AFTER FINISH GRADING.
5. STABILIZATION OF ALL WORK AREAS SHALL BE COMPLETED NOT MORE THAN 45 DAYS FOLLOWING THE START OF WORK.
6. STABILIZE ALL DRAINAGE SWALES PRIOR TO DIRECTING RUNOFF TO THEM.

SEQUENCE OF WORK

THE SEQUENCE OF WORK SHALL BE FOLLOWED WITHIN EACH PHASE OF THE PROJECT. AT NO TIME OR PLACE SHALL PROJECT PHASING SUPERCEDE SOUND SEDIMENT AND EROSION CONTROL PLANNING.

1. INSTALL SILT FENCE IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS, IN LOCATIONS DETAILED ON THIS PLAN OR AS ORDERED BY THE ENGINEER.
2. CONSTRUCT THE STABILIZED CONSTRUCTION ENTRANCE TO PREVENT TRACKING OF SEDIMENT OFFSITE.
3. CLEAR AND GRUB THE DRIVEWAY CORRIDOR.
4. CONSTRUCT ACCESS DRIVE IN ACCORDANCE WITH APPROVED PLANS.
5. CLEAR & GRUB PARKING AREA. CONSTRUCT NEW PARKING LOT.
6. LOAM AND SEED DISTURBED AREAS, STABILIZE SLOPES WITH MATTING WHERE SPECIFIED.
7. REMOVE SILT FENCE AFTER ALL UPHILL SOILS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION.

1. PHASE CONSTRUCTION AND SEQUENCE EARTH DISTURBANCE ACTIVITIES TO REDUCE THE AREA OF LAND DISTURBED AT ANY ONE TIME.
2. MAINTAIN AS MUCH NATURAL VEGETATION AS IS PRACTICABLE.
3. USE TRAFFIC CONTROL TO RESTRICT TRAFFIC TO PREDETERMINED ROUTES.
4. USE TEMPORARY MULCHING, PERMANENT MULCHING, TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER TO REDUCE THE NEED FOR DUST CONTROL.
5. APPLY WATER, OR OTHER DUST INHIBITING AGENTS OR TACKIFIERS, AS APPROVED BY THE NHDES.

PERMITS REQUIRED:

1. CITY OF KEENE, SITE PLAN REVIEW
2. CITY DEMOLITION PERMIT

PROPERTY OWNER & APPLICANT:

560 MAIN STREET, LLC
20 MANCHESTER STREET
KEENE, NH 03431

DIG SAFE 1-888-344-7233

A.D.A. ACCESSIBILITY NOTES:

ALL CONSTRUCTION SHALL COMPLY WITH DEPARTMENT OF JUSTICE 28 CFR PART 36, A.D.A. STANDARDS FOR ACCESSIBLE DESIGN. THIS INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING REQUIREMENTS:

PARKING SPACES AND ACCESS AISLES:

1. PARKING SPACES AND ACCESS AISLES SHALL HAVE SURFACE SLOPES NOT EXCEEDING 1:50 (2%) IN ANY DIRECTION.
2. MINIMUM PARKING SPACE WIDTH SHALL BE 8 FT.
3. MINIMUM ACCESS AISLE WIDTH SHALL BE 5 FT (8 FT. FOR VAN ACCESSIBLE SPACES).
4. ACCESSIBLE SPACES SHALL BE DESIGNATED AS RESERVED BY A SIGN SHOWING THE SYMBOL OF ACCESSIBILTY. VAN ACCESSIBLE SPACES SHALL BE FURTHER DESIGNATED AS SUCH BY APPROPRIATE SIGNAGE.

ACCESSIBLE ROUTES:

5. AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED FROM PUBLIC TRANSPORTATION STOPS, A.D.A. PARKING, PASSENGER LOADING ZONES, AND PUBLIC STREETS OR SIDEWALKS, TO AN A.D.A. BUILDING ENTRANCE.
6. AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT A.D.A. ACCESSIBLE BUILDINGS, ACCESSIBLE ELEMENTS AND FACILITIES (MAILBOXES, TRASH RECEPTACLES, COMMON AREAS), AND A.D.A. PARKING THAT ARE ON THE SAME SITE.
7. MAXIMUM SLOPE OF SURFACES ADJACENT TO AN ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20 (5%).
8. CURB RAMP FLARES SHALL NOT EXCEED A SLOPE OF 1:12 (8.33%).
9. MAXIMUM CROSS-SLOPE ALONG ANY PORTION OF THE ACCESSIBLE ROUTE SHALL NOT EXCEED 1:50 (2%).
10. TRANSITIONS FROM RAMPS AND WALKS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES.

RAMPS:

11. ANY PART OF AN ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 (5%) SHALL BE CONSIDERED A RAMP.
12. THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP.
13. MAXIMUM SLOPE OF ANY RAMP SHALL BE 1:12 (8.33%).
14. MAXIMUM RISE OF ANY RAMP SHALL BE 30 IN. ANY RAMP HAVING A RISE GREATER THAN OR EQUAL TO 6 IN. SHALL HAVE AT LEAST ONE HANDRAIL.
15. RAMPS SHALL HAVE LEVEL LANDINGS AT BOTTOM AND TOP. LANDINGS SHALL BE AS WIDE AS THE RAMP AND AT LEAST 60 IN. LONG.
16. OUTDOOR RAMPS AND THEIR APPROACHES SHALL BE DESIGNED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.

IN THE EVENT THAT THESE REQUIREMENTS CONFLICT WITH DESIGN PLANS, OR IF FIELD CONDITIONS RENDER THESE UNATTAINABLE, CONTACT THE ARCHITECT AND/OR ENGINEER PRIOR TO BEGINNING WORK.

STABILIZATION DEFINITION:

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED COVER HAS BEEN ESTABLISHED IN A MANNER THAT IS EVENLY DISTRIBUTED OVER THE SITE, WITH NO LARGE AREAS OF BARE SOIL;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED;
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03.

SEED SPECIFICATIONS

TEMPORARY SEED

PERENNIAL RYE GRASS

PERMANENT SEED:

ALL MOWABLE AREAS: PARK SEED NHDOT TYPE 15
(CONSERVATION MIX ACCEPTABLE, AS APPROVED BY ENGINEER)

CREEPING RED FESCUE	40 LB/AC
PERENNIAL RYEGRASS	50 LB/AC
KENTUCKY BLUEGRASS	25 LB/AC
REDTOP	5 LB/AC
TOTAL:	120 LB/AC

ALL SLOPES 5:1 OR STEEPER: SLOPE SEED NHDOT TYPE 45
(OR OTHER WILDFLOWER MIX APPROVED BY ENGINEER)

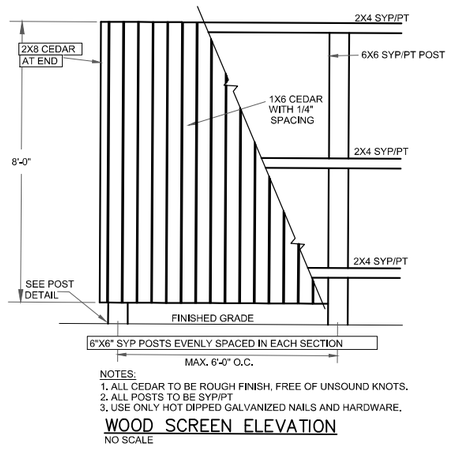
CREEPING RED FESCUE	35 LB/AC
PERENNIAL RYEGRASS	30 LB/AC
REDTOP	5 LB/AC
ALSIKE CLOVER	5 LB/AC
LANCE-LEAVED COREOPSIS	5 LB/AC
OXEYE DAISY	3 LB/AC
BUTTERFLY WEED	3 LB/AC
BLACKEYED SUSAN	3 LB/AC
WILD LUPINE	3 LB/AC
TOTAL:	95 LB/AC

LEGEND

	HYDRANT
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	CULVERT END SECTION
S	SEWER MANHOLE
	GATE VALVE
D	DRAIN MANHOLE
	HANDICAP PARKING
	LIGHT POLE
S	SEWER LINE
W	WATER LINE
SD	STORM DRAIN LINE
SF	SILT FENCE
	100 YEAR FLOODPLAIN BOUNDARY
	WETLAND BOUNDARY
	SIGN
U.N.O.	UNLESS NOTED OTHERWISE
N.I.C.	NOT IN CONTRACT
T.B.R.	TO BE REMOVED
O.A.E.	OR APPROVED EQUAL
S.C.E.	STABILIZED CONSTRUCTION ENTRANCE
I.C.C.	INTEGRAL CONCRETE CURB
V.C.C.	VERTICAL CONCRETE CURB
V.G.C.	VERTICAL GRANITE CURB
T.D.	TIP-DOWN

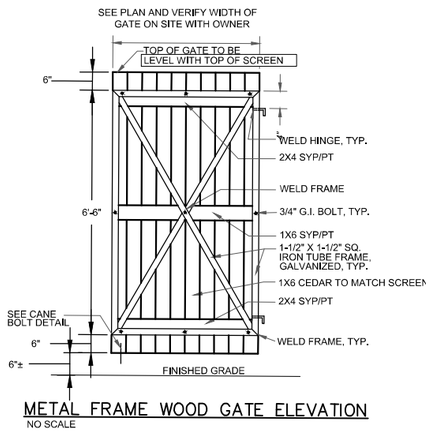
37 MANCHESTER SITE DATA TABLE

TAX MAP #:	114-003-000-0000, 94,579 SQ. FT. ± 2.17± ACRES	
ZONE:	COMMERCE	
	AVAILABLE:	REQUIRED:
LOT SIZE:	2.17± ACRES	15,000 SF
FRONTAGE:	145 FEET	50 FEET
	ALLOWED:	PROPOSED:
BLDG. HEIGHT:	42 FEET	NA
BUILDING SETBACKS:		
FRONT:	20'	
REAR:	20'	
SIDES:	20'	
LOT COVERAGE:	MAXIMUM:	PROPOSED:
BUILDINGS:	80% (75,663 SF/1.74 AC)	28.5% (26,920 SF/0.62 AC)
TOTAL IMPERMEABLE:	80% (75,663 SF/1.74 AC)	65.7% (62,170 SF/1.43 AC)
PARKING:	REQUIRED:	PROPOSED:
9' X 18':	OFFICE: 4 SPACES/1,000 GFA STORAGE: 1 SPACE/3,000 GFA =(4,900*4/1000)+(22,020*1/1,000) =20+22=42	42 (OF WHICH 2 ARE ADA)
A.D.A. ACCESSIBLE:	2	2
LANDSCAPING:	REQUIRED: 1 TREE/10 SPACES 42*1/10 =4	PROPOSED: 5

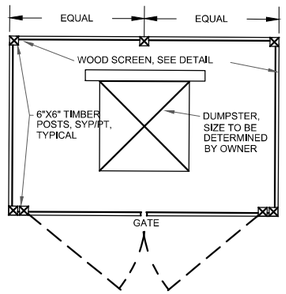


NOTES:
1. ALL CEDAR TO BE ROUGH FINISH, FREE OF UNSOUND KNOTS.
2. ALL POSTS TO BE SYP/PT
3. USE ONLY HOT DIPPED GALVANIZED NAILS AND HARDWARE.

WOOD SCREEN ELEVATION
NO SCALE



METAL FRAME WOOD GATE ELEVATION
NO SCALE



NOTES:
1. ALL WOOD POSTS TO BE PRESSURE TREATED, FREE FROM EXCESSIVE CRACKS, CHIPS, WARPS OR KNOTS.
2. ALL FASTENERS TO BE HOT DIPPED GALVANIZED.
3. WOOD SCREEN MEMBERS AND GATES TO CONFORM TO DETAIL ELEVATION AS NOTED.
4. DIMENSIONS OF ENCLOSURE TO BE DETERMINED BY OWNER PRIOR TO FABRICATION OR CONSTRUCTION.

WOOD DUMPSTER ENCLOSURE
NO SCALE

LIZA P. SARGENT No. 13365 - STATE OF NEW HAMPSHIRE - LICENSED PROFESSIONAL ENGINEER

5/7/26
Liza Sargent
LIZA P. SARGENT DATE
R.C.E. NUMBER: 13365

NO.	REVISION	DATE	DWN	CHK
1	REVISED PER CITY STAFF COMMENTS	07-MAY-26	LPS	LPS

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Engineering
Planning
Landscape Architecture
Surveying

SVE Associates
P.O. Box 1818
439 West River Road
Brattleboro, VT 05302
T 802.257.0561
F 802.257.0721
www.sveassoc.com

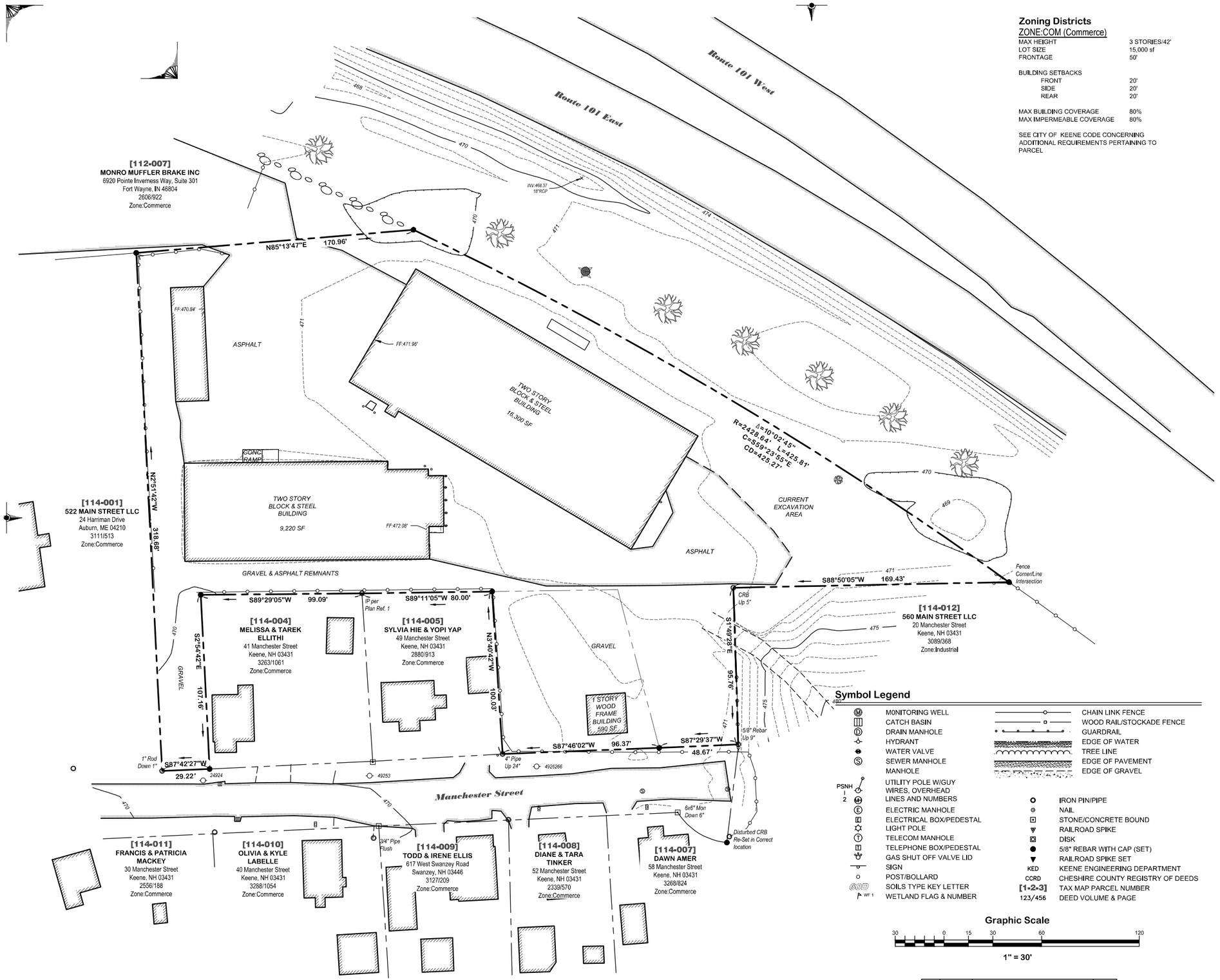
NOTES & LEGEND

560 MAIN STREET

37 MANCHESTER ST
KEENE, NEW HAMPSHIRE

560 MAIN STREET, LLC

PROJ. #: K2665-01
DATE: 30-MAR-26
DESIGN: LPS
DRAWN: AJG
CHECKED: LPS
SHEET N-1



Zoning Districts

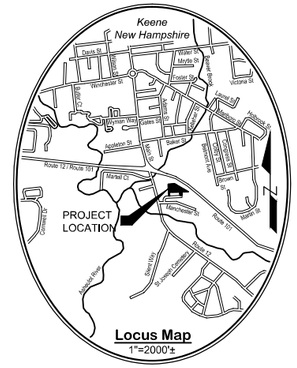
ZONE:COM (Commerce)

MAX HEIGHT	3 STORIES/42'
LOT SIZE	15,000 sf
FRONTAGE	50'
BUILDING SETBACKS	
FRONT	20'
SIDE	20'
REAR	20'
MAX BUILDING COVERAGE	80%
MAX IMPERMEABLE COVERAGE	80%

SEE CITY OF KEENE CODE CONCERNING ADDITIONAL REQUIREMENTS PERTAINING TO PARCEL

N

NAD83
NH State Plane 2025



Symbol Legend

M	MONITORING WELL		CHAIN LINK FENCE
	CATCH BASIN		WOOD RAIL/STOCKADE FENCE
D	DRAIN MANHOLE		GUARDRAIL
	HYDRANT		EDGE OF WATER
	WATER VALVE		TREE LINE
S	SEWER MANHOLE		EDGE OF PAVEMENT
	MANHOLE		EDGE OF GRAVEL
PSNH	UTILITY POLE W/GUY WIRES, OVERHEAD		
2	LINES AND NUMBERS		IRON PIN/PIPE
E	ELECTRIC MANHOLE		NAIL
	ELECTRICAL BOX/PEDESTAL		STONE/CONCRETE BOUND
	LIGHT POLE		RAILROAD SPIKE
T	TELECOM MANHOLE		DISK
	TELEPHONE BOX/PEDESTAL		5/8" REBAR WITH CAP (SET)
	GAS SHUT OFF VALVE LID		RAILROAD SPIKE SET
	SIGN	KED	KEENE ENGINEERING DEPARTMENT
	POST/BOLLARD	CCRD	CHESHIRE COUNTY REGISTRY OF DEEDS
60D	SOILS TYPE KEY LETTER	[1-2-3]	TAX MAP PARCEL NUMBER
WF 1	WETLAND FLAG & NUMBER	123/456	DEED VOLUME & PAGE

Graphic Scale

30 0 15 30 60 120

1" = 30'

NO.	DATE	REVISION	BY

Plan References

REFERENCES INCLUDE ALL INFORMATION REFERRED TO ON ANY OF THE FOLLOWING PLANS

1. TWO LOT SUBDIVISION OF TAX MAP 306-22-007-0000, 580 MAIN STREET, PREPARED FOR CITY OF KEENE, DATED FEBRUARY 28, 2004; BY ROGER MONSELL, CLOUGH HARBOUR & ASSOCIATES (Cab.12 Dr.10 No.178 CCRD)
2. STATE OF NEW HAMPSHIRE, PLANS OF PROPOSED FEDERAL AID URBAN PROJECT U 013-1(6), NH PROJECT NO. P-3435-C, ASBUILT PLANS, DATED 4/5/1963 OBTAINED FROM NHDOT ONLINE PROJECT CENTER.
3. SUBDIVISION PLAT PREPARED FOR TIRE WAREHOUSE CENTRAL, INC, DATED DECEMBER 15, 1987, BY DAVID A. MANN (Cab.10 Dr.00 No.128 CCRD & Cab.9 Dr.00 No.159)
4. TWO LOT SUBDIVISION PLAN, LAND OF THE CITY OF KEENE, DATED 9/13/19, BY RUSSELL J. HUNTLEY, HUNTLEY SURVEY & DESIGN, PLLC (Plan 19116-8 CCRD)

Notes

1. **NORTH ORIENTATION:** NORTH SHOWN ON THIS PLAN IS REFERENCED TO NAD83 NH STATE PLANE GRID, BASED ON A STATIC GPS SURVEY PERFORMED IN CONJUNCTION WITH PLAN REFERENCE NO.4. NORTH IS SHOWN ONLY TO DEFINE ANGULAR RELATIONSHIPS.
2. **BOUNDARY LINES:** THE BOUNDARY LINES SHOWN ON THIS PLAN WERE CALCULATED FROM DEEDS, RECORD PLANS, AND PHYSICAL EVIDENCE FOUND DURING THE FIELD SURVEY.
3. **TOPOGRAPHY:** TOPOGRAPHYS HOWN ON THIS PLAN WAS DEVELOPED FROM AN ACTUAL FIELD SURVEY BY HUNTLEY SURVEY & DESIGN, PLLC PERFORMED DURING THE MONTH OF SEPTEMBER 2025. THE VERTICAL DATUM IS NAVD88. CONTOUR INTERVAL IS ONE (1) FOOT.
4. **UNDERGROUND UTILITIES DISCLAIMER:** ANY UNDERGROUND UTILITIES, STRUCTURES, AND FACILITIES SHOWN HAVE BEEN PLOTTED BASED ON FIELD SURVEY OF SURFACE LOCATIONS AND AVAILABLE DATA FROM PRIOR MAPS AND RECORDS. THEIR EXISTENCE AND LOCATIONS MUST BE CONSIDERED APPROXIMATE. OTHER UNDERGROUND UTILITIES MAY EXIST THAT WERE UNKNOWN OR NOT INVESTIGATED AT THE TIME OF SURVEY. **ALL UTILITY SIZES AND LOCATIONS MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION. CALL DIG-SAFE BEFORE DIGGING.**
5. **WETLANDS:** A SITE INSPECTION FOR THE PRESENCE OF JURISDICTIONAL WETLANDS WAS PERFORMED BY HUNTLEY SURVEY & DESIGN DURING THE MONTH OF SEPTEMBER 2025. JURISDICTIONAL WETLANDS WERE NOT FOUND.
6. **FEMA FLOOD ZONE:** THE PARCELS SHOWN ARE CURRENTLY GRAPHICALLY LOCATED IN ZONE X AND ARE NOT WITHIN A SPECIAL FLOOD HAZARD AREA, SEE FEMA PANEL 33005C0267E EFFECTIVELY DATED MAY 23, 2006, NOTE THAT PRELIMINARY FLOOD MAP CHANGES INDICATE PORTIONS OF THE PROJECT SITE ARE TO BE INCLUDED IN ZONE AE

811 DigSafe Systems

Surveyor's Certification

PURSUANT TO RSA 676:18, III AND RSA 672:14, I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PRODUCED BY ME OR UNDER MY DIRECT SUPERVISION FROM A TOTAL STATION AND DATA COLLECTOR TRAVERSE, WITH A POSITION TOLERANCE THAT MEETS OR EXCEEDS NH LAN 500 STANDARDS AND THE ALLOWABLE RELATIVE POSITIONAL ACCURACY REQUIRED BY THE STATE OF NEW HAMPSHIRE IN TABLE 500.1, "ACCURACY MEASUREMENTS, LOCAL ACCURACY OF CONTROL SUPPORTING THE SURVEY."
THIS SURVEY IS BASED ON:

A. INFORMATION RECORDED AT THE CHESHIRE COUNTY REGISTRY OF DEEDS AS REFERENCED HEREON,
B. INFORMATION PROVIDED BY THE CLIENT, AND
C. PHYSICAL EVIDENCE FOUND DURING THE FIELD SURVEY.

BOUNDARY SURVEY CERTIFICATION

PURSUANT TO RSA 676:18, III AND RSA 672:14, I FURTHER CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION AS DEFINED BY THIS TITLE, AND THAT ALL LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED. NO NEW STREETS OR WAYS ARE SHOWN ON THIS PLAT.

Existing Conditions Plan of Land

OF

560 Main Street, LLC

located at
Tax Map 114 Lot 3
37 Manchester Street, Keene, Cheshire County, New Hampshire
Book 3299, Page 950

Surveyed 09/2025 **Plan prepared 10/02/2025**
Project No. H25-053 **Cad File No. H25-053 Excon.dwg**

Huntley Survey & Design, PLLC
NH & VT Land Surveying, Wetlands & NH Septic System Design
659 West Road, Temple, NH 03084 (603) 924-1669 www.huntleysurvey.com

[112-007]
MONRO MUFFLER BRAKE INC
6920 Pointe Inverness Way, Suite 301
Fort Wayne, IN 46804
2606/922
Zone:Commerce

[114-001]
522 MAIN STREET LLC
24 Hamiman Drive
Auburn, ME 04210
3111/513
Zone:Commerce

[114-003]
560 MAIN STREET LLC
37 Manchester Street
Keene, NH 03431
3299/950
Zone: Commerce

[114-004]
MELISSA & TAREK ELLITHI
41 Manchester Street
Keene, NH 03431
3263/1061
Zone:Commerce

[114-005]
SYLVIA HIE & YOPI YAP
49 Manchester Street
Keene, NH 03431
2880/913
Zone:Commerce

[114-012]
560 MAIN STREET LLC
20 Manchester Street
Keene, NH 03431
3089/368
Zone:Industrial

[114-011]
FRANCIS & PATRICIA MACKEY
30 Manchester Street
Keene, NH 03431
2556/188

[114-010]
OLIVIA & KYLE LABELLE
40 Manchester Street
Keene, NH 03431
3288/1054

[114-009]
TODD & IRENE ELLIS
617 West Swanzey Road
Swanzey, NH 03446
3127/209

[114-008]
DIANE & TARA TINKER
52 Manchester Street
Keene, NH 03431

[114-007]
DAWN AMER
58 Manchester Street
Keene, NH 03431
3268/824

37C RENTAL: COLD STORAGE 1420 SF
FF-470.84'
42.3'±
471
470
474
INV=466.37' 18"RCP
37A: 8 PERSON WAREHOUSE & OFFICE FOR FROLING ENERGY
FF-471.96'
HANDICAP PARKING SIGN MOUNTED ON BUILDING, TYP. OF 2
5'
16'
TWO STORY BLOCK & STEEL BUILDING 16,300 SF
37D RENTAL: STORAGE
CONC. RAMP
TWO STORY BLOCK & STEEL BUILDING 9,220 SF
37B RENTAL: 4 EMPLOYEES
FF-472.08'
SNOW STORAGE
CURRENT EXCAVATION AREA
EXPAND GRAVEL, 1,275±SF
EXPAND GRAVEL, 300±SF
RECYCLING BINS
DUMPSTER ENCLOSURE, SEE DETAILS ON SHEET N-1
GRAVEL & ASPHALT REMNANTS TBR, LOAM, SEED & MULCH
ONE WAY ONLY SIGN
SNOW STORAGE
LOAM, SEED & MULCH
GRAVEL
SILT FENCE OR STRAW WATTLE
GRAVEL PARKING 14 SPACES
PROPOSED ONE-WAY ACCESS BETWEEN 20 & 37 MANCHESTER STREET
PROPOSED 6FT TALL WOODEN FENCE
1 STORY WOOD FRAME BUILDING 590 SF TBR
WHEEL STOP, TYP. OF 17
TREE, TYP. OF 5
24.0'
AS
EXISTING FENCE TO BE REMOVED
PROPOSED NEW DRIVEWAY
GRAVEL TBR LOAM SEED & MULCH
24924
49253
1206266

NOTES:

1. EXISTING CONDITIONS SURVEY BY HUNTLEY SURVEY & DESIGN, PLLC, PREPARED 10/02/2025.
2. THE PARCEL IS CURRENTLY GRAPHICALLY LOCATED IN ZONE X AND IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA, SEE FEMA PANEL 33005C0267E EFFECTIVELY DATED MAY 23, 2006. NOTE THE PRELIMINARY FLOOD MAP CHANGES INDICATE PORTIONS OF THE PROJECT SITE ARE TO BE INCLUDED IN THE ZONE AE.
3. PARKING SPACES ARE SHOWN FOR PLANNING PURPOSES. SPACES ARE NOT STRIPED.

LANDSCAPE LEGEND:

SYMBOL	TYPE	QUANTITY	PLANTING SIZE	MATURE HEIGHT
AS	AMERICAN SYCAMORE	5	3" CAL.	90–100 F'

- STATE OF NEW HAMPSHIRE - LIZA P. SARGENT No. 13365 LICENSED PROFESSIONAL ENGINEER -

Liza Sargent 5/7/26

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

NO.	REVISION	DATE	DWN	CHK
1	REVISED PER CITY STAFF COMMENTS	07-MAY-26	LPS	LPS

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Planning
Landscape Architecture
Surveying

SVE Associates
P.O. Box 1818
439 West River Road
Brattleboro, VT 05302
T 802.257.0561
F 802.257.0721
www.sveassoc.com

SITE PLAN

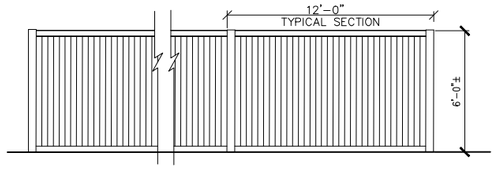
560 MAIN STREET
37 MANCHESTER ST
KEENE, NEW HAMPSHIRE

560 MAIN STREET, LLC

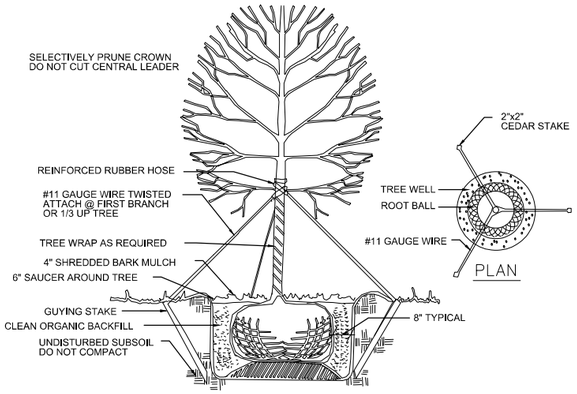
0 10 20 40
GRAPHIC SCALE 1" = 20'

N

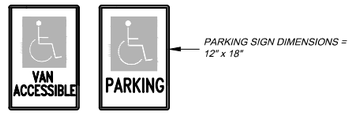
PROJ. #: K2665-01
DATE: 30-MAR-26
DESIGN: LPS
DRAWN: AJG
CHECKED: LPS
SHEET C-1

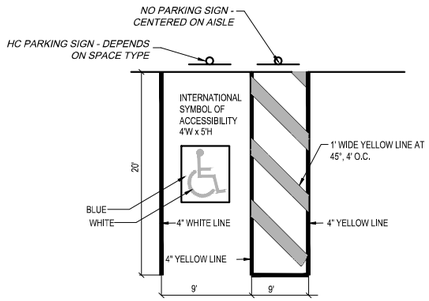


WOOD FENCE
NOT TO SCALE

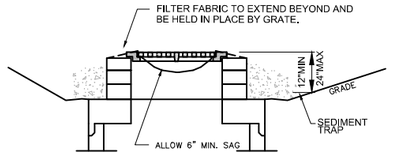


TREE PLANTING & GUYING DETAIL
NO SCALE

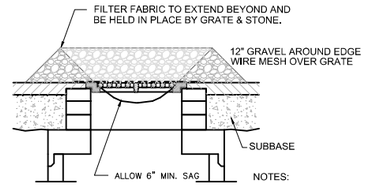




HANDICAP PARKING SPACE DETAIL
NOT TO SCALE



LANDSCAPED AREAS

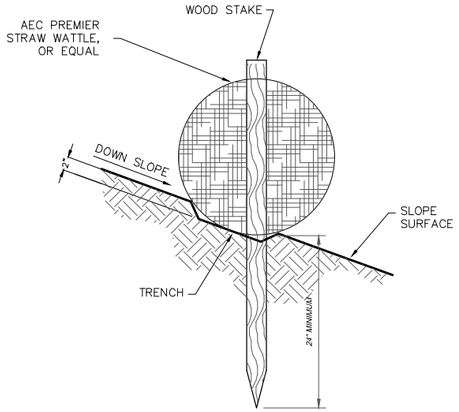


PAVED AREAS

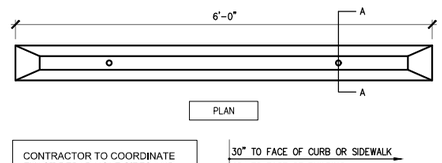
NOTES:
1. TEMPORARY DURING CONSTRUCTION.
2. REMOVE AND REPLACE WHEN CLOGGED.

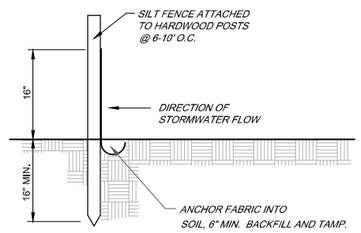
REGULAR MAINTENANCE, INCLUDING REPLACEMENT OF SEDIMENT & EROSION CONTROLS SHALL BE CONDUCTED IN ACCORDANCE WITH ALL PERMIT CONDITIONS, AT NO ADDITIONAL COST TO THE OWNER.

CATCH BASIN GRATE INLET FILTER
NOT TO SCALE

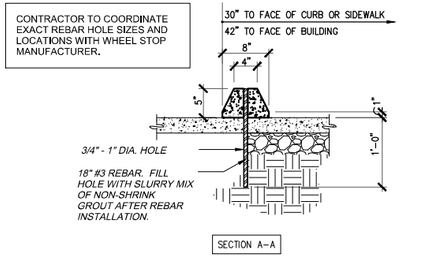


STRAW WATTLE
NOT TO SCALE

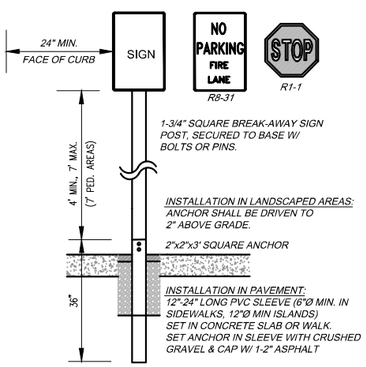




SILT FENCE
NOT TO SCALE

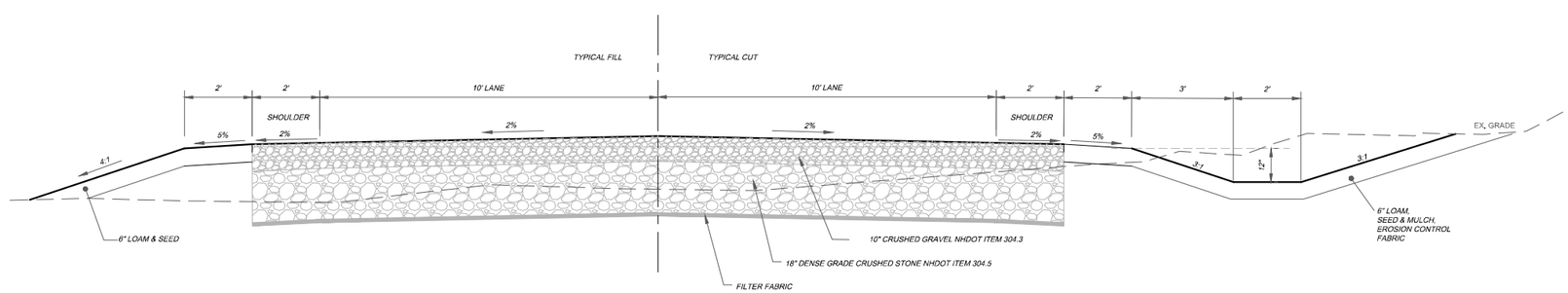


PRECAST CONCRETE WHEEL STOP
NOT TO SCALE



SIGN TYPE AND SIZE VARIES (SEE PLAN). ALL INSTALLATIONS SHALL COMPLY WITH MUTCD. ALL SIGN HARDWARE AND MATERIALS SHALL BE PROVIDED IN ACCORDANCE WITH THIS DETAIL. EXISTING SIGNS SHALL BE RELOCATED I.A.W. NH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

SIGN DETAIL
NOT TO SCALE



GRAVEL ROAD CROSS SECTION
SCALE: 1"=2'

STATE OF NEW HAMPSHIRE
LIZA P. SARGENT
No. 13365
LICENSED PROFESSIONAL ENGINEER

Liza Sargent 5/7/26
LIZA P. SARGENT DATE
R.C.E. NUMBER: 13365

NO.	REVISION	DATE	DWN	CHK
1	REVISED PER CITY STAFF COMMENTS	07-MAY-26	LPS	LPS

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F 802.257.0721
www.sveassoc.com

CONSTRUCTION DETAILS

560 MAIN STREET

37 MANCHESTER ST
KEENE, NEW HAMPSHIRE

560 MAIN STREET, LLC

GRAPHIC SCALE: AS SHOWN

PROJ. #: K2665-01

DATE: 30-MAR-26

DESIGN: LPS
DRAWN: AJG
CHECKED: LPS

SHEET C-2

REFERENCE NOTES:

1. AERIAL IMAGERY SHOWN IS REFERENCED FROM THE CITY OF KEENE, NH AXIS GIS MAPPER ON MAY 7, 2026. IMAGERY SHOWN IS FROM BASEMAP "2025 CITY IMAGES".
2. THE PURPOSE OF EXHIBIT A IS TO SHOW THE CONFIGURATION BETWEEN 20 AND 37 MANCHESTER STREETS AND THE PROPOSED RENTAL AREAS ON 20 MANCHESTER.

NO.	REVISION	DATE	DWN	CHK
1	PHASE II BUILDING FOOTPRINT	14-FEB-23	LPS	LPS
2	PHASE II BUILDING FOOTPRINT	17-MAR-23	LPS	LPS
3	REVISED PER CITY STAFF COMMENTS	07-MAY-26	LPS	LPS

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F 802.257.0721
www.sveassoc.com

RENTAL AREA EXHIBIT

560 MAIN STREET

560 MAIN STREET, LLC
590 Hancock Road
Peterborough, NH 03458

0 25' 50' 100'
GRAPHIC SCALE 1" = 50'

PROJ. #: K2665
DATE: 20-SEPT-19
DESIGN: LPS
DRAWN: TS/LPS
CHECKED: LPS
EXHIBIT A

NO.	REVISION	DATE	DWN	CHK

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www.sveassoc.com

TURNING MOVEMENT-KEENE LADDER TRUCK

560 MAIN STREET

37 MANCHESTER ST
KEENE, NEW HAMPSHIRE

560 MAIN STREET, LLC

0 25' 50' 100'
GRAPHIC SCALE 1" = 50'

N

PROJ. #: **K2665-01**

DATE: 30-MAR-26

DESIGN: LPS
DRAWN: AJG
CHECKED: LPS

EXHIBIT **B**

NO.	REVISION	DATE	DWN	CHK

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Landscape Architecture
Surveying

SVE Associates
P.O. Box 1818
439 West River Road
Brattleboro, VT 05302
T 802.257.0561
F 802.257.0721
www.sveassoc.com

TURNING MOVEMENT- BOX TRUCK

560 MAIN STREET

37 MANCHESTER ST
KEENE, NEW HAMPSHIRE

560 MAIN STREET, LLC

0 25' 50' 100'
GRAPHIC SCALE 1" = 50'

N

PROJ. #:
K2665-01

DATE:
30-MAR-26

DESIGN: LPS
DRAWN: AJG
CHECKED: LPS

EXHIBIT
C

Existing Painted Steel Siding

Proposed Wood Siding Vertical Board and Batton

Return to:
Susan A. Manchester, Esq.
Sheehan Phinney Bass & Green PA
1000 Elm Street, 17th Floor
Manchester, NH 03101
T/S: $11,250.00

E Doc # 2500329 01/15/2025 08:30:42 AM
Book 3299 Page 950 Page 1 of 4
Register of Deeds, Cheshire County
LCHIP CHA130851 25.00
TRANS TAX CH858089 11,250.00

Transfer Tax:$ 11,250.00

WARRANTY DEED

Monro, Inc., f/k/a Monro Muffler Brake, Inc., a New York corporation having an address of 295 Woodcliff Drive, Suite 202, Fairport, New York 14450, for consideration paid, grants to ***560 Main Street LLC***, a New Hampshire limited liability company having an address of 20 Manchester Street, Keene, NH 03431, with warranty covenants:

"TRACT I" - 37 Manchester Street

A certain tract or parcel of land with the buildings thereon located in the City of Keene, Cheshire County, New Hampshire, bounded and described as follows:

Beginning at an iron pin on the northerly side of Manchester Street, said pin being located twenty-nine and thirty hundredths (29.30) feet, more or less, westerly of the southwest corner of land now or formerly of Rajala;

Thence North 12° 28.4' East along land now or formerly of Bergevin, a distance of three hundred eighteen and eighty-four hundredths (318.84) feet, more or less, to an iron pin at land now or formerly of Damon;

Thence South 79° 23.5' East along said Damon land, a distance of one hundred seventy and ninety-eight hundredths (170.98) feet, more or less, to an iron pin on the southwesterly side of New Hampshire Route 101;

Thence southeasterly along the southwesterly side of said Route 101, a distance of four hundred thirty (430.0) feet, more or less;

Thence North 75° 25' West, a distance of three (3.0) feet, more or less, to the northeast corner of land of the City of Keene and continuing in the same direction along said City of Keene land, and along Tract II below, and along land now or formerly of Fecto, and land now or formerly of Rajala, a distance of four hundred ninety-eight (498.0) feet, more or less, to an iron pin at the northwest corner of said Rajala land;

Thence South 12° 17.5' West along said Rajala land, a distance of one hundred six and seventy-nine hundredths (106.79) feet, more or less, to an old stone bound on the northerly side of Manchester Street;

Thence North 77° 17' West along said Street, a distance of twenty-nine and thirty hundredths (29.30) feet, more or less, to the point of beginning.

Also conveying a right-of-way in common with others as follows:

A right-of-way twelve (12.0) feet wide in said Keene, along the southerly line of land now or formerly of Hamilton Realty Corporation, from Main Street to premises now or formerly of Norman H. Cotton and James D. Walker, d/b/a Keene Specialty Sales (formerly Baker Manor), as shown on a plan entitled "Norman H. Cotton and James D. Walker, Keene Specialty Sales, Keene, New Hampshire" Surveyed April 1968, revised through October, 1975, prepared by Roy K. Piper, recorded in the Cheshire County Registry of Deeds in Plan Book 35, Page 9.

"TRACT II" – 37 Manchester Street

A certain tract of land in Keene, County of Cheshire and State of New Hampshire, being shown as Lot 1 on a plan of land entitled "Subdivision Plan Prepared for Tire Warehouse Central, Inc., Land of City of Keene, Keene, N.H." dated December 16, 1987, prepared by David A. Mann Associates, and recorded in the Cheshire County Registry of Deeds in Plan Book 9, Page 159, being bounded and described as follows:

Beginning at an iron pin in the northerly line of Manchester Street which marks the corner of other land of Tire Warehouse Central, Inc.;

Thence North 0° 10' East, a distance of 100.47 feet bounding on other land of Tire Warehouse Central, Inc. to an iron pin;

Thence South 75° 44' East, a distance of 70.83 feet bounding on other land of Tire Warehouse Central, Inc. to an iron pin;

Thence South 12° 50' West, a distance of 95.76 feet along a wire fence bounding on other land of the City of Keene to an iron pin in the northerly line of Manchester Street;

Thence North 77° 44' West, a distance of 48.77 feet on the northerly line of Manchester Street to the place of beginning.

The above-described Tract II is merged with and considered an integral part of Tract I, and is not to be conveyed or transferred separately from other land of Tire Warehouse Central, Inc. in the future.

"TRACT III" – 53 Manchester Street

A certain tract of land, with any buildings thereon, situated in said Keene and being Lots numbered 15, 16, 17 and 18 on a plan of land entitled "Main Street Terrace, Keene, N.H., Owned by A. W. Lacroix, Manchester, N.H." dated March, 1924, prepared by E. N. Sheffield, C.E., and recorded in Plan Book 2, Page 121 of the Cheshire County Registry of Deeds, to which plan reference may be had for a more particular description.

Meaning and intending to describe and convey a portion (Tracts II, III and IV) of the same premises conveyed to Monro Muffler Brake, Inc. by Warranty Deed from Tire Warehouse Central, Inc. dated October 2, 2009 and recorded in the Cheshire County Registry of Deeds on November 4, 2009 in Book 2606, Page 922.

[Signature Page Follows]

IN WITNESS WHEREOF, Monro, Inc., f/k/a Monro Muffler Brake, Inc. has caused this instrument to be executed this 13th day of January, 2025.

MONRO, INC.

By: _____
Name: Brian J. D'Ambrosia
Its: Executive Vice President and Chief Financial Officer
Duly Authorized

STATE OF New York
COUNTY OF Monroe

On this 13th day of January, 2025, before me, the undersigned notary public, personally appeared Brian J. D'Ambrosia, proved to me through satisfactory evidence of identification, which was: [ ] at least one current document issued by a federal or state government agency bearing the photographic image of the signatory's face and signature, [ ] the oath or affirmation of a credible witness unaffected by the document or transaction who is personally known to me and who personally knows the signatory, or [X] identification of the signatory based on my personal knowledge of the identity of the signatory, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose, as Chief Executive Officer of Monro, Inc., as the voluntary act of Monro, Inc.

Seal:

_____
Notary Public
My Commission Expires: 11/5/2025

MINDI S. COLLOM
Notary Public, State of New York
Monroe County
Reg. No. 01CO6065971
Commission Expires 11/5/2025

CITY OF KEENE
NEW HAMPSHIRE

Meeting Date: May 26, 2026

To: Planning Board

From: Megan Fortson, Planner

Through: Mari Brunner, Senior Planner

Subject: **PB-26-11 - GMS Parking Lot Expansion - Major Site Plan & Surface Water Protection Conditional Use Permit - Applicant Fieldstone Land Consultants, on behalf of owner GMS Realty LLP, proposes to expand the rear parking lot and install stormwater management infrastructure within the 30-ft surface water buffer on the lot at 30 Production Ave. The property is ~3.1 ac and is in the Industrial District.**

Recommendation:

To review the attached staff report and application materials in preparation for the public hearing.

Attachments:

1. Staff Report
2. Application
3. Narrative
4. Plan Set
5. Drainage Report

Background:

The ~3.1-ac subject parcel is located on the eastern side of Production Ave in the Industrial District. The site is currently developed with a 4-unit industrial building occupied by the Fastenal Fulfillment Center, Pathways Book Service, and Green Mountain Electric Supply. The applicant proposes to formalize and expand the parking area at the rear of the site by adding 24 additional spaces. To accommodate this additional impervious area and solve existing drainage issues, a new stormwater management area is proposed to be installed within the 30-ft surface water buffer. Per Section 11.6.1.A.4 of the Land Development Code (LDC), the construction of new stormwater management facilities and structures within the surface water buffer requires the submittal of a Conditional Use Permit for review by the Planning Board

STAFF REPORT

PB-26-11 – MAJOR SITE PLAN & SURFACE WATER PROTECTION CONDITIONAL USE PERMIT, 30-42 PRODUCTION AVE

Request:

Applicant Fieldstone Land Consultants, on behalf of owner GMS Realty LLP, proposes to expand the rear parking lot and install stormwater management infrastructure within the 30-ft surface water buffer on the lot at 30-42 Production Ave (TMP #110-006-000). The property is ~3.1-ac in size and is located in the Industrial District.

Background:

The ~3.1-ac subject parcel is located on the eastern side of Production Ave in the Industrial District (Figure 1). Adjacent uses include a commercial office/warehouse building to the north, Unity Homes manufacturing to the west, and undeveloped land to the south and east. The site is currently developed with a 4-unit industrial building occupied by the Fastenal Fulfillment Center, Pathways Book Service, and Green Mountain Electric Supply. Parking spaces are located to the west of the existing building with site access from two curb cuts along Production Ave. The rear of the site is occupied by an informal gravel parking area with some areas of pavement. A City tax ditch runs along the southeastern property boundary and is accompanied by wetlands, which run along the full length of the eastern property line.

Figure 1. Aerial imagery of the subject parcel at 30-42 Production Ave from 2025.

The applicant proposes to formalize and expand the parking area at the rear of the site by adding 24 additional spaces. To accommodate this additional impervious area and solve existing drainage issues, a new stormwater management area is proposed to be installed within the 30-ft surface water buffer. Per Section 11.6.1.A.4 of the Land Development Code (LDC), the construction of new stormwater management facilities and structures within the surface water buffer requires the submittal of a Conditional Use Permit for review by the Planning Board.

Determination of Regional Impact:

Staff have made a preliminary evaluation that the proposal does not appear to have the potential for "regional impact" as defined in RSA 36:55. The Board should determine whether the proposal could have the potential for regional impact.

Completeness:

The applicant requests exemptions from submitting a landscaping plan, lighting plan, elevations/renderings, a traffic analysis, soil analysis, historic evaluation, architectural & visual appearance analysis, and a screening analysis. Planning Staff have made the preliminary determination that granting the requested exemptions would have no bearings on the merits of the application and recommend that the Board accept the application as "complete."

Engineering Staff Comments:

- Please coordinate the planned start of construction with Public Works in order for the Highway Division to access and maintain the existing tax ditch that runs through the site during construction in order to minimize disturbance and disruption to operations.

APPLICATION ANALYSIS

ARTICLE 11, SECTION 11.6 – SURFACE WATER PROTECTION STANDARDS:

2.A **Relocation of Proposed Use / Activity:** The applicant proposes to formalize and expand the rear parking area by adding 24 additional parking spaces. The expanded parking area will provide more space for tenants to accept deliveries by large trucks and solve existing drainage issues. The parking lot is designed to pitch to the rear of the lot into a detention basin at the back of the building. The site is bounded on its eastern side by an area of wetlands, which run parallel to the City's tax ditch. Figure 2 shows the location of the wetlands in red and the 30-ft surface water buffer in orange.

The narrative states that the area to be impacted is currently a mix of trees and brush that have grown in along the tax ditch over time. Poorly drained soils adjacent to this area have formed a wetland. The applicant states that the stormwater management system cannot avoid being located within the buffer and goes on to state that the new drainage system has been located to avoid any impacts to the wetlands resource itself. Approximately 9,875-sf of impact is proposed within the 30-ft surface water buffer as a result of lowering grades and constructing a rain garden as the new stormwater management system, which the applicant says will function as a manmade wetland.

2.B **Buffer Encroachment:** The narrative states that the rain garden was designed to be narrow and long to minimize impacts to the surface water buffer and ensure that the wetlands would not be impacted by stormwater runoff. The detention area is at a lower elevation to receive stormwater and provide storage space for stormwater and floodwaters in this area, which is relatively flat.

2.C **Adverse Impacts:** The narrative states that runoff from the parking lot will be directed to the rain garden and treated by an amended soil layer and rain garden plantings. Any water that flows over from the spillway will be treated to ensure that direct runoff from the paved areas does not flow directly into the wetland. Silt fencing will be installed along the eastern boundary of the proposed rain garden to protect the wetlands during construction. After construction, disturbed areas will be planted and seeded for stabilization. Planning Staff recommend that the Board include a condition of approval related to the flagging and inspection of the surface water buffer prior to the commencement of site work.

Per Section 11.6.3.A of the LDC, this application has been referred to the Conservation Commission for review at their meeting on Monday, May 18th. Planning Staff will share any comments provided by the Commission during the public hearing for this application.

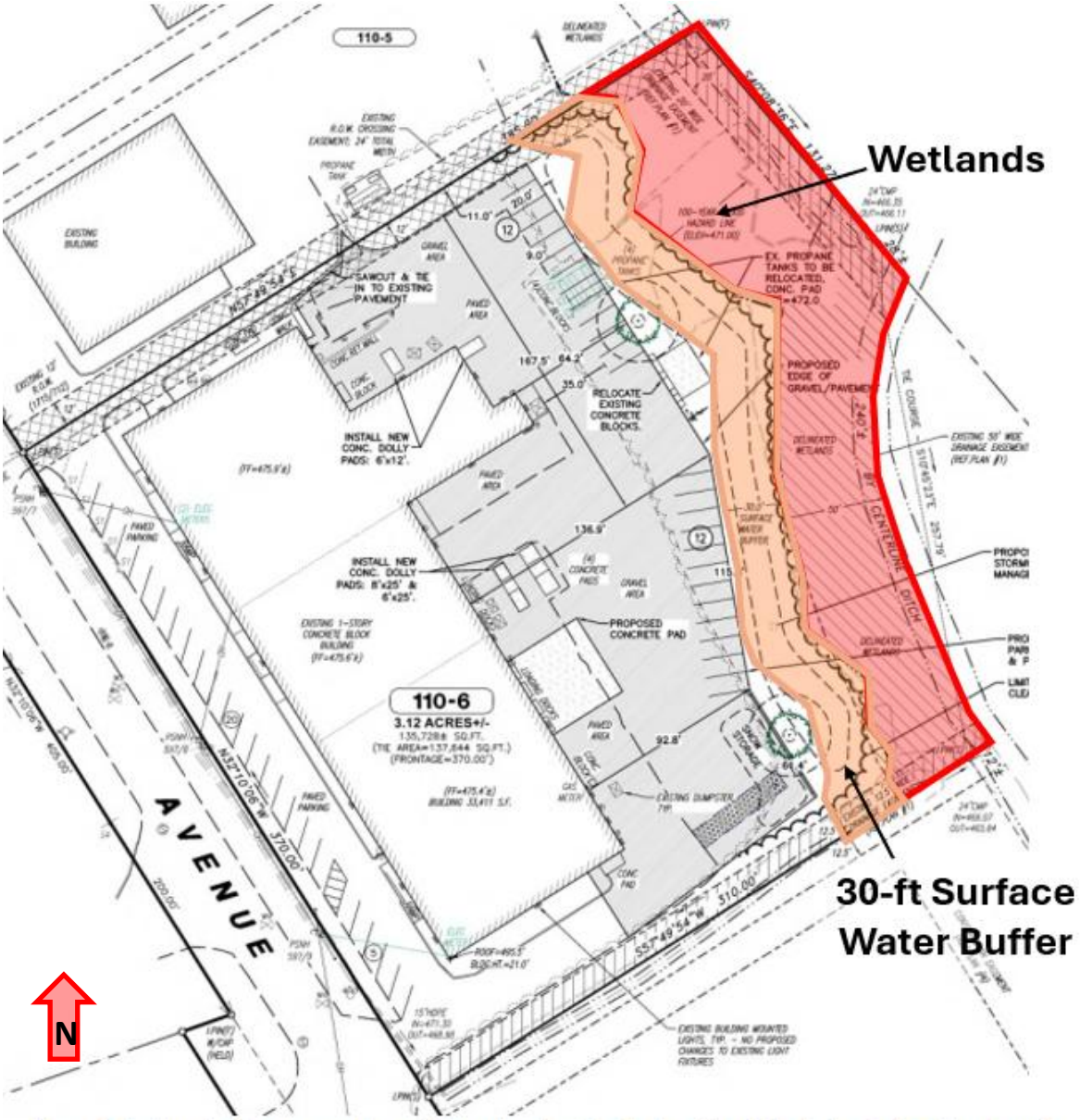


Figure 2. A snippet of the proposed conditions plan showing the location of the delineated wetlands and 30-ft surface water buffer on the parcel at 30-42 Production Ave.

2.D **<u>Preservation of Buffer</u>:** The narrative states that impacted portions of the surface water buffer will be replanted with water-loving plant species and a conservation seed mix will be used to stabilize the berm for the rain garden. Work within the tax ditch will be coordinated with the Public Works Department to ensure that impacted areas are only disturbed once. Planning Staff recommend that the Board include a condition of approval related to the submittal of a security to cover sediment and erosion control measures as well as all landscaping and seed mix needed to stabilize the rain garden.

2.E **Additional Criteria for Consideration:** During the deliberation of this application, the Board may consider the quality, location, connectivity, and other characteristics of the wetlands listed under this section of the LDC when deciding whether to allow the proposed encroachment into the surface water buffer.

ARTICLE 21 – SITE DEVELOPMENT STANDARDS:

21.2 **Drainage:** The project narrative states that to alleviate existing drainage issues on the site, the site will be re-graded towards the new rain garden, which will be used to treat and store stormwater runoff. Drainage calculations were submitted as part of the application materials and reviewed by the City Engineer. This standard appears to be met.

21.3 **Sediment & Erosion Control:** Silt fencing will be installed along the western edge of the wetlands and 30-ft buffer to protect this area from receiving sediment during construction. A stabilized construction entrance is also proposed. This standard appears to be met.

21.4 **Snow Storage & Removal:** The proposed conditions plan shows a snow storage area at the southeastern corner of the new parking area. Note #13 on the plan states that snow cannot be pushed into or stored within the 30-ft surface water buffer. This standard appears to be met.

21.5 **Landscaping:** The applicant proposes to install two, 2" caliper Red Maple trees along the eastern edge of the parking area. Section 9.4.5.A of the LDC requires that for parking lots with 10+ parking spaces that one tree with a 3" diameter as measured 6' from the ground must be installed for every ten parking spaces. Alternatively, a group of three or more trees with a 2" caliper as measured 6' from the ground can also be planted instead. At the time of this staff report, Planning Staff were waiting to hear back from the applicant about how they plan on addressing this requirement. Planning Staff recommend that the Board include a condition of approval related to the submittal of an updated plan that complies with this section of the LDC as well as a security to cover the cost of all landscaping.

21.6 **Screening:** The proposed parking area and relocated propane tanks will not be visible from the public right-of-way. This standard is not applicable.

21.7 **Lighting:** No lighting proposed as part of this application. This standard is not applicable.

21.8 **Sewer & Water:** No changes are proposed to water or sewer utilities. This standard is not applicable.

21.9 **Traffic & Access Management:** The site is currently accessed via two curb cuts along Production Ave, which are not proposed to be altered as part of this application. The narrative states that no additional vehicle traffic is expected as improvements are only being made to accommodate existing truck deliveries. This standard is not applicable.

21.10 **Filling & Excavation:** The narrative states that while filling and excavation is proposed as part of this project, it will not exceed the 50-truck limit needed to provide a truck route as part of the application materials. This standard appears to be met.

21.11 **Surface Waters & Wetlands:** Surface waters and wetlands are addressed under the criteria for Article 11 of the LDC included above.

21.12 **Hazardous & Toxic Materials:** The narrative states that there are no hazardous and toxic materials proposed as part of this application. This standard is not applicable.

21.13 **Noise**: The narrative states that no additional noise will be generated as a result of the proposed modifications. This standard is not applicable.

21.14 **Architecture & Visual Appearance:** The narrative states that there are no changes proposed to the architecture or visual appearance of the existing building. This standard is not applicable.

Recommended Motion:

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

"Approve PB-26-11 as shown on the plan set identified as "Site Development Plans, Green Mountain Electric Supply" prepared by Fieldstone Land Consultants, PLLC at a scale of 1 inch = 40 feet on April 17, 2026 and last revised on May 11, 2026 with the following conditions:

1. **Prior to final approval and signature of the plans by the Planning Board Chair, the following conditions precedent shall be met:**
    a. **Owner's signature appears on the plans.**
    b. **Submittal of five (5) full size paper copies and a flattened PDF version of the final plan set.**
    c. **Submittal of an updated proposed conditions plan that complies with the parking lot landscaping requirements outlined under Section 9.4.5.A of the LDC.**
    d. **Submittal of a security to cover the cost of erosion and sediment control measures, as-built plans, landscaping, and a conservation seed mix in a form and amount acceptable to the Community Development Director.**
2. **Subsequent to final approval and signature of the plans 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 have been installed, and the 30-ft surface water buffer is flagged by a surveyor licensed in the state of NH. Community Development Staff shall inspect the erosion control measures and wetland flagging to ensure compliance with the approved plans and all City of Keene regulations.**
    b. **Following the installation of landscaping, the Community Development Department shall be contacted to perform an initial inspection.**
    c. **One year following the installation of all landscaping, the Community Development Department shall be contacted to perform a final inspection."**

CITY OF KEENE
NEW HAMPSHIRE

Planning Application

Project Number:	PB-26-11	**Date Submitted:**	April 17, 2026
Project Name:	GMS - Parking Lot Expansion	**Zoning:**	IND
Project Address:	30 PRODUCTION AVE.	**Parcel Size:**	33252
Parcel Number:	110006000000000		

Owner Information

GMS REALTY LLP	356 RATHE RD	COLCHESTER VT 05446
Name	*Address*	*City/State/Zip*

Applicant Name
John Noonan

Applicant Phone #
6036725456

Authorized Agent Name
Chad E. Branon

Authorized Agent Phone #
603-672-5456

Project Description
Green Mountain Electric Supply is looking to expand the rear parking lot of the existing site at 30 Production Ave and improve drainage. They are looking for more parking spaces and area to unload supply trucks. The rear parking lot has been designed to pitch to the rear of the lot and improve drainage at the rear of the building.

Attachments

Narrative & Plan Set		***Technical Reports***	
Narrative	Submitted	Drainage Report	Submitted
Location Map	Submitted	Traffic Report / Analysis	Exemption Requested
Existing Conditions Plan	Submitted	Soil Analysis	Exemption Requested
Proposed Conditions Plan	Submitted	Historic Evaluation	Exemption Requested
Grading Plan	Submitted	Screening Analysis	Exemption Requested
Landscaping Plan	Exemption Requested	Architectural Analysis	Exemption Requested
Lighting Plan	Exemption Requested	Other Reports / Analyses	N/A
Elevations / Renderings	Exemption Requested		

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

GMS Realty, LLP
Parking Lot Expansion
Site Plan Narrative

GMS Realty, LLP
Tax Map Parcel 110, Lot 6
30-42 Production Avenue, Keene, New Hampshire

Revised: May 11, 2026

Project Narrative:

Fieldstone Land Consultants, on behalf of Green Mountain Electric Supply, Inc. and GMS Realty, LLP, is submitting a Site Plan application for Planning Board review. The proposal consists of expanding the rear parking lot on Tax Map Lot 110-006 located at 30-42 Production Avenue. The applicant would like to increase the parking and improve truck access to the rear of the existing building.

The existing Tax Map Parcel 110-006-000 has 3.12 +/- acres with 370.0 feet of frontage along Production Avenue. The lot is located in the Industrial District and is currently developed with a three-tenant building, parking lot, and rear loading docks. The property is used by three businesses within the building; Green Mountain Electric Supply, Pathway Book Service, and Fastenal. There are 25 parking spaces at the front of the building that utilize two curb cuts onto Production Avenue. The access to the rear of the building is used for material deliveries to the three buildings with loading docks. The rear parking lot has a very narrow driveway around the northwest unit (30 Production Ave.), which has posed issues with deliveries to each of the tenants. The rear parking lot also drainage issues, where the owner has reported standing water within a large section of the paved area.

The proposal is to expand the rear parking lot to make it more user-friendly and provide more space for the multi-tenant building to accept deliveries by large trucks. The parking lot will have a total of 24 new parking spaces, where the increase is less than the 100% threshold where 25 existing parking spaces exist. The northern driveway is shared by Parcel 110-005 and the subject property, where the driveway follows the property line and is on both lots. There is an existing right-of-way in the deed that allows for both parties to cross this area for access.

The loading docks currently have small concrete dolly pads, which are planned to be replaced and made larger at each loading dock location. The propane tanks in the rear parking lot will be relocated to provide for the expanded parking lot and be out of the way from vehicle traffic. The rear parking lot grades will be reconstructed to pitch away from the building and toward the east. Along the eastern edge of the parking lot a long rain garden basin will be constructed to provide stormwater management and improve the drainage situation. The basin will be constructed partially into the 100-year floodplain, however, the grades will only be lowered and no fill is proposed in the floodplain. The rain garden will also impact the wetland buffer; however these will only be for stormwater management and erosion control measures. There are no permanent structures or impacts within the

wetland buffer and no wetland resource impacts associated with the project.

Site Development Standards (Article 21 of the LDC):

21.2. Drainage & Stormwater: The site currently has drainage issues in the rear parking lot/loading dock area, which drove the need for the project improvements. The rear parking lot will be expanded and graded to the east, where a proposed rain garden basin will be constructed. The raingarden will provide stormwater treatment and retention of rainstorm runoff waters. The rain garden spillway elevation is at the 100-Year Flood Elevation (471.0) to control flow out of the basin during large storm events. There will be plantings within the amended soil in the rain garden for plants to absorb stormwater and provide treatment for the runoff from the rear parking lot. There is a stormwater summary included with the application.
21.3 Sediment & Erosion Control: Temporary erosion control measures consisting of silt fencing and a stabilized construction entrance to be used during the construction process.
21.4 Snow Storage & Removal: Snow will be stored on site adjacent to the parking areas, similar to the existing condition.
21.5 Landscaping: The existing landscaping will remain. There will be plantings within the rain garden to facilitate stormwater treatment.
21.6 Screening: The parking lot expansion will not be visible from a public way. The propane utility will be moved further behind the building and less visible from surrounding properties and is not visible from a public way.
21.7 Lighting: There are existing building mounted lights that will remain unchanged. There are no proposed light fixtures.
21.8 Sewer & Water: Sewer and water are municipal services, and will not change.
21.9 Traffic & Access Management: Access will continue to be off Production Avenue with truck access being improved around the building. The overall business traffic is not anticipated to change and Production Avenue will not be adversely impacted by this improvement.
21.10 Filling & Excavation: The proposed grading will require removal of material to construct the rain garden basin. This will not be a substantial amount of material and certainly under the 50 truck limit.
21.11 Surface Waters & Wetlands: There is a wetland along the eastern boundary following the City Tax Ditch system. The impacts to 30' wetland buffer will be for the construction of the stormwater management system, the rain garden. There are no wetland resource impacts.
21.12 Hazardous & Toxic Materials: There are none associated with this project.
21.13 Noise: Noise will not change from the existing condition. There will be short term construction noise associated with the site improvements, but will not impact abutters.
21.14 Architecture & Visual Appearance: The architecture of the building will not change.

SITE DEVELOPMENT PLANS

GREEN MOUNTAIN ELECTRIC SUPPLY

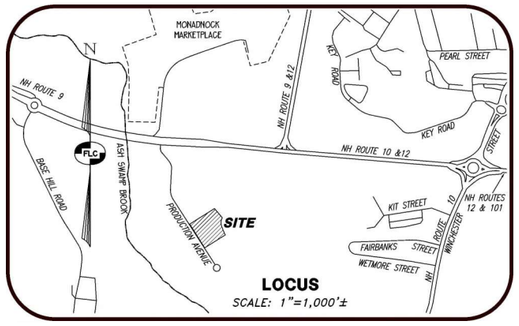
- TAX MAP 110, LOT 006 -

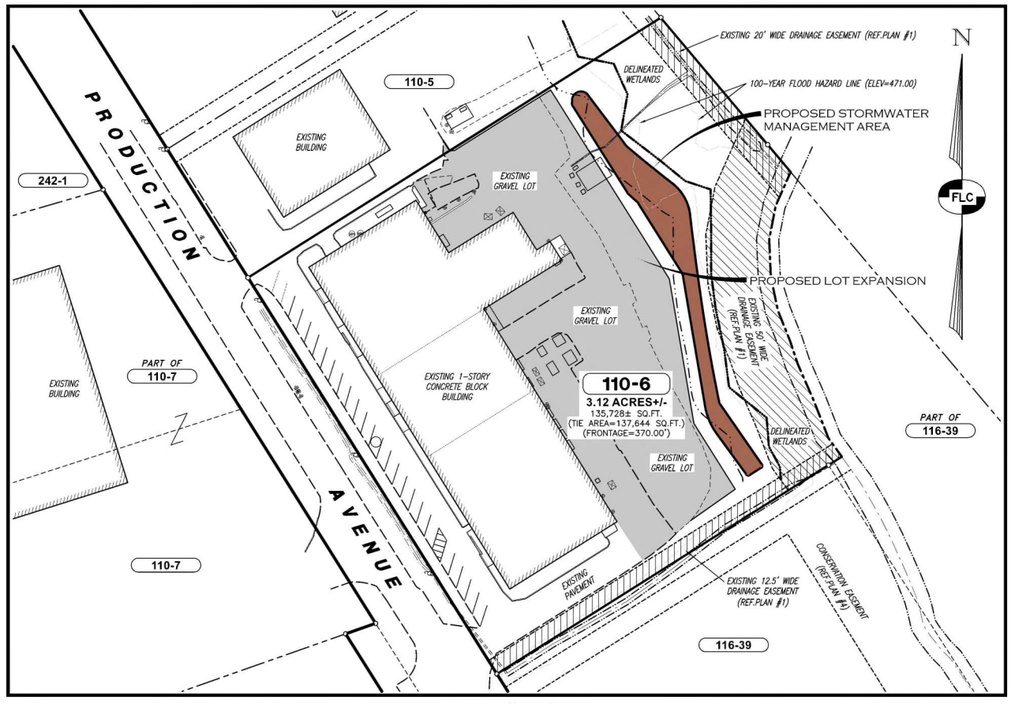
(30-42 PRODUCTION AVENUE)

KEENE, NEW HAMPSHIRE

APRIL 17, 2026

LAST REVISED: MAY 11, 2026





SCALE: 1" = 60'

SHEET INDEX

SHEET	TITLE
CV-1	COVER SHEET
EX-1	EXISTING CONDITIONS PLAN
SP-1	SITE PLAN
GR-1	GRADING & DRAINAGE PLAN
DT-1	EROSION CONTROL DETAILS
DT-2	CONSTRUCTION DETAILS

PREPARED FOR:

GREEN MOUNTAIN ELECTRIC SUPPLY, INC.

356 RATHE ROAD, COLCHESTER, VT 05446

LAND OF:

GMS REALTY, LLP

356 RATHE ROAD, COLCHESTER, VT 05446

CHAD E. BRANON NH 12197 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

5/11/2026

LAND-OWNER SIGNATURE
OWNER: _____ DATE:

APPROVED BY THE KEENE PLANNING BOARD
ON: _____ CERTIFIED BY
CHAIRMAN: _____ AND
SECRETARY: _____

811 DigSafe MA-ME-NH-RI-VT

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.

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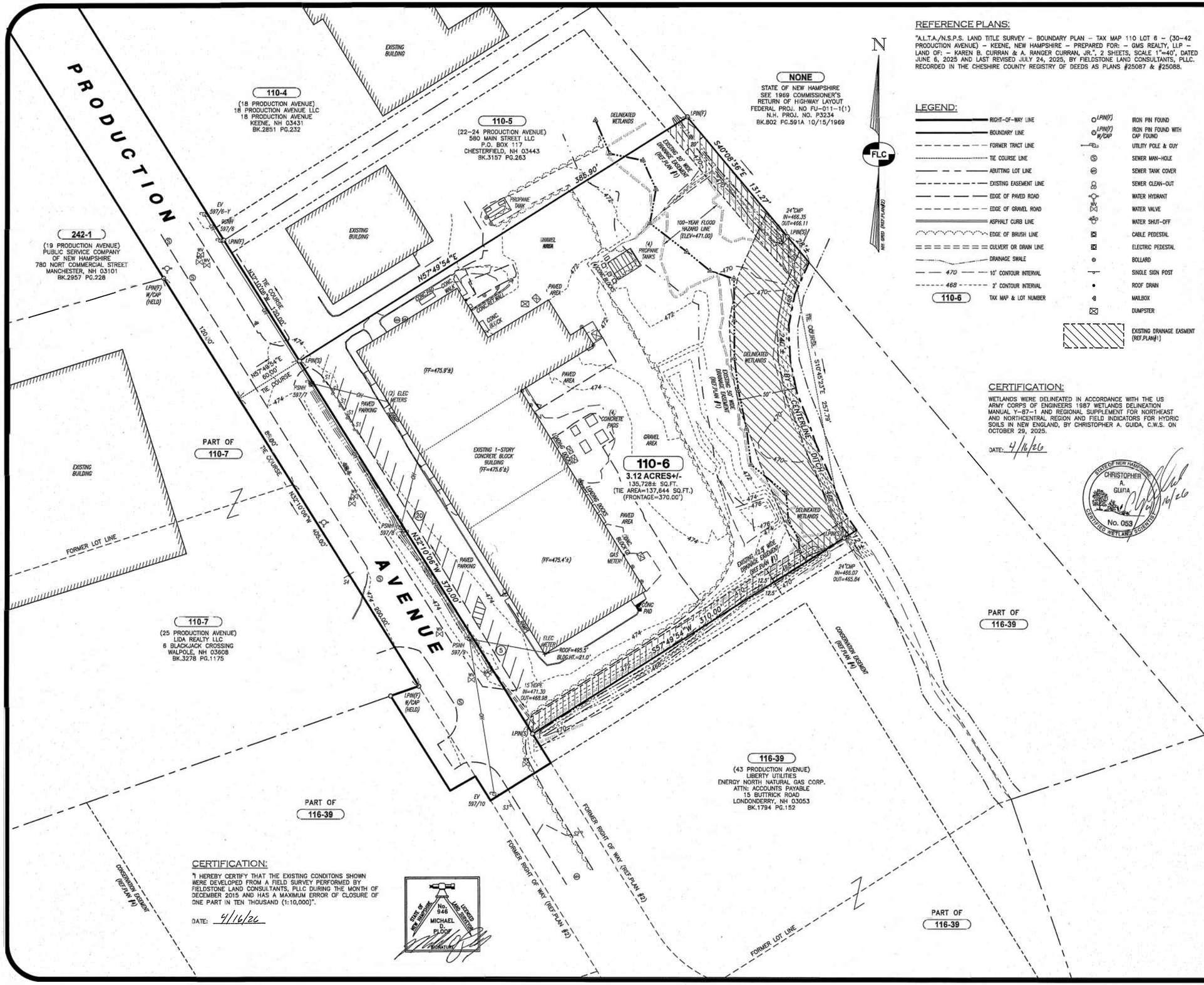
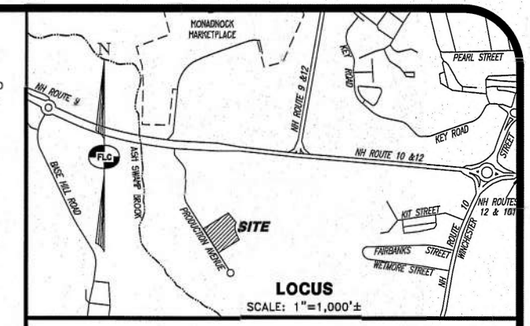
FIELDSTONE LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603)-672-5456 Fax: (603)-413-5456
www.FieldstoneLandConsultants.com

REV.	DATE	DESCRIPTION	C/O	DR	CK

FILE: 3902CV01B.dwg | PROJ. NO. 3902.01 | SHEET: CV-1





REFERENCE PLANS:

"A.L.T.A./N.S.P.S. LAND TITLE SURVEY – BOUNDARY PLAN – TAX MAP 110 LOT 6 – (30–42 PRODUCTION AVENUE) – KEENE, NEW HAMPSHIRE – PREPARED FOR: – GMS REALTY, LLP – LAND OF: – KAREN B. CURRAN & A. RANGER CURRAN, JR.", 2 SHEETS, SCALE 1"=40', DATED JUNE 6, 2025 AND LAST REVISED JULY 24, 2025, BY FIELDSTONE LAND CONSULTANTS, PLLC. RECORDED IN THE CHESHIRE COUNTY REGISTRY OF DEEDS AS PLANS #25087 & #25088.

LEGEND:

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- FORMER TRACT LINE
- TIE COURSE LINE
- ABUTTING LOT LINE
- EXISTING EASEMENT LINE
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- ASPHALT CURB LINE
- EDGE OF BRUSH LINE
- CULVERT OR DRAIN LINE
- DRAINAGE SWALE
- 470 — 10' CONTOUR INTERVAL
- 468 — 2' CONTOUR INTERVAL
- 110-6 TAX MAP & LOT NUMBER

- LPIN(F) IRON PIN FOUND
- LPIN(F) W/CAP IRON PIN FOUND WITH CAP FOUND
- UTILITY POLE & GUY
- SEWER MAN-HOLE
- SEWER TANK COVER
- SEWER CLEAN-OUT
- WATER HYDRANT
- WATER VALVE
- WATER SHUT-OFF
- CABLE PEDESTAL
- ELECTRIC PEDESTAL
- BOLLARD
- SINGLE SIGN POST
- ROOF DRAIN
- MAILBOX
- DUMPSTER
- EXISTING DRAINAGE EASMENT (REF.PLAN#1)

CERTIFICATION:

WETLANDS WERE DELINEATED IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS 1987 WETLANDS DELINEATION MANUAL Y-87-1 AND REGIONAL SUPPLEMENT FOR NORTHEAST AND NORTHCENTRAL REGION AND FIELD INDICATORS FOR HYDRIC SOILS IN NEW ENGLAND, BY CHRISTOPHER A. GUIDA, C.W.S. ON OCTOBER 29, 2025.

DATE: 4/16/26

STATE OF NEW HAMPSHIRE CHRISTOPHER A. GUIDA No. 053 CERTIFIED WETLAND SCIENTIST

4/16/26

CERTIFICATION:

"I HEREBY CERTIFY THAT THE EXISTING CONDITONS SHOWN WERE DEVELOPED FROM A FIELD SURVEY PERFORMED BY FIELDSTONE LAND CONSULTANTS, PLLC DURING THE MONTH OF DECEMBER 2015 AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000)".

DATE: 4/16/26

STATE OF NEW HAMPSHIRE No. 946 LICENSED LAND SURVEYOR MICHAEL D. FLOOD SIGNATURE

NOTES:

1. THE OWNER OF RECORD FOR TAX MAP 110 LOT 6 IS GMS REALTY, LLP, 356 RATHE ROAD, COLCHESTER, VT 05446. THE DEED REFERENCE FOR THE LOT IS BK.3321 PG.716 DATED AUGUST 25, 2025 IN THE CHESHIRE REGISTRY OF DEEDS.
2. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS FOR TAX MAP LOT 110–6 WITH ALL EASEMENTS AND IMPROVEMENTS.
3. THE BOUNDARY INFORMATION SHOWN HEREON WAS DEVELOPED FROM REFERENCE PLAN #1 TOGETHER WITH A PRECISE TIE–IN FIELD SURVEY PERFOMED BY THIS OFFICE DURING THE MONTH OF SEPTEMBER 2024.
4. HORIZONTAL ORIENTATION IS BASED ON NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM. VERTICAL DATUM IS NAVD88. BOTH ARE BASED ON FIELD GPS OBSERVATIONS THAT WERE UPLOADED TO AND CALCULATED BY THE NOAA ONLINE POSTIONING USER SERVICE (OPUS). FINAL PLAN ORIENTATION WAS ADJUSTED SLIGHTLY TO MATCH REFERENCE PLANS #2 THRU #4.
5. THE TOTAL AREA OF EXISTING TAX MAP LOT 110–6 IS 3.12± ACRES OR 135,728± SQ.FT. TOTAL FRONTAGE ALONG PRODUCTION AVENUE IS 370.00'.
6. ZONING FOR THE LOT IS THE INDUSTRIAL DISTRICT. REQUIREMENTS ARE:
   MIN. LOT AREA=NONE
   MIN. WIDTH AT BUILDING LINE=NONE
   MIN. ROAD FRONTAGE=50 FT.
   MIN. FRONT SETBACK=20 FT.
   MIN. REAR SETBACK=20 FT.
   MIN.SIDE SETBACK=15 FT.
   MAX. BUILDING COVERAGE=80%
   MAX. IMPERVIOUS COVERAGE=80%
   MAX. BUILDING HEIGHT=2 STORIES OR 35 FT.
7. WETLANDS SHOWN HERE WERE DELINEATED IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS 1987 WETLANDS DELINEATION MANUAL Y–87–1 AND REGIONAL SUPPLEMENT FOR NORTHEAST AND NORTHCENTRAL REGION AND FIELD INDICATORS FOR HYDRIC SOILS IN NEW ENGLAND, BY CHRISTOPHER A. GUIDA, C.W.S. IN OCTOBER 2025.
8. THE REAR PORTION OF THE SITE IS LOCATED IN THE ZONE AE SPECIAL FLOOD HAZARD AREA, HAVING A DETERMINED BASE FLOOD ELEVATION OF 471.00, AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), CHESHIRE COUNTY, CITY OF KEENE (330023), NEW HAMPSHIRE, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, COMMUNITY MAP NUMBER: 33005C0266E, DATED MAY 23, 2006.
9. THE SITE IS CURRENTLY SERVICED BY OVERHEAD & UNDERGROUND UTILITES, MUNICIPAL WATER, SEWER AND GAS.
10. ANY LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.
11. THERE ARE A TOTAL OF 25 REGULAR AND HANDICAPPED PARKING SPACES ON SITE.

GRAPHIC SCALE
40' 20' 0 40' 80' 120
IMPERIAL: 1"=40'

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	12/01/25	ADD F.I.R.M. FLOOD LINE	----	TJB	MDP

EXISTING CONDITIONS PLAN
TAX MAP 110 LOT 6
(30-42 PRODUCTION AVENUE)
KEENE, NEW HAMPSHIRE

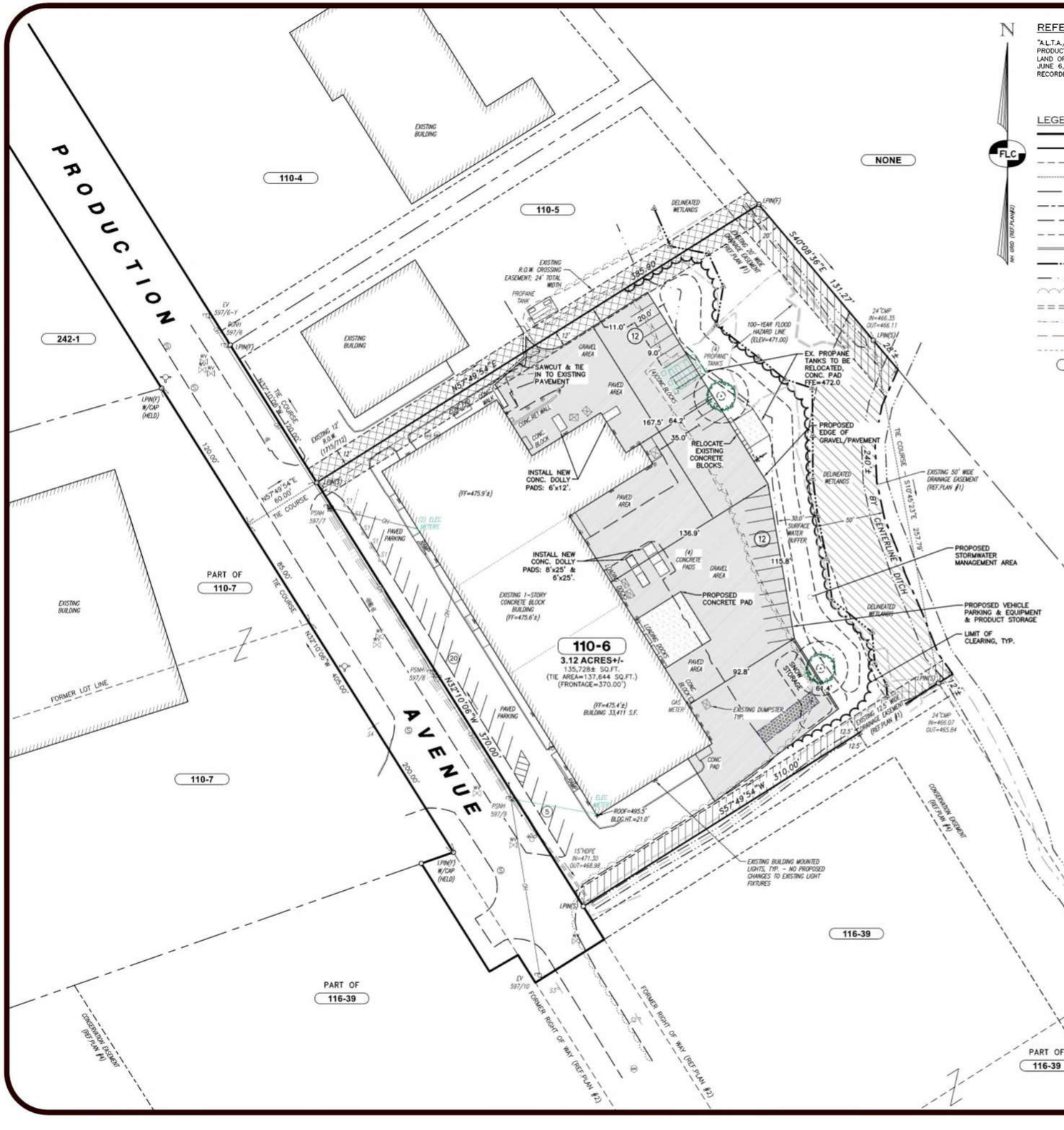
PREPARED FOR:
GREEN MOUNTAIN ELECTRIC SUPPLY, INC.
356 RATHE ROAD, COLCHESTER, VT 05446

LAND OF:
GMS REALTY, LLP
356 RATHE ROAD, COLCHESTER, VT 05446

SCALE: 1"=40' OCTOBER 31, 2025

Surveying ✦ Engineering ✦ Land Planning ✦ Permitting ✦ Septic Designs
FIELDSTONE LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

FILE: 3902EX01A.DWG	PROJ. NO. 3902.01	SHEET NO. EX-1	PAGE NO. 1 OF 1



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- EDGE OF GRAVEL ROAD
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- LPIN(T) IRON PIN FOUND
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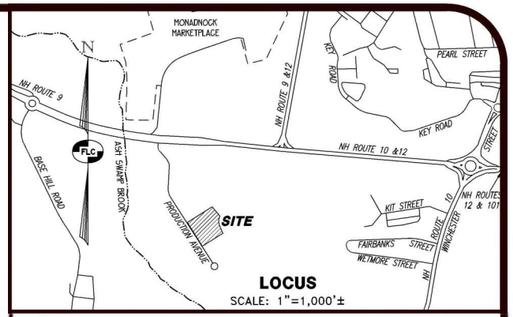
- SEWER MAN-HOLE
- SEWER TANK COVER
- SEWER CLEAN-OUT
- WATER HYDRANT
- WATER VALVE
- WATER SHUT-OFF
- CABLE PEDESTAL
- ELECTRIC PEDESTAL
- BOLLARD
- SINGLE SIGN POST
- ROOF DRAIN
- MAILBOX
- DUMPSTER
- LIGHT FIXTURE
- EXISTING DRAINAGE EASEMENT (REF.PLAN #1)

PROPOSED FEATURES

- EDGE OF PAVEMENT
- GRAVEL SHOULDER
- SWALE
- STORMWATER MANAGEMENT AREA
- UGE — UNDERGROUND UTILITY LINE
- PAVED/GRAVEL AREA
- LIMITS OF CLEARING
- TRAFFIC FLOW (NOT PAINTED ARROWS)
- PLANTING DRIP LINE / ACE / MATURE DRIP LINE — (2) ACER RUBRUM (RED MAPLE) TREES, 2" CALIPER



LOCUS
SCALE: 1"=1,000'±

NOTES:

1. THE OWNER OF RECORD FOR TAX MAP 110 LOT 6 IS GMS REALTY, LLP, 356 RATHE ROAD, COLCHESTER, VT 05446. THE DEED REFERENCE FOR THE LOT IS BK.3321 PG.716 DATED AUGUST 25, 2025 IN THE CHESHIRE REGISTRY OF DEEDS.

2. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED PARKING AND STORAGE AREA EXPANSION WITH ASSOCIATED SITE IMPROVEMENTS FOR TAX MAP LOT 110-6.

3. THE BOUNDARY INFORMATION SHOWN HEREON WAS DEVELOPED FROM REFERENCE PLAN #1 TOGETHER WITH A PRECISE TIE-IN FIELD SURVEY PERFOMED BY THIS OFFICE DURING THE MONTH OF SEPTEMBER 2024.

4. HORIZONTAL ORIENTATION IS BASED ON NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM. VERTICAL DATUM IS NAVD88. BOTH ARE BASED ON FIELD GPS OBSERVATIONS THAT WERE UPLOADED TO AND CALCULATED BY THE NOAA ONLINE POSTIONING USER SERVICE (OPUS). FINAL PLAN ORIENTATION WAS ADJUSTED SLIGHTLY TO MATCH REFERENCE PLANS #2 THRU #4.

5. THE TOTAL AREA OF EXISTING TAX MAP LOT 110-6 IS 3.12± ACRES OR 135,728± SQ.FT. TOTAL FRONTAGE ALONG PRODUCTION AVENUE IS 370.00'.

6. ZONING FOR THE LOT IS THE INDUSTRIAL DISTRICT. REQUIREMENTS ARE:
   MIN. LOT AREA=NONE
   MIN. WIDTH AT BUILDING LINE=NONE
   MIN. ROAD FRONTAGE=50 FT.
   MIN. FRONT SETBACK=20 FT.
   MIN. REAR SETBACK=20 FT.
   MIN.SIDE SETBACK=15 FT.
   MAX. BUILDING COVERAGE=80% (33,411 SF = 24.6%)
   MAX. IMPERVIOUS COVERAGE=80% (EXISTING = 56893 SF) (PROPOSED = 87386 SF, 64.3%)
   MAX. BUILDING HEIGHT=2 STORIES OR 35 FT.

7. WETLANDS SHOWN HERE WERE DELINEATED IN ACCORDANCE WITH THE US ARMY CORPS OF ENGINEERS 1987 WETLANDS DELINEATION MANUAL Y-87-1 AND REGIONAL SUPPLEMENT FOR NORTHEAST AND NORTHCENTRAL REGION AND FIELD INDICATORS FOR HYDRIC SOILS IN NEW ENGLAND, BY CHRISTOPHER A. GUIDA, C.W.S. IN OCTOBER 2025.

8. THE REAR PORTION OF THE SITE IS LOCATED IN THE ZONE AE SPECIAL FLOOD HAZARD AREA, HAVING A DETERMINED BASE FLOOD ELEVATION OF 471.00, AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), CHESHIRE COUNTY, CITY OF KEENE (330023), NEW HAMPSHIRE, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, COMMUNITY MAP NUMBER: 33005C0266E, DATED MAY 23, 2006.

9. THE SITE IS CURRENTLY SERVICED BY OVERHEAD & UNDERGROUND UTILITES, MUNICIPAL WATER, SEWER AND GAS.

10. ANY LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.

11. THERE ARE A TOTAL OF 25 EXISTING REGULAR AND ADA PARKING SPACES. THERE ARE 24 PROPOSED PARKING SPACES, LESS THAN 100% INCREASE.

12. DUMPSTERS ON SITE WILL BE SET IN EXISTING LOCATIONS, FOLLOWING PAVING; NO CHANGE

13. SNOW TO BE STORED ON SITE. SNOW CANNOT BE PUSHED INTO OR STORED WITHIN THE 30' SURFACE WATER BUFFER.

REV.	DATE	DESCRIPTION	C/O	DR	CK
B	5/11/26	REV. PER STAFF REVIEW		CJC	JEN
A	3/9/26	REV. PER PRELIMINARY STAFF REVIEW	---	CLR	CEB

SITE PLAN
TAX MAP 110 LOT 6
(30-42 PRODUCTION AVENUE)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
GREEN MOUNTAIN ELECTRIC SUPPLY, INC.
356 RATHE ROAD, COLCHESTER, VT 05446

LAND OF:
GMS REALTY, LLP
356 RATHE ROAD, COLCHESTER, VT 05446

SCALE: 1"=40' APRIL 17, 2026

CHAD E. BRANON NO. 12159 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
5/11/2026

GRAPHIC SCALE
40' 20' 0 40' 80' 120'
IMPERIAL: 1"=40'

Surveying + Engineering + Land Planning + Permitting + Septic Designs
FIELDSTONE LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

FILE: 3902SP01B.DWG | PROJ. NO. 3902.01 | SHEET NO. SP-1

May 07, 2026 - 9:48am FJC-19
P:\0_FLC\0_PROJECTS\03902\3902.01\DWGS\

PRODUCTION AVENUE

NONE

110-4

110-5

110-7

242-1

116-39

EXISTING BUILDING

EXISTING 1-STORY CONCRETE BLOCK BUILDING (FF=475.6 ±)

(FF=475.4 ±) BUILDING 33,411 S.F.

(FF=475.9 ±)

DELINEATED WETLANDS

EXISTING 20' WIDE DRAINAGE EASEMENT (REF.PLAN #1)

EXISTING R.O.W. CROSSING EASEMENT; 24' TOTAL WIDTH

EXISTING 12' R.O.W. (715/712)

100-YEAR FLOOD HAZARD LINE (ELEV=471.00)

BUFFER IMPACT 9,875 SF

PROPOSED 34'W SPILLWAY ELEV.=471.0

34.6403

30.0' SURFACE WATER BUFFER

EXISTING 50' WIDE DRAINAGE EASEMENT (REF.PLAN #1)

PROPOSED RAIN GARDEN BOT.=470.0 BERM=472.0

INSTALL TEMPORARY SILT FENCE (TYP.)

INSTALL TEMPORARY GRAVEL CONSTRUCTION EXIT (TYP.)

EXISTING 12.5' DRAINAGE EASEMENT (REF.PLAN #1)

CONSERVATION EASEMENT (REF.PLAN #4)

24"CMP IN=466.35 OUT=466.11

24"CMP IN=466.07 OUT=465.84

15"HDPE IN=471.30 OUT=468.98

ROOF=495.5 BLDG.HT.=21.0'

EV 597/6-Y

PSNH 597/6

PSNH 597/7

PSNH 597/8

PSNH 597/7

EV 597/10

GH

REFERENCE PLANS:

"A.L.T.A./N.S.P.S. LAND TITLE SURVEY – BOUNDARY PLAN – TAX MAP 110 LOT 6 – (30-42 PRODUCTION AVENUE) – KEENE, NEW HAMPSHIRE – PREPARED FOR: – GMS REALTY, LLP – LAND OF: – KAREN B. CURRAN & A. RANGER CURRAN, JR.", 2 SHEETS, SCALE 1"=40', DATED JUNE 6, 2025 AND LAST REVISED JULY 24, 2025, BY FIELDSTONE LAND CONSULTANTS, PLLC. RECORDED IN THE CHESHIRE COUNTY REGISTRY OF DEEDS AS PLANS #25087 & #25088.

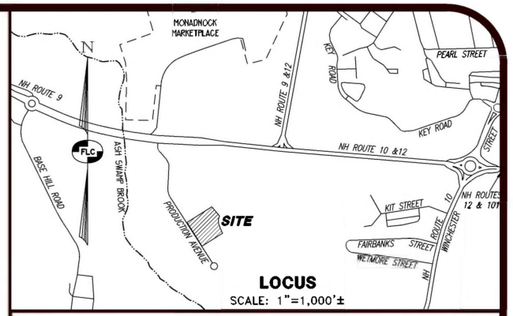
LEGEND:

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- FORMER TRACT LINE
- TIE COURSE LINE
- ABUTTING LOT LINE
- EXISTING EASEMENT LINE
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- ASPHALT CURB LINE
- EDGE DELINEATED WETLAND
- SURFACE WATER BUFFER LINE
- EDGE OF BRUSH LINE
- CULVERT OR DRAIN LINE
- DRAINAGE SWALE
- 470 — 10' CONTOUR INTERVAL
- 468 — 2' CONTOUR INTERVAL
- 110-6 TAX MAP & LOT NUMBER

- (PIN(F)) IRON PIN FOUND
- (PIN(F) W/CAP) IRON PIN FOUND WITH CAP FOUND
- UTILITY POLE & GUY
- SEWER MAN-HOLE
- SEWER TANK COVER
- SEWER CLEAN-OUT
- WATER HYDRANT
- WATER VALVE
- WATER SHUT-OFF
- CABLE PEDESTAL
- ELECTRIC PEDESTAL
- BOLLARD
- SINGLE SIGN POST
- ROOF DRAIN
- MAILBOX
- DUMPSTER
- EXISTING DRAINAGE EASMENT (REF.PLAN#1)

PROPOSED FEATURES

- 472 — 2 FT. CONTOUR
- 470 — 10 FT. CONTOUR
- 4715 SPOT ELEVATION
- EDGE OF PAVEMENT
- GRAVEL SHOULDER
- SWALE
- BERM
- PAVED AREA
- STONE CHECK DAM
- LIMITS OF CLEARING
- SWALE/GUTTER/CROWN LINE
- DRAINAGE FLOW ARROW
- TEMPORARY SILT FENCE
- TP: 2 L=>96" S=>96" TEST PIT LOCATION L=DEPTH TO LEDGE S=DEPTH TO SHWT



LOCUS
SCALE: 1"=1,000'±

NOTES:

1. THE OWNER OF RECORD FOR TAX MAP 110 LOT 6 IS GMS REALTY, LLP, 356 RATHE ROAD, COLCHESTER, VT 05446. THE DEED REFERENCE FOR THE LOT IS BK.3321 PG.716 DATED AUGUST 25, 2025 IN THE CHESHIRE REGISTRY OF DEEDS.

2. THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE IMPROVEMENTS FOR TAX MAP LOT 110-6.

3. THE BOUNDARY INFORMATION SHOWN HEREON WAS DEVELOPED FROM REFERENCE PLAN #1 TOGETHER WITH A PRECISE TIE-IN FIELD SURVEY PERFOMED BY THIS OFFICE DURING THE MONTH OF SEPTEMBER 2024.

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6. ZONING FOR THE LOT IS THE INDUSTRIAL DISTRICT. REQUIREMENTS ARE:
   MIN. LOT AREA=NONE
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   MIN. ROAD FRONTAGE=50 FT.
   MIN. FRONT SETBACK=20 FT.
   MIN. REAR SETBACK=20 FT.
   MIN.SIDE SETBACK=15 FT.
   MAX. BUILDING COVERAGE=80%
   MAX. IMPERVIOUS COVERAGE=80%
   MAX. BUILDING HEIGHT=2 STORIES OR 35 FT.

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10. ANY LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.

11. THERE ARE EXISTING 25 REGULAR AND HANDICAPPED PARKING SPACES ON SITE. THERE ARE 24 PROPOSED PARKING SPACES, LESS THAN 100% INCREASE.

GRAPHIC SCALE
40' 20' 0 40' 80' 120'
IMPERIAL: 1"=40'

REV.	DATE	DESCRIPTION	C/O	DR	CK
B	5/11/26	REV. PER STAFF REVIEW		CJC	JEN
A	3/9/26	REV. PER PRELIMINARY STAFF REVIEW	---	CLR	CEB

GRADING & DRAINAGE PLAN

TAX MAP 110 LOT 6
(30-42 PRODUCTION AVENUE)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
GREEN MOUNTAIN ELECTRIC SUPPLY, INC.
356 RATHE ROAD, COLCHESTER, VT 05446

LAND OF:
GMS REALTY, LLP
356 RATHE ROAD, COLCHESTER, VT 05446

SCALE: 1"=40' APRIL 17, 2026

Surveying + Engineering + Land Planning + Permitting + Septic Designs
FIELDSTONE LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

FILE: 3902SP01B.DWG | PROJ. NO. 3902.01 | SHEET NO. GR-1

1. PRIOR TO STARTING ANY WORK ON THE SITE THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES.

2. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS THEREOF IN NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICE STORM WATER MANUALS, VOLUME 1-3, LATEST EDITION.

3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PER PLANS AND DETAILS. PERIMETER CONTROLS SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF EARTH DISTURBING ACTIVITIES.

4. INSTALL INLET PROTECTION AROUND ALL STORM DRAIN STRUCTURES. INLET PROTECTION BMP'S SHALL REMAIN UNTIL THE SITE IS STABILIZED. CONSTRUCTION OF STORMWATER BASINS AND TREATMENT SWALES SHALL OCCUR PRIOR TO AND EARTH MOVING OPERATION THAT WILL INFLUENCE STORM WATER RUNOFF.

5. THE WORK AREA SHALL BE GRADED, SHAPED AND OTHERWISE DRAINED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE THE LIMITS OF THE WORK AREA.

6. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEN POSSIBLE.

7. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 0.25-INCH OR GREATER RAINFALL. SEDIMENTS SHALL BE DISPOSED OF IN AN UPLAND AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND BE PERMANENTLY STABILIZED.

8. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPS ARE STABILIZED. THE SITE WILL BE SUBJECT TO ENVIRONMETNAL MONITORING.

9. THE LAND AREA EXPOSED SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. ALL NON-ACTIVE DISTURBED AREAS SHALL BE STABILIZED WITHIN 30 DAYS OF THE DISTURBANCE. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF FINAL GRADING.

10. DITCHES, SWALES AND DRAINAGE BASINS SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

11. AN AREA SHALL BE CONSIDERED STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP, HAS BEEN INSTALLED; OR
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

12. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 3:1 (HORIZONTAL / VERTICAL). UNLESS OTHERWISE SPECIFIED THE CONTRACTOR SHALL USE NORTH AMERICAN GREEN BIONET SC150BN SHORT TERM BIODEGRADABLE DOUBLE-NET STRAW BLANKET, OR APPROVED EQUAL.

13. ALL AREAS RECEIVING EROSION CONTROL STONE OR RIPRAP SHALL HAVE A GEOTEXTILE MATERIAL INSTALLED BELOW THE STONE (SEE APPROPRIATE DETAILS).

14. ALL DISTURBED AREAS TO TURF FINISHED SHALL BE COVERED WITH A MINIMUM THICKNESS OF 6 INCHES OF COMPACTED LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW:

PERMANENT SEED (LAWN AREAS)	LBS / 1,000 SQ. FT.	PERMANENT SLOPE SEED MIX	LBS / 1,000 SQ. FT.
CREEPING RED FESCUE	0.92 LBS	CREEPING RED FESCUE	0.80 LBS
PERENNIAL RYEGRASS	1.15 LBS	PERENNIAL RYEGRASS	0.69 LBS
KENTUCKY BLUEGRASS	0.58 LBS	REDTOP	0.12 LBS
REDTOP	0.12 LBS	ALSIKE CLOVER	0.12 LBS
		BIRDSFOOT TREFOIL	
APPLICATION RATE TOTALS 2.8 LBS PER 1,000 SF		**APPLICATION RATE TOTALS *1.85 LBS PER 1,000 SF**	

15. TEMPORARY STABILIZATION OF DISTURBED AREAS:
STRIPPED SOIL SHALL BE STOCKPILED UNCOMPACTED, AND STABILIZED AGAINST EROSION AS OUTLINED BELOW:
SEED BED PREPARATION: 10-10-10 FERTILIZATION TO BE SPREAD AT THE RATE OF 7 LBS. PER 100 SF AND AGRICULTURAL LIMESTONE AT A RATE OF 90 LBS PER 1000 SF AND INCORPORATED INTO THE SOIL. THE SOIL FERTILIZER AND LIMESTONE SHALL BE TILLED TO PREPARE FOR SEEDING.

A. SEED MIXTURE: USE ANY OF THE FOLLOWING:

SPECIES	RATE PER 1,000 SF	DEPTH	SEEDING DATES
WINTER RYE	2.5 LBS	1 INCH	8/15 TO 9/15
OATS	2.5 LBS	1 INCH	4/15 TO 10/15
ANNUAL RYEGRASS	1.0 LBS	0.25 INCH	8/15 TO 9/15

B. MULCHING: MULCH SHOULD BE USED ON HIGHLY ERODIBLE AREAS, AND WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT AS FOLLOWS:

TYPE	RATE PER 1,000 SF	USE AND COMMENTS
STRAW	70 TO 90 LBS	MAY BE USED WITH PLANTINGS, MUST BE ANCHORED TO BE USED ALONE
WOOD CHIPS OR BARK MULCH	460 TO 920 LBS	USED WITH TREE AND SHRUB PLANTINGS
FIBROUS MATTING	AS RECOMMENDED BY MANUFACTURER	MUST BE BIODEGRADABLE. USE IN SLOPE AREAS AND AREAS DIFFICULT TO VEGETATE
CRUSHED STONE 1/4" TO 1-1/2" DIA.	SPREAD TO GREATER THAN 1/2" THICKNESS	USE IN SPECIFIC AREAS AS SHOWN ON PLAN OR AS NEEDED

16. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE (CRITICAL TIME FRAMES OR VARIABLE SITES) THEN APPLY FERTILIZER AT A RATE OF 11 POUNDS PER 1,000 SF AND LIMESTONE AT A RATE OF 90 POUNDS PER 1,000 SF. FERTILIZER SHALL BE LOW PHOSPHATE (LESS THAN 2% PHOSPHORUS).

17. CAUTION SHOULD BE TAKE WHEN THE PROPERTY IS LOCATED WITHIN 250 FEET OF A WATER BODY. IN THIS CASE ALL FERTILIZERS SHALL BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER. SLOW RELEASE FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN COMPONENT. NO FERTILIZER EXCEPT LIMESTONE SHALL BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE ARE REGULATED LIMITATIONS.

18. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS (SEE WINTER CONSTRUCTION NOTES). NO DISTURBED AREAS SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.

19. A VIGOROUS DUST CONTROL PROGRAM SHALL BE APPLIED BY THE SITE CONTRACTOR. DUST SHALL BE MANAGED THROUGH THE USE OF WATER AND/OR CALCIUM CHLORIDE.

20. IN NO WAY ARE THE MEASURES INDICATED ON THE PLANS OR IN THESE NOTES TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGMENT TO INSTALL ADDITIONAL EROSION CONTROL MEASURES AS SITE CONDITIONS, WEATHER OR CONSTRUCTION METHODS WARRANT.

21. FOLLOWING PERMANENT STABILIZATION, TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND ACCUMULATED SEDIMENTATION IS TO BE DISPOSED OF IN AN APPROVED LOCATION, OUTSIDE OF JURISDICTIONAL WETLANDS.

22. THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 430:53 AND AGR 3800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

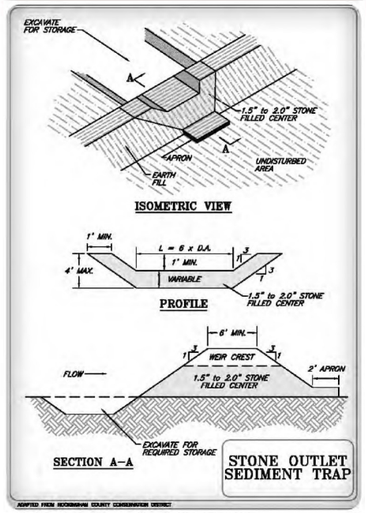
EROSION CONTROL NOTES — 1 / DT-1

1. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED. STABILIZATION METHODS SHALL INCLUDE SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

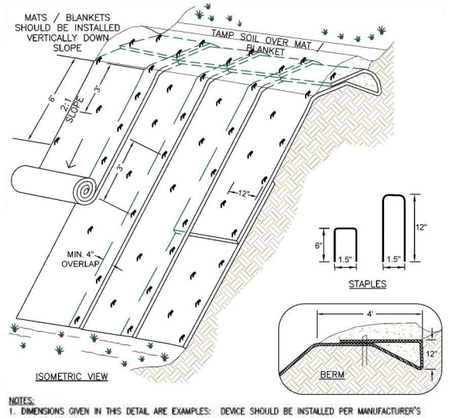
3. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL OR PROPERLY INSTALLED EROSION CONTROL BLANKETS COVERED WITH HAY. OTHER STABILIZATION OPTIONS ARE TO BE APPROVED BY THE APPROPRIATE AGENCIES AND THE DESIGN ENGINEER. IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER MONTHS THEN THE ROAD SHOULD BE CLEARED OF ACCUMULATED SNOW AFTER EACH STORM EVENT.

WINTER CONSTRUCTION NOTES — 2 / DT-1



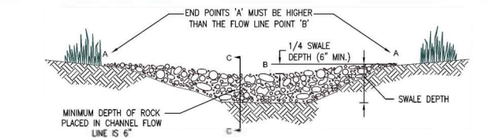
1. The trap shall be installed as close to the disturbed area or source of sediment as possible;
2. The maximum contributing drainage area to the trap shall be less than 5 acres;
3. The minimum volume of the trap shall be 3,600 cubic feet of storage for each acre of drainage area;
4. The side slopes of the trap shall be 3:1 or flatter, and shall be stabilized immediately after their construction;
5. The outlet of the trap shall be a minimum of one foot below the crest of the trap and shall discharge to a stabilized area;
6. The trap shall be cleaned when 50 percent of the original volume is filled; and
7. The materials removed from the trap shall be properly disposed of and stabilized.
8. Refer to the New Hampshire Stormwater Manual, Volume 3 for alternative sediment trap options.

SEDIMENT TRAP — 3 / DT-1

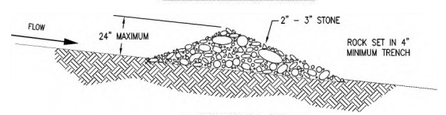


NOTES:
1. DIMENSIONS GIVEN IN THIS DETAIL ARE EXAMPLES: DEVICE SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. INSTALL STRAW/COCONUT FIBER EROSION CONTROL MAT SUCH AS NORTH AMERICAN GREEN BIONET SC150BN SHORT TERM BIODEGRADABLE DOUBLE-NET STRAW BLANKET OR EQUAL ON ALL SLOPES EXCEEDING 3' HORZ : 1' VERT.
3. THE EROSION CONTROL MATERIAL(S) SHALL BE ANCHORED WITH "U" SHAPED 11 GAUGE WIRE STAPLES OR WOODEN STAKES WITH A MINIMUM TOP WIDTH OF 1 INCH AND LENGTH OF 6 INCH.
4. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS / BLANKETS SHALL HAVE GOOD SOIL CONTACT.
5. APPLY LIME, FERTILIZER AND PERMANENT SEEDING BEFORE PLACING BLANKETS.
6. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET AS SHOWN. ROLL THE BLANKETS DOWN THE SLOPE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES OR STAKES IN APPROPRIATE LOCATIONS. REFER TO MANUFACTURERS STAPLE GUIDE FOR CORRECT STAPLE PATTERN.
7. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
8. IN LOOSE SOIL CONDITIONS THE USE OF STAPLES OR STAKE LENGTHS GREATER THAN 6 INCHES MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
9. THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS WHERE DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED AND REMULCHED AS DIRECTED.
10. THERE SHALL BE NO PLASTIC FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN ½ INCHES MATERIAL UTILIZED. THIS DOES NOT APPLY TO TURF REINFORCEMENT MATS.
11. TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.

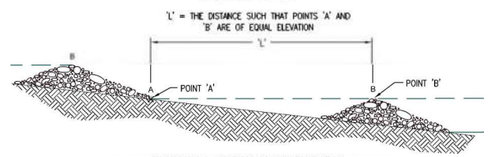
EROSION BLANKETS - SLOPE INSTALLATION — 4 / DT-1



VIEW LOOKING UPSTREAM



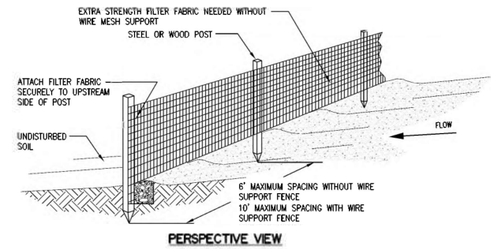
SECTION C - C



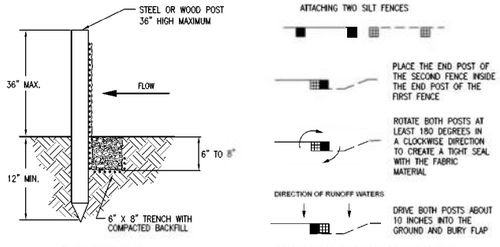
PROFILE - CHECK DAM SPACING

NOTES:
1. STONE CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE CHECK DAM SHOULD BE LESS THAN ONE ACRE.
3. STONE CHECK DAMS SHOULD NOT BE USED IN A FLOWING STREAM.
4. STONE CHECK DAMS SHOULD BE CONSTRUCTED OF WELL-GRADED ANGULAR 2 TO 3 INCH STONE. THE INSTALLATION OF 3/4-INCH STONE ON THE UPGRADIENT FACE IS RECOMMENDED FOR BETTER FILTERING.
5. WHEN INSTALLING STONE CHECK DAMS THE CONTRACTOR SHALL KEY THE STONE INTO THE CHANNEL BANKS AND EXTEND THE STONE BEYOND THE ABUTMENTS A MINIMUM OF 18-INCHES TO PREVENT FLOW AROUND THE DAM.
6. STONE CHECK DAMS SHOULD BE REMOVED ONCE THE SWALE OR DITCH HAS BEEN STABILIZED UNLESS OTHERWISE SPECIFIED.

STONE CHECK DAM — 5 / DT-1



PERSPECTIVE VIEW

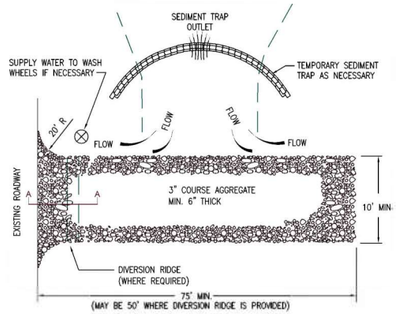


SECTION VIEW — ATTACHING TWO SILT FENCES

NOTES:
1. SILT FENCES SHOULD NOT BE USED ACROSS STREAMS, CHANNELS, SWALES, DITCHES OR OTHER DRAINAGE WAYS.
2. SILT FENCE SHOULD BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE AND THE ENDS OF THE SILT FENCE SHOULD BE FLARED UPSLOPE.
3. IF THE SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE OR THE PRESENCE OF HEAVY ROOTS THE BASE OF THE FABRIC SHOULD BE EMBEDDED WITH A MINIMUM THICKNESS OF 8 INCHES OF 3/4-INCH STONE.
4. SILT FENCES PLACED AT THE TOE OF SLOPES SHOULD BE INSTALLED AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND ACCESS FOR MAINTENANCE.
5. THE MAXIMUM SLOPE ABOVE THE FENCE SHOULD BE 2:1 AND THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHOULD BE 100 FEET.
6. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
7. SILT FENCES SHOULD BE REMOVED WHEN THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILT FENCE — 6 / DT-1

SECTION A-A



PLAN VIEW

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. THE MINIMUM STONE USED SHOULD BE 3-INCH CRUSHED STONE.
3. THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
4. THE PAD SHOULD EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER.
5. THE PAD SHOULD SLOPE AWAY FROM THE EXISTING ROADWAY.
6. THE PAD SHOULD BE AT LEAST 6-INCHES THICK.
7. THE GEOTEXTILE FILTER FABRIC SHOULD BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
8. THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF-SITE.
9. NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.
10. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
11. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

SCALE: N.T.S.

GRAVEL CONSTRUCTION EXIT — 7 / DT-1

CONTACT DIG SAFE
72 HOURS PRIOR TO CONSTRUCTION
DIGSAFE.COM
OR DIAL 811
IT'S SMART. IT'S FREE. IT'S THE LAW.

REV.	DATE	DESCRIPTION	C/O	DR	CK
-	-	-		-	-

EROSION CONTROL DETAILS

TAX MAP 110 LOT 6
(30-42 PRODUCTION AVENUE)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
GREEN MOUNTAIN ELECTRIC SUPPLY, INC.
356 RATHE ROAD, COLCHESTER, VT 05446

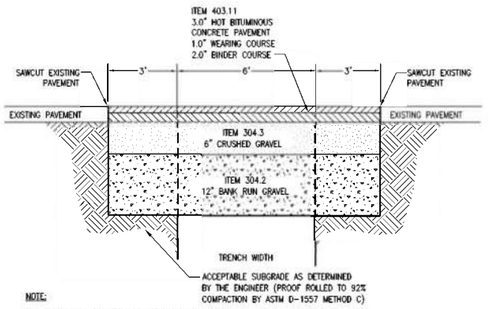
SCALE: NONE — APRIL 17, 2026

Surveying + Engineering + Land Planning + Permitting + Septic Designs
FIELDSTONE LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

FILE: 3902DT01.DWG | PROJ. NO. 3902.01 | SHEET NO. DT-1

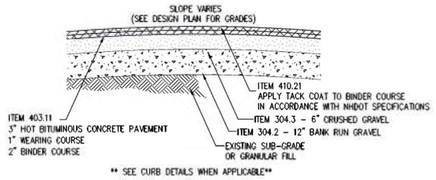
1. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF KEENE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE CONSTRUCTED PRIOR TO AND/OR DURING CONSTRUCTION. FIELDSTONE LAND CONSULTANTS, PLLC, AS THE DESIGN 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.
3. THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1-800-255-4977 IN NH, 1-888-344-7233 IN MA).
4. COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SPECIAL CONDITIONS OF TOWN/CITY AGENCIES, SUCH AS THE PLANNING BOARD, ZONING BOARD, CONSERVATION COMMISSION, AND OTHERS, IS MANDATORY AND IS THE RESPONSIBILITY OF THE OWNER.
5. ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN/CITY BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND FIELDSTONE LAND CONSULTANTS, PLLC PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE CITY DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCURATE AS-BUILT INFORMATION OF ALL WORK, ESPECIALLY UNDERGROUND CONSTRUCTION OF UTILITY LINES, SERVICES, CONNECTIONS, ETC. AND APPROPRIATE TIES TO ABOVE GROUND PERMANENT STRUCTURES, FIELD SURVEY COORDINATES, OR SOME OTHER METHOD OF ESTABLISHING THE AS-BUILT CONDITION OF ALL CONSTRUCTION.
8. THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 430:53 AND AGR 3800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

GENERAL CONSTRUCTION NOTES | 1 DT-2



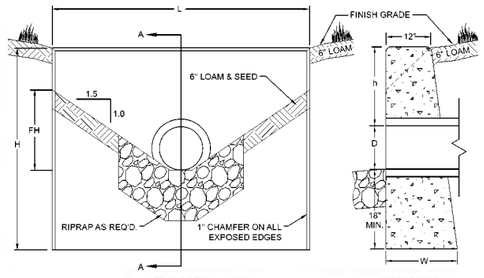
NOTE:
THE BINDER COURSE SHALL BE PLACED IMMEDIATELY AFTER TRENCH CONSTRUCTION AND ALLOWED TO STAND A MINIMUM OF 90 DAYS. A LEVELING COURSE SHALL BE APPLIED OVER THE TRENCH AFTER 90 DAYS AND THE ENTIRE ROAD OVERLAID TO THE LIMITS SHOWN ON THE PLANS.

PAVEMENT TRENCH PATCH | 2 DT-2



** SEE CURB DETAILS WHEN APPLICABLE**

PAVEMENT SECTION | 3 DT-2

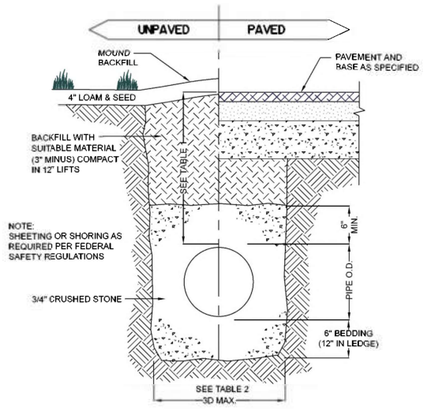


CULVERT DIAM.	HEADWALL LENGTH	HEADWALL HEIGHT	FILL HEIGHT	TOP HEIGHT	HEADWALL BOTTOM
D	L	H	FH	h	WIDTH W
INCHES	FEET & INCHES				
12	4'-8"	3'-9"	1'-1"	1'-0"	1'-11.75"
15	5'-11"	4'-2"	1'-7"	1'-5"	2'-0"
18	6'-11"	4'-5"	1'-10"	1'-5"	2'-1"
24	8'-10"	4'-11"	2'-5"	1'-5"	2'-3"

HEADWALL SHALL BE STEEL REINFORCED. DESIGN TO BE DETERMINED BY MANUFACTURER.

SCALE: N.T.S.

HEADWALL - PRECAST CONCRETE (OR EQUAL) | 4 DT-2

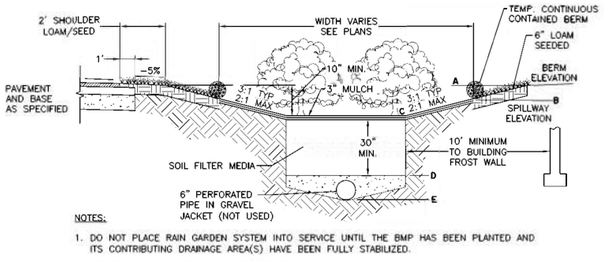


NOTE:
SHEETING OR SHORING AS REQUIRED PER FEDERAL SAFETY REGULATIONS

TABLE 1 (RECOMMENDED COVER)		
LOCATION	PIPE MATERIAL	MINIMUM COVER
PAVED ROADS	ALL	3 FT.
UNPAVED ROADS	ALL	2 FT.
DRIVEWAYS	ALL	1 FT.
UNPAVED AREAS	ALL	2 FT.

TABLE 2 (RECOMMENDED TRENCH WIDTH)	
INSIDE DIAMETER	TOTAL WIDTH
12" TO 24" OVER 24"	I.D. + 24" 2 x I.D.

DRAINAGE TRENCH (TYPICAL) | 5 DT-2



NOTES:

1. DO NOT PLACE RAIN GARDEN SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING DRAINAGE AREA(S) HAVE BEEN FULLY STABILIZED.
2. TO PREVENT DEGRADATION OF INFILTRATION FUNCTION:

   A. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

   B. DO NOT COMPACT THE EXCAVATION.

   C. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE RAIN GARDEN AREA DURING ANY STAGE OF CONSTRUCTION.

   FROM UNHSC BIORETENTION SOIL SPECIFICATION FEBRUARY 2017.

2.1 SOIL MEDIA SPECIFIED ACCORDING TO PERFORMANCE REQUIREMENTS: PARTICLE SIZE DISTRIBUTION ACCORDING TO ASTM D422 (STANDARD TEST METHOD FOR PATRICLE-SIZE ANALYSIS OF SOILS).

   1. PARTICLE SIZE DISTRIBUTION BY SEPARATES:
      a. EXCLUDE ANY MATERIAL >4.76 mm - 0%
      b. VERY COARSE SAND/GRAVEL: GRAVEL (2.0 TO 4.76 mm) 5% MAXIMUM (PERCENT BY DRY WEIGHT).
      c. SAND (0.42 TO 2.0 mm) 60 - 85% (PERCENT BY DRYWEIGHT).
      d. SILT (0.075 TO 0.42 mm) 20% MAXIMUM (PERCENT BY DRYWEIGHT).
      e. CLAY (LESS THAN 0.075 mm) 5% MAXIMUM (PERCENT BY DRYWEIGHT).

   TABLE 1: ACCEPTABLE PARTICLE SIZE DISTRIBUTION OF FINAL BIORETENTION SOIL MIX.

SIEVE #	SIEVE SIZE (mm)	% PASSING
4	0.187 (4.76)	100
10	0.079 (2)	95
40	0.017 (0.42)	40-15
200	0.003 (0.075)	10-20
>200	PAN	0-5

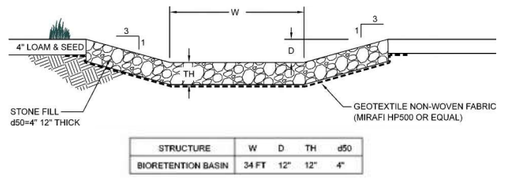
RAIN GARDEN INVERT INFORMATION					
GARDEN #	ELEVATION				
	A	B	C	D	E
1	472.0	471.0	470.0	468.5	NA

** SEE LANDSCAPE PLAN FOR PLANTINGS

RAIN GARDEN-BIORETENTION TYPICAL SECTION | 6 DT-2

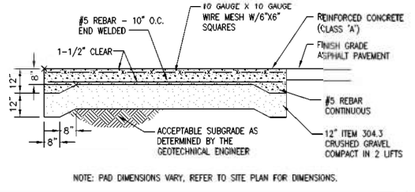
RAIN GARDEN PLANTINGS:

1. LOWBUSH BLUEBERRY - 1-2' / #2
2. SHEEP LAUREL - UP TO 4'/#2
3. BLUE FLAG IRIS - 2-3'/#2
4. CARDINAL FLOWER - 2-4'/#2
5. NEW ENGLAND ASTER - UP TO 5'/#2
6. BLACK EYED SUSAN - 1-3' HT./#2



STRUCTURE	W	D	TH	d50
BIORETENTION BASIN	34 FT	12"	12"	4"

EMERGENCY SPILLWAY DETAIL | 7 DT-2



NOTE: PAD DIMENSIONS VARY, REFER TO SITE PLAN FOR DIMENSIONS.

DOLLY PADS TYPICAL SECTION | 8 DT-2

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REV.	DATE	DESCRIPTION	C/O	DR	CK
-	-	-		-	-

CONSTUCTION DETAILS

TAX MAP 110 LOT 6
(30-42 PRODUCTION AVENUE)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
GREEN MOUNTAIN ELECTRIC SUPPLY, INC.
356 RATHE ROAD, COLCHESTER, VT 05446

SCALE: NONE — APRIL 17, 2026

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STORM WATER MANAGEMENT NARRATIVE
TAX MAP PARCELS 110, LOT 6
GREEN MOUNTAIN ELECTRIC SUPPLY, INC.
30-42 PRODUCTION AVENUE
KEENE, NEW HAMPSHIRE

Prepared for:
GMS Realty, LLP

April 17, 2026

I) INTRODUCTION

On behalf of our client, GMS Realty, LLP, we are submitting this narrative to explain the drainage improvements that will be completed as part of the project. The subject lot is located at 30-42 Production Avenue in Keene, New Hampshire. The project consists of expanding the existing pavement at the rear of the building to provide more parking spaces, improve truck unloading areas, and improve the drainage of the loading dock areas.

The project will add 24 new parking spaces to the rear of the building with approximately 30,000 square feet of pavement and widening the parking lot by 30 feet to the east. The existing concrete dolly pads at the loading docks will be removed and replaced to improve the function of the loading docks for tractor trailer deliveries.

Our client has found that the rear parking lot does not drain well and has many puddles that remain after rainstorm events. The intent of the project was to improve truck deliveries and improve the drainage at the rear of the existing building.

II) DRAINAGE DESIGN

In accordance with the City of Keene LDC, we are proposing a low-impact design to improve the drainage at the rear of the existing building. The entire rear parking area will be regraded and paved to drain away from the loading docks, and sheet flow into a proposed rain garden/bioretention basin. The bioretention basin will treat stormwater via the landscaping and the soil mixture in the bottom of the basin. This basin will hold the 25-Year storm event and the spillway is set at the 100-year storm elevation. The outlet spillway is 34-feet wide and will act as a level spreader that outlets towards the wetlands and the City Tax Ditch to the east. This system will improve the qualitative and quantitative impacts of the stormwater runoff to address the existing drainage issues on site and meet the City's requirement of LDC Section 21.2 for Drainage & Stormwater Management.

CITY OF KEENE
NEW HAMPSHIRE

Meeting Date: May 26, 2026

To: Planning Board

From: Megan Fortson, Planner

Through: Mari Brunner, Senior Planner

Subject: **PB-26-12 - Elm-Carroll Cottage Court - Major Site Plan & Cottage Court Conditional Use Permit - Applicant Fieldstone Land Consultants, on behalf of owner Nuevo Transfers LLC, proposes to construct four townhouse-style multifamily buildings with a total of 14 units. The property is ~.75 ac and is in the Medium Density District.**

Recommendation:

To review the attached staff report and application materials in preparation for the public hearing.

Attachments:

1. Staff Report
2. Application
3. Narrative
4. Architectutral & Visual Appearance Narrative
5. Plan Set
6. Floor Plans & Elevations
7. Stormwater Management Report

Background:

The four subject parcels are each ~0.19-ac in size and occupy an area of land abutting Elm St to the west and Carroll St to the east. All four lots are currently undeveloped. The applicant proposes to construct a townhouse-style Cottage Court Development consisting of two 3-unit buildings and two 4-unit buildings. Site access will be provided by a curb cut along each street. Per Section 17.5.5.A.1 of the Land Development Code (LDC), Cottage Court Developments proposing the construction of five or more dwelling units are required to obtain both Major Site Plan and Conditional Use Permit approval from the Planning Board.

STAFF REPORT

PB-26-12 – MAJOR SITE PLAN & COTTAGE COURT CONDITIONAL USE PERMIT – ELM CITY COMMONS, ELM ST & CARROLL ST

Request:

Applicant Fieldstone Land Consultants, on behalf of owner Nuevo Transfers LLC, proposes to construct four townhouse buildings with a total of 14 units on the parcels at 0 Carroll St; 0 Elm St; and 225 Elm St (TMP#s 536-049-000; 536-050-000; 536-055-000 & 536-056-000). The parcels are ~.75-ac in total and are located in the Medium Density District.

Background:

The four subject parcels are each ~0.19-ac in size and occupy an area of land abutting Elm St to the west and Carroll St to the east (Figure 1). Both of these streets connect with Spruce St to the north and High St to the south. Adjacent uses include a mix of residential dwellings of varying densities ranging from single-family homes to buildings with 5+ apartments. All four lots are currently undeveloped.

Figure 1. Aerial imagery from 2025 showing the subject parcels with frontage along both Elm St & Carroll St.

The applicant proposes to construct a townhouse-style Cottage Court Development consisting of two 3-unit buildings and two 4-unit buildings. Site access will be provided by a curb cut along each street. Per Section 17.5.5.A.1 of the Land Development Code (LDC), Cottage Court Developments proposing the construction of five or more dwelling units are required to obtain both Major Site Plan and Conditional Use Permit approval from the Planning Board.

Determination of Regional Impact:

Staff have made a preliminary evaluation that the proposal does not appear to have the potential for "regional impact" as defined in RSA 36:55. The Board should make a final determination as to whether the proposal could have the potential for regional impact.

Completeness:

The applicant requests exemptions from submitting a traffic analysis, soil analysis, historic evaluation, architectural and visual appearance analysis, and a screening analysis. Planning Staff recommend that the Board grant the requested exemptions and accept the application as "complete."

Departmental Comments:

- **Zoning:** Foundation corners will need to be pinned by a licensed surveyor and verified prior to pour to ensure that yard setbacks are not violated.
- **Engineering:** The City Engineer had several comments and questions related to the proposed water and sewer utilities. In response to these comments, the applicant submitted an updated plan set, which is currently in the process of being reviewed by the City Engineer's Office. Planning Staff will provide an updated on this aspect of the application during the public hearing for the proposal at the Planning Board meeting on Tuesday, May 26th.
- **Building & Fire:** All proposed buildings will be required to comply with the NH State Building & Fire Codes.

APPLICATION ANALYSIS:

ARTICLE 17 – COTTAGE COURT CONDITIONAL USE PERMIT CRITERIA:

4 **Permitted Uses:** The applicant proposes to construct a 14-unit Cottage Court Development consisting of two triplexes and two townhomes with four units each. Per Table 17-1 of the Land Development Code, these uses are allowed in the Medium Density District subject to the issuance of a Conditional Use Permit by the Planning Board. This standard appears to be met.

5.1 **Development Types Allowed:** The proposal involves the development of a single parcel of land that will be owned and managed by a Condominium Association. The site is currently comprised of four separate parcels that will need to be merged. Staff recommend that the Board include conditions of approval related to the completion of a voluntary merger prior to final approval of the application as well as the submittal of draft and recorded condominium agreements and any other legal instruments that may be necessary for this proposal. This standard appears to be met.

5.2 **Dimensional Standards:** The proposed Cottage Court Development has been designed to comply with all applicable dimensional requirements (Table 2). Section 17.5.2.C.1 of the LDC allows Cottage Court Developments in the Medium Density District the flexibility of having a maximum height of 35' or 2.5 stories. The proposed townhouse buildings are three stories tall with a maximum height of 34.5-ft.

Due to the close proximity of the proposed buildings to the front setbacks along Elm St and Carroll St, the Zoning Administrator has requested that the Board include a condition of approval related to the foundation corners being pinned by a licensed surveyor and verified by Community Development Staff prior to pouring the foundation to ensure that the required side setbacks are not violated. This standard appears to be met.

Table 2: Required vs. proposed dimensional standards.

	Required	***Proposed***
Minimum lot size	~0.18-ac (8,000-sf)	~0.75-ac (32,494-sf)
Minimum lot width at building line	60-ft	~172.45-ft
Minimum Tract Frontage	50-ft	-186-ft on west side (along Elm St) -186-ft on east side (along Carroll St)
Front Setback	15-ft	-Minimum setback of 17.4-ft on west side -Minimum of 15.3-ft setback on east side
Rear Setback	15-ft	N/A
Side Setback	10-ft	-Minimum of 26.3-ft setback on north side -Minimum of 27.6-ft setback on south side
Max Building Coverage	45%	26.5%
Max Impervious Coverage	60%	50.4%
Max Stories Above Grade / Building Height	2.5 stories or 35' max	34.5-ft max height

5.3 Conditional Use Permit Standards:

A. **Dwelling Unit Size:** The proposed units will each have a 1,100-sf gross floor area where a maximum average of 1,250 is required and a 616-sf footprint per unit where a maximum of 900 is required. This standard appears to be met.

B. **Parking:** Cottage Court developments must provide at least one parking space per unit and no more than one parking space per bedroom. Each of the 14 units will have two bedrooms, therefore a minimum of 14 parking spaces and a maximum of 28 spaces are required. The plan shows 28 parking spaces – 1 in the garage for each unit and 1 in a surface-level parking space outside the garage (Figure 2). This standard appears to be met.

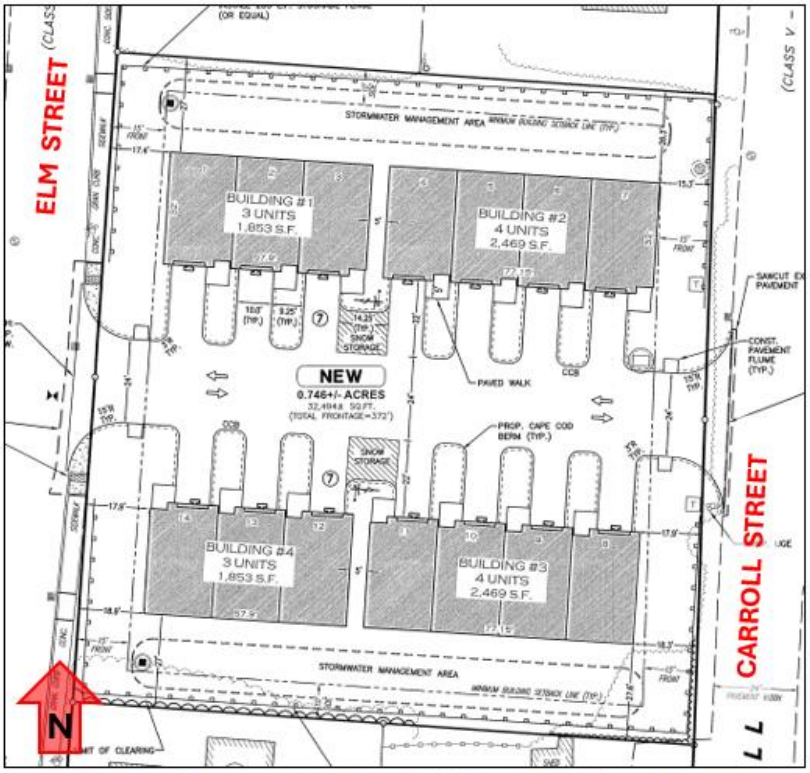


Figure 2. A snippet of the proposed conditions plan showing the proposed layout of the development.

C. **Building Separation:** The narrative states that there will be a 5-ft separation between each building and exterior walls will be fire-rated to meet building and fire codes. This standard appears to be met.

D. **Driveways:** The applicant proposes a curb cut on Elm St and another on Carroll St. Each curb cut will be designed to accommodate two-way traffic with a 24'-wide vehicle travel aisle connecting both sides. They are proposed to be ~30'-wide at the curb line and ~52'-wide at the property line where a maximum width of 25' and 50' are allowed, respectively. Planning Staff are waiting to hear back from the applicant regarding how they plan to meet this requirement and will share updated information with the Board during the public hearing for this application.

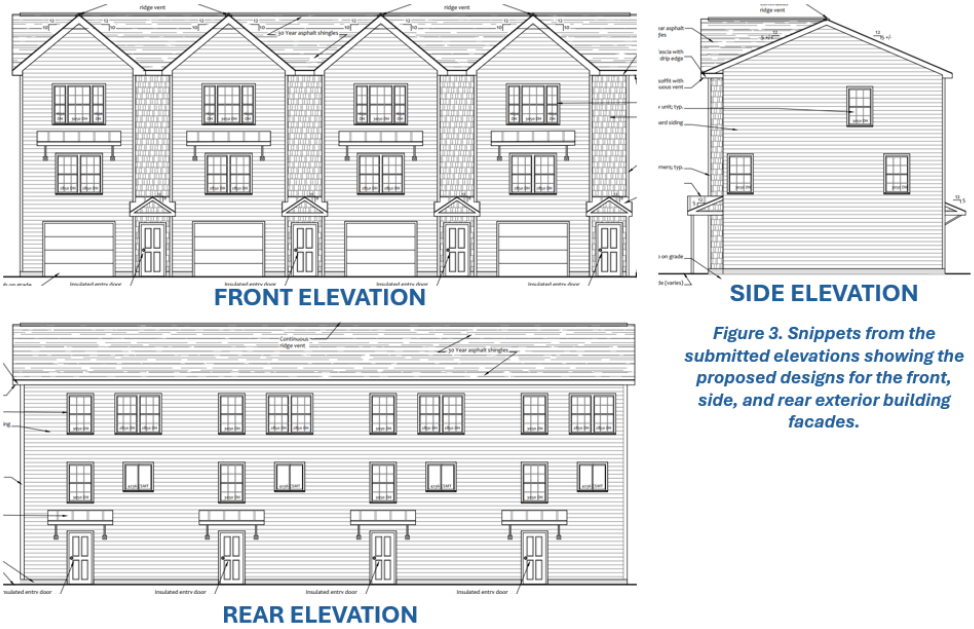


Figure 3. Snippets from the submitted elevations showing the proposed designs for the front, side, and rear exterior building facades.

E. **Screening:** The subject parcels are surrounded by residential uses of varying densities with heights that range from one to three stories. Given that the proposed building type is more intense than most of the surrounding building types, the applicant proposes to screen the site using 6'-tall stockade fencing along the north and south property lines.

The proposed landscaping plan currently shows a combination of 6'-tall stockade fencing with some landscaping along both street frontages. Planning Staff have requested that the applicant reduce the amount of fencing along the property boundaries facing the public rights-of-way and install landscaping as a softer and more pedestrian-friendly form of screening. At the time of this staff report, the applicant was working with the property owner to create an updated landscaping and screening plan. Updated materials will be shared with the Planning Board during the public hearing for this application.

F. **Architectural Guidelines:** The proposed elevations show that the building exterior will be finished with a mix of horizontal vinyl siding and vinyl shake siding (Figure 3). The narrative states that the buildings will be finished with neutral colors that fit in other similar buildings in the neighborhood and around the City. The Board will need to determine if the applicant has satisfied the intent of this standard.

ARTICLE 21 – SITE DEVELOPMENT STANDARDS:

2. **Drainage:** The site will be graded to convey drainage away from the buildings and driveways via grass swales to two bioretention basins (i.e. – "rain gardens") located to the rear of each building. These basins will treat stormwater runoff using landscaping, a filter media layer, and underdrains that will tie into the City storm drains in the public rights-of-way. At the time of this staff report, Planning Staff were waiting to hear back from the City Engineer regarding whether the updated plans satisfy his comments related to the City water and sewer utilities.

3. **Sediment & Erosion Control:** Proposed erosion control measures include the installation of catch basin silt socks, silt fencing, and two stabilized construction entrances during construction. Following the completion of the project, permanent erosion control measures will consist of stone riprap and drip strips and established vegetation. Planning Staff recommend that the Board include conditions of approval related to the submittal of a security to cover the cost of sediment and erosion control measures as well as the inspection of these measures following their installation prior to the commencement of site work. This standard appears to be met.

4. **Snow Storage & Removal:** Two snow storage areas are identified on the proposed conditions plan adjacent to parking spaces at the center of the site. The narrative states that excess snow will be removed from the site as needed and can also be stored in the landscaping islands between units. This standard appears to be met.

5. **Landscaping:** The proposed landscaping plan shows the installation of four Red Maple trees along the entrances along with shrubs, including rhododendrons, silky dogwoods, and winterberries. As mentioned previously, Planning Staff have spoken with the applicant about installing perimeter landscaping in place of the proposed stockade fencing along the western and eastern property lines to screen the parking area from the road. Section 9.4.4.A of the LDC requires that a perimeter landscape area be created for any commercial parking lots visible from the public right-of-way. In accordance with subsection (6) of this standard, the applicant is requesting that the Board approve an alternative landscaping plan, if it is determined that the proposed design generally meets the intent of these standards.

Interior parking lot landscaping will include the installation of four Hawthorne trees in the parking lot landscaping islands. Rain gardens will be furnished with a mixture of low bush blueberries, sheep laurels, blue flag irises, and a mixture of flowers. Planning Staff recommend that the Board include conditions of approval related to the submittal of a security to cover the cost of landscaping as well as the completion of initial and final landscaping inspections.

6. **Screening:** The narrative states that transformers serving the development will be screened by shrubs. This standard appears to be met.

7. **Lighting:** The proposed light fixtures are full cut-off with a color rendering index of 90 and a color temperature of 3,000K. A total of 14 lights will be installed with one at the entrance of each unit. Lighting levels do not exceed 0.1-fc at the property line or 1-fc at the right-of-way line. The average illumination levels are 0.73-fc for the northern parking lot and 0.75-

fc for the southern parking lot. The uniformity ratio (the ratio of the average to the minimum lighting levels in footcandles) is 3.65-fc for the northern parking lot and 3.75-fc for the southern parking lot. This standard appears to be met.

8. **Sewer & Water:** The City Engineer provided the applicant with a variety of comments related to the proposed water and sewer utilities. Comments to be addressed include specific questions about the invert for the water main, calculations for the daily and peak water demand, and details for the proposed on-site pump station, amongst others. At the time of this staff report, Planning Staff are waiting to hear back from the City Engineer to see if these comments have been sufficiently addressed. An update will be provided during the public hearing for this application.

Planning Staff recommend that the Board include a condition of approval related to the submittal of a security to cover the cost of as-built plans showing the final location and specifications for all installed infrastructure following the completion of construction.

9. **Traffic & Access Management:** The anticipated traffic demand for this development is 81 vehicle trips on a weekday and 79.4 trips on a weekend day. During the weekday PM peak hour, 7.3 vehicle trips are expected, and 6.2 trips are expected during the weekday AM peak hour. The applicant submitted estimates using the most recent version of the ITE Trip Generation Manual and stated that they do not foresee this development having a negative impact on the function of Elm St. The City Engineer did not express any concerns regarding the trip generation estimates submitted with the application materials.

10. **Filling & Excavation:** The narrative states that proposed grading on the site will require filling in some areas and excavation in others. Fill material will be stockpiled on the site and some materials needed for construction will also be imported to the property. Any excavation within the public right-of-way will be handled as part of the Excavation Permit that will be submitted to and reviewed by the Public Works department. The underlying soil quality on the site will require the installation of pilings and grade beams to support the construction of the multi-story buildings, which will be addressed as part of the building permit review process for this project. It is not anticipated that more than 50 trucks of materials will be moved to and/or from the site. This standard appears to be met.

11. **Surface Waters & Wetlands:** There are no surface waters or wetlands present on the subject parcels. This standard is not applicable.

12. **Hazardous & Toxic Materials:** There are no known hazardous or toxic materials on the site. This standard is not applicable.

13. **Noise:** Noise levels will be consistent with a residential use. This standard appears to be met.

14. **Architecture & Visual Appearance:** See 17.5.3 subsection (F), above.

Recommended Motion:

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

"Approve PB-26-12 as shown on the plan set identified as "Multi-Family Residential Development; Tax Map 536 Lots 49, 50, 55 & 56; Elm City Commons" prepared by Fieldstone Land Consultants, PLLC at varying scales on April 17, 2026 and last revised on May 11, 2026, and in the elevations identified as "Elm City Commons; Elm and Carroll Streets; Keene, NH 03431" prepared by Sampson Architects at varying scales on April 14, 2026 with the following conditions:

1. **Prior to the final approval and signature of the plans by the Planning Board Chair, the following conditions precedent shall be met:**
    a. **Owner's signature appears on the title page and proposed conditions plan.**
    b. **Submittal of five (5) full size paper copies and a flattened PDF version of the final plan set and elevations.**
    c. **Submittal of a recorded Voluntary Merger for the four (4) subject parcels.**
    d. **Submittal of a security to cover the cost of sediment and erosion control measures, landscaping, and as-built plans in a form and amount acceptable to the Community Development Director.**
    e. **Submittal of draft written documentation of any easements or/or other necessary legal instruments required for this application, which shall be subject to review by the City Attorney.**
    f. **Submittal of an updated plan set showing additional perimeter landscaping along Elm St & Caroll St and addressing all outstanding comments from the City Engineer.**
2. **Subsequent to final approval and signature of the plans by the Planning Board Chair, the following conditions shall be met:**
    a. **Prior to the commencement of site work, a preconstruction meeting will be scheduled with Community Development Staff.**
    b. **Prior to the commencement of site work, the erosion and sediment control measures shall be inspected by the Community Development Department to ensure compliance with this application and all City of Keene regulations.**
    c. **Prior to the installation of building foundations, the building corners shall be pinned by a surveyor and inspected by Community Development Staff to ensure compliance with the required setbacks.**
    d. **Submittal of recorded easements and/or any other legal instruments necessary for this application to the Community Development Department.**
    e. **Following the installation of landscaping, the Community Development Department shall be contacted to perform an initial inspection.**
    f. **One year following the installation of all landscaping, the Community Development Department shall be contacted to perform a final landscaping inspection."**

CITY OF KEENE
NEW HAMPSHIRE

Planning Application

Project Number:	PB-26-12	**Date Submitted:**	April 17, 2026
Project Name:	Elm-Carroll Cottage Court	**Zoning:**	MD
Project Address:	0 ELM ST.	**Parcel Size:**	0
Parcel Number:	536055000000000		

Owner Information

NUEVO TRANSFERS LLC	69A ISLAND ST.	KEENE NH 03431
Name	*Address*	*City/State/Zip*

Applicant Name
John Noonan

Applicant Phone #
6036725456

Authorized Agent Name
Chad E. Branon

Authorized Agent Phone #
603-672-5456

Project Description
14 Units of Townhouse style buildings separated into 4 buildings and designed based on the Cottage Court requirements. There will be a central driveway, individual driveways and garages for each unit. The site will be serviced by municipal water and sewer.

Attachments

Narrative & Plan Set		***Technical Reports***	
Narrative	Submitted	Drainage Report	Submitted
Location Map	Submitted	Traffic Report / Analysis	Exemption Requested
Existing Conditions Plan	Submitted	Soil Analysis	Exemption Requested
Proposed Conditions Plan	Submitted	Historic Evaluation	Exemption Requested
Grading Plan	Submitted	Screening Analysis	Exemption Requested
Landscaping Plan	Submitted	Architectural Analysis	Submitted
Lighting Plan	Submitted	Other Reports / Analyses	
Elevations / Renderings	Submitted		

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

Masiello Cottage Court Development
Elm City Commons
Site Plan, Cottage Court CUP Narrative

Tax Map Parcel 536, Lots 49, 50, 55 & 56
Elm Street & Carroll Street, Keene, New Hampshire

Revised: May 11, 2026

Project Narrative:

Fieldstone Land Consultants, on behalf of Christopher Masiello, is submitting a Cottage Court Overlay development plan for Planning Board review. The proposal consists of developing Tax Map Lot 536-49, 50, 55 & 56 located on Elm Street and Carroll Street, in a Cottage Court townhouse residential development with 14 dwelling units. The applicant has decided to utilize the recently adopted Cottage Court Overlay regulations with a private central driveway with access to both Elm Street and Carroll Street. This layout will provide condominium style ownership for future homeowners with a goal of providing much needed affordable, owner-occupied housing.

The existing Tax Map Lots 536-49, 50, 55 & 56 have a combined size of 0.746 acres with 186 feet of frontage along Carroll Street and Elm Street (total of 372 feet of frontage). These lots will be joined into a single lot with a voluntary lot merger, following Planning Board review of the project. The lot is located in the Medium-Density District and is currently vacant. The property is cleared and there are no utilities or drainage within the lot. There are no wetlands present on or near the subject lot.

Four buildings are being proposed with 2 three-unit buildings and 2 four-unit buildings. All four buildings will have access from Elm Street and Carroll Street via a central driveway that runs through the new lot. The stabilized construction entrances will be used at both driveway curb cuts during construction. A homeowner's association will be formed to provide maintenance of the access driveway, common utilities, stormwater management systems, and site amenities.

The 3 story unit sizes will be equal and will consist of a garage at ground level and two-bedrooms. The building height will meet the 35' maximum height requirement. The building design contemplates a modern Townhouse style architecture and will meet the Cottage Court standards. The architectural plans for these units have been provided for review and comment.

The residential development will be serviced by the municipal water and sanitary sewer infrastructure. A blanket easement will be provided to the City of Keene for the infrastructure on site, but does not obligate the City to maintain the utilities on site. The water and sewer infrastructure on site will be owned and maintained by the Condominium Association. The stormwater management will be constructed on site to mitigate storm runoff, provide treatment of runoff, and will be maintained by the homeowner's association.

The development will require two applications from the Planning Board; a Major Site Plan application, and the Cottage Court Conditional Use Permit (CUP). The development standards for all applications are outlined below with descriptions on how the standards are met.

Cottage Court Overlay CUP Standards (Article 17.5.3 of the LDC):

17.5.3.A Dwelling Unit Sizes: All units will meet the maximum of 900 footprint area with 660 SF per unit, and 1,250 S.F. in average gross floor area (average for the whole development). The unit size is listed on SP-1 sheet and uses the interior floor space for the calculation.
17.5.3.B Parking: There are no parking lots proposed for this site. Each dwelling unit can fit at least 1 space per driveway and an additional 1 space in a single-car garage in each unit (28 spaces total).
17.5.3.C Building Separation: The buildings are separated to meet building and fire codes. There are four buildings to provide 14 Units total and the buildings are separated by 5 feet. This will require the exterior walls of the building to be fire rated construction.
17.5.3.D Driveways: The driveways will meet the requirements of this section. The main private drive will be 24' wide with cape cod asphalt curbing. The driveways will be 10' wide and a minimum of 22' long. Access of emergency vehicles, such as a fire ladder truck, will be from Elm Street and Carroll Street.
17.5.3.E Internal Roads: The development will not have a "road" with a defined right-of-way. There will be a central driveway from Carroll to Elm Street with each units' driveway off this central driveway.
17.5.3.F Screening: The proposed buildings will be screened from adjacent properties and the City Street. A proposed fence and a vegetated buffer are to be provided along road frontages of Elm Street and Carroll Street. A fence is proposed along the northern and southern property lines where residential homes abut the development.

Site Development Standards (Article 21 of the LDC):

21.2. Drainage & Stormwater: The site will be designed to convey the drainage away from the buildings and off the paved driveways. The stormwater will be managed to provide treatment and retention of rainstorm runoff waters. The systems have been designed to match or reduce the stormwater runoff that exists on the undeveloped site for the 2, 10, 25, and 50 year storm events, as required by the City of Keene. There are two stormwater bioretention basins located behind each building. These basins will treat water by utilizing landscaping, a filter media layer, and underdrains. The underdrains will tie into the City storm-drain systems in the streets.
21.3 Sediment & Erosion Control: Temporary erosion control measures consisting of catch basin silt-socks, silt fencing, and a stabilized construction entrance will be used during the construction process. The permanent erosion control measures will consist of stone rip-rap, stone drip strips, established vegetation, and asphalt pavement.
21.4 Snow Storage & Removal: Snow will be removed from the site during larger events. Smaller storms can be stored on the landscaped island between each driveway. A central striped island was created to allow for snow storage on both sides of the main driveway.
21.5 Landscaping: Landscaping will meet the City LDC standards and is provided along the driveway, front of the buildings and within the bioretention area. Plantings around the

bioretention basins will provide landscaping features to the rear of the buildings. As the individual driveways at each unit are not a standard parking lot layout, we are requesting that the Planning Board review and approve an Alternative Landscaping Plan for this development.
21.6 Screening: The northern and southern boundary will have a solid fencing installed with some perimeter trees to provide screening to the residential abutting properties. The transformers for the development will be screened by shrubs.
21.7 Lighting: All lighting will meet the City LDC standards and will not impact the public. Details are shown on the LT-1 Lighting Plan utilizing building mounted LED, full cut-off lights.
21.8 Sewer & Water: Sewer and water will be municipal services, which includes domestic water and sanitary sewer to each building. There are sewer and water mains in both Carroll and Elm Street. Upon review with the City Engineer, there is a central sewer trunk line proposed that will run into a pump station. The pump station will pump the sewer up to a gravity manhole prior to tying into the existing sewer manhole in Elm Street.
21.9 Traffic & Access Management: Access will be off Elm Street and Carroll Street with a private drive, built to City Road standards. The estimated trip generation for the site is 81 vehicle trip ends on a weekday (7 entering, 7 exiting). Estimated trip generation during weekday PM peak hour is 7.3 vehicle trips and weekday AM peak hour is 6.2 trips. The weekend Saturday trip ends is 79.4 trips. Based on the ITE Manual, the trip generation falls below the 100 vehicles or more peak hour traffic volume at the intersection with Elm Street and/or Carroll Street. We do not foresee this development having a negative impact on the function of Elm Street or require any improvements to the City Street. The connection between Carroll and Elm Street will provide options for the tenants to enter/leave the site, thereby reducing traffic impacts that would otherwise be seen with one driveway curb cut.
21.10 Filling & Excavation: The proposed grading will require filling in some areas and excavation in other areas. The materials used to fill on site, will be stock piled on the property. Select gravels and fill material for construction will need to be imported to the site. Any excavations within the City right-of-way will be outlined in the Excavation Permit with Keene Public Works. The underlying soil quality will require pilings and grade beams to support the multi-story building. The geotechnical engineer will outline this design as part of the building permit. It is not anticipated that more than 50 trucks of material will be moved on/off site.
21.11 Surface Waters & Wetlands: There are no wetlands or surface waters on the site.
21.12 Hazardous & Toxic Materials: There are none associated with this project.
21.13 Noise: Noise increase will be minimal for the residential use, consistent with abutters.
21.14 Architecture & Visual Appearance: The architecture will be a townhouse style building with gabled roofs and first story garages. The colors and tones of the siding will be neutral in color and fit in with similar buildings in the neighborhood and in the City. All of the homes in the surrounding neighborhood have gabled roofs and clapboard siding. There is a mix of wood clapboard siding and vinyl siding on the surrounding homes. The proposed buildings will have gabled roofs and vinyl clapboard siding that will be similar in appearance to these surrounding homes. We believe that the visual appearance of the proposed buildings will fit in with the surrounding neighborhood and be an improvement to the aesthetics in the neighborhood. Please refer to the architectural plans for building details.

Descriptive Narrative

Existing / Proposed Uses:
The four lots are located between Elm and Caroll streets is currently vacant. This proposal is to develop the lot with 14 residential units that will be for sale.

Description of Size / Intensity of Use:
The four lots total approximately .8 acres. The lot is located in the medium density district. The 14 proposed units being proposed utilizing the newly adopted Cottage Court overlay standards. All lot coverage and frontage requirements are able to be met.

Description of Proposed Development:
This application proposes to develop a vacant lot to provide additional housing units.

Traffic Impact:
The proposed project will have limited impact on existing traffic patterns and will be consistent with the residential use of the neighborhood.

Description of Parking Demand / Impact:
All required parking for the new dwelling unit exists currently on site. Adjacent to existing dwelling unit there are two existing parking locations. No changes to existing curb cut are planned.

Location of access points:
Access to the proposed unit will be from the single existing driveway cut.

Other Descriptive Information:
This proposal is limited in scope and is consistent with the neighborhood.

Drainage & Stormwater Management:
There is minimal change being proposed to the lot. The intent is to maintain current drainage patterns.

Sedimentation Control:
Sedimentation control will continue to utilize existing structures.

Snow Storage and Removal:
Snow will be pushed adjacent to existing parking behind existing dwelling.

Landscaping:
Proposed landscaping will be consistent with the neighborhood.

Screening:
Trash receptacles will be located on the side of the structure, out of view from public roadways. Proposed screening will be achieved with landscaping, consistent with the neighborhood.

Lighting:
All exterior lighting will be residential in scale and used to light ingress and egress points.

Water & Sewer:
The proposed building will be tied to city water and sewer.

Traffic & Access Management:
There will be no need to manage access to the site given its residential use.

Filling & Excavation:
There will be no changes to the existing site. No filling or excavation are to take place.

Surface Waters & Wetland:
There are no wetlands on the site.

Hazardous & Toxic Materials:
There are no hazardous or toxic materials involved with this proposal.

Noise:
Noise impact from the proposed project will be minimal and consistent with adjacent residential uses.

Architectural & Visual Appearance:
The proposed buildings will be residential in use and is wood framed and have an exterior appearance, massing and detailing that is consistent with the neighborhood.

MULTI-FAMILY RESIDENTIAL DEVELOPMENT

- TAX MAP 536 LOTS 49, 50, 55 & 56 -

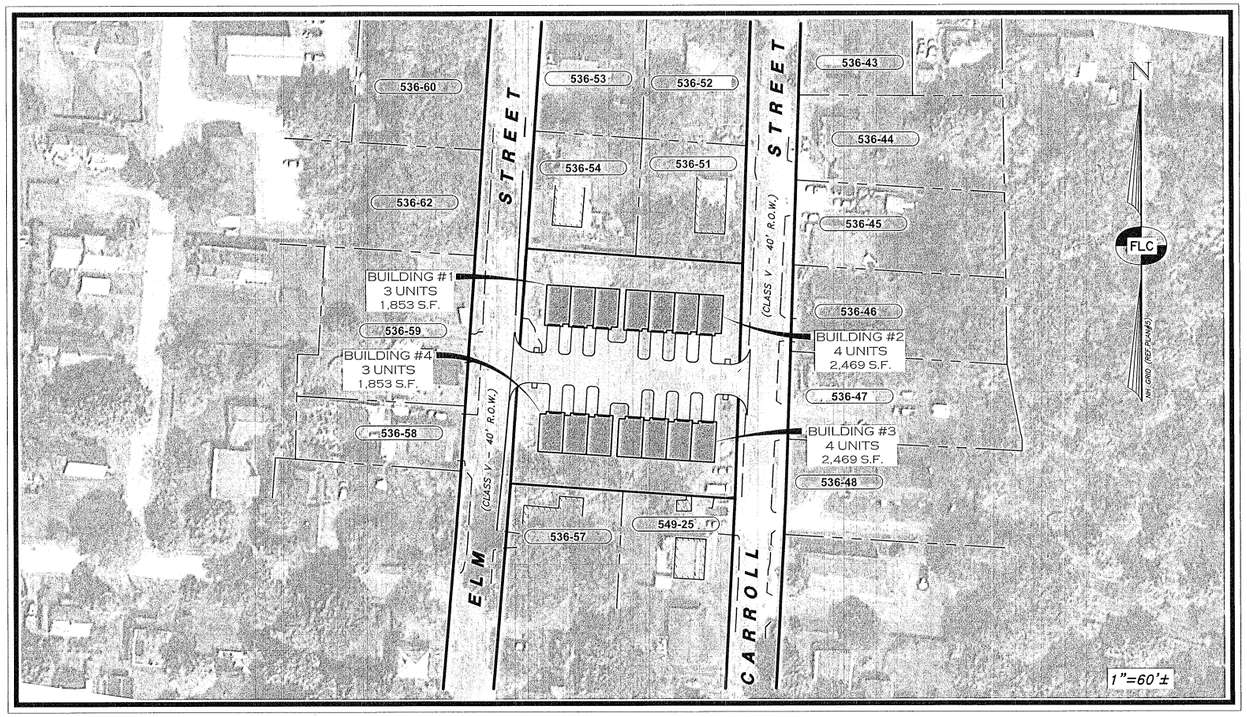
ELM CITY COMMONS

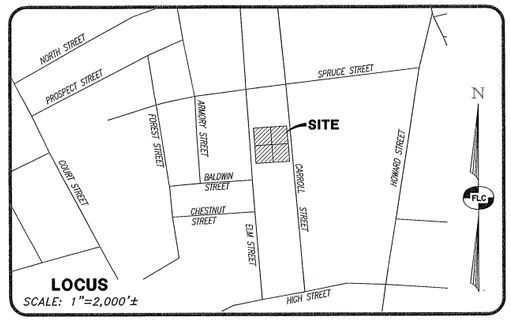
0 ELM STREET, 0 CARROLL STREET & 225 ELM STREET

KEENE, NEW HAMPSHIRE

APRIL 17, 2026

REVISED: MAY 11, 2026





SHEET INDEX

PAGE	SHEET	TITLE
1	CV-1	COVER SHEET
2	EX-1	EXISTING CONDITIONS PLAN
3	SP-1	SITE LAYOUT PLAN
4	GR-1	GRADING, DRAINAGE & EROSION CONTROL PLAN
5	UT-1	UTILITY PLAN
6	LS-1	LANDSCAPING PLAN
7	LT-1	LIGHTING PLAN
8	DT-1	EROSION CONTROL DETAILS
9	DT-2	CONSTRUCTION DETAILS
10	DT-3	SEWER CONSTRUCTION DETAILS
11	DT-4	SEWER PUMP CHAMBER DETAILS
12	DT-5	WATER CONSTRUCTION DETAILS

PREPARED FOR:

CHRISTOPHER MASIELLO

118 PORTSMOUTH AVENUE, BUILDING D SUITE 204 - STRATHAM, NH 03885

LAND OF:

NUEVO TRANSFERS LLC

69A ISLAND STREET - KEENE, NH 03431

Surveying ⌖ Engineering ⌖ Land Planning ⌖ Permitting ⌖ Septic Designs

W E

FIELDSTONE LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

CHAD E BRANON No 12191 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE 5/11/2026

LAND-OWNER SIGNATURE

OWNER: _____ DATE: _____

APPROVED BY THE KEENE PLANNING BOARD

ON: _____ CERTIFIED BY

CHAIRMAN: _____ AND

SECRETARY: _____

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION
DIGSAFE.COM
OR DIAL 10 1 1
CALL 1011 - KNOW WHAT'S BELOW
811 DigSafe MA ME NH RI VT

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/11/26	REVS PER CITY COMMENTS		CJC	JEN

FILE: 4200CV00A.dwg | PROJ. NO. 4200.00 | SHEET: CV-1

May 11, 2026 - 10:20am TLC-31
P:\0_FLC\0_PROJECTS\04200\4200.00\DWGS\

STRUCTURE INFORMATION:

SMH #1012
RIM=500.85'
INV. IN (SW)=497.40
INV. OUT (SMH#1007)=497.38
CENTER INV.=497.40
SHELF=497.83

SMH #1007
RIM=499.18
INV. IN (SMH#1012)=495.95
INV. OUT (NE)=495.98
CENTER INV.=495.98
SHELF=496.33

CB #1003
RIM=498.66
INV. IN (CB#1005)=494.26
INV. OUT (CB#1004)=494.24
CENTER INV.=492.09

CB #1004
RIM=498.78
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INV. IN (CB#1009)=493.72
INV. OUT (NE)=493.45
CENTER INV.=491.83

CB #1009
RIM=498.83
INV. IN (CB#1010)=493.73
INV. IN (NE)=495.25
INV. OUT (CB#1004)=493.53
CENTER INV.=491.46

CB #1344
RIM=500.45
INV. OUT (CB#1343)=497.69
CENTER INV.=496.75

CB #1351
RIM=500.39
INV. IN (SE)=498.19
INV. OUT (CB#1352)=497.83
CENTER INV.=497.41

CB #1352
CNG - VEHICLE PARKED

CB #1010
RIM=500.42'
INV. IN (SW)=494.36
INV. IN (CB#1011)=496.8±
INV. OUT (CB#1009)=493.79
CENTER INV.=491.36

CB #1011
RIM=500.37
INV. OUT (CB#1010)=498.06
CENTER INV.=495.68

CB #1005
RIM=498.78
INV. IN (CB#1106)=495.62
INV. OUT (CB#1103)=495.10
CENTER INV.=493.07

CB #1006
RIM=498.16
INV. OUT (CB#1005)=496.13

SMH #1342
RIM=498.93
INV. IN (SW)=495.82
INV. OUT (NE)=495.82
CENTER INV.=495.82
SHELF=496.27

CB #1343
RIM=500.17
INV. IN (CB#1344)=497.46
INV. OUT (CB#1341)=497.06
CENTER INV.=496.61

CERTIFICATION:

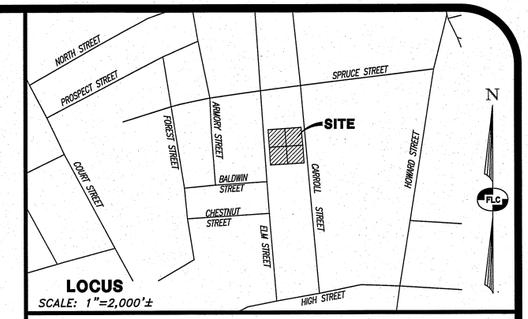
"I HEREBY CERTIFY THAT THE EXISTING CONDITONS SHOWN WERE DEVELOPED FROM A FIELD SURVEY PERFORMED BY FIELDSTONE LAND CONSULTANTS, PLLC DURING THE MONTH OF JUNE 2025 AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000)".

DATE: 5/11/26

STATE OF NEW HAMPSHIRE — No. 946 — MICHAEL D. FLOOD — LICENSED LAND SURVEYOR — SIGNATURE

LEGEND:

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- FORMER LOT LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- CURB LINE
- EDGE OF TREE LINE
- EASEMENT LINE
- 500 — 10' CONTOUR INTERVAL
- 498 — 2' CONTOUR INTERVAL
- STOCKADE FENCE
- CULVERT
- OH — OVERHEAD UTILITY LINE
- W — WATER LINE PER GIS
- S — SEWER LINE
- 536-50 — TAX MAP & LOT NUMBER
- LPIN(F) — IRON PIN FOUND
- LPIPE(F) — IRON PIPE FOUND
- LPIPE(*) — IRON PIPE PER REF PLAN
- UTILITY POLE & GUY
- CATCH BASIN (SQUARE)
- CATCH BASIN (ROUND)
- DRAIN MANHOLE
- SEWER MANHOLE
- WATER HYDRANT
- WATER VALVE
- WATER SHUT-OFF
- #217 — BUILDING & ADDRESS NO.
- GRAVEL AREA



REFERENCE PLANS:

1. "CITY OF KEENE, N.H. – SUBDIVISION FOR – CARL & SHIRLEY FAIRBANKS," SCALE:1"=50', DATED: MAY 1, 1973, DRAWN BY: FRANK A. GLINE JR. RECORDED IN C.C.R.D P0025–0025B.
2. "IN THE CITY OF KEENE – PLAN OF SUBDIVISION FOR – TERRY A. & FREDERICA A. BISHOP" SCALE:1"=50', DATED: 12/10/84, DRAWN BY: FRANK A. GLINE JR. RECORDED IN C.C.R.D P0051–0030A.
3. "URBAN SPACES I – BY – AMERICAN DESIGN HOMES – OWNER: PETER & LINDA A. DE SANTIS", SCALE: NOTED PER SECTION, DATED: MARCH 7, 1983, DRAWN BY: AMERICAN DESIGN HOMES. RECORDED IN C.C.R.D. PLAN C04–D00–0184.

NOTES:

1. THE OWNER OF RECORD FOR TAX MAP 536 LOT 49, TAX MAP 536 LOT 50, TAX MAP 536 LOT 55, AND TAX MAP 536 LOT 56 IS NUEVO TRANSFERS LLC, 69A ISLAND STREET, KEENE, NH 03431. DEED REFERENCE TO PARCEL IS BK. 3203 PG. 722, DATED 2/24/2022 IN THE C.C.R.D.
2. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF TAX MAP 536 LOTS 49, 50, 55 & 56.
3. ZONING FOR THE ENTIRE PARCEL IS THE MEDIUM DENSITY (MD) DISTRICT. MINIMUM LOT AREA IS 8,000 S.F. MINIMUM LOT WIDTH AT BUILDING LINE IS 60 FT. MINIMUM ROAD FRONTAGE IS 50 FT. BUILDING SETBACKS ARE 15' FRONT, 10' SIDE AND 15' REAR. SURFACE WATER PROTECTION DISTRICT BUFFER IS 30 FT.
4. THE EXISTING IMPROVEMENTS, MONUMENTS AND LINES OF OCCUPATION SHOWN ARE THE RESULT OF AN ON–SITE FIELD SURVEY PERFORMED BY THIS OFFICE IN JUNE, 2025.
5. THE BOUNDARY INFORMATION SHOWN FOR EXISTING LOTS 536–49, 536–50, 536–55, AND 536–56 WAS DEVELOPED FROM THE REFERENCE PLANS CITED HEREON TOGETHER WITH A PRECISE FIELD SURVEY PERFORMED BY THIS OFFICE DURING THE MONTH OF JUNE 2025.
6. HORIZONTAL ORIENTATION IS NAD83 & VERTICAL DATUM IS NAVD88 PER A GPS CORS SOLUTION.
7. NO PORTION OF LOTS 536–49, 536–50, 536–55, AND 536–56 ARE SUBJECT TO THE 100 YEAR FLOOD PER FEMA FIRM MAP FOR THE CITY OF KEENE, NH. NUMBER 33005C0267E EFFECTIVE DATE MAY 23, 2006.
8. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED IN PART FROM PLANS OF RECORD TOGETHER WITH CITY GIS DATA & FIELD LOCATIONS. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.

GRAPHIC SCALE
20' 10' 0 20' 40' 60'
IMPERIAL: 1"=20'

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/11/26	REVS PER CITY COMMENTS		CJC	MDP

EXISTING CONDITIONS PLAN
TAX MAP 536 LOTS 49, 50, 55, 56
(0 ELM STREET, 0 CARROLL STREET & 225 ELM STREET)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

LAND OF:
NUEVO TRANSFERS LLC
69A ISLAND STREET, KEENE, NH 03431

SCALE: 1" = 20' JUNE 18, 2025

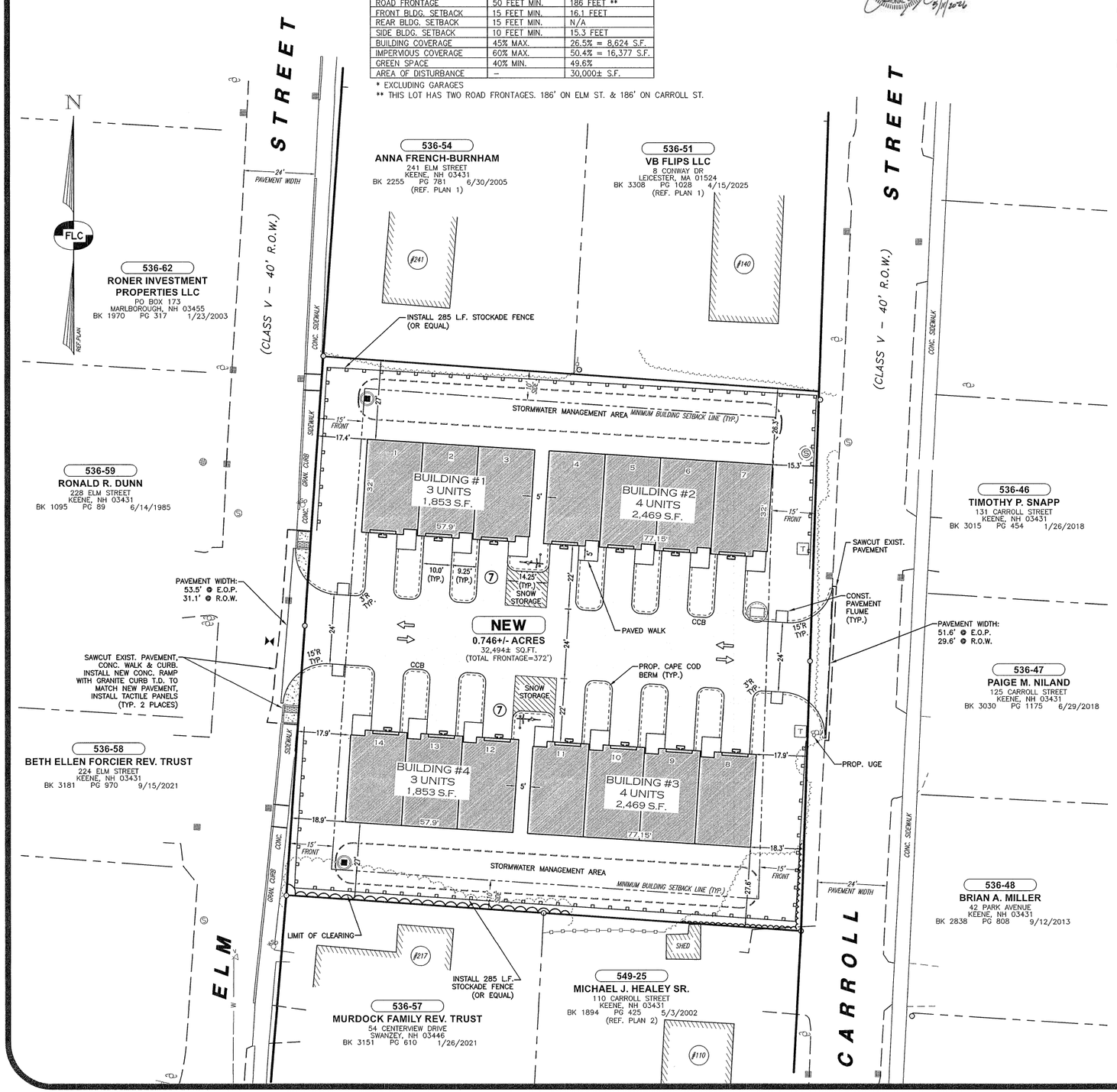
Surveying ⌖ Engineering ⌖ Land Planning ⌖ Permitting ⌖ Septic Designs
FIELDSTONE LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

FILE: 4200EX00A.dwg | PROJ. NO. 4200.00 | SHEET: EX–1

ZONING CHART - COTTAGE COURT OVERLAY DISTRICT		
MULTI-FAMILY	REQUIRED:	PROPOSED:
BUILDING HEIGHT	2.5 STORIES OR 35 FEET MAX.	34.5 FEET
AVG. GROSS AREA *	1,250 S.F. MAX.	1,100 S.F.
BUILDING FOOTPRINT	900 S.F. MAX.	616 S.F.
ROAD WIDTH	20-24 FEET	24 FEET
LOT AREA	8,000 S.F. MIN.	32,494 S.F.
ROAD FRONTAGE	50 FEET MIN.	186 FEET **
FRONT BLDG. SETBACK	15 FEET MIN.	16.1 FEET
REAR BLDG. SETBACK	15 FEET MIN.	N/A
SIDE BLDG. SETBACK	10 FEET MIN.	15.3 FEET
BUILDING COVERAGE	45% MAX.	26.5% = 8,624 S.F.
IMPERVIOUS COVERAGE	60% MAX.	50.4% = 16,377 S.F.
GREEN SPACE	40% MIN.	49.6%
AREA OF DISTURBANCE	-	30,000± S.F.

* EXCLUDING GARAGES
** THIS LOT HAS TWO ROAD FRONTAGES. 186' ON ELM ST. & 186' ON CARROLL ST.

CHAD E. BRANON NO. 12195 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE
5/11/2026



GENERAL NOTES CONTINUED:

11. TRASH SHALL BE HANDLED BY EACH HOMEOWNER; NO DUMPSTERS PROPOSED.
12. A BUILDING PERMIT WILL NEED TO BE SUBMITTED FOR THE CONSTRUCTION OF THE DWELLING UNITS TO BE COMPLETED BY THE CONTRACTOR.
13. EACH DWELLING UNIT WILL HAVE LARGE ADDRESS NUMBERS CLEARLY VISIBLE FOR EMERGENCY RESPONSES. ADDRESSES DETERMINED BY THE 911 MANAGER. EACH DWELLING UNIT WILL HAVE AN INDIVIDUAL MAILBOX.
14. PROPOSED STORMWATER COLLECTION SYSTEMS WILL NOT BE OWNED OR MAINTAINED BY THE CITY. THE OWNER OF SUBJECT LOT IS RESPONSIBLE FOR ALL DRAINAGE MAINTENANCE.
15. ANY TREE CANOPY EXTENDING INTO THE PLANE OF ROAD TRAVEL SURFACES SHALL BE MAINTAINED AT 13' - 6" MINIMUM.
16. THE WATER AND SEWER WILL BE OWNED BY CONDO ASSOCIATION AND TIE INTO THE MUNICIPAL INFRASTRUCTURE. A BLANKET EASEMENT WILL BE RECORDED TO GRANT THE CITY ACCESS TO THE WATER AND SEWER UTILITIES ON SITE.

GRAPHIC SCALE
20' 10' 0 20' 40' 60'
IMPERIAL: 1"=20'

LEGEND:

EXISTING FEATURES

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- CURB LINE
- EDGE OF TREE LINE
- EASEMENT LINE
- 500 10' CONTOUR INTERVAL
- 498 2' CONTOUR INTERVAL
- STOCKADE FENCE
- CULVERT
- OH OVERHEAD UTILITY LINE
- W WATER LINE PER GIS
- S SEWER LINE
- 536-50 TAX MAP & LOT NUMBER

- I.PIN(F) IRON PIN FOUND
- I.PIPE(F) IRON PIPE FOUND
- I.PIPE(*) IRON PIPE PER REF PLAN
- UTILITY POLE & GUY
- CATCH BASIN (SQUARE)
- CATCH BASIN (ROUND)
- DRAIN MAN-HOLE
- SEWER MAN-HOLE
- WATER HYDRANT
- WV WATER VALVE
- WATER SHUT-OFF
- #217 BUILDING & ADDRESS NO.

PROPOSED FEATURES

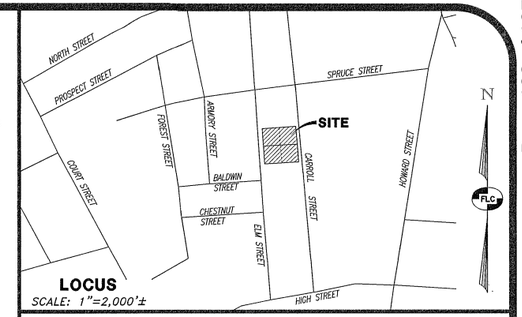
- EDGE OF PAVEMENT
- CCB CAPE COD BERM (CCB)
- LIMITS OF CLEARING
- EROSION CONTROL STONE
- PAVEMENT AREA
- CONCRETE WALK
- MISCELLANEOUS SIGN
- TRAFFIC SIGN
- WALL MOUNTED LIGHT
- TRAFFIC FLOW (NOT PAINTED ARROW)
- 12 UNIT NUMBER
- STOCKADE FENCE
- 500 10 FT. CONTOUR
- 498 2 FT. CONTOUR
- 499.43 SPOT ELEVATION
- 499.93 / 499.43 BOTTOM OF CURB / TOP OF CURB
- SWALE/GUTTER LINE
- T.B.R. TO BE REMOVED
- LIMITED COMMON AREA LINE
- LCA 14 LIMITED COMMON AREA NUMBER

- W WATER LINE
- S SEWER LINE
- SFM SEWER FORCE MAIN
- SEWER MANHOLE
- E-ONE PUMP CHAMBER
- OH OVERHEAD UTILITIES
- UGE UNDERGROUND UTILITY LINES
- UTILITY POLE
- T TRANSFORMER PAD
- C.O. SEWER SERVICE CLEAN OUT
- DRAINAGE FLOW ARROW
- STORM WATER DRAINAGE
- SAWCUT LINE
- STONE CHECK DAM
- TEMPORARY SILT FENCE
- GRAVEL CONSTRUCTION EXIT
- CATCH BASIN
- SILT SACK
- 7 PARKING COUNT

MINIMUM ON-SITE PARKING REQUIREMENTS:				
PRINCIPAL USE	TOWN REQUIREMENTS	TOTAL UNITS	SPACES REQUIRED	SPACES PROVIDED
MULTI-FAMILY	MIN. 1 SPACE/UNIT	14	MIN. 14	14
	MAX. 1 SPACE/BED	2 BEDS/UNIT	MAX. 24	

LAND-OWNER SIGNATURE
OWNER: _____
DATE: _____

APPROVED BY THE KEENE PLANNING BOARD
ON: _____ CERTIFIED BY
CHAIRMAN: _____ AND
SECRETARY: _____



LOCUS
SCALE: 1"=2,000'±

REFERENCE PLANS:

1. "CITY OF KEENE, N.H. - SUBDIVISION FOR - CARL & SHIRLEY FAIRBANKS," SCALE:1"=50', DATED: MAY 1, 1973, DRAWN BY: FRANK A. GLINE JR. RECORDED IN C.C.R.D P0025-0025B.
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GENERAL NOTES:

1. THE OWNER OF RECORD FOR TAX MAP 536 LOT 49, TAX MAP 536 LOT 50, TAX MAP 536 LOT 55, AND TAX MAP 536 LOT 56 IS NUEVO TRANSFERS LLC, 69A ISLAND STREET, KEENE, NH 03431. DEED REFERENCE TO PARCEL IS BK. 3203 PG. 722, DATED 2/24/2022 IN THE C.C.R.D.
2. THE PURPOSE OF THIS PLAN IS TO SHOW A CONDOMINIUM DEVELOPMENT WITH ASSOCIATED SITE IMPROVEMENTS FOR TAX MAP 536 LOT 49, TAX MAP 536 LOT 50, TAX MAP 536 LOT 55, AND TAX MAP 536 LOT 56, AS SHOWN.
3. ZONING FOR THE ENTIRE PARCEL IS THE MEDIUM DENSITY (MD) DISTRICT. MINIMUM LOT AREA IS 8,000 S.F. MINIMUM LOT WIDTH AT BUILDING LINE IS 60 FT. MINIMUM ROAD FRONTAGE IS 50 FT. BUILDING SETBACKS ARE 15' FRONT, 10' SIDE AND 15' REAR. SURFACE WATER PROTECTION DISTRICT BUFFER IS 30 FT.
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9. EXCESSIVE SNOW IS TO BE REMOVED OFF SITE IF SNOW STORAGE AREAS ARE FILLED.
10. ALL BUILDINGS SHALL BE CONSTRUCTED TO MEET ALL BUILDING CODES AND FIRE CODES. DESIGN PLANS OF THE BUILDINGS WILL BE PROVIDED WITH THE BUILDING PERMIT.

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/11/26	REVS PER CITY COMMENTS		CJC	JEN

SITE LAYOUT PLAN

TAX MAP 536 LOTS 49, 50, 55, 56
(0 ELM STREET, 0 CARROLL STREET & 225 ELM STREET)
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

LAND OF:
NUEVO TRANSFERS LLC
69A ISLAND STREET, KEENE, NH 03431

SCALE: 1" = 20' APRIL 17, 2026

Surveying + Engineering + Land Planning + Permitting + Septic Designs
FIELDSTONE LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
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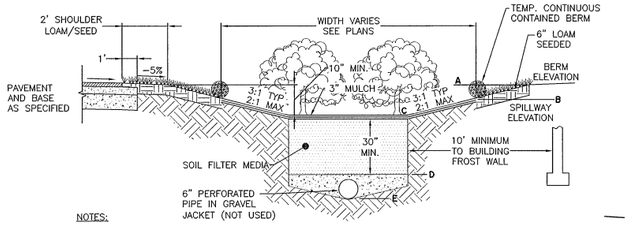
FILE: 4200SP00A.dwg | PROJ. NO. 4200.00 | SHEET: SP-1

RAIN GARDEN PLANTINGS:

1. LOWBUSH BLUEBERRY – 1–2' / #2
2. SHEEP LAUREL – UP TO 4'/#2
3. BLUE FLAG IRIS – 2–3'/#2
4. CARDINAL FLOWER – 2Ø4'/#2
5. NEW ENGLAND ASTER – UP TO 5'/#2
6. BLACK EYED SUSAN – 1–3' HT./#2



NOTES:

1. DO NOT PLACE RAIN GARDEN SYSTEM INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED AND ITS CONTRIBUTING DRAINAGE AREA(S) HAVE BEEN FULLY STABILIZED.
2. TO PREVENT DEGRADATION OF INFILTRATION FUNCTION:

   A. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

   B. DO NOT COMPACT THE EXCAVATION.

   C. DO NOT DISCHARGE SEDIMENT–LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE RAIN GARDEN AREA DURING ANY STAGE OF CONSTRUCTION.

   FROM UNHSC BIORETENTION SOIL SPECIFICATION FEBRUARY 2017.

2.1 SOIL MEDIA SPECIFIED ACCORDING TO PERFORMANCE REQUIREMENTS: PARTICLE SIZE DISTRIBUTION ACCORDING TO ASTM D422 (STANDARD TEST METHOD FOR PATRICLE–SIZE ANALYSIS OF SOILS).

1. PARTICLE SIZE DISTRIBUTION BY SEPARATES:
   a. EXCLUDE ANY MATERIAL >4.76 mm – 0%
   b. VERY COARSE SAND/GRAVEL: GRAVEL (2.0 TO 4.76 mm) 5% MAXIMUM (PERCENT BY DRY WEIGHT).
   c. SAND (0.42 TO 2.0 mm) 60 – 85% (PERCENT BY DRYWEIGHT).
   d. SILT (0.075 TO 0.42 mm) 20% MAXIMUM (PERCENT BY DRYWEIGHT).
   e. CLAY (LESS THAN 0.075 mm) 5% MAXIMUM (PERCENT BY DRYWEIGHT).

TABLE 1: ACCEPTABLE PARTICLE SIZE DISTRIBUTION OF FINAL BIORETENTION SOIL MIX.

SIEVE #	SIEVE SIZE (mm)	% PASSING
4	0.187 (4.76)	100
10	0.079 (2)	95
40	0.017 (0.42)	40–15
200	0.003 (0.075)	10–20
>200	PAN	0–5

GARDEN #	RAIN GARDEN INVERT INFORMATION ELEVATION				
	A	B	C	D	E
1 & 2	498.0	NA	497	494.25	493.75

RAIN GARDEN TYPICAL SECTION | 1 GR-1

STRUCTURE INFORMATION:

CB #1003
RIM=498.66
INV. IN (CB#1005)=494.26
INV. OUT (CB#1004)=494.24
CENTER INV.=492.09

CB #1004
RIM=498.78
INV. IN (CB#1003)=494.31
INV. IN (CB#1009)=493.72
INV. OUT (NE)=493.45
CENTER INV.=491.83

CB #1009
RIM=498.83
INV. IN (CB#1010)=493.73
INV. IN (NE)=495.25
INV. OUT (CB#1004)=493.53
CENTER INV.=491.46

CB #1344
RIM=500.45
INV. OUT (CB#1343)=497.69
CENTER INV.=496.75

CB #1351
RIM=500.39
INV. IN (SE)=498.19
INV. OUT (CB#1352)=497.83
CENTER INV.=497.41

CB #1352
CNO – VEHICLE PARKED

CB #1010
RIM=500.42'
INV. IN (SW)=494.36
INV. IN (CB#1011)=496.84
INV. OUT (CB#1009)=493.79
CENTER INV.=491.36

CB #1011
RIM=500.37
INV. OUT (CB#1010)=498.06
CENTER INV.=495.68

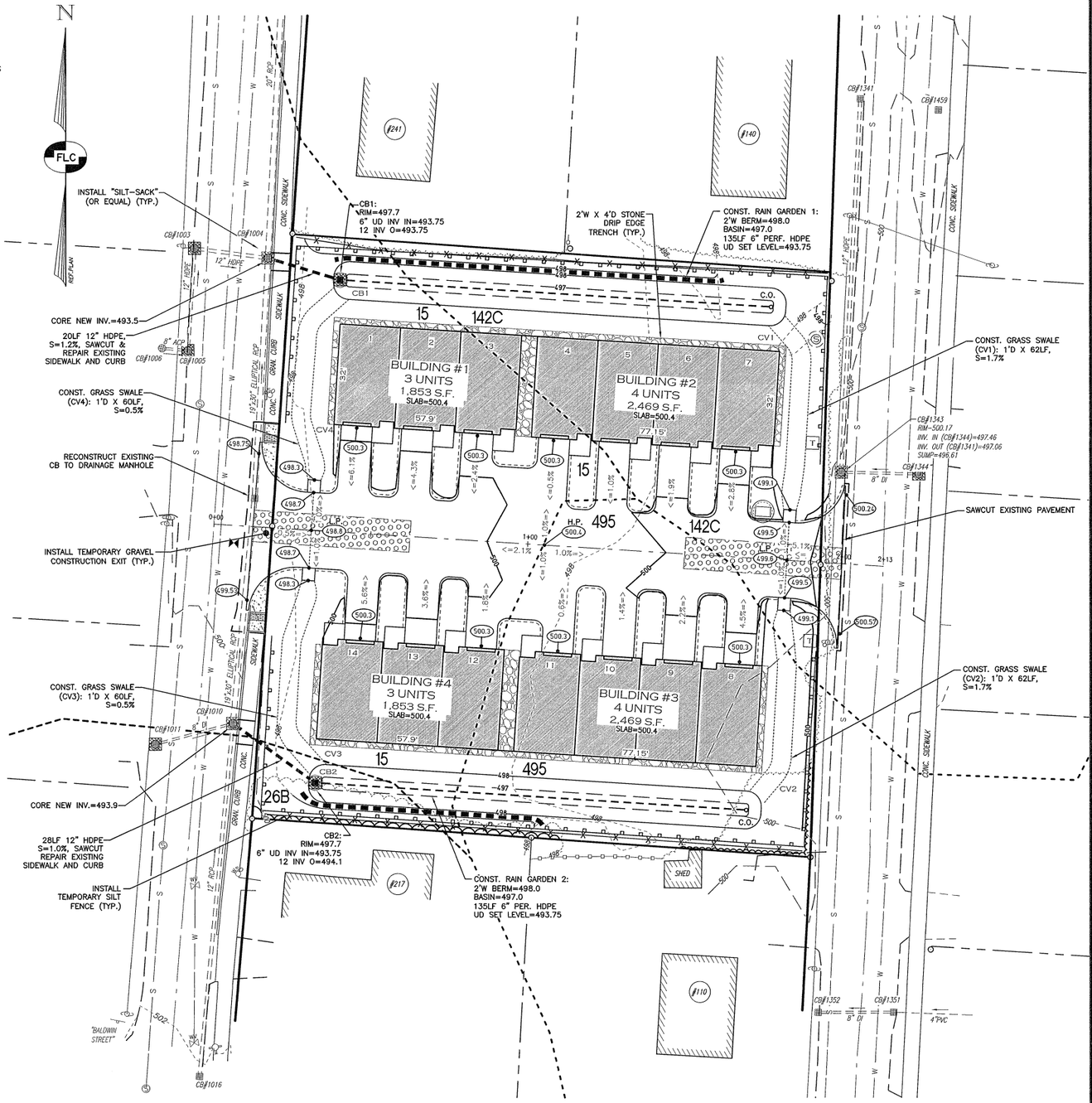
CB #1005
RIM=498.78
INV. IN (CB#1106)=495.62
INV. OUT (CB#1103)=495.10
CENTER INV.=493.07

CB #1006
RIM=498.16
INV. OUT (CB#1005)=496.13

CB #1343
RIM=500.17
INV. IN (CB#1344)=497.46
INV. OUT (CB#1341)=497.06
CENTER INV.=496.61

NRCS SOILS LEGEND:
SOURCE: USDA NRCS WEB SOIL SURVEY

– – – – – – – –	SOIL BOUNDARY
15	SEARSPORT MUCKY PEAT, HSG D
26B	WINDSOR LOAMY SAND, 3 TO 8%, SLOPES, HSG A
142C	MONADNOCK FINE SANDY LOAM, 8 TO 15% SLOPES, HSG B
495	OSSIPEE MUCKY PEAT, HSG D



CONSTRUCTION SEQUENCE NOTES:

1. INSTALL SILTATION CONTROL FENCES IN LOCATIONS SHOWN HEREON. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION.
2. INSTALL STABILIZED CONSTRUCTION EXIT(S).
3. CUT AND CLEAR TREES; DISPOSE OF DEBRIS. STUMPS ARE TO BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
4. REMOVE TOPSOIL AND STOCKPILE AWAY FROM ANY WETLAND. STABILIZE STOCKPILE IMMEDIATELY BY SEEDING. PLACE SILT FENCE AROUND THE DOWN SLOPE SIDE OF EARTH STOCKPILES.
5. ROUGH GRADE SITE – CONSTRUCT DRAINAGE BASINS AND DRAINAGE SWALES DURING INITIAL PORTION OF CONSTRUCTION. STABILIZE IMMEDIATELY PER THE CONSTRUCTION AND EROSION CONTROL DETAILS. DO NOT DIRECT STORM WATER RUNOFF TO THESE STRUCTURES UNTIL A HEALTHY VEGETATIVE COVER IS ESTABLISHED.
6. BEGIN BUILDING CONSTRUCTION.
7. CONSTRUCT GRAVEL PARKING AREA (PAVEMENT OPTIONAL) AND BUILDING PAD. INSTALL UTILITIES AND STRUCTURES. ALL CUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE THE EROSION CONTROL NOTES.
8. INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS AND AFTER EVERY 0.25" OR GREATER RAINFALL.
9. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES, SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
10. FINISH GRADING TO PREPARE FOR PAVING (IF ANY) AND LOAMING. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
11. FINISH PAVING (IF ANY). PERMANENT SEEDING SHALL BE PERFORMED UPON COMPLETION OF PARKING AREA (SEE EROSION CONTROL NOTES).
12. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.
14. ALL STRUCTURES SHALL BE CLEANED OF SEDIMENTS ONCE CONSTRUCTION IS COMPLETE.
15. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.

GENERAL CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF KEENE.
2. 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. FIELDSTONE LAND CONSULTANTS, PLLC, AS THE DESIGN 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.
3. THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1–800–255–4977 IN NH, 1–888–344–7233 IN MA).
4. COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SPECIAL CONDITIONS OF TOWN/CITY AGENCIES, SUCH AS THE PLANNING BOARD, ZONING BOARD, CONSERVATION COMMISSION, AND OTHERS, IS MANDATORY AND IS THE RESPONSIBILITY OF THE OWNER.
5. ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN/CITY BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND FIELDSTONE LAND CONSULTANTS, PLLC PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE CITY DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCURATE AS–BUILT INFORMATION OF ALL WORK, ESPECIALLY UNDERGROUND CONSTRUCTION OF UTILITY LINES, SERVICES, CONNECTIONS, ETC. AND APPROPRIATE TIES TO ABOVE GROUND PERMANENT STRUCTURES, FIELD SURVEY COORDINATES, OR SOME OTHER METHOD OF ESTABLISHING THE AS–BUILT CONDITION OF ALL CONSTRUCTION.
8. THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 430:53 AND AGR 3800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

SEE SITE LAYOUT PLAN SHEET SP-1 FOR LEGEND, LOCUS, PLAN REFERENCES & GENERAL NOTES.

GRAPHIC SCALE
20' 10' 0 20' 40' 60'
IMPERIAL: 1"=20'

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/11/26	REVS PER CITY COMMENTS		CJC	JEN

GRADING, DRAINAGE & EROSION CONTROL PLAN

TAX MAP 536 LOTS 49, 50, 55, 56
(0 ELM STREET, 0 CARROLL STREET & 225 ELM STREET)
KEENE, NEW HAMPSHIRE

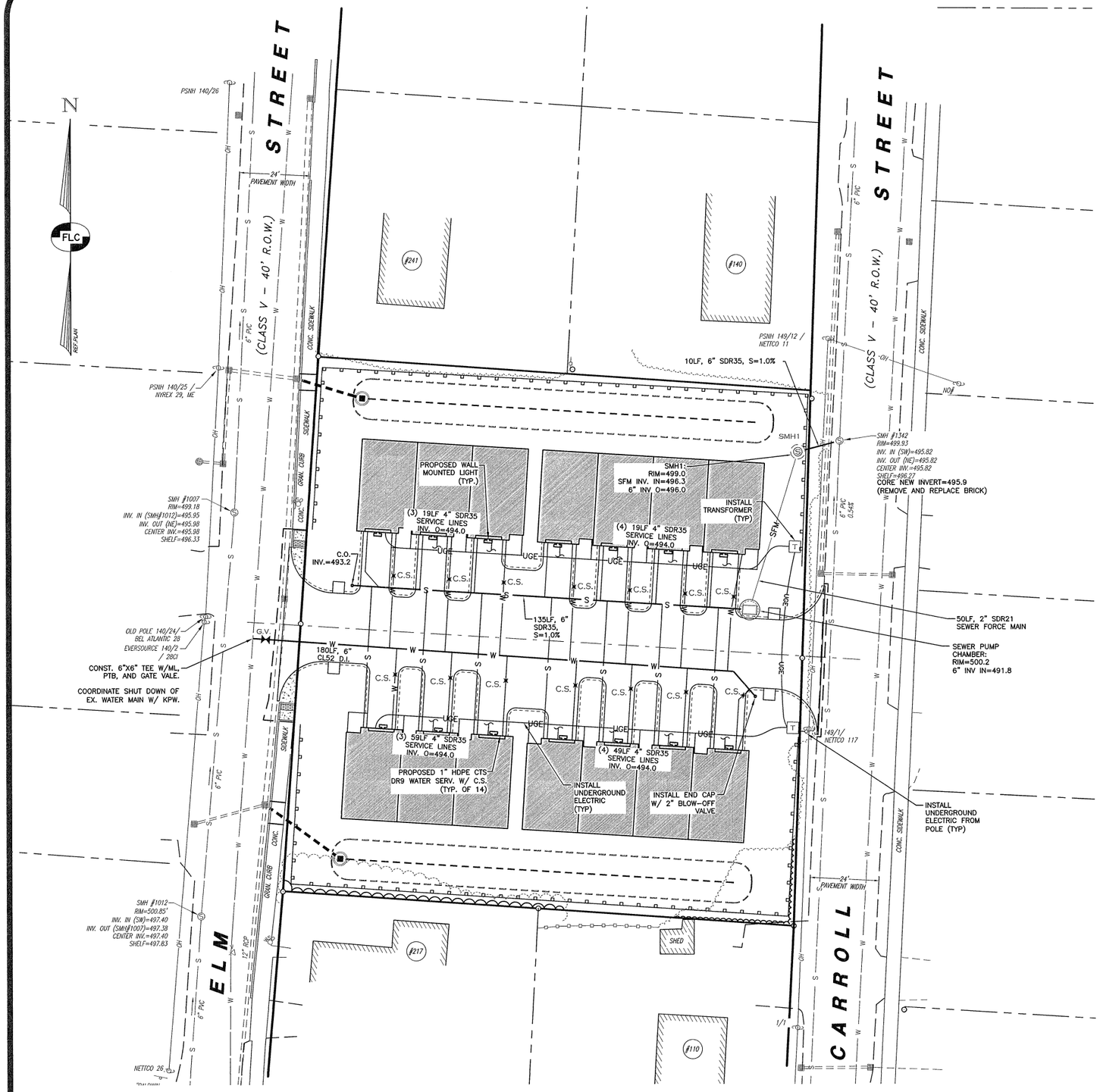
PREPARED FOR:
CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

LAND OF:
NUEVO TRANSFERS LLC
69A ISLAND STREET, KEENE, NH 03431

SCALE: 1" = 20' APRIL 17, 2026

Surveying ◆ Engineering ◆ Land Planning ◆ Permitting ◆ Septic Designs
FIELDSTONE LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

FILE: 4200SP00A.dwg | PROJ. NO. 4200.00 | SHEET: GR–1



LEGEND:

EXISTING FEATURES

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- CURB LINE
- EDGE OF TREE LINE
- EASEMENT LINE
- 500 — 10' CONTOUR INTERVAL
- 498 — 2' CONTOUR INTERVAL
- STOCKADE FENCE
- CULVERT
- OH — OVERHEAD UTILITY LINE
- W — WATER LINE PER GIS
- S — SEWER LINE
- 536-50 — TAX MAP & LOT NUMBER

- IPIN(F) — IRON PIN FOUND
- IPIPE(F) — IRON PIPE FOUND
- IPIPE(*) — IRON PIPE PER REF PLAN
- UTILITY POLE & GUY
- CATCH BASIN (SQUARE)
- CATCH BASIN (ROUND)
- DRAIN MAN-HOLE
- SEWER MAN-HOLE
- WATER HYDRANT
- WV — WATER VALVE
- WATER SHUT-OFF
- #217 — BUILDING & ADDRESS NO.

PROPOSED FEATURES

- EDGE OF PAVEMENT
- CCB — CAPE COD BERM (CCB)
- LIMITS OF CLEARING
- EROSION CONTROL STONE
- PAVEMENT AREA
- CONCRETE WALK
- MISCELLANEOUS SIGN
- TRAFFIC SIGN
- WALL MOUNTED LIGHT
- TRAFFIC FLOW (NOT PAINTED ARROW)
- 12 — UNIT NUMBER
- STOCKADE FENCE
- 500 — 10 FT. CONTOUR
- 498 — 2 FT. CONTOUR
- (499.4) — SPOT ELEVATION
- 499.4 / 499.4 — BOTTOM OF CURB / TOP OF CURB
- SWALE/GUTTER LINE
- T.B.R. — TO BE REMOVED
- LIMITED COMMON AREA LINE
- L.C.A.(14) — LIMITED COMMON AREA NUMBER

- W — WATER LINE
- S — SEWER LINE
- SFM — SEWER FORCE MAIN
- SEWER MANHOLE
- E-ONE PUMP CHAMBER
- OH — OVERHEAD UTILITIES
- UGE — UNDERGROUND UTILITY LINES
- UTILITY POLE
- T — TRANSFORMER PAD
- C.O. — SEWER SERVICE CLEAN OUT
- DRAINAGE FLOW ARROW
- STORM WATER DRAINAGE
- SAWCUT LINE
- STONE CHECK DAM
- TEMPORARY SILT FENCE
- GRAVEL CONSTRUCTION EXIT
- CATCH BASIN
- SILT SACK
- (7) — PARKING COUNT

SANITARY SEWER CALCULATIONS:

1. THE SEWER DAILY FLOW RATE: 120 GPD/BEDROOM X 28 BEDROOMS = 3,360 GPD
2. INFILTRATION: 135 LF 6"ø SDR 35 = 0.025 MI (6"x0.025 MI) x 300 GPD/INCH-MILE = 45 GPD
3. AVERAGE DAILY FLOW: 3,360 + 45 = 3,405 GPD
4. PEAK DESIGN FLOW: PEAKING FACTOR = 6 (< 100,000 GPD) 6 x 3,405 GPD = 20,430 GPD

STRUCTURE INFORMATION:

CB #1003
RIM=498.66
INV. IN (CB#1005)=494.26
INV. OUT (CB#1004)=494.24
CENTER INV.=492.09

CB #1004
RIM=498.78
INV. IN (CB#1003)=494.31
INV. IN (CB#1009)=493.72
INV. OUT (NE)=493.45
CENTER INV.=491.83

CB #1009
RIM=498.83
INV. IN (CB#1010)=493.73
INV. IN (NE)=495.25
INV. OUT (CB#1004)=493.53
CENTER INV.=491.46

CB #1344
RIM=500.45
INV. OUT (CB#1343)=497.69
CENTER INV.=496.75

CB #1351
RIM=500.39
INV. IN (SE)=498.19
INV. OUT (CB#1352)=497.83
CENTER INV.=497.41

CB #1352
CNO - VEHICLE PARKED

CB #1010
RIM=500.42'
INV. IN (SW)=494.36
INV. IN (CB#1011)=496.8±
INV. OUT (CB#1009)=493.79
CENTER INV.=491.36

CB #1011
RIM=500.37
INV. OUT (CB#1010)=498.06
CENTER INV.=495.68

CB #1005
RIM=498.78
INV. IN (CB#1106)=495.62
INV. OUT (CB#1103)=495.10
CENTER INV.=493.07

CB #1006
RIM=498.16
INV. OUT (CB#1005)=496.13

CB #1343
RIM=500.17
INV. IN (CB#1344)=497.46
INV. OUT (CB#1341)=497.06
CENTER INV.=496.61

SMH #1012
RIM=500.85'
INV. IN (SW)=497.40
INV. OUT (SMH#1007)=497.38
CENTER INV.=497.40
SHELF=497.83

SMH #1007
RIM=499.18
INV. IN (SMH#1012)=495.95
INV. OUT (NE)=495.98
CENTER INV.=495.98
SHELF=496.33

SMH #1342
RIM=499.93
INV. IN (SW)=495.82
INV. OUT (NE)=495.82
CENTER INV.=495.82
SHELF=496.27

UTILITY NOTES:

1. 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 SEWERS AND DRAINS AND THE NHDOT STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION APPROVED AND ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
2. 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.
3. 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.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACT "DIGSAFE" AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1-888-344-7233)
5. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE TOWN DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS. THE WATER AND SEWER CONNECTIONS IN CITY STREETS WILL REQUIRE AN EXCAVATION PERMIT AND COORDINATION WITH KEENE PUBLIC WORKS.
6. 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.
7. 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.
8. ALL TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
9. EXISTING PAVEMENT SHALL BE SAW-CUT AS NECESSARY. THE CONTRACTOR SHALL ENSURE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW PAVEMENT.
10. ALL POWER WORK SHALL CONFORM TO EVERSOURCE STANDARDS. THE POWER SERVICE SIZES SHALL BE VERIFIED BY AN ELECTRICAL ENGINEER AND EVERSOURCE.
11. ALL TELEPHONE WORK SHALL CONFORM TO CONSOLIDATED COMMUNICATIONS SPECIFICATIONS.
12. PRIOR TO CONSTRUCTION, THE DEVELOPER WILL BE REQUIRED TO OBTAIN AN EXCAVATION AND UTILITY CONNECTION PERMIT FOR THE PROPOSED IMPROVEMENTS.
13. ALL SEWER MAIN AND SERVICES ARE REQUIRED TO HAVE A MINIMUM 6 FEET OF COVER. WATER MAINS AND SERVICES ARE REQUIRED TO A HAVE A MINIMUM 5 FEET OF COVER. AT ANY CROSSING, THE WATER MAIN AND SERVICES MUST HAVE 18" OF VERTICAL SEPARATION ABOVE SEWER.
14. A BLANKET EASEMENT WILL BE RECORDED THAT GRANTS THE CITY ACCESS TO THE WATER AND SEWER UTILITIES ON SITE, IN CASE OF EMERGENCIES. THE WATER AND SEWER INFRASTRUCTURE ON SITE WILL BE OWNED AND MAINTAINED BY THE CONDOMINIUM ASSOCIATION.
15. EACH UNIT SHALL HAVE A WATER METER, BACKFLOW DEVICE, AND CURB STOP VALVE INSTALLED. THE WATER SERVICE LINES SHALL BE HDPE, CTS, DR9 RATED FOR 250 PSI. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL WATER AND SEWER TIE INS WITH THE KEENE PUBLIC WORKS DEPARTMENT.

SEE SITE LAYOUT PLAN SHEET SP-1 FOR LOCUS, PLAN REFERENCES & GENERAL NOTES.

GRAPHIC SCALE
20' 10' 0 20' 40' 60'
IMPERIAL: 1"=20'

REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/11/26	REVS PER CITY COMMENTS		CJC	JEN

UTILITY PLAN

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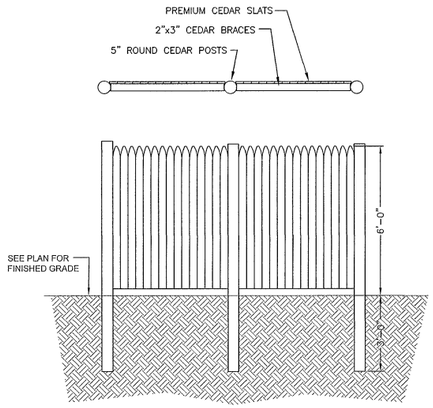
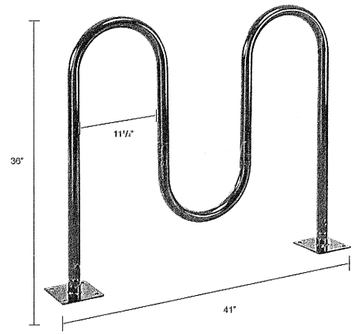


NOTES:
1. THE STYLE OF FENCE IS PREMIUM CEDAR STOCKADE FENCE WITH 5" ROUND POSTS AS OFFERED BY AMERICAN FENCES, INC. (OR EQUAL).

SCALE: N.T.S.

STOCKADE FENCE | 1 | LS-1

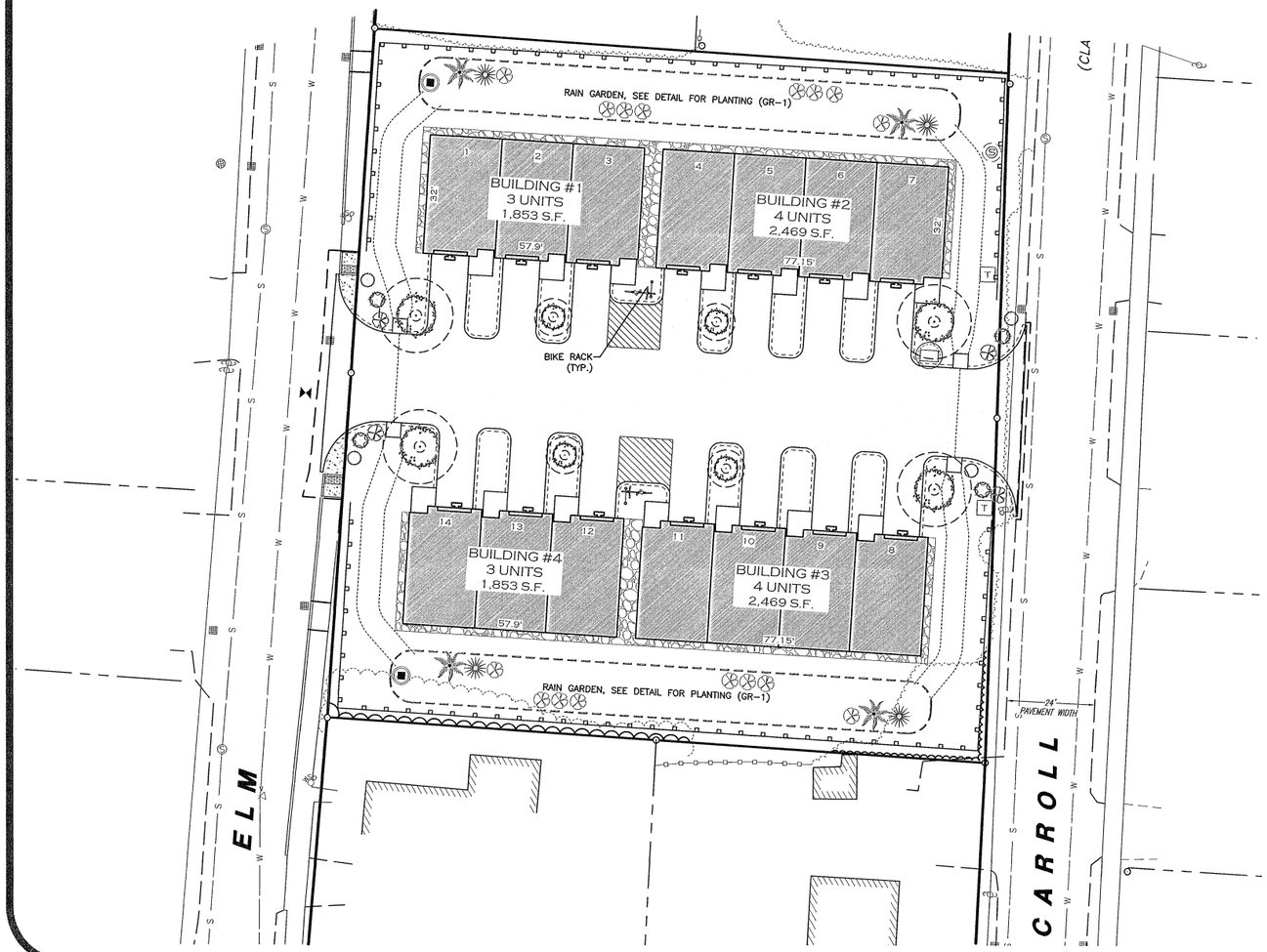


1. INSTALL 1/2" STAINLESS BOLTS INTO DROP-IN ANCHORS BY HILTI.
2. SET TWO 8"ø SONOTUBES FILLED WITH CONCRETE TO CONNECT BASE PLATES TO.

5 - BIKE WAVE BIKE RACK

SCALE: N.T.S.

B & B SHRUB PLANTING DETAIL | 2 | LS-1

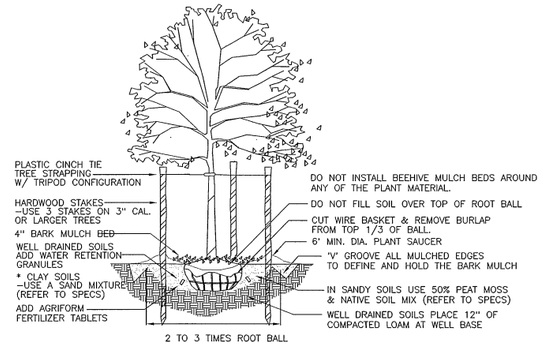


PLANT SYMBOLS | PLANT LIST & NAME | QTY.

ACE	ACER RUBRUM (RED MAPLE TREE)	(4) 3" CAL., 12' TALL, 6' DRIP LINE 50'H, 40' DRIP LINE AT MATURITY
CRA	CRATAEGUS MACROSPERMA (HAWTHORN)	(4) 3" CAL., 10' TALL, 5' DRIP LINE 25'H, 20' DRIP LINE AT MATURITY
PJM	P.J.M. RHODODENDRON SHRUB	(4) 2 GALLON CONTAINER, 1.5' – 2'H (4'H MATURE)
COR	CORNUS AMOMUM (SILKY DOGWOOD SHRUB)	(4) 3 GALLON CONTAINER, 2.5' – 3'H (8'H MATURE)
ILC	ILEX VERTICILLATA (WINTERBERRY SHRUB)	(4) 2 GALLON CONTAINER, 1.5' – 2'H (4'H MATURE)

RAIN GARDEN PLANTINGS:

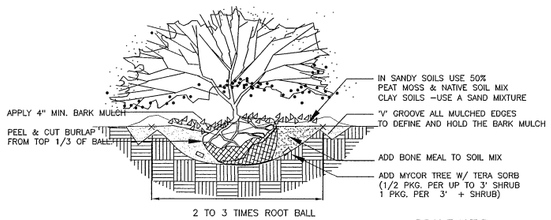
	LOWBUSH BLUEBERRY	(2) 3 GALLON CONTAINER, 1.5' – 2'H
	SHEEP LAUREL	(2) 2 GALLON CONTAINER, 0' – 4'H
	BLUE FLAG IRIS	(2) 2 GALLON CONTAINER, 2' – 3'H
	CARDINAL FLOWER	(2) 2 GALLON CONTAINER, 2' – 4'H
	NEW ENGLAND ASTER	(2) 2 GALLON CONTAINER, 0' – 5'H
	BLACK EYED SUSAN	(2) 2 GALLON CONTAINER, 1' – 3'H



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

SCALE: N.T.S.

DECIDUOUS TREE PLANTING DETAIL | 3 | LS-1



SCALE: N.T.S.

B & B SHRUB PLANTING DETAIL | 4 | LS-1

LANDSCAPING NOTES:

1. 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.
2. 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.
3. EXISTING TREES THAT ARE TO BE REMOVED, SHALL BE REMOVED ENTIRELY FROM THE SITE, INCLUDING STUMPS. NO STUMP-DUMPS ARE ALLOWED ON SITE.
4. UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED WITHIN THE IMMEDIATE AREA NO PLANT MATERIAL SHALL BE INSTALLED.
5. UNLESS OTHERWISE NOTED OR APPROVED, ALL TREES MUST BE BALLED AND BURLAPPED.
6. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF "THE AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
7. ANY PROPOSED PLANT MATERIAL SUBSTITUTIONS MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE.
8. 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.
9. 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.
10. 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.
11. WHERE APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
12. PLANTS SHALL BE INSTALLED WITHIN ONE YEAR OF COMMENCEMENT OF CONSTRUCTION
13. 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.
14. ALL LANDSCAPED AREAS WILL BE MAINTAINED TO HAVE A SUFFICIENT AMOUNT OF WATER TO MAINTAIN VIABILITY EITHER BY IRRIGATION OR BY OTHER MEANS.
15. PROPOSED PLANTINGS SHALL NOT CONFLICT WITH SNOW STORAGE AREAS, LIGHT FIXTURES OR UNDERGROUND UTILITIES.
16. TREE CANOPY EXTENDING INTO THE ROADWAY MUST BE MAINTAINED AT 13'-6" FROM THE ROAD SURFACE.
17. 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.

SEE SITE LAYOUT PLAN SHEET SP-1 FOR LEGEND, LOCUS, PLAN REFERENCES & GENERAL NOTES.

GRAPHIC SCALE

20' 10' 0 20' 40' 60'

IMPERIAL: 1"=20'

REV.	DATE	DESCRIPTION	C/O	DR	CK
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LANDSCAPING PLAN

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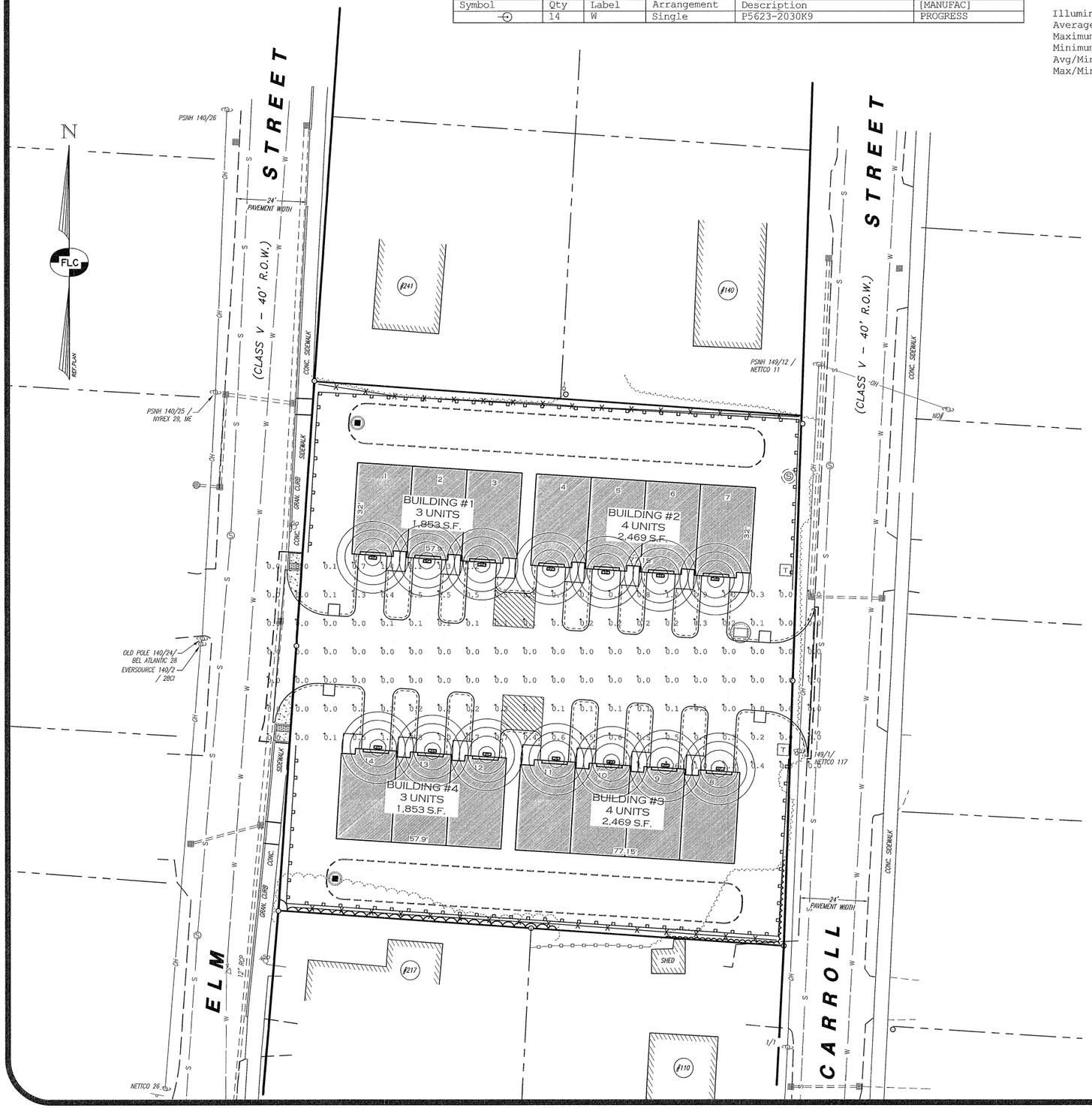
Luminaire Schedule					
Symbol	Qty	Label	Arrangement	Description	[MANUFAC]
⊣⊙	14	W	Single	P5623-2030K9	PROGRESS

NORTHERN PARKING SPOTS

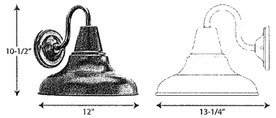
Illuminance (Fc)
Average = 0.73
Maximum = 1.4
Minimum = 0.2
Avg/Min Ratio = 3.65
Max/Min Ratio = 7.00

SOUTHERN PARKING SPOTS

Illuminance (Fc)
Average = 0.75
Maximum = 1.6
Minimum = 0.2
Avg/Min Ratio = 3.75
Max/Min Ratio = 8.00



P5623-2030K9



Photometrics:

ELECTRICAL DATA	P5623-2030K9
Input Voltage	120 V
Input Frequency	60 Hz
Input Current	0.075 A
Power Factor	Greater than 0.90
THD	<20%
EMI/RFI	Meets FCC Title 47, Part 15 Class B
Operating Temperature	-30 °C to 30 °C
Dimming	Yes*

Over-voltage, over-current, short-circuit protected
*See Dimming Notes for more information

Performance:

Number of Modules	1
Input Power	9 W
Input Voltage	120 V
Input Frequency	60 Hz
Lumens/LPW (Source)	623/69.2 (LM-82)
Lumens/LPW (Delivered)	479/61.1 (LM-79)
CCT	3000 K
CRI	90 CRI
Life (hours)	60000 (L70/TM-21)
EMI/RFI	Meets FCC Title 47, Part 15 Class B
Max. Operating Temp	30 °C
Warranty	5-year Limited Warranty
Labels	cCSAus Wet Location Listed

LIGHTING NOTES:

1. LIGHTING FIXTURES SHALL BE POSITIONED TO PREVENT UNDESIRABLE INCIDENTAL ILLUMINATION OF ABUTTING PROPERTIES, THE STREET, AND THE NIGHTTIME SKY. GLARE, DIRECTIONS, AND LIGHT LEVEL SHOULD BE CONSIDERED IN DESIGN OF ILLUMINATION PLANS.
2. SECURITY, PARKING LOT, AND SIGN LIGHTING SHALL BE SHIELDED OR OTHERWISE DESIGNED TO ENSURE THE LIGHT IS DIRECTED DOWNWARD.
3. TO PREVENT LIGHT POLLUTION AND IMPACTS ON ABUTTING PROPERTIES, THE TOTAL CUTOFF OF LIGHT SHOULD OCCUR WITHIN THE PROPERTY LINES OF THE PARCEL TO BE DEVELOPED.
4. SITE LIGHTING TRESPASS ONTO ADJACENT RESIDENTIAL USES OR ZONING DISTRICTS SHALL BE MINIMIZED.
5. SITE LIGHTING SHALL MINIMIZE LIGHT SPILL INTO THE DARK NIGHT SKY.
6. FIXTURES AND LIGHTING SYSTEMS USED FOR SAFETY AND SECURITY SHALL BE IN GOOD WORKING ORDER AND SHALL BE MAINTAINED IN A MANNER THAT SERVES THE ORIGINAL DESIGN INTENT OF THE SYSTEM.
7. VEGETATION AND LANDSCAPING SHALL BE MAINTAINED IN A MANNER THAT DOES NOT OBSTRUCT SECURITY LIGHTING AND MINIMIZES POSSIBLE ENTRAPMENT SPACES.
8. ALL LIGHT FIXTURES WILL HAVE A TIMER AND MOTION SENSOR TO ELIMINATE UNNECESSARY LIGHTING.
9. LIGHT FIXTURES ARE AVAILABLE THROUGH EXPOSURE 2 LIGHTING. ANY CHANGE IN FIXTURE MUST BE APPROVED BY THE OWNER, DESIGN ENGINEER, AND TOWN.

SEE SITE LAYOUT PLAN SHEET SP-1 FOR LEGEND, LOCUS, PLAN REFERENCES & GENERAL NOTES.

GRAPHIC SCALE
20' 10' 0 20' 40' 60'
IMPERIAL: 1"=20'

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LIGHTING PLAN

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1. PRIOR TO STARTING ANY WORK ON THE SITE THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES.

2. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS THEREOF IN NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICE STORM WATER MANUALS, VOLUME 1–3, LATEST EDITION.

3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PER PLANS AND DETAILS. PERIMETER CONTROLS SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF EARTH DISTURBING ACTIVITIES.

4. INSTALL INLET PROTECTION AROUND ALL STORM DRAIN STRUCTURES. INLET PROTECTION BMP'S SHALL REMAIN UNTIL THE SITE IS STABILIZED. CONSTRUCTION OF STORMWATER BASINS AND TREATMENT SWALES SHALL OCCUR PRIOR TO AND EARTH MOVING OPERATION THAT WILL INFLUENCE STORM WATER RUNOFF.

5. THE WORK AREA SHALL BE GRADED, SHAPED AND OTHERWISE DRAINED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, SILTATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE THE LIMITS OF THE WORK AREA.

6. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEN POSSIBLE.

7. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 0.25–INCH OR GREATER RAINFALL. SEDIMENTS SHALL BE DISPOSED OF IN AN UPLAND AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF–SITE AND BE PERMANENTLY STABILIZED.

8. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED. THE SITE WILL BE SUBJECT TO ENVIRONMENTAL MONITORING.

9. THE LAND AREA EXPOSED SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. ALL NON–ACTIVE DISTURBED AREAS SHALL BE STABILIZED WITHIN 30 DAYS OF THE DISTURBANCE. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF FINAL GRADING.

10. DITCHES, SWALES AND DRAINAGE BASINS SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

11. AN AREA SHALL BE CONSIDERED STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3–INCHES OF NON–EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP, HAS BEEN INSTALLED; OR
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

12. EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 3:1 (HORIZONTAL / VERTICAL). UNLESS OTHERWISE SPECIFIED THE CONTRACTOR SHALL USE NORTH AMERICAN GREEN BIONET SC150BN SHORT TERM BIODEGRADABLE DOUBLE–NET STRAW BLANKET, OR APPROVED EQUAL.

13. ALL AREAS RECEIVING EROSION CONTROL STONE OR RIPRAP SHALL HAVE A GEOTEXTILE MATERIAL INSTALLED BELOW THE STONE (SEE APPROPRIATE DETAILS).

14. ALL DISTURBED AREAS TO TURF FINISHED SHALL BE COVERED WITH A MINIMUM THICKNESS OF 6 INCHES OF COMPACTED LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW:

PERMANENT SEED (LAWN AREAS)	LBS / 1,000 SQ. FT.	PERMANENT SLOPE SEED MIX	LBS / 1,000 SQ. FT.
CREEPING RED FESCUE	0.92 LBS	CREEPING RED FESCUE	0.80 LBS
PERENNIAL RYEGRASS	1.15 LBS	PERENNIAL RYEGRASS	0.69 LBS
KENTUCKY BLUEGRASS	0.58 LBS	REDTOP	0.12 LBS
REDTOP	0.12 LBS	ALSIKE CLOVER	0.12 LBS
		BIRDSFOOT TREFOIL	
APPLICATION RATE TOTALS 2.8 LBS PER 1,000 SF		**APPLICATION RATE TOTALS *1.85 LBS PER 1,000 SF**	

15. TEMPORARY STABILIZATION OF DISTURBED AREAS:
STRIPPED SOIL SHALL BE STOCKPILED UNCOMPACTED, AND STABILIZED AGAINST EROSION AS OUTLINED BELOW:
SEED BED PREPARATION: 10–10–10 FERTILIZATION TO BE SPREAD AT THE RATE OF 7 LBS. PER 100 SF AND AGRICULTURAL LIMESTONE AT A RATE OF 90 LBS PER 1000 SF AND INCORPORATED INTO THE SOIL. THE SOIL, FERTILIZER AND LIMESTONE SHALL BE TILLED TO PREPARE FOR SEEDING.

A. SEED MIXTURE: USE ANY OF THE FOLLOWING:

SPECIES	RATE PER 1,000 SF	DEPTH	SEEDING DATES
WINTER RYE	2.5 LBS	1 INCH	8/15 TO 9/15
OATS	2.5 LBS	1 INCH	4/15 TO 10/15
ANNUAL RYEGRASS	1.0 LBS	0.25 INCH	8/15 TO 9/15

B. MULCHING: MULCH SHOULD BE USED ON HIGHLY ERODIBLE AREAS, AND WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT AS FOLLOWS:

TYPE	RATE PER 1,000 SF	USE AND COMMENTS
STRAW	70 TO 90 LBS	MAY BE USED WITH PLANTINGS, MUST BE ANCHORED TO BE USED ALONE
WOOD CHIPS OR BARK MULCH	460 TO 920 LBS	USED WITH TREE AND SHRUB PLANTINGS
FIBROUS MATTING	AS RECOMMENDED BY MANUFACTURER	MUST BE BIODEGRADABLE. USE IN SLOPE AREAS AND AREAS DIFFICULT TO VEGETATE
CRUSHED STONE. 1/4" TO 1–1/2" DIA.	SPREAD TO GREATER THAN 1/2" THICKNESS	USE IN SPECIFIC AREAS AS SHOWN ON PLAN OR AS NEEDED

16. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE (CRITICAL TIME FRAMES OR VARIABLE SITES) THEN APPLY FERTILIZER AT A RATE OF 11 POUNDS PER 1,000 SF AND LIMESTONE AT A RATE OF 90 POUNDS PER 1,000 SF. FERTILIZER SHALL BE LOW PHOSPHATE (LESS THAN 2% PHOSPHORUS).

17. CAUTION SHOULD BE TAKE WHEN THE PROPERTY IS LOCATED WITHIN 250 FEET OF A WATER BODY. IN THIS CASE ALL FERTILIZERS SHALL BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER. SLOW RELEASE FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN COMPONENT. NO FERTILIZER EXCEPT LIMESTONE SHALL BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE ARE REGULATED LIMITATIONS.

18. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS (SEE WINTER CONSTRUCTION NOTES). NO DISTURBED AREAS SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.

19. A VIGOROUS DUST CONTROL PROGRAM SHALL BE APPLIED BY THE SITE CONTRACTOR. DUST SHALL BE MANAGED THROUGH THE USE OF WATER AND/OR CALCIUM CHLORIDE.

20. IN NO WAY ARE THE MEASURES INDICATED ON THE PLANS OR IN THESE NOTES TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGMENT TO INSTALL ADDITIONAL EROSION CONTROL MEASURES AS SITE CONDITIONS, WEATHER OR CONSTRUCTION METHODS WARRANT.

21. FOLLOWING PERMANENT STABILIZATION, TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND ACCUMULATED SEDIMENTATION IS TO BE DISPOSED OF IN AN APPROVED LOCATION, OUTSIDE OF JURISDICTIONAL WETLANDS.

22. LOT DISTURBANCE OTHER THAN SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

23. THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 430:53 AND AGR 3800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

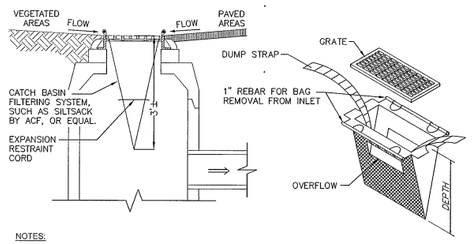
EROSION CONTROL NOTES — 1 / DT-1

1. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED. STABILIZATION METHODS SHALL INCLUDE SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.

2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

3. AFTER OCTOBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL OR PROPERLY INSTALLED EROSION CONTROL BLANKETS COVERED WITH HAY. OTHER STABILIZATION OPTIONS ARE TO BE APPROVED BY THE APPROPRIATE AGENCIES AND THE DESIGN ENGINEER. IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER MONTHS THEN THE ROAD SHOULD BE CLEARED OF ACCUMULATED SNOW AFTER EACH STORM EVENT.

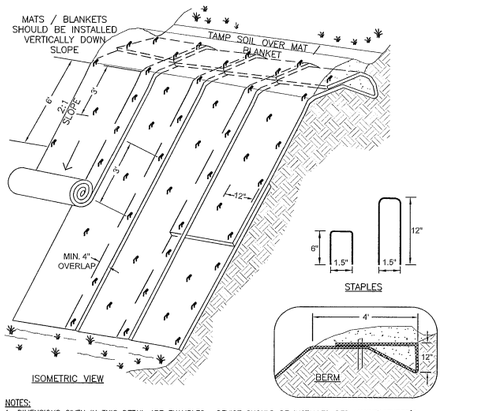
WINTER CONSTRUCTION NOTES — 2 / DT-1



NOTES:

1. INSTALL AND MAINTAIN SACKS IN ALL CATCH BASINS.
2. TO INSTALL SACK, REMOVE CATCH BASIN GRATE AND PLACE SACK IN OPENING. HOLD OUT APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME FOR THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
3. THE SACK SHOULD BE INSPECTED AFTER EVERY STORM, OR ONCE EVERY TWO WEEKS, WHICH EVER OCCURS FIRST.
4. THE RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SACK SHOULD BE EMPTIED. EMPTY THE SACK AWAY FROM THE CATCH BASIN TO PREVENT SEDIMENT FROM RE–ENTERING THE CATCH BASIN. EMPTY THE SACK PER THE MANUFACTURES RECOMMENDATIONS.
5. REPLACE THE SACK IN THE CATCH BASIN AFTER THE SACK HAS BEEN EMPTIED. ONCE CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED BY PAVING OR A HEALTHY VEGETATIVE COVER, REMOVE THE SACK FROM THE CATCH BASINS.

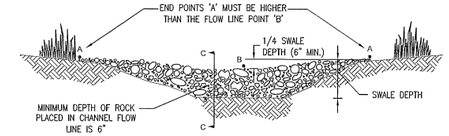
SILT SACK SEDIMENT FILTER — 3 / DT-1



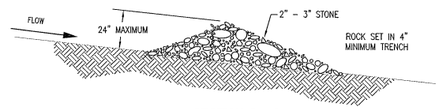
NOTES:

1. DIMENSIONS GIVEN IN THIS DETAIL ARE EXAMPLES: DEVICE SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
2. INSTALL STRAW/COCONUT FIBER EROSION CONTROL MAT SUCH AS NORTH AMERICAN GREEN BIONET SC150BN SHORT TERM BIODEGRADABLE DOUBLE–NET STRAW BLANKET OR EQUAL ON ALL SLOPES EXCEEDING 3' HORZ : 1' VERT.
3. THE EROSION CONTROL MATERIAL(S) SHALL BE ANCHORED WITH "U" SHAPED 11 GAUGE WIRE STAPLES OR WOODEN STAKES WITH A MINIMUM TOP WIDTH OF 1 INCH AND LENGTH OF 6 INCH.
4. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS / BLANKETS SHALL HAVE GOOD SOIL CONTACT.
5. APPLY LIME, FERTILIZER AND PERMANENT SEEDING BEFORE PLACING BLANKETS.
6. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET AS SHOWN. ROLL THE BLANKETS DOWN THE SLOPE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES OR STAKES IN APPROPRIATE LOCATIONS. REFER TO MANUFACTURERS STAPLE GUIDE FOR CORRECT STAPLE PATTERN.
7. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
8. IN LOOSE SOIL CONDITIONS THE USE OF STAPLES OR STAKE LENGTHS GREATER THAN 6 INCHES MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
9. THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS WHERE DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE REFERTILIZED, RESEEDED AND REMULCHED AS DIRECTED.
10. THERE SHALL BE NO PLASTIC FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN ⅛ INCHES MATERIAL UTILIZED. THIS DOES NOT APPLY TO TURF REINFORCEMENT MATS.
11. TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.

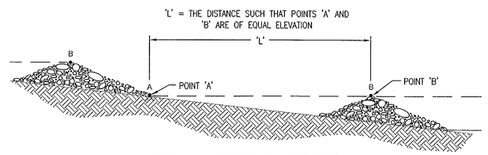
EROSION BLANKETS - SLOPE INSTALLATION — 4 / DT-1



VIEW LOOKING UPSTREAM



SECTION C - C

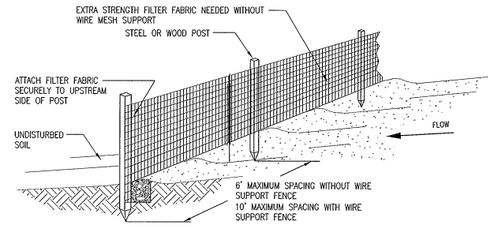


PROFILE - CHECK DAM SPACING

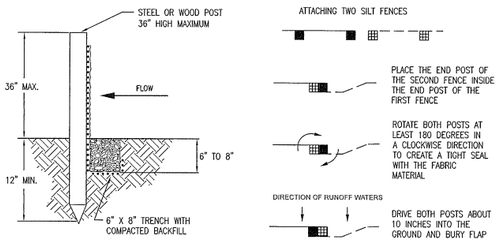
NOTES:

1. STONE CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
2. THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE CHECK DAM SHOULD BE LESS THAN ONE ACRE.
3. STONE CHECK DAMS SHOULD NOT BE USED IN A FLOWING STREAM.
4. STONE CHECK DAMS SHOULD BE CONSTRUCTED OF WELL–GRADED ANGULAR 2 TO 3 INCH STONE. THE INSTALLATION OF 3/4–INCH STONE ON THE UPGRADIENT FACE IS RECOMMENDED FOR BETTER FILTERING.
5. WHEN INSTALLING STONE CHECK DAMS THE CONTRACTOR SHALL KEY THE STONE INTO THE CHANNEL BANKS AND EXTEND THE STONE BEYOND THE ABUTMENTS A MINIMUM OF 18–INCHES TO PREVENT FLOW AROUND THE DAM.
6. STONE CHECK DAMS SHOULD BE REMOVED ONCE THE SWALE OR DITCH HAS BEEN STABILIZED UNLESS OTHERWISE SPECIFIED.

STONE CHECK DAM — 5 / DT-1



PERSPECTIVE VIEW



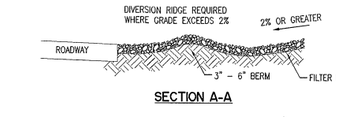
SECTION VIEW

ATTACHING TWO SILT FENCES

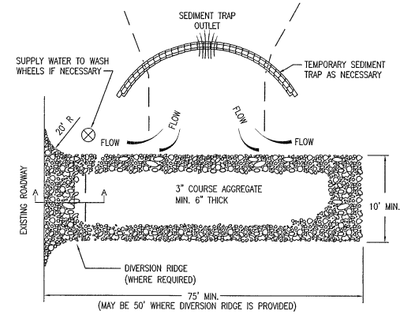
NOTES:

1. SILT FENCES SHOULD NOT BE USED ACROSS STREAMS, CHANNELS, SWALES, DITCHES OR OTHER DRAINAGE WAYS.
2. SILT FENCE SHOULD BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE AND THE ENDS OF THE SILT FENCE SHOULD BE FLARED UPSLOPE.
3. IF THE SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE OR THE PRESENCE OF HEAVY ROOTS THE BASE OF THE FABRIC SHOULD BE EMBEDDED WITH A MINIMUM THICKNESS OF 8 INCHES OF 3/4–INCH STONE.
4. SILT FENCES PLACED AT THE TOE OF SLOPES SHOULD BE INSTALLED AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND ACCESS FOR MAINTENANCE.
5. THE MAXIMUM SLOPE ABOVE THE FENCE SHOULD BE 2:1 AND THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHOULD BE 100 FEET.
6. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF–SITE AND CAN BE PERMANENTLY STABILIZED.
7. SILT FENCES SHOULD BE REMOVED WHEN THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILT FENCE — 6 / DT-1



SECTION A-A



PLAN VIEW

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. THE MINIMUM STONE USED SHOULD BE 3–INCH CRUSHED STONE.
3. THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3–INCH TO 6–INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
4. THE PAD SHOULD EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER.
5. THE PAD SHOULD SLOPE AWAY FROM THE EXISTING ROADWAY.
6. THE PAD SHOULD BE AT LEAST 6–INCHES THICK.
7. THE GEOTEXTILE FILTER FABRIC SHOULD BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
8. THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF–SITE.
9. NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.
10. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.
11. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

SCALE: N.T.S.

GRAVEL CONSTRUCTION EXIT — 7 / DT-1

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–	–	–		–	–

EROSION CONTROL DETAILS

TAX MAP 536 LOTS 49, 50, 55, 56
0 ELM STREET, 0 CARROLL STREET
& 225 ELM STREET
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

SCALE: NONE — APRIL 17, 2026

Surveying ✣ Engineering ✣ Land Planning ✣ Permitting ✣ Septic Designs

FIELDSTONE LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
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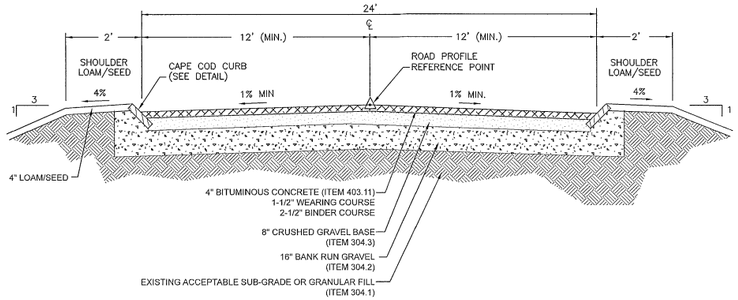
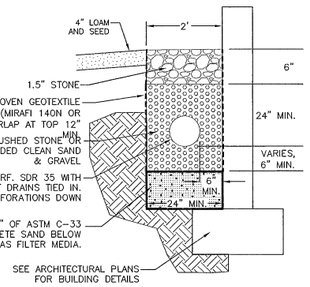


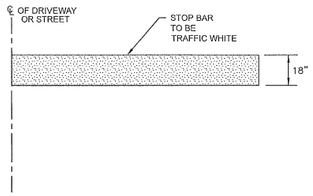
TYPICAL CROSS SECTION — 1 / DT-2

GENERAL ROAD CONSTRUCTION NOTES:

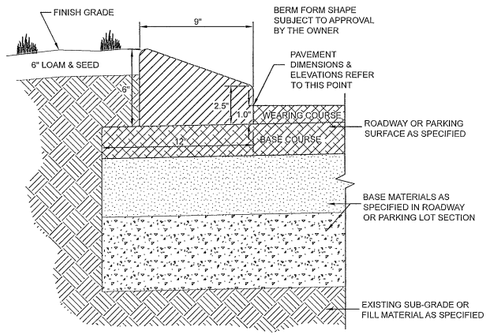
1. REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER ROAD FOUNDATION MATERIAL WITHIN 3' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO THE DIRECTOR OF PUBLIC WORKS. COMPACTION TO BE AT LEAST 95% OF THE DRY WEIGHT AS DETERMINED BY MODIFIED PROCTOR TESTING (ASTM 1557).
2. ALL MATERIALS AND CONSTRUCTION SHALL MEET AND BE COMPLETED IN STRICT ACCORDANCE WITH THE CITY OF KEENE'S CURRENT ROAD AND DRAINAGE SPECIFICATIONS.
3. WHERE ROAD GRADE IS 5% OR GREATER, ROAD SWALE SHALL BE LINED WITH RIPRAP (2 LAYERS, 6" TO 8" STONE, 6' WIDE WITH 6" GRAVEL BASE OR EROSION CONTROL FABRIC).
4. ALL UTILITY POLES AND TRANSFORMER SLABS SHALL BE LOCATED AT THE RIGHT OF WAY LINE.



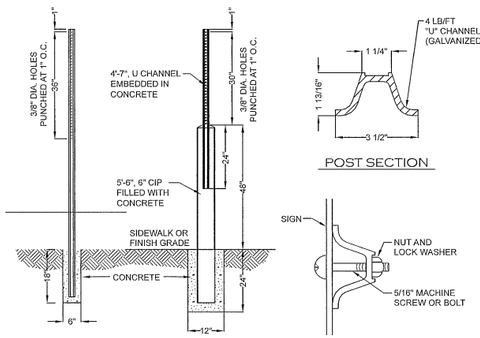
STONE DRIP EDGE TRENCH — 2 / DT-2



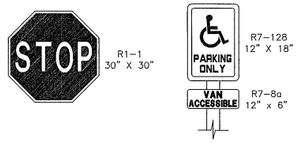
STOP BAR DETAIL — 5 / DT-2



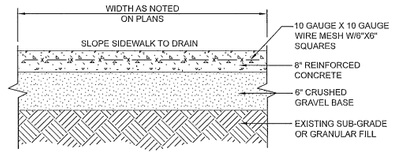
CURB - ASPHALT (CAPE COD BERM) — 3 / DT-2



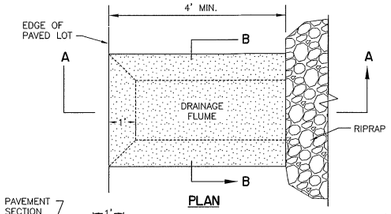
SIGN POST - STANDARD & W/BOLLARD — 6 / DT-2

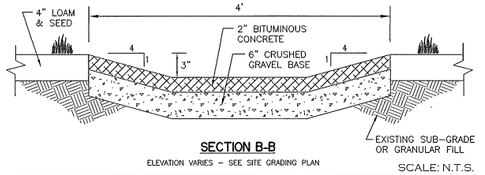


SIGNS — 7 / DT-2



CONCRETE SIDEWALK — 8 / DT-2





PAVED DRAINAGE FLUME — 9 / DT-2

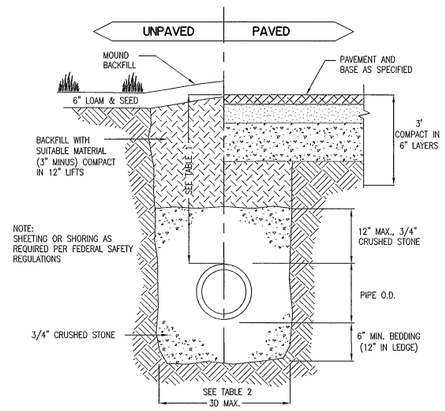
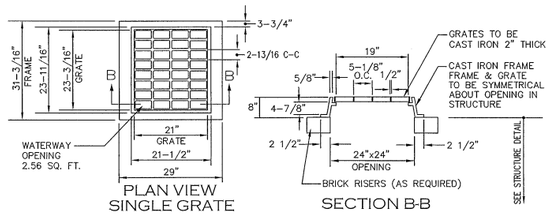


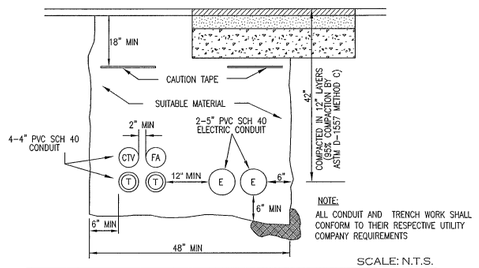
TABLE 1 (RECOMMENDED COVER)		
LOCATION	PIPE MATERIAL	MINIMUM COVER
PAVED ROADS	ALL	3 FT.
GRAVEL ROADS	ALL	2 FT.
DRIVEWAYS	ALL	1 FT.
UNPAVED AREAS	ALL	2 FT.

TABLE 2 (RECOMMENDED TRENCH WIDTH)	
INSIDE DIAMETER	TOTAL WIDTH
12" TO 24" OVER 24"	I.D. + 24" 2 x I.D.

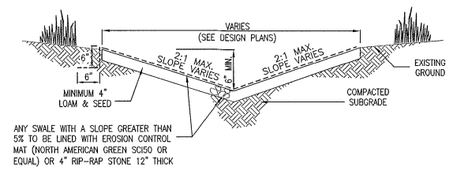
DRAINAGE TRENCH (TYPICAL) — 10 / DT-2



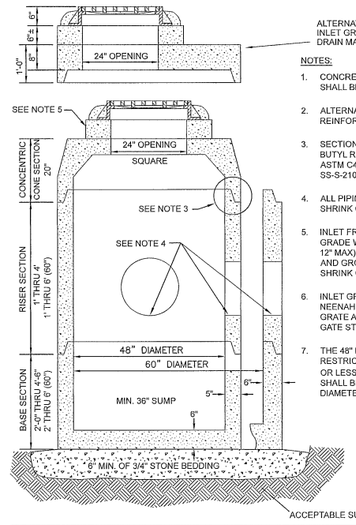
FRAME AND GRATE - NHDOT TYPE B — 11 / DT-2



TYPICAL UTILITY TRENCH — 4 / DT-2



CONVEYANCE SWALE DETAIL — 12 / DT-2



NOTES:

1. CONCRETE COMPRESSIVE STRENGTH SHALL BE 4000 PSI MINIMUM.
2. ALTERNATIVE TOP SLAB SHALL BE STEEL REINFORCED TO MEET H-20 LOADING.
3. SECTION JOINTS SHALL BE SEALED WITH BUTYL RUBBER AND SHALL CONFORM TO ASTM C443 SPEC. AND FED SPEC. SS-S-210A.
4. ALL PIPING SHALL BE SEALED WITH NON SHRINK GROUT.
5. INLET FRAME SHALL BE ADJUSTED TO GRADE WITH BRICK AND MORTAR (8" MIN - 12" MAX) OR ONE SOLID CONCRETE RING AND GROUT, SEALED IN PLACE WITH NON SHRINK GROUT.
6. INLET GRATE AND FRAME IS TO BE NEENAH MODEL R-3570 FOR SINGLE GRATE AND MODEL R-3571 FOR A DOUBLE GATE STRUCTURE OR EQUAL.
7. THE 48" DIAMETER MANHOLE SHALL BE RESTRICTED TO PIPES OF 24" IN DIAMETER OR LESS. THE 60" DIAMETER MANHOLE SHALL BE RESTRICTED TO PIPES OF 36" IN DIAMETER OR LESS.

CATCH BASIN — 13 / DT-2

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION
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REV.	DATE	DESCRIPTION	C/O	DR	CK
–	–	–	–	–	–

CONSTRUCTION DETAILS

TAX MAP 536 LOTS 49, 50, 55, 56
0 ELM STREET, 0 CARROLL STREET
& 225 ELM STREET
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

SCALE: NONE — APRIL 17, 2026

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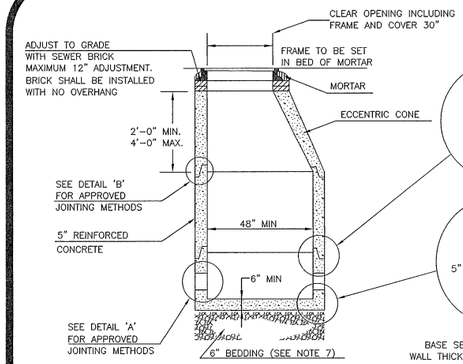
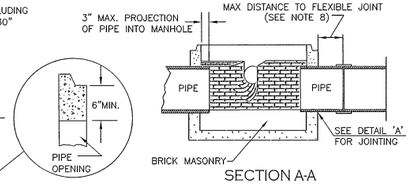
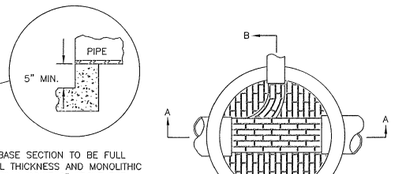


TYPICAL SECTION



SECTION A-A

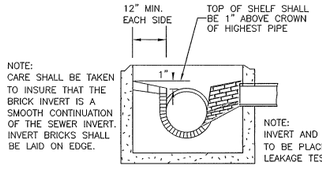


BASE SECTION TO BE FULL WALL THICKNESS AND MONOLITHIC TO A POINT 6" ABOVE THE PIPE CROWN.

PLAN

NOTES:

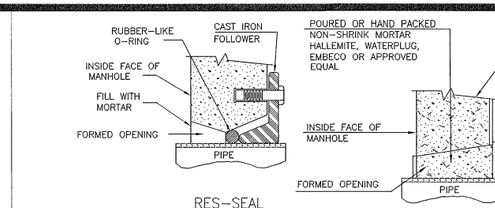
1. IT IS INTENDED: THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE. STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENTS AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING PER Env-Wq 704.10 (d). IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
2. BARRELS AND CONE SECTIONS: SHALL BE PRECAST REINFORCED CONCRETE
3. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C 478.
4. BASE SECTIONS: SHALL BE MONOLITHIC TO A POINT 6" ABOVE THE CROWN OF THE INCOMING PIPE, AND SHALL BE PRE-CAST REINFORCED CONCRETE.
5. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE DIRECTION OF FLOW. THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE. CROWN AND SLOPE TO DRAIN TOWARD THE FLOW THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
6. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN EQUAL TO CLASS 30, CONFORMING TO ASTM A-48 AND PROVIDE A 30 INCH CLEAR OPENING. THE COVERS SHALL BE THE WORD "SEWER" IN 3 INCH HIGH LETTERS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
7. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 SIZE #67.
   100% PASSING 1 INCH SCREEN
   90-100% PASSING 3/4 INCH SCREEN
   20-55% PASSING 3/8 INCH SCREEN
   0-10% PASSING #4 SIEVE
   0-5% PASSING #8 SIEVE
   WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE. SCREENED GRAVEL OR CRUSHED STONE 1-1/2 TO ½ INCH SHALL BE USED.
8. FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES:
   RCP & CI PIPE - ALL SIZES - 48"
   PVC PIPE - UP THROUGH 15" DIAMETER - NO FLEXIBLE JOINT REQUIRED
9. SHALLOW MANHOLE IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED. IT MUST HAVE AN ECCENTRIC ENTRANCE OPENING AND BE CAPABLE OF SUPPORTING H-20 LOADING.
10. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE SEALED WITH A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT IN ACCORDANCE WITH Env-Wq 704.10 (f). A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON AN MASTIC-LIKE OR ELASTOMERIC SEALANT
11. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.
12. MATERIAL REQUIREMENTS FOR BRICK AND MORTAR SHALL CONFORM TO Env-Wq 704.10 (k) (9) THROUGH (14)
13. ALL SEWER CONSTRUCTION SHALL CONFORM TO SPECIFICATIONS DEFINED BY CITY OF KEENE STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION. THESE STANDARD MANHOLE DRAWINGS ARE NOT COMPLETE WITHOUT THESE SPECIFICATIONS.



SECTION B-B

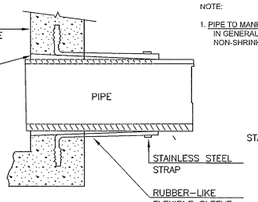
SCALE: N.T.S.

STANDARD MANHOLE - PART A | 1 | DT-3



RES-SEAL (OR EQUAL)

NON-SHRINKING MORTAR (OR EQUAL)

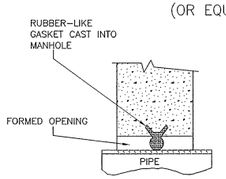


LOCK-JOINT FLEXIBLE MANHOLE SLEEVE (OR EQUAL)

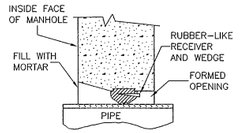
NOTE:
1. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER AND, IN GENERAL, WILL DEPEND FOR WATERTIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.

NOTE:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.

STATE OF NEW HAMPSHIRE APPROVED PRODUCTS
[A] SIKAFLEX-12-SL
[B] SONNEBORN BUILDING PRODUCTS
SONNOLASTIC SL-1



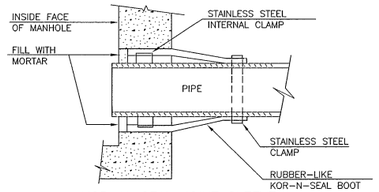
A-LOK (OR EQUAL)



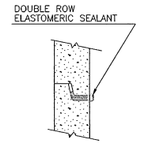
PRESS-WEDGE II (OR EQUAL)

NOTE:
1. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL BE, IN GENERAL, DEPEND FOR WATERTIGHTNESS UPON AN ELASTOMERIC GASKET.

DETAIL A



KOR-N-SEAL JOINT SLEEVE (OR EQUAL)



ELASTOMERIC SEALANT (OR EQUAL)

DETAIL B

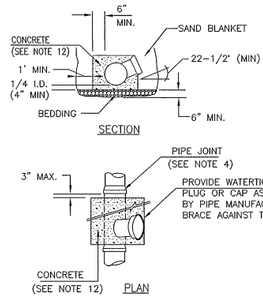
SCALE: N.T.S.

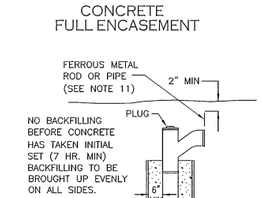
STANDARD MANHOLE - PART B | 3 | DT-3

NOTES:
1. MINIMUM SIZE PIPE FOR HOUSE SERVICE SHALL BE 4 INCHES.
2. PIPE AND JOINT MATERIALS
   A. PLASTIC SEWER PIPE
      1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	PVC (SOLID WALL)*	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 TO T-3)
F704	PVC (ROBBED WALL)	8" THROUGH 36"
D2680	ABS (COMPOSITES WALL)*	8" THROUGH 15"

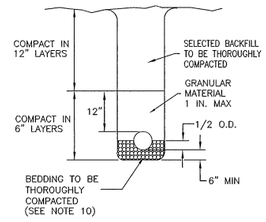
      *PVC: POLY VINYL CHLORIDE
      *ABS: ACRYLONITRILE-BUTADIENE-STYRENE
      2. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMREIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.
      ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).
      JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.
   B. DUCTILE-IRON PIPE, FITTINGS AND JOINTS.
      1. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE:
         A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536 DUCTILE IRON CASTINGS.
         A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.
      2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:
         A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE AND FITTINGS.
3. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
4. JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATERTIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER "Y" OR AT THE FOUNDATION WALL, APPROPRIATE ADAPTERS SHALL BE USED.
5. "T" AND "Y" WHERE A "T" OR "Y" IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE IN THE SEWER, FOLLOWING MANUFACTURERS INSTRUCTIONS USING A BOLTED, CLAMPED, OR EPOXY CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH (OR OTHER SUCH MATERIAL) AROUND THE JOINT OR APPLYING MORTAR TO HOLD THE CONNECTION AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED, AS SHOWN IN THE DETAIL, UP TO AND INCLUDING 15" DIAMETER."
6. HOUSE SEWER INSTALLATION THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL, AS SPECIFIED IN NOTE 10, BEDDING AND RE-FILL FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4 INCH PER FOOT. PIPE JOINTS MUSH BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
7. TESTING THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS (PRIOR TO BACKFILLING):
   A. AN OBSERVATION "T" SHALL BE INSTALLED AS SHOWN. WHEN READY TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE "T". AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.
   B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS. IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.
   C. DRY FLUORESCENT DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER. IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE POPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST MANHOLE DOWNSTREAM. LEAKAGE O OBSERVED IN ANY OF THE ABOVE, ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG UP, IF NECESSARY, AND RELAID SO AS TO ASSURE WATERTIGHTNESS.
8. ILLEGAL CONNECTIONS NOTHING BUT SANITARY WASTE FLOW FROM THE HOUSE TOILETS SINKS, LAUNDRY, ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.
9. HOUSE WATER SERVICE SHALL NOT BE LAID IN THE SAME TRENCH AS THE SEWER SERVICE.
10. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.
    100% PASSING 1 INCH SCREEN
    90-100% PASSING 3/4 INCH SCREEN
    20-55% PASSING 3/8 INCH SCREEN
    0-10% PASSING #4 SIEVE
    0-5% PASSING #8 SIEVE
    WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE (1-1/2 TO 1/2 INCH) SHALL BE USED.
11. LOCATION THE LOCATION OF THE "T" OR "Y" SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE "T" OR "Y", AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.
12. CONCRETE CONCRETE SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE N.H. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:
    CEMENT: 6.0 BAGS/C.Y. WATER: 5.75 GALS/BAG CEMENT
    AGGREGATE: 1 INCH MAX
13. CHIMNEYS IF VERTICAL DROP INTO THE SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.





CONCRETE FULL ENCASEMENT

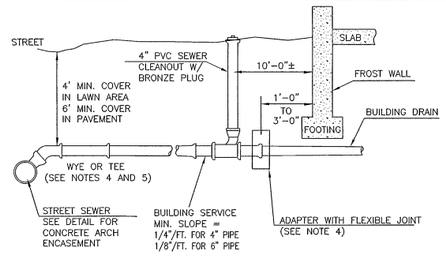
CHIMNEY (SEE NOTE 13)



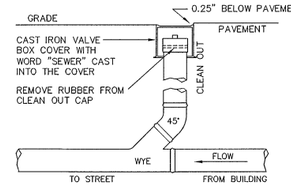
TRENCH CROSS-SECTION

SCALE: N.T.S.

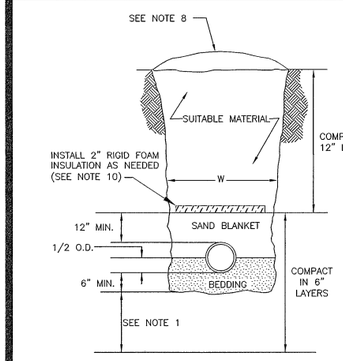
HOUSE SEWER DETAILS | 4 | DT-3



SERVICE CONNECTION BUILDING

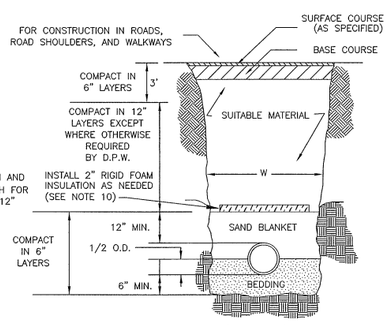


SEWER SERVICE CLEAN OUT DETAIL

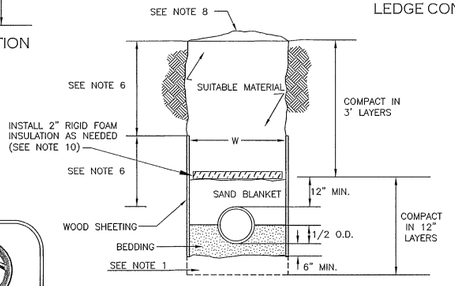


EARTH CONSTRUCTION

NOTE:
MIN. BEDDING DEPTH AND MAX. PAYMENT DEPTH FOR LEDGE EXCAVATION: 12"



LEDGE CONSTRUCTION



EARTH CONSTRUCTION WITH SHEETING

SCALE: N.T.S.

STANDARD TRENCH SECTION | 2 | DT-3

NOTES:
1. ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE, REFILL WITH BEDDING MATERIAL. (SEE ALSO NOTE 7).
2. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33, STONE SIZE #67
   100% PASSING 1 INCH SCREEN
   90-100% PASSING 3/4 INCH SCREEN
   20-50% PASSING 3/8 INCH SCREEN
   0-10% PASSING #4 SIEVE
   0-5% PASSING #8 SIEVE
3. SAND BLANKET: CLEAN SAND, FREE FROM ORGANIC MATTER, SO GRADED THAT 90-100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE OMITTED FOR DUCTILE IRON AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE.
4. SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALK WAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES, IN LARGEST DIMENSION OR ANY MATERIAL WHICH AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT TO MAINTAIN THE COMPLETED CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP-SOIL, LOAM, MUCK OR PEAT. IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE (AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY) WILL BE PRESERVED.
5. BASE COURSE: IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF N.H. DEPT. OF TRANSPORTATION.
6. WOOD SHEETING: IF REQUIRED, IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER. IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE THE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISH GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
7. W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D.. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
8. FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOUNDED TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
9. CONCRETE: FOR ENCASEMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000#) CONCRETE OF THE N.H. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:
   CEMENT: 6.0 BAGS PER CUBIC YARD
   WATER: 5.75 GALLONS PER BAG OF CEMENT
   MAXIMUM AGGREGATE SIZE: 1 INCH
   NOTE: ANY SEWER PIPE TO BE ENCASED MUST BE MADE OF DUCTILE IRON.
10. INSTALL TWO INCH THICK, DOW STYROFOAM™ BRAND HIGHLOAD 40 (OR EQUAL) RIGID FOAM INSULATION WHERE LESS THAN FOUR (4) FEET OF COVER IS PROVIDED ON CROSS COUNTRY SEWER AND/OR LESS THAN SIX (6) FEET OF COVER IS PROVIDED UNDER PAVED AREAS.

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OR DIAL 8 1 1
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888-DIG-SAFE (888-344-7233)

REV.	DATE	DESCRIPTION	C/O	DR	CK
–	–	–	–	–	–

SEWER CONSTRUCTION DETAILS

TAX MAP 536 LOTS 49, 50, 55, 56
0 ELM STREET, 0 CARROLL STREET
& 225 ELM STREET
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

SCALE: NONE APRIL 17, 2026

Surveying ⌖ Engineering ⌖ Land Planning ⌖ Permitting ⌖ Septic Designs

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LAND CONSULTANTS, PLLC
206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

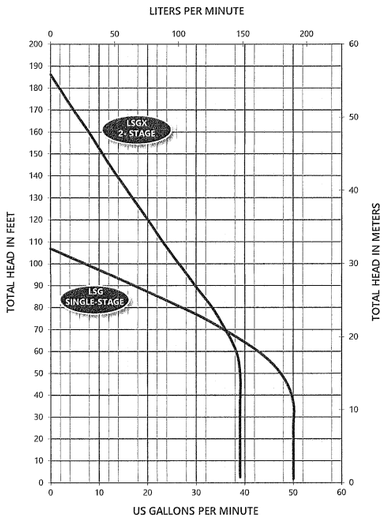
FILE: 4200DT00A.dwg | PROJ. NO. 4200.00 | SHEET: DT-3

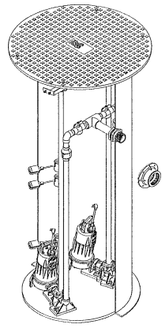
Liberty Pumps
A Family and Employee Owned Company

Product Specification

D36120LSG/LSGX-Series

Omnivore® 2 hp Duplex Grinder Packages



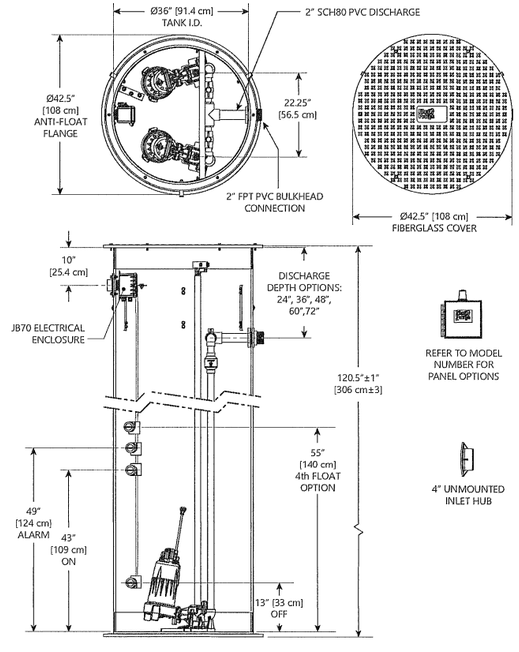


ATTENTION

For pressure sewer applications, verify a ***Redundant Check Valve Assembly*** (curb stop and check valve) is installed between the pump discharge and the street main, as close to the public right-of-way as possible, on all installations to protect from system pressures.

7000 Apple Tree Avenue Bergen NY 14416 ■ Phone 1-800-543-2550 ■ Fax 1-585-494-1839 ■ Email Liberty@LibertyPumps.com ■ Web www.LibertyPumps.com

D36120LSG/LSGX-Series Dimensional Data



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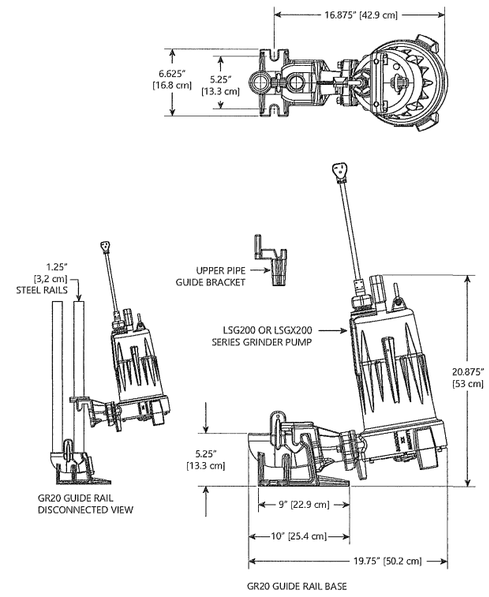
D36120LSG/LSGX-Series Dimensional Data



7000 Apple Tree Avenue Bergen NY 14416 ■ Phone 1-800-543-2550 ■ Fax 1-585-494-1839 ■ Email Liberty@LibertyPumps.com ■ Web www.LibertyPumps.com

SCALE: N.T.S.

LIBERTY PUMP CHAMBER DETAIL | 1 / DT-4

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REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/11/26	REVS PER CITY COMMENTS		CJC	JEN

SEWER PUMP CHAMBER DETAILS
TAX MAP 536 LOTS 49, 50, 55, 56
0 ELM STREET, 0 CARROLL STREET
& 225 ELM STREET
KEENE, NEW HAMPSHIRE

PREPARED FOR:
CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

SCALE: NONE APRIL 17, 2026

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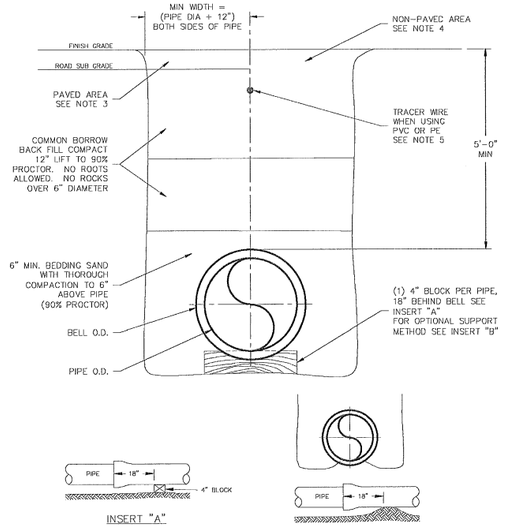
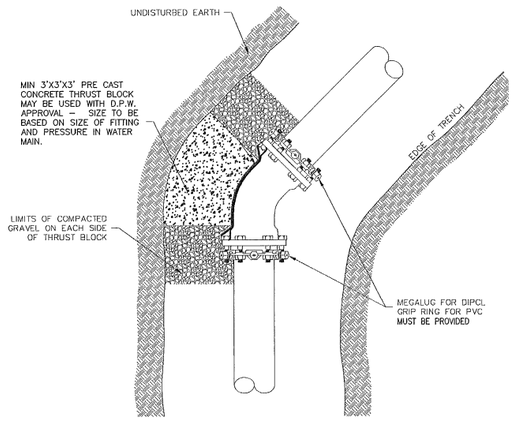
FILE: 4200DT00A.dwg | PROJ. NO. 4200.00 | SHEET: DT-4



NOTES:
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO **D.P.W.** TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF **5'-6"** FROM TOP OF PIPE TO FINISH GRADE. **PROVIDE 2" THICK, 24" WIDE INSULATION WHERE COVER IS LESS THAN 4'.**
3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
5. **PROVIDE LOCATER TAPE (TERRA TAPE SAFETY LINE 1300 OR EQUAL) ON ALL PIPES. TRACER WIRE FOR PVC OR HDPE MAINS SHALL BE AWG-12.**

SCALE: N.T.S.

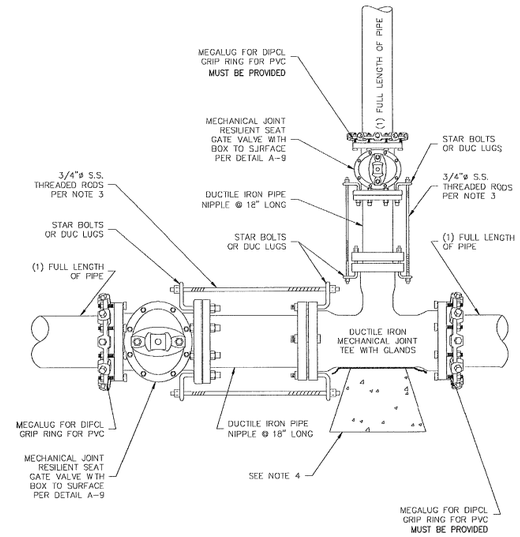
TYPICAL TRENCH DETAIL — 1 / DT-5



NOTES:
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO **D.P.W.** TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4"ø S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.
   10" FITTING OR SMALLER = (2) 3/4"ø S.S. RODS & ASSOC. HARDWARE.
   12" FITTING OR LARGER = (4) 3/4"ø S.S. RODS & ASSOC. HARDWARE.
4. **MIN 3'X3'X3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH D.P.W. APPROVAL. – SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.**

SCALE: N.T.S.

TYPICAL THRUST BLOCK BEHIND FITTINGS — 2 / DT-5



NOTES:
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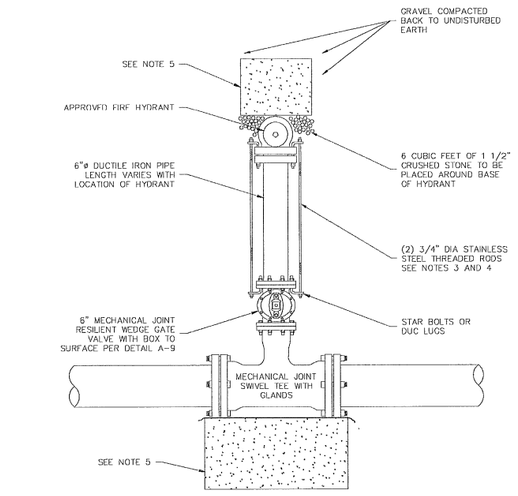
   12" FITTING OR LARGER = (4) 3/4"ø S.S. RODS & ASSOC. HARDWARE.
4. **MIN 3'X3'X3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH D.P.W. APPROVAL. – SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL 2.**

SCALE: N.T.S.

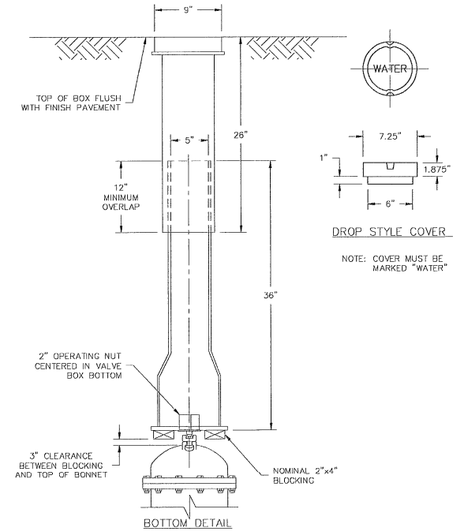
TYPICAL TEE INSTALLATION — 3 / DT-5



NOTES:
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO **D.P.W.** TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. 3/4"ø S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.
   10" FITTING OR SMALLER = (2) 3/4"ø S.S. RODS & ASSOC. HARDWARE.
   12" FITTING OR LARGER = (4) 3/4"ø S.S. RODS & ASSOC. HARDWARE.
4. WHEN DISTANCE FROM WATER MAIN TO HYDRANT IS MORE THAN 10' SUBSTITUTE MEGALUGS (OR GRIP RINGS) IN LIEU OF THREADED RODS.
5. **MIN 3'X3'X3' PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH D.P.W. APPROVAL. – SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL 2.**
6. **OWNER/ENGINEER SHALL APPROVE ALL HYDRANT LOCATIONS IN FIELD PRIOR TO INSTALLATION.**
7. **PLUG HYDRANT DRAIN PORT WITH BRASS PLUG.**
8. **USE MJ HYDRANT ANCHOR TEE AND RESTRAINED MJ DI PIPE IN LIEU OF STAINLESS STEEL RODS.**
9. **ALL HYDRANTS TO OPEN RIGHT (CW).**

SCALE: N.T.S.

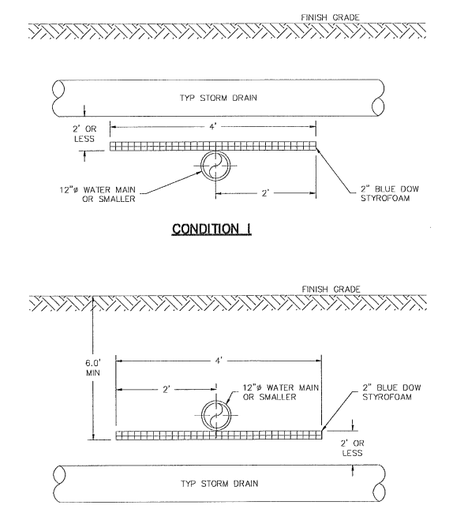
TYPICAL HYDRANT INSTALLATION — 4 / DT-5



NOTES:
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO **D.P.W.** TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE..

SCALE: N.T.S.

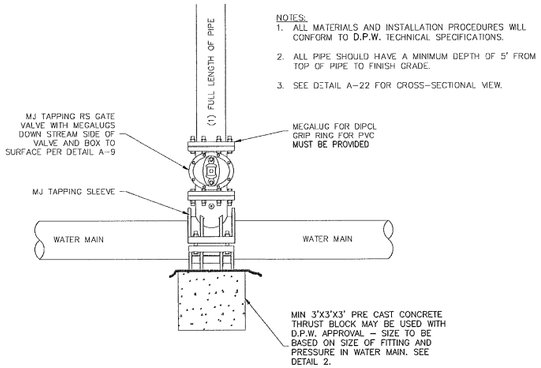
TYPICAL VALVE BOX — 5 / DT-5



NOTES:
1. **DEPARTMENT OF PUBLIC WORKS** RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
3. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

SCALE: N.T.S.

STORM DRAIN / WATER MAIN INTERSECTING RUNS — 6 / DT-5



NOTES:
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO **D.P.W.** TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. SEE DETAIL A-22 FOR CROSS-SECTIONAL VIEW.

SCALE: N.T.S.

TYPICAL LARGE SERVICE AND/OR TAPPING SLEEVE — 7 / DT-5

1. ALL WATER MAIN AND SERVICE CONNECTION CONSTRUCTION MUST COMPLY WITH KEENE DEPARTMENT OF PUBLIC WORKS CURRENT SPECIFICATIONS FOR WATER MAIN INSTALLATION, EXTENSIONS, SERVICE AND DISTRIBUTION SYSTEM.
2. ALL SPRINKLER AND DOMESTIC LEADS TO BUILDING SHALL END 5 FEET OUTSIDE THE FACE OF THE BUILDING WALL, UNLESS NOTED, AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END (FOR OTHERS TO REMOVE AND EXTEND THE LINE AS NECESSARY).
3. THRUST BLOCKS AND MEGALUG RESTRAINTS SHALL BE PROVIDED AT ALL HORIZONTAL BENDS, TEES, AND FIRE HYDRANTS PER DETAIL.
4. MINIMUM COVER ON ALL WATER LINES IS 5'-6".
5. CONTRACTOR SHALL MAINTAIN A 5'-0" HORIZONTAL SEPARATION (UNLESS OTHERWISE NOTED) AND 6" VERTICAL SEPARATION BETWEEN WATER SERVICE AND UTILITIES OTHER THAN SANITARY SEWER MAINS.
6. INSPECTIONS ON WATER SERVICE INSTALLATION DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE SITE CONTRACTOR AND SHALL BE COORDINATED WITH KEENE PUBLIC WORKS. ALL INSPECTION FEES SHALL BE PAID FOR BY THE CONTRACTOR.
7. CONTRACTOR SHALL HAVE BACTERIOLOGICAL AND PRESSURE TESTING PERFORMED. CONTRACTOR SHALL GIVE KEENE PUBLIC WORKS DEPARTMENT (350 MARLBORO STREET, KEENE, NH 03431) A COPY OF THE RESULTS. A KEENE PUBLIC WORKS REPRESENTATIVE SHALL BE ON-SITE TO WITNESS TEST.
8. ALL PIPE, VALVES, MISCELLANEOUS MATERIALS AND INSTALLATION SHALL CONFORM TO KEENE PUBLIC WORKS SPECIFICATIONS.
9. ALL FIRE HYDRANTS, VALVES, FITTINGS, PIPES, ETC. SHALL BE IN ACCORDANCE WITH KEENE PUBLIC WORKS SPECIFICATIONS.
10. METALLIC TAPE OR DETECTOR WIRE SHALL BE INSTALLED IN THE SAME TRENCH WITH ALL NONMETALLIC PIPE SUCH THAT THE PIPE MAY BE LOCATED WITH ELECTRONIC LOCATING EQUIPMENT. METALLIC TAPE OR DETECTOR WIRE SHALL BE INSTALLED APPROXIMATELY 12" TO 18" BELOW GRADE DIRECTLY ABOVE THE TOP OF THE PIPE. DETECTOR WIRE SHALL BE 14 GAUGE SOLID COPPER, SIMPLEX BW3001 OR EQUAL. METALLIC TAPE SHALL BE 2" MINIMUM METALIZED TAPE, GRIFFOLYN COMPANY, INC., TERRATAPE OR EQUAL.
11. CONTRACTOR SHALL ENSURE ALL WATER VALVES ARE IN A FULLY OPEN POSITION UPON COMPLETION OF PROJECT.
12. CONTRACTOR SHALL COORDINATE ALL WATER INTERRUPTIONS WITH THE TOWN AND AFFECTED PROPERTY OWNERS.

WATER SYSTEM CONSTRUCTION NOTES — 8 / DT-5

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REV.	DATE	DESCRIPTION	C/O	DR	CK
A	5/11/26	REVS PER CITY COMMENTS		CJC	JEN

WATER CONSTRUCTION DETAILS

TAX MAP 536 LOTS 49, 50, 55, 56
0 ELM STREET, 0 CARROLL STREET
& 225 ELM STREET
KEENE, NEW HAMPSHIRE

PREPARED FOR:

CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

SCALE: NONE — APRIL 17, 2026

Surveying ✣ Engineering ✣ Land Planning ✣ Permitting ✣ Septic Designs

W E

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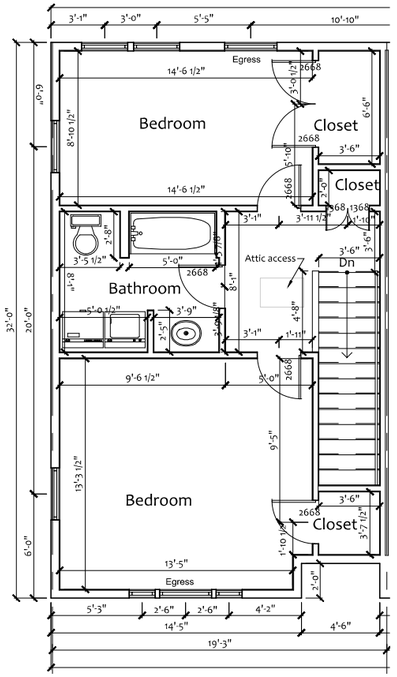
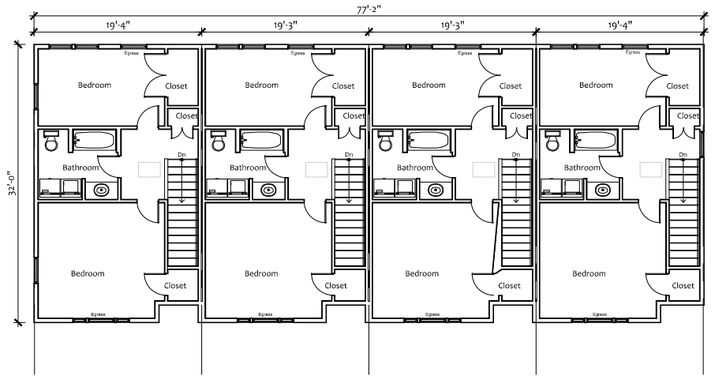
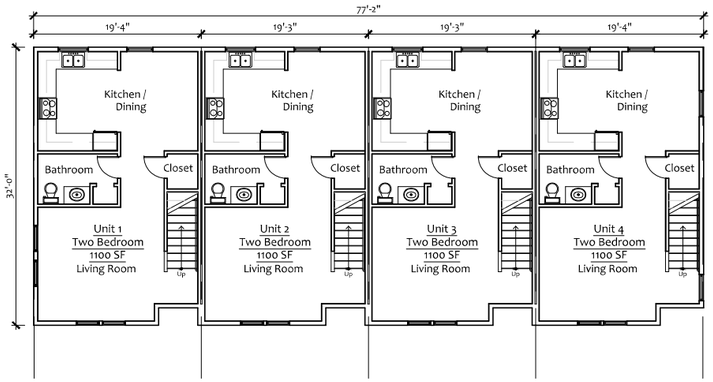


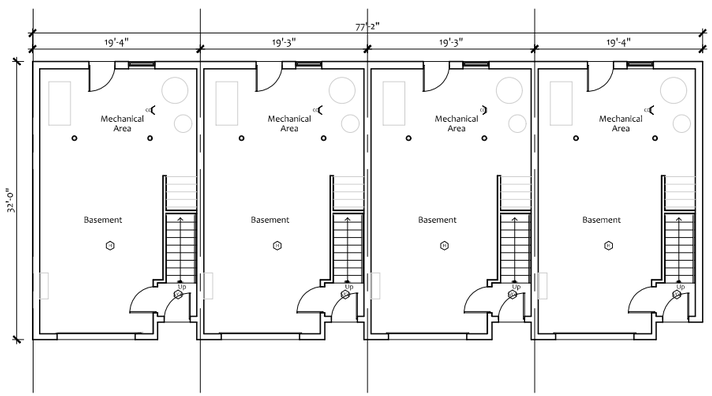
Second Floor (Single Unit)
Scale: 1/4" = 1'-0"



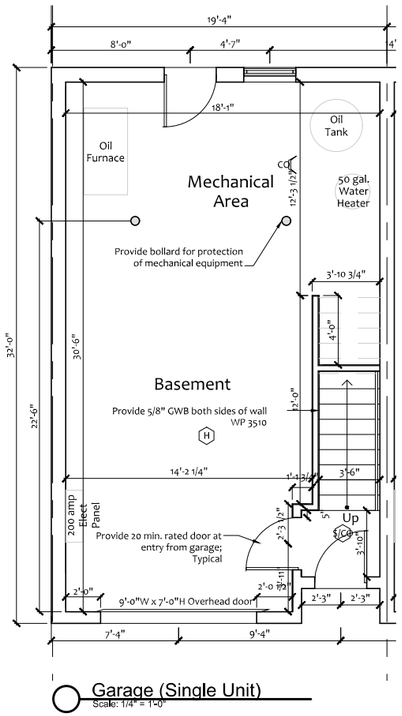
Second Floor Plan
Scale: 1/8" = 1'-0"



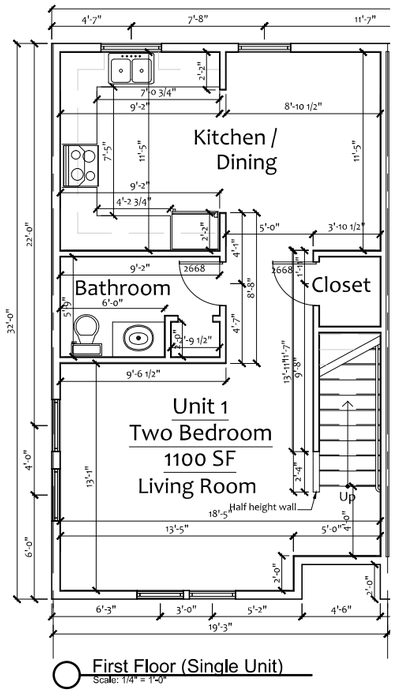
First Floor Plan
Scale: 3/16" = 1'-0"



Basement Floor Plan
Scale: 3/16" = 1'-0"



Garage (Single Unit)
Scale: 1/4" = 1'-0"



First Floor (Single Unit)
Scale: 1/4" = 1'-0"

These drawings are LIMITED SCOPE and are intended only to describe general design intent, scale, overall spatial relationships and material where indicated.
These drawings shall be considered preliminary for purposes of design review, comment, or budget pricing only, unless expressly released for other purposes as indicated in the issue log.
The architect assumes responsibility for errors in the information provided, and not for omissions.

Architect:
Sampson Architects
Timothy Sampson
NCARB, LEED AP
11 King Court
Suite 1E
Keene, NH
603 769 7736

Engineer:
•

SAMPSON ARCHITECTS
2025
WO# 25-014

Prepared For
Christopher Masiello
118 Portsmouth Ave
Bldg D Suite E
Stratham, NH 03855

PROJECT
Elm City Commons
Elm and Caroll Streets
Keene, NH 03431

TITLE
Floor Plans
Details
Notes

Date:	Revisions:
4.14.26	Planning Board Review
-	-
-	-

SCALE as noted

DATE 4.14.26

SHEET NUMBER
A1

A
B
C
D
1
2
3
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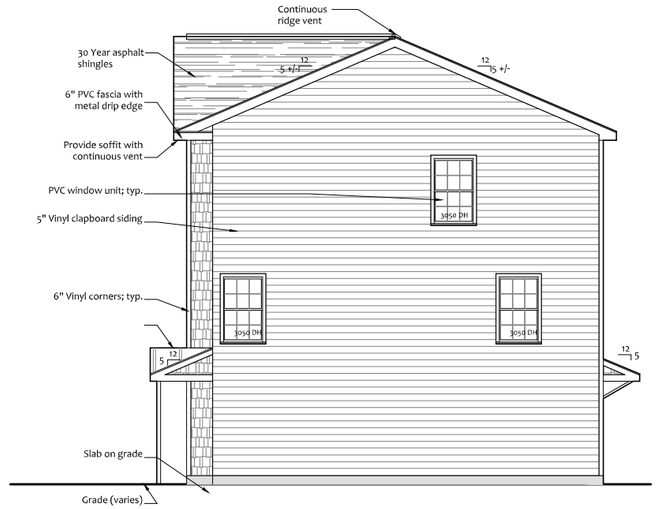
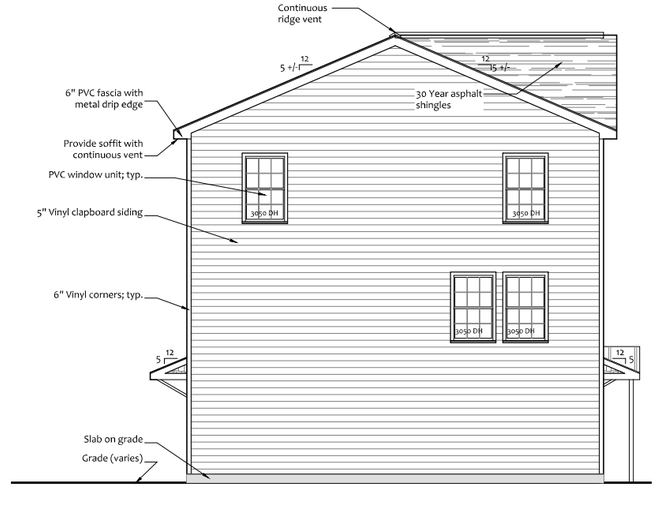
5
6

Front Elevation
Scale: 3/16" = 1'-0"



Right Elevation
Scale: 3/16" = 1'-0"

Rear Elevation
Scale: 3/16" = 1'-0"



Left Elevation
Scale: 3/16" = 1'-0"

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603 769 7736

Engineer:
-

 WO# 25-014

Prepared For
Christopher Masiello
118 Portsmouth Ave
Bldg D Suite E
Stratham, NH 03855

PROJECT
Elm City Commons
Elm and Caroll Streets
Keene, NH 03431

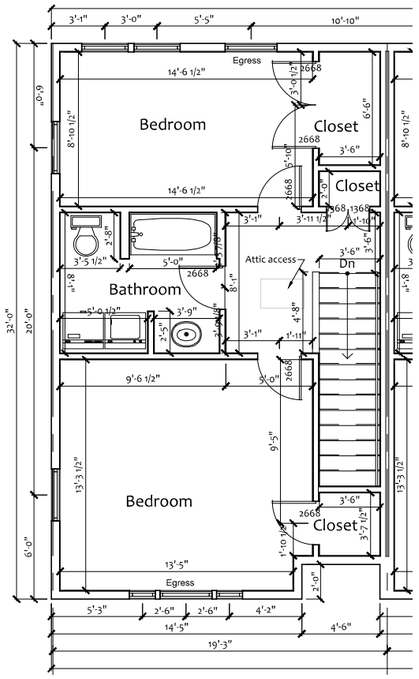
TITLE
Elevations
-
-

Date:	Revisions:
4.14.26	Planning Board Review
-	-
-	-

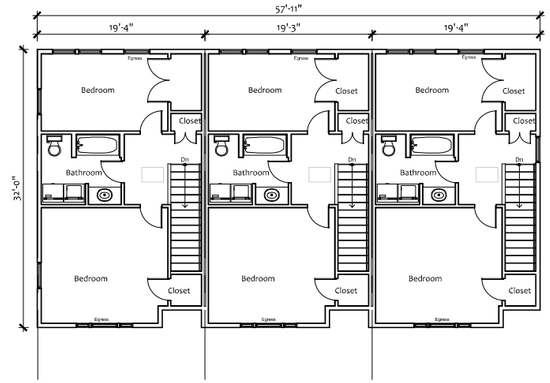
SCALE as noted

DATE 4.14.26

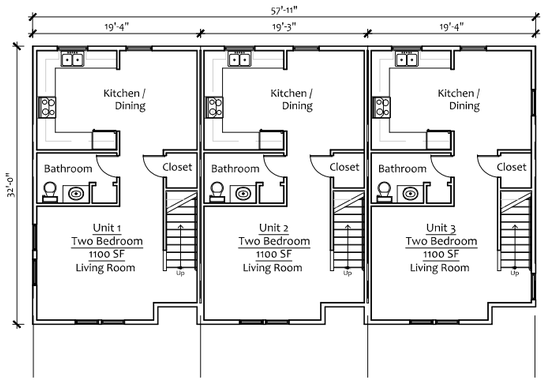
SHEET NUMBER
A2



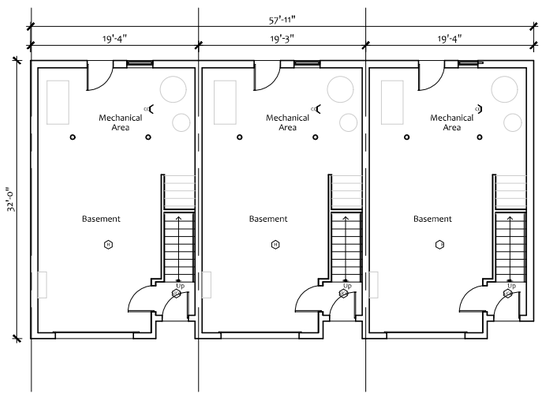
Second Floor (Single Unit)
Scale: 1/4" = 1'-0"



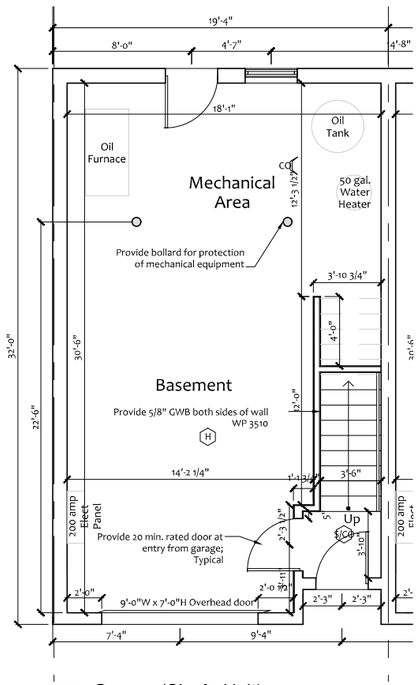
Second Floor Plan
Scale: 1/8" = 1'-0"



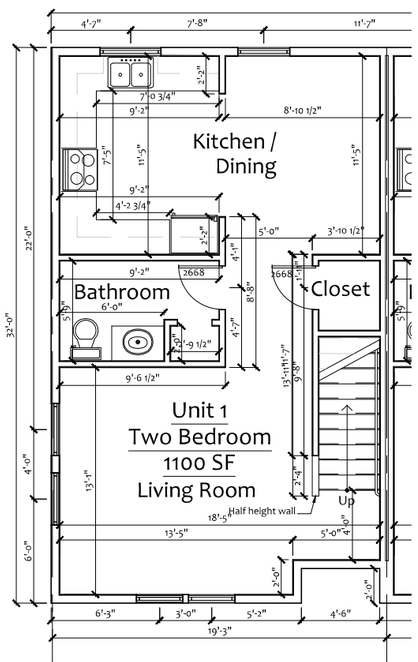
First Floor Plan
Scale: 3/16" = 1'-0"



Basement Floor Plan
Scale: 3/16" = 1'-0"



Garage (Single Unit)
Scale: 1/4" = 1'-0"



First Floor (Single Unit)
Scale: 1/4" = 1'-0"

These drawings are LIMITED SCOPE and are intended only to describe general design intent, scale, overall spatial relationships and material where indicated.
These drawings shall be considered preliminary for purposes of design review, comment, or budget pricing only, unless expressly released for other purposes as indicated in the issue log.
The architect assumes responsibility for errors in the information provided, and not for omissions.

Architect:
Sampson Architects
Timothy Sampson
NCARB, LEED AP
11 King Court
Suite 1E
Keene, NH
603 769 7736

Engineer:

SAMPSON ARCHITECTS
2025 WO# 25-014

Prepared For
Christopher Masiello
118 Portsmouth Ave
Bldg D Suite E
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TITLE
Floor Plans
Details
Notes

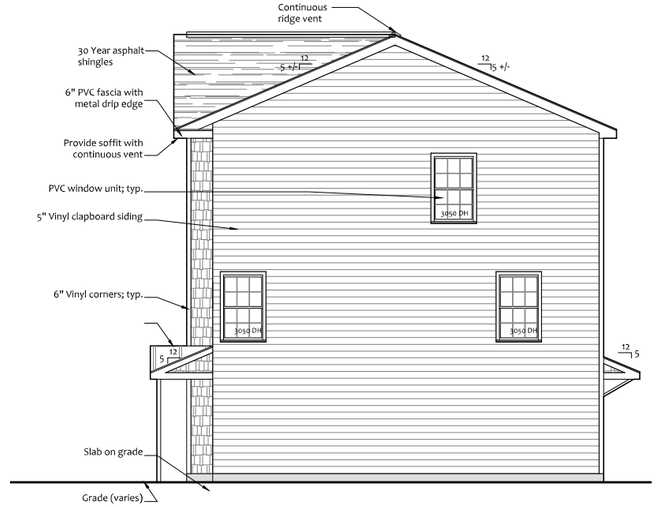
Date:	Revisions:
4.14.26	Planning Board Review
-	-
-	-

SCALE as noted

DATE 4.14.26

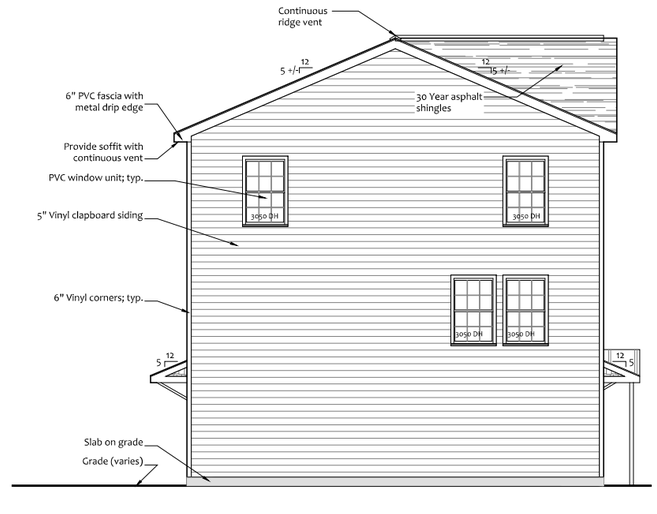
SHEET NUMBER
A3

Front Elevation
Scale: 3/16" = 1'-0"



Right Elevation
Scale: 3/16" = 1'-0"

Rear Elevation
Scale: 3/16" = 1'-0"



Left Elevation
Scale: 3/16" = 1'-0"

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-	-

SCALE as noted

DATE 4.14.26

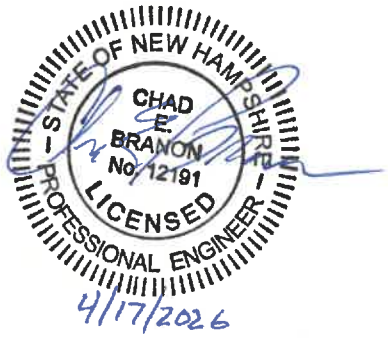
SHEET NUMBER
A4

Storm Water Management Report

ELM CITY COMMONS

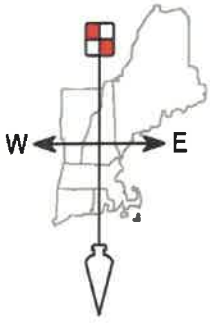
Project Location:
Tax Map 536 Lot 49, 50, 55, 56
0 Elm Street & 0 Carroll Street
Keene, NH 03431

Prepared for:
Christopher Masiello
538 Main Street
Walpole, NH 03608



Date: April 17, 2026

Surveying ⌖ Engineering ⌖ Land Planning ⌖ Permitting ⌖ Septic Designs



FIELDSTONE
LAND CONSULTANTS, PLLC

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

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Section 3.2 Drainage Area Plans

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STORM WATER MANAGEMENT REPORT
TAX MAP PARCELS 536, LOTS 49, 50, 55, 56
ELM CITY COMMONS
ELM & CARROLL STREETS
KEENE, NEW HAMPSHIRE

Prepared for:
Christopher Masiello & Nuevo Transfers, LLC

April 17, 2026

I) INTRODUCTION

The following are storm water drainage calculations for the proposed Elm City Commons Cottage Court Development on Tax Map 536, Lots 49, 50, 55, and 56 in Keene, NH. The proposal consists of developing these parcels located on Elm Street and Carroll Street, in a Cottage Court townhouse residential development with 14 dwelling units. The development will utilize a private central driveway with access to both Elm Street and Carroll Street. This layout will provide condominium style ownership for future homeowners with a goal of providing much needed affordable, owner-occupied housing. This project will disturb 30,000± square feet of area within the new boundary after merging the four building parcels. The new area of the merged lot will be 0.746 Acres with a total of 372-feet of frontage.

The purpose of this report is to analyze the qualitative and quantitative impacts of the proposed development. 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 Land Development Code.

II) SITE DESCRIPTION (EXISTING)

The subject property is currently an undeveloped area that consists of four (4) small building lots. There was a home on one of the lots that was demolished many years ago and the foundation removed. There are no wetlands on the parcels. The site is a mix of gravel fill, old excavation holes, and is mostly vegetated in brush. NRCS soil survey maps indicated that the soils present on the property consists of Searsport Mucky Peat (15), Windsor Loamy Sand (26B), Monadnock Fine Sandy Loam (142C) and Ossipee Mucky Peat (495). The soils are a mix of Hydrologic Soil Group (HSG) "A" , HSG "B", and HSG "D" soils.

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 detention basins and culverts.

Stormwater management systems and erosion control 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 City of Keene LDC and 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), twenty-five (25) and fifty (50) year frequency storm events have been evaluated. These storm events have been analyzed to compare the Pre and Post-development peak flow rates for the site (see attached comparison table). The stormwater model uses the 24-hour listed Extreme Precipitation Tables by Cornell University for the location of the site. Those values are as follows:

2 Year = 2.76 inches 10 Year = 3.98 inches 25 Year =4.92 inches 50 Year = 5.77 inches

Pre-Development Drainage Conditions:

As can be seen on the Pre-Development drainage plan, the property drains toward the northern boundary and ultimately to Elm Street's closed drainage system, modeled as observation point (OP1). The subcatchment, E1S, consists of the entire proposed development area and outlines the flow towards the northern boundary and Elm Street. The property has historically been used for residential homes, although the homes were removed many years ago and the land left vacant. There are some trees along the southern boundary and mostly brush on the remainder of the lot.

Post-Development Drainage Conditions:

As can be seen on the Post-Development Drainage Plan, the proposed drainage flows from the site and ultimately into the Elm Street closed drainage system, defined as Observation Point 1 (OP1). The proposed site has been graded to low points near the intersections of both driveways. The driveway is crowned and will direct runoff into pavement flumes and grass swales at each end of the buildings. The grass swales will direct the water to the bioretention basins at the rear of each building, along the southern and northern boundaries. The bioretention basins will utilize landscaping and a filter layer to provide treatment of the stormwater while having volume above

the filter media to handle the 50 year storm event without overtopping. The bioretention basins will have underdrains tied into a catch basin outlet structure. The outlet structures will have raised outlet culverts, that are elevated slightly above the underdrain elevations. The outlet structures will be tied into the existing catch basins in Elm Street at CB 1010 and CB 1009. The rear building roof runoff will be captured via stone drip strips. The drip strips will reduce velocity, prevent splashing of water/loam onto the building, and allow for some infiltration of stormwater.

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. The proposed development will result in no increase in stormwater flow to the observation point due to the site improvements.

The net result is that new paved areas and building roofs will receive qualitative treatment and that due to the proposed Stormwater BMPs there will be no increase in the peak rates of runoff leaving the site. This will be achieved by constructing four (4) pavement flumes, four (4) grass treatment swales, two (2) stone drip strips, and two (2) bioretention basins.

The following table is a summary of the attached calculations and show a comparison of the peak flow rates at the observation points for the site. The values presented are based on pre- and post-development conditions.

Table 1.1: Peak Flow Rates (CFS) and Volume (AF) Offsite to ELM STREET - OP1

STORM FREQUENCY	PRE-DEV. RUNOFF (CFS / AF)	POST-DEV. RUNOFF (CFS / AF)	CHANGE (CFS / AF)
2-YEAR	0.21 / 0.036	0.24 / 0.074	+0.03 / +0.038
10-YEAR	0.53 / 0.082	0.40 / 0.126	-0.13 / +0.044
25-YEAR*	0.82 / 0.123	0.48/ 0.169	-0.34 / +0.046
50-YEAR	1.10 / 0.163	0.90 / 0.209	-0.20 / +0.046

*25 YEAR STORM EVENT IS REQUIRED BY THE CITY OF KEENE LDC STANDARDS

Soil Map—Cheshire County, New Hampshire

Map Scale: 1:651 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 5 10 20 30

Feet: 0 30 60 120 180

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cheshire County, New Hampshire
Survey Area Data: Version 29, Sep 9, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 15, 2020—Oct 31, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
15	Searsport mucky peat	0.4	33.8%
26B	Windsor loamy sand, 3 to 8 percent slopes	0.1	9.4%
142C	Monadnock fine sandy loam, 8 to 15 percent slopes	0.4	30.0%
495	Ossipee mucky peat	0.3	26.8%
Totals for Area of Interest		**1.3**	**100.0%**

AERIAL

City of Keene, NH

1 inch = 2000 Feet

0 2000 4000 6000

April 16, 2026

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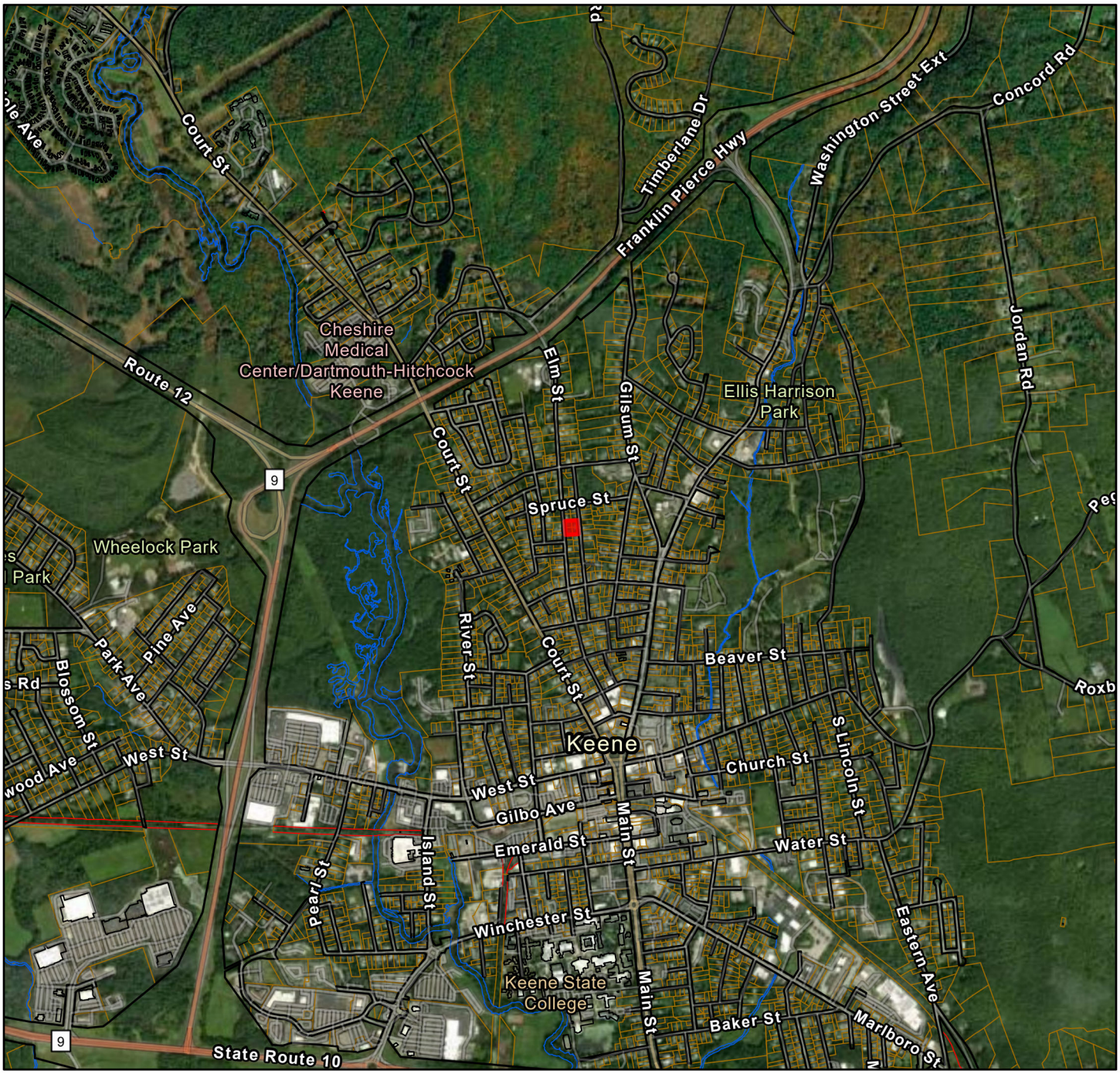


Common Line
Condo
Dispute
PWater
Private Road
Property Line
Public Road
Railroad

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point	
Smoothing	Yes
State	New Hampshire
Location	New Hampshire, United States
Latitude	42.943 degrees North
Longitude	72.281 degrees West
Elevation	150 feet
Date/Time	Thu Apr 16 2026 10:33:09 GMT-0400 (Eastern Daylight Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.43	0.53	0.70	0.87	1.09	**1yr**	0.75	1.01	1.25	1.54	1.90	2.34	2.60	**1yr**	2.07	2.50	2.89	3.52	4.09	**1yr**
2yr	0.34	0.52	0.65	0.85	1.07	1.34	**2yr**	0.93	1.20	1.53	1.87	2.28	2.76	3.11	**2yr**	2.44	2.99	3.50	4.17	4.77	**2yr**
5yr	0.40	0.63	0.78	1.05	1.34	1.68	**5yr**	1.16	1.51	1.93	2.35	2.84	3.40	3.88	**5yr**	3.01	3.73	4.34	5.12	5.83	**5yr**
10yr	0.45	0.71	0.90	1.22	1.59	2.01	**10yr**	1.37	1.79	2.30	2.80	3.35	3.98	4.59	**10yr**	3.52	4.41	5.10	5.98	6.79	**10yr**
25yr	0.54	0.86	1.09	1.50	1.99	2.53	**25yr**	1.72	2.25	2.90	3.51	4.19	4.92	5.73	**25yr**	4.35	5.51	6.33	7.34	8.31	**25yr**
50yr	0.61	0.98	1.25	1.76	2.37	3.02	**50yr**	2.04	2.68	3.47	4.19	4.95	5.77	6.79	**50yr**	5.11	6.53	7.46	8.58	9.69	**50yr**
100yr	0.70	1.13	1.46	2.07	2.81	3.60	**100yr**	2.43	3.18	4.13	4.97	5.85	6.78	8.04	**100yr**	6.00	7.73	8.79	10.04	11.30	**100yr**
200yr	0.80	1.30	1.69	2.42	3.34	4.29	**200yr**	2.88	3.79	4.93	5.91	6.92	7.96	9.54	**200yr**	7.05	9.17	10.37	11.75	13.18	**200yr**
500yr	0.96	1.58	2.06	2.99	4.19	5.40	**500yr**	3.62	4.77	6.21	7.42	8.64	9.86	11.96	**500yr**	8.73	11.50	12.90	14.47	16.16	**500yr**

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.23	0.36	0.43	0.58	0.72	0.84	**1yr**	0.62	0.82	0.97	1.25	1.55	2.11	2.37	**1yr**	1.86	2.28	2.60	3.26	3.59	**1yr**
2yr	0.32	0.50	0.61	0.83	1.02	1.17	**2yr**	0.88	1.15	1.34	1.71	2.15	2.69	3.05	**2yr**	2.38	2.93	3.42	4.08	4.66	**2yr**
5yr	0.37	0.57	0.70	0.96	1.23	1.40	**5yr**	1.06	1.37	1.57	2.00	2.50	3.19	3.64	**5yr**	2.83	3.50	4.03	4.83	5.48	**5yr**
10yr	0.41	0.62	0.77	1.08	1.39	1.59	**10yr**	1.20	1.55	1.77	2.25	2.79	3.61	4.17	**10yr**	3.20	4.01	4.65	5.48	6.19	**10yr**
25yr	0.46	0.70	0.87	1.24	1.64	1.88	**25yr**	1.41	1.84	2.08	2.63	3.22	4.29	4.97	**25yr**	3.79	4.78	5.54	6.47	7.29	**25yr**
50yr	0.51	0.77	0.96	1.38	1.86	2.14	**50yr**	1.60	2.09	2.34	2.97	3.58	4.90	5.68	**50yr**	4.33	5.46	6.34	7.37	8.27	**50yr**
100yr	0.56	0.84	1.05	1.52	2.09	2.42	**100yr**	1.80	2.37	2.65	3.35	3.98	5.60	6.52	**100yr**	4.96	6.27	7.29	8.41	9.38	**100yr**
200yr	0.61	0.92	1.17	1.69	2.36	2.75	**200yr**	2.03	2.68	2.99	3.79	4.43	6.42	7.48	**200yr**	5.68	7.20	8.38	9.60	10.67	**200yr**
500yr	0.70	1.04	1.34	1.95	2.77	3.24	**500yr**	2.39	3.17	3.52	4.46	5.09	7.72	9.01	**500yr**	6.83	8.67	10.10	11.50	12.67	**500yr**

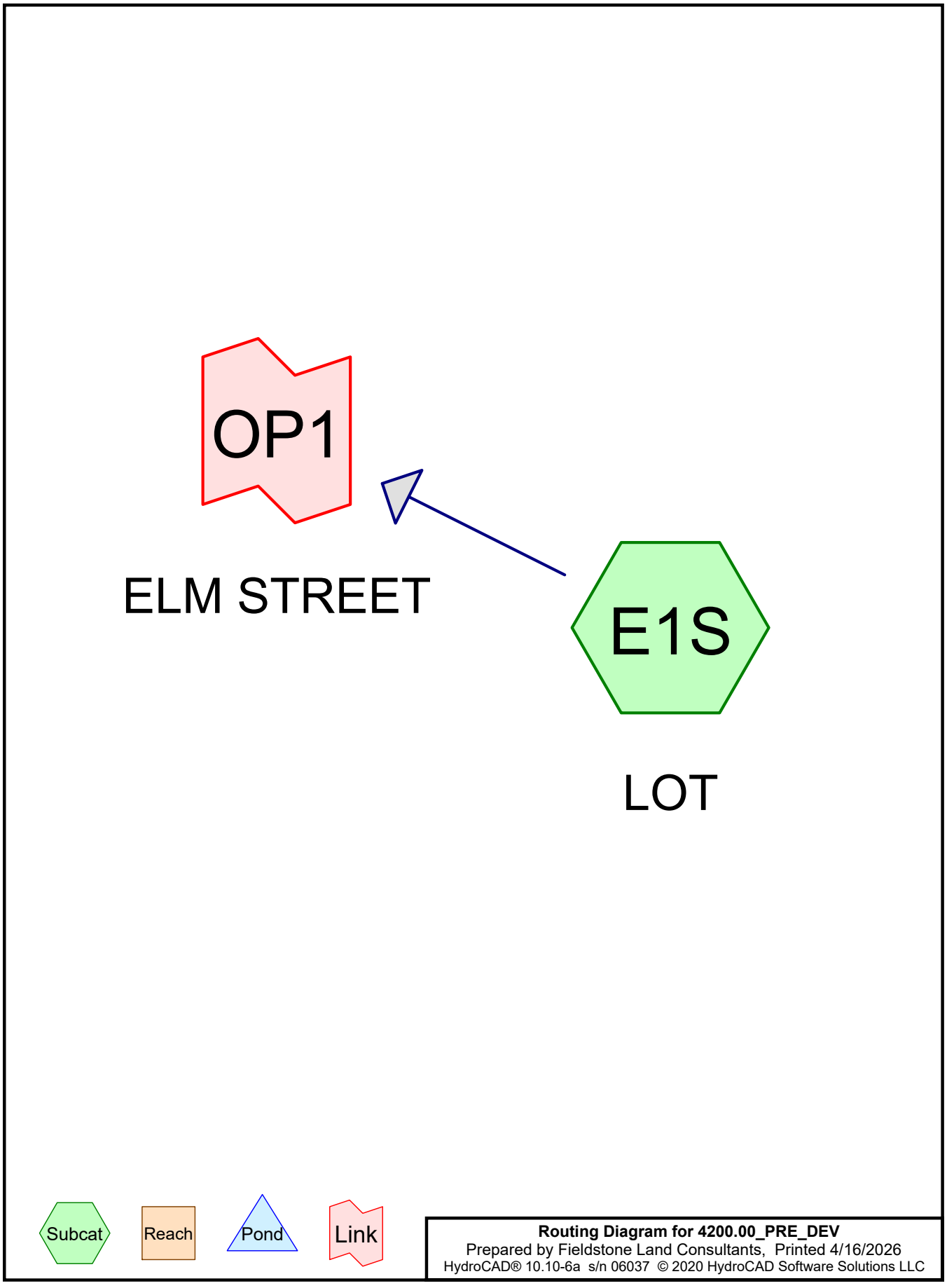
Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.31	0.48	0.58	0.79	0.97	1.13	**1yr**	0.83	1.11	1.26	1.58	2.00	2.50	2.81	**1yr**	2.21	2.70	3.10	3.74	4.37	**1yr**
2yr	0.35	0.55	0.67	0.91	1.12	1.28	**2yr**	0.97	1.25	1.44	1.81	2.29	2.83	3.22	**2yr**	2.51	3.10	3.61	4.29	4.91	**2yr**
5yr	0.44	0.68	0.84	1.15	1.46	1.69	**5yr**	1.26	1.65	1.86	2.30	2.84	3.64	4.17	**5yr**	3.22	4.01	4.66	5.47	6.24	**5yr**
10yr	0.53	0.81	1.01	1.40	1.81	2.10	**10yr**	1.57	2.06	2.28	2.77	3.38	4.41	5.08	**10yr**	3.91	4.88	5.63	6.57	7.49	**10yr**
25yr	0.68	1.03	1.28	1.83	2.41	2.81	**25yr**	2.08	2.75	2.97	3.52	4.23	5.68	6.60	**25yr**	5.02	6.35	7.26	8.35	9.53	**25yr**
50yr	0.81	1.24	1.54	2.22	2.98	3.50	**50yr**	2.57	3.42	3.63	4.24	5.02	6.86	8.05	**50yr**	6.08	7.74	8.79	10.03	11.44	**50yr**
100yr	0.99	1.49	1.87	2.70	3.70	4.37	**100yr**	3.20	4.27	4.44	5.09	5.96	8.29	9.82	**100yr**	7.34	9.44	10.64	12.04	13.72	**100yr**
200yr	1.20	1.80	2.28	3.31	4.61	5.47	**200yr**	3.98	5.34	5.43	6.13	7.09	10.02	11.97	**200yr**	8.86	11.51	12.89	14.44	16.45	**200yr**
500yr	1.55	2.31	2.97	4.32	6.14	7.35	**500yr**	5.30	7.19	7.09	7.83	8.91	12.83	15.54	**500yr**	11.36	14.94	16.58	18.35	20.92	**500yr**

Powered by ACIS Northeast Regional Climate Center

Section 1.1

Existing Conditions
2, 25 & 50 Year Storm Summary



Routing Diagram for 4200.00_PRE_DEV
Prepared by Fieldstone Land Consultants, Printed 4/16/2026
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Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1S: LOT Runoff Area=32,494 sf 0.00% Impervious Runoff Depth=0.59"
Flow Length=228' Tc=41.0 min CN=70 Runoff=0.21 cfs 0.036 af

Link OP1: ELM STREET Inflow=0.21 cfs 0.036 af
Primary=0.21 cfs 0.036 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.036 af Average Runoff Depth = 0.59"
100.00% Pervious = 0.746 ac 0.00% Impervious = 0.000 ac

Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1S: LOT Runoff Area=32,494 sf 0.00% Impervious Runoff Depth=1.98"
Flow Length=228' Tc=41.0 min CN=70 Runoff=0.82 cfs 0.123 af

Link OP1: ELM STREET Inflow=0.82 cfs 0.123 af
Primary=0.82 cfs 0.123 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.123 af Average Runoff Depth = 1.98"
100.00% Pervious = 0.746 ac 0.00% Impervious = 0.000 ac

Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1S: LOT Runoff Area=32,494 sf 0.00% Impervious Runoff Depth=2.62"
Flow Length=228' Tc=41.0 min CN=70 Runoff=1.10 cfs 0.163 af

Link OP1: ELM STREET Inflow=1.10 cfs 0.163 af
Primary=1.10 cfs 0.163 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.163 af Average Runoff Depth = 2.62"
100.00% Pervious = 0.746 ac 0.00% Impervious = 0.000 ac

Section 1.2

Existing Conditions
10 Year Storm Full Summary

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.023	30	Brush, Good, HSG A (E1S)
0.198	48	Brush, Good, HSG B (E1S)
0.354	73	Brush, Good, HSG D (E1S)
0.009	96	Gravel surface, HSG B (E1S)
0.163	96	Gravel surface, HSG D (E1S)
0.746	**70**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.023	HSG A	E1S
0.207	HSG B	E1S
0.000	HSG C	
0.517	HSG D	E1S
0.000	Other	
0.746		**TOTAL AREA**

Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment E1S: LOT Runoff Area=32,494 sf 0.00% Impervious Runoff Depth=1.32"
Flow Length=228' Tc=41.0 min CN=70 Runoff=0.53 cfs 0.082 af

Link OP1: ELM STREET Inflow=0.53 cfs 0.082 af
Primary=0.53 cfs 0.082 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.082 af Average Runoff Depth = 1.32"
100.00% Pervious = 0.746 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment E1S: LOT

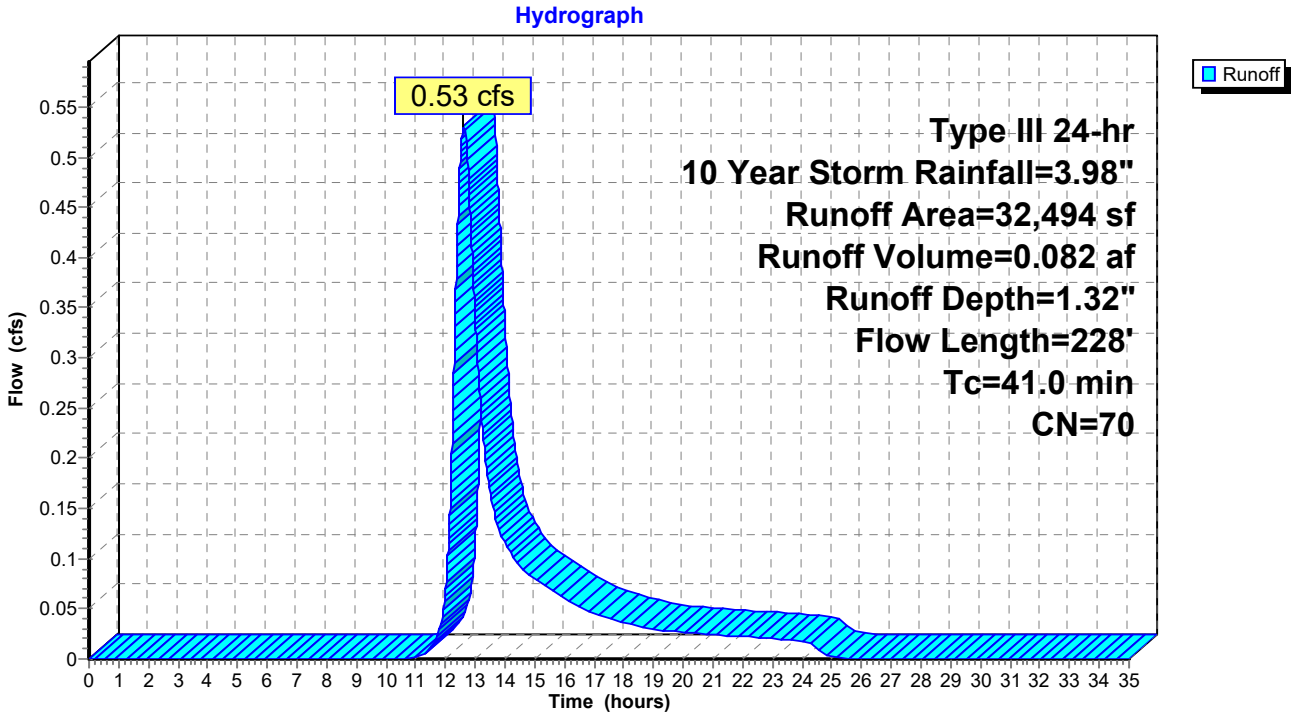
Runoff = 0.53 cfs @ 12.62 hrs, Volume= 0.082 af, Depth= 1.32"
Routed to Link OP1 : ELM STREET

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
981	30	Brush, Good, HSG A
385	96	Gravel surface, HSG B
8,622	48	Brush, Good, HSG B
6,560	96	Gravel surface, HSG D
538	96	Gravel surface, HSG D
15,408	73	Brush, Good, HSG D
32,494	70	Weighted Average
32,494		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
34.2	100	0.0300	0.05		**Sheet Flow, A-B** Woods: Dense underbrush n= 0.800 P2= 2.76"
6.8	128	0.0039	0.31		**Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps
41.0	228	Total			

Subcatchment E1S: LOT

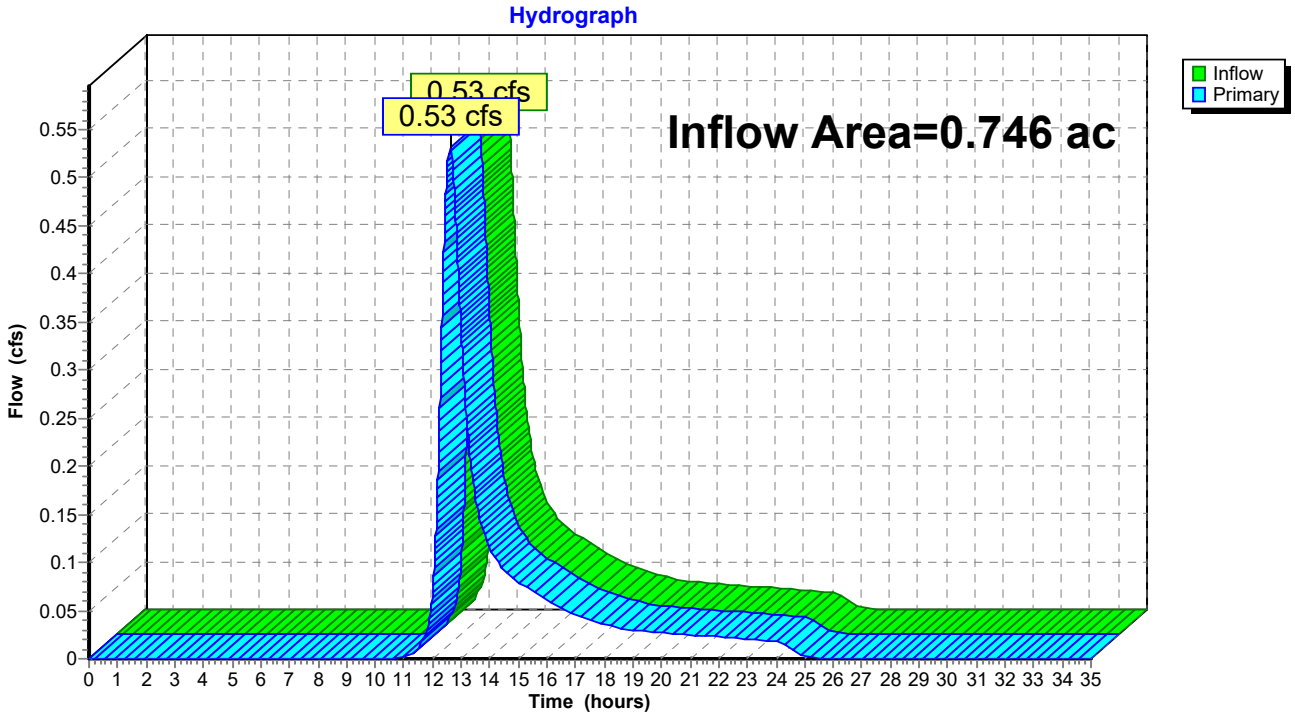


Summary for Link OP1: ELM STREET

Inflow Area = 0.746 ac, 0.00% Impervious, Inflow Depth = 1.32" for 10 Year Storm event
Inflow = 0.53 cfs @ 12.62 hrs, Volume= 0.082 af
Primary = 0.53 cfs @ 12.62 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min

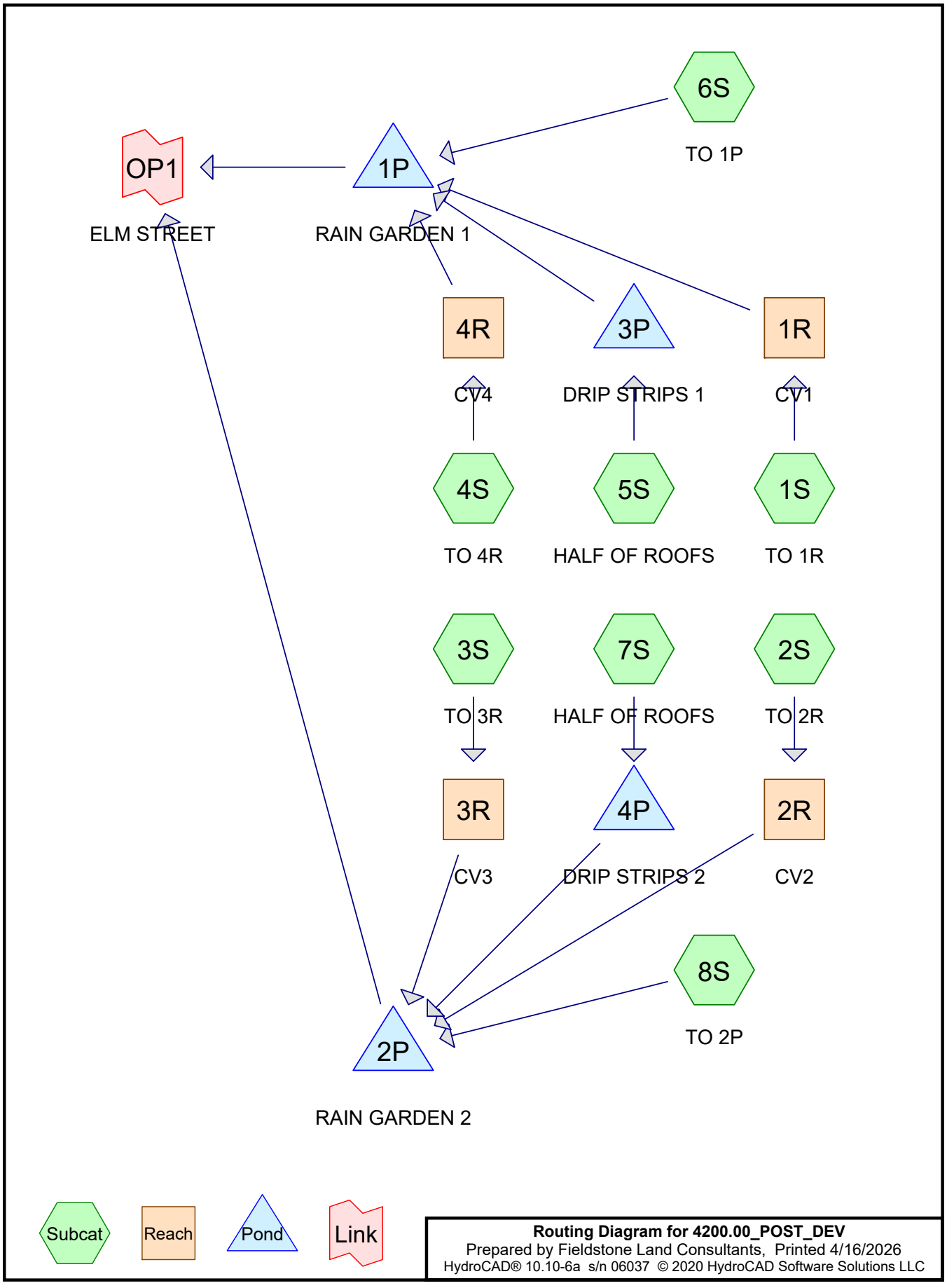
Primary outflow = Inflow, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs

Link OP1: ELM STREET



Section 2.1

Proposed Conditions
2, 25, & 50 Year Storm Summary


6S
TO 1P
OP1
ELM STREET
1P
RAIN GARDEN 1
4R
CV4
3P
DRIP STRIPS 1
1R
CV1
4S
TO 4R
5S
HALF OF ROOFS
1S
TO 1R
3S
TO 3R
7S
HALF OF ROOFS
2S
TO 2R
3R
CV3
4P
DRIP STRIPS 2
2R
CV2
8S
TO 2P
2P
RAIN GARDEN 2
Subcat
Reach
Pond
Link
Routing Diagram for 4200.00_POST_DEV
Prepared by Fieldstone Land Consultants, Printed 4/16/2026
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Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: TO 1R Runoff Area=3,596 sf 83.37% Impervious Runoff Depth=2.03"
Tc=6.0 min CN=93 Runoff=0.19 cfs 0.014 af

Subcatchment 2S: TO 2R Runoff Area=3,740 sf 83.56% Impervious Runoff Depth=2.22"
Tc=6.0 min CN=95 Runoff=0.21 cfs 0.016 af

Subcatchment 3S: TO 3R Runoff Area=3,485 sf 82.73% Impervious Runoff Depth=2.22"
Tc=6.0 min CN=95 Runoff=0.20 cfs 0.015 af

Subcatchment 4S: TO 4R Runoff Area=3,628 sf 83.85% Impervious Runoff Depth=2.22"
Tc=6.0 min CN=95 Runoff=0.21 cfs 0.015 af

Subcatchment 5S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=2.53"
Tc=6.0 min CN=98 Runoff=0.14 cfs 0.011 af

Subcatchment 6S: TO 1P Runoff Area=6,620 sf 0.48% Impervious Runoff Depth=0.47"
Tc=6.0 min CN=67 Runoff=0.06 cfs 0.006 af

Subcatchment 7S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=2.53"
Tc=6.0 min CN=98 Runoff=0.14 cfs 0.011 af

Subcatchment 8S: TO 2P Runoff Area=6,950 sf 0.46% Impervious Runoff Depth=0.71"
Tc=6.0 min UI Adjusted CN=73 Runoff=0.12 cfs 0.009 af

Reach 1R: CV1 Avg. Flow Depth=0.21' Max Vel=1.42 fps Inflow=0.19 cfs 0.014 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.19 cfs 0.014 af

Reach 2R: CV2 Avg. Flow Depth=0.22' Max Vel=1.46 fps Inflow=0.21 cfs 0.016 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.21 cfs 0.016 af

Reach 3R: CV3 Avg. Flow Depth=0.27' Max Vel=0.89 fps Inflow=0.20 cfs 0.015 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.20 cfs 0.015 af

Reach 4R: CV4 Avg. Flow Depth=0.27' Max Vel=0.90 fps Inflow=0.21 cfs 0.015 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.20 cfs 0.015 af

Pond 1P: RAIN GARDEN 1 Peak Elev=495.84' Storage=410 cf Inflow=0.45 cfs 0.035 af
Outflow=0.11 cfs 0.035 af

Pond 2P: RAIN GARDEN 2 Peak Elev=496.25' Storage=493 cf Inflow=0.53 cfs 0.040 af
Outflow=0.13 cfs 0.039 af

Pond 3P: DRIP STRIPS 1 Peak Elev=496.38' Storage=87 cf Inflow=0.14 cfs 0.011 af
Outflow=0.04 cfs 0.011 af

Pond 4P: DRIP STRIPS 2 Peak Elev=496.38' Storage=87 cf Inflow=0.14 cfs 0.011 af
Outflow=0.04 cfs 0.011 af

Link OP1: ELM STREET

Inflow=0.24 cfs 0.074 af
Primary=0.24 cfs 0.074 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.097 af Average Runoff Depth = 1.56"
48.96% Pervious = 0.365 ac 51.04% Impervious = 0.381 ac

Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: TO 1R Runoff Area=3,596 sf 83.37% Impervious Runoff Depth=4.12"
Tc=6.0 min CN=93 Runoff=0.38 cfs 0.028 af

Subcatchment 2S: TO 2R Runoff Area=3,740 sf 83.56% Impervious Runoff Depth=4.34"
Tc=6.0 min CN=95 Runoff=0.40 cfs 0.031 af

Subcatchment 3S: TO 3R Runoff Area=3,485 sf 82.73% Impervious Runoff Depth=4.34"
Tc=6.0 min CN=95 Runoff=0.37 cfs 0.029 af

Subcatchment 4S: TO 4R Runoff Area=3,628 sf 83.85% Impervious Runoff Depth=4.34"
Tc=6.0 min CN=95 Runoff=0.39 cfs 0.030 af

Subcatchment 5S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=4.68"
Tc=6.0 min CN=98 Runoff=0.25 cfs 0.020 af

Subcatchment 6S: TO 1P Runoff Area=6,620 sf 0.48% Impervious Runoff Depth=1.75"
Tc=6.0 min CN=67 Runoff=0.30 cfs 0.022 af

Subcatchment 7S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=4.68"
Tc=6.0 min CN=98 Runoff=0.25 cfs 0.020 af

Subcatchment 8S: TO 2P Runoff Area=6,950 sf 0.46% Impervious Runoff Depth=2.22"
Tc=6.0 min UI Adjusted CN=73 Runoff=0.41 cfs 0.029 af

Reach 1R: CV1 Avg. Flow Depth=0.27' Max Vel=1.68 fps Inflow=0.38 cfs 0.028 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.37 cfs 0.028 af

Reach 2R: CV2 Avg. Flow Depth=0.28' Max Vel=1.71 fps Inflow=0.40 cfs 0.031 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.40 cfs 0.031 af

Reach 3R: CV3 Avg. Flow Depth=0.34' Max Vel=1.04 fps Inflow=0.37 cfs 0.029 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.37 cfs 0.029 af

Reach 4R: CV4 Avg. Flow Depth=0.35' Max Vel=1.06 fps Inflow=0.39 cfs 0.030 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.39 cfs 0.030 af

Pond 1P: RAIN GARDEN 1 Peak Elev=497.52' Storage=1,100 cf Inflow=1.06 cfs 0.081 af
Outflow=0.22 cfs 0.081 af

Pond 2P: RAIN GARDEN 2 Peak Elev=497.66' Storage=1,232 cf Inflow=1.18 cfs 0.089 af
Outflow=0.25 cfs 0.088 af

Pond 3P: DRIP STRIPS 1 Peak Elev=496.96' Storage=222 cf Inflow=0.25 cfs 0.020 af
Outflow=0.05 cfs 0.020 af

Pond 4P: DRIP STRIPS 2 Peak Elev=496.96' Storage=222 cf Inflow=0.25 cfs 0.020 af
Outflow=0.05 cfs 0.020 af

Link OP1: ELM STREET

Inflow=0.48 cfs 0.169 af
Primary=0.48 cfs 0.169 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.210 af Average Runoff Depth = 3.38"
48.96% Pervious = 0.365 ac 51.04% Impervious = 0.381 ac

Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: TO 1R Runoff Area=3,596 sf 83.37% Impervious Runoff Depth=4.96"
Tc=6.0 min CN=93 Runoff=0.45 cfs 0.034 af

Subcatchment 2S: TO 2R Runoff Area=3,740 sf 83.56% Impervious Runoff Depth=5.18"
Tc=6.0 min CN=95 Runoff=0.47 cfs 0.037 af

Subcatchment 3S: TO 3R Runoff Area=3,485 sf 82.73% Impervious Runoff Depth=5.18"
Tc=6.0 min CN=95 Runoff=0.44 cfs 0.035 af

Subcatchment 4S: TO 4R Runoff Area=3,628 sf 83.85% Impervious Runoff Depth=5.18"
Tc=6.0 min CN=95 Runoff=0.46 cfs 0.036 af

Subcatchment 5S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=5.53"
Tc=6.0 min CN=98 Runoff=0.29 cfs 0.024 af

Subcatchment 6S: TO 1P Runoff Area=6,620 sf 0.48% Impervious Runoff Depth=2.36"
Tc=6.0 min CN=67 Runoff=0.41 cfs 0.030 af

Subcatchment 7S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=5.53"
Tc=6.0 min CN=98 Runoff=0.29 cfs 0.024 af

Subcatchment 8S: TO 2P Runoff Area=6,950 sf 0.46% Impervious Runoff Depth=2.90"
Tc=6.0 min UI Adjusted CN=73 Runoff=0.54 cfs 0.039 af

Reach 1R: CV1 Avg. Flow Depth=0.29' Max Vel=1.76 fps Inflow=0.45 cfs 0.034 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.44 cfs 0.034 af

Reach 2R: CV2 Avg. Flow Depth=0.30' Max Vel=1.79 fps Inflow=0.47 cfs 0.037 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.47 cfs 0.037 af

Reach 3R: CV3 Avg. Flow Depth=0.37' Max Vel=1.09 fps Inflow=0.44 cfs 0.035 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.44 cfs 0.035 af

Reach 4R: CV4 Avg. Flow Depth=0.37' Max Vel=1.10 fps Inflow=0.46 cfs 0.036 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.46 cfs 0.036 af

Pond 1P: RAIN GARDEN 1 Peak Elev=497.73' Storage=1,372 cf Inflow=1.31 cfs 0.100 af
Outflow=0.39 cfs 0.100 af

Pond 2P: RAIN GARDEN 2 Peak Elev=497.76' Storage=1,356 cf Inflow=1.45 cfs 0.110 af
Outflow=0.63 cfs 0.109 af

Pond 3P: DRIP STRIPS 1 Peak Elev=497.21' Storage=278 cf Inflow=0.29 cfs 0.024 af
Outflow=0.06 cfs 0.024 af

Pond 4P: DRIP STRIPS 2 Peak Elev=497.21' Storage=278 cf Inflow=0.29 cfs 0.024 af
Outflow=0.06 cfs 0.024 af

Link OP1: ELM STREET

Inflow=0.90 cfs 0.209 af
Primary=0.90 cfs 0.209 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.257 af Average Runoff Depth = 4.14"
48.96% Pervious = 0.365 ac 51.04% Impervious = 0.381 ac

Section 2.2

Proposed Conditions
10 Year Storm Full Summary

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.023	39	>75% Grass cover, Good, HSG A (8S)
0.118	61	>75% Grass cover, Good, HSG B (1S, 6S, 8S)
0.225	80	>75% Grass cover, Good, HSG D (1S, 2S, 3S, 4S, 6S, 8S)
0.000	98	Paved parking, HSG B (6S)
0.064	98	Paved parking, HSG D (2S)
0.033	98	Roofs, HSG B (5S)
0.070	98	Roofs, HSG D (5S, 7S)
0.056	98	Unconnected pavement, HSG B (1S, 2S, 4S, 8S)
0.157	98	Unconnected pavement, HSG D (1S, 3S, 4S, 6S, 8S)
0.746	**85**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.023	HSG A	8S
0.207	HSG B	1S, 2S, 4S, 5S, 6S, 8S
0.000	HSG C	
0.516	HSG D	1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S
0.000	Other	
0.746		**TOTAL AREA**

Time span=0.00-35.00 hrs, dt=0.01 hrs, 3501 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: TO 1R Runoff Area=3,596 sf 83.37% Impervious Runoff Depth=3.20"
Tc=6.0 min CN=93 Runoff=0.30 cfs 0.022 af

Subcatchment 2S: TO 2R Runoff Area=3,740 sf 83.56% Impervious Runoff Depth=3.41"
Tc=6.0 min CN=95 Runoff=0.32 cfs 0.024 af

Subcatchment 3S: TO 3R Runoff Area=3,485 sf 82.73% Impervious Runoff Depth=3.41"
Tc=6.0 min CN=95 Runoff=0.30 cfs 0.023 af

Subcatchment 4S: TO 4R Runoff Area=3,628 sf 83.85% Impervious Runoff Depth=3.41"
Tc=6.0 min CN=95 Runoff=0.31 cfs 0.024 af

Subcatchment 5S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=3.75"
Tc=6.0 min CN=98 Runoff=0.20 cfs 0.016 af

Subcatchment 6S: TO 1P Runoff Area=6,620 sf 0.48% Impervious Runoff Depth=1.13"
Tc=6.0 min CN=67 Runoff=0.19 cfs 0.014 af

Subcatchment 7S: HALF OF ROOFS Runoff Area=2,236 sf 100.00% Impervious Runoff Depth=3.75"
Tc=6.0 min CN=98 Runoff=0.20 cfs 0.016 af

Subcatchment 8S: TO 2P Runoff Area=6,950 sf 0.46% Impervious Runoff Depth=1.51"
Tc=6.0 min UI Adjusted CN=73 Runoff=0.28 cfs 0.020 af

Reach 1R: CV1 Avg. Flow Depth=0.25' Max Vel=1.59 fps Inflow=0.30 cfs 0.022 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.29 cfs 0.022 af

Reach 2R: CV2 Avg. Flow Depth=0.26' Max Vel=1.62 fps Inflow=0.32 cfs 0.024 af
n=0.030 L=62.0' S=0.0177 '/' Capacity=12.04 cfs Outflow=0.32 cfs 0.024 af

Reach 3R: CV3 Avg. Flow Depth=0.32' Max Vel=0.99 fps Inflow=0.30 cfs 0.023 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.29 cfs 0.023 af

Reach 4R: CV4 Avg. Flow Depth=0.32' Max Vel=1.00 fps Inflow=0.31 cfs 0.024 af
n=0.030 L=60.0' S=0.0050 '/' Capacity=6.39 cfs Outflow=0.31 cfs 0.024 af

Pond 1P: RAIN GARDEN 1 Peak Elev=497.18' Storage=779 cf Inflow=0.79 cfs 0.060 af
Outflow=0.19 cfs 0.060 af

Pond 2P: RAIN GARDEN 2 Peak Elev=497.32' Storage=875 cf Inflow=0.89 cfs 0.067 af
Outflow=0.22 cfs 0.066 af

Pond 3P: DRIP STRIPS 1 Peak Elev=496.70' Storage=161 cf Inflow=0.20 cfs 0.016 af
Outflow=0.05 cfs 0.016 af

Pond 4P: DRIP STRIPS 2 Peak Elev=496.70' Storage=161 cf Inflow=0.20 cfs 0.016 af
Outflow=0.05 cfs 0.016 af

Link OP1: ELM STREET

Inflow=0.40 cfs 0.126 af
Primary=0.40 cfs 0.126 af

Total Runoff Area = 0.746 ac Runoff Volume = 0.159 af Average Runoff Depth = 2.56"
48.96% Pervious = 0.365 ac 51.04% Impervious = 0.381 ac

Summary for Subcatchment 1S: TO 1R

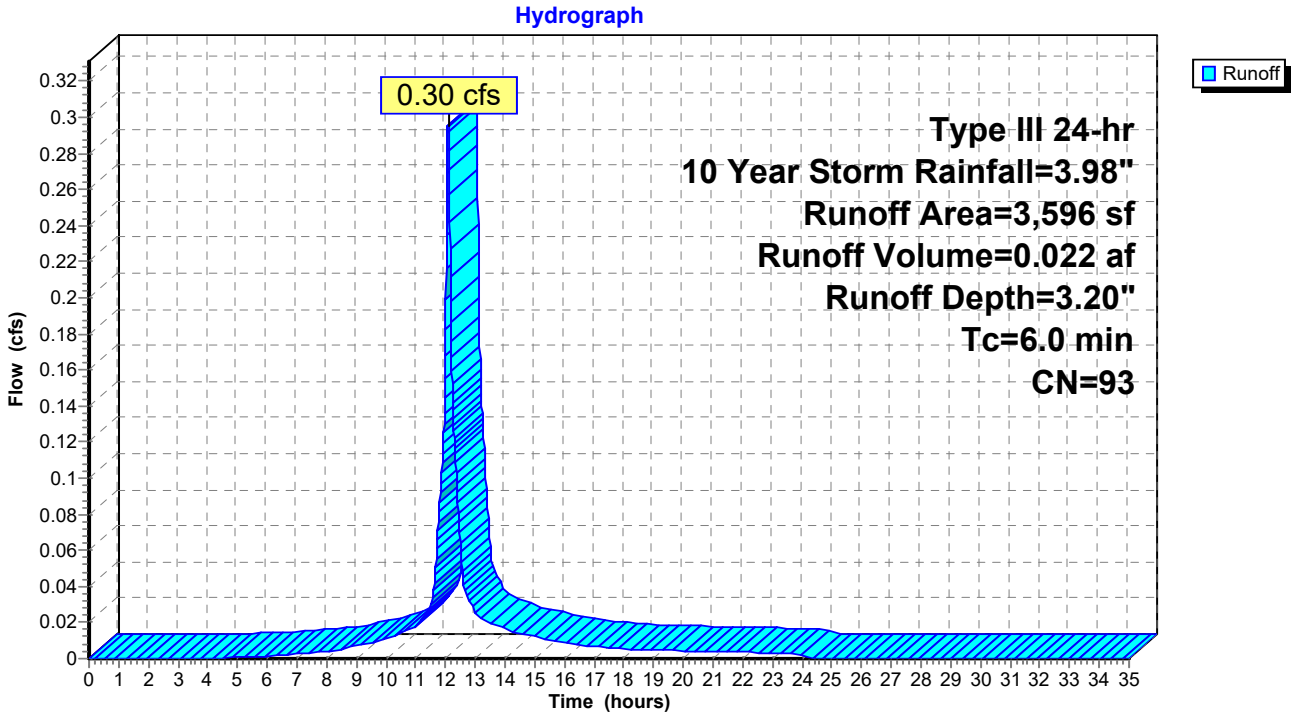
Runoff = 0.30 cfs @ 12.08 hrs, Volume= 0.022 af, Depth= 3.20"
Routed to Reach 1R : CV1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
233	80	>75% Grass cover, Good, HSG D
365	61	>75% Grass cover, Good, HSG B
909	98	Unconnected pavement, HSG D
2,089	98	Unconnected pavement, HSG B
3,596	93	Weighted Average
598		16.63% Pervious Area
2,998		83.37% Impervious Area
2,998		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 1S: TO 1R



Summary for Subcatchment 2S: TO 2R

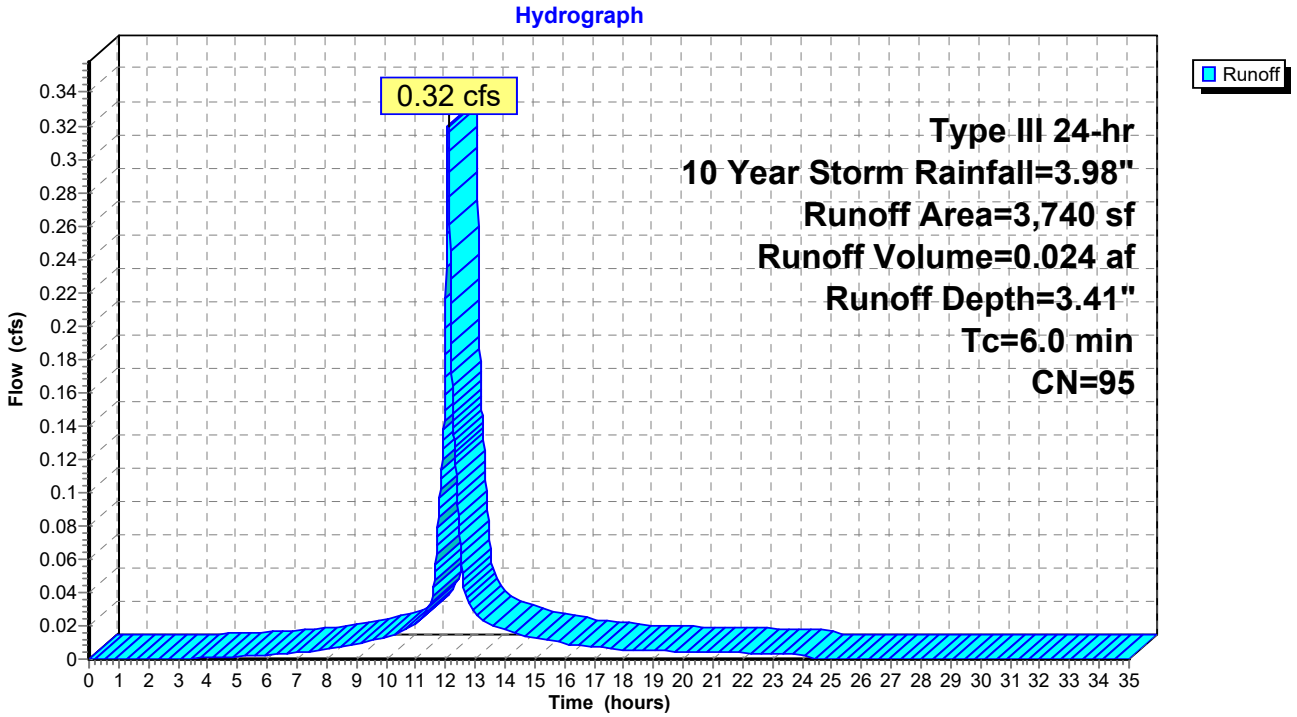
Runoff = 0.32 cfs @ 12.08 hrs, Volume= 0.024 af, Depth= 3.41"
Routed to Reach 2R : CV2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
322	98	Unconnected pavement, HSG B
615	80	>75% Grass cover, Good, HSG D
2,803	98	Paved parking, HSG D
3,740	95	Weighted Average
615		16.44% Pervious Area
3,125		83.56% Impervious Area
322		10.30% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 2S: TO 2R



Summary for Subcatchment 3S: TO 3R

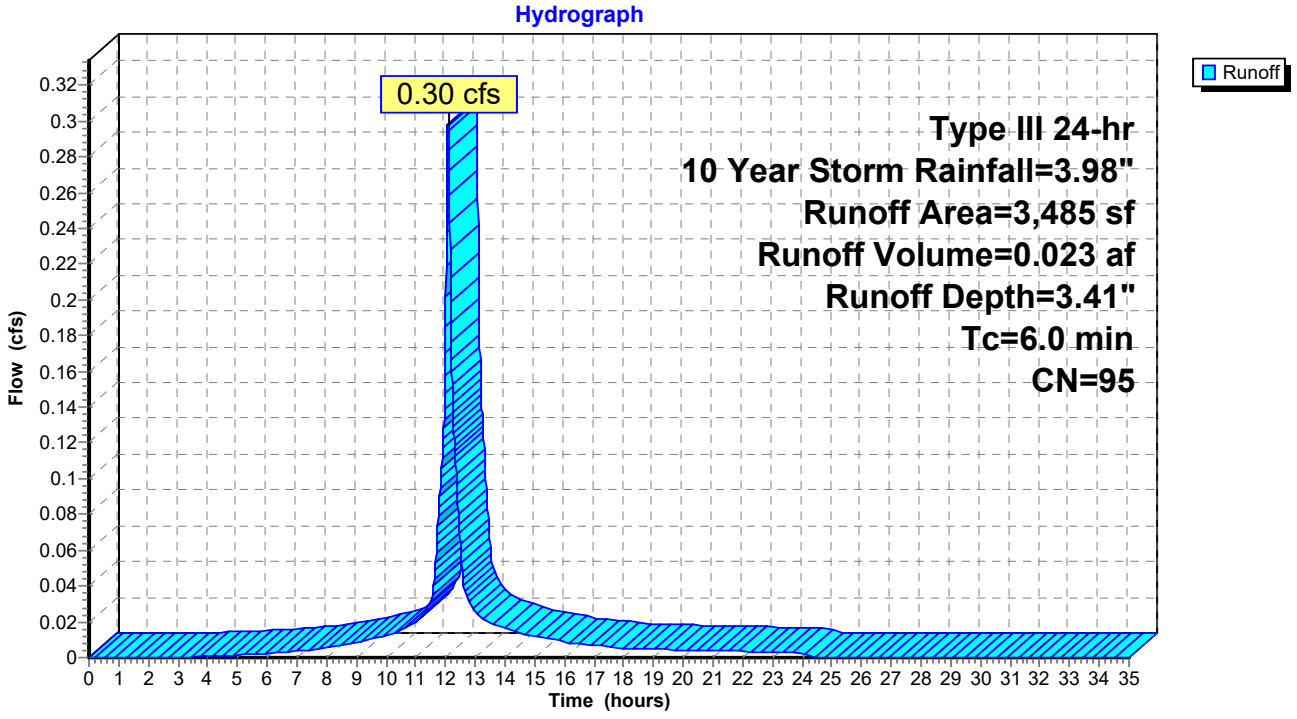
Runoff = 0.30 cfs @ 12.08 hrs, Volume= 0.023 af, Depth= 3.41"
Routed to Reach 3R : CV3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
602	80	>75% Grass cover, Good, HSG D
2,883	98	Unconnected pavement, HSG D
3,485	95	Weighted Average
602		17.27% Pervious Area
2,883		82.73% Impervious Area
2,883		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 3S: TO 3R



Summary for Subcatchment 4S: TO 4R

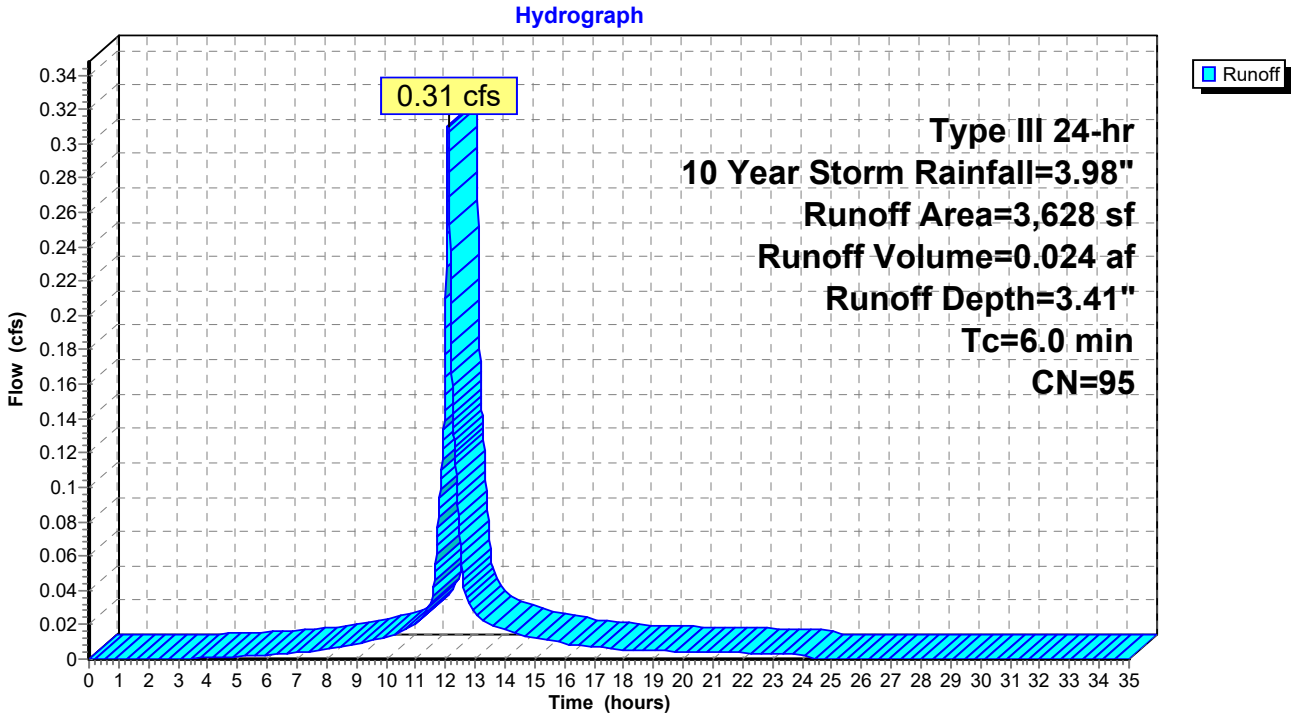
Runoff = 0.31 cfs @ 12.08 hrs, Volume= 0.024 af, Depth= 3.41"
Routed to Reach 4R : CV4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
586	80	>75% Grass cover, Good, HSG D
3,022	98	Unconnected pavement, HSG D
20	98	Unconnected pavement, HSG B
3,628	95	Weighted Average
586		16.15% Pervious Area
3,042		83.85% Impervious Area
3,042		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 4S: TO 4R



Summary for Subcatchment 5S: HALF OF ROOFS

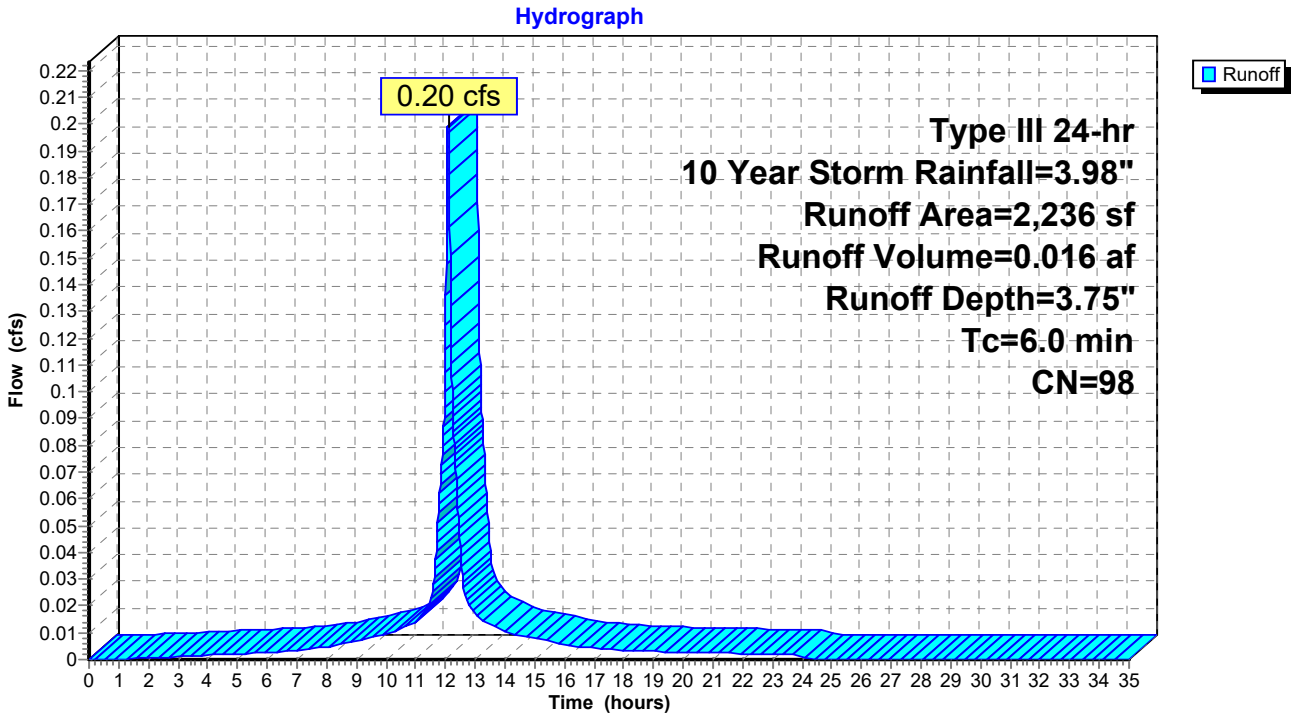
Runoff = 0.20 cfs @ 12.08 hrs, Volume= 0.016 af, Depth= 3.75"
Routed to Pond 3P : DRIP STRIPS 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
1,421	98	Roofs, HSG B
815	98	Roofs, HSG D
2,236	98	Weighted Average
2,236		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 5S: HALF OF ROOFS



Summary for Subcatchment 6S: TO 1P

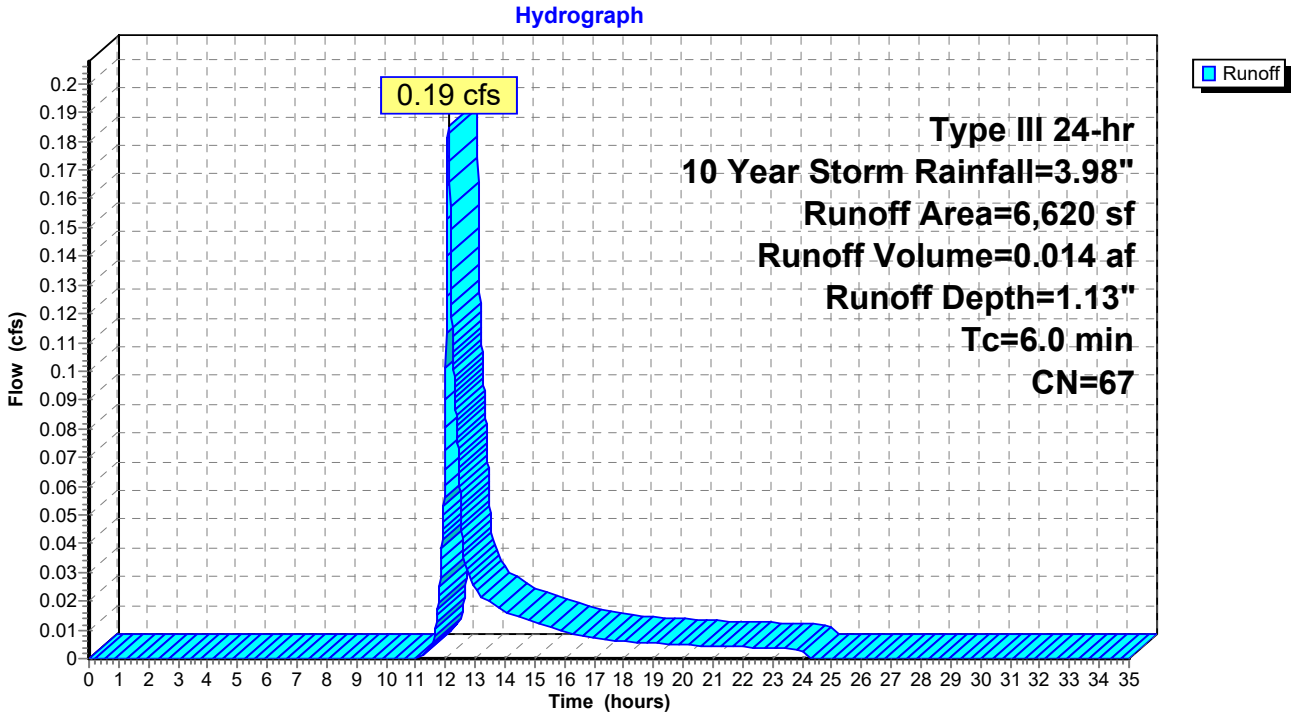
Runoff = 0.19 cfs @ 12.10 hrs, Volume= 0.014 af, Depth= 1.13"
Routed to Pond 1P : RAIN GARDEN 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
4,486	61	>75% Grass cover, Good, HSG B
16	98	Paved parking, HSG B
16	98	Unconnected pavement, HSG D
2,102	80	>75% Grass cover, Good, HSG D
6,620	67	Weighted Average
6,588		99.52% Pervious Area
32		0.48% Impervious Area
16		50.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 6S: TO 1P



Summary for Subcatchment 7S: HALF OF ROOFS

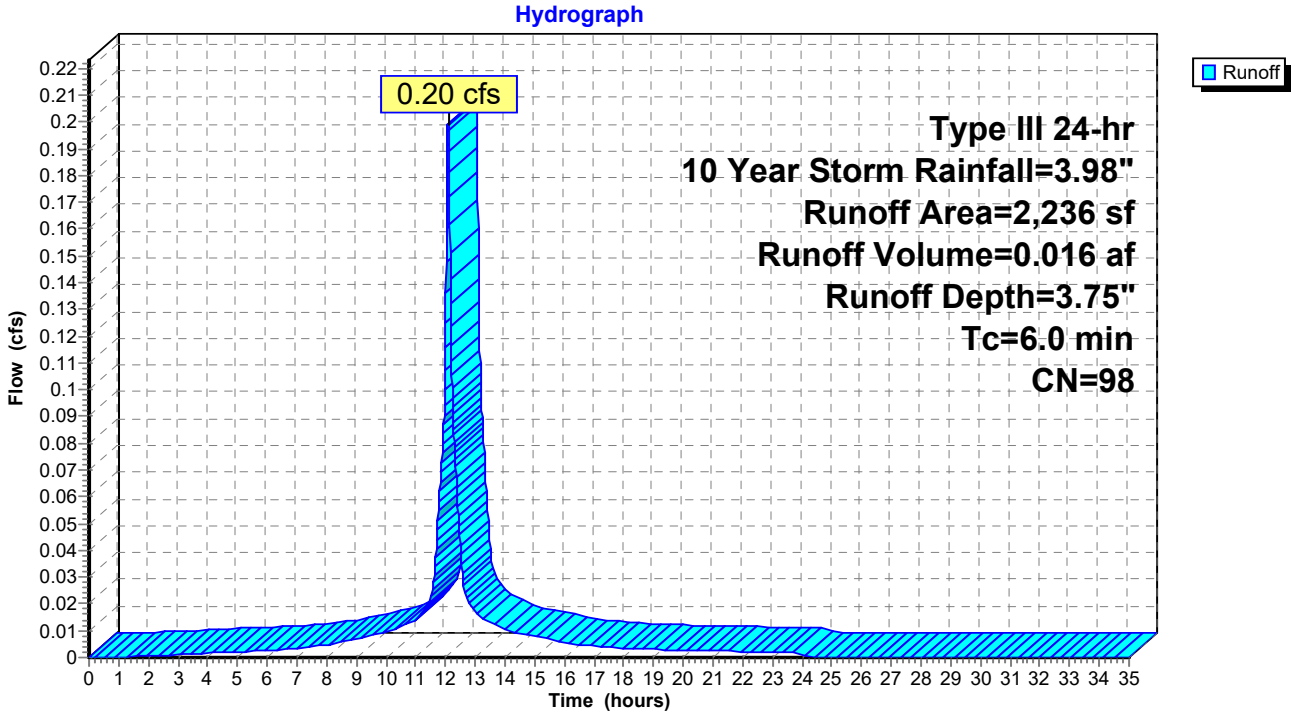
Runoff = 0.20 cfs @ 12.08 hrs, Volume= 0.016 af, Depth= 3.75"
Routed to Pond 4P : DRIP STRIPS 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Description
2,236	98	Roofs, HSG D
2,236		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 7S: HALF OF ROOFS



Summary for Subcatchment 8S: TO 2P

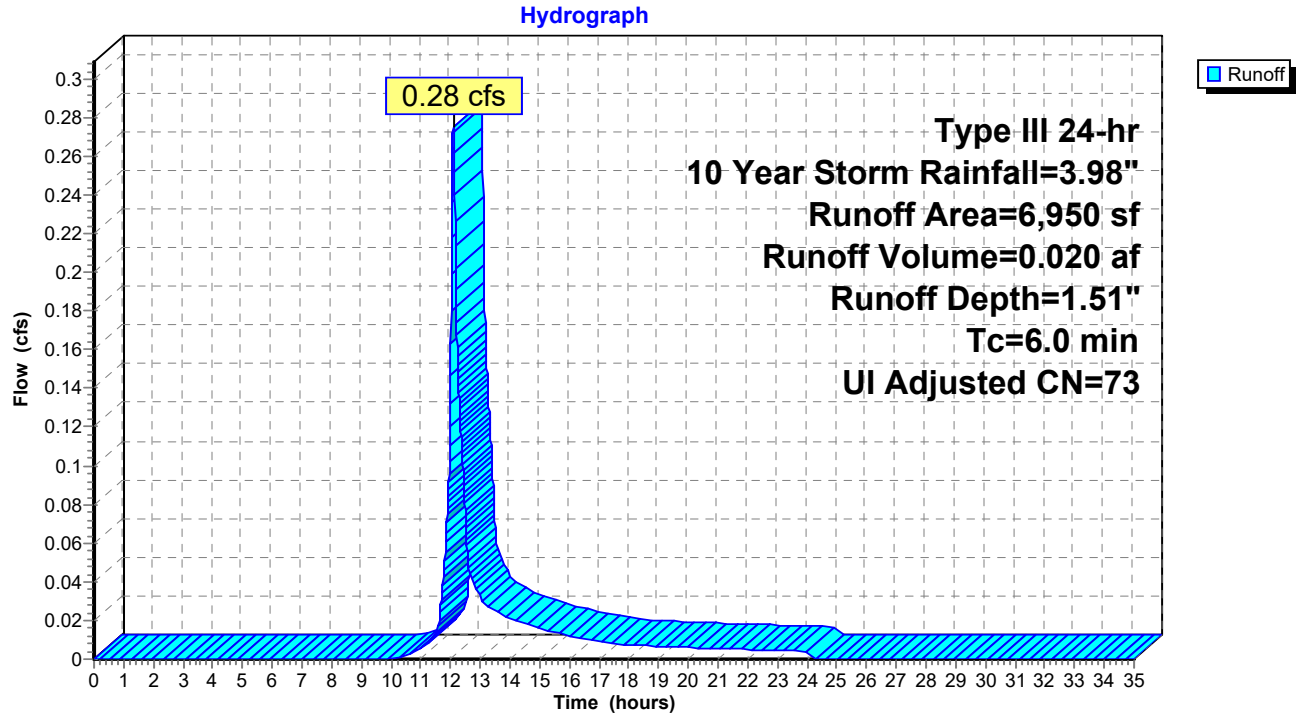
Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af, Depth= 1.51"
Routed to Pond 2P : RAIN GARDEN 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs
Type III 24-hr 10 Year Storm Rainfall=3.98"

Area (sf)	CN	Adj	Description
16	98		Unconnected pavement, HSG B
278	61		>75% Grass cover, Good, HSG B
981	39		>75% Grass cover, Good, HSG A
16	98		Unconnected pavement, HSG D
5,659	80		>75% Grass cover, Good, HSG D
6,950	74	73	Weighted Average, UI Adjusted
6,918			99.54% Pervious Area
32			0.46% Impervious Area
32			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, DIRECT**

Subcatchment 8S: TO 2P



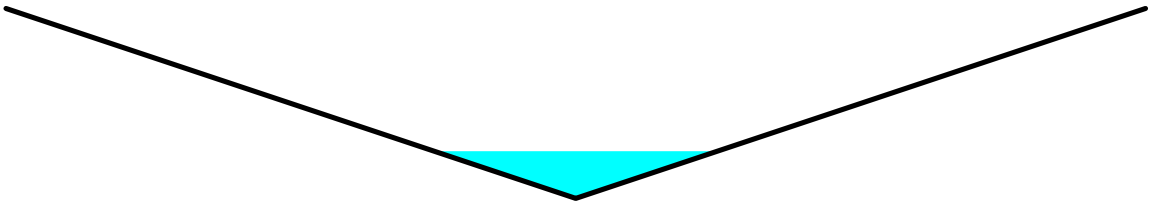
Summary for Reach 1R: CV1

Inflow Area = 0.083 ac, 83.37% Impervious, Inflow Depth = 3.20" for 10 Year Storm event
Inflow = 0.30 cfs @ 12.08 hrs, Volume= 0.022 af
Outflow = 0.29 cfs @ 12.09 hrs, Volume= 0.022 af, Atten= 1%, Lag= 0.5 min
Routed to Pond 1P : RAIN GARDEN 1

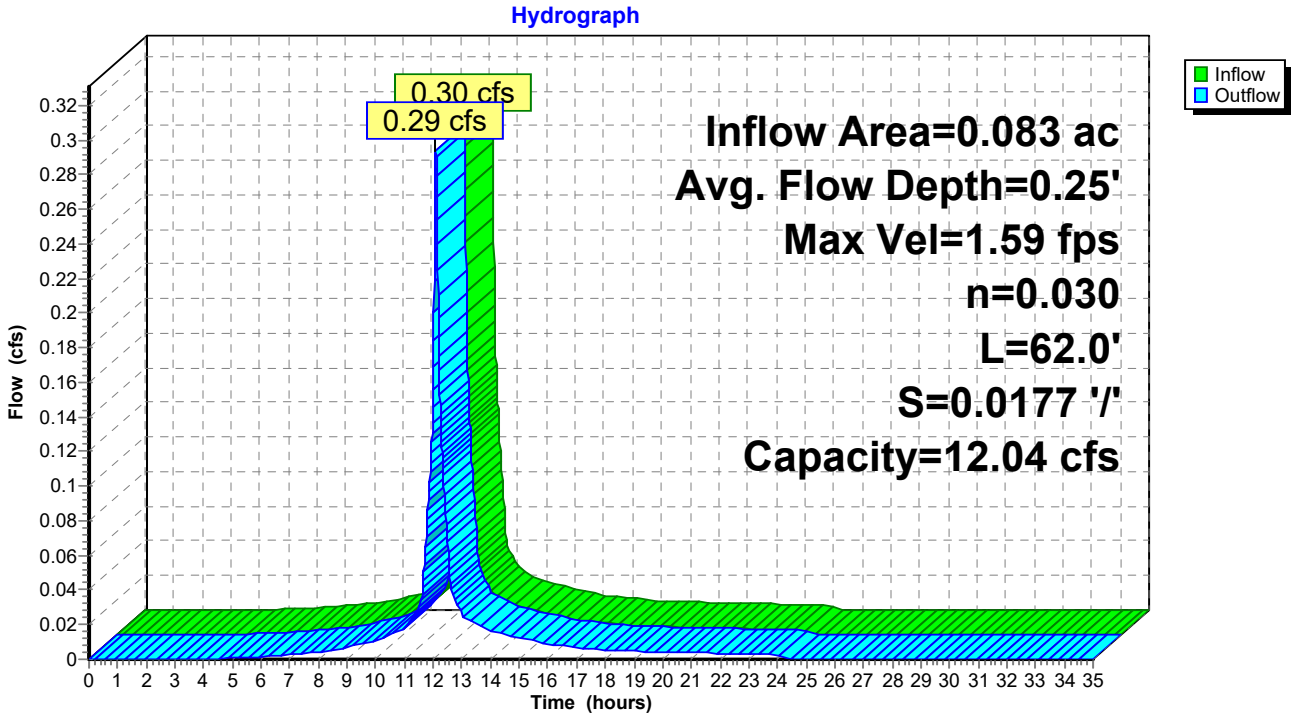
Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 1.59 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 0.61 fps, Avg. Travel Time= 1.7 min

Peak Storage= 11 cf @ 12.09 hrs
Average Depth at Peak Storage= 0.25' , Surface Width= 1.49'
Bank-Full Depth= 1.00' Flow Area= 3.0 sf, Capacity= 12.04 cfs

0.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 3.0 '/' Top Width= 6.00'
Length= 62.0' Slope= 0.0177 '/'
Inlet Invert= 499.10', Outlet Invert= 498.00'



Reach 1R: CV1



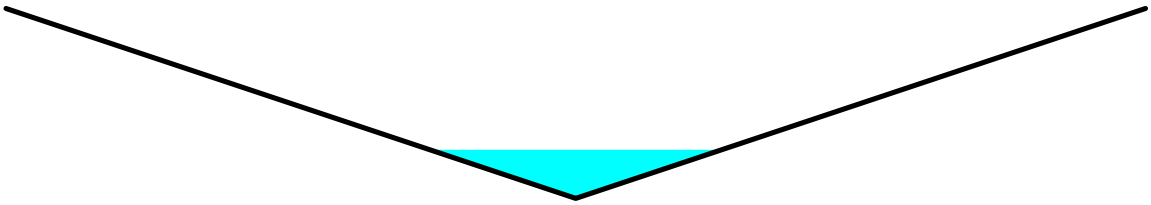
Summary for Reach 2R: CV2

Inflow Area = 0.086 ac, 83.56% Impervious, Inflow Depth = 3.41" for 10 Year Storm event
Inflow = 0.32 cfs @ 12.08 hrs, Volume= 0.024 af
Outflow = 0.32 cfs @ 12.09 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.5 min
Routed to Pond 2P : RAIN GARDEN 2

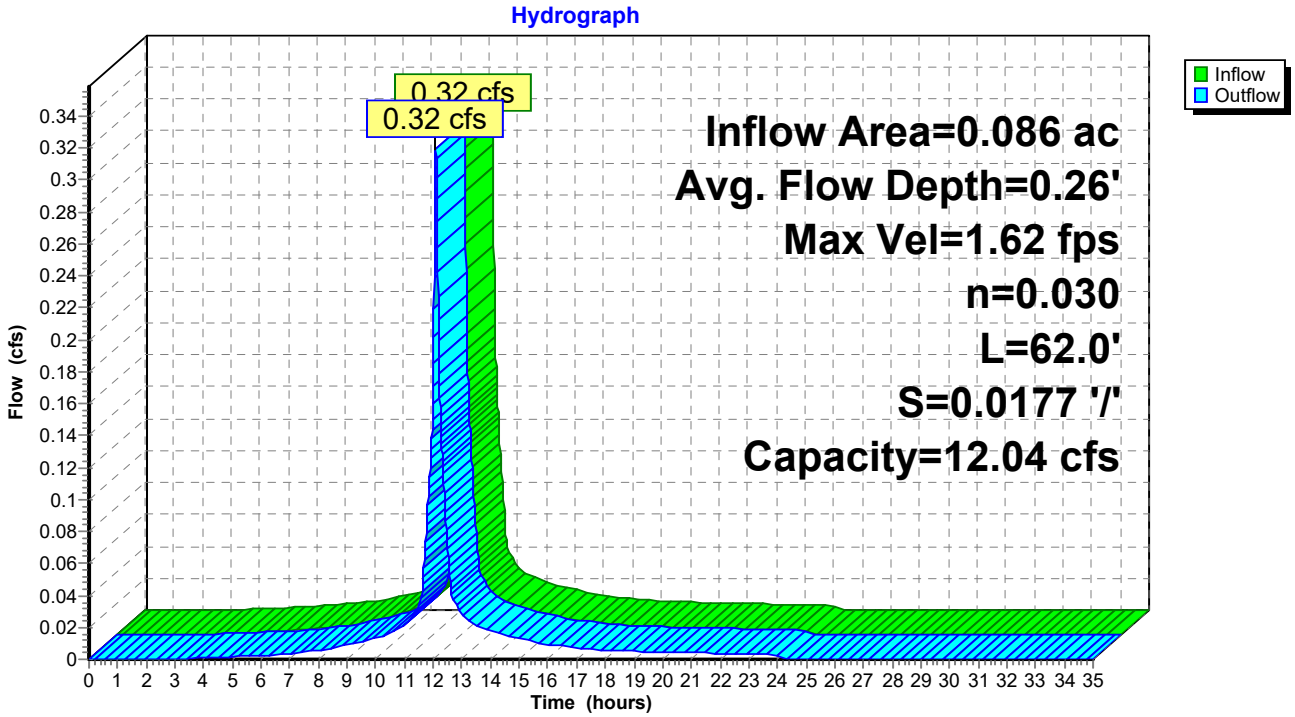
Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 1.62 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 0.62 fps, Avg. Travel Time= 1.7 min

Peak Storage= 12 cf @ 12.09 hrs
Average Depth at Peak Storage= 0.26' , Surface Width= 1.54'
Bank-Full Depth= 1.00' Flow Area= 3.0 sf, Capacity= 12.04 cfs

0.00' x 1.00' deep channel, n= 0.030
Side Slope Z-value= 3.0 '/' Top Width= 6.00'
Length= 62.0' Slope= 0.0177 '/'
Inlet Invert= 499.10', Outlet Invert= 498.00'



Reach 2R: CV2



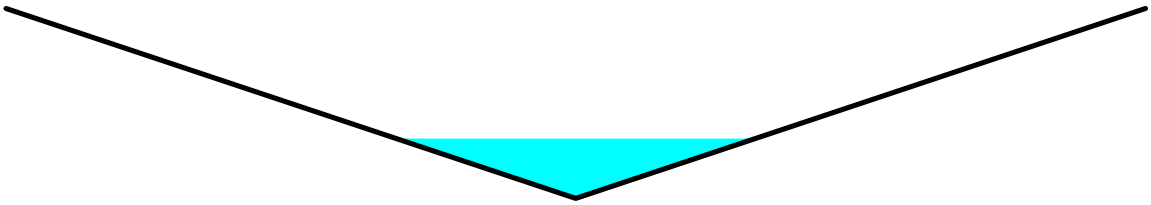
Summary for Reach 3R: CV3

Inflow Area = 0.080 ac, 82.73% Impervious, Inflow Depth = 3.41" for 10 Year Storm event
Inflow = 0.30 cfs @ 12.08 hrs, Volume= 0.023 af
Outflow = 0.29 cfs @ 12.10 hrs, Volume= 0.023 af, Atten= 1%, Lag= 0.8 min
Routed to Pond 2P : RAIN GARDEN 2

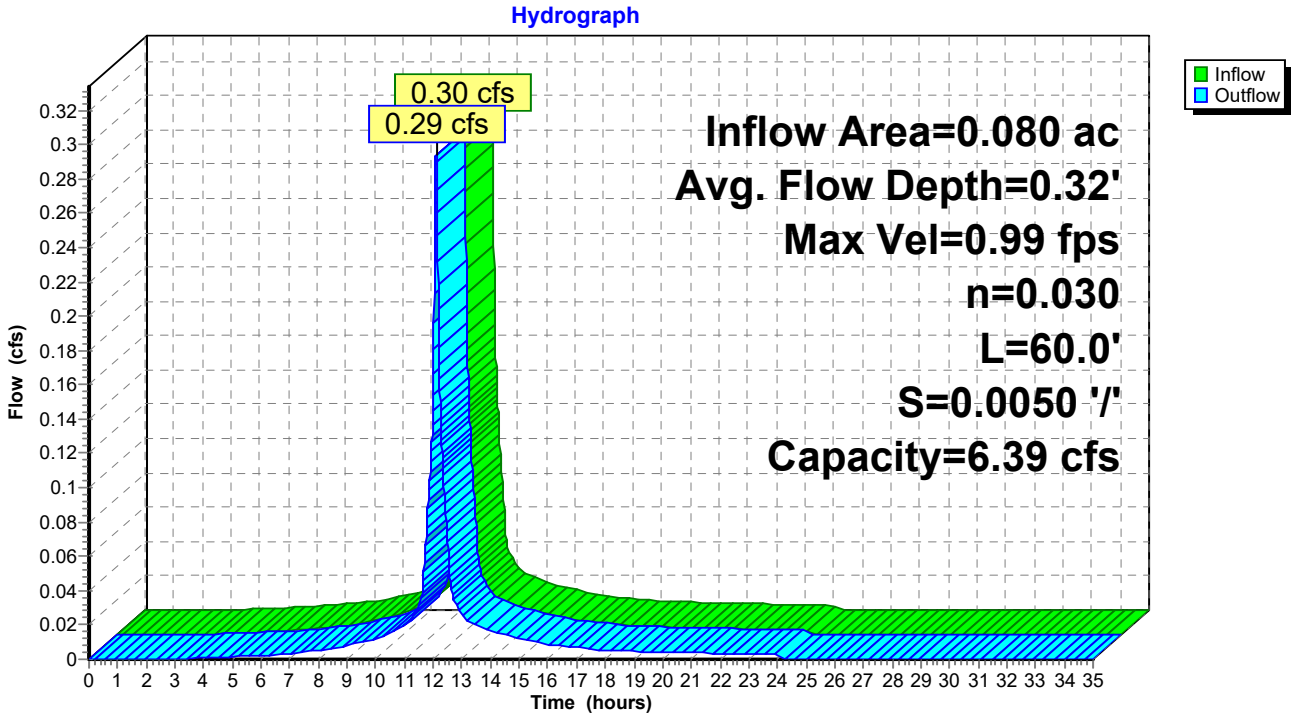
Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 0.99 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 0.38 fps, Avg. Travel Time= 2.6 min

Peak Storage= 18 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.32' , Surface Width= 1.89'
Bank-Full Depth= 1.00' Flow Area= 3.0 sf, Capacity= 6.39 cfs

0.00' x 1.00' deep channel, n= 0.030
Side Slope Z-value= 3.0 '/' Top Width= 6.00'
Length= 60.0' Slope= 0.0050 '/'
Inlet Invert= 498.30', Outlet Invert= 498.00'



Reach 3R: CV3



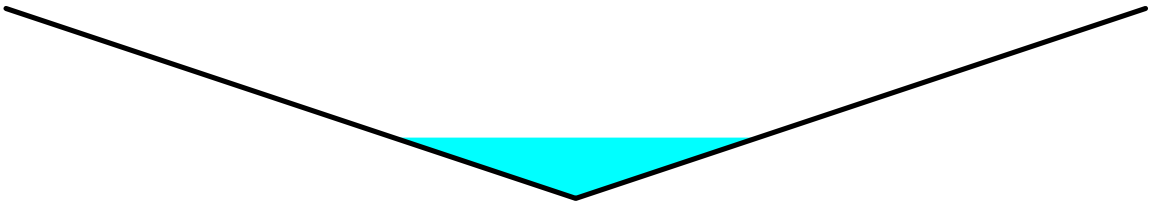
Summary for Reach 4R: CV4

Inflow Area = 0.083 ac, 83.85% Impervious, Inflow Depth = 3.41" for 10 Year Storm event
Inflow = 0.31 cfs @ 12.08 hrs, Volume= 0.024 af
Outflow = 0.31 cfs @ 12.10 hrs, Volume= 0.024 af, Atten= 1%, Lag= 0.8 min
Routed to Pond 1P : RAIN GARDEN 1

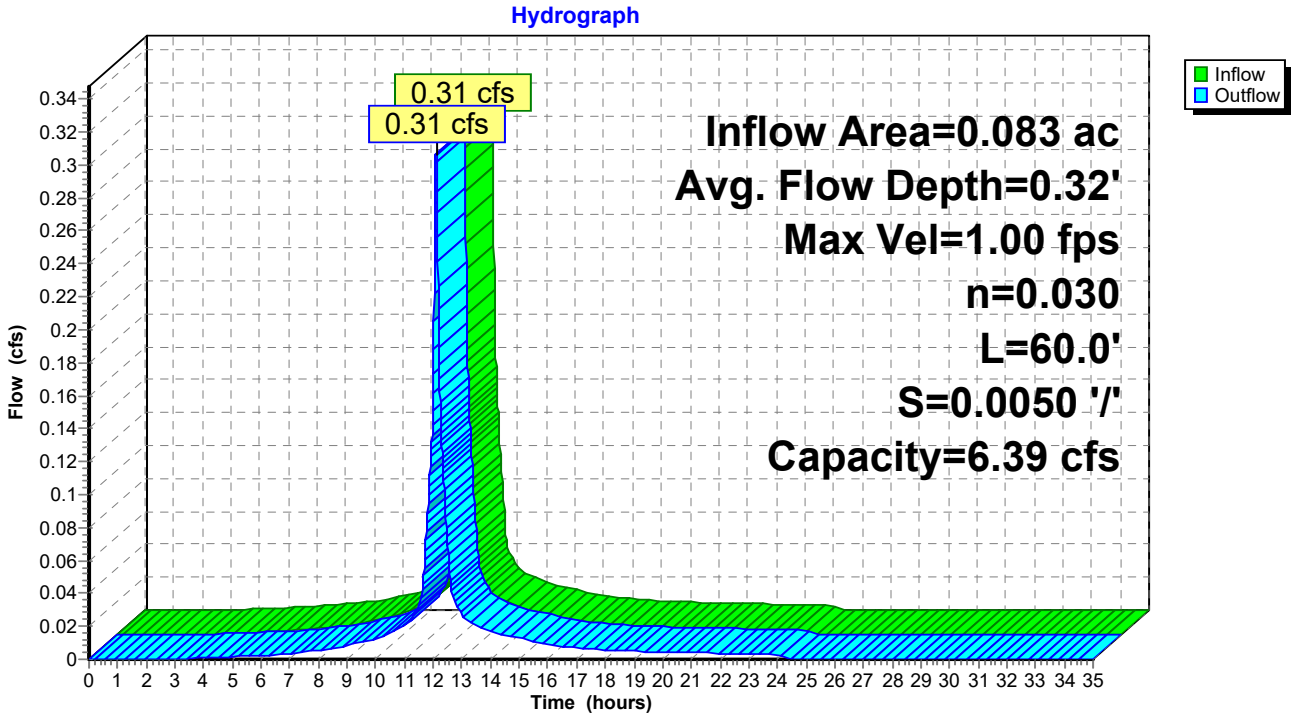
Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 1.00 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 0.38 fps, Avg. Travel Time= 2.6 min

Peak Storage= 18 cf @ 12.10 hrs
Average Depth at Peak Storage= 0.32' , Surface Width= 1.92'
Bank-Full Depth= 1.00' Flow Area= 3.0 sf, Capacity= 6.39 cfs

0.00' x 1.00' deep channel, n= 0.030
Side Slope Z-value= 3.0 '/' Top Width= 6.00'
Length= 60.0' Slope= 0.0050 '/'
Inlet Invert= 498.30', Outlet Invert= 498.00'



Reach 4R: CV4



Summary for Pond 1P: RAIN GARDEN 1

Inflow Area = 0.369 ac, 51.67% Impervious, Inflow Depth = 1.95" for 10 Year Storm event
Inflow = 0.79 cfs @ 12.10 hrs, Volume= 0.060 af
Outflow = 0.19 cfs @ 12.51 hrs, Volume= 0.060 af, Atten= 76%, Lag= 24.8 min
Primary = 0.19 cfs @ 12.51 hrs, Volume= 0.060 af
Routed to Link OP1 : ELM STREET

Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 497.18' @ 12.51 hrs Surf.Area= 1,844 sf Storage= 779 cf
Flood Elev= 498.00' Surf.Area= 2,800 sf Storage= 1,790 cf

Plug-Flow detention time= 46.0 min calculated for 0.060 af (100% of inflow)
Center-of-Mass det. time= 46.0 min (848.5 - 802.5)

Volume	Invert	Avail.Storage	Storage Description
#1	497.00'	1,128 cf	**Basin (Prismatic)** Listed below (Recalc)
#2	494.25'	600 cf	**Sand (Prismatic)** Listed below (Recalc) 1,499 cf Overall x 40.0% Voids
#3	493.75'	63 cf	**Stone (Prismatic)** Listed below (Recalc) 156 cf Overall x 40.0% Voids
		1,790 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
497.00	545	0	0
498.00	1,710	1,128	1,128

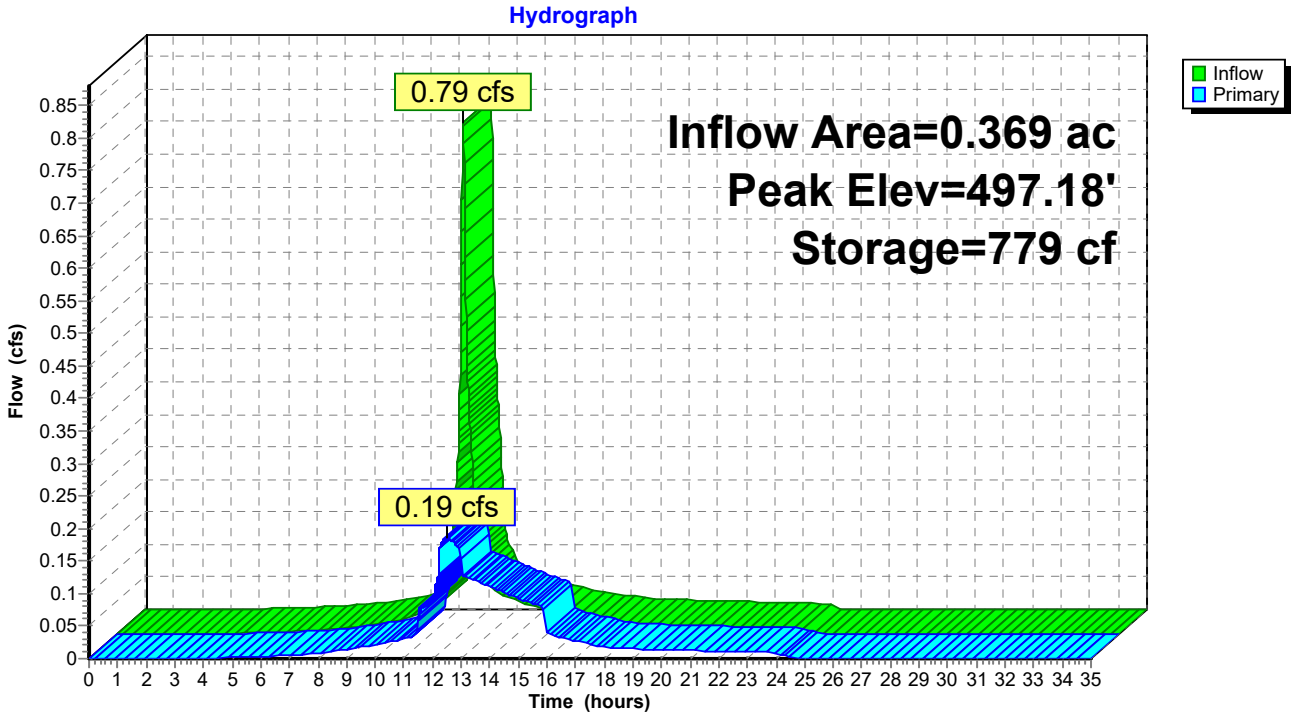
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
494.25	545	0	0
497.00	545	1,499	1,499

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
493.75	80	0	0
494.25	545	156	156

Device	Routing	Invert	Outlet Devices
#1	Device 2	493.75'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 490.00' Phase-In= 0.10'
#2	Device 3	493.75'	**6.0" Round UD** L= 135.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 493.75' / 493.75' S= 0.0000 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.20 sf
#3	Primary	493.75'	**12.0" Round Culvert** L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 493.75' / 493.50' S= 0.0125 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf
#4	Primary	497.70'	**24.0" x 24.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.19 cfs @ 12.51 hrs HW=497.18' TW=0.00' (Dynamic Tailwater)
- **3=Culvert** (Passes 0.19 cfs of 5.11 cfs potential flow)
  - **2=UD** (Passes 0.19 cfs of 0.52 cfs potential flow)
    - **1=Exfiltration** (Controls 0.19 cfs)
- **4=Grate** (Controls 0.00 cfs)

Pond 1P: RAIN GARDEN 1



Summary for Pond 2P: RAIN GARDEN 2

Inflow Area = 0.377 ac, 50.43% Impervious, Inflow Depth = 2.14" for 10 Year Storm event
Inflow = 0.89 cfs @ 12.09 hrs, Volume= 0.067 af
Outflow = 0.22 cfs @ 12.50 hrs, Volume= 0.066 af, Atten= 76%, Lag= 24.1 min
Primary = 0.22 cfs @ 12.50 hrs, Volume= 0.066 af
Routed to Link OP1 : ELM STREET

Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 497.32' @ 12.50 hrs Surf.Area= 1,936 sf Storage= 875 cf
Flood Elev= 498.00' Surf.Area= 2,800 sf Storage= 1,729 cf

Plug-Flow detention time= 55.6 min calculated for 0.066 af (98% of inflow)
Center-of-Mass det. time= 46.0 min (844.7 - 798.8)

Volume	Invert	Avail.Storage	Storage Description
#1	497.00'	1,073 cf	**Basin (Conic)** Listed below (Recalc)
#2	494.25'	600 cf	**Sand (Conic)** Listed below (Recalc) 1,499 cf Overall x 40.0% Voids
#3	493.75'	56 cf	**Stone (Conic)** Listed below (Recalc) 139 cf Overall x 40.0% Voids
		1,729 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
497.00	545	0	0	545
498.00	1,710	1,073	1,073	1,716

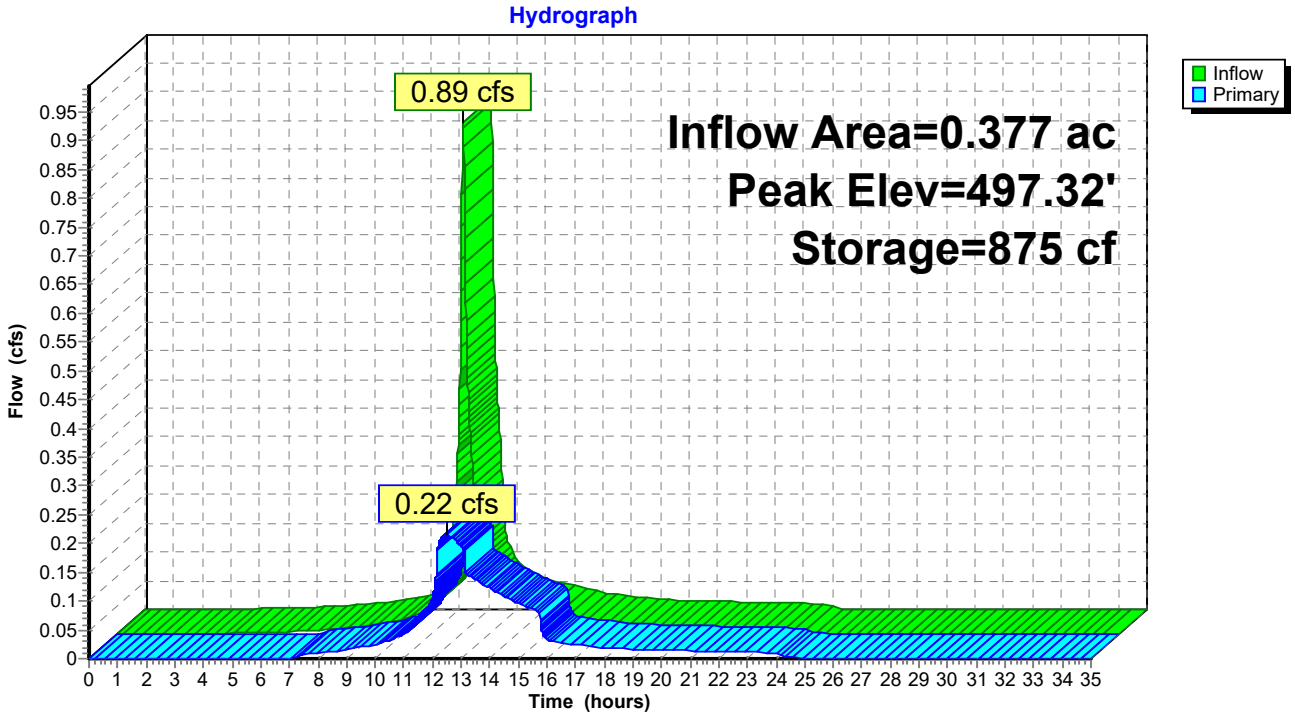
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
494.25	545	0	0	545
497.00	545	1,499	1,499	773

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
493.75	80	0	0	80
494.25	545	139	139	546

Device	Routing	Invert	Outlet Devices
#1	Device 2	493.75'	**3.000 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 490.00' Phase-In= 0.10'
#2	Device 3	493.75'	**6.0" Round UD** L= 135.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 493.75' / 493.75' S= 0.0000 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.20 sf
#3	Primary	494.20'	**12.0" Round Culvert** L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 494.20' / 493.90' S= 0.0107 '/' Cc= 0.900 n= 0.020 Corrugated PE, corrugated interior, Flow Area= 0.79 sf
#4	Primary	497.70'	**24.0" x 24.0" Horiz. Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.22 cfs @ 12.50 hrs HW=497.32' TW=0.00' (Dynamic Tailwater)
- **3=Culvert** (Passes 0.22 cfs of 4.83 cfs potential flow)
  - **2=UD** (Passes 0.22 cfs of 0.53 cfs potential flow)
    - **1=Exfiltration** (Controls 0.22 cfs)
- **4=Grate** (Controls 0.00 cfs)

Pond 2P: RAIN GARDEN 2



Summary for Pond 3P: DRIP STRIPS 1

Inflow Area = 0.051 ac,100.00% Impervious, Inflow Depth = 3.75" for 10 Year Storm event
Inflow = 0.20 cfs @ 12.08 hrs, Volume= 0.016 af
Outflow = 0.05 cfs @ 12.46 hrs, Volume= 0.016 af, Atten= 75%, Lag= 22.4 min
Discarded = 0.05 cfs @ 12.46 hrs, Volume= 0.016 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 496.70' @ 12.46 hrs Surf.Area= 575 sf Storage= 161 cf
Flood Elev= 500.00' Surf.Area= 575 sf Storage= 920 cf

Plug-Flow detention time= 22.3 min calculated for 0.016 af (100% of inflow)
Center-of-Mass det. time= 22.3 min (774.3 - 752.1)

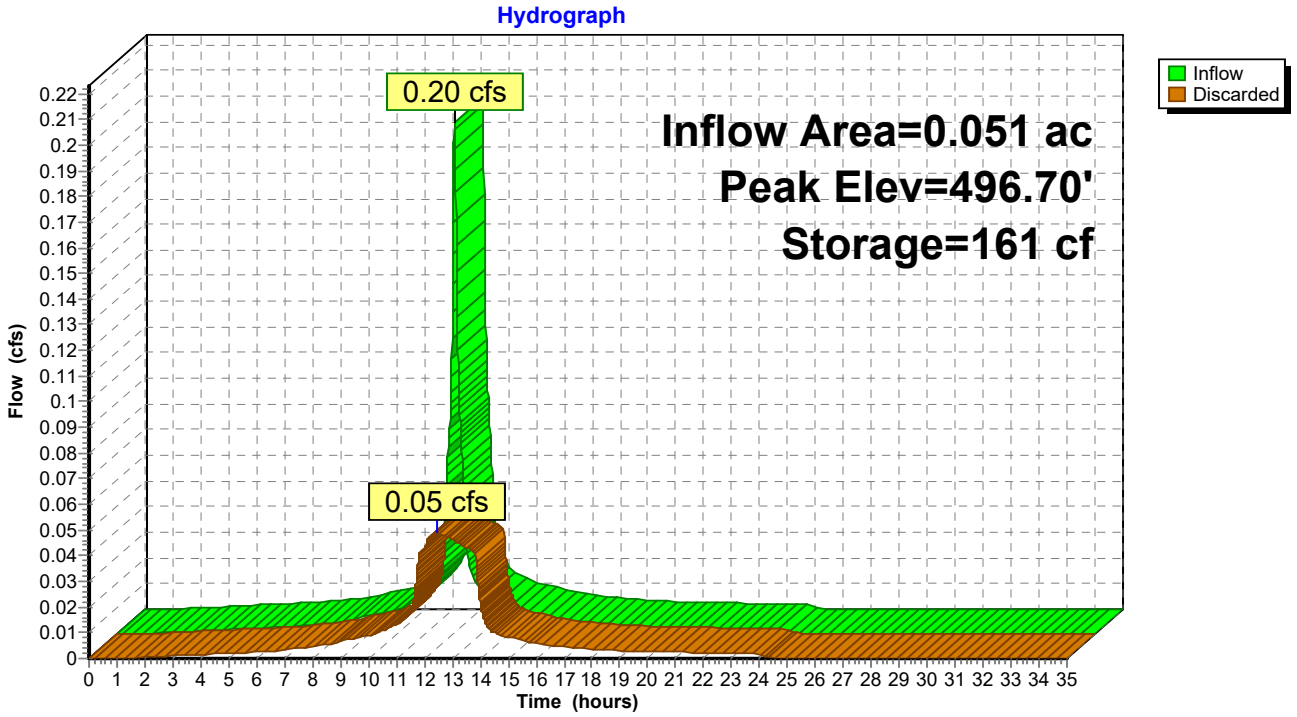
Volume	Invert	Avail.Storage	Storage Description
#1	496.00'	920 cf	**Stone (Conic)** Listed below (Recalc) 2,300 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
496.00	575	0	0	575
500.00	575	2,300	2,300	915

Device	Routing	Invert	Outlet Devices
#1	Discarded	496.00'	**3.000 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 490.00' Phase-In= 0.10'

Discarded OutFlow Max=0.05 cfs @ 12.46 hrs HW=496.70' (Free Discharge)
↑**1=Exfiltration** (Controls 0.05 cfs)

Pond 3P: DRIP STRIPS 1



Summary for Pond 4P: DRIP STRIPS 2

Inflow Area = 0.051 ac,100.00% Impervious, Inflow Depth = 3.75" for 10 Year Storm event
Inflow = 0.20 cfs @ 12.08 hrs, Volume= 0.016 af
Outflow = 0.05 cfs @ 12.46 hrs, Volume= 0.016 af, Atten= 75%, Lag= 22.4 min
Discarded = 0.05 cfs @ 12.46 hrs, Volume= 0.016 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 496.70' @ 12.46 hrs Surf.Area= 575 sf Storage= 161 cf
Flood Elev= 500.00' Surf.Area= 575 sf Storage= 920 cf

Plug-Flow detention time= 22.3 min calculated for 0.016 af (100% of inflow)
Center-of-Mass det. time= 22.3 min (774.3 - 752.1)

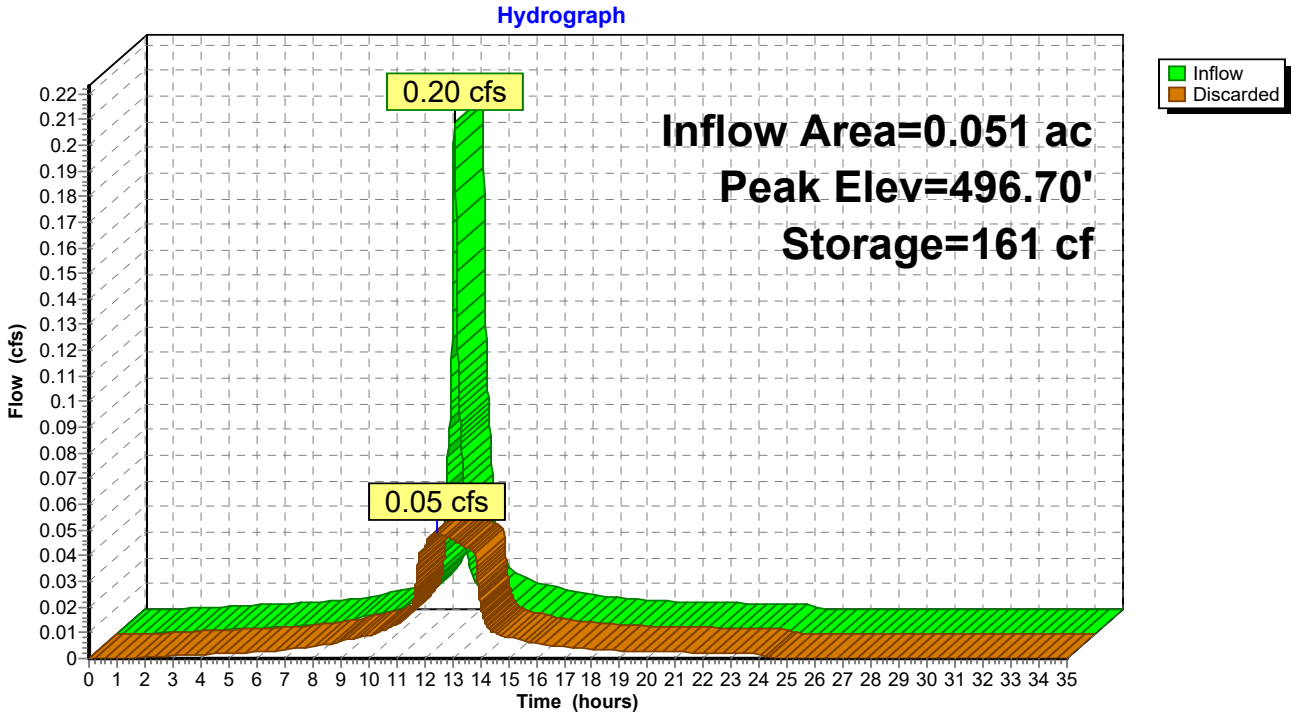
Volume	Invert	Avail.Storage	Storage Description
#1	496.00'	920 cf	**Stone (Conic)** Listed below (Recalc) 2,300 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
496.00	575	0	0	575
500.00	575	2,300	2,300	915

Device	Routing	Invert	Outlet Devices
#1	Discarded	496.00'	**3.000 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 490.00' Phase-In= 0.10'

Discarded OutFlow Max=0.05 cfs @ 12.46 hrs HW=496.70' (Free Discharge)
↑**1=Exfiltration** (Controls 0.05 cfs)

Pond 4P: DRIP STRIPS 2

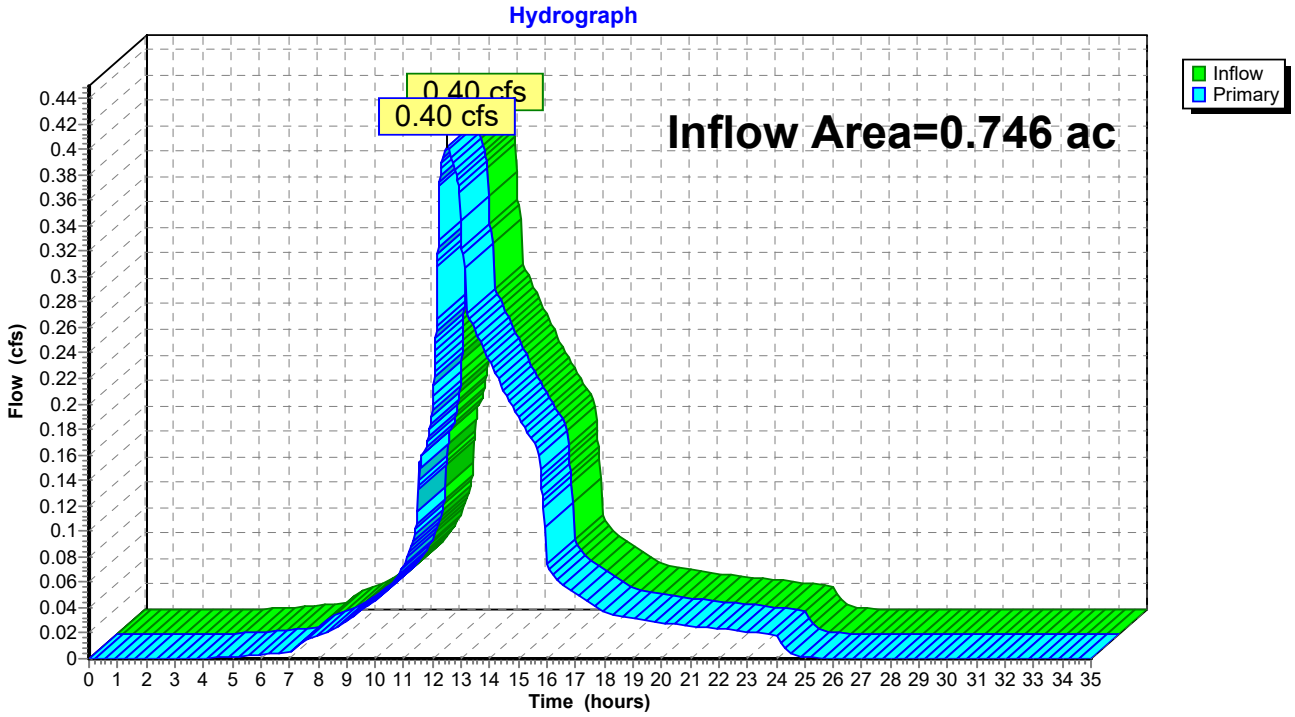


Summary for Link OP1: ELM STREET

Inflow Area = 0.746 ac, 51.04% Impervious, Inflow Depth = 2.03" for 10 Year Storm event
Inflow = 0.40 cfs @ 12.50 hrs, Volume= 0.126 af
Primary = 0.40 cfs @ 12.50 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-35.00 hrs, dt= 0.01 hrs

Link OP1: ELM STREET



Section 3.1

Inspection & Maintenance Manual

Elm City Commons
Main Street - Keene, New Hampshire
Storm Water Management System
Inspection and Maintenance Manual

Introduction

The operation and maintenance of a storm water management system and its individual components is as critical to system performance as the design. Without proper maintenance, best management practices (BMPs) are likely to become functionally impaired or to fail, providing reduced or no treatment of storm water. Proper operation and maintenance will ensure that the storm water system and individual BMPs will remain effective at removing pollutants as designed and meeting New Hampshire's water quality objectives. Proper maintenance will:

- Maintain the volume of storm water treated over the long term;
- Sustain the pollutant removal efficiency of the BMP;
- Reduce the risk of re-suspending sediment and other pollutants captured by the BMP;
- Prevent structural deterioration of the BMP and minimize the need for expensive repairs;
- Decrease the potential for failure of the BMP.

Responsible Maintenance Party:

Applicant: Christopher Masiello
118 Portsmouth Ave, Building D, Suite 204
Stratham, NH 03885

Report Information:

- Christopher Masiello will be the entity responsible for implementing the required reporting, inspection, and maintenance activities identified in the I & M manual.
- Inspection and maintenance reports shall be completed after each inspection. Copies of the report forms to be completed by the inspector are attached at the end of this manual, including:
    - Inspection checklist to be used during each inspection;
    - Inspection and maintenance logs to document each inspection and maintenance activity;

Maintenance Recommendations for Best Management Practices:

The following recommendations are to be used as a guide for the inspection and maintenance of the permanent erosion and sediment control measures.

We recommend that inspections be performed every couple of weeks and after larger storm events within the first year following construction to ensure that the site remains stabilized (site and slopes).

Rain Gardens

- Basin should be inspected at least twice annually, and following any rainfall event exceeding 2.5 inches in a 24 hour period, with maintenance or rehabilitation conducted as warranted by such inspection.
- Inspect, repair and remove debris from headwalls, end sections and riprap aprons at pipe outlets.
- Remove accumulated debris such as leaves, sticks, or trash from top stone layer and clean out grates. Open the clean out grates and verify that the underlying pipe is clear of sediment. If sediment is visible, flush each pipe with water until sediment is removed. Remove sediment at the outlet pipe, prior to the grass treatment swale.
- Dispose of sediments and other wastes in conformance with applicable local, state and federal regulations.
- If an infiltration system does not drain within 72-hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to restore infiltration function, including but not limited to removal of accumulated sediments or reconstruction of the infiltration basin.

Treatment Swales

- Inspect the grass treatment swales for erosion, debris, and woody vegetation. Remove debris and cut woody vegetation. Repair any eroded areas with loam and seed immediately.
- Verify that no invasive species are growing, and mitigate according to state regulations.
- The grass swales should be mowed periodically to maintain 3-inches of grass height.

Drainage Catch Basins

- Inspect basins at least semi-annually.
- Vacuum the sediment basins when the sediment reaches one-half the depth from the bottom of the catch basin to the invert of the outlet pipe.
- Repair damaged basin grates immediately after the inspection.
- Repair pavement damage around the basins immediately after the inspection to prevent further damage to the structure or paved area.

- Dispose of sediments and other wastes in conformance with applicable local, state and federal regulations.

Outlet Protection - Riprap Aprons

- Inspect the outlet protection annually for damage and deterioration. Repair damages immediately.
- Remove debris from apron area.

Inspection Checklist /Maintenance Logs

The inspection checklist and maintenance logs following this report shall be used as a guide for the inspection reporting for this project.

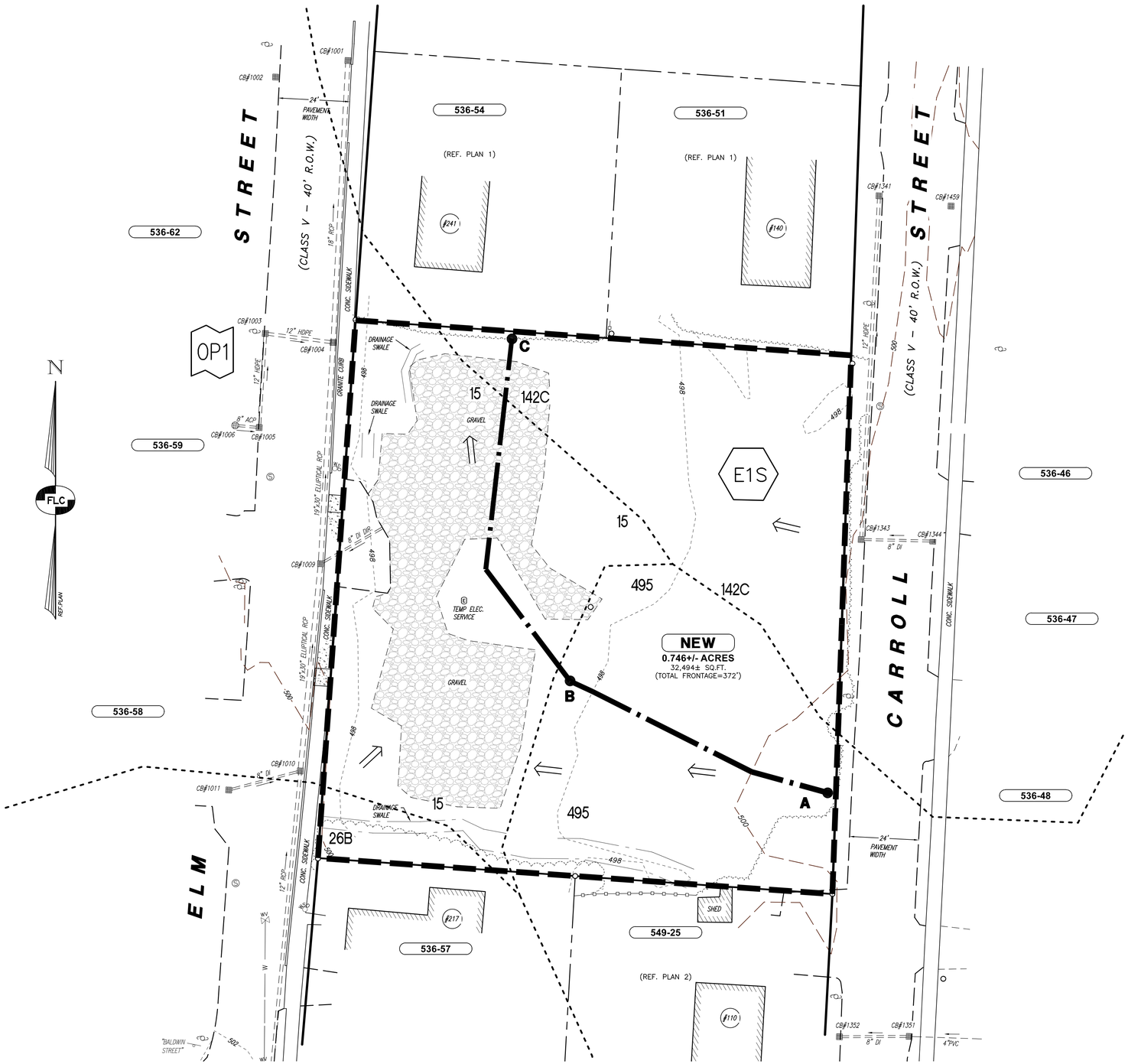
Inspection Checklist

- ☐ Rain Gardens
- ☐ Treatment Swales
- ☐ Outlet Protections
- ☐ Outlet Protection/Riprap Aprons

Inspection and Maintenance Log					
	BMP	**Inspection Date**	**Inspected By**	**Maintenance Required?**	**Maintenance Performed**
1				❑Yes ❑No	
2				❑Yes ❑No	
3				❑Yes ❑No	
4				❑Yes ❑No	
5				❑Yes ❑No	
6				❑Yes ❑No	
7				❑Yes ❑No	
8				❑Yes ❑No	
9				❑Yes ❑No	

Section 3.2

Drainage Area Plans



DRAINAGE SYMBOLS:

- 1P — PIPE OR BASIN
- E1S — SUBCATCHMENT
- R2 — REACH
- 0P1 — OBSERVATION POINT
- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- SURFACE WATER FLOW

NRCS SOILS LEGEND:

SOURCE: USDA NRCS WEB SOIL SURVEY

SOIL BOUNDARY	
15	SEARSPORT MUCKY PEAT, HSG D
26B	WINDSOR LOAMY SAND, 3 TO 8%, SLOPES, HSG A
142C	MONADNOCK FINE SANDY LOAM, 8 TO 15% SLOPES, HSG B
495	OSSIPEE MUCKY PEAT, HSG D

GRAPHIC SCALE

20' 10' 0 20' 40' 60'

IMPERIAL: 1"=20'

REV.	DATE	DESCRIPTION	C/O	DR	CK

PRE-DEVELOPMENT DRAINAGE PLAN

TAX MAP 536 LOTS 49, 50, 55, 56
(0 ELM STREET, 0 CARROLL STREET
& 225 ELM STREET)
KEENE, NEW HAMPSHIRE

PREPARED FOR:

CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

LAND OF:

NUEVO TRANSFERS LLC
69A ISLAND STREET, KEENE, NH 03431

SCALE: 1" = 20' APRIL 17, 2026

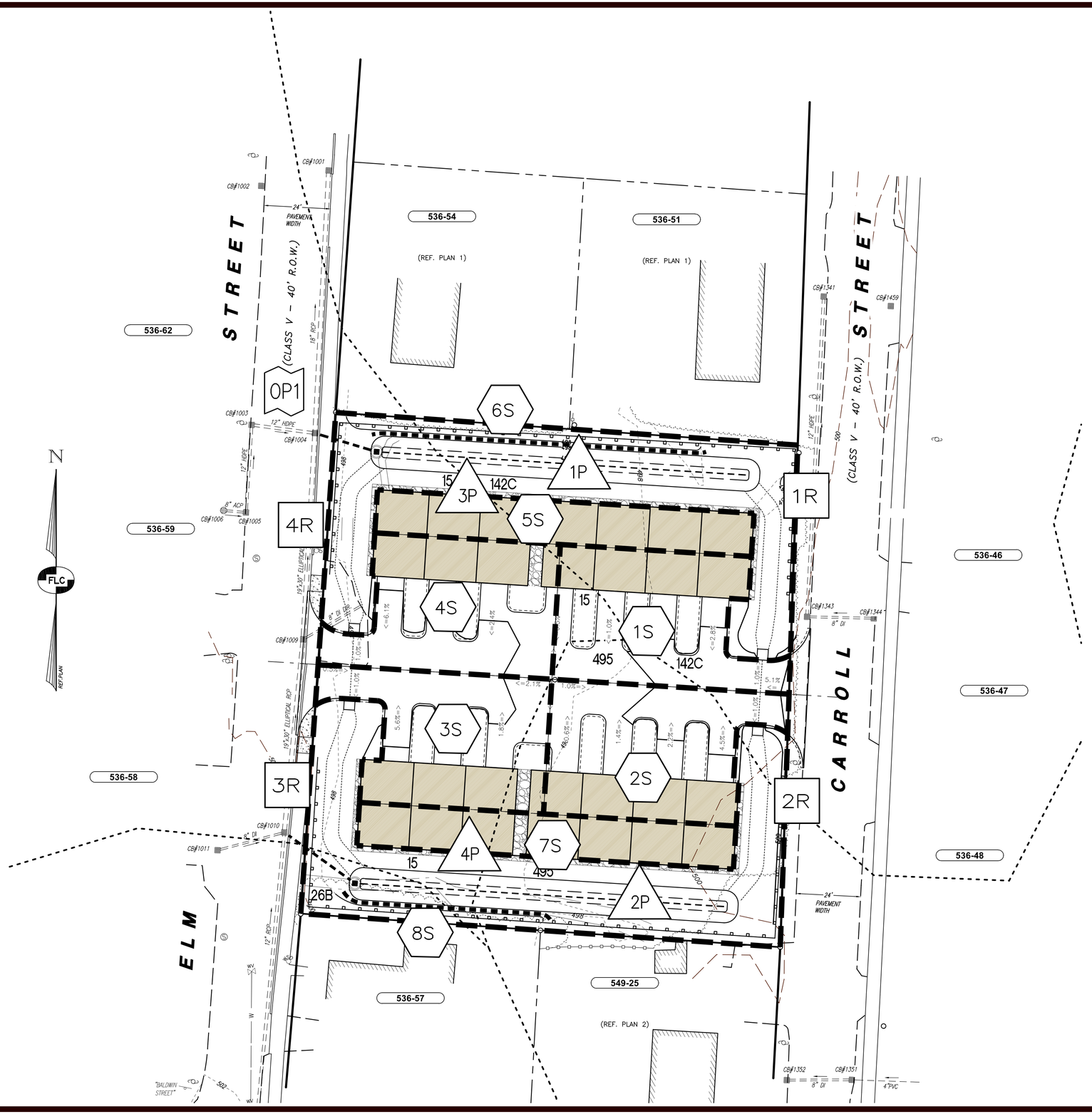
Surveying ⌖ Engineering ⌖ Land Planning ⌖ Permitting ⌖ Septic Designs

FIELDSTONE LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
45 Roxbury Street, Keene, NH 03431
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

FILE: 4200DP00.dwg	PROJ. NO. 4200.00	SHEET: DP-1

Apr 17, 2026 — 7:20am FLC-31
P:\0_FLC\0_PROJECTS\04200\4200.00\DWGS\



DRAINAGE SYMBOLS:

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- E1S — SUBCATCHMENT
- 1R — REACH
- 0P1 — OBSERVATION POINT
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- TIME OF CONCENTRATION
- SURFACE WATER FLOW

NRCS SOILS LEGEND:

SOURCE: USDA NRCS WEB SOIL SURVEY

SOIL BOUNDARY

15	SEARSPORT MUCKY PEAT, HSG D
26B	WINDSOR LOAMY SAND, 3 TO 8%, SLOPES, HSG A
142C	MONADNOCK FINE SANDY LOAM, 8 TO 15% SLOPES, HSG B
495	OSSIPEE MUCKY PEAT, HSG D

GRAPHIC SCALE

20' 10' 0 20' 40' 60'

IMPERIAL: 1"=20'

REV.	DATE	DESCRIPTION	C/O	DR	CK

POST-DEVELOPMENT DRAINAGE PLAN

TAX MAP 536 LOTS 49, 50, 55, 56
(0 ELM STREET, 0 CARROLL STREET & 225 ELM STREET)
KEENE, NEW HAMPSHIRE

PREPARED FOR:

CHRISTOPHER MASIELLO
118 PORTSMOUTH AVENUE, BUILDING D SUITE 204, STRATHAM, NH 03885

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FILE: 4200DP00.dwg	PROJ. NO. 4200.00	SHEET: DP-2

Apr 16, 2026 - 1:44pm FLC-31
P:\0_FLC\0_PROJECTS\04200\4200.00\DWGS\

CITY OF KEENE
NEW HAMPSHIRE

Meeting Date: May 26, 2026

To: Planning Board

From: Evan Clements, Planner

Through: Mari Brunner, Senior Planner

Subject: **PB-26-13 - George St. Cottage Court Conditional Use Permit - Applicant A. Eli Leno, on behalf of owner NH Home Buyers LLC, proposes to convert a detached garage into a dwelling unit on the single-family property located at 135 George St. (TMP# 534-002-000). The property is ~.26 ac and is in the Low Density District.**

Recommendation:

To review the attached staff report and application materials in preparation for the public hearing.

Attachments:

1. Staff Report
2. Application Materials
3. Applicant Narrative
4. Existing & Proposed Conditions Plan
5. Architectural Plans

Background:

The subject property is an existing .26 ac residential lot located on the south side of George St. between Charles St. to the east and Sullivan St. to the west. The property contains an existing ~800 Sq. ft. single-family residence and driveway. The purpose of this application is to construct a second single-family home on the southeast corner of the property. The new residence will utilize the existing driveway and contain an attached single car garage. The proposed location conforms with all current setback requirements. No additional changes to the property are proposed.

STAFF REPORT

PB-26-13 – COTTAGE COURT CONDITIONAL USE PERMIT – SINGLE FAMILY UNIT, 135 GEORGE ST

Request:

Applicant A. Eli Leno, on behalf of owner NH Home Buyers LLC, proposes to construct a second detached single-family residence on the property located at 135 George St. (TMP# 534-002-000). The property is ~.26 ac and is in the Low Density District.

Background:

The subject property is an existing .26 ac residential lot located on the south side of George St. between Charles St. to the east and Sullivan St. to the west. The property contains an existing ~800 Sq. ft. single-family residence and driveway. The house was built in 1905 and is legally non-conforming with respect to the front and side setbacks. The detached garage that was located on the property was recently demolished as it was in poor condition. The property is in the Low Density District and is adjacent to single-family uses to the north and west, a duplex to the east, and forested cemetery land to the south.

Fig 1: Aerial of 135 George St outlined in yellow.

The purpose of this application is to construct a second single-family home on the southeast corner of the property. The new residence will utilize the existing driveway and contain an attached single car garage. The proposed location conforms with all current setback requirements. No additional changes to the property are proposed.

Determination of Regional Impact:

Staff have made a preliminary evaluation that the proposal does not appear to have the potential for "regional impact" as defined in RSA 36:55. The Board should make a final determination as to whether the proposal could have the potential for regional impact.

Completeness:

The applicant requests exemptions from submitting a grading plan, landscaping plan, lighting plan, and all technical reports. Staff have made the preliminary determination that granting these exemptions will have no bearing on the merits of the application and recommend that the Board accept the application as complete.

Application Analysis:

Article 17 – Cottage Court Conditional Use Permit Criteria:

17.4 Permitted Uses: The permitted use table 17-1 allows for Dwelling, Single-Family in the Low-Density zoning district. This standard has been met.

17.5.1 Development Types Allowed: The applicant proposes to maintain the existing lot as a single parcel and add the second dwelling unit. At this time the applicant has not decided if the units will be rented out or sold as condominiums. This standard has been met.

17.5.3 Conditional Use Permit Standards:

A. Dwelling Unit Size: The proposed building footprint and gross floor area (gfa) of the dwelling unit is 804 sq. ft. The building footprint is calculated excluding the garage and porches, and the unit size is calculated excluding garages. Since the proposed porches are covered but not enclosed by walls, these are also excluded from the unit size calculation. This standard is met.

B. Parking: Each unit will have one exterior parking space. This standard is met.

C. Building Separation: Each building has more than 5 ft of separation. This standard is met.

D. Driveways: Both units will utilize existing driveways and street access points. No new street access or driveways are proposed. This standard is met.

E. Screening: The proposed single-family residence is not a greater intensity of use than surrounding uses. Additional screening is not required. This standard is met.

F. Architectural Guidelines: The applicant proposes a single-story cottage-style bungalow that appears to utilize traditional building materials and architectural practices common throughout the City. The Board will need to determine if this standard is met.

Fig 2: Rendering of proposed dwelling.

Recommended Motion:

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

"Grant final approval for PB-26-13 as shown on the plans prepared by Associated Designs Inc. at a scale of ¼ inch =1 foot on January 21, 2026 and on the plans prepared by Smith & Pospesil Land Surveying Company, PLLC at a scale of 1inch =10 feet on May 2, 2026 with the following conditions:

1. **Subsequent to final approval and signature of the plans by the Planning Board Chair, the following conditions shall be met:**
    a. **Prior to the commencement of site work, the erosion and sediment control measures shall be inspected by the Community Development Department to ensure compliance with this application and all City of Keene regulations.**
    b. **Submittal of recorded easements and/or any other legal instruments necessary for this application to the Community Development Department.**

City of Keene, NH

Cottage Court 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:

NUMBER OF NEW DWELLING UNITS PROPOSED: 2 total, 1 new

(Please note: Proposals that include the creation of 5 or more new units will require concurrent Major Site Plan review. See the Major/Minor Site Plan application for additional information.)

project address(es): 135 George Street, Keene, NH 03431

DOES THIS PROJECT INCLUDE A PROPOSAL TO SUBDIVIDE ONE OR MORE PARCELS?

- YES
- ■ NO

(If yes, a Subdivision application will need to be submitted and reviewed currently with the Cottage Court application. See the Article 20 of the Land Development Code (LDC) for additional information.)

AVERAGE GROSS FLOOR AREA OF ALL PROPOSED UNITS (In SF): 2440

SECTION 2: CONTACT INFORMATION

PROPERTY OWNER	APPLICANT
NAME/COMPANY: NH Home Buyers LLC	**NAME/COMPANY:** Starting Nine Consulting Inc.
MAILING ADDRESS: PO Box 4066, Windham, NH 03087	**MAILING ADDRESS:** 10 Lydston Lane, Litchfield, NH 03052
PHONE: [redacted]	**PHONE:** [redacted]
EMAIL: [redacted]	**EMAIL:** [redacted]
SIGNATURE: DocuSigned by: Jeremy Beland A3D5A9BAC5C54BB...	**SIGNATURE:** DocuSigned by: [signature]
PRINTED NAME: Jeremy Beland	**PRINTED NAME:** Jim Cardello

AUTHORIZED AGENT (if different than Owner/Applicant)	FOR OFFICE USE ONLY:
NAME/COMPANY: A. Eli Leino, Esq., Bernstein Shur	**TAX MAP PARCEL #(s):** 534 .0 02 .0 00.
MAILING ADDRESS: 670 N. Commercial St, Ste 108, PO Box 1120, Manchester, NH 03105-1120	
PHONE: [redacted]	**PARCEL SIZE:** 0.26
EMAIL: [redacted]	**DATE STAMP:** RECEIVED APR 17 2026 By
SIGNATURE: [signature]	**ZONING DISTRICT:** LD
PRINTED NAME: A. Eli Leino	**PROJECT #:** PB-26-13

SECTION 3: APPLICATION SUBMISSION REQUIREMENTS

A COMPLETE APPLICATION MUST INCLUDE THE FOLLOWING ITEMS. BOTH PHYSICAL & DIGITAL COPIES OF APPLICATION MATERIALS MUST BE SUBMITTED USING THE METHODS BELOW.

- **Digitally:** Email (communitydevelopment@keenenh.gov) or a file-sharing platform (such as Dropbox)
- **Mail / Hand Deliver:** Community Development (4th Floor), City Hall, 3 Washington St, Keene, NH 03431

The submittal requirements for Cottage Court Conditional Use Permit (CUP) applications are outlined further in **Article 17.5.5.B** and **Article 26.14** of the Land Development Code (LDC). You may request an exemption from providing any of the items below, except the application fee, notice list, narrative, and mailing labels. The Community Development Director may grant an exemption, if it is determined that the scope of the project does not warrant the submittal.

Note: Additional information may be required by the respective decision-making authority during the review process.

GENERAL SUBMITTAL REQUIREMENTS

CERTIFIED NOTICE LIST (See **Attachment A** for more information.)

2 SETS OF MAILING LABELS (See **Attachment A** for more information.)

PROJECT NARRATIVE (See **Section 2 of Attachment B** for more information.)

FEES: Fill in the information below to calculate the total fee.

$100 base fee + $62 legal ad fee + ($1.44 current USPS certificate of mailing rate x 18 abutters) = $192.72 **(Total Fee)**

NOTE: Please call the Community Development Department for the current certificate of mailing rate. Checks should be made payable to the *City of Keene*. Credit card payments are accepted in-person or by calling 603-352-5440.

WAIVERS (See **Section 3 of Attachment B** for additional information.)

☐ **WAIVER(S) REQUESTED**
☒ **NO WAIVER(S) REQUESTED**

PLAN SETS (See Attachment C for additional information.)		SUBMITTED	EXEMPTION REQUESTED
LOCATION MAP OF PROPOSED IMPROVEMENTS	To be provided		
EXISTING CONDITIONS PLAN	To be provided		
PROPOSED CONDITIONS PLAN			X
GRADING PLAN			X
LANDSCAPING PLAN			X
LIGHTING PLAN			X
ELEVATIONS		✔	

TECHNICAL REPORTS (See Attachment C for additional information.)	SUBMITTED	EXEMPTION REQUESTED
DRAINAGE REPORT		✔
TRAFFIC ANALYSIS (ONLY REQUIRED FOR PROJECTS PROPOSING 10 OR MORE NEW DWELLING UNITS)		✔
SOIL ANALYSIS		✔
HISTORIC EVALUATION		✔
SCREENING ANALYSIS		✔
ARCHITECTURAL & VISUAL APPEARANCE ANALYSIS		✔
OTHER REPORTS / ANALYSES		✔

POSTED NOTICE REQUIREMENT (See Section 1 of Attachment B for additional information.)

ATTACHMENT A: CERTIFIED NOTICE LIST INSTRUCTIONS

City of Keene, NH

Community Development Department
Certified Notice List

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

Per Article 26.2.4 of the Land Development Code (LDC) and in accordance with state law, certain Zoning Board of Adjustment (ZBA), Planning Board, and Historic District Commission (HDC) applications require mailed notice.

The following parties are required to be noticed as part of the application process:

-Property owner
-Project applicant
-Authorized agent (if applicable)
-All direct property abutters (including those across water bodies and roads), as well as all properties within 200-ft of the subject parcel
-Every engineer, architect, land surveyor, or soil scientist whose professional seal appears on any plan
-Holders of conservation, preservation, or agricultural preservation restrictions on the property

**Note: Only direct abutters must be noticed as part of HDC applications.*

For these applications, the following items must be submitted:

-A list of all persons entitled to notice
-2 sets of mailing labels
-Notice certification form
-Mailing fee (current USPS certificate of mailing rate* x number of abutters)

**Please call the Community Development Department for the current certificate of mailing rate.*

The notice list shall include the following information:

-Property owner's name
-Property owner's mailing address
-Property owner's street address,
-The tax map parcel (TMP) number(s) (15-digit number)

The mailing labels shall include the following information:

-Property owner's name
-Property owner's mailing address
-The tax map parcel (TMP) number(s)

The City of Keene's GIS Database (axisgis.com/keenenh/) can be used to generate an abutters list and mailing labels.

PLEASE MAKE SURE THAT ALL PARTIES INCLUDED ON THE NOTICE LIST ARE ALSO INCLUDED ON THE MAILING LABELS.

CERTIFICATION OF ACCURACY

By signing below, you are certifying that the submitted notice list is accurate and true to the best of your ability and that per **Article 26.2.4.A.3** of the LDC, the notice list is current to within 10 days of the application submittal.

Jim Cardello
Print Name

04/16/2026
Date

DocuSigned by:
184F95967165413
Signature

RECEIVED
APR 17 2026
By

PB-26-13

NOTICE LIST			
This template can be used to record the name, mailing address, street address, and tax map parcel (TMP) # for each party that is required to be noticed as part of an application.			
OWNER NAME	**MAILING ADDRESS**	**STREET ADDRESS (If different from mailing address)**	**TAX MAP PARCEL (TMP) #**
Harry & Helen Shaw	136 George St, Keene, NH 03431		532-032-000
Benjamin O. Wilson	140 George St, Keene, NH 03431		532-033-000
Joshua & Rebecca Bezio	4 Charles St, Keene, NH 03431		532-034-000
Jason D. Woodson	39 Old Homestead Hwy Rear, N. Swanzey, NH 03431		532-055-000
Carrie Goldsmith & Gary Bernard	140 Talbot Hill Rd, Swanzey, NH 03431		534-001-000
Paul James & Annette Shackett	131 George St, Keene, NH 03431		534-003-000
City of Keene c/o City Manager	3 Washington St, Keene, NH 03431		534-004-000
Dan Toback, NH Home Buyers LLC	PO Box 4066, Windham, NH 03087		534-002-000
Jim Cardello, Starting Nine Consulting Inc.	10 Lydston Rd, Litchfield, NH 03052		
Eric Pospesil, Smith & Pospesil Land Surveying Co.	19 Annies Moonlight Dr, Franconia, NH 03580		
A. Eli Leino, Bernstein Shur Sawyer & Nelson	PO Box 1120, Manchester, NH 03105-1120		

ARTICLE 17. COTTAGE COURT OVERLAY DISTRICT
CONDITIONAL USE PERMIT NARRATIVE
135 George Street
Map 534, Lot 002
Keene, NH

In accordance with the Conditional Use Permit Procedure set forth in Land Development ("LDC") Code Section 17.5.5.B., please accept the following Narrative on behalf of the Applicant. 135 George Street (the "Property") is a 0.26-acre lot situated in the Low Density (LD) zoning district. The Property is improved by a single-family home built in 1905, as well as a garage. The Applicant is proposing to renovate the existing three-bedroom, one-bathroom house. The garage will be replaced with a two-bedroom, two-bathroom home with garage, built on a 1,201 square-foot footprint featuring 800 square feet of living space (see building plan included herewith).

Pursuant to Section 17.1, the proposal promotes infill development, encourages efficient use of land through the additional proposed unit, provides the type of "starter home' generally missing from the market, and encourages compact development within walking distance from Downtown Keene. Per Section 17.2, the location in the LD zone is applicable for the proposed Cottage Court development, and the proposed single-family use is allowed by Table 17-1.

17.5.3 Conditional Use Permit Standards

A. The proposed new building will provide 800 square feet of living space. This complies with the size requirement, which specifically excludes garages from the calculation.

B. At least one exterior parking space will be provided for each home, in compliance with this requirement.

C. The buildings will be separated to the maximum amount possible on the lot while complying with the side setback requirements.

D. No driveways providing access to three or more units are contemplated.

E. No internal roads are contemplated.

F. Both buildings, and neighborhood generally, are developed as single-family homes. As such, criterion F is not applicable to this project.

GRID N

NEW HAMPSHIRE STATE PLANE
COORDINATE SYSTEM NAD 83
MAGNETIC DECLINATION: 13° 38' W
CONVERGENCE ANGLE =0°24'35" TO GEODETIC NORTH
OBSERVATION DATE: APRIL, 2026
COMBINED SCALE FACTOR: 0.99997433

SULLIVAN STREET

TM 532 LOT 32
HARRY C & HELEN E SHAW
BK 784 PG 187
136 GEORGE ST
KEENE NH 03431

PAVED DRIVE

SIGN

GRANITE RETAINING WALL

SIDEWALK

TBM MAG NAIL
ELEV:541.86

BITUMINOUS CURB

GEORGE STREET

CATCH BASIN

120/11

SIGN

N 80°33'03" E 105.00'

3/4" IRON PIPE FOUND FLUSH

FLOWERING DECIDUOUS TREES

PAVED DRIVE

PAVED DRIVE

15' BUILDING SETBACK

WALKWAY

10" CHERRY
12" OAK
16" MAPLE
11" OAK
6" OAK
8" CHERRY

HOUSE

HOUSE

TM 534 LOT 3
PAUL J & ANNETTE M
SHACKETT
BK 3291 PG 709
131 GEORGE ST
KEENE NH 03431

DECK

CHAPEL DRIVE

PAVED DRIVE

DOG KENNEL

GARAGE

N 17°40'03" W 111.28'

24" MAPLE

10' BUILDING SETBACK

WOOD FENCE

STONE RETAINING WALL

MAPLE CLUMP

GRAVEL (FORMER GARAGE)

SHRUB

SHRUB

8" MAPLE
16" MAPLE

S 14°31'17" E 113.08'

14" MAPLE

TBM MAG NAIL
ELEV:546.80

10' BUILDING SETBACK

36" MAPLE

TM 534 LOT 2
NH HOME BUYERS LLC
BK 3326 PG 294
11,350.04 SQ FT
.26 AC

20' BUILDING SETBACK

TM 534 LOT 1
GOLDSMITH & BARNARD
REVOCABLE TRUST
BK 3157 PG 650
140 TALBOT HILL RD
SWANZEY NH 03446

30" OAK

WIRE FENCE

16" MAPLE

15" MAPLE

S 81°59'33" W 99.12'

24" MAPLE

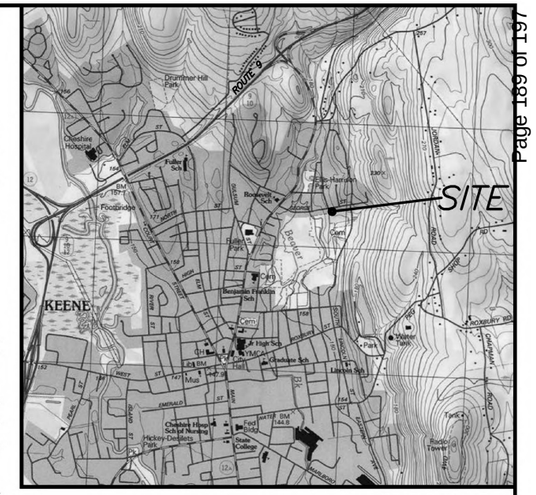
8" MAPLE

TBM MAG NAIL
ELEV:542.25

GATE

20" MAPLE

TM 534 LOT 4
CITY OF KEENE
3 WASHINGTON ST
KEENE NH 03431



LOCATION MAP
1 inch = 2000 feet

LEGEND

- Monument Found
- Calculated Point
- Utility Pole
- Hydrant
- Sewer Manhole
- Catch Basin
- Property Line
- Approx Abutters Line
- Major Contour Line
- Minor Contour Line
- Stonewall

0' 10' 20' 30'

Scale: 1 inch = 10 feet

Notes:

1. Owner of Record: NH Home Buyers LLC P.O. Box 4066 Windham, NH 03807.
2. The Basis of Bearing is Grid. The Horizontal Datum is on the New Hampshire State Plane Coordinate System NAD83 (2011). The Vertical Datum is NAVD 88. Both horizontal and vertical datum's were derived from a static GNSS observation taken during the time of the field survey and processed using the Online Positioning User System (OPUS).
3. This plan is based on a field survey completed in April of 2026 using iGage dual frequency RTK survey grade GNSS receivers, and meets the technical standards for an urban survey per the NH Code of Administrative Rules of the Board of Licensure for Land Surveyors.
4. The property lies in the Low Residential Zoning District – LR. Building Setbacks are 15' front, 10 feet side and 20' rear.
5. The subject parcel is severed by municipal water and sewer

Certification

"I certify that this survey plat is not a subdivision pursuant to N.H.R.S.A. Title LXIV 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." RSA 676:18,iii

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — NO. 967 — ERIC POSPESIL — SIGNATURE

A SURVEY OF LAND FOR

NH HOME BUYERS LLC

TAX MAP 534 LOT 2
VOLUME 3326 PAGE 294
IN THE TOWN OF
KEENE, NEW HAMPSHIRE

SMITH & POSPESIL
LAND SURVEYING COMPANY, PLLC
240 QUEBEC ROAD, LYMAN, N.H. 03585

APRIL 30, 2026

GRID N

NEW HAMPSHIRE STATE PLANE
COORDINATE SYSTEM NAD 83
MAGNETIC DECLINATION: 13° 38' W
CONVERGENCE ANGLE -0°24'35" TO GEODETIC NORTH
OBSERVATION DATE: APRIL, 2026
COMBINED SCALE FACTOR: 0.99997433

SULLIVAN STREET

TM 532 LOT 32
HARRY C & HELEN E SHAW
BK 784 PG 187
136 GEORGE ST
KEENE NH 03431

PAVED DRIVE

SIGN

GRANITE RETAINING WALL

SIDEWALK

TBM MAG NAIL
ELEV:541.86

BITUMINOUS CURB

GEORGE STREET

CATCH BASIN

120/11

N 80°33'03" E 105.00'

3/4" IRON PIPE FOUND FLUSH

10" CHERRY
12" OAK
16" MAPLE
11" OAK
6" OAK
8" CHERRY

WALKWAY

FLOWERING DECIDUOUS TREES

15' BUILDING SETBACK

HOUSE

PAVED DRIVE

GARAGE

SHRUB
SHRUB

PAVED APRON

STEP

CONCRETE PORCH

CHAPEL DRIVE

TM 534 LOT 3
PAUL J & ANNETTE M SHACKETT
BK 3291 PG 709
131 GEORGE ST
KEENE NH 03431

DECK

24" MAPLE

N 17°40'03" W 111.28'

10' BUILDING SETBACK

WOOD FENCE

STONE RETAINING WALL

TM 534 LOT 2
NH HOME BUYERS LLC
BK 3326 PG 294
11,350.04 SQ FT
.26 AC

CONC. WALK

CONCRETE PATIO

BULK HEAD

10' BUILDING SETBACK

8" MAPLE
16" MAPLE

S 14°31'17" E 113.08'

14" MAPLE

TBM MAG NAIL
ELEV:546.80

TM 534 LOT 1
GOLDSMITH & BARNARD REVOCABLE TRUST
BK 3157 PG 650
140 TALBOT HILL RD
SWANZEY NH 03446

36" MAPLE

20' BUILDING SETBACK

30" OAK

WIRE FENCE

PAVED DRIVE

DOG KENNEL

GARAGE

GATE

16" MAPLE

15" MAPLE

S 81°59'33" W 99.12'

24" MAPLE

8" MAPLE

TBM MAG NAIL
ELEV:542.25

20" MAPLE

TM 534 LOT 4
CITY OF KEENE
3 WASHINGTON ST
KEENE NH 03431

LOCATION MAP
1 inch = 2000 feet

LEGEND

- Monument Found
- Calculated Point
- Utility Pole
- Hydrant
- Sewer Manhole
- Catch Basin
- Property Line
- Approx Abutters Line
- Major Contour Line
- Minor Contour Line
- Stonewall

0' 10' 20' 30'

Scale: 1 inch = 10 feet

STATE OF NEW HAMPSHIRE — NO. 992 — ERIC S. POSPESIL — SIGNATURE — LICENSED LAND SURVEYOR

PROPPOSED CONDITIONS PLAN

NH HOME BUYERS LLC

TAX MAP 534 LOT 2
VOLUME 3326 PAGE 294
IN THE TOWN OF
KEENE, NEW HAMPSHIRE

SMITH & POSPESIL
LAND SURVEYING COMPANY, PLLC
240 QUEBEC ROAD, LYMAN, N.H. 03585

MAY 2, 2026

STANDARD CONSTRUCTION NOTES

General-

1.All construction, plumbing, electrical and mechanical will comply with the 2021 IRC One and two Family Dwelling Code and State, County and Municipal Codes.

2. Local registered design professional to verify all structural members capacity to support loads as required by site specific conditions and location prior to construction.

3. Wall bracing requirements shall b e reviewed by local design professional to comply with IRC Section R602.10 or when applicable R602.12 or designed by local registered design professional.

4.Construction shall comply with all Covenants, Conditions and Restrictions recorded against the land.

5.General contractor and all subcontractors will review plans for accuracy and verify all dimensions and compliance with above codes (see #1) prior to the start of construction. Bids submitted will be according to such review.

6.Safety, care of adjacent properties during construction, and compliance with all applicable safety regulations is, and shall be, the contractors and subcontractors responsibility.

7.All trees to be protected from damage of construction process and machines
unless approved for removal by owner.

8. It is the responsibility of the builder / contractor to provide waterproof protection of the structure.

Concrete-

1.Concrete shall be 5-7% air entrained with a minimum compressive strength of:
a) 2500 psi for basement walls and foundations not exposed to weather and for basement slabs and interior slabs on a grade.
b) 3000 psi for basement foundation and exterior walls and other vertical work exposed to weather.
c) 3500 psi for carport, porches and steps exposed to weather and garage floor slabs.
d. All concrete to comply with Section R402.2.

2.All concrete form work to be adequately tied together and braced to form a true line, square corners and plumb walls.

3.Footing and stem wall reinforcement shall comply with Sections R403.1.3.5.1 through R403.1.3.5.4. Steel reinforcement shall comply with requirements of ASTM A615 or A996M. ASTM A996 bars produced from rail steel shall be type R. The minimum yield strength of reinforcing steel shall be 40,000 psi (Grade 40)(276 MPa).

4.Poured footing to be poured on level (less the 1" in 10'-0" slope), undisturbed soil.

5.Install 3"X3"X0.229 galvanized plate washers between foundation sill plate and nut on all foundation bolts.

6.Crawl space venting minimum 1.0 sq.ft. for each 150 sq.ft. of foundation area.

Metal-

1.All flashing to be 24 ga. G.I. metal. Gravel stops and beam caps to be 22 ga. G.I. metal.

2.All framing connections to be Simpson Company, or approved equivalent.

Framing-

1.Exposed plywood to be exterior grade CCX. Nail 6" on edge 12" in field unless specified otherwise.

2.All dimension lumber to be Douglas Fir-Larch, 2x4 standard or better all other #2 or better unless noted otherwise.

3.All walls to be double plated, and plated joints will not be less than 48" apart. Top plate of interior partitions shall tie full into exterior wall plate.

4.Provide operable egress windows at basement and every sleeping room with a minimum clear opening of 5.7 sq.ft. (Ground floor egress window 5 sq.ft.) Least openable height: shall be net 24"; least openable width: shall be net 20"; sill height shall not be more than 44" above the floor. (R310.1).

5.Level changes at entries to be minimum 1/2" maximum 7 1/2".

6.Exterior bearing wall headers as per framing plans.

7.Interior bearing wall headers to be 4x6#2 df-l unless noted.

8.Plumbing walls to be 2X6 minimum unless approved by plumbing contractor.

9.Provide blocking for backing: Shower rod, 84" height; Towel rod, 42" height; Curtain rod, each side of all windows.

10.All pre-wiring for telephone, TV, Stereo etc. to be coordinated with owner.

11.All trusses to be per manufacturers engineering specifications. Truss details to be provided upon framing inspection. Truss manufacturer to verify all spans and configurations prior to truss fabrication.

12.Trusses shall not bear on interior partitions unless so designed.

13.Insulation baffles to be CDX plywood (or approved equal); no felt paper allowed. Use scrap if available.

Masonry-

1.Stone or Brick selected by owner.

2.Masonry fireplace to be constructed as per Section R1001, including fire damper as per Section R1001.7.1.

3.Provide an outside air inlet as per section R1006. Combustion air ducts shall be installed as per fireplace manufacturers instructions.

Thermal Protection-

1.Energy efficiency requirements to be reviewed for compliance with Chapter 11 based on climate zones defined by Figure N1101.7. Local codes may supersede base IRC code. Local design professional to review plans for compliance.

2. Prescriptive envelope requirements (Table N1101.1(1)):

Exterior walls above grade:	R-21 w/ intermediate wall framing.
Exterior walls below grade:	R-15, R-21 in framed cavity.
Flat ceilings:	R-49 (R-21 for less than 150 sq.ft.)
Vaulted ceilings (less than 50%):	R-30 rafter / R-30 Scissor truss
Vaulted ceilings. (50% or greater):	R-38 rafter / R-38 Scissor truss
Underfloors:	R-30
Slab edge perimeter:	R-15 (min. 24" horiz. or vert. below grade
Heated slab interior:	R-10 under entire slab.
Windows:	U-0.27 Maximum
Skylights:	U-0.50 Maximum
Exterior doors:	U-0.20 Maximum
Ext. doors w/ > 2.5 sq.ft. glazing	U-0.40 Maximum

3. Ground surface of the under-floor space to be covered by Class I vapor retarder or other approved material lapped not less than 12" at joints at extended not less than 12" up perimeter foundation.

4. Install Class II vapor retarder on the warm in winter side of the insulation in all framed walls, floors, and roof/ceiling that are included in the thermal envelop.

Plumbing-

1.Fixtures to be identified by owner. Color to be white unless specified.

2.Plumbing waste lines to be located as follows: The center line of water closet waste line to be 12" from face of wall behind; Tub waste lines to be centered in wall behind controls and 15" face of side wall.

3.All wallboard joints, cut edges and pipe openings at tub and shower enclosures to be protected with a separate coat of tile adhesive used as sealer. Prior to application of the finish material, all openings around pipes, fixtures, etc. to be caulked with approved waterproof non-hardening caulking compound.

4.The maximum amount of water used by new plumbing fixtures: a) toilets: 1.6 gal. per flush; b) shower heads: 2.5 GPM; c)interior faucets: 2.5 GPM.

5.Showers shall be equipped with control valves of the pressure balance/ thermostatic mixing, or the combination pressure balance/thermostatic mixing valve type with high limit stops in accordance with ASME A112.18.1. [P-418]

6.Glass tub and shower doors to be safety glazed to comply with CPSC 16-CFR, Part 1201.

7.Plumbing contractor to install plumbing to minimize noise from use and protect structural support members.

8.Water heaters to be provided with pressure relief valves with provision to drain to exterior or approved drain.

9.Water heaters shall be anchored to resist horizontal movement. [P-507.2].

10.Storm water drains (within 5' of foundation wall) shall be of material as specified for sanitary drainage work. Storm water sewers (5' and beyond foundation) shall be of an approved material as per plumbing contractor.

Finish-

1.All finishes to be identified by owner, including cabinets, doors, and finish trim, etc.

2.Flash all exterior doors, windows, and horizontal wood trim as required.

3.Counter tops to be self edged, and coved. (or as per owner).

4.All open flames and glow elements to be minimum 18" above garage floor.

5.Dwelling-Garage separation as per table R302.6.
a. From the residence and attics, 1/2" Gypsum bd. applied to garage side.
b. From habitable rooms above the garage, 5/8" Type "X" gypsum bd.
c. Walls and other structural elements supporting assemblies used for separation required my this section, 1/2" gypsum bd.
d. Garages located less than 3' from a dwelling unit, 1/2" gypsum bd. on interior side of walls within this area.

6.Skylights shall be of an approved kit design, or provide construction plans and details on site to be approved by the inspector before installation begins. All minimum glazing and curb requirements of R-308.6 shall be met.

7.Provide a minimum of 30" wide-space and 21" clear in front of all water closets. [Figure R307.1].

8.Minimum hallway width 36": finish wall to finish wall. [R-311.6]

9.Provide an approved smoke detector as per section R314 and in compliance w/ NFPA 72. at all floor levels and at all sleeping areas. Coordinate location with field inspector.

10.Provide approved carbon monoxide alarms as per section R315. Alarms shall be listed with UL2034. Combination carbon monoxide and smoke alarms are allowed as per R315.4 and shall be listed in accordance with UL217 and UL2034.

11.Recessed light fixtures installed in insulated cavities shall be labeled as suitable for being installed in direct contact with insulation, i.e. IC rated.

THE PIKE COTTAGE
REVERSE / BASEMENT FOUNDATION

TITLE: ARTIST'S RENDERING & STANDARD CONSTRUCTION NOTES
DATE: 01/21/26
SCALE: NOTED
DRAWN BY: K.A
CHECK BY: TT

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EUGENE, OREGON
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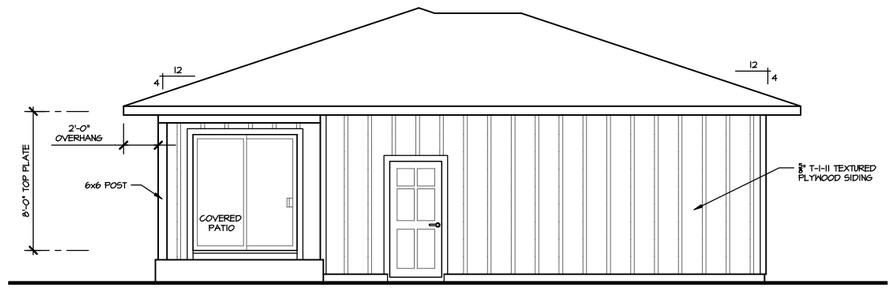
FAX: (541) 461-1274

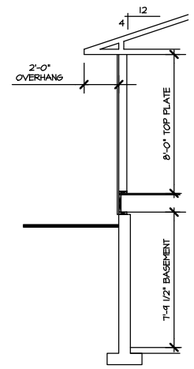
REVISIONS:
REVISION OF: 1057-002

PROJECT: 31-339R REVERSE BASEMENT
SHEET 1 OF 7



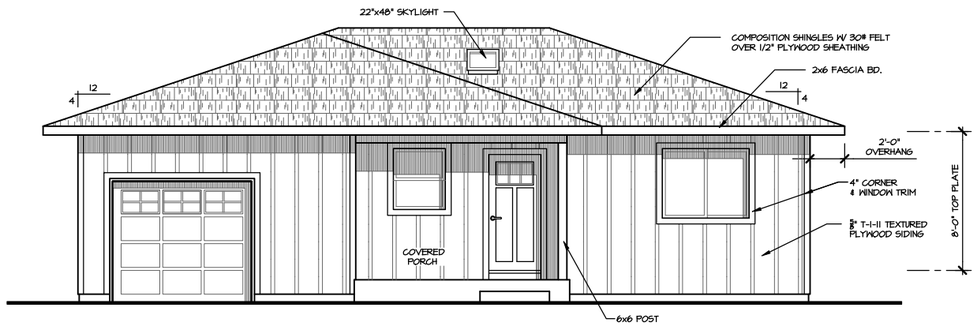
LEFT ELEVATION

SCALE: 1/4"=1'-0"



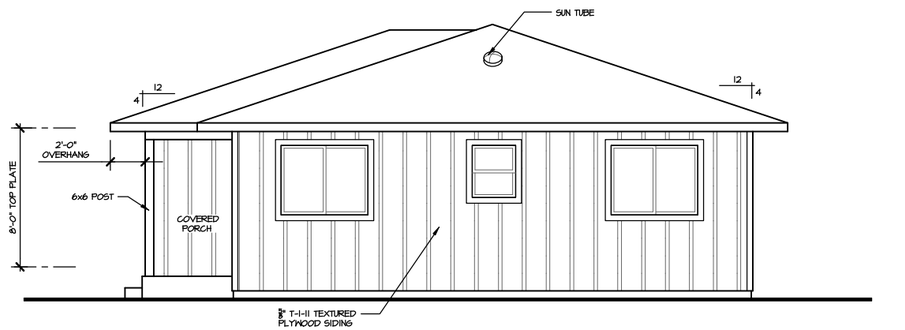
EAVE REFERENCE OUTLINE

SCALE: 1/4"=1'-0"



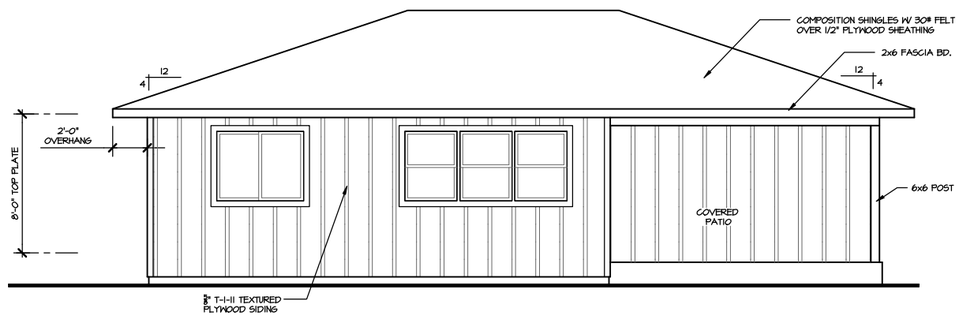
FRONT ELEVATION

SCALE: 1/4"=1'-0"



RIGHT ELEVATION

SCALE: 1/4"=1'-0"



REAR ELEVATION

SCALE: 1/4"=1'-0"

NOTES:

OWNER & BUILDER/ CONTRACTOR(S) TO REVIEW PLAN FOR COMPLETENESS AND ACCURACY PRIOR TO CONSTRUCTION. NOTIFY ASSOCIATED DESIGNS INC. OF ANY ERRORS OR OMISSIONS PRIOR TO THE START OF CONSTRUCTION.

ASSUMED DESIGN LOADS:

LIVE LOAD @ FLOOR	=	40 PSF
DEAD LOAD @ FLOOR	=	10 PSF
LIVE/SNOW LOAD @ ROOF	=	25 PSF
DEAD LOAD @ ROOF	=	15 PSF
SOIL BEARING PRESSURE	=	1500 PSF

THE PIKE COTTAGE

REVERSE / BASEMENT FOUNDATION

TITLE: ELEVATIONS

DATE: 01/21/26

SCALE: NOTED

DRAWN BY: KA CHECK BY: TT

Associated DESIGNS

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EUGENE, OREGON
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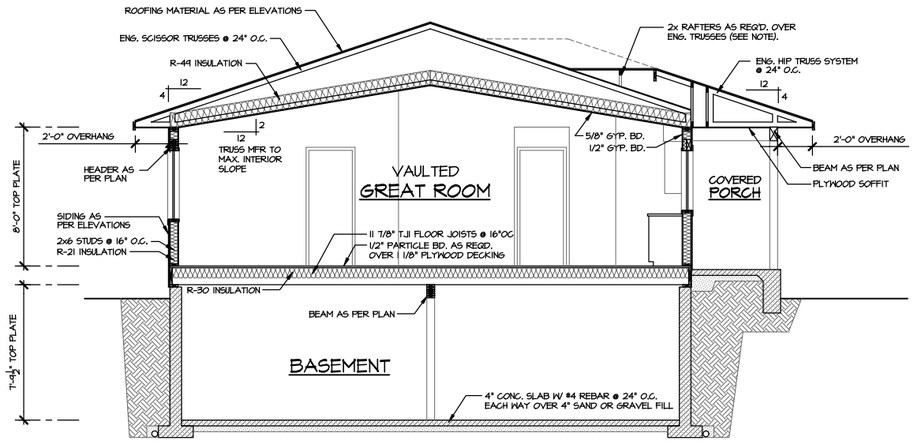
FAX: (541) 461-1274

REVISIONS:

REVISION OF: 1057-002

PROJECT: 31-339R REVERSE BASEMENT

SHEET 2 OF 7



SECTION A-A

SCALE: 1/4"=1'-0"

LEGEND:

READING DOOR & WINDOW SIZES:
SIZES ARE LISTED AS FEET/INCHES/FEET/INCHES.
I.E., 3068 DOOR IS 3'-0" WIDE x 6'-8" TALL
5040 WINDOW IS 5'-0" WIDE x 4'-0" TALL

STANDARD ABBREVIATIONS:

DOORS

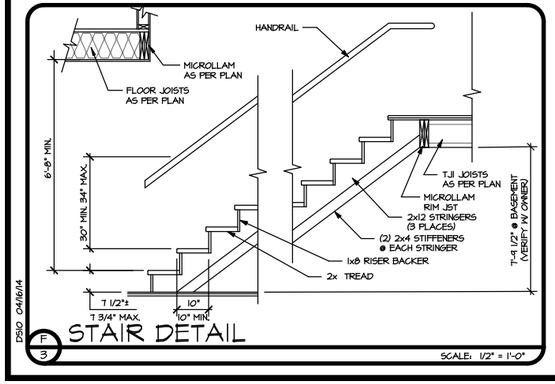
SC.	SOLID CORE
FR. DR.	FRENCH DOOR
PKT DR	POCKET DOOR
PR.	PAIR
BF	BI-FOLD
BP	BI-PASS

WINDOWS

FX	FIXED
CSMT	CASEMENT
SH	SINGLE HUNG
DH	DOUBLE HUNG
XO	HORIZONTAL SLIDER (TWO PANEL)
XOX	HORIZONTAL SLIDER (THREE PANEL)

FLOOR PLAN

A.F.F.	ABOVE FINISHED FLOOR
C.O.	CASED OPENING
DBL	DOUBLE
DN	DOWN
DW	DISHWASHER
F.A.U.	FORCED AIR UNIT
GD	GARBAGE DISPOSAL
H.B.	HOSE BIB
REF	REFRIDGERATOR
MW	MICROWAVE
S & P	SHELF & POLE
V.T.O.	VENT TO OUTSIDE
W.H.	WATER HEATER



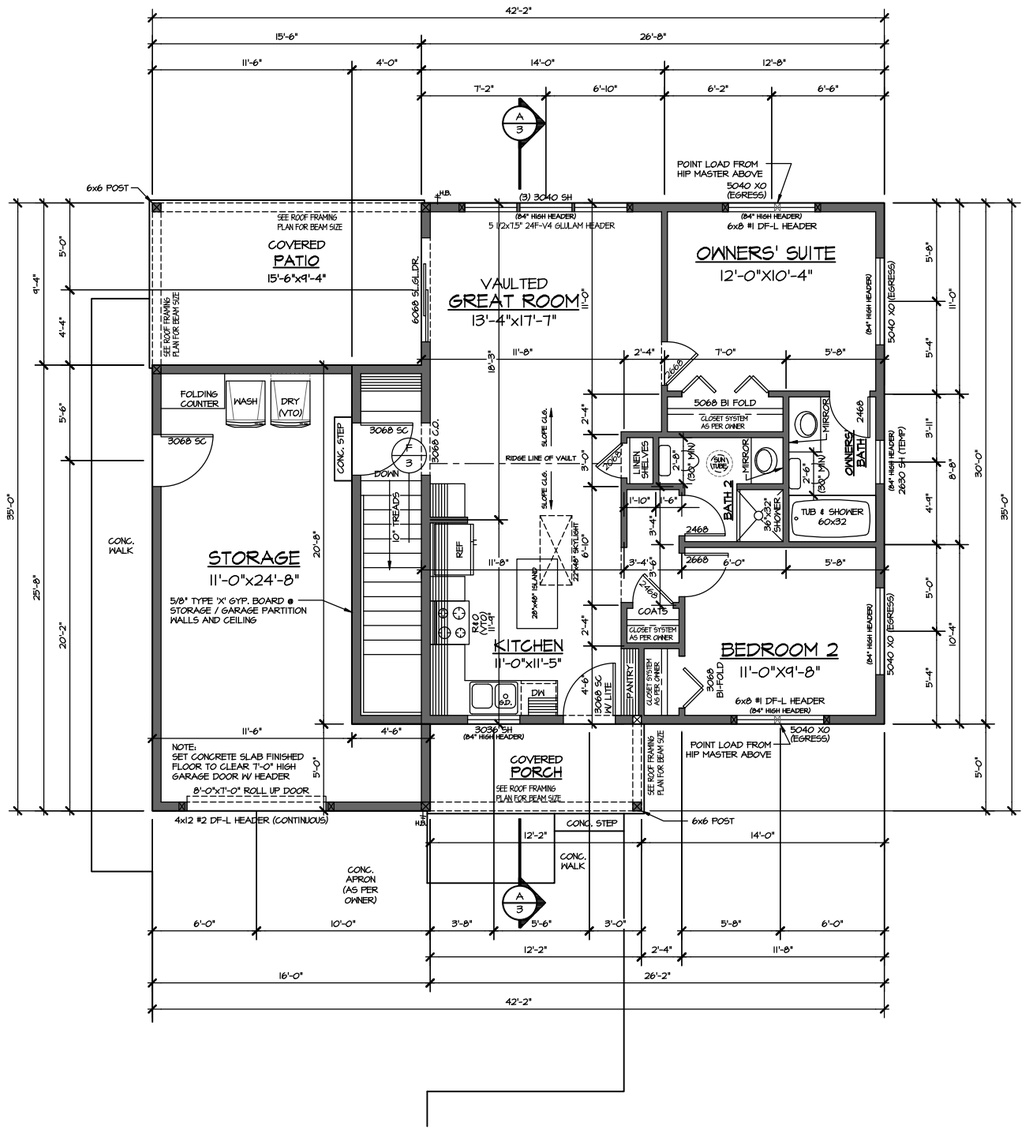
DSIG 04/16/14

WALL BRACING NOTE:

WALL BRACING REQUIREMENTS SHALL BE REVIEWED BY LOCAL PROFESSIONAL TO COMPLY WITH IRC SECTION R602.10 OR WHEN APPLICABLE SECTION R602.12. CONTRACTOR TO REFER TO WALL BRACING DESIGN FOR ADDITIONAL HOLD-DOWN AND NAILING REQUIREMENTS.

NOTES:

- EXTERIOR WALL HEADERS TO BE 4x8 #2 DF-L W/ 2" RIGID INSULATION, UNLESS NOTED OTHERWISE.
- INTERIOR BEARING WALL HEADERS TO BE 4x6, UNLESS NOTED OTHERWISE.
- SOLID BLOCKING OF POSTS AT BEAM, HEADER AND POINT LOADS TO BE 2x STUDS NAILED TOGETHER TO MATCH THE WIDTH OF THE SUPPORTING MEMBER ABOVE (EX: (2) 2x STUDS @ 4x BEAM, (3) 2x STUDS @ 6x BEAM, ETC.) UNLESS NOTED OTHERWISE.
- COORDINATE PREWIRE FOR TV, STEREO, TELEPHONE AND SECURITY SYSTEM WITH OWNER.
- MECHANICAL SYSTEM TO BE DESIGNED BY MECHANICAL CONTRACTOR TO MEET OWNERS NEEDS AND COMPLY WITH LOCAL CODES.
- CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
- TYPICAL ANGLE IS 45° UNLESS NOTED OTHERWISE.
- ALL NAILING TO BE IN COMPLIANCE W/ IRC TABLE R602.3(1) OR IBC TABLE 2304.9.1.
- LOCAL PROFESSIONAL TO VERIFY STRUCTURAL MEMBERS CAPACITY TO SUPPORT LOADS AS REQUIRED BY SITE CONDITIONS AND LOCATION PRIOR TO CONSTRUCTION.



FLOOR PLAN

SCALE: 1/4"=1'-0"

BASEMENT SQUARE FOOTAGE:	
LIVING AREA	883 SQ.FT.
STORAGE	318 SQ.FT.
TOTAL	1201 SQ.FT.

REVIEWED RM DIMS/SQ.FT.: KA CHECK: TT UPDATED: 01/21/26

THE PIKE COTTAGE

REVERSE / BASEMENT FOUNDATION

TITLE: FLOOR PLAN & SECTION A-A
SCALE: NOTED
DRAWN BY: KA CHECK BY: TT
DATE: 01/21/26

Associated DESIGNS

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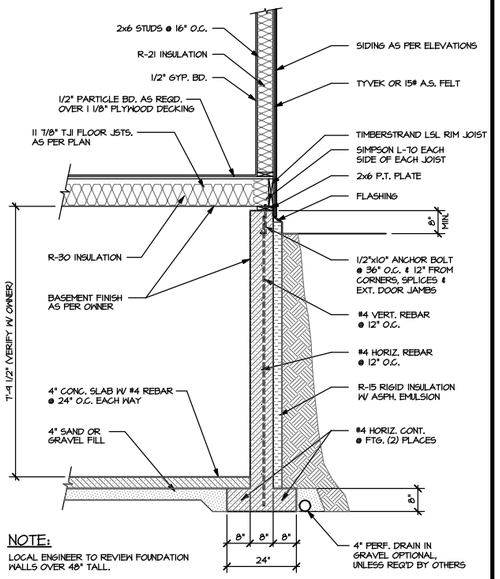
FAX: (541) 461-1274

REVISIONS:

REVISION OF: 1057-002

PROJECT: 31-339R REVERSE BASEMENT

SHEET 3 OF 7

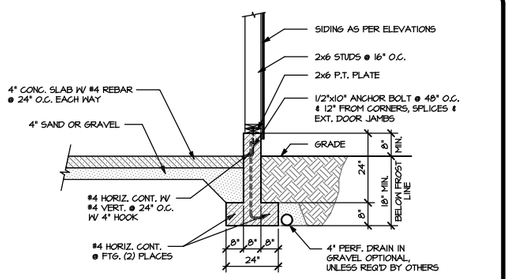


NOTE:
LOCAL ENGINEER TO REVIEW FOUNDATION WALLS OVER 48" TALL.

DES 10/13/14

A/4 FOUNDATION DETAIL

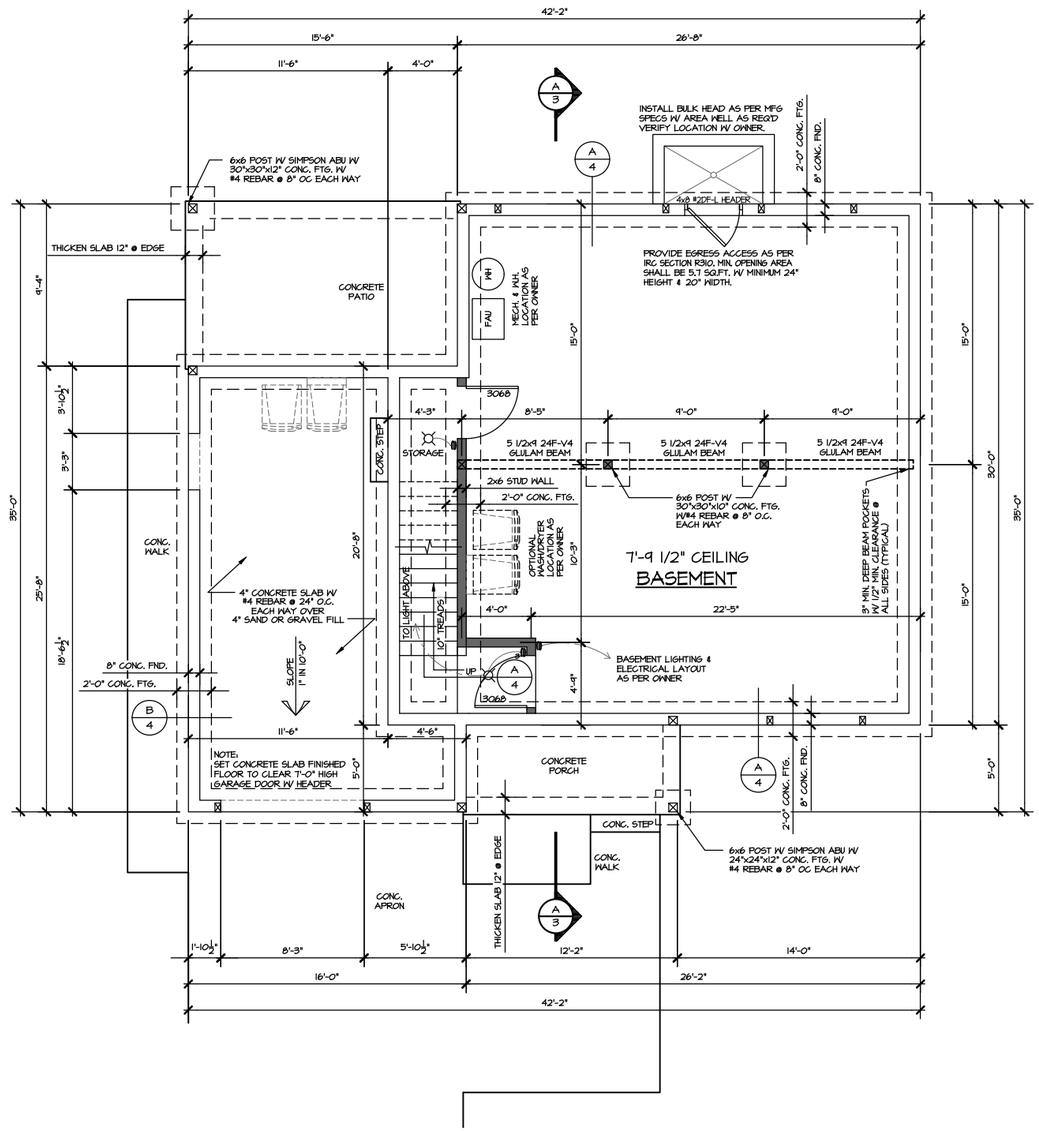
SCALE: 1/2" = 1'-0"



DES 04/24/13

B/4 GARAGE FOUNDATION DETAIL

SCALE: 1/2" = 1'-0"



FOUNDATION PLAN

SCALE: 1/4"=1'-0"

WALL BRACING NOTE:
WALL BRACING REQUIREMENTS SHALL BE REVIEWED BY LOCAL PROFESSIONAL TO COMPLY WITH IRC SECTION R602.10 OR WHEN APPLICABLE SECTION R602.12. CONTRACTOR TO REFER TO WALL BRACING DESIGN FOR ADDITIONAL HOLD-DOWN AND NAILING REQUIREMENTS.

NOTES:

- USE METAL FASTENERS AT ALL POST TO FOOTING CONNECTIONS.
- BASEMENT ELECTRICAL & LIGHTING LAYOUT AS PER OWNER.
- LOCAL ENGINEER TO REVIEW FOUNDATION WALLS OVER 48" TALL.
- ALL NAILING TO BE IN COMPLIANCE W/ IRC TABLE 602.3(1) OR IBC TABLE 2304.9.1.
- LOCAL PROFESSIONAL TO VERIFY STRUCTURAL MEMBERS CAPACITY TO SUPPORT LOADS AS REQUIRED BY SITE CONDITIONS AND LOCATION PRIOR TO CONSTRUCTION.

THE PIKE COTTAGE
REVERSE / BASEMENT FOUNDATION

TITLE: FOUNDATION PLAN & DETAILS
DATE: 01/21/26
SCALE: NOTED
DRAWN BY: KA
CHECK BY: TT

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www.AssociatedDesigns.com
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EUGENE, OREGON
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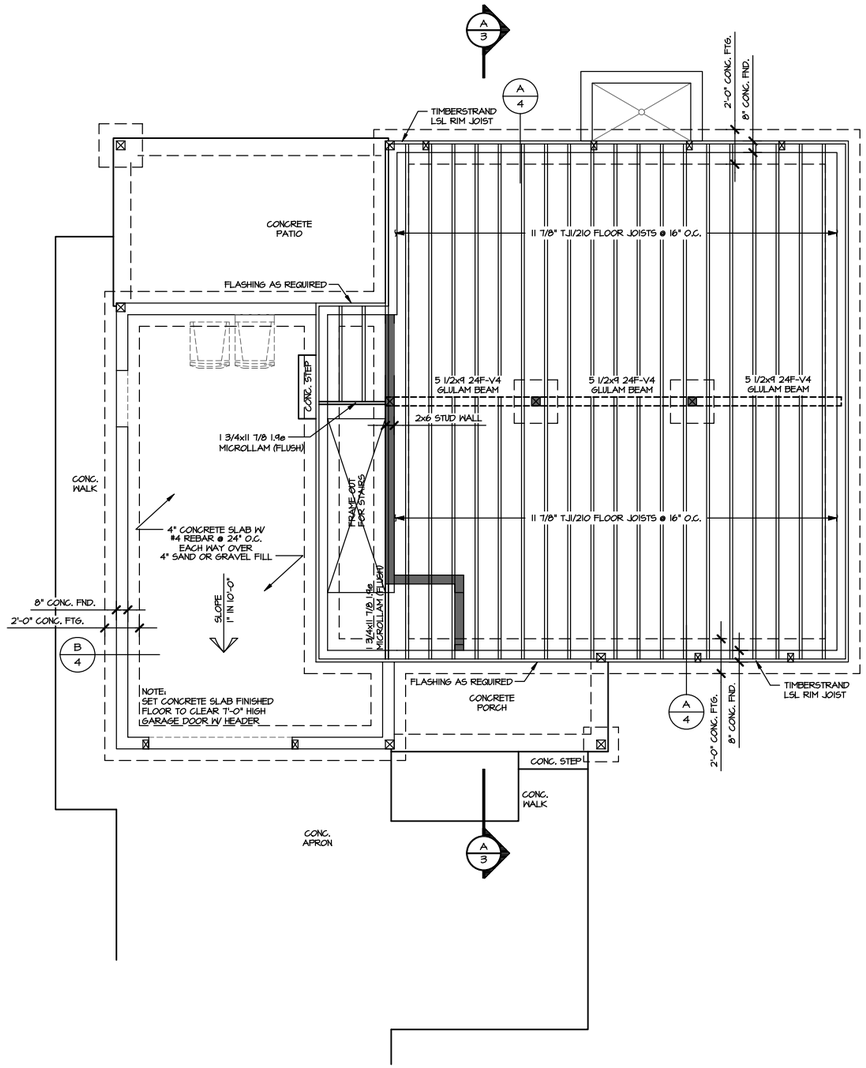
FAX: (541) 461-1274

REVISIONS:

REVISION OF: 1051-002

PROJECT: 31-339R REVERSE BASEMENT

SHEET 4 OF 7



FLOOR FRAMING PLAN

SCALE: 1/4"=1'-0"

WALL BRACING NOTE:

WALL BRACING REQUIREMENTS SHALL BE REVIEWED BY LOCAL PROFESSIONAL TO COMPLY WITH IRC SECTION R602.10 OR WHEN APPLICABLE SECTION R602.12. CONTRACTOR TO REFER TO WALL BRACING DESIGN FOR ADDITIONAL HOLD-DOWN AND NAILING REQUIREMENTS.

NOTES:

- PROVIDE SOLID BLOCKING AS PER TJI MFG. (NOT SHOWN).
- USE METAL FASTENERS AT ALL BEAM TO SUPPORT MEMBER CONNECTIONS.
- USE SIMPSON IUS 11.88 JOIST HANGERS (WIDTH AS REQUIRED FOR TJI SERIES) AT FLUSH BEAMS.
- INSTALL (2) 12d NAILS @ EACH TJI JOIST BEARING LOCATION. ONE (1) NAIL EACH SIDE OF WEB (1 1/2" MINIMUM FROM END).
- ALL NAILING TO BE IN COMPLIANCE W/ IRC TABLE 602.3(1) OR IBC TABLE 2304.9.1.
- LOCAL PROFESSIONAL TO VERIFY STRUCTURAL MEMBERS CAPACITY TO SUPPORT LOADS AS REQUIRED BY SITE CONDITIONS AND LOCATION PRIOR TO CONSTRUCTION.

THE PIKE COTTAGE

REVERSE / BASEMENT FOUNDATION

TITLE: FLOOR FRAMING PLAN

DATE: 01/21/26

SCALE: NOTED

DRAWN BY: KA CHECK BY: TT

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ASSOCIATED DESIGNS, INC.
www.AssociatedDesigns.com
1100 JACOBS DRIVE
EUGENE, OREGON
97402-1983
(541) 461-2082
FAX: (541) 461-1274

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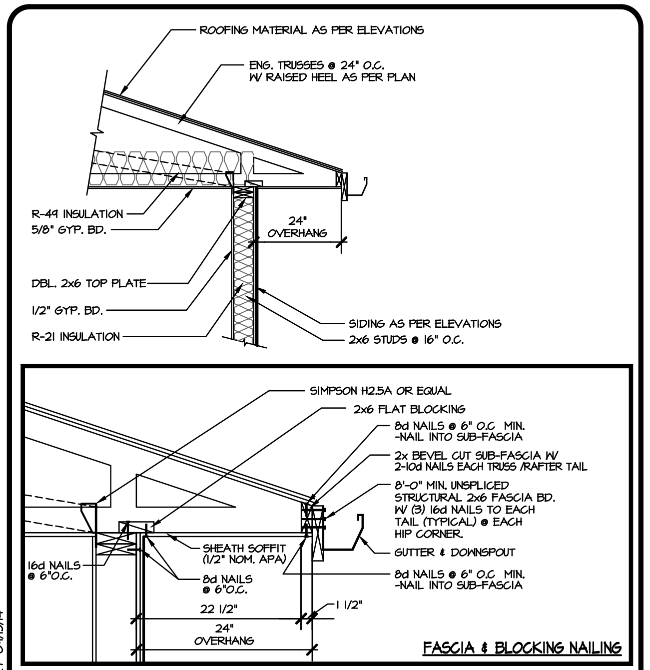
PROJECT: 31-339R REVERSE BASEMENT

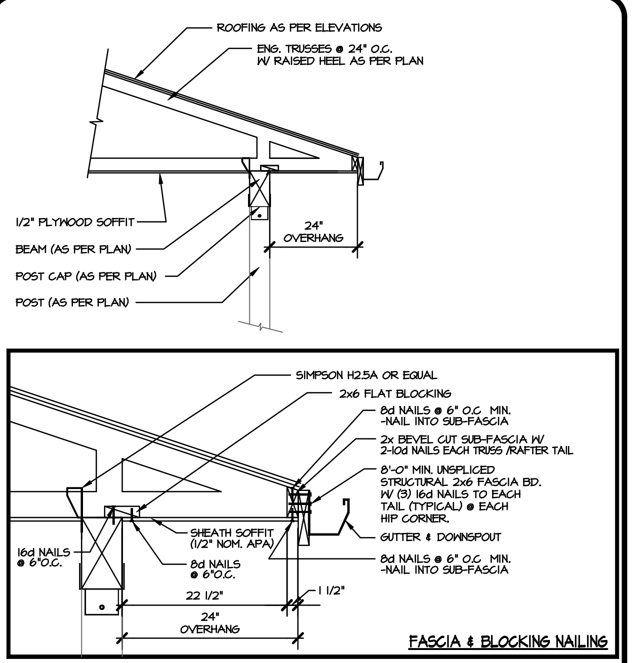
SHEET 5 OF 7



DRT27 09/15/14

C/6 EAVE DETAIL

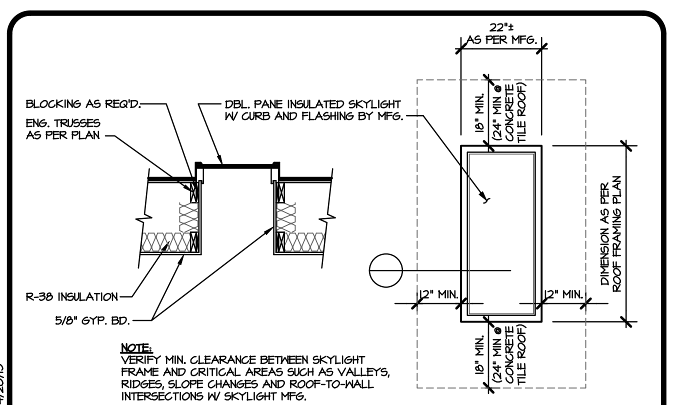
SCALE: 1/2" = 1'-0"



DRT28 09/15/14

D/6 EAVE DETAIL

SCALE: 1/2" = 1'-0"

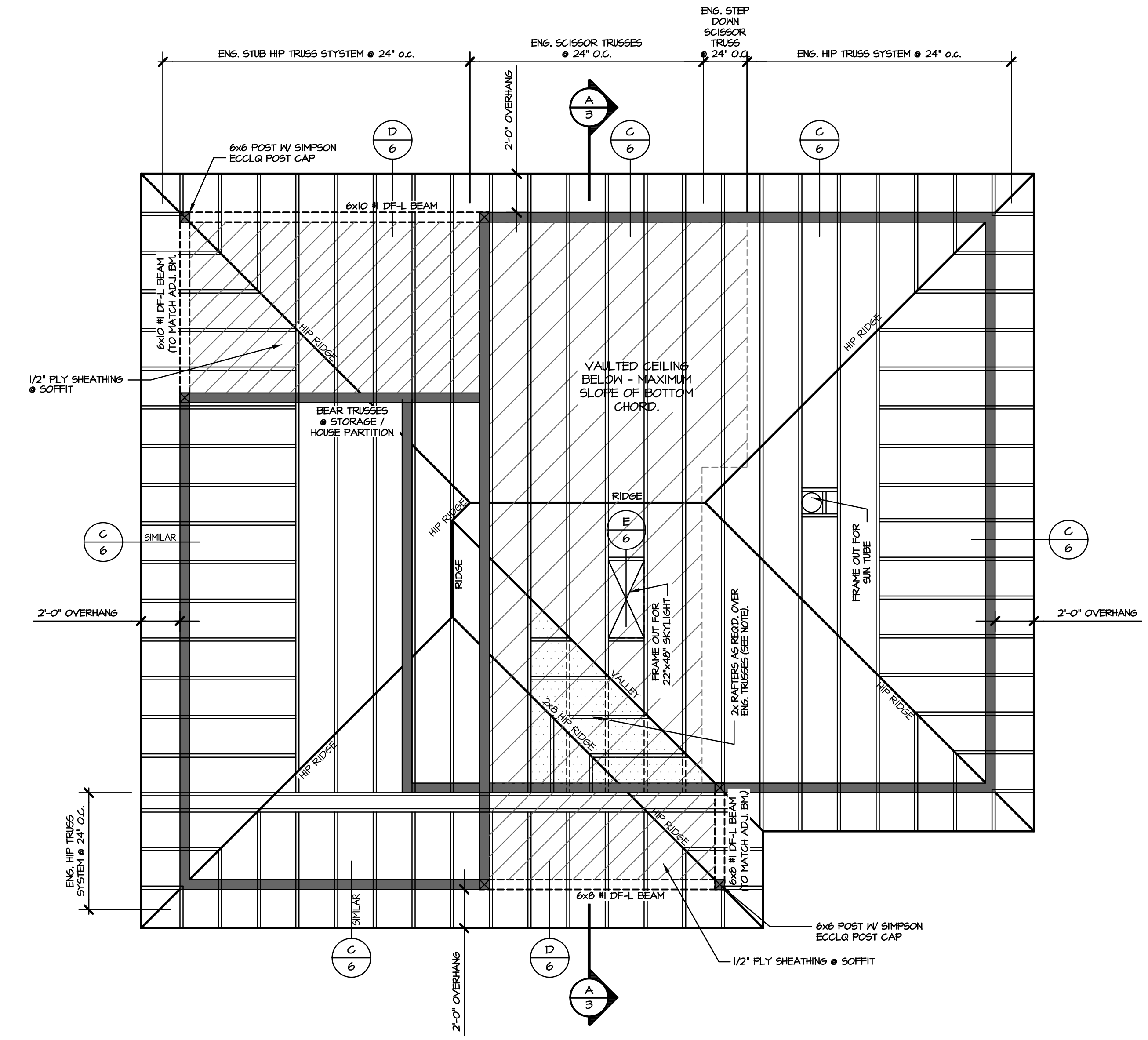


NOTE:
VERIFY MIN. CLEARANCE BETWEEN SKYLIGHT FRAME AND CRITICAL AREAS SUCH AS VALLEYS, RIDGES, SLOPE CHANGES AND ROOF-TO-WALL INTERSECTIONS W/ SKYLIGHT MFG.

DY1 04/20/13

E/6 SKYLIGHT DETAIL

SCALE: 1/2" = 1'-0"



WALL BRACING NOTE:

WALL BRACING REQUIREMENTS SHALL BE REVIEWED BY LOCAL PROFESSIONAL TO COMPLY WITH IRC SECTION R602.10 OR WHEN APPLICABLE SECTION R602.12. CONTRACTOR TO REFER TO WALL BRACING DESIGN FOR ADDITIONAL HOLD-DOWN AND NAILING REQUIREMENTS.

ROOF VENTING:

PROVIDE ONE (1) SQ.FT. VENTING FOR EACH 150 SQ.FT. ATTIC AREA. USE CONTINUOUS RIDGE VENTS AND SOFFIT VENTS AS REQUIRED. (8"x8" JACK VENTS MAY BE USED IN PLACE OF RIDGE VENTS).

NOTES:

- USE METAL FASTENERS AT ALL BEAM TO SUPPORT MEMBERS.
- TYPICAL ROOF PITCH IS 4" IN 12". TRUSS MFG. TO MAXIMIZE SLOPE OF SCISSOR TRUSS BOTTOM CHORD.
- SOLID BLOCKING OF POSTS AT BEAM, HEADER AND POINT LOADS TO BE 2x STUDS NAILED TOGETHER TO MATCH THE WIDTH OF THE SUPPORTING MEMBER ABOVE (EX: (2) 2x STUDS @ 4x BEAM, (3) 2x STUDS @ 6x BEAM, ETC.) (EX: (2) 2x STUDS @ 2-PLY TRUSS, (3) 2x STUDS @ 3-PLY TRUSS, ETC.)
- SEE FLOOR PLAN FOR HEADER SIZES.
- TRUSS MFG. TO VERIFY ALL DIMENSIONS PRIOR TO TRUSS ASSEMBLY.
- PROVIDE 22"x30" ATTIC ACCESS TO ANY ATTIC AREA WITH CLEAR HEIGHT GREATER THAN 30".
- ALL NAILING TO BE IN COMPLIANCE W/ IRC TABLE 602.3(1) OR IBC TABLE 2304.9.1.
- LOCAL PROFESSIONAL TO VERIFY STRUCTURAL MEMBERS CAPACITY TO SUPPORT LOADS AS REQUIRED BY SITE CONDITIONS AND LOCATION PRIOR TO CONSTRUCTION.

OVER FRAMING:

PROVIDE SHEATHING AT TRUSSES UNDER OVER FRAMING WITH BLOCKING TO 2x6 #2DF-L RAFTERS AS REQUIRED FOR 9'-0" MAX SPAN OR USE RAFTERS AS PER SPAN CHART.

MAXIMUM RAFTER SPAN CHART:

ASSUMED 25 PSF LIVE LOAD & 15 PSF DEAD LOAD
MAXIMUM ROOF PITCH 10/12.

#2DF-L OR BETTER @ 24"OC

2x6 = 9'-0"	2x8 = 11'-4"
2x10 = 14'-0"	2x12 = 16'-0"

#2DF-L OR BETTER @ 16"OC

2x6 = 10'-6"	2x8 = 13'-8"
2x10 = 17'-0"	2x12 = 19'-8"

CEILING JOIST SPAN CHART:

ASSUMED 20 PSF LIVE LOAD & 10 PSF DEAD LOAD

#2DF-L OR BETTER @ 24"OC

2x4 = 7'-0"	2x6 = 10'-0"	2x12 = 19'-6"
2x8 = 12'-8"	2x10 = 15'-8"	

#2DF-L OR BETTER @ 16"OC

2x4 = 8'-4"	2x6 = 12'-4"	2x12 = 23'-6"
2x8 = 15'-8"	2x10 = 19'-0"	

ROOF FRAMING PLAN

SCALE: 1/4"=1'-0"

THE PIKE COTTAGE

REVERSE / BASEMENT FOUNDATION

TITLE: ROOF FRAMING PLAN & DETAILS

DATE: 01/21/26

SCALE: NOTED

DRAWN BY: KA

CHECK BY: TT

ASSOCIATED DESIGNS, INC.
www.AssociatedDesigns.com
1100 JACOBS DRIVE
EUGENE, OREGON
97402-1983
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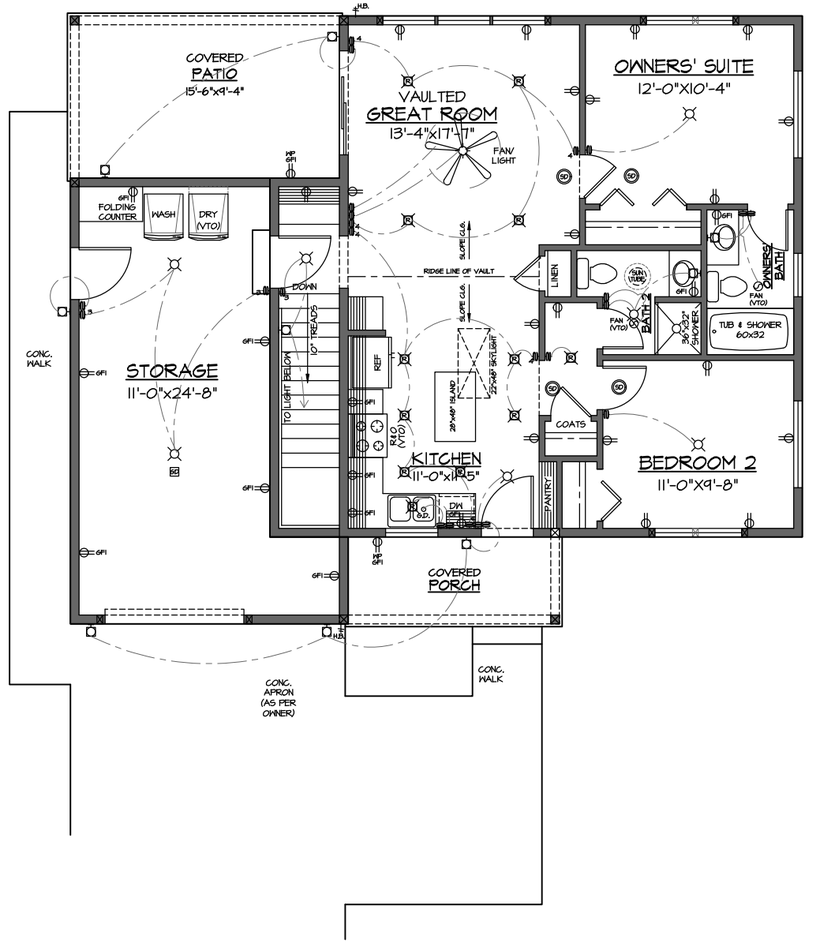
SHEET 6 OF 7

LIGHTING LEGEND:

- 12"x48" LED FIXTURE
- UNDER CABINET LED LIGHTING
- CEILING LIGHT
- RECESSED CEILING LIGHT
- RECESSED EYEBALL CEILING LIGHT
- HANGING CEILING LIGHT
- WALL MOUNTED LIGHT
- SMOKE ALARM / CARBON MONOXIDE ALARM AS PER R314 & R315.
- FAN (VENT TO OUTSIDE)
- DUPLEX OUTLET
- DUPLEX OUTLET / SPLIT WIRED
- WALL OUTLET, GROUND FAULT INTERRUPT
- WALL OUTLET, WATER PROOF GROUND FAULT INTERRUPT
- SWITCH
- 3 WAY SWITCH
- GARAGE DOOR OPENER
- PC PHOTOCELL
- FLOOD LIGHTS. OPTIONAL MOTION DETECTORS AS PER OWNER
- RECESSED STAIR DOWN LIGHTING - CONNECTED TO PHOTOCELL
- CAR CHARGING STATION

NOTES:

- GROUND FAULT CIRCUIT PROTECTION REQUIRED FOR ALL 110 VOLT, SINGLE PHASE, 15 & 20 AMP OUTLETS INSTALLED OUTSIDE, IN GARAGE, BATHROOMS, WITHIN 72" OF KITCHEN SINK OR ABOVE KITCHEN COUNTERS.
- COORDINATE PREWIRE FOR STEREO, TELEVISIONS, TELEPHONE AND SECURITY SYSTEM WITH OWNER.
- MECHANICAL SYSTEM TO BE DESIGNED BY MECHANICAL CONTRACTOR TO MEET OWNERS NEEDS AND COMPLY WITH IRC CHAPTERS 12 THROUGH 24 AND LOCAL CODES.



ELECTRICAL PLAN

SCALE: 1/4"=1'-0"

THE PIKE COTTAGE

REVERSE / BASEMENT FOUNDATION

TITLE: ELECTRICAL PLAN

DATE: 01/21/26

SCALE: NOTED

DRAWN BY: KA CHECK BY: TT

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www.AssociatedDesigns.com
1100 JACOBS DRIVE
EUGENE, OREGON
97402-1983
(541) 461-2082
FAX: (541) 461-1274

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