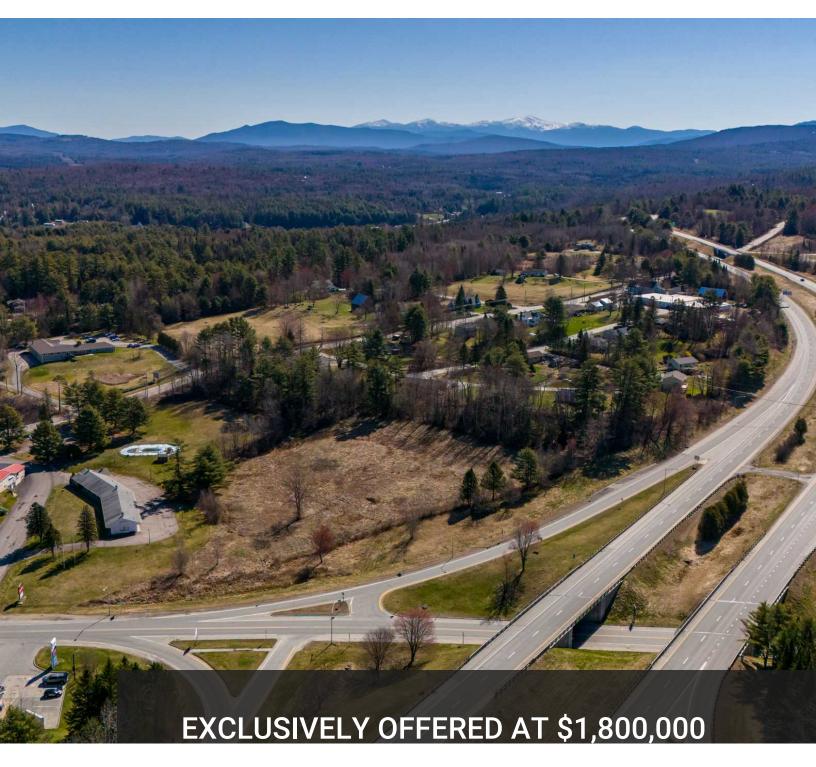
#### **EXCEPTIONAL DEVELOPMENT OPPORUNITY**

### PRIME LOCATION ADJACENT TO US ROUTE 93 BE A PART OF LITTLETON, NH'S SUCCESS!!





BADGER PEABODY & SMITH REALTY PO Box 789

Franconia, NH 03580



PRESENTED BY:

ANDY SMITH, CCIM

President/CEO office: (603) 823-5700 cell: (603) 616-9443 AndyS@BadgerPeabodySmith.com New Hampshire MARY M. DOHERTY

Associate Broker office: 603-767-7507 maryd@badgerpeabodysmith.co 53401 (NH)

The calculations and data presented are deemed to be accurate, but not guaranteed. They are intended for the purpose of illustrative projections and analysis. The information provided is not intended to replace or serve as substitute for any legal, accounting, investment, real estate, tax or other professional advice, consultation or service. The user of this software should consult with a professional in the respective legal, accounting, tax or other professional area before making any decisions.

## **REGIONAL MAP** Prime Site at Exit 41, Littleton, NH 337 Cottage Street | Littleton, NH 03561 ALDERBROOK 302 APTHORP Littleton NEWTONS MOBILE PARK Bethlehem 302 BARRETT Franconia Sugar Hill Google Map data ©2025 Google

#### PROPERTY DESCRIPTION

Prime Site at Exit 41, Littleton, NH 337 Cottage Street | Littleton, NH 03561



Spectacular Development Opportunity - Prime Location in Littleton, NH

Seize this 6.94± acre development opportunity strategically positioned alongside the Exit 41 off-ramp from US Route 93. This highly visible parcel offers exceptional highway access, making it an ideal site for a hospitality, retail, or mixed-use development.

Key features include:

Unmatched Visibility & Accessibility – Located directly off US Route 93, with access from both Cottage Street and NH Route 302 (Bethlehem Road), a major East/West corridor.

Development Potential – A conceptual plan is available, showcasing the potential placement of a hotel and restaurant, catering to travelers and visitors to the Littleton area. On site municipal water/sewer.

Existing Structure – A former motel is currently on-site but has not been operational for several years, presenting a prime redevelopment opportunity to either include in your plans or remove to start fresh.

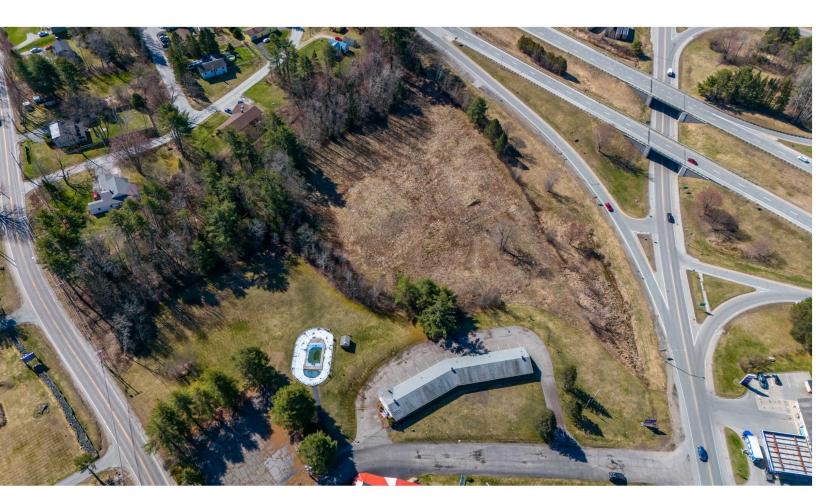
High Traffic Area – Positioned in a growing commercial hub, benefiting from consistent traffic flow and proximity to key regional attractions.

This parcel is perfectly suited for a new hospitality venture, retail complex, or a combination of both—serving business and leisure travelers alike. Don't miss the chance to invest in one of Littleton's most promising development sites.

Less than 3 hours to Boston, Portland, Burlington and Montreal, Que.



Prime Site at Exit 41, Littleton, NH 337 Cottage Street | Littleton, NH 03561











# Conceptual Development Plan for Exit 41 – Commercial Site

Eames Reality, Littleton NH March 2021



PROJECT NO. 20256 COPYRIGHT @ 2021 HORIZONS ENGINEERING



34 School Street, Littleton, NH 03561 • Ph 603-444-4111 • Fax 603-444-1343 • www.horizonsengineering.com

March 18, 2021 Project No. 20256

Mr. Jack Eames Eames Realty 32 Main Street Littleton, NH 03561

Subject: Exit 41 Conceptual Development Plan

Dear Mr. Eames

In accordance with our agreement, we have completed conceptual layouts for the development of the 6.94-acre parcel of land you own located at 337 Cottage Street in Littleton, New Hampshire. Lot 43 of Tax map 93 currently has the Exit 41 Travel Inn located on it and there is approximately 5 acres of undeveloped land.

The lot lends itself to the development of commercial space as it is convenient to Interstate access, has municipal water and sewer at the property and is certainly developable. We have presented three different scenarios for consideration.

The greatest challenge of the parcel is the wetlands that are located in the undeveloped area. The first concept minimizes the impact to the wetlands, which should be fairly straightforward to permit. The other two concepts maximize the development potential (larger building and more parking) but would require a major wetlands impact.

Thank you for the opportunity to provide these conceptual plans to you for the development of the property. If you have any questions or need additional services please don't hesitate to reach out.

Sincerely,

Cathy Furtek Conway, P.E.

Vice President Municipal Operations

Justin Daigneault Project Engineer

#### **Table of Contents**

EXIT 41 PROPERTY HIGHLIGHTS	1
SITE LOCATION AND DESCRIPTION	3
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APPENDIX D NRCS SOILS MAP	

#### **EXIT 41 PROPERTY HIGHLIGHTS**

- ➤ PREMIUM SITE: Commercial Zoned 7.3-acre lot including R.O.W. and is the only premium site of this size directly off of a Littleton exit.
- **DEVELOPMENT**: Tractor Supply size development with simple permitting level under the 10,000 SF wetlands disturbance.
- > OPPORTUNITY ZONE: Littleton was designated as an Opportunity Zone on May 3, 2018.
- **ECONOMIC HUB:** Littleton serves a population of close to 100,000 in New Hampshire, Vermont and Canada. Walmart, Home Depot, Lowes, Staples and Harbor Freight are among some of the retailers in town.
- ➤ <u>ACCESS</u>: Large access driveway, 60-foot width at entrance and 24 foot driveway width through property from Exit 41 and Route 302 for easy ingress/egress.
- **TRAFFIC COUNT**: The annual average daily traffic count at the Exit 41 northbound off ramp is 1527 vehicles per day plus 1069 vehicles at the Exist 41 southbound off ramp.
- ➤ <u>VISIBILITY</u>: Incredible unhindered visibility from highway.
- ➤ <u>UTILITIES:</u> Water, sewer and power to site. Town owned Littleton Water and Light has some of the lowest utility rates in the state.
- > SIGNAGE: No town sign restrictions. The site has premium road signage from and off of exit.
- **PERMITTING**: Town of Littleton is pro-development and does not require a formal vote for Site Plan Review.



Aerial View of Property

#### SITE LOCATION AND DESCRIPTION

The proposed commercial development site is located adjacent to Exit 41 off of Interstate 93 in Littleton, New Hampshire. The 6.94-acre site currently has the Exit 41 Travel Inn located on the parcel with the remainder open field and wooded. The total lot area is 7.3 acres including the Right of Way.

The site has access off of Route 302 (Cottage Street) just north of Exit 41 and also on Route 302 and Route 16 (Bethlehem Road). The access includes a fifty-foot right of way that is shared with adjacent lot 41 of tax map 93. The photo below shows the visibility of the property from I-93 northbound.



The property is located in the Commercial-1 Zone. The site includes the developed area of the Inn, parking lot and associated amenities. The undeveloped portion of the property to the south does includes wetlands. The site is currently served by municipal water and sewer and there is a sewer main easement along the eastern corner of the property.

Littleton is one of the twenty-seven New Hampshire Census Tracts designated as an OPPORTUNITY ZONE, a federal program implmented on May 3, 2018 by Governor Chris Sununu. Investors can defer capital gains on earnings that have been reinvested in the zones through Opportunity Funds. Opportunity Funds are private sector investment vehicles that invest at least 90 percent of their capital in Opportunity zones. Long-term investments maintained for over ten years do not have to pay additional capital gains taxes on earnings from Opportunity Zone investments.

#### PROPOSED BUILDING DATA

Three conceptual plans were created for potential commercial development of the property. Each includes the removal of the current structure, different building size and parking lot configurations with varying degrees of wetlands impact.

Concept #1 includes a 19,000 SF building with 15,000 SF of exterior display space and 48 parking spaces. Approximately 8000 square feet of wetlands would be impacted (which keeps the project in a simpler permitting level under 10,000 SF of disturbance). This layout and concept is similar in scope to recent Tractor Supply developments.

Concept #2 includes a 30,000 SF building and 200 parking spaces. Approximately 53,300 SF of wetlands would be impacted which moves this project into a major wetlands impact permit process.

Concept #3 maximizes the use of the property with a 44,720 SF building and 160 parking spaces. Approximately the same amount of wetlands is impacted with this project as the second concept.

Concept #4 includes a 5,800 SF restaurant and a 15,000 SF hotel development on the property with a total of approximately 170 parking spaces. A retaining wall would be required. The wetlands impact is minimal with this site layout.

It is important to note that during the design phase of any of these alternatives, consideration will need to be given to the following:

- Retaining walls will likely be necessary along the north and east sides of the development to accommodate slopes and elevation changes.
- ➤ The location of the 25' sewer line easement needs to be verified as there is some discrepancy between field information on manholes and its plotted location. While the sewer line has been abandoned it is still in place. During design phase it will be important to have initial conversations with the Town of Littleton Sewer Department concerning what work can be done in the easement area.
- ➤ During the design phase, consideration will need to be given to stormwater runoff and detention to keep post development runoff from the site equal to or less than pre development. A detention pond or infiltration galleries under the parking area will likely be required.
- Although the Town of Littleton does not have requirements for parking spaces, the New Hampshire Department of Transportation will have requirements as part of a driveway permit amendment. The differences between concept 2 and concept 3 relate to the number of parking spaces versus the building square footage so building use will dictate which of these alternatives could work best for a developer.



The photo to the above shows a view of the property from Route 302 and 18.

The four conceptual development plans are included in Appendix A of this report. The development concepts have been prepared with the criteria of minimizing construction cost and total disturbance (wetlands included) while maximizing the available commercial space and preserving a buffer around the property.

### ZONING DISTRICT AND LAND USE REGULATIONS

The property has recently been re-zoned so the entire parcel is located within the Commercial One District. A copy of the zoning map is included in Appendix B of this report.

The following uses are permitted in the Commercial I Zone:

Animal Hospital, Boarding houses, tourist homes Boat yards Food and produce stands (limited to 300 square feet and selling only food or produce grown on the premises) Funeral homes, Growth and harvesting forest products (orchards, etc.) Home health care provider, Hospital Mail order business, Manufacturing Medical Facilities, Neighborhood Commercial Use, Office buildings, Open storage of timber and lumber, Open storage of building materials, Outdoor commercial, recreational facility, Public parks and playgrounds, Recreation facility, Restaurants and indoor commercial establishments, Retail establishments, Short-term rentals, Sexually Oriented Businesses, Temporary or portable structures, Travel trailer or motor home, Wholesale

*The following uses are permitted by Special Exception:* 

Auto repair shop Auto sales agency Church Clubs and lodges Commercial removal of loam, clay, sand, gravel and ledges Day care services Factory Retail Establishments Fraternal organizations Garage apartments General Service garage Grazing, Care, Raising, or Keeping of Livestock Group care facilities Manufactured housing parks Manufacturing Motel/Hotel Multi-family housing Nursing homes/Elderly Congregate Care Facility Parking lots used as a primary use Personal Wireless Communications Facilities Planned unit development Public and private campgrounds Raising agricultural crops Research Facilities Retail gasoline stations Sanataria Sawmills and

Horizons Engineering, Inc.

Eames Exit 41 Concept March 2021 Page **6** 

lumber treatment facilities Schools and educational institutions Single-family conversion into multi-family units Single-family conversion to two family dwelling Storage of volatile fuels for resale Temporary dumping and filling as a means for eventual use by a conforming and permitted use Temporary or portable structures which are incidental to the construction of the main building and will remain for periods over six months Warehouses

The Lot Requirements for the Commercial 1 District are as follows:

Required Width
Required Depth
250 feet
Front Yard Setback
Side Yard Setback
Rear Yard Setback
25 feet
25 feet

Max Building Height 35 feet (3 stories)

At this point it is not clear if Route 302 and 18 would need to be treated as a side or front setback. The layout as proposed includes a fence within the setback area. Also, there is a retaining wall that could be eighteen feet tall, any wall greater than six feet requires a special exception.

In commercial districts which adjoin land in rural or residential districts, the commercial activity shall be screened or buffered if requested by the Planning Board.

#### PARKING AND LOADING

Adequate off-street parking will be determined by the use and not by local regulations. There are no off-street parking requirements for the Town of Littleton. However, the New Hampshire Department of Transportation will require adequate off-street parking as part of the Driveway permitting process on a state highway.

The Town does require off street loading such that the delivery vehicles are able to park outside of any street right of way.

#### **SIGNAGE**

The Town of Littleton does not have any signage restrictions.

#### **LANDSCAPING**

The Town of Littleton does not have any landscaping requirements.

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#### **FLOOD ZONE**

The site is not located within the flood hazard area as shown on the Flood Insurance Rate Map (FIRM) for the Town of Littleton, New Hampshire. Community Panel Number 33009C0117E is attached in Appendix C of this report.

#### **PERMITTING**

Local, State and Federal permitting will be required for the development of the parcel.

#### Local Permitting

- ➤ The Town of Littleton requires Site Plan Review consultation for any project that has a building larger than 25,000 square feet. No formal vote is required.
- ➤ The Town of Littleton Zoning Board requires a special exception for any retaining wall greater than six feet in height.
- ➤ Town of Littleton Driveway Permit Change in Use for access to Cottage Street
- The following Town Departments will also need to approve the design plans
  - o Littleton Water and Light Municipal Water Connection
  - o Littleton Public Works Department Municipal Sewer Connection
  - o Littleton Fire Department Building Code Compliance
  - Littleton Police Department

#### State Permitting

- New Hampshire Department of Environmental Services Alteration of Terrain is required for a disturbance of more than 100,000 square feet. The three concepts presented disturb more than 100,000 square feet. This permit application process requires a drainage analysis to ensure storm water discharge from the site does not increase once the site is developed. Oftentimes a detention pond or infiltration gallery is necessary to detain some of the increased runoff.
- New Hampshire Department of Environmental Services Wetlands Dredge and Fill Permit is necessary anytime wetlands is impacted. The first concept disturbs less than 10,000 SF of wetlands so a minor impact permit would be required. The second and third concepts would require a major impact permit. A major impact of the magnitude contemplated in Concepts two and three would also require mitigation. The goal of this permit is to make sure that wetlands disturbance is avoided or minimized.
- ➤ New Hampshire Department of Transportation Driveway Permit Change in Use. All three concepts utilize the existing driveway off Route 302 & 18. However, since the use

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Eames Exit 41 Concept March 2021 Page 8

will be changed from a motel to another commercial use, the Department will require an application for a Driveway Permit. The District office will likely require a Traffic Study as part of the permitting process. Similar to the Alteration of Terrain, they will also require that there is not increase in runoff from the site onto their road or right of way so the drainage analysis will also need to be provided to them.

#### Federal Permitting

➤ Environmental Protection Agency NPDES General Permit. Prior to construction of the site, a Stormwater Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI) will need to be submitted to EPA. This permit is necessary anytime there is more than an acre of disturbance and establishes the requirements for erosion control design and monitoring during construction.

#### TRAFFIC AND SITE ACCESS

There is an existing Right of Way that connects this parcel to

- ➤ Route 302 and 18 also known as Bethlehem Road and also
- ➤ Cottage Street to the west.

The current right of way has been adequate to provide access to the motels that are on the subject parcel and the adjacent parcel. However, a change in use permit will be required for retail commercial development. Minor modifications may be required to address turning radii for tractor trailer trucks and additional drainage but otherwise the current access points should provide adequate site distance.

Both of these roads are state highways and access to Interstate 93 from Cottage Street is approximately 100 feet to south.

#### **GEOTECHNICAL**

No onsite subsurface investigations have been completed. A review of the USDA Soil Conservation Survey mapping (Attached in Appendix D) indicates this site consists of fine sandy loam and gravelly soils. Some of the soils such as Peacham and Ossipee located in the wetlands areas are obviously hydric soils with high water tables. The remainder of the site is predominately Herman Monadnock soils which are well drained sandy loam soils. They are a stony soil, but based on this soil's classification, there is no ledge close to surface.

#### **UTILITIES**

#### Sanitary Sewer

The site is currently served by municipal sewer. There is a sewer easement that runs across the northeastern corner of the parcel. This sewer line has been abandoned in place. There is currently a sewer service to the motel that connects to the municipal eight-inch sewer line on Cottage Street.

#### Water

The site is currently served by municipal water from the Littleton Water and Light Department. There is a six-inch cast iron water main serving the property from Bethlehem Road with a cast iron four-inch service line. The hydrant located at the north side of the parcel can provide a fire flow of approximately 980 gallons per minute with a static pressure of 102 psi and a residual pressure of 40 psi.

#### Electric, Phone and Cable

Services are available through the following utility companies

- > Littleton Water and Light Department
- > Fairpoint Communication
- > Time Warner Cable

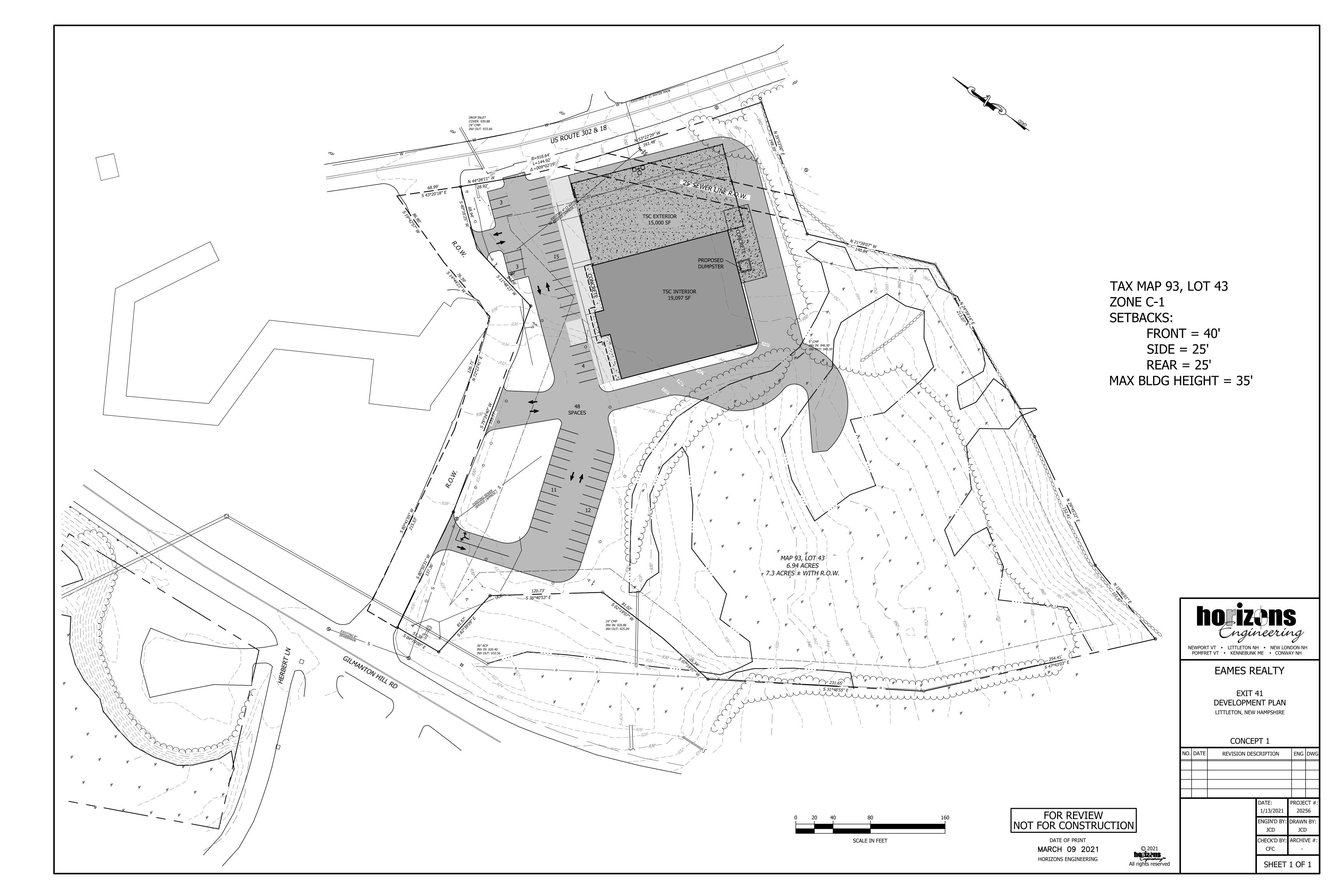
#### SITE DEVELOPMENT COSTS

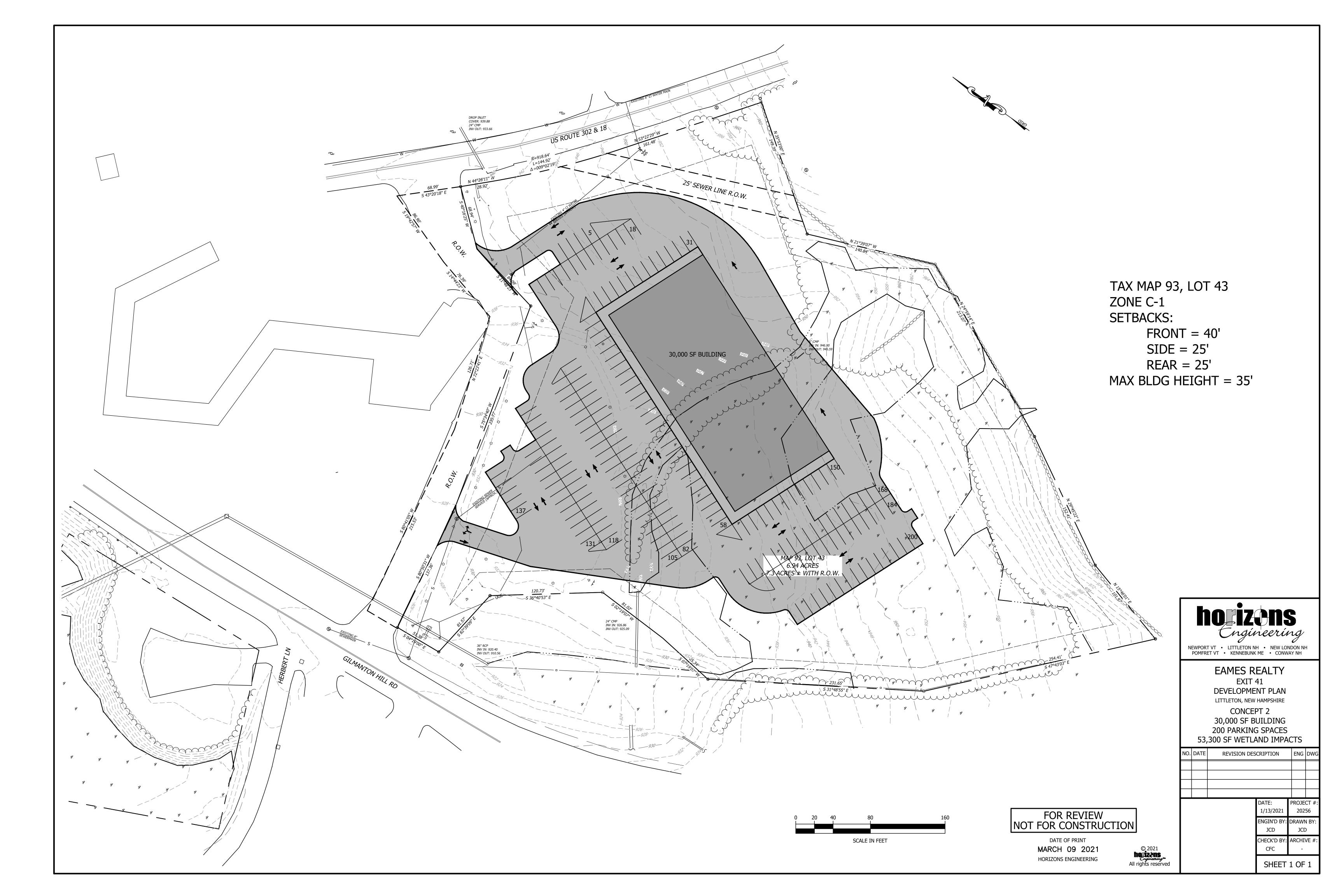
Please See Next Page

### EAMES REALTY EXIT 41 PROPERTY - COMMERCIAL DEVELOPMENT PRELIMINARY OPINION OF PROBABLE CONSTRUCTION COST Conceptual Site Plan - Concept 1 - March 2021

OPINION OF PROBABLE ON-SITE CONSTRUCTION COST						
OFINION OF PROBABLE ON-SITE CONSTR	100110	IN CUST	$\vdash$	UNIT	1	
DESCRIPTION	UNIT	QTY.		PRICE		TOTAL
Mobilization	LS	1	\$	20,000.00	\$	20,000.00
Clearing and Grubbing	A	0.7	\$	10,000.00	\$	6,500.00
Common Excavation	CY	8,000	\$	10.00	\$	80,000.00
Ledge Excavation	CY	0	\$	125.00	\$	-
Fill	CY	2,000	\$	10.00	\$	20,000.00
Crushed Gravel	CY	800	\$	28.00	\$	22,400.00
Gravel	CY	3,000	\$	25.00	\$	75,000.00
Wearing Course Pavement-1 inch thickness	TON	210	\$	110.00	\$	23,100.00
Base Course Pavement-2 inch thickness	TON	450	\$	110.00	\$	49,500.00
Pavement Markings 4"	LF	2,100	\$	1.00	\$	2,100.00
2" Bituminous Sidewalk	SY	75	\$	50.00	\$	3,750.00
Granite Curb for sidewalks	LF	120	\$	40.00	\$	4,800.00
Handicap Ramps	EA	1	\$	3,500.00	\$	3,500.00
All	I.E.	100	Ф	<b>50.00</b>	ф	7,000,00
4" sewer service	LF	100	\$	50.00	\$	5,000.00
6" Water Main	LF	100	\$	75.00	\$	7,500.00
1" water service	LF	100	\$	50.00	\$	5,000.00
Water service connection tap saddle,	EA	1	\$	3,000.00	\$	3,000.00
Hydrants	EA	1	\$	4,500.00	\$	4,500.00
Stormwater treatment/detention	LS	1	\$	10,000.00	\$	10,000.00
18" HDPE Storm Drain	LF	180	\$	75.00	\$	13,500.00
Catch Basins	EA	6	\$	2,500.00	\$	15,000.00
Stone Masonry Headwalls	EA	4	\$	3,000.00	\$	12,000.00
Chain Link Fencing (around wall)	LF	300	\$	15.00	\$	4,500.00
Redi-Rock Retaining Wall (assumes \$28/sf						
material estimated cost plus \$10/sf installation						
cost)	SF	2,800	\$	65.00	\$	182,000.00
Demolition	LS	1	\$	20,000.00	\$	20,000.00
Signage	LS	1	\$	8,000.00	\$	8,000.00
Site Lighting	LS	1	\$	40,000.00	\$	40,000.00
Landscaping	LS	1	\$	5,000.00	\$	5,000.00
Surface Restoration	LS	1	\$	2,500.00	\$	2,500.00
Erosion Control	LS	1	\$	2,200.00	\$	2,200.00
Loam, Fertilizer, Seed, And Mulch	SY	650	\$	5.00	\$	3,250.00
						· · · · · · · · · · · · · · · · · · ·
SUBTOTAL					\$	653,600.00
15% CONTINGENCY					\$	98,040.00
TOTAL CONSTRUCTION COST					\$	751,640.00
ROUNDED TOTAL CONSTRUCTION COST Horizons E		nin o. Tra			\$	751,600.00

# APPENDIX A CONCEPTUAL PLANS



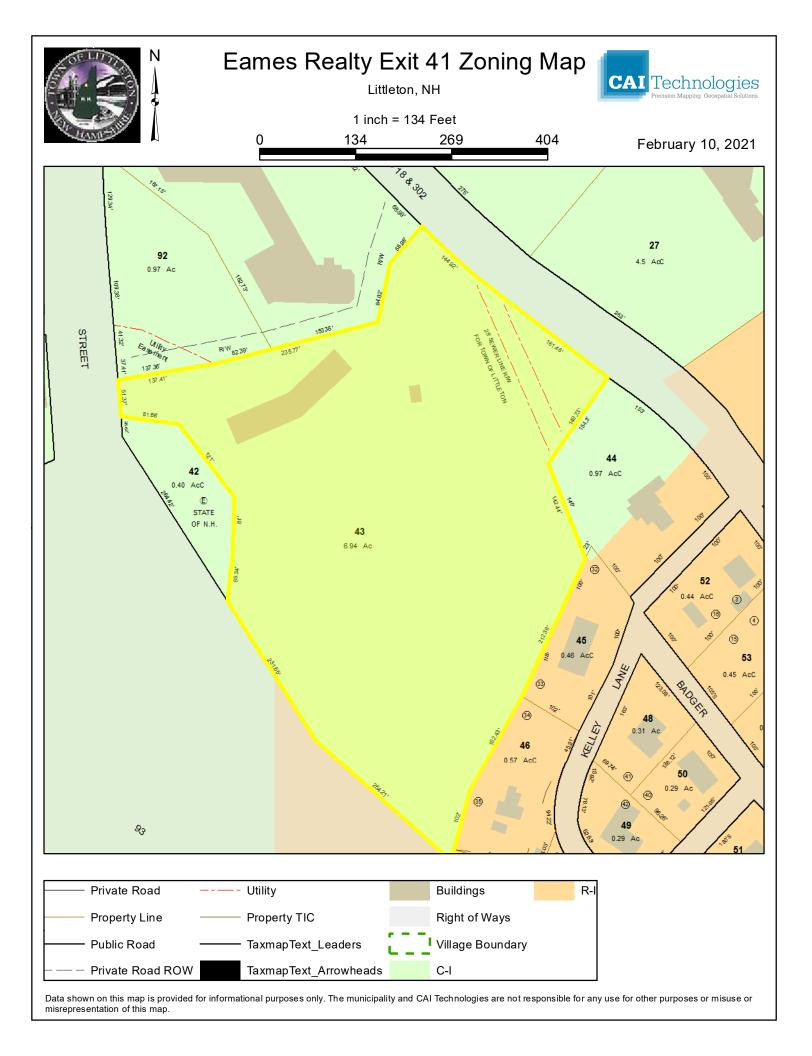




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#### **APPENDIX B**

#### **ZONING MAP**



# APPENDIX C FLOOD ZONE MAP

#### NOTES TO USERS

up is for use in administering the National Flood Insurance Program. It is necessarily identify all areas subject to flooding, particularly from local a sources of small size. The community map repository should be d for possible updated or additional flood hazard information.

and to floatings have been determined, uses a entranged to communication of the control of the c

Il Base Flood Elevations shown on this map apply only landward of onat Goodetc Vertical Datum of 1929 (NOVO 29). Users of this FIRM is make that coated flood elevations are also provided in the Dummay of the Elevation stories in the Flood insurance Story report for this provision. On the Committee of the Elevation Story report for the provision and story of the Elevation Story of the Elevation Story and the Story of Story and Committee of the Elevation Story and the Story are higher than stories shown on this FIRM.

fee of the **floodways** were computed at cross sections and interpolated cross sections. The floodways were tissed on lydusatic considerations and to requirements of the National Flood insurance Program. Floodway and other pertinent floodway data are provided in the Flood insurance port for this jurnaticism.

areas not in Special Flood Hazard Areas may be protected by **flood structures.** Refer to Section 2.4 "Flood Protection Measures" of the surrance Study report for information on flood control structures for this

ection used in the preparation of this map was New Hampshire State 500. The horizontal datum was NAD 83, GRS80 spheroid. Differences soo. The indirections and make that as, decision spreads between the in, spheroid, projection or Slate Plane zones used in the production of or adjacent jurisdictions may result in slight positional differences in map across jurisdiction boundaries. These differences do not affect the r of this FIRM.

levalions on this map are referenced to the National Geodetic Vertical 11 10/20. These flood elevations must be compared to structure and elevations referenced to the same vertical datum. For information grounderino between the National Geodetic Vertical Datum of 10/20 Now1-American Vertical Datum of 10/30, void the National Geodetic Now1-American Vertical Datum of 10/30, void the National Geodetic to 10/30 to 10/30

Reference System Division Geodetic Survey, NGAA oring Metro Center at-West Highway oring, Maryland 20910 3-3191

in current elevation, description, and/or location information for bench shown on this map, please contact the Information Services Branch National Geodelic Survey at (301) 713-3242, or visit its website at ownga.noan.gov.

sp information shown on this FRM was derived from U.S. Geological Digital Chrisophoto Quadrangles produced at a scale of ±12,000 from sply dated 10½ or tater. These images were necast by the New ise Geographically Referenced Analysis and Information Transfer System ANTI) onto the New Hampfarite State Plance occentiate eystem.

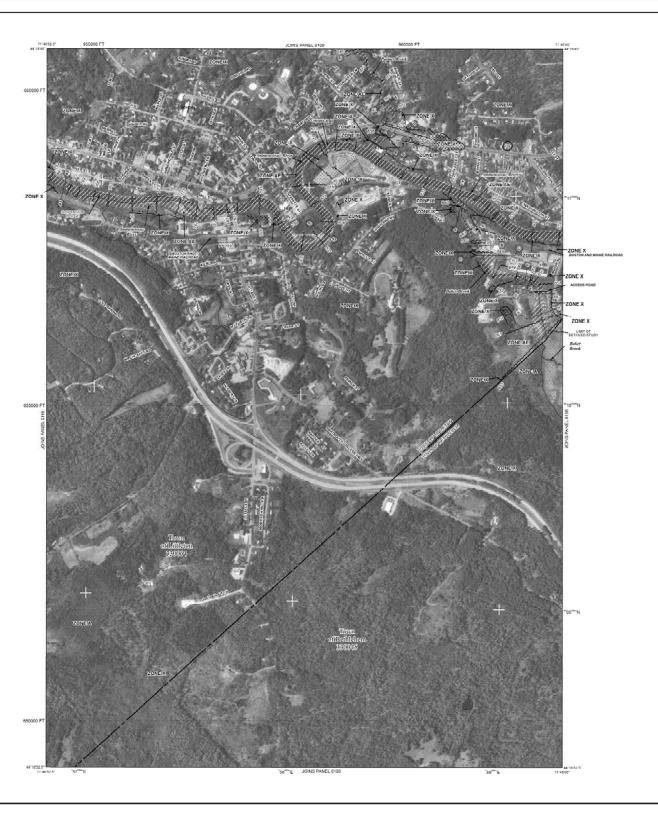
p reflects more detailed and up to date stream channel configurations are shown on the persons FRIM for this jurisdiction. The floodplains and the state user standarders from the previous FIRM any has been adjusted with the stream channel configurations. As a result, the Theod and Floodlang Data Salles in the Flood Institution Salles Salles and Floodlang Data Salles in the Flood Institution Salles in what is above on this range.

ate limits shown on this map are based on the best data assistate at the publication. Because changes due to annexations or de-annexations may curred after this map was published, map users should contact appropriate by criticals to verify current corporate limit locations.

refer to the separately printed Map Index for an overview map of the showing the layout of map panels, community map recository addresses, string of Communities table containing National Floor insurance Program or each community as well as a lieting of the panels on which each pur south community as well as a lieting of the panels on which each pur is located.

the FEMA Map Genére Genter et 1-00-355-3518 for information on products associated with this FIRM. Available products may include y asseed eather of Map Change, a Flood insurance Study report, include resions of this map. The FEMA Map Service Center may also be reached 1-00-358-90-30 and its section as <u>Projectives may for the section</u>.

ive questions about this map or questions concerning the National Floor as Program in general, please call 1-877-FEMA MAP (1-877-336-2927) or FEMA website at http://www.fema.gov.



#### LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUIT BY THE 1% ANNUAL CHANCE FLOOD

20NE A No Sase Flood Develtions determined.

20NE AH Rood depths of 1 to 3 feet (usually areas of ponding); if

ZONE AR

20NE A55

Coastal flood zone with velocity hazard (wave action); no i ZONE V 20NE VE

Coastal flood zone with velocity hazard (wave action): I 1111

FLOODWAY AREAS IN ZONE AE

20NE D

ZONE X

OTHER AREAS

Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) ARE

nally located within or adjacent to Special Flood Hazard A CBRS areas and CRAs an

1% annual chance floodplain boundary

Floodway boundary Zone D boundary ......

Boundary dividing Special Rood Hazard Area : boundary dividing Special Flood Hazard Areas of diff Flood Beviations, flood depths or flood velocities.

Base Flood Elevation line and value, elevation in feet\*

\* Referenced to the Ne Coodetic Vortical Datum of 1525

(A)-----(A) Transect line

87"07"45", 32"22"30" Geographic coordinates referenced to the North Ameri of 1983 (WAD 83), Western Hermonere

76""N 1000-meter Disserval Transverse Mercatry grid unities,

600000 FT DX5510\_

• M1.5 River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

To determine if flood insurance is available in this community, contact your Instrument or call the National Flood Insurance Program at 1-800-638-6629.





GRAFTON COUNTY, NEW HAMPSHIRE

(ALL JURISDICTIONS)

PANEL 117 OF 1185

(SEE MAP INDEX FOR FIRM PANEL LA

CONTAINS: NUMBER PANEL

COMMUNITY

NSURANCE

TIONAL FLOOD

W.

BETHEREIN TOWN OF 20005 0117 LITTLETON FOWN OF 20004 0117

MAP NU 330090



Federal Emergency Management A

# APPENDIX D NRCS SOILS MAP



Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

#### **Custom Soil Resource** Report for **Grafton County, New Hampshire**



#### **Preface**

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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#### **How Soil Surveys Are Made**

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

#### Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

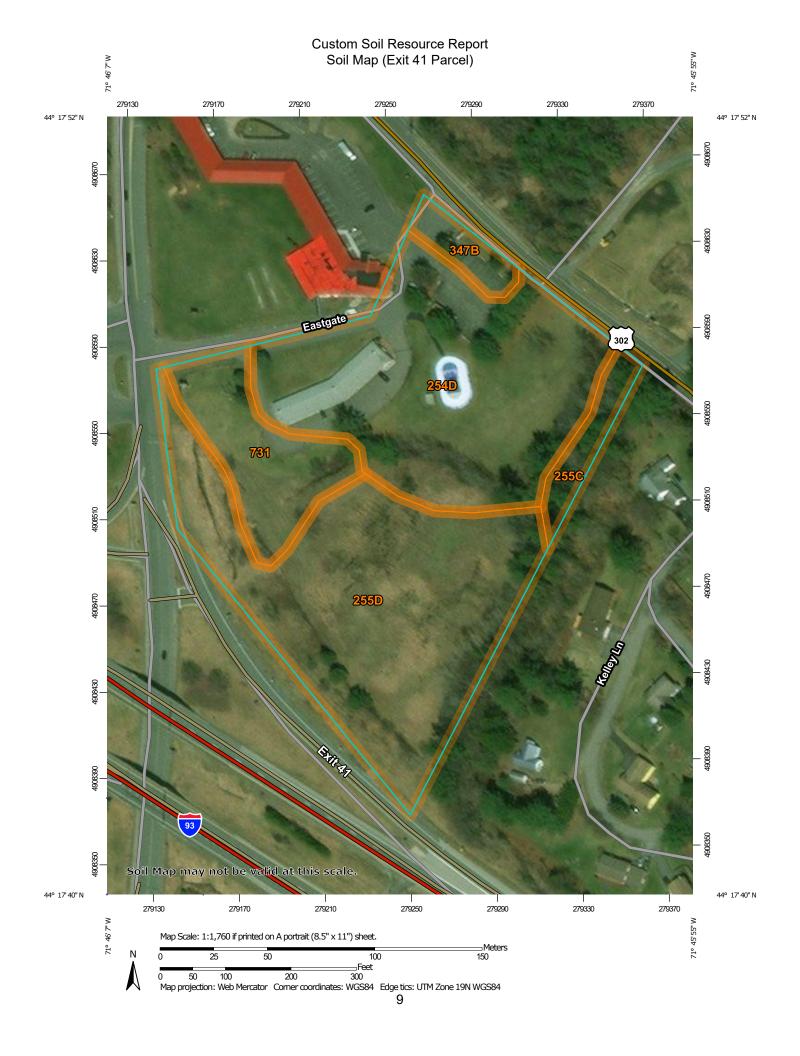
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



#### 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**

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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

Slide or Slip

Sinkhole

Sodic Spot

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

#### Water Features

Streams and Canals

#### Transportation

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Rails

Interstate Highways

**US Routes** 

Major Roads

00

Local Roads

# Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

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: Grafton County, New Hampshire Survey Area Data: Version 23, May 29, 2020

Soil map units are labeled (as space allows) for map scales 1:50.000 or larger.

Date(s) aerial images were photographed: Apr 14, 2013—Jun 24. 2016

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 (Exit 41 Parcel)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
254D	Monadnock and Hermon soils, 15 to 25 percent slopes	3.2	39.1%
255C	Hermon and Monadnock soils, 8 to 15 percent slopes, very stony	0.3	3.7%
255D	Monadnock and Hermon soils, 15 to 25 percent slopes, very stony	3.5	42.6%
347B	Lyme and Moosilauke soils, 3 to 8 percent slopes, very stony	0.2	3.0%
731	Peacham and ossipee soils, very stony	1.0	11.7%
Totals for Area of Interest		8.3	100.0%

# **Map Unit Descriptions (Exit 41 Parcel)**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it

was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

# **Grafton County, New Hampshire**

# 254D—Monadnock and Hermon soils, 15 to 25 percent slopes

#### **Map Unit Setting**

National map unit symbol: 2x9pf Elevation: 490 to 1,380 feet

Mean annual precipitation: 31 to 65 inches Mean annual air temperature: 36 to 54 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Monadnock and similar soils: 45 percent Hermon and similar soils: 40 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Monadnock**

#### Setting

Landform: Hills, mountains

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Mountainflank, side slope, nose slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy supraglacial meltout till derived from granite and gneiss and/or mica schist and/or phyllite over sandy and gravelly supraglacial meltout till derived from granite and gneiss and/or mica schist and/or phyllite

# **Typical profile**

Ap - 0 to 7 inches: fine sandy loam Bs1 - 7 to 9 inches: fine sandy loam

Bs2 - 9 to 19 inches: gravelly fine sandy loam BC - 19 to 22 inches: gravelly fine sandy loam 2C1 - 22 to 42 inches: gravelly loamy sand 2C2 - 42 to 65 inches: gravelly loamy sand

#### **Properties and qualities**

Slope: 15 to 25 percent

Depth to restrictive feature: 15 to 30 inches to strongly contrasting textural

stratification

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.03 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 3.3 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Hydric soil rating: No

#### **Description of Hermon**

#### Setting

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Mountainflank, side slope, nose slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Sandy and gravelly supraglacial meltout till derived from granite

and gneiss

#### **Typical profile**

Ap - 0 to 9 inches: sandy loam

Bs1 - 9 to 16 inches: very gravelly sandy loam
Bs2 - 16 to 32 inches: extremely gravelly loamy sand
C - 32 to 65 inches: very gravelly coarse sand

## **Properties and qualities**

Slope: 15 to 25 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(1.42 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 3.9 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A Hydric soil rating: No

#### **Minor Components**

# Waumbek

Percent of map unit: 8 percent Landform: Mountains, hills

Landform position (two-dimensional): Footslope, backslope

Landform position (three-dimensional): Mountainflank, side slope, nose slope *Microfeatures of landform position:* Open depressions, open depressions

Down-slope shape: Convex, concave Across-slope shape: Convex, concave

Hydric soil rating: No

#### Lyme

Percent of map unit: 7 percent Landform: Mountains, hills

Landform position (two-dimensional): Toeslope, footslope

Landform position (three-dimensional): Mountainflank, side slope, nose slope *Microfeatures of landform position:* Open depressions, open depressions

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

# 255C—Hermon and Monadnock soils, 8 to 15 percent slopes, very stony

#### Map Unit Setting

National map unit symbol: 2x9ph

Elevation: 0 to 1,610 feet

Mean annual precipitation: 31 to 65 inches
Mean annual air temperature: 36 to 54 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Farmland of local importance

#### **Map Unit Composition**

Hermon, very stony, and similar soils: 45 percent Monadnock, very stony, and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Hermon, Very Stony**

#### Settina

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Mountainbase, mountainflank, side slope,

nose slope, interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Sandy and gravelly supraglacial meltout till derived from granite

and gneiss

# Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

E - 2 to 3 inches: sandy loam Bhs - 3 to 9 inches: sandy loam

Bs1 - 9 to 16 inches: very gravelly sandy loam
Bs2 - 16 to 32 inches: extremely gravelly loamy sand
C - 32 to 65 inches: very gravelly coarse sand

#### **Properties and qualities**

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(1.42 to 14.03 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water capacity: Low (about 4.2 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A Hydric soil rating: No

#### Description of Monadnock, Very Stony

#### Setting

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainbase, mountainflank, side slope,

nose slope, interfluve

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Loamy supraglacial meltout till derived from granite and gneiss and/or mica schist and/or phyllite over sandy and gravelly supraglacial meltout till derived from granite and gneiss and/or mica schist and/or phyllite

# Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material

E - 3 to 8 inches: fine sandy loam
Bs1 - 8 to 10 inches: fine sandy loam
Bs2 - 10 to 12 inches: fine sandy loam

Bs3 - 12 to 22 inches: gravelly fine sandy loam BC - 22 to 25 inches: gravelly fine sandy loam 2C1 - 25 to 45 inches: gravelly loamy sand 2C2 - 45 to 65 inches: gravelly loamy sand

# **Properties and qualities**

Slope: 8 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.1 percent Depth to restrictive feature: 18 to 36 inches to strongly contrasting textural

stratification

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.03 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 4.3 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B Hydric soil rating: No

#### **Minor Components**

#### Waumbek, very stony

Percent of map unit: 5 percent Landform: Mountains, hills

Landform position (two-dimensional): Footslope, backslope

Landform position (three-dimensional): Mountainflank, mountainbase, side slope, nose slope, interfluve

Microfeatures of landform position: Closed depressions, open depressions, open depressions, closed depressions

Down-slope shape: Convex, concave Across-slope shape: Linear, concave

Hydric soil rating: No

#### Lyme, very stony

Percent of map unit: 5 percent Landform: Mountains, hills

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainbase, mountainflank, interfluve,

side slope, nose slope

Microfeatures of landform position: Open depressions, closed depressions, closed

depressions, open depressions Down-slope shape: Concave

Hydric soil rating: Yes

# Colton, very stony

Percent of map unit: 4 percent Landform: Mountains, hills

Across-slope shape: Concave

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Mountainbase, mountainflank, interfluve,

nose slope, side slope

Microfeatures of landform position: Rises, rises

Down-slope shape: Convex Across-slope shape: Convex

Hydric soil rating: No

# Peru, very stony

Percent of map unit: 1 percent Landform: Mountains, hills

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Mountainbase, mountainflank, side slope,

nose slope, interfluve

Microfeatures of landform position: Open depressions, closed depressions, closed

depressions, open depressions Down-slope shape: Concave, convex Across-slope shape: Concave, linear

Hydric soil rating: No

# 255D—Monadnock and Hermon soils, 15 to 25 percent slopes, very stony

#### **Map Unit Setting**

National map unit symbol: 2x9pj Elevation: 430 to 1,540 feet

Mean annual precipitation: 31 to 65 inches
Mean annual air temperature: 36 to 54 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Monadnock, very stony, and similar soils: 45 percent Hermon, very stony, and similar soils: 40 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

# **Description of Monadnock, Very Stony**

#### Setting

Landform: Mountains, hills

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Mountainflank, side slope, nose slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy supraglacial meltout till derived from granite and gneiss and/or mica schist and/or phyllite over sandy and gravelly supraglacial meltout till derived from granite and gneiss and/or mica schist and/or phyllite

# **Typical profile**

Oe - 0 to 3 inches: moderately decomposed plant material

E - 3 to 8 inches: fine sandy loam
Bs1 - 8 to 10 inches: fine sandy loam
Bs2 - 10 to 12 inches: fine sandy loam

Bs3 - 12 to 22 inches: gravelly fine sandy loam BC - 22 to 25 inches: gravelly fine sandy loam 2C1 - 25 to 45 inches: gravelly loamy sand 2C2 - 45 to 65 inches: gravelly loamy sand

#### **Properties and qualities**

Slope: 15 to 25 percent

Surface area covered with cobbles, stones or boulders: 1.1 percent Depth to restrictive feature: 18 to 36 inches to strongly contrasting textural

stratification

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.03 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 4.3 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B Hydric soil rating: No

#### **Description of Hermon, Very Stony**

#### Settina

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, summit, shoulder

Landform position (three-dimensional): Mountainflank, side slope, nose slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Sandy and gravelly supraglacial meltout till derived from granite

and gneiss

# Typical profile

Oa - 0 to 2 inches: highly decomposed plant material

E - 2 to 3 inches: sandy loam Bhs - 3 to 9 inches: sandy loam

Bs1 - 9 to 16 inches: very gravelly sandy loam
Bs2 - 16 to 32 inches: extremely gravelly loamy sand
C - 32 to 65 inches: very gravelly coarse sand

#### **Properties and qualities**

Slope: 15 to 25 percent

Surface area covered with cobbles, stones or boulders: 1.1 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat excessively drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(1.42 to 14.03 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 4.2 inches)

### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: A Hydric soil rating: No

#### **Minor Components**

#### Waumbek, very stony

Percent of map unit: 8 percent Landform: Mountains, hills

Landform position (two-dimensional): Footslope, backslope

Landform position (three-dimensional): Mountainflank, side slope, nose slope Microfeatures of landform position: Open depressions, open depressions

Down-slope shape: Convex, concave Across-slope shape: Convex, concave

Hydric soil rating: No

#### Lyme, very stony

Percent of map unit: 7 percent Landform: Mountains, hills

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainflank, side slope, nose slope Microfeatures of landform position: Open depressions, open depressions

Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

# 347B—Lyme and Moosilauke soils, 3 to 8 percent slopes, very stony

#### **Map Unit Setting**

National map unit symbol: 9fhx Elevation: 460 to 4.000 feet

Mean annual precipitation: 31 to 95 inches Mean annual air temperature: 27 to 55 degrees F

Frost-free period: 60 to 160 days

Farmland classification: Not prime farmland

# **Map Unit Composition**

Lyme and similar soils: 55 percent Moosilauke and similar soils: 30 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

### **Description of Lyme**

# **Setting**

Landform: Ground moraines

Parent material: Till

#### Typical profile

Oe - 0 to 6 inches: mucky peat

H1 - 6 to 11 inches: cobbly fine sandy loam H2 - 11 to 22 inches: cobbly fine sandy loam H3 - 22 to 65 inches: gravelly fine sandy loam

### Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.20 to 6.00 in/hr)

Depth to water table: About 0 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Available water capacity: Moderate (about 7.9 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A/D Hydric soil rating: Yes

#### **Description of Moosilauke**

#### Setting

Landform: Ground moraines Parent material: Glacial drift

#### Typical profile

H1 - 0 to 5 inches: fine sandy loam H2 - 5 to 22 inches: fine sandy loam

H3 - 22 to 65 inches: sand

#### Properties and qualities

Slope: 3 to 8 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00

in/hr)

Depth to water table: About 0 to 18 inches

Frequency of flooding: None Frequency of ponding: None

Available water capacity: Low (about 5.7 inches)

#### Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: A/D Hydric soil rating: Yes

#### **Minor Components**

#### Not named

Percent of map unit: 8 percent

Hydric soil rating: No

#### Not named wet

Percent of map unit: 7 percent Landform: Depressions Hydric soil rating: Yes

# 731—Peacham and ossipee soils, very stony

#### **Map Unit Setting**

National map unit symbol: 9flq Elevation: 380 to 3,560 feet

Mean annual precipitation: 28 to 95 inches
Mean annual air temperature: 27 to 55 degrees F

Frost-free period: 60 to 160 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Peacham and similar soils: 41 percent Ossipee and similar soils: 39 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

#### **Description of Peacham**

#### Setting

Landform: Ground moraines

Parent material: Basal lodgement till derived from granite and gneiss and/or basal

lodgement till derived from schist

#### **Typical profile**

Oa - 0 to 7 inches: muck

H1 - 7 to 15 inches: gravelly fine sandy loam

H2 - 15 to 65 inches: sandy loam

#### **Properties and qualities**

Slope: 0 to 2 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent Depth to restrictive feature: 10 to 39 inches to densic material

Drainage class: Very poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

high (0.00 to 0.20 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None Frequency of ponding: Frequent

Available water capacity: Low (about 4.6 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 5s

Hydrologic Soil Group: D Hydric soil rating: Yes

#### **Description of Ossipee**

#### Setting

Landform: Bogs

Parent material: Organic material over till

#### Typical profile

Oe1 - 0 to 6 inches: mucky peat Oe2 - 6 to 41 inches: mucky peat H - 41 to 65 inches: silt loam

# **Properties and qualities**

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.20 to 2.00 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: None

Frequency of ponding: Frequent

Available water capacity: Very high (about 24.5 inches)

# Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w

Hydrologic Soil Group: A/D Hydric soil rating: Yes

#### **Minor Components**

#### Greenwood

Percent of map unit: 10 percent

Landform: Bogs Hydric soil rating: Yes

#### Not named wet

Percent of map unit: 5 percent Landform: Ground moraines Hydric soil rating: Yes

#### Lyme

Percent of map unit: 3 percent Landform: Ground moraines Hydric soil rating: Yes

#### **Pillsbury**

Percent of map unit: 2 percent Landform: Ground moraines Hydric soil rating: Yes

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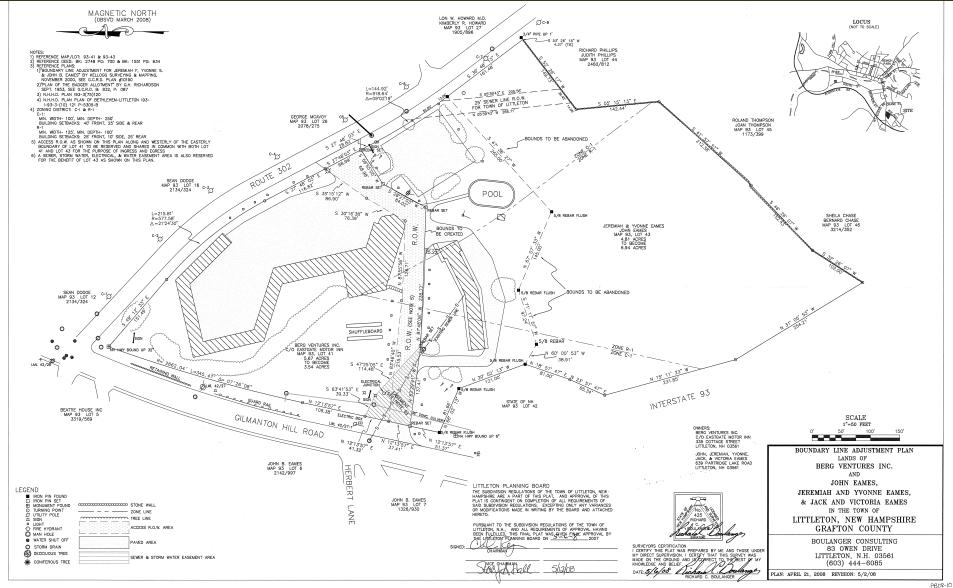
**TAX MAP** Prime Site at Exit 41, Littleton, NH 337 Cottage Street | Littleton, NH 03561 **26-1** 2.46 Ac TTAGE 41 ROUTES TO & SUC 2.57 Ac 248 27 6 92 4.5 AcC 0.97 Ac 153.38 STREET RT LANE Easome R/W 82.39' 137.36 51.37 44 42 0.97 AcC 0.40 AcC Œ STATE OF N.H. 43 6.94 Ac (32) 52 0.44 AcC 4 (15) 45 0.46 AcC 53 (33) INTERSTATE (34) KELLEY 48 0.31 Ac 0. 46 0.57 AcC 50 0.29 Ac 40 42 49 છુ 0.29 Ac 18.93, 47 0.52 AcC 34.68 27.49 (25) 27.49 (44) (23) 1



(43)

# **SURVEY**

Prime Site at Exit 41, Littleton, NH 337 Cottage Street | Littleton, NH 03561



#1318\$









#### WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS that we, JEREMIAH F. EAMES, YVONNE S. EAMES and JOHN B. EAMES d/b/a Eames Partnership, all of Littleton, County of Grafton and State of New Hampshire, (hereinafter "grantor"), for consideration paid, grant to EAMES PROPERTY INVESTMENT COMPANY, LLC, a New Hampshire Limited Liability Company, with a mailing address of 32 Main Street, Littleton, New Hampshire 03561 (hereinafter "Grantee"). Such transfer is made with WARRANTY COVENANTS:

All of our right, title and interest in and to a certain piece or parcel of land, together with any buildings and improvements thereon, located in the Town of **LITTLETON**, County of Grafton, and State of New Hampshire, bounded and further described as follows:

- 1. Real estate located at Bethlehem Road and being all and the same premises described in Quitclaim Deed of United States Small Business Administration to Jeremiah F. Eames and Yvonne S. Eames and John B. Eames dated July 12, 1985 and recorded in the Grafton County Registry of Deeds at Book 1551, Page 634;
- 2. Real estate located at Bethlehem Road and being all and the same premises described in deed of George H. Herbert to Jeremiah F. Eames and Yvonne S. Eames and John B. Eames d/b/a Eames Partnership dated October 27, 2000 and recorded in the Grafton County Registry of Deeds at Book 2497, Page 015;

See Notice of Merger dated November 17, 2000 recorded in said Registry at Book 2525, Page 988.

EXCEPTING and RESERVING the land and buildings described in Warranty Deed of Jeremiah F. Eames, Yvonne S. Eames and John B. Eames d/b/a Eames Partnership to Eastgate Motor Inn & Restaurant, LLC. dated January 31, 2001 and recorded in the Grafton County Registry of Deeds at Book 2514, Page 339.

SUBJECT TO AND TOGETHER WITH all matters set forth in the aforesaid instruments, and of record.

SUBJECT TO real estate taxes assessed by the Town of Littleton as of April 1, 2008.



The premises conveyed hereby are not homestead property.

IN WITNESS WHEREOF, we have hereunto set our hands as of the 6+ day of May 2008.

John B. Eames

STATE OF NEW HAMPSHIRE **COUNTY OF GRAFTON** 

This instrument was acknowledged before me on May 6, 2008 by Jeremiah F. Eames.

Notary Public (seal)

My commission expires:

STATE OF NEW HAMPSHIRE **COUNTY OF GRAFTON** 

This instrument was acknowledged before me on May 6, 2008 by Yvonne S. Eames.

Notary Public (seal) My commission expires:

STATE OF NEW HAMPSHIRE **COUNTY OF GRAFTON** 

This instrument was acknowledged before me on May 2008 by John B. Eames, HAM

EXPIRES

otary Public (seal) My commission expires:

This deed has been prepared solely at the request of and from information provided by the

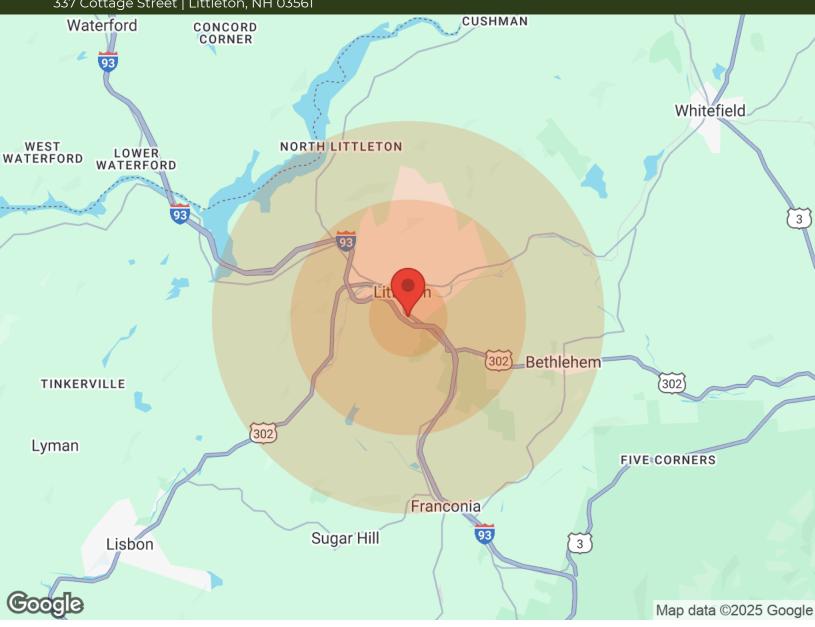
Grantor/Grantors without the benefit of a title search on behalf of the Grantor/Grantors.

EamesPrtn to Eames LLC.doc

# **LOCATION MAPS** Prime Site at Exit 41, Littleton, NH 337 Cottage Street | Littleton, NH 03561 ctules Bridges Hwy Crane St Bethlehem Rd Bitchcroft Dr Herbertin CraneSt Bernen Rd Remich St telley Ln **Coogle** 93 Map data ©2025 Google ALDERBROOK 93 (302) APTHORP Littleton NEWTONS MOBILE PARK **Bethlehem** 302 BARRETT Coogle (302) Map data ©2025 Google

# **DEMOGRAPHICS**

Prime Site at Exit 41, Littleton, NH 337 Cottage Street | Littleton, NH 03561



Income

Population	1 Mile	3 Miles	5 Miles
Male	506	1,727	2,820
Female	635	1,952	3,073
Total Population	1,141	3,679	5,893
Age	1 Mile	3 Miles	5 Miles
Ages 0-14	142	567	856
Ages 15-24	123	498	805
Ages 25-54	425	1,401	2,195
Ages 55-64	162	481	834
Ages 65+	289	732	1,203
Race	1 Mile	3 Miles	5 Miles
White	1,131	3,634	5,830
Black	N/A	2	2
Am In/AK Nat	N/A	1	1
Hawaiian	N/A	N/A	N/A
Hispanic	3	36	36
Multi-Racial	20	74	94

Median	\$32,601	\$34,277	\$39,219
< \$15,000	186	298	341
\$15,000-\$24,999	69	161	198
\$25,000-\$34,999	43	288	441
\$35,000-\$49,999	102	363	555
\$50,000-\$74,999	100	348	565
\$75,000-\$99,999	22	95	210
\$100,000-\$149,999	63	132	306
\$150,000-\$199,999	N/A	10	10
> \$200,000	9	25	25
Housing	1 Mile	3 Miles	5 Miles
Total Units	535	1,626	2,499
Occupied	486	1,441	2,182
Owner Occupied	216	699	1,319
Renter Occupied	270	742	863
Vacant	49	185	317

1 Mile

3 Miles

5 Miles

