

DRIFTWOOD TOWNHOMES
TAX MAP 17.3, LOT 06
FACT SHEET
SEPTEMBER 2018

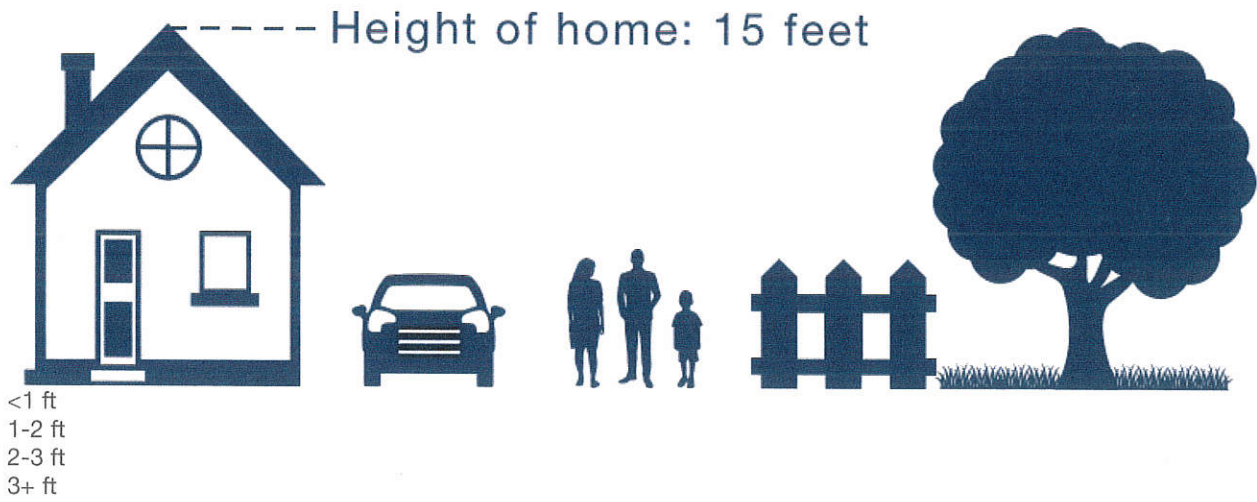
	EXISTING	PROPOSED
Number of buildings	12	4
Buildings code compliant to current code	0	4
Units with sprinklers	0	8
Number of outdoor amenities (pool)	1	0
Number of residential units	15	8
Number of bedrooms	22	16
Number of commercial rental units	1	0
Number of restaurants	1	0
Number of residential units in the 50-foot tidal buffer	3	0
Impervious in the 50-foot tidal buffer	2,091 Sf	±40 SF
Impervious between 50 and 100-feet from tidal wetland	8,228 SF	1,845 SF
Lot coverage – effective impervious	24,400 SF	10,560 SF
Pervious pavement or pavers	0 SF	12,300 SF
Linear feet of access onto the public roadways	±275 LF	±45 LF
Reduction of impervious in Town and State ROW		4,480 SF
Total reduction in site effective impervious associated with the project		18,300 SF

1215 Ocean Blvd
Memo re 2nd Driveway Entrance/Exit

- Respectfully disagree with Applicant's Attorney June 28th communication which notes, in part: "...the assertion that a second driveway entrance and exit be provided, overlooks requirements and intent of the RZO and LDR"
- Refer to minutes of PB 4.19.19, pages 5 and 8:
 - PB concerns raised regarding flooding/surge from the marsh
 - Attorney Donovan's opinion that this site would be grandfathered regarding the lesser traveled street requirement (RZO 202.6)
- Refer to minutes of ZBA 10.3.18, page 7: "Mr. Weinrieb stated that all the flooding that is seen is the surge coming in from the marsh", in response to Vice-Chair Crapo asking if the FEMA flood zone they are protecting against is from the marsh or the ocean.
- Refer to Attorney Donovan's letter of 5.30.19 regarding Appendix G to the LDR, Section 5M: *Driveways greater than 150 feet measured from the edge of the paved roadway to the residence shall be equipped with a suitable turnaround for emergency apparatus and require written approval from the Rye Fire Chief.*
Does proposed driveway allow for turnaround of Rye's new ladder truck providing ladder, pumper, engine, rescue, and tank facilities?
- Attorney Phoenix notes that the gravel driveway, if grandfathered for current use, "...would have to be substantially expanded...." However, the width of the existing gravel driveway is, in one area per Plan Set (3.26.19) sheet S-1, depicted at 12', and the width of the proposed driveway is, in one area per Plan Set (3.26.19) sheet C-4, depicted at 12'. Both would require expansion – WFH and 1244 Washington 20' drives.
- While the responsibility for administering the regulations and issuing driveway permits rests with the DPW Director, the Rye Master Plan, Chapter 3 Coastal Hazards and Climate Adaptation (RMP Ch 3) (adopted 12.12.17) states on 3-2 that the Town's primary goals relating to coastal hazards and climate adaptation are to, amongst others: ensure the safety of residents and businesses, identify areas at high risk to coastal hazards including storm flooding and erosion, and manage development and use of land and resources in high risk areas.

- Attorney Phoenix rightly raises concerns regarding this well-traveled area in the summer months (LDR 602.2.A.2 re Through Traffic and LDR 611.5.B.1 re minimizing conflicts with pedestrians and other users of exterior spaces). However, safety and welfare with respect to high water also remains a responsibility as set forth in RZO 301.4: "Purpose: In the interest of public health, convenience, safety and welfare, the regulations of this District are intended to guide the use of areas of land with extended periods of high water tables." Inundation of this site is noted in Waterstone Engineering's Summary, 4.23.19 Technical Memorandum p. 1 including: "The site is inundated by the 100-year flood event in Parsons Creek and is expected to flood the majority of the site to a depth of 3-4 feet". RMP Ch 3, Figure 2, *History of significant coastal storm and flood events that have impacted Rye* (3-3) includes 14 events from 1972-2016, 13 of which occurred from Labor Day through Memorial Day, periods of lesser travel intensity but possibly impactful from storm perspectives.
- Flood data (Flood iQ) is referenced in Seacoast Online: Rising Tides, Falling Property Values? February 9, 2019, and includes a photo of this area during a King Tide on January 23, 2019 (<https://www.seacoastonline.com/news/20190209/rising-tides-falling-property-values>). Under models provided by Flood iQ (What's Affected), most trucks are unable to drive at a depth of 1-2' of flooding.
- The PB should consider the most efficacious way of assuring movement of persons and vehicles to safety in a flood/surge environment on 1215 Ocean Boulevard. A Second Driveway Entrance/Exit may well realize this measure of safety. Recently, a limited access drive was approved in connection with the Housing Partnership Workforce Housing Application to enhance fire safety.

From Flood iQ:
FLOOD AT 1-2 FEET



What's affected

Depth

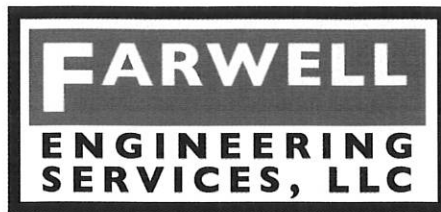
Electrical outlets	1+ ft
Furnaces, HVAC systems	1+ ft
Most trucks unable to drive	1+ ft

From: Judy Scott dhs.1966@yahoo.com
Date: Jun 27, 2019 at 2:07:52 PM
To: Judy Scott dhs.1966@yahoo.com



Sent from my iPad





265 Wadleigh Falls Road Lee, NH 03861 Ph(603)292-5787
WWW.FARWELLENGINEERING.COM

July 8, 2019

Kimberly Reed, Planning Board Administrator
Town of Rye
10 Central Road
Rye, NH 03870

Re: Samonas – Septic Design
1215 Ocean Boulevard
Rye, NH
FES #1867

Dear Ms. Reed:

Farwell engineering has reviewed the septic information for the proposed project at 1215 Ocean Boulevard. We are submitting the following information for the consideration of the board:

The attorney for the applicant has stated in the most recent submittal letter dated June 28, 2019 “Applicant’s 8-unit proposal enhances the wetland and wetland buffer, reduces the impervious coverage, improves drainage, meets flood requirements and supports the proposed units and septic.” FES has reviewed the design and finds that the lot loading is not sufficient for 16 bedrooms.

Lot Loading:

The septic plan proposed by the applicant dated March 26, 2019 by Altus Engineering NHDES-SSB Site Plan Sheet SS-1. The plan has a “LOT LOADING CAPACITY CALCULATION”. The calculation indicates the area of the lot minus the very poorly drained soils is 1.52 acres and the sewage loading factor for group 3 soils with 0-8% slopes is 1.6. The lot loading is the acreage x 2000 gpd / 1.6 = 1,900 gallons per day. The calculation goes on to “Municipal water supply-2.0” and doubles the lot loading to 3,800 gallons per day. This doubling of the lot loading capacity is incorrect.

It appears that Altus Engineering has mis-interpreted New Hampshire Code of Administrative Rules section Env-Wq 1005.03 Minimum Lot Sizes (f) For individual lots served or proposed to be served by an on-site ISDS and a public water system the lot size shall be at least 50% of the size shown in table 1005-1 or 20,000 ft² whichever is greater. This is not intended to allow lot loading to be doubled because the lot is serviced by a public water supply. The benefit of being supplied by public water is that there is no well radius to remove from the lot area. Env-Wq 1005.03 (f) is only applicable for subdivision of lots and does not apply to lot loading.

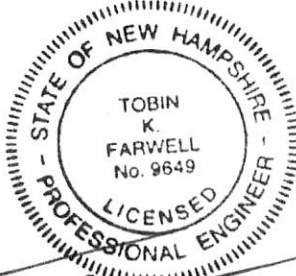
I have reviewed the Rule interpretation with Mr. Eric Thomas and Darren King of NHDES Subsurface Systems Bureau. I have attached an email from Mr. Darren King that Env- Wq 1005.03 (f) does not double the lot loading capacity. Mr. King was not given the entire plan and misinterpreted the lot area. He is quite clear on that the lot loading is not double based on 1005.03 (f). I have attached his email for your review.

Conclusion:

The lot loading for this lot is 1900 gallons per day. Bedrooms are 150 gallons per day. Therefore the maximum number of bedrooms for this site is 12 (1800 gallons per day).

Thank you for your time reviewing this important information. I look forward to discussing this at the Planning board meeting on July 9, 2019.

Sincerely,



Tobin Farwell

Tobin Farwell, P.E.

1867-lot loading ltr

Without view of the entire parcel, lets assume the parcel of land is 1.52 acres. The lot loading shall need to be calculated by first subtracting any unusable land such as ledge outcrop(s), slopes over 35%, surface water /very poorly drained soil. After that, lets assume the 0.3 acres of very poorly drained soil and 0.15 acres of ledge; with municipal water there is no well radius to subtract. 1.52 minus 0.45 acres = 1.07 acres of usable land.

With group 3 assuming the average land is no more than 8% slope, the soil factor of 1.6.

The calculation for the maximum lot loading use, can be calculated as follows (1.07 acres x 2000 gallons) % 1.6 soil factor= 1,337.5gpd. The municipal water supply does not apply, instead helps such that there is no on-site well radius to subtract.

Also, using the calculation formula per Env-Wq 1005.03 and flow of 1,900gpd (16 bedrooms @150gpd/bedroom); the $(Q(\text{gpd})/2000\text{gpd}/\text{acres}) \times \text{soil factor}$ would require usable land of as follows:
 $(1900\text{gpd}/2000(\text{gpd}/\text{acre})) \times 1.6(\text{soil factor}) = \text{requires the usable land of 1.52 acres.}$

Again, if the usable land of 1.52 acres is provided - then the parcel of land would be able to support maximum flow of 1900gpd. But the other example with a bit of unusable land, then 1.07 acres would not support the 16 bedrooms. The "municipal water supply – 2.0 factor" is not granted for doubling the lot loading calculations. Env-Wq 1005.03(f) under the "Minimum Lot Sizes" applies to subdivision applications.

Darren K. King
Subsurface System Bureau, LRM
Water Division, Department of Environmental Services
29 Hazen Dr, Concord, NH 03301
(603)271-3501

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From: Tobin Farwell - FES <[t_farwell@farwellengineering.com](mailto:farwell@farwellengineering.com)>

Sent: Tuesday, June 25, 2019 11:25 AM

To: King, Darren <Darren.King@des.nh.gov>

Subject: RE: Individual Sewage Disposal System Application, Work #201902913

EXTERNAL: Do not open attachments or click on links unless you recognize and trust the sender.

Darren,

Thanks for the information regarding lot loading and municipal water. Can you please review the attached clip for lot loading and let me know if this is acceptable.

LOT LOADING CAPACITY CALCULATION

HIGH INTENSITY SOIL SURVEY BY JOSEPH NOEL
 A/B SLOPES - GROUP 3 - 66,140 SF (1.52 AC.)

$$\begin{aligned} \text{MIN. LOT SIZE} &= (Q(\text{gpd})/2,000 (\text{gpd/acre})) / \text{FACTOR} \\ &= (1.52 \text{ acres} \times 2,000 \text{ gpd/acre}) / 1.6 = 1,900 \text{ GPD} \end{aligned}$$

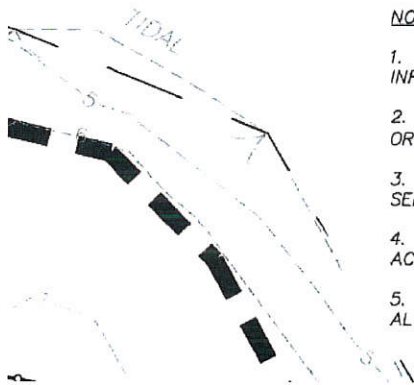
$$\begin{aligned} \text{MUNICIPAL WATER SUPPLY} - 2.0 \text{ FACTOR} &= 1,900 \text{ GPD} \times 2.0 \\ &= 3,800 \text{ GPD MAX. LOADING} \end{aligned}$$

PROPOSED LOT LOADING: 16 BEDROOMS X 150 GPD/BEDROOM = **2,400 GPD**

WATER SUPPLY: MUNICIPAL SYSTEM (RYE WATER DISTRICT)

SOIL INFORMATION CONFIRMED BY TEST PITS.

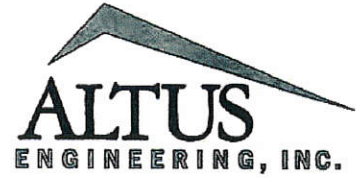
PARCEL HAS AN AREA OF 2.25 ACRES±



NOTES:

1. SEE UTILITIES PLAN FOR ADDITIONAL UTILITY SERVICE INFORMATION, SHEET C-5.
2. NO KNOWN BURIAL SITES OR CEMETARIES THAT ARE ON OR WITHIN 100' OF THE PROPERTY.
3. SEE SHEET SS-2 FOR NOTES & KEY ELEVATIONS FOR SEPTIC SYSTEM.
4. SEE GRADING PLAN FOR ADDITIONAL SPOT GRADES ACROSS SITE.
5. WAIVER REQUEST FOR TIES & TBMS. PROPOSED ALTERNATIVE: LLS TO LAYOUT BUILDINGS & SEPTIC SYSTEMS.

Thanks
 Tobin



133 COURT STREET PORTSMOUTH, NH 03801
 (603) 433-2335 www.ALTUS-ENG.com

ISSUED FOR:

APPROVAL

ISSUE DATE:

MARCH 26, 2019

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EDW	03/26/19

Farwell Engineering Services, LLC
265 Wadleigh Falls Road
Lee, NH 03861

Phone (603)292-5787
www.farwellengineering.com

See Peter

6. Show snow storage areas. **Snow Storage Areas have been shown along the drives and in the Sediment Basin.**
7. Specify the soil mix and depth of it in the rain garden which addresses the infiltration concerns as discussed between your landscape consultant and Danna Truslow. **Detail CC on Sheet D5 has been revised to specify the UNHSC Bioretention Soil Specification dated February, 2017. The gradation table has been revised to match the specification as well.**
8. Address the concern about bollards at fire access road. **We have discussed this issue with Town of Rye, Fire Chief, Mark Cotreau. It is our understanding that installing signs at each end of the access lane stating "No Parking, Fire Lane" will be acceptable to Chief Cotreau.**

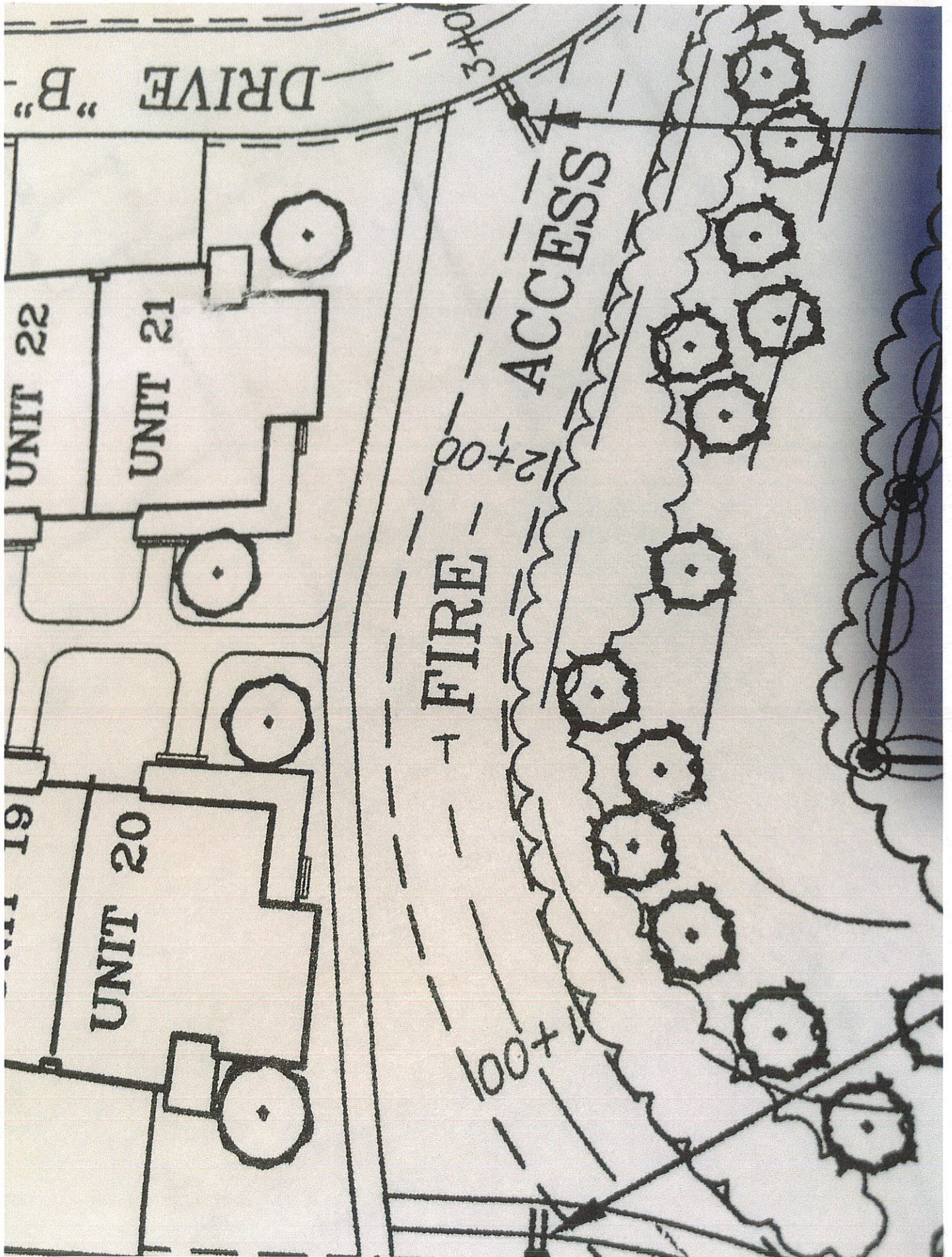
Should there be any questions or comments regarding our revisions, please do not hesitate to contact us.

Sincerely,



John Chagnon, PE; Ambit Engineering, Inc.

cc: Stephen D. Harding, Michael Donovan



*IMPERVIOUS COVERAGE MAY BE INCREASED IF A STORMWATER MANAGEMENT PLAN IS SUBMITTED AND APPROVED BY THE PLANNING BOARD.

LIGHTING NOTE:

NO STREET LIGHTS ARE PROPOSED. EACH UNIT WILL HAVE MOTION ACTIVATED LIGHTS OVER THE GARAGE DOORS.

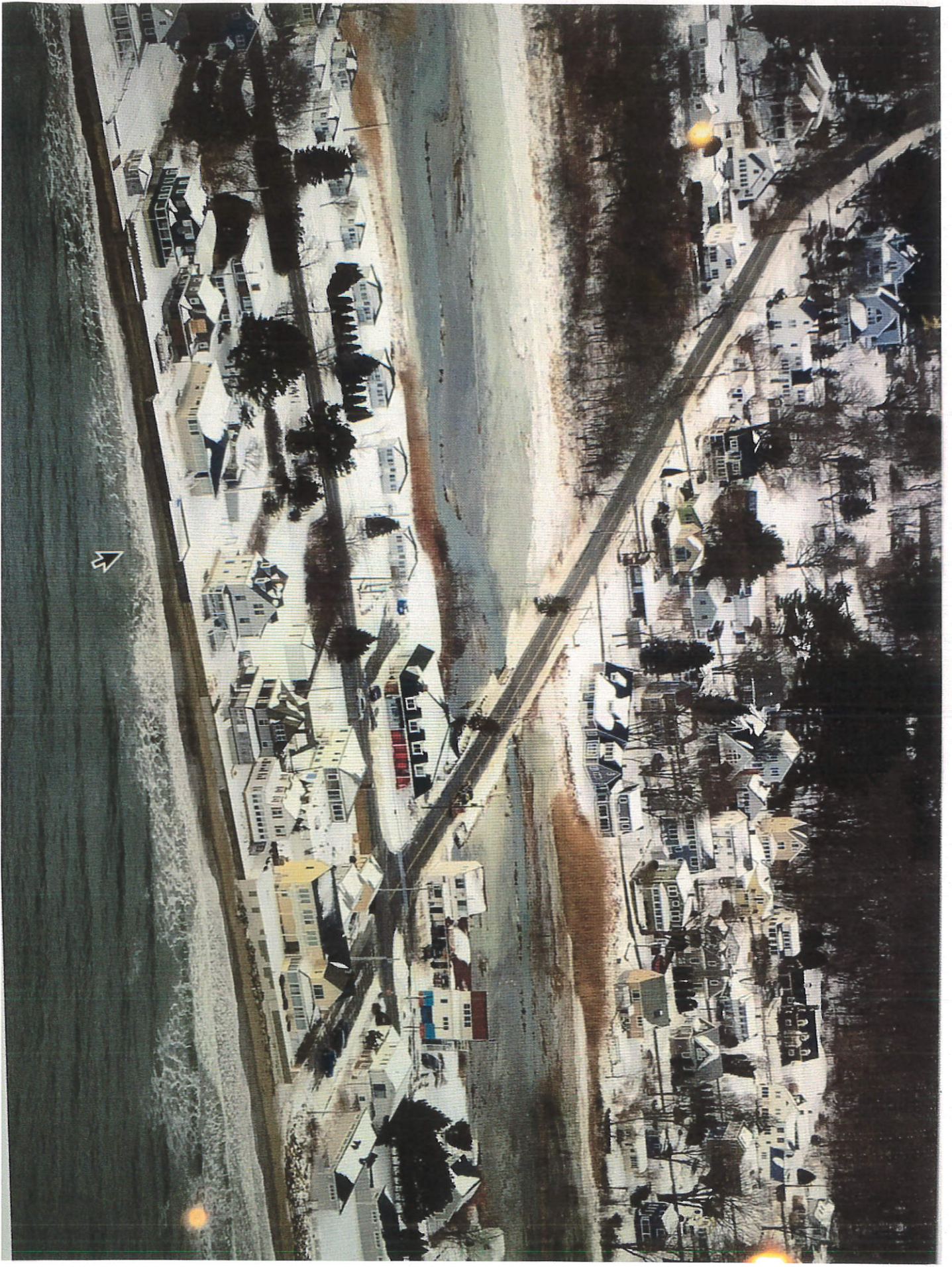
FIRE ACCESS:

SNOW SHALL BE REMOVED FROM FIRE LANE AFTER EVERY SNOW EVENT. SEE PLAN FOR SNOW STORAGE AREAS LOCATIONS. "NO PARKING, FIRE LANE" SIGNS SHALL BE INSTALLED AT EACH ENTRY TO FIRE LANE.

BUFFER NOTE:

BUFFERS SHALL COMPLY WITH TOWN OF RYE ZONING REGULATIONS SECTION 202 APPLICABILITY OF USE DISTRICT REGULATIONS: 202.10.

The sea around Pines Cove in Rye during a King Tide Jan 23
(2012)



Rye Town of Climate Change & Sea Level Rise in Coastal NH Part Revised July 4/1/2014

Chapter 3. Coastal Hazards and Climate Adaptation¹

3.1 Introduction

Like other coastal municipalities in New Hampshire, Rye is confronted by a challenging set of concerns relating to coastal hazards and climate change that include exposure to storms, coastal erosion and flooding, damage to critical infrastructure, and impacts to key coastal resources. Rye has experienced significant impacts during extreme and moderate coastal storm events, increases in extreme rainfall events, and localized flooding from more frequent seasonal highest tides both in immediate coastal areas and inland. Coastal flooding is compounded by increased stormwater runoff from development and impervious surfaces throughout the Town. These observed impacts may be exacerbated by changes in climate that may cause future increases in the frequency and intensity of storms and rates of sea-level rise.

Projected changes in climate and coastal conditions will present challenges to many sectors of municipal governance, asset and infrastructure management, sustainability of recreation and tourism, and protection of natural resources and coastal ecosystems. Adapting to changing conditions will play an important part in the Town's strategic planning and actions in the future. Effective preparedness and proactive land use management will help the Town reduce its future exposure and improve resilience to increased flood risks and thus minimize economic, social, and environmental impacts. The Coastal Hazards and Adaptation Chapter addresses the following topics:

Present and Future Coastal Hazards

Future Impacts to Coastal Areas

Other Climate-Related Impacts

Future Growth and Development

Community Adaptation and Resilience

Recommendations for Future Actions



Figure 1. Storm damage on Route 1A. [Photo Credit: Kimberly Reed (1/10/13)]

Coastal hazards and adaptation strategies identified in this chapter will be expanded upon in the Transportation, Land Use and Natural Resources Chapters of the Master Plan.

¹ Preparation of this Chapter was funded by a grant from the Northeast Region Ocean Council through the U.S. Fish & Wildlife Service.

3.2 Vision

Vision Statement

Proactive strategies are identified and implemented that address the impacts of coastal hazards, and ensure the community is better prepared to protect the security, health and safety of its citizens, provide for a stable and viable economic future, and create a more sustainable and climate resilient community.

The Town’s primary goals relating to coastal hazards and climate adaptation are to:

- Protect important infrastructure.
- Ensure the safety of residents and businesses.
- Identify areas at high risk to coastal hazards including storm flooding and erosion.
- Manage development and use of land and resources in high risk areas.
- Adapt built landscapes and natural landscapes to changing conditions.

Summary of Public Input – Issues and Concerns

The Planning Board sponsored two public informational workshops on May 12 and June 22, 2016 to gain public input on the draft recommendations for this Chapter. Below is a summary of key issues and concerns raised most frequently during these workshops which are also reflected in the primary goals stated above.

Topic Areas	Public Comments			
Impacts and Flood Risk	Consider economic implications of impacts	Sea-level rise and rising groundwater impacts to septic system function	Consider short, medium and long-term timeframes for action	Need plans to adapt roads and its infrastructure
Municipal Actions	Support future investment, transparency of funds	Clarity about municipal roles and responsibilities	Improve communications systems for emergency response	Consider expansion of public sewer services
Resource Protection & Public Safety	Preserve the health and function of saltmarshes to protect life and property	Protect drinking water from contamination	Coordinate with the state on road improvements	Foster community coordination during emergencies
Regulations	Be proactive, address development in high risk areas	Manage stormwater and flooding from precipitation	Comprehensive action plan to address climate impacts and adaptation strategies	Consistency, better oversight, strengthen standards