

Hayes Engineering, Inc

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Refer to File No. LYF-0381B

January 27, 2022

Emilie Cademartori
Planning Board
Town Hall, 55 Summer St
Lynnfield, MA 01940

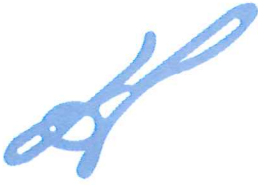
RE: Response to Linden Engineering Letter, Dated: December 9, 2021
Response to Lynnfield Center Water District Letter, Dated: June 23, 2021
Vallis Way, Lynnfield, MA

Dear Emilie,

The following are the applicant's responses to the issues raised by Linden Engineering which were not completed to their satisfaction. Numbers in this letter correspond to the numbers in that response.

COMMENTS FROM LINDEN ENGINEERING'S JUNE 17, 2021, INITIAL REVIEW

3. Requires an action of the Planning Board.
8. The standard soil test pit logs for SWMA 1, 2, & 3 were provided in the report entitled "Drainage Analysis, Vallis Way, Lynnfield, Massachusetts, Dated: April 15, 2021. They are included here for easy access.
9. It is my understanding the Town Council provided the Planning Board with an opinion on the Stormwater Management Bylaw Regulations as it relates to this subdivision, and I have been led to believe the conclusion is that a separate stormwater permit is not required for a plan that has undergone the scrutiny of the Planning Board.
10. This requires a legal opinion.
11. The catch basin at the end of the street at Station 9+63.32 can be changed to a double catch basin grate.
12. It is believed that the exact location of the gate, or gates, can be determined on the ground with the developer and contractor.
14. I believe the Town council has weighed in on the legality of the easement to Smith Farm Trail.
19. The recommendation can be accommodated.



To: E. Cademartori, Planning Board
RE: Response – Linden Engineering Letter, Dated: December 9, 2021
Response – Lynnfield Center Water District Letter, Dated: June 23, 2021
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Comments from the Town Engineer

- 3. Requires and action of the Planning Board.
- 4d. The additional details can be provided.
- 6. The applicant's engineer has arranged a meeting with the Water District Superintendent to resolve any issues relative to the water system. The plans for RMLD for servicing the future lots are unknown to the undersigned at this time. The developer has indicated that natural gas is not being provided to this subdivision.
- 7. The additional light can be added to the plan.

SHEET 1 of 8 (now 10) – LOTTING PLAN

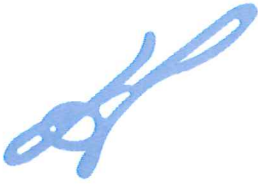
SECTION 375-7.1.D(1) – Requires an action by the Planning Board

SHEET 3 of 8 (now 10) – PLAN AND PROFILE

- G. The handicapped ramps can be extended to the back edge of sidewalk.
- H. It has been determined that the applicant will be blasting the entire hill away to bring the grade down as requested by the abutter.
- J. The additional details can be added.
- L. The Planning Board needs to make a determination as to this.
- O. The additional light can be added to the plan.
- S. It is the undersigned's opinion that placing the sediment control in a shallow trench can cause further environmental damage, such as root damage.

SHEETS 7 & 8 of 8 (now 8, 9, & 10 of 10) – DETAIL SHEETS

- 375-6.4.G(1)(h) - Will be removed.
- Z. The applicant's engineer has set a meeting with the Water District Superintendent to review his criteria.



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AA.A. The note can be added to the plan. The applicant has verified that the STC 900 can accept the pipes as indicated, the discrepancy will be corrected. (To the best of our knowledge, the new Town Engineer has not weighed in on the drainage system.)

DD. The drain configuration will be revised, sizing calculation provided, and test holes conducted.

FF.2). Needs to be addressed by the Geotechnical Engineer.

FF.4). Needs to be responded to by the applicant's council.

GG. The paragraph will be added to the plan.

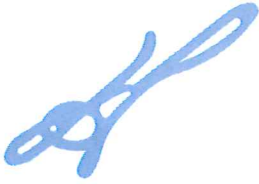
KK. The Board of Health should be in the position to respond, septic inspector's inspection of the existing sanitary systems at 109 Lowell Street has been submitted, which was the only additional information they requested.

LL. Needs to be addressed by the applicant's lawyer.

MM. The plan will be amended to show that the bituminous concrete sidewalk and berm being replaced with a former driveway to 109 Lowell Street is being abandoned.

It is the undersigned understanding that the Planning Board was looking for a direct response to each of the items referenced in this letter, in addition to the engineer's response to the Water District concerns in a November 30th letter by the applicants engineer to John Schenna, P.E., Superintendent Lynnfield Water District, Dated: November 30, 2021. The following are the applicant's responses to the issues in the Lynnfield Center Water District Letter to Emilie Cademartori, Director of Planning and Conservation, Town Hall, 55 Summer Street, Town of Lynnfield, 01940. Numbered paragraphs in this response correspond to the numbers in that June 23, 2021, letter.

1. The discussions with the Water Superintendent, the undersigned provided the results of the flow test at the end of Mohawk Lane which is hydraulically similar to the proposed Vallis Way subdivision. I believe the conclusion of that test was that adequate fire and domestic flow is available in this area for the proposed subdivision.
2. We have improved the geometry of the water main extension to Smith Farm Trail. The language of the easement.
3. The applicant understands that construction and testing requirements of the Lynnfield Center Water District must be adhered to and also that shop drawings are required for submittal prior to construction. Language will be in the H-1 conveyance, this is an issue between the town and the district.



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3a. A fire hydrant has been added at approximately Station 4+35 to meet the requirements. A 10 x 10-foot easement should not be required as the fire hydrant is within the layout.

3b. A triple gate will be added at the Smith Farm Trail connection.

3c. Again, the proposed hydrant at the end of the street does not require a 10 x 10-foot easement for repair or placement.

3d. The applicant understands that the tapping sleeve needs to be stainless steel.

4. The applicant understands that the homes to be constructed must have 1" diameter piping for their services and be copper from the main to the curb stop but can be plastic from the curb stop to the house.

5. The main on Vallis Way is constructed for a proposed future extension with an 8 x 8 x 6 Tee and hydrant gate. Main will be terminated with a mechanical joint cap.

6. The Lynnfield Center Water District fees and bonding requirements should be discussed with the applicant after the project is approved.

Very truly yours,

Peter J. Ogren, P.E., P.L.S.

PJO/ao

Enclosure

Cc: Paul Caggiano

Jay Kimball

John Schenna, P.E., LCWD

Patrick McAlpine, P. E., Town Engineer

William Jones



Commonwealth of Massachusetts
 City/Town of LYNNFIELD
 Form 11 - Soil Suitability Assessment

Field Diagrams

Use this sheet for field diagrams:





Commonwealth of Massachusetts
 City/Town of **LYNNFIELD**
 Form 11 - Soil Suitability Assessment

C. On-Site Review (continued)

Deep Observation Hole Number: SWMA-3

Depth (in.)	Soil Horizon/ Layer	Soil Matrix Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-10	A	10YR 3/3				fsl	0	0%	gr	mfr	
10-24	Bw	10YR 5/6				ls			m	mfr	
24-40	C1	2.5Y 5/6				fs	0	0%	rm	mfr	
40-132	C2	2.5Y 6/3	7132			gros	20	20%	sg	mvr	

Additional Notes:



Commonwealth of Massachusetts
 City/Town of CYMFIELD
 Form 11 - Soil Suitability Assessment

C. On-Site Review (continued)
 Deep Observation Hole Number: SWMA-3 Date: 4-13-21 Time: _____
 Weather: Cloudy 48°

- Location VALLEY WAY
 Ground Elevation at Surface of Hole: _____ feet
 Latitude/Longitude: _____ / _____
 Land Use: WOODS
 Surface Stones (e.g., cobbles, stones, boulders, etc.): NONE Slope (%): A
 (e.g., woodland, agricultural field, vacant lot, etc.)
 Vegetation: OAK, PINE, MAPLE
- Distances from:

Open Water Body	<u>7100</u>	Drainage Way	_____
Property Line	<u>30</u>	Drinking Water Well	<u>7100</u>
	feet		feet
	feet		feet

 Position on Landscape (SU, SH, BS, FS, Wetlands): 7100
 Other: _____
- Parent Material: Outwash
 Unsuitable Materials Present: Yes No
 If Yes: Disturbed Soil Fill Material Impervious Layer(s) Weathered/Fractured Rock Bedrock
 Groundwater Observed: Yes No if yes: NO
 Estimated Depth to High Groundwater: 7132 inches
 Depth Weeping from Pit: _____ Depth Standing Water in Hole: _____
 elevation



Commonwealth of Massachusetts
 City/Town of **LYNNFIELD**
 Form 11 - Soil Suitability Assessment

C. On-Site Review (continued)
 Deep Observation Hole Number: **SWMA-2**

Depth (in.)	Soil Horizon/ Layer	Soil Matrix Color- Moist (Munsell)	Redoximorphic Features		Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color		Percent	Gravel			
0-9	A	10YR 3/3			fs	0	0%	gr	mfr	
9-24	Bw	10YR 5/4			vy cobbcs	20	20%	sg	muf	
24-63	C1	2.5Y 6/3			gr cs	20	10%	sg	muf	
63-83	C2	2.5Y 5/6			fs	0	0%	m	mfr	
83-115	C3	2.5Y 6/3			gr cs	20	10%	sg	muf	
115-132	C4	2.5Y 5/6	7132		fs	0	0%	m	mfr	

Additional Notes:



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C. On-Site Review (continued)

Deep Observation Hole Number: SWMA-1

Deep Observation Hole Number:

Depth (in.)	Soil Horizon/ Layer	Soil Matrix Color- Moist (Munsell)	Redoximorphic Features			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-10	A	10YR 3/3				fsl	0	0%	gr	mfr	
10-24	Bw	10YR 5/4				vy Cob CS	20	2%	sg	mfr	
24-50	C1	2.5Y 6/3				GRCS	20	10%	sg	MNfr	
50-60	C2	2.5Y 7/4				S	5	0%	sg	MNfr	
60-144	C3	2.5Y 6/3	2144"			GRCS	20	10%	sg	MNfr	

Additional Notes:



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 Form 11 - Soil Suitability Assessment

C. On-Site Review (continued)

Deep Observation Hole Number: SWMA 1 Date: 4-13-21 Time: SUNNY Weather: 48°

- Location YALLISWAY
 Ground Elevation at Surface of Hole: _____ feet
 Latitude/Longitude: _____
- Land Use WOODS
 (e.g., woodland, agricultural field, vacant lot, etc.)
OAK PINE
 Vegetation
 Surface Stones (e.g., cobbles, stones, boulders, etc.) NONE
 Slope (%) 2
- Distances from:
 Open Water Body 7100 feet
 Drainage Way _____ feet
 Property Line 40 feet
 Drinking Water Well 7100 feet
 Other _____ feet
 Position on Landscape (SU, SH, BS, FS, Wetlands) 7100 feet
 Other _____ feet
- Parent Material: Outwash Plain
 Unsuitable Materials Present: Yes No

- If Yes: Disturbed Soil Fill Material Impervious Layer(s) Weathered/Fractured Rock Bedrock
 Groundwater Observed: Yes No
 If Yes: _____
 Depth Weeping from Pit _____
 Depth Standing Water in Hole _____
- Estimated Depth to High Groundwater: 7 1/4" inches
 elevation _____



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F.

G. Soil Evaluator Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.



Signature of Soil Evaluator

Gordon Rogerson SE2074

Typed or Printed Name of Soil Evaluator / License #



Date

June 30, 2022

Expiration Date of License



Commonwealth of Massachusetts
City/Town of **LYNNFIELD**
Form 11 - Soil Suitability Assessment

A. Facility Information

Owner Name LINDA VALLIS
Street Address 109 LOWELL ST.
City LYNNFIELD State MA
Map/Lot # 01940
Zip Code 01940

B. Site Information

- (Check one) New Construction Upgrade Repair
- Soil Survey Available? Yes No
If yes: MERS Source 254B Soil Map Unit
- Soil Name MERRIMAC fsi
Soil Limitations OUTWASH PLAIN
Geologic/Parent Material OUTWASH PLAIN
Landform OUTWASH PLAIN
If yes: Year Published/Source _____ Publication Scale _____ Map Unit _____
- Flood Rate Insurance Map
Above the 500-year flood boundary? Yes No
If Yes, continue to #5.
- Within a velocity zone? Yes No
- Within a Mapped Wetland Area? Yes No
- Current Water Resource Conditions (USGS):
Range: Above Normal Normal Below Normal
Month/Year _____
- Other references reviewed: _____

Wetland Type

MassGIS Wetland Data Layer: