



Town of Reading
16 Lowell Street
Reading, MA 01867-2683

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To: Community Planning and Development Commission
CC: Bill Crowley, Attorney / Thad Berry, P.E.
From: Julie Mercier, Community Development Director
Date: May 19, 2016
Re: 364 Lowell Street – Planner’s Notes

The memo herein is intended as an overview of the site and the project, and is not an exhaustive list of staff comments or outstanding requirements. See the Draft Decision, dated 5/23/16, for more details.

Planning Staff have reviewed the Definitive Plan and Application for a proposed 4-lot Subdivision at 364 Lowell Street. In addition to notes from the Development Review Team meeting on March 16th, comments on the project have been received from the Board of Health, Town Engineer, Conservation Administrator, RMLD, Fire Department, and Police Department – these comments are attached.

Based on the feedback received, the project is not ready to be approved at this time.

Background

In 2013, the Conservation Commission issued an Order of Resource Area Delineation (ORAD) for the site, and the Applicant filed a Notice of Intent (NOI). The NOI was subsequently withdrawn, so no Order of Conditions is on record for the site. The Applicant will need to file a new Notice of Intent for the project.

In 2014, the Applicant filed for a Letter of Eligibility from the State for a 16-unit Comprehensive Permit. This application is still pending; no letter has been issued.

Existing Conditions

The site is approximately 2.574 acres and contains an existing house, gravel road, driveway, septic system and lawn. The site access is via a 56’ wide curb cut off of Lowell Street. The site is heavily forested and has a peak elevation of 198’ at its northeast corner. More than half of the site is within a wetland resource area or 100’ wetland buffer area. The Applicant will need to provide calculations proving that the upland area for each proposed lot is at least 12,000 SF.

Town of Reading water and sewer, as well as gas, telephone, electric, and a closed drainage system, are located within Lowell Street. The site has an existing septic system.

Zoning

The site is within the S-15 Zoning District and the Aquifer Protection Overlay District. The Applicant will need to provide calculations proving that the maximum impervious surface does not exceed 15% on any lot.

The Applicant is proposing to maintain the existing house in its present location, but to have the lot’s legal frontage be along the proposed subdivision road. In doing so, the existing house will not meet the 20’ front yard setback requirement, and the Applicant will need to seek a variance from the Zoning Board of Appeals.

The Applicant is proposing to add a garage to the existing house. A portion of the proposed garage will infringe on the 20’ front yard setback, thus the Applicant will need to seek a variance from the Zoning Board of Appeals.

Subdivision Rules & Regulations

The Applicant is proposing to subdivide the property into 4 lots that fully conform to the frontage and area requirements of the S-15 Zoning District. Lot 1 will contain the existing house at 364 Lowell Street. Lots 2,

3 and 4 are proposed to be developed with new homes that will meet the setback requirements of the S-15 Zoning District.

The proposed 40' wide subdivision road will be located within the existing curb cut and the historic 40' right-of-way. It will have a pavement width of 28', be 326' in length, and will end in a cul-de-sac bulb with a 36' radius. The turn radius needs to be approved by the Fire Department.

The project will be tied to Town of Reading water (8" line in Lowell, 1" line to homes) and sewer (8" pipe in Lowell, 4" pipe to homes), and gas, telephone, electric and cable. All new utilities will be located within the right-of-way. The existing septic system will be decommissioned. Two light poles are proposed and shall be installed in accordance with RMLD standards and specifications. The Applicant shall coordinate the installation and/or decommissioning of any utilities with the Town Engineer, the Health Agent, and the RMLD.

The project includes the construction of five LID BMPs to capture site and driveway stormwater runoff. A closed drainage system will collect stormwater runoff from the proposed subdivision road and direct it to BMP Pond 1, which is on Lot 1. A poorly maintained culvert under the MBTA tracks at the southern end of the site causes a lot of water backup in the neighborhood; the Applicant is proposing to add a drainage ditch along the southern property line. The Applicant shall work with the Town Engineer to ensure that all drainage measures are properly designed and constructed and that any mitigation is implemented as needed.

Next Steps

After the presentation by the Development Team, discussion amongst the Commission members, and public comment, the CPDC should review the draft list of conditions and consider what, if any, additional information is needed from the Applicant.

The CPDC is scheduled to meet on June 6th and June 20th – there is room on both agendas for a continued public hearing on this matter.

364 Lowell Street – Definitive Subdivision Plan – Staff Comments received since 3/16 DRT

Board of Health

The Board of Health voted to approve the proposed definitive plans at 364 Lowell Street without conditions on May 18, 2016.

Conservation Division

1. There are new stormwater structures and buildings within the 25' foot and 35' no build zone
2. Subcatchment flow point DPI-7, does the overflow run under the driveway or over it in Lot 2.
3. The Proposed house on Lot 2 is in the no build zone it look like there is room to move it out of the 25' no structure area
4. Lot 2 is located in an area where there is a Potential Vernal Pool, the structure needs to be moved out of this PVP habitat zone, reduced in size or eliminated altogether.
5. The entire property is in close proximity to a Potential Vernal Pool, there should be no curbing or open areas in the curbing to allow animal access to the resource area.
6. The conservation office or the Engineering Dept. did not witness the test pits on that site
7. The Commission requires a test pit at every infiltration location.
8. There are some deposits of loose bare dirt and dead leaves at the edges of the cleared area, including along the southern and eastern sides of the clearing near the wetland. The loose dirt might erode into the wetlands during heavy storms.
9. Only native planting allowed with in the 100' buffer zone
10. Must meet Stormwater maintenance requirements for TSS removal /Zone II

Reading Municipal Light Department

1. The pad-mount transformer for this project will be located on a 10' x 10' easement located at the lot corner of lots 3 & 4. There is a conflict with the proposed fire hydrant and the LID BMPs on each lot.
2. The RMLD will determine the location of the underground electric facilities and street light(s) for the subdivision.
3. The proposed riser pole has existing underground utilities to house #370 Lowell Street. If the developer wishes to use that pole, they will need to address re-feeding this house from the subdivision. The developer will need to work this out with the property owner. The RMLD will not bare any of the costs or responsibility associated with this arrangement.
4. The tree behind the proposed riser pole will need to be trimmed/cut back to allow use of the top of the pole.
5. The RMLD will also require an anchor behind the proposed riser pole.

Fire Department

The turnaround at the end of the road does not meet our requirements. The Reading Fire Department requires a 45' outside radius and a 27' inside radius free of parked cars and other obstacles. The submitted drawing shows a 37' radius along the side walk and a 42' radius along the side without a side walk.

Police Department

At this time, the police department would anticipate a stop sign erected at the intersection of the new street and Lowell Street.

May 19, 2016

Memo

To: Julie D. Mercier, AICP, LEED AP - Community Development Director
From: George J. Zambouras, Town Engineer
CC: CPDC Members, Charles Tirone Conservation Administrator
Date: May 12, 2016
Re: Lyle Estates – Definitive Subdivision

Documents reviewed:

- Definitive Subdivision & Notice of Intent entitled “Lyle Estates” containing 16 sheets, dated April 4, 2016 prepared by ASB Design Group, Inc.
- Project Data / Environmental Impact Report Definite Subdivision and Notice of Intent – Lyle Estate, dated April 2016 prepared by ASB Design Group, Inc.
- Drainage Report Accompanying Definite Subdivision and Notice of Intent – Lyle Estate, dated April 2016 prepared by ASB Design Group, Inc.

In review of the attached documents the Engineering Division has the following comments:

General

1. The subdivision is proposed over an area that has or had a paper streets (Street No. 1 and Street No. 8) already layed out on the property. The applicant should provide the documentation regarding building a dwelling over the paper street, do they need to be abandoned?
2. In numerous locations the font size and type render the font to be unreadable additionally several font sizes are not in compliance with the registry of deed standards for recordable plans. This should be corrected on the final plans.
3. If approved by the CPDC the final mylar plans shall be submitted in black ink, no colors.

Plans

Plan C-1

4. The applicant has requested several waivers to the Town’s roadway standards. If approved by the CPDC, to ensure access by emergency vehicles I recommend that “No Parking” be permitted on one side of the roadway and the entire cul-de-sac. (Note – turning radius for emergency vehicles indicated the entire pavement surface of the cul-de-sac is required)

Plan C-2

5. “Project General Notes”, #3 the number for DigSafe is 1-888-DIG-SAFE
6. “Traffic Management General Notes”, #4 should be amended to include that work hours on Lowell Street is limited to 9AM – 3PM
7. “Sanitary Sewer Notes”, #1 “Sewer Department” shall be replaced with “Engineering Division”

8. "Sanitary Sewer Notes", #11 "Repaired" shall be replaced with "replaced at the discretion of the Town Engineer"
9. "Sanitary Sewer Notes", #14 is not correct by town standards. The new sewer main shall pass an air pressure test as directed by the Town Engineering Office.
10. "General Utility Notes", "Haverhill" shall be replaced with "Reading"

Plan C-3

11. Spelling Error of "Limit of Roadway Stitation" at the entrance of Plymouth Road should be corrected on final plans.
12. Note #1 – indicates that the definitive plans Bench Mark was obtained from the Town's as-built plans without verification in the field i.e. no measure down to the invert to obtain the actual elevation. This note need to be clarified, was the actual invert obtain in the field or was the rim elevation used? If the rim elevation was used the plans datum and bench mark must be corrected prior to approval.

Plan C-4

13. A site easement on Lot 1 at Lowell Street shall be required.

Plan C-5

14. The proposed hydrant should be relocated within the cul-de-sac. The ideal location would be approximately 20 feet to the left of the driveway of lot 2 between the two proposed trees.
15. Lowell Street has been recently paved. The pavement repair on Lowell Street will require a mill and overlay the full width of the pavement (curb to curb). and will extend at least 10 feet beyond the limits of any disturbance.
16. The proposed plans call for a reduction in the width of the sidewalk on Lowell Street. Lowell Street is a sidewalk plow route and a 5 foot sidewalk width must be maintained. The area indicated as grass should remain as concrete sidewalk.
17. The proposed driveway to Lot 1 does not meet Board of Selectmen Driveway Policies. Specifically the 18 foot length from the Right-of-Way.
18. The existing water service to the home on Lot 1 (364 Lowell St) shall be identified on the plans. The Town's records indicate that the service is a ¾" galv. Iron service (stop to cellar) installed on November 23, 1927. This service should be replaced in it's entirety.

Plan C-6

19. The driveways on all of the plans shall be labeled approximate location only. The final driveway plans must have individual plot plans that are reviewed and approved by the Engineering Office.

Plan C-7

20. "Notes", #8, spelling "BMP IWILL...".
21. The note on the existing lot of Francis Kiley Jr. has a spelling error "vehicale".

Plan C-8

22. The plans show the sewer service for Lot 2 going into the SMH. This is not permitted.
23. The plans should have the proposed elevations of the cellar floor, sill, first floor and garage floor for each of the homes.
24. The plans show a HP ramp at the driveway to Lot 2. This is not allowed. The driveway at this location, must meet our standard driveway apron cross section.
25. The horizontal locations of the proposed utilities in the road are not in the correct location as required by the Subdivision Regulations and this office.
26. The plans show a detail of the reduction of the sidewalk. As mentioned in #16 above, the reduction of the sidewalk width is not allowed.
27. In the profile plan, the location of the profile of the home of Lot 3 is not in the correct location
28. In the profile plan, the location of the profile of the home of lot 2 is not shown.

29. There appears to be a vertical conflict with the proposed sewer services for lot 2 and lot 3 with the proposed water main.
30. In the profile plan, the station for the summit sewer manhole is incorrect.
31. The location of the summit sewer manhole in the profile plan is not correct.
32. SMH #2 has an "invert in". If this is for the sewer service to Lot 2, then this is not allowed.
33. The catch basin rim to invert distance is 2.5 feet which is not feasible. A greater separation is required.

Plan C-9

34. The plans show a detail for the HP Ramp at the driveway for Lot 2. As said in #24 above, this is not allowed. The detail should be deleted.
35. The proposed cross section (40' Right-Of-Way) does not match what is proposed on the plan view.
36. The proposed cross section (40' Right-Of-Way) has an error on the sewer type pipe.
37. The required 60' Right-Of-Way cross section should be removed from the plans.
38. The standard detail for the crosswalk markings shows a "Ladder" type crosswalk layout. This is not the standard for that area.

Plan C-10

39. Wetland Restoration Detail has spelling errors
40. Lot 2 Roof Runoff Infiltration Detail shall have elevations of the following: inverts, top of drainage unit, and ground elevations.
60. An O&M manual shall be developed for the homeowner of each lot that has onsite drainage and shall have names and contact information of the responsible parties and/or companies that will maintain the proposed stormwater devices and porous pavements. The O & M manual shall indicate that annual reports of inspections, maintenance and repairs shall be submitted to the Town Engineer by January 15th of each year. The applicant should place deed restrictions on the lots prior to transfer to ensure the proper management of stormwater.
41. Roof down spots are required for connection of the roof run-off to the infiltration system. Stoned trench drip lines should not be used.

Plan C-11

42. The Sewer Main Trench Detail says "6" In Ledge". This shall be changed to "12" In Ledge".
43. The Water Main Trench Detail says "9", 6" in Ledge". This shall be replaced with 0", 6" in ledge". The water main shall be installed on undisturbed material unless ledge is present.

Plan C-13

44. "Sewer Manhole Notes" #5 "Mortar" shall be replaced with "Portland Cement"
45. "Sewer Manhole Notes" #6 Sewer manhole frames and covers shall be Neenah Foundry: Catalog #1720 - A (part #17202017 frame; 17205019 cover): or East Jordan Iron Works: Catalog #1258Z 1258A1 Assembly (Product #00125845A03) with a specified height of 8": or an approved equal.
46. The details for all manholes and castings shall indicate concrete poured collar around the adjusted manhole casting.
47. The sewer cleanout for Lot 2 shall be a mini manhole and not a wye connection.

Plan C-14

48. The BMP #1 Planting Detail shows a 195 grade behind the sidewalk. This appears to be low in relation to the top of the granite curb and needs to be verified.
49. The elevations shown on the BMP #1 Granite Curb Overflow Structure is not on the same datum as the rest of the plans, and needs to be corrected.

Hydraulic Calculations

The hydraulic calculations should be revised and resubmitted. It is recommended that the Applicant's Engineer meet with the Engineering Division to review the deficiencies prior to resubmittal. Listed below are a few of the items which need to be addressed in the revised submittal:

51. A comparison of Pre and Post run-off volumes should be furnished
52. The hydrograph time should be extended beyond 20 hours to capture all runoff.
53. Pre development sub-catchment does not include existing house impervious.
54. Calculations should be provided for roof infiltration units.
55. Pervious pavers were modeled with a CN of 39, this is too low.
56. In Sub-catchment 9, the pond is not modelled as an impervious surface which is the correct method for ponds.
57. The ponds peak water elevations indicate the ponds are surcharging back into the drainage system and is not reflected in the calculations. To properly model the extent of backwater, the catch basins and drain manholes should be modeled as ponds.
58. Why are different exfiltration rates used for ponds? All site soils are sand. All exfiltration rates should be based on the Rawls rates

Stormwater Compliance

61. The recharge calculations should be furnished.
62. Calculations should be provided to prove the BMP drains in 72 hours as stipulated in the check list.
63. The site will require an EPA SWPPP prior to the start of construction. The completed SWPPP should be furnished to the Engineering Division.
64. A stormwater maintenance and operation plan is required for the roadway stormwater devices.

Development Review Team Meeting
March 16, 2016
Lyle Estates

Staff Present (see attached sign in sheet for contact info): Assistant Town Manager Jean Delios, Conservation Administrator Chuck Tirone, Community Development Director Julie Mercier, Town Engineer George Zambouras, Public Works Director Jeff Zager, Safety Officer David Savio, Community Services Officer Kristen Stasiak, Housing Coordinator Laurie Stanton, ASB Design Engineer Thad Berry, Jamieson Development Manager David Jamieson, Attorney Bill Crowley, Wetland Consultant Bill Manuell.

Applicant:

The project is currently pending with the State for a 40B determination of eligibility. The Applicant is now filing a 4-lot Subdivision Plan. The Applicant has increased the turning radius in the cul-de-sac. The existing house currently has frontage on Lowell Street. The new road will be constructed over the existing roadway. There are trees all over the site and at the property lines. Each lot will have a rain garden. The soil on site is very sandy. They are keeping the existing house and adding a garage to it. A neighbor uses the northeast corner of the site for junk storage.

The following is a list of comments from the DRT.

DRT Comments		
Planning		
	Comment	Policy/Regulation
1. Plan / Paper Streets	Need a plan showing entire property and paper streets	
2. Zoning Table	Zoning Table should be added to plans	
3. S-15 Calcs	Each lot required to have a minimum of 12,000 SF of upland	
4. Home/Garage	Existing home & new garage will not meet setbacks = Variances	
5. Trees	Tree Removal plan requested	
6. Aquifer	Satisfy the Aquifer Protection Overlay District	
7. Structures	It appears that there are existing structures encroaching on site	
8. Solar	Orient the homes for rooftop solar	
DPW/Engineering		
	Comment	Policy/Regulation
1. Street Trees	Need approval from Tree Warden; either create tree easement for the Town or put on private property with deed restriction.	
2. Curbing / Sidewalks	Curb line, handicap ramp & property line radius need to connect; curbs need to be granite with paved sidewalks (no concrete needed at end of sidewalk)	

3. Milling	Road was just paved, entire length 20' beyond limits will need to be milled and connections patched	
4. Drainage	Historical records and survey data should be provided, Town will need easement for swale	
5. Mitigation	Culvert should be cleaned out and restored to historic condition	
Conservation		
	Comment	Policy/Regulation
1. Flags	Would like to know if the wetland flags are still there	
2. Variances	Variances and mitigation needed for work within 25' and 35'	
3. Landscaping	Would like to see plans for removing weeds/cleaning up/trees	
4. Vernal Pool	Keep people away from that area during vernal pool season	
5. Rain Gardens	Pretreatment before the rain gardens	
RMLD		
	Comment	
1. Transformer	Need a 10x10 easement for transformer/ underground utilities in between lots 3 and 4.	