



MEMORANDUM

TO: Planning Director, Planning

FROM: Michael Sprague, Engineering

DATE: December 26, 2018; Amended 1/18/19

SUBJECT: 15-17 Fairland St Preliminary Conventional Subdiv. Plan

The engineering division has reviewed the Preliminary Conventional Subdivision Plans titled "Fairland Estates" dated November 21, 2018. We submit the following;

Comment to Planning:

Please be advised that the engineering division is aware of the submission process involved with the proposed subdivision approval. And with that we expect that our comments will be addressed as this process moves forward toward the definitive subdivision design. The nature of some of our comments will be best addressed as the design progresses further along.

Stormwater Comments:

- In the stormwater analysis the time span, dt and storm data should be the same for both existing and proposed conditions.
- The units in the HydroCAD should also be consistent. Pond 3P: System 3 has different units than the other systems.
- Test pits were shown on the plans. The estimated seasonal high ground water (E.S.H.G.W.) elevation was shown on the plans. A test pit should be performed in approximation of the large infiltration system, System 3, to verify adequate soils.
- Two feet of separation was provided between ESHGWT and the bottom of the infiltration chambers.
- An O&M plan was submitted and is adequate.
- With a proposed connection to the Town's drainage system, a review by the Conservation Commission would be required.

Utilities:

Sanitary Sewer

- Several drop sewer manholes are called out on the plans. A drop manhole detail shall be shown on the final set of plans.

- A sewer manhole must be installed on Lincoln Street.
- A minimum two course brick detail shall be shown on all sewer manhole details.
- All manhole frame and covers should be consistent with Town of Lexington Standards.
- All sewer pipes should conform to Town of Lexington Standards.
- A profile of the proposed water line shall be shown on the final design plans.

Water

- Hydrants shall be American-Darling 5 ¼ inch B-84-B-5. Hydrant color; should conform to Lexington Fire Dept rules. We require this information be clearly noted on the plans.
- All hydrants, valves and valve boxes shall be American made only. Valves shall open **right (clockwise), hydrants shall open right (clockwise)**. We require this information be clearly noted on the plans.
- All proposed vertical and horizontal bends for the proposed water main shall be on plans with adequate restraining glands, rods and thrust restraints.
- Please identify locations of any bends in the water main, bends will require restraints in accordance with town standards.
- An effort should be made to reduce the amount of clutter on plans so the proposed water services can be clearly identified. Will make addition comments after review of revised plans.
- A standard detail for tap and sleeve connections shall be added calling out a ductile iron sleeve.
- A note shall be added to note shall be added to General Notes 3. Lexington water and sewer division is not part of Dig-Safe and must be notified for water mark-outs prior to any construction activity.
- A profile of the sewer plan shall be shown on the final plans.