

July 14, 2020

Tina Cassidy, Director
Woburn Planning Board
Woburn City Hall
10 Common Street
Woburn, MA 01801

A&M Project #: 1623-10
New Boston Street Rear
Definitive Subdivision Plan
A&M Response to Peer Review

Dear Planning Board Members and Ms. Cassidy,

On behalf of the applicant, Industriplex Woburn LLC, Allen & Major Associates, Inc. (A&M), respectfully submits this response letter for the proposed definitive subdivision at 0 New Boston Street, Woburn MA. The responses are in regards to the peer review letter generated by The City of Woburn Engineering Department on behalf of the Woburn Planning Board.

1. Under the Woburn Planning Board Land Subdivision Rules and Regulations (WPBLSRR) definitions, the subdivision is classified as a type III subdivision. The maximum length for a road ending in a cul-de-sac is 600 feet. A Type III roadway right of way shall be 60 feet in width. The proposed right of way as shown on the plan is 60' in width as required.

A&M Response:

The proposed roadway is approximately 400 feet in length.

2. The proposed roadway cross section does not conform to the standard Type III cross section detail. The applicant is seeking several waivers to this requirement.

A&M Response:

No response required.

3. Approximately 250' of the proposed road crosses the Boston Edison easement, which will require a license from the utility company. The location of the proposed roadway may limit the utility company's access along this easement.

A&M Response:

The applicant is aware of this and is actively working with Eversource to secure all necessary licenses and/or permits for the proposed work.

4. The proposed location of the cul-de-sac is directly adjacent to a capped hide pile on lot 2. The location of the limits of the hide pile should be shown on the plan. The proposed roadway construction on the east side of the cul-de-sac may infringe on the cap. A section profile of this area should be shown on the plan to ensure the cap is not compromised by the removal of undesirable material under the roadway gravel sub base.

A&M Response:

Additional profiles have been added on sheet C-105B showing the limits, both horizontal & vertical, of the existing subgrade geotextile cap. All record elevations of the existing cap from plan titled "Project Record Lot (West Hide Pile), dated August 8, 2000, last revised September 30, 2008, and prepared by Meridian Land Services.

All Class C & Class D Land, at a minimum has a cover comprising of geotextile fabric. In some cases, the fabric overlaps into Class B Land, depending on how and where the geotextile roll finished. Portions of the proposed roadway's gravel sub-base will intercept the existing geotextile cap within the Class C land as shown on sheet C-105B. No disturbance within Class D Land is proposed.

Class C land is described as land that may contain contaminated groundwater, and contains contaminated soil and cover. Class D land is similar to Class C land but also contains four animal hide piles.

The applicant will work closely with the EPA and consult a Licensed Site Professional (LSP) to provide oversight and direction for all work within the Class C land.

5. The proposed water main to the project is an 8" cement lined ductile iron water pipe connected to an existing water main located in New Boston Street. Section III.E.1 requires type III subdivisions be serviced with a minimum of 12" water mains. The applicant is requesting a waiver of this requirement.

A&M Response:

No response required.

6. The proposed water main is dead ended at the terminus of the cul-de-sac. Section III.E.4 requires subdivision water systems to be looped. The applicant is requesting a waiver of this requirement.

A&M Response:

No response required.

7. The proposed roadway will be supplied with 2 hydrants, the last hydrant being at the terminus of the proposed water main. The location of this hydrant allows for periodic flushing in lieu of a looped water system.

A&M Response:

No response required.

8. The definitive plan shows a proposed sewer which connects to the existing 15" municipal cross-country sewer running under the former B and M rail bed and into New Boston Street. The size and material of the utility shall be noted on the roadway plan profile. The pipe slopes should also be noted on the roadway profile. Sewer manholes should have station labels.

A&M Response:

The size and material of the existing 15" clay sewer is now noted on the roadway profile. The slope of all proposed pipes is called out on the profile. Station labels have been added to sewer manholes on the profile and utilities plan.

9. The engineer of record should submit calculations on the sewer pipes to ensure that critical velocities do not exceed 10 fps (standard engineering design) at peak flow periods.

A&M Response:

For peak flow conditions, the 8" sewer is assumed to be flowing full. Using Manning's formula, the critical velocities occur in the two pipe sections having a slope of 3.5% and a peak calculated flow of ± 6.48 fps. A copy of the table has been attached to this response letter.

10. A detail of the drop connection at the existing municipal sewer manhole is shown on sheet C-506.

A&M Response:

No response required.

11. The preliminary plan showed catch basins at the entryway of the proposed road at the intersection of New Boston Street. The definitive plan shows these basins relocated to the east. Therefore, the first 85 feet of the road will have storm water runoff which will sheet flow onto New Boston Street. This section of roadway will require some method of collecting the storm water runoff and not being allowed to sheet onto New Boston Street.

A&M Response:

Two Catch basins have been added at the entryway of the proposed road at the intersection of New Boston Street. These catch basins will collect the last ± 85 feet of runoff from the proposed roadway and discharge to a shallow detention basin.

12. The drain lines are labeled as HDPE pipe. All drainage piping shall be reinforced concrete pipe.

A&M Response:

Drain lines are now called out to be RCP.

13. Drain line pipe sizes, materials and pipe slopes should be shown on the plan profile. Catch basins and drain manholes should have station labels.

A&M Response:

The pipe sizes, materials, and slopes are labeled on the profile. Station labels have been added to the profile and grading and drainage plan.

14. A comprehensive drainage report has been submitted with the subdivision application. The report supports the subdivision drainage system design. Post development storm water runoff is mitigated by the installment of an underground detention facility. The report shows that the post development storm water rate of runoff will be less that the pre development rate of runoff.

A&M Response:

No response required.

15. No information has been submitted regarding site distances at the intersection of New Boston Street and the proposed roadway.

A&M Response:

No response required.

16. The proposed subdivision road location connects to the current New Boston Street layout of 1889. Currently, the city of Woburn has a design plan at the 75% completion stage for the bridge replacement over the railroad. The proposed right of way layout for the bridge replacement will alter this connection both horizontally and vertically.

A&M Response:

No response required.

17. Lots 2 and 3 as shown on the lotting plan may not meet the lot width requirement of 40 feet minimum. This determination would fall under the jurisdiction of the city of Woburn Inspectional services.

A&M Response:

It is A&M's understanding that Lots 2 & 3 meet the Lot Width requirement of 40 feet, as defined in Section 2 and illustrated in Section 16 of the City of Woburn Zoning Ordinance.

If you have any questions or comments, please do not hesitate to contact me.

Very Truly Yours,

ALLEN & MAJOR ASSOCIATES, INC.



Timothy J. Williams, P.E.
Principal

Title **Sewer Pipe Flow**
 Project New Boston Street Rear

Minimum Slope: 0.01
 Minimum Pipe Size: 8"
 Manning's n: 0.013 PVC

By ND
 Chk'd TW
 Apprv'd TW

Line		Pipe Size <i>D</i> (in)	Slope <i>s</i> (%)	Flow at Inv. Slope	
From Upper	To Lower			Q_{full} (cfs)	V_{full} (fps)
SMH4	SMH3	8	1.00%	1.21	3.46
SMH3	SMH2	8	1.00%	1.21	3.46
SMH2	SMH1	8	3.50%	2.27	6.48
SMH1	EX.SMH	8	3.50%	2.27	6.48