

FD 250 Turnpike, LLC
118 Turnpike Road, Suite 300
Southborough, MA 01772

August 1, 2025

Re: Environmental Analysis
250 Turnpike Road, Southborough, MA 01772
Assessor's Map 277, Lot 27, Parcel 2, 2A, and 46

Goddard Consulting, LLC, (Goddard) is pleased to submit this updated "Environmental Analysis" on behalf of FD 250 Turnpike, LLC (the Applicant) in connection with its "Town of Southborough Board of Appeals Comprehensive Permit Application" and supplemental materials, plans, and reports submitted therewith (collectively, the Application). An initial Environmental Analysis was submitted in June of 2024; however, the project has been redesigned since then, so we are providing an updated analysis for the Board's review. The proposed project pursuant to the Application is more particularly described and depicted, in part, in site plans entitled "Site Plan of Land at 250 Turnpike Road", dated January 31, 2025, prepared by Expedited Engineering, LLC in 21 sheets (Site Plans). For purposes of this letter, see also, the "Drainage Report for Comprehensive Permit Development at 250 Turnpike Road, Southborough, MA" prepared by Expedited Engineering, LLC, dated January 31, 2025 (Drainage Report), identifying and analyzing proposed stormwater appurtenances required by the proposed development. As described in the Application and the Site Plans, the proposed development consists of 32 townhouse units along with associated parking areas, access drive, septic system, and municipal utility connections and infrastructure (the Development) which is proposed on two parcels totaling ± 9.83 acres (the Development Parcels) of the site (the Property) owned by FD 250 Turnpike, LLC (see Town Assessor's Parcel ID: 277-27-2.A). This Environmental Analysis is being submitted under the Town of Southborough's Zoning Board of Appeals Comprehensive Permit Regulations and Guidelines (CPRG), Section 4.1.12 which states, in part:

"An "Environmental Analysis" shall be prepared by a qualified Environmental Scientist, with qualifications including training, education, etc., and shall be provided to the Board. The person performing the Environmental Analysis shall (1) have at least a masters degree in ecological science from an accredited college or university, or (2) be another competent professional with at least two years experience in environmental analysis. The Environmental Analysis shall assess the impact of the development on the environment within and adjacent to the development. The analysis shall include, but shall not be limited to, the evaluation of pre-development conditions and post- development impacts on:

- 4.1.12.1 - Surface and groundwater quality;*
- 4.1.12.2 - Groundwater recharge of upper aquifers and perched groundwater layers;*
- 4.1.12.3 - Wildlife habitats and corridors;*
- 4.1.12.4 - Wetlands and bodies of water, including streams and rivers, both localized and general;*
- 4.1.12.5 - Existing and potential domestic water supplies;*
- 4.1.12.6 - Species of special concern in Massachusetts; and*
- 4.1.12.7 - Road salt and fertilizer loading.*

The Environmental Analysis shall include proposed mitigation of the post- development impacts identified. Mitigation measures requiring ongoing or periodic maintenance shall be identified and a maintenance plan shall be included with the Environmental Analysis;"

Hard copies can be provided at the request of the Board. If you have any questions, please feel free to contact Goddard Consulting at (508) 393-3784.

TABLE OF CONTENTS

1.0	EXISTING AND PROPOSED CONDITIONS.....	2
2.0	SURFACE AND GROUNDWATER QUALITY (CPRG 4.1.12.1).....	2
3.0	GROUNDWATER RECHARGE OF UPPER AQUIFERS AND PERCHED GROUND WATER LAYERS (CPRG 4.1.12.2)	3
4.0	WILDLIFE HABITAT AND CORRIDORS (CPRG 4.1.12.3).....	3
5.0	WETLAND AND BODIES OF WATER (CPRG 4.1.12.4)	4
6.0	EXISTING AND POTENTIAL DOMESTIC WATER SUPPLIES (CPRG 4.1.12.5)	4
7.0	SPECIES OF SPECIAL CONCERN IN MASSACHUSETTS (CPRG 4.1.12.6).....	5
8.0	ROAD SALT AND FERTILIZER LOADING (CPRG 4.1.12.7)	5
9.0	CONCLUSION.....	5

1.0 EXISTING AND PROPOSED CONDITIONS

The northern portion of the Property (± 9.83 acres) is currently developed with an 18,281 sf three-story building with parking areas and related infrastructure. The rear of the Property is comprised of a forested hillside. Several Bordering Vegetated Wetlands (BVW) exists in the northern and central portion of the site. Access to the Property is from the eastbound side of Route 9. Commercial developments are located along Route 9 to the north, east, and west of the site. Residential developments are present to the southeast, south, and southwest of the site. An additional parcel addressed as 125 Parkerville Road is a part of this project. This parcel is currently developed with a single-family house and associated infrastructure.

The Development consists of the construction of 32 townhouse style rental units along with associated parking, driving aisles, sidewalks, septic system, landscaped areas, and utility infrastructure. Additionally, stormwater will be managed through four inground detention/infiltration structures, which will infiltrate and detain runoff. Through the use of these four structures, the peak rate of flow from the site will be kept at or below the predevelopment rate of flow. The building will be accessed to the north from Route 9 eastbound, then by utilizing an existing access parking lot, and then a proposed $\pm 1,000$ -foot-long paved access driveway.

2.0 SURFACE AND GROUNDWATER QUALITY (CPRG 4.1.12.1)

New impervious pavement proposed for the Development is designed to drain to catch basins. These catch basins will capture and move water through underground pipes into four proposed subsurface infiltration structures. Pretreatment of the stormwater runoff created by the new impervious surfaces will be managed through the catch basins before being discharged into the proposed infiltration structures. Roof runoff from proposed buildings will be captured in gutters and transported via drainpipes into the same four proposed subsurface infiltration structures.

The proposed stormwater system has been designed to reduce peak runoff rates from the development through the 100-year storm (see the Drainage Report for details). According to Expedited Engineering, LLC, the Best Management Practices (BMPs) of the stormwater management system is designed to meet total suspended solid removal requirements within the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Handbook Standards. In short, the proposed stormwater management system proposed for the Development complies, in every respect, with the requirements of the Massachusetts Wetlands Protection Act at G.L. c. 30, §§ 61-62H and 310 CMR 10.00, *et. seq.*, (together, the WPA) and the WPA regulations at 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a), specifically.

The Development will be served by a septic system. The proposed septic systems are located on the Development Parcel, in the southwestern portion of the Property as depicted in the Site Plans. The Site Plans show the leaching area under the cul-de-sac southwest of Units 22-26 and north of Units 14-19. Proposed, but not shown on the plans is a force main line from the pump chamber, a manifold between leaching trenches and distribution lines over the trenches. The proposed system is sized to handle the proposed Development based on 310 CMR 15.00, *et. seq.* (Title V) and Development for the proposed bedrooms.

3.0 GROUNDWATER RECHARGE OF UPPER AQUIFERS AND PERCHED GROUND WATER LAYERS (CPRG 4.1.12.2)

The Development will maintain existing drainage watersheds to the best extent practicable to minimize impacts. The proposed stormwater management system includes four subsurface infiltration structures. The project includes the addition of approximately ± 1.67 acres (73,104 sf) of new impervious surfaces according to the Site Plans. According to the Stormwater Checklist prepared by Expedited Engineering, LLC, the cubic feet of volume that is required is 1,633 and the proposed subsurface structures will hold more than 16,000 cubic feet. Calculations provided indicate that the infiltration system will completely drain in 25 hours, which is much less than the 72 hours required under the MassDEP Stormwater Standards. Three (3) to four and a half (4 ½) feet of separation to estimated seasonal high groundwater is proposed (reference detail sheet D3 and D5 of the Site Plans). Additionally, Expedited Engineering LLC has stated that the project design will meet all 10 of MassDEP's Stormwater Management Standards. The proposed stormwater management system for the Development complies, in every respect, with the requirements of the WPA and the WPA regulations at 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a) specifically. A waiver is sought for the Southborough Zoning By-Laws § 174-13.5., stormwater permit for development.

4.0 WILDLIFE HABITAT AND CORRIDORS (CPRG 4.1.12.3)

The Development Parcel is primarily forested with upland and wetland areas. These areas include mature upland forest comprised mostly of Northern Red Oak (*Quercus rubra*), Red Maple (*Acer rubrum*), and Witch Hazel (*Hamamelis virginiana*). The Bordering Vegetated Wetlands are comprised mostly of red maple, Yellow Birch (*Betula alleghaniensis*), Black Birch (*Betula lenta*), Winterberry (*Ilex verticillata*), Japanese Barberry (*Berberis thunbergii*), and Skunk Cabbage (*Symplocarpus foetidus*). The proposed development retains forested portions of the site, including the forested uplands on the southern portion of the Development Parcel as well as the vegetated wetlands and a considerable amount of the 100-foot Buffer Zone. Wildlife habitat and corridors to the east, west, and north of the Development Parcel are limited and sparse due to existing commercial and residential developments on the abutting parcels. Invasive species present on-site include Japanese barberry, Morrow's Honeysuckle (*Lonicera morrowii*), Multiflora Rose (*Rosa multiflora*), Winged Euonymus (*Euonymus alatus*), Japanese Knotweed (*Reynoutria japonica*), Asiatic Bittersweet (*Celastrus orbiculatus*), Purple Loosestrife (*Lythrum salicaria*), Jetbead (*Rhodotypos scandens*), and Garlic Mustard (*Alliaria petiolata*).

Overall, wildlife habitat impacts associated with the proposed project are expected to be minor when considered in the context of the surrounding developed landscape. The loss of some upland forest cover, including mature trees

and understory vegetation, will reduce local habitat quality, primarily affecting small and large mammals as well as some forest-nesting birds. The proposed access road may slightly disrupt amphibian movement between upland areas and vernal pool habitats, though these effects are limited in scale and can be mitigated. While the site does contribute to localized ecological connectivity, the project is not expected to significantly alter migratory patterns or the site's overall ability to support common wildlife species.

Several mitigation strategies are currently proposed for this project, including invasive species removal, replacement of native vegetation, and a low mobility wildlife crossing under the access drive to provide a corridor for wildlife movement. For more detailed information on wildlife habitat and corridors, see the Wildlife Habitat Evaluation and Vernal Pool Migration Study Report dated May 15, 2025, prepared by Goddard Consulting that was previously submitted to the Southborough Zoning Board of Appeals.

5.0 WETLAND AND BODIES OF WATER (CPRG 4.1.12.4)

The Property contains four wetland systems. The Development is subject to a permit under the WPA and is designed to minimize wetland and resource area impacts to the greatest extent possible. Even though the Development is made pursuant to the Application under M.G.L. c. 40B §§ 21-23 and 760 CMR 56.00 et. seq. and, as such, is exempted from any otherwise applicable Southborough By-laws, rules and regulations, the majority of the Development will stay outside of the 20-foot No Disturb Area applicable under the Town of Southborough Wetlands Regulations, Chapter 170, Wetlands Protection, adopted January 2, 2002 (the Southborough Wetlands By-Law) as depicted on the Site Plan. To mitigate for intrusions into the 20-foot No Disturb Area, the Applicant has proposed a 4,045 sf compensatory wetland replication area. For more detailed information on the proposed mitigation, see the Compensatory Wetland Replication Plan dated July 25, 2025, prepared by Goddard Consulting that was previously submitted to the Southborough Zoning Board of Appeals. All work anticipated by the Development proposed within buffer zones are jurisdictional under the WPA and will be accomplished with the filing of a Notice of Intent application to the Southborough Conservation Commission under the WPA and not the Southborough Wetland By-Law from which the Development is exempt.

The Property in general is tributary to the Sudbury River and is within an Outstanding Resource Water area (ORW). Water quality of these identified resource areas (reference the Site Plans) will not be affected by the increase in impervious surfaces anticipated by the Development. According to Expedited Engineering, LLC, the stormwater management system is designed to remove at least 80% of Total Suspended Solids and is designed in complete compliance with the requirements set forth in the MassDEP Stormwater Handbook standards at WPA regulations at 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a) specifically.

Erosion Controls will be set up along the limit of work to prevent erosion and sedimentation from the Development and the Development Parcel into the wetlands and watershed. A Pollution Prevention Plan will be implemented to inspect the site and erosion controls (reference sheet D4 of the Site Plans). Additionally, the development will need an EPA Construction General Permit (CGP) as the proposed disturbance and construction area will be greater than 1-acre in size.

6.0 EXISTING AND POTENTIAL DOMESTIC WATER SUPPLIES (CPRG 4.1.12.5)

There is currently a municipal water service to the Property and the Development anticipates utilizing the Town of Southborough's public water supply. An approximately 30-foot-wide easement from the 125 Parkerville Road, currently owned by the applicant, to the Development Parcel for utilities and access are depicted on the Site Plans. The proposed water utility conduits, pipes, and appurtenances will run through this easement. The surface and ground water at the Property will not be subject to draw down for use of drinking water, or other uses, further minimizing the overall environmental impacts.

7.0 SPECIES OF SPECIAL CONCERN IN MASSACHUSETTS (CPRG 4.1.12.6)

The Property is not mapped as Estimated Habitat for Rare Wildlife or Priority Habitat of Rare Species by the Massachusetts Natural Heritage Endangered Species Program.

The Property does not contain any mapped potential or certified vernal pools according to Massachusetts Natural Heritage Endangered Species Program. The stormwater management basin located directly south of the existing office building has been determined to provide habitat for vernal pool species through the vernal pool study conducted by Goddard Consulting during the Spring of 2025. No species of special concern, threatened, or endangered species were encountered or identified during the study.

8.0 ROAD SALT AND FERTILIZER LOADING (CPRG 4.1.12.7)

According to Expedited Engineering, LLC, the stormwater management system is designed to remove at least 80% of Total Suspended Solids. The stormwater management system is designed to meet the requirements set forth in the MassDEP Stormwater Handbook standards at WPA regulations at 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a) specifically. Additional erosion control measures are proposed to ensure no contaminants enter the surface water or groundwater via discharge. The Development is designed to eliminate all untreated discharges.

9.0 CONCLUSION

In conclusion, it is the opinion of Goddard Consulting that the Development will have minimal impacts to water quality, groundwater recharge, wildlife habitat and species of special concern, or existing and potential water supplies to the Property. The development has been designed in compliance with the WPA and the Massachusetts Stormwater Management Handbook and associated stormwater standards at 310 CMR 10.05(6)(k) and the Water Quality Certification Regulations, 314 CMR 9.06(6)(a), specifically, and other applicable state and federal rules and regulations. The Application and the Development is proposed under M.G.L. c. 40B §§ 21-23 and 760 CMR 56.00 et. seq. and is, accordingly, exempt from all Southborough By-Laws, rules and regulations from which the Development is exempt.

Sincerely,

Goddard Consulting, LLC



Scott Goddard
Principal, PWS