



## **1.1 EXECUTIVE SUMMARY**

In accordance with the provisions of the Town of Hingham Zoning Bylaws, the Applicant, Atlantic Development, proposes to relocate the existing driveway at 6 New Towne Drive, Hingham, MA

The site is bound by New Towne Drive to the north, residential properties to the east and west, and the Hingham Department of Public Works (DPW) property to the South. A culvert and resultant intermittent stream separates the property from the neighbor to the west. The property is located at Parcel 79-0-24 and is approximately 0.77 acres and is located within the Residence A Zoning District. A sewer easement runs through the property, from north to south.

The homeowners of 6 New Towne Drive initiated the relocation of the existing driveway due to its steep grade. During icy, winter conditions, using the driveway becomes extremely dangerous. The homeowners have described on that on several occasions, their vehicles have slid down the driveway and out into the road. It is also difficult to climb the steep slope in wintery conditions. Also, the tight angle at the top of the driveway makes it difficult to maneuver in and out of the garage. The applicant proposes to relocate the driveway to the west of its current location, which would make it longer and allow for a safer, flatter slope. The project would also include the installation of a retaining wall and guardrail to the western edge of the proposed driveway.

The proposed driveway is located within the 100-ft Inland Bank buffer zone and within the sewer easement. The design incorporated herein is the culmination of a year of collaboration with the Hingham Sewer Department and Sewer Commission for the work proposed within the existing sewer easement that conveys sewer from the subdivision through the DPW property. The placement of the wall location, slightly within the 50-ft buffer, is to allow the wall to remain at a minimal height as possible to satisfy the request of the Sewer Department and the DPW. This application requests a variance for work within the 50-ft BVW buffer. Mitigation efforts are discussed further in Section 1.6.

## **1.2 APPROVALS BEING SOUGHT**

A Notice of Intent (NOI) is being filed with the Town of Hingham Conservation Commission and the Massachusetts Department of Environmental Protection (MA DEP) for the proposed work. The applicant requests that the permit approvals encompass the entirety of the scope listed below, and as shown in the accompanying plan set:

- The relocation of a residential driveway
- A retaining wall, guard rail and trench drain along the western edge of the driveway within the 50-ft wetland buffer



### **1.3 FEMA FLOOD MAPS**

The parcel is shown on FEMA Flood Insurance Rate Map 25023C0082J dated 7/17/2012. The entire site is located within Zone X, which is defined as areas determined to be outside the 500-year floodplain and determined to be outside the 1% and 0.2% annual chance floodplain.

### **1.4 ON-SITE SOIL INFORMATION**

The Natural Resource Conservation Service (NRCS) maps the on-site soil as Chatfield-Rock outcrop- Canton Complex, Soil Map Unit 111C, classified as Hydrologic Soil Group (HSG) "B." This soil is representative of the entire property, including the the location of the existing residence, the proposed location of the driveway. NRCS describes this soil as well drained, with a depth to water table of over 80 inches.

Refer to Section 5.1 for complete soil information.

### **1.5 ENVIRONMENTAL RESOURCE AREAS ANALYSIS**

The project does contain Environmental Resource Areas, and therefore the project must be permitted through MassDEP the Hingham Conservation Commission.

On August 7, 2019, the inland bank associated with an intermittent stream was delineated by John Zimmer of South River Environmental ("SRE"). The field review was conducted in accordance with the Massachusetts Wetlands Protection Act and the Town of Hingham Wetlands Protection Bylaw.

The Wetlands Protection Act defines inland bank as the portion of the land surface which normally abuts and confines a waterbody. Bank occurs between a waterbody and a vegetated bordering wetland and adjacent floodplain, or between a water body and an upland area. Bank may be partially or totally vegetated, or may be comprised of exposed soil, gravel, or stone. The upper boundary of a Bank is the first observable break in the slope or the mean annual flood or high-water level, whichever is lower.

An intermittent stream was identified and delineated along the western property boundary. The stream is located within an existing drainage outlet from New Towne Drive. The western property boundary is located in the vicinity of the intermittent stream; therefore, only the eastern bank (closest to the proposed activities) was delineated. The stream delineation commences at flag WF-1 located west of the outlet culvert and extends to the southeast, ending at flag WF-7 adjacent to southwestern property corner. The stream was not flowing at the time of the field survey (following rain event). The stream channel was approximately 3 to 5 feet in width but varied along its length. The substrate within the stream appeared to be a mix of sand, cobble and silt/muck. The stream is not depicted on the USGS topographic map for the property (See Figure 1). The stream continues further south away from the property where it flows into a bordering vegetated wetland further south of the property boundary.



The site does not appear to contain any areas designated as estimated or priority endangered species habitat, certified vernal pools or areas of critical environmental concern. The site does not contain areas classified as estimated habitats of rare wildlife by the Natural Heritage and Endangered Species Program of the Division of Fisheries and Wildlife.

The following is a summary of the buffer and protection zones that portions of the project are proposed within:

1) 100' Inland Bank Buffer (310 CMR 10.55).

Portions of the proposed improvements, including, but not limited to a relocated bituminous driveway, concrete block retaining wall, guardrail, improved drainage, and landscaping is proposed within the 100' Inland Bank buffer zone. The amount of disturbed areas within the buffer zone is equal to approximately 0.10 acres (4,224 SF), with an increase of 0.04 acres (1,623 SF) of impervious area. Please see the accompanying plan set and supporting information for more details on the work proposed within the 100' BVW. We note the area of work proposed is already developed as part of the sewer easement and as lawn area for the existing residence.

2) 50' Intermittent Bank Buffer (Hingham Wetland Regulations)

The Town of Hingham does have Town by-laws for wetland protection, including a 50' "No-touch" Buffer to the Inland Bank. The amount of disturbed area within the ft buffer zone is approximately 131SF and is limited to 42 LF of retaining wall, 26 LF of guardrail, and 0 SF of bituminous asphalt. The applicant is hereby requesting a variance for the work proposed within the 50' Inland Bank Buffer. The areas around the proposed work will be seeded with a wetland mix to restore BVW buffer functionality.

3) Tree Removal and Replacement Policy (Town of Hingham Conservation Commission)

The Town of Hingham's tree removal and replacement policy states that trees within jurisdictional areas that are 6 inches (6") or greater in diameter at breast height (DBH), must be replaced. Trees within the 100ft buffer zone must be replaced at a 1:1 ratio, and trees removed within the 50ft buffer zone must be replaced at a 2:1 ratio. There are five (5) trees proposed to be removed within the 100ft buffer zone and there are no trees proposed to be removed within the 50ft buffer. The trees were located via ground survey by Hoyt Land Surveyors and Crocker Design Group.



### **1.6 BUFFER ZONE MITIGATION**

In accordance with the Town of Hingham Wetland Regulations and the Tree Removal and Replacement Policy, there are nine (9) trees proposed to be replanted within the 100ft buffer zone, as well as 100LF of evergreen hedge and 927SF of disturbed land to be seeded with Conservation/Wildlife Wetland Mix (per New England Wetland Plant Mix) to restore the functionality of the buffer zones.

In addition to the tree and shrub plantings, and the wetland mix seeding, a trench drain is proposed to be installed to the western edge of the driveway, to prevent runoff and sediment from the impervious drive from entering the resource area, and also promote groundwater recharge.

### **1.7 CONCLUSION**

In conclusion, the project has been designed in accordance with the requirements of the MA DEP and in compliance with the Town of Hingham's Conservation Commission Wetland Regulations. The applicant respectfully requests the Commissions consideration of approval and issuance of an Order of Conditions, accordingly.

### **1.8 Figures**

- FIG 1 USGS MAP
- FIG 2 ORTHOGRAPHIC MAP
- FIG 3 NHESP HABITAT MAP
- FIG 4 FEMA FLOODPLAIN MAP (EFFECTIVE PANEL)
- FIG 6 MASSDEP WETLANDS MAP

[https://crockerdesigngroupcom-my.sharepoint.com/personal/gabecrocker\\_crockerdesigngroup\\_com/Documents/Projects/100-102 Hingham - 75 Abington St/Stormwater Report/1-Cover TOC and Narrative/1D - Narrative.docx](https://crockerdesigngroupcom-my.sharepoint.com/personal/gabecrocker_crockerdesigngroup_com/Documents/Projects/100-102 Hingham - 75 Abington St/Stormwater Report/1-Cover TOC and Narrative/1D - Narrative.docx)