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Plantation Apartments II
22 Johnston Way
Stow, M

Stormwater Management Memorandum

The proposed project includes the construction of a gravel access road for the drilling of additional wells on the property, directional drilling of a water service, and the construction of a well house and associated appurtenances.

Existing Conditions

The proposed site consists of three separate parcels all owned by the Plantation Apartments (0 Great Road, 22 Johnston Way, & 252 Great Road). The existing Plantations Apartments exist on the middle of the three parcels and are accessed on Johnston Way. Elizabeth Brook exists to the southwest of the property and wetlands exist along the southern property line at the bottom of a steep embankment. A stream exists along the property line between 0 Great road and 22 Johnston Way. A portion of the site falls within the 100-year flood elevation from the existing stream. However, no construction activities are proposed within the flood elevation. An access easement through 302 Great Road will be used to install the gravel access road and will be used to access the well building.

Proposed Conditions

The proposed project involves the construction of a gravel access road to drill 3-4 wells on the subject parcel. The gravel access road will fall within the 100-foot buffer zone, and a booster station building will be installed adjacent to the drilled wells on the gravel access road. The three proposed wells will be used as the water supply to a new apartment building adjacent to the existing Plantation Apartments. The water supply line for the new building will be directionally drilled underneath the existing stream on the property. Impervious areas have been limited to the well house roof, as gravel is proposed for the access road.

While the proposed project is not required to meet stormwater regulations as defined in 310 CMR 10.05(6)(1), the applicant is proposing to install a gravel recharge trench along the proposed gravel access road to mitigate the any stormwater runoff. Additionally, a UIC (underground injection control) drywell is proposed to store and exfiltrate any backwash associated with the proposed well house. All recharge areas have been proposed outside of the proposed IWPA radii.

Erosion control barriers are proposed downhill of all proposed work to prevent any erosion and washout due to the proposed construction activities. Straw bales reinforced with silt fence are proposed adjacent to the gravel access road, while straw wattles are proposed around the well-drilling locations. During the

trenchless drilling of the proposed water line, a dewatering basin will be constructed adjacent to the launch pit for the drill to contain any water building associated with the drilling.