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# Development Impact Statement

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## Ultrasonic MRI

### Proposed Car Wash and Gas Station

Assessor's Map 106, Lots 115 & 116

West Main Road

Middletown, RI

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#### Prepared For

Exit Strategy LLC  
103 Wellington Avenue  
Newport, RI 02840

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## **1.0 INTRODUCTION**

This Development Impact Statement is required under Section 310 – Development Impact Review of the Town of Middletown Zoning Ordinance, October 2006.

### **1.1 Site Description**

The Site consists of two single family residential parcels fronting on West Main Road in a “General Business” zone. These two structures include several smaller accessory structures, decks, and paved driveways. A total of three curb cuts are present. The lots are bounded to the east by a large multifamily residential property “East Bay Apartments”. The two sides of the site are bounded by private rights of way leading to the large multifamily project to the rear. On either side of these two rights of way, commercial developments are present. The majority of the site is planted with maintained lawns with some limited areas of brush along the perimeter. Each property is served by municipal sewer and water as well as overhead electric and communication services from utility poles along West Main Road. A concrete sidewalk with precast concrete curbing is present along the RIDOT roadway.

There are no wetlands or other features protected by the state present either on-site or in the direct vicinity. The Site lies with the Town of Middletown Watershed Protection District Zone 2.

In general, the site slopes from the east corner of the two properties to the west towards West Main Road and the RIDOT right of way. The developed portions of the site are relatively flat with slopes ranging from 2 to 10 percent. The steeper portions of the Site are generally along the perimeter in vegetated areas. Per the USDA Natural Resource Conservation Service, the primary soil type on site is PmB (Pittstown Silt Loam). Soil type Ud (Udorthents) is present along the edge of the roadway. PmB is a type C hydrologic soil common to Aquidneck Island.

### **1.2 Zoning**

The subject properties are zoned GBA (General Business – Traffic Sensitive). The commercial properties on either side of the site are zoned similarly. The multifamily residential property to the rear of the site is zoned RMA (Residential Multifamily). Properties located across West Main Road are also zoned GBA.

The Applicant is proposing to demolish the existing structures and develop a gas station and car wash with a commercial storefront. This use requires a special use permit for the GBA zoning district per the Town of Middletown Zoning Ordinance.

### **1.3 Regulations and Guidelines**

Regulations and Ordinances that helped to shape the development of the project site were the following:

1. Town of Middletown Comprehensive Amendment Zoning Ordinance.
2. Town of Middletown Rules and Regulations Regarding the Subdivision and Development of Land.
3. State of Rhode Island Stormwater Design and Installation Standards Manual (March 2015).
4. Urban Hydrology for Small Watersheds. (TR-55 Manual)
5. Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction.
6. Rhode Island Department of Transportation Standard Details.
7. Soil Erosion and Sediment Control Handbook.

## **2.0 SITE IMPROVEMENTS**

The owner intends to demolish all existing structures and improvements and subsequently construct a gas station with a car wash and commercial storefront. Six (6) fueling pumps will serve the gas station under a canopy to be located adjacent to the roadway. The car wash will be located in the rear of the structure with a dual lane stacking area located to the left of the building. A car drying area is to be located at the exit of the car wash and will include nine (9) stations. Paved parking spaces will be located in front of the building adjacent a concrete sidewalk. Additional parking spaces will be located adjacent to the drying stations. The curb cuts onto the adjacent roadway will be revised. The northernmost curb cut will be expanded to a width of 24-feet while the two southernmost curb cuts will be closed. A new curb cut will be opened in the private right of way on the south side of the site. This will allow for lot entry along the southwest side of the Site from this private right of way. All work performed within the state right of way will conform to RIDOT standards and specifications and will require a Physical Alteration Permit from the state. New utilities connections from existing mains in West Main Road will be constructed to support the new structure. Underground electrical and communication services will be dropped from overhead lines along West Main Road. All utility work within the state right of way will require a RIDOT utility permit.

The project includes the following highlighted stormwater design points:

- Runoff from the rooftops of the structure, gas pump canopy, and paved surfaces will be collected and treated in a subsurface sand filter device. Overflow runoff will be detained in a subsurface detention system before being released into the RIDOT drainage system.
- Drainage requirements of the Middletown Regulations, Rhode Island Stormwater Design and Installation Standards Manual, and the RIDOT have been met with approved Low Impact Development (LID) water quality treatment designs and conventional volume controls.
- The drainage system design adheres to all additional minimum standards of a Land Use with Higher Potential Pollutant Loads (LUPPL).

### **2.1 District Regulations (Middletown Zoning Ordinance Article 6)**

The project as proposed does not require any dimensional variances from the Zoning Ordinance. A variance for portions of the landscape buffering may be required along the private right of way to be developed as part of the project.

### **2.2 Supplementary Regulations (Article 7)**

The following information details the project's conformance with the Supplementary Regulations (Article 7) of the Zoning Ordinance:

- The front, side and rear yards will be unoccupied and unobstructed by buildings or structures.
- No accessory structures are proposed within ten (10) feet of a proposed property line.
- All proposed structures will not exceed the District Dimensional Regulations.
- Any fencing will not exceed 6 feet in height.

- There will be no disposal trench, disposal bed, cesspool, seepage pit, septic tank, septic field or other facility designed to leach liquid wastes into the soil, which could enter a wetland or river.
- There will be no storage or parking of major recreation equipment, mobile homes or unserviceable vehicles.
- All yard requirements will comply with Section 716 of the Middletown Zoning Ordinance.
- Any landscaping will conform to Section 723 of the Middletown Zoning Ordinance.
- No structures will be erected and no vegetation will be planted or maintained in such a manner as to obstruct vision at the intersection.
- A special use permit will be sought for the project uses.
- The number of curb cuts will be minimized in order to better facilitate the orderly flow of traffic to and from the Site in a traffic sensitive district.

### **3.0 TRAFFIC CONDITIONS**

A traffic study has been prepared for this project. The report of findings has been attached to this document. Please refer to this document for the impacts of the proposed development.

#### **3.1 Parking (Middletown Zoning Ordinance Article 13)**

The proposed development meets the parking requirements of Middletown. A total of 13 paved parking spaces are required for the gas station/and commercial retail use. No public parking is required by the proposed use.

### **4.0 WATER SUPPLY - DOMESTIC**

The project will be served by municipal water (Newport Water). A letter of availability provided by Newport Water has been requested.

#### **Water Quantity Methodology**

The following calculation determines the estimated maximum hourly water flow for the Ultrasonic MRI Car Wash / Gas Station commercial development using the method provided in the International Plumbing Code (2015). The development consists of a fueling station, a bagel shop, a dog washing station, and a car wash. Counts below are estimated based on likely architectural designs.

<u>Fixture</u>	<u>No.</u>	<u>Water-Supply Fixture Unit Value (WSFU)</u>	<u>Total</u>
Lavatory (public)	2	2.0	4.0
Water Closet (public)	2	10.0	20.0
Slop Sink	1	4.0	4.0
Coffee Station Sink	1	4.0	4.0
Dog washing stations	2	4.0	8.0
Dishwashing Machine	1	1.4	1.4
Hand Sink	2	4.0	8.0
Coffee Station Sink	1	4.0	4.0
<b>Total =</b>			<b>53.4 WSFU</b>

(Taken from Table E103.3 (2))

For a supply system with predominately Flushometer valves, the maximum water demand (taken from Table E103.3 (3)) is equal to:

$$53.4 \text{ WSFU} = 51.4 \text{ gpm}$$

In addition to the water supply demand of the main structure, the car wash requires an additional demand. A typical modern cash wash has a maximum flow rate of **60 gpm**. This car wash will not feature water reclamation.

$$\text{Maximum Water Demand (MWD)} = 111.4 \text{ gpm} \times 60 = 6,684 \text{ gallons per hour}$$

$$\text{Average Day Water Demand (Open 7 days a week year round 12 hours a day) (ADD}_{OS}) = \text{MWD} / 2.5$$

$$\text{ADD}_{OS} = 6,684 / 2.5 = 2,674 \text{ gph} = 32,088 \text{ gpd}$$

$$\text{Average Day Water Demand (Annualized) (ADD}_{OS}) = \text{ADD} = 32,088 \text{ gpd}$$

$$\text{Peak Day Water Demand} = \text{ADD} \times 1.6 = 32,088 \times 1.6 = 51,341 \text{ gpd}$$

## 5.0 SEWAGE DISPOSAL

The Town of Middletown provides public sewer disposal along West Main Road. The project proposes to tie into the main in East Main Road using an existing 6-inch, gravity sewer service stub. The Town of Middletown Department of Public Works has been contacted to determine if sanitary sewer is available to service the project. All construction and design will be in accordance with the Town of Middletown "Use and Installation of Sewers."

## **6.0 STORM DRAINS**

Under existing conditions, the property generally slopes from the center to the adjacent properties and towards the adjacent roadways.

Low Impact Development water quality devices and conventional volume control systems have been implemented to manage stormwater generated by the development. Stormwater from the roof of the main structure and the pump canopy will be routed to a subsurface sand filter for treatment. Filtered runoff will discharge to a small riprap area adjacent to the RIDOT swale in Aquidneck Avenue. Overflow runoff, in excess of the filter capacity, will be discharged to the lined detention basin at the rear of the site. The roof of the cash wash and a portion of the pavement adjacent to the two drive-through lanes will be routed to a second subsurface sand filter. Discharge and overflow runoff from this device will also be discharged to the lined detention basin. Discharge runoff from this volume control device will be to a riprap spillway and towards the freshwater wetlands. The remainder of the stormwater discharge from the site will be via overland flow to the abutting properties and roadways.

The proposed drainage system is designed to maintain or reduce the peak runoff rate to equal or less than that of the existing conditions during the Type III, 24-hour design storms for the 2, 10, 25 and 100-year storm events. The proposed drainage system is also designed to provide water quality treatment in conformance with current RIDEM recommendations.

For detailed description and calculations please refer to the project Drainage Report.

## **7.0 ELECTRIC SERVICE**

National Grid provides overhead electrical services along the adjacent roadway. The project proposes to draw electrical and communication services from an existing pole. Underground services will be run to the structure. The existing utility services to the site will be removed. The proposed service is subject to design and review by National Grid. All construction and design will be in accordance with the National Grid Rules and Regulations.

## **8.0 GAS SERVICE**

A connection to the gas main in West Main Road is proposed. If allowable by the provider, an existing service connection will be reused. All construction and design will be in accordance with the National Grid Rules and Regulations.

## **9.0 POLICE**

Police enforcement will be provided by the Middletown Police Department. Since the project is surrounded by similar use developments and does not contain any special or unusual features, the project should receive similar protection.

## **10.0 FIRE PROTECTION**

Fire protection will be provided by the Middletown Fire Department. An existing hydrant is located to the south at the intersection with West Main Road and the Navy Base Access Road. The pump canopy will have a fire suppression system.

## **11.0 SCHOOLS**

This project will have no impact on the school system.

## **12.0 EMERGENCY SERVICES**

Since the project is surrounded by similar use developments and does not contain any special or unusual features, the project should have similar access to emergency services. The project itself will have two access points for emergency vehicles on West Main Road. Both entrances will be of sufficient size for emergency vehicles.

## **13.0 PHYSICAL AND ECOLOGICAL CHARACTERISTICS**

### **13.1 Surrounding Lands**

Surrounding land use consists primarily of commercial properties and large scale multifamily residential. The two parcels to be developed represent one of the last pockets of single family use within a predominately commercial urban area. The proposed development use and appearance will be consistent with the surrounding area of Middletown. An existing gas station is located two lots away to the north at the corner of Forest Avenue and West Main Road.

### **13.2 Wetlands**

There are no freshwater wetlands on the subject properties.

### **13.3 Flood Plain & Soils**

According to the Flood Insurance Rate Mapping for the Town of Middletown (Community Panel No. 44005C0093J, revised September 4, 2013), the site is located in Zone X. Zone X is within the area of minimal flooding for the 100-year flood.

The soil types on site consist of PmB (Pittstown Silt Loams) and Ud (Udorthents) as designated by the USDA Natural Resource Conservation Service. PmB is a type C hydrologic soil common to Aquidneck Island.

#### **13.4 Vegetation**

Aside from the two residences and driveways, the two properties consist of maintained lawns. Areas of brush line the properties lines at the rear and sides of the site. There is no other significant ground cover.

#### **13.5 Wildlife Habitat**

Since this site is developed and the surrounding areas are largely developed with similar usages, the subject property is not considered a significant wildlife habitat. To the best of our knowledge, there are no endangered or threatened species living on the site.

#### **13.6 Environmental**

The applicant will meet all environmental requirements of the Rhode Island Department of Environmental Management and the Town of Middletown. Construction of this development will improve the environmental conditions of the site with sediment collection measures, a reduction in peak run-off and increased water quality of the site stormwater discharge.

### **14.0 CHARACTER OF THE COMMUNITY**

#### **14.1 Scenic**

Located in a developed urban area with a history of similar development, the properties do not have scenic value.

#### **14.2 Archaeological Conditions**

There are no special or unique archaeological conditions on the site. If any archaeological artifacts or remains are found during construction, work will stop immediately and a historic/archaeological expert will be consulted to determine the significance of the find. The archaeological remains, if they are found to be significant, will be preserved based on the Town and expert's recommendation and/or opinion.

#### **14.3 Scale**

The scale of the proposed structures will not exceed the development standards for this zoning district and will be comparable to that of nearby commercial properties.

#### **14.4 Placement**

The placement of all proposed structures will meet all setback requirements of Middletown. Screening and general appearance were also considered during development so as to have minimal impact to abutters and traffic flow.

#### **14.5 Lighting**

Site lighting will include canopy lighting and pole mounted lights for parking and drive through aisles. All exterior lighting will be LED. A lighting plan will be provided.

#### **14.6 Use of Open Space**

There is no open space component associated with the proposed use.

#### **14.7 Abutting Properties and Property Value**

This development will have no detrimental effects on abutting property values since abutting properties are of similar types of land use.

#### **15.0 CONCLUSION**

It is our opinion that this proposed development will have no negative environmental impacts on the Town of Middletown as a whole or to abutting property owners. The quality of the development and its intended purpose to provide desirable commercial services in a central location will be an asset to the town.