

## Memo- Existing Conditions at Site #8

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**Project Name:** Madison Water Works  
Eastside Water Master Plan

**BDC Project Number:** 50646

**Date of Memo:** February 27, 2011

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### **DRAFT**

This memo is regarding the existing conditions at Well Site #8 of the Madison Water Works, as shown on Figure 1.

#### **Requirements:**

The existing trapezoidal site measures approximately 137'-9"x 80'-0" and is located on the south-west corner of Olbrich Park, just east of the intersection of Lakeland Avenue & Welch Avenue.

According to the current Madison Zoning Code, the site is zoned C WP-08.

There are no setbacks according to the Madison Zoning Code.

An existing 140,000 gallon below grade reservoir is located just north of the property line. According to a 2006 inspection conducted by Black & Veatch, the reservoir is in good shape and is not planned on being replaced at the current time. The reservoir is small and does not meet current Utility standards. It is noted that any work on the existing reservoir may invoke current DNR requirements which do not permit a totally buried facility. Current DNR regulations require a minimum of 2 feet of the top of the reservoir to be exposed. This would significantly alter the current look and use of the west end of Olbrich Park.

Water quality concerns about iron and manganese necessitate a facility of approximately 2,500 net square feet to house the necessary pumping, filtration equipment, and chemical feed systems. In addition, another 1,500 square feet of area may be needed in the future for organic contaminant treatment. Thus, the ultimate total treatment facility may be 4,000 square feet.

#### **Constraints:**

The site has a moderate slope towards the lake. The current pump house is located so that three sides of the structure are buried and the front of the pump house is fully exposed, much like a walk out basement. This existing set-up would remain as the existing well location will remain.

Well 8 is located within a major city park, on quiet streets in a residential area made up of predominantly pre-war two-story single-family homes. Many of the neighbors across Welch Avenue have enjoyed an unbridled view from their homes to Lake Monona for decades. This view should remain for all intents and purposes.

Based on current City ordinances, a city wide referendum would be required to build outside of the Water Utility property. This referendum may not be acceptable to local neighborhood groups and could end up not passing. Without additional property, deal with future water quality problems would be difficult, if not impossible.

The current below grade reservoir forms a popular neighborhood sledding hill. Any changes to the site should strive to keep the sledding hill in the best condition possible.

The site contains 2 large trees at the south-west corner of the property. These trees add beauty and assist in cleaning the air of the neighborhood and should remain.

The current site plan allows for future expansion if additional filtering or treatment equipment is needed in the future. This expansion would require a city wide referendum for approval. The expansion would cut 30'-40' off the width of the sledding hill but the site could possibly be regarded to minimize the amount of sledding hill lost. (Note: Property lines need to be verified, this future expansion may be located off the Water Utility's property.)

Lakeland Avenue is an existing and easy access point for maintenance and operations personnel. It is also heavily used as a bike path and is to remain.

### **Opportunities:**

The form of the building (3 sides buried, 1 side exposed) creates a natural location for a promenade, outdoor pavilion or similar shared-use structure. The lower area, if expanded, may be a prime location for indoor restrooms maintained by the city park system.

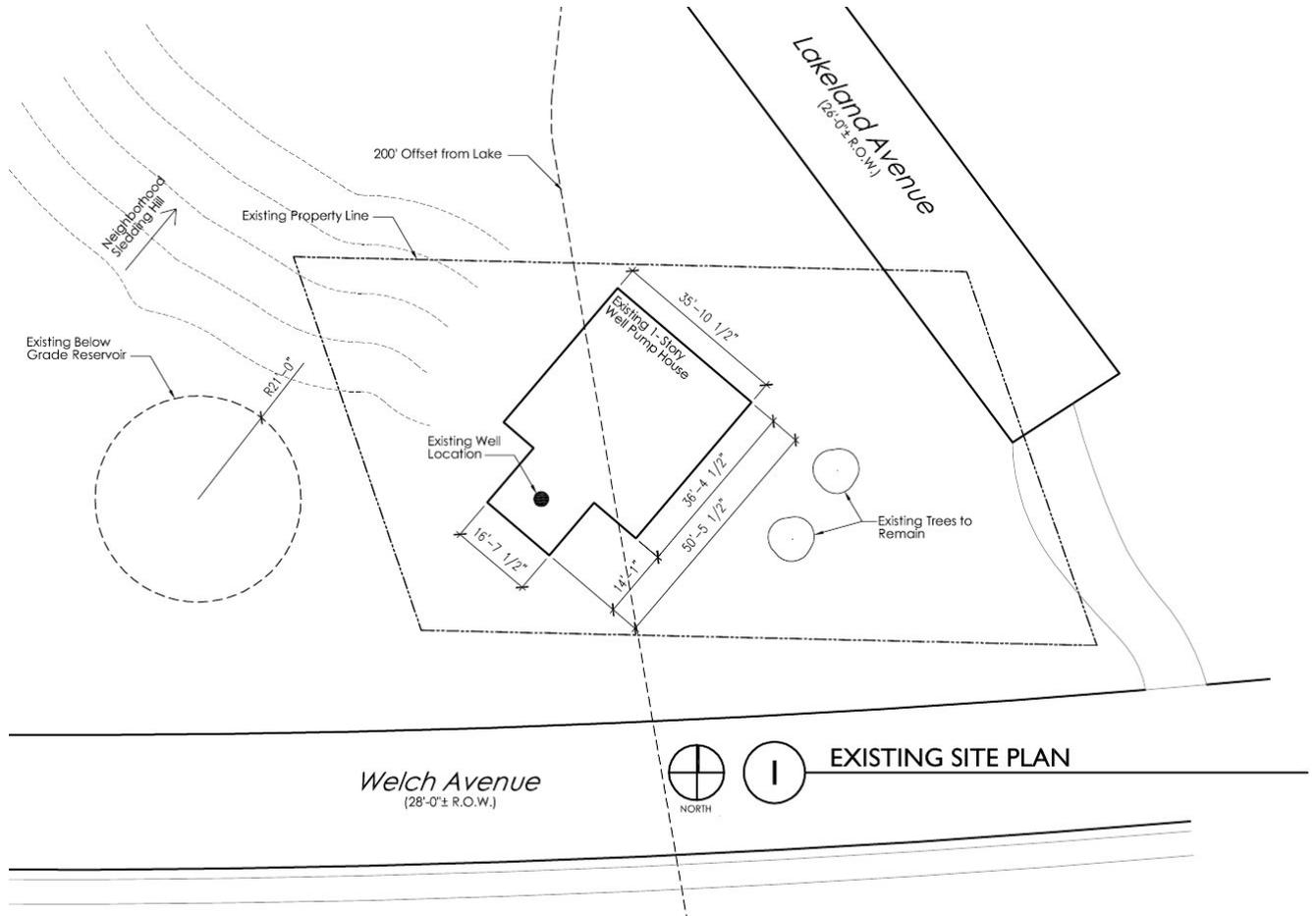
A vacant historic industrial building is located 1,800± feet north of the site that could be used to house a new filtration and treatment plant. The filtration and treatment plant would reside in 10-30% of the building. The rest of the building used by the Parks Department for storage and maintenance purposes.

### **Key Points:**

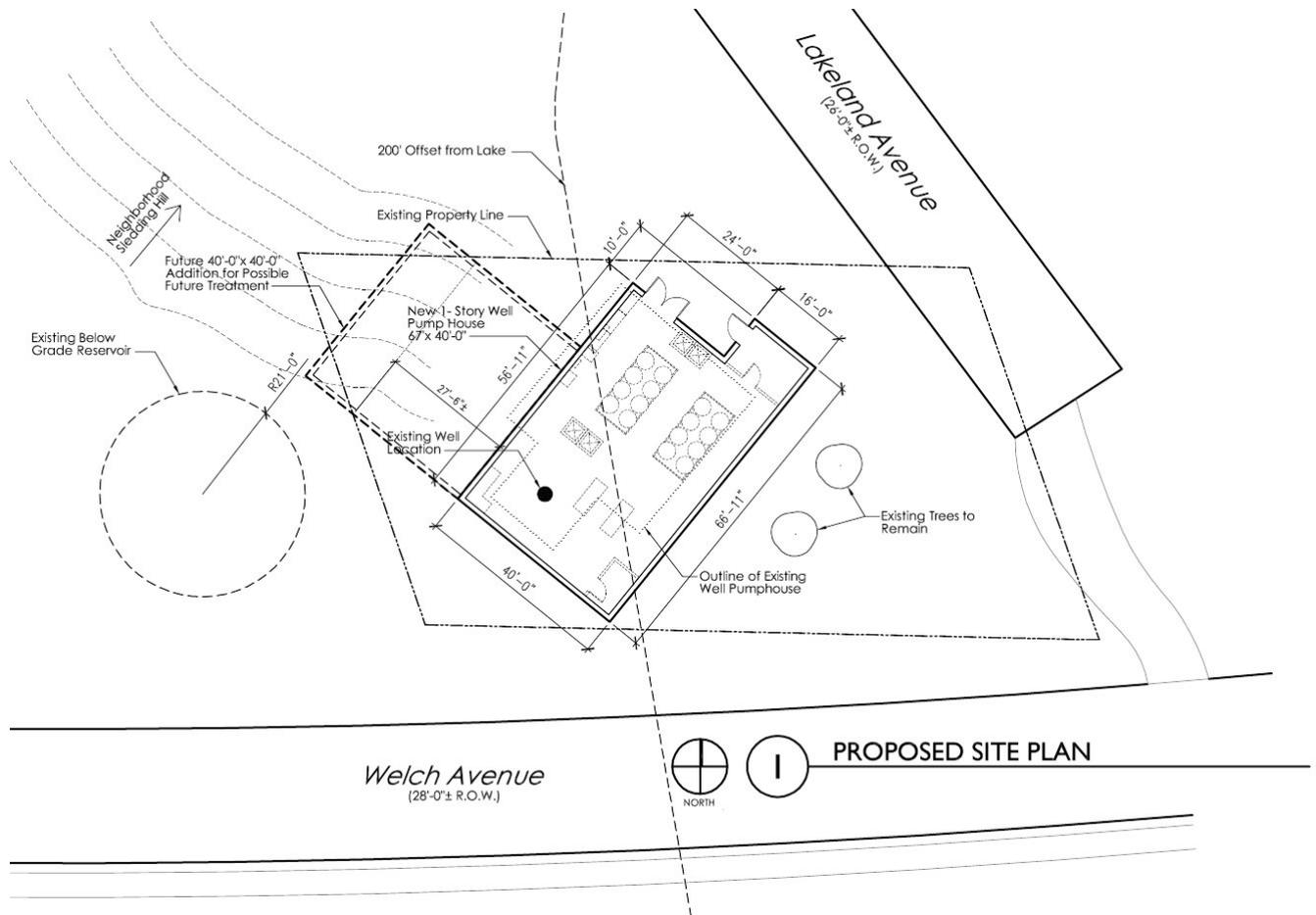
The site, while able to accommodate the program requirements of the new filtration equipment, is on the constrained side if the sledding hill is to be maintained. Should water quality continue to deteriorate or additional capacity is need due to the growth of the city, there would be no room for future growth without major alterations to the sledding hill as currently constructed and a successful city wide referendum.

There exists minimal room to change the form of the building or add landscaping without direct involvement of the city parks system. This means that there are minimal opportunities to screen unsightly mechanical apparatus from the neighborhood and park users.

**DRAFT**



**Figure 1.**



**Figure 2.**