

# Arbor Hills Supplemental Fire Flow Supply



2<sup>nd</sup> Public Meeting  
September 10, 2009

## Introductions

➤ *Project Manager: Al Larson P.E.*

➤ *Citizen's Advisory Panel (CAP)*

Sheri Carter  
Chuck Friedrichs  
Tracy Fuller  
Roger Hanson  
Bryan Manning

Harry Sulzer  
Ray Walker  
Ken White  
Patty Zahler

## Public Participation Process

1. Establish the Project (Complete 6-23-09)
2. *Evaluate Alternatives* ← **We're here**
3. Site Selection
4. Architectural Features

## Public Participation Process

### Citizen's Advisory Panel (CAP)

- A CAP is formed @ the start of the project
- The CAP provides feedback throughout
- The makeup of the CAP may change as the project details develop and evolve
- Each Step has at least one public meeting
- Each Step has at least one public hearing

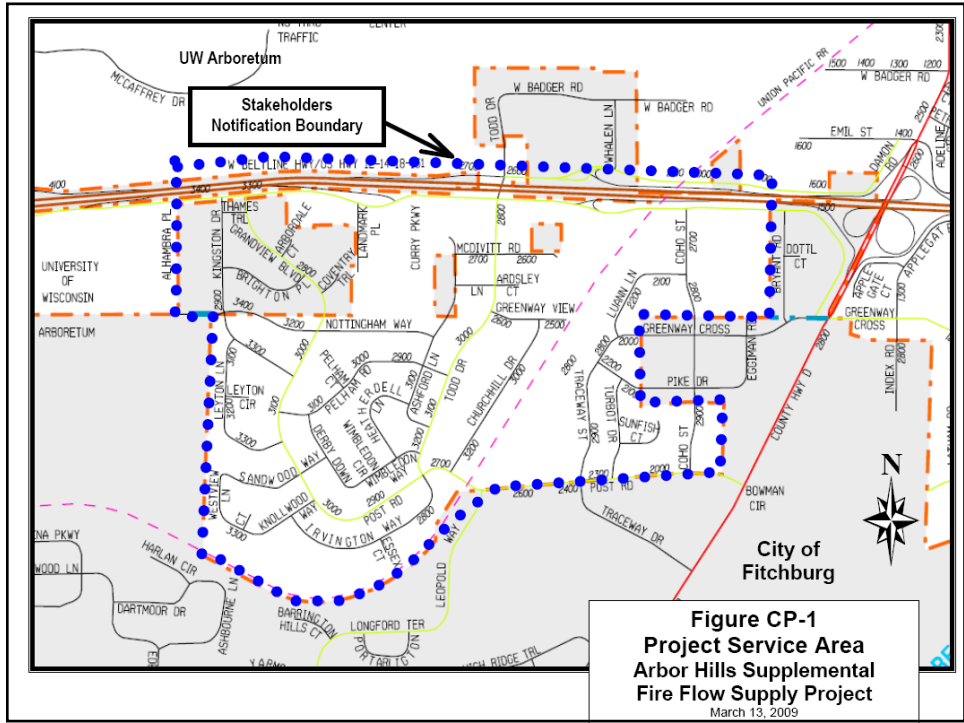
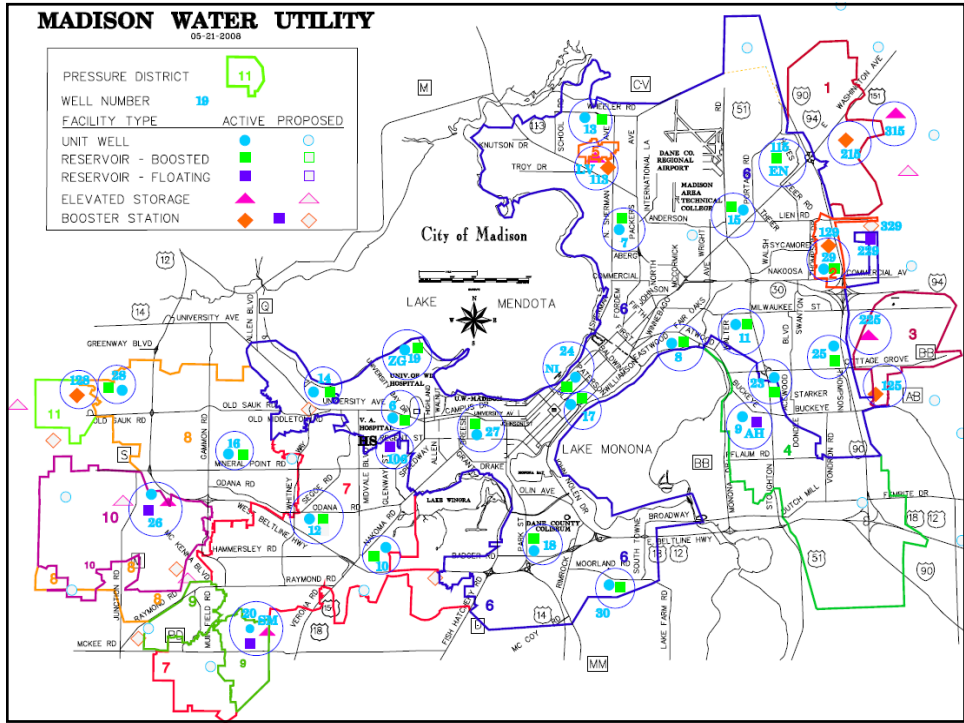
# For More Information

■ [www.madisonwater.org](http://www.madisonwater.org)

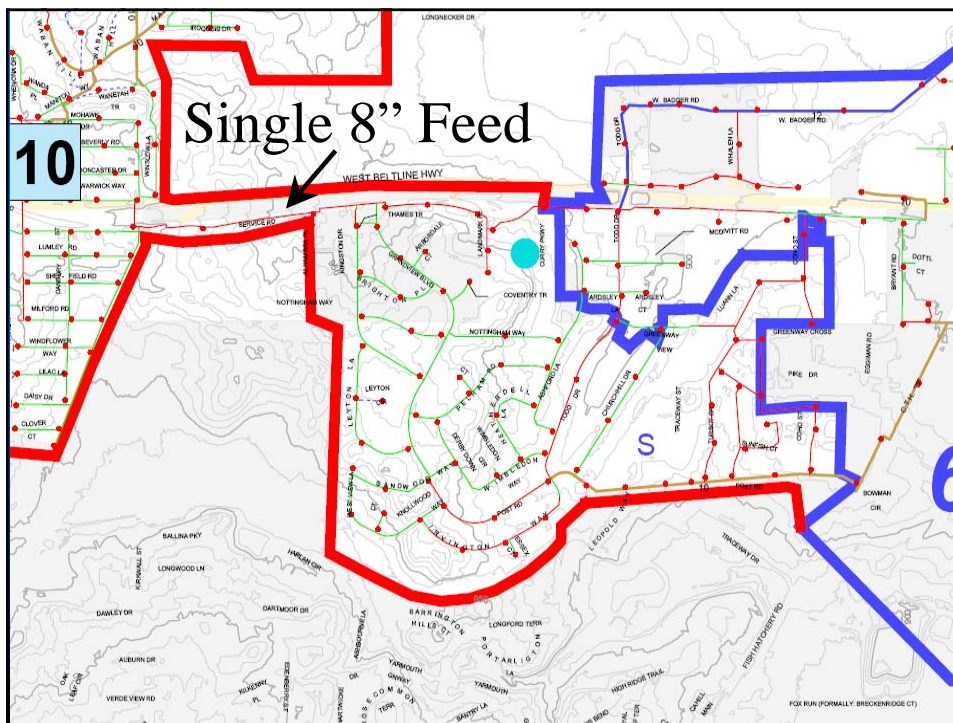
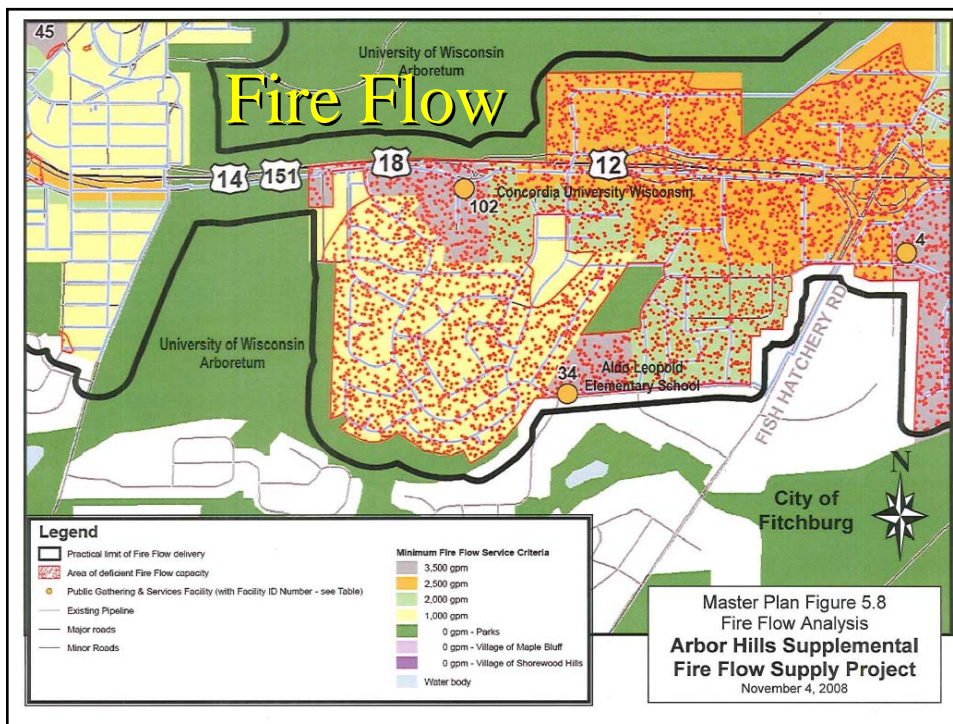
The screenshot shows the homepage of the City of Madison Water Utility website. The browser window title is "Water Utility - City of Madison, WI - Windows Internet Explorer". The address bar shows "http://www.cityofmadison.com/water/". The page has a blue header with the utility's logo and navigation links. A sidebar on the left contains links for "About Us", "Water Utility Board", "Doing Business", "Water Main Flushing", "Water FAQs", and "Just for Kids". The main content area features a "What's New" section with "NEWS RELEASES" and "NOTICES & OTHER ANNOUNCEMENTS". A red arrow points to a news release dated Sep 2, 2009, titled "Madison Water Utility Establishes Water Treatment and Quality Policies for Iron and Manganese".

# For More Information


The screenshot shows the "Notices of Intent to Establish Projects" page. The browser window title is "Notices of Intent to Establish Projects - Water Utility - City of Madison, WI - Windows Internet Explorer". The address bar shows "http://www.cityofmadison.com/water/plans/projects.cfm". The page features a navigation menu and a sidebar. The main content area is titled "NOTICES OF INTENT TO ESTABLISH PROJECTS" and includes a "CONTACT" section with the phone number (608) 266-4653. The "ARBOR HILLS SUPPLEMENTAL FIRE FLOW SUPPLY" section describes the project and provides a meeting notice for Thursday, September 10th at 6:30 p.m. A blue arrow points to the "Project Docs" section, which lists several PDF documents for download, including "Arbor Hills Project Scoping Document (PDF)", "Forms for Arbor Hills Project Scoping Document (PDF 3.26 MB)", "Arbor Hills Public Participation Plan (PDF)", "Arbor Hills Communication Plan (PDF)", and "Arbor Hills Alternative Evaluation (PDF)".







# Alternative Evaluation Report

 <b>Madison Water Utility</b>	<b>Alternative Evaluation</b>	Project Manager:	Al Larson, P.E. 608.266.4652 <a href="mailto:al Larson@cityofmadison.com">al Larson@cityofmadison.com</a>
		Project Information:	Arbor Hills Supplemental Fire Flow Supply Project / 1-0850-02
Alder Dist: 14	Section: Engineering	1 <sup>st</sup> Draft:	August 4, 2009
Alder: Tim Bruer		Ref'd by Water Board:	
		Approved:	

## Alternative Evaluation

### Arbor Hills Supplemental Fire Flow Supply

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## Alternatives

1. Maintain the status quo (Do nothing)
2. Construct pumping station and pipeline along the proposed bike path
3. Drill a new well
4. Buy water from Fitchburg
5. Construct a 750,000 gallon elevated tank

## Alternative #1

### Maintain Status Quo

(Do Nothing)

Description: Recognize the limitations of the system and live with them

Cost: \$0

Service: Increasing risk of lost service

Schedule: Not Applicable

Recommendation: Does not meet minimum standards, will not be considered further

## Alternative #2

### Construct a Pump Station

Description: Construct a 2,000 gpm booster pumping station to pump water from Zone 6 to Zone 7

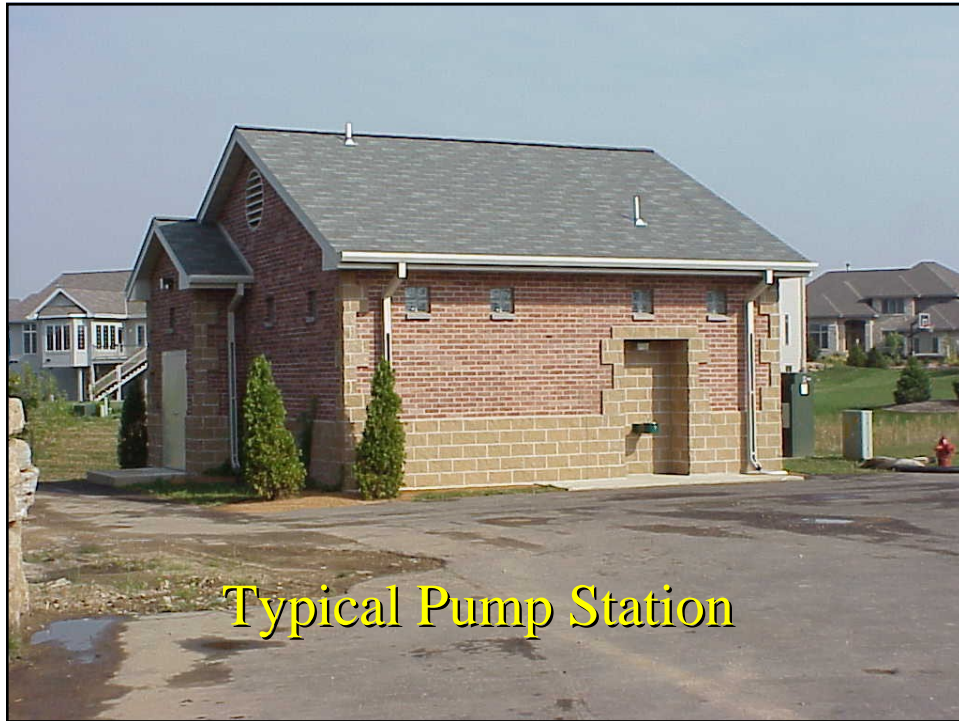
Cost: Pump Station = \$1,000,000 (Includes Engineering)

Operating Costs = \$53,000 per year

Service: Improves fire flow and system reliability

Schedule: Construction 2010/2011

Recommendation: Construct a pump station in conjunction with Cannonball Trail Water Main



Typical Pump Station

## Alternative #3 Drill a New Well

Description: Drill a new well in the Arbor Hills neighborhood with a pump station and reservoir

Cost: Construction = \$3.4 million (includes engineering)

Operating Costs = \$100,000 per year

Service: Improves fire flow and system reliability

Schedule: Construction 2012/2013

Recommendation: Another well is not needed in this area. This alternative is not recommended.





Typical Unit Well

## Alternative #4 Buy Water from Fitchburg

Description: Fitchburg drills a new well and a metered inter-tie constructed for Madison.

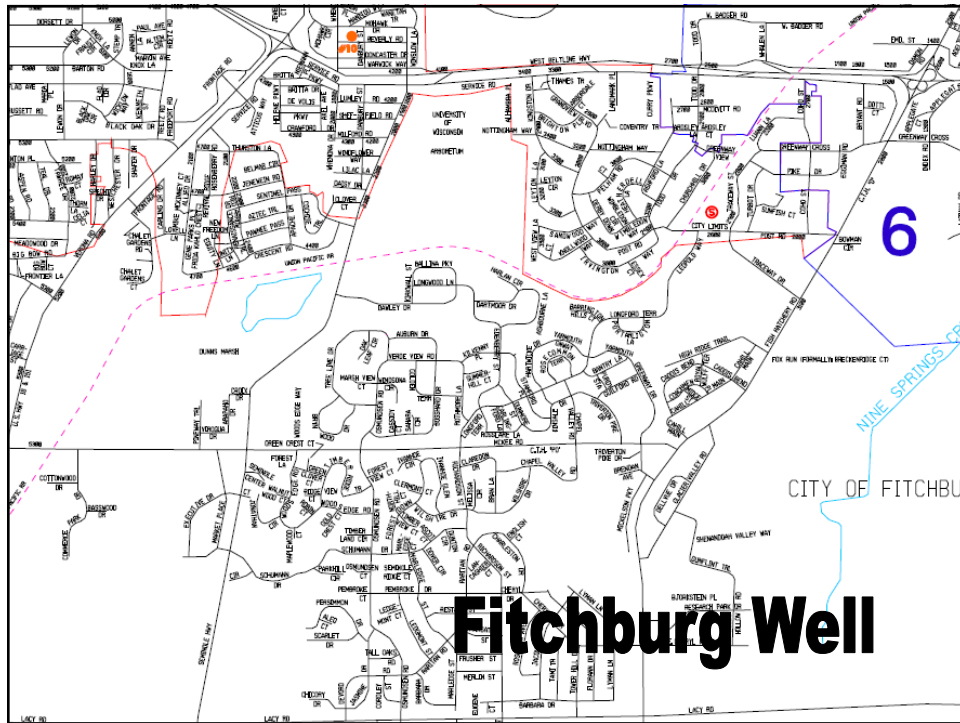
Cost: Construction = All City of Fitchburg (\$3 million)

Annual Water Cost = \$160,000 per year

Service: Reliability controlled by of Fitchburg

Schedule: Unknown? .. Earliest 2012/2013

Recommendation: Due to costs, schedule, and other unknowns this alternative is not recommended.



**Alternative #5**

**Construct a Water Tower**

Description: Construct a 200 foot tall 750,000 gallon reservoir and pump station.

Cost: Construction = \$3.1 million (includes engineering)

Operating Costs = \$40,000 per year

Service: Improves fire flow and system reliability

Schedule: Construction 2011/2012

Recommendation: Significant neighborhood opposition make this alternative unfeasible. Not recommended.

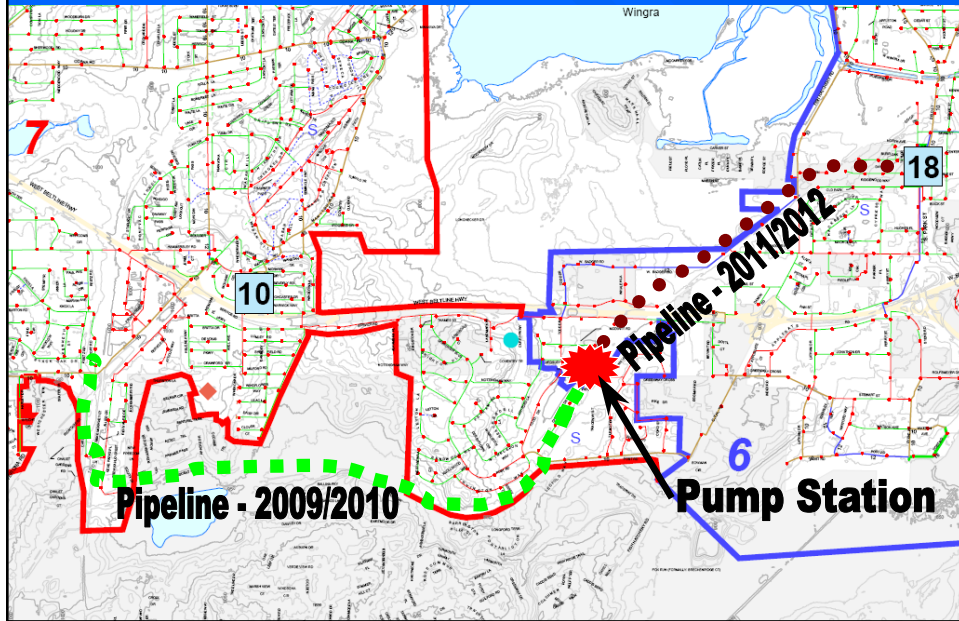
## Typical Water Tower



## Recommendation

- Based on this alternative evaluation, it is recommended that Madison Water Utility construct a water pumping station to improve fire flow capacity and reliability in the Arbor Hills area.
- This pump will work in conjunction with the Cannonball Trail water transmission main.

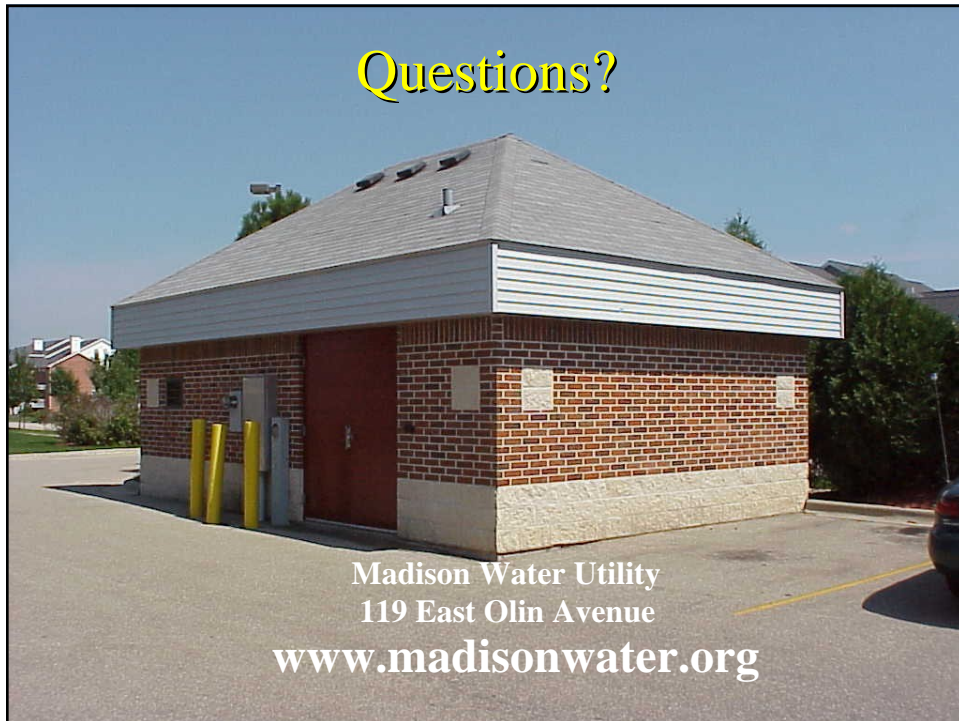
# Full Project



# Potential Project Site











## **Contact Information**

### 24-Hour Phone Line

**266-4665**

### Water Quality Phone Line

**266-4654**

Tom Heikkinen GM – 266-4652; Cell 213-4302

[theikkinen@madisonwater.org](mailto:theikkinen@madisonwater.org)

Al Larson P.E. – 266-4653; Cell 225-9131

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