

Water Treatment Facility Pete's Hill Site Option



Presented by

Bolton & Menk, Inc.

October 21, 2013



Elko New Market Water Supply

- If we drew a diagram..
 - Wells
 - Well house
 - Elevated Storage
 - Distribution Network
 - Individual Services



Project Background

- City of Elko New Market has water quality issues
 - Radium – Primary DWS
 - Iron - Secondary DWS
 - Manganese – Secondary DWS
- Exceeds MCL for Radium
- Compliance Agreement with MDH



Water Treatment Facility – Design Goals

- Provide a High Quality Finished Water
- Easy to Operate
- Low Maintenance Costs
- Flexibility for Future Expansion



Architectural Features

- Cast-in-Place Concrete and Masonry
- Aesthetically Pleasing
- Energy Efficient
- Low Maintenance
- Cost Effective



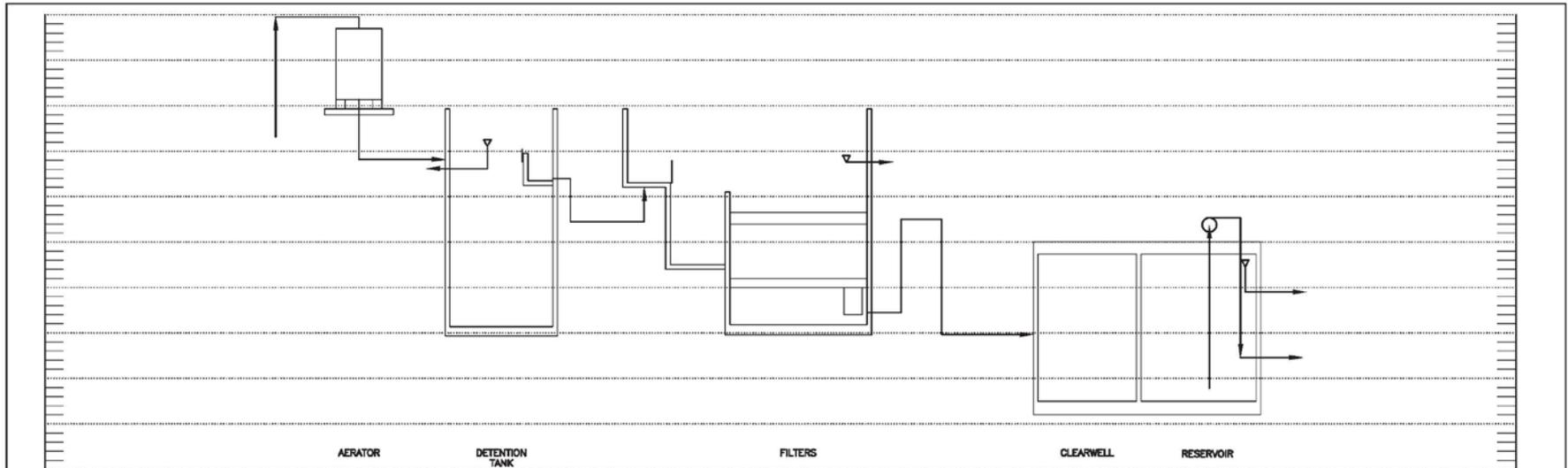


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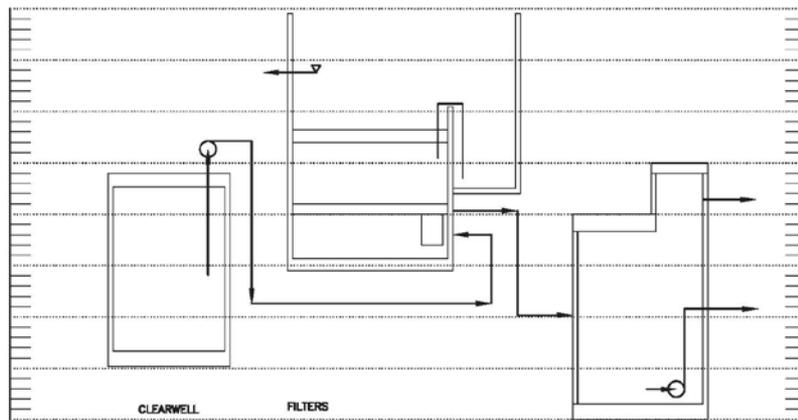
SUBWAY

S

Hydraulic Profile



FILTRATION HYDRAULIC PROFILE



BACKWASH HYDRAULIC PROFILE

SCALES SHOWN ON DRAWINGS ARE FOR
 24" X 36" SIZE SHEETS ONLY. DIMENSIONS
 PERTAIN TO ANY OTHER SIZE SHEETS
 NEED TO HAVE SCALES ADJUSTED ACCORDINGLY
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ELKO NEW MARKET, MINNESOTA
 WATER TREATMENT FACILITY
 PROPOSED HYDRAULIC PROFILE
 DESIGN REPORT

FIGURE

4.2

Schedule

Proposed Schedule	
Item	Date
1. Prepare Preliminary Design Engineering Report	June 2013
2. City of Elko New Market staff and Council review Design Engineering Report	July 2013
3. Prepare final plans & specifications	Sept.-Oct. 2013
4. City of Elko New Market staff review plans & specifications at 50 and 90 percent levels	Nov.-Dec. 2013
5. Minnesota Department of Health review plans & specifications	January 2014
6. Advertise for bids	March 2014
7. Open bids and award contract	April 2014
8. Initiate construction	May 2014
9. Complete construction	December 2015
<ul style="list-style-type: none"> • MDH Compliance Agreement Dates 	<ul style="list-style-type: none"> • Complete Construction • In Compliance
	December 2016
	December 2017

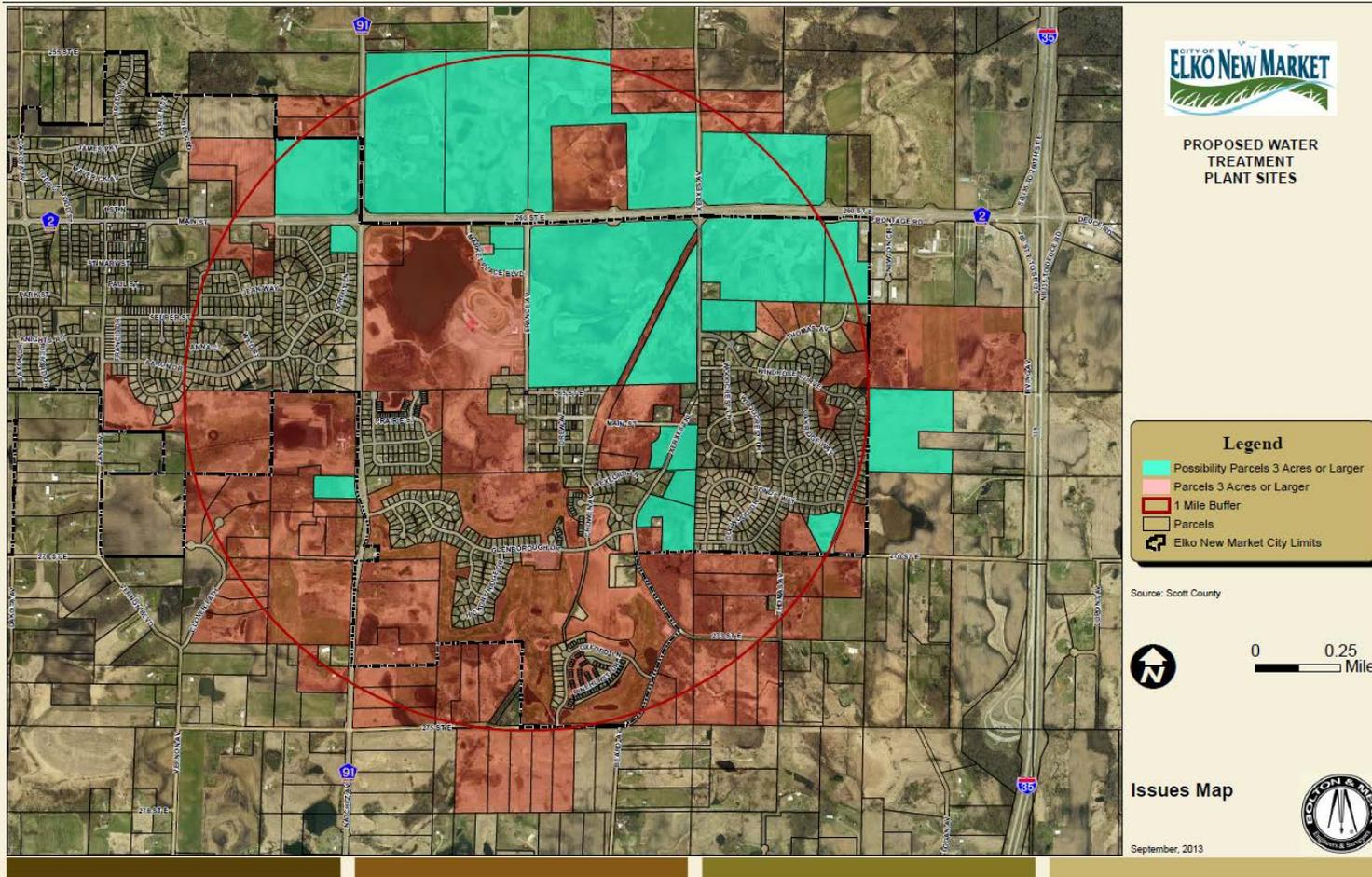


Where to put it?

- First Screening by:
- Costs
 - Land and easements
 - piping (how far to connections?)
 - constructability (terrain and soils)



Site Search



Feasibility-level Review

- Three Sites found feasible
- Other factors
 - Land use compatibility
 - Operations
 - Connectivity
 - Expandability
 - Service to Growth Areas
- Public Works and Pete's Hill emerged



Two Sites – Now What?

- Resident Involvement

- Information
- Identify concerns and opportunities
- Identify possible ways to address
- Report to Council

-Council Selects a Site-

- Establish process for involvement through design and construction for stakeholders

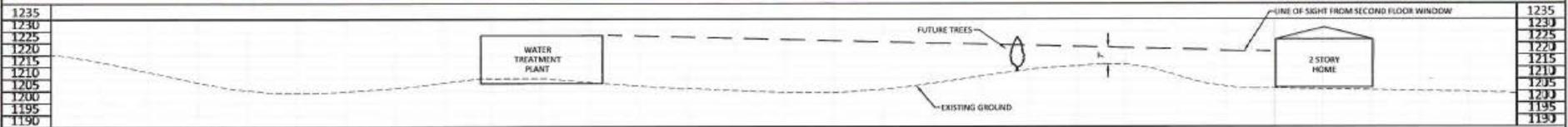


Pete's Hill Siting

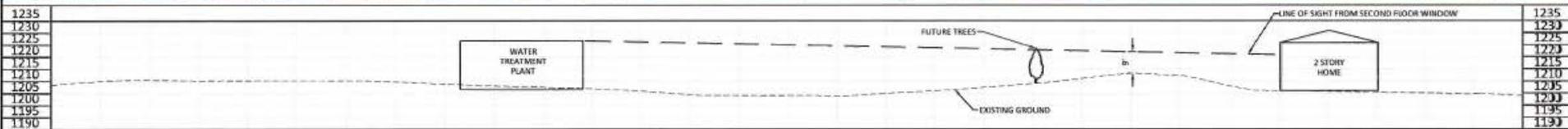




Lot 3 Sight Lines



Lot 6 Sightlines



Questions?



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Bolton & Menk, Inc.

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