AGENDA

1. Attendees

2. Review of Last Meeting (July 10, 2019)
   a. Review Meeting Minutes (See enclosed Meeting Minutes from July 10, 2019 meeting
   b. Review Previous Handouts/Concept Drawings (See attachments from email dated 5/30/2019)

3. Review Updated Conceptual Drawings
   a. Updated site rendering (Page 1 of 9)
   b. Plantings have been provided in front of the fence along lighthouse point road (Page 2 of 9)
   c. Fencing layout includes areas of concrete wall, decorative fence, and salvaged chain link fence (Page 2 of 9)
   d. Concrete wall and fencing alternative have been updated (Pages 4/5 of 9) to align with Two Harbors and Scandinavian inspiration (Shown on Page 3 of 9)
   e. Decorative gate concepts provided Page 6 of 9
   f. Screening and vegetation view from Lighthouse Point Road provided on sheet 7 of 9
   g. Metal fence/structural steel concepts (Pages 8/9 of 9)

4. Miscellaneous Topics to Cover
   a. Staging Area/Construction Easement
   b. Construction Access: Park Road to South Avenue Only?
   c. Are there existing easements on Cave property?
Tara Wittlief

From: Brian Guldan <Brian.Guldan@bolton-menk.com>
Sent: Thursday, May 30, 2019 3:20 PM
To: Jackie Rennwald; Craig Jussila; Mayor Chris Swanson
Cc: Dan Walker; Luke Heikkila; Joseph Rhein; Joseph Pelawa
Subject: Two Harbors WWTF
Attachments:
2019.05.30_WWTF Landscape Concepts.pdf; TWO HARBORS - 2019-05-29 FINISHES.PDF; Kaiser-Oakland-raingarden.jpg; Issaquah.jpg; Goat-Hill.jpg; SLS_Hotel_BeverlyHills_CA_2932_1200px.jpg; Comcast-Headquarters-Philadelphia-PA.JPG; Field-Blvd.jpg

Members of the Public Utilities Committee,

Since we have postponed the meeting that was originally scheduled for June 5th to discuss site aesthetics for the WWTF, I wanted to provide you all with some preliminary information so I can gather some feedback.

The first attachment provides a site landscape plan along with photo displays of various types of plantings and fencing that can be used. I want to call you attention to the follow items:

- Tree placements are preliminary and may need to be adjusted based on the final underground utility design.
- Except for the west side of the site along Lighthouse Point Road, the remainder of the site has limited space along the property line for trees. To best address screening on the north, east, and south property lines two options are 1) to use fencing/walls as the primary screen or 2) work with adjacent land owners to see if plantings can occur outside the City property lines.
- Currently the berm and plantings along the west property line are within the fence. Please consider the following options
  - Leave as shown
  - Place fence on top of berm
  - Place berm in front of the fence (this option is likely the most difficult and may create conflicts with drainage and utilities in the exiting road ROW)

The second attachment provides some additional fence types (page 1) as well as some possible concrete options for tank finished and screen walls (page 2).

Lastly I have attached a number of photos showing metal trellis screen that could be used on some of the tank walls. These are quite common now and the screens are affordable. This would not be intended as a primary screen, but could be used to break up the large poured concrete walls on the NE side of the site.

Another option to consider is having an architectural finish on the circular biosolids tanks. The following link provides some examples of how these tanks can be dressed up architecturally. There is several pages of tanks you can flip through to view different options. If you are interested I can also reach out to the tank supplier to see if this is something that could be done to the existing EQ tank. [https://preload.com/projects/](https://preload.com/projects/)

I know there is a lot of information here, but I wanted to provide you with a number of options to think about so you can let us know what you like and don't like. This will help us to provide more detailed renderings that we can share with you at the next meeting. Please let me know your thoughts and I will have our team prepare some appropriate site renderings for further visual aids.

Please do not hesitate to contact me if you have any questions.
Thanks,

Brian J Guldan P.E.
Principal Environmental Engineer
Bolton & Menk, Inc.
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Suite 206
Ramsey, MN 55303-5119
Phone: 763-433-2851 ext. 2658
Mobile: 612-499-0533
Brian.Guldan@bolton-menk.com
Bolton-Menk.com
FENCE MATERIALS:
- Plain steel panels and decorated panels and shapes
- Corrugated metal panels
- Metal mesh or rods painted or galvanized

Water Treatment Facility - Two Harbors, MN
Fence Materials
CAST CONCRETE TEXTURES ON TANKS:
- MATCH MASONRY OF BUILDINGS AND PAINT TO MATCH
- NATURAL STONE LOOK AND PAINT A COORDINATED COLOR TO COMPLEMENT BUILDINGS
- ABSTRACT AND NATURAL TEXTURES AND IMAGES

WATER TREATMENT FACILITY - TWO HARBORS, MN
CAST CONCRETE TEXTURES
DANIELLE DETLEFSEN  
225 8TH ST  
TWO HARBORS MN 55616

CUSTOMER#: 02-2228  
INVOICE#: 202010166673  
INVOICE DATE: 1/07/2021  
DUE DATE: 10/30/2020

Amount Paid ________

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PLEASE INCLUDE INVOICE # AND CUSTOMER # ON REMITTANCE

****THANK YOU****  TOTAL DUE: 262.50

MAKE CHECK PAYABLE TO: CITY OF TWO HARBORS  
522 1ST AVE.  
TWO HARBORS, MN 55616-1504
AGENDA

1. Attendees
   Mayor Swanson, Ben Redden, Miranda Pietila, Luke Heikkila, Paul Johnson, Curt Cavallin, Joel Odens,
   Jeff Rapp, Brian Guldan

2. Overview of Project
   a. Review aerial photos and aerial renderings of site
   b. Review street view renderings
   c. Discuss building materials/finishes
      i. City Comments – Whiskey Row Concept, Scandinavian Theme

3. Discuss Screening Options
   a. Natural Screening
      i. Brian to discuss bullet items from May 30th email regarding the landscape plan.

      • Tree placements are preliminary and may need to be adjusted based on the final underground utility design.

      • Except for the west side of the site along Lighthouse Point Road, the remainder of the site has limited space along the property line for trees. To best address screening on the north, east, and south property lines two options are 1) to use fencing/walls as the primary screen or 2) work with adjacent land owners to see if plantings can occur outside the City property lines.

      • Currently the berm and plantings along the west property line are within the fence. Please consider the following options
         o Leave as shown
         o Place fence on top of berm
         o Place berm in front of the fence (this option is likely the most difficult and may create conflicts with drainage and utilities in the exiting road ROW) This is the preferred City option

   b. Fencing
      i. Review types/determine City preferences
         1. 6 foot – No Barb Wire!
         2. Relocate the south fence to the north side
         3. Fence 6’ tall on top of berm
         4. Provide arches at entrance? – Need to be high as large trucks will need to enter
ii. Review location. Entire site perimeter?

4. **Miscellaneous Topics to Cover**

a. Tank architectural finish for cast-in-place concrete tanks?
   i. City is not a fan of waves/arches. Likes stamped concrete Brian to follow up
      with stamped concrete costs
      1. Craig Habighorst (Rice Lake Construction) - $30-$40/sq ft for form liners.
         $3-$5/sq ft for stain. Can be done on circular tanks, but more
         expensive.

b. Look at adding beams to aeration basins/clarifiers for aesthetics.
   i. Steel beam (bridge beam
   ii. Match ore docks

c. Tank metal trellis options – City was not a fan of this concept

d. Tank architectural finish for wire round tanks?

e. Check with City Trees and Trails committee. Possibly transplant trees from other
   properties.

f. Mayor to contact Sam Cave
   i. Plant trees on his property?
   ii. Construction Easement?

  g. Gates
     i. Want swing gates with contrasting design
Two Harbors
WWTF
Improvements
Evergreen plantings, shrubs, and grasses will be planted on a berm along 3rd Street and strategically located to screen portions of the water treatment plant and soften the overall facade.

Concrete Wall and Decorative Fence
A mix of a concrete wall with columns and panels with a decorative fence will surround the perimeter of the water treatment plan. The following pages explore the materiality of these elements. The layout plan to the right illustrates where each element is located.
SCREENING CONCEPT VISUALIZATIONS

ALTERNATIVE 1

Concrete Wall Columns & Panels - Stone pattern with cap and base. Stone color and pattern to match existing bridge structure in Two Harbors

Decorative Fence - Horizontal metal rail, black or red to match existing bridge structure in Two Harbors

ALTERNATIVE 2

Concrete Wall Columns - Stone pattern with cap and base. Stone color and pattern to match existing bridge structure in Two Harbors

Concrete Wall Panels - Horizontal wood "board form" pattern

Decorative Fence - Vertical metal rail, black

ALTERNATIVE 3

Concrete Wall Columns - Gray concrete column with relief.

Concrete Wall Panels - Vertical wood "fence" pattern

Decorative Fence - Vertical metal rail, black

WASTEWATER TREATMENT FACILITY
The gates to the Wastewater Treatment Facility could mimic the decorative rail alternatives to blend in with the rest of the screening fence creating a streamlined appearance or could be made to stand out with additional customizations, creating an artistic feature.

The five artistic gates shown represent the wide range of customization and materials that could be used on a decorative gate. Costs vary.
Berm and Plant Material

Evergreen plantings, shrubs, and grasses will be planted on a berm along 3rd Street and strategically located to screen portions of the water treatment plant and soften the overall facade.

### PLANT SCHEDULE

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<td>Grasses</td>
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### ELEVATION OF WEST SCREENING FENCE AND VEGETATION

**WASTEWATER TREATMENT FACILITY**

**PRELIMINARY PLANTING PLAN**
Waste Water Treatment Facility - Two Harbors, MN
Metal Fence At Entry Study
Waste Water Treatment Facility - Two Harbors, MN
Metal Fence At Tank Study