



Ad Hoc Stormwater, Wastewater and Water Citizens Advisory Committee
Wednesday, December 2, 2020 - 6:00 PM
Newberg City Hall
414 E First Street (teleconference meeting)

Join from a PC, Mac, iPad, iPhone or Android device:
Please click this URL to join. <https://zoom.us/j/94583777944>

Or join by phone:
Dial (for higher quality, dial a number based on your current location):
+1 669 900 6833, +1 253 215 8782, +1 346 248 7799, +1 929 205 6099,
+1 301 715 8592,+1 312 626 6799

Webinar ID: 945 8377 7944
Email any comments to Brett.Musick@newbergoregon.gov

- I. COMMITTEE INTRODUCTIONS**
- II. ELECTION OF COMMITTEE CHAIR AND VICE CHAIR**
- III. COMMITTEE PURPOSE AND GENERAL BACKGROUND**
- IV. NEW BUSINESS**
 - Water Master Plan Technical Update Consultant Presentation, Murraysmith
 - Wastewater Master Plan Technical Update Consultant Presentation, Keller
- V. PUBLIC COMMENTS**
- VI. ITEMS FROM STAFF**
- VII. ITEMS FROM COMMITTEE MEMBERS**
- VIII. ADJOURNMENT**

ACCOMMODATION OF PHYSICAL IMPAIRMENTS: In order to accommodate persons with physical impairments, please notify the Engineering Department of any special physical or language accommodations you may need as far in advance of the meeting as possible, and no later than two business days prior to the meeting. To request these arrangements, please contact the Engineering Department at (503) 537-1273. For TTY services please dial 711.

Technical Update to the Wastewater Master Plan - CAC #1

December 2, 2020



Master Plan Updates

- Drivers
 - Riverfront Master Plan
 - Additional developments, improvements, planning information relevant to each utility included in the individual updates.
- Goals/Objectives
 - Reflect accepted Riverfront Master Plan data and recommendations in City master plans.
 - Incorporate additional developments, information into updates and recommended Capital Improvement Plans (CIP).
 - Infrastructure-Based Time Extension Request (IBTER)

Project Overview



- Scope



- IBTER
- Riverfront Master Plan
- Additional Items
 - Evaluation Threshold Review
 - Riverrun Subdivision Addition
 - Springbrook Basin (Crestview Crossing/Drive)
- Update Evaluation, Alternatives, and Capital Improvement Plan (CIP)
- Public Review and Council Presentation
 - Citizen Advisory Committee (CAC)
 - Three (3) meetings
 - Planning Commission
 - City Council Work Session and Adoption

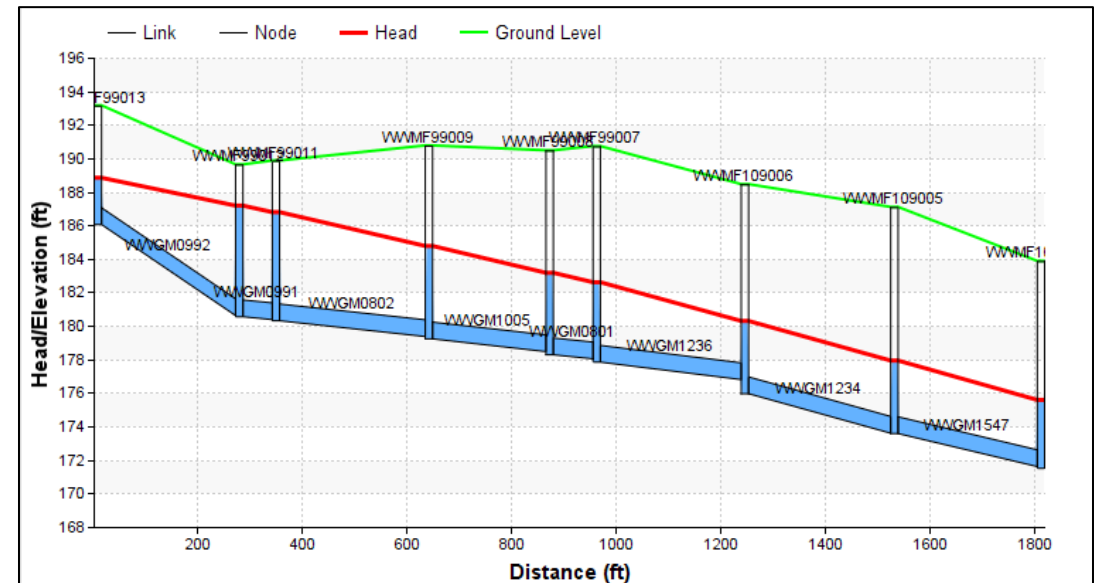
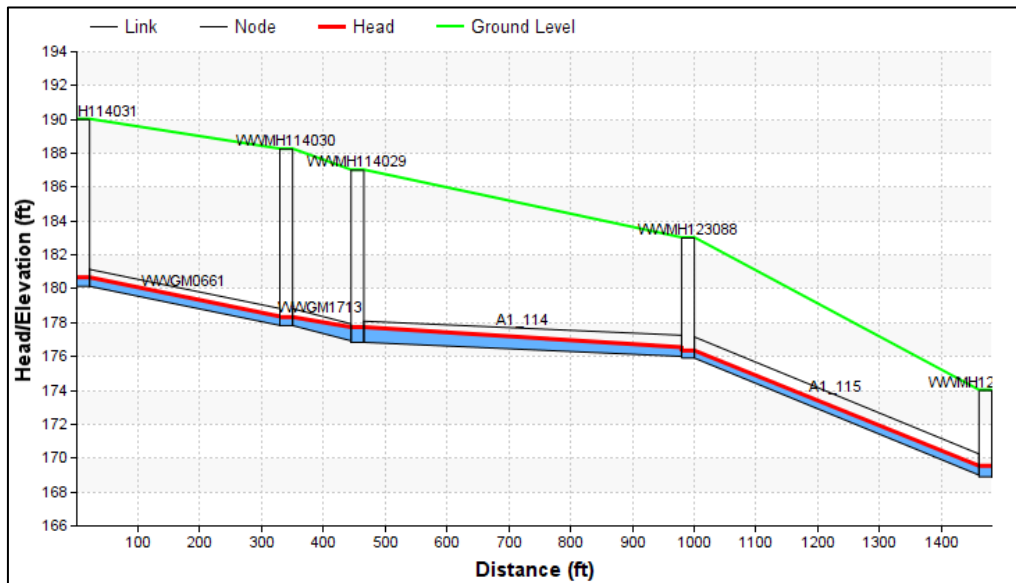
- Schedule

- CAC #1 – today, 12/2/2020
- CAC #2 – 1/7/2021
- CAC #3 – 2/10/2021
- Planning Commission – 3/11/2021
- City Council Work Session – 4/5/2021
- City Council Adoption – 4/19/2021



Hydraulic Grade Line (HGL) and Surge

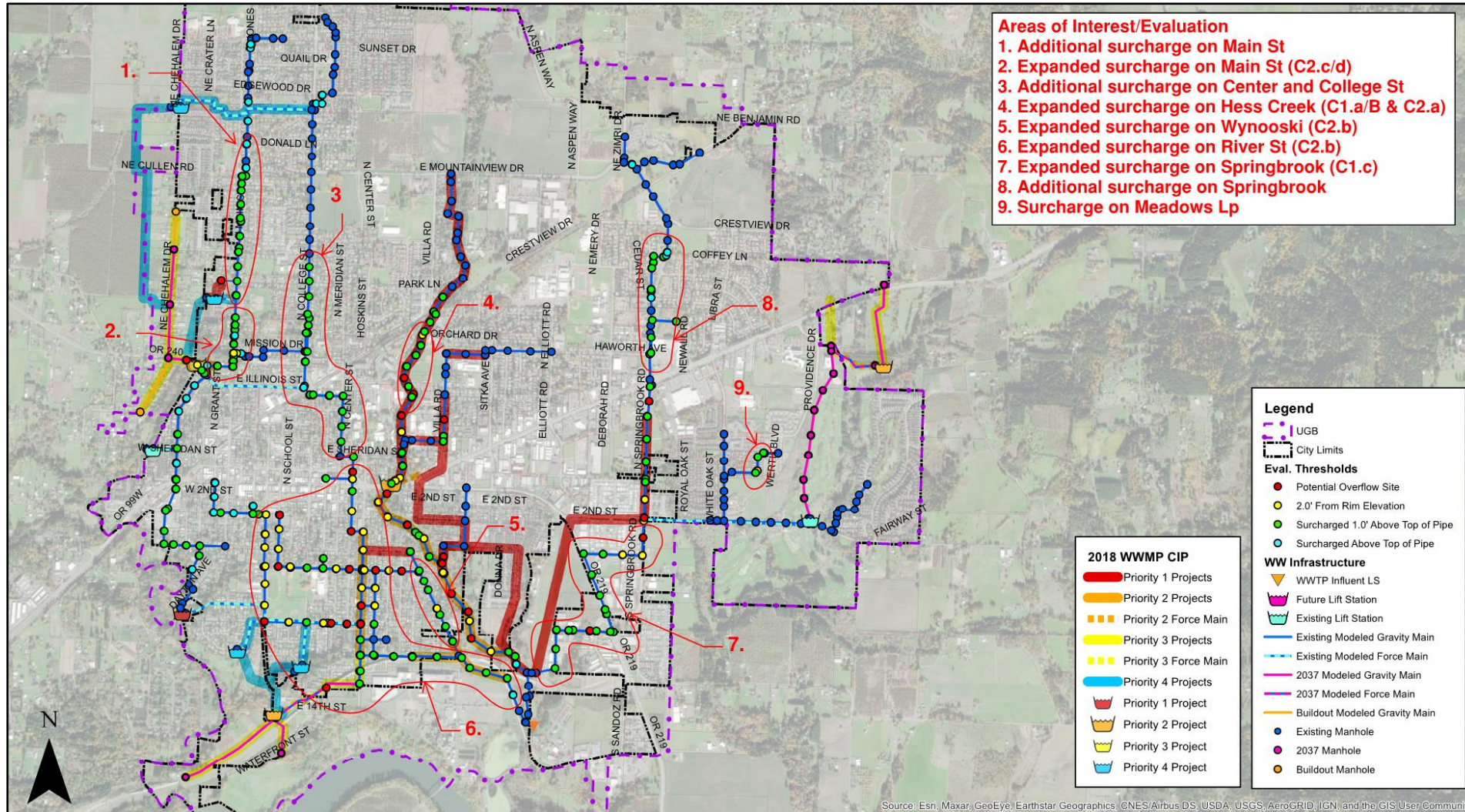
- The hydraulic grade line (HGL) is the surface or profile of water flowing in an open channel or a pipe flowing partially full. If a pipe is under pressure, the hydraulic grade line is the level water would rise to in a manhole connected to the pipe. Shown as red line in figures below.
- Surge occurs when the HGL exceeds the top (crown) of pipe. Seen in figure on the right below.



Evaluation Threshold vs. Design Criteria

- Evaluation Threshold
 - Threshold that is used in study to identify deficiencies in infrastructure and trigger improvement projects.
 - Different thresholds can be used to help prioritize deficiencies in system.
 - Can progressively lower as make progress with improvements and in subsequent studies.
 - Options: 85% full pipe, top of pipe, 1-foot above top of pipe, **2-feet below rim**, at the rim
- Design Criteria
 - Standards that govern the design of improvements. Often included as part of the City Public Works Design Standards (PWDS).
 - Pipeline in the CIP would be sized to meet the design criteria.
 - Options: 60% full pipe, **85% full pipe and upsize**, 85% full pipe, top of pipe.

Impacts of Evaluation Threshold Adjustment



Evaluation Threshold Comparison

Wastewater Master Plan Update



Figure 1

City of Newberg, OR
December 2020



Planning Criteria

- Collection system hydraulic evaluation
 - 5-year, 24-hour storm event peak flows
 - Evaluation threshold
 - CAC input today
 - Design Criteria (Recommended)
 - 85% full depth at peak flows
 - Major trunk lines may be upsized one additional, nominal pipe size
- Pump stations evaluated at firm capacity
 - Largest pump offline (Oregon DEQ standard)

Questions or Comments?



- ▶ Next Meeting (CAC #2) – Thursday, 1/7/2021 (proposed)
 - ▶ Subject: Updated System Capacity and Deficiencies Evaluation

