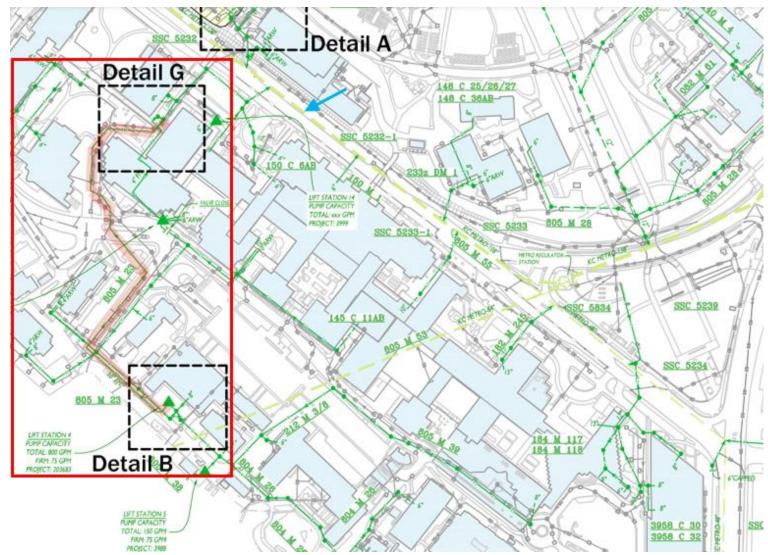
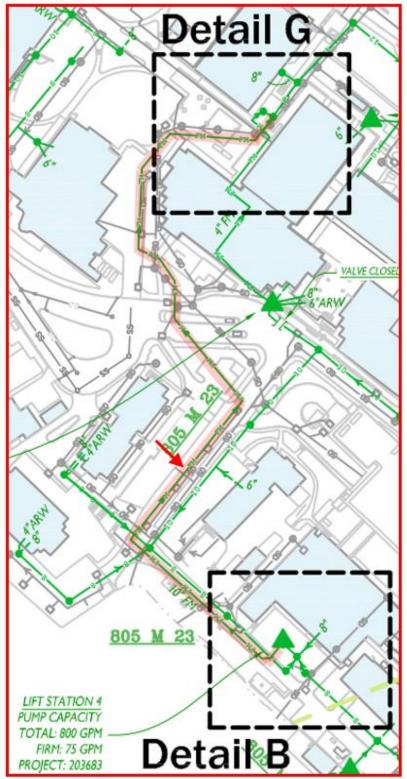
Supplemental Documents: UW Record Drawings

Appendix 7 – UW Record Drawing snip - Sanitary Sewer



High level snip of campus sanitary sewer system. Force main highlighted in red. KCM main denoted by blue arrow, <u>805RU-01, Sanitary Sewer Distribution, Rev. G, 5-18-20</u>

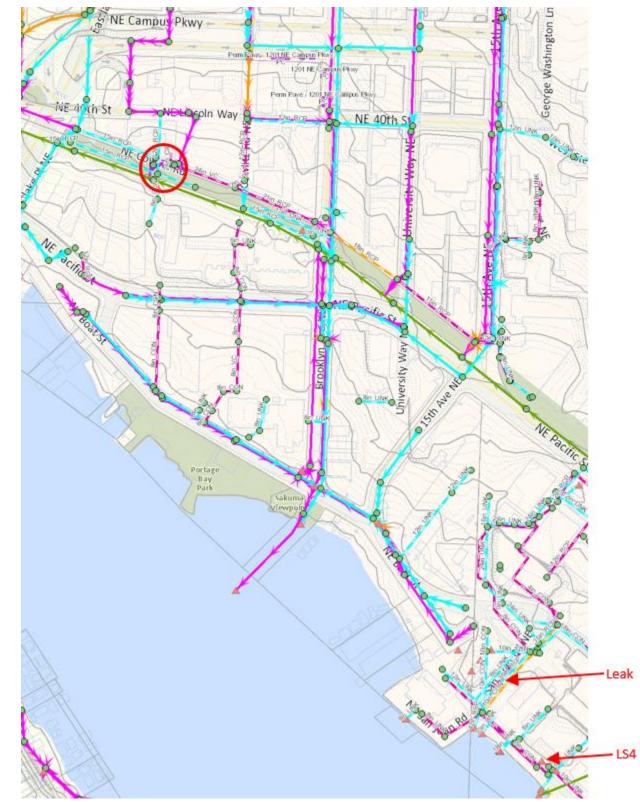


Appendix 8 - Enlarged area of Appendix G. Approximate leak location denoted by red arrow

805RU-01, Sanitary Sewer Distribution, Rev. G, 5-18-20



Appendix 9 – This UW composite utility plan snip is intended to show some but not necessarily all additional utilities in the area as a heads up for planning purposes – storm, water, sewer, and natural gas. However, the plan omits electrical, high voltage, telecom, steam, and tunnels. Note vendor is responsible for an 811 Call Before You Dig utility locate. Also, note that the composite utility plan uses sector maps for added clarity resulting in the west match line being further east than the sewer system snip above. <u>875RU-E, Composite</u> <u>Utilities, Sheet E, 5-18-20</u>



Appendix 10 – Alternative Disposal Sites via UW sanitary sewer manholes

City of Seattle DSO Water & Sewer Map snip, <u>https://gisrevprxy.seattle.gov/wab_ext/DSOResearch_Ext</u>



805RU-01, Sanitary Sewer Distribution, Rev. G, 5-18-20

Appendix 13 – 1963 Utilities & Tunnel Extensions, identifies FM size, cast iron, detail 1 relationship to gravity SS and SD.

See attached

Appendix 14 – 2014 Lift Station #4 C01 pump replacement, Site, TESC, bypass pumping plan – FOR REFERENCE ONLY

See attached

Appendix 15 – 2014 Lift Station #4 Pre-Design Report, pp. 1-18 including flow data – FOR REFERENCE ONLY

See attached

Appendix 16 – Video pipe inspection requirements

- 1. Provide a written video inspection plan in advance of the work including mapping.
- 2. If a section(s) of pipe is removed as part of repair work, the goal is to conduct video pipe inspection to record upstream and downstream pipe conditions to get a better understanding of remaining life so UW can follow on to pursue funding and a replacement schedule.
- 3. Use alphanumeric notation to markup scalable plans to provide references and support the written video inspection plan and video inspection, sequentially labelling manholes and other structures alphabetically, and pipe segments between structures numerically, or in a similar documented fashion.
- 4. Use only self-levelling video-audio enabled camera and recording equipment with a location beacon paired with surface location equipment to allow the camera to be located at finish grade.
- 5. Use typical video formats such as mp4.
- 6. Video inspection work shall occur in zero to minimal pipe fluid conditions; use stars and other hardware to keep video camera out of fluid in the piping.
- 7. Zero out the lineal foot counter and timer on the video camera prior to each entry.
- 8. Identify and label entry points and the extent of each video inspection run on the plan. Prior to camera entry, pan above grade surroundings, pause camera on features such as street signs, buildings, building signs, etc., identify and narrate compass direction of entry point and the initial direction of camera progress, activate video and insert camera.
- 9. Record in writing, video narration and post-production video text if possible, notation on the plan, and paint in the field to describe observations and conditions including lineal feet markers.
- 10. Stop forward or reverse camera progress to narrate areas and features of interest, e.g. leaks, degraded or offset piping, tree root intrusion, etc., by panning the camera and pausing at 9, Noon, 3, and 6, or a similar documented fashion.
- 11. Move camera forward and in reverse in a slow, uniform fashion; video both forward and reverse.
- 12. Coordinate with owner to evaluate non-leak related issues, e.g. root intrusion, debris, damaged but intact non-leaking piping, etc., prior to repairing pipe to evaluate whether to try to resolve such issues, e.g. root cutting, hydro-jet cleaning, pipe lining, etc.
- 13. Provide deliverables covering all relevant items discussed above.