

Examples of NNSA's Aging Infrastructure

November 2021



Mission Enabling: Power Systems Electrical Failures



Power Cable: represents several conductors in TA-III and Remotes power distribution feeders that are beyond recommended service life. Failure in the cable insulation cause an outage to the feeder, and the facilities were powered by generators until the feeder could be replaced (left)

SUB35 Transition Bay: The transition bay failed February 2021. There is an active (NA-50 funded) design project for replacement. Additionally SUB 36, 41, 37, and 42 are in need of replacement (right)



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Chilled Water Equipment (CHAMP)



Non-Nuclear Components, Building 905: Original chilled water equipment (almost 30 years old). CHAMP hasn't started this project yet.



Tests & Experiments, Building 6593: Chillers at end of life with hail damaged. CHAMP will start design.



Mission Enabling, Building 6650: Chiller at end of life. CHAMP has completed the assessment and will start design.



Global Security, Building 823: Chillers are at end of life. Project is on the CHAMP list.

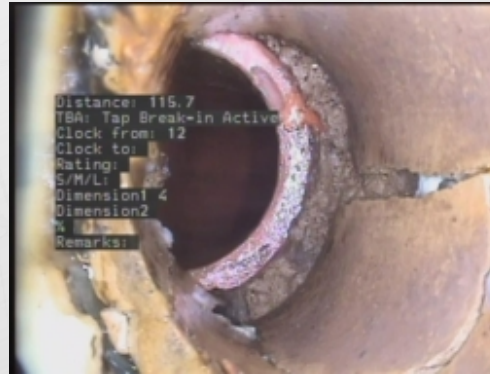


Tests & Experiments: Stormwater Drainage Issues along 10K Sled Track



10K Sled Track Drainage Issues: these photos are representative of over 20 similar drainage issue in TA-III and the Remotes. Other locations with drainage issues that are impacting facilities include 6570, 6620, 6505, 6750, and the Aerial Cable Site.

Mission Enabling: Sanitary Sewer Line Condition



Clay line that is cracking and requires refurbishment



Failed joint that requires excavation and repair

Mission Enabling, Substation 26



Transformer is late 1950's/early 1960's vintage and was remanufactured in 1979 and placed in service. This substation and transformer is currently the most problematic, in the TA-III and Remotes power distribution system.