

DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

SECTION A. Project Title: TAN Fire and Potable Water Line Replacement

SECTION B. Project Description and Purpose:

Test Area North (TAN) building TAN-610, TAN Pump House, delivers fire and potable water distribution for the Test Area North (TAN) area. The TAN Pump House was designed and built in the 1950's to supply water for several dozen buildings and about 800 people, but currently supplies water for three buildings, TAN-687 (TAN Fire Station), TAN-1611 (New Pump and Treat Facility), and TAN-1614 (In Situ Bioremediation). The system is oversized, has several dead legs, and frequent maintenance issues occur due to age. The purpose of the proposed action is to furnish the necessary structures, systems, and components to deliver a reliable and adequate supply of fire and potable water to TAN-687, TAN-1611, and TAN-1614.

The proposed action installs distribution piping from TAN-614 to the TAN area (see Figures 1-3).

Figure 1. TAN Fire and Potable Water Line Location

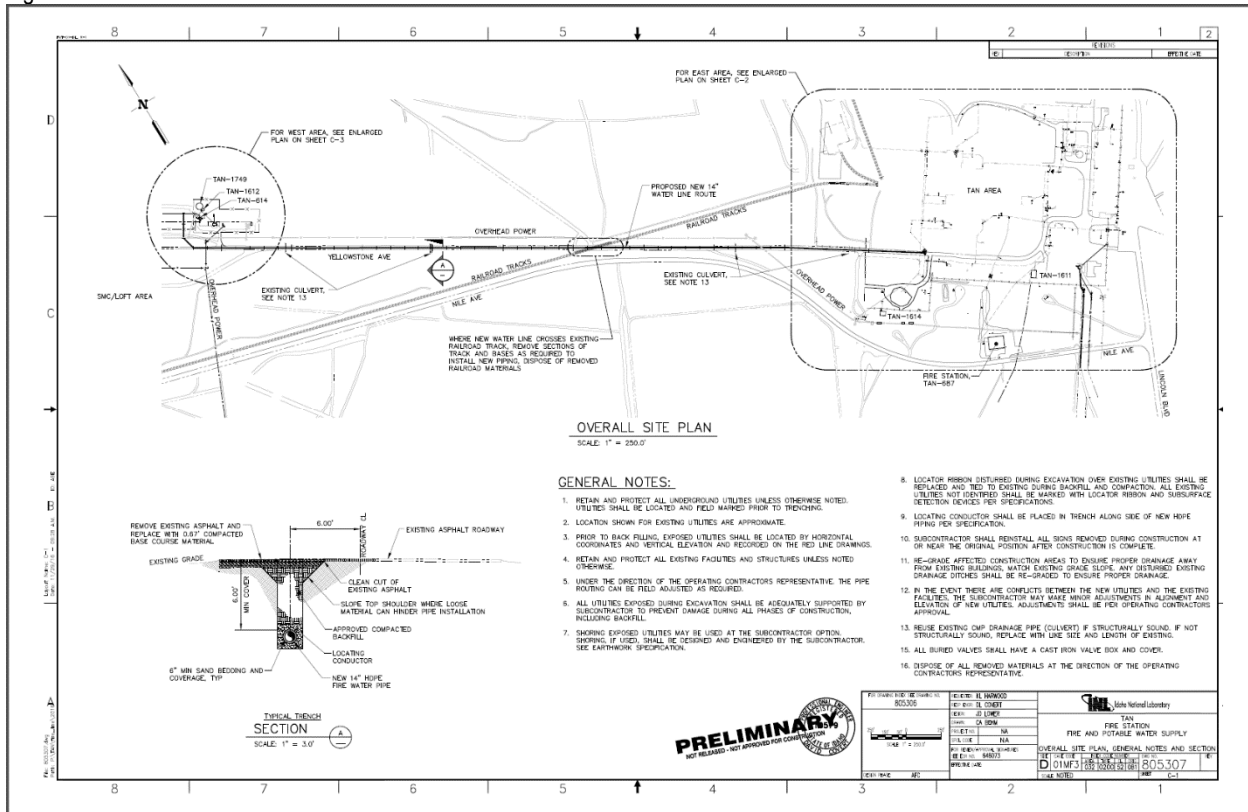


Figure 2. Piping to be Removed from Service

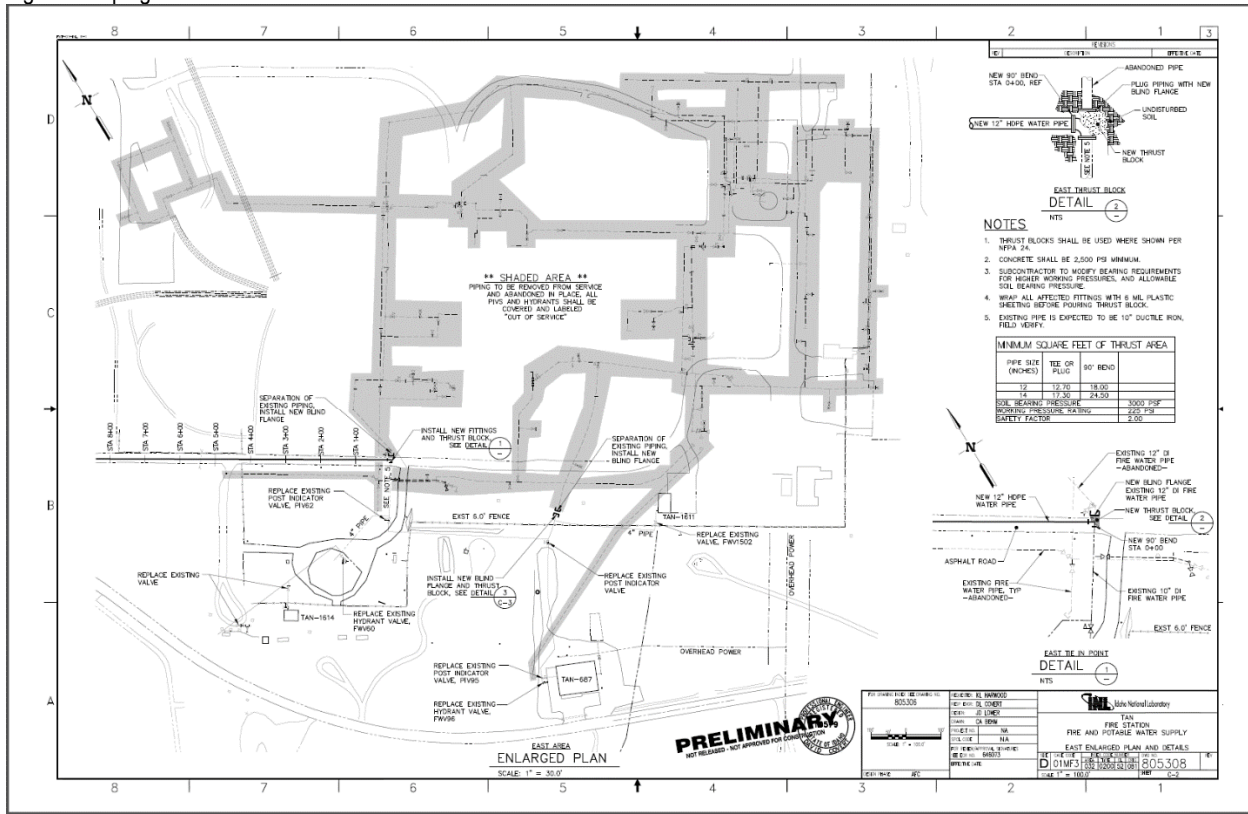
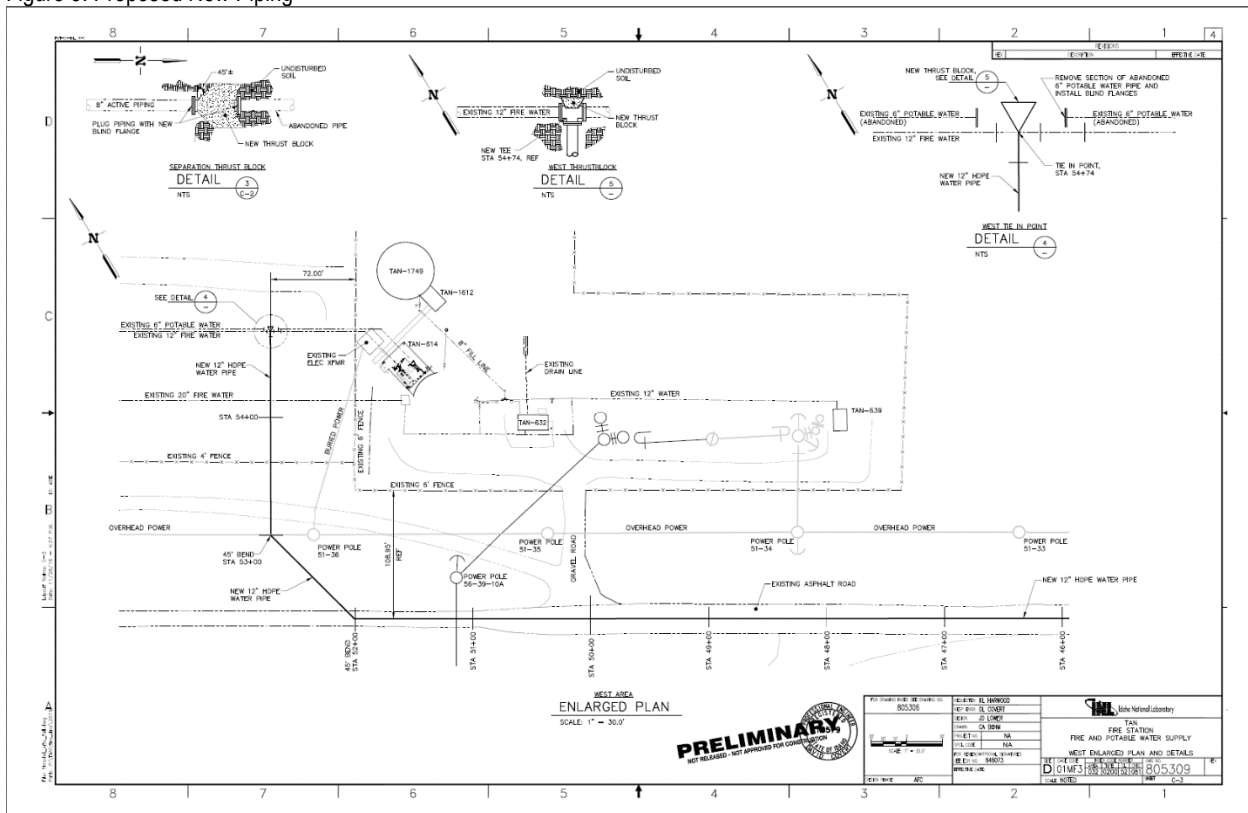


Figure 3. Proposed New Piping



The new fire and potable water distribution line will be buried a minimum of 6 ft. The existing distribution piping to TAN-687, TAN-1611, and TAN-1614 will be used, and the distribution piping near fire hydrants HYD7 and HYD8 will be capped and abandoned in place. The proposed action requires four fire hydrants and seven post-indicator valves (PIVs).

DOE-ID NEPA CX DETERMINATION

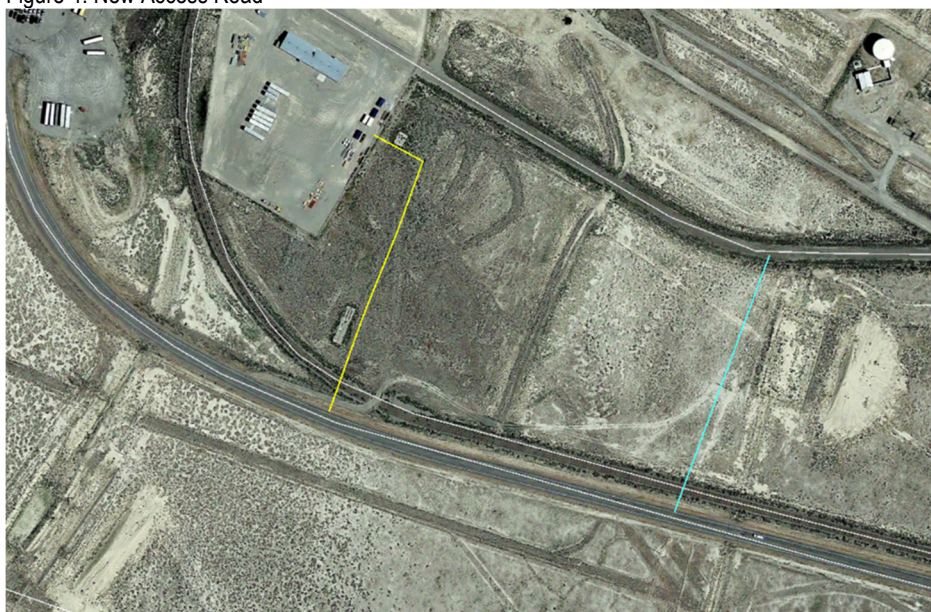
Idaho National Laboratory

The piping proposed for abandonment and capping in place is served by two production/potable water wells--ANP-01 and ANP-02. Well ANP-01 has been out of service for about 15 years and has no power or pump. Well ANP-02 pumps water to TAN-687, TAN-1611, and TAN-1614. The proposed action supplies water to TAN-687, TAN-1611, and TAN-1614 from TAN-614. If no other use is identified for wells ANP-01 and ANP-02, then the wells need to be decommissioned in accordance with IDAPA 37.03.09.025.16.

The proposed action does not address DOE Standard DOE-STD-1066-2012, DOE Standard Fire Protection, paragraph 4.2.7.1.2, which states, "Reliability. The water supply and distribution system should be designed to prevent a single failure from causing the system to fail to meet its demand. Design features should include looped and gridded distribution piping with sectional valves and redundant supplies (pumps and tanks or elevated water sources)." Loop piping is a good design, but not required. To use the proposed design, Facility Management must obtain approval from the INL Fire Marshall, SMC/TAN Fire Protection Engineer, and F&SS Utility Operations.

To provide more convenient access to TAN-614 and the new warehouse at the Specific Manufacturing Capability, the proposed action constructs a new 20 ft. wide gravel road, as shown by the blue line in Figure 4. The road crosses the TAN security fence and a railroad bed. The yellow line was considered as a location for the access road, but was eliminated, because a dike for controlling run off would be damaged by the placing a road at this location.

Figure 4. New Access Road



SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Project activities have the potential to create fugitive dust.

Mobile generators, welders, heavy equipment, and compressors will contribute to air emissions during construction.

Discharging to Surface-, Storm-, or Ground Water

The project will tie-in to existing water lines, so there is a potential for some discharge during tie-in.

Disturbing Cultural or Biological Resources

Soil disturbing activities have the potential to impact biological and cultural resources.

Generating and Managing Waste

Industrial waste such as concrete, asphalt, scrap wood, scrap metal, packaging material, rags, insulation, wire, pipe scrap, etc., will be generated during the project.

Hazardous waste generation is not anticipated, although paint waste, adhesive waste, and spill material have the potential for being hazardous.

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

Releasing Contaminants

Typical construction chemicals such as fuels, lubricants, adhesives, paints, concrete, concrete cure, asphalt, refrigerants, etc., will be used and will be submitted to chemical inventory lists with associated Safety Data Sheets (SDSs) for approval in the vendor data system prior to use. The Facility Chemical Coordinator will enter these chemicals into the INL Chemical Management Database. All chemicals will be managed in accordance with laboratory procedures.

Although not anticipated, there is a potential for spills when using chemicals or fueling equipment. In the event of a spill, notify facility PEL. If the PEL cannot be contacted, report the release to the Spill Notification Team (208-241-6400). Clean up the spill and turn over spill cleanup materials to WGS."

The project will disturb known Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites.

Using, Reusing, and Conserving Natural Resources

Recycled materials will be used to the greatest extent practicable in the selection of building materials.

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification: Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: 10 CFR 1021, Appendix B, B1.13 "Pathways, short access roads, and rail lines," B5.2 "Modifications to pumps and piping," and B5.3 "Modification or abandonment of wells."

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, B1.13 "Construction, acquisition, and relocation, consistent with applicable right-of-way conditions and approved land use or transportation improvement plans, of pedestrian walkways and trails, bicycle paths, small outdoor fitness areas, and short access roads and rail lines (such as branch and spur lines)," and

B5.2, "Modifications to existing pump and piping configurations (including, but not limited to, manifolds, metering systems, and other instrumentation on such configurations conveying materials such as air, brine, carbon dioxide, geothermal system fluids, hydrogen gas, natural gas, nitrogen gas, oil, produced water, steam, and water). Covered modifications would not have the potential to cause significant changes to design process flow rates or permitted air emissions," and

B5.3, "Modification (but not expansion) or plugging and abandonment of wells, provided that site characterization has verified a low potential for seismicity, subsidence, and contamination of freshwater aquifers, and the actions are otherwise consistent with best practices and DOE protocols, including those that protect against uncontrolled releases of harmful materials. Such wells may include, but are not limited to, storage and injection wells for brine, carbon dioxide, coalbed methane, gas hydrate, geothermal, natural gas, and oil. Covered modifications would not be part of site closure."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) Yes No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 7/09/2018