



# DOE-ID-INL-22-009 R1

August 2022

*Changing the World's Energy Future*

Kailey L Jorgensen



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**August 2022**

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**SECTION A. Project Title: TAN Utility Corridor R1**

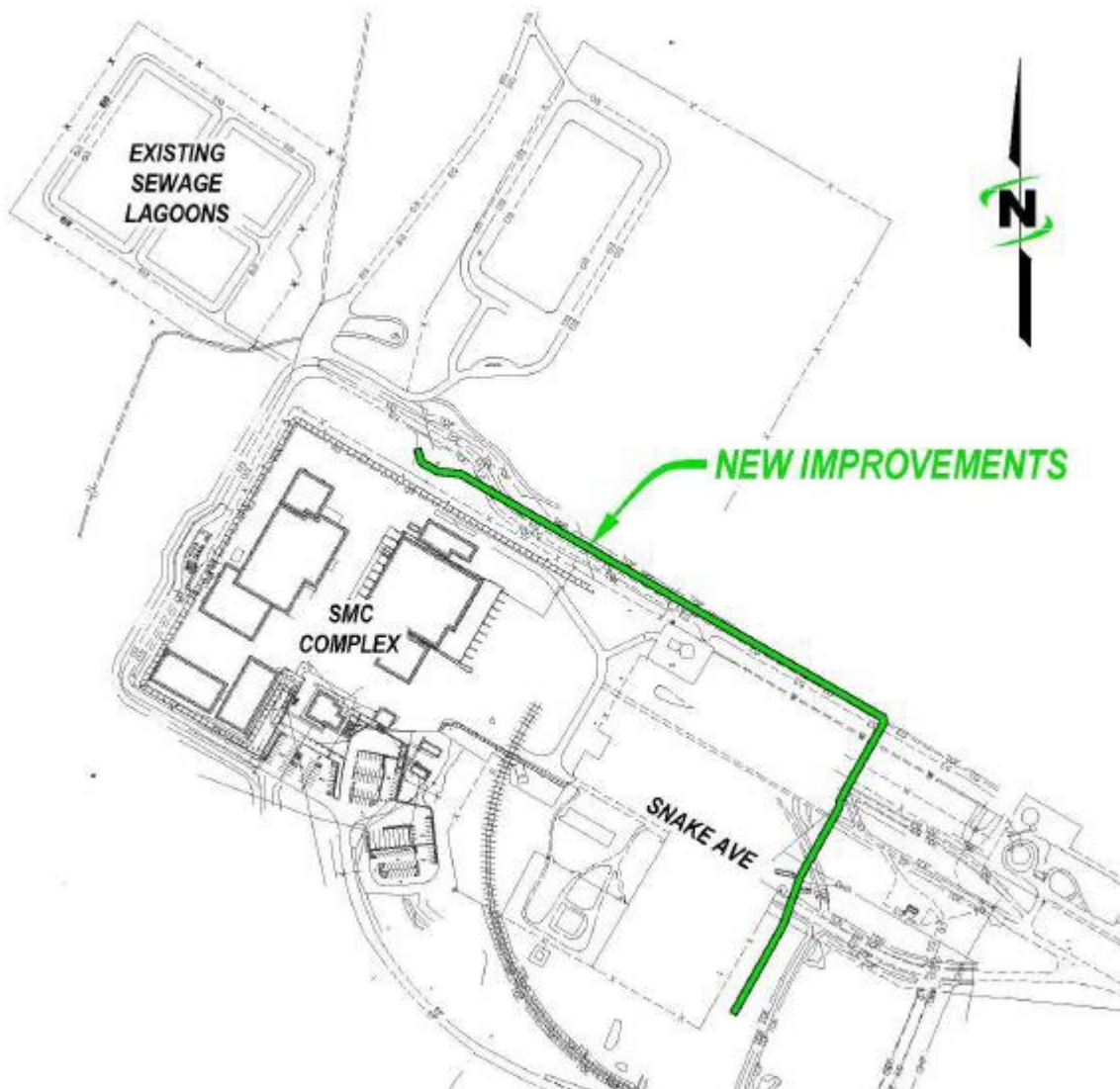
**SECTION B. Project Description and Purpose:**

**Revision 1.**

The purpose of this revision is to address a design change in the TAN Utility Corridor regarding the sewer system. The project will no longer be installing a septic system and will instead install a sewer line connecting to the existing sewage lagoons located north of SMC. See Figure R1 for proposed alignment of the gravity and pressure sewer mains. The alignment begins with a new gravity sewer main located north of Nile Avenue and southeast of the SMC Complex. This main runs to the north to the new sanitary sewer lift station, located north of Snake Avenue. From this point, a new pressure main runs to the north for approximately 500 feet and then turns to the west until it connects into the existing sanitary sewer lift station, located northeast of the SMC Complex. As shown in Figure R1, Figure R2, and Figure R3, the sanitary sewer new lift station will be located at the downstream end of the new sanitary sewer gravity mains, which is directly north of Snake Avenue, southeast of the SMC Complex. The lift station will receive wastewater from the new 8-inch gravity sewer main and discharge it through a single 4-inch pressure main that will connect to the existing sanitary sewer lift station, eventually conveying the wastewater to the SMC STP. The lift station will consist of a wet-well mounted pumping station with duplex, submersible, non-clog pumps enclosed in a concrete wet-well structure. The pumps will alternate on pumping cycles to provide even wear. Each pump will be capable of handling the ordinary peak flows, which will provide redundancy and allow maintenance of one pump and still leave the lift station in service. A high-level float switch will turn on both pumps to provide for extra large peak flows which may occur at extremely infrequent intervals. The pumps will be grinder pumps which will grind the sewage into a slurry and pump to a new pressurized sewer main. A back-up portable diesel generator and automatic transfer switch will be available near the lift station to provide auxiliary power in the event of an outage. The electrical and control panels will be located on a free-standing equipment rack near the lift station. Alarm outputs will be included in the control panel and will include power failure, pump failure, high water level, and low water level alarms. Each of these alarm signals will be sent to a local alarm and light at the lift station to inform the maintenance staff of the status of the lift station. Since the new lift station and new collection system will be capable of serving a much larger service area than what will be originally required and due to the small flows, the wastewater will be stored in the lift station wet well for extended periods of time until the wastewater level rises high enough to start a pump. This extended storage time in the lift station may result in odor issues as well as other maintenance issues. For these reasons, carbon filters on the wet well vents will be installed to mitigate odor problems. During initial operation with extremely low flows, the pump ON/OFF level set-points should be tightened as much as possible to minimize the operating volumes and cycle times. However, a minimum operating volume should be maintained to provide reliable level control and avoid cycling of the pumps in excess of the manufacturer's recommendations (typically less than 8 to 10 starts per hour). Also, it may be necessary to supplement the wastewater flow with additional clean water to keep the pumps cycling more often (e.g. 2-3 times per day) since the initial flows will be lower than designed for. Any infrastructure to add clean water will need to comply with cross-connection control regulations with approved backflow prevention measures. Other utilities including water, telecom and power as described in the original scope will be unchanged.

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Figure R1



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Figure R2

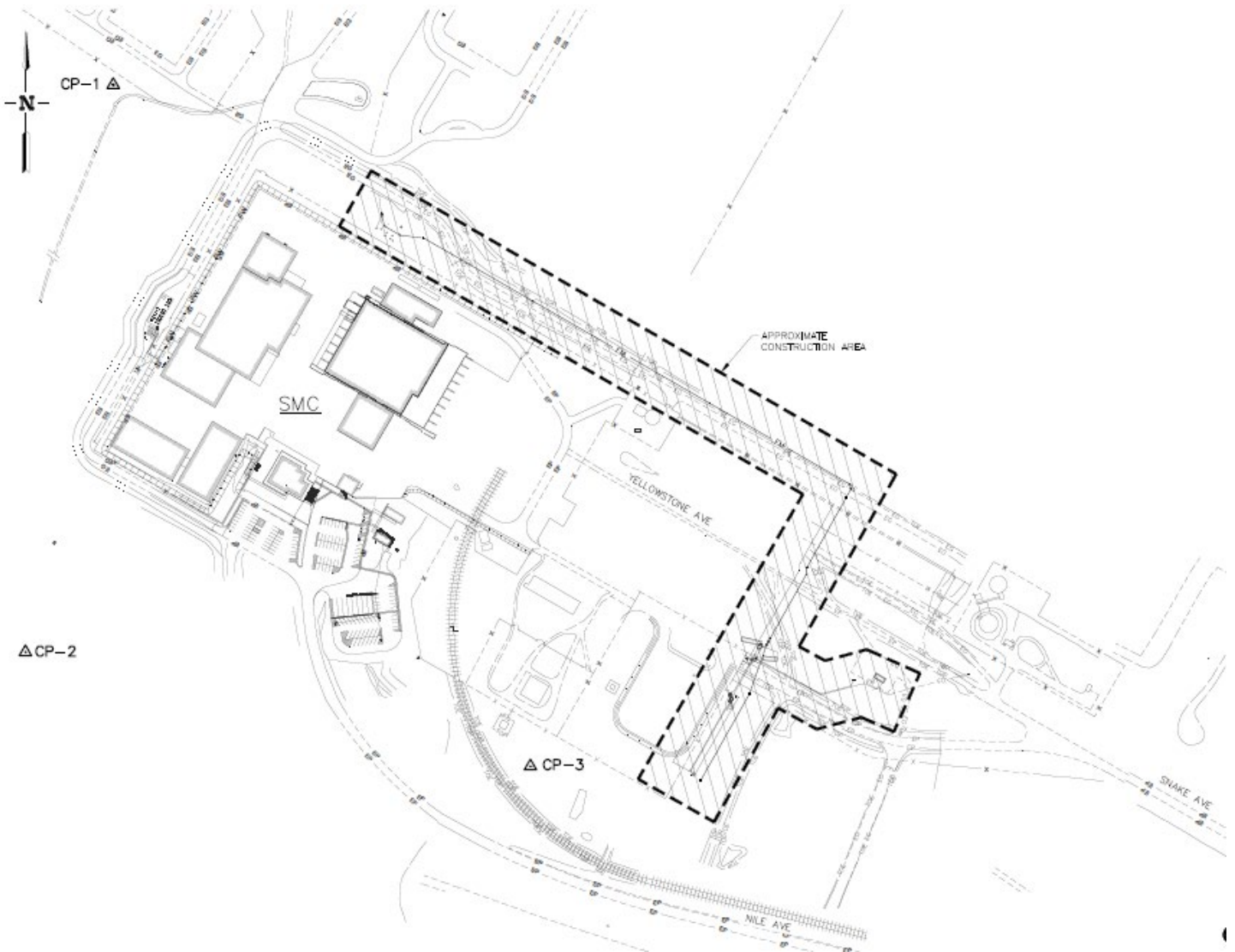
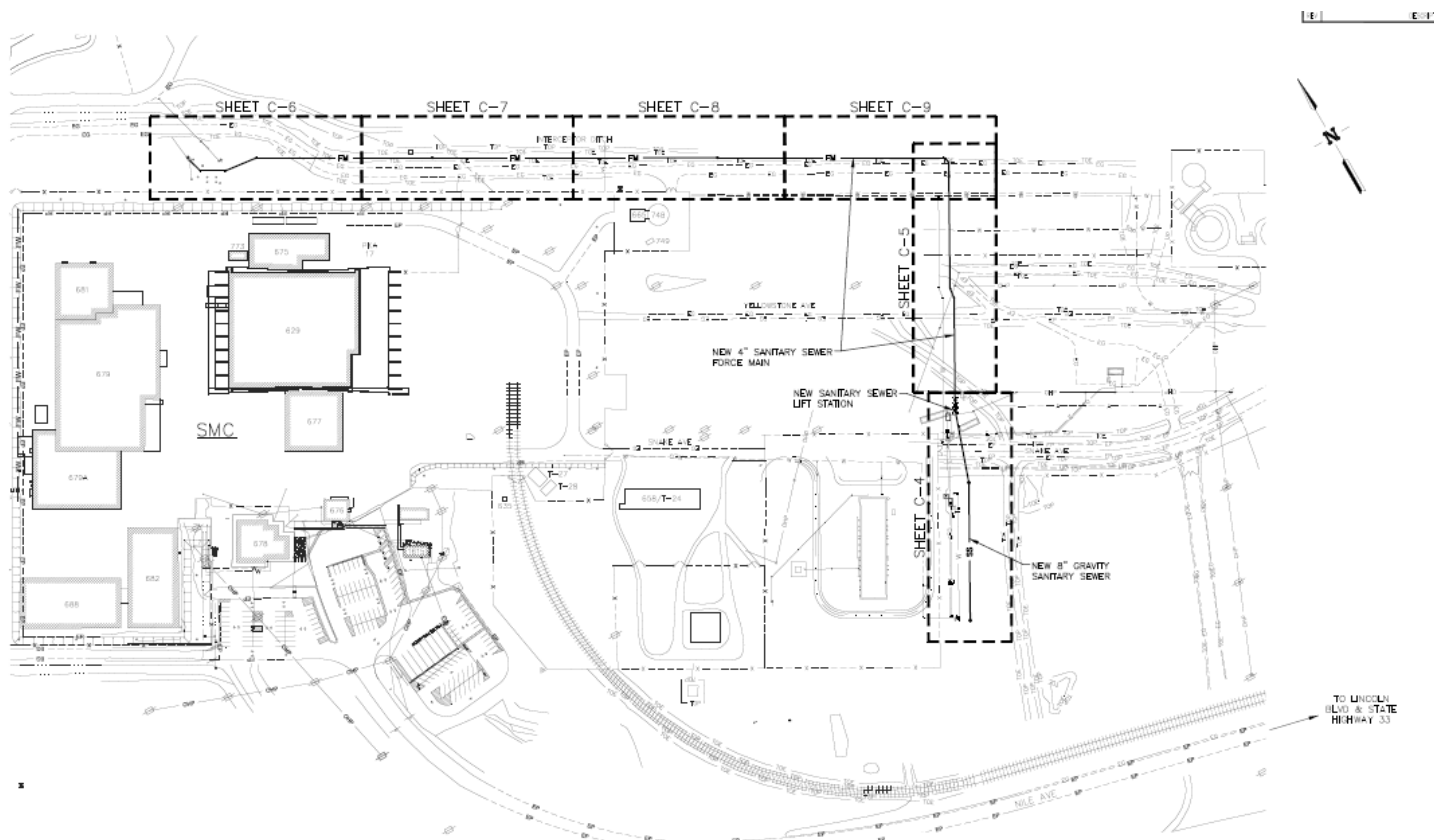


Figure R3



**ORIGINAL ECP SCOPE**

Existing utility infrastructure (water, telecom, power, and septic service) are inadequate for current operations at Specific Manufacturing Capability (SMC) and additional utility lines are needed to meet the current utility demand and accommodate future facilities. The scope of this project is to install new utility lines southeast of SMC Warehouse (TAN-1617) (See Figure 1). Proposed water, telecom, and septic service lines will be placed in underground trenches at various depths that meet existing building codes and mission need. The additional utility lines will be connect from the existing utility lines located north/northeast of the proposed project area. The proposed power line will be partially installed above ground on power poles from the existing power lines and then placed in an underground trench near active areas to avoid associated hazards. Although only one additional pole is expected, final design may differ slightly. The new septic system can be seen in green on Figure 2 and the drain field will disturb roughly 100' x 100' of ground. All activities will occur in areas that have been previously disturbed.

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Figure 2



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### SECTION C. Environmental Aspects or Potential Sources of Impact:

#### Air Emissions

Generating fugitive dust or other fugitive emissions. Emissions from combustions engines.

#### Discharging to Surface-, Storm-, or Ground Water

A new septic system will be installed as part of this project. These activities are outside the INL Stormwater Corridor.

#### Disturbing Cultural or Biological Resources

A Section 106 review is required and FRM-3004 will need to be submitted to DOE for review prior to any project activities related to INL-22-009 R1. Please see BEA-22-18 R1. If objects of potential archaeological or historical significance (e.g., arrowheads, flints, bones, etc.) are encountered during project activities, personnel must discontinue disturbance in the area and contact CRMO.

There is the potential for this work to impact vegetation and for project personnel to interact with various wildlife species. The potential for impact will be minimized by the short duration, small footprint, infrequent access to equipment, and the commitment of the project to use existing roadways and previously disturbed areas wherever possible. A Biological Resource Review will be arranged within two weeks of the initiation of any activities that might disturb soil or vegetation as well as following project activities. The Biological Resource Review is intended to document the condition of the site prior to project activities and following project activities. A nesting bird survey is included with the Biological Resource Review for actions occurring between April 1 and October 1 per compliance with the Migratory Bird Treaty Act.

#### Generating and Managing Waste

Construction activities may generate waste such as scrap metal, paper, plastic and other general construction debris.

#### Releasing Contaminants

This project is not expected to generate radiological waste.

CERCLA areas are located near the proposed activity. Project personnel will notify the Idaho Environmental Coalition (IEC) CERCLA NSD coordinator to have an NSD determination completed prior to starting work. Radiological control personnel will be onsite when excavating activities (URMA area) occur, however contamination is not expected, and soil waste will be minimal. If contamination is discovered, stop work and contact the CERCLA NSD Coordinator or the CERCLA PEL for further instructions.

When chemicals are used during the project there is the potential for spills that could impact the environment (air, water, soil).

#### Using, Reusing, and Conserving Natural Resources

Recyclable materials will be recycled.

**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)).

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**References:**

10 CFR 1021, Appendix B, 1.26 "Small water treatment facilities," B2.2 "Building and equipment instrumentation," and B4.11 "Electric power substations and interconnection facilities."

**Justification:**

Project activities are consistent with 10 CFR 1021, Appendix B, B1.26 "Siting, construction, expansion, modification, replacement, operation, and decommissioning of small (total capacity less than approximately 250,000 gallons per day) wastewater and surface water treatment facilities whose liquid discharges are externally regulated, and small potable water and sewage treatment facilities;"

B2.2 "Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, and security equipment);" and

B4.11 "Construction or modification of electric power substations or interconnection facilities (including, but not limited to, switching stations and support facilities)."

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

Approved by Jason L. Anderson, DOE-ID NEPA Compliance Officer on: 08/04/2022