

**DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory**

SECTION A. Project Title: Specific Manufacturing Capability (SMC) Pavement Repair and Replacement

SECTION B. Project Description and Purpose:

Revision 3:

This revision is to update the project description for the paving areas east and northeast of TAN-629 that are depicted in Figure 2. Due to several depressed localities within these areas, excavation may have to extend to about 2-4 feet deep in these localities in order to stabilize and provide adequate soil compaction for asphalt placement. There are known CERCLA sites, such as LOFT-01, LOFT-05, LOFT-06, LOFT-07, and LOFT-10. All of the CERCLA sites in these areas do **not** have Institutional Controls (ICs). Excavated soil will be reused if compaction standards can be met, and/or new soil will be brought in. If compaction standards cannot be met, then the soil will be isolated onsite and confirmatory sampling to meet the CFA WAC will be performed prior to its disposition at the CFA landfill. In the unlikely event that both compaction standards and CFA WAC requirements cannot be met, then the soil will be packaged per WGS requirements and disposed of accordingly; i.e. ICDF or Energy Solutions.

Revision 2:

This revision captures updates to the project scope. Figure 2 shows the latest proposed pavement repair areas

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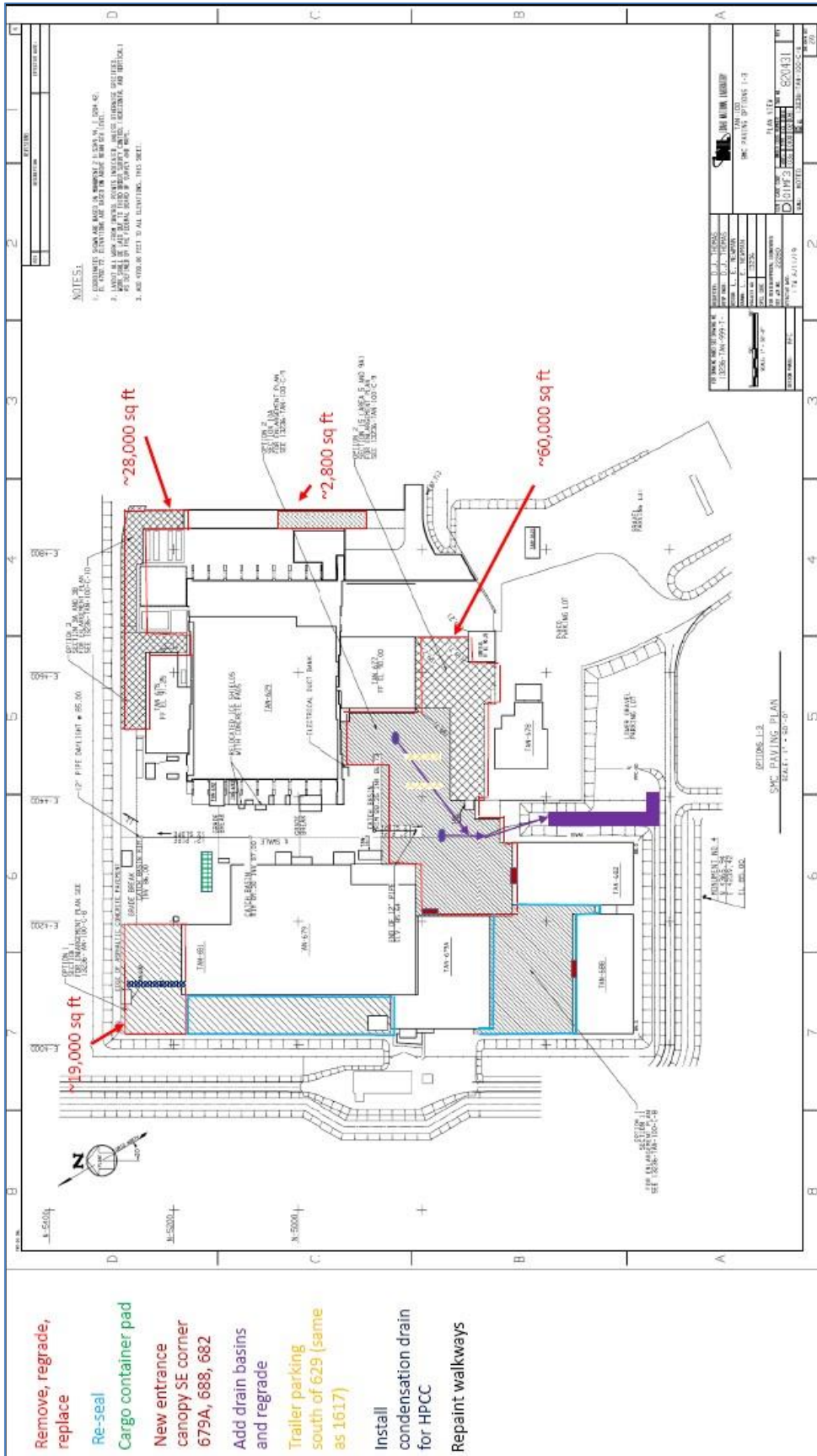


Figure 2:

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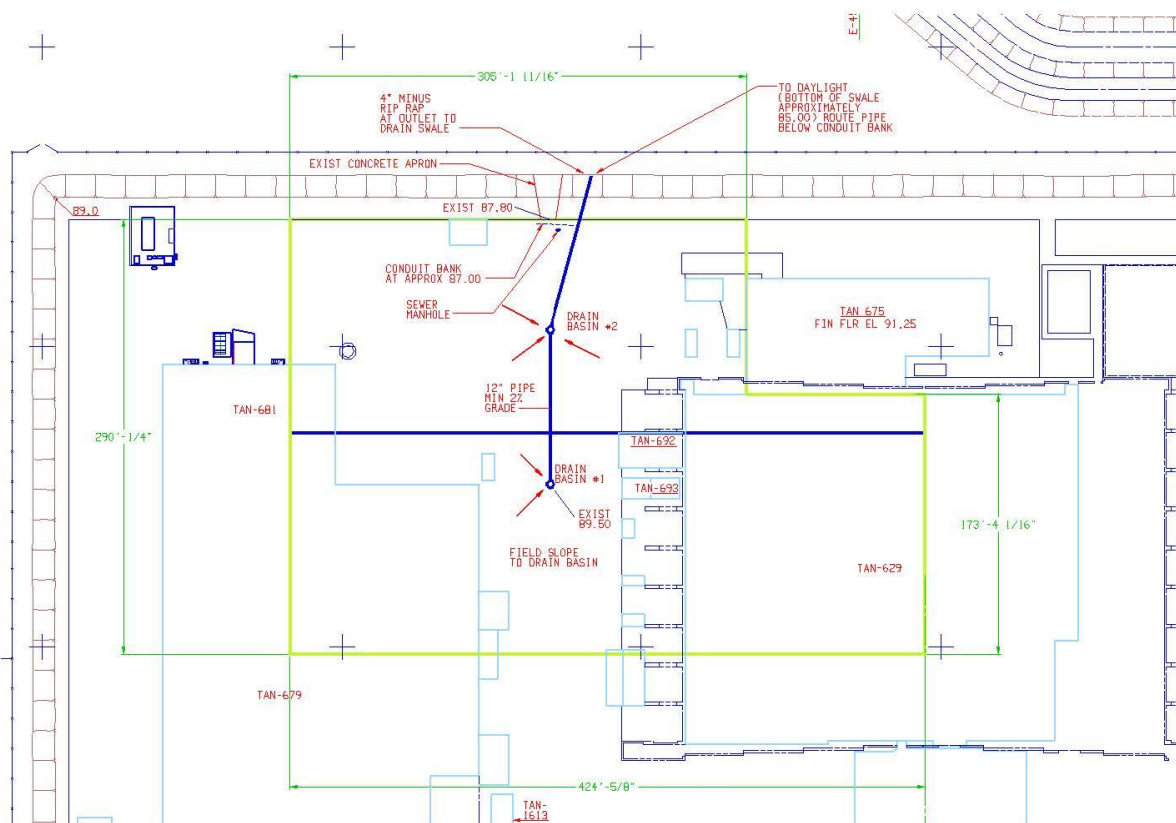
The proposed updates continue to include excavating approximately 10 inches of soil and pavement where the work will occur, and the disposal of soil and asphalt will be at the CFA Landfill. Sampling and analyses were conducted per a Virtual Sample Plan (version 7.12a), April 3, 2020, for the proposed pavement repair areas. All the analytical results met the CFA Waste Acceptance Criteria (PPD-180) for volumetric radiologically contaminated waste, i.e. Cs-137 below 0.75 pCi/g (Interoffice Memorandum to Dan Martin and Bryce Hillman, from David Wells, May 21, 2020).

Revision 1:

This revision captures changes to project scope. The proposed action no longer includes a new trench drain between buildings Test Area North (TAN)-679 and TAN-629 at the Specific Manufacturing Capability (SMC). New soil having better compaction characteristics is needed in the area for the base for the new pavement. Soil sampling results from the area show no contamination. The proposed action includes excavating 10 to 12 inches of soil in the area between TAN-679 and TAN-629 and disposing of it at the Central Facilities Area (CFA) landfill.

In addition, rather than installing the concrete trench drain, the proposed change includes grading the excavated location to a minimum 2% slope and installing drain basins and pipe to drain stormwater to the north at the same discharge location proposed for the original trench drain (see Figure 1). After excavating soil and installing the drain basins and pipe, the area will be backfilled, compacted, graded for surface drainage, then paved.

Figure 1. Drain basin and pipe installation at SMC



Original EC:

The Specific Manufacturing Capability (SMC) is paved with asphalt within the facility fence. The asphalt paving has drainage issues and shows signs of deterioration. Better stormwater drainage would eliminate ponding that can be a safety hazard. The proposed action would remove and replace most of the pavement and patch and/or seal small areas of pavement not in need of replacement inside the fenced area at SMC. New pavement would also be installed along the east side of building Test Area North (TAN)-629. In areas where replacement of pavement is proposed, all concrete manhole collars would also be replaced. In addition, a new drainage plan would be designed that would include a new trench drain that would extend from the south to the north end of the area between buildings TAN-679 and TAN-629. The SMC area is excluded from the stormwater corridor.

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The proposed action would be completed in two phases over four years.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

The proposed action has the potential to contribute to air emissions from operating fuel burning equipment. If mobile sources (equipment) will be used temporarily, they must meet Idaho Administrative Procedures Act (IDAPA) 58.01.01.625 visible emission opacity requirements. Fugitive dust may be generated during proposed work.

Discharging to Surface-, Storm-, or Ground Water

Project activities have the potential to excavate near or through stormwater ditches.

The proposed action would improve stormwater drainage at SMC. The project area is excluded from the storm water corridor.

Disturbing Cultural or Biological Resources

Soil disturbance inside facility boundaries has the potential to disturb cultural resources if unknown resources are inadvertently discovered.

Generating and Managing Waste

Project activities will generate a variety of waste including industrial and hazardous waste. It is anticipated that the following types of waste would be generated:

- Industrial waste includes boxes, wood, paper, asphalt, etc. Potential waste materials will be evaluated for waste minimization prior to generation, and industrial waste generated during project activities will be evaluated for recycling opportunities prior to disposal at the Idaho National Laboratory (INL) Landfill Complex.
- Hazardous wastes have the potential to be generated during project activities from using hazardous chemicals to clean or decontaminate equipment and systems. All waste material generated or removed will be characterized according to applicable RCRA regulations. In all cases, potential and existing hazardous waste streams will be evaluated for minimization potential and recycling opportunities prior to disposal.

Chemical or radiological contamination is not anticipated in the soil, however, if unusual conditions (i.e. staining, odor, high radioactivity) are encountered during the excavation, contact BEA CERCLA TPOC Mark Verdoorn (208-526-8135), the Fluor Idaho Notice of Soil Disturbance (NSD) coordinator Erik Whitmore (208-533-0178), or Fluor Idaho Environmental Restoration (ER) PEL Donna Nicklaus (208-533-0737) for additional instructions.

All waste generated will be managed according to laboratory procedures. Pollution prevention/waste minimization would be implemented where economically practicable to reduce the volume and/or toxicity of waste generated. All waste generated would be transferred to WGS for appropriate disposition. All waste generated from these activities would have an identified disposition path prior to it being generated.

Releasing Contaminants

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

All chemicals and associated Safety Data Sheets (SDS's) must be submitted in the vendor data system for approval. The Chemical Coordinator would track these chemicals in the INL Comply Plus Chemical Management System. Chemical use has a potential for small air emissions and spills. In the event of a spill, notify facility Environmental Staff. If Environmental Staff 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.

Using, Reusing, and Conserving Natural Resources

All materials would be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill where conditions allow. The project would practice sustainable acquisition.

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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 to Subpart D items B1.3, "Routine Maintenance/custodial services for buildings, structures, infrastructures, equipment," B2.5, "Facility safety and environmental improvements," and B1.33 "Stormwater runoff control."

Justification:

B1.3, "Routine maintenance activities and custodial services for buildings, structures, rights-of-way, infrastructures (including, but not limited to, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed, provided that the activities would be conducted in a manner in accordance with applicable requirements. Custodial services are activities to preserve facility appearance, working conditions, and sanitation (such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal). Routine maintenance activities, corrective (that is, repair), preventive, and predictive, are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Such maintenance may occur as a result of severe weather (such as hurricanes, floods, and tornados), wildfires, and other such events. Routine maintenance may result in replacement to the extent that replacement is in-kind and is not a substantial upgrade or improvement. In-kind replacement includes installation of new components to replace outmoded components, provided that the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Routine maintenance activities include, but are not limited to:

- a) Repair or replacement of facility equipment, such as lathes, mills, pumps, and presses;
- b) Door and window repair or replacement;
- c) Wall, ceiling, or floor repair or replacement;
- d) Reroofing;
- e) Plumbing, electrical utility, lighting, and telephone service repair or replacement;
- f) Routine replacement of high-efficiency particulate air filters;
- g) Inspection and/or treatment of currently installed utility poles;
- h) Repair of road embankments;
- i) Repair or replacement of fire protection sprinkler systems;
- j) Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing, and scraping and grading of unpaved surfaces;
- k) Erosion control and soil stabilization measures (such as reseeding, gabions, grading, and revegetation);
- l) Surveillance and maintenance of surplus facilities in accordance with DOE Order 435.1, "Radioactive Waste Management," or its successor;
- m) Repair and maintenance of transmission facilities, such as replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed powerlines, in accordance, where appropriate, with 40 CFR part 761 (Polychlorinated Biphenyls Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions) or its successor;
- n) Routine testing and calibration of facility components, subsystems, or portable equipment (such as control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes);
- o) Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming), and removal of contaminated intact equipment and other material (not including spent nuclear fuel or special nuclear material in nuclear reactors); and
- p) Removal of debris.

B2.5, "Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 CFR part 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel)."

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B1.33 "Design, construction, and operation of control practices to reduce stormwater runoff and maintain natural hydrology. Activities include, but are not limited to, those that reduce impervious surfaces (such as vegetative practices and use of porous pavements), best management practices (such as silt fences, straw wattles, and fiber rolls), and use of green infrastructure or other low impact development practices (such as cisterns and green roofs)."

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: 9-15-2020