

May 16, 2022

Dr. Weiquan Dong, PE
Bureau of Corrective Actions, Special Projects Branch
Nevada Division of Environmental Protection
2030 E. Flamingo Rd., Suite 230
Las Vegas, Nevada 89119

Subject: Contingency Plan for Unit 4 Source Area In-Situ Bioremediation Treatability Study – Road Construction, Gate Installation, Treatment System Installation, and Treatment System Operations

Dear Mr. Dong:

At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this Contingency Plan to support ongoing Phase 2 activities for the Unit 4 Source Area In-Situ Bioremediation Treatability Study (Study). Upcoming site activities include installation and operation of an in-situ bioremediation treatment system, road construction, and gate installation. The scope of work for the treatment system installation and operations are detailed in Sections 5.1.2 and 5.1.3 of the Unit 4 Source Area In-Situ Bioremediation Treatability Study Work Plan Addendum (Work Plan Addendum), dated July 22, 2021, and approved by the Nevada Division of Environmental Protection (NDEP) on September 1, 2021. In addition to treatment system installation and operation, the scope of work and a map for the road construction and gate installation are included below and attached. Investigation derived waste will be managed in accordance with the Site Management Plan (SMP), Revision 7.

Some of these activities will occur within 50 feet of groundwater extraction treatment system (GWETS) components. The GWETS components that may be affected during road construction, gate installation, treatment system installation, and treatment system operations include existing monitoring wells. As per Section 5.7 of the SMP, this Contingency Plan outlines protection measures to be implemented to prevent damage of any nearby GWETS components.

Road Construction and Gate Installation Scope of Work

As required by Clark County, Tetra Tech will perform necessary upgrades to the existing gravel road and access gate between the Unit 4 Building and Process Tank T-201 to support Phase 2 activities of the Study. The section of gravel road on the EMD (also known as Borman Specialty Materials) leasehold area, shown on the attached **Figure 1**, will be paved to facilitate transporting water from the Unit 4 Building to Process Tank T-201. In acknowledgement of the necessity to operate trucks on a 24-hour clock, it is necessary to install an automatic gate to allow trucks to enter and exit the EMD leasehold area without requiring an EMD-approved attendant. An overview of the road construction and gate installation scope of work is provided below:

- The paved road will be constructed to allow transport of trucks with a capacity of up to 10,000 gallons of extracted groundwater from the Unit 4 Source Area In-Situ Bioremediation Treatability Study.
- The paved road will allow an appropriate truck turn radius into and out of the EMD leasehold area at the new gate location.

- The paved road will be designed at a 20-foot width to match the existing gravel road width, except at the turning point, where the paved road will be variably wider to accommodate truck turning radii as shown on **Figure 1**.
- The gate will be 40-foot long to allow truck passage at the EMD requested location.
- The distance to extend power to the new gate location is approximately 1,100 feet.
- The construction activities associated with the new gate will include the installation of a 15KVA transformer to convert from 480V to 120V to supply the appropriate power for gate operation.

Protection Measures

Personnel and subcontractors will protect the GWETS components by using the following precautions and procedures during road construction, gate installation, treatment system installation, and treatment system operations activities:

- Cones, caution tape, or safety fence will be installed as a visual indicator and protective barrier around the monitoring wells before activities involving heavy equipment are performed in their proximity.
- Daily health and safety "tailgate" meetings will be held prior to the start of field work. During that time, the Health and Safety Plan (HASP) will be reviewed. Discussions of health and safety hazards and preventions will also be held at that time. The names and contact numbers for all Tetra Tech field staff and Tetra Tech subcontractors will be confirmed. Clear lines of communication will be established for swift and coordinated responses to potential releases.
- A utility locate will be conducted prior to invasive work associated with the project, including gate post installation and/or power installation.
- A task-specific Activity Hazard Analysis (AHA) will be prepared and reviewed prior to beginning each new task. Hazards related to each step of a task will be identified, including working in proximity to existing GWETS components. Procedures needed to mitigate those hazards will be identified and implemented.
- Equipment transport routes will be established to avoid an encounter with exposed monitoring wells. Drivers and operators will be well-informed of the hazards prior to operating equipment at the facility.
- Erosion control measures, such as the use of temporary straw wattles, will be implemented to prevent stormwater runoff erosion damage.
- Work areas will be delineated as necessary to avoid unauthorized entry into the work area.
- Staging areas and parking areas will be identified with cones, delineators, caution tape, or safety fence.
- A designated spotter will be used during movement of heavy machinery. A policy of no vehicle backing without performing a 360-degree inspection and spotter guidance will be enforced.

Response Procedures

The construction personnel will be informed of the following response procedures in the event of a release:

- The immediate action taken in response of a release of untreated groundwater during field activities will be to shut down and contain any uncontrolled flow.
- If activities associated with this work scope result in the release of untreated groundwater, the release will be reported to the NDEP 24-Hour Spill Notification Line, if required by NAC 445A.345 to 445A.348.

Please contact us at (303) 447-1823 if you have any questions. Tetra Tech appreciates the opportunity to provide this Contingency Plan.

Sincerely,

Tetra Tech, Inc.



Dana Grady
Project Manager



Jesse Bunkers
Field Operations Manager

Attachments: Figure 1 – Contingency Plan

CERTIFICATION

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been prepared in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state, and local statutes, regulations, and ordinances.

Description of Services Provided: Prepared Contingency Plan for Unit 4 Source Area In-Situ Bioremediation Treatability Study.



David Wilson, CEM
Principal Engineer
Tetra Tech, Inc.

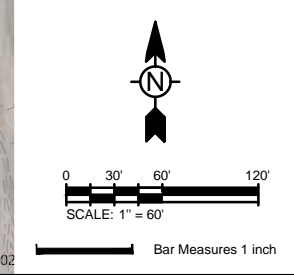
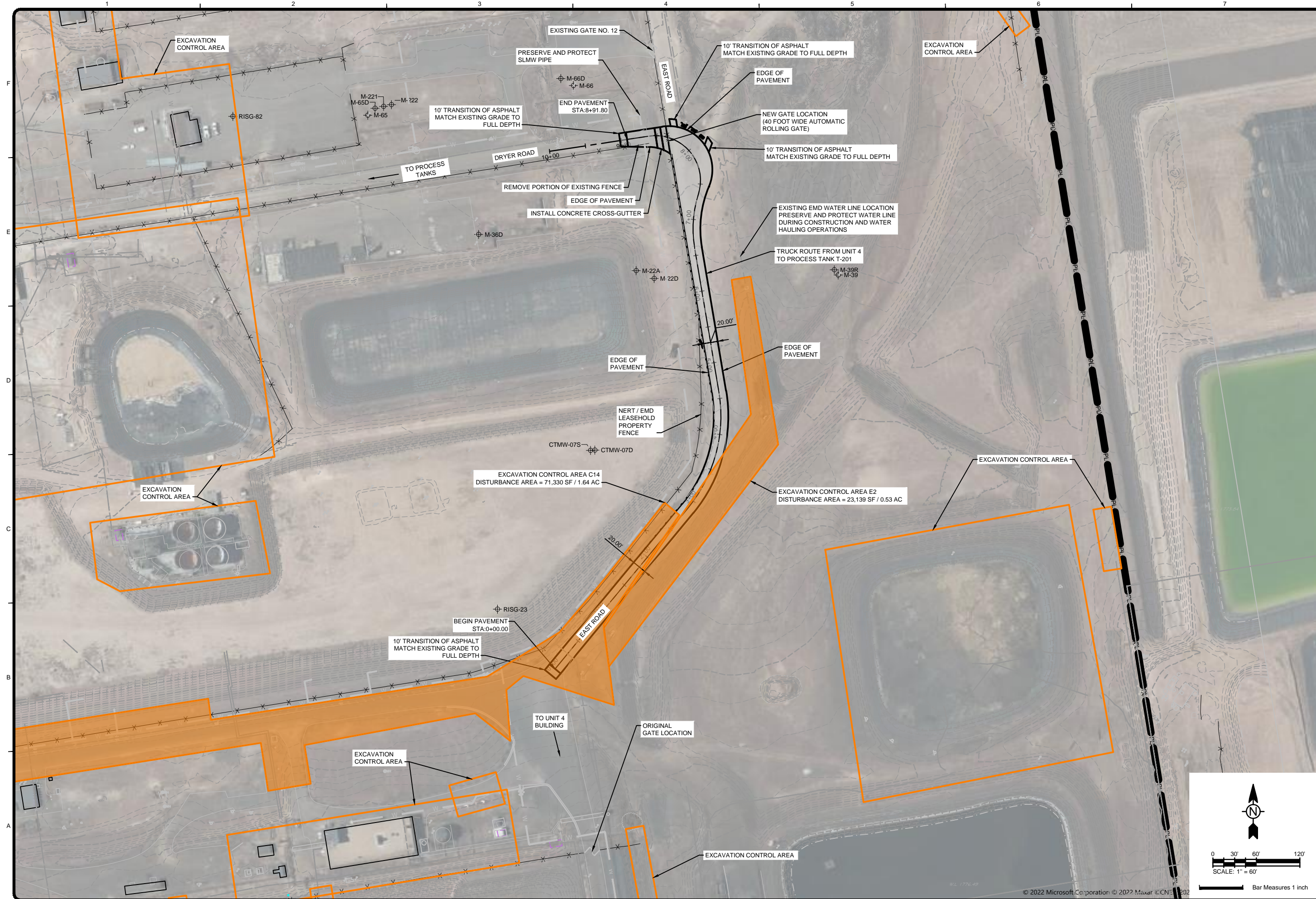
May 16, 2022

Date

Nevada CEM Certificate Number: 2385
Nevada CEM Expiration Date: September 19, 2022

Figures

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**FOR REVIEW
NOT FOR CONSTRUCTION**

MARK	DATE	DESCRIPTION	BY
A	4/5/22	ISSUED FOR REVIEW	KRA

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A	4/5/22	ISSUED FOR REVIEW	KRA

NEVADA ENVIRONMENTAL RESPONSE TRUST
HENDERSON, NEVADA
EAST ROAD IMPROVEMENTS
CONTINGENCY PLAN

Project No.: 117-7502021-M21
Designed By: K. AVERY
Drawn By: L. WEATHERL
Checked By: C. HAYES

FIG 01

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