



# CONTRACT #9

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**December 8, 2023**

**Presentation to the  
West Virginia Contractors  
Association & the  
United Mine Workers of America**

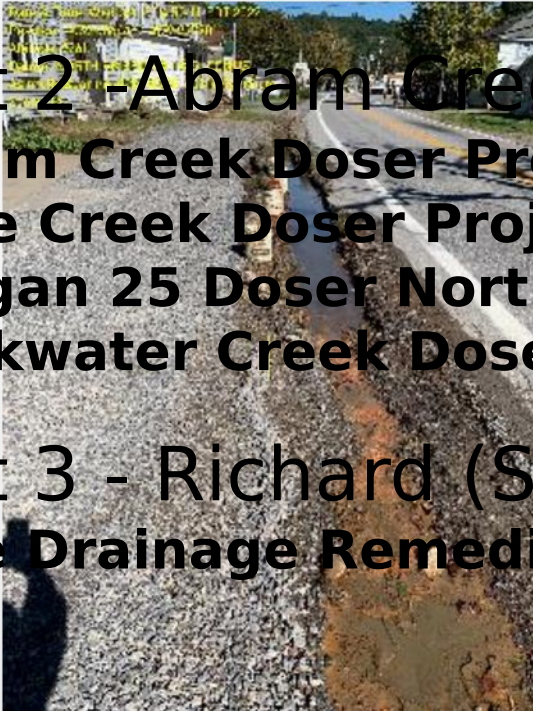


# CONTRACT #9

Contract 1 - Three Fork Creek Watershed Restoration Project  
Cocoon Creek Doser Project  
South Birds Creek Doser Project  
Quires Creek Doser Project.  
North Birds Creek (Pell Road - Paving & Instrumentation Coordination only)

Contract 2 - Abram Creek AMD Treatment Phase II Project  
Abram Creek Doser Project  
Little Creek Doser Project  
Organ 25 Doser North Birds Creek (Pell Road)  
Blackwater Creek Doser/Structure Demolition Project

Contract 3 - Richard (Shaver) Drainage Project  
In-line Drainage Remediation Project.



THREE FORK CREEK (PROJECT 1) AND ABRAM CREEK (PROJECT 2) DOSER PROJECTS  
GENERAL SCOPE & OBJECTIVES

## GENERAL SCOPE AND OBJECTIVES

### Proposed System

- New Dosers with higher technology with adjacent instrumentation/electrical pre-fab building.
- Replacement of all existing lime dosers with exception of Pell Road (separate contract) and Blackwater Doser. Contractor to maintain existing doser operations until new doser has been constructed and operational. Both Lime Slurry and/or Dry Lime systems will be utilized.
- New system services to be provided to each doser:
  - Electric Service.
  - Water Supply Service (City or County)
  - Communications/Instrumentation/Monitoring system.
  - Paving of doser lots and/or access roadways.
- Remote capabilities to check and self adjusting treatment based on one (1) pH monitoring station upstream of treatment and two (2) pH monitoring stations installed downstream of treatment.

## **GENERAL SCOPE AND OBJECTIVES**

### **Project 3 - (Richard Shaver) AMD Drainage Project.**

#### **Existing Conditions**

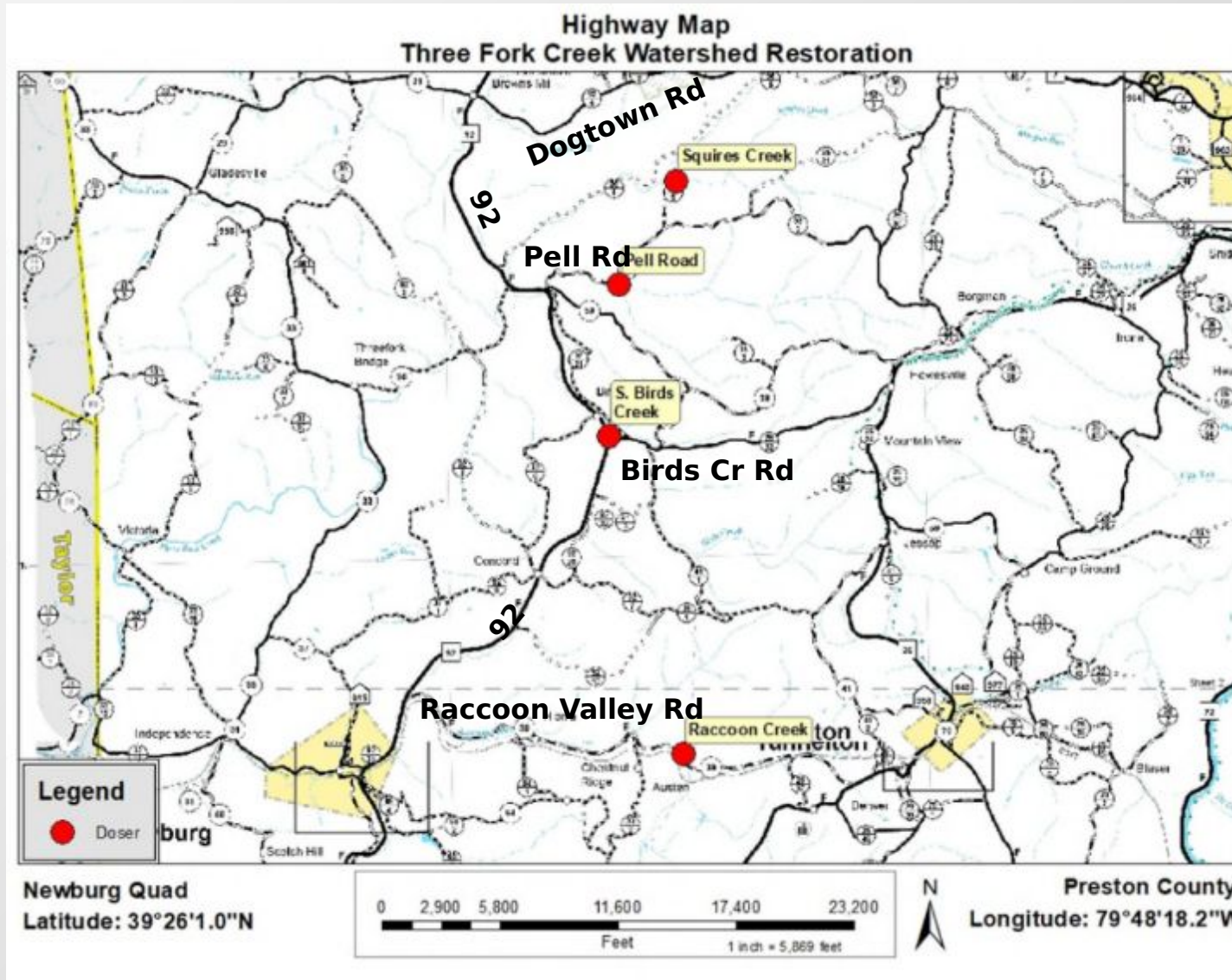
- AMD contaminated groundwater is perking through Rt. 7 from existing Rock Forge underground mine.
- Existing flooding of basements with AMD contaminated groundwater.
- Existing collapsed and draining portals.

#### **Proposed Objective.**

- Address the drainage from the existing Rock Forge abandoned deep mine by reducing the existing water level in the mine by pumping to new Richard AMD treatment system.

# **THREE FORKS CREEK WATERSHED RESTORATION**

# THREE FORKS CREEK WATERSHED RESTORATION SITE LOCATIONS

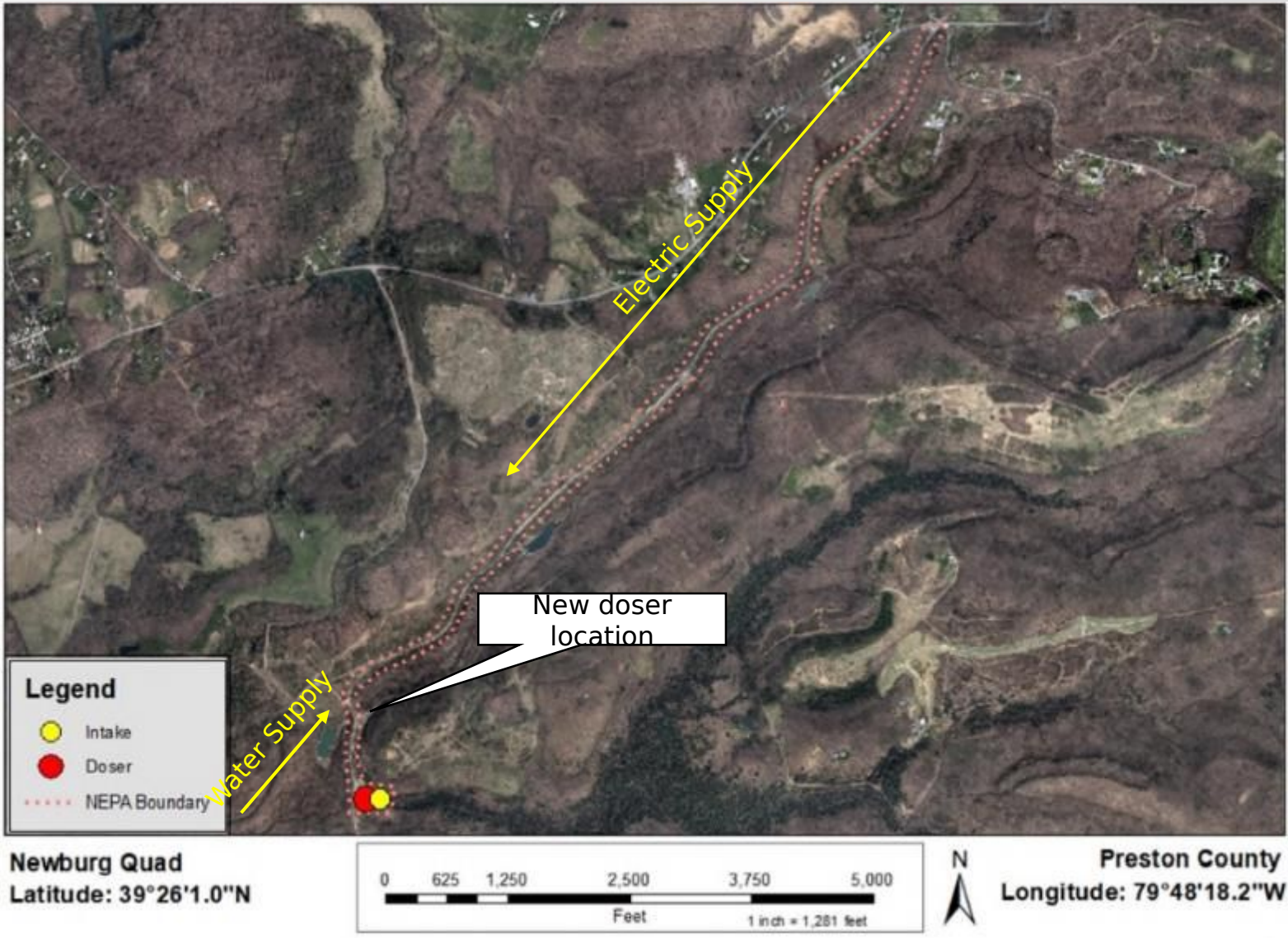


# SQUIRES CREEK DOSER



- **Need to relocate the site due to potential flooding reasons.**
- **Site and doser has been previously flooded.**
- **Locate the silo and building along the bonded haul road and run a lime slurry feed line(s) to the stream, either upstream or downstream of the existing culvert.**
- **This system will need to be a slurry lime system.**
- **100 Ton capacity of hydrated lime.**
- **Site is currently on an active coal permit, water treatment only.**

# SQUIRES CREEK DOSER





# SOUTH BIRDS CREEK DOSER



- **Site has had flooding issues in the past, want new system above 100-year flood plain.**
- **This system will need to be a slurry lime system.**
- **75 Ton capacity.**
- **There is an existing water line to the east at the location.**
- **The existing intake line needs to be protected during construction.**

# Preliminary Conceptual South Birds Creek

# RACCOON CREEK DOSER



- This system will be a Slurry lime system.
- 75 Ton Doser Hydrated Lime Capacity.
- App. 8,000 L.F. waterline - Kingwood Water.
- pH probes to be put on the next two bridges downstream, one upstream at inlet location.

# **ABRAM CREEK AMD TREATMENT PHASE II**

# WATERSHED RESTORATION PROJECTS

## Project 2 - Abram Creek AMD Watershed Restoration Project

- Existing Abram Creek Restoration Dosers were installed approximately 12 years ago. (All to be replaced\*)
  - Abram Creek Doser\*
  - Little Creek Doser\*
  - Morgan 45 Doser\*
  - Blackwater Facilities (Upgrade of monitoring system, control center, and painting.
- Existing three dosers actively treating Abram Creek since 2010.
- Significant improvements have been made to the quality of the streams.
- Existing system is prone to issues, mostly related to clogging of the intake lines.
- Steam has fluctuations in stream levels, system must be checked twice a week.

# WATERSHED RESTORATION PROJECTS

- Pre-design water sampling to be performed.

## New System

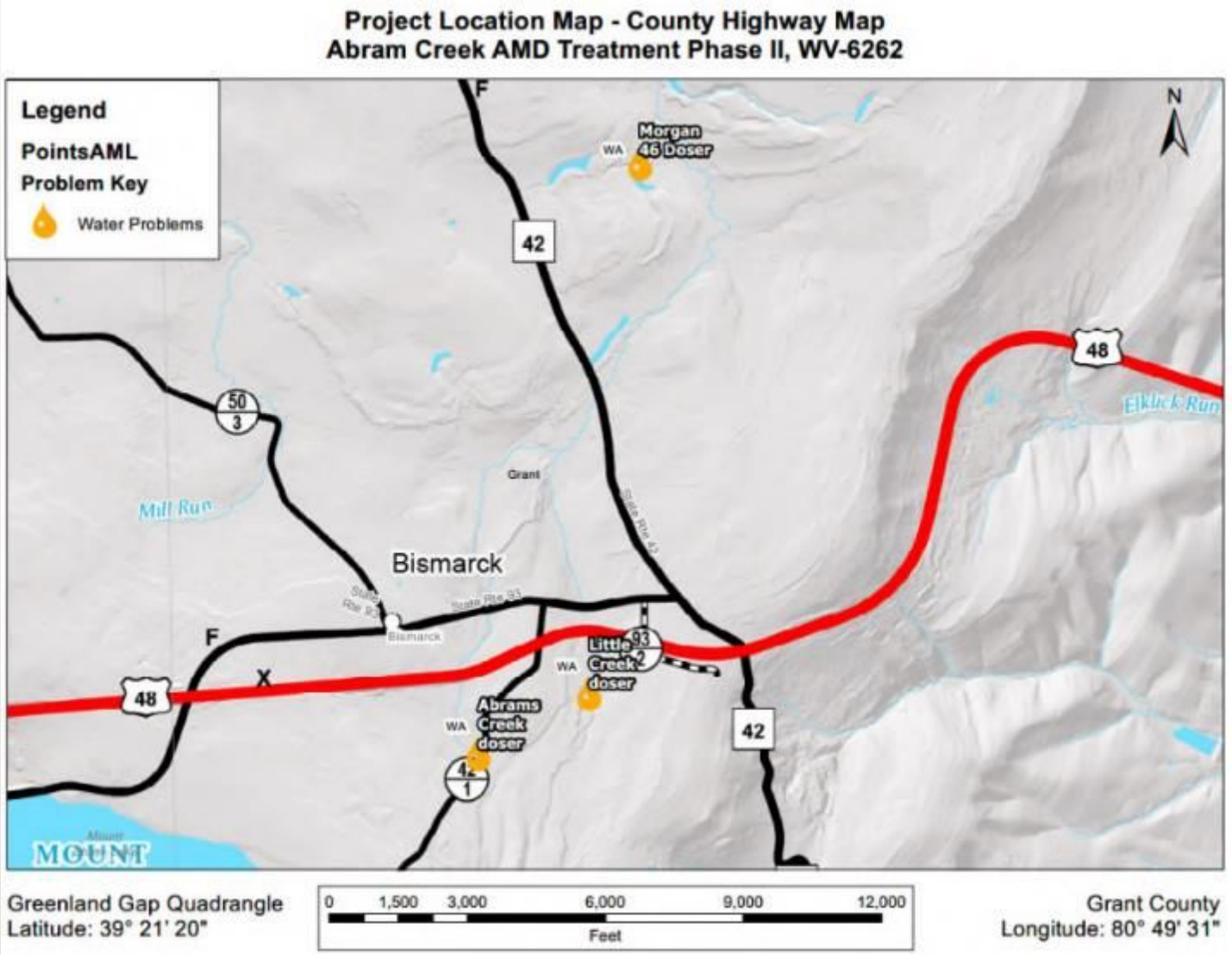
- New Dosers with higher technology with adjacent instrumentation/electrical pre-fab building.
- New system
  - Electric Service
  - Water Supply
  - Communications
- Remote capabilities to check and self adjusting treatment based on two (2) pH monitoring stations installed downstream of treatment.
- All monitoring/control system to be relayed to Richard, WV facility.
- All paved road access and parking area.

# WATERSHED RESTORATION PROJECTS

## Blackwater Facilities (Tucker County)

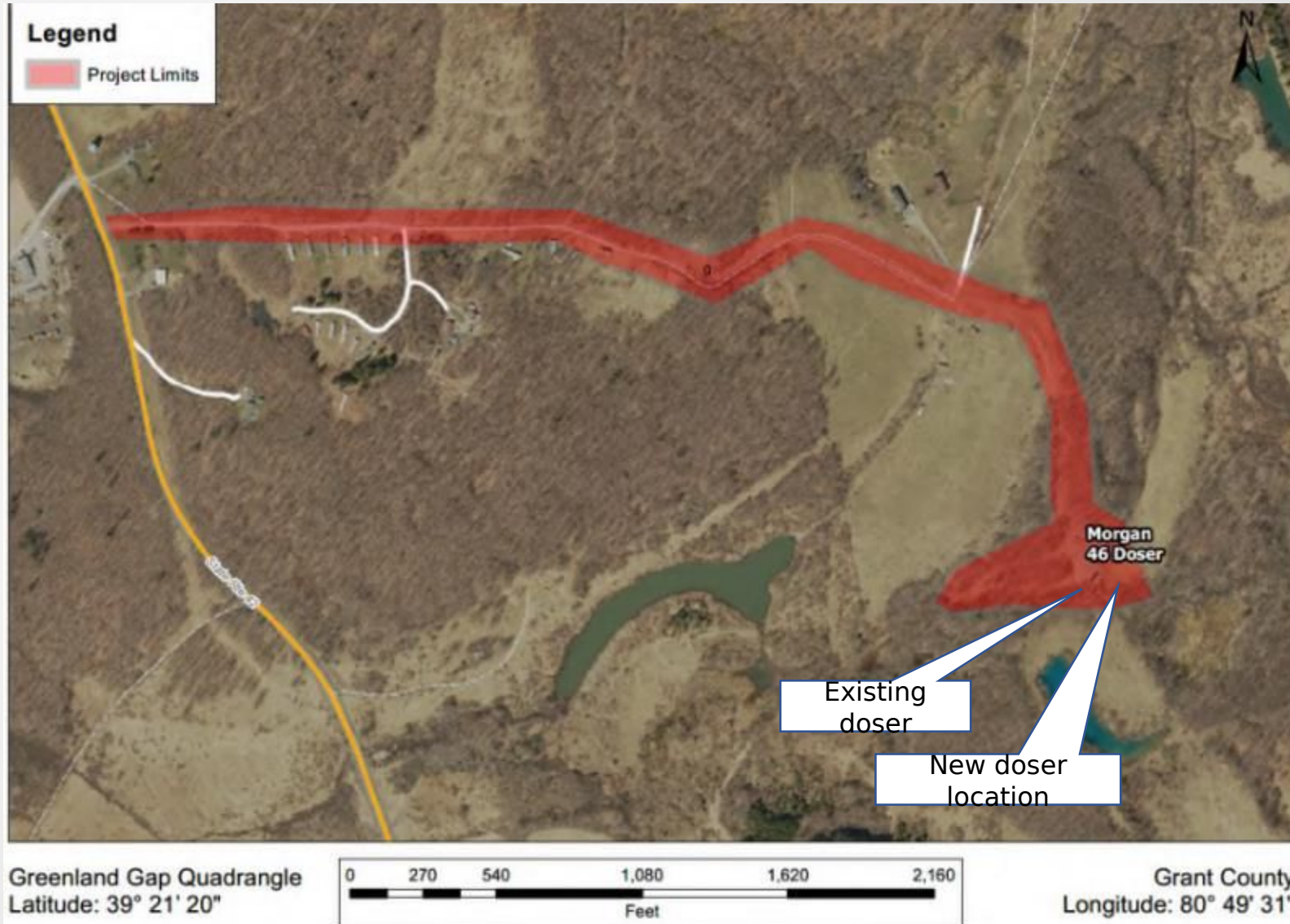
- Demolition of existing storage building
- Demolition of older doser
- Update of newer doser – instrumentation/monitoring systems, upgrade control center/painting.

# ABRAM CREEK AMD TREATMENT PHASE II SITE LOCATIONS



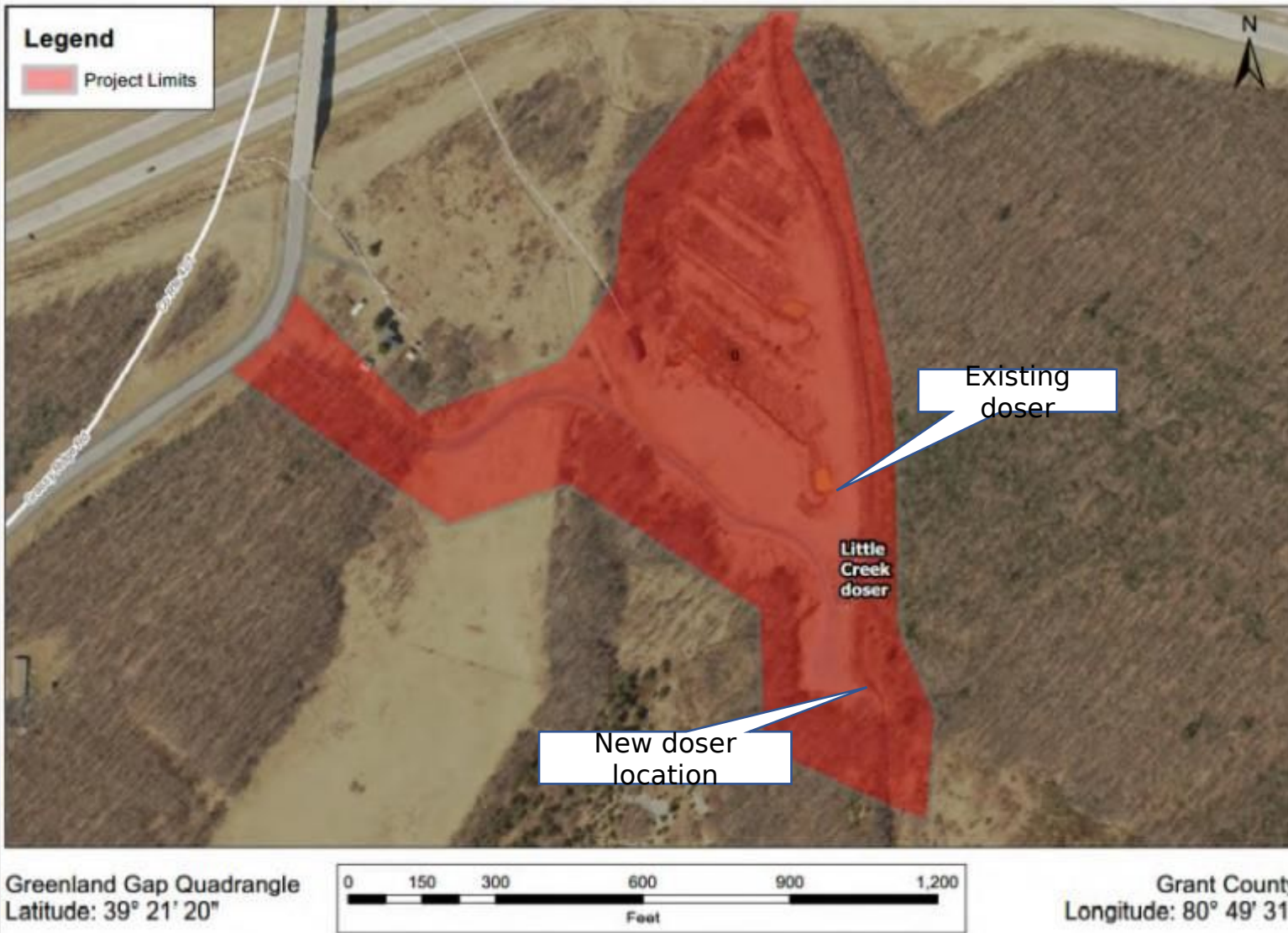


# MORGAN 45 DOSER



- **Locate new doser to the east (downstream) of the existing doser.**
- **Dry feed hydrated lime is the preferred treatment method.**
- **50 Ton doser.**
- **Existing doser utilizes solar power for operation.**
- **Existing solar panels and electrical system to be removed by the contractor for use by WVDEP at another location.**
- **Existing inlet is located approximately 2,100 feet upstream of existing doser.**
- **Location of the proposed doser will be in the vicinity of mine spoil from an old adjacent pre-law surface mine pit.**
- **Will need to excavate to form the site pad**
- **Preference to underground**

# LITTLE CREEK DOSER



- **Dry feed hydrated lime is the preferred treatment method.**
- **50 Ton doser**
- **New doser will be located further up the hill on the flat area.**
- **Remove all existing inlet valves and structures.**
- **Remove all grouted channel and replace with rock rip rap.**

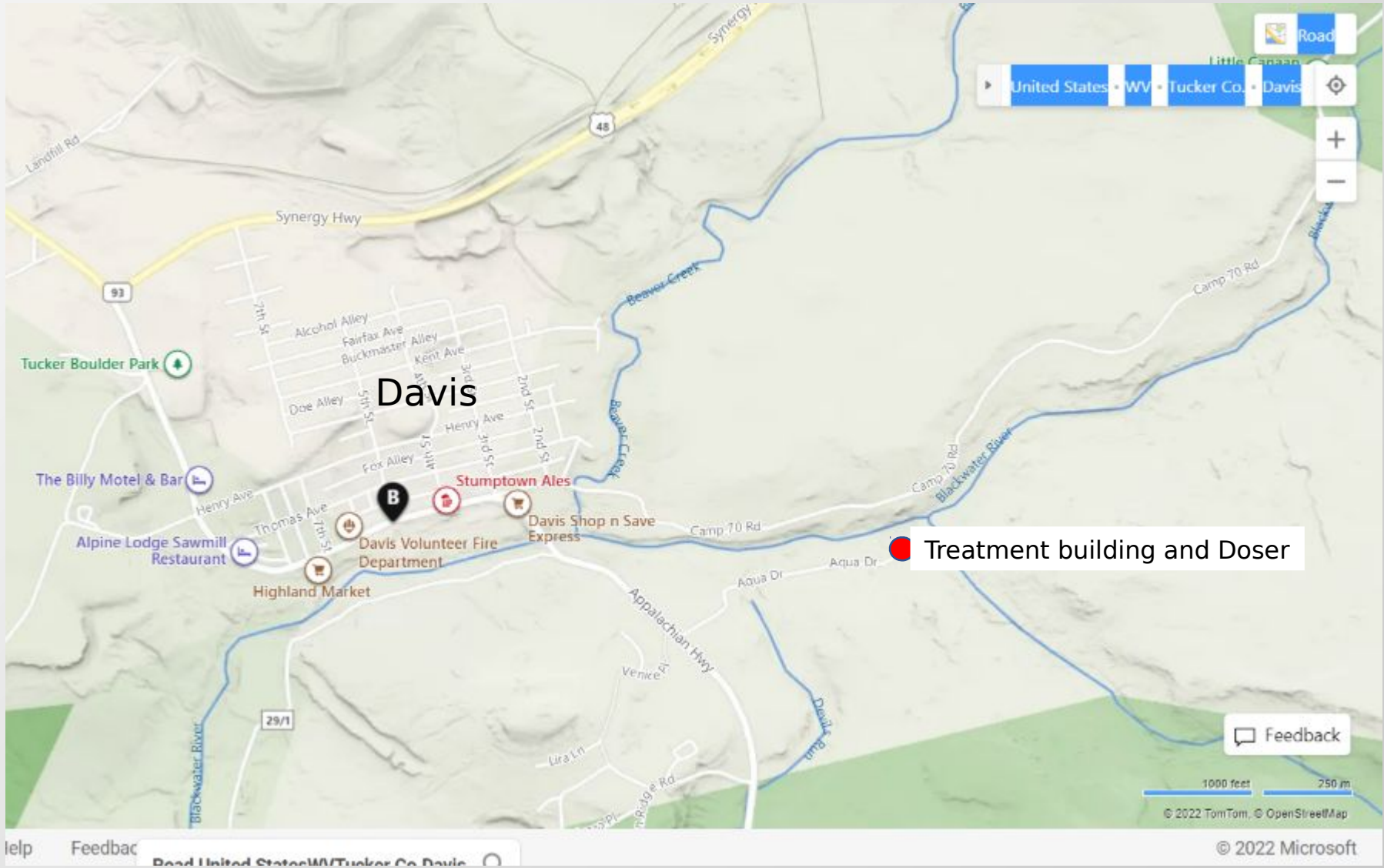
# ABRAM CREEK DOSER



- **Dry feed hydrated lime is the preferred treatment method.**
- **50 Ton doser.**
- **Locate new doser downstream of old doser.**
- **Plug existing inlet lines (2).**
- **Eliminate grouted channel and have new doser feed directly to existing stream.**

# **BLACKWATER FACILITIES OLD LIME BARREL TREATMENT BUILDING & DOSERS**

# OLD LIME BARREL TREATMENT BUILDING & DOSER SITE LOCATION



# Old Lime Barrel Treatment Building



**Demolition of Site. Scrapping of metal in building walls and roofing. Disposal of all materials in accordance with all applicable Federal, State, and Local Statutes and Regulations. Disposal tickets to be provided to the State for record. Concrete pad to be left in place or buried with minimal amount of soil material. No protrusions or unfilled holes remaining.**

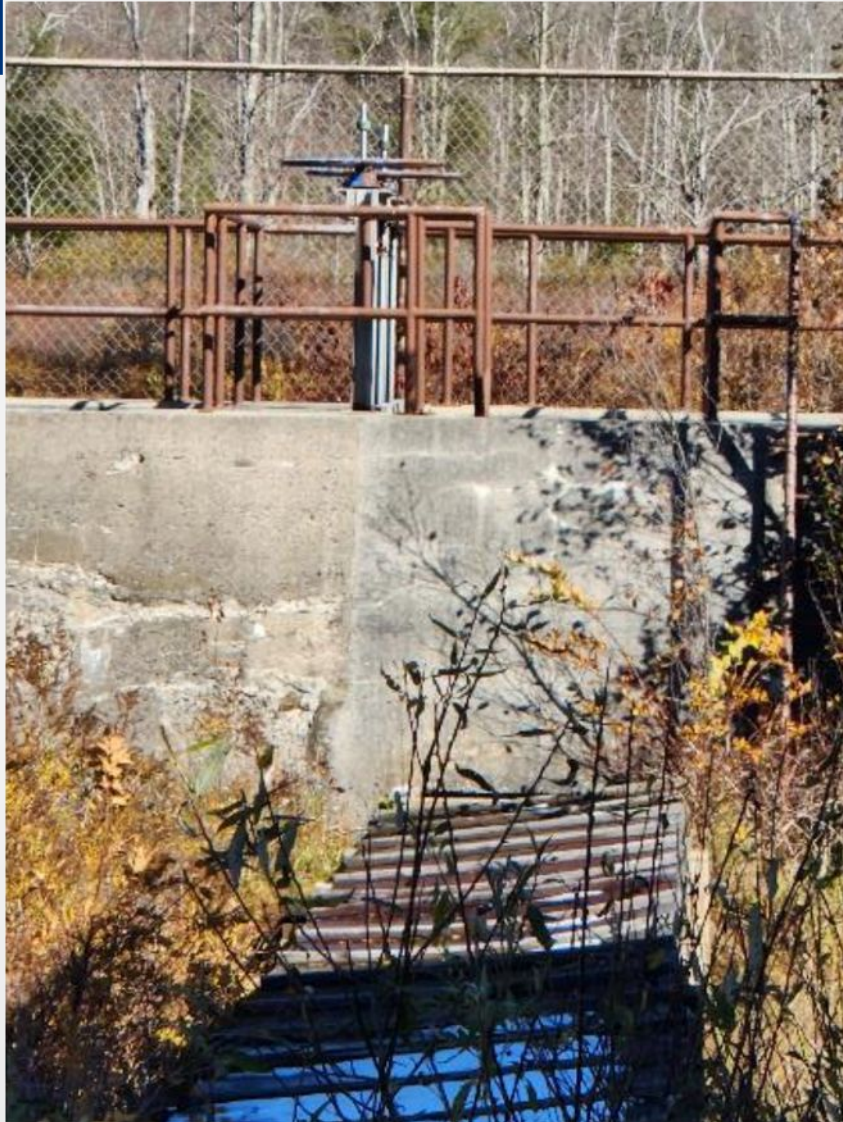
# Old Lime Barrel Treatment Building



- **Remove the entire wooden sluice channel outside the building on the stream side.**
- **Remove bins and grinder mechanisms/dosing equipment to recycle.**



## Old Lime Barrel Treatment Building



- **Remove the valves and structures within the diversion structure located at the dam and renovate/reconfigure the diversion structure.**



## OLD DOSER



- **Doser to be demoed and removed from the site in its entirety.**
- **Concrete pad to be left in place or buried with minimal amount of soil material.**
- **No protrusions or unfilled holes remaining.**
- **Submersible pump located in the adjacent manhole associated with the old Doser is to be removed.**
- **Contractor is to take possession of the old doser in its entirety including the emergency generator**
- **Remove gas line back to gas meter. Replace gas line going to the new doser.**
- **Separate gas and electric between doser and building.**
- **Separate electrical services (3), currently in same box**



## NEW DOSER

- **Install all new sensors in facility and set it up for similar monitoring as other dosers.**
- **Replace existing Control Center**
- **Replace Insulation (pink) board inside entry door.**
- **Replace bottom seal on door.**
- **Paint entire outside of doser (not silo). No sandblasting. Wire brush preparation only.**
- **Color to match existing color.**

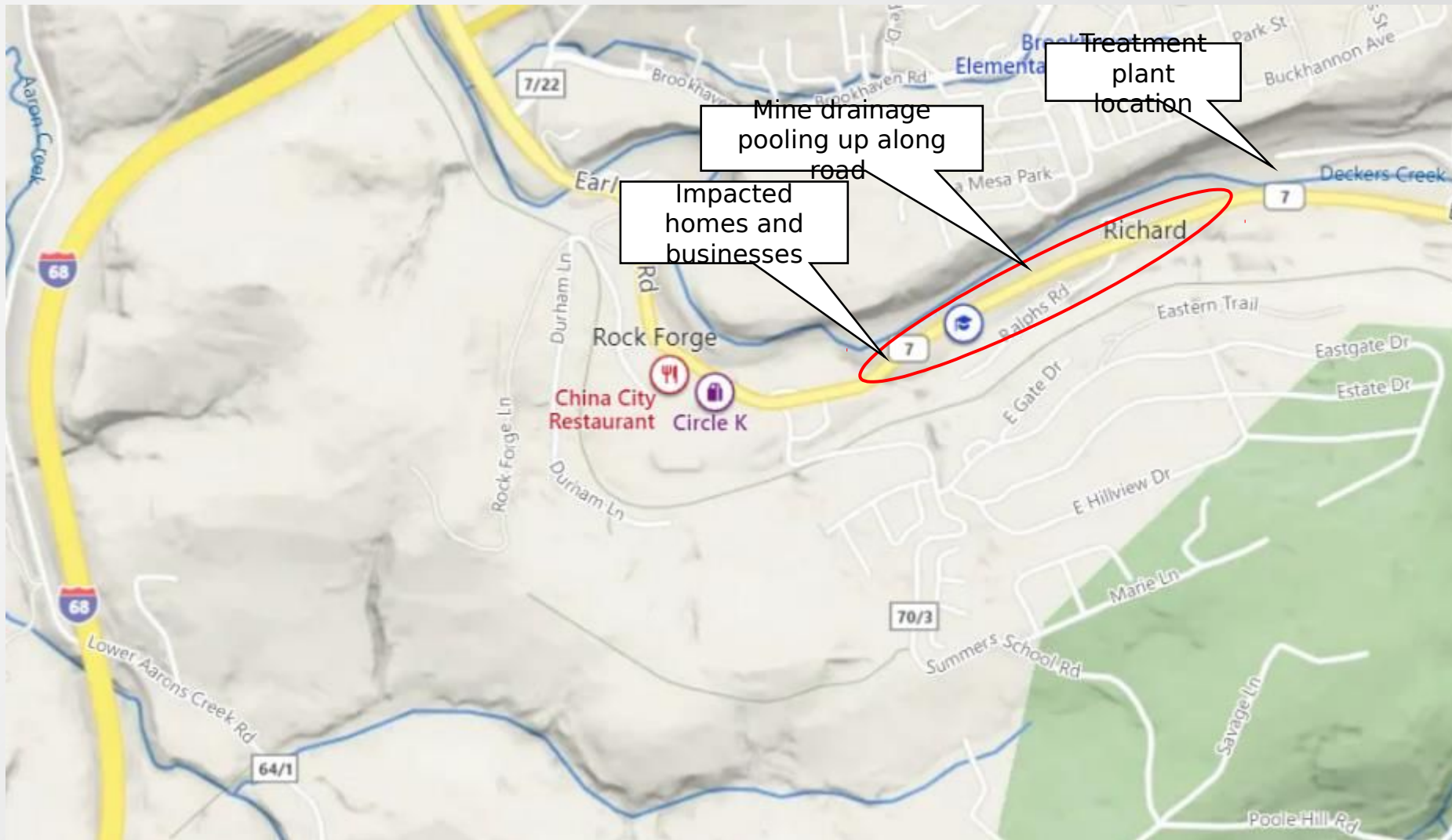
# **RICHARD (SHAVER) DRAINAGE**

# WATERSHED RESTORATION PROJECTS

## **Project 3 - (Richard Shaver) AMD Drainage Project.**

- AMD contaminated groundwater is perking through Rt. 7 from existing underground mines.
- Existing flooding of basements with AMD contaminated groundwater.
- Existing collapsed and draining portals.
- Existing blocked channels/ coal fines in channels.
- Reduce existing water level in mine/ Pump to new Richard AMD treatment system.

# RICHARD (SHAVER) DRAINAGE SITE LOCATION

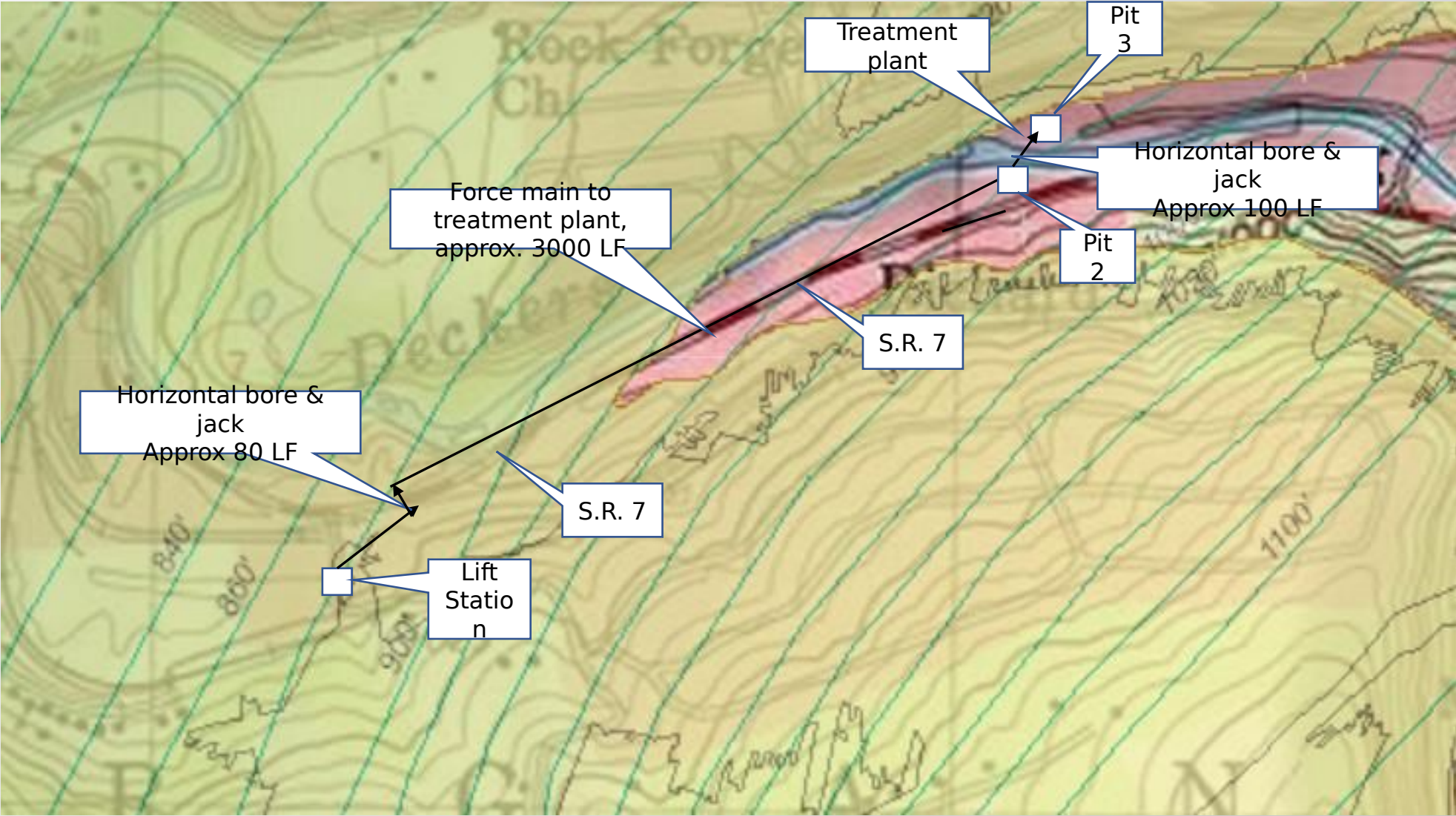


- The primary objective of this project is to capture, collect, and convey the AMD to the Richard Mine Treatment Facility and prevent further damages throughout the community of Richard.
- Treating this AMD will further enhance the restoration of the Deckers

# RICHARD (SHAVER) DRAINAGE



# RICHARD (SHAVER) DRAINAGE AMD CONVEYANCE



WATERSHED RESTORATION PROJECTS  
Current Project Status

**Project 1 - Three Fork Doser; Project 2 - Abram Doser, Project 3 - Richard Drainage Remediation**

**1. Realty - Exploratory Right of Entries (EROEs)**

- EROEs are required for access before any consultants may enter any property that would be incorporated for exploratory purposes or could be potentially be considered included in the construction of the project. Realty personnel must make the initial contact with the property corners.

**2. Mapping & Surveying**

- Approximately 60% to 70% of the Mapping/Surveying (Drone) has been completed. Some mapping attained by public Right of Way access. On the ground/on site surveying locating property lines/monuments, utilities still need completed once EROEs have been attained.

**3. Geotechnical Investigations**

- Two Bore holes have been completed on the Richard Drainage Remediation Project
- Only recently attained the necessary EROEs to allow drilling on a couple of the Doser Sub-Projects within the next month on the Abram Project. First Doser Project property is scheduled to be drilled December 11, 2023



## WATERSHED RESTORATION PROJECTS Current Project Status

### **Project 1 - Three Fork Doser; Project 2 - Abram Doser, Project 3 - Richard Drainage Remediation**

#### **4. Design**

- Coordination of electric, potential water supply companies, contacting Development Agencies, etc.
- Currently working on the Conceptual Design layouts based on the available information.
- Currently contacting several Doser Manufacturers to attain lead time for the preparation of shop drawings/approval/doser manufacturing time and delivery based on their current workload.

#### **5. Permitting**

- Richards:
  - Construction Stormwater General Permit
  - WVDOH MM-109
  - Floodplain Permit
- Three Forks:
  - Potentially NWP 5 for the installation of the pH monitoring sites, that will be determined when final locations are determined.

# WATERSHED RESTORATION PROJECTS

## Current Project Status

### Project 1 - Three Fork Dosers; Project 2 - Abram Doser, Project 3 - Richard Drainage Remediation

#### 5. Permitting (*Continued*)

The following are potential permits since designs not significantly complete but do not anticipate major Corps of Engineer Permits. Permit process commenced based on preliminary estimated LODs for each site.

- Richards:
  - Construction Stormwater General Permit
  - WVDOH MM-109
  - Floodplain Permit
- Three Forks:
  - Potentially NWP 5 for the installation of the pH monitoring sites, that will be determined when final locations are determined.
  - Construction Stormwater General Permit
  - WVDOH MM-109
  - Bat Survey/Clearance of Buffer Zones
  - Floodplain Permit

# WATERSHED RESTORATION PROJECTS

## Current Project Status

### Project 1 - Three Fork Doser; Project 2 - Abram Doser, Project 3 - Richard Drainage Remediation

#### 5. **Permitting (*Continued*)**

- Abrams Creek:
  - Little Creek and Blackwater have the potential to need USACE permits. Blackwater would be because of the removal of the sluice gates and concrete pad parallel to the building.
  - Potentially NWP 5 for the installation of the pH monitoring sites, that will be determined when final locations are determined.
  - Construction Stormwater General Permit
  - WVDOH MM-109
  - Bat Survey/Clearance of Buffer Zones
  - Floodplain Permit

WATERSHED RESTORATION PROJECTS  
Current Project Status

**Project 1 - Three Fork Doser; Project 2 - Abram Doser, Project 3 - Richard Drainage Remediation**

**6. Schedule** (Dependent of attainment of EROEs and Mapping/Surveying)

<b>Project 1 &amp; Project 2 (Dosers)</b>	<b>Date</b>
• Notice to Proceed	July 2023
• Conceptual Plans	January 2024
• Plans & Specifications	June 2024
• Environment Clearances/Permits	June 2024
• Construction Bidding	June 2024 - August 2024
• Construction	August 2026
• Post Construction Maintenance	August 2027

WATERSHED RESTORATION PROJECTS  
Current Project Status

**Project 1 - Three Fork Dosers; Project 2 - Abram Doser, Project 3 -  
Richard Drainage Remediation**

**6. Schedule (*Continued*)**

<b>Richard Drainage Remediation</b>	<b>Date</b>
• Notice to Proceed	July 2023
• Conceptual Plans	January 2024
• Environment Clearances/Permits	April 2024
• Plans & Specifications	May 2024
• Construction Bidding	July 2024-September 2024
• Construction	September 24 -January 2025
• Post Construction Maintenance	January 2026