



# AJM, Incorporated

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A Full Service Environmental Company

May 20, 2024

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Donnie McCurry  
Montana Department of Environmental Quality  
Petroleum Tank Cleanup Section  
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Helena, MT 59620-0901  
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**RE: Corrective Action Work Plan Required for the Petroleum Release at the Town Pump Butte 8, 2001 Dewey Blvd, Butte, Silver Bow County, Montana; Facility ID 47-08686. Release 6541.**

Mr. McCurry,

Per discussion, AJM Incorporated (AJM) has completed the following work plan to conduct groundwater monitoring well installation, development, and sampling at the Town Pump located at 2001 Dewey Blvd, Butte MT 59701. AJM will conduct a groundwater sampling prior to the future construction at this location to determine baseline groundwater in the area of the future underground storage tank (UST) installation.

## **BACKGROUND**

Town Pump Inc owns and operates four cathodically protected steel USTs, three gasoline and one diesel, that were installed in 1981. The facility contains two 30,000 gallon gasoline tanks, one 12,000 gasoline tank and one 12,000 diesel tank. According to the 30 Day Leak Report submitted on March 28, 2023, Release 6541 was discovered on March 27, 2023 when diesel filters were being changed and a shear valve was not tripped prior to removing the filter. Approximately 10 gallons of diesel was disposed of from the concrete near dispenser 3/4 and 25 gallons of fuel has released into the environment from under the dispenser in the dirt sump. On April 11, 2024, soil samples were collected from the soil underneath this dispenser and results indicated petroleum hydrocarbon soil impacts above Montana Risk Based Screening Levels (RBSLs).

## **OBJECTIVES OF INVESTIGATION**

The purpose of this investigation is to determine the extent and magnitude of impacts in the soil and groundwater on the east side of the facility property following Release 6541. The owner is planning to

**AJM**  
Incorporated

expand and update the facility by installing new USTs to the east of the fuel canopy. During the installation, dewatering the excavation may be necessary to ensure the USTs are properly anchored and buried in a near surface aquifer (approximately 5ft to groundwater).

### **MINIMUM WORK PLAN TASKS**

The minimum tasks to complete this work include site utility identification, installation of 1 inch geoprobe monitoring wells, soil sample collect from coring, develop, and remove silt from newly constructed monitoring wells, collect groundwater sample, and complete necessary reporting.

### **TASK I – MONITORING WELL CONSTRUCTION**

AJM proposes to install two 1 inch geoprobe monitoring wells to approximately 14ft below ground surface (bgs). Flush threaded schedule 40 PVC 0.02 slot wells will be screened from 4-14ft bgs and solid casing to be installed from 4ft bgs to grade. 10/20 silica sand pack will be used from the total depth to 3ft bgs, then hydrated bentonite from 3ft bgs to 1-foot bgs, and a flush mounted 5 inch monitoring well box. Monitoring wells will be installed in the grass area on the east side of the property, and another installed off the north side of the existing fuel canopy (see Figure 2 for Site Map). To preserve the well near the canopy, it must be constructed outside of the construction of the new fuel canopy. The monitoring wells placed on the east side of the property will determine if the groundwater in this location exceeds Montana Risk Based Screening Levels (RBSLs) and will be useful in identifying important site characteristics.

Monitoring wells will be developed prior to groundwater sample collection. The expected groundwater depth is estimated to be approximately 5ft bgs and flows toward Blacktail Creek, just north of I-90.

### **TASK II – SOIL SAMPLE COLLECTION**

Up to 4 soil samples will be collected from the two soil borings. These samples will be collected from any depth the shows evidence of petroleum hydrocarbon impact and another sample will be collected at the soil water interface. In field testing will be conducted using a photoionization detector (PID) and heated head space to measure volatile organic carbon (VOC). If soil cores show less than 50ppm VOCs via PID and no visual or olfactory evidence of impact, then only a soil water interface sample will be collected. Soil samples will be immediately cooled on ice and sent to an accredited laboratory for analysis of volatile petroleum hydrocarbons (VPH) and extractable petroleum hydrocarbons (EPH).

### **TASK III - GROUNDWATER SAMPLING**

Groundwater samples will be collected from newly construction geo-probe monitoring wells. During well purging, stabilization parameters will be collected including temperature, pH, dissolved oxygen, conductivity, turbidity and ORP. Once the above parameters are within 10% of previous readings, a sample will be collected. All sampling will be conducted per AJM's Quality Assurance Project Plan along with the established MDEQ Quality Assurance Plan (QAP). Sampling order will be determined based on previous well contamination moving from least known concentrations to higher concentrations.

All non-well specific equipment will be washed with Alconox and triple rinsed prior to sampling a subsequent well. Standard HDPE ¼ inch tubing will be installed into the monitoring wells and a low flow (less than 300mL/min) peristaltic pump will be used to collect groundwater samples. Appropriate labeling, cooling, and chain of custody protocols will be followed. Samples will be delivered under chain of custody to an accredited laboratory for analysis of VPH and EPH using appropriate DEQ and Environmental Protection Agency (EPA) methodology. EPH fractionation will be conducted as necessary based on total extractable concentrations and analyte reporting limits will be below the standards

established by the DEQ. All water produced from this sampling process will be allowed to evaporate on the asphalt and no on-site storage of groundwater is currently planned.

**REPORT WRITING**

One Remedial Investigation Report (Report) will be completed following the standardized DEQ guidance document found on the dropdown on the Petroleum Tank Cleanup Section (PTCS) webpage. This Report will include the following:

- Components of an AR-03 Well Installation Report and Groundwater Monitoring Report.
- Discussion of the monitoring method results, deviations from the approved work plan, recommendations, and conclusions.
- Baseline groundwater data tables.
- Submit WP and reports electronically following the PTCS requirements.
- Validate all laboratory data using the DEQs Data Validation Summary Form.

A cost estimate for the above-described work and can be found in Appendix B. Work at Butte Town Pump #8 can begin upon written approval by the DEQ. Please do not hesitate to call if there are any questions or if we can provide any additional information.

Sincerely,

*Lars Heinstedt*

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Lars Heinstedt, Staff Scientist  
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*Dennis Franks*

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AJM Incorporated  
Dennis Franks, President  
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**Appendix A**  
Site Location  
Site Map

# BUTTE #8

## HARRISON AVENUE

### BUTTE, MT

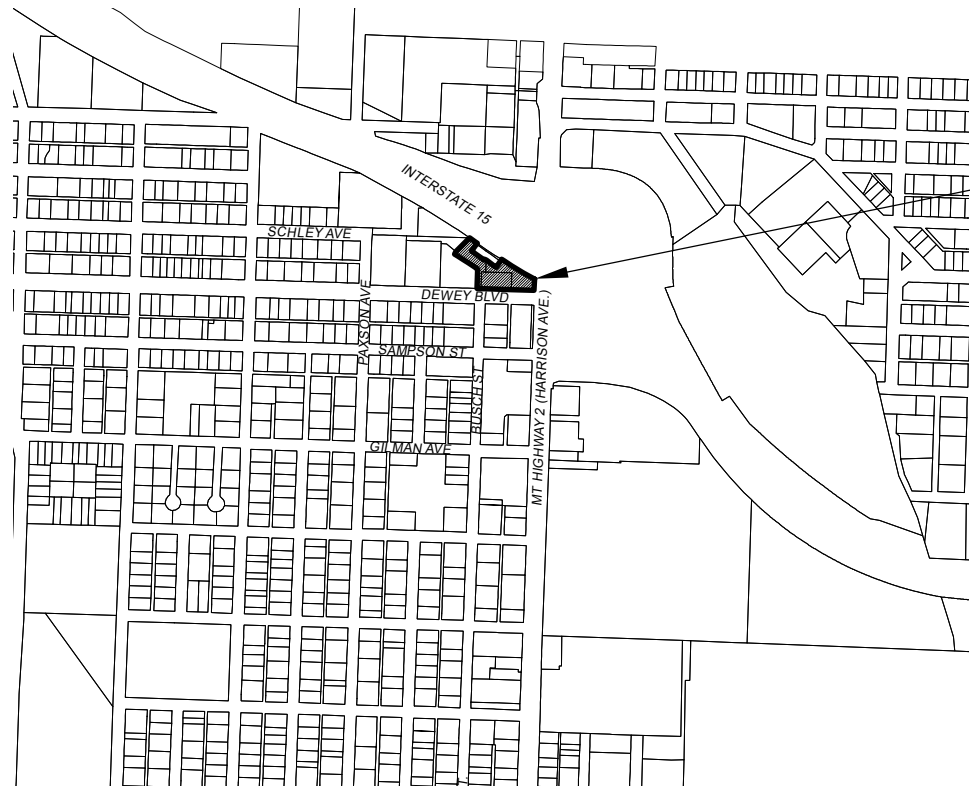
#### 2024



**BIG SKY CIVIL & ENVIRONMENTAL, INC**

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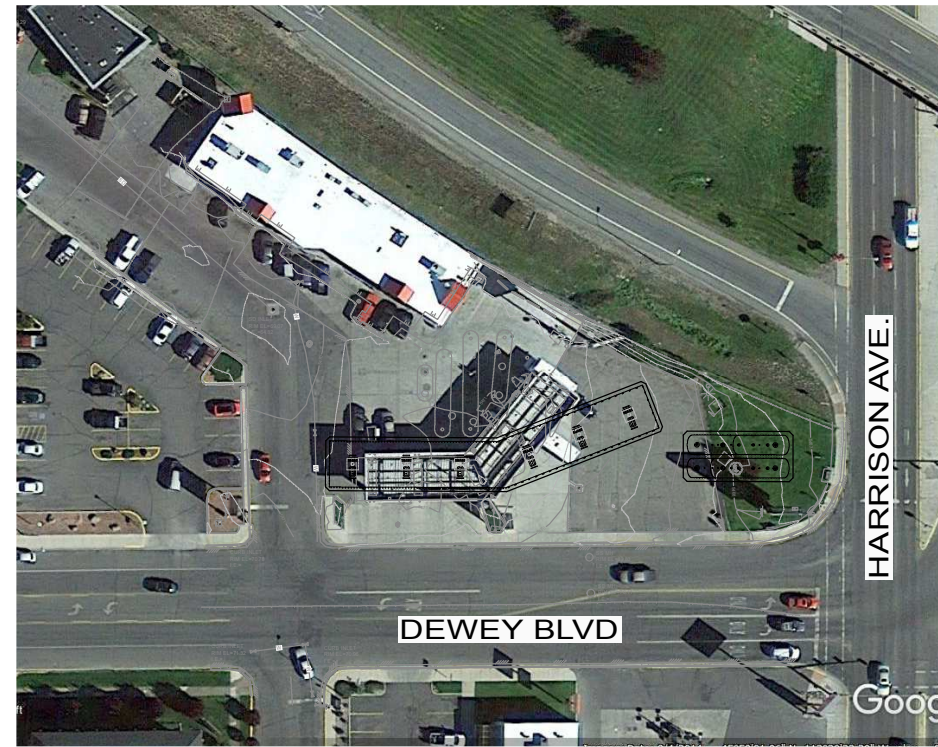


**VICINITY MAP**

**PROJECT LOCATION**

### LEGEND

EXISTING	NEW	
—W—	—W—	WATER
⊕	⊕	FIRE HYDRANT
∇	∇	VALVE
⊙	⊙	CURB STOP
—S—	—S—	SANITARY SEWER
—SS—	—SS—	SEWER SERVICE
○	○	MANHOLE
—FM—	—FM—	FORCE MAIN
—SD—	—SD—	STORM DRAIN
⊕	⊕	STORM INLET
—OPH—		OVERHEAD ELECTRICAL
—E—		UNDERGROUND ELECTRICAL
—T—		TELEPHONE
⊕		TELEPHONE PEDESTAL
⊕		POWER POLE
—	—	CURB AND GUTTER
----	----	CULVERT
~	~	CONTOURS
---	---	PROPERTY LINE
///	///	ASPHALTIC CONCRETE SURFACING
⊕	⊕	CONCRETE SURFACING
⊕	⊕	GRAVEL SURFACING
⊕	⊕	LANDSCAPING



**SITE AERIAL**

### SITework NOTES

- TRENCH BACKFILL IN CITY & MDT R/W SHALL BE COMPLETED W/ FLOWABLE FILL.
- ALL WORK W/IN CITY & MDT R/W SHALL BE COMPLETED PER APPLICABLE STANDARDS.
- CONTRACTOR SHALL CLOSELY COORDINATE GAS SERVICE AND PRIMARY ELECTRICAL LINE ROUTING TO AVOID CONFLICTS W/ STORM DRAIN SYSTEM & OTHER IMPROVEMENTS.
- SITE STRIPING SHALL BE 4" WIDE YELLOW STRIPES. HANDICAP PARKING SPACES & ACCESSIBLE AISLES SHALL BE 4" BLUE STRIPES. HANDICAP SYMBOLS SHALL BE 3'x3' W/ A WHITE EPOXY SYMBOL ON A BLUE BACKGROUND.
- CONTRACTOR SHALL PAINT ALL NEW FULL-HEIGHT CURB INSTALLED ALONG HARRISON AVE. YELLOW PER MDT STANDARDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NECESSARY RESTRIPING IN HARRISON AVE., IF DEEMED NECESSARY.
- CONCRETE SIDEWALK W/IN MDT R/W SHALL BE INSTALLED PER MDT STD DWG 608-05 AND CONCRETE C&G SHALL BE INSTALLED PER MDT STD DWG 609-05.

### ABBREVIATIONS

AB	AGGREGATE BASE (GRAVEL)	MH	MANHOLE
AC	ASPHALTIC CONCRETE (PAVEMENT)	N.I.C.	NOT IN CONTRACT
B.C.	BACK OF CURB	PVC	POLYVINYL CHLORIDE (PIPE)
C/L	CENTERLINE	RCP	REINFORCED CONCRETE PIPE
CO	CLEANOUT	SAN.	SANITARY SEWER
C.P.	CONTROL POINT	SD	STORM DRAIN
CY	CUBIC YARDS	SHT.	SHEET
DIP	DUCTILE IRON PIPE	SS	SEWER SERVICE
EA.	EACH	SW	SIDEWALK
EL./ELEV.	ELEVATION	S.Y.	SQUARE YARDS
EX./EXIST.	EXISTING	TBM	TEMPORARY BENCH MARK
F.F.	TOP OF FINISH FLOOR ELEVATION	TP	TOP OF PAVEMENT
G OR GAS	GAS (NATURAL)	TYP.	TYPICAL
F/L OR FL.	FLOW LINE	W	WATER
I.E.	INVERT ELEVATION	WS	WATER SERVICE
L.F.	LINEAL FEET	W/	WITH
		XING	CROSSING

### GENERAL NOTES

THE ENGINEER HAS ATTEMPTED TO SHOW ON THE PLANS ALL KNOWN UNDERGROUND UTILITIES AND SERVICE LINES FOR THE PURPOSE OF IDENTIFYING POTENTIAL CONFLICTS. THE PRESENTATION OF EXISTING UTILITIES IS NOT WARRANTED TO BE EITHER COMPLETE OR EXACT IN HORIZONTAL POSITION OR ELEVATION. THE CONTRACTOR SHALL DETERMINE OR VERIFY VERTICAL AND HORIZONTAL UTILITY LOCATIONS PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DATA WITH EACH RESPECTIVE UTILITY OWNER PRIOR TO BIDDING AND/OR INITIATING CONSTRUCTION. THE ENGINEER ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF UTILITY LOCATION DATA PRESENTED ON THE DRAWINGS. VARIANCES FROM LOCATION SHOWN ON ANY UTILITY CROSSED SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING.

ALL WORK IN MDT RIGHT-OF-WAY, WATER SERVICE LINE, TRENCHES, SIDEWALKS, CURB & GUTTER, APPROACHES AND THE LIKE SHALL BE COMPLETED IN ACCORDANCE WITH MDT REQUIREMENTS. ALL WORK IN CITY RIGHT-OF-WAY SHALL BE COMPLETED IN ACCORDANCE WITH CITY REQUIREMENTS.

REFER TO MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS AND ANY APPLICABLE BUTTE-SILVER BOW DESIGN DETAILS FOR ADDITIONAL UTILITY DETAILS.

CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT FOR EXISTING SOIL TYPES AND SUBSURFACE CONDITIONS.

BEARING SOURCE = NAD 83  
VERTICAL DATUM = NAVD 88

### SHEET INDEX

- C1 - COVER
- C2 - DEMO PLAN
- C3 - SITE IMPROVEMENTS
- C4 - GRADING & DRAINAGE PLAN
- C5 - STORM PLAN & PROFILE
- C6 - DETAILS

PROFESSIONAL SEAL

BY: CJM  
DATE: 2/19/24

OWNER:

BUTTE 8  
RE2 LLC

PROJECT NAME:

BUTTE #8  
SITE IMPROVEMENTS  
BUTTE, MT

SHEET TITLE:

COVER  
FIGURE 1  
SITE LOCATION

DRAWING INFORMATION:

BSCE PROJECT NUMBER: 22AI  
OWNER FILE NUMBER: XXXX  
CADD FILE NAME: 22AI-C1  
ASSOCIATED PROJECTS: XXXX

SHEET:

C1 OF 6

PROFESSIONAL SEAL

BY: CJM  
DATE: 2/19/24

OWNER:

BUTTE 8  
RE2 LLC

PROJECT NAME:

BUTTE #8  
SITE IMPROVEMENTS  
BUTTE, MT

SHEET TITLE:

FIGURE 2  
SITE MAP

DRAWING INFORMATION:

BSCE PROJECT NUMBER: 22AI  
OWNER FILE NUMBER: XXXX  
CADD FILE NAME: 22AI-C3  
ASSOCIATED PROJECTS: XXXX

SHEET:

C3 OF 6

SS MH  
RIM EL=70.29  
I.E.=

SD INLET  
RIM EL=69.65  
I.E.=

SD INLET  
RIM EL=69.07  
I.E.=64.82

CURB INLET  
RIM EL=70.78  
I.E.=

SS MH  
RIM EL=69.83  
I.E.=

SD MH  
RIM EL=70.11  
I.E.=

CURB INLET  
RIM EL=71.32  
I.E.=

CURB INLET  
RIM EL=70.96  
I.E.=

**MW** Proposed Monitoring Well Locations

