


**COLORADO**Division of Reclamation,  
Mining and Safety

Department of Natural Resources

**MINERALS PROGRAM INSPECTION REPORT****PHONE: (303) 866-3567**

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

<b>MINE NAME:</b> Dellacroce Pit	<b>MINE/PROSPECTING ID#:</b> M-1993-050	<b>MINERAL:</b> Gravel	<b>COUNTY:</b> El Paso
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Timothy A. Cazier	<b>INSP. DATE:</b> July 10, 2018	<b>INSP. TIME:</b> 10:40
<b>OPERATOR:</b> Raymond F. & Robert W. Dellacroce	<b>OPERATOR REPRESENTATIVE:</b> Jason Ulmer	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Partial Bond	<b>BOND AMOUNT:</b> \$37,949.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> November 20, 2018

**The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.**

**INSPECTION TOPIC:** Financial Warranty

**PROBLEM/POSSIBLE VIOLATION NO. 1:** Problem: The financial warranty is not adequate to reclaim the site in accordance with the approved reclamation plan. This is a failure to maintain the proper financial warranty amount to complete reclamation of the affected lands pursuant to C.R.S. 34-32.5-117(4)(b) of the Act.

**CORRECTIVE ACTIONS:** The operator shall submit adequate financial warranty, as determined by the Division. The Division will be sending a separate surety increase notice to the operator regarding the increase of the financial warranty. The operator will have 60 days from the date on the surety increase notice to post the additional financial warranty.

**CORRECTIVE ACTION DUE DATE:** 1/18/19

**INSPECTION TOPIC:** Gen. Compliance With Mine Plan

**PROBLEM/POSSIBLE VIOLATION NO. 2:** Problem: Land has been mined outside of the approved affected area boundary. This is a possible violation at this time pursuant to C.R.S. 34-32.5-116(4)(i) for failure to protect areas outside of the affected land from slides or damages occurring during the mining operation.

**CORRECTIVE ACTIONS:** Submit an amendment application to increase the affected area boundary to include the disturbed area and place affected area boundary markers to help prevent additional mining outside the affected area boundary.

**CORRECTIVE ACTION DUE DATE:** 1/18/19

## **OBSERVATIONS**

This inspection was conducted by Tim Cazier (DRMS) as part of the regular monitoring program. The Permittee (Raymond F. & Robert W. Dellacroce) was represented by Mr. Jason Ulmer (Pioneer Sand) during the inspection. The Dellacroce Pit is accessed from West Baptist Road on which the entrance is located approximately 1 mile west of Interstate 25 (exit 158). This is a 112c gravel mine. The site was active at the time of the inspection.

Availability of Records: Annual fees are paid through May 2018. The previous inspection was on November 9, 2014. The approved post-mine land use is rangeland. There are no open infractions. Both the surface and minerals are privately owned.

Backfilling and Grading: The site is a ridge being mined such that a visual berm remains between the active mining and the surrounding area. These visual berms (see **Photo 1**) will be pulled down using an excavator as part of the reclamation effort (see **Photo 2**). As such, sufficient backfill material is available.

Financial Warranty: The \$37,949 bond held by the Division is not adequate for the observed mine disturbance. The 2014 bond estimate was for 17 acres of disturbance. The current disturbance is approximately 25 acres. A revised bond estimate is enclosed as **Attachment 1. The inadequate financial warranty is cited as Problem 1 on page 1 of this report.** Please review the bond estimate within two weeks.

Fish and Wildlife: No impact to wildlife was observed.

Hydrologic Balance: No standing water was observed in the pit and no exposed groundwater was observed.

Gen. Compliance with Mine Plan: The general operation of the mine appears to be in conformance with the approved mine plan. However, there is an area of disturbance on the north side of the pit (east of Phase XI, north of Phase I, and west of Phase V) that is outside the approved affected area boundary (see **Figure 1A**). This disturbed area is estimated to be approximately 1.6 acres. **This disturbed area outside the affected area boundary is cited as Problem 2 on page 1 of this report.** Google Earth was used to measure the disturbed area, which was estimated to be approximately 25 acres, based on 2017 imagery. The maximum allowed disturbance by permit is 64.8 acres. However, based on AR-01 maps, the maximum allowed disturbed area is closer to 40.6 acres (see **Figure 1B**). Perimeter (or boundary highwalls) were near vertical and estimated to vary between 10 and 15 feet in height. Internal highwalls were estimated to be 20 feet in height. Google Earth was used to estimate the highwall lengths (see **Figure 2**) for the enclosed bond estimate. As discussed under "Backfilling and Grading" above, sloughing of these highwalls is not a concern as they will be pulled down for reclamation (see **Photo 2**). The DRMS received a phone call prior to this inspection from a nearby resident asking why they could "see the mine" at the time. During this inspection it was determined what the caller observed was stockpiled product (see **Photo 3**) having been processed on site and that it would soon be moved offsite, thereby restoring the viewshed to normal.

Off-site Damage: The operation is within the permit boundary, if not the affected area boundary as discussed under "Gen. Compliance with Mine Plan" above.

Processing Waste: No processing waste was observed.

Roads: Haul and access roads did not appear to be a source of sediment that could be tracked offsite.

Reclamation Success: No additional reclamation has been initiated.

Revegetation: Revegetation on the east end of the site (Phases II through VI) was completed as of the previous inspection. This area was released from reclamation liability (see **Photo 4**). No other areas have reached the stage of reclamation where revegetation can be initiated. No noxious weeds were observed.

Sediment Control: No erosion problems were observed and no BMPs were needed at the time of the inspection.

Support Facilities On-site: A screen plant, crusher, wheel loader, and dozer were observed on site (see **Photo 5**).

Signs and Markers: The permit sign was properly posted at the scale house (see **Photo 6**) and boundary markers were observed to delineate the permit boundary (see **Photo 7**).

Permit Stipulations: There are no permit stipulations.

Storm Water MGT Plan: No oil or fuel spills observed. Stormwater drains to the east sediment pond pit and infiltrates.

Topsoil: A topsoil stockpile was observed on the west end of the site (see **Photo 8**).

Structures: No structures were observed within 200 feet of the affected area.

Summary: Please review the enclosed bond estimate. **The Division will send a surety increase letter after two weeks.** The required amendment application is due on January 18, 2019.

Please contact Tim Cazier (303)866-3567 ext. 8169 or email at [tim.cazier@state.co.us](mailto:tim.cazier@state.co.us) if you have any questions regarding this report or bond estimate.

## **PHOTOGRAPHS**



Photo 1. Typical visual berm (south side, west end, looking east).



**PHOTOGRAPHS (cont.)**



Photo 2. Reclaimed visual berm (south side, east end, looking SE).



Photo 3. Observable (above visual berms) product stockpile (south side, looking NW).



**PHOTOGRAPHS (cont.)**



Photo 4. Reclaimed east end (Phases II through VI, looking east).



Photo 5. Active mining and equipment (central area, looking east).



**PHOTOGRAPHS (cont.)**



Photo 6. Permit sign.



Photo 7. Typical permit boundary marker (north of entrance road, looking north).

**PHOTOGRAPHS (cont.)**



Photo 8. Topsoil stockpile (looking east from west end).

**GENERAL INSPECTION TOPICS**

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <b>PB</b>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>NA</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <b>PB</b>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>NA</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>NA</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / **PB = Problem cited** / PV = Possible violation cited

**Inspection Contact Address**

Raymond F. & Robert W. Dellacroce  
2210 West Baptist Road  
Colorado Springs, CO 80921

Enclosures

ec: DRMS file  
Julie Sevier, Pioneer Sand Company  
Jason Ulmer, Pioneer Sand Company

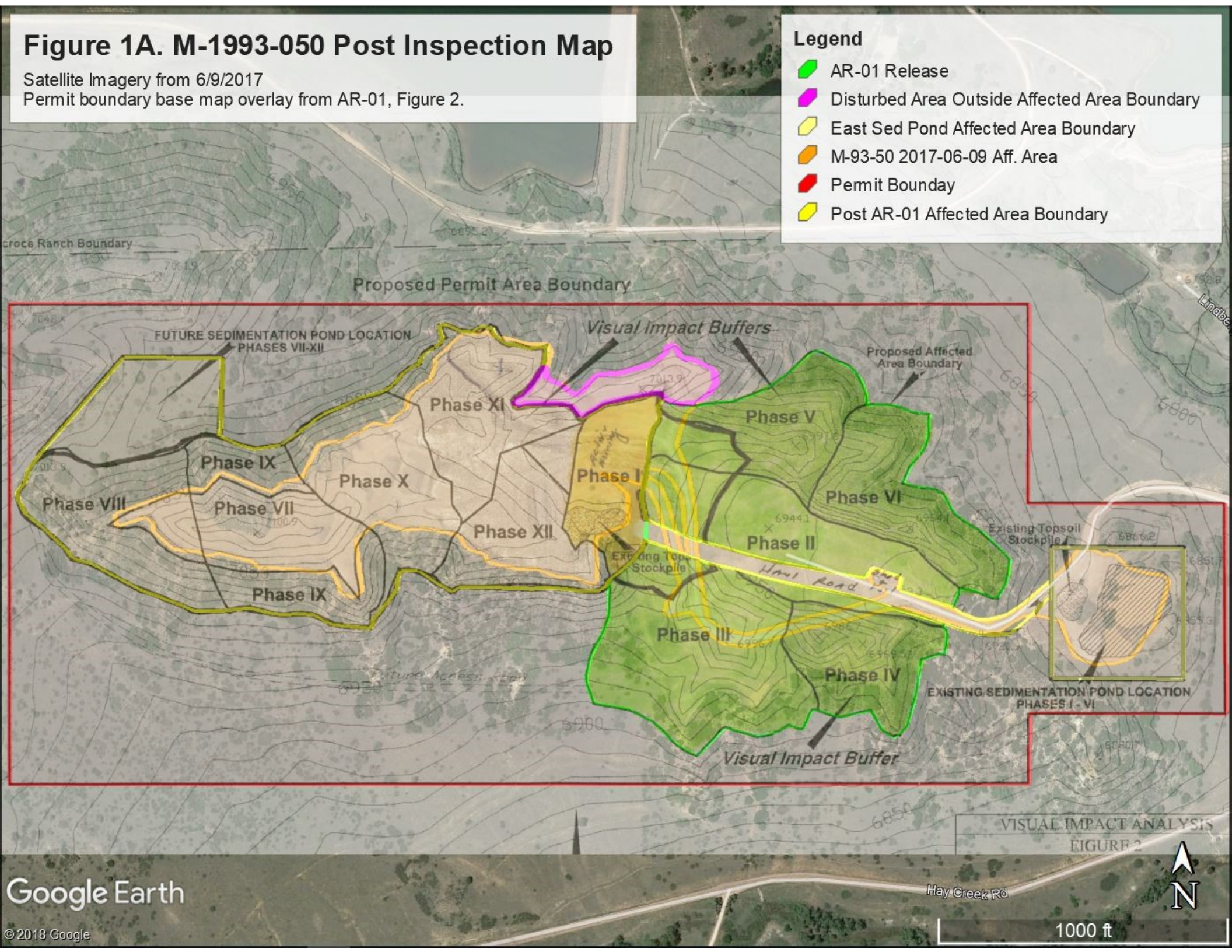


# Figure 1A. M-1993-050 Post Inspection Map

Satellite Imagery from 6/9/2017  
Permit boundary base map overlay from AR-01, Figure 2.

## Legend

- AR-01 Release
- Disturbed Area Outside Affected Area Boundary
- East Sed Pond Affected Area Boundary
- M-93-50 2017-06-09 Aff. Area
- Permit Boundary
- Post AR-01 Affected Area Boundary



VISUAL IMPACT ANALYSIS  
FIGURE 2



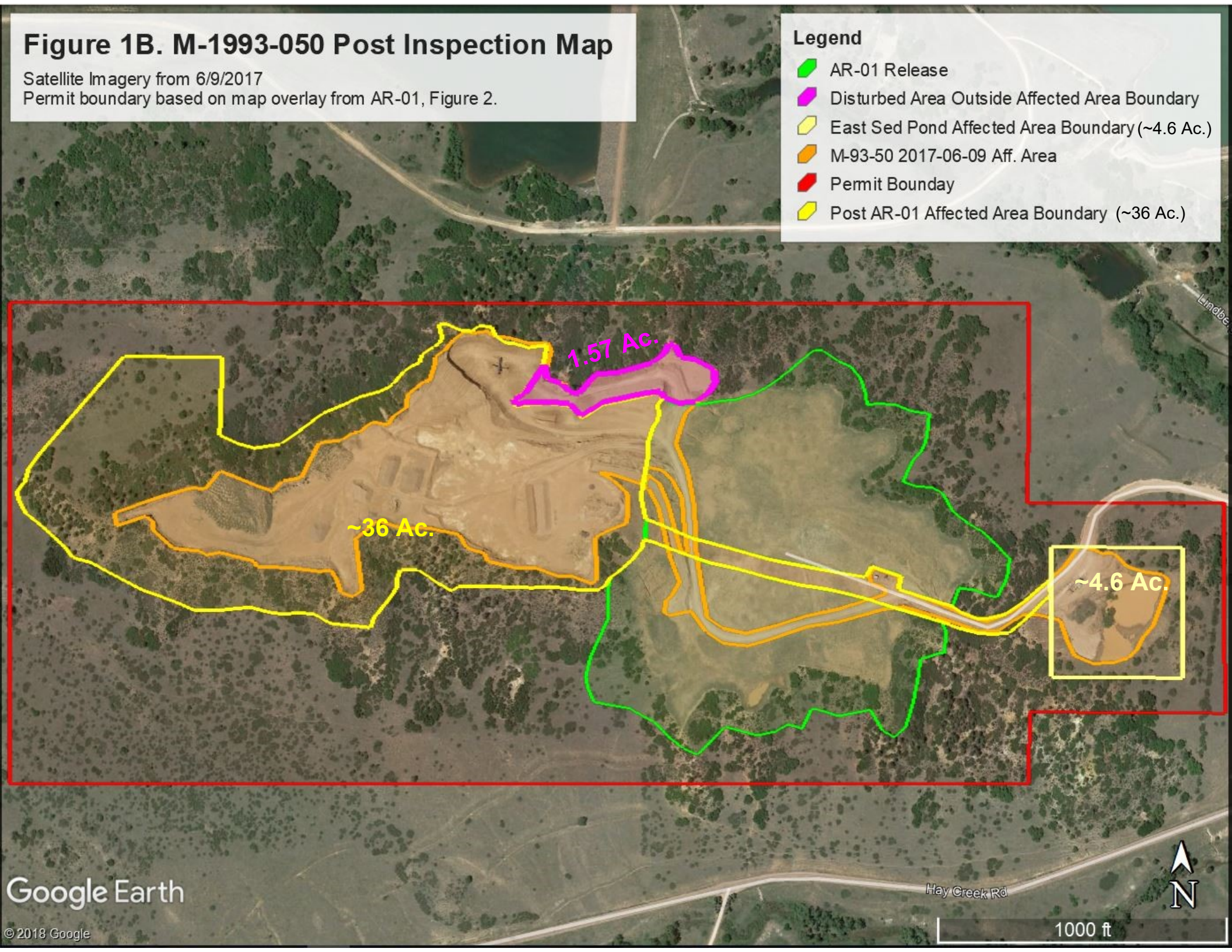


# Figure 1B. M-1993-050 Post Inspection Map

Satellite Imagery from 6/9/2017  
Permit boundary based on map overlay from AR-01, Figure 2.

## Legend

- AR-01 Release
- Disturbed Area Outside Affected Area Boundary
- East Sed Pond Affected Area Boundary (~4.6 Ac.)
- M-93-50 2017-06-09 Aff. Area
- Permit Boundary
- Post AR-01 Affected Area Boundary (~36 Ac.)



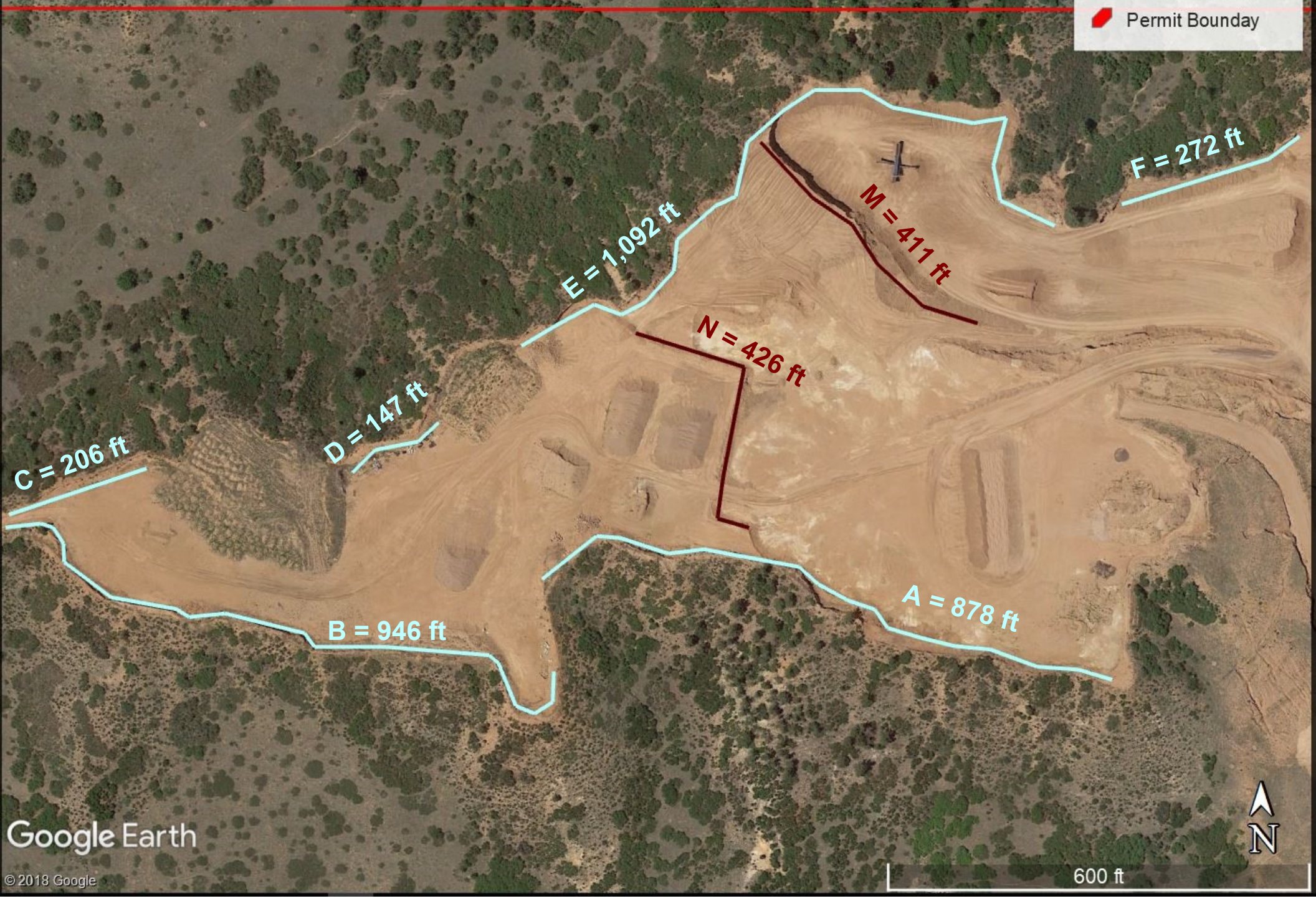


# Figure 2. M-1993-050 Highwall Delineation Map

Satellite Imagery from 6/9/2017

## Legend

- Boundary Highwall
- Internal Highwall
- Permit Boundary





## COST SUMMARY WORK

Task description: Cost Summary

Site: Dellacroce Pit

Permit Action: 2018 Surety Update

Permit/Job#: M1993050

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 11/19/2018

County: El Paso

Filename: M050-000

User: TC1

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Cut interior highwalls to 3H:1V	DOZER	1	9.20	\$2,090.00
002	Pull down perimeter highwalls	EXCAVATE	1	10.68	\$1,942.00
003	Apply 6 inches of topsoil over 25 acres	TRUCK1	1	47.61	\$23,253.00
004	Reveg 25 Acres	REVEGE	1	40.00	\$28,053.00
005	Mob/Demob	MOBILIZE	1	2.60	\$3,605.00
<b><u>SUBTOTALS:</u></b>				<b>110.09</b>	<b>\$58,943</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$1,190.65

Performance bond: 1.05

Total = \$618.90

Job superintendent: 55.05

Total = \$4,021.04

Profit: 10.00

Total = \$5,894.30

TOTAL O & P = \$11,724.89

CONTRACT AMOUNT (direct + O & P) = \$70,667.89

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.00

\$3,533.39

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$15,258.28

**TOTAL BOND AMOUNT (direct + indirect) = \$74,201.28**

**TOTAL BOND AMOUNT ROUNDED (direct + indirect) = \$74,200.00**



**BULLDOZER WORK**Task description: **Cut interior highwalls to 3H:1V**Site: **Dellacroce Pit**Permit Action: **2018 Surety Update**Permit/Job#: **M1993050****PROJECT IDENTIFICATION**Task #: **001**  
Date: **11/19/2018**  
User: **TC1**State: **Colorado**  
County: **El Paso**Abbreviation: **None**  
Filename: **M050-001**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**  
Horsepower: **310**  
Blade Type: **Semi-Universal**  
Attachment: **1-shank ripper**  
Shift Basis: **1 per day**  
Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$12.36	NA
Ripper op. Cost/Hour:	\$7.67	100
Operator Cost/Hour:	\$40.23	NA
Total unit Cost/Hour:	\$227.23	
Total Fleet Cost/Hour:	<b>\$227.23</b>	

**MATERIAL QUANTITIES**Initial Volume: **3,270**  
Swell factor: **1.060**  
Loose volume: **3,466 LCY**Source of estimated volume: **Google Earth & site photos; Task 001.1 spreadsheet**Source of estimated swell  
factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**  
Unadjusted hourly  
production: **852.6 LCY/hr**Materials consistency description: **Consolidated stockpile 1.0**Average push  
gradient: **0 %**  
Average site altitude: **6,950 feet**Material weight: **2,850 lbs/LCY**Weight description: **Gravel - Dry (1/4" - 2" diam.)**

Job Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.807	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4421

Adjusted unit  
production: 376.93 LCY/hr  
Adjusted fleet  
production: **376.93** LCY/hr

**JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.603/LCY

Total job time: **9.20** Hours  
Total job cost: **\$2,090**





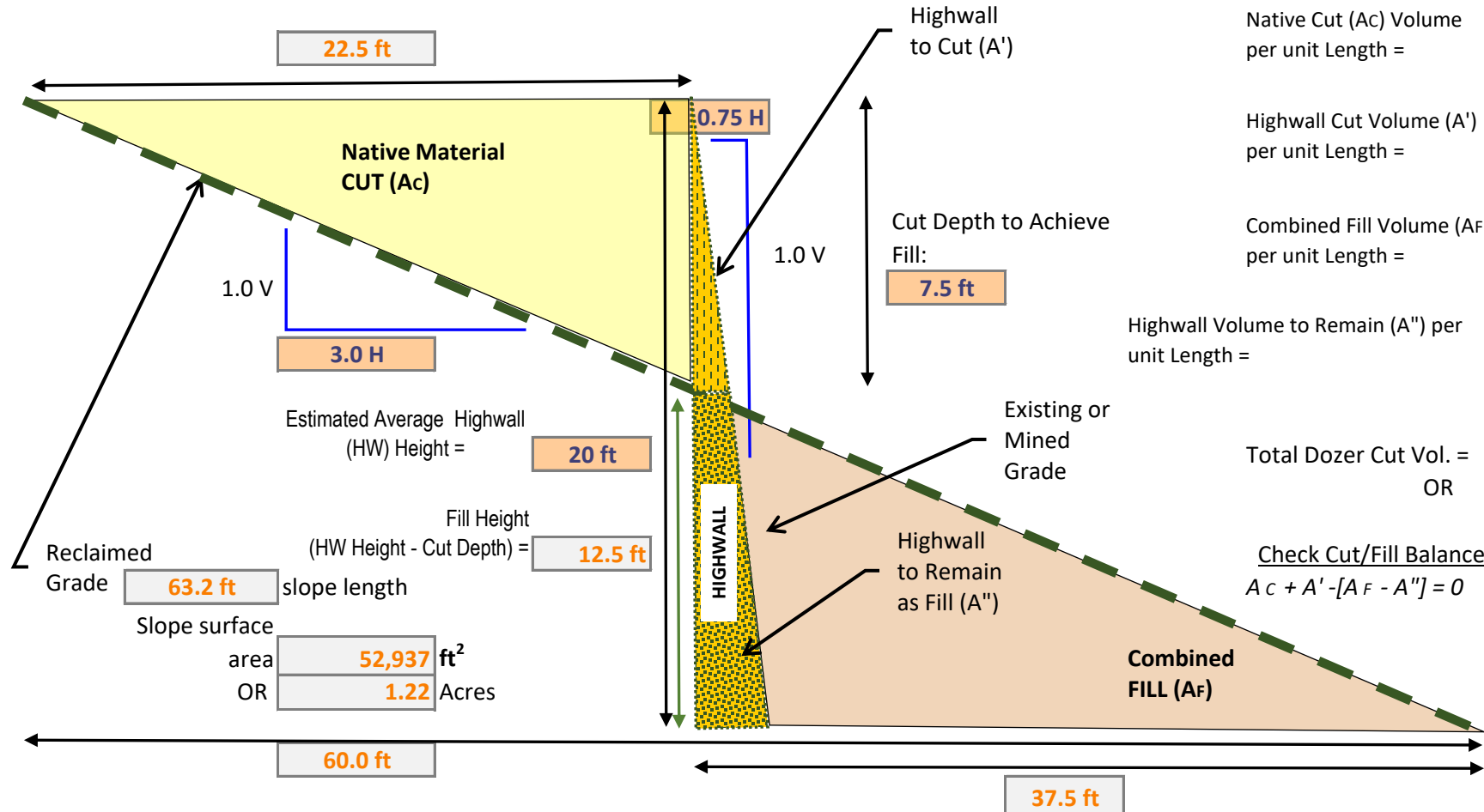
### Task # 001.1 Highwall Backfill Volume Estimate - Dozer

PROJECT: Dellacroce Pit  
PERMIT No.: M-1993-050  
HIGHWALL LOCATION: Internal Highwalls

#### LEGEND

Input

Result



### HIGHWALL CUT - FILL VOLUME ESTIMATE

## HYDRAULIC EXCAVATOR WORK

Task description: Pull down perimeter highwalls

Site: Dellacroce Pit

Permit Action: 2018 Surety Update

Permit/Job#: M1993050

### PROJECT IDENTIFICATION

Task #: 002

State: Colorado

Abbreviation: None

Date: 11/19/2018

County: El Paso

Filename: M050-002

User: TC1

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat 345D L 12'-10"

Stick

Horsepower: 380

Attachment 1: ROPS Cab

Weight (MT): 49.37

Shift Basis: 1 per day

Data Source: (CRG)

### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$66.64	NA
Operating Cost/Hour:	\$78.14	100
Operator Cost/Hour:	\$36.93	NA
Total Unit Cost/Hour:	\$181.72	
Total Fleet Cost/Hour:	\$181.72	

### MATERIAL QUANTITIES

Initial volume: 4,980

CCY

Swell factor: 1.125

Loose volume: 5,603

LCY

Source of estimated volume: Google Earth 2017 & site photos; Task 002.1 spreadsheet

Source of estimated swell factor: Cat Handbook

### HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description:	<u>AVERAGE</u>
Secondary Job Condition within Basic Description:	<u>AVERAGE</u>
Cycle Time Value:	<u>0.315</u> minutes

### Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity:	<u>3.14</u>	LCY (heaped)
Bucket Fill Factor:	<u>1.100</u>	Other - rock/dirt mixtures (100-120%) <u>1.100</u>
Adjusted Capacity:	<u>3.45</u>	LCY

### Job Condition Correction Factors

Site Altitude: 6950 feet

		Source
Altitude Adj:	<u>0.96</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.80</u>	multiplier

Unadjusted Hourly Unit Production:	<u>657.90</u>	LCY/Hour
Adjusted Hourly Unit Production:	<u>524.22</u>	LCY/Hour
Adjusted Hourly Fleet Production:	<u>524.22</u>	LCY/Hour

### JOB TIME AND COST

Fleet size:	<u>1</u>	Excavator	Total job time:	<u>10.69</u>	Hours
Unit cost:	<u>\$0.347</u>	/LCY	Total job cost:	<u>\$1,942</u>	





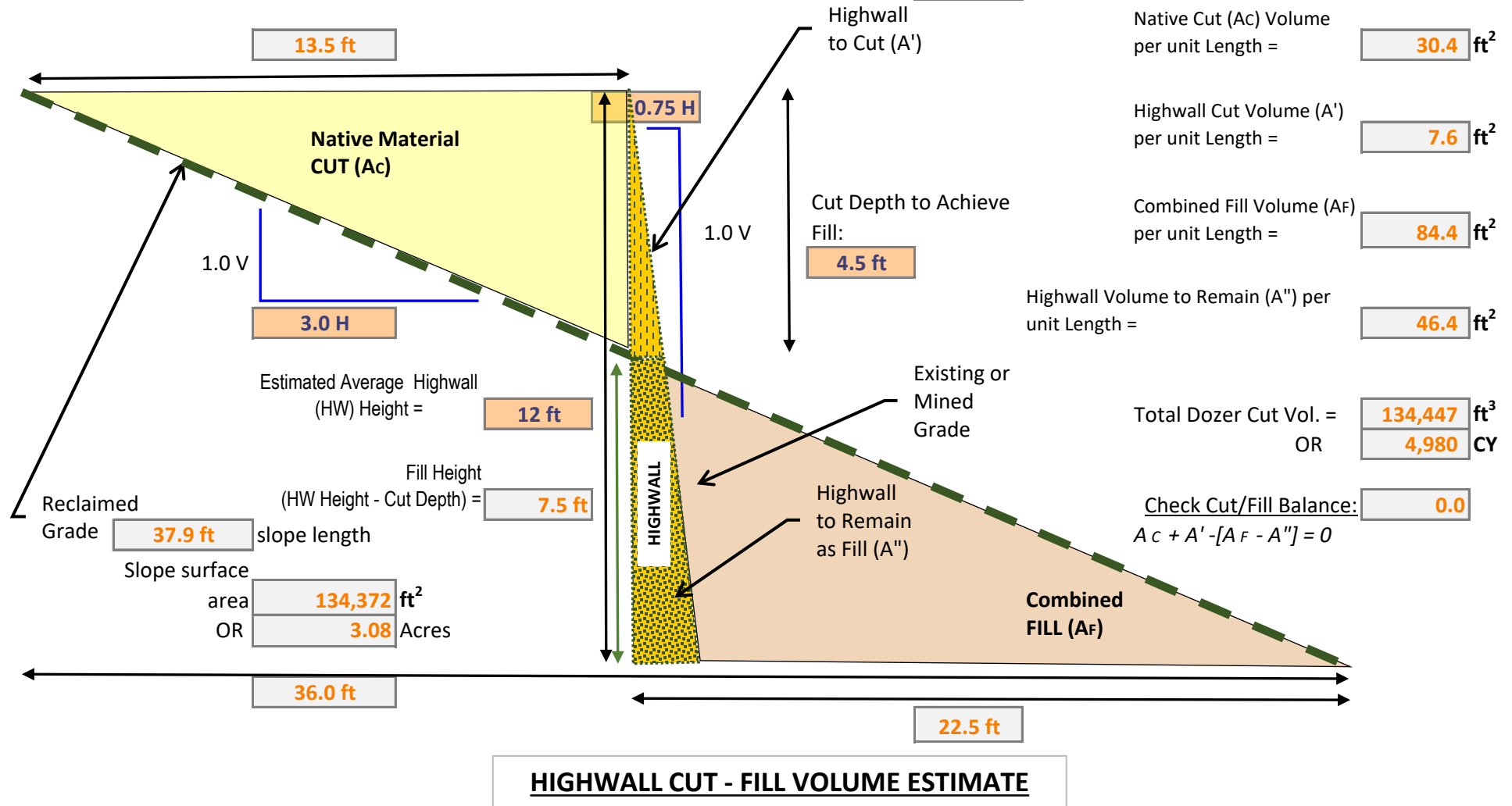
### Task # 002.1 Highwall Backfill Volume Estimate - Excavator

PROJECT: Dellacroce Pit  
PERMIT No.: M-1993-050  
HIGHWALL LOCATION: Perimeter Highwalls

#### LEGEND

Input

Result



**TRUCK/LOADER TEAM WORK**Task description: Apply 6 inches of topsoil over 25 acresSite: Dellacroce PitPermit Action: 2018 Surety UpdatePermit/Job#: M1993050**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 11/19/2018County: El PasoFilename: M050-003User: TC1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Generic 12-18 cy, 6x4
-Loader:	CAT 938H
Support Equipment -Load Area:	NA
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

**Cost Breakdown:**

	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	100	NA	NA
Ownership cost/hour:	\$22.72	\$25.88	NA	\$93.62	NA	NA
Operating cost/hour:	\$44.95	\$32.57	NA	\$73.35	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	NA	NA
Operator cost/hour:	\$25.65	\$36.13	NA	\$40.23	NA	NA
Unit Subtotals:	\$93.31	\$94.57	NA	\$207.20	NA	NA
Number of Units:	2	1	0	1	0	0
Group Subtotals:	Work: \$281.19		Support: \$207.20		Maint: \$0.00	

Total work team cost/hour: \$488.39**MATERIAL QUANTITIES**Initial volume: 20,167

CCY

Swell factor: 1.000Loose volume: 20,167

LCY

Source of estimated volume: Calculation: 6 inches over 25 acresSource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$0.00Total Cost: \$0.00**HOURLY PRODUCTION****Truck Capacity:****Truck Payload (weight) Basis:**Material weight: 1,600

Pounds/LCY

Description: Top SoilRated Payload: 50,300

Pounds

Payload Capacity: 31.44

LCY

**Truck Bed (volume) Basis:**

Struck Volume:	12.00	LCY
Heaped Volume:	18.00	LCY
Average Volume:	15.00	LCY
Adjusted Volume:	18.00	LCY

Final Truck Volume Based on Number of Loader Passes: 17.16 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	3.900	LCY (heaped)
Bucket Fill Factor:	1.100	Other - rock/dirt mixtures (100-120%) 1.100
Adjusted Capacity:	<b>4.290</b>	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 6950 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	<b>0.830</b>	<b>0.830</b>	

**Loading Tool Cycle Time:**

Number of Loading Tool Passes Required to Fill  
Truck: 4 passes

**Excavators and Front Shovels:**

Machine Cycle Time vs. Job Condition Rating: NA  
Selected Value within this Basic Rating: NA

Track Loaders – Material Description: \_\_\_\_\_

**Cycle Time Elements (min.):**

Load: NA      Maneuver: NA      Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.483 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders - 0.04	-0.040	(Cat HB)
Operation:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)

Net Cycle Time Adjustment: -0.010 minutes  
Adjusted Loader Cycle Time: **0.473** minutes  
Net Load Time per Truck: **1.518** minutes

**Truck Cycle Time:**

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.518	Minutes	Adjusted for site altitude:	1.518	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes



Truck Travel (Haul & Return) Time:  
maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered.

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	900.00	-3.00	3.00	0.00	2938	0.426

Haul Time: **0.426** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	900.00	3.00	3.00	6.00	2736	0.364

Return Time: **0.364** minutes

Total Truck Cycle Time: **3.708** minutes

Loading Tool unit					
Production	<u>510.33</u>	LCY/Hour	Adjusted for job efficiency:	<u>423.58</u>	LCY/Hour
Truck Unit Production	<u>277.71</u>	LCY/Hour	Adjusted for job efficiency:	<u>230.50</u>	LCY/Hour
Optimal No. of Trucks:	<u>2</u>	Truck(s)	Selected Number of Trucks:	<u>2</u>	Truck(s)
			Adjusted hourly truck team production:	<u>460.99</u>	LCY/Hour
			Adjusted single truck/loader team production:	<u>423.58</u>	LCY/Hour
			Adjusted multiple truck/loader team production:	<b><u>423.58</u></b>	LCY/Hour

### **JOB TIME AND COST**

Fleet size: 1 Team(s) Total job time: **47.61** Hours

Unit cost: \$1.153 /LCY Total job cost: **\$23,253**

**REVEGETATION WORK**Task description: Reveg 25 AcresSite: Dellacroce PitPermit Action: 2018 Surety UpdatePermit/Job#: M1993050**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 11/19/2018County: El PasoFilename: M050-004User: TC1Agency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
6-24-24, 10-20-10, 15-15-15	6.00	pound	\$0.27	\$1.62
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$1.62</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$34.72
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$34.72</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$106.29
<b>Total Tilling Cost/Acre</b>	<b>\$106.29</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Smooth Brome - Lincoln	2.00	6.66	\$8.72
Intermediate Wheatgrass - Oahe	2.00	4.27	\$7.86
Slender Wheatgrass - San Luis	0.80	2.92	\$2.65
Thickspike Wheatgrass - Critana	0.80	2.83	\$4.70
Western Wheatgrass - Arriba	2.40	6.06	\$19.87
<b>Totals Seed Mix</b>	<b>8.00</b>	<b>22.74</b>	<b>\$43.80</b>

**Application**

Description	Cost /Acre
-------------	------------

	\$0.00
<b>Total Seed Application Cost/Acre</b>	<b>\$0.00</b>

## MULCHING and MISCELLANEOUS

## Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$288.00	\$576.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$576.00</b>

## Application

Application	
Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$68.78
<b>Total Mulch Application Cost/Acre</b>	<b>\$68.78</b>

## NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

## JOB TIME AND COST

No. of Acres:	25	Cost /Acre:	\$831.21
Estimated Failure Rate:	35%	Cost /Acre*:	\$831.21
*Selected Replanting Work Items:	FERTILIZING,TILLING,SEEDING, MULCHING		

Initial Job Cost:	<b>\$20,780.25</b>
Reseeding Job Cost:	<b>\$7,273.09</b>
Total Job Cost:	<b>\$28,053</b>
Job Hours:	<b>40.00</b>



**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mob/Demob**Site: **Dellacroce Pit**Permit Action: 2018 Surety UpdatePermit/Job#: M1993050**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 11/19/2018County: El PasoFilename: M050-005User: TC1Agency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,  
400 HP (2ND HALF, 2006)Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT  
TRAILER (25T, 50T, AND 100T)**Cost Breakdown:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

**NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	47.71	\$93.62	\$117.55	1	\$211.17	\$117.55	\$250.00
Cat 345D L 12'- 10" Stick	54.31	\$66.64	\$125.45	1	\$192.09	\$125.45	\$250.00
CAT 938H	16.34	\$25.88	\$88.67	1	\$114.55	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00

Subtotals: **\$622.02** **\$420.34** **\$1,000.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 12-18 cy, 6x4	\$93.32	2	\$186.64	\$186.64

Subtotals: **\$186.64** **\$186.64**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>COLORADO SPRINGS</u>	
Total one-way travel distance:	<u>20.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$3,455.91</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$149.31</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.40</u>	<u>0.40</u>
Return Time (Hours):	<u>0.40</u>	<u>0.40</u>
Loading Time (Hours):	<u>0.25</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.25</u>	<u>NA</u>
Subtotals:	<u>1.30</u>	<u>0.80</u>

**JOB TIME AND COST**

Total job time: 2.60 Hours

Total job cost: \$3,605