COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

October 31, 2024

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RE: Piceance Pit, Permit No. M-2001-077, Reclamation Cost Estimate SO-6

This reclamation cost updated was in response SO-6 and the site inspection conducted on October 24, 2024. It is Division policy to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

The bond was last recalculated in 2023 with SI-1. Significant activity has occurred on site since the previous calculation. Below is a table summarizing input values. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation plan.

Assumptions:

- Site is 34.13 ac w/ 4.5 ac undisturbed. Pit/pond footprint is 15 ac
- All slopes go to a 3H: 1V or less

Task	Form Used	Description
01a	Demo	Remove Scale footers 70' x 15'
02a	Pumping	Dewater 12 ac pond approx. 10 ft prior to grading *Worst Case this would be required if site was abandoned
03a	Dozer	Highwall Grading to 3H: 1V = 9,196 BCY N: 800 LF @20'H 1H: 1V to 3H: 1V cut/fill = 2,963BCY E: 900LF @20'H Vert to 3H: 1V cut/fill = 4,983 BCY, SE: 600 LF @ 15'H 1H: 1V to 3H: 1V cut/fill = 1,250 BCY
04a	Ripper	Decompact pit stockpile areas 15 ac
05a	Truck	Spread topsoil 8" over 17.63 ac = 18,962 CCY Avg distance 1000 LF away 34.13ac - 12 ac pond- 4.5ac undisturbed = 17.63 ac
06a	Reveg	Reveg all areas where Topsoil was applied

		Riparian Mix – 3,100 LF perimeter of pond x 20ft (partially above and below water) total of 1.42 ac
06b	Reveg	Upland Mix – (17.63 ac topsoiled–1. 24 ac wetland) 16.21 ac (stockpile area and perimeter berms)
10a	Mob	Initial Mobilization – Updated equipment teams utilized
10b	Mob	Secondary Mobilization
Indirect		DRMS Standard Overhead Costs: Liability insurance, performance bond, profit, administration, Legal, Engineering and Project Management

Please feel free to contact me with any further questions.

Sincerely,

Amy Yeldell

Amy Yeldell
Environmental Protection Specialist

COST SUMMARY WORK

Task description: **Bond updated for SO-6**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: ACY State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-ACY
User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demo structures	DEMOLISH	1	5.50	$1,088
02a	Dewater Pit	PUMPING	1	445.59	$16,278
03a	Regrade highwalls to 3H: 1V	DOZER	2	9.07	$5,836
04a	Decompact stockpile areas	RIPPER	1	24.14	$8,309
05a	Transport and spread topsoil	TRUCK1	1	51.42	$57,230
06a	Reveg Riparian Areas	REVEGE	1	3.00	$1,494
06b	Reveg Upland Areas	REVEGE	1	24.00	$19,515
10a	Initial Mobilization	MOBILIZE	1	11.60	$20,701
10b	Secondary Mobilization	MOBILIZE	1	11.60	$2,722
	SUBTOTALS:			**585.92**	**$133,173**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$2,690
Performance bond:	1.05	Total =	$1,398
Job superintendent:	292.96	Total =	$23,223
Profit:	10.00	Total =	$13,317
		TOTAL O & P =	$40,629
		CONTRACT AMOUNT (direct + O & P) =	$173,802

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$500	Total =	$500
Engineering work and/or contract/bid preparation:	4.25	Total =	$7,387
Reclamation management and/or administration:	5.00		$8,690
CONTINGENCY:	3.00	Total =	$3,995
		TOTAL INDIRECT COST =	$61,200
		TOTAL BOND AMOUNT (direct + indirect) =	**$194,373**

DEMOLITION WORK

Task description: **Demo structures**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 01A State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-01a
User: ACY

Agency or organization name: DRMS

UNIT COSTS **Location adjustment: 89.80 %**

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale footers	70' x 15'	Demo. and on-site disposal in existing pit, 1.5 ft. x 2 ft. - Max. 200 ft. push	170.00	LF	$7.13	$1,212.13

Job Hours: 5.50 **Subtotal (unadjusted): $1,212.13** **Total Cost (adjusted for location): $1,088.49**

PUMPING WORK

Task description: **Dewater Pit**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-02a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Submersible pump - 460v, 6 in.	1
Attachment 1:	Suction hose - 6 in. diam., 25 ft.	2
Attachment 2:	Discharge hose - 6 in. D., 25 ft.	6
Labor Unit 1:	Pump operator	1

Horsepower: 60
Shift Basis: 1 per day
Weight: 0.45
(US Tons)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$10.44	NA
Operating Cost/Hour:	$4.02	100
Operator Cost/Hour:	$22.07	NA
Total Unit Cost/Hour:	$36.53	

Total Fleet Cost/Hour: $36.53

PUMPING QUANTITIES

Initial Pond Volume: 120.00
Final Pond Volume: **39,102,069.60** gallons
Total Pond Inflow Surface Area: 450,500 Sq. ft.
Total Pond Inflow Volume per Hour: 79,197.90 gallons

Conversion factor: 325850.5800
Unit inflow rate in gph/sq. ft.: 0.1758

Source of estimated volume: 12 ac pond 10 ft deep bottom inflow

PUMPING TIME

Maximum Pump Capacity:	130,000	gph/pump
Estimated Suction Head:	5	feet
Estimated Discharge Head:	15	feet
Total Head:	20	feet
CPB Pump Capacity:	129,600	gph/pump
Site Altitude:	5,700	feet

Adjusted Pumping Capacity:	129,600	gph
Initial Unadjusted Pumping Time:	301.71	hours
Inflow during Initial Pumping:	23,895,076	gallons
Net Unadjusted Pumping Time:	486.09	Hours
Altitude Adjustment Factor:	1.0000	(3% rule)
Pump Efficiency Factor:	0.9167	(55 min./hr.)
Total Adjusted Pumping Time:	445.60	hours

JOB TIME AND COST

Total job time: **445.60** Hours

Unit cost: $0.000258 /Gallon Total job cost: **$16,278**

BULLDOZER WORK

Task description: **Regrade highwalls to 3H: 1V**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-03a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Horsepower: 310
Blade Type: Semi-Universal
Attachment: NA
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $321.62
Total Fleet Cost/Hour: **$643.23**

MATERIAL QUANTITIES

Initial Volume: 9,196
Swell factor: 1.250
Loose volume: **11,495** LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 75 feet
Unadjusted hourly production: 1,017.1 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -30 %
Average site altitude: 5,700 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% Earth

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6228

Adjusted unit production: 633.45 LCY/hr
Adjusted fleet production: **1266.9** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.508/LCY

Total job time: **9.07** Hours
Total job cost: **$5,836**

BULLDOZER RIPPING WORK

Task description: **Decompact stockpile areas**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-04a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper Ownership Cost/Hour:	$14.53	NA
Ripper Operating Cost/Hour:	$7.95	100
Operator Cost/Hour:	$38.59	NA
Total Unit Cost/Hour:	$344.10	

Total Fleet Cost/Hour: **$344.10**

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 15.00 acres Rip Depth (ft): 2.00 Volume: 48,400 BCY or CCY

Source of estimated quantity: Staff estimates

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	2.56	feet/pass
Average Ripping Width:	7.08	feet/pass
Average Ripping Length:	150.00	feet/pass
Average Dozer Speed:	88.00	feet/minute
Average Maneuver Time:	0.25	minutes/pass
Production per unit area:	0.748	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.748 Acres/hr

Site Altitude:	5,700	feet
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Adjusted Hourly Unit Production: 0.62 Acres/hr
Adjusted Hourly Fleet Production: **0.62** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **24.15** Hours

Unit cost: $553.942 Per acre Total job cost: **$8,309**

TRUCK/LOADER TEAM WORK

Task description: **Transport and spread topsoil**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-05a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Shift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Cat 730
-Loader:	CAT 972H
Support Equipment -Load Area:	Cat D8T - 8SU
-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	20	100	NA	NA
Ownership cost/hour:	$108.67	$62.43	$173.32	$173.32	NA	NA
Operating cost/hour:	$66.26	$57.98	$21.94	$109.71	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	$0.00	$0.00	$0.00	NA	NA
Ripper op. cost/hour:	NA	$0.00	$0.00	$0.00	NA	NA
Operator cost/hour:	$25.24	$36.85	$38.59	$38.59	NA	NA
Unit Subtotals:	$200.17	$157.26	$233.85	$321.62	NA	NA
Number of Units:	2	1	1	1	0	0
Group Subtotals:	Work:	$557.60	Support:	$555.47	Maint:	$0.00

Total work team cost/hour: **$1,113.07**

MATERIAL QUANTITIES

Initial volume: 18,962 CCY Swell factor: 1.215
Loose volume: **23,039** LCY

Source of estimated volume: 17.63 ac @ 8”
Source of estimated swell factor: Cat Handbook
Material Purchase Cost: $0.00
Total Cost: $0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 1,600 Pounds/LCY
Description: Top Soil
Rated Payload: 62,000 Pounds
Payload Capacity: 38.75 LCY

Truck Bed (volume) Basis:

Struck Volume:	17.10	LCY
Heaped Volume:	22.10	LCY
Average Volume:	19.60	LCY
Adjusted Volume:	22.10	LCY

Final Truck Volume Based on Number of Loader Passes: **17.64** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.600	LCY (heaped)
Bucket Fill Factor:	1.050	Other - moist loam (100-110%) 1.050
Adjusted Capacity:	**5.880**	LCY

Job Condition Corrections: Site Altitude (ft.): 5700 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	**0.830**	**0.830**	

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 3 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): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 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:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
	Net Cycle Time Adjustment:	-0.050	minutes
	Adjusted Loader Cycle Time:	**0.475**	minutes
	Net Load Time per Truck:	**1.050**	minutes

Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.050	Minutes	Adjusted for site altitude:	1.050	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

Truck Travel (Haul & Return) Time: Road Condition: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	4.00	4.00	1774	0.753

Haul Time: **0.753** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	4.00	4.00	2855	0.518

Return Time: **0.518** minutes
Total Truck Cycle Time: **3.921** minutes

Loading Tool unit Production 641.45 LCY/Hour Adjusted for job efficiency: 532.41 LCY/Hour

Truck Unit Production 269.93 LCY/Hour Adjusted for job efficiency: 224.04 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 448.09 LCY/Hour
Adjusted single truck/loader team production: 448.09 LCY/Hour
Adjusted multiple truck/loader team production: **448.09** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **51.42** Hours

Unit cost: $2.484 /LCY Total job cost: **$57,230**

REVEGETATION WORK

Task description: **Reveg Riparian Areas**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 06A State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-06a
User: ACY

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			$	$
			Total Fertilizer Materials Cost/Acre	**$0.00**

Application

Description	Cost /Acre
	$
Total Fertilizer Application Cost/Acre	**$0.00**

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	$117.61
Total Tilling Cost/Acre	**$117.61**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	$29.08
Streambank Wheatgrass - Sodar	5.50	17.93	$45.66
Western Wheatgrass - Rosanna	8.00	20.20	$70.20
Saltgrass, Inland	1.50	20.79	$74.76
Tufted Hairgrass	1.00	57.39	$28.48
Basin Wildrye - Trailhead	5.00	20.32	$65.07
Totals Seed Mix	22.00	175.66	**$313.26**

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	$236.64
Total Seed Application Cost/Acre	**$236.64**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$4.13	$4.13
Total Mulch Materials Cost/Acre				**$4.13**

Application

Description	Cost /Acre
Weed spray, truck, aquatic area, nox. [DMG]	$79.77
Total Mulch Application Cost/Acre	**$79.77**

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: 1.42 Cost /Acre: $751.41
Estimated Failure Rate: 40% Cost /Acre*: $751.41
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$1,067.00**
Reseeding Job Cost: **$426.80**
Total Job Cost: **$1,494**
Job Hours: **3.00**

REVEGETATION WORK

Task description: **Reveg Upland Areas**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 06B State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-06b
User: ACY

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			$	$
			Total Fertilizer Materials Cost/Acre	**$0.00**

Application

Description	Cost /Acre
	$
Total Fertilizer Application Cost/Acre	**$0.00**

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	$117.61
Total Tilling Cost/Acre	**$117.61**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	6.00	19.42	$103.33
Bluebunch Wheatgrass - Secar	6.00	19.28	$63.08
Bottlebrush Squirreltail	4.50	19.83	$114.32
Sandberg Bluegrass - VNS	1.50	31.85	$21.67
Streambank Wheatgrass - Sodar	5.50	17.93	$45.66
Western Wheatgrass - Rosanna	8.00	20.20	$70.20
Totals Seed Mix	31.50	128.52	**$418.27**

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	$236.64
Total Seed Application Cost/Acre	**$236.64**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$4.13	$4.13
Total Mulch Materials Cost/Acre				**$4.13**

Application

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	$83.26
Total Mulch Application Cost/Acre	**$83.26**

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: 16.21 Cost /Acre: $859.91
Estimated Failure Rate: 40% Cost /Acre*: $859.91
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$13,939.14**
Reseeding Job Cost: **$5,575.66**
Total Job Cost: **$19,515**
Job Hours: **24.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Initial Mobilization**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 10A State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-10a
User: ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck 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:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	$10.44	$22.18	$23.94
Operating Cost/Hour:	$26.48	$54.55	$55.65
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$23.53	$23.53
Total Unit Cost/Hour:	$59.44	$122.78	$125.64

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
Submersible pump - 460v, 6 in.	0.45	$8.79	$59.44	1	$68.23	$59.44	$250.00
Cat 307D 7'-3" Stick	7.95	$281.20	$59.44	1	$340.64	$59.44	$250.00
Cat D8T - 8SU	53.08	$187.85	$125.64	2	$626.98	$251.28	$750.00
Drill/Broadcast Seeder with Tractor	25.00	$41.02	$59.44	1	$100.46	$59.44	$250.00
Cat 730	25.19	$108.67	$59.44	2	$336.22	$118.88	$500.00
CAT 972H	28.00	$62.43	$122.78	1	$185.21	$122.78	$250.00
Subtotals:					**$1,657.74**	**$671.26**	**$2,250.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 30K GVW	$94.44	1	$94.44	$94.44
Light Duty Pickup, 4x4, 1 T. Crew	$130.54	2	$261.08	$261.08
Subtotals:			**$355.52**	**$355.52**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	120.00	miles
Average Travel Speed:	50.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$18,994.68
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$1,706.50

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	2.40	2.40
Return Time (Hours):	2.40	2.40
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	5.80	4.80

JOB TIME AND COST

Total job time:	**11.60**	Hours
Total job cost:	**$20,701**	

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Secondary Mobilization**

Site: **Piceance Pit** Permit Action: SO-6 Permit/Job#: M2001077

PROJECT IDENTIFICATION

Task #: 10B State: Colorado Abbreviation: None
Date: 10/31/2024 County: Rio Blanco Filename: M077-10b
User: ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck 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:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	$10.44	$22.18	$23.94
Operating Cost/Hour:	$26.48	$54.55	$55.65
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$23.53	$23.53
Total Unit Cost/Hour:	$59.44	$122.78	$125.64

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
Drill/Broadcast Seeder with Tractor	25.00	$41.02	$59.44	1	$100.46	$59.44	$250.00
Subtotals:					**$100.46**	**$59.44**	**$250.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	$130.54	2	$261.08	$261.08
Subtotals:			**$261.08**	**$261.08**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	120.00	miles
Average Travel Speed:	50.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$1,468.44
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$1,253.18

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	2.40	2.40
Return Time (Hours):	2.40	2.40
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	5.80	4.80

JOB TIME AND COST

Total job time:	**11.60**	Hours
Total job cost:	**$2,722**	