

COST SUMMARY WORK

Task description: Bond Estimate October 2021

Site: Lombard #3 Permit Action: 2021 Bond Estimate
Revised

Permit/Job#: M2020057

PROJECT IDENTIFICATION

Task #: 00R State: Colorado Abbreviation: None
Date: 10/11/2021 County: Clear Creek Filename: M057-00R
User: PSH

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01R	Mob / Demob	MOBILIZE	1	20.57	\$2,302
02R	Backfill Adit	MINESEAL	1	16.00	\$1,954
03R	Revegetate 0.918 Acres	REVEGE	1	16.00	\$3,594
04R	Replace Topsoil 4-6" - 0.918 Acres	DOZER	1	14.45	\$1,392
<u>SUBTOTALS:</u>				67.02	\$9,242

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$187
Performance bond:	1.05	Total =	\$97
Job superintendent:	33.51	Total =	\$2,414
Profit:	10.00	Total =	\$924

TOTAL O & P = \$3,622

CONTRACT AMOUNT (direct + O & P) = \$12,864

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$0	Total =	\$0
Engineering work and/or contract/bid preparation:	4.25	Total =	\$547
Reclamation management and/or administration:	5.00		\$643

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$4,812

TOTAL BOND AMOUNT (direct + indirect) = \$14,000 (Rounded)

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob / Demob**

Site: **Lombard #3** Permit Action: 2021 Bond Estimate
Revised Permit/Job#: M2020057

PROJECT IDENTIFICATION

Task #: 01R State: Colorado Abbreviation: None
 Date: 10/11/2021 County: Clear Creek Filename: M057-01R
 User: PSH

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:	\$21.28	\$37.94	\$47.67
Operating Cost/Hour:	\$26.55	\$50.48	\$56.21
Operator Cost/Hour:	\$20.54	\$20.54	\$20.54
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$68.37	\$132.49	\$147.95

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 246C	3.58	\$21.64	\$68.37	1	\$90.01	\$68.37	\$250.00
Subtotals:					\$90.01	\$68.37	\$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Subtotals:			\$0.00	\$0.00

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: DENVER
 Total one-way travel distance: 40.00 miles
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost * \$2,302.17
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$0.00
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.14	1.14
Return Time (Hours):	1.14	1.14
Loading Time (Hours):	4.00	NA
Unloading Time (Hours):	4.00	NA
Subtotals:	10.29	2.29

JOB TIME AND COST

Total job time: 20.57 Hours

Total job cost: \$2,302

SAFEGUARDING UNDERGROUND OPENINGS

Task description: Backfill Adit

Site: Lombard #3 Permit Action: 2021 Bond Estimate
Revised Permit/Job#: M2020057

PROJECT IDENTIFICATION

Task #: 02R State: Colorado Abbreviation: None
Date: 10/11/2021 County: Clear Creek Filename: M057-02R
User: PSH

Agency or organization name: DRMS

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Lombard #3	6x6	Adit closure - backfilling (per cu. yd.)	75.00	CY	\$25.00	\$1,875.00
Drive equipment to/from site on Cumberland Gulch Road	6200'	CAT 246C	1.00	EA	\$78.99	\$78.99

Job Hours: 16.00

Total Cost: \$1,953.99

REVEGETATION WORKTask description: Revegetate 0.918 AcresSite: Lombard #3 Permit Action: 2021 Bond Estimate
RevisedPermit/Job#: M2020057**PROJECT IDENTIFICATION**Task #: 03R State: Colorado Abbreviation: None
Date: 10/11/2021 County: Clear Creek Filename: M057-03R
User: PSHAgency 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
Hand raking (MEANS 32 91 13.23 0250)	\$1,546.38
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$1,836.78

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Elk Sedge	2.90	6.66	\$1,249.90
Idaho Fescue	0.80	10.10	\$7.58
Locoweed, Showy	0.25	0.72	\$17.38
Parry's Oatgrass	2.00	4.13	\$44.00
Prairie Junegrass	0.15	7.97	\$3.90
Spike Muhly	0.23	8.45	\$2.23
		38.03	\$1,324.99

Totals Seed Mix	6.33		
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Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

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:	0.92	Cost /Acre:	\$3,428.99
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,592.21
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$3,154.67
Reseeding Job Cost:	\$439.45
Total Job Cost:	\$3,594
Job Hours:	16.00

BULLDOZER WORKTask description: **Replace Topsoil 4-6" - 0.918 Acres**Site: **Lombard #3**Permit Action: 2021 Bond Estimate
RevisedPermit/Job#: M2020057**PROJECT IDENTIFICATION**Task #: 04RState: ColoradoAbbreviation: NoneDate: 10/11/2021County: Clear CreekFilename: M057-04RUser: PSHAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D3K XL - 3PHorsepower: 74Blade Type: Power Angle TiltAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$27.67	NA
Operating Cost/Hour:	\$27.39	100
Ripper own.		
Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA
Total unit Cost/Hour:	\$96.36	
Total Fleet Cost/Hour:	\$96.36	

MATERIAL QUANTITIESInitial Volume: 740Swell factor: 1.000Loose volume: **740 LCY**Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 100.0 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 5 %Average site altitude: 11,400 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor****Source**

Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.600	(FND-SF)
Push gradient:	0.903	(CAT HB)
Altitude:	0.880	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5122

Adjusted unit
production: 51.22 LCY/hr
Adjusted fleet
production: **51.22 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.881/LCY

Total job time: **14.45 Hours**
Total job cost: **\$1,392**