

March 28, 2025

Roger Hageman Glacier Rock Company 1806 S CR 5 Fort Collins, CO 80525

Re: Glacier Rock - File No. M-1994-096 Glacier Rock Company Technical Revision (TR-2) Request for Technical Revision

Dear Roger Hageman:

On March 28, 2025 the Division of Reclamation, Mining and Safety concluded its review of the Technical Revision application submitted to the Division on February 26, 2025, addressing the following:

Update to the mining and reclamation plan.

The decision reached by the Division is: awaiting warranty.

The terms of Technical Revision No. 2 approved by the Division are hereby incorporated into Permit No. M-1994-096. All other conditions and requirements of Permit No. M-1994-096 remain in full force and effect.

The revised liability amount exceeds the financial warranty currently held (see below), please submit additional bond or a rider to your existing bond that equals or exceeds the Revised Liability by **May 27, 2025**. The revision will not be final until the bond is approved by the Division.

Bond Held:	\$52,475.00
Prior Liability:	\$52,475.00
Change in Liability:	\$37,958.00
Revised Liability:	\$90,433.00
Prior Permit Acreage:	49.00
Change in Permit Acreage:	0.00
Revised Permit Acreage:	49.00
Prior Affected Acreage:	43.00



Change in Affected Acreage:	0.00
Revised Affected Acreage:	43.00

If you have any questions, please contact me by telephone at (720) 812-2002, or by email at Joel.renfro@state.co.us.

Sincerely,

lRinbe

Joel Renfro Environmental Protection Specialist

cc: Karen Horner, Glacier Rock Company Kyle Regen, Civil Resources, LLC Amy Eschberger, DRMS Sara Stevenson-Benn, DRMS

M-GR-04

COST SUMMARY WORK

Task descrip	tion:	Cost Summary					
Site: Glacier R	ock	Per	rmit Action:	TR2	Permit/Job	o#: <u>M1994096</u>	
PROJECT Task #: Date: User:	DENTIFIC 000 3/24/2025 JR2	ATION State: County:	Colorado Larimer		Abbreviation: Filename:	None M096-000	

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Grade pit wall to 3H:1V	DOZER	1	6.16	\$1,289
002	Rip pit floor	RIPPER	1	15.77	\$3,528
003	Rip topsoil/overburden stockpiling areas	RIPPER] 1	2.21	\$496
004	Retopsoil 12.35 acres at 9 inch depth	SCRAPER1] 1	14.90	\$30,271
005	Revegetate 12.35 acres	REVEGE	1	12.35	\$19,203
006	Rip recycling yard	RIPPER] 1	4.57	\$1,023
007	Retopsoil 2.9 acres at 6 inch depth - recycling yard	SCRAPER1	1	2.33	\$4,738
008	Revegetate 2.9 acres - recycling yard	REVEGE	1	5.00	\$4,509
009	Mobilization/Demobilization	MOBILIZE	1	6.16	\$10,053
		<u>SUBTO</u>	TALS:	69.45	\$75,110

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$1,517
Performance bond:	1.05	Total =	\$789
Job superintendent:	34.73	Total =	\$2,753
Profit:	10.00	Total =	\$7,511
		TOTAL O & P =	\$12,570
		CONTRACT AMOUNT (direct + O & P) = $($	\$87,680

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	\$500 0.00 0.00	Total = Total =	\$500 \$0 \$0
CONTINGENCY:	3.00	Total =	\$2,253
	TOTAL I	NDIRECT COST =	\$15,323
TOTAL BO	OND AMOUNT (direct + indirect) =	\$90,433

Page 1 of 2

BULLDOZER WORK

Task description:	Grade pit wall to 3H:1V				
Glacier Rock	Permit Act	ion: <u>TR</u>		Permit/Job#:	M1994096
PROJECT IDENTIF	ICATION				
Task #: 001	State: Color	ado		Abbreviation:	None
Date: 3/24/2025	County: Larin			Filename:	M096-001
User: JR2					
Agency or orga	nization name: DRMS				
HOURLY EQUIPME	ENT COST				
	t D7R DS XR Series II				
Horsepower: 240	m 				
Blade Type: Ser Attachment: NA	mi-Universal				
	er day				
	RG)				
	- /				
Cost Breakdown:		I	Utilization %		
Ownership Cost/Hour:	\$90	24	<u>Otinization %</u> NA		
Operating Cost/Hour:	\$78		100		
Ripper own. Cost/Hour:		.00	NA		
Ripper op. Cost/Hour:	\$0	.00	0		
Operator Cost/Hour:	\$40	<u>.</u>	NT A		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$209.23 \$209.23	.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume:4,37	\$209.23 \$209.23 FITIES 75	.04			
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>4,37</u> Swell factor: <u>1.25</u>	\$209.23 \$209.23 FITIES 75	.04			
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>4,37</u> Swell factor: <u>1.25</u>	\$209.23 \$209.23 STITIES 5 10 19 LCY me:Approx 1,400' L			<u>S</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu	\$209.23 \$209.23 CITIES 5 60 9 LCY me: Approx 1,400' L 1 factor: Cat Handbook			<u>S</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance:	\$209.23 \$209.23 CITIES '5 '0 '9 LCY me: Approx 1,400' L 1 factor: Cat Handbook TION _50 feet			<u>s</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ	\$209.23 \$209.23 STITIES 5 60 59 LCY me: Approx 1,400' L 1 factor: Cat Handbook TION 50 feet ction: 1,022.9 LCY/hr	x 15' H	with nr vertical slope	<u>S</u>	
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Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ	\$209.23 \$209.23 STITIES 5 60 59 LCY me: Approx 1,400' L 1 factor: Cat Handbook TION 50 feet ction: 1,022.9 LCY/hr	x 15' H	with nr vertical slope	<u>s</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient:	\$209.23 \$250 \$200 <t< td=""><td>x 15' H</td><td>with nr vertical slope</td><td><u>s</u></td><td></td></t<>	x 15' H	with nr vertical slope	<u>s</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description:	\$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$50 \$9.20 \$9.20 \$9.20 \$9.20 \$9.20 \$9.20 \$9.20 \$9.20 \$9.20 \$9.20 \$1.400' L \$1.400' L \$1.400' L \$2.60 feet \$2.650 lbs/LCY \$2.650 lbs/LCY \$2.650 lbs/LCY	x 15' H	with nr vertical slope	<u>s</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$50.20 \$9 LCY me: _Approx 1,400' L \$1 factor: Cat Handbook TION \$50 feet ction: _1,022.9 LCY/hr scription: _Compacted fill	x 15' H	with nr vertical slope nkment 0.9 Kearth Source	<u>S</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	\$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$209.23 \$50.20 \$9 LCY me: _Approx 1,400' L Cat Handbook TION \$50 feet ction: 1,022.9 LCY/hr scription: Compacted fill _5,430 feet	x 15' H	with nr vertical slope	<u>S</u>	
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,37 Swell factor: 1.25 Loose volume: 5,46 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	x 15' H	with nr vertical slope nkment 0.9 Kearth Source	<u>s</u>	

Task # 001

Job efficient	cy: ().830	(1 SHIFT/DAY)
Spoil pi	le:	1.000	(DOZ-OC)
Push gradie	nt:	1.115	(CAT HB)
Altitud	le:	1.000	(CAT HB)
Material Weig	ht: ().868	(CAT HB)
Blade typ	be:1	1.000	(PAT)
Net correction	on: 0.8676		
Adjusted unit production:	887.47 LCY/hi		
Adjusted fleet production:	887.47 LCY/hi	•	

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.236/LCY

Total job time:	6.16 Hours
Total job cost:	\$1,289

BULLDOZER RIPPING WORK

	Task description:	Rip p	oit floor				
Site	: Glacier Rock		Permit Action:	TR2	Permi	t/Job#:	M1994096
	PROJECT ID	ENTIFICATI(<u>ON</u>				
	Task #: 002	2	State: Colorado		Abbrevia	ation: N	Jone
		4/2025	County: Larimer				1096-002
	User: JR2	2	-				
	Agency	or organization	name: DRMS				
	HOURLY EQ	UIPMENT CO	DST				
	Basic	Machine: Cat	D7R DS XR Series II		Horsepower:	240)
	Ripper Att		hank Ripper		Shift Basis:	1 per	
					Data Source:	(CR	
	Cost Breakdown						
	COSt Dicardown	<u>-</u>			Utilization %		
		Ownership Co	st/Hour:	\$90.24	NA		
		Operating Co		\$78.95	100		
	Ripp	er Ownership Co		\$9.25	NA		
		per Operating Co		\$5.20	100		
		Operator Co	st/Hour:	\$40.04	NA		
		Total Unit Co	ost/Hour:	\$223.68			
		Total Fleet Co	st/Hour: \$223	3.68			
	MATERIAL (.1 1 4		
			Sele	cted estimating	method: Area		
	Alternate Method	<u>ls:</u>					
Seismic:	NA		Bank Volume:	NA	BCY	NA	
Area:	10.00	acres	Rip Depth (ft):	1.50	Volume:24,2	00	BCY or CC
		Source of estin	nated quantity: DRMS				
	HOURLY PR	ODUCTION					
	Seismic:						
	<u>Beisinie.</u>	5	Seismic Velocity:	NA	feet/second		
	Area:			2.45	6 /		
			e Ripping Depth:	2.45	feet/pass		
		0	e Ripping Width:	6.50	feet/pass		
			Ripping Length: age Dozer Speed:	700.00 88.00	feet/pass feet/minute		
			Maneuver Time:	0.25		G	
		U	ion per unit area:	0.23	minutes/pas acres/hour	8	
	Job Condition Co			0.701			
				0.54	. ~		
	Un	adjusted Hourly	Unit Production:	0.764	Acres/hr		
			Site Altitude:	5,430	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day))	
			Net Correction:	0.83	multiplier		
		Adjusted	Hourly Unit Production:	0.63	Acres/hr		
			Hourly Fleet Production:	0.63	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1	Grader(s)	Total job time	e: 15.7'	7	Hours
		1		·			
	Unit cost:	\$352.800	Per acre	Total job cos	t: \$3,52	8	

BULLDOZER RIPPING WORK

	Task description	on:	Rip topsoil/over						
Site	: Glacier Ro	ck	Per	mit Action:	TR2	Peri	nit/Job#:	M1994	1096
	PROJECT I	DENTIFIC	CATION						
	Date:	003 3/24/2025 JR2	State: County:	Colorado Larimer			viation: ename:	None M096-0	003
			zation name: DF	RMS					
	C								
	HOURLY E							• • •	
		ic Machine: Attachment:	Cat D7R DS XR 3-Shank Ripper		<u> </u>	Horsepower:		240 Der day	
	Ripper	Attachment.				Data Source:		CRG)	
	Cost Breakdow	vn:							
						Utilization %			
					\$90.24 \$78.95	<u>NA</u>			
	Ri		ing Cost/Hour:		\$78.95	100 NA			
			ing Cost/Hour:		\$5.20	100			
			ator Cost/Hour:		\$40.04	NA			
		Total U	Unit Cost/Hour:		\$223.68				
		Total Fl	leet Cost/Hour:	\$223	3.68				
	MATERIAI	OLIANTI	TIFS	C - 1-					
			<u>TTES</u>	Sele	ected estimating	method: Area			
	Alternate Meth	nods:							
		10401							
smic:	NA			k Volume:	NA	BCY		NA	DOV
smic: Area:		acrea	s Rip	Depth (ft):	1.50	BCY Volume:3,2		NA	_ BCY or C
	NA	acrea		Depth (ft):	1.50			NA	_ BCY or C
	NA	acres	s Rip	Depth (ft):	1.50			NA	BCY or C
	NA 1.35	acres	s Rip	Depth (ft):	1.50			NA	_ BCY or (
	<u>NA</u> <u>1.35</u> HOURLY P	acres	s Rip	Depth (ft):	1.50		267	NA	BCY or C
	<u>NA</u> <u>1.35</u> HOURLY P	acres	s Rip I of estimated quantit	Depth (ft):	1.50	Volume: 3,2	267	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic:	acres Source c RODUCTI	s Rip I of estimated quantit CON Seismic Velo Average Ripping Do	Depth (ft): ty: ty: depth:	1.50 NA 2.45	Volume: 3,2	267	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic:	acres Source c RODUCTI A A	s Rip I of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping W	Depth (ft): ty: ty: city: epth: idth:	1.50 NA 2.45 6.50	Volume:	267	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic:	acres Source c RODUCTI A A	s Rip I of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping W verage Ripping Ler	Depth (ft):	1.50 NA 2.45 6.50 300.00	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass	.d	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic:	acrea Source o RODUCTI A A A	s Rip I of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping Lei Average Ripping Lei Average Dozer Sp	Depth (ft): ty: decity: epth: idth: ngth: peed:	1.50 NA 2.45 6.50 300.00 88.00	Volume:	d te	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic:	acres Source o RODUCTI A A A	s Rip 1 of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping Lei Average Ripping Lei Average Dozer Sp verage Maneuver T	Depth (ft): ty: ty: DRMS dresserve ty:	1.50 NA 2.45 6.50 300.00 88.00 0.25	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass feet/minut minutes/p	d d te ass	NA	_ BCY or C
	<u>NA</u> 1.35 HOURLY P Seismic: Area:	acres Source of RODUCTI A A A A Y P	s Rip I of estimated quantit CON Seismic Velo Average Ripping De Average Ripping Lei Average Ripping Lei Average Ripping Lei Average Dozer Sp verage Maneuver T roduction per unit a	Depth (ft): ty: ty: DRMS dresserve ty:	1.50 NA 2.45 6.50 300.00 88.00	Volume:	d d te ass	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic: Area: Job Condition	acres Source of RODUCTI A A A A A P Correction F	s Rip 1 of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping Lei Average Ripping Lei Average Maneuver T verage Maneuver T roduction per unit s Cactors	Depth (ft): ty: provide the second se	1.50 NA 2.45 6.50 300.00 88.00 0.25 0.734	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass feet/minut minutes/p acres/hour	d d te ass	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic: Area: Job Condition	acres Source of RODUCTI A A A A A P Correction F	s Rip I of estimated quantit CON Seismic Velo Average Ripping De Average Ripping Lei Average Ripping Lei Average Dozer Sp verage Maneuver T roduction per unit i <u>Factors</u> Hourly Unit Produc	Depth (ft): ty: decity: epth: idth: ngth: peed: area: tion:	1.50 NA 2.45 6.50 300.00 88.00 0.25 0.734 0.734	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass feet/minut acres/hour Acres/hr	d d te ass	NA	_ BCY or C
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	NA 1.35 HOURLY P Seismic: Area: Job Condition	acres Source of RODUCTI A A A A A P Correction F	s Rip I of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping Lei Average Ripping Lei Average Dozer Sp verage Maneuver T roduction per unit i <u>Factors</u> Hourly Unit Produc Site Altitude Job Efficie	Depth (ft):	1.50 NA 2.45 6.50 300.00 88.00 0.25 0.734 5,430 1.00 0.83	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass feet/pass feet/minut minutes/p acres/hour Acres/hr feet (CAT HB (1 shift/da	d d te ass r	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic: Area: Job Condition	acres Source of RODUCTI A A A A P Correction F Unadjusted F	s Rip I of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping Len Average Ripping Len Average Maneuver T roduction per unit i Cactors Hourly Unit Produc Site Altitude Job Efficie Net Correc	Depth (ft):	1.50 NA 2.45 6.50 300.00 88.00 0.25 0.734 5,430 1.00 0.83 0.83	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass feet/pass feet/minut minutes/p acres/hou Acres/hr feet (CAT HB (1 shift/da multiplier	d d te ass r	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic: Area: Job Condition	acres Source of RODUCTI A A A A P Correction F Unadjusted F	s Rip I of estimated quantit CON Seismic Velo Average Ripping Do Average Ripping Len Average Ripping Len Average Maneuver T roduction per unit s Cactors Hourly Unit Produc Site Altitude Job Efficie Net Correc	Depth (ft): ty: decity: epth: idth: idth: ngth: peed: tion: tion: tude: ency: production:	1.50 NA 2.45 6.50 300.00 88.00 0.25 0.734 5,430 1.00 0.83 0.83 0.61	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass feet/pass feet/minut minutes/p acres/hou Acres/hr feet (CAT HB (1 shift/da multiplier Acres/hr	d d te ass r	NA	_ BCY or C
	NA 1.35 HOURLY P Seismic: Area: Job Condition	acres Source of RODUCTI A A A A P Correction F Unadjusted F Unadjusted F	s Rip I of estimated quantit CON Seismic Velo Average Ripping De Average Ripping Ler Average Ripping Ler Average Dozer Sp verage Maneuver T roduction per unit i Cactors Hourly Unit Produc Site Altitude Job Efficie Net Correc justed Hourly Unit	Depth (ft): ty: decity: epth: idth: idth: ngth: peed: tion: tion: tude: ency: production:	1.50 NA 2.45 6.50 300.00 88.00 0.25 0.734 5,430 1.00 0.83 0.83	Volume: 3,2 feet/secon feet/pass feet/pass feet/pass feet/pass feet/pass feet/minut minutes/p acres/hou Acres/hr feet (CAT HB (1 shift/da multiplier	d d te ass r	NA	_ BCY or C
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SCRAPER TEAM WORK

Site: Glacier Rock		Permit Action:	TR2	Peri	mit/Job#: <u>M199</u>	4096
PROJECT IDEN	TIFICATION					
Task #:004		State: Colorado			viation: None	
Date: <u>3/24/2</u> User: JR2	<u>025</u> Cor	unty: <u>Larimer</u>		Fil	ename: M096-	004
	·					
Agency or	organization name:	DRMS				
HOURLY EQUI	<u>PMENT</u>		COSTS	hift basis: <u>1 per d</u>	<u>ay</u>	
		Equipm	ent Description			
		craper: Cat 63	1G			
Suppo	- ort Equipment -Loa	-Dozer: NA d Area: NA				
	-Dum	p Area: Cat D7	R DS XR Series I	I		
Road Ma	aintenance – Motor (<u>4M</u> Tanker, 2,500 Gal			
	- water	TTUCK. Water	<u>1 alikel, 2,500 Gai</u>	•		
Cost Breakdown:	Scraper Wo	rk Team	Support Equi	oment	Maintenance	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water
%Utilization-machine:	100	NA	NA	100	100	
Ownership cost/hour:	\$442.19	NA	NA	\$90.24	\$129.81	
Operating cost/hour:	\$252.89	NA	NA	\$78.95	\$89.13	
%Utilization-ripper:	NA	NA	NA	NA	50	
Ripper own. cost/hour:	NA	NA	NA	\$0.00	\$5.75	
Ripper op. cost/hour:	NA	NA	NA	\$0.00	\$2.09	
Operator cost/hour:	\$57.52	NA	NA	\$40.04	\$56.70	
Unit Subtotals:	\$752.60	NA	NA	\$209.23	\$283.48	
Number of Units:	2	0	0	1	1	
Group Subtotals:	Work:	\$1,505.20	Support:	\$209.23	Maint:	\$31
Total work team cos	t/hour: <u>\$2,032.01</u>					
MATERIAL QUA	<u>ANTITIES</u>					
Initial volume:		CCY	Swell fact	tor: <u>1.215</u>		
Loose volume:	18,156	LCY				
	rce of estimated vo of estimated swell f		cres x 9 inch depth			
Source	or estimated swell I	factor: Cat Han	UUUUK			
HOURLY PROD	UCTION					
			Scraper Bo	owl (volume) Bas	is:	
Material weight:	1,600 lbs/LCY		Struck	Volume: 24.00		CY
				1 1 0100	т	CV
Material description: Rated Payload:	Top Soil 81,600 pounds		Heaped Average			CY CY

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time: <u>0.80</u> Minutes 0.70 Minutes

Job Condition Correction:

Site Altitude: 5430 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	1.50	3.00	4.50	1667	0.49

Haul Time: **0.49** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	-1.50	3.00	1.50	2914	0.38
				Return Time:	0.38 1	ninutes
			Total Scrape	team cycle time:	2.37	minutes
			Adjusted f	or job conditions:	609.37	LCY/Hour
			Selected Nu	mber of Scrapers:	2	Scraper(s)
	Adjusted	d single scrap	er team (unit) h	ourly production:	1,218.73	LCY/Hour
	Adjusted m	ultiple scrape	er team (fleet) h	ourly production:	1,218.73	LCY/Hour
	Unadjusted unit pro-			LCY/Hour		

Fleet size:	1	Team(s)	Total job time:	14.90	Hours
Unit cost:	\$1.667	/LCY	Total job cost:	\$30,271	_

REVEGETATION WORK

Task descri	ption:	Revegetate 12.35 acres			
ite: Glacier	Rock	Permit Action:	TR2	Permit/Job	o#: <u>M1994096</u>
	DENTIFIC			Abbreviation:	None
Task #: Date:	005 3/24/2025	State: <u>Colorado</u> County: Larimer		Abbreviation: Filename:	M096-005
User:	JR2				

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
Chisel plowing {DMG}	\$102.41
Total Tilling Cost/Acre	\$102.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Kaw	0.44	1.31	\$6.90
Indiangrass - Cheyenne	0.35	1.07	\$4.31
Switchgrass - Blackwell	0.25	2.23	\$3.30
Blue Grama - Lovington	0.15	2.45	\$4.16
Sideoats Grama - Vaughn	0.68	2.23	\$16.72
Western Wheatgrass - Arriba	3.20	8.08	\$28.91
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Totals Seed Mix	5.57	19.45	\$68.63

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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

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:	12.35	Cost /Acre:	\$1,478.61
Estimated Failure Rate:	25%	Cost /Acre*:	\$305.27
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$18,260.83
Reseeding Job Cost:	\$942.52
Total Job Cost:	\$19,203
Job Hours:	12.35

BULLDOZER RIPPING WORK

	Task description:	Rip ro	ecycling yard				
Site	Glacier Rock		Permit Action:	TR2	Permit/Job	o#: <u>M1994096</u>	j
	PROJECT ID	ENTIFICATIC	<u>DN</u>				
	Task #: 006	5	State: Colorado		Abbreviation	: None	
		4/2025	County: Larimer		Filename	: M096-006	
	User: JR2	2					
	Agency	or organization r	name: DRMS				
	HOURLY EQ	UIPMENT CO	<u>ST</u>				
	Basic 1	Machine: Cat l	D7R DS XR Series II		Horsepower:	240	
	Ripper Att		ank Ripper			1 per day	_
					Data Source:	(CRG)	
	Cost Breakdown:						
		-			Utilization %		
			st/Hour:	\$90.24	NA		
		Operating Cos		\$78.95	100		
		er Ownership Cos		\$9.25	NA		
	Ripp	per Operating Cos		\$5.20	100		
		Operator Cos		\$40.04	NA		
		Total Unit Cos	st/Hour:	\$223.68			
		Total Fleet Cos	st/Hour: \$223	.68			
	MATERIAL Q	MANTITIES	Sala	atad actimating	mathad. Area		
			Sele	cted estimating	method: Area		
	Alternate Method	<u>1s:</u>					
smic:	NA			NA	BCY	NA	
Area:	2.90	acres	Rip Depth (ft):	1.50	Volume: <u>7,018</u>	B	CY or C
		Source of estim	ated quantity: DRMS				
	HOURLY PRO	DUCTION					
	Seismic:						
	<u>Seisine.</u>	S	eismic Velocity:	NA	feet/second		
		2					
	Area:			2.45	C · · ·		
			Ripping Depth:	<u>2.45</u> 6.50	feet/pass		
			Ripping Width: Ripping Length:	700.00	feet/pass feet/pass		
			ge Dozer Speed:	88.00	feet/minute		
			Maneuver Time:	0.25	minutes/pass		
			on per unit area:	0.764	acres/hour		
	Job Condition Co						
		adjusted Hourly	Unit Production	0.764	Acres/hr		
	UII	aujusted Hourry					
			Site Altitude:	5,430	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day)		
			Net Correction:	0.83	multiplier		
			Hourly Unit Production:	0.63	Acres/hr		
		Adjusted H	lourly Fleet Production:	0.63	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	1	Grader(s)	Total job time	e: 4.57	Hours	5
				,			
	Unit cost:	\$352.800	Per acre	Total job cos	st: \$1,023		

Scraper Worksheet Cont'd

Task # 007

Page 1 of 2

SCRAPER TEAM WORK

Site: Glacier Rock		Permit	Action:	TR2	Perr	mit/Job#: <u>M199</u> 4	4096
PROJECT IDENT	TIFICATION						
Task #: _ 007	St	tate: C	Colorado		Abbrev	viation: None	
Date: $3/24/20$	25 Cou	nty: L	arimer		Fil	ename: M096-0	007
User: JR2							
Agency or o	organization name:	DRMS	S				<u></u> _
HOURLY EQUIP	MENT_			COSTS	hift basis: <u>1 per d</u>	ay	
			Equipme	ent Description			
		craper:	Cat 631	G			
Suppo	rt Equipment -Load	Dozer: Area:	NA NA				
	-Dump			R DS XR Series I	I		
Road Ma	intenance – Motor C		CAT 14				
	-Water	I ruck:	Water	Fanker, 2,500 Gal	•		
Cost Breakdown:	Scraper Worl	k Team		Support Equi	pment	Maintenance	
	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	Water Tr
%Utilization-machine:	100		NA	NA	100	100	
Ownership cost/hour:	\$442.19		NA	NA	\$90.24	\$129.81	\$1
Operating cost/hour:	\$252.89		NA	NA	\$78.95	\$89.13	\$2
%Utilization-ripper:	NA		NA	NA	NA	50	
Ripper own. cost/hour:	NA		NA	NA	\$0.00	\$5.75	\$
Ripper op. cost/hour:	NA		NA	NA	\$0.00	\$2.09	\$
Operator cost/hour:	\$57.52		NA	NA	\$40.04	\$56.70	\$
Unit Subtotals:	\$752.60		NA	NA	\$209.23	\$283.48	\$3
Number of Units:	2 Work:	\$1,50	0	0 Support:	\$209.23	1 Maint:	\$317.5
Group Subtotals:	work.	\$1,50.	5.20	Support:	\$209.25	Iviaint:	\$517.5
Total work team cost	/hour: <u>\$2,032.01</u>						
MATERIAL QUA	NTITIES						
Initial volume:	2,339		CCY	Swell fac	tor: 1.215		
Loose volume:	2,339		LCY	5 wen rae	<u> </u>		
Sou	rce of estimated vol	ume.	2.9 acres	x 6 inch depth			
	of estimated swell fa		Cat Hand				
HOURLY PRODU	JCTION						
				Scraper B	owl (volume) Basi	is:	
Material weight:	1,600 lbs/LCY				Volume: <u>24.00</u>		CY
Material description: Rated Payload:	Top Soil 81,600 pounds			Heaped Average	Volume: <u>34.00</u> Volume: <u>29.00</u>		CY CY

<u>0.80</u> Minutes

0.70 Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5430 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	1.50	3.00	4.50	1667	0.49

Haul Time: **0.49** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	-1.50	3.00	1.50	2914	0.38
				Return Time:	0.38	minutes
			Total Scraper	team cycle time:	2.37	minutes
	Adjusted for job conditions:					LCY/Hour
Selected Number of Scrapers:					2	Scraper(s)
Adjusted single scraper team (unit) hourly production:				1,218.73	LCY/Hour	
	Adjusted m	ultiple scrap	er team (fleet) h	ourly production:	1,218.73	LCY/Hour
Optima	Unadjusted unit prod I Number of Scrapers pe			LCY/Hour		
JOB TI	ME AND COST					
Fleet	size: 1	Team(s)	Тс	otal job time:	2.33	Hours

Unit cost: \$1.667 /LCY

Total job cost: \$4,738

REVEGETATION WORK

Task de	escription:	Revegetate 2.9 acres - recycli	ing yard		
Site: Glac	ier Rock	Permit Action:	TR2	Permit/Job	#: M1994096
<u>PROJE</u>	CT IDENTIFIC	ATION			
	$\begin{array}{r} \text{ate:} & 008 \\ \hline 3/24/2025 \\ \hline \text{ser:} & JR2 \end{array}$	State:ColoradoCounty:Larimer		Abbreviation: Filename:	None M096-008
	Agency or organiz	zation 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
Chisel plowing {DMG}	\$102.41
Total Tilling Cost/Acre	\$102.41

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Big Bluestem - Kaw	0.44	1.31	\$6.90
Indiangrass - Cheyenne	0.35	1.07	\$4.31
Switchgrass - Blackwell	0.25	2.23	\$3.30
Blue Grama - Lovington	0.15	2.45	\$4.16
Sideoats Grama - Vaughn	0.68	2.23	\$16.72
Western Wheatgrass - Arriba	3.20	8.08	\$28.91
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Totals Seed Mix	5.57	19.45	\$68.63

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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
	Total Mulch Application Cost/Acre	\$85.37

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
		Totals 1	Nursery Stoc	k Cost / Acre	\$ 0.00

JOB TIME AND COST

No. of Acres:	2.9	Cost /Acre:	\$1,478.61
Estimated Failure Rate:	25%	Cost /Acre*:	\$305.27
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$4,287.97
Reseeding Job Cost:	\$221.32
Total Job Cost:	\$4,509
Job Hours:	5.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Mo	bilization/Demob	ilization				
Glacier Rock		Permit	Action: <u>TR2</u>			Permit/Job#: <u>M</u>	1994096
PROJECT IDE	NTIFICATI	<u>ON</u>					
Task #: 009	9	State: Co	olorado		Abbre	eviation: None	
Date: 3/2 User: JR	24/2025 2	County: La	rimer		F	ilename: M096	-009
Agency	or organization	n name: DRMS					
EQUIPMENT 7	FRANSPOR	<u>T RIG COST</u>					
					Shift ba	sis: 1 per da	у
					Cost Data Sou		
Truc	k Tractor Desc	ription: GENE	RIC ON-HIGH		UCK TRACTO (2ND HALF,	DR, 6X4, DIESEL 2006)	POWERED,
Truc	k Trailer Desc	ription: G				ROP DECK EQUI	IPMENT
			r	FRAILER	(25T, 50T, A)	ND 100T)	
Cost Breakdown:							
Available Rig C	anacities	0-25 Tons	26-50 Tons	51	+ Tons		
	o Cost/Hour:	\$10.44	\$22.18		23.94		
	g Cost/Hour:	\$26.48	\$54.55		55.65		
	r Cost/Hour:	\$20.48	\$22.52		22.52		
	r Cost/Hour:	\$0.00	\$23.53		23.53		
	t Cost/Hour:						
Total Uni	t Cost/Hour:	\$59.44	\$122.78	\$	25.64		
NON ROADAB	LE EQUIPN	MENT:					
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t	5.2.0	fleet		
Cat D7R DS XR Series II	32.01	\$90.24	\$122.78	1	\$213.02	\$122.78	\$250.00
Cat D7R DS XR Series II	35.93	\$99.49	\$122.78	1	\$222.27	\$122.78	\$250.00
CAT 14M	23.57	\$135.56	\$59.44	1	\$195.00	\$59.44	\$250.00
Cat 631G	52.50	\$442.19	\$125.64	1	\$567.83	\$125.64	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00

Subtotals: **\$1,298.58 \$490.08 \$1,250.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 2,500 Gal.	\$34.10	1	\$34.10	\$34.10
		Subtotals:	\$34.10	\$34.10

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	FORT COLLINS	
Total one-way travel distance:	16.00	miles
Average Travel Speed:	55.00	mph
Total Non-Roadable Mob/Demob Cost *	\$10,033.57	
'* two round trips with haul rig:	\$10,055.57	_
Total Roadable Mob/Demob Cost **	\$19.84	
** one round trip, no haul rig:	φ17.04	

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.29	0.29
Return Time (Hours):	0.29	0.29
Loading Time (Hours):	1.25	NA
Unloading Time (Hours):	1.25	NA
Subtotals:	3.08	0.58

JOB TIME AND COST

Total job time: 6.16 Hours

Total job cost: \$10,053