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

1313 Sherman Street, Room 215
Denver, CO 80203

May 13, 2019

Mark Gardner
Whitewater Building Materials Cooperation
940 South 10th Street
Grand Junction, CO 81501

RE: Gunnison River Gravel Pits, Permit No. M-2009-048, Technical Revision (TR-3) Approval

Dear Mr. Gardner:

On May 13, 2019 the Division of Reclamation, Mining and Safety (Division) approved the Technical Revision request (TR-3) submitted on April 17, 2019, addressing the following:

Revise Mine Plan: Mine Pit #1 then Pit #5, 2000 CY of stockpile and compacted area to remain

The terms of the TR-3 approved by the Division are hereby incorporated into Permit No. M-2009-048. All other conditions and requirements of the permit remain in full force and effect.

The estimated liability amount of *$91,664.00* exceeds the *$ 88,767.00* Financial Warranty currently held for this site. If you have not already done so, please submit additional bond in the amount of *$ 2,897.00*. ***Pursuant to Section 34–32.5–117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.*** The additional amount needs to be accepted prior **Friday, July 12, 2019**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted. The revision will not be final until the bond is approved by the Division.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@ state.co.us

Sincerely,

Amy Yeldell

Amy Yeldell
Environmental Protection Specialist

Cc: Travis Marshall, Senior EPS, Grand Junction DRMS

COST SUMMARY WORK

Task description: **TR-3 Update**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: ACY State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048
User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
000	Walk Away Provision-Pit 5	NA	1	1.00	$12,404
002	Pit 1-Regarde highwalls	DOZER	2	56.24	$23,306
003	Pit 1-Topsoil application	DOZER	2	5.62	$2,329
004	Pit 1-Reveg	REVEGE	1	4.00	$2,657
005	Pit 5-Rip Stockpile area	RIPPER	2	5.45	$2,443
006	Pit 5-Topsoil application	DOZER	2	22.01	$9,122
007	Pit 5-Reveg	REVEGE	1	16.00	$15,607
008	Initial Mob	MOBILIZE	1	3.06	$3,934
009	Secondary Mob	MOBILIZE	1	3.06	$1,645
	SUBTOTALS:			**116.44**	**$73,447**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$1,484
Performance bond:	1.05	Total =	$771
Job superintendent:	58.22	Total =	$4,253
Profit:	10.00	Total =	$7,345
		TOTAL O & P =	$13,852
		CONTRACT AMOUNT (direct + O & P) =	$87,299

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$0	Total =	$0
Engineering work and/or contract/bid preparation:	0.00	Total =	$0
Reclamation management and/or administration:	5.00		$4,365
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$18,217
		TOTAL BOND AMOUNT (direct + indirect) =	**$91,664**

Gunnison River Gravel Pits
M-2009-048
Task: 000 Water Supply

Walk Away-Provision

Pit 5 completely dewatered (107ac/ft + depletions = 147 ac/ft), pay for out of priority refilling (BOR Blue Mesa cost)

147Ac/Ft @ $84.38 = $12,403.86

Total Water Cost $12,403.86

BULLDOZER WORK

Task description: **Pit 1-Regarde highwalls**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-002
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:	$93.62	NA
Operating Cost/Hour:	$73.35	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$40.23	NA

Total unit Cost/Hour: $207.20
Total Fleet Cost/Hour: **$414.41**

MATERIAL QUANTITIES

Initial Volume: 27,600
Swell factor: 1.120
Loose volume: **30,912** LCY

Source of estimated volume: 2300 LF 36'H 1:1 to 3:1 cut fill, TR-3 Pit 1 map
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 115 feet
Unadjusted hourly production: 776.8 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -5 %
Average site altitude: 4,670 feet

Material weight: 3,250 lbs/LCY

Weight description: Gravel - Pitrun

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:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.708	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3538

Adjusted unit production: 274.83 LCY/hr
Adjusted fleet production: **549.66** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.754/LCY

Total job time: **56.24** Hours
Total job cost: **$23,306**

BULLDOZER WORK

Task description: **Pit 1-Topsoil application**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-003
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:	$93.62	NA
Operating Cost/Hour:	$73.35	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$40.23	NA

Total unit Cost/Hour: $207.20
Total Fleet Cost/Hour: **$414.41**

MATERIAL QUANTITIES

Initial Volume: 1,923
Swell factor: 1.115
Loose volume: **2,144** LCY

Source of estimated volume: 10" depth over 1.43 ac above water
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 300 feet
Unadjusted hourly production: 291.4 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
Average site altitude: 4,670 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 190.69 LCY/hr
Adjusted fleet production: **381.38** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $1.087/LCY

Total job time: **5.62** Hours
Total job cost: **$2,329**

REVEGETATION WORK

Task description: **Pit 1-Reveg**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-004
User: ACY

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Potassium nitrate, 13-46-0	100.00	pound	$1.25	$125.00
			Total Fertilizer Materials Cost/Acre	**$125.00**

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	$34.72
Total Fertilizer Application Cost/Acre	**$34.72**

TILLING

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

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	$29.00
Alkaligrass, Fult's	0.50	13.77	$1.74
Crested Wheatgrass - Hy-Crest	3.00	13.77	$13.59
Tall Fescue - Maxim Blend (Dwarf)	3.00	15.63	$7.11
Saltbush, Four Wing	1.00	1.38	$12.80
Totals Seed Mix	8.50	83.59	**$64.24**

Application

Description	Cost /Acre

Drill Seeding (DRMS Survey Cost)	$232.00
Total Seed Application Cost/Acre	**$232.00**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$2.81	$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$288.00	$576.00
Total Mulch Materials Cost/Acre				**$578.81**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$68.78
Power mulcher (MEANS 32 91 13.16 0350)	$92.78
Weed spray, truck, aquatic area, nox. [DMG]	$70.14
Total Mulch Application Cost/Acre	**$231.70**

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: 1.43 Cost /Acre: $1,372.76
Estimated Failure Rate: 40% Cost /Acre*: $1,213.04
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$1,963.05**
Reseeding Job Cost: **$693.86**
Total Job Cost: **$2,657**
Job Hours: **4.00**

BULLDOZER RIPPING WORK

Task description: **Pit 5-Rip Stockpile area**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 005 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-005
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:	$93.62	NA
Operating Cost/Hour:	$73.35	100
Ripper Ownership Cost/Hour:	$8.93	NA
Ripper Operating Cost/Hour:	$7.78	100
Operator Cost/Hour:	$40.23	NA
Total Unit Cost/Hour:	$223.91	

Total Fleet Cost/Hour: **$447.82**

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 7.00 acres Rip Depth (ft): 2.00 Volume: 22,587 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:	200.00	feet/pass
Average Dozer Speed:	88.00	feet/minute
Average Maneuver Time:	0.25	minutes/pass
Production per unit area:	0.773	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.773 Acres/hr

Site Altitude:	4,670	feet
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Adjusted Hourly Unit Production: 0.64 Acres/hr
Adjusted Hourly Fleet Production: **1.28** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **5.45** Hours

Unit cost: $348.931 Per acre Total job cost: **$2,443**

BULLDOZER WORK

Task description: **Pit 5-Topsoil application**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 006 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-006
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:	$93.62	NA
Operating Cost/Hour:	$73.35	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$40.23	NA

Total unit Cost/Hour: $207.20
Total Fleet Cost/Hour: **$414.41**

MATERIAL QUANTITIES

Initial Volume: 7,529
Swell factor: 1.115
Loose volume: **8,395** LCY

Source of estimated volume: 10" depth over 7 ac above water
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 300 feet
Unadjusted hourly production: 291.4 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
Average site altitude: 4,670 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 190.69 LCY/hr
Adjusted fleet production: **381.38** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $1.087/LCY

Total job time: **22.01** Hours
Total job cost: **$9,122**

REVEGETATION WORK

Task description: **Pit 5-Reveg**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 007 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-007
User: ACY

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Potassium nitrate, 13-46-0	100.00	pound	$1.25	$125.00
			Total Fertilizer Materials Cost/Acre	**$125.00**

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	$34.72
Total Fertilizer Application Cost/Acre	**$34.72**

TILLING

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

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	$29.00
Alkaligrass, Fult's	0.50	13.77	$1.74
Crested Wheatgrass - Hy-Crest	3.00	13.77	$13.59
Tall Fescue - Maxim Blend (Dwarf)	3.00	15.63	$7.11
Saltbush, Four Wing	1.00	1.38	$12.80
Totals Seed Mix	8.50	83.59	**$64.24**

Application

Description	Cost /Acre

Drill Seeding (DRMS Survey Cost)	$232.00
Total Seed Application Cost/Acre	**$232.00**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$2.81	$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$288.00	$576.00
Total Mulch Materials Cost/Acre				**$578.81**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$68.78
Power mulcher (MEANS 32 91 13.16 0350)	$92.78
Weed spray, truck, aquatic area, nox. [DMG]	$70.14
Total Mulch Application Cost/Acre	**$231.70**

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: 8.4 Cost /Acre: $1,372.76
Estimated Failure Rate: 40% Cost /Acre*: $1,213.04
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$11,531.18**
Reseeding Job Cost: **$4,075.81**
Total Job Cost: **$15,607**
Job Hours: **16.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Initial Mob**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 008 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-008
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:	$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	53.08	$102.55	$125.45	2	$456.00	$250.90	$500.00
Drill/Broadcast Seeder with Tractor	25.00	$15.54	$88.67	1	$104.21	$88.67	$250.00
Power Mulcher (Bowie LD-90)	6.00	$8.33	$88.67	1	$97.00	$88.67	$250.00
Subtotals:					**$657.21**	**$428.24**	**$1,000.00**

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	$76.10	1	$76.10	$76.10
Subtotals:			**$76.10**	**$76.10**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	12.00	miles
Average Travel Speed:	45.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$3,893.33
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$40.59

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.27	0.27
Return Time (Hours):	0.27	0.27
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.53	0.53

JOB TIME AND COST

Total job time:	**3.07**	Hours
Total job cost:	**$3,934**	

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Secondary Mob**

Site: **Gunnison River Gravel Pits** Permit Action: TR-3 Permit/Job#: M2009048

PROJECT IDENTIFICATION

Task #: 009 State: Colorado Abbreviation: None
Date: 5/1/2019 County: Mesa Filename: M048-009
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:	$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
Drill/Broadcast Seeder with Tractor	25.00	$15.54	$88.67	1	$104.21	$88.67	$250.00
Power Mulcher (Bowie LD-90)	6.00	$8.33	$88.67	1	$97.00	$88.67	$250.00
Subtotals:					**$201.21**	**$177.34**	**$500.00**

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	$76.10	1	$76.10	$76.10
Subtotals:			**$76.10**	**$76.10**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	12.00	miles
Average Travel Speed:	45.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$1,604.31
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$40.59

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.27	0.27
Return Time (Hours):	0.27	0.27
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.53	0.53

JOB TIME AND COST

Total job time:	**3.07**	Hours
Total job cost:	**$1,645**	

Gunnison River Gravel Pits
M-2009-048
TR-3 Updates

Mine Pit 1 then resume mining of Pit 5. Concurrent reclamation, only one pit dewatered completely at one time.

Pit 1:

- 2300 LF perimeter of affected lands
- Mining depth 36' H , re-grade to 3:1, approx. 26 ft above water
- 5.18 ac affected lands- 3.5 ac pond -0.25 stockpile area = 1.43 ac to be topsoiled and seeded
- 2000 cy stockpile to remain unreclaimed north of pond (approx.. 1 ac)

Pit 5:

- Based on current site conditions
- Approx. 0.6 ac currently pond, slopes surrounding are graded, topsoiled, no seed
- Approx. 7 ac stockpile area, needs ripping, topsoil and seed
- 10.5 ac affected lands – 0.6 ac pond – 1.5 ac stockpile = 8.4 ac topsoil and seed
- Once mined out only 3 ac will require seeding (5.5 ac pond)
- Compacted pad area to be left unreclaimed north of pond (approx. 2 ac.)