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

December 27, 2022

Jim Doody
Grand Junction Pipe & Supply Co.
556 Struthers Avenue
Grand Junction, CO 81501

Re: Delta Paving Gravel Pit, File No. M-1998-105,
Amendment Application (AM-01) – Reclamation Cost Estimate

Mr. Doody:

The Division of Reclamation, Mining and Safety (Division) has reviewed your AM-01 application for the Delta Paving Gravel Pit. Enclosed is the related estimate of reclamation costs using our CIRCES computer software program. The total amount is $167,661.

Please let me know if you have any comments or questions on this estimate. You can contact me at rob.zuber@state.co.us or (720) 601-2276.

Sincerely,

Robert D. Zuber
Environmental Protection Specialist

Enclosure: Reclamation Cost Estimate

Copied via e-mail: Michael Cunningham, DRMS
Ben Langenfeld, Lewicki & Associates

ENCLOSURE

COST SUMMARY WORK

Task description: **Cost Summary**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 11/15/2022 County: Delta Filename: M105-000
User: RDZ

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01	Dewatering pit	PUMPING	1	437.70	$27,794
04a	Phase 1 - haul material to pond slopes	TRUCK1	2	31.44	$22,694
04b	Phase 1 - grade material on pond slopes	DOZER	2	12.30	$7,106
05a	Haul topsoil	TRUCK1	2	17.23	$12,440
05b	Grade topsoil	DOZER	2	4.93	$2,847
06	Rip area for revegetation	RIPPER	2	22.54	$13,023
07	Vegetate Phase 1 and stockpile area	REVEGE	1	27.00	$49,283
10	Mobilization and Demobilization	MOBILIZE	1	0.44	$1,776
		SUBTOTALS:		**553.58**	**$136,963**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$2,767
Performance bond:	1.05	Total =	$1,438
Job superintendent:	57.72	Total =	$4,337
Profit:	10.00	Total =	$13,696
		TOTAL O & P =	$22,238
		CONTRACT AMOUNT (direct + O & P) =	$159,201

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$500	Total =	$500
Engineering work and/or contract/bid preparation:	0.00	Total =	$0
Reclamation management and/or administration:	5.00		$7,960
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$30,698
		TOTAL BOND AMOUNT (direct + indirect) =	**$167,661**

PUMPING WORK

Task description: **Dewatering pit**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #:	01	State:	Colorado	Abbreviation:	None
Date:	11/15/2022	County:	Delta	Filename:	M105-01
User:	RDZ				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Centrifugal pump - 200M, 10 in.	1
Attachment 1:	Suction hose - 6 in. diam., 25 ft.	1
Attachment 2:	Discharge hose - 6 in. D., 25 ft.	1
Labor Unit 1:	Pump operator	1

Horsepower: 70
Shift Basis: 1 per day
Weight: 1.95
(US Tons)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$16.19	NA
Operating Cost/Hour:	$19.63	100
Operator Cost/Hour:	$27.68	NA
Total Unit Cost/Hour:	$63.50	

Total Fleet Cost/Hour: $63.50

PUMPING QUANTITIES

Initial Pond Volume:	294.00		Conversion factor:	325850.5800
Final Pond Volume:	**95,800,070.52**	gallons		
Total Pond Inflow Surface Area:	75,000	Sq. ft.	Unit inflow rate in gph/sq. ft.:	0.0879
Total Pond Inflow Volume per Hour:	6,592.50	gallons		

Source of estimated volume: Applicant's Exhibit L

PUMPING TIME

Maximum Pump Capacity:	200,000	gph/pump
Estimated Suction Head:	10	feet
Estimated Discharge Head:	5	feet
Total Head:	15	feet
CPB Pump Capacity:	201,000	gph/pump
Site Altitude:	4,990	feet

Adjusted Pumping Capacity:	201,000	gph
Initial Unadjusted Pumping Time:	476.62	hours
Inflow during Initial Pumping:	3,142,099	gallons
Net Unadjusted Pumping Time:	492.25	Hours
Altitude Adjustment Factor:	0.9700	(3% rule)
Pump Efficiency Factor:	0.9167	(55 min./hr.)
Total Adjusted Pumping Time:	437.71	hours

JOB TIME AND COST

Total job time: **437.71** Hours

Unit cost: $0.000281 /Gallon Total job cost: **$27,794**

TRUCK/LOADER TEAM WORK

Task description: **Phase 1 - haul material to pond slopes**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 11/15/2022 County: Delta Filename: M105-04a
User: RDZ

Agency 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 966H high lift
Support Equipment -Load Area:	NA
-Dump Area:	NA
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	NA	NA	NA
Ownership cost/hour:	$24.21	$49.15	NA	NA	NA	NA
Operating cost/hour:	$57.28	$43.04	NA	NA	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	$0.00	NA	NA	NA	NA
Operator cost/hour:	$32.54	$40.71	NA	NA	NA	NA
Unit Subtotals:	$114.03	$132.90	NA	NA	NA	NA
Number of Units:	4	2	0	0	0	0
Group Subtotals:	Work:	$721.92	Support:	$0.00	Maint:	$0.00

Total work team cost/hour: **$721.92**

MATERIAL QUANTITIES

Initial volume: 27,000 CCY Swell factor: 1.000
Loose volume: **27,000** LCY

Source of estimated volume: Applicant's Exhibit L
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: 2,900 Pounds/LCY
Description: Sand and gravel - Dry
Rated Payload: 50,300 Pounds
Payload Capacity: 17.34 LCY

Truck Bed (volume) Basis:

Struck Volume:	12.00	LCY
Heaped Volume:	18.00	LCY
Average Volume:	15.00	LCY
Adjusted Volume:	17.34	LCY

Final Truck Volume Based on Number of Loader Passes: **13.88** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.000	LCY (heaped)
Bucket Fill Factor:	0.925	Loose material - 1/8" to 3/8" (90 - 95%) 0.925
Adjusted Capacity:	**4.625**	LCY

Job Condition Corrections: Site Altitude (ft.): 4990 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): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Stockpile:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Dump Target:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
	Net Cycle Time Adjustment:	0.000	minutes
	Adjusted Loader Cycle Time:	**0.500**	minutes
	Net Load Time per Truck:	**1.100**	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.100	Minutes	Adjusted for site altitude:	1.100	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time: Road Condition: Very hard, smooth, asphalt or concrete, no tire penetration 1.2

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	1.20	1.20	2895	0.409

Haul Time: **0.409** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	1.20	1.20	2913	0.309

Return Time: **0.309** minutes
Total Truck Cycle Time: **3.218** minutes

Loading Tool unit Production 520.31 LCY/Hour Adjusted for job efficiency: 431.86 LCY/Hour

Truck Unit Production 258.70 LCY/Hour Adjusted for job efficiency: 214.72 LCY/Hour

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

Adjusted hourly truck team production: 429.44 LCY/Hour
Adjusted single truck/loader team production: 429.44 LCY/Hour
Adjusted multiple truck/loader team production: **858.89** LCY/Hour

JOB TIME AND COST

Fleet size: 2 Team(s) Total job time: **31.44** Hours

Unit cost: $0.841 /LCY Total job cost: **$22,694**

BULLDOZER WORK

Task description: **Phase 1 - grade material on pond slopes**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #:	04B	State:	Colorado	Abbreviation:	None
Date:	11/15/2022	County:	Delta	Filename:	M105-04b
User:	RDZ				

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:

		Utilization %
Ownership Cost/Hour:	$124.85	NA
Operating Cost/Hour:	$97.63	100
Ripper own. Cost/Hour:	$16.38	NA
Ripper op. Cost/Hour:	$8.60	100
Operator Cost/Hour:	$41.30	NA

Total unit Cost/Hour: $288.76
Total Fleet Cost/Hour: **$577.52**

MATERIAL QUANTITIES

Initial Volume:	27,000
Swell factor:	1.000
Loose volume:	**27,000** LCY

Source of estimated volume: Applicant's Exhibit L
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet
Unadjusted hourly production: 1,400.0 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: -10 %
Average site altitude: 4,990 feet

Material weight: 2,900 lbs/LCY

Weight description: Sand and gravel - Dry

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7837

Adjusted unit production: 1,097.18 LCY/hr
Adjusted fleet production: **2194.36** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.263/LCY

Total job time: **12.30** Hours
Total job cost: **$7,106**

TRUCK/LOADER TEAM WORK

Task description: **Haul topsoil**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 11/15/2022 County: Delta Filename: M105-05a
User: RDZ

Agency 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 966H high lift
Support Equipment -Load Area:	NA
-Dump Area:	NA
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	NA	NA	NA
Ownership cost/hour:	$24.21	$49.15	NA	NA	NA	NA
Operating cost/hour:	$57.28	$43.04	NA	NA	NA	NA
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	$0.00	NA	NA	NA	NA
Operator cost/hour:	$32.54	$40.71	NA	NA	NA	NA
Unit Subtotals:	$114.03	$132.90	NA	NA	NA	NA
Number of Units:	4	2	0	0	0	0
Group Subtotals:	Work:	$721.92	Support:	$0.00	Maint:	$0.00

Total work team cost/hour: **$721.92**

MATERIAL QUANTITIES

Initial volume: 14,800 CCY Swell factor: 1.000
Loose volume: **14,800** LCY

Source of estimated volume: Applicant's Exhibit L
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: 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: **15.75** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.000	LCY (heaped)
Bucket Fill Factor:	1.050	Moist loam or sandy clay (100% - 110%) 1.050
Adjusted Capacity:	**5.250**	LCY

Job Condition Corrections: Site Altitude (ft.): 4990 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): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Stockpile:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Dump Target:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
	Net Cycle Time Adjustment:	0.000	minutes
	Adjusted Loader Cycle Time:	**0.500**	minutes
	Net Load Time per Truck:	**1.100**	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.100	Minutes	Adjusted for site altitude:	1.100	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time: Road Condition: Very hard, smooth, asphalt or concrete, no tire penetration 1.2

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	1.20	1.20	2895	0.409

Haul Time: **0.409** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	1.20	1.20	2913	0.309

Return Time: **0.309** minutes
Total Truck Cycle Time: **3.218** minutes

Loading Tool unit Production 590.63 LCY/Hour Adjusted for job efficiency: 490.22 LCY/Hour

Truck Unit Production 293.66 LCY/Hour Adjusted for job efficiency: 243.74 LCY/Hour

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

Adjusted hourly truck team production: 487.48 LCY/Hour
Adjusted single truck/loader team production: 487.48 LCY/Hour
Adjusted multiple truck/loader team production: **974.95** LCY/Hour

JOB TIME AND COST

Fleet size: 2 Team(s) Total job time: **15.18** Hours

Unit cost: $0.740 /LCY Total job cost: **$10,959**

BULLDOZER WORK

Task description: **Grade topsoil**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #:	05B	State:	Colorado	Abbreviation:	None
Date:	11/15/2022	County:	Delta	Filename:	M105-05b
User:	RDZ				

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:

		Utilization %
Ownership Cost/Hour:	$124.85	NA
Operating Cost/Hour:	$97.63	100
Ripper own. Cost/Hour:	$16.38	NA
Ripper op. Cost/Hour:	$8.60	100
Operator Cost/Hour:	$41.30	NA

Total unit Cost/Hour: $288.76
Total Fleet Cost/Hour: **$577.52**

MATERIAL QUANTITIES

Initial Volume:	14,800
Swell factor:	1.215
Loose volume:	**17,982** LCY

Source of estimated volume: Applicant's Exhibit L
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet
Unadjusted hourly production: 1,400.0 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: -10 %
Average site altitude: 4,990 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3027

Adjusted unit production: 1,823.78 LCY/hr
Adjusted fleet production: **3647.56** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: $0.158/LCY

Total job time: **4.93** Hours
Total job cost: **$2,847**

BULLDOZER RIPPING WORK

Task description: **Rip area for revegetation**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #: 06 State: Colorado Abbreviation: None
Date: 11/15/2022 County: Delta Filename: M105-06
User: RDZ

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$124.85	NA
Operating Cost/Hour:	$97.63	100
Ripper Ownership Cost/Hour:	$16.38	NA
Ripper Operating Cost/Hour:	$8.60	100
Operator Cost/Hour:	$41.30	NA
Total Unit Cost/Hour:	$288.76	

Total Fleet Cost/Hour: **$577.52**

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 22.00 acres Rip Depth (ft): 0.50 Volume: 17,747 BCY or CCY

Source of estimated quantity: Applicant's Exhibit L

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	3.71	feet/pass
Average Ripping Width:	5.56	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:	0.588	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.588 Acres/hr

Site Altitude:	4,990	feet
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Adjusted Hourly Unit Production: 0.49 Acres/hr
Adjusted Hourly Fleet Production: **0.98** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **22.55** Hours

Unit cost: $591.937 Per acre Total job cost: **$13,023**

REVEGETATION WORK

Task description: **Vegetate Phase 1 and stockpile area**

Site: **Delta Paving Gravel Pit** Permit Action: AM-01 Permit/Job#: M1998105

PROJECT IDENTIFICATION

Task #: 07 State: Colorado Abbreviation: None
Date: 11/15/2022 County: Delta Filename: M105-07
User: RDZ

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	$0.38	$76.00
			Total Fertilizer Materials Cost/Acre	**$76.00**

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	$39.64
Total Fertilizer Application Cost/Acre	**$39.64**

TILLING

Description	Cost /Acre
Chisel plowing {DMG}	$98.43
Weed control spraying (MEANS 31 31 16.13 3100)	$290.40
Total Tilling Cost/Acre	**$388.83**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	0.50	8.16	$6.86
Indian Ricegrass - Native	1.60	5.18	$10.40
Sand Dropseed	0.10	11.94	$0.98
Galleta	2.00	7.30	$44.70
Sainfoin - Remont	2.00	0.87	$6.32
Totals Seed Mix	6.20	33.45	**$69.26**

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 - Curtail @ 4.0 pt/ac	1.00	ACRE	$7.94	$7.94
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$421.36	$842.72
Total Mulch Materials Cost/Acre				**$850.66**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$73.00
Weed spray, truck, non-aquatic area, nox. [DMG]	$62.72
Total Mulch Application Cost/Acre	**$135.72**

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:	22	Cost /Acre:	$1,792.11
Estimated Failure Rate:	25%	Cost /Acre*:	$1,792.11
*Selected Replanting Work Items:	FERTILIZING,TILLING,SEEDING,MULCHING		

Initial Job Cost:	**$39,426.42**
Reseeding Job Cost:	**$9,856.61**
Total Job Cost:	**$49,283**
Job Hours:	**27.00**