COST SUMMARY WORK

Task description: **New permit application**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: ACY State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-ACY
User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Dewater Area 1	PUMPING	1	521.47	$28,900
02a	Grade Highwall Area 1	DOZER	1	16.06	$3,950
02b	Transport and place backfill in Area 2	TRUCK1	1	197.39	$139,267
03a	Transport & Spread Topsoil in Area 1	TRUCK1	1	16.51	$11,651
03b	Transport & Spread Topsoil in Area 2	TRUCK1	1	17.75	$12,525
04a	Reveg 10ac upland	REVEGE	1	15.00	$22,947
10a	Initial Mobilization	MOBILIZE	1	2.30	$3,989
10b	Secondary Mobilization	MOBILIZE	1	2.30	$1,357
		SUBTOTALS:		**788.78**	**$224,586**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$4,537
Performance bond:	1.05	Total =	$2,358
Job superintendent:	134.00	Total =	$9,320
Profit:	10.00	Total =	$22,459
		TOTAL O & P =	$38,673
		CONTRACT AMOUNT (direct + O & P) =	$263,259

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$500	Total =	$500
Engineering work and/or contract/bid preparation:	4.25	Total =	$11,189
Reclamation management and/or administration:	5.00		$13,163
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$63,525
		TOTAL BOND AMOUNT (direct + indirect) =	**$288,111**

PUMPING WORK

Task description: **Dewater Area 1**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 01A State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-01a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Submersible pump - 460v, 8 in.	1
Attachment 1:	Suction hose - 6 in. diam., 25 ft.	2
Attachment 2:	Discharge hose - 6 in. D., 25 ft.	3
Labor Unit 1:	Pump operator	1

Horsepower: 95
Shift Basis: 1 per day
Weight: 0.70
(US Tons)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$12.71	NA
Operating Cost/Hour:	$14.48	100
Operator Cost/Hour:	$28.23	NA
Total Unit Cost/Hour:	$55.42	

Total Fleet Cost/Hour: $55.42

PUMPING QUANTITIES

Initial Pond Volume: 269.10
Final Pond Volume: **87,686,391.08** gallons
Total Pond Inflow Surface Area: 70,000 Sq. ft.
Total Pond Inflow Volume per Hour: 12,306.00 gallons

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

Source of estimated volume: PAR- 200gpm recharge on 20.7 ac 13ft pond

PUMPING TIME

Maximum Pump Capacity:	170,000	gph/pump
Estimated Suction Head:	15	feet
Estimated Discharge Head:	15	feet
Total Head:	30	feet
CPB Pump Capacity:	165,600	gph/pump
Site Altitude:	4,530	feet

Adjusted Pumping Capacity:	165,600	gph
Initial Unadjusted Pumping Time:	529.51	hours
Inflow during Initial Pumping:	6,516,116	gallons
Net Unadjusted Pumping Time:	568.86	Hours
Altitude Adjustment Factor:	1.0000	(3% rule)
Pump Efficiency Factor:	0.9167	(55 min./hr.)
Total Adjusted Pumping Time:	521.47	hours

JOB TIME AND COST

Total job time: **521.47** Hours

Unit cost: $0.000307 /Gallon Total job cost: **$28,900**

BULLDOZER WORK

Task description: **Grade Highwall Area 1**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-02a
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:	$116.22	NA
Operating Cost/Hour:	$89.77	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$40.04	NA

Total unit Cost/Hour: $246.02
Total Fleet Cost/Hour: **$246.02**

MATERIAL QUANTITIES

Initial Volume: 8,360
Swell factor: 1.230
Loose volume: **10,283** LCY

Source of estimated volume: 1500LF @ 20'H vertical to 3H:1V
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 65 feet
Unadjusted hourly production: 1,170.3 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -5 %
Average site altitude: 4,350 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5472

Adjusted unit production: 640.39 LCY/hr
Adjusted fleet production: **640.39** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.384/LCY

Total job time: **16.06** Hours
Total job cost: **$3,950**

TRUCK/LOADER TEAM WORK

Task description: **Transport and place backfill in Area 2**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 02B State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-02b
User: ACY

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 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	5	50	NA	NA
Ownership cost/hour:	$24.61	$48.09	$116.22	$116.22	NA	NA
Operating cost/hour:	$50.89	$58.95	$4.49	$44.88	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:	$24.82	$35.97	$40.04	$40.04	NA	NA
Unit Subtotals:	$100.33	$143.01	$160.74	$201.14	NA	NA
Number of Units:	2	1	1	1	0	0
Group Subtotals:	Work:	$343.67	Support:	$361.88	Maint:	$0.00

Total work team cost/hour: **$705.55**

MATERIAL QUANTITIES

Initial volume: 100,000 CCY Swell factor: 1.000
Loose volume: **100,000** LCY

Source of estimated volume: PAR Mine Plan 3.0
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: 2,100 Pounds/LCY
Description: Earth - Loam
Rated Payload: 50,300 Pounds
Payload Capacity: 23.95 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: **17.64** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.600	LCY (heaped)
Bucket Fill Factor:	1.050	Moist loam or sandy clay (100% - 110%) 1.050
Adjusted Capacity:	**5.880**	LCY

Job Condition Corrections: Site Altitude (ft.): 4350 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 and up 0.00	0.000	(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:	-0.060	minutes
	Adjusted Loader Cycle Time:	**0.465**	minutes
	Net Load Time per Truck:	**1.030**	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.030	Minutes	Adjusted for site altitude:	1.030	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time: Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1100.00	0.00	5.00	5.00	2218	0.611

Haul Time: **0.611** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1100.00	0.00	5.00	5.00	2814	0.427

Return Time: **0.427** minutes
Total Truck Cycle Time: **3.468** minutes

Loading Tool unit Production 691.76 LCY/Hour Adjusted for job efficiency: 574.16 LCY/Hour

Truck Unit Production 305.19 LCY/Hour Adjusted for job efficiency: 253.31 LCY/Hour

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

Adjusted hourly truck team production: 506.62 LCY/Hour
Adjusted single truck/loader team production: 506.62 LCY/Hour
Adjusted multiple truck/loader team production: **506.62** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **197.39** Hours

Unit cost: $1.393 /LCY Total job cost: **$139,267**

TRUCK/LOADER TEAM WORK

Task description: **Transport & Spread Topsoil in Area 1**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-03a
User: ACY

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 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	5	50	NA	NA
Ownership cost/hour:	$24.61	$48.09	$116.22	$116.22	NA	NA
Operating cost/hour:	$50.89	$58.95	$4.49	$44.88	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:	$24.82	$35.97	$40.04	$40.04	NA	NA
Unit Subtotals:	$100.33	$143.01	$160.74	$201.14	NA	NA
Number of Units:	2	1	1	1	0	0
Group Subtotals:	Work:	$343.67	Support:	$361.88	Maint:	$0.00

Total work team cost/hour: **$705.55**

MATERIAL QUANTITIES

Initial volume: 8,066 CCY Swell factor: 1.115
Loose volume: **8,994** LCY

Source of estimated volume: PAR 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: 2,100 Pounds/LCY
Description: Earth - Loam
Rated Payload: 50,300 Pounds
Payload Capacity: 23.95 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: **17.64** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.600	LCY (heaped)
Bucket Fill Factor:	1.050	Moist loam or sandy clay (100% - 110%) 1.050
Adjusted Capacity:	**5.880**	LCY

Job Condition Corrections: Site Altitude (ft.): 4350 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 and up 0.00	0.000	(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:	-0.060	minutes
	Adjusted Loader Cycle Time:	**0.465**	minutes
	Net Load Time per Truck:	**1.030**	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.030	Minutes	Adjusted for site altitude:	1.030	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time: Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	5.00	5.00	2218	0.476

Haul Time: **0.476** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	5.00	5.00	2814	0.320

Return Time: **0.320** minutes
Total Truck Cycle Time: **3.226** minutes

Loading Tool unit Production 691.76 LCY/Hour Adjusted for job efficiency: 574.16 LCY/Hour

Truck Unit Production 328.08 LCY/Hour Adjusted for job efficiency: 272.31 LCY/Hour

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

Adjusted hourly truck team production: 544.62 LCY/Hour
Adjusted single truck/loader team production: 544.62 LCY/Hour
Adjusted multiple truck/loader team production: **544.62** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **16.51** Hours

Unit cost: $1.295 /LCY Total job cost: **$11,651**

TRUCK/LOADER TEAM WORK

Task description: **Transport & Spread Topsoil in Area 2**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 03B State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-03b
User: ACY

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 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	5	50	NA	NA
Ownership cost/hour:	$24.61	$48.09	$116.22	$116.22	NA	NA
Operating cost/hour:	$50.89	$58.95	$4.49	$44.88	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:	$24.82	$35.97	$40.04	$40.04	NA	NA
Unit Subtotals:	$100.33	$143.01	$160.74	$201.14	NA	NA
Number of Units:	2	1	1	1	0	0
Group Subtotals:	Work:	$343.67	Support:	$361.88	Maint:	$0.00

Total work team cost/hour: **$705.55**

MATERIAL QUANTITIES

Initial volume: 8,066 CCY Swell factor: 1.115
Loose volume: **8,994** LCY

Source of estimated volume: PAR 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: 2,100 Pounds/LCY
Description: Earth - Loam
Rated Payload: 50,300 Pounds
Payload Capacity: 23.95 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: **17.64** LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.600	LCY (heaped)
Bucket Fill Factor:	1.050	Moist loam or sandy clay (100% - 110%) 1.050
Adjusted Capacity:	**5.880**	LCY

Job Condition Corrections: Site Altitude (ft.): 4350 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 and up 0.00	0.000	(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:	-0.060	minutes
	Adjusted Loader Cycle Time:	**0.465**	minutes
	Net Load Time per Truck:	**1.030**	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.030	Minutes	Adjusted for site altitude:	1.030	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time: Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1100.00	0.00	5.00	5.00	2218	0.611

Haul Time: **0.611** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1100.00	0.00	5.00	5.00	2814	0.427

Return Time: **0.427** minutes
Total Truck Cycle Time: **3.468** minutes

Loading Tool unit Production 691.76 LCY/Hour Adjusted for job efficiency: 574.16 LCY/Hour

Truck Unit Production 305.19 LCY/Hour Adjusted for job efficiency: 253.31 LCY/Hour

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

Adjusted hourly truck team production: 506.62 LCY/Hour
Adjusted single truck/loader team production: 506.62 LCY/Hour
Adjusted multiple truck/loader team production: **506.62** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **17.75** Hours

Unit cost: $1.393 /LCY Total job cost: **$12,525**

REVEGETATION WORK

Task description: **Reveg 10ac upland**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-04a
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)	$107.16
Total Tilling Cost/Acre	**$107.16**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	2.00	78.05	$56.95
Indian Ricegrass - Paloma	0.50	1.62	$5.56
Galleta	0.50	1.83	$11.18
Slender Wheatgrass - Native	3.00	10.95	$13.88
Western Wheatgrass - Arriba	4.00	10.10	$26.00
Saltbush, Four Wing	4.00	5.51	$50.00
Totals Seed Mix	14.00	108.06	**$163.56**

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
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$301.00	$602.00
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	$2.92	$2.92
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$4.16	$4.16
Total Mulch Materials Cost/Acre				**$609.08**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$70.17
Power mulcher (MEANS 32 91 13.16 0350)	$101.93
Weed spray, hand, aquatic area, nox. [DMG]	$183.16
Weed spray, truck, non-aquatic area, nox. [DMG]	$62.72
Total Mulch Application Cost/Acre	**$417.98**

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: 10 Cost /Acre: $1,529.78
Estimated Failure Rate: 50% Cost /Acre*: $1,529.78
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$15,297.80**
Reseeding Job Cost: **$7,648.90**
Total Job Cost: **$22,947**
Job Hours: **15.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Initial Mobilization**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 10A State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-10a
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:	$17.20	$29.63	$38.69
Operating Cost/Hour:	$26.56	$47.02	$55.69
Operator Cost/Hour:	$23.63	$23.63	$23.63
Helper Cost/Hour:	$0.00	$23.53	$23.53
Total Unit Cost/Hour:	$67.39	$123.81	$141.54

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	47.71	$116.22	$123.81	1	$240.03	$123.81	$250.00
CAT 972H	28.00	$48.09	$123.81	1	$171.90	$123.81	$250.00
Drill/Broadcast Seeder with Tractor	25.00	$6.72	$67.39	1	$74.11	$67.39	$250.00
Power Mulcher (Bowie LD-90)	6.00	$11.19	$67.39	1	$78.58	$67.39	$250.00
Submersible pump - 460v, 8 in.	0.70	$10.98	$67.39	1	$78.37	$67.39	$250.00
Subtotals:					**$642.99**	**$449.79**	**$1,250.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 12-18 cy, 6x4	$100.32	2	$200.64	$200.64
Flatbed Truck, 4x2, 30K GVW	$58.44	1	$58.44	$58.44
Subtotals:			**$259.08**	**$259.08**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	3.00	miles
Average Travel Speed:	40.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$3,949.90
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$38.86

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.08	0.08
Return Time (Hours):	0.08	0.08
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.15	0.15

JOB TIME AND COST

Total job time:	**2.30**	Hours
Total job cost:	**$3,989**	

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Secondary Mobilization**

Site: **23 1/4 West Pit** Permit Action: App Permit/Job#: M2020035

PROJECT IDENTIFICATION

Task #: 10B State: Colorado Abbreviation: None
Date: 11/2/2020 County: Mesa Filename: M035-10b
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:	$17.20	$29.63	$38.69
Operating Cost/Hour:	$26.56	$47.02	$55.69
Operator Cost/Hour:	$23.63	$23.63	$23.63
Helper Cost/Hour:	$0.00	$23.53	$23.53
Total Unit Cost/Hour:	$67.39	$123.81	$141.54

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	$6.72	$67.39	1	$74.11	$67.39	$250.00
Power Mulcher (Bowie LD-90)	6.00	$11.19	$67.39	1	$78.58	$67.39	$250.00
Subtotals:					**$152.69**	**$134.78**	**$500.00**

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	$58.44	1	$58.44	$58.44
Subtotals:			**$58.44**	**$58.44**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	3.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$1,348.50	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$8.77	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.08	0.08
Return Time (Hours):	0.08	0.08
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.15	0.15

JOB TIME AND COST

Total job time:	**2.30**	Hours
Total job cost:	**$1,357**	