# Appendix A Bond Addendum Summary

| Activity | | PR-9 Costs (DIRECT COST SUMMARY) | PR-10 (I and J Pit Mine Plan) | PR-10 Costs | TR-130 | TR-130 Costs | TR-132 | TR-132 Costs |
|---|---|---|---|---|---|---|---|---|
| **Regrade** | | $ 14,322,436 | | $ 535,304 | | $ 1,630,781 | | $ - |
| **Topsoil Replacement** | | $ 4,685,072 | | $ 166,849 | | $ 214,901 | | $ 167,272 |
| **Facilities Removal** | | $ 829,523 | | $ - | | $ - | | $ - |
| **Revegetation** | | $ 1,797,133 | | $ 58,374 | | $ 81,095 | | $ 27,442 |
| **Miscellaneous** | | $ 1,001,173 | | $ - | | $ - | | $ - |
| **Total** | | **$ 22,635,336** | | $ 760,527 | | **$ 1,926,777** | | **$ 194,714** |
| **Reclamation not yet Bond Released Cost** | | $ 1,072,724 | | $ 130,483 | | $ 93,617 | | $ 35,137 |
| (RNYBR) 1048.41 Acres, See table below summary DRMS supplied values for PR9 | | | RNYBR, 126 acres | | RNYBR, 90.4 acres | | RNYBR, 33.9 acres | |
| **Total Direct Cost** | | **$ 23,708,060** | | **$ 891,009** | | **$ 2,020,393** | | **$ 229,851** |
| **INDIRECT COSTS** | | | | | | | | |
| **Public Liability Ins (2.02%)** | 2.02% | $ 457,234 | | $ 17,998 | | $ 40,812 | | $ 4,643 |
| **Contractor Perf Bond (1.05%)** | 1.05% | $ 237,671 | | $ 9,356 | | $ 21,214 | | $ 2,413 |
| **Contractor Profit (10%)** | 10.00% | $ 2,263,534 | | $ 20,387 | | $ 202,039 | | $ 22,985 |
| **Job Superintendent** | | $ 146,991 | | $ 89,101 | | $ 46,885 | | $ 5,334 |
| **Total Indirect Cost** | | **$ 3,105,430** | | **$ 136,842** | | **$ 310,951** | | **$ 35,376** |
| **DRMS Admin Expense (6.90%)** | | **$ 1,561,838** | (5.92%) | **$ 61,349** | | **$ 138,516** | | **$ 16,201** |
| **PR09 Worst Case Bond Estimate Total** | | **$ 27,302,604** | **PR-10 Worst Case Bond Est.** | **$ 1,089,200** | **TR-130 Worst Case Bond Est.** | **$ 2,469,860** | **TR-132 Worst Case Bond Est.** | **$ 281,428** |
| **Acreage Change** | | **1.2** | | **155.0** | | **61.20** | | **0.00** |

| Acres | Cost/Acre | % |
|---|---|---|
| 1584.59 | $ 17,230.07 | 100% |
| 175.00 | $ 6,892.03 | 40% |
| 562.40 | $ 2,584.51 | 15% |

**Phase Bond Release Area Cost Accounting**

| | PR-9 | PR-10 | TR-130 | TR-132 |
|---|---|---|---|---|
| PR9 Worst Case Bond Estimate Total | $ 27,302,604 | | | |
| Phase I Bond Release | $ 1,206,106 | | | |
| Phase II Bond Release | $ 1,453,531 | | | |
| | | Accrued Total Bond | Accrued Total Bond | Accrued Total Bond |
| **Grand Total Bond Estimate** | **$ 29,962,241** | **$ 29,968,404** | **$ 32,438,263** | **$ 32,719,692** |
| DRMS RNYBR adjustment added to Trapper Bond Estimate | $ 31,034,965 | | | |
| DRMS CIRCES Total Bond Estimate | **$ 28,879,204** | | | |

## Direct cost RNYBR

| | PR-9 Acres | PR-9 $/Acre | PR-9 Total Cost | PR-10 Acres | PR-10 $/Acre | PR-10 Total Cost |
|---|---|---|---|---|---|---|
| Topsoil Acres | 258.29 | $ 2,720.89 | $ 702,778.47 | 31.5 | $ 2,720.89 | $ 85,708.04 |
| Revegetation Acres | 258.29 | $ 831.80 | $ 214,846.23 | 31.5 | $ 831.80 | $ 26,201.70 |
| Re-seed revegetated area (assume 17.5% Failure Rate) | 790.12 | $ 145.57 | $ 115,014.14 | 94.5 | $ 145.57 | $ 13,755.89 |
| Site Maintenance | 1048.41 | $ 38.23 | $ 40,085.17 | 126.0 | $ 38.23 | $ 4,816.98 |
| | | | **$ 1,072,724** | | | **$ 130,483** |

| | TR-130 Acres | TR-130 $/Acre | TR-130 Total Cost | TR-130 Acres | TR-130 $/Acre | TR-130 Total Cost |
|---|---|---|---|---|---|---|
| Topsoil Acres | 22.6 | $ 2,720.89 | $ 61,492.17 | 8.5 | $ 2,720.89 | $ 23,079.95 |
| Revegetation Acres | 22.6 | $ 831.80 | $ 18,798.70 | 8.5 | $ 831.80 | $ 7,055.74 |
| Re-seed revegetated area (assume 17.5% Failure Rate) | 67.8 | $ 145.57 | $ 9,869.66 | 25.4 | $ 145.57 | $ 3,704.39 |
| Site Maintenance | 90.4 | $ 38.23 | $ 3,455.99 | 33.9 | $ 38.23 | $ 1,297.14 |
| | | | **$ 93,617** | | | **$ 35,137** |

Revision: TR-132
Submitted: 9-22-22

**Table A-1.1**
**TR-132 Bond Determination for Worst Case Year 2022**

| Activity | | | Cost ($) |
|---|---|---|---|
| **Direct Costs** | | | |
| Regrade | | $ | - |
| Topsoil Replacement | | $ | 167,272 |
| Facilities Removal | | $ | - |
| Revegetation | | $ | 27,442 |
| Miscellaneous | | $ | - |
| Additional 33.9 acres (topsoil + Reveg); See table below summary | | $ | 35,137 |
| **Total** | | **$** | **229,851** |
| **Indirect Costs** | | | |
| **Overhead and Profit:** | | | |
| Public Liability Insurance | 2.02% | **$** | **4,643** |
| Contractor Perf Bond | 1.05% | **$** | **2,413** |
| Job Superintendent * | | **$** | **5,334** |
| Contractor Profit | 10.0% | **$** | **22,985** |
| **Total** | | **$** | **35,376** |
| **Total Direct + Indirect Costs** | | **$** | **265,227** |
| Financial warranty processing (legal/related costs): | $ 500.00 | $ | 500 |
| Engineering Work and/or contract/bid prep: 3.27% of contract: | 3.27% | $ | 8,673 |
| Reclamation Management and/or Administration; 2.65% of contract: | 2.65% | $ | 7,029 |
| Total | | $ | 16,201 |
| **Worst Case Bond Estimate Total** | | **$** | **281,428** |

| | |
|---|---|
| % Un-topsoiled affected Acres Proposed | 25% |
| % Un-revegetated affected Acres Proposed | 25% |

## Direct cost for additional 90.4 acres (Topsoil & Re-vegetation)

| | Acres | $/Acre ** | | Total Cost |
|---|---|---|---|---|
| Topsoil Acres | 8.48 | $ 2,720.89 | | $ 23,079.95 |
| Revegetation Acres | 8.48 | $ 831.80 | | $ 7,055.74 |
| Re-seed revegetated area (assume 17.5% Failure Rate) | 25.45 | $ 145.57 | * | $ 3,704.39 |
| Site Maintenance | 33.93 | $ 38.23 | | $ 1,297.14 |
| Cost Summary | | | | $ 35,137 |

* 17.5% of revegetation cost per acre
** Cost/Acre from PR-10 Circes 9/25/2020

| | |
|---|---|
| Circes PR9 Final Bond Estimate | $ 28,879,204 |
| Total PR9 + PR10+TR-130 Bond Estimate | $ 32,438,262.63 |
| Total TR-132 Bond Estimate (from total above) | $ 281,428 |
| Total PR9 + PR10+ TR-130+TR-132 Bond Estimate | $ 32,719,691 |

**Table A-2.1** **Topsoil replacement fleet costs**

**Scrapers**

| Equipment | Units Required | Ownership Cost/Hour | Oper. Cost Cost/Hour | Operator ($/hr) | Cost ea. ($/hr) | Total Cost ($/hr) | |
|---|---|---|---|---|---|---|---|
| single shift | | | | | | | |
| Cat 637 G w/push-pull | 8 | $ 223.48 | $ 193.77 | $ 30.90 | $ 448.15 | $ 3,585.20 | |
| Motor Grader | 1 | $ 70.80 | $ 56.31 | $ 28.56 | $ 155.67 | $ 155.67 | |
| Support (Load Area) Cat D10 -10SU | 1 | $ 169.60 | $ 166.94 | $ 41.30 | $ 377.82 | $ 377.82 | |
| Support (Dump Area) Cat D10 -10SU | 1 | $ 169.60 | $ 166.94 | $ 41.30 | $ 377.82 | $ 377.82 | |
| Water Truck | 1 | $ 11.70 | $ 9.00 | $ 21.12 | $ 41.82 | $ 41.82 | |
| Total | | $ 645.18 | $ 592.96 | $ 163.18 | $ 1,401.28 | $ 4,538.33 | |
| | | | | | | $ 953.13 | |

**Truck/Trackhoe Topsoil Replacement**

| Equipment | Units Required | Ownership Cost/Hour | Oper. Cost Cost/Hour | Operator ($/hr) | Cost ea. ($/hr) | Total Cost ($/hr) | |
|---|---|---|---|---|---|---|---|
| single shift | | | | | | | |
| **CAT 385D L 18'-1" Stick** | 1 | $ 219.19 | $ 176.71 | $ 37.32 | $ 433.22 | $ 433.22 | |
| **CAT 777F** | 4 | $ 175.01 | $ 139.87 | $ 33.71 | $ 348.59 | $ 1,394.36 | |
| **Motor Grader (Cat 16M)** | 1 | $ 70.80 | $ 53.49 | $ 28.56 | $ 152.85 | $ 152.85 | 95 % utilization |
| **Support (Load Area) Cat DI0T-10SU** | 1 | $ 169.61 | $ 166.95 | $ 41.30 | $ 377.84 | $ 377.84 | |
| **Support (Dump Area) Cat D10T -10SU** | 1 | $ 169.61 | $ 166.95 | $ 41.30 | $ 377.84 | $ 377.84 | |
| **Water Truck- Water Tanker, 2500 Gal.** | 1 | $ 11.70 | $ 9.00 | $ - | $ 20.70 | $ 20.70 | 50 % utilization |
| Total | | $ 815.92 | $ 712.97 | $ 182.19 | $ 1,711.04 | $ 2,756.81 | |
| | | | | | | $ 1,362.45 | Cost/HR without Cat 777 |

**Table A-2.2** **Revegetation Unit Costs**

| | |
|---|---|
| **Rangeland with Shrubs: (From TR-124 Circes Estimate)** | |
| **Total Tilling Cost/Acre** | $ 98.43 |
| **Total Seed Mix Cost/Acre** | $ 354.70 |
| **Total Seed Application Cost/Acre** | $ 232.00 |
| **Total** | $ 685.13 |
| | |
| **Rangeland without Shrubs: (From RN-06 Circes Estimate)** | |
| **Total Tilling Cost/Acre** | $ - |
| **Total Seed Mix Cost/Acre** | $ 354.70 |
| **Total Seed Application Cost/Acre** | $ 232.00 |
| **Total** | $ 586.70 |

**Note: Unit costs taken from RN8 Circes Est. 7/6/2022**

**Table A-9.1** **Summary of topsoil replacement costs**

| Topsoil Replacement | | | | | | |
|---|---|---|---|---|---|---|
| **Area** | **Cubic Yards** | **Rate (cyds/hr)** | **Scraper/ Truck Hours** | **Fleet Hours** | **Ave. Fleet Cost ($/hr)** | **Total ($)** |
| I/J Pit Spoil Stockpile Addition | 7,357 | 800 | 7 | 59 | $ 4,538.33 | $ 33,388.49 |
| Dragline Walk Road | 47,379 | 978 | 49 | 194 | $ 2,756.81 | $ 133,883.60 |
| | | | | | | **$ 167,272.09** |

33.93 Acres

## Table A-10.6 — Calculations for time required for topsoiling - Ithaca/Jennings Pit Spoil Dump Stockpile- (withScrapers)



**Ithaca/Jennings Pit Spoil Dump Stockpile**

| Route From | Cubic Yards | Haul Distance (Ft.) | Average Grade (%) | Production Rate (cyds/hr) | Adjusted* Production (cyds/hr) | Scraper/Truck Hours | Number of Scrapers | Fleet Hours | Fleet Cost ($/hr) | Total ($) |
|---|---|---|---|---|---|---|---|---|---|---|
| NN20-2 to I/J Spoil dump expansion | 7,357 | 761 | 0.0% | 800 | 1000 | 7 | 8 | 58.9 | $ 4,538.33 | $ 33,388.49 |
| **Total** | 7,357 | 761 | 0.0% | 800 | 800 | 7 | 3 | 59 | $ 4,538.33 | $ 33,388.49 |
| | 4.6 Acres | | | | | | | | | |

## Table A-10.6 — Calculations for time required for topsoiling - Dragline walk road (with Truck/Excavator)



**Queen Anne Dragline Walk Road**

| Route From | Cubic Yards | Haul Distance (Ft.) | Average Grade (%) | Production Rate (cyds/hr) | Adjusted* Production (cyds/hr) | Loader Hours | Number of Trucks | Truck Hours | Fleet Cost ($/hr) | Total ($) |
|---|---|---|---|---|---|---|---|---|---|---|
| ASH4-2020 to Walk Road | 8,695 | 2,288 | 2.8% | 880 | 880 | 10 | 4 | 39.5 | $ 2,756.81 | $ 27,239.16 |
| ASH1-2020 to Walk Road | 38,684 | 2,130 | -3.8% | 1000 | 1000 | 39 | 4 | 154.7 | $ 2,756.81 | $ 106,644.44 |
| **Total** | 47,379 | 2,159.00 | -2.6% | 978 | 978 | 49 | 4 | 194.3 | $ 2,756.81 | $ 133,883.60 |
| | 29.4 Acres | | | | | | | | | |

**Table A-11.1** **Summary of estimated revegetation quantities and costs.**

| Postmining Land Use | | - Location | Acres | Unit Cost ($/acre) (1) | Total Cost ($) |
|---|---|---|---|---|---|
| Cropland | | None | 0 | $ - | $ - |
| Rangeland | | I/J Spoil Dump Expansion | 4.6 | $ 685.13 | $ 3,124.28 |
| w/o shrubs | | Dragline Walk Road | 29.4 | $ 685.13 | $ 20,120.31 |
| (below 6700' Elev.) | | | | | $ - |
| | | Sub-Total | 33.9 | | $ 23,244.59 |
| Rangeland | | | | | |
| w/shrubs | | None | 0.0 | $ - | $ - |
| (above 6700' Elev.) | | | | | |
| | | Sub-Total | 0.0 | | $ - |
| | | Total Remaining Regrade | 33.9 | Acres | $ 23,244.59 |
| Re-seed For Failure (2) | | | | | |
| Cropland re-seed | | | 0 | $ 137.20 | $ - |
| Rangeland w/o shrubs re-seed | | | 5.9 | $ 706.98 | $ 4,197.53 |
| Rangeland w/shrubs re-seed | | | 0 | $ 571.48 | $ - |
| | | Sub-Total | 5.9 | | $ 4,197.53 |
| Other Costs | | | | | |
| Shrub Transplant | 0 | clumps | $ 11,086.00 | per clump | $ - |
| Erosion Control Ditches | 50,000 | feet | $ 38.92 | per 100 Feet | $ - |
| Drainage Stabilization | 0 | acres (3) | $ 17,393.00 | per acre | $ - |
| TOTAL | | | | | **$ 27,442.13** |

(1) Unit Cost from Table A-2.2 (from RN8 Circes Est 7/6/2022)
(2) Based on 17.5% failure rate of cropland (0.0 ac), rangeland w/o shrubs (429 ac) and rangeland w/shrubs (2,121 ac).
(3) 37,300 feet of re-established drainage, 30 feet wide.