

| ESTIMATE OF PROBABLE COST OF DESIGN & CONSTRUCTION                               |           |            |              |  |             | DATE PREPARED<br>12/15/2009 | SHEET 1 OF 1 |                        |
|--|-----------|------------|--------------|--|-------------|-----------------------------|--------------|------------------------|
| PROJECT<br>Haines Borough Biomass Boiler   |           |            |              | <b>CTA Architects Engineers</b><br>306 West Railroad Avenue, Suite 104, Missoula, MT 59802<br>406.728.9522 800.780.7455 Fax: 406.728.8287<br>1-800-780-7455<br>http://www.ctagroup.com E-mail: info@ctagroup.com |             |                             |              |                        |
| Option<br>A.1A Fully Automated 2.6 MMBtu/hr Wood Chip Boiler with Metal Building |           |            |              |  |             |                             |              |                        |
| Entire Campus - Biomass Building Location A                                      |           |            |              |  |             |                             |              |                        |
| ESTIMATOR<br>Ratz  |           |            |              |  |             |                             |              |                        |
| Costs obtained from RS Means and historical information.                         |           |            |              |  |             |                             |              |                        |
|  | QUANTITY  |            | MATERIAL     |  | LABOR       |                             | TOTAL COST   | PROJECT COMPONENT COST |
|  | No. Units | Unit Meas. | Per Unit     | TOTAL  | Per Unit    | TOTAL                       |              |                        |
| <b>BIOMASS BOILER AND STACK SYSTEM</b>   |           |            |              |  |             |                             |              |                        |
| Wood Fired Heating System (2.6 MMBtu/hr Output- Hot Wtr)                         | 1         | assy       | \$250,000.00 | \$250,000  | \$55,000.00 | \$55,000                    | \$305,000    |                        |
| Electrostatic Precipitator   | 1         | assy       | \$120,000.00 | \$120,000  | \$10,000.00 | \$10,000                    | \$130,000    |                        |
| Stack  | 1         | assy       | \$45,000.00  | \$45,000   | \$5,000.00  | \$5,000                     | \$50,000     |                        |
| Subtotal   |           |            |              |  |             |                             | \$485,000    |                        |
| <b>TOTAL- BIOMASS BOILER SYSTEMS</b>   |           |            |              |  |             |                             |              | <b>\$485,000</b>       |
| <b>BOILER BUILDING COSTS</b>   |           |            |              |  |             |                             |              |                        |
| Boiler Plant Building - Metal Building (Slab on Grade)                           | 2000      | sf         | \$50.00      | \$100,000  | \$40.00     | \$80,000                    | \$180,000    |                        |
| Site Work for Building   | 1         | ls         | \$30,000.00  | \$30,000   | \$30,000.00 | \$30,000                    | \$60,000     |                        |
| Subtotal   |           |            |              |  |             |                             | \$240,000    |                        |
| <b>TOTAL- Boiler Building</b>  |           |            |              |  |             |                             |              | <b>\$240,000</b>       |
| <b>BOILER BUILDING MECHANICAL COSTS</b>  |           |            |              |  |             |                             |              |                        |
| Site Utilities   |           |            |              |  |             |                             |              |                        |
| 1-1/2" Water Service   | 250       | lf         | \$1.60       | \$400  | \$2.15      | \$538                       | \$938        |                        |
| Trenching & Backfill (4' w x 8' d x 150 lf)                                      | 300       | cy         | \$4.50       | \$1,350  | \$7.50      | \$2,250                     | \$3,600      |                        |
| 6" PVC Sewer Main  | 250       | lf         | \$10.00      | \$2,500  | \$4.00      | \$1,000                     | \$3,500      |                        |
| Trenching & Backfill (4' w x 8' d x 250 lf)                                      | 300       | cy         | \$4.50       | \$1,350  | \$7.50      | \$2,250                     | \$3,600      |                        |
| Domestic Water System  |           |            |              |  |             |                             |              |                        |
| 1-1/2" Insulated Copper CW   | 100       | lf         | \$25.00      | \$2,500  | \$16.00     | \$1,600                     | \$4,100      |                        |
| 3/4" Insulated Copper (CW & HW)  | 175       | lf         | \$9.00       | \$1,575  | \$11.00     | \$1,925                     | \$3,500      |                        |
| Emergency Shower and Mixing Valve  | 1         | assy       | \$2,000.00   | \$2,000  | \$320.00    | \$320                       | \$2,320      |                        |
| Electric Water Heater  | 1         | ea         | \$1,000.00   | \$1,000  | \$210.00    | \$210                       | \$1,210      |                        |
| Service Sink   | 1         | ea         | \$960.00     | \$960  | \$740.00    | \$740                       | \$1,700      |                        |
| D-W-V System   |           |            |              |  |             |                             |              |                        |
| 2" PVC D-W-V   | 120       | lf         | \$3.25       | \$390  | \$18.00     | \$2,160                     | \$2,550      |                        |
| 4" PVC D-W-V   | 70        | lf         | \$8.00       | \$560  | \$20.00     | \$1,400                     | \$1,960      |                        |
| Floor Drains   | 3         | ea         | \$575.00     | \$1,725  | \$64.00     | \$192                       | \$1,917      |                        |
| Miscellaneous Plumbing   | 1         | ls         | \$2,500.00   | \$2,500  | \$2,500.00  | \$2,500                     | \$5,000      |                        |
| HVAC   |           |            |              |  |             |                             |              |                        |
| Combustion Ductwork  | 600       | lbs        | \$1.20       | \$720  | \$6.75      | \$4,050                     | \$4,770      |                        |
| Louvers  | 60        | sf         | \$60.00      | \$3,600  | \$18.00     | \$1,080                     | \$4,680      |                        |
| Control Dampers  | 4         | ea         | \$480.00     | \$1,920  | \$95.00     | \$380                       | \$2,300      |                        |
| Small Air Handling Unit for chip drying at metering bin                          | 1         | ea         | \$10,000.00  | \$10,000   | \$2,500.00  | \$2,500                     | \$12,500     |                        |
| Heating Hot Water Piping   |           |            |              |  |             |                             |              |                        |
| 1-1/2" Insulated Copper  | 120       | lf         | \$15.00      | \$1,800  | \$15.00     | \$1,800                     | \$3,600      |                        |
| 6" Insulated Black Steel   | 150       | lf         | \$63.00      | \$9,450  | \$50.00     | \$7,500                     | \$16,950     |                        |
| Base mounted boiler pumps w/ accessories   | 2         | ea         | \$10,000.00  | \$20,000   | \$2,500.00  | \$5,000                     | \$25,000     |                        |
| Unit Heater  | 4         | ea         | \$800.00     | \$3,200  | \$150.00    | \$600                       | \$3,800      |                        |
| Unit Heater Piping Assembly  | 4         | ea         | \$650.00     | \$2,600  | \$700.00    | \$2,800                     | \$5,400      |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000  | \$5,000.00  | \$5,000                     | \$10,000     |                        |
| In Slab Radiant Heat System  |           |            |              |  |             |                             |              |                        |
| 1-1/2" Insulated Copper Piping   | 80        | lf         | \$15.00      | \$1,200  | \$15.00     | \$1,200                     | \$2,400      |                        |
| 5/8" PEX Tubing  | 750       | lf         | \$1.40       | \$1,050  | \$1.70      | \$1,275                     | \$2,325      |                        |
| Manifold - 8 circuit   | 1         | ea         | \$250.00     | \$250  | \$250.00    | \$250                       | \$500        |                        |
| Manifold Piping Assembly   | 1         | ea         | \$650.00     | \$650  | \$700.00    | \$700                       | \$1,350      |                        |
| Temperature Controls (includes pump VFD's)                                       | 1         | ls         | \$15,000.00  | \$15,000   | \$10,000.00 | \$10,000                    | \$25,000     |                        |
| Plant Electrical Work  | 1         | ls         | \$25,000.00  | \$25,000   | \$12,500.00 | \$12,500                    | \$37,500     |                        |
| Emergency Generator 75KW   | 75        | KW         | \$475.00     | \$35,625   | \$60.00     | \$4,500                     | \$40,125     |                        |
| Subtotal   |           |            |              |  |             |                             | \$234,095    |                        |
| <b>TOTAL- BOILER BUILDING MECHANICAL &amp; ELECTRICAL COSTS</b>                  |           |            |              |  |             |                             |              | <b>\$234,095</b>       |
| <b>SUBTOTAL BUILDING &amp; BOILER</b>  |           |            |              |  |             |                             |              | <b>\$959,095</b>       |
| <b>MECHANICAL INTEGRATION COSTS</b>  |           |            |              |  |             |                             |              |                        |
| <b>School</b>  |           |            |              |  |             |                             |              |                        |
| Heating Hot Water Piping   |           |            |              |  |             |                             |              |                        |
| 4" Pre-Insulated Piping System (Below Grade)                                     | 1300      | lf         | \$60.00      | \$78,000   | \$20.00     | \$26,000                    | \$104,000    |                        |
| 4" Insulated Black Steel (Above Grade)   | 120       | lf         | \$40.00      | \$4,800  | \$33.00     | \$3,960                     | \$8,760      |                        |
| Trenching & Backfill (8' w x 4' d x 650 lf)                                      | 770       | cy         | \$6.40       | \$4,928  | \$5.30      | \$4,081                     | \$9,009      |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00   | \$1,000.00  | \$1,000.00                  | \$3,500.00   |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$16,000.00  | \$16,000.00  | \$2,500.00  | \$2,500.00                  | \$18,500.00  |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000  | \$5,000.00  | \$5,000                     | \$10,000     |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500  | \$2,500.00  | \$2,500                     | \$5,000      |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500  | \$1,000.00  | \$1,000                     | \$2,500      |                        |
| Subtotal   |           |            |              |  |             |                             | \$161,269    |                        |
| <b>Vocational Education Building (continued from main School)</b>                |           |            |              |  |             |                             |              |                        |
| Heating Hot Water Piping   |           |            |              |  |             |                             |              |                        |
| 1-1/2" Pre-Insulated Piping System (Below Grade)                                 | 530       | lf         | \$30.00      | \$15,900   | \$10.00     | \$5,300                     | \$21,200     |                        |
| 1-1/2" Insulated Copper (Above Grade)  | 300       | lf         | \$15.00      | \$4,500  | \$15.00     | \$4,500                     | \$9,000      |                        |
| Trenching & Backfill (8' w x 4' d x 265 lf)                                      | 315       | cy         | \$6.40       | \$2,016  | \$5.30      | \$1,670                     | \$3,686      |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00   | \$1,000.00  | \$1,000.00                  | \$3,500.00   |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$7,500.00   | \$7,500.00   | \$1,500.00  | \$1,500.00                  | \$9,000.00   |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000  | \$5,000.00  | \$5,000                     | \$10,000     |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500  | \$2,500.00  | \$2,500                     | \$5,000      |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500  | \$1,000.00  | \$1,000                     | \$2,500      |                        |
| Subtotal   |           |            |              |  |             |                             | \$63,886     |                        |
| <b>Administration &amp; Library</b>  |           |            |              |  |             |                             |              |                        |
| Heating Hot Water Piping   |           |            |              |  |             |                             |              |                        |
| 2-1/2" Pre-Insulated Piping System (Below Grade)                                 | 1500      | lf         | \$30.00      | \$45,000   | \$10.00     | \$15,000                    | \$60,000     |                        |
| 1" Insulated Copper (Above Grade)  | 100       | lf         | \$9.00       | \$900  | \$11.00     | \$1,100                     | \$2,000      |                        |
| 2" Insulated Copper (Above Grade)  | 100       | lf         | \$22.00      | \$2,200  | \$16.00     | \$1,600                     | \$3,800      |                        |
| Trenching & Backfill (8' w x 4' d x 750 lf)                                      | 900       | cy         | \$6.40       | \$5,760  | \$5.30      | \$4,770                     | \$10,530     |                        |
| Heating Injection Pump   | 2         | ea         | \$2,500.00   | \$5,000.00   | \$1,000.00  | \$2,000.00                  | \$7,000.00   |                        |
| Water to Water Heat Exchanger  | 2         | ea         | \$7,500.00   | \$15,000.00  | \$1,500.00  | \$3,000.00                  | \$18,000.00  |                        |
| Miscellaneous Piping Components  | 2         | ea         | \$5,000.00   | \$10,000.00  | \$5,000.00  | \$10,000.00                 | \$20,000.00  |                        |
| Temperature Controls   | 2         | ls         | \$2,500.00   | \$5,000  | \$2,500.00  | \$5,000                     | \$10,000     |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500  | \$1,000.00  | \$1,000                     | \$2,500      |                        |
| Subtotal   |           |            |              |  |             |                             | \$133,830    |                        |
| <b>TOTAL- MECHANICAL INTEGRATION COSTS</b>                                       |           |            |              |  |             |                             |              | <b>\$358,985</b>       |
| <b>SUBTOTAL</b>  |           |            |              |  |             |                             |              | <b>\$1,318,079</b>     |
| General Conditions & Construction Mgr. Fees                                      |           |            |              |  |             |                             |              | 20%                    |
|  |           |            |              |  |             |                             |              | \$263,616              |
| <b>SUBTOTAL</b>  |           |            |              |  |             |                             |              | <b>\$1,581,695</b>     |
| Escalation to Bid Date (Feb. 2010)   |           |            |              |  |             |                             |              | 5%                     |
|  |           |            |              |  |             |                             |              | \$79,085               |
| <b>SUBTOTAL</b>  |           |            |              |  |             |                             |              | <b>\$1,660,780</b>     |
| REMOTE FACTOR  |           |            |              |  |             |                             |              | 30.00%                 |
|  |           |            |              |  |             |                             |              | \$498,234              |
| <b>SUBTOTAL CONSTRUCTION</b>   |           |            |              |  |             |                             |              | <b>\$2,159,013</b>     |
| <b>SOFT COSTS</b>  |           |            |              |  |             |                             |              |                        |
| A/E Design Services (boiler, building & integration)                             |           |            |              |  |             |                             |              |                        |
| Site Survey  | 1         | ls         | \$7,500.00   | \$7,500  |             |                             | \$7,500      |                        |
| Geotechnical Investigation   | 1         | ls         | \$15,000.00  | \$15,000   |             |                             | \$15,000     |                        |
| Asbestos Survey and Report   | 1         | ls         | \$5,000.00   | \$5,000  |             |                             | \$5,000      |                        |
| Construction Material Testing  | 1         | ls         | \$5,000.00   | \$5,000  |             |                             | \$5,000      |                        |
| Building Permit  | 1         | ls         | \$7,500.00   | \$7,500  |             |                             | \$7,500      |                        |
| Equipment Commissioning  | 1         | ls         | \$15,000.00  | \$15,000   |             |                             | \$15,000     |                        |
| Air Quality Engineering  | 1         | ls         | \$10,000.00  | \$10,000   |             |                             | \$10,000     |                        |
| Air Quality Permit   | 1         | ls         | \$0.00       | \$0  |             |                             | \$0          |                        |
| <b>SUBTOTAL SOFT COSTS</b>   |           |            |              |  |             |                             |              | <b>\$231,078</b>       |
| <b>OTHER COSTS</b>   |           |            |              |  |             |                             |              |                        |
| Live bottom chip van   |           |            |              |  |             |                             |              |                        |
|  | 1         | ea         | \$40,000.00  | \$40,000   |             |                             | \$40,000     |                        |
| <b>SUBTOTAL OTHER COSTS</b>  |           |            |              |  |             |                             |              | <b>\$40,000</b>        |
| <b>PRECONTINGENCY PROJECT TOTAL</b>  |           |            |              |  |             |                             |              | <b>\$2,430,091</b>     |
| CONTINGENCY  |           |            |              |  |             |                             |              | 10.00%                 |
|  |           |            |              |  |             |                             |              | \$243,009              |
| <b>RECOMMENDED PROJECT BUDGET - DESIGN AND CONSTRUCTION COSTS</b>                |           |            |              |  |             |                             |              | <b>\$2,673,100</b>     |

| ESTIMATE OF PROBABLE COST OF DESIGN & CONSTRUCTION                               |           |            |              |             | DATE PREPARED<br>12/15/2009  |             | SHEET 1 OF 1 |                        |
|--|-----------|------------|--------------|-------------|--|-------------|--------------|------------------------|
| PROJECT<br>Haines Borough Biomass Boiler   |           |            |              |             | <b>CTA Architects Engineers</b><br>306 West Railroad Avenue, Suite 104, Missoula, MT 59802<br>406. 728. 9522 800. 780. 7455 Fax: 406. 728. 8287<br>1-800-780-7455<br>http://www.ctagroup.com E-mail: info@ctagroup.com |             |              |                        |
| Option<br>A.2A Fully Automated 2.6 MMBtu/hr Wood Chip Boiler with Metal Building |           |            |              |             |  |             |              |                        |
| Entire Campus Less Vocational Education Building - Biomass Building Location A   |           |            |              |             |  |             |              |                        |
| ESTIMATOR<br>Ratz  |           |            |              |             |  |             |              |                        |
| Costs obtained from RS Means and historical information.                         |           |            |              |             |  |             |              |                        |
|  | QUANTITY  |            | MATERIAL     |             | LABOR  |             | TOTAL COST   | PROJECT COMPONENT COST |
|  | No. Units | Unit Meas. | Per Unit     | TOTAL       | Per Unit   | TOTAL       |              |                        |
| <b>BIOMASS BOILER AND STACK SYSTEM</b>   |           |            |              |             |  |             |              |                        |
| Wood Fired Heating System (2.6 MMBtu/hr Output- Hot Wtr)                         | 1         | assy       | \$250,000.00 | \$250,000   | \$55,000.00  | \$55,000    | \$305,000    |                        |
| Electrostatic Precipitator   | 1         | assy       | \$120,000.00 | \$120,000   | \$10,000.00  | \$10,000    | \$130,000    |                        |
| Stack  | 1         | assy       | \$45,000.00  | \$45,000    | \$5,000.00   | \$5,000     | \$50,000     |                        |
| Subtotal   |           |            |              |             |  |             | \$485,000    |                        |
| <b>TOTAL- BIOMASS BOILER SYSTEMS</b>   |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$485,000              |
| <b>BOILER BUILDING COSTS</b>   |           |            |              |             |  |             |              |                        |
| Boiler Plant Building - Metal Building (Slab on Grade)                           | 2000      | sf         | \$50.00      | \$100,000   | \$40.00  | \$80,000    | \$180,000    |                        |
| Site Work for Building   | 1         | ls         | \$30,000.00  | \$30,000    | \$30,000.00  | \$30,000    | \$60,000     |                        |
| Subtotal   |           |            |              |             |  |             | \$240,000    |                        |
| <b>TOTAL- Boiler Building</b>  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$240,000              |
| <b>BOILER BUILDING MECHANICAL COSTS</b>  |           |            |              |             |  |             |              |                        |
| Site Utilities   |           |            |              |             |  |             |              |                        |
| 1-1/2" Water Service   | 250       | lf         | \$1.60       | \$400       | \$2.15   | \$538       | \$938        |                        |
| Trenching & Backfill (4' w x 8' d x 150 lf)                                      | 300       | cy         | \$4.50       | \$1,350     | \$7.50   | \$2,250     | \$3,600      |                        |
| 6" PVC Sewer Main  | 250       | lf         | \$10.00      | \$2,500     | \$4.00   | \$1,000     | \$3,500      |                        |
| Trenching & Backfill (4' w x 8' d x 250 lf)                                      | 300       | cy         | \$4.50       | \$1,350     | \$7.50   | \$2,250     | \$3,600      |                        |
| Domestic Water System  |           |            |              |             |  |             |              |                        |
| 1-1/2" Insulated Copper CW   | 100       | lf         | \$25.00      | \$2,500     | \$16.00  | \$1,600     | \$4,100      |                        |
| 3/4" Insulated Copper (CW & HW)  | 175       | lf         | \$9.00       | \$1,575     | \$11.00  | \$1,925     | \$3,500      |                        |
| Emergency Shower and Mixing Valve  | 1         | assy       | \$2,000.00   | \$2,000     | \$320.00   | \$320       | \$2,320      |                        |
| Electric Water Heater  | 1         | ea         | \$1,000.00   | \$1,000     | \$210.00   | \$210       | \$1,210      |                        |
| Service Sink   | 1         | ea         | \$960.00     | \$960       | \$740.00   | \$740       | \$1,700      |                        |
| D-W-V System   |           |            |              |             |  |             |              |                        |
| 2" PVC D-W-V   | 120       | lf         | \$3.25       | \$390       | \$18.00  | \$2,160     | \$2,550      |                        |
| 4" PVC D-W-V   | 70        | lf         | \$8.00       | \$560       | \$20.00  | \$1,400     | \$1,960      |                        |
| Floor Drains   | 3         | ea         | \$575.00     | \$1,725     | \$64.00  | \$192       | \$1,917      |                        |
| Miscellaneous Plumbing   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500     | \$5,000      |                        |
| HVAC   |           |            |              |             |  |             |              |                        |
| Combustion Ductwork  | 600       | lbs        | \$1.20       | \$720       | \$6.75   | \$4,050     | \$4,770      |                        |
| Louvers  | 60        | sf         | \$60.00      | \$3,600     | \$18.00  | \$1,080     | \$4,680      |                        |
| Control Dampers  | 4         | ea         | \$480.00     | \$1,920     | \$95.00  | \$380       | \$2,300      |                        |
| Small Air Handling Unit for chip drying at metering bin                          | 1         | ea         | \$10,000.00  | \$10,000    | \$2,500.00   | \$2,500     | \$12,500     |                        |
| Heating Hot Water Piping   |           |            |              |             |  |             |              |                        |
| 1-1/2" Insulated Copper  | 120       | lf         | \$15.00      | \$1,800     | \$15.00  | \$1,800     | \$3,600      |                        |
| 6" Insulated Black Steel   | 150       | lf         | \$63.00      | \$9,450     | \$50.00  | \$7,500     | \$16,950     |                        |
| Base mounted boiler pumps w/ accessories   | 2         | ea         | \$10,000.00  | \$20,000    | \$2,500.00   | \$5,000     | \$25,000     |                        |
| Unit Heater  | 4         | ea         | \$800.00     | \$3,200     | \$150.00   | \$600       | \$3,800      |                        |
| Unit Heater Piping Assembly  | 4         | ea         | \$650.00     | \$2,600     | \$700.00   | \$2,800     | \$5,400      |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00   | \$5,000     | \$10,000     |                        |
| In Slab Radiant Heat System  |           |            |              |             |  |             |              |                        |
| 1-1/2" Insulated Copper Piping   | 80        | lf         | \$15.00      | \$1,200     | \$15.00  | \$1,200     | \$2,400      |                        |
| 5/8" PEX Tubing  | 750       | lf         | \$1.40       | \$1,050     | \$1.70   | \$1,275     | \$2,325      |                        |
| Manifold - 8 circuit   | 1         | ea         | \$250.00     | \$250       | \$250.00   | \$250       | \$500        |                        |
| Manifold Piping Assembly   | 1         | ea         | \$650.00     | \$650       | \$700.00   | \$700       | \$1,350      |                        |
| Temperature Controls (includes pump VFD's)                                       | 1         | ls         | \$15,000.00  | \$15,000    | \$10,000.00  | \$10,000    | \$25,000     |                        |
| Plant Electrical Work  | 1         | ls         | \$25,000.00  | \$25,000    | \$12,500.00  | \$12,500    | \$37,500     |                        |
| Emergency Generator 75KW   | 75        | KW         | \$475.00     | \$35,625    | \$60.00  | \$4,500     | \$40,125     |                        |
| Subtotal   |           |            |              |             |  |             | \$234,095    |                        |
| <b>TOTAL- BOILER BUILDING MECHANICAL &amp; ELECTRICAL COSTS</b>                  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$234,095              |
| <b>SUBTOTAL BUILDING &amp; BOILER</b>  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$959,095              |
| <b>MECHANICAL INTEGRATION COSTS</b>  |           |            |              |             |  |             |              |                        |
| <b>School</b>  |           |            |              |             |  |             |              |                        |
| Heating Hot Water Piping   |           |            |              |             |  |             |              |                        |
| 4" Pre-Insulated Piping System (Below Grade)                                     | 1300      | lf         | \$60.00      | \$78,000    | \$20.00  | \$26,000    | \$104,000    |                        |
| 4" Insulated Black Steel (Above Grade)   | 120       | lf         | \$40.00      | \$4,800     | \$33.00  | \$3,960     | \$8,760      |                        |
| Trenching & Backfill (8' w x 4' d x 650 lf)                                      | 770       | cy         | \$6.40       | \$4,928     | \$5.30   | \$4,081     | \$9,009      |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00   | \$1,000.00  | \$3,500.00   |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$16,000.00  | \$16,000.00 | \$2,500.00   | \$2,500.00  | \$18,500.00  |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00   | \$5,000     | \$10,000     |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500     | \$5,000      |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00   | \$1,000     | \$2,500      |                        |
| Subtotal   |           |            |              |             |  |             | \$161,269    |                        |
| <b>Administration &amp; Library</b>  |           |            |              |             |  |             |              |                        |
| Heating Hot Water Piping   |           |            |              |             |  |             |              |                        |
| 2-1/2" Pre-Insulated Piping System (Below Grade)                                 | 1500      | lf         | \$30.00      | \$45,000    | \$10.00  | \$15,000    | \$60,000     |                        |
| 1" Insulated Copper (Above Grade)  | 100       | lf         | \$9.00       | \$900       | \$11.00  | \$1,100     | \$2,000      |                        |
| 2" Insulated Copper (Above Grade)  | 100       | lf         | \$22.00      | \$2,200     | \$16.00  | \$1,600     | \$3,800      |                        |
| Trenching & Backfill (8' w x 4' d x 750 lf)                                      | 900       | cy         | \$6.40       | \$5,760     | \$5.30   | \$4,770     | \$10,530     |                        |
| Heating Injection Pump   | 2         | ea         | \$2,500.00   | \$5,000.00  | \$1,000.00   | \$2,000.00  | \$7,000.00   |                        |
| Water to Water Heat Exchanger  | 2         | ea         | \$7,500.00   | \$15,000.00 | \$1,500.00   | \$3,000.00  | \$18,000.00  |                        |
| Miscellaneous Piping Components  | 2         | ea         | \$5,000.00   | \$10,000.00 | \$5,000.00   | \$10,000.00 | \$20,000.00  |                        |
| Temperature Controls   | 2         | ls         | \$2,500.00   | \$5,000     | \$2,500.00   | \$5,000     | \$10,000     |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00   | \$1,000     | \$2,500      |                        |
| Subtotal   |           |            |              |             |  |             | \$133,830    |                        |
| <b>TOTAL- MECHANICAL INTEGRATION COSTS</b>                                       |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$295,099              |
| <b>SUBTOTAL</b>  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$1,254,194            |
| <i>General Conditions &amp; Construction Mgr. Fees</i>                           |           |            |              |             |  |             |              |                        |
|  | 20%       |            |              |             |  |             | \$250,839    |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$1,505,032            |
| <i>Escalation to Bid Date (Feb. 2010)</i>  |           |            |              |             |  |             |              |                        |
|  | 5%        |            |              |             |  |             | \$75,252     |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$1,580,284            |
| REMOTE FACTOR  |           |            |              |             |  |             |              |                        |
|  | 30.00%    |            |              |             |  |             |              | \$474,085              |
| <b>SUBTOTAL CONSTRUCTION</b>   |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$2,054,369            |
| <b>SOFT COSTS</b>  |           |            |              |             |  |             |              |                        |
| <i>A/E Design Services (boiler, building &amp; integration)</i>                  |           |            |              |             |  |             |              |                        |
|  | 10%       |            |              |             |  |             | \$158,028    |                        |
| <i>Site Survey</i>   |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$7,500.00   | \$7,500     |  |             | \$7,500      |                        |
| <i>Geotechnical Investigation</i>  |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$15,000.00  | \$15,000    |  |             | \$15,000     |                        |
| <i>Asbestos Survey and Report</i>  |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$5,000.00   | \$5,000     |  |             | \$5,000      |                        |
| <i>Construction Material Testing</i>   |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$5,000.00   | \$5,000     |  |             | \$5,000      |                        |
| <i>Building Permit</i>   |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$7,500.00   | \$7,500     |  |             | \$7,500      |                        |
| <i>Equipment Commissioning</i>   |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$15,000.00  | \$15,000    |  |             | \$15,000     |                        |
| <i>Air Quality Engineering</i>   |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$10,000.00  | \$10,000    |  |             | \$10,000     |                        |
| <i>Air Quality Permit</i>  |           |            |              |             |  |             |              |                        |
|  | 1         | ls         | \$0.00       | \$0         |  |             | \$0          |                        |
| <b>SUBTOTAL SOFT COSTS</b>   |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             | \$223,028    | \$223,028              |
| <b>OTHER COSTS</b>   |           |            |              |             |  |             |              |                        |
| <i>Live botton chip van</i>  |           |            |              |             |  |             |              |                        |
|  | 1         | ea         | \$40,000.00  | \$40,000    |  |             | \$40,000     | \$40,000               |
| <b>SUBTOTAL OTHER COSTS</b>  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             | \$40,000     | \$40,000               |
| <b>PRECONTINGENCY PROJECT TOTAL</b>  |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$2,317,397            |
| CONTINGENCY  |           |            |              |             |  |             |              |                        |
|  | 10.00%    |            |              |             |  |             |              | \$231,740              |
| <b>RECOMMENDED PROJECT BUDGET - DESIGN AND CONSTRUCTION COSTS</b>                |           |            |              |             |  |             |              |                        |
|  |           |            |              |             |  |             |              | \$2,549,137            |

| ESTIMATE OF PROBABLE COST OF DESIGN & CONSTRUCTION   |           |            |              |             | DATE PREPARED  | SHEET 1 OF 1 |             |                        |
|--|-----------|------------|--------------|-------------|--|--------------|-------------|------------------------|
| PROJECT<br>Haines Borough Biomass Boiler   |           |            |              |             | <b>CTA Architects Engineers</b><br>306 West Railroad Avenue, Suite 104, Missoula, MT 59802<br>406. 728. 9522 800. 780. 7455 Fax: 406. 728. 8287<br>1-800-780-7455<br>http://www.ctagroup.com E-mail: info@ctagroup.com |              |             |                        |
| Option<br><b>A.3A Fully Automated 2.6 MMBtu/hr Wood Chip Boiler with Metal Building</b>      |           |            |              |             |  |              |             |                        |
| <b>School Building Only Less Vocational Education Building - Biomass Building Location A</b> |           |            |              |             |  |              |             |                        |
| ESTIMATOR<br>Ratz  |           |            |              |             |  |              |             |                        |
| Costs obtained from RS Means and historical information.                                     |           |            |              |             |  |              |             |                        |
|  | QUANTITY  |            | MATERIAL     |             | LABOR  |              | TOTAL COST  | PROJECT COMPONENT COST |
|  | No. Units | Unit Meas. | Per Unit     | TOTAL       | Per Unit   | TOTAL        |             |                        |
| <b>BIOMASS BOILER AND STACK SYSTEM</b>   |           |            |              |             |  |              |             |                        |
| Wood Fired Heating System (2.6 MMBtuh Output- Hot Wtr)                                       | 1         | assy       | \$250,000.00 | \$250,000   | \$55,000.00  | \$55,000     | \$305,000   |                        |
| Electrostatic Precipitator   | 1         | assy       | \$120,000.00 | \$120,000   | \$10,000.00  | \$10,000     | \$130,000   |                        |
| Stack  | 1         | assy       | \$45,000.00  | \$45,000    | \$5,000.00   | \$5,000      | \$50,000    |                        |
| Subtotal   |           |            |              |             |  |              | \$485,000   |                        |
| <b>TOTAL- BIOMASS BOILER SYSTEMS</b>   |           |            |              |             |  |              |             | <b>\$485,000</b>       |
| <b>BOILER BUILDING COSTS</b>   |           |            |              |             |  |              |             |                        |
| Boiler Plant Building - Metal Building (Slab on Grade)                                       | 2000      | sf         | \$50.00      | \$100,000   | \$40.00  | \$80,000     | \$180,000   |                        |
| Site Work for Building   | 1         | ls         | \$30,000.00  | \$30,000    | \$30,000.00  | \$30,000     | \$60,000    |                        |
| Subtotal   |           |            |              |             |  |              | \$240,000   |                        |
| <b>TOTAL- Boiler Building</b>  |           |            |              |             |  |              |             | <b>\$240,000</b>       |
| <b>BOILER BUILDING MECHANICAL COSTS</b>  |           |            |              |             |  |              |             |                        |
| Site Utilities   |           |            |              |             |  |              |             |                        |
| 1-1/2" Water Service   | 250       | lf         | \$1.60       | \$400       | \$2.15   | \$538        | \$938       |                        |
| Trenching & Backfill (4' w x 8' d x 150 lf)  | 300       | cy         | \$4.50       | \$1,350     | \$7.50   | \$2,250      | \$3,600     |                        |
| 6" PVC Sewer Main  | 250       | lf         | \$10.00      | \$2,500     | \$4.00   | \$1,000      | \$3,500     |                        |
| Trenching & Backfill (4' w x 8' d x 250 lf)  | 300       | cy         | \$4.50       | \$1,350     | \$7.50   | \$2,250      | \$3,600     |                        |
| Domestic Water System  |           |            |              |             |  |              |             |                        |
| 1-1/2" Insulated Copper CW   | 100       | lf         | \$25.00      | \$2,500     | \$16.00  | \$1,600      | \$4,100     |                        |
| 3/4" Insulated Copper (CW & HW)  | 175       | lf         | \$9.00       | \$1,575     | \$11.00  | \$1,925      | \$3,500     |                        |
| Emergency Shower and Mixing Valve  | 1         | assy       | \$2,000.00   | \$2,000     | \$320.00   | \$320        | \$2,320     |                        |
| Electric Water Heater  | 1         | ea         | \$1,000.00   | \$1,000     | \$210.00   | \$210        | \$1,210     |                        |
| Service Sink   | 1         | ea         | \$960.00     | \$960       | \$740.00   | \$740        | \$1,700     |                        |
| D-W-V System   |           |            |              |             |  |              |             |                        |
| 2" PVC D-W-V   | 120       | lf         | \$3.25       | \$390       | \$18.00  | \$2,160      | \$2,550     |                        |
| 4" PVC D-W-V   | 70        | lf         | \$8.00       | \$560       | \$20.00  | \$1,400      | \$1,960     |                        |
| Floor Drains   | 3         | ea         | \$575.00     | \$1,725     | \$64.00  | \$192        | \$1,917     |                        |
| Miscellaneous Plumbing   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500      | \$5,000     |                        |
| HVAC   |           |            |              |             |  |              |             |                        |
| Combustion Ductwork  | 600       | lbs        | \$1.20       | \$720       | \$6.75   | \$4,050      | \$4,770     |                        |
| Louvers  | 60        | sf         | \$60.00      | \$3,600     | \$18.00  | \$1,080      | \$4,680     |                        |
| Control Dampers  | 4         | ea         | \$480.00     | \$1,920     | \$95.00  | \$380        | \$2,300     |                        |
| Small Air Handling Unit for chip drying at metering bin                                      | 1         | ea         | \$10,000.00  | \$10,000    | \$2,500.00   | \$2,500      | \$12,500    |                        |
| Heating Hot Water Piping   |           |            |              |             |  |              |             |                        |
| 1-1/2" Insulated Copper  | 120       | lf         | \$15.00      | \$1,800     | \$15.00  | \$1,800      | \$3,600     |                        |
| 6" Insulated Black Steel   | 150       | lf         | \$63.00      | \$9,450     | \$50.00  | \$7,500      | \$16,950    |                        |
| Base mounted boiler pumps w/ accessories   | 2         | ea         | \$10,000.00  | \$20,000    | \$2,500.00   | \$5,000      | \$25,000    |                        |
| Unit Heater  | 4         | ea         | \$800.00     | \$3,200     | \$150.00   | \$600        | \$3,800     |                        |
| Unit Heater Piping Assembly  | 4         | ea         | \$650.00     | \$2,600     | \$700.00   | \$2,800      | \$5,400     |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00   | \$5,000      | \$10,000    |                        |
| In Slab Radiant Heat System  |           |            |              |             |  |              |             |                        |
| 1-1/2" Insulated Copper Piping   | 80        | lf         | \$15.00      | \$1,200     | \$15.00  | \$1,200      | \$2,400     |                        |
| 5/8" PEX Tubing  | 750       | lf         | \$1.40       | \$1,050     | \$1.70   | \$1,275      | \$2,325     |                        |
| Manifold - 8 circuit   | 1         | ea         | \$250.00     | \$250       | \$250.00   | \$250        | \$500       |                        |
| Manifold Piping Assembly   | 1         | ea         | \$650.00     | \$650       | \$700.00   | \$700        | \$1,350     |                        |
| Temperature Controls (includes pump VFD's)   | 1         | ls         | \$15,000.00  | \$15,000    | \$10,000.00  | \$10,000     | \$25,000    |                        |
| Plant Electrical Work  | 1         | ls         | \$25,000.00  | \$25,000    | \$12,500.00  | \$12,500     | \$37,500    |                        |
| Emergency Generator 75KW   | 75        | KW         | \$475.00     | \$35,625    | \$60.00  | \$4,500      | \$40,125    |                        |
| Subtotal   |           |            |              |             |  |              | \$234,095   |                        |
| <b>TOTAL- BOILER BUILDING MECHANICAL &amp; ELECTRICAL COSTS</b>                              |           |            |              |             |  |              |             | <b>\$234,095</b>       |
| <b>SUBTOTAL BUILDING &amp; BOILER</b>  |           |            |              |             |  |              |             | <b>\$959,095</b>       |
| <b>MECHANICAL INTEGRATION COSTS</b>  |           |            |              |             |  |              |             |                        |
| School   |           |            |              |             |  |              |             |                        |
| Heating Hot Water Piping   |           |            |              |             |  |              |             |                        |
| 4" Pre-Insulated Piping System (Below Grade)   | 1300      | lf         | \$60.00      | \$78,000    | \$20.00  | \$26,000     | \$104,000   |                        |
| 4" Insulated Black Steel (Above Grade)   | 120       | lf         | \$40.00      | \$4,800     | \$33.00  | \$3,960      | \$8,760     |                        |
| Trenching & Backfill (8' w x 4' d x 650 lf)  | 770       | cy         | \$6.40       | \$4,928     | \$5.30   | \$4,081      | \$9,009     |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00   | \$1,000.00   | \$3,500.00  |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$16,000.00  | \$16,000.00 | \$2,500.00   | \$2,500.00   | \$18,500.00 |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00   | \$5,000      | \$10,000    |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500      | \$5,000     |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00   | \$1,000      | \$2,500     |                        |
| Subtotal   |           |            |              |             |  |              | \$161,269   |                        |
| <b>TOTAL- MECHANICAL INTEGRATION COSTS</b>   |           |            |              |             |  |              |             | <b>\$161,269</b>       |
| <b>SUBTOTAL</b>  |           |            |              |             |  |              |             | <b>\$1,120,364</b>     |
| General Conditions & Construction Mgr. Fees  |           |            |              |             |  |              |             |                        |
|  | 20%       |            |              |             |  |              | \$224,073   |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |  |              |             | <b>\$1,344,436</b>     |
| Escalation to Bid Date (Feb. 2010)   |           |            |              |             |  |              |             |                        |
|  | 5%        |            |              |             |  |              | \$67,222    |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |  |              |             | <b>\$1,411,658</b>     |
| REMOTE FACTOR  |           |            |              |             |  |              |             |                        |
|  | 30.00%    |            |              |             |  |              | \$423,497   |                        |
| <b>SUBTOTAL CONSTRUCTION</b>   |           |            |              |             |  |              |             | <b>\$1,835,155</b>     |
| <b>SOFT COSTS</b>  |           |            |              |             |  |              |             |                        |
| A/E Design Services (boiler, building & integration)   |           |            |              |             |  |              |             |                        |
|  | 10%       |            |              |             |  |              | \$141,166   |                        |
| Site Survey  | 1         | ls         | \$7,500.00   | \$7,500     |  |              | \$7,500     |                        |
| Geotechnical Investigation   | 1         | ls         | \$15,000.00  | \$15,000    |  |              | \$15,000    |                        |
| Asbestos Survey and Report   | 1         | ls         | \$5,000.00   | \$5,000     |  |              | \$5,000     |                        |
| Construction Material Testing  | 1         | ls         | \$5,000.00   | \$5,000     |  |              | \$5,000     |                        |
| Building Permit  | 1         | ls         | \$7,500.00   | \$7,500     |  |              | \$7,500     |                        |
| Equipment Commissioning  | 1         | ls         | \$15,000.00  | \$15,000    |  |              | \$15,000    |                        |
| Air Quality Engineering  | 1         | ls         | \$10,000.00  | \$10,000    |  |              | \$10,000    |                        |
| Air Quality Permit   | 1         | ls         | \$0.00       | \$0         |  |              | \$0         |                        |
| <b>SUBTOTAL SOFT COSTS</b>   |           |            |              |             |  |              |             | <b>\$206,166</b>       |
| <b>OTHER COSTS</b>   |           |            |              |             |  |              |             |                        |
| Live botton chip van   | 1         | ea         | \$40,000.00  | \$40,000    |  |              | \$40,000    |                        |
| <b>SUBTOTAL OTHER COSTS</b>  |           |            |              |             |  |              |             | <b>\$40,000</b>        |
| <b>PRECONTINGENCY PROJECT TOTAL</b>  |           |            |              |             |  |              |             | <b>\$2,081,321</b>     |
| CONTINGENCY  |           |            |              |             |  |              |             |                        |
|  | 10.00%    |            |              |             |  |              | \$208,132   |                        |
| <b>RECOMMENDED PROJECT BUDGET - DESIGN AND CONSTRUCTION COSTS</b>                            |           |            |              |             |  |              |             | <b>\$2,289,453</b>     |

| ESTIMATE OF PROBABLE COST OF DESIGN & CONSTRUCTION                               |           |            |              |             |             | DATE PREPARED<br>12/15/2009  | SHEET 1 OF 1 |                        |
|--|-----------|------------|--------------|-------------|-------------|--|--------------|------------------------|
| PROJECT<br>Haines Borough Biomass Boiler   |           |            |              |             |             | <b>CTA Architects Engineers</b><br>306 West Railroad Avenue, Suite 104, Missoula, MT 59802<br>406. 728. 9522 800. 780. 7455 Fax: 406. 728. 8287<br>1-800-780-7455<br>http://www.ctagroup.com E-mail: info@ctagroup.com |              |                        |
| Option<br>A.1B Fully Automated 2.6 MMBtu/hr Wood Chip Boiler with Metal Building |           |            |              |             |             |  |              |                        |
| Entire Campus - Biomass Building Location B                                      |           |            |              |             |             |  |              |                        |
| ESTIMATOR<br>Ratz  |           |            |              |             |             |  |              |                        |
| Costs obtained from RS Means and historical information.                         |           |            |              |             |             |  |              |                        |
|  | QUANTITY  |            | MATERIAL     |             | LABOR       |  | TOTAL COST   | PROJECT COMPONENT COST |
|  | No. Units | Unit Meas. | Per Unit     | TOTAL       | Per Unit    | TOTAL  |              |                        |
| <b>BIOMASS BOILER AND STACK SYSTEM</b>   |           |            |              |             |             |  |              |                        |
| Wood Fired Heating System (2.6 MMBtu/hr Output- Hot Wtr)                         | 1         | assy       | \$250,000.00 | \$250,000   | \$55,000.00 | \$55,000   | \$305,000    |                        |
| Electrostatic Precipitator   | 1         | assy       | \$120,000.00 | \$120,000   | \$10,000.00 | \$10,000   | \$130,000    |                        |
| Stack  | 1         | assy       | \$45,000.00  | \$45,000    | \$5,000.00  | \$5,000  | \$50,000     |                        |
| Subtotal   |           |            |              |             |             |  | \$485,000    |                        |
| <b>TOTAL- BIOMASS BOILER SYSTEMS</b>   |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$485,000              |
| <b>BOILER BUILDING COSTS</b>   |           |            |              |             |             |  |              |                        |
| Boiler Plant Building - Metal Building (Slab on Grade)                           | 2000      | sf         | \$50.00      | \$100,000   | \$40.00     | \$80,000   | \$180,000    |                        |
| Site Work for Building   | 1         | ls         | \$30,000.00  | \$30,000    | \$30,000.00 | \$30,000   | \$60,000     |                        |
| Subtotal   |           |            |              |             |             |  | \$240,000    |                        |
| <b>TOTAL- Boiler Building</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$240,000              |
| <b>BOILER BUILDING MECHANICAL COSTS</b>  |           |            |              |             |             |  |              |                        |
| Site Utilities   |           |            |              |             |             |  |              |                        |
| 1-1/2" Water Service   | 250       | lf         | \$1.60       | \$400       | \$2.15      | \$538  | \$938        |                        |
| Trenching & Backfill (4' w x 8' d x 150 lf)                                      | 300       | cy         | \$4.50       | \$1,350     | \$7.50      | \$2,250  | \$3,600      |                        |
| 6" PVC Sewer Main  | 250       | lf         | \$10.00      | \$2,500     | \$4.00      | \$1,000  | \$3,500      |                        |
| Trenching & Backfill (4' w x 8' d x 250 lf)                                      | 300       | cy         | \$4.50       | \$1,350     | \$7.50      | \$2,250  | \$3,600      |                        |
| Domestic Water System  |           |            |              |             |             |  |              |                        |
| 1-1/2" Insulated Copper CW   | 100       | lf         | \$25.00      | \$2,500     | \$16.00     | \$1,600  | \$4,100      |                        |
| 3/4" Insulated Copper (CW & HW)  | 175       | lf         | \$9.00       | \$1,575     | \$11.00     | \$1,925  | \$3,500      |                        |
| Emergency Shower and Mixing Valve  | 1         | assy       | \$2,000.00   | \$2,000     | \$320.00    | \$320  | \$2,320      |                        |
| Electric Water Heater  | 1         | ea         | \$1,000.00   | \$1,000     | \$210.00    | \$210  | \$1,210      |                        |
| Service Sink   | 1         | ea         | \$960.00     | \$960       | \$740.00    | \$740  | \$1,700      |                        |
| D-W-V System   |           |            |              |             |             |  |              |                        |
| 2" PVC D-W-V   | 120       | lf         | \$3.25       | \$390       | \$18.00     | \$2,160  | \$2,550      |                        |
| 4" PVC D-W-V   | 70        | lf         | \$8.00       | \$560       | \$20.00     | \$1,400  | \$1,960      |                        |
| Floor Drains   | 3         | ea         | \$575.00     | \$1,725     | \$64.00     | \$192  | \$1,917      |                        |
| Miscellaneous Plumbing   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00  | \$2,500  | \$5,000      |                        |
| HVAC   |           |            |              |             |             |  |              |                        |
| Combustion Ductwork  | 600       | lbs        | \$1.20       | \$720       | \$6.75      | \$4,050  | \$4,770      |                        |
| Louvers  | 60        | sf         | \$60.00      | \$3,600     | \$18.00     | \$1,080  | \$4,680      |                        |
| Control Dampers  | 4         | ea         | \$480.00     | \$1,920     | \$95.00     | \$380  | \$2,300      |                        |
| Small Air Handling Unit for chip drying at metering bin                          | 1         | ea         | \$10,000.00  | \$10,000    | \$2,500.00  | \$2,500  | \$12,500     |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 1-1/2" Insulated Copper  | 120       | lf         | \$15.00      | \$1,800     | \$15.00     | \$1,800  | \$3,600      |                        |
| 6" Insulated Black Steel   | 150       | lf         | \$63.00      | \$9,450     | \$50.00     | \$7,500  | \$16,950     |                        |
| Base mounted boiler pumps w/ accessories   | 2         | ea         | \$10,000.00  | \$20,000    | \$2,500.00  | \$5,000  | \$25,000     |                        |
| Unit Heater  | 4         | ea         | \$800.00     | \$3,200     | \$150.00    | \$600  | \$3,800      |                        |
| Unit Heater Piping Assembly  | 4         | ea         | \$650.00     | \$2,600     | \$700.00    | \$2,800  | \$5,400      |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00  | \$5,000  | \$10,000     |                        |
| In Slab Radiant Heat System  |           |            |              |             |             |  |              |                        |
| 1-1/2" Insulated Copper Piping   | 80        | lf         | \$15.00      | \$1,200     | \$15.00     | \$1,200  | \$2,400      |                        |
| 5/8" PEX Tubing  | 750       | lf         | \$1.40       | \$1,050     | \$1.70      | \$1,275  | \$2,325      |                        |
| Manifold - 8 circuit   | 1         | ea         | \$250.00     | \$250       | \$250.00    | \$250  | \$500        |                        |
| Manifold Piping Assembly   | 1         | ea         | \$650.00     | \$650       | \$700.00    | \$700  | \$1,350      |                        |
| Temperature Controls (includes pump VFD's)                                       | 1         | ls         | \$15,000.00  | \$15,000    | \$10,000.00 | \$10,000   | \$25,000     |                        |
| Plant Electrical Work  | 1         | ls         | \$25,000.00  | \$25,000    | \$12,500.00 | \$12,500   | \$37,500     |                        |
| Emergency Generator 75KW   | 75        | KW         | \$475.00     | \$35,625    | \$60.00     | \$4,500  | \$40,125     |                        |
| Subtotal   |           |            |              |             |             |  | \$234,095    |                        |
| <b>TOTAL- BOILER BUILDING MECHANICAL &amp; ELECTRICAL COSTS</b>                  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$234,095              |
| <b>SUBTOTAL BUILDING &amp; BOILER</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$959,095              |
| <b>MECHANICAL INTEGRATION COSTS</b>  |           |            |              |             |             |  |              |                        |
| <b>School</b>  |           |            |              |             |             |  |              |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 4" Pre-Insulated Piping System (Below Grade)                                     | 2600      | lf         | \$60.00      | \$156,000   | \$20.00     | \$52,000   | \$208,000    |                        |
| 4" Insulated Black Steel (Above Grade)   | 120       | lf         | \$40.00      | \$4,800     | \$33.00     | \$3,960  | \$8,760      |                        |
| Trenching & Backfill (8' w x 4' d x 1300 lf)                                     | 1550      | cy         | \$6.40       | \$9,920     | \$5.30      | \$8,215  | \$18,135     |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00  | \$1,000.00   | \$3,500.00   |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$16,000.00  | \$16,000.00 | \$2,500.00  | \$2,500.00   | \$18,500.00  |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00  | \$5,000  | \$10,000     |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00  | \$2,500  | \$5,000      |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00  | \$1,000  | \$2,500      |                        |
| Subtotal   |           |            |              |             |             |  | \$274,395    |                        |
| <b>Vocational Education Building (continued from main School)</b>                |           |            |              |             |             |  |              |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 1-1/2" Pre-Insulated Piping System (Below Grade)                                 | 530       | lf         | \$30.00      | \$15,900    | \$10.00     | \$5,300  | \$21,200     |                        |
| 1-1/2" Insulated Copper (Above Grade)  | 300       | lf         | \$15.00      | \$4,500     | \$15.00     | \$4,500  | \$9,000      |                        |
| Trenching & Backfill (8' w x 4' d x 265 lf)                                      | 315       | cy         | \$6.40       | \$2,016     | \$5.30      | \$1,670  | \$3,686      |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00  | \$1,000.00   | \$3,500.00   |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$7,500.00   | \$7,500.00  | \$1,500.00  | \$1,500.00   | \$9,000.00   |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00  | \$5,000  | \$10,000     |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00  | \$2,500  | \$5,000      |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00  | \$1,000  | \$2,500      |                        |
| Subtotal   |           |            |              |             |             |  | \$63,886     |                        |
| <b>Administration &amp; Library</b>  |           |            |              |             |             |  |              |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 2-1/2" Pre-Insulated Piping System (Below Grade)                                 | 150       | lf         | \$30.00      | \$4,500     | \$10.00     | \$1,500  | \$6,000      |                        |
| 1" Insulated Copper (Above Grade)  | 100       | lf         | \$9.00       | \$900       | \$11.00     | \$1,100  | \$2,000      |                        |
| 2" Insulated Copper (Above Grade)  | 100       | lf         | \$22.00      | \$2,200     | \$16.00     | \$1,600  | \$3,800      |                        |
| Trenching & Backfill (8' w x 4' d x 120 lf)                                      | 150       | cy         | \$6.40       | \$960       | \$5.30      | \$795  | \$1,755      |                        |
| Heating Injection Pump   | 2         | ea         | \$2,500.00   | \$5,000.00  | \$1,000.00  | \$2,000.00   | \$7,000.00   |                        |
| Water to Water Heat Exchanger  | 2         | ea         | \$7,500.00   | \$15,000.00 | \$1,500.00  | \$3,000.00   | \$18,000.00  |                        |
| Miscellaneous Piping Components  | 2         | ea         | \$5,000.00   | \$10,000.00 | \$5,000.00  | \$10,000.00  | \$20,000.00  |                        |
| Temperature Controls   | 2         | ls         | \$2,500.00   | \$5,000     | \$2,500.00  | \$5,000  | \$10,000     |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00  | \$1,000  | \$2,500      |                        |
| Subtotal   |           |            |              |             |             |  | \$71,055     |                        |
| <b>TOTAL- MECHANICAL INTEGRATION COSTS</b>                                       |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$409,336              |
| <b>SUBTOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$1,368,430            |
| General Conditions & Construction Mgr. Fees                                      |           |            |              |             |             |  |              |                        |
|  | 20%       |            |              |             |             |  | \$273,686    |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$1,642,116            |
| Escalation to Bid Date (Feb. 2010)   |           |            |              |             |             |  |              |                        |
|  | 5%        |            |              |             |             |  | \$82,106     |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$1,724,222            |
| REMOTE FACTOR  |           |            |              |             |             |  |              |                        |
|  | 30.00%    |            |              |             |             |  | \$517,267    |                        |
| <b>SUBTOTAL CONSTRUCTION</b>   |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$2,241,488            |
| <b>SOFT COSTS</b>  |           |            |              |             |             |  |              |                        |
| A/E Design Services (boiler, building & integration)                             |           |            |              |             |             |  |              |                        |
|  | 10%       |            |              |             |             |  | \$172,422    |                        |
| Site Survey  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$7,500.00   | \$7,500     |             |  | \$7,500      |                        |
| Geotechnical Investigation   |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$15,000.00  | \$15,000    |             |  | \$15,000     |                        |
| Asbestos Survey and Report   |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$5,000.00   | \$5,000     |             |  | \$5,000      |                        |
| Construction Material Testing  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$5,000.00   | \$5,000     |             |  | \$5,000      |                        |
| Building Permit  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$7,500.00   | \$7,500     |             |  | \$7,500      |                        |
| Equipment Commissioning  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$15,000.00  | \$15,000    |             |  | \$15,000     |                        |
| Air Quality Engineering  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$10,000.00  | \$10,000    |             |  | \$10,000     |                        |
| Air Quality Permit   |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$0.00       | \$0         |             |  | \$0          |                        |
| <b>SUBTOTAL SOFT COSTS</b>   |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  | \$237,422    | \$237,422              |
| <b>OTHER COSTS</b>   |           |            |              |             |             |  |              |                        |
| Live bottom chip van   |           |            |              |             |             |  |              |                        |
|  | 1         | ea         | \$40,000.00  | \$40,000    |             |  | \$40,000     | \$40,000               |
| <b>SUBTOTAL OTHER COSTS</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  | \$40,000     | \$40,000               |
| <b>PRECONTINGENCY PROJECT TOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$2,518,911            |
| CONTINGENCY  |           |            |              |             |             |  |              |                        |
|  | 10.00%    |            |              |             |             |  |              | \$251,891              |
| <b>RECOMMENDED PROJECT BUDGET - DESIGN AND CONSTRUCTION COSTS</b>                |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$2,770,802            |

| ESTIMATE OF PROBABLE COST OF DESIGN & CONSTRUCTION                               |           |            |              |             | DATE PREPARED<br>12/15/2009  | SHEET 1 OF 1 |             |                        |  |
|--|-----------|------------|--------------|-------------|--|--------------|-------------|------------------------|--|
| PROJECT<br>Haines Borough Biomass Boiler   |           |            |              |             | <b>CTA Architects Engineers</b><br>306 West Railroad Avenue, Suite 104, Missoula, MT 59802<br>406. 728. 9522 800. 780. 7455 Fax: 406. 728. 8287<br>1-800-780-7455<br>http://www.ctagroup.com E-mail: info@ctagroup.com |              |             |                        |  |
| Option<br>A.1C Fully Automated 2.6 MMBtu/hr Wood Chip Boiler with Metal Building |           |            |              |             |  |              |             |                        |  |
| Entire Campus Including Sewer Plant - Biomass Building Location C                |           |            |              |             |  |              |             |                        |  |
| Costs obtained from RS Means and historical information.                         |           |            |              |             | ESTIMATOR<br>Ratz  |              |             |                        |  |
|  | QUANTITY  |            | MATERIAL     |             | LABOR  |              | TOTAL COST  | PROJECT COMPONENT COST |  |
|  | No. Units | Unit Meas. | Per Unit     | TOTAL       | Per Unit   | TOTAL        |             |                        |  |
| <b>BIOMASS BOILER AND STACK SYSTEM</b>   |           |            |              |             |  |              |             |                        |  |
| Wood Fired Heating System (2.6 MMBtu/hr Output- Hot Wtr)                         | 1         | assy       | \$250,000.00 | \$250,000   | \$55,000.00  | \$55,000     | \$305,000   |                        |  |
| Electrostatic Precipitator   | 1         | assy       | \$120,000.00 | \$120,000   | \$10,000.00  | \$10,000     | \$130,000   |                        |  |
| Stack  | 1         | assy       | \$45,000.00  | \$45,000    | \$5,000.00   | \$5,000      | \$50,000    |                        |  |
| Subtotal   |           |            |              |             |  |              | \$485,000   |                        |  |
| <b>TOTAL- BIOMASS BOILER SYSTEMS</b>   |           |            |              |             |  |              |             | <b>\$485,000</b>       |  |
| <b>BOILER BUILDING COSTS</b>   |           |            |              |             |  |              |             |                        |  |
| Boiler Plant Building - Metal Building (Slab on Grade)                           | 2000      | sf         | \$50.00      | \$100,000   | \$40.00  | \$80,000     | \$180,000   |                        |  |
| Site Work for Building   | 1         | ls         | \$30,000.00  | \$30,000    | \$30,000.00  | \$30,000     | \$60,000    |                        |  |
| Subtotal   |           |            |              |             |  |              | \$240,000   |                        |  |
| <b>TOTAL- Boiler Building</b>  |           |            |              |             |  |              |             | <b>\$240,000</b>       |  |
| <b>BOILER BUILDING MECHANICAL COSTS</b>  |           |            |              |             |  |              |             |                        |  |
| Site Utilities   |           |            |              |             |  |              |             |                        |  |
| 1-1/2" Water Service   | 250       | lf         | \$1.60       | \$400       | \$2.15   | \$538        | \$938       |                        |  |
| Trenching & Backfill (4' w x 8' d x 150 lf)                                      | 300       | cy         | \$4.50       | \$1,350     | \$7.50   | \$2,250      | \$3,600     |                        |  |
| 6" PVC Sewer Main  | 250       | lf         | \$10.00      | \$2,500     | \$4.00   | \$1,000      | \$3,500     |                        |  |
| Trenching & Backfill (4' w x 8' d x 250 lf)                                      | 300       | cy         | \$4.50       | \$1,350     | \$7.50   | \$2,250      | \$3,600     |                        |  |
| Domestic Water System  |           |            |              |             |  |              |             |                        |  |
| 1-1/2" Insulated Copper CW   | 100       | lf         | \$25.00      | \$2,500     | \$16.00  | \$1,600      | \$4,100     |                        |  |
| 3/4" Insulated Copper (CW & HW)  | 175       | lf         | \$9.00       | \$1,575     | \$11.00  | \$1,925      | \$3,500     |                        |  |
| Emergency Shower and Mixing Valve  | 1         | assy       | \$2,000.00   | \$2,000     | \$320.00   | \$320        | \$2,320     |                        |  |
| Electric Water Heater  | 1         | ea         | \$1,000.00   | \$1,000     | \$210.00   | \$210        | \$1,210     |                        |  |
| Service Sink   | 1         | ea         | \$960.00     | \$960       | \$740.00   | \$740        | \$1,700     |                        |  |
| D-W-V System   |           |            |              |             |  |              |             |                        |  |
| 2" PVC D-W-V   | 120       | lf         | \$3.25       | \$390       | \$18.00  | \$2,160      | \$2,550     |                        |  |
| 4" PVC D-W-V   | 70        | lf         | \$8.00       | \$560       | \$20.00  | \$1,400      | \$1,960     |                        |  |
| Floor Drains   | 3         | ea         | \$575.00     | \$1,725     | \$64.00  | \$192        | \$1,917     |                        |  |
| Miscellaneous Plumbing   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500      | \$5,000     |                        |  |
| HVAC   |           |            |              |             |  |              |             |                        |  |
| Combustion Ductwork  | 600       | lbs        | \$1.20       | \$720       | \$6.75   | \$4,050      | \$4,770     |                        |  |
| Louvers  | 60        | sf         | \$60.00      | \$3,600     | \$18.00  | \$1,080      | \$4,680     |                        |  |
| Control Dampers  | 4         | ea         | \$480.00     | \$1,920     | \$95.00  | \$380        | \$2,300     |                        |  |
| Small Air Handling Unit for chip drying at metering bin                          | 1         | ea         | \$10,000.00  | \$10,000    | \$2,500.00   | \$2,500      | \$12,500    |                        |  |
| Heating Hot Water Piping   |           |            |              |             |  |              |             |                        |  |
| 1-1/2" Insulated Copper  | 120       | lf         | \$15.00      | \$1,800     | \$15.00  | \$1,800      | \$3,600     |                        |  |
| 6" Insulated Black Steel   | 150       | lf         | \$63.00      | \$9,450     | \$50.00  | \$7,500      | \$16,950    |                        |  |
| Base mounted boiler pumps w/ accessories   | 2         | ea         | \$10,000.00  | \$20,000    | \$2,500.00   | \$5,000      | \$25,000    |                        |  |
| Unit Heater  | 4         | ea         | \$800.00     | \$3,200     | \$150.00   | \$600        | \$3,800     |                        |  |
| Unit Heater Piping Assembly  | 4         | ea         | \$650.00     | \$2,600     | \$700.00   | \$2,800      | \$5,400     |                        |  |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00   | \$5,000      | \$10,000    |                        |  |
| In Slab Radiant Heat System  |           |            |              |             |  |              |             |                        |  |
| 1-1/2" Insulated Copper Piping   | 80        | lf         | \$15.00      | \$1,200     | \$15.00  | \$1,200      | \$2,400     |                        |  |
| 5/8" PEX Tubing  | 750       | lf         | \$1.40       | \$1,050     | \$1.70   | \$1,275      | \$2,325     |                        |  |
| Manifold - 8 circuit   | 1         | ea         | \$250.00     | \$250       | \$250.00   | \$250        | \$500       |                        |  |
| Manifold Piping Assembly   | 1         | ea         | \$650.00     | \$650       | \$700.00   | \$700        | \$1,350     |                        |  |
| Temperature Controls (includes pump VFD's)                                       | 1         | ls         | \$15,000.00  | \$15,000    | \$10,000.00  | \$10,000     | \$25,000    |                        |  |
| Plant Electrical Work  | 1         | ls         | \$25,000.00  | \$25,000    | \$12,500.00  | \$12,500     | \$37,500    |                        |  |
| Emergency Generator 75KW   | 75        | KW         | \$475.00     | \$35,625    | \$60.00  | \$4,500      | \$40,125    |                        |  |
| Subtotal   |           |            |              |             |  |              | \$234,095   |                        |  |
| <b>TOTAL- BOILER BUILDING MECHANICAL &amp; ELECTRICAL COSTS</b>                  |           |            |              |             |  |              |             | <b>\$234,095</b>       |  |
| <b>SUBTOTAL BUILDING &amp; BOILER</b>  |           |            |              |             |  |              |             | <b>\$959,095</b>       |  |
| <b>MECHANICAL INTEGRATION COSTS</b>  |           |            |              |             |  |              |             |                        |  |
| School   |           |            |              |             |  |              |             |                        |  |
| Heating Hot Water Piping   |           |            |              |             |  |              |             |                        |  |
| 4" Pre-Insulated Piping System (Below Grade)                                     | 2100      | lf         | \$60.00      | \$126,000   | \$20.00  | \$42,000     | \$168,000   |                        |  |
| 4" Insulated Black Steel (Above Grade)   | 400       | lf         | \$40.00      | \$16,000    | \$33.00  | \$13,200     | \$29,200    |                        |  |
| Trenching & Backfill (8' w x 4' d x 2100 lf)                                     | 2500      | cy         | \$6.40       | \$16,000    | \$5.30   | \$13,250     | \$29,250    |                        |  |
| Directional Boring under Highway and Street                                      | 2         | ea         | \$0.00       | \$0         | \$40,000.00  | \$80,000     | \$80,000    |                        |  |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00   | \$1,000.00   | \$3,500.00  |                        |  |
| Water to Water Heat Exchanger  | 1         | ea         | \$16,000.00  | \$16,000.00 | \$2,500.00   | \$2,500.00   | \$18,500.00 |                        |  |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00   | \$5,000      | \$10,000    |                        |  |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500      | \$5,000     |                        |  |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00   | \$1,000      | \$2,500     |                        |  |
| Subtotal   |           |            |              |             |  |              | \$345,950   |                        |  |
| Vocational Education Building  |           |            |              |             |  |              |             |                        |  |
| Heating Hot Water Piping   |           |            |              |             |  |              |             |                        |  |
| 1-1/2" Pre-Insulated Piping System (Below Grade)                                 | 0         | lf         | \$30.00      | \$0         | \$10.00  | \$0          | \$0         |                        |  |
| 1-1/2" Insulated Copper (Above Grade)  | 100       | lf         | \$15.00      | \$1,500     | \$15.00  | \$1,500      | \$3,000     |                        |  |
| Trenching & Backfill (8' w x 4' d x 265 lf)                                      | 0         | cy         | \$6.40       | \$0         | \$5.30   | \$0          | \$0         |                        |  |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00   | \$1,000.00   | \$3,500.00  |                        |  |
| Water to Water Heat Exchanger  | 1         | ea         | \$7,500.00   | \$7,500.00  | \$1,500.00   | \$1,500.00   | \$9,000.00  |                        |  |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00   | \$5,000      | \$10,000    |                        |  |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500      | \$5,000     |                        |  |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00   | \$1,000      | \$2,500     |                        |  |
| Subtotal   |           |            |              |             |  |              | \$33,000    |                        |  |
| Administration & Library   |           |            |              |             |  |              |             |                        |  |
| Heating Hot Water Piping   |           |            |              |             |  |              |             |                        |  |
| 2-1/2" Pre-Insulated Piping System (Below Grade)                                 | 2460      | lf         | \$30.00      | \$73,800    | \$10.00  | \$24,600     | \$98,400    |                        |  |
| 1" Insulated Copper (Above Grade)  | 100       | lf         | \$9.00       | \$900       | \$11.00  | \$1,100      | \$2,000     |                        |  |
| 2" Insulated Copper (Above Grade)  | 100       | lf         | \$22.00      | \$2,200     | \$16.00  | \$1,600      | \$3,800     |                        |  |
| Trenching & Backfill (8' w x 4' d x 1390 lf)                                     | 1460      | cy         | \$6.40       | \$9,344     | \$5.30   | \$7,738      | \$17,082    |                        |  |
| Heating Injection Pump   | 2         | ea         | \$2,500.00   | \$5,000.00  | \$1,000.00   | \$2,000.00   | \$7,000.00  |                        |  |
| Water to Water Heat Exchanger  | 2         | ea         | \$7,500.00   | \$15,000.00 | \$1,500.00   | \$3,000.00   | \$18,000.00 |                        |  |
| Miscellaneous Piping Components  | 2         | ea         | \$5,000.00   | \$10,000.00 | \$5,000.00   | \$10,000.00  | \$20,000.00 |                        |  |
| Temperature Controls   | 2         | ls         | \$2,500.00   | \$5,000     | \$2,500.00   | \$5,000      | \$10,000    |                        |  |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00   | \$1,000      | \$2,500     |                        |  |
| Subtotal   |           |            |              |             |  |              | \$178,782   |                        |  |
| Sewer Treatment Plant  |           |            |              |             |  |              |             |                        |  |
| Heating Hot Water Piping   |           |            |              |             |  |              |             |                        |  |
| 2-1/2" Pre-Insulated Piping System (Below Grade)                                 | 300       | lf         | \$30.00      | \$9,000     | \$10.00  | \$3,000      | \$12,000    |                        |  |
| 2" Insulated Copper (Above Grade)  | 400       | lf         | \$22.00      | \$8,800     | \$16.00  | \$6,400      | \$15,200    |                        |  |
| Trenching & Backfill (8' w x 4' d x 150 lf)                                      | 180       | cy         | \$6.40       | \$1,152     | \$5.30   | \$954        | \$2,106     |                        |  |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00   | \$1,000.00   | \$3,500.00  |                        |  |
| Water to Water Heat Exchanger  | 1         | ea         | \$7,500.00   | \$7,500.00  | \$1,500.00   | \$1,500.00   | \$9,000.00  |                        |  |
| Unit Heater  | 5         | ea         | \$800.00     | \$4,000     | \$150.00   | \$750        | \$4,750     |                        |  |
| Unit Heater Piping Assembly  | 5         | ea         | \$650.00     | \$3,250     | \$700.00   | \$3,500      | \$6,750     |                        |  |
| Miscellaneous Piping Components  | 1         | ea         | \$5,000.00   | \$5,000.00  | \$5,000.00   | \$5,000.00   | \$10,000.00 |                        |  |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00   | \$2,500      | \$5,000     |                        |  |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00   | \$1,000      | \$2,500     |                        |  |
| Subtotal   |           |            |              |             |  |              | \$70,806    |                        |  |
| <b>TOTAL- MECHANICAL INTEGRATION COSTS</b>                                       |           |            |              |             |  |              |             | <b>\$628,538</b>       |  |
| <b>SUBTOTAL</b>  |           |            |              |             |  |              |             | <b>\$1,587,633</b>     |  |
| General Conditions & Construction Mgr. Fees                                      | 20%       |            |              |             |  |              | \$317,527   |                        |  |
| <b>SUBTOTAL</b>  |           |            |              |             |  |              |             | <b>\$1,905,159</b>     |  |
| Escalation to Bid Date (Feb. 2010)   | 5%        |            |              |             |  |              | \$95,258    |                        |  |
| <b>SUBTOTAL</b>  |           |            |              |             |  |              |             | <b>\$2,000,417</b>     |  |
| REMOTE FACTOR  | 30.00%    |            |              |             |  |              | \$600,125   |                        |  |
| <b>SUBTOTAL CONSTRUCTION</b>   |           |            |              |             |  |              |             | <b>\$2,600,542</b>     |  |
| <b>SOFT COSTS</b>  |           |            |              |             |  |              |             |                        |  |
| A/E Design Services (boiler, building & integration)                             | 10%       |            |              |             |  |              | \$200,042   |                        |  |
| Site Survey  | 1         | ls         | \$7,500.00   | \$7,500     |  |              | \$7,500     |                        |  |
| Geotechnical Investigation   | 1         | ls         | \$15,000.00  | \$15,000    |  |              | \$15,000    |                        |  |
| Asbestos Survey and Report   | 1         | ls         | \$5,000.00   | \$5,000     |  |              | \$5,000     |                        |  |
| Construction Material Testing  | 1         | ls         | \$5,000.00   | \$5,000     |  |              | \$5,000     |                        |  |
| Building Permit  | 1         | ls         | \$7,500.00   | \$7,500     |  |              | \$7,500     |                        |  |
| Equipment Commissioning  | 1         | ls         | \$15,000.00  | \$15,000    |  |              | \$15,000    |                        |  |
| Air Quality Engineering  | 1         | ls         | \$10,000.00  | \$10,000    |  |              | \$10,000    |                        |  |
| Air Quality Permit   | 1         | ls         | \$0.00       | \$0         |  |              | \$0         |                        |  |
| <b>SUBTOTAL SOFT COSTS</b>   |           |            |              |             |  |              | \$265,042   | <b>\$265,042</b>       |  |
| <b>OTHER COSTS</b>   |           |            |              |             |  |              |             |                        |  |
| Live botton chip van   | 1         | ea         | \$40,000.00  | \$40,000    |  |              | \$40,000    |                        |  |
| <b>SUBTOTAL OTHER COSTS</b>  |           |            |              |             |  |              | \$40,000    | <b>\$40,000</b>        |  |
| <b>PRECONTINGENCY PROJECT TOTAL</b>  |           |            |              |             |  |              |             | <b>\$2,905,584</b>     |  |
| CONTINGENCY  | 10.00%    |            |              |             |  |              | \$290,558   |                        |  |
| <b>RECOMMENDED PROJECT BUDGET - DESIGN AND CONSTRUCTION COSTS</b>                |           |            |              |             |  |              |             | <b>\$3,196,142</b>     |  |

| ESTIMATE OF PROBABLE COST OF DESIGN & CONSTRUCTION                           |           |            |              |             |             | DATE PREPARED<br>12/15/2009  | SHEET 1 OF 1 |                        |
|--|-----------|------------|--------------|-------------|-------------|--|--------------|------------------------|
| PROJECT<br>Haines Borough Biomass Boiler                                     |           |            |              |             |             | <b>CTA Architects Engineers</b><br>306 West Railroad Avenue, Suite 104, Missoula, MT 59802<br>406. 728. 9522 800. 780. 7455 Fax: 406. 728. 8287<br>1-800-780-7455<br>http://www.ctagroup.com E-mail: info@ctagroup.com |              |                        |
| Option<br>B.1 Fully Automated 2.6 MMBtu/hr Pellet Boiler with Metal Building |           |            |              |             |             |  |              |                        |
| Entire Campus - Biomass Building Location A                                  |           |            |              |             |             |  |              |                        |
| ESTIMATOR<br>Ratz  |           |            |              |             |             |  |              |                        |
| Costs obtained from RS Means and historical information.                     |           |            |              |             |             |  |              |                        |
|  | QUANTITY  |            | MATERIAL     |             | LABOR       |  | TOTAL COST   | PROJECT COMPONENT COST |
|  | No. Units | Unit Meas. | Per Unit     | TOTAL       | Per Unit    | TOTAL  |              |                        |
| <b>BIOMASS BOILER AND STACK SYSTEM</b>                                       |           |            |              |             |             |  |              |                        |
| Pellet Fired Heating System (2.6 MMBtu/hr Output- Hot Wtr)                   | 1         | assy       | \$180,000.00 | \$180,000   | \$40,000.00 | \$40,000   | \$220,000    |                        |
| Electrostatic Precipitator   | 1         | assy       | \$120,000.00 | \$120,000   | \$10,000.00 | \$10,000   | \$130,000    |                        |
| Pellet Silo  | 1         | assy       | \$10,000.00  | \$10,000    | \$1,500.00  | \$1,500  | \$11,500     |                        |
| Subtotal   |           |            |              |             |             |  | \$361,500    |                        |
| <b>TOTAL- BIOMASS BOILER SYSTEMS</b>   |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$361,500              |
| <b>BOILER BUILDING COSTS</b>   |           |            |              |             |             |  |              |                        |
| Boiler Plant Building - Metal Building (Slab on Grade)                       | 1000      | sf         | \$50.00      | \$50,000    | \$40.00     | \$40,000   | \$90,000     |                        |
| Site Work for Building   | 1         | ls         | \$30,000.00  | \$30,000    | \$30,000.00 | \$30,000   | \$60,000     |                        |
| Subtotal   |           |            |              |             |             |  | \$150,000    |                        |
| <b>TOTAL- Boiler Building</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$150,000              |
| <b>BOILER BUILDING MECHANICAL COSTS</b>                                      |           |            |              |             |             |  |              |                        |
| Site Utilities   |           |            |              |             |             |  |              |                        |
| 1-1/2" Water Service   | 250       | lf         | \$1.60       | \$400       | \$2.15      | \$538  | \$938        |                        |
| Trenching & Backfill (4' w x 8' d x 150 lf)                                  | 300       | cy         | \$4.50       | \$1,350     | \$7.50      | \$2,250  | \$3,600      |                        |
| 6" PVC Sewer Main  | 250       | lf         | \$10.00      | \$2,500     | \$4.00      | \$1,000  | \$3,500      |                        |
| Trenching & Backfill (4' w x 8' d x 250 lf)                                  | 300       | cy         | \$4.50       | \$1,350     | \$7.50      | \$2,250  | \$3,600      |                        |
| Domestic Water System  |           |            |              |             |             |  |              |                        |
| 1-1/2" Insulated Copper CW   | 100       | lf         | \$25.00      | \$2,500     | \$16.00     | \$1,600  | \$4,100      |                        |
| 3/4" Insulated Copper (CW & HW)  | 175       | lf         | \$9.00       | \$1,575     | \$11.00     | \$1,925  | \$3,500      |                        |
| Emergency Shower and Mixing Valve  | 1         | assy       | \$2,000.00   | \$2,000     | \$320.00    | \$320  | \$2,320      |                        |
| Electric Water Heater  | 1         | ea         | \$1,000.00   | \$1,000     | \$210.00    | \$210  | \$1,210      |                        |
| Service Sink   | 1         | ea         | \$960.00     | \$960       | \$740.00    | \$740  | \$1,700      |                        |
| D-W-V System   |           |            |              |             |             |  |              |                        |
| 2" PVC D-W-V   | 120       | lf         | \$3.25       | \$390       | \$18.00     | \$2,160  | \$2,550      |                        |
| 4" PVC D-W-V   | 70        | lf         | \$8.00       | \$560       | \$20.00     | \$1,400  | \$1,960      |                        |
| Floor Drains   | 3         | ea         | \$575.00     | \$1,725     | \$64.00     | \$192  | \$1,917      |                        |
| Miscellaneous Plumbing   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00  | \$2,500  | \$5,000      |                        |
| HVAC   |           |            |              |             |             |  |              |                        |
| Combustion Ductwork  | 600       | lbs        | \$1.20       | \$720       | \$6.75      | \$4,050  | \$4,770      |                        |
| Louvers  | 60        | sf         | \$60.00      | \$3,600     | \$18.00     | \$1,080  | \$4,680      |                        |
| Control Dampers  | 4         | ea         | \$480.00     | \$1,920     | \$95.00     | \$380  | \$2,300      |                        |
| Small Air Handling Unit for chip drying at metering bin                      | 1         | ea         | \$10,000.00  | \$10,000    | \$2,500.00  | \$2,500  | \$12,500     |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 1-1/2" Insulated Copper  | 120       | lf         | \$15.00      | \$1,800     | \$15.00     | \$1,800  | \$3,600      |                        |
| 6" Insulated Black Steel   | 150       | lf         | \$63.00      | \$9,450     | \$50.00     | \$7,500  | \$16,950     |                        |
| Base mounted boiler pumps w/ accessories                                     | 2         | ea         | \$10,000.00  | \$20,000    | \$2,500.00  | \$5,000  | \$25,000     |                        |
| Unit Heater  | 4         | ea         | \$800.00     | \$3,200     | \$150.00    | \$600  | \$3,800      |                        |
| Unit Heater Piping Assembly  | 4         | ea         | \$650.00     | \$2,600     | \$700.00    | \$2,800  | \$5,400      |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00  | \$5,000  | \$10,000     |                        |
| In Slab Radiant Heat System  |           |            |              |             |             |  |              |                        |
| 1-1/2" Insulated Copper Piping   | 80        | lf         | \$15.00      | \$1,200     | \$15.00     | \$1,200  | \$2,400      |                        |
| 5/8" PEX Tubing  | 750       | lf         | \$1.40       | \$1,050     | \$1.70      | \$1,275  | \$2,325      |                        |
| Manifold - 8 circuit   | 1         | ea         | \$250.00     | \$250       | \$250.00    | \$250  | \$500        |                        |
| Manifold Piping Assembly   | 1         | ea         | \$650.00     | \$650       | \$700.00    | \$700  | \$1,350      |                        |
| Temperature Controls (includes pump VFD's)                                   | 1         | ls         | \$15,000.00  | \$15,000    | \$10,000.00 | \$10,000   | \$25,000     |                        |
| Plant Electrical Work  | 1         | ls         | \$25,000.00  | \$25,000    | \$12,500.00 | \$12,500   | \$37,500     |                        |
| Emergency Generator 75KW   | 75        | KW         | \$475.00     | \$35,625    | \$60.00     | \$4,500  | \$40,125     |                        |
| Subtotal   |           |            |              |             |             |  | \$234,095    |                        |
| <b>TOTAL- BOILER BUILDING MECHANICAL &amp; ELECTRICAL COSTS</b>              |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$234,095              |
| <b>SUBTOTAL BUILDING &amp; BOILER</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$745,595              |
| <b>MECHANICAL INTEGRATION COSTS</b>  |           |            |              |             |             |  |              |                        |
| <b>School</b>  |           |            |              |             |             |  |              |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 4" Pre-Insulated Piping System (Below Grade)                                 | 1300      | lf         | \$60.00      | \$78,000    | \$20.00     | \$26,000   | \$104,000    |                        |
| 4" Insulated Black Steel (Above Grade)                                       | 120       | lf         | \$40.00      | \$4,800     | \$33.00     | \$3,960  | \$8,760      |                        |
| Trenching & Backfill (8' w x 4' d x 650 lf)                                  | 770       | cy         | \$6.40       | \$4,928     | \$5.30      | \$4,081  | \$9,009      |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00  | \$1,000.00   | \$3,500.00   |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$16,000.00  | \$16,000.00 | \$2,500.00  | \$2,500.00   | \$18,500.00  |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00  | \$5,000  | \$10,000     |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00  | \$2,500  | \$5,000      |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00  | \$1,000  | \$2,500      |                        |
| Subtotal   |           |            |              |             |             |  | \$161,269    |                        |
| <b>Vocational Education Building (continued from main School)</b>            |           |            |              |             |             |  |              |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 1-1/2" Pre-Insulated Piping System (Below Grade)                             | 530       | lf         | \$30.00      | \$15,900    | \$10.00     | \$5,300  | \$21,200     |                        |
| 1-1/2" Insulated Copper (Above Grade)  | 300       | lf         | \$15.00      | \$4,500     | \$15.00     | \$4,500  | \$9,000      |                        |
| Trenching & Backfill (8' w x 4' d x 265 lf)                                  | 315       | cy         | \$6.40       | \$2,016     | \$5.30      | \$1,670  | \$3,686      |                        |
| Heating Injection Pump   | 1         | ea         | \$2,500.00   | \$2,500.00  | \$1,000.00  | \$1,000.00   | \$3,500.00   |                        |
| Water to Water Heat Exchanger  | 1         | ea         | \$7,500.00   | \$7,500.00  | \$1,500.00  | \$1,500.00   | \$9,000.00   |                        |
| Miscellaneous Piping Components  | 1         | ls         | \$5,000.00   | \$5,000     | \$5,000.00  | \$5,000  | \$10,000     |                        |
| Temperature Controls   | 1         | ls         | \$2,500.00   | \$2,500     | \$2,500.00  | \$2,500  | \$5,000      |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00  | \$1,000  | \$2,500      |                        |
| Subtotal   |           |            |              |             |             |  | \$63,886     |                        |
| <b>Administration &amp; Library</b>  |           |            |              |             |             |  |              |                        |
| Heating Hot Water Piping   |           |            |              |             |             |  |              |                        |
| 2-1/2" Pre-Insulated Piping System (Below Grade)                             | 1500      | lf         | \$30.00      | \$45,000    | \$10.00     | \$15,000   | \$60,000     |                        |
| 1" Insulated Copper (Above Grade)  | 100       | lf         | \$9.00       | \$900       | \$11.00     | \$1,100  | \$2,000      |                        |
| 2" Insulated Copper (Above Grade)  | 100       | lf         | \$22.00      | \$2,200     | \$16.00     | \$1,600  | \$3,800      |                        |
| Trenching & Backfill (8' w x 4' d x 750 lf)                                  | 900       | cy         | \$6.40       | \$5,760     | \$5.30      | \$4,770  | \$10,530     |                        |
| Heating Injection Pump   | 2         | ea         | \$2,500.00   | \$5,000.00  | \$1,000.00  | \$2,000.00   | \$7,000.00   |                        |
| Water to Water Heat Exchanger  | 2         | ea         | \$7,500.00   | \$15,000.00 | \$1,500.00  | \$3,000.00   | \$18,000.00  |                        |
| Miscellaneous Piping Components  | 2         | ea         | \$5,000.00   | \$10,000.00 | \$5,000.00  | \$10,000.00  | \$20,000.00  |                        |
| Temperature Controls   | 2         | ls         | \$2,500.00   | \$5,000     | \$2,500.00  | \$5,000  | \$10,000     |                        |
| Electrical Work  | 1         | ls         | \$1,500.00   | \$1,500     | \$1,000.00  | \$1,000  | \$2,500      |                        |
| Subtotal   |           |            |              |             |             |  | \$133,830    |                        |
| <b>TOTAL- MECHANICAL INTEGRATION COSTS</b>                                   |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$358,985              |
| <b>SUBTOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$1,104,579            |
| General Conditions & Construction Mgr. Fees                                  |           |            |              |             |             |  |              |                        |
|  | 20%       |            |              |             |             |  | \$220,916    |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$1,325,495            |
| Escalation to Bid Date (Feb. 2010)   |           |            |              |             |             |  |              |                        |
|  | 5%        |            |              |             |             |  | \$66,275     |                        |
| <b>SUBTOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$1,391,770            |
| REMOTE FACTOR  |           |            |              |             |             |  |              |                        |
|  | 30.00%    |            |              |             |             |  |              | \$417,531              |
| <b>SUBTOTAL CONSTRUCTION</b>   |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$1,809,300            |
| <b>SOFT COSTS</b>  |           |            |              |             |             |  |              |                        |
| A/E Design Services (boiler, building & integration)                         |           |            |              |             |             |  |              |                        |
|  | 10%       |            |              |             |             |  | \$139,177    |                        |
| Site Survey  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$7,500.00   | \$7,500     |             |  | \$7,500      |                        |
| Geotechnical Investigation   |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$15,000.00  | \$15,000    |             |  | \$15,000     |                        |
| Asbestos Survey and Report   |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$5,000.00   | \$5,000     |             |  | \$5,000      |                        |
| Construction Material Testing  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$5,000.00   | \$5,000     |             |  | \$5,000      |                        |
| Building Permit  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$7,500.00   | \$7,500     |             |  | \$7,500      |                        |
| Equipment Commissioning  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$15,000.00  | \$15,000    |             |  | \$15,000     |                        |
| Air Quality Engineering  |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$10,000.00  | \$10,000    |             |  | \$10,000     |                        |
| Air Quality Permit   |           |            |              |             |             |  |              |                        |
|  | 1         | ls         | \$0.00       | \$0         |             |  | \$0          |                        |
| <b>SUBTOTAL SOFT COSTS</b>   |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  | \$204,177    | \$204,177              |
| <b>OTHER COSTS</b>   |           |            |              |             |             |  |              |                        |
| Live bottom chip van   |           |            |              |             |             |  |              |                        |
|  | 1         | ea         | \$40,000.00  | \$40,000    |             |  | \$40,000     | \$40,000               |
| <b>SUBTOTAL OTHER COSTS</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  | \$40,000     | \$40,000               |
| <b>PRECONTINGENCY PROJECT TOTAL</b>  |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$2,053,477            |
| CONTINGENCY  |           |            |              |             |             |  |              |                        |
|  | 10.00%    |            |              |             |             |  |              | \$205,348              |
| <b>RECOMMENDED PROJECT BUDGET - DESIGN AND CONSTRUCTION COSTS</b>            |           |            |              |             |             |  |              |                        |
|  |           |            |              |             |             |  |              | \$2,258,825            |