

**Board of County Commissioners - Staff Report****Meeting Date:** November 28, 2016**Presenter:** Heather Overholser**Submitting Dept:** ISWR/Engineering**Subject:** Update on ISWR Capital Projects**Statement / Purpose:**

To review the status and upcoming staff recommendations regarding ISWR capital projects: Recycling Center, Waste Excavation, Trash Transfer Station and Landfill Closure.

**Background / Description (Pros & Cons):**

Recycling Center – The Recycling Center Phase 1 construction is nearing completion. The expected substantial completion date is mid-December, and staff hopes to be able to move in prior to the Christmas holiday. The project is on budget, including one change order in the amount of \$13,801, as well as an increase in the force account in the amount of \$10,000. The total approved project amount is \$1,267,801; however, this includes the total force account of \$60,000, all of which may not be necessary to complete the project. Staff is excited to move out of the construction trailer and into new offices. A ribbon-cutting ceremony will be planned for this winter.

Waste Excavation – The waste excavation project with Montana Civil Contractors is going well and within budget to date; however, there is a considerable amount of additional waste (almost double the original estimate both above and below grade), which is necessary to remove per the WDEQ-approved landfill closure plan. Work this summer was slow-going due to large amounts of over-excavation that was required, as well as wet weather in the fall. For all of these reasons, staff recommends that Montana Civil return in 2017 to complete the project. Engineers recently estimated the quantity of remaining waste, and a new proposal/change order will be brought in front of the Commissioners in December for consideration, which would increase the total project cost to address the following:

- Considerable additional waste removal beyond the original scope of work;
- Re-mobilization in 2017 - an additional 37% on top of the original mobilization cost as Montana Civil plans to leave some equipment on site over the winter and a second full mobilization will not be necessary;
- An increase in two unit cost items (waste excavation and clean soil excavation) due to the additional quantities being 70% greater than the original scope of work;
- A 44% increase in fuel costs since the project was bid; and,
- A new substantial completion date due to change in conditions (November 15, 2017).

Please note, the two negotiated unit cost items proposed for an increase by Montana Civil (waste excavation and clean soil excavation and backfill) would only be applied to quantities beyond the original scope of work, even though those quantities have not yet been reached to date. With the adjustments as listed above, the proposed estimated contract total cost is \$3,596,257. This new total project cost is clearly more than the bid amount of \$2.5 million; however, it is \$1.8 million less than the engineer's estimate and \$170,672 less than ISWR's project budget of \$3.8 million.

Interim Transfer Station – Serious concerns are shared among all involved in the transfer station planning about the multitude of challenges (operational, safety and construction) of building the trash transfer facility in two phases, which would result in the intermingling of construction with the daily operations of the facility. In addition to this serious safety concern, it also presents operational and logistical issues. The original plan was to construct phase 1 of the transfer building within feet to the north of the existing facility, then shift the day-to-day waste operation to the new phase 1 structure, demolish the old facility, and finally construct phase 2 as an addition to phase 1. At the time of initial planning, with very little available space on the site, a two phase construction seemed to be the only option, albeit not ideal. Since then, the waste excavation project was moved up on the overall landfill closure project timeline and, as a result, we now have considerable space on the lower pad. This additional space affords us the opportunity to build the planned 4800 sq. ft. compost building in 2017 instead of 2019 so that it could be utilized as an interim transfer station during the construction of the permanent transfer facility. After going through the scale house construction with a temporary scale and scale house, all agree that, without the temporary facility, the project would have been enormously challenging and a safety risk for the County. As such, staff is recommending the construction of an interim transfer station in 2017, which will eventually serve as a permanent compost and waste diversion facility. A building for composting is included in the overall project budget.



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An interim transfer station facility would have significant positive impacts on the overall project, including:

- Increased safety for the public, staff and contractors during transfer facility construction by separating the day-to-day waste operations from construction activities;
- Improved operation and construction logistics, as well as avoided complications of the two occurring simultaneously in the same location;
- Substantial cost savings and increased competitive bidding due to a less complex project that can be built in one phase rather than two, and without the added complication of ongoing daily County operations. (Through informal conversations with people in the construction industry, we found their opinion is that there is potential to decrease the project cost by 10-25% by constructing the facility in one phase as opposed to two.); and,
- Provide a permanent facility on site for future improved composting operations and waste diversion.

The overall project schedule is proposed as follows:

- 2017 – Construct interim transfer station and complete waste excavation;
- 2018 – Construct permanent transfer station and complete landfill capping; and,
- 2019 – Finalize compost system improvements and install remaining necessary infrastructure (as funding allows).

The cost to construct the interim transfer station is estimated to be \$705,000 for a metal building and \$544,000 for a fabric building, including a 10% contingency, as well as a 10% annual inflation factor. Although more expensive, staff recommends constructing a metal building to ensure structure longevity. As previously mentioned, the cost of a structure for composting is included in the budget for the overall project, and we expect to see significantly lower costs for the transfer facility due to the single phase approach that the interim facility offers. The transfer facility engineer's estimate stands at approximately \$8,040,000. Even a 10% decrease would amount to an \$800,000 decrease in project cost.

**Golder Contract Amendment for Interim Transfer Station:** The interim transfer station planning, design, and procurement is not included in Golder's approved scope of work. As time is of the essence, staff recommends an amendment to the contract with Golder Associates so work can be completed in a timely manner to put the interim facility out to bid in March 2017. Bidding out by the beginning of March is within a procurement time frame that would encourage the best pricing and the most bidders. Staff is in the process of evaluating the Golder contract amendment proposal and scope of work, and plans to bring it to the BCC for consideration in December. The to-be proposed additional scope of work would increase the Golder contract by \$349,287. An original proposal received from Golder was in the amount of \$468,578. Through modifications to the scope of work, reallocation of unspent approved funds, and negotiation with Golder and sub-contractors, staff was able to reduce the proposal amount by \$119,291. Scope of work items include:

- Interim transfer station design, bid document preparation, procurement support;
- Engineering support during 2017 waste excavation and interim TTS construction;
- Grading plan revisions due to increased waste quantities and a road relocation, and the redesign of the storm water system;
- Redesign of landfill cap on USFS property to accommodate additional volume of waste; and,
- Construction quality assurance and management during construction of the Interim transfer station and waste excavation in 2017.

**Stakeholder Analysis & Involvement:** Many stakeholders have been involved throughout the planning of these projects, including Teton County Engineering, Planning, Building and ISWR, ISWR's Advisory Board and committees, CTA Architects-Engineers, Golder Associates, Gordon Environmental, ISWR's construction manager, Yellow Iron, Terra Firma, the Wyoming Department of Environmental Quality, the Wyoming Office of State Lands and Investments, WYDOT and the Bridger-Teton National Forest.

**Attachment:** Overall Horsethief Canyon project budget vs. actual – updated November 22, 2016

ISWR Taming the Wild Waste Horsethief Canyon Project																
UPDATED																
11/22/2016																
PROJECT EXPENSES																
Project Component	Pre-FY2015 Budget	Pre-FY2015 Actual	FY2015 Budget	FY2015 Actual	FY2016 Budget	FY2016 Actual	FY2017 Budget	FY2017 Actual	FY2018 Budget	FY2018 Actual	FY2019 Budget	FY2019 Actual	FY2020 Budget	FY2020 Actual	ALL FYs Budget Total	ALL FYs Actual Total
GW Monitoring (Pre-FY2016 only), DEQ N&E Study (Golder)	\$32,084	\$32,084	\$17,000	\$6,147	\$ -	\$ -	0	0	0		0		0		\$49,084	\$38,231
Weed Management	\$0	\$0	\$2,100	\$0	\$2,850		\$0	\$0	\$0		\$0		\$0		\$4,950	\$0
Scale House & TTS Planning	\$0	\$0	\$496,312	\$319,991	\$331,142	\$36,007	\$256,446	\$0	\$0		\$0				\$1,083,900	\$355,998
Scale House + Septic Construction	\$0	\$0	\$31,500	\$0	\$2,303,714	\$2,325,133	\$20,000	\$0	\$0		\$0				\$2,355,214	\$2,325,133
TTS Construction & Fire Suppression	\$0	\$0	\$0	\$0	\$101,652	\$23,400	\$526,082	\$333,156	\$3,151,956		\$5,598,887				\$9,378,577	\$356,556
Landfill Closure Planning	\$146,281	\$146,281	\$215,804	\$105,243	\$110,329	\$80,645	\$31,020	\$0	\$60,000		\$0				\$563,434	\$332,169
Landfill Closure Construction	\$0	\$0	\$0	\$0	\$431,526	\$356,054	\$1,451,986	\$713,000	\$3,427,365		\$3,906,378				\$9,217,255	\$1,069,054
Compost Facility Planning	\$0	\$0	\$3,880	\$813	\$21,649	\$2,266	\$28,112	\$0	\$0						\$53,641	\$3,079
Compost Facility Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0				\$2,000,000		\$2,000,000	\$0
Miscellaneous	\$457	\$457					\$0	\$0	\$0						\$457	\$457
	\$178,822	\$178,822	\$766,596	\$432,194	\$3,302,862	\$2,823,504	\$2,313,646	\$1,046,157	\$6,639,321	\$0	\$9,505,265	\$0	\$2,000,000	\$0	\$24,706,512	\$4,480,677