



521 Drainage Authority
Minutes of the Regular Board Meeting
August 25, 2010
Mesa County Courthouse
544 Rood Avenue, Training Room B, Grand Junction, Colorado

Board Members Present:

Richard Bowman, Chairman
Craig Meis, Vice-Chairman
Dave Edwards, Director
Mel Mulder, Secretary

Board Member Absent:

Tom Kenyon, Treasurer

Technical and Authority Staff Present:

Trent Prall	City of Grand Junction, Engineering Manager
Bud Thompson	Mesa County, Project Manager
Jim Shanks	5-2-1 Drainage Authority Manager
Mary Sparks	5-2-1 Drainage Authority Admin Assistant

Guests Present:

Ron Stoneburner	Steering Committee
Kevin Williams	Grand Valley Drainage District, Board Member

Called to Order

Chairman Bowman called the meeting to order at 3:00 p.m. Roll was called.

Review and Adoption of the Board Meeting Agenda

Motion to adopt the agenda: Director Mulder
Seconded: Director Edwards
In favor: All
Opposed: None
Motion passed with voice vote 4-0

Consent Agenda:

1. Agenda Item 1 – Review and adopt minutes of the May 26, 2010, Board Meeting for the 5-2-1 Drainage Authority
2. Agenda Item 2 – Financial Reports

Financial Reports

Overview of Financials – Bank Reconciliation, Transaction Detail by Account, Budget vs. Actual, Summary Balance Sheet

The following checks were signed by the Board:

1. 5-2-1- Drainage Authority – Check No. 1443: \$50,000 for third quarter contract payment to the City of Grand Junction.
2. Westcrete Cache, LLC – Check No. 1444: \$288.25 for last lease and utilities payment for 573 W. Crete.

Motion to approve Consent Agenda: Director Mulder

Seconded: Director Edwards

In Favor: All

Motion Passed with voice vote of 4-0

End of Consent Agenda

Discussion Items

3. Recognition of former Board Member Dave Walker

Dave Walker was not present to receive the wood stove plaque in recognition of his service on the Board of the 5-2-1 Drainage Authority.

4. Bosley Wash Final Design Proposal

Overview by - Jim Shanks

A brief history of Bosley Wash: Bosley Wash is located north of I-70 and east of the Clifton Interchange around 33 ½ Road, west of Mt. Garfield. There was a study of Bosley Wash due to ongoing flash flooding south of I-70. About four years ago there was a fatality because of a flash flood where Bosley Wash crosses Interstate 70. It was a priority to make modifications to detain the runoff and lower the peak flows. This proposal is a modification of the natural terrain to capture the runoff from this area and hold it so it will not inundate I-70 and keep downstream properties from flooding. The design release rate out of Bosley Wash was 50 cubic feet per second. One of the reasons the 5-2-1 Drainage Authority was formed was to try to look at some of the major drainage areas like Bosley Wash, Douglas Wash, Lewis Wash, Big Salt Wash, Leach Creek, etc.. The 5-2-1 was tasked with the more regional drainage planning since these drainages cross several government jurisdictions. The 5-2-1 has never funded a project, they have only done studies and design work, no construction to date.

The statutory mandate we are governed by is the Clean Water Act and the National Flood Insurance Program. Bosley Wash became a problem because the man-made encroachments such as buildings, houses and roadways. The purpose of this proposed project is not to make things better than nature but to mitigate the effects of human interference with nature.

The reason for the redesign from the original design by Olsson & Assoc. is to accommodate the land trade made between Mesa County and a private property owner.

There is a water quality component to the Bosley Wash project as the basin is designed to capture sediment and there is an area designated to deposit the captured sediment. There are multiple

reasons for doing Bosley Wash, to control stormwater runoff from the area from impacting the down stream individuals that widens out the flood plain and to take properties out of the floodplain. It is a lot cheaper to put in a detention basin rather than enlarge all of the downstream bridges and structures. The strategy is to have the facility designed so that whenever a funding source is identified; the project will be ready to go. Also having a design in place will allow Mesa County to proceed with the land trade with the BLM that will be required to accommodate the project.

At the Board meeting held on May 26, 2010, the Board reviewed a Re-design of the proposed Bosley Wash detention basin prepared by the City of Grand Junction. Subsequent to this review the City of Grand Junction met with the State Engineer's office to inquire about the submittal requirements for their approval of the detention basin structure.

Based on direction from the State Engineer's office the City has prepared a proposal to complete the design work on Bosley Wash in order to obtain a permit from the State Engineer's office. The comments from the State Dam Safety Engineer are summarized as follows:

- A peak Storm analysis must be performed for the structure, using a design event equal to $0.45 \times \text{PMP}$, where PMP is the Probable Maximum Precipitation event as defined in section 4.2.27 of Rule 4 (Colorado, 2007).
- Perform dam failure simulations and analysis and prepare emergency response plan.
- Perform detailed foundation analysis for embankment.
- Perform detailed seepage analysis for embankment.
- Perform seismic hazard analysis for embankment, outlet works, and spillway.
- Prepare geologic map for site.
- Obtain additional shear strength data for fill materials to be used in embankment construction.
- Perform hydraulic fracturing analysis for embankment.
- Evaluate spillway and spillway outfall armor for susceptibility to freeze-thaw damage.
- Consider structural concrete as an alternative for protection of spillway and spillway outfall area.
- Evaluate pore pressures and seepage beneath spillway area surface protection (in filter/drain material beneath grouted riprap) and propose drain mechanism.
- Co-location of spillway and detention basin outfall (42" RCP) is regarded as un-desirable by State Engineer's Office. Spillway's on constructed fill are highly susceptible to seepage and piping, which would lead to failure of embankment and spillway. Either adequately evaluate and protect against such events, or consider relocating the entire dam by moving embankment northwest to current location of inflow to basin. This alteration could then be coupled with a spillway constructed around the end of the embankment, thereby avoiding spillway construction on placed fill. Such an alteration would also reduce the threat to the highway posed by spillway operation.

ATTACHMENTS: August 18, 2010 memo from City of Grand Junction Utility Engineer Bret Guillory defining a scope of services and offering to perform the engineering work to meet the requirements of the State Engineer's Office for a lump sum of \$27,500.

The City's specific proposal is for only the number of hours and no overhead. 5-2-1 Drainage Authority and if the government issues stimulus funds, this project would be ready to build. TAC met and discussed Bosley Wash and decided to keep moving along with the final design instead of doing nothing. Mesa County continues with the land swap for Bosely Wash. In the preliminary budget for 2011, \$27,000 is budgeted for final design for the Bosley Wash project. After final design is complete, there will be a funding issue for construction. Most federal dollars will be going to biggest flood risks in larger areas. Our state congressmen could help with funding to this area. Not many firms can contract a project for \$57 per hour, this is one of the benefits of contracting with the City of Grand Junction. There will be some sub work and is included in the \$27,500. A letter of agreement would be a sufficient contract.

Motion to authorize the Chairman to enter into an agreement with the City of Grand Junction in the amount of \$27,500 to complete the Bosley Wash redesign: Director Mulder

Seconded: Director Edwards

In Favor: All

Motion passed with voice vote 4-0

Preliminary 2011 Budget

Overview by - Jim Shanks

At the Board meeting held on May 26, 2010, the Board asked that a preliminary 2011 budget be prepared prior to September of 2010.

The Board adopted a 2010 budget in December 2009 that included \$342,519 of expenditures, \$110,500 in revenues, with a projected a fund balance at the end of 2010 of \$274,860.

Based on expenditures through July, the estimated expenditures for 2010 are \$258,684, revenues of \$35,490 with a projected fund balance of \$283,685.

The proposed 2011 budget includes expenditures of \$257,270, revenues of \$26,200 and a projected end of year balance of \$52,615.

This proposed budget assumes that no monetary contributions are made in 2011 by any of the 5-2-1 members. The budget also assumes that the existing contract with the City of Grand Junction for management services for \$200,000 per year remains the same.

2009 contributions to the 5-2-1 Drainage Authority from its member entities were as follows:

- Mesa County - \$237,732
- City of Grand Junction - \$198,110
- Grand Valley Drainage District - \$29,717
- City of Fruita - \$19,811
- Town of Palisade - \$9,906

The Board asked for a cost allocation alternative analysis among the five entities for the 2012 budget year by the next board meeting. The cost share should reflect the level of effort for each the 6 program goals required by the MS4 permit.

For 2011 the budget assumes funding using the existing fund balance. Projected fund balance carry forward for 2010 would be \$284,000 with a projected 2011 ending balance of \$52,000. Fruita still wants to be a part of the 5-2-1 Drainage Authority and is expected to be included within the permit area in 2012 once the 2010 Census is complete. It was stated that the 5-2-1 Drainage Authority cannot dissolve and have the stormwater permit responsibility revert to each individual entity. The Board needs to confirm that the City of Grand Junction is still willing to provide management services for \$200,000 for 2011.

Motion to approve the 2011 Budget: Director Meis
Seconded – Director Edwards
Motion passed 4-0 on a roll call vote.

6. Managers Report

Training: The 5-2-1 Drainage Authority will be holding two training classes in October:

October 18 – CDOT Erosion Control Supervisor Certification Class

October 19 – Developing and Implementing Stormwater Management Plans

The Conducting Stormwater Compliance Inspection two day class was not offered because of low enrollment numbers. The cost of each class has been increased to \$150. Registration began on August 23. Information is available on the 5-2-1 web site: www.521drainageauthority.org.

A training class on Municipal Housekeeping and Spill Prevention and Cleanup was held on August 19, 2010 at the Mesa County Fairgrounds Mesa County Safety Fair. The Housekeeping is part of the program requirements. Audit check list has been sent out and TAC has discussed this. Those attending included the Mesa County Road and Bridge Department, City of Grand Junction Utilities and Grand Valley Drainage District. A brief summary of the current operational make-up of the 5-2-1 Drainage Authority was also given.

Office Lease/Auction: The office lease was terminated at the end of July and the keys returned to West Cache, LTD. The office furniture has been removed by Buster Cattles auction service and will be auctioned at the next City/County surplus auction. Some of the excess office equipment was distributed between the various entities. Assets other than office equipment left for auction, the lease is completed.

Construction Stormwater Permits Issued:

1. River Trail Subdivision 3141 D Road-City
2. Eastmoor Sewer 30 Road and E ½ Road-County
3. Las Colonias Tamarisk Removal 9th & Struthers-City
4. I-70B Widening – 24 Road to 24 ¾ Road-City
5. American Furniture Warehouse 2571 US 6&50-City

Most construction is commercial and not residential with approximately 90% of the stormwater permits being with the City of Grand Junction.

Construction Stormwater Inspections:

Many permits are active with no construction. Some are in foreclosure-bank owned. The responsible party would then be the bank. The Water's Edge Subdivision has four lots with five different banks involved in the foreclosure.

The Construction Stormwater permits under construction have six permits that have been given Notices of Violation. Follow up inspections are being scheduled with each of these permits to determine if they have complied with the requirements of their permit.

Public Education: Jim Shanks, Kristin Winn and Mary Sparks attended the Farmers Market on August 12. The 5-2-1 booth included education material to inform people that storm water goes to the river and the harmful effects of illicit discharges into the stormwater systems.

The 5-2-1 Drainage Authority participated with dumpster costs for the river clean up last Saturday in the Fruita area. This was budgeted under public participation.

Illicit Discharge (Hot Line) Complaints:

There was a total of 18 Hot Line calls from June through the August 2010. Follow up on several of the calls will be available next meeting.

TAC: The Technical Advisory Committee met on August 18 at Grand Junction City Hall. Topics discussed included the following:

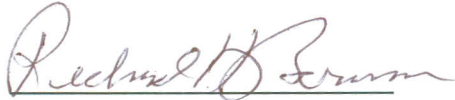
1. Bosley Wash design: The TAC reviewed the proposal to complete the design work as required by the State Engineer. The TAC recommended that we continue making progress on this project so that the project can proceed whenever funding may be available.
2. 2011 Proposed Budget: The TAC reviewed the preliminary 2011 Budget and recommended that \$27,500 be budgeted for the design work on Bosley Wash. They also recommended that we look to see if there is any grant funding available.
3. Orchard Mesa PDM (Pre-Disaster Mitigation) grant. The application period has expired for 2010. There is a local match of approximately \$500,000 that would be required to obtain any grant funding for this project.
4. Municipal Good Housekeeping Training: Jim Shanks is planning to provide training to Mesa County Road and Bridge on Aug 19. GVDD and City of Grand Junction will send people to it. The training materials are available on DVD if any of the entities want to use them. The 5-2-1 audits will be scheduled for later in the year.
5. Town of Palisade: The Town of Palisade has not been participating in the TAC. Jim Shanks said that he has been sending all TAC correspondence to Tim Sarmo, Town Manager.

Meeting Calendar: The next meeting is scheduled for December 8, 2010 at 3:00 p.m.

Discussion items for December 8th meeting:

- Cost allocation for each entity for 2012 budget

Meeting adjourned 4:20 p.m.

A handwritten signature in cursive script, appearing to read "Richard Bowman".

Richard Bowman, Chairman