

## MINUTES

Grand Junction Housing Authority  
Board of Commissioners' Meeting  
**Special July Meeting**

Monday, July 1, 2008  
Housing Authority Offices  
1011 N. Tenth Street  
**11:30 a.m.**

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### 1. Call to Order

A special Grand Junction Housing Authority (GJHA) Board Meeting was called to order on July 1, 2008 at 11:40 a.m. by Board Chair Steve Heinemann. Those in attendance included Board Members Kathleen Belgard, Teresa Coons, Erin Ginter, and Patti Hoff; and Staff Members Jody Kole, Kristine Franz, and Don Hartman.

### 2. Consider Proposed Change Orders for Arbor Vista

Although Board Members have been previously advised and kept well informed of the yielding soil problem at the Arbor Vista Development, the group was briefed with the following summarization and Board questions were addressed.

Currently, there is a yielding soils problem (unstable dirt) underneath the street and parking lot. This condition was originally found and identified as a problem when construction began, but over time has progressively "healed", as it is described by the project team. Irrigation water, clogged and leaking irrigation pipes, as well as an over abundant amount of snow fall this past winter have been credited for the extremely wet ground. The ground has begun to dry, however, and is becoming a less severe issue.

Don discussed the evolution of proposed remediation from inception two months ago to the present. The following proposed scenarios were visually identified on the site plan for easy review and understanding.

<u>Site Plan No.</u>	<u>Scenario</u>	<u>Estimated Cost</u>
1)	Original proposed remediation included all of Court Road and all of the parking lot on the north side; there were no tests done on the southern portion of the parking lot. At the request of D. Hartman, additional areas will be investigated.	\$190,000
2)	Site plan color coding denoted moderate to noticeable "pumping" (soil movement). A cement stabilization company from Denver whose expertise is mixing cement into the soil with an auger to "stabilize the dirt" became involved. The Grand Junction City Inspector agreed with the recommended fixes.	\$ 12,590

<u>Site Plan No.</u>	<u>Scenario</u>	<u>Estimated Cost</u>
	Communication continued between Shaw Builders and GJHA regarding the need for projected costs for this cement stabilization. Civil engineer Jim Langford's remediation suggestion (with no guarantee) was made based on his similar past and successful Grand Valley experiences, but his suggestion wasn't in agreement with the recommendations from the material manufacture and the soil engineer.	
3)	The reworking of three particular areas were identified on the site plan: soil stabilization would be done with Portland Cement on the southern portion of Court Road and along the south side of the east parking lot; two layers of fabric (one being Mirafi and one Tensar) will be separated by 2" of road base on top of the Mirafi and 4" of road base on top of the Tensar in the southwest corner where there is access to 28 Road and would be done last. Langford suggested that, due to his initially inaccurate design of the parking lot, a layer of the Mirafi fabric be added to the center drive lane to help stabilize the soil.	\$ 56,963

Jody mentioned that the Denver cement stabilization company is already in Grand Junction working on a City project. If the Board chooses to give authorization now, the work could begin as early as Thursday, July 3rd and would eliminate mobilization costs later from the Front Range.

Additional discussion ensued. Concerned with the larger picture and the potential of outside irrigation water permeating the site under whatever conditions, Patti questioned the bearing capacity of the soil underneath the buildings. Answering the question, Don and Steve assured the group that this issue has already been addressed. All the buildings' soil bearing capacity was tested and approved prior to construction. Originally, the locations for each of the buildings had been tested but the road had not. Protecting the site in the future still was of concern. Don and Steve informed the group that the major irrigation leak has been repaired and that the pipes underneath the road feeding the site have been blocked off.

Don suggested that further questions could be addressed with the expertise of the soil's engineer consultant, Dennis Lambert of Lambert and Associates, who is under contract to GJHA and awaiting a Board conference telephone call, if the Board requested it. Upon placement of the call, Jody requested and received answers from Dennis on the following two questions:

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- 1) Was this soil problem discoverable beforehand?

Dennis noted that the site history is unknown so one has to be wary because used sites can have surprises. Small diameter holes are drilled in discrete locations and sometimes something isolated (leaking utilities, a garden area, tree pocket) can be hit. His report inferred that, based on an irrigated environment, areas could become more wet as work progressed on the site.

- 2) Is this likely to be an on-going problem with the irrigation water in the area?

Dennis indicated the source could be irrigation water or it could be water from isolated unrelated sources from previous site uses. Because there are varying degrees of wetness in several areas, it appears not to be driven by irrigation but by site history. It seems that the wet areas are becoming less wet, possibly because the source of water is less constant. If irrigation water was the dominate influence for the localized areas that are causing the problem, the wet areas would be much worse, because this is the height of irrigation season.

Teresa's question regarding the most recent proposal for fixing the problem, and in Dennis's opinion, is the fix adequate, was addressed. Dennis stated that in his report, alternatives were given for pavement sections that would provide the level of service that assumptions were made during the analysis. He continued by citing several examples and stressed that the problem is not the longevity of the pavement section, but getting it built.

With no further questions, the conference call concluded.

Steve mentioned that he isn't an engineer but understood the philosophy and, that in his opinion, it would work.

Advising the group of a second problem, Don referenced the site plan and the areas that can't be stabilized using the Portland Cement. These areas will have to be remediated last, using a different method. He explained, outlining why this remediation would have to be delayed. Arbor Vista's sanitary sewer lines tie into major lines on the south at Bunting and to the west on 28 Road. Recently discovering that utilities are encased in concrete and are in a different location than where they should be, plus realizing that the Fruitvale sanitary line running down 28 Road has a "belly" or low-spot in it, causing a reduced flow, means that tapping into the lines as planned isn't an option. The road will have to be uncovered to determine a workaround. Alternatives such as tying the lines into Bunting have been explored but determined unworkable. At this time there isn't an estimated cost, but a Change Order will be submitted for Board approval after additional investigation has been completed.

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Board approval of the four Change Orders totaling \$56,963.00 was requested by GJHA Staff, to which a motion by Teresa, a second by Patti, and a unanimous vote gave the authorization to proceed.

Everyone was in agreement that lessons learned with Arbor Vista should be applied to future developments.

Sharing exciting news on the construction status, Don informed the group that four buildings are under roof, two buildings are being framed with a third one starting at the end of the week, all foundations are poured, windows are in on the majority of the front buildings, and mechanical, plumbing, and electrical are going in on two buildings.

### **3. Adjourn**

With business concluded, the Meeting was adjourned at 12:23 p.m. with a motion by Teresa, a second by Patti, and a unanimous vote.