

**CLEAR CREEK FHAD AND MASTER PLAN
PROGRESS MEETING
MAY 25, 2006 9:00 AM**

UDFCD BOARD ROOM

Minutes

- Ben Urbonas (UDFCD) began the meeting by introducing Ken MacKenzie. Ben mentioned that Ken has replaced John Doerfer and will be involved in master planning studies for the UDFCD. All attendees also introduced themselves. Meeting agendas and a sign in sheet were distributed.
- Craig Jacobson (ICON) provided a summary of action items from the previous meeting. Craig mentioned that a reminder was emailed to CDOT for survey information concerning the scour areas at I-25. Craig also mentioned that ICON had completed the field work required to obtain information on the pedestrian bridges that were omitted from the initial bridge surveys work.
- Craig provided an update as to the status of the FHAD. Craig mentioned that ICON had completed a first run at the complete hydraulic model. The model still needed to be fine tuned before the floodplain would be delineated. Craig mentioned that there still may be some issues with the mapping limits, but he would know more after reviewing the hydraulics in the coming weeks.
- Maps were distributed displaying Problem ID areas in Adams County. Craig mentioned that ICON had utilized the FHAD hydraulic models to identify problem areas in the Clear Creek floodplain. Craig noted that many of the problems were associated with bridge overtopping. Most bridges had capacity up to the 50-year event, however, Tennyson and Lowell showed overtopping as frequently as the 10-year event. Craig mentioned that the structures impacted were sporadic. The most notable areas of inundation were around Federal Boulevard and at the mobile home park adjacent to Tennyson Street. Craig also noted that spills were identified from Clear Creek to the North Overflow Area as frequent as the 2-year event. Craig was not able to recall the exact location that the spills occurred, but did mention that the 2-year discharge in the North Overflow was only around 20-cfs and no structures would likely see much damage during that flooding event.
- Craig mentioned that the master planning efforts in Adams County would mainly focus on bridge replacements and north overflow conveyance. In his opinion, much of the reduction in damages to structures would occur with the bridge improvements. Craig mentioned that ICON was not planning on evaluating improvements to protect single, isolated structures in the floodplain, but would focus on groups of structures, such as at Federal Boulevard and the mobile home park.

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- Craig asked about whether replacement of all bridges should be considered to provide 100-year capacity for the Master Plan. Besharah Najjar (Adams County) mentioned that the bridge at Lowell Boulevard was recently replaced and he did not foresee the County replacing the structure. Ben mentioned that replacing the bridges should not be ruled out, and should be evaluated, regardless of the likelihood of actual replacement.
- Besharah mentioned that the impacts on the floodplain of the proposed Fast Tracks railway alignments will need to be considered with the master plan alternatives. Besharah mentioned that fill will be required for the expansion of the rail lines and stations will be proposed at major roadway intersections. These stations may be in the floodplain. Ken MacKenzie thought that the impacts from Fast Tracks may not be that significant, as they had to follow the existing rail alignments that currently crossed Clear Creek and that their construction requirements prohibited having tracks within the 100-year floodplain. The Master Plan should provide guidance to help identify future sizes of the rail crossings.
- Terry Barnhart (Hyland Hills Recreation) discussed the greenhouse site on the east side of Lowell Boulevard, across from the proposed Hyland Hills Park. Terry mentioned that a residential development was originally proposed for this site, however, the original plans had fallen through. Terry also mentioned that a significant amount of fill had been brought in several years ago for the development. Terry suggested considering a floodplain preservation alternative for this area. Ben mentioned that a buyout may be expensive. Ben suggested that Terry complete some of the leg work to determine a buyout figure. Ben also suggested that ICON visit the site and evaluate the potential impacts of the fill that has been left on-site. Besharah mentioned that maintenance of the open space was a concern to the County and would need to be clarified prior a buyout.
- Degradation areas along the Clear Creek channel were discussed. Dave Bennetts (UDFCD) mentioned that he was aware of isolated areas of bank instability between the two sewer crossings at the downstream end of Clear Creek and near Prospect Park. Dave also mentioned that other isolated areas of instability did exist. In the past, the maintenance program has focused on areas where improvements, such as the trail system, were endangered. Aggregation also needs to be considered. The footbridge at the Lena Gulch confluence is an example of an area that has experienced aggregation.

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- Dave mentioned that one of the goals for the Clear Creek corridor was to make it boatable. The Master Plan should consider boat chutes at both new structures and existing structures.
- It was noted that the Master Plan should address channel stability through use of drop structures, as well as areas of bank instability through use of riprap and grading.
- Craig mentioned that ICON is in the process of completing Utility Research in the Adams County area. Craig mentioned that storm sewer inventory information had been provided by Adams County. ICON had also contacted special districts in addition to private utility owners throughout the County.
- Craig mentioned that ICON would be completing similar utility research in the Jefferson County and Denver areas. Craig requested that Wheat Ridge, Jefferson County, Golden, and Arvada provide any information that may be available on the Cities and County utilities. Craig mentioned that at a minimum line work identifying utility locations, type, and size be provided. At crossings with Clear Creek, depths and inverts will be needed for alternative analyses and profiles.
- Steve Nguyen mentioned that many of the City of Wheat Ridge's utilities are available online.
- The next meeting was scheduled for 9:00 AM on Thursday, June 22, at the UDFCD.

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ACTION ITEMS:

- Attendees to provide utility information to ICON for Jefferson County, Golden, Wheat Ridge, Arvada, and Denver Areas.
- Terry Barnhart to research buyout costs for floodplain preservation east of Lowell Boulevard.

- END OF MEETING--

To the best of my knowledge, these minutes are a factual account of the business conducted, the discussions that took place, and the decisions that were reached at the subject meeting. Please direct any exceptions to these minutes in writing to the undersigned within ten (10) days of the issue date appearing herein. Failure to do so will constitute acceptance of these minutes as statements of fact in which you concur.

Minutes prepared by:



Craig D. Jacobson, P.E.
ICON Engineering, Inc.

5-25-06
Date



Clear Creek Progress Meeting

**May 25, 2006
9:00 AM
UD&FCD Board Room**

Meeting called by: ICON/UDFCD **Facilitator:** Doug Williams
Note taker: Craig Jacobson

Invited Attendees: See Attached Sign-in Sheet

Agenda

Item:	Presented By:	Time:
1. Introduction	Ben Urbonas	5 minutes
2. Summary of Last Meetings Action Items	ICON	2 minutes
3. FHAD Update & Issues	ICON	20 minutes
4. Master Plan Discussions	ICON	
4a. Adams County Problem ID	ICON	15 minutes
4b. Adams County Master Planning	ICON	20 minutes
5. Utility Investigations	ICON	5 minutes
6. Schedule	ICON	5 minutes
7. Set Next Meeting:	Ben Urbonas	5 minutes

Action Items

Item:	Person Responsible:	Due Date:
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Additional Information

Special notes:

Clear Creek FHAD/MP Meeting Attendance Record

Place a checkmark under the "Progress No. 1" column to indicate your attendance today. Also, please verify your contact information and add any missing items. Thank you!

Invitees	Kick-off Meeting April 5, 2006	Progress No. 1 May 1, 2006	Progress No. 2 May 25, 2006	Address	Email	Phone	Fax
Penn Gildersleeve, ICON	X			8100 S. Akron Street Ste 300 Centennial, CO 80112	pgildersleeve@iconeng.com	303-221-0802	303-221-4019
Doug Williams, ICON	X			8100 S. Akron Street Ste 300 Centennial, CO 80112	dwilliams@iconeng.com	303-221-0802	303-221-4019
Craig Jacobson, ICON	X			8100 S. Akron Street Ste 300 Centennial, CO 80112	cjacobson@iconeng.com	303-221-0802	303-221-4019
Ben Urbonas, UDFCD	X			2480 W. 26th Ave Ste 156B Denver, CO 80211	burbonas@udfcd.org	303-455-6277	303-455-7880
Dave Bennetts, UDFCD	X			2480 W. 26th Ave Ste 156B Denver, CO 80211	dbennetts@udfcd.org	303-455-6277	303-455-7880
Bill DeGroot, UDFCD	X			2480 W. 26th Ave Ste 156B Denver, CO 80211	bdegroot@udfcd.org	303-455-6277	303-455-7880
Ken MacKenzie, UDFCD	X			2480 W. 26th Ave Ste 156B Denver, CO 80211	kmackenzie@udfcd.org	303-455-6277	303-455-7880
Jessica Murphy, Adco	X			12200 N. Pecos Street, 3rd Floor Westminster, CO 80234	jmurphy@co.adams.co.us	303-453-8767	303-453-8775
Besharah Najjar, Adco	X			12200 N. Pecos Street, 3rd Floor Westminster, CO 80234	bnajjar@co.adams.co.us	303-453-8770	303-453-8775
Marc Pedrucci, Adco	X				mpedrucci@co.adams.co.us	303-637-8014	303-637-8015
John Conn, Jeffco	X			100 Jefferson County Pkwy Ste 3500 Golden 80419	jconn@jeffco.us	303-2718496	303-271-8490
Mike Vanatta, Jeffco	X				mvanatta@jeffco.us	303-271-8481	303-271-8490
Dave Ridenour, Denver	X			Public Works 201 W Colfax Ave Denver 80202	david.ridenour@ci.denver.co.us	720-865-2524	720-865-2676
Vince Auriemma, Golden	X				vauriemma@ci.golden.co.us	303-384-8156	303-384-8161
Steve Nguyen, Wheat Ridge	X				snguyen@ci.wheatridge.co.us	303-235-2862	303-235-2857
Patrick Dougherty, Arvada	X			8101 Ralston Road; Arvada, CO 80002	patrick@arvada.org	720-898-7642	720-898-7603
Georgia Simpson, Arvada	X			8101 Ralston Road; Arvada, CO 80002	gsimpson@ci.arvada.co.us		
Terry Barnhart, Hyland Hills	X			1800 West 89th Avenue Federal Heights, CO 80260	tbarnhart@hylandhills.org	303-650-7609	303-650-7594
Scott Franklin, COE	X				j.s.franklin@usace.army.mil		
Ken Vaught, Coors	X				ken.vaught@coors.com	303-277-2756	303-277-3833
Carol Duecker, RTD	X				carol.duecker@rtdfastracks.com	303-299-6970	303-299-6994
Andy Amparan, BSNF	X				andy.amparan@bnsf.com	913-551-4964	913-551-4794
Woody Starner, BNSF	X				Elwood.Starner@BNSF.com		
Justin Werdel, CDOT	X			2000 S. Holly Street; Denver, CO 80222	justin.werdel@dot.state.co.us	303-757-9823	
Max Dodson, EPA	X				dodson.max@epa.gov		
Mike Palumbo, Project One	X			Project One Integrated Services; 9785 Maroon Circle, Suite 150; Englewood, CO 80112	mikep@projectoneis.com	303-771-0396	303-771-0398
Susan Grabler, Union Pacific	X				skgrabler@up.com		