ITEM # 24
DATE: 07-10-12

COUNCIL ACTION FORM

SUBJECT: PROFESSIONAL SERVICES CONTRACT TO DEVELOP A COMMUNITY FLOOD MITIGATION STRATEGY

BACKGROUND:

The flood of August 2010 was a significant event in Ames, causing disruptions to public services, commercial, and industrial activities, and the lifestyles of much of the community. In response to the impacts of the flood, the City Council established a new goal to **mitigate flooding in our community.** This goal included the following two objectives, each of which included both short-term and long-term mitigation.

- To reduce the possibility of damage in our community caused by river/watershed flooding.

- To reduce the possibility of damage in our community caused by localized flooding.

Since that time, staff has been working to develop a **proposed approach to a community-wide, multi-jurisdictional effort to engage the public and identify possible causes, issues, approaches, and potential options to address flooding in Ames.**

On January 5, 2012, staff issued a Request for Information (RFI) from firms that would likely be interested in assisting with a study to accomplish that objective. The purpose of the RFI was to solicit ideas and suggestions from experienced firms about how to go about such a study. The RFI was sent to 20 firms, nine of which responded. Staff used the feedback from the RFI to develop a formal Request for Qualifications (RFQ), which was released on April 6, 2012. In the RFQ, staff described the desired scope of work and asked firms to submit their qualifications to perform that work. The scope included the following tasks:

- Baseline Flood Discharge update. This task would prepare an updated estimate of the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year discharges at the three USGS river gauging stations in Ames.

  Included in this task is an evaluation of how those discharges would vary based on a series of different climatic assumptions about future rainfall patterns. This type of "sensitivity analysis" will be used when considering and evaluating the possible mitigation activities and strategies that will be developed later in the study.

- Floodplain Mapping Update. This task includes developing a flood inundation map for each of the storm events analyzed in the first task. These maps will show the difference in inundation for each of the storm frequency intervals and also the differences in likely inundation between the different rainfall patterns.

  Included in this task will be a tabulation of addresses of structures that would be impacted for each of the storm intervals studied.

  Not included in the scope of work is the submission of updated models and maps to FEMA for adoption and publication. If the City desires to have the maps submitted to FEMA after the evaluation is completed, the agreement would need to be amended for that purpose.

- Alternatives Analysis. The key element of developing a flood mitigation strategy will be to identify, evaluate, and recommend a list of possible flood mitigation alternatives. This includes both physical improvements and related policies. **Public participation and involvement is central to this portion of the study.** The proposed approach to gaining this public participation is detailed later in this Council Action Form.

  The concept will be for City staff to work with other governmental partners (Iowa State University, Story County, and the Iowa Department of Transportation) to develop a list of *possible* flood mitigation efforts that could be undertaken. At the initial development stage, all ideas will be considered as "on the table." **Public input will play a significant and substantial role in developing this list.**

  An initial screening will be performed to determine which of the mitigation measures are realistic and feasible. The feasibility analysis will consider things such as constructability, permitting constraints, cost, impacts to land and property owners, reduction in base flood elevation, environmental impacts, and other benefits and impacts. **Public input will also play a significant role in defining the parameters used to weigh potential mitigation measures against each other.**

  For those parameters deemed "feasible," supplemental hydraulic and hydrologic analyses will be performed to evaluate the alternatives. For example, if an option was to involve modification to a bridge or the construction of a detention basin, modeling will be performed to estimate the flood reduction those options would provide.

  From this evaluation, a list of prioritized mitigation measures in ranked order will be presented to the City Council for its consideration and subsequent action. Possible measures will include policy-based changes, as well as actual physical improvements.

Responses to the RFQ were due on April 29, 2012, and eight submittals were received. A team of City staff (Bob Kindred, Steve Osguthorpe, John Joiner, and John Dunn) reviewed and scored the submittals, with input from staff at Iowa State University, Story County, and the Iowa Department of Transportation.

The list of submitting firms is shown below in alphabetical order, with the three highest rated firms shown in bold type.

Ayres & Associates
Bolton and Menk
Burns & McDonnell
HDR Engineers
HR Green
Snyder & Associates
Stanley Consultants
MHW

Each of the three top-rated firms was invited to meet with the City and its partners to share their qualifications and discuss their proposed approach to the study. At the time of the interviews, each firm brought two envelopes. One included their proposed scope of work, and the other included their proposed fee to complete their scope.

The qualifications and approach of each firm, as well as their proposed scopes of work, were rated and scored by those participating in the interviews using the following scoring rubric.

Strength in flood **modeling** and **mapping**	**15%**
Approach to **leveraging** the work of other entities	**10%**
Track record in **implementing** effective, innovative mitigation strategies	**15%**
Strength in **engaging the public**	**15%**
Approach to **evaluating** possible mitigation measures (design, cost estimating, environmental impacts, etc.)	**15%**
Strength in **incorporating climate variability** into the recommendations	**10%**
Ability to work **cooperatively** and **effectively** with City staff and its partner agencies	**5%**
Overall appropriateness of proposed scope of work (Is everything included? Any unusual exceptions? Are the tasks balanced?)	**5%**
Subtotal	**90%**

Only after compiling the scores were the fee envelopes opened, with the fees comprising the final 10 percent of each firm's score.

After reviewing and considering the entirety of each firm's qualifications and proposed scope, as well as each firm's approach to the project, staff selected HDR Engineers as the firm that was most appropriate for the specific needs of this study. Among the many considerations, the advantages brought by working with HDR include the following.

- The Iowa Flood Center is included as a sub-consultant on their team, bringing both its technical expertise to the evaluation and its credibility to the end report.
- HDR's team also includes a meteorologist who can help the team work with City staff and ISU researchers on the climate sensitivity analysis portion of the study.
- Their approach in similar work for other communities has included a holistic approach to the watershed, including a consideration of the environmental impacts (good and bad) when evaluating possible mitigation measures.
- Their proposed scope gave good consideration to incorporating input from both the public and the Council.

In the Request for Qualifications, staff dictated a timeline that would allow the final recommendations of the study to be available in time for development of the next Capital Improvements Plan update. The RFQ also described a public involvement process that included City staff conducting meetings in advance of the consulting firm beginning work.

During the interviews, all three firms indicated that, in order to meet both the project schedule and the authorized budget, their proposed scopes of work included less public engagement than they felt was ideally needed. **After additional consideration, staff agreed that the public participation process needs to be more robust than was initially identified in the RFQ, since it is essential to the ultimate success of the study.** Having an open public discussion will generate the broadest perspectives on possible mitigation strategies. Just as important, conducting the dialogue in a transparent, open format will lend credibility to the final recommendations so that, even if someone is not happy with a recommendation's inclusion (or exclusion) from the final report, they will at least have had the opportunity to be part of how the decision was reached.

After negotiating with HDR, the following public involvement process is proposed.

- **Public Meetings – Round 1.** The kick-off will consist of a series of public meetings.
  - **Two open house-style meetings** will be held where interested individuals can meet with City staff, the design team, and available staff from ISU, Story County and IDOT, to learn about the purpose and specific tasks of the study. One meeting will be held during the day, and one will be held during the evening. The meetings will be very informal, allowing for a high level of one-on-one discussions.
  - **Two formal presentation-style meetings** will be held where the design team can share how the study will progress. An opportunity will be provided

for interested individuals to make public statements on how they have been impacted by flooding and their thoughts about any particular mitigation measure that might be considered. These meetings will be held approximately ten days to two weeks after the open house-style meetings. Like the open house meetings, one meeting will be held during the day and one during the evening.

  - Recognizing that not everyone will be able to attend a public meeting or feel comfortable sharing their thoughts in a public forum, HDR will coordinate with City staff to provide a **virtual, on-line meeting** where the information presented at the open house and presentation meetings will be available, as well as a mechanism to provide comments and feedback to the design team and City staff.

- **Council Workshop Number 1.** Concurrent with the public meetings, HDR will be performing the baseline modeling and mapping. When that step is complete, a Council workshop will be held to share the results of that effort. Included will be the findings from the climate and rainfall sensitivity analyses.
- **Public Meetings – Round 2.** Incorporating the feedback received from the public meetings, from staff and from Council, HDR will conduct an initial screening of the complete list of possible mitigation measures developed. **Two public meetings** (one during the day and one during the evening) will be held to share both the conclusions of the initial screening as well as the screening methodology. An **on-line meeting** similar to that described above in Round 1 will be used again in Round 2.
- **Council Workshop Number 2.** Following shortly after the second round of public meetings will be a second workshop with Council. At the workshop, HDR will share the initial screening results as well as a summary of the public feedback and comments received. At that workshop, Council will ideally be comfortable providing direction to the design team of those mitigation measures that Council would like to see move forward. This would not be the "final" selection, but simply a screening to reduce the list of alternatives that HDR will further develop.
- **Public Meetings – Round 3.** After the second Council workshop, HDR will complete a more thorough evaluation of the mitigation measures highlighted by Council for additional evaluation. At the conclusion of that evaluation, HDR will hold **two more public meetings** (one during the day and one during the evening) to share the final screening matrix with the public and gather all final public input prior to bringing the completed evaluation to Council. As with the previous public meetings, an **on-line meeting** will be used again in Round 3.
- **Final Presentation to Council.** At the end of the study, HDR will present to the Council the final list of evaluated alternatives for which the benefits and costs have been quantified as much as possible. The final product will provide conceptual level descriptions and cost estimates so that measures selected by the Council can be programmed into a future Capital Improvements Plan project.

This more robust public participation scope will mean that the final presentation to Council will not take place until after the 2013-2018 Capital Improvements Plan

has been finalized. However, staff should be able to present Council with a preliminary list of potential projects (with costs) prior to adoption of the CIP.

The City Council previously budgeted $250,000 from the General Fund for this study. The cost of the final recommended professional services agreement with HDR is as follows:

Base Proposal	$242,991
Expanded Public Participation	40,380
Total	$283,371

There will be additional expenses during the public participation process for things such as printing, postage, and possibly meeting room rentals. An additional $5,000 could be allocated for these expenses, bringing the total estimated cost for the flood mitigation study to $288,371. This exceeds the budgeted amount by $38,371. This additional amount is available from the Council's 2011/12 contingency fund, which had undesignated funding of $91,053 remaining at the end of the fiscal year.

ALTERNATIVES:

1. Approve the professional services agreement with HDR Engineers, Inc. of Omaha, Nebraska to develop a flood mitigation strategy in the amount of $283,371, and allocate an additional $38,371 from the Council's unspent 2011/12 contingency fund.

2. Direct staff to renegotiate the professional services agreement with HDR Engineers, Inc. of Omaha, Nebraska to develop a flood mitigation strategy with an alternative scope of service. Council would need to specify any desired changes to the scope.

3. Do not approve a professional services agreement at this time. Provide staff with direction for the desired direction of the study.

MANAGER'S RECOMMENDED ACTION:

Mitigating the damage due to flooding is an important goal of the City Council. Staff has collaborated with ISU, Story County and the IDOT to develop a plan that places a high priority on public involvement and on performing technically-based evaluations of mitigation measures that can individually and collectively work to achieve the Council's goal. A competitive, qualifications-based process was used to select the firm best suited for completing the desired study.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby approving the professional services agreement with HDR Engineers, Inc. of Omaha, Nebraska to develop a flood mitigation strategy in the amount of $283,371, and allocating an additional $38,371 from the Council's unspent 2011/12 contingency fund.