

**STUDY SESSION**  
**River Des Peres Project and**  
**Visioning and Comprehensive Plan Updates**  
VIA VIDEOCONFERENCE  
March 8, 2021  
5:30 p.m.

**AGENDA**

Requested by City Manager

**1. MEETING CALLED TO ORDER**

At the Study Session of the City Council of University City held via videoconference, on Monday, March 8, 2021, Mayor Terry Crow called the meeting to order at 5:31 p.m.

In addition to the Mayor, the following members of Council were present:

Councilmember Stacy Clay  
Councilmember Aleta Klein  
Councilmember Steven McMahon  
Councilmember Jeffrey Hales  
Councilmember Tim Cusick  
Councilmember Bwayne Smotherson

Also in attendance were City Manager, Gregory Rose; City Attorney, John F. Mulligan, Jr.; Director of Planning and Zoning, Clifford Cross; Director of Public Works, Sinan Alpaslan; Janet Buchanan, Matt Jones, and Shawn Sullivan of the *U.S. Army Corps of Engineers*.

**2. CHANGES TO REGULAR AGENDA**

No changes requested.

**3. RIVER DES PERES PROJECT UPDATE**

Mr. Rose stated staff has been working with the Army Corps of Engineers, Stormwater Task Force, and MSD to identify options that would best address the issue of flooding, and this is an update on that project.

Mr. Alpaslan stated Janet Buchanan, Matt Jones, and Shawn Sullivan of the Army Corps of Engineers have been working on a General Reevaluation Report (GRR) for the River Des Peres basin, and recently presented a similar update to the Stormwater Task Force.

**The Project Area**

- Upper River Des Peres between 1-170 and southeast of Heman Park where the river goes underground

**The Flood Risk-Management Study**

- Evaluate solutions to manage the hazards associated with flooding
- Reduce flood risk to homes and businesses in and around the floodplain
- Generation of a General Reevaluation Report; a reevaluation of the previously studied Congressionally authorized project from 1988

**The Process**

- Review of Previous Studies
  - Documented flood conditions in 1988
  - Economic calculations for structures contained in the 2013 analysis

- June 2020 - Virtual workshop with key federal, state, and local entities
  - September 2020 - Public meeting
  - H & H Analysis; Hydrology and Hydraulics
    - Utilizes the PC Swmm model based on 2017 geometry provided by Wood Environment and Infrastructure Solutions.
    - Utilizes Wood's HEC-RAS hydraulic model that looks at flow within River Des Peres
  - Structure Inventory and Analysis
    - Cross references information on structures with flood depths, types of structures, and foundations
  - Life-Safety Analysis
  - Economic Analysis
  - Environmental Assessment
    - Analysis of impacts on cultural resources, i.e., community spaces or historic places of interest
- ❖ *Both the PC Swmm and HEC-RAS models are currently being reviewed by a team outside of the St. Louis District of the Corps of Engineers. All results will be provided to City staff upon completion.*
- ❖ *Once these analyses are completed, the St. Louis Planning Team will create several alternatives or a set of measures and solutions to determine the most feasible plan for rerouting structures, adding additional sewer lines, and what might be hydraulically effective in reducing damage.*

#### **Preliminary List of Measures and Solutions - Ineffective**

- Diversion of the River Des Peres; no place for the diverted channel to be relocated; cannot transfer water outside the watershed per MSD and Corps policies.
- Modifying tubes; based on constraints from MSD and best practices indicating that you should not transfer additional water downstream and exacerbate flooding in the lower portions.
- Relocation of structures in the same parcel or neighborhood; based on lack of space.

#### **Preliminary List of Measures and Solutions - Effective**

- Detention Basins
 

Dry detention basins are dry all of the time except during storm events and have a maximum storm capacity when those events occur.

  - Five sites were examined, the team determined that 2 sites were hydraulically feasible, but no determination was made as to whether they were economically or environmentally feasible
  - Properties within the footprint of the basin will need to be bought, the utilities rerouted, and the fill removed and disposed of
  - Recreation and naturalized features like trails and sports fields may be included in the designs
  - The basin to the west of 1-170 is in Overland; no outreach will be made to the City of Overland until a determination has been made as to whether it will be included in the plan
  - The basin located next to Olive Blvd. is the same area explored in the 2009 Draft GRR called the Olive Detention Area

- Levees and Floodwalls
 

Levees are often made of earth and have a wide base. Floodwalls have a smaller base, are typically not as tall, and are more expensive.

  - Levee placements can create lots of challenges
  - While levees decrease the risk of flooding for properties located behind them, they can cause the water that has spread out over the area to move elsewhere, creating the need for detention
  - Six levees were developed to avoid the floodway, tie into high ground, and minimize road crossings
  - Buy-outs will be needed in the levee or floodwall footprint
  - Land that has been acquired through the FEMA Hazard Mitigation Grant Program cannot be impacted
  
- Channel and Bridge Modification
  - The channel modification from the original feasibility study was reevaluated and the determination that it was not hydraulically feasible on its own without a combination of other measures was confirmed
  
- Elevation of Structures
 

The entire building is elevated so that the first floor living space and all associated mechanical and electrical systems are above flood level.

  - Elevation reduces direct flood risks and allows individuals to remain in their home
  - Elevation reduces or eliminates the need for NFIP Insurance premiums
  - Due to the limits on how high a building can be raised per state and local codes, elevation may not be possible for all structures
  - Elevated structures must also meet certain accessibility requirements established under the ADA
  
- Flood Proofing
  - Primarily used on industrial or commercial structures
  - Only recommended for passive flood-proofing; i.e., flood vents on the outside that allow water inside the basement to equalize the pressure on the wall
  - Other strategies include elevating utilities, installing sewage flowvac valves, acquisition of the parcel, and demolition of the structure
  - Some amount of acquisition is likely to be needed
  - Acquisitions eliminate the flood-risk to occupants of the structure
  - Recreation and natural features can be incorporated into the acquired land; i.e., trails, community parks, and green spaces
  
- ❖ *Buy-outs included in the Corps' Final GRR are mandatory. The City will be responsible for acquiring any properties needed to fully execute the GRR. Property owners are qualified for benefits under the Uniformed Relocation Act that helps them relocate to a structure of similar size and value outside of the flood hazard area.*
  
- Flood Warning System
  - To be coordinated with the Stormwater Task Force
  
- Natural and Nature-Based Solutions
 

The Corps is required to look at these solutions which may include floodplain and channel restoration.

## Next Steps

- Project currently in the Alternative Evaluation Stage
- May 2021 - Selection of Tentatively Selected Plan (TSP)
- July 2021 - Public meeting to review TSP

Ms. Buchanan stated the Corps is required to identify the plan that has the most economic benefit, called the National Economic Developmental Plan (NED). Should the City elect to employ a Locally Preferred Plan rather than the NED, it must be reviewed with the Corps to ensure it provides a feasible set of circumstances for approval. Any cost differences between the Locally Preferred Plan and the NED must be borne by the City.

She stated as the Corps moves towards the TSP, she would propose two options to promote communication and ensure buy-in with the City:

1. Providing a representative from the City to attend team meetings, provide input, and act as a liaison between the two entities
2. Presenting another update to City Council in May

Mr. Rose stated this project; which dates back to the '80s, is a complex process that has just recently started to move forward again. However, based on his understanding, while the options presented by Ms. Buchanan can be either/or, they can also be combined. He stated Sinan has been the City's representative throughout this process, so unless Council would like to do something different, he would recommend that he remain in that role.

Mayor Crow stated his assumption is that his colleagues would be agreeable to Sinan remaining as the contact person. And if it is appropriate, he would suggest that the Chair of the Stormwater Task Force; who might bring a slightly different perspective, also be allowed to participate.

Councilmember Cusick stated that the Chair of the Task Force is Todd Thompson.

Mayor Crow stated Mr. Rose could assist Ms. Buchanan in establishing a date for her team to make its final presentation to Council.

Councilmember Cusick asked how much of the information contained in the models and analyses were based on actual data gathered after the 2008 and 2020 flood events? Ms. Buchanan stated although their economist conducted some additional research to make sure the structures listed in the inventory were correct, the structural information was derived solely from the National Structure Inventory. With regards to the H & H Analysis and flood depths, her understanding is that the engineer used the 2008 gauge data from the river itself to calibrate the HEC-RAS model. She stated she is uncertain whether he received any of the structural lines on the buildings, so if that information is available, it would be helpful to make sure that is another calibration point.

Councilmember Cusick asked who would be responsible for the costs to implement the TSP? Mr. Sullivan stated the cost-share is 65 percent federal and 35 percent non-federal. However, the primary consideration related to this cost-share is that there are 134 structures roughly situated in the five-year floodplain, which means there is a 20 percent chance of flooding in any given year. The City has mitigated approximately 24 of those structures through FEMA programs, which has a cost-share of 75/25. And if the City were to continue down that path it would take over 30 years to mitigate the remaining structures. So, although it will take another two years for the Corps to complete its plan, an approved TSP allows the City to access the federal funds needed to mitigate all of these structures and address the issues related to flooding at a much more rapid pace.

Councilmember Cusick asked if the City's acceptance of the TSP would guarantee the 65/35 cost-share from the government or would approval of the funding have to come from Congress? Mr. Sullivan stated once the Corps receives authorization for the project, they are then required to go through the appropriation process to obtain the funds. The good news is that when they conducted several Congressional visits last week, almost all of the members they talked to were in favor of bringing earmarks back.

Councilmember Clay asked if a potential acquisition area was near the detention basin at Groby Road, south of Olive? Ms. Buchanan stated there are only two large parcels near the detention basin south of Olive. She stated they fluctuated about showing that specific map today but she would be happy to talk about that area in more detail. Councilmember Clay asked if there would be potential acquisitions near the levee and floodwall? Ms. Buchanan stated that is an area that the team is still evaluating. Any levee constructed in those areas would necessitate the need to cut through a lot of parcels and homes. So, she thinks moving forward, a lot of that will be screened out because of the cost and the need to consider so many other things. Ms. Buchanan stated they are required to first look at the hydraulics and the impact of building a levee, like removing some of the homes in the footprint of the levee or floodwall to protect the homes located behind them.

Mayor Crow asked for an update on the progress of the flood warning system? Mr. Alpaslan stated the gauge at Drexel has already been installed, the pole is up at Fogerty Park, and the gauge will be installed this week. The Commission is in the process of testing the equipment and hopes to begin working with the City's Emergency Services Department very shortly.

He stated there is a third gauge being contemplated for a location in Olivette, and they are currently working with the City of Olivette to identify a location and complete that installation.

Mayor Crow asked if it was possible to make this information more readily available to the public? He stated he thinks it would be great to display some photographs of the system in one of the City's publications.

Councilmember Cusick stated part of the conversation with Emergency Services will include how this information should be disseminated to the public.

Mr. Rose stated he will have Sinan put together some information that can be included in one of the weekly newsletters and the summer edition of ROARS.

Mr. Smotherson asked how much input will the City have in determining what Measures and Solutions will ultimately be selected? Ms. Buchanan stated the bottom line is that the Corps cannot propose a plan without the City's approval, which is why they have scheduled the Public Meeting. And if the City is not in agreement with the NED plan, the Corps will be just as amenable to working with the City to develop a Locally Preferred Plan because it would be futile to move forward if everyone is not comfortable with the end results.

Mayor Crow thanked members of the Corps of Engineers for their presentation.

#### **4. VISIONING AND COMPREHENSIVE PLAN UPDATE**

Mr. Rose stated this is a discussion on the visioning process associated with the Comprehensive Plan.

##### **Visioning Process**

- What does U City look like today?
- What will U City look like in the future; 2050 or 2100?
- Is it a walkable community?
- Does it have bike trails?

- What type of school system does U City have?
  - What should be the focus on crime prevention?
- ❖ *The next phase of this process requires establishing priorities and action steps to make certain these priorities are being achieved.*

Mr. Rose stated initially staff envisioned a process where they would work with one company to achieve both the Visioning and Comprehensive Plan Update, however, that process did not go as well as they had anticipated. Staff was able to find two companies that excelled in each of these disciplines and is recommending that they be allowed to move forward with the Visioning Process, and thereafter, start the Comprehensive Plan Update in approximately four to six months.

He stated in his opinion, the Visioning Process; which will provide much of the data for the Comprehensive Plan Update, will be the most challenging because it will require the community to solidify 35,000 different visions to ensure every view is represented in the vision. The Comprehensive Plan creates a strategy for implementing that vision.

The next step will be to appoint a Steering Committee, similar to one created for the Economic Development Strategy. And since there are two overlapping components in this process he thinks it would be reasonable to have some members of the Plan Commission; or at least the Chairperson, be a part of this committee.

Councilmember Clay suggested including high school students on the committee since they will be the folks most likely to inherit these outcomes.

He stated he is a veteran of a few visioning and planning processes and while he is supportive of trying something new, he has not encountered this practice being conducted by two separate companies. He stated in his opinion, the only possible hurdle might be the ability to coordinate both processes seamlessly.

Mr. Rose stated while it would have been ideal to have found one company, fortunately, the two processes he went through did employ two different companies. And the company that develops the updates may also be needed to assist staff with revising any zoning codes impacted by the Plan.

Mayor Crow stated it was somewhat daunting to hear Mr. Rose mention the year 2050 until he realized that he had moved to U City in 1994. And that made him a little intrigued to find out how long his colleagues had lived here.

Councilmember Klein stated she has lived in U City for almost twelve years.

Councilmember Smotherson stated he has lived here for over fifty years.

Councilmember Cusick stated twenty-two years.

Councilmember Clay stated nineteen-years.

Councilmember Hales stated eighteen-years.

Councilmember McMahon stated he moved to U City in 1993.

Mayor Crow stated visioning is pretty interesting when you think about what U City was like when you first moved here, where it is now, and what it will look like in the future.

Mr. Rose stated with Council's approval, he will confer with the City Attorney to determine whether the City is legally obligated to pursue the RFQ process. And if that is not a requirement, then his next step will be to see if an agreement can be reached with the first company to coordinate the Visioning Process.

**5. ADJOURNMENT**

Mayor Crow thanked everyone for their participation and adjourned the Study Session at 6:20 p.m.

Linda Schaeffer  
Acting City Clerk

