



## Legislation Details (With Text)

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**File created:** 3/17/2016      **In control:** City Council

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**Title:** Actions related to the 100-year floodplain in the Downtown Cultural Arts District (Council Districts 3)  
1. Approve a professional service agreement with Blair, Church and Flynn to evaluate storm water runoff and groundwater recharge potential in the Downtown Cultural Arts District.  
2. \*\*\*RESOLUTION - 35th amendment to the Annual Appropriation Resolution (AAR) No. 2015-104 to appropriate \$50,000 to fund the storm water and recharge evaluation (Requires 5 affirmative votes).

**Sponsors:** Public Works Department

**Indexes:**

**Code sections:**

**Attachments:** 1. 16 35th BCF Groundwater. SRM.pdf, 2. Agreement with Blair Church and Flynn regarding CAD.pdf, 3. Sole Source Memo re BCF Evaluate Flood Potential in Downtown.pdf

Date	Ver.	Action By	Action	Result
3/31/2016	1	City Council	approved	Pass

## REPORT TO THE CITY COUNCIL

**March 31, 2016**

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Public Works Department

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Public Works Department, Traffic and Engineering Services Division

## SUBJECT

Actions related to storm water runoff and recharge evaluation in the Downtown Cultural Arts District (Council District 3)

1. Approve a professional service agreement with Blair, Church and Flynn to evaluate storm water runoff and groundwater recharge potential in the Downtown Cultural Arts District.
2. \*\*\*RESOLUTION - 35th amendment to the Annual Appropriation Resolution (AAR) No. 2015-104 to appropriate \$50,000 to fund the storm water and recharge evaluation (Requires 5 affirmative votes).

## RECOMMENDATIONS

Staff recommends the Council take the following actions:

1. Approve an amendment to the existing agreement with Blair, Church and Flynn (BCF) to evaluate storm water runoff and groundwater recharge potential in the Cultural Arts District; and authorize the Public Works Director or designee to execute the agreement.
2. Adopt the 35th Amendment to the Annual Appropriation Resolution (AAR) No. 2014-95 to appropriate \$50,000 to fund the storm water and recharge evaluation.

## **EXECUTIVE SUMMARY**

Fresno Metropolitan Flood Control District (FMFCD) has identified the Downtown Cultural Arts District as an area subject to flooding during a major storm such as a 100-year event. FMFCD's system is designed to handle approximately a 5-year storm in the Downtown area and a 2-year storm in the rest of the City. Staff is recommending the Council approve an agreement with BCF to evaluate methods to reduce or eliminate the flooding in this area. They will also investigate the potential for groundwater recharge in any new ponding basins that are needed to reduce the flood area. BCF is uniquely qualified to evaluate storm water runoff and ground water recharge potential in the Cultural Arts District due to their previous engineering work in the area and familiarity with the FMFCD modeling.

## **BACKGROUND**

The Downtown Cultural Arts District has been identified by FMFCD as an area subject to flooding during a major storm such as a 100-year event. FMFCD requires that all new buildings have finished floor elevations to be above the estimated water surface elevation during these major storms, which often involves raised foundations. The raised foundations make it difficult for the new buildings to achieve ground floor access from the sidewalk while also meeting the Americans with Disabilities Act (ADA) requirements. A 100-year storm would also impact other older buildings that do not have raised foundations. The area subject to flooding is roughly bordered by Belmont, Stanislaus, Van Ness and H Street.

FMFCD does not design their pipe and collection system to accommodate large storms. However, they set street grades that allow the water to flow out of the area before the depth of the standing water reaches the finished floor level of the buildings. The Cultural Arts District was built long ago and the streets were not designed to flow as well as the streets in the newer parts of town. The natural slope in this area is for the water to flow to the west. The existing Union Pacific tracks are higher than the surrounding terrain and block the flow of the runoff.

BCF was retained in 2015 to survey the area and prepare a computer model of the floodplain. Therefore, BCF is uniquely qualified to evaluate storm water runoff and ground water recharge potential in the Cultural Arts District. Staff is recommending a new agreement to have BCF prepare a concept design for a pipe system and determine the size required for a storage basin. They will also determine street grades and prepare construction cost estimates. The basin would be used for ground water recharge during most average rainfall seasons but would be drained whenever a large storm event was predicted.

It is important to complete this work before High Speed Rail (HSR) installs new railroad tracks, due to the potential need for a culvert or series of culverts to convey the water under the Union Pacific tracks and the new HSR tracks. There may also be an opportunity to share a basin with HSR. No location has been identified for a basin, at this time, but several City-owned and HSR owned parcels will be evaluated.

## **ENVIRONMENTAL FINDINGS**

By the definition provided in the California Environmental Quality Act Guidelines Section 15378, an evaluation of the storm water runoff patterns does not meet the definition of a project as defined by the California Environmental Quality Act.

## **LOCAL PREFERENCE**

Local preference was not implemented because BCF is uniquely qualified.

## **FISCAL IMPACT**

Approval of the attached amendment will have no impact on the General Fund. All costs, including the consultant agreement and associated staff costs, are being allocated from Measure C Flexible Funds.

### **Attachments:**

Resolution No. 2016-XX

Consultant Services Agreement