



City Council Report

Date: April 6, 2015
To: City Council
Through: Kari Kent, Deputy City Manager
From: Beth Huning, City Engineer
Rob Kidder, Assistant City Engineer
Subject: Flood Control Improvements (Five Locations) – Five Intergovernmental Agreement's (IGA's) with the Flood Control District of Maricopa County to Cost-Share in the Construction of Five Drainage Improvement Projects

District 1, District 4

Strategic Initiatives



Purpose and Recommendation

The purpose of this report is to provide information for the City Council to review and consider approval of five (5) separate Intergovernmental Agreements ("IGA's") between the Flood Control District of Maricopa County ("District") and the City of Mesa ("City") for the design, right-of-way acquisition, utility relocations, construction, construction management, and operation and maintenance of drainage improvements within the City. The five proposed IGA's that City staff has recommended the City Council review and consider approval of are for the following Projects:

1. 10th Avenue and Sirrine Drainage Improvement Project
2. 2nd Avenue and Solomon Drainage Improvement Project
3. Emerald Acres Drainage Improvement Project
4. Royal Palms Drainage Improvement Project
5. 9th Avenue and Horne Drainage Improvement Project

Staff recommends the Council approve all five (5) IGA's and a Resolution authorizing the City Manager or his designee to execute each of the Agreements.

Background

On April 27, 2011, the District Board of Directors adopted Resolution FCD 2009R003A (C-69-09-062-6-01) authorizing the District to cost-share in recommended drainage projects by local agencies under the District's Small Project Assistance Program ("Program"). City staff proposed the five (5) individual Projects identified in the preceding section for cost share under the Program. Subsequently, each Project has been approved by the District for funding up to maximum of \$250,000.

10th Avenue and Sirrine Drainage Improvements

10th Avenue, between Pasadena Avenue and Mesa Drive, can be improved to provide enhanced storm water conveyance for several residential properties along this section of the street. City staff determined that this segment of 10th Avenue should be improved to help convey the runoff generated during storm events. City staff has proposed the construction of storm drain and catch basins at this location to collect the runoff and direct it into the City's storm drain system.

2nd Avenue and Solomon Drainage Improvements

This area of the City (south of Main Street, and north of Broadway Road between Horne and Spencer) experienced flooding on September 8, 2014 and September 27, 2014. Excess storm water from Main Street flowed through this area and the current storm drain should be improved. City staff has proposed the construction of a 42-inch storm drain along Miller Road that will carry the excess storm water from Main Street to a proposed regional detention basin. An additional storm drain is also proposed to be installed along adjacent streets. These storm drain lines are also proposed to carry storm water to the new regional detention basin.

Emerald Acres Drainage Improvements

This area of the City (south of Southern Avenue, north of the US-60 between Stapley Drive and Harris Drive) will benefit from optimized storm water drainage infrastructure. City staff has proposed adding a new bleed-off line from a basin on Hilton that will tie into the existing storm drain at Stapley Drive. In conjunction with the storm drain improvements, the two existing detention basins at Hilton and Harris will be modified to increase the storage volume. Finally, staff has proposed the construction of an overflow structure at the southwest corner of Emerald Park. Excess storm water from Emerald Park will flow through an overflow structure into the existing ADOT canal along the US 60.

Royal Palms Drainage Improvements

Residential properties adjacent to an existing basin, located on the Royal Palms Golf Course (north of McLellan Road and south of Jensen Street), would benefit from the project proposed for this area. During larger storm events, water levels increase and back up in storm drain lines that outfall to the golf course basin. Contributing storm drain lines and catch basins back up with water. City staff has proposed the installation of flap gates at existing manholes to restrict water backup into the local streets and properties. Staff has also proposed the construction of a storm drain relief line from the existing storm drain system in McLellan Road (which feeds into the golf course basin) and connecting to an existing storm drain line that outfalls into the Candlelight Park basin, where additional capacity has been identified. This proposed line connection provides relief to the Royal Palm residents. Should volume of storm water within the golf course basin exceed designed volumes, the relief line will divert flows to the Candlelight Basin, to handle additional volume from the Royal Palm Golf Course basin.

9th Avenue and Horne Drainage Improvements

This area of the City (south of Broadway Road, north of Southern Avenue between Horne and Solomon Drive) has experienced flooding. The topography of the area is also flat and lacks drainage infrastructure to convey storm water runoff. City staff has proposed the construction of a storm drain network to capture and convey runoff to the Sherwood Basin at the US 60 and Horne. Improvements include the construction of new storm drain system, catch basins, and potentially a retention basin at the southwest corner of 9th Avenue and Horne.

Discussion

The purpose of each IGA is to identify and define the responsibilities of the District and the City for the design, right-of-way acquisition, utility relocations, construction, construction management, and operation and maintenance of the proposed Project. The City must participate in the construction cost of each project, and also operate and maintain the facilities. The District will fund seventy-five percent (75%) of the project construction cost incurred and invoiced between July 1, 2015 and June 30, 2016, with the funding from the District capped at \$250,000 per Project in accordance with the District's Program as stated in each IGA.

Once a bid for each Project has been received and accepted, the construction contract will be brought to the City Council for award. The local matching funds will come from the Transportation Department's Operating Budget.

Alternatives

The Council could choose not to enter into each of the five (5) IGA's with the District. The City's lack of participation would stop the Projects and the drainage problems for each of the areas identified in Mesa would continue. This alternative is not recommended.

Fiscal Impact

The District will fund seventy-five percent (75%) of the project construction costs incurred, with the City funding the remaining twenty-five percent (25%). Any additional costs that exceed the District's maximum contribution of \$250,000, will be the City's responsibility. The City will also be 100% responsible for design, land acquisition, construction administration, and operation and maintenance costs. A breakdown of the total estimated construction cost for each Project is as follows:

Project Description	Total Est. Project Cost	District Est. Contribution	City's Est. Contribution
1. 10th Ave and Sirrine	\$195,000	\$113,000	\$82,000
2. 2nd Ave and Solomon	\$1,760,000	\$250,000	\$1,510,000
3. Emerald Acres	\$540,000	\$250,000	\$290,000
4. Royal Palms	\$213,000	\$109,000	\$104,000
5. 9th Ave and Horne	\$2,700,000	\$250,000	\$2,450,000
Totals	\$5,408,000	\$972,000	\$4,436,000

In accordance with the terms of the IGA, the District's Program contributions are limited to project construction costs incurred during the fiscal year for which the project is submitted.

Coordinated With

The Transportation Department concurs with this recommendation.