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TO: Michael C. Van Milligen, City Manager

FROM: Gus Psihoyos, City Engineer

DATE: March 19, 2018

RE: Bee Branch Watershed Flood Mitigation Project, HUD National Disaster Resilience Grant, Infrastructure Contract #13-NDRI-011, Status of Funded Activities

INTRODUCTION

The purpose of this memorandum is to provide information for a public hearing on the status of funded activities associated with the $23.3 million in HUD CDBG National Disaster Resilience Grant specifically for the Bee Branch Watershed Flood Mitigation Project infrastructure improvements. Presentation of the information at a public hearing is required per the funding contract, Contract #13-NDRI-011, with the Iowa Economic Development Authority.

BACKGROUND

In January 2016, the State was awarded $95.7 million in HUD National Disaster Resiliency Competition grant funds. Per the award, the City of Dubuque is to receive $23.3 million for storm water infrastructure improvements associated with the Bee Branch Watershed Flood Mitigation Project.

In October of 2016, the City Council adopted Resolution 362-16, authorizing the execution of a funding contract with the Iowa Economic Development Authority (IEDA) as a requirement for the City's receipt of $23,309,600.00 in CDBG Disaster Recovery – National Disaster Resiliency funds for the infrastructure improvements associated with the Bee Branch Watershed Flood Mitigation Project.

As a requirement set forth by Section 508 of the Housing and Community Development Act of 1987, local governments receiving HUD funds must hold a public hearing on the status of a funded activity during the project. This requirement is extended to the City of Dubuque through the City's funding contract with the IEDA, the funding contract that outlines the City's receipt of $23.3 million in CDBG Disaster Recovery – National Disaster Resiliency funds for the infrastructure improvements associated with the Bee Branch Watershed Flood Mitigation Project.

DISCUSSION

Since 1999 there have been six Presidential Disaster Declarations due to the property damage caused by flash flooding in the Bee Branch Watershed. While the Bee Branch Watershed comprises just over 20% of the entire city by area, more than 50% of Dubuque's population either lives or works in the watershed.

The sixth disaster (DR-4018) occurred in July of 2011 when a storm event stalled over Northeast Iowa and dropped more than 14 inches of rain in less than 12 hours on parts of the city. The aftermath was devastating with the Bee Branch watershed hit hardest. The city's storm drains were unable to handle the water, and substantial flash flooding occurred, damaging elements of the drainage system, tearing up roads, and flooding homes and businesses. The reports included 32 sewer back-ups, 259 requests for basement pumping, and 47 sanitary/storm sewer maintenance requests.

NEED: HUD CDBG National Objective

The Bee Branch Watershed flood prone area qualifies as the most impacted and distressed area and the improvements represent unmet recovery needs (MID-URN). Therefore, the infrastructure improvements meet the national objective of benefiting low and moderate income areas by helping to address unmet needs in an area that was subject to a Presidential Disaster Declaration in 2011.

Most Impacted and Most Distressed

Following the July 2011 storms, the City of Dubuque received reports of damage to 200+ homes concentrated in the Bee Branch Watershed flood prone area. Impacts included flooded basements, collapsed foundations, destroyed furnaces and water heaters, and other structural damages. Substantiating data includes city records of calls to pump flooded homes, as well as records of calls for volunteer assistance. The flood prone properties include census tracts 1, 4, 5, 6, and 11.02, representing about 35% of Dubuque's population. Approximately 69% of the people in the flood-prone, at-risk area are at less than 80% median income. This is where the most vulnerable populations live, and the areas most impacted by 2011 flooding.

Unmet Recovery Need

While Dubuque did receive aid, the City has Unmet Recovery Needs that have not been addressed by federal, state, or other sources. The 2011 rainstorm overwhelmed and damaged Dubuque's storm sewer system tasked with conveying floodwaters. The damaged portion of the system, twin 10-foot wide by 11-foot high pipes, occurred where the storm sewer system outlets into the Bee Branch Creek just south of Garfield Avenue, where the sewer crosses under an active Canadian Pacific railroad yard. The 20-foot end section of the storm sewer partially collapsed. Repaired to its pre-disaster condition, the system remains inadequate to handle even storms that are much smaller than the 2011 event. Dubuque's unmet infrastructure needs include three storm water infrastructure projects to safely convey water through, and prevent flood damage to, the "most impacted and most distressed" area of the Bee Branch Watershed.

There are three activities funded through the City's contract with the IEDA (Contract), under which the City is to receive $23.3 million in CDBG Disaster Recovery – National Disaster Resiliency funds for the infrastructure improvements. Per the Contract, the City is eligible to receive up to $157,500.00 in administrative costs associated with managing the infrastructure grant. The status of administrative expenses is as follows:

Expenses - Administration	Expended to Date	Budget Remaining	Total
Grant Administrator - City Staff	$29,437.96	$85,287.04	$114,725.00
Environmental General Infrastructure	$17,163.10	$25,611.90	$42,775.00
Total	**$46,601.06**	**$110,898.94**	**$157,500.00**

The Bee Branch Railroad Culvert Infrastructure Improvements will augment the storm sewer drainage system damaged in July 2011 that currently conveys storm water through the Canadian Pacific railroad yard at 506 Garfield Avenue. The improvement involves tunneling six 8-foot-diameter culverts approximately 165 feet through Canadian Pacific Railroad right-of-way to a proposed junction box. It also includes the construction of five 12-foot wide by 10-foot high box storm sewers from the proposed junction box 200 feet north toward Garfield Avenue and the Upper Bee Branch Creek.

The City contracted with Strand to design the improvements. Section 106 environmental clearance has been granted. The City has contracted with Ahlers and Cooney to assist with the acquisition of easements. Title searches have been completed and appraisals have been ordered. Some of the easements are being sought from Canadian Pacific Railway (CPR). A City delegation met with CPR officials to discuss the design of the improvements. CPR must approve the design as a prerequisite to issuing easements. The status of funded expenses related to the Bee Branch Railroad Culvert Infrastructure Improvements is as follows:

Railroad Culverts	Expended to Date	Budget Remaining	Total
Misc.	$3.04	$996.96	$1,000.00
City Staff	$39,399.28	$57,039.72	$96,439.00
Right of Way		$300,000.00	$300,000.00
ECIA		$30,561.00	$30,561.00
Engineering Design/Survey	$486,910.00	$595,090.00	$1,082,000.00
Legal	$4,718.61	$245,281.39	$250,000.00
Construction		$7,240,000.00	$7,240,000.00
Total	**$531,030.93**	**$8,468,969.07**	**$9,000,000.00**

The 22nd St./Kaufmann Avenue Storm Sewer Improvements will provide for a storm sewer designed to handle the 25-year storm and street that will pass the 100-year storm through the Kaufmann Avenue corridor and down 22nd Street to Elm Street. High-capacity inlets and up to an additional 80 standard single-grate inlets will be provided to

drain the floodwaters into the proposed box culvert storm sewer. The project requires the reconstruction of the street and the relocation of existing underground utilities along the right-of-way.

The City contracted with IIW Engineers to design the improvements along 22nd Street from Elm Street through Central Avenue and up Kaufmann Avenue to Kane Street. The entire length has been surveyed and developed to a preliminary design level. Due to the length of the project, the improvements are being constructed through multiple contracts.

The first segment includes improvements between Elm Street and Central Avenue. The final construction plans have been completed. Section 106 environmental clearance was granted and the City has begun obtaining voluntary easements on properties adjacent to the City right-of-way. The City initiated the public bidding process in March of 2018.

The status of funded expenses related to the 22nd St./Kaufmann Avenue Storm Sewer Improvements is as follows:

22nd Street Storm Sewer	Expended to Date	Budget Remaining	Total
Misc.	$664.79	$335.21	$1,000.00
City Staff	$47,145.99	$75,982.46	$123,128.45
ECIA		$31,000.00	$31,000.00
Legal	$0.00	$100,000.00	$100,000.00
Engineering Design/Survey	$639,444.28	$184,769.27	$824,213.55
Construction		$10,420,658.00	$10,420,658.00
Total	**$687,255.06**	**$10,812,409.73**	**$11,500,000.00**

The 17th St./West Locust Storm Sewer Improvements will provide for a storm sewer designed to handle the 25-year storm and street that will pass the 100-year storm along W. Locust Street, down 17th Street, under the railroad tracks on Pine Street, to the Bee Branch Creek. The storm sewer under the railroad tracks must be designed to carry the floodwaters from 100-year storm as the railroad tracks on Pine Street act as a dam and will not allow floodwaters to flow overland into the Bee Branch Creek. A combination of high-capacity inlets and standard single grate inlets will be provided to drain the floodwaters into the proposed box culvert storm sewer. The project requires the re-construction of the street and the relocation of existing underground utilities along the right-of-way.

The City contracted with IIW Engineers to design the improvements along 17th Street from the Bee Branch Creek to W. Locust Street and up W. Locust Street to Rosedale Avenue. The entire length has been surveyed. Due to the length of the project, the improvements are being constructed through multiple contracts.

Construction of the first segment, from Pine Street to Elm Street, was completed in the fall of 2017. It involved the installation of a large box culvert under the roadway and large, high-capacity inlets to drain the street. The second segment, from Elm Street to Heeb Street, is at a 90% design. The status of funded expenses related to the 17th St./West Locust Storm Sewer Improvements is as follows:

17th Street Storm Sewer	Expended to Date	Budget Remaining	Total
Misc.	$900.56	$4,099.44	$5,000.00
City Staff	$67,063.76	$36,936.24	$104,000.00
ECIA	$1,557.60	$13,442.40	$15,000.00
Legal	$20,153.07	$29,846.93	$50,000.00
Engineering Design/Survey	$818,954.63	$512,401.37	$1,331,356.00
Construction	$726,615.57	$368,028.43	$1,094,644.00
Total	**$1,635,245.19**	**$964,754.81**	**$2,600,000.00**

BUDGET

In addition to the HUD CDBG National Disaster Resilience Grant funding, per the Contract, the City has committed to $21,600,000 for the improvements as local, Direct Leverage. This is being done through a State Revolving Fund (SRF) loan specifically for the Bee Branch Railroad Culvert Improvements, state sales tax increment through the State Flood Mitigation Program, and local stormwater management utility fees. The status of funded expenses related to these funding sources is as follows:

Other Funding	Expended to Date	Budget Remaining	Total
SRF Railroad - (Railroad Culverts)	$63,452.81	$10,124,297.19	$10,187,750.00
Sales Tax Increment - (22nd Street)	$0.00	$3,900,000.00	$3,900,000.00
Storm Water Utility - (17th Street)	$0.00	$1,300,000.00	$1,300,000.00
Sales Tax Increment - (17th Street)	$439,069.64	$6,941,930.36	$7,381,000.00
Total	**$502,522.45**	**$22,266,227.55**	**$22,768,750.00**

REQUESTED ACTION

No action required. The purpose of this memo is to provide information for public review and comment.

Attach.
Prepared by Deron Muehring, Civil Engineer
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