



**STATE OF IOWA
FLOOD MITIGATION PROGRAM
PROGRESS REPORT**

PERIOD COVERED BY THIS REPORT: 5/1/2019 to 10/31/2019
 LOCAL CONTACT NAME: Ellen Habel, Asst. City Administrator
 GOVERNMENTAL ENTITY: City of Coralville, IA
 ADDRESS: 1512 7th Street
 Coralville, IA 52241
 TELEPHONE NUMBER: 319-248-1700
 PROJECT TITLE: City of Coralville Flood Mitigation Program Project
 AGREEMENT NUMBER: 2013-0
 ACTIVITY COMPLETION TIMEFRAME: 12/4/2013 to 12/31/2017

	FEDERAL	LOCAL	STATE (STIF only)	TOTAL
TOTAL FUNDS APPROVED:	\$ 8,546,161	\$ 5,204,498	\$ 9,769,000	\$ 23,519,659
TOTAL FUNDS EXPENDED TO DATE:	\$ 8,546,161	\$ 6,862,645	\$ 9,769,000	\$ 25,177,806
PROJECT OVERRUN/ (UNDERRUN):	\$ -	\$ 1,658,147	\$ -	\$ 1,658,147
The percentage of actual work that has been completed at the end of the reporting period (not a % of funds expended)				100%
The estimated cost of the project at completion (which may even exceed the awarded amount)				\$ 25,177,806

Type of Expense & Funding Source	Budget (from Application)	Federal/ Local/ State (STIF only)	Total Expended to Date	Remaining Balance
Engineering/Contractual Services:	\$ 2,099,482			
5th Street Elevation Design - STIF		State	\$ 338,719	
Clear Creek Flood Wall Design - STIF		State	\$ 543,085	
Design & Construction Admin: Storm Water Pump Stations, Storm Sewers, Sanitary Sewer		Local/Federal	\$ 1,499,482	
Lift Station Flood Protection - CDBG			\$ -	
TOTAL			\$ 2,331,286	\$ (231,804)
Property Acquisition & Easement:	\$ 4,018,183			
Acquisitions & Easements for Pump Stations Storm sewers, Lift Station - CDBG		Local/Federal	\$ 488,700	
Acquisitions & Easements, 5th St. Elevation- STIF		State	\$ 110,010	
Acquisitions & Easements, Clear Creek Walls- STIF		State	\$ 3,259,117	
Acquisitions & Easements for Berms - local		Local	\$ 1,332,483	
TOTAL			\$ 5,190,310	\$ (1,172,127)
Construction:	\$ 17,033,015			
Pump Stations, Storm Sewers, Sanitary Lift Station Flood Protection - CDBG		Local/Federal	\$ 6,573,925	
Berms, Clear & Biscuit Creek - local		Local	\$ 200,000	
Clear Creek Flood Wall -STIF		State	\$ 4,327,795	
5th St. Elevation- STIF		State	\$ 2,144,522	
Berms, & Flood Walls, Clear & Biscuit Creek-IJOBSII		Local	\$ 3,657,090	

TOTAL			\$ 16,903,332	\$ 129,683
Utility Relocations		\$ 368,979		
Pump Station, Sanitary Sewer Lift Station Flood Protection - CDBG		Local/Federal	\$ 48,979	
5th St. Elevation- STIF		State	\$ 456,714	
Clear Creek Flood Wall - STIF		State	\$ 247,185	
TOTAL			\$ 752,878	\$ (383,899)
		\$ -		
			\$ -	
			\$ -	
TOTAL			\$ -	\$ -
		\$ -		
			\$ -	
			\$ -	
TOTAL			\$ -	\$ -
Total Project Budget Summary		\$ 23,519,659	\$ 25,177,806	\$ (1,658,147)
FUNDING SOURCE:	FEDERAL (from Application)	LOCAL (from Application)	STATE (STIF only) (from Application)	Total Expended to Date
City of Coralville		\$ 1,547,408		\$ 3,205,555.00
CDBG	\$ 8,546,161			\$ 8,546,161.00
I-Jobs II		\$ 3,657,090		\$ 3,657,090.00
Sales Tax Increment			\$ 9,769,000	\$ 9,769,000.00
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
Total Project Funding Source	\$ 8,546,161	\$ 5,204,498	\$ 9,769,000	\$ 25,177,806.00
Indebtedness Incurred (Bonds, etc.)	Rate of Interest	Length of Term (start & end)	Costs of Issuance	Net Proceeds
	0.00%		\$ -	\$ -
	0.00%		\$ -	\$ -
	0.00%		\$ -	\$ -
NON-PUBLIC INVESTMENT - Entity				Total to Date
Kum N Go New Construction				\$ 1,335,847
Old Town Mixed Use Development New Construction (Watts Development)				\$ 20,734,356
River View Plaza Buildings 1 and 2				\$ 9,410,000
Monica's Restaurant Remodel				\$ 85,000
Total Non-Public Investment				\$ 31,565,203

Project Status- entire project (Check One)	Description of significant activities this semi-annual term . Include comparison of actual accomplishments to the objectives identified in your application. Attach pictures and a narrative. Status changes or delays, please explain reason.
<input type="checkbox"/> On Schedule	<p>All construction operations for the elevation of 5th Street and the Clear Creek South Floodwall project have been completed, including the final construction close out activities.</p>
<input type="checkbox"/> Delayed	
<input type="checkbox"/> Canceled	
<input checked="" type="checkbox"/> Completed	
<input type="checkbox"/> Suspended	

Application Work Schedule (Milestones)			Milestone Status
#	Description:	Submitted Completion Date:	Anticipated / Actual Completion Date:
Phase II, 5th Street Elevation			
1	Design	5/1/2014	1/15/2015
2	Acquisitions & Permitting	7/1/2014	3/1/2015
3	Bid Process	9/1/2014	2/1/2015
4	Award of Contract	10/1/2014	2/28/2015
5	Construction	3/1/2015	6/10/2016
Phase II, Flood Walls			
1	Design	7/1/2015	6/17/2016
2	Acquisitions & Permitting	10/1/2015	7/15/2016
3	Bid Process	12/1/2015	8/9/2016
4	Award of Contract	1/1/2016	8/23/2016
5	Construction	12/31/2017	12/31/2017

Person Completing this Report: Ellen Habel

Date: 11/7/2019

I, the undersigned, hereby certify that the above information is accurate and true, and in accordance with the approved project plan and state and federal regulations and policies governing this award.

Signature on file

Signature of Authorized Representative or Governmental Entity

Kelly Hayworth- City Administrator

Name of Authorized Representative or Governmental Entity

Instructions to complete this form

Areas shaded are to be completed by State HSEMD Personnel.

Areas shaded are to be completed by the governmental entity or authorized administrator.

**City of Coralville, Iowa
Report 10
November 2019**

The City of Coralville was awarded funds through the Flood Mitigation Program for a two-phase project.

PHASE I:

New storm water pump station located at 209 2nd Street

A new storm water pump station at the former site of Movies to Go/Movie Gallery is located on the existing 42-inch storm sewer outlet pipe at the north end of the parking lot behind the store at 211 2nd Street/Highway 6. All existing and future storm sewers between Highway 6 and Clear Creek, as well as most south of Highway 6, are directed to the new pump station. The internal weir of the pump station is built to an elevation of 662.8. A sluice gate and duckbill on the 42-inch outlet pipe protects the upstream storm sewer system. The estimated 70 cubic feet per second peak flow pump capacity reflects the 10-year design flow for the drainage area.

New storm water pump station located at 300 3rd Avenue

A second new storm water pump station is located on City property just northeast of the confluence of Biscuit Creek and Clear Creek. A gate structure on the west bank of Biscuit Creek protects the storm sewer system west of Biscuit Creek and north of Clear Creek from flood water backup. In the event of gate closure, a 48-inch pipe below Biscuit Creek directs storm sewer flows to the storm water pump station. All existing and future storm sewers east of Biscuit Creek are directed to the pump station. The internal weir of the pump station is built to an elevation of 662.4. A sluice gate and duckbill on the 72-inch inlet/outlet pipes protect the upstream storm sewer system. The 200 cubic feet per second peak flow pump capacity reflects the estimated 10-year design flow for the drainage areas both east and west of Biscuit Creek, assuming typical commercial redevelopment.

4th Avenue Storm Sewer Work

The interior storm sewer system on the west side of Biscuit Creek has been reconfigured to direct flow away from the flood protection area and to the collection system on 4th Avenue, where it is accessible to the City for maintenance. The storm water is piped south and east to the Biscuit Creek west gate structure. Within the structure, two sluice gates perform as follows: the first closes the 60-inch reinforced concrete pipe gravity outlet to Biscuit Creek and protects the upstream storm water system from high water elevations on Clear Creek or Biscuit Creek; the second gate opens simultaneously when the first is closed and allows storm water to flow in a pipe below Biscuit Creek to the Biscuit Creek storm water pump station on the east bank at 300 3rd Avenue. This design allows the entire Biscuit Creek area to be served by a single pump station. The storm sewer system west of Biscuit Creek is protected with the proposed Biscuit Creek west gate structure and Biscuit Creek storm water pump station.

Flood Walls and Berms

Along the north bank of Clear Creek from Highway 6 to the west bank of Biscuit Creek, approximately 490 feet of 3-foot high removable flood wall and the associated storm sewer work has been constructed. Along the west bank of Biscuit Creek from Clear Creek to 5th Street, a portion of the flood walls were incorporated with the construction of private residential condominiums with an additional 66 feet of 4.7-foot high permanent flood wall to connect from the condominiums into an earthen berm. The remainder of the flood protection to 5th Street is approximately 400 feet of 4.7-foot high earthen berm.

For the east bank of Biscuit Creek from 5th Street to Clear Creek, in coordination with a private redevelopment, flood protection includes approximately 800 feet of 7 to 8-5-foot high earthen berm. The Biscuit Creek Retention Ponds slow the flow of water from Biscuit Creek into Clear Creek to reduce flooding and improve water quality in Biscuit Creek, Clear Creek, and the Iowa River.

On the north bank of Clear Creek from Biscuit Creek to 1st Avenue, private redevelopment has also included approximately 710 feet of 7 to 13-foot high berm from the storm water pump station on 3rd Avenue to 1st Avenue. The 3rd Avenue sanitary sewer lift station has been raised to provide flood protection.

PHASE II:

Permanent and Removable Flood Walls

On the south bank of Clear Creek from Highway 6 to 1st Avenue, the bank ranges in elevation from 650 to 656, requiring from 4.7 to 8.7 feet of protection. A series of permanent and removable flood walls of nearly 1,500 feet in length, with the permanent concrete walls protecting to at least the 100-year flood elevation, will be constructed. The removable flood walls are designed to be installed on top of the permanent flood walls to provide protection to the 2008 flood elevation plus 1 foot.

The removable walls consist of 11 inch high by 2.5 inch wide by 20 foot long aluminum panels with rubber gasket seals on the bottom of the panels. Support beams are bolted to embeds in the permanent concrete walls at 10 foot intervals. The aluminum panels weigh 110 pounds each so can be easily be installed by 2 workers. The panels are stacked one on top of another to obtain the desired flood protection elevation. The system is modular so that additional panels can be added at any time if additional protection height becomes necessary. The City has installed over 2,500 lineal feet of this combination of permanent and removable flood walls. Through coordination with other local governments and the U.S. Army Corps of Engineers regarding outflows on the Coralville Reservoir during times of elevated water levels, staff will have time to install the removable walls in affected areas.

5th Street Elevation for Flood Protection

Biscuit Creek passes under 5th Street, a major east-west collector street, just north of Clear Creek. The street is also a significant element of several Coralville Transit routes so it is essential for public transportation. Elevating 5th Street at Biscuit Creek will prevent flooding in the area and allow 5th Street to remain open during flood events. The elevation of 5th Street will consist of the removal and replacement of approximately 730 lineal feet of Portland cement concrete (PCC) paving of 5th Street, a new PCC box culvert, new storm sewer system, impervious embankment fill, and pedestrian walks. This project will raise 5th Street in elevation up to 7.6 feet.

Progress Update:

Phase I: This work is complete.

Phase II: 5th Street Elevation

The City completed the 5th Street Elevation portion of the project as the first part of Phase II. The City contracted with HR Green Company for engineering and design services. Design, permitting, property easements, and acquisitions are complete.

The project was bid, with work beginning in mid-March 2015 when weather allowed. Portzen Construction of Dubuque was the contractor. Work performed on the 5th Street Reconstruction Project includes removal of the existing culvert and replacing it with a new double cell culvert. Installation of the culvert also included placing new embankment along both sides of the culvert approximately 6' thick to raise the height of the roadway to allow usage during high water periods. 5th Street itself was then constructed over newly placed sub-base after new storm sewer was installed. The street opened to traffic in late 2015. Levees on each side have been graded and final seeding has been completed. All storm sewer and stormwater planters have been completed.

In 2016, final punch work list was completed, which included repairing damaged sidewalks, driveways, and ADA ramps; routing and sealing of joints and cracks in concrete; work on drainage structures and the sidewalks around them.

The project was delayed due to private utility relocations, wet City borrow site, and high water levels in Biscuit Creek.

Phase II: Permanent and Removable Flood Walls

The City completed the flood walls on the south side of Clear Creek as the second portion of Phase II. Previously completed work included preliminary design, supplemental survey, and private utility coordination; field review of project site; preparation of easement acquisition plats; meetings with impacted private property owners; property appraisals; easement negotiations with private property owners; finalization of utility relocation plans and relocation of overhead utilities underground; issuance of plans and specifications for electrical work to be completed; and final plans for the floodwall design.

When the plans were issued for bid, six bidders submitted for the project. The low bidder was Peterson Contractors, Inc. (PCI) of Reinbeck, Iowa. Initial construction activities included shop drawing review of the contractor's proposed materials of construction.

Construction began on the floodwall east of Pump Station 10 on November 10, 2016, and progressed through the winter months.

Construction began on the floodwall west of Pump Station 10 in the middle of June 2017 and progressed through the summer. Both the sheet pile and concrete cap of the floodwall section are 100% installed west of Pump Station 10, and floodwall construction was complete early in September. The contractor is currently working on set up of the removable floodwall panels to ensure a proper fit.

The storm water bio-retention cell was completed early in May 2017. Sub-drain and storm sewer installation east and west of Pump Station 10 are now complete.

Grading and placement of rip-rap and seeding on the creek side of the floodwall is complete. Seeding on the dry side of the floodwall is also complete.

Punch list items, such as removing all storm water intakes inlet protection, making sure the storm water pipes were clear of debris, repairing tire tracks in seeded areas, general cleanup of trash over the entire project site, etc. were noted during a final walk-through in early November 2017. All construction activities were completed by December 18, 2017. The project was accepted by the City and final payment to the construction contractor was approved on December 26, 2017.



Figure 1: Floodwall west of Pump Station 10 as viewed from the north side of Clear Creek



Figure 2: Floodwall east of Pump Station 10 as viewed from the north side of Clear Creek