

Subgrant Project Application

Application Title: Mill Creek Acquisition Project

Subgrant Applicant: Anytown

Application Number: Automatically Assigned by e-Grants

Application Year: Automatically Assigned by e-Grants

Grant Type: Automatically Assigned by e-Grants

Address: 10 Union Street, Anytown, OH 44444-4444

Contact Information	
Point of Contact Information	
Title	Mr.
First Name	John
Middle Initial	A
Last Name	Smith
Title	Village Engineer
Agency/Organization	Anytown
Address 1	10 Union Street
Address 2	
City	Anytown
State	OH
ZIP	44444-4444
Phone	987-654-3210
Fax	987-654-1230
Email	j.smith@anytown.gov
Alternate Point of Contact Information	
Title	Ms.
First Name	Jane
Middle Initial	W
Last Name	Doe
Title	Village Administrator
Agency/Organization	Anytown
Address 1	10 Union Street
Address 2	
City	Anytown
State	OH
ZIP	44444-4444
Phone	987-654-3210
Fax	987-654-1230
Email	rbass@delhi.oh.us

Community Information							
Please provide the name of each community that will benefit from this mitigation activity.							
State	County Code	Community Name	CID Number	CRS Community	CRS Rating	State Legislative District	US Congressional District
OH	390204_QBM0Z0BDN	HAMILTON COUNTY *	390204	N		390204	1
Enter Community Profile information below. Help							
Hamilton County is a large metropolitan community surrounding the City of Cincinnati in southwestern Ohio. The region is bordered to the south by the Ohio River and has a multiplicity of drainage tributaries flowing to the Ohio River that all can lead to potential flooding problems. The general area receives an average of 42 inches of rainfall a year, however, small intensive cells that dump an inordinate amount of rain in a small time period are not uncommon. The weather is notoriously changeable and besides flooding, also can consist of wind and tornado events, ice and snow storms, landslides and earthquakes.							
Comments							
Delhi Township began as an agricultural community but due to its hilly nature, most farms were small "garden" or "truck" farms that specialized in specific crops. This created an intensive collection of greenhouses growing tomatoes and flowers and this led to Delhi Township's moniker as the "Floral Paradise". Flash flooding along creeks have plagued the area since it was first settled, and this problem was exacerbated by piping in the creeks for sanitary and storm sewers with undersized pipes that were inadequate for later population expansion. The original Rapid Run Creek was one such area that was piped and was noted as one of the significant flooding hazards in the "Delhi Township - All Natural Hazards Mitigation Plan".							
Attachments							

State	OH
Community Name	HAMILTON COUNTY *
County Name	OHIO
County Code	HAMILTON COUNTY
City Code	390204
FIPS Code	061 Help
CID Number	390204 Help
CRS Community	N
CRS Rating	
State Legislative District	390204
US Congressional District	1
FIRM or FHBM available?	Yes
Community Status	PARTICIPATING Help
Community participates in NFIP ?	Yes
Date entered in NFIP	07-02-1973
Date of most recent Community Assistance Visit (CAV) ?	03-04-2008 Help

Mitigation Plan Information			
Is the entity that will benefit from the proposed activity covered by a current FEMA-approved multi-hazard mitigation plan in compliance with 44 CFR Part 201?			Yes
If Yes, please answer the following:			
What is the name of the plan?	Delhi Township All Natural Hazards Mitigation Plan		
What is the type of plan?	Local Multihazard Mitigation Plan		
When was the current multihazard mitigation plan approved by FEMA?	11-22-2005		
Describe how the proposed activity relates to or is consistent with the FEMA-approved mitigation plan.	The proposed property acquisition of homes along the old Rapid Run Creek corridor is very consistent with the FEMA-approved mitigation plan. The State of Ohio is plagued by several disaster types, with flooding as the number one problem, not only in the state but also in the entire nation. Property acquisition is one of the best ways to mitigate flood damage, especially with significant cost-benefit numbers as an indicator of feasibility. As taken directly from the All Natural Hazards Mitigation Plan, "a major concern in Delhi Township is inadequate drainage. Action items suggested to address the problem of adequate drainage were: additional detention, separation of combined sewers, and enlarging pipes. In terms of flash flooding in low zones like Rapid Run and Wulff Run, it was stated that nothing can be done shy of detention to alleviate the flooding problems. In terms of the health hazard caused by raw sewage backing up in basements, the Metropolitan Sewer District's (MSD) Water In Basement Program (WIB) was suggested as an action item along with hepatitis shots."		
If No or Not Known, please answer the following:			
Does the entity have any other mitigation plans adopted?			Yes
If Yes, please provide the following information.			
Plan Name	Plan Type	Date Adopted	Attachment
Hamilton County All Natural Hazards Mitigation Pla	FMA or CRS Plan	03-28-2007	
Does the State/Tribe in which the entity is located have a current FEMA-approved mitigation plan in compliance with 44 CFR Part 201?			Yes
If Yes, please answer the following:			
What is the name of the plan?	State Hazard Mitigation Plan		
What is the type of plan?	Standard State Multi-hazard Mitigation Plan		
When was the current multihazard mitigation plan approved by FEMA?	05-16-2008		
Describe how the proposed activity relates to or is consistent with the State/Tribe's FEMA-approved mitigation plan.	The proposed property acquisition of homes along Rapid Run Creek is also very consistent with the State's FEMA-approved mitigation plan. The State of Ohio is plagued by several disaster types, with flooding as the number one problem, not only in the state but also in the entire nation. Property acquisition is one of the best ways to mitigate flood damage, especially with significant cost-benefit numbers as an indicator of feasibility.		
If you would like to make any comments, please enter them below.			
To attach documents, click the <i>Attachments</i> button below.			
DelhiTwpHMP_final.pdf DelhiTwpHMP-res to adopt.pdf topo map.pdf			

Mitigation Activity Information	
What type of activity are you proposing?	Help
200.1 - Acquisition of Private Real Property (Structures and Land) - Riverine	
If you selected Other or Miscellaneous, above, please specify:	
Title of your proposed activity:	
Rapid Run Flooding #1 - Property Acquisition - Delhi Township	
Are you doing construction in this project?	
No	
If you would like to make any comments, please enter them below.	
<p>During the planning process of the All Natural Hazard Mitigation Plan, it was determined that flash flooding was potentially the most serious and costly hazard facing Delhi Township, which is consistent with both the State of Ohio and the entire nation. The original Rapid Run Creek corridor, which was long ago piped in with undersized sanitary and stormwater lines incapable of handling increased population density, was actually highlighted in the Plan. Due to both undersized sanitary and stormwater systems that contribute to the overland flooding during rainfall events, the region is plagued by repetitive flooding and losses. The May 10th, 2003 rainfall event of 3.5 inches (less than a 10 year event) underscores this fact. Property acquisition will allow this systemic flooding to be alleviated once the area is converted to open space and when coupled with additional green initiatives, such as a wetland corridor, will help reduce both the overland flooding as well as decreasing the load on the storm and sanitary systems.</p>	
Attachments:	

Problem Description	
Please describe the problem to be mitigated. Include the geographic area in your description.	
Delhi Township is a suburb of the City of Cincinnati, bordering Green Township to the south and adjacent to and west of the City of Cincinnati. According to the 2000 census, Delhi has a population of just over 31,000. Rapid Run Road is a major four lane road that runs east-to-west through the Township. A large culvert runs beneath Rapid Run Road from Devils Backbone Road to Covedale Avenue. The culvert ranges in size from a 12' x 9' arch near Neeb Road to a 78" diameter circular pipe near Covedale Avenue. Storm flows have exceeded the capacity of the culvert along Rapid Run on several occasions, resulting in street and structure flooding. Flooding issues are most pronounced between Anderson Ferry and Neeb Roads. On May 10, 2003, Delhi Township experienced a significant rain event, receiving 3.5 inches of rain in less than six hours. Storm flows exceeded the capacity of the culvert causing significant surface and structure flooding along Rapid Run Road. Due to a lack of a natural drainage way, floodwaters were conveyed down the roadway and through residential property flooding multiple residences between Neeb and Anderson Ferry Roads. Modeling indicates this flood was less severe than a 10-year storm event. Video 1 shows the flooding on May 10, 2003. Video 2 shows typical damages to homes from the event. Structural and content damages are fully apparent.	
Enter the Latitude and Longitude coordinates for the project area.	
Latitude:	-84.6319
Longitude:	39.1117
Attachments:	
Rapid Run 05 10 03 Video 1.mpg Rapid Run 05 10 03 Video 2.mpg May 10 2003 Photo 2.jpg May 10 2003 Photo 1.jpg May 10 2003 Photo 3.jpg May 10 2003 Photo 4.jpg Hydrologic Hydraulic Report Rapid Run Drainage Study.pdf Hydrologic Hydraulic Report Appendices.zip	

Hazard Information	
Select hazards to be mitigated	Flood
If other hazards, please specify	
If you would like to make any comments, please enter them below.	
Flash flooding of the Rapid Run area poses several hazards to residents. Structure and content damage to residents is the primary hazard. The risk of bodily injury or death to residents with living space below grade is real due to the location and access to the subgrade garages and attached finished basements.	
Attachments:	
Annotated FIRM 39061C0282D.pdf	

FIRM Information	
Is the project located within a hazard area:	No
If other identified high hazard area, please specify:	
Is there a Flood Insurance Rate Map (FIRM) or Flood Hazard Boundary Map (FHBM) available for your project area?	Yes
Enter FIRM Panel Number:	39061C0282D
Is the project site marked on the map?	Electronic map attached

Select Flood Zone Designation	Area of minimal flood hazards (C, X)
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Scope of Work
What are the goals and objectives of this activity?
The primary goal of the "Rapid Run Flooding #1 - Property Acquisition -Delhi Township" project is to acquire and demolish nine (9) floodprone structures along Rapid Run Road in Delhi Township. This will, in turn, reduce repetitive loss to human health and welfare, as well as to their associated structures and possessions caused by repetitive flooding. Delhi Township is very pro-mitigation and through property acquisition and demolition, the best available solution may be used to address a multiplicity of problems that have plagued Delhi Township residents over a significant period of time. In addition to protecting the immediate residents afflicted by repetitive flooding, the project will also be able to aid in water quality and quantity problems that affect down-watershed inhabitants, as well as utilize some green initiatives, such as planting natural grass wetlands to further assist in reducing peak flow, increasing water take-up and reducing the overall sediment load by decreasing erosion.
Briefly describe the need for this activity.
The need for this property acquisition project has been ongoing for the last several decades. The post-WWII population explosion and housing boom caused a large number of homes to be built in areas that are now recognized as incompatible with optimum human habitat and health. Rapid Run Creek was an intermittent stream back in the 1960s and once all the available flat and suitable farm land was used up, it was normal procedure to level off the accessible land along the creeks and build on it. Rapid Run was no such exception and this portion of the creek was piped into a combination sanitary/storm sewer whose carrying capacity was suitable for the 50s and 60s but not for later expansion and development. As a result of this, flooding occurs on a regular basis during significant rainfall events, usually less than a 10 year rainfall event.
Describe the problems this activity will address.
This property acquisition and subsequent demolition will address several important problems, the most important being the reduction of serious threats to human health and welfare. The residents whose property is acquired will no longer be in immediate danger from stormwater flooding, particularly in their basements. While loss of life might seem implausible to some, there was a death several years ago in another part of Cincinnati due to two residents trying to unsuccessfully prevent their basement from flooding, as well as trying to remove items from the basement flood waters. Another problem that will be alleviated is the potential for infection from sanitary lines that back up into the basement living areas and pose a health threat to all residents in the structure. Repetitive flooding events also bring about repetitive insurance claims and loss of material possessions that need to be replaced and this project will also stop that problem. Converting the demolished homes to a green bioretention stormwater facility will help in reducing overland flooding downgradient by reducing the peak water flow, thereby decreasing sediment load and associated erosion. Potential use of a natural wetlands type of planting will also aid in water uptake to some degree and increase water quality as it eventually flows into the Ohio River several miles away. This impact affects not only the immediate residents but all other Delhi Township residents located in the drainage basin - an area that encompasses approximately 25% of the total Township population. Of course, all residents benefit economically by reducing the repetitive flooding events and decreasing associated Township costs in maintenance, cleanup and traffic control. The entire Township population also benefits from the effects of improved water quality and decreased water quantity, as well as gaining increased tax value by becoming recognized as a green community. This problem is essentially the same one addressed by the Glenroy/Schroer HMPG project (funded under Disaster #1390) several years ago, which has been considered to be a huge success in taming floodwaters and protecting residents and there have been no adverse effects since the project was completed. It should be noted that, as with the Glenroy/Schroer HMPG Project, all property acquired during this project will be deed restricted and maintained as open space, in perpetuity.
Describe the methodology for implementing this activity.
Delhi Township intends to use a similar methodology to the successful one employed in the 2003 HMPG-funded Glenroy-Schroer acquisition and demolition project located nearby which experienced similar type problems. This methodology includes working closely with affected homeowners, initiating and incorporating public input, and continuing partnerships with experienced contractors, consultants, and local and State officials. The Township will utilize an experienced in-house Project Manager to facilitate the project and keep tabs on costs and project activity. Consistent with the Metropolitan Sewer District's (MSD) partnership with the City of Cincinnati, both in-house and outside legal counsel, real estate division employees and licensed appraisers will be used to assist in property acquisitions based on a fair market value. A demolition contract will be advertised and awarded by the Metropolitan Sewer District, as per all legal governmental requirements, rules and regulations. Delhi Township, and specifically its internal Project Manager, will work closely with the Ohio Emergency Management Agency throughout the project to ensure all other existing regulations and requirements are fulfilled. Once the project is completed, the Hamilton County Commissioners, through their Metropolitan Sewer District (MSD), will assume maintenance responsibilities for the acquired properties. For more information on the project tasks and responsibilities please see the Work Schedule and Cost Estimate sections of this application.
If you would like to make any comments, please enter them below.
Attachments:
County match and maintenance letter.pdf

Enter Work Schedule					
Description Of Task	Starting Point	Unit Of Time	Duration	Unit Of Time	Work Complete By
FEMA Approval of Project	1	DAYS	1	DAYS	FEMA
Pre-Award Documents Preparation and Award Agreements with Ohio EMA	1	DAYS	90	DAYS	Delhi Township and Ohio EMA
Designate In-House Project Manager	90	DAYS	45	DAYS	Delhi Township
Hire Appraiser, Identify Title Company and Bank	135	DAYS	45	DAYS	Project Manager and Delhi Township
Complete Appraisals	180	DAYS	90	DAYS	Appraiser, Project Manager, and Delhi Township
Make Purchase Offer to Property Owners	270	DAYS	90	DAYS	Project Manager and Delhi Township
Complete Closings on Properties	360	DAYS	210	DAYS	Project Manager and Delhi Township
Demolish Structures and Grade Properties	570	DAYS	300	DAYS	Project Manager, Delhi Township, and Demolition Contractor
Close Out Project with Ohio EMA	870	DAYS	120	DAYS	Project Manager, Delhi Township, and Ohio EMA
Estimate the total duration of the proposed activity:			1000	DAYS	

Properties									
Damaged Property Address:									
Address line 1	5609 Rapid Run Rd								
Address line 2									
City	Cincinnati								
County	Hamilton								
State	OH								
ZIP	45238 - 4245								
Owner Information:									
First Name	Cincinnati Metropolitan								
Middle Name									
Last Name	Housing Authority								
Phone	<table border="0"> <tr> <td>Home</td> <td>Office</td> </tr> <tr> <td>Cell</td> <td>Ext.</td> </tr> <tr> <td></td> <td>Other</td> </tr> <tr> <td></td> <td>Ext.</td> </tr> </table>	Home	Office	Cell	Ext.		Other		Ext.
Home	Office								
Cell	Ext.								
	Other								
	Ext.								
Owner's Mailing Address:									
Address line 1	16 W Central Parkway Pkwy								
Address line 2									
Other (PO Box, Route, etc)									
City	Cincinnati								
State	OH								
ZIP	45202 - 7210								
Does this property have other co-owners or holders of recorded interest?	N								

Property Information:	
Age of structure (year built)	1961
SHPO Review	Unknown
SHPO Reviewed Date	
Structure Type	Single Family
Foundation type	Basement
Basement	Yes
Type of Residence	Rental
Parcel Number	540-0062-0064-00
Property Tax Identification Number	540-0062-0064-00
Latitude	39.111452
Longitude	-84.631209
Does this property have an NFIP Policy Number	No
Policy Number	
Insurance Policy Provider	
Select hazard to be mitigated:	Flood

Damage Category	0-49% Damaged
Pre-Event Fair Market Value	101,010.00
Benefit Cost Analysis Performed	Yes
Benefit Cost Ratio	3.85
Legal Description	
Rapid Run Rd 53.76 x 177.64 Ir Blk A Lot 2 Kelly Hills Sub	

Property Information II:	
* Primary Property Action	Acquisition/Demolition
Secondary Property Actions	
Flood Hazard	
Base Flood Elevation (only applicable when Property Action is Elevation)	785.35 feet
First Floor Elevation (only applicable when Property Action is Elevation)	783.77 feet
Number of feet the lowest floor elevation of the structure is being raised above Base Flood Elevation (only applicable when Property Action is Elevation)	feet
Flood Source	Riverine Flooding
Property located within	Not Applicable
* Is there a Flood Insurance Rate Map (FIRM) available for your project area?	Yes
Is the property site marked on the map?	Yes
* Flood Zone Designation (only applicable when Property Action is Elevation)	Area of minimal flood hazards (C, X)

FIRM Information (Flood Maps)			
Community Name	CID Number	FIRM Panel Number	Effective Date
HAMILTON COUNTY *	390204	39061C0282D	05-17-2004

Comments	
Attachments	
Name	Date Attached
Annotated FIRM 39061C0282D.pdf	11-06-2008
5609 Rapid Run Auditor Data Sheet.pdf	01-10-2008
Voluntary Interest Forms.pdf	09-04-2009

Decision Making Process

Describe the process you used to decide that this project is the best solution to the problem.

The process used to delineate this project has been a very methodical and detailed one. Community involvement has been solicited since inception and this has been increased in recent years with the more current rainfall events, such as the May, 2003 event. Public meetings were held while working on the All Natural Hazard Mitigation Plan to consider the best method to handle the problems in the community and during these meetings it became quite evident that Rapid Run was one of the most viable mitigation candidates since flooding impacted the greatest number of residents. This fact (and specific area) is mentioned in the Plan. Property acquisition is by far the most practical and cost effective solution for this problem area and benefits not only the immediate residents, but the surrounding community as well. Any flooding effects that can be reduced by retention and reduction of peak flow of flood waters greatly impacts not only the downstream areas, but in this case has an even greater benefit by reducing any inflow into the sanitary and storm system that is undersized and overflows when stressed. The combination effect of surface stormwater flooding and sanitary pipe backup combines to create a very unhealthy situation which can be immediately harmful to life and property by flooding homes but also includes the additional byproduct of residents being exposed to the harmful effects of raw sanitary sewage. This project most directly and effectively addresses the immediate threat of health, life and property losses while also contributing to a long term environmental plus by creating green retention areas that would aid in reducing peak flow.

Explain why this project is the best alternative.

This property acquisition project is the best alternative, not only for the reasons stated above, but because the spectrum of choices does not have any truly viable alternatives. The option of doing nothing, while least costly from the project standpoint, does not address the health and welfare of the Township residents affected by the flooding, nor does it take into account the total cost of a cumulative loss of property created by repetitive flooding. The ultimate solution of leaving the homes intact and increasing the stormwater and sanitary sewer pipe sizes is incredibly expensive, as referenced in the engineer's study, and would entail a total disruption to the traffic flow and general public life on a busy suburban street. The existing Rapid Run Road would have to be totally excavated, all current utilities moved, large-diameter pipes installed and then a new road surface constructed. This solution could still result in an increased flood hazard downstream. In addition, this most expensive alternative would also be the most disruptive to the environment and would not benefit water quality. Acquisition and demolition is the best long term solution for addressing the repetitive flooding issue by cost effectively reducing total flood damages along Rapid Run.

Comments:

Attachments:

200.1 - Acquisition of Private Real Property (Structures and Land) - Riverine					Federal Share: \$ 994,550.00	
Item Name	Subgrant Budget Class	Unit Quantity	Unit of Measure	Unit Cost (\$)	Cost Estimate (\$)	
Asbestos Inspection	Contractual	9.00	Each	\$ 1,000.00	\$ 9,000.00	
Property Acquisition	Contractual	5.00	Each	\$ 136,672.00	\$ 683,360.00	
Property Appraisals	Contractual	9.00	Each	\$ 500.00	\$ 4,500.00	
Closing Costs / Legals Fees	Contractual	9.00	Each	\$ 3,000.00	\$ 27,000.00	
Developmental Rights Acquisition	Contractual	1.00	Each	\$ 113,360.00	\$ 113,360.00	
Demolition and Site Grading and Seeding	Contractual	9.00	Each	\$ 6,000.00	\$ 54,000.00	
Project Implementation	Personnel	1.00	Each	\$ 31,500.00	\$ 31,500.00	
Property Acquisition	Contractual	3.00	Each	\$ 113,360.00	\$ 340,080.00	
URA Rental Assistance	Other (Rental Assistance)	1.00	Each	\$ 5,250.00	\$ 5,250.00	
Asbestos Abatement	Contractual	9.00	Each	\$ 6,500.00	\$ 58,500.00	
Total Cost					\$ 1,326,550.00	
Total Project Cost Estimate: \$ 1,326,550.00						

Match Sources		
Activity Cost Estimate	\$ 1,326,550.00	
Federal Share Percentage	74.97267348%	
Non-Federal Share Percentage	25.02732652%	
	Dollars	Percentage
Proposed Federal Share	\$ 994,550.00	74.97267348%
Proposed Non-Federal Share	\$ 332,000.00	25.02732652%

Matching Funds				
Source Agency	Name of Source Agency	Funding Type	Amount (\$)	Action
Local Agency Funding	Metropolitan Sewer District of Greater Cincinnati	Program Income	\$ 332,000.00	View Details
Grand Total			\$ 332,000.00	
If you would like to make any comments, please enter them below.				
<p>The Metropolitan Sewer District is extremely interested and willing to fund practical solutions to ongoing environmental and flooding problems, especially those that address a global solution that not only decreases flooding events and sanitary sewer problems, but also help in providing a "green", natural solution to environmental water quality and quantity problems. Installing/planting natural wetlands types of grasses would aid in this positive redevelopment of a problem area.</p>				
Attachments				
Mitigation Cost Breakdown.pdf				

Funding Source	Local Agency Funding
Name of Funding Source	Metropolitan Sewer District of Greater Cincinnati
Funding Type	Program Income
Amount	\$ 332,000.00
Date of availability	01-01-2009
Funds commitment letter date	01-10-2008
Attachment (funds commitment letter)	090903 County match and maintenance letter.pdf

Cost Effectiveness Information	
Attach the Benefit Cost Analysis (BCA), if completed for this project	
Rapid Run Flooding BCA Analyses.zip BC Helpline Correspondence.zip Economic Guidance Memorandum 04-01.pdf Mitigation Cost Breakdown.pdf Finished Basement Surveys.zip Average Price per Square Foot Data 2007.pdf BCA Data Documentation Narrative.pdf Survey Documentation.zip	
What is the source and type of the problem?	
The source of flooding for the structures within this project is a 2.3 square mile fully-built watershed. The watershed is drained by a large culvert that runs below Rapid Run. During heavy rain events, the capacity of the sewer is exceeded resulting in flood waters flowing overland down Rapid Run Road. Many of these homes have subterranean garages that allow for surface flow to cascade down their driveways and enter their basements.	
How frequent is the event?	
Modeling, as described in the attached Rapid Run Drainage Study Hydrologic and Hydraulic Report, indicates street and structure flooding for the 2-year storm event. The May 10th, 2003 storm event described previously, at 3.5 inches, is less than a 10-year storm event. Residents have reported flooding on multiple occasions in the last 10 years.	
How severe is the damage?	
Damage from flooding along Rapid Run Road includes structural damage to residential structures, as well as severe damage to the contents of structures. Residents reported collapsed block walls, buckled garage doors, damaged electric, as well as ruined drywall and carpeting. Since flooding often affects below-grade garages and basements, automobiles and common utilities (furnace, washer, dryer, water heater) have been declared as total losses.	
What kinds of property are at risk?	
The properties at risk are all residential structures. Most of the structures are single story homes with below grade garages connected to a full basement. Some homes sit on slab foundations.	
Are there better, alternative ways to solve the problem?	
No better alternatives exist to solve this flood problem. The "do nothing" alternative would result in the continued flooding of homes along Rapid Run. The reduction of flood risk by increasing the size of the culvert was analyzed during the Rapid Run Drainage Study. To eliminate flooding for the 25-year storm, up to 6000 feet of culvert would have to be replaced with new culverts ranging from 10' diameter to 30'x10' arch culvert. The costs for the culvert alone, not including demolition, utility replacement, costs for loss of use and the complete replacement of Rapid Run Road, would exceed \$12 million. Detention was evaluated upstream of Wilderness Trail. For the 10-year storm event, a combination of detention ponds would remove street flooding for the 10-year storm event and reduce flooding for the 25-year event. The detention ponds combined contained approximately 11.4 acre-feet of storage. Flooding downstream of Wilderness Trail was only minimally reduced and would not remove these flood prone structures from the 10-year or 25-year floodplain. The location of the detention basins along Rapid Run Road would require the purchase of 32 properties. The costs for construction of the basin, including purchase of property, are estimated at \$9 million.	
Are the mitigation project costs well documented and reasonable?	
Yes	
If you would like to make any comments, please enter them below.	
Attachments:	
Property Acquisition Drawing.pdf	

Damage History		
		Amount of

Date	Event	Description of Damage	Damage
01-2000	Flood	Flooding of finished basement at 5439 Rapid Run Road caused damage to furniture, carpet, wall, utilities, and vehicle. Damage estimated based on home owner survey. Damages to other homes is acknowledged, but undocumented.	\$ 20,000.00
05-2003	Flood	Flooding of street caused water to overflow driveways and fill up basements and garages. Based on a limited homeowner survey, damages were estimated. Damages to homes included structural failure of walls, damage to paneling, carpet, contents, and utilities (washer, dryer, furnace, etc.) In addition, many reported loss of vehicles. Total damages are likely much higher than the amount provided due to lack of homeowner data and limits of survey.	\$ 230,000.00
Total Amount of Damage			\$ 250,000.00

A. National Historic Preservation Act - Historic Buildings and Structures	
* 1. Does your project affect or is it in close proximity to any buildings or structures 50 years or more in age?	No
If Yes, you must confirm that you have provided the following:	
<input type="checkbox"/> The property address and original date of construction for each property affected (unless this information is already noted in the Properties section), <input type="checkbox"/> A minimum of two color photographs showing at least three sides of each structure (Please label the photos accordingly), <input type="checkbox"/> A diagram or USGS 1:24,000 scale quadrangle map displaying the relationship of the property(s) to the project area.	
To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:	
<input type="checkbox"/> Information gathered about potential historic properties in the project area, including any evidence indicating the age of the building or structure and presence of buildings or structures that are listed or eligible for listing on the National Register of Historic Places or within or near a National Register listed or eligible historic district. Sources for this information may include the State Historic Preservation Officer, and/or the Tribal Historic Preservation Officer (SHPO/THPO), your local planning office, historic preservation organization, or historical society. <input type="checkbox"/> Consideration of how the project design will minimize adverse effects on known or potential historic buildings or structures, and any alternatives considered or implemented to avoid or minimize effects on historic buildings or structures. Please address and note associated costs in your project budget. <input type="checkbox"/> For acquisition/demolition projects affecting historic buildings or structures, any data regarding the consideration and feasibility of elevation, relocation, or flood proofing as alternatives to demolition. <input type="checkbox"/> Attached materials or additional comments.	
Comments:	
There are no historic buildings or structures within this property acquisition area that would be affected.	
Attachments:	
Rapid Run Structure Photos.zip	

B. National Historic Preservation Act - Archeological Resources	
* 1. Does your project involve disturbance of ground?	Yes
If Yes, you must confirm that you have provided the following:	
<input checked="" type="checkbox"/> A description of the ground disturbance by giving the dimensions (area, volume, depth, etc.) and location <input checked="" type="checkbox"/> The past use of the area to be disturbed, noting the extent of previously disturbed ground. <input checked="" type="checkbox"/> A USGS 1:24,000 scale or other site map showing the location and extent of ground disturbance.	
To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:	
<input type="checkbox"/> Any information about potential historic properties, including archeological sites, in the project area. Sources of this information may include SHPO/THPO, and/or the Tribe's cultural resources contact if no THPO is designated. Include, if possible, a map showing the relation of any identified historic properties to the project area.	

<input type="checkbox"/> Attached materials or additional comments.
Comments:
Demolishing homes ranging from 900 to 2,000 square feet in size. Minimal ground disturbance will be implemented within the affected property limits. Heavy equipment only being used when necessary. No excavation will be performed outside building footprint unless necessary. Delhi Township will monitor excavation activity, and if any artifacts or human remains are found during excavation, all work will cease and the Township will notify FEMA, Grantee, and the SHPO. Major demolition activities will be confined to front and back of structures. Heavy equipment will, whenever possible, be kept on driveways, street or other hard surfaces. Hand-work will be performed whenever possible. No on-site disposal of demolition debris will be allowed and all materials will be transported to an approved landfill. No on-site granular material will be excavated or stripped to use for capping foundation. Best Management Practices will be applied. Ohio EMA will coordinate with the Ohio Historic Preservation Office for Section 106 Review. Previous land use prior to residential housing was stream bed and floodplain. The Project Overview Drawing is provided.
Attachments:
Property Acquisition Drawing.pdf

C. Endangered Species Act and Fish and Wildlife Coordination Act

* 1. Are Federally listed threatened or endangered species or their critical habitat present in the area affected by the project?	No
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If Yes, you must confirm that you have provided the following:
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<input type="checkbox"/> Information you obtained to identify species in or near the project area. Provide the source and date of the information cited.
--

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:

<input type="checkbox"/> Any request for information and associated response from the USFWS, the National Marine Fisheries Service (NMFS) (for affected ocean-going fish), or your State Wildlife Agency, regarding potential listed species present and potential of the project to impact those species.
<input type="checkbox"/> Attached materials or additional comments.

Comments:

There are no threatened or endangered species, nor any critical habitat, within the property acquisition area.

* 2. Does your project remove or affect vegetation?	No
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If Yes, you must confirm that you have provided the following:
--

<input type="checkbox"/> Description of the amount (area) and type of vegetation to be removed or affected.
<input type="checkbox"/> A site map showing the project area and the extent of vegetation affected.
<input type="checkbox"/> Photographs or digital images that show both the vegetation affected and the vegetation in context of its surroundings.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:

<input type="checkbox"/> Attached materials or additional comments.

Comments:

This property acquisition project will not remove or affect any vegetation

* 3. Is your project in, near (within 200 feet), or likely to affect any type of waterway or body of water?	No
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If Yes, and project is not within an existing building, you must confirm that you have provided the following:	
<input type="checkbox"/>	A USGS 1:24,000 scale quadrangle map showing the project activities in relation to all nearby water bodies (within 200 feet).
<input type="checkbox"/>	Any information about the type of water body nearby including: its dimensions, the proximity of the project activity to the water body, and the expected and possible changes to the water body, if any. Identify all water bodies regardless whether you think there may be an effect
<input type="checkbox"/>	A photograph or digital image of the site showing both the body of water and the project area.
To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:	
<input type="checkbox"/>	Evidence of any discussions with the US Fish and Wildlife Service (USFWS), and/or your State Wildlife Agency concerning any potential impacts if there is the potential for the project to affect any water body.
<input type="checkbox"/>	Attached materials or additional comments.
Comments:	
In the project area, the original Rapid Run Creek bed, which had intermittent flow, has been moved, piped and covered.	
Attachments:	

D. Clean Water Act, Rivers and Harbors Act, and Executive Order 11990 (Protection of Wetlands)	
* 1. Will the project involve dredging or disposal of dredged material, excavation, adding fill material or result in any modification to water bodies or wetlands designated as "waters of the U.S" as identified by the US Army Corps of Engineers or on the National Wetland Inventory?	No
If Yes, you must confirm that you have provided the following:	
<input type="checkbox"/>	Documentation of the project location on a USGS 1:24,000 scale topographic map or image and a copy of a National Wetlands Inventory map or other available wetlands mapping information.
To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:	
<input type="checkbox"/>	Request for information and response letter from the US Army Corps of Engineers and/or State resource agencies regarding the potential for wetlands, and applicability of permitting requirements.
<input type="checkbox"/>	Evidence of alternatives considered to eliminate or minimize impacts to wetlands.
<input type="checkbox"/>	Attached materials or additional comments.
Comments:	
This acquisition project does not affect water bodies or wetlands, as designated by the US Army Corps of Engineers or the National Wetland Inventory.	
Attachments:	

E. Executive Order 11988 (Floodplain Management)	
* 1. Does a Flood Insurance Rate Map (FIRM), Flood Hazard Boundary Map (FHBM), hydrologic study, or some other source indicate that the project is located in or will affect a 100 year floodplain, a 500 year floodplain if a critical facility, an identified regulatory floodway, or an area prone to flooding?	No
If Yes, please indicate in the text box below any documentation to identify the means or the alternatives considered	

to eliminate or minimize impacts to floodplains (See the 8 step process found in 44 CFR Part 9.6.) to help FEMA evaluate the impact of the project:	
The FIRM map does not indicate the project area to be in 100 or 500 year floodplain.	
* 2. Does the project alter a watercourse, water flow patterns, or a drainage way, regardless of its floodplain designation?	No
If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project:	
<input type="checkbox"/> Hydrologic/hydraulic information from a qualified engineer to demonstrate how drainage and flood flow patterns will be changed and to identify down and upstream effects. <input type="checkbox"/> Evidence of any consultation with US Army Corps of Engineers (may be included under Part D of the Environmental Information). <input type="checkbox"/> Request for information and response letter from the State water resource agency, if applicable, with jurisdiction over modification of waterways. <input type="checkbox"/> Attached materials or additional comments.	
Comments:	
This project does not alter a watercourse, water flow patterns or drainage way.	
Attachments:	

F. Coastal Zone Management Act	
* 1. Is the project located in the State's designated coastal zone?	No
If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project:	
<input type="checkbox"/> Information resulting from contact with the appropriate State agency that implements the coastal zone management program regarding the likelihood of the project's consistency with the State's coastal zone plan and any potential requirements affecting the cost or design of the proposed activity. <input type="checkbox"/> Attached materials or additional comments.	
Comments:	
The project is not located within a designated coastal zone.	
Attachments:	

G. Farmland Protection Policy Act	
* 1. Will the project convert more than 5 acres of "prime or unique" farmland outside city limits to a non-agricultural use?	No
Comments:	
The project does not affect farmland in any way.	
Attachments:	

H. RCRA and CERCLA (Hazardous and Toxic Materials)	
* 1. Is there a reason to suspect there are contaminants from a current or past use on the property	

associated with the proposed project?	No
If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project:	
<input type="checkbox"/> Comments and any relevant documentation.	
<input type="checkbox"/> Results of any consultations with State or local agency to obtain permit with requirements for handling, disposing of or addressing the effects of hazardous or toxic materials related to project implementation.	
<input type="checkbox"/> Attached materials or additional comments.	
Comments:	
There are no known contaminants from any current or past uses of this property.	
* 2. Are there any studies, investigations, or enforcement actions related to the property associated with the proposed project?	No
If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project:	
<input type="checkbox"/> Comments and any relevant documentation.	
<input type="checkbox"/> Results of any consultations with State or local agency to obtain permit with requirements for handling, disposing of or addressing the effects of hazardous or toxic materials related to project implementation.	
<input type="checkbox"/> Attached materials or additional comments.	
Comments:	
There are no studies, investigations or enforcement actions related to this project.	
* 3. Does any project construction or operation activities involve the use of hazardous or toxic materials?	No
If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project:	
<input type="checkbox"/> Comments and any relevant documentation.	
<input type="checkbox"/> Results of any consultations with State or local agency to obtain permit with requirements for handling, disposing of or addressing the effects of hazardous or toxic materials related to project implementation.	
<input type="checkbox"/> Attached materials or additional comments.	
Comments:	
There are no construction or operation activities in the project area.	
* 4. Do you know if any of the current or past land-uses of the property affected by the proposed project or of the adjacent properties are associated with hazardous or toxic materials?	No
If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project:	
<input type="checkbox"/> Comments and any relevant documentation.	
<input type="checkbox"/> Results of any consultations with State or local agency to obtain permit with requirements for handling, disposing of or addressing the effects of hazardous or toxic materials related to project implementation.	
<input type="checkbox"/> Attached materials or additional comments.	
Comments:	
There are no known hazardous or toxic materials associated with the project area.	
Attachments:	

I. Executive Order 12898, Environmental Justice for Low Income and Minority Populations	
* 1. Are there low income or minority populations in the project's area of effect or adjacent to the project area?	No
If Yes, you must confirm that you have provided the following:	
<input type="checkbox"/> Description of any disproportionate and adverse effects to these populations.	
To help FEMA evaluate the impact of the project, please indicate below any other information you are providing:	
<input type="checkbox"/> Description of the population affected and the portion of the population that would be disproportionately and adversely affected. Please include specific efforts to address the adverse impacts in your proposal narrative and budget.	
<input type="checkbox"/> Attached materials or additional comments.	
Comments:	
There are no low income or minority populations in the project area.	
Attachments:	

J. Other Environmental/Historic Preservation Laws or Issues	
* 1. Are there other environmental/historic preservation requirements associated with this project that you are aware of?	No
If Yes, please indicate in the text box below a description of the requirements, issues or public involvement effort.	
There are no environmental/historic preservation requirements associated with this project.	
* 2. Are there controversial issues associated with this project?	No
If Yes, please indicate in the text box below a description of the requirements, issues or public involvement effort.	
There are no controversial issues associated with this project.	
* 3. Have you conducted any public meeting or solicited public input or comments on your specific proposed mitigation project?	Yes
If Yes, please indicate in the text box below a description of the requirements, issues or public involvement effort.	
Yes, Delhi Township has held public meetings, as well as soliciting public input for this project. The public has attended several meetings about the area as far back as 2004, as well as being informed about progress through the local newspaper and through letters and information bulletins passed out by the Township. Public sentiment has been very favorable to the property acquisition alternative.	
Attachments:	
public meeting minutes 091703.pdf Flood timeline.pdf public meeting notice.pdf	

K. Summary and Cost of Potential Impacts	
* 1. Having answered the questions in parts A. through J., have you identified any aspects of your proposed project that have the potential to impact environmental resources or historic properties?	No
If Yes, you must confirm that you have:	

- Evaluated these potential effects and provided the materials required in Parts A through J that identify the nature and extent of potential impacts to environmental resources and/or historic properties.
- Consulted with appropriate parties to identify any measures needed to avoid or minimize these impacts.
- Considered alternatives that could minimize both the impacts and the cost of the project.
- Made certain that the costs of any measures to treat adverse effects are realistically reflected in the project budget estimate.

Comments:

This project should have no adverse impact on any environmental resources or historic properties.

Attachments:

Maintenance Schedule and Costs	
Provide a maintenance schedule including cost information	Yearly grass mowing (with litter pick-up prior to mowing): \$1,000.00 per annum
Identify entity that will perform any long-term maintenance	Hamilton County Board of Commissioners through Metropolitan Sewer District
If you would like to make any comments, please enter them below.	The property will be maintained by an agency of the Hamilton County Board of Commissioners (official owners of the property by legal definition) after property acquisition is completed.
Attach letter from entity accepting performance responsibility	Local Match and Ongoing Maintenance Certification.pdf

Evaluation Information (Part 1 of 4)	
Is the recipient participating in the Community Rating System (CRS) ?	No
If yes, what is their CRS rating ?	
Is the recipient a Cooperating Technical Partner (CTP) ?	No
Is the recipient a Firewise Community ?	No
If yes, please provide their Firewise Community number.	
Has the recipient adopted building codes consistent with the International Codes ?	Yes
Has the recipient adopted the National Fire Protection Association (NFPA) 5000 Code ?	Yes
Have the recipient's building codes been assessed on the Building Code Effectiveness Grading Schedule (BCEGS) ?	No
If yes, what is their BCEGS rating?	
Is the recipient a Disaster Resistant University ?	No
Is the recipient a Historically Black College or University or a Tribal College or University ?	No

Evaluation Information (Part 2 of 4)
Describe the desired outcome and methodology of the mitigation activity in terms of mitigation objectives to be achieved.
<p>The desired outcome of the Rapid Run Flooding - Property Acquisition - Delhi Township Project is to remove residents from the harmful health effects and property loss of flooding and to alleviate the overland flooding that currently affects a series of homes along the aforementioned Rapid Run Road, and to do it in the most cost-effective and beneficial manner possible. Property acquisition and subsequent demolition has been deemed to be the most beneficial method of the various alternatives, based on detailed cost-benefit analyses performed. Once the homes are demolished, the properties will be properly graded and planted for an optimum bioretention stormwater facility. The Metropolitan Sewer District (MSD) is contemplating using "green initiative" and planting natural wetlands type grasses and plants to further aid in reducing peak flow, increasing water uptake and filtering sediment load. All of these activities will serve to decrease/slow down the down-gradient overland water flow during intense rainfall events, as well as removing the residents from harm's way and repetitive loss damages by removing them from the flooding equation. In essence, all of the mitigation objectives will be met head-on and at an extremely beneficial cost analysis.</p>
Describe performance expectations and timeline for interim milestones and overall completion of mitigation activity.
<p>Delhi Township and the Metropolitan Sewer District (MSD) are progressive agencies who both demand the highest quality of work for their constituent residents and costumers/consumers. High caliber performance results are therefore also demanded from their bonded subcontractors. This project can be simplified by breaking it down into three major categories: (1)home appraisals, (2)home purchases/acquisitions, and (3) demolition/grading. The home appraisal phase is scheduled to take approximately five months in duration. The home purchase/acquisition phase is estimated to take ten months duration and the demolition/grading and Close Out phase is slotted for 14 months duration, for a total project duration of approximately 34 months (please reference Work Schedule for a more complete breakdown). Of course, several portions of the operation will overlap as one phase progresses to another and a significant amount of time savings can allow the schedule to be compressed when needed. The project is anticipated to be completed well in advance of the official deadline.</p>
Describe how you will manage the costs and schedule, and how you will ensure successful performance.
<p>Delhi Township and the Metropolitan Sewer District (MSD) will handle the costs and scheduling of this project similar to the very successful Glenroy/Schroer HMPG project they both participated in several years ago. That project was very similar in nature in its property acquisition/demolition phase. Although fewer homes were purchased in that project, it actually was more complicated due to the additional scope of work involving a retention basin, complete roadway reconstruction and addition of another partner (Hamilton County Engineer). For this project, Delhi Township and MSD will each have a designated project manager who will coordinate all activities and track all expenses. MSD will have oversight control of its sister-agency, the City of Cincinnati's Real Estate Division, who will perform a good portion of the bulk of the project's activities - property appraisal and home acquisition. Both parties will be involved in submitting quarterly reports and making any necessary adjustments while proceeding along the project timeline. Strict adherence to costs and scheduling should bring this project to fruition both under-budget and ahead of schedule, just as the Glenroy/Schroer project was successfully completed.</p>
Describe the staff and resources needed to implement this mitigation activity and the applicant's ability to provide these resources.
<p>Delhi Township and the Metropolitan Sewer District (MSD)have sufficient quality staff and ample resources dedicated to see this project to successful conclusion. Both of these agencies have also shown their ability to work well together on the successful Glenroy/Schroer HMPG project several years ago, which also involved a third governmental agency, the Hamilton County Engineer's Office. Any legal problems or questions that arise will be able to be answered by Delhi Township's Law Director, Hamilton County's Prosecutor and the City of Cincinnati's City Solicitor. Delhi Township and MSD also have at their disposal both in-house and outsourced engineering staffs, as well as internal project managers, inspectors and administrative staff. In addition to having the proper resources and mindset to see this project through to fruition, they also have a long history of teaming up together to solve local problems and complaints for their combined residential base. MSD's commitment, both monetary and intellectual, is further enhanced by the outward necessity and internal desire of successfully responding to its consent decree requiring them to address various environmental/flooding/sanitary resolutions as mandated by the court system. Both Delhi Township and MSD will continue to prove to be powerful partners while implementing this extremely beneficial mitigation activity.</p>
If applying for multiple mitigation activities, how do these activities relate?
<p>This project does not involve multiple mitigation activities since it is based solely on mitigating flooding as the sole source problem.</p>

Evaluation Information (Part 3 of 4)

How will this mitigation activity leverage involvement of partners to enhance its outcome?

As stated previously, Delhi Township and MSD will work with all of their partners to see this project brought to a successful conclusion, just as they have done in the past with the Glenroy/Schroer HMPG project that was similar in nature and in close proximity to this project. Both agencies will also work closely with all the affected residents involved, as well as contractors, subcontractors and the media. With all of these partners working in conjunction, the project will be a huge cost/benefit success while also promoting environmentally green initiatives, newly imposed stormwater regulations and public trust and welfare.

How will this mitigation activity offer long-term financial and social benefits?

Long term benefits derived from this project include the reduction in repetitive flooding and associated benefits in human health and welfare issues. The immediate residents will no longer suffer huge financial losses or potential health and well-being issues related to the potential exposure to sanitary waters. Both Delhi Township and MSD will benefit greatly from this reduction, not only financially from an infrastructure/maintenance viewpoint, but also from the increased public perception and awareness of proactive measurements taken to combat a problem head-on. An added bonus of mitigating this flooding issue is that all of the benefits associated with it are long term and extremely durable, especially when considering the net present worth value and spreading it out over decades. Immediate results will be seen as soon as the project is implemented and these results will carry on in perpetuity, not only from reducing the risk to residents but from an increased quality of life and environment standpoint. The entire project dovetails quite nicely with the consent decree issued to MSD to reduce their systems environmental impact throughout their service area. From a social standpoint, the entire community will also benefit from an increased environmental commitment and a reduction in peak water flow and improvement in water quality that will bring recognition to the region as an outstanding place to live.

How does this mitigation activity comply with Federal laws and Executive Orders, and how is it complementary to other Federal programs?

FEMA, as well as many other state and local agencies, recognize that one of the best, if not the absolute best, methods of mitigating a flooding situation is by removing the residents from the flood zone. The property acquisition and demolition facets of this project do just that and at a very competitive cost benefit ratio, especially when comparing it to other alternatives that are not as viable or much more costly. This activity complies with all Federal laws and programs and is complementary to other Federal programs that address disaster aid and mitigation.

What outreach activities are planned relative to this mitigation activity (e.g., signs, press releases, success stories, developing package to share with other communities, losses avoided analysis) and/or how will this mitigation activity serve as a model for other communities (i.e. Do you intend to mentor other communities, Tribes or States? Do you intend to prepare a description of the process followed in this activity so that others may learn from the example)?

Delhi Township and the Metropolitan Sewer District (MSD) have an enviable record of always reaching out to the communities involved and their residents, whether through community meetings, press releases or individual meetings with concerned citizens. The policy of having an "open door" free flow of information is beneficial to all and consistent with the legal demands of open records laws required of all government agencies. This mitigation activity is consistent with the Glenroy/Schroer HMPG Project completed several years ago and used as a model for this application. A successful award will allow this program to also be added to the arsenal of weapons and models used to fight flooding and one that can be accessed by any other interested community, agency or individual at any time. In addition, the project will serve as a boilerplate model for future solutions to MSD/Hamilton County's myriad problems associated with flooding and with costs approaching an estimated 2.34 billion dollars to fix the entire Hamilton County area. This program also fits well with the Hamilton County Stormwater rules and regulations requiring yearly public information dissemination.

Evaluation Information (Part 4 of 4)	
Please provide the percent of the population benefiting from this mitigation activity.	0.1
Please explain your response.	While this acquisition/demolition project is involved with 9 homes (4.0 persons per home x 9 homes = 36 persons in an approximate 31,000 population base), it also benefits all downgradient residents as well. This was estimated from CAGIS mapping to include approximately 2000 homes (2000 homes x 4.0 persons per home = 8000 persons) and would actually benefit approximately 25.8% of Delhi Township (8600 persons divided by 31,000 residents = 25.8%)
Net Present Value of Project Benefits (A)	\$ 8256904.00
Total Project Cost Estimate (B)	\$ 1454971.00
What is the Benefit Cost Ratio for the entire project (A/B)?	5.675
Analysis Type	FEMA BCA software methodology
What is the primary hazard data used for the BCA?	Flood
What secondary hazards were considered during the BCA?	null
Other Secondary Hazard	
Does this mitigation activity protect a critical facility?	No
If yes, please select the type of critical facilities to be protected	
Comments:	
Name	Date Attached
enquirer article 051103 (2).pdf	11-03-2008
enquirer article 051103.pdf	11-03-2008
enquirer article 020407.pdf	11-03-2008
Benefit Cost Breakdown.pdf	11-06-2008

Comments and Attachments			
Name of Section	Comment	Attachment	Date Attached
Application Level		Delhi Statement of Assurances.pdf	09-04-2009
		Salary and Benefits.pdf	09-04-2009
		Budget Support Narrative (FF 20-20 attachment).xls	09-04-2009
		Model Deed Restriction.pdf	09-04-2009
Community Information	Delhi Township began as an agricultural community but due to its hilly nature, most farms were small "garden" or "truck" farms that specialized in specific crops. This created an intensive collection of greenhouses growing tomatoes and flowers and this led to Delhi Township's moniker as the "Floral Paradise". Flash flooding along creeks have plagued the area since it was first settled, and this problem was exacerbated by piping in the creeks for sanitary and storm sewers with undersized pipes that were inadequate for later population expansion. The original Rapid Run Creek was one such area that was piped and was noted as one of the significant flooding hazards in the "Delhi Township - All Natural Hazards Mitigation Plan".		
Mitigation Plan Information		DelhiTwpHMP-res to adopt.pdf	11-03-2008
		DelhiTwpHMP final.pdf	11-03-2008
		topo map.pdf	11-03-2008
Mitigation Activity Information	During the planning process of the All Natural Hazard Mitigation Plan, it was determined that flash flooding was potentially the most serious and costly hazard facing Delhi Township, which is consistent with both the State of Ohio and the entire nation. The original Rapid Run Creek corridor, which was long ago piped in with undersized sanitary and stormwater lines incapable of handling increased population density, was actually highlighted in the Plan. Due to both undersized sanitary and stormwater systems that contribute to the overland flooding during rainfall events, the region is plagued by		

	repetitive flooding and losses. The May 10th, 2003 rainfall event of 3.5 inches (less than a 10 year event) underscores this fact. Property acquisition will allow this systemic flooding to be alleviated once the area is converted to open space and when coupled with additional green initiatives, such as a wetland corridor, will help reduce both the overland flooding as well as decreasing the load on the storm and sanitary systems.		
Hazard Information	Flash flooding of the Rapid Run area poses several hazards to residents. Structure and content damage to residents is the primary hazard. The risk of bodily injury or death to residents with living space below grade is real due to the location and access to the subgrade garages and attached finished basements.	May 10 2003 Photo 2.jpg	11-03-2008
		May 10 2003 Photo 1.jpg	11-03-2008
		May 10 2003 Photo 3.jpg	11-03-2008
		Rapid Run 05 10 03 Video 1.mpg	11-03-2008
		Hydrologic Hydraulic Report Rapid Run Drainage Study.pdf	11-03-2008
		Hydrologic Hydraulic Report Appendices.zip	11-03-2008
		Rapid Run 05 10 03 Video 2.mpg	11-03-2008
		May 10 2003 Photo 4.jpg	11-03-2008
		Annotated FIRM 39061C0282D.pdf	11-06-2008
Scope of Work (Part 1)		County match and maintenance letter.pdf	09-03-2009
Match Sources	The Metropolitan Sewer District is extremely interested and willing to fund practical solutions to ongoing environmental and flooding problems, especially those that address a global solution that not only decreases flooding events and sanitary sewer problems, but also help in providing a "green", natural solution to environmental water quality and quantity problems. Installing/planting natural wetlands types of grasses would aid in this positive redevelopment of a problem area.	Mitigation Cost Breakdown.pdf	11-06-2008
		090903 County match and maintenance letter.pdf	09-04-2009
Cost Effectiveness Information		BCA Data Documentation Narrative.pdf	11-06-2008
		Average Price per Square Foot Data 2007.pdf	11-06-2008
		Finished Basement Surveys.zip	11-06-2008
		Mitigation Cost Breakdown.pdf	11-06-2008
		Economic Guidance Memorandum 04-01.pdf	11-03-2008
		BC Helpline Correspondence.zip	11-03-2008
		Rapid Run Flooding BCA Analyses.zip	11-06-2008
		Property Acquisition Drawing.pdf	11-06-2008
Survey Documentation.zip	12-17-2008		
Maintenance	The property will be maintained by an agency of the Hamilton County Board of		

Schedule and Costs	Commissioners (official owners of the property by legal definition) after property acquisition is completed.	Local Match and Ongoing Maintenance Certification.pdf	11-03-2008
Evaluation Information		Benefit Cost Breakdown.pdf	11-06-2008
		enquirer article 020407.pdf	11-03-2008
		enquirer article 051103.pdf	11-03-2008
		enquirer article 051103 (2).pdf	11-03-2008

Assurances and Certifications	
Please click the link in the status column to view forms.	
Forms	Status
Part I: FEMA Form 20-16A, Assurances Non-Construction Programs.	Complete
Part II: FEMA Form 20-16C, Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibilities Matters; and Drug-Free Workplace Requirements.	Complete
Part III: SF-LLL, Disclosure of Lobbying Activities (Complete only if applying for a grant of more than \$100,000 and have lobbying activities using Non-Federal funds. See Form 20-16C for lobbying activities definition.)	Not Applicable

FEMA Form 20-16A, Assurances-Non-Construction Programs

Note: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 USC Section 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 CFR 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (PL 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 USC Section 1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 USC Section 794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 USC Section 6101-6107), which prohibits discrimination on the basis of age; (e) The Drug Abuse Office and Treatment Act of 1972 (PL 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (PL 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) Sections 523 and 527 of the Public Health Service Act of 1912 (42 USC 290-dd-3 and 290-ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 USC Section 3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) Any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) The requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (PL 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply with the provisions of the Hatch Act (5 USC Section 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
9. Will comply, as applicable, with the provisions of Davis-Bacon Act (40 USC Section 276a to 276a-7), Copeland Act (40 USC Section 276c and 18 USC 874), and the Contract Work Hours and Safe Standards Act (40 USC Section 327-333), regarding labor standards for federally assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (PL 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 USC Section 1451 et seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 USC Section 17401 et seq.); (g) protection of underground source of drinking water under the Safe Drinking

Water Act of 1974, as amended, (PL 93-523); and (h) protection of endangered species under the Endangered Special Act of 1973, as amended, (PL 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 USC Section 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 USC Section 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 USC Section 469a-1 et seq.)
14. Will comply with PL 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (PL 89-544, as amended, 7 USC 2131 et seq.) pertaining to the care, handling, treatment of warm blooded animals held research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 USC Section 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.
19. It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act (29 USC Section 201), as they apply to employees of institutions of higher education, hospitals, and other non-profit organizations.

I, Bruce Raabe, hereby sign this form as of 11-10-2008.

You must read and sign these assurances by providing your password and checking the box at the bottom of this page.

Note: Fields marked with an * are required.

Certifications Regarding Lobbying; Debarment, Suspension and Other Responsibility Matters; and Drug-Free Workplace Requirements.

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 44 CFR Part 18, "New Restrictions on Lobbying; and 28 CFR Part 17, "Government-wide Debarment and suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Federal Emergency Management Agency (FEMA) determines to award the covered transaction, grant, or cooperative agreement.

1. LOBBYING

A. As required by the section 1352, Title 31 of the US Code, and implemented at 44 CFR Part 18 for persons entering into a grant or cooperative agreement over \$100,000, as defined at 44 CFR Part 18, the applicant certifies that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement and extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement;

(b) If any other funds than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal grant or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities", in accordance with its instructions;

Standard Form LLL Disclosure of Lobbying Activities Not Attached

(c) The undersigned shall require that the language of this certification be included in the award documents for all the sub awards at all tiers (including subgrants, contracts under grants and cooperative agreements, and subcontract(s)) and that all subrecipients shall certify and disclose accordingly.

2. DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS (DIRECT RECIPIENT)

As required by Executive Order 12549, Debarment and Suspension, and implemented at 44 CFR Part 67, for prospective participants in primary covered transactions, as defined at 44 CFR Part 17, Section 17.510-A. The applicant certifies that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this application been convicted of or had a civilian judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or locally) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default; and

B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

Explanation:

3. DRUG-FREE WORKPLACE (GRANTEES OTHER THAN INDIVIDUALS)

As required by the Drug-Free Workplace Act of 1988, and implemented at 44 CFR Part 17, Subpart F, for grantees, as defined at 44 CFR part 17, Sections 17.615 and 17.623:

(A) The applicant certifies that it will continue to provide a drug-free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;

(b) Establishing an on-going drug free awareness program to inform employees about:

- (1) The dangers of drug abuse in the workplace;
- (2) The grantee's policy of maintaining a drug-free workplace;
- (3) Any available drug counseling, rehabilitation and employee assistance programs;
- and
- (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(c) Making it a requirement that each employee to be engaged in the performance of the grant to be given a copy of the statement required by paragraph (a);

(d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will:

- (1) Abide by the terms of the statement; and
- (2) Notify the employee in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction.

(e) Notifying the agency, in writing within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to the applicable FEMA awarding office, i.e. regional office or FEMA office.

(f) Taking one of the following actions against such an employee, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted:

- (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
- (2) Require such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement or other appropriate agency.

(g) Making a good effort to continue to maintain a drug free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f).

(B) The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance

Street	City	State	ZIP
665 Neeb Road	Cincinnati	OH	45233-4613

Section 17.630 of the regulations provide that a grantee that is a State may elect to make one certification in each Federal fiscal year. A copy of which should be included with each application for FEMA funding. States and State agencies may elect to use a Statewide certification.

I, Bruce Raabe, hereby sign this form as of 11-10-2008.

APPLICATION FOR FEDERAL ASSISTANCE (SF 424)		2. DATE SUBMITTED 12-18-2008	Applicant Identifier
1. TYPE OF SUBMISSION Non-Construction		3. DATE RECEIVED BY STATE 12-18-2008	State Application Identifier
		4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
5. APPLICANT INFORMATION			
Legal Name Delhi Township Board of Trustees		Organizational Unit Delhi Township	
Address 665 Neeb Road, Cincinnati, OH 45233-4613		Name and telephone number of the person to be contacted on matters involving this application Bruce Raabe, 513-922-8609	
6. EMPLOYER IDENTIFICATION NUMBER (EIN) 31-6000570		6.a. DUNS NUMBER 048325229	7. TYPE OF APPLICANT Local Government
8. TYPE OF APPLICATION Project Application		9. NAME OF FEDERAL AGENCY Federal Emergency Management Agency	
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER 97.047 CFDA TITLE PDM Competitive		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT Rapid Run Flooding #1 - Property Acquisition - Delhi Township	
12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.) HAMILTON COUNTY			
13. PROPOSED PROJECT: Start Date: End Date :		14. CONGRESSIONAL DISTRICTS OF: a. Applicant OH1 b. Project OH1	
15. ESTIMATED FUNDING		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS? No, Program is not covered by E.O. 12372	
a. Federal	\$ 994,550.00	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? No	
b. Applicant	\$ 0.00		
c. State	\$ 0.00		
d. Local	\$ 332,000.00		
e. Other	\$ 0.00		
f. Program Income	\$ 0.00		
g. TOTAL	\$ 1,326,550.00		
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.			
a. Name of Authorized Representative Bruce Raabe	b. Title	c. Telephone Number 5139228609	
d. Signature of Authorized Representative Bruce Raabe		e. Date Signed 12-18-2008	

