City of Hudson Storm Water Rankings Summary and Table of Contents

Summary

The City Staff has generated a ranking of the City's storm water infrastructure to identify those components of the storm water system that have the highest need of replacement, improvement and on-going maintenance. The rankings were generated for the following four categories: (1) regional storm water improvements and floodplains (2) bridges and culverts, (3) trunk storm sewers and (4) work orders. Cost estimates for improvements or repairs for the top ranking projects within the public storm water system were identified and can be seen on the attached spreadsheets and maps.

The study was conducted by evaluating the City's storm water infrastructure starting with FEMA Flood Zones and Regional Projects, then City owned bridges, major culverts (30" and greater) and finally work-order generated, on-going maintenance.

The City Staff created and generated these rankings with Hudson staff by utilizing information found in the City's GIS database, watershed studies and review and input by the Public Works staff.

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REGIONAL STORM WATER CAPITAL PROJECTS

OHIO HUDSON

Project Information				Scoring Categories (Max 100 points)									
Ref. No.	**Project Name**	**Project Type**	**Description**	**Property Flooding Score**	**Drainage Area Size**	**Outside Agency Requirement ?**	**Project Has Outside Agency Funding?**	**Water Quality Score**	**Overall Project Score**	**Estimated Schedule**	**Estimated Design Cost**	**Estimated Construction Cost**	**Estimated Design & Construction Cost**
1	BCC Pond Improvements at Outlet Structure	Regional Flood Control	ODNR requirement to modified lower dam outlet.	30	30	20	0	0	**80**	0 - 5 years	**$25,000.00**	**$25,000.00**	**$50,000.00**
2	BCC Pond Improvements	Regional Flood Control	ODNR requirement to provide emergency overflow improvements, armoring embankment, and uniform elevation of bike trail on embankment.	30	30	20	0	0	**80**	0 - 5 years	**$12,000.00**	**$300,000.00**	**$312,000.00**
3	Brandywine Creek/Turnpike Storm Management	Regional Flood Control	Regional storm water management structure to reduce runoff downstream in Brandywine Creek. Project is located just north of Ohio Turnpike on Brandywine Creek.	30	20	0	10	0	**60**	0 - 5 years	**$47,000.00**	**$100,000.00**	**$147,000.00**
4	Norfolk & Southern RXR Culvert Improvement	Regional Flood Control	Culvert installation on the Norfolk and Southern RR property to reduce the flooding near the area of Atterbury Blvd. and Lennox Rd.	30	20	0	0	0	**50**	0 - 5 years	**$0.00**	**$640,000.00**	**$640,000.00**
5	Willows Pond Project	Regional Flood Control	Mud Brook Watershed Improvement that removes 5 residential properties from 100-yr. flood limits.	20	30	0	0	0	**50**	0 - 5 years	**$0.00**	**$1,400,000.00**	**$1,400,000.00**
												Total:	**$2,549,000.00**

Ref. No.	**Project Name**	**Project Type**	**Description**	**Watershed Study Score**	**Estimated Study Schedule**	**Estimated Study Cost**
6	Tinkers Creek Watershed Study	Study	Regional Re-Study required. Last watershed study conducted in 2004.	10	0 - 5 years	**$150,000.00**
7	Brandywine Creek Watershed Study	Study	Regional Re-Study required. Last watershed study conducted in 1996.	10	0 - 5 years	**$140,000.00**
8	Mud Brook Watershed Study	Study	Regional Re-Study required. Last watershed study conducted in 2006.	0	5 - 10 years	**$75,000.00**
					Total:	**$365,000.00**

Watershed Study Scoring Key (Max 10 Points)

Category	**Points**
Not studied within the last 10 years	10
Study conducted within the last 10 years	0

Regional Capital Improvements Scoring Key (Max 100 Points)

Property Flooding		**Drainage Area Size**		**Project Required by Outside Agency*?**		**Outside Agency* Funding Secured?**		**Water Quality**	
Category	**Points**	**Category**	**Points**	**Category**	**Points**	**Category**	**Points**	**Category**	**Points**
Reduces flooding for 10 or more structures/units	30	Project Drainage Area is 100 acres or more	30	The project is required by outside agency	20	The project has funding by an outside agency.	10	Project will include water quality features	10
Reduces flooding for 4 - 9 structures/units	20	Project drainage area is 25 - 99 acres	20	The project is not required by outside agency	0	The project does not have funding by an outside agency	0	Project will not include water quality features	0
Reduces flooding for 1 - 3 structures	10	Project drainage area is less than 25 acres	10	*Outside Agencies include: ODNR, OEPA, OTC, etc.					
Does not reduce flooding for any structures	0								

= Indicates a Project or Study Currently Budgeted in 2016-2020 Five Year Capital Improvemet Summary

City of Hudson Storm Water FEMA Flood Zones

- FEMA Floodway

FEMA Flood Zone

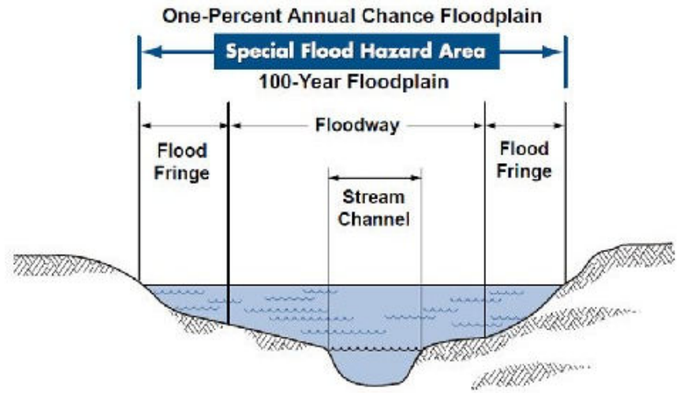
- A - 100 Yr. Flood Zone (no BFE)
- AE - 100 Yr. Flood Zone (w/ BFE)
- 500 Year Flood Zone
- City Limits
- Street
- Watersheds
- Railroad
- Building
- Lake/Pond
- River/Stream

N

0 0.25 0.5 Mi.

0 0.25 0.5 Km.

One-Percent Annual Chance Floodplain



OHIO HUDSON

City of Hudson, OH
GIS Division

Complied March 2016

Disclaimer:

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CITY BRIDGE RANKINGS

OHIO HUDSON

Bridge Information					Bridge Scoring (Max 100 Points)								
Ref. No.	City Bridge No.	Bridge / Street Name	Feature Crosses	Project Notes	Bridge Appraised Condition Score (see note below)	Bridge Contains 100-Year Flood Score	Property Impact Score (see key below)	Bridge Age Score	Overall Bridge Score	Estimated Construction or Maintenance Schedule	Estimated Design Costs	Estimated Construction Costs	Estimated Design & Construction Costs
1	776-7889	Owen Brown Street	Brandywine Creek	Bridge is undersized for 100-Year Flood.	10	30	20	0	**60**	0 - 5 years	**$80,000.00**	**$1,420,000.00**	**$1,500,000.00**
2	776-7811	Ingleside Drive	Brandywine Creek	Bridge is over 80 years old and is in poor condition.	20	0	20	20	**60**	0 - 5 years	**$90,000.00**	**$1,910,000.00**	**$2,000,000.00**
3	776-7870	Brandywine Drive	Brandywine Creek	Bridge reconstruction project scheduled for 2016.	20	0	20	5	**45**	0 - 5 years	**$0.00**	**$425,000.00**	**$425,000.00**
4	776-7862	Blackberry Drive	Brandywine Creek	Bridge reconstruction project scheduled for 2016.	20	0	20	5	**45**	0 - 5 years	**$0.00**	**$425,000.00**	**$425,000.00**
5	776-7897	Clinton Street	Brandywine Creek		10	0	20	0	**30**	10 + years	**$0.00**	**$50,000.00**	**$50,000.00**
6	776-7900	Village Way	Brandywine Creek		10	0	20	0	**30**	10 + years	**$0.00**	**$50,000.00**	**$50,000.00**
7	776-7994	Atterbury Boulevard	Brandywine Creek		10	0	20	0	**30**	10 + years	**$0.00**	**$50,000.00**	**$50,000.00**
8	776-8036	Youth Development Center Drive B	Brandywine Creek		20	0	5	0	**25**	N/A	**N/A**	**N/A**	**N/A**
9	776-7919	Veterans Way	Norfolk & Southern RR		0	0	20	0	**20**	N/A	**N/A**	**N/A**	**N/A**
10	776-8028	Youth Development Center Drive A	Brandywine Creek Branch		10	0	5	0	**15**	N/A	**N/A**	**N/A**	**N/A**
												Total:	**$4,350,000.00**

BRIDGE SCORING KEY (Max 100 Points)

ODOT Appraised Condition Score *		Bridge Contains the 100-Year Flood?		Property Impact Rating Score**		Age Score	
Category	Points	Category	Points	Category	Points	Category	Points
0 - 3	30	No	30	High Impact	20	75+ years	20
4 - 6	20	Yes	0	Medium Impact	10	50-74 years	15
7 - 8	10			Low Impact	5	25 - 49 years	5
9	0					< 25 years	0

* See attached "Explanation of Appraisal" for Appraised Condition Score Key from ODOT Inspection Manual.

= Indicates a Project or Study Currently Budgeted in 2016-2020 Five Year Capital Improvemet Summary

**Bridge Rating Impact Key:

High Impact - Homes/businesses will definitely be affected (i.e. flooded basements) if the bridge fails.

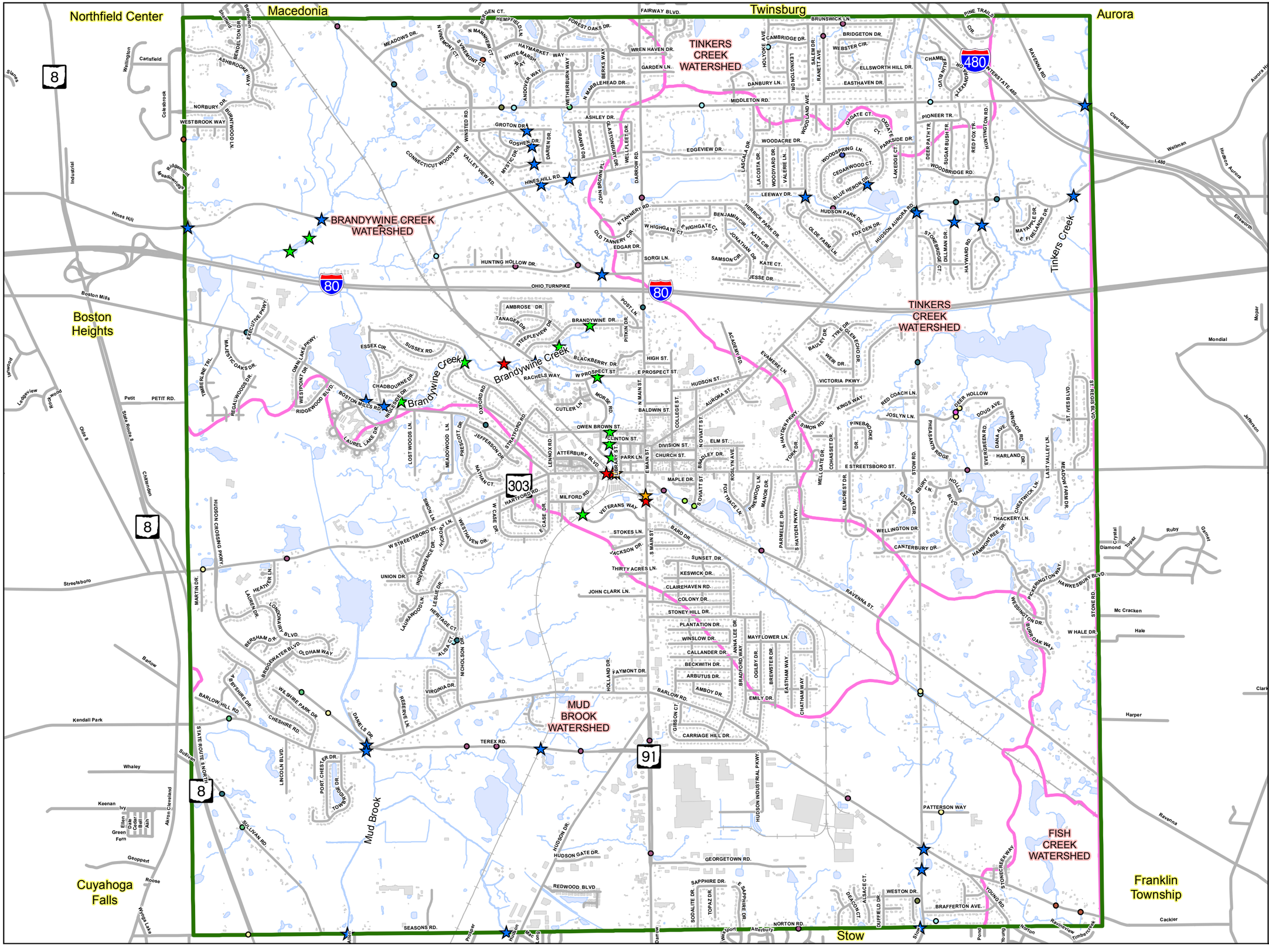
Medium Impact - Homes/businesses might be affected (flooded or unable to be accessed due to flooded driveway) if the culvert fails.

Low Impact - No homes/business will be affected if the culvert fails.

EXPLANATION OF APPRAISAL

The appraisal system used describes the general, overall conditions of the bridge and is based on a descending scale of 9 to 0. The system conforms to the 2010 Ohio Department of Transportation's *Bridge Inspection Manual*.

Condition Code	Description
9	**As-built condition.**
8	**Very good condition** - no problems noted.
7	**Good condition** - some minor problems.
6	**Satisfactory condition** - structural elements show some minor deterioration.
5	**Fair condition** - all primary structural elements are sound, but have minor section loss, deterioration, spalling or scour.
4	**Poor condition** - advanced section loss, deterioration, spalling or scour.
3	**Serious condition** - loss of section, deterioration, spalling, or scour has seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
2	**Critical condition** - advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored, it may be necessary to close the bridge until corrective action is taken.
1	**"Imminent" failure condition** - major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structural stability. Bridge is closed to traffic but corrective action may put bridge back into light service.
0	**Failed condition** - out of service - beyond corrective action.



City of Hudson Storm Water Bridges and Large Roadway Culverts

Bridge Custodian

- City of Hudson
- Railroad
- State of Ohio
- Summit County

Culverts

- 30" - 8 Crossings
- 33" - 1 Crossing
- 36" - 7 Crossings
- 42" - 5 Crossings
- 48" - 4 Crossings
- 54" - 2 Crossings
- 60" - 2 Crossings
- 72" - 1 Crossing
- Box - 15 Crossings
- Elliptical - 20 Crossings

- City Limits
- Street
- Watersheds
- Railroad
- Building
- Lake/Pond
- River/Stream

N

0 0.25 0.5 Mi.

0 0.25 0.5 Km.

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MAJOR CULVERT RANKINGS (30" +)

Culvert Information						Culvert Scoring (Max 100 Points)							
Ref. No.	**Culvert No.**	**Bridge / Street Name**	**Road Category**	**Culvert Size**	**Property Impact Notes**	**Culvert Condition Score**	**Property Impact Score**	**Culvert Material Score**	**Culvert Size Score**	**Roadway Category Score**	**Overall Culvert Score**	**Estimated Construction or Maintenance Schedule**	**Estimated Design & Construction Costs**
1	69	Valley View Rd	Collector	5' x 2.75' Box	Culvert is in poor condition. If failure occurs, driveway would be flooded.	20	15	10	20	5	**70**	0 - 5 years	**$100,000.00**
2	135	Ranett Ave	Residential	49" x33" Arched Culverts	Twin metal culverts have both have failed and are in need of repair.	30	5	20	10	0	**65**	0 - 5 years	**$75,000.00**
3	200	Sullivan Rd	Residential	42" x 24" Stone Box	Modified stone culvert to be updated w SR 8 recon. project	20	15	10	20	0	**65**	0 - 5 years	**$155,000.00**
4	284	Darrow Rd	Arterial	53" X 34" Elliptical	South of I-80 under SR 91.	5	20	5	20	10	**60**	5 - 10 years	**$125,000.00**
5	122	Valley View Rd.	Collector	9' x 4.5' Arched Culvert	If failure occurs, two houses would flood and two others would have no access.	5	20	20	10	5	**60**	5 - 10 years	**$150,000.00**
6	20	Blue Heron Dr	Residential	87" X 137" Arch	Would affect houses on Blue Heron and Woodspring Dr. Currently in fair condition.	5	20	20	10	0	**55**	5 - 10 years	**$100,000.00**
7	45	E. Streetsboro St	Arterial	106" X 68" Elliptical	Possible that private streets and 3 or more houses could flood. Currently in fair condition.	5	20	5	10	10	**50**	5 - 10 years	**$95,000.00**
8	188	Darrow Rd	Arterial	68" X 106" Elliptical	Would probably close Georgetown Rd. affecting the businesses if failure occurs. In fair condition.	5	20	5	10	10	**50**	5 - 10 years	**$85,000.00**
9	382	Darrow Rd	Arterial	48" X 60" Elliptical	Failure could affect houses all the way to Tamarisk, Lascala and Herrick park Dr. if failure occurs.	5	20	5	10	10	**50**	5 - 10 years	**$75,000.00**
10	48	Ravenna St.	Collector	53" X 83" Elliptical		5	20	5	10	10	**50**	5 - 10 years	**$75,000.00**
10	155	Stow Rd.	Arterial	8' X 4' Elliptical	Failure would partially flood Stow Rd.	5	15	5	10	10	**45**	10 + years	**$65,000.00**
11	3	Terex Rd.	Collector	62" x 96" Elliptical	Two or more houses may become flooded should this culvert fail along withnearby culvert become obstructed.	5	20	5	10	5	**45**	10 + years	**$48,000.00**
12	4	Terex Rd.	Collector	24" x 44" Elliptical	This pipe is close to nearby culvert, but the is too high to prevent flooding in this area should other become obstructed.	5	20	5	10	5	**45**	10 + years	**$24,000.00**
13	168	Stow Rd.	Arterial	30"	Water may be close to house if culvert fails.	5	10	20	0	10	**45**	10 + years	**$18,000.00**
14	113	Stow & Norton Rd.	Arterial	30"	Water could flow close to the house if culvert fails.	5	10	20	0	10	**45**	10 + years	**$36,000.00**
15	463	Hudson Dr.	Collector	72" x 42" Elliptical		5	5	20	10	5	**45**	10 + years	**$30,000.00**
16	400	Terex Rd.	Arterial	8' x 5' Elliptical	The business entrance at Terex Rd. would be partially submerged if culvert fails.	5	10	5	10	10	**40**	10 + years	**$60,000.00**
17	27	Hudson-Aurora Rd.	Collector	4' X 2' Box		5	5	5	20	5	**40**	10 + years	**$18,000.00**
18	29	Hudson-Aurora Rd.	Collector	38" X 60" Box		5	5	5	20	5	**40**	10 + years	**$24,000.00**

Culvert Information						Culvert Scoring (Max 100 Points)							
Ref. No.	**Culvert No.**	**Bridge / Street Name**	**Road Category**	**Culvert Size**	**Property Impact Notes**	**Culvert Condition Score**	**Property Impact Score**	**Culvert Material Score**	**Culvert Size Score**	**Roadway Category Score**	**Overall Culvert Score**	**Estimated Construction or Maintenance Schedule**	**Estimated Design & Construction Costs**
19	149	Stow Rd.	Arterial	30"		5	5	20	0	10	**40**	10 + years	**$12,000.00**
20	21	Blue Heron Dr.	Residential	60" X 38"" Elliptical		5	20	5	10	0	**40**	10 + years	**$18,000.00**
21	6	Terex Rd.	Collector	48"		5	5	20	5	5	**40**	10 + years	**$42,000.00**
22	101	Norton Rd.	Arterial	38" X 60" Elliptical		5	5	5	10	10	**35**	10 + years	**$30,000.00**
23	112	W. Streetsboro St	Arterial	23" X 14" Elliptical	The house adjacent to this culvert would not be affected. No issues.	5	5	5	10	10	**35**	10 + years	**$6,000.00**
24	362	Barlow Rd.	Arterial	23" X 14" Elliptical		5	5	5	10	10	**35**	10 + years	**$6,000.00**
25	418	Darrow Rd	Arterial	48" X 76" Elliptical		5	5	5	10	10	**35**	10 + years	**$78,000.00**
26	143	Barlow Rd.	Arterial	42"		0	5	20	0	10	**35**	10 + years	**$24,000.00**
27	144	Barlow Rd.	Arterial	42"		0	5	20	0	10	**35**	10 + years	**$24,000.00**
28	92	Weston Dr.	Residential	60"	1 driveway and 2-3 houses could flood if culvert fails.	5	20	5	5	0	**35**	10 + years	**$216,000.00**
29	297	Oviatt & Ravenna	Residential	54"	Failure could affect the Fire Dept. Evaluate as part of BCC outlet design.	5	20	5	5	0	**35**	10 + years	**$36,000.00**
30	298	Oviatt St.	Residential	54"	Failure could affect the Fire Dept. Evaluate as part of BCC outlet design.	5	20	5	5	0	**35**	10 + years	**$66,000.00**
31	5	Terex Rd.	Collector	36"		5	5	20	0	5	**35**	10 + years	**$36,000.00**
32	167	Stow Rd.	Arterial	36"	Water may be close to house if culvert fails.	5	10	5	0	10	**30**	10 + years	**$18,000.00**
33	166	Ravenna St.	Collector	30" X 60" Elliptical	Water would flow over Ravenna St. (minor flooding) if culvert fails.	5	5	5	10	5	**30**	10 + years	**$60,000.00**
34	14	Hunting Hollow Dr	Residential	60" x 38" Elliptical	Just west of Valley View Rd. Culvert failure may cause yard flooding and limited driveway access.	5	10	5	10	0	**30**	10 + years	**$36,000.00**
35	622	Barlow Ponds	N/A	4' x 4' Box	Replaced 2010…good condition.	0	5	5	20	0	**30**	10 + years	**N/A**
36	109	W. Streetsboro St	Arterial	36"	There is a secondary outlet at the East side of the pond.	5	5	5	0	10	**25**	10 + years	**$36,000.00**
37	376	W. Streetsboro St	Arterial	90"	Structural Liner in 2008…good condition.	0	5	5	5	10	**25**	10 + years	**N/A**

Culvert Information						Culvert Scoring (Max 100 Points)							
Ref. No.	Culvert No.	Bridge / Street Name	Road Category	Culvert Size	Property Impact Notes	Culvert Condition Score	Property Impact Score	Culvert Material Score	Culvert Size Score	Roadway Category Score	Overall Culvert Score	Estimated Construction or Maintenance Schedule	Estimated Design & Construction Costs
38	386	Middleton Rd.	Collector	60"		5	5	5	5	5	**25**	10 + years	**$24,000.00**
39	393	Middleton Rd.	Collector	30"	Water may get close to house foundations if culvert fails.	5	10	5	0	5	**25**	10 + years	**$12,000.00**
40	412	Middleton Rd.	Collector	48"		5	5	5	5	5	**25**	10 + years	**$24,000.00**
41	50	Deer Hollow	Residential	72"	Driveway would be flooded if culvert fails.	5	10	5	5	0	**25**	10 + years	**$144,000.00**
42	437	Hunting Hollow Dr	Residential	2' x 3' Elliptical	Not a flood hazardous area….no impacts.	5	5	5	10	0	**25**	10 + years	**$12,000.00**
43	732	Brunswick Ln.	Residential	52" X 82" Elliptical		5	5	5	10	0	**25**	10 + years	**$24,000.00**
44	74	Middleton Rd.	Collector	30"		5	5	5	0	5	**20**	10 + years	**$48,000.00**
45	264	W. Prospect St.	Collector	30"	Not a flood hazardous area…no impacts	5	5	5	0	5	**20**	10 + years	**$18,000.00**
46	409	Middleton Rd.	Collector	30"		5	5	5	0	5	**20**	10 + years	**$18,000.00**
47	103	Georgetown Rd.	Collector	36"	Would flow over the road before affecting any structure…no impacts.	5	5	5	0	5	**20**	10 + years	**$18,000.00**
48	18	Holyoke Ave	Residential	30"	No houses would be affected…no impacts.	5	5	5	0	0	**15**	10 + years	**$12,000.00**
49	51	Deer Hollow	Residential	36"		5	5	5	0	0	**15**	10 + years	**$18,000.00**
50	#	Sullivan Rd.	Residential	48"		0	5	5	5	0	**15**	10 + years	**$24,000.00**
												Total:	**$1,463,000.00**

Note: Some culvert ages are undetermined at this time and therefore culvert age has not been ranked.

CULVERT SCORING KEY (Max 100 Points)

Condition Score		Impact Rating Score*		Material Score		Size Score		Roadway Category Score	
Category	**Points**	**Category**		**Category**	**Points**	**Category**	**Points**	**Category**	**Points**
Failed	30	High Impact	20	Metal	20	Box	20	Arterial	10
Poor	20	Medium Impact	15	Stone	10	Elliptical or Arch	10	Collector	5
Fair	5	Low Impact	5	Concrete, Vitrified Clay	5	Round: 48" +	5	Residential	0
Good	0			Plastic (PVC, HDPE)	5	Round: 30" - 42"	0		

*Culvert Rating Impact Key:

High Impact - Homes/businesses will definitely be affected (i.e. flooded basements) if the culvert fails.

Medium Impact - Homes/businesses might be affected (flooded or unable to be accessed due to flooded driveway) if the culvert fails.

Low Impact - No homes/business will be affected if the culvert fails.

= Indicates a Project or Study Currently Budgeted in 2016-2020 Five Year Capital Improvemet Summary

STORM WATER WORK ORDER SUMMARY

Year	Storm Sewer WO Repairs			Sinkholes WO Repairs			Catch BasinWO Repairs			Manholes WO Repairs			Storm Culverts WO Repairs			Storm Ditches WO Repairs			
	Storm Sewer WO's Closed	Storm Sewer Repair Average Cost	Year Total	Sinkhole WO's Closed	Sinkhole Repair Average Cost	Year Total	Catch BasinWO's Closed	Catch Basin Repair Average Cost	Year Total	Manhole WO's Closed	Manhole Repair Average Cost	Year Total	Storm Culverts WO's Closed	Storm Culvert Repair Average Cost	Year Total	Storm Ditches WO's Closed	Storm Ditch Repair Average Cost	Year Total	Total Work Order Expendatures per Year
2013	13	$5,000	**$65,000**	22	$5,000	**$110,000**	40	$5,000	**$200,000**	0	$ 7,500	**$0**	60	$1,000	**$60,000**	98	$3,500.0	**$343,000.0**	**$778,000**
2014	13	$5,000	**$65,000**	16	$5,000	**$80,000**	64	$5,000	**$320,000**	2	$ 7,500	**$15,000**	140	$1,000	**$140,000**	118	$3,500.0	**$413,000.0**	**$1,033,000**
2015	28	$5,000	**$140,000**	40	$5,000	**$200,000**	57	$5,000	**$285,000**	3	$ 7,500	**$22,500**	124	$1,000	**$124,000**	124	$3,500.0	**$434,000.0**	**$1,205,500**
Average No. of WO's	18			26			54			2			108			113			
Avg. Annual Expenditures			**$90,000**			**$130,000**			**$268,333**			**$12,500**			**$108,000**			**$396,666.7**	**$1,005,500**

Work Type Descriptions:

Storm Sewer (Pipe) Work Order Repairs - include cleaning of storm sewers, repair/replacement of damaged sections of pipe, or the installation of new storm sewers.

Sink Hole Work Order Repairs - include the excavation, repair and restoration of individual sink holes on storm sewers.

Catch Basin Work Order Repairs - include repair/maintenance issues (structural repair, lid replacement, etc.), replacement of failed structures, and the installation of new catch basins.

Manhole Work Order Repairs - include repair/maintenance issues (structural repair, lid replacement, etc.) and partial replacement of failed structures.

Storm Culvert Work Order Repairs - include the cleaning of residentially owned culverts and repair/replacement of smaller (12”-27” dia.) City owned culverts under roadways.

Storm Ditch Work Order Repairs - include the re-grading and restoration of street side ditches (at the request of owner) to alleviate ponding.

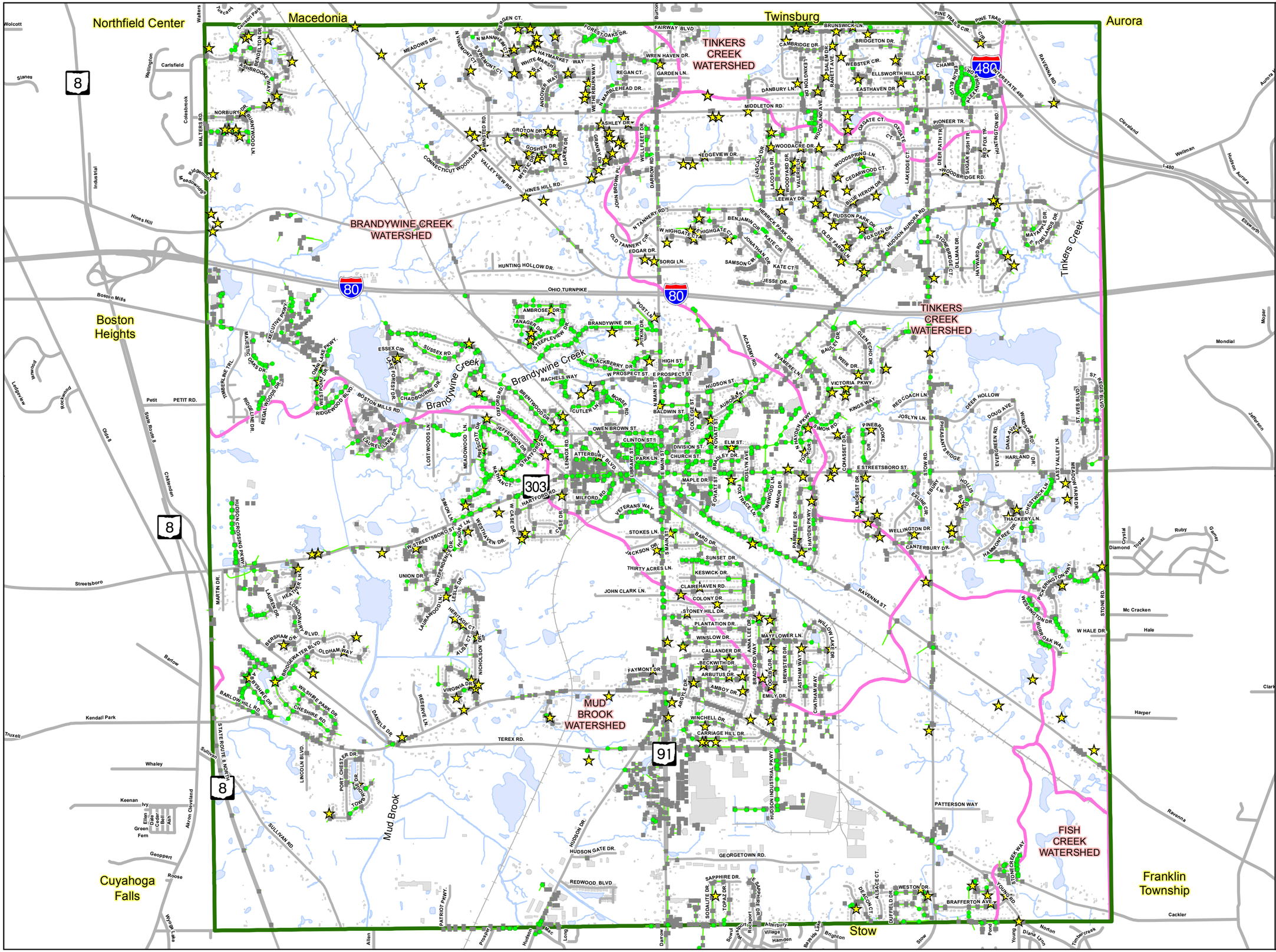
Work Order Completion Summary

	2013	2014	2015	2016
New Work Orders (+):	194	281	301	42
Closed Work Orders (-):	233	353	376	29
WO Balance Increase/Decrease:	**-39**	**-72**	**-75**	**13**

Notes:

1) Data collected as of February 23, 2016
2) No Work Order Closed Data previous to 2012 due to software tranfer.
3) Open CityWorks Storm Water Work Orders as of March 1, 2016 = 296

City of Hudson Storm Water Overall Storm System



- Open Storm Work Orders - 296
- Manholes - 1073
- Catch Basins - 5194
- Storm Lines - 121. 5 Mi.
- City Limits
- Watersheds
- Street
- Railroad
- Building
- Lake/Pond
- River/Stream

N

0 0.25 0.5 Mi.

0 0.25 0.5 Km.

OHIO HUDSON

City of Hudson, OH
GIS Division

Complied March 2016

Disclaimer:

All data on this map were created for the City of Hudson to assist City Departments in management and planning activities. The suitability of this map for any other use is not guaranteed and the user assumes all risk for such uses. The City of Hudson, Ohio, assumes no legal responsibility for the information on this map. Users noting errors or omissions are encouraged to contact the City of Hudson Geographic Information Services at 330-342-9541.

5-YEAR BUDGETED CAPITAL PROJECT SUMMARY

OHIO HUDSON

Ref. No.	Project Name	Description	Project Type	2016	2017	2018	2019	2020	Total Estimated Design & Construction Cost (Budgeted 2016 - 2020)	Beyond Estimated Costs (2021+)
1	BCC Pond Improvements at Outlet Structure	ODNR Requirement	Regional Flood Control	$25,000.00	$25,000.00				**$50,000.00**	
2	BCC Pond Improvements	ODNR Requirement	Regional Flood Control		$120,000.00	$300,000.00			**$420,000.00**	
3	Brandywine Creek/Turnpike Storm Management	OTC Grant	Regional Flood Control	$12,000.00		$35,000.00	$100,000.00		**$147,000.00**	
4	Norfolk & Southern RXR Culvert Improvement	RxR Culvert Upsizing	Regional Flood Control		$640,000.00				**$640,000.00**	
5	Willows Pond Project	Storm Water Management Pond	Regional Flood Control		$1,450,000.00				**$1,450,000.00**	
6	Tinkers Creek Watershed Study	Watershed Last Studied in 2004	Study			$150,000.00			**$150,000.00**	
7	Brandywine Creek Watershed Study	Watershed Last Studied in 1996	Study					$140,000.00	**$140,000.00**	
8	Owen Brown Street Bridge	Bridge Capacity Needs Evaluated	Bridge Design and Construction			$80,000.00			**$80,000.00**	$1,420,000.00
9	Ingleside Drive Bridge	Bridge is Aging and in poor condition	Bridge Design and Construction				$90,000.00		**$90,000.00**	$1,910,000.00
10	Brandywine Drive Bridge	Bridge Rehabilitation	Bridge Design and Construction	$425,000.00					**$425,000.00**	$50,000.00
11	Blackberry Drive Bridge	Bridge Rehabilitation	Bridge Design and Construction	$425,000.00					**$425,000.00**	$50,000.00
12	Valley View Rd Culvert	5' x 2.75' Stone Box Culvert Replacement	Major Culvert Design and Construction		$100,000.00				**$100,000.00**	
13	Ranett Ave Culverts	49" x33" Metal Arched Culverts Replacement	Major Culvert Design and Construction	$75,000.00					**$75,000.00**	
14	Sullivan Rd Culvert	42" x 24" Stone Box Culvert Replacement	Major Culvert Design and Construction			$35,000.00			**$35,000.00**	$120,000.00
			Year Totals:	**$962,000.00**	**$2,335,000.00**	**$600,000.00**	**$190,000.00**	**$140,000.00**	**$4,227,000.00**	
15	Storm Water Work Orders	Stm. Sewers Infrastructure Repairs	Work Order Maintenance Projects	$1,000,000.00	$1,000,000.00	$1,000,000.00	$1,000,000.00	$1,000,000.00	**$5,000,000.00**	

= Indicates a Project or Study Currently Budgeted in 2016-2020 Five Year Capital Improvemet Summary

Grand Total:	**$13,454,000.00**
Average / Year:	**$2,690,800.00**