

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe1

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 12

Condition: Good

Photo 1 Direction:

Comments:

FES type. On right side of drain facing upstream. Photo taken facing south.

Observation Location:

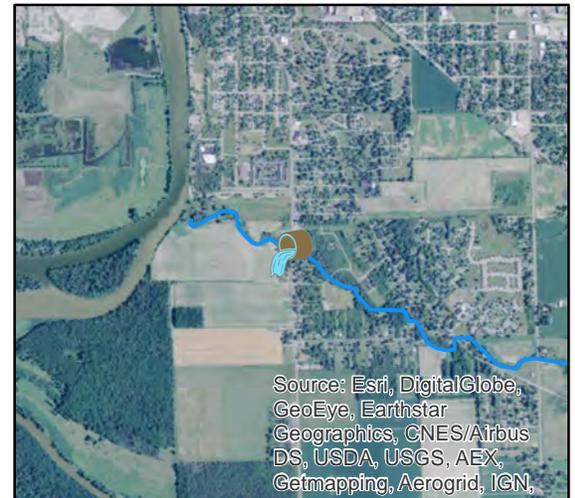


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe2

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 18

Condition: Good

Photo 1 Direction:

Comments:

Upstream right side 18" diameter east side of m-13 photo taken facing south, flows north

Observation Location:

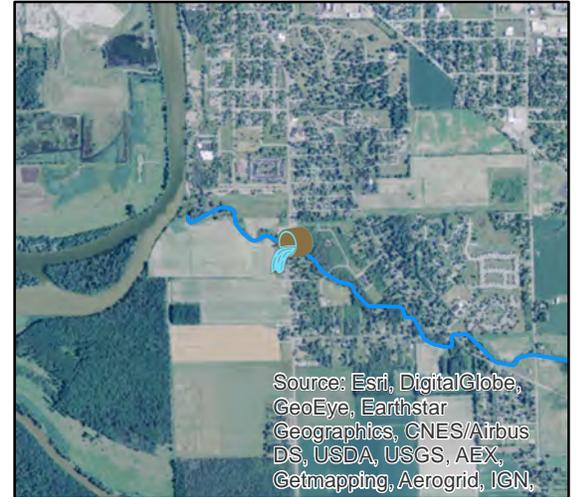


Photo 1

Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe3

Material Type: Concrete

Location:

Diameter (inches): 18

Condition: Good

Photo 1 Direction:

Comments:

FES outlet 18", left side of drain, east side of m-13, photo taken facing north, flows south

Observation Location:

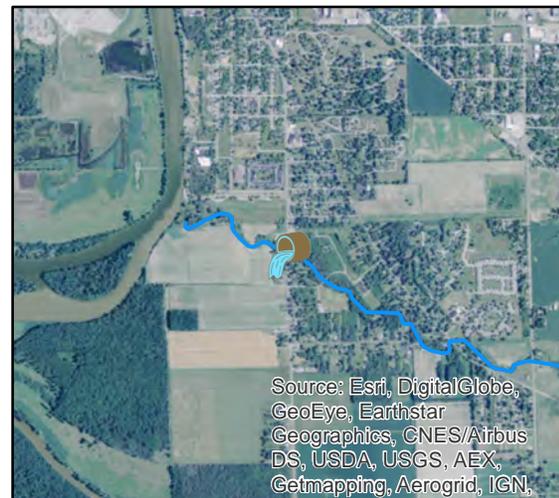


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe4

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 4

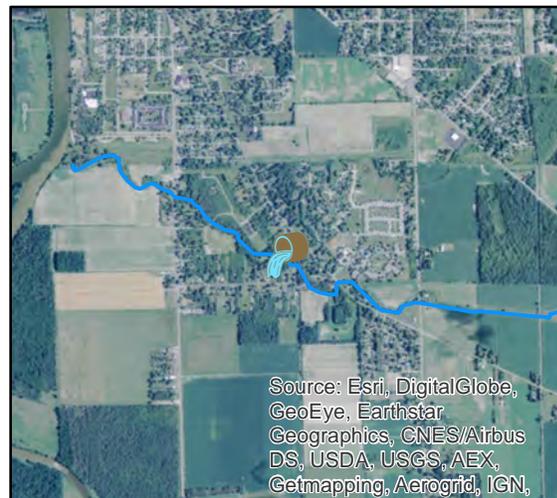
Condition: Good

Photo 1 Direction:

Comments:

Photo facing northeast. Enters drain on left. 4" hdpe.

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe5

Material Type: CMP

Location: Right Side Facing Upstream

Diameter (inches): 30

Condition: Fair

Photo 1 Direction:

Comments:

30" cmp enters drain from right side. Photo facing south. Broken concrete pieces around outlet to support as head wall.

Observation Location:

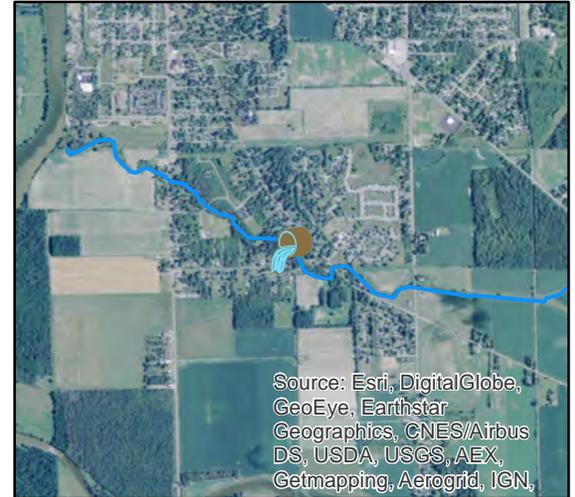


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe6

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 18

Condition: Good

Photo 1 Direction:

Comments:

18" concrete pipe enters drain from left. Photo facing north. Significant erosion at outlet and loose sediment. Elevated above drain about 3 ft. No splash pad present.

Observation Location:

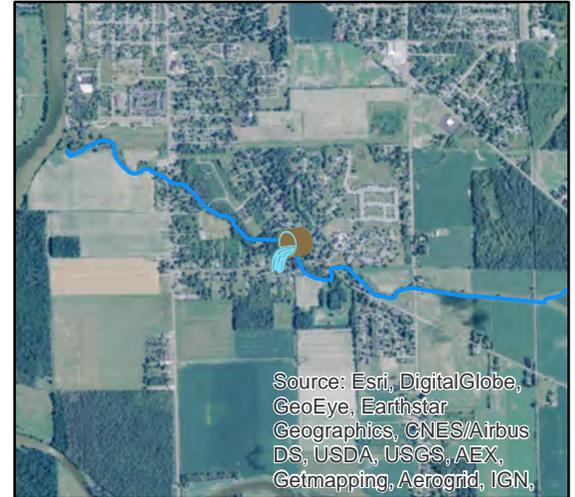


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe7

Material Type: Clay

Location: Left Side Facing Upstream

Diameter (inches): 2

Condition: Poor

Photo 1 Direction:

Comments:

Surface outlet pipe is broken. 2" clay on left side of drain. Erosion at outlet. Photo facing north.n

Observation Location:

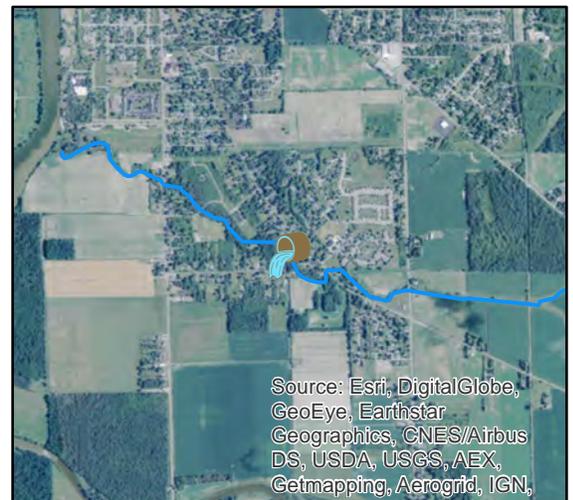


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe8

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 3

Condition: Fair

Photo 1 Direction:

Comments:

3" concrete pipe enters drain from left. Photo facing east.

Observation Location:

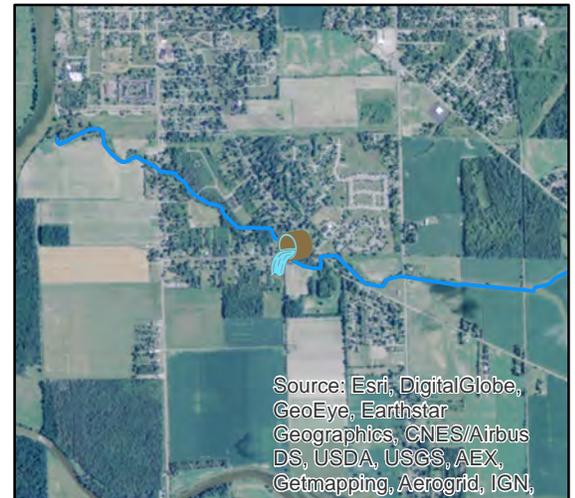


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe9

Material Type: SDR?PVC

Location: Right Side Facing Upstream

Diameter (inches): 1

Condition: Good

Photo 1 Direction:

Comments:

1.5" pic pipe enters drain on right. Probably from sump pump. Erosion at outlet. Photo facing west.

Observation Location:

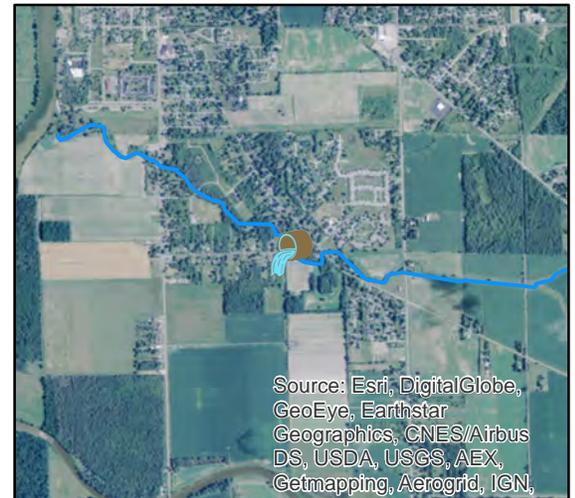


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe10

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 36

Condition: Good

Photo 1 Direction:

Comments:

Enters drain from left. Upstream of Washington rd. Cut into the side of the drain. Additional concrete headwall support. Flows southwest. Photo facing downstream.

Observation Location:

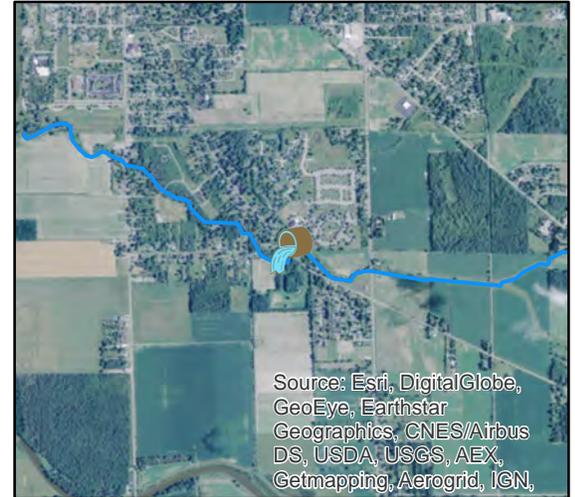


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe11

Material Type: CMP

Location: Right Side Facing Upstream

Diameter (inches): 12

Condition: Good

Photo 1 Direction:

Comments:

20 ft cmp connecting roadside ditch on southwest side of washington rd. Flows northwest. Photo facing northwest. Enters drain on right. 12" diam

Observation Location:

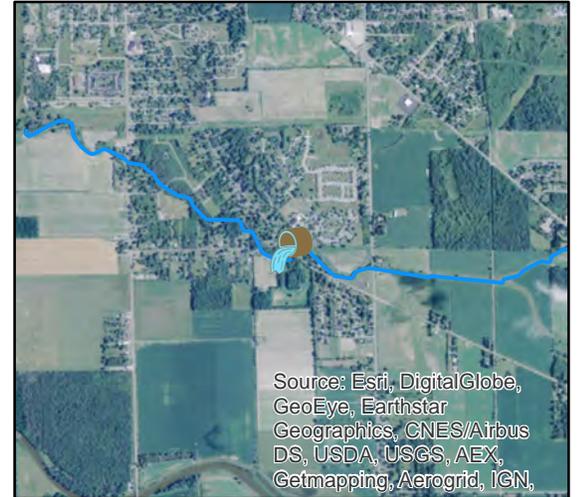


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe12

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 12

Condition: Failed

Photo 1 Direction:

Comments:

12" surface outlet pipe enters drain from left side downstream of Washington Rd. Broken at end. Within headwall and constructed bank. Flows southeast. Photo facing northwest.

Observation Location:

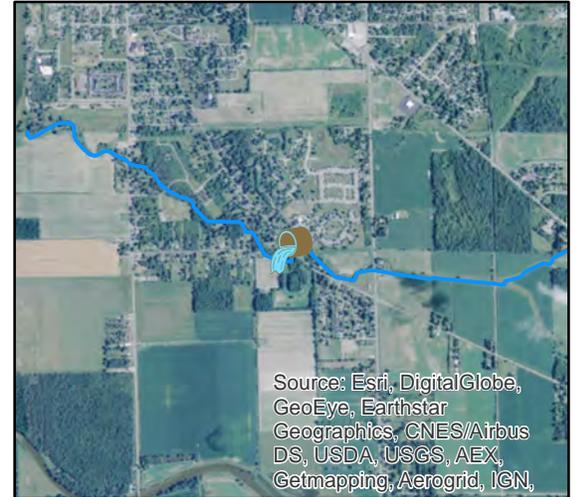


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe13

Material Type: CMP

Location: Right Side Facing Upstream

Diameter (inches): 12

Condition: Poor

Photo 1 Direction:

Comments:

12" cmp enters drain on right side. Rusted out in bottom. Photo1 facing upstream. Rusted out in bottom. 20 ft culvert carrying roadside ditch on southeast side of Washington rd. flows northwest.

Observation Location:

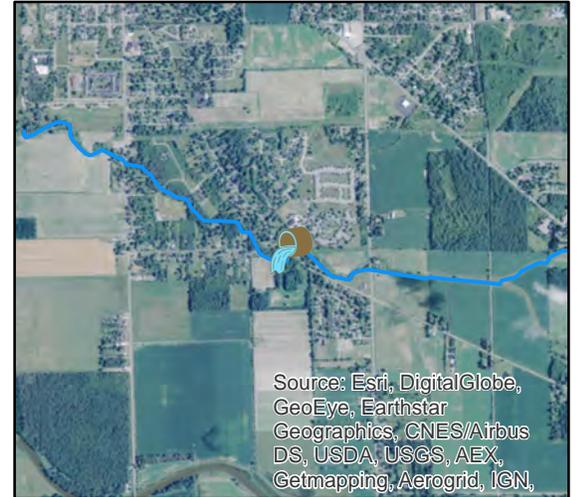


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe14

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 24

Condition: Fair

Photo 1 Direction:

Comments:

24" diam concrete surface outlet pipe. Head wall structure is falling and possibly depositing large rocks in drain. Photo1 facing south. Photo2 facing north.

Observation Location:

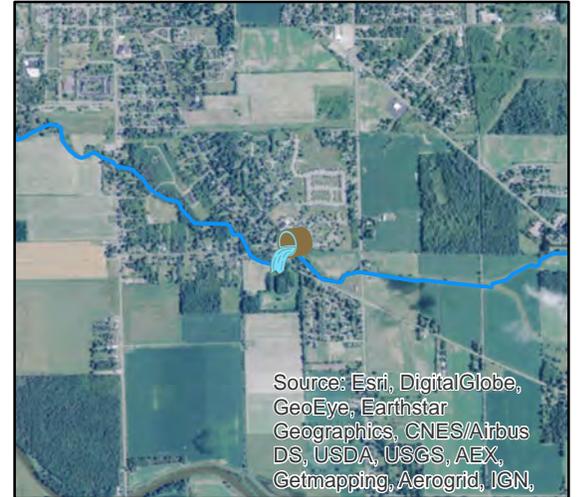


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe15

Material Type: Other

Location: Right Side Facing Upstream

Diameter (inches): 4

Condition: Fair

Photo 1 Direction:

Comments:

4" diam metal pipe enters drain from right. Photo facing upstream.

Observation Location:

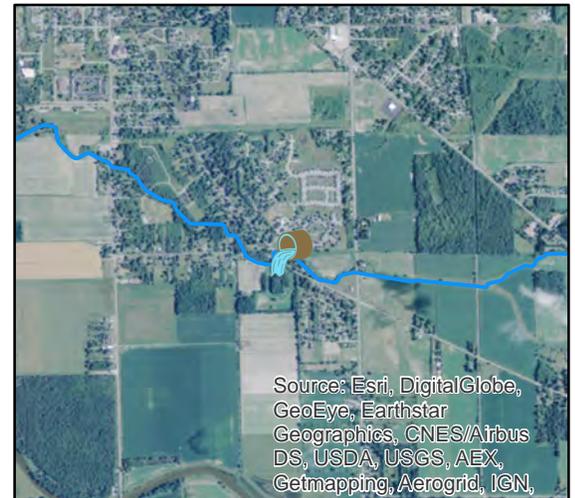


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe16

Material Type: Other

Location: Right Side Facing Upstream

Diameter (inches): 4

Condition: Fair

Photo 1 Direction:

Comments:
4" diam metal surface outlet pipe enters drain on right. Photo facing southwest.

Observation Location:

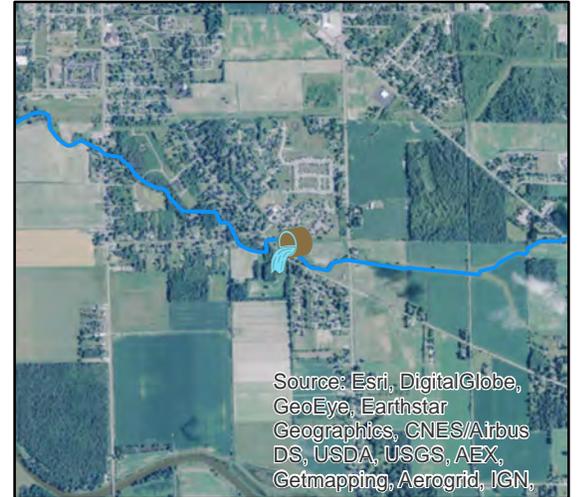


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe17

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 18

Condition: Failed

Photo 1 Direction:

Comments:

18" concrete surface outlet pipe enters drain on right side. Failed. Broken into multiple pieces with significant erosion around it. Photo facing south.

Observation Location:

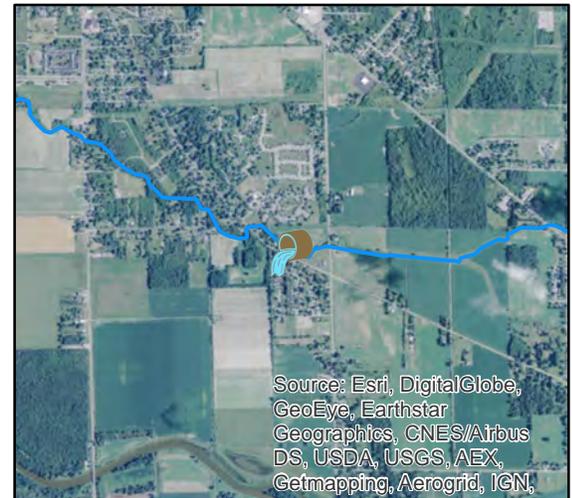


Photo 1



Photo 2

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe18

Material Type: Clay

Location: Right Side Facing Upstream

Diameter (inches): 4

Condition: Failed

Photo 1 Direction:

Comments:

4" clay surface outlet pipe. Failed condition. Ends 15" to right of drain. Caused erosion inland. Photos facing east.

Observation Location:

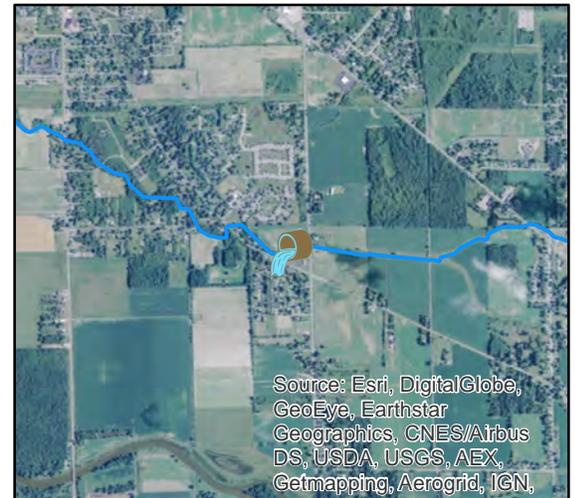


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe19

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 10

Condition:

Photo 1 Direction:

Comments:

10" surface outlet pipe enters drain. Cut into culvert. Photo1 facing downstream. Photo2 facing north.

Observation Location:

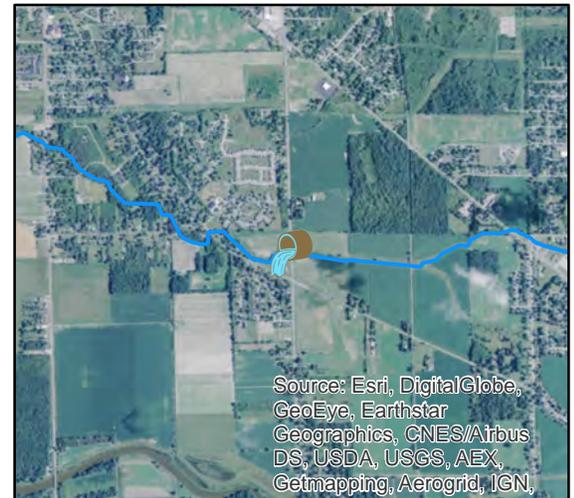


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe20

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 18

Condition: Fair

Photo 1 Direction: Northwest

Comments:

18" diam concrete sop enters drain on left. Bag riprap headwall in fair condition. Significant erosion behind it.

Observation Location:

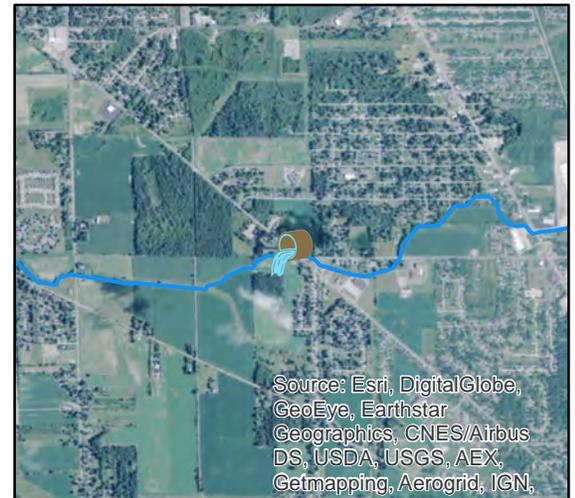


Photo 1



Photo 2

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe21

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 8

Condition: Fair

Photo 1 Direction: Southeast

Comments:

8" concrete sop enters drain on right side under bridge.

Observation Location:

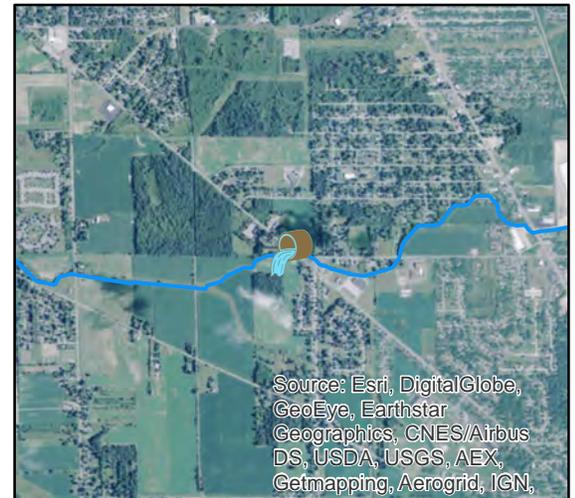


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe22

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 6

Condition: Fair

Photo 1 Direction: Northwest

Comments:

6" hdpe sop enters drain on left.

Observation Location:

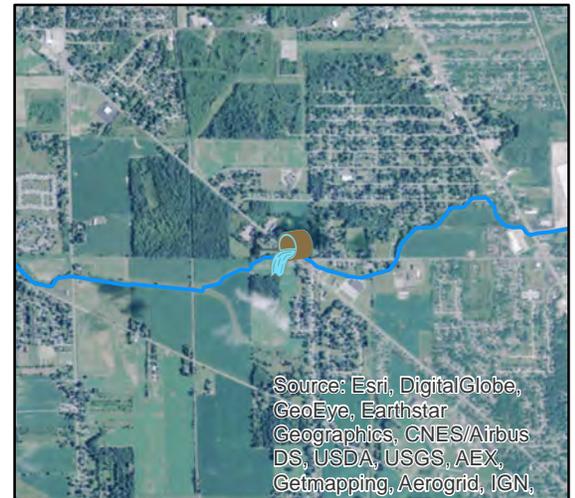


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe23

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 30

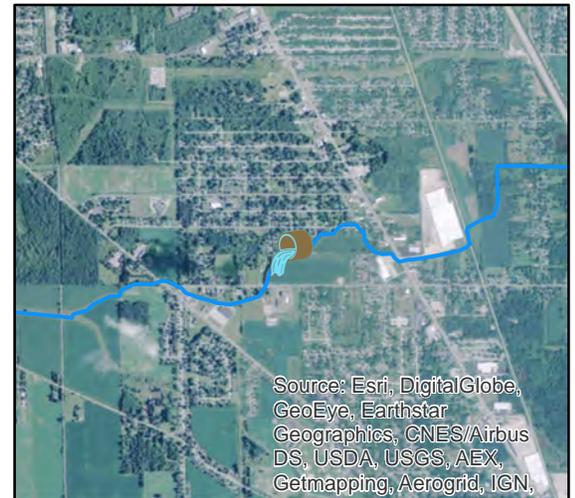
Condition: Poor

Photo 1 Direction: North

Comments:

30" rcp left side of the drain. Picture facing North

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe24

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 30

Condition: Good

Photo 1 Direction: East

Comments:

30" concrete sop enters drain on right side under bridge crossing. Flows west. On south side of King st.

Observation Location:

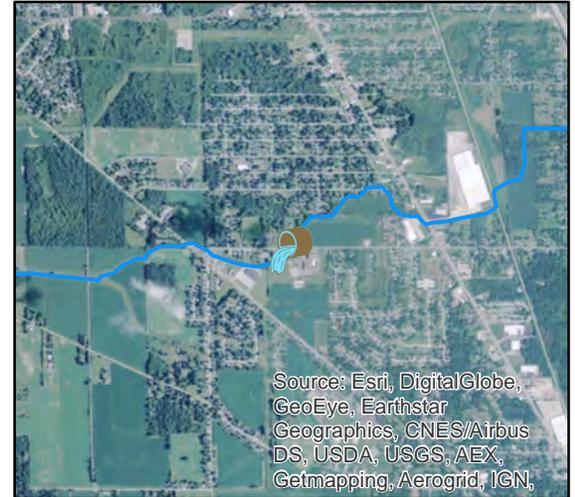


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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe25

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 12

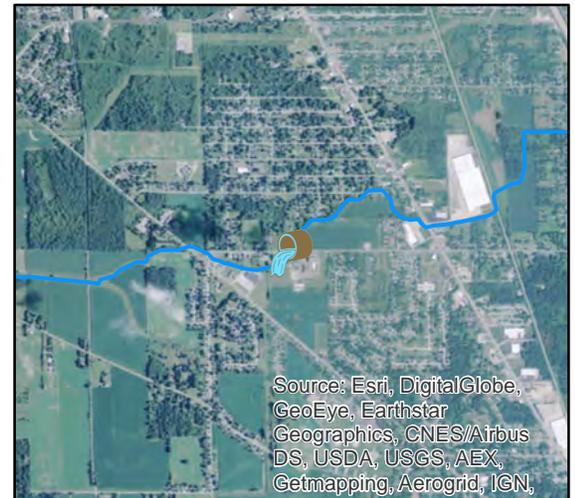
Condition: Fair

Photo 1 Direction: West

Comments:

12" concrete sop enters drain on left. Flows east. On south side of King st.

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe26

Material Type: CMP

Location: Right Side Facing Upstream

Diameter (inches): 18

Condition: Fair

Photo 1 Direction: East

Comments:

18" cmp enters drain on right. Cuts into culvert. In addition to 30" concrete sop. Flows west. On south side of King st.

Observation Location:

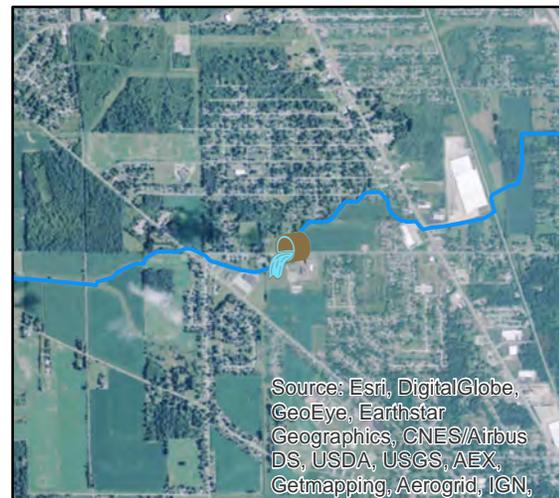


Photo 1



Photo 2

Photo 3

CLIENT	Saginaw County Public Works Commissioner	 HUBBELL, ROTH & CLARK, INC CONSULTING ENGINEERS SINCE 1915	555 Hulet Drive P.O. Box 824 Bloomfield Hills, MI 48303-0824 (248) 454-6300 http://www.hrc-engr.com	DATE:	08/16/2016
				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe27

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 6

Condition: Good

Photo 1 Direction: Facing Upstream

Comments:

6" diam hdpe sop enters drain on right. Spoke to homeowner who does not know where it is draining from.

Observation Location:

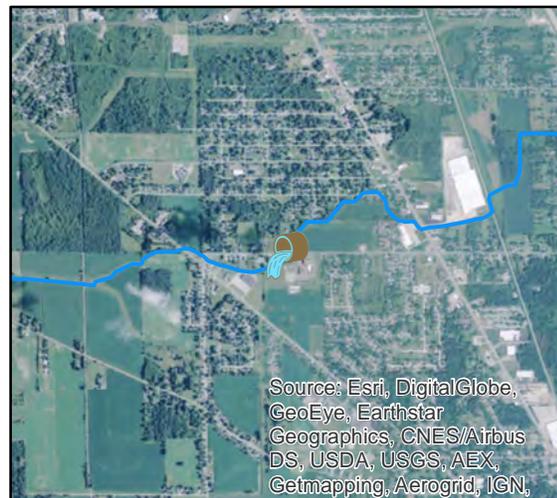


Photo 1



Photo 2

Photo 3

CLIENT	Saginaw County Public Works Commissioner	 HUBBELL, ROTH & CLARK, INC CONSULTING ENGINEERS SINCE 1915	555 Hulet Drive P.O. Box 824 Bloomfield Hills, MI 48303-0824 (248) 454-6300 http://www.hrc-engr.com	DATE:	08/16/2016
				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe28

Material Type: CMP

Location: Right Side Facing Upstream

Diameter (inches): 24

Condition: Poor

Photo 1 Direction: Facing Downstream

Comments:

24" cmp sop enters drain on left. Photo facing downstream. Rusted at outlet.

Observation Location:

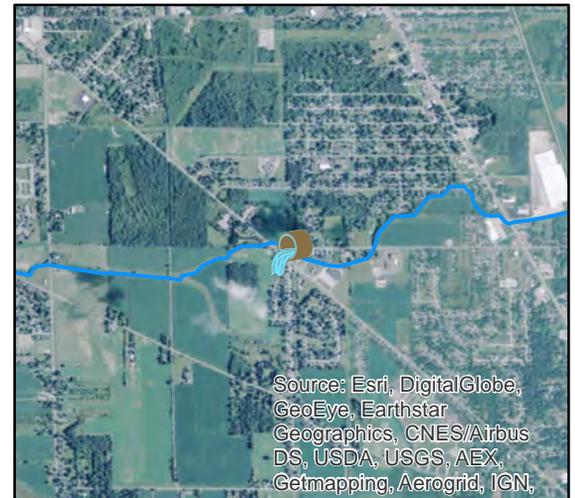


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe29

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 8

Condition: Poor

Photo 1 Direction: Facing Downstream

Comments:

8" cmp enters drain on left. Photo facing downstream. Rusted out. Enters drain under King St.

Observation Location:

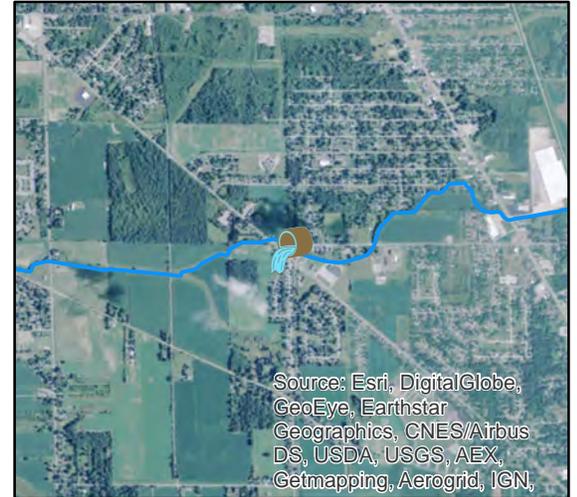


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe30

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 18

Condition: Poor

Photo 1 Direction: Southeast

Comments:

18" hdpe sop enters drain on right. End is falling apart. Headwall is eroding. Resulted in bank erosion and sediment bar.

Observation Location:

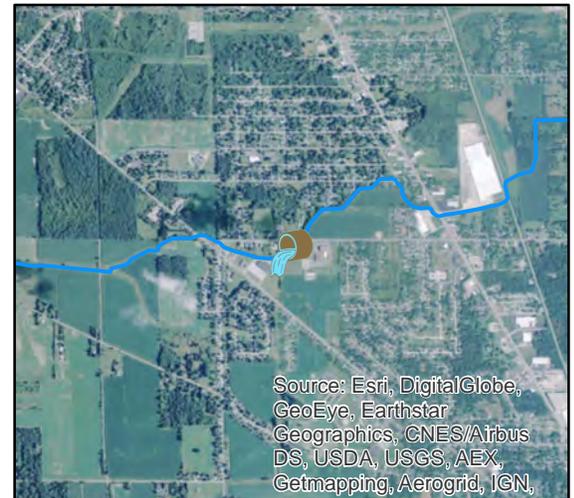


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe31

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 12

Condition: Good

Photo 1 Direction: South

Comments:

12" hdpe sop. Outlet to storm manhole. Enters drain on right. Flows north.

Observation Location:

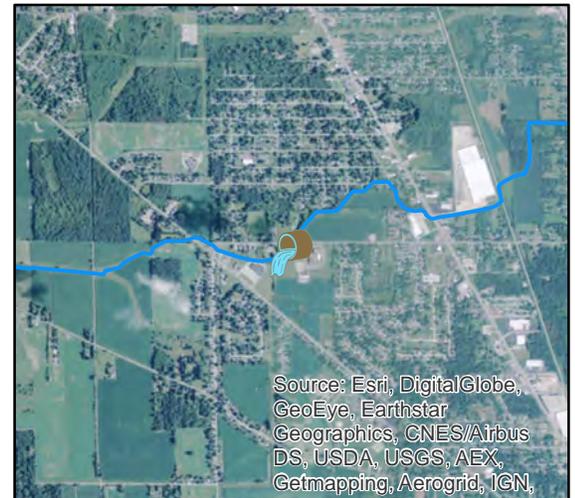


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe32

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 3

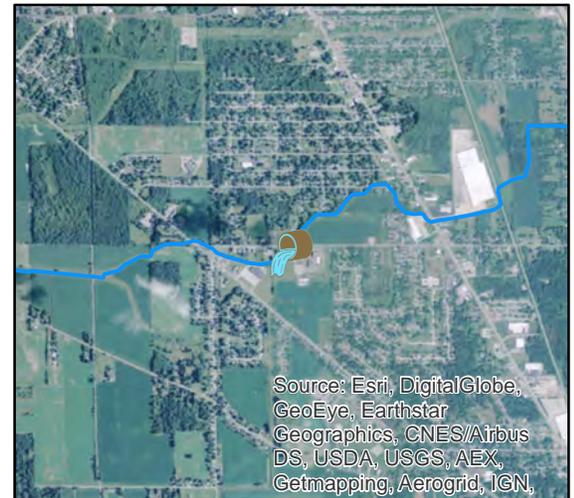
Condition: Poor

Photo 1 Direction: Facing Upstream

Comments:

3" hdpe sop enters drain on left at top of bank.

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe33

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 22

Condition: Poor

Photo 1 Direction: North

Comments:

Surface outlet pipe is turned up at the end and crushed slightly.

Observation Location:

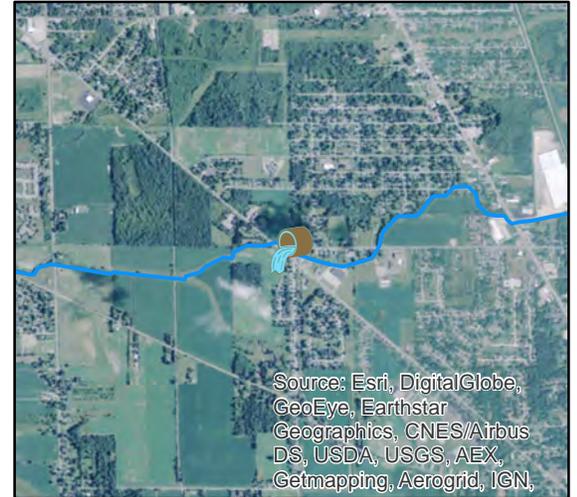


Photo 1



Photo 2



Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe34

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 6

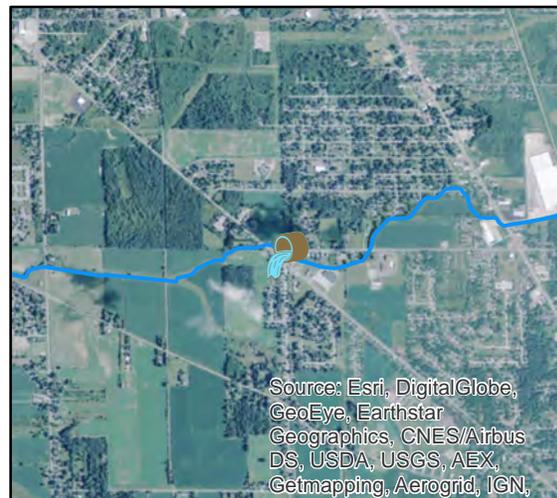
Condition: New

Photo 1 Direction: Facing Upstream

Comments:

HDPE inlet on left side of drain.

Observation Location:



Source: Esri, DigitalGlobe,
GeoEye, Earthstar
Geographics, CNES/Airbus
DS, USDA, USGS, AEX,
Getmapping, AeroGrid, IGN,

Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe35

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 6

Condition: New

Photo 1 Direction: Facing Upstream

Comments:
HDPE inlet at King Street crossing.

Observation Location:

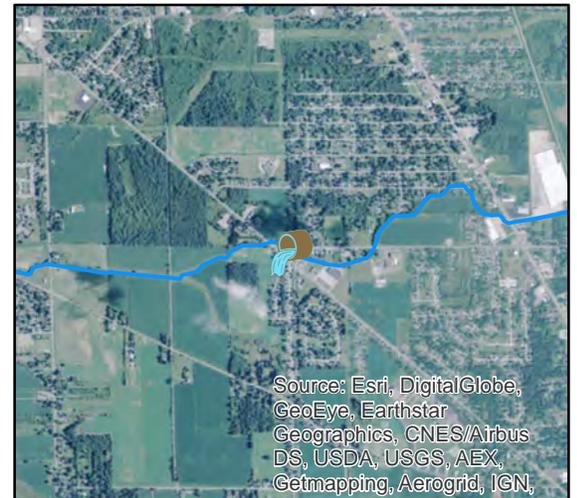


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe36

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 6

Condition: Good

Photo 1 Direction: Facing Upstream

Comments:

Surface outlet 6" HDPE on left side of drain.

Observation Location:

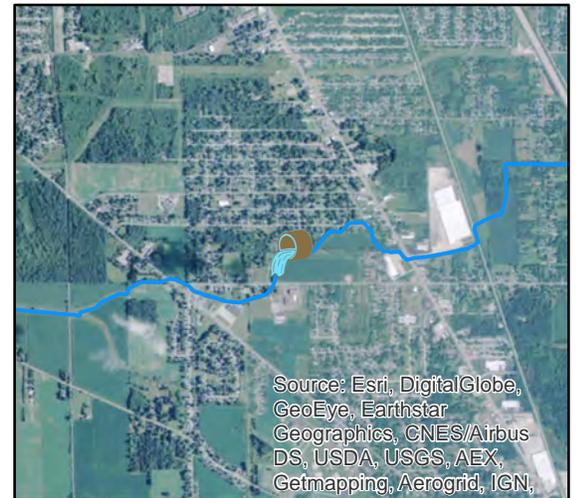


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe37

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 18

Condition: Fair

Photo 1 Direction: Southeast

Comments:

Black plastic field tile pipe in decent condition. On right side of drain.

Observation Location:

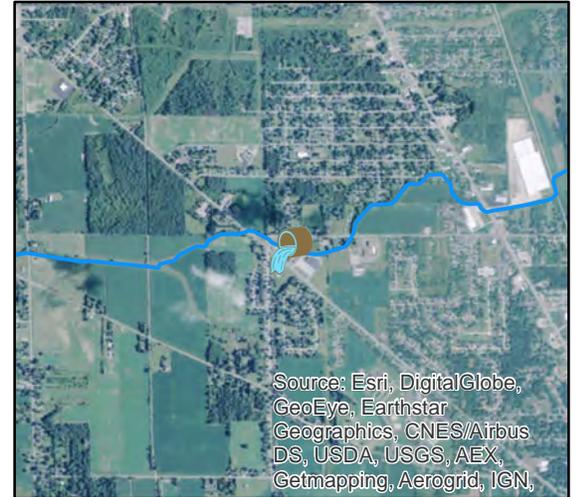


Photo 1



Photo 2



Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe38

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 20

Condition: Good

Photo 1 Direction: East

Comments:

Field tile pipe on right side of drain. Black plastic HDPE in good condition. About 20" diameter.

Observation Location:

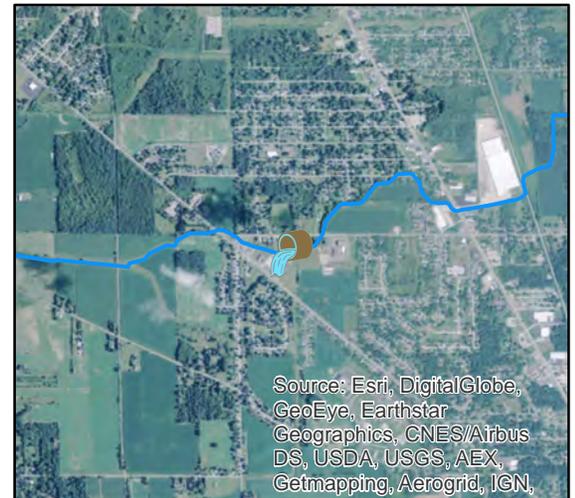


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe39

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 12

Condition: Fair

Photo 1 Direction: Southeast

Comments:

Surface outlet HDPE on right side of drain in fair condition. About 12" diameter. Extends into water. Manhole 100 ft right of drain leading to sop.

Observation Location:

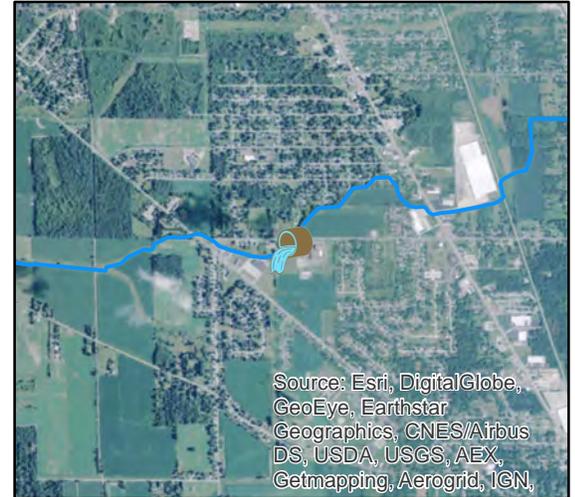


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe40

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 12

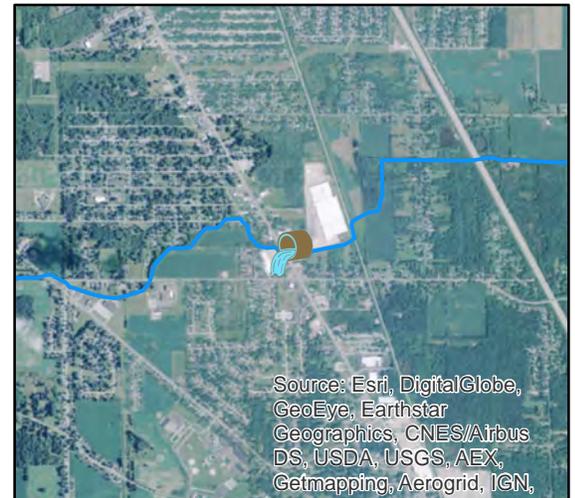
Condition: Fair

Photo 1 Direction: North

Comments:

12"rcp left side of the drain . Picture facing North

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe41

Material Type: Other

Location: Right Side Facing Upstream

Diameter (inches): 3

Condition: Fair

Photo 1 Direction: Southeast

Comments:

3" metal sop enters drain on right. Flows northwest.

Observation Location:

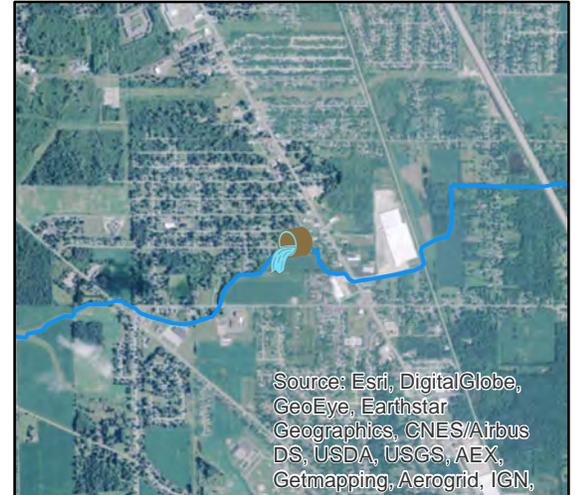


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe42

Material Type: CMP

Location: Right Side Facing Upstream

Diameter (inches): 24

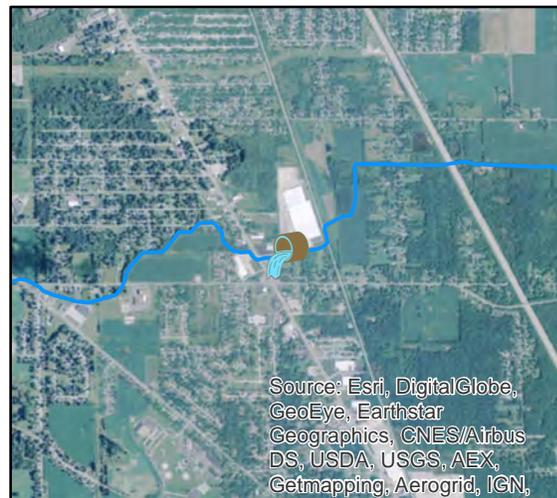
Condition: Good

Photo 1 Direction: South

Comments:

24" cmp right side of the drain. Picture facing South.

Observation Location:



Source: Esri, DigitalGlobe,
GeoEye, Earthstar
Geographics, CNES/Airbus
DS, USDA, USGS, AEX,
Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe43

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 42

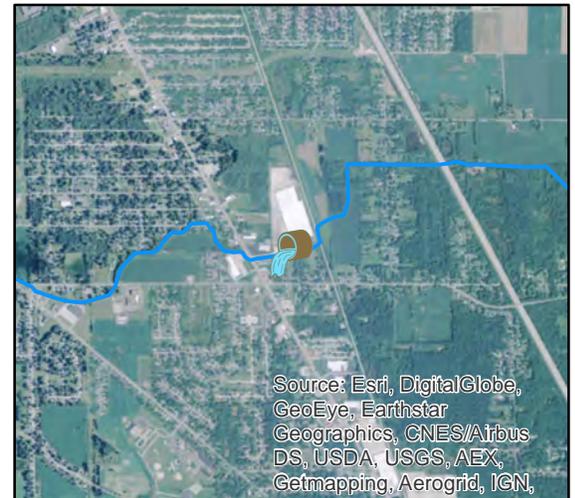
Condition: Good

Photo 1 Direction: North

Comments:

42" rcp end section left side of the drain. Picture facing north.

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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				SCALE:	
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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe44

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 24

Condition: Fair

Photo 1 Direction: Facing Upstream

Comments:

24" cmp sop flows southeast, on west side of Broadway st. Enters drain on left.

Observation Location:

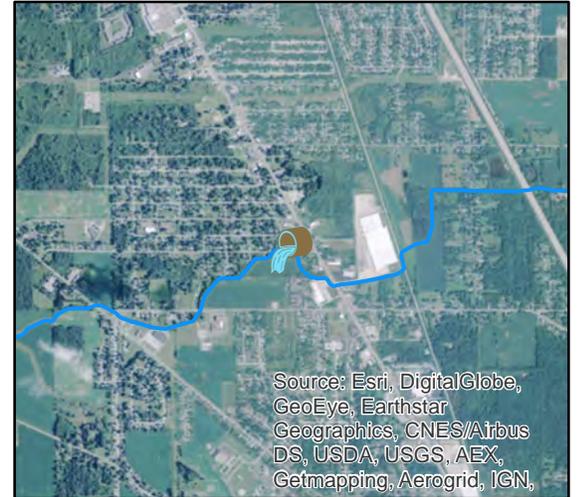


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe45

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 6

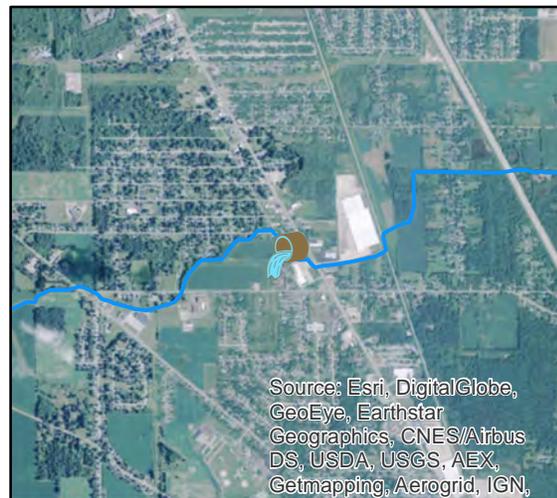
Condition: Good

Photo 1 Direction: Northeast

Comments:

6" concrete sop enters drain on left.

Observation Location:



Source: Esri, DigitalGlobe,
 GeoEye, Earthstar
 Geographics, CNES/Airbus
 DS, USDA, USGS, AEX,
 Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe46

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 24

Condition: Fair

Photo 1 Direction: Facing Upstream

Comments:

24" concrete pipe with grate enters drain on right. Flows north. Erosion around head wall. Upstream of fence.

Observation Location:

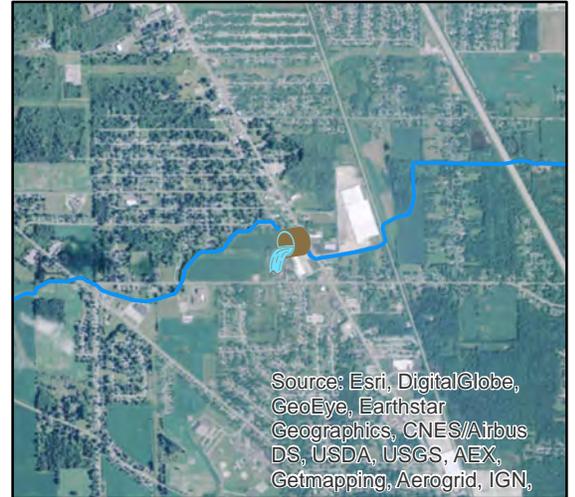


Photo 1



Photo 2



Photo 3



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			P.O. Box 824		SCALE:	
NOTE			Bloomfield Hills, MI 48303-0824		SHEET #:	
			(248) 454-6300		JOB #:	20160331
			http://www.hrc-engr.com			

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe47

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 24

Condition: Failed

Photo 1 Direction: Facing Upstream

Comments:

24" concrete sop enters drain on right. Flows north. End section has broken off. Significant erosion at broken part of outlet.

Observation Location:

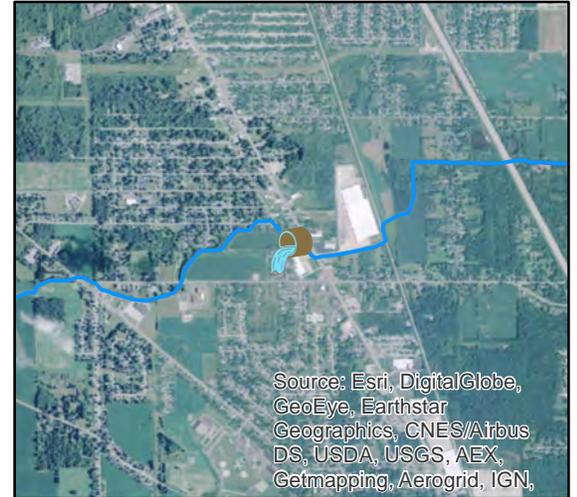


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe48

Material Type: SDR?PVC

Location: Right Side Facing Upstream

Diameter (inches):

Condition: Fair

Photo 1 Direction: South

Comments:

6" pic sop enters drain on right.

Observation Location:

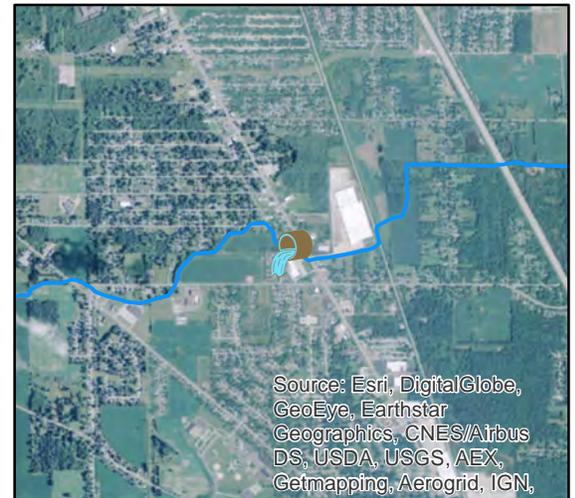


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe49

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 40

Condition: Good

Photo 1 Direction: North

Comments:

Surface outlet concrete pipe on left side of drain protruding from underneath tree. About 40" diameter in good condition. Flow path beneath there is broken stone/concrete.

Observation Location:

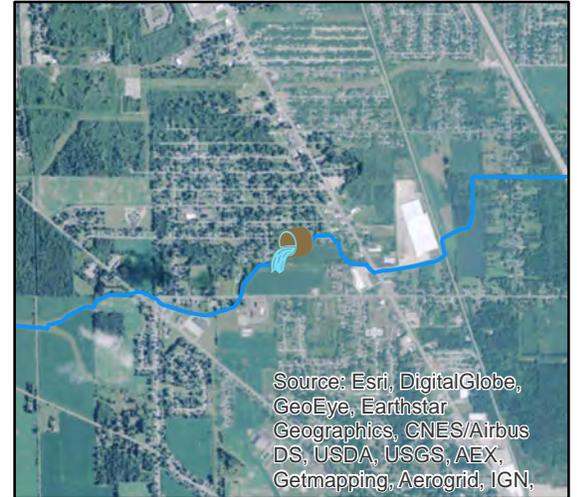


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe50

Material Type: SDR?PVC

Location: Left Side Facing Upstream

Diameter (inches): 4

Condition: Good

Photo 1 Direction: North

Comments:

Surface outlet PVC pipe on left side of drain. Good condition, but bottom of pipe is a little broken off.

Observation Location:

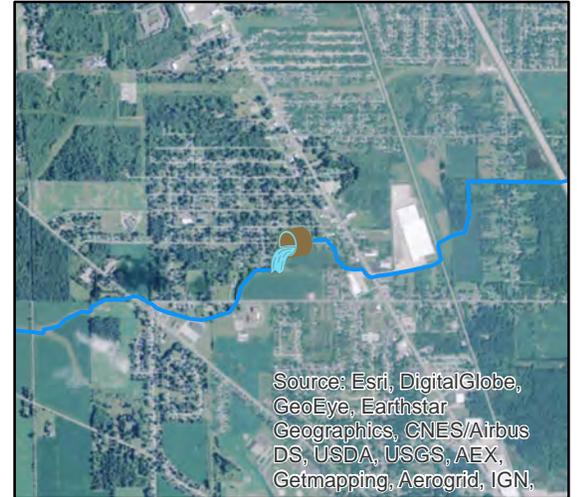


Photo 1



Photo 2



Photo 3

CLIENT	Saginaw County Public Works Commissioner	 HUBBELL, ROTH & CLARK, INC CONSULTING ENGINEERS SINCE 1915	555 Hulet Drive P.O. Box 824 Bloomfield Hills, MI 48303-0824 (248) 454-6300 http://www.hrc-engr.com	DATE:	08/16/2016
				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe51

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 4

Condition: Failed

Photo 1 Direction: Northwest

Comments:

Failed CMP surface outlet on left side of drain. 4" pipe. Rusted, broken and filled with dirt. Not in working condition.

Observation Location:

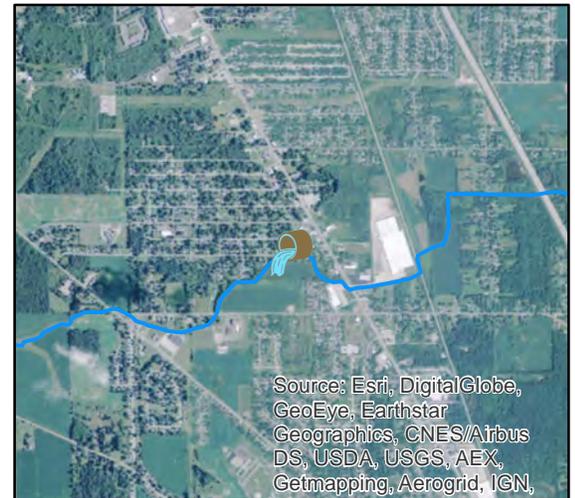


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe52

Material Type: SDR?PVC

Location: Right Side Facing Upstream

Diameter (inches): 24

Condition: Good

Photo 1 Direction: Facing Upstream

Comments:

PVC 24" pipe on right side of drain. Significant drop in drain depth where pipe is. Some woody debris in front of pipe.

Observation Location:

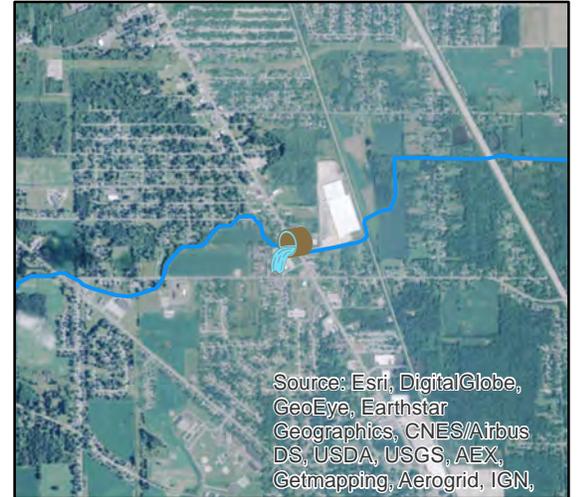


Photo 1



Photo 2



Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe53

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 12

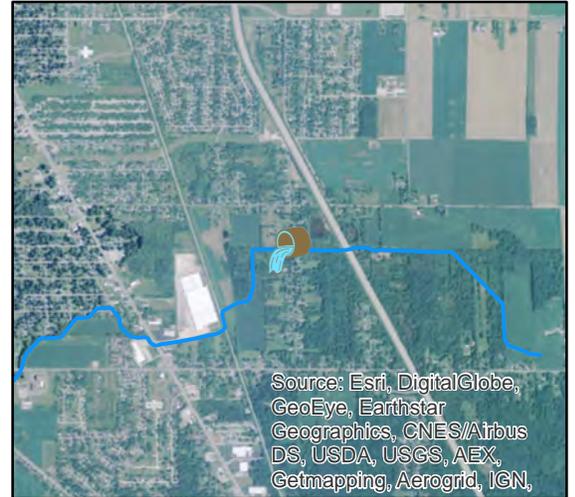
Condition: Good

Photo 1 Direction: Facing Upstream

Comments:

12" HDPE surface outlet pipe on either side of drain. Picture facing upstream.

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe54

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 12

Condition: Good

Photo 1 Direction: Facing Upstream

Comments:

12" HDPE surface outlet pipes on either side of culvert crossing. Picture facing upstream.

Observation Location:

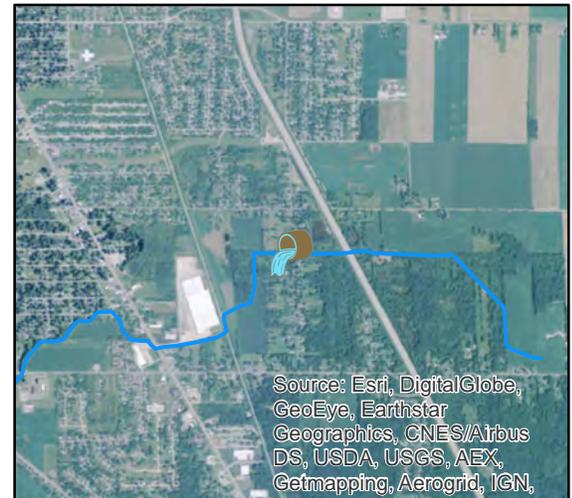


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe55

Material Type: Concrete

Location: Right Side Facing Upstream

Diameter (inches): 30

Condition: Fair

Photo 1 Direction: Facing Upstream

Comments:

Surface outlet metal concrete pipe on right side of drain. 30" wide. Has sediment built up inside and extending log protruding out. Erosion above and around pipe.

Observation Location:

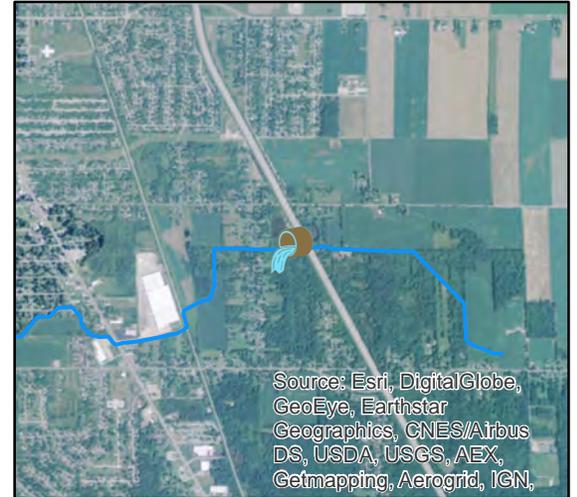


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe56

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 24

Condition: Good

Photo 1 Direction: Facing Upstream

Comments:

24" hdpe flows south on I75. Large stone head wall. Enters drain on left.

Observation Location:

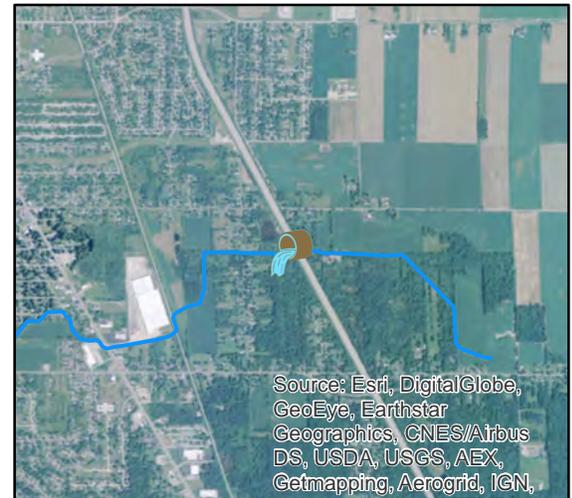


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe57

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 24

Condition: Good

Photo 1 Direction: South

Comments:

24" hdpe flows north along I75 and enters drain on right.

Observation Location:

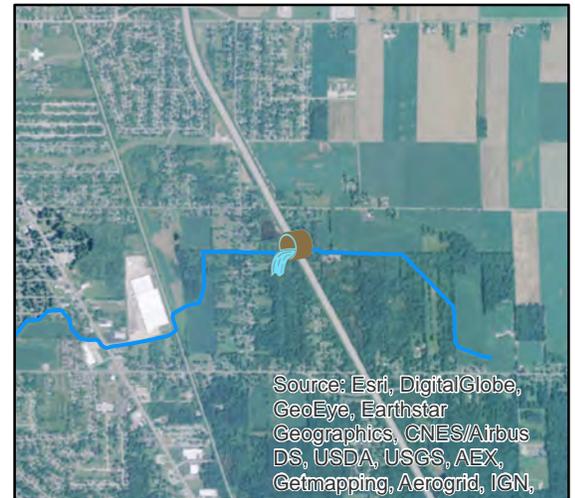


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe58

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 24

Condition: New

Photo 1 Direction: South

Comments:

24" hdpe sop enters drain on right from I75. New riprap headwall.

Observation Location:

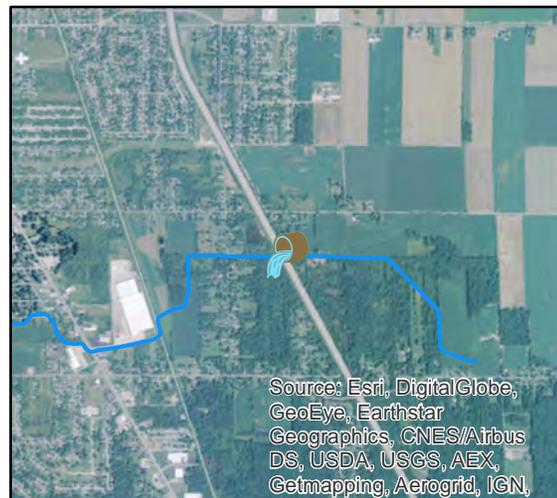


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe59

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 24

Condition: New

Photo 1 Direction: North

Comments:

24" diam hdpe sop enters drain on left. Flows south along I75. New riprap headwall.

Observation Location:

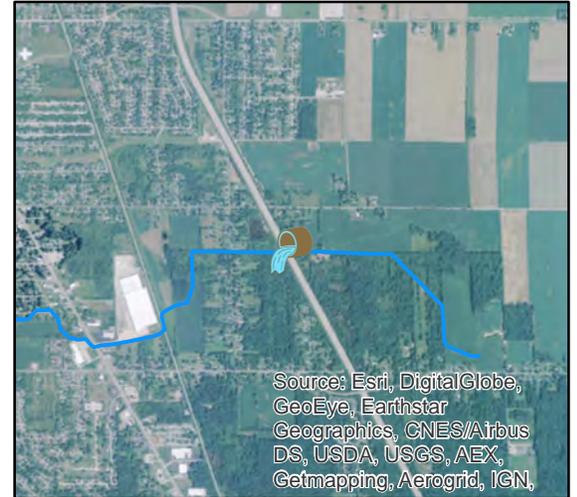


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe60

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 24

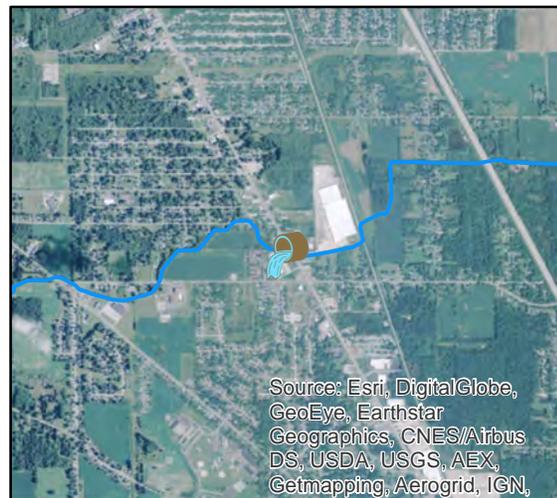
Condition: Good

Photo 1 Direction: Facing Downstream

Comments:

24" HDPE entering drain on right side facing upstream.

Observation Location:



Source: Esri, DigitalGlobe,
GeoEye, Earthstar
Geographics, CNES/Airbus
DS, USDA, USGS, AEX,
Getmapping, AeroGrid, IGN,

Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe61

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 12

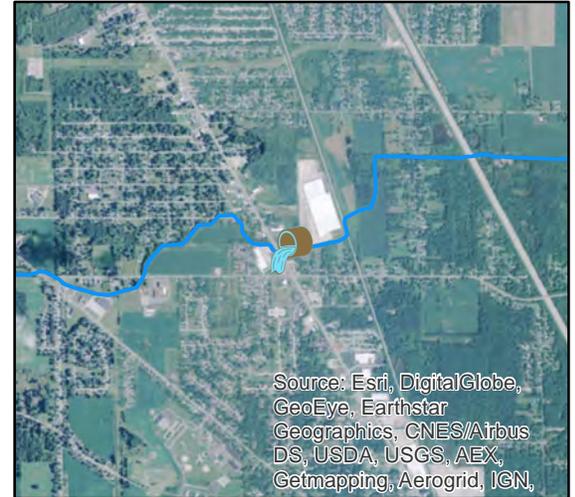
Condition: Good

Photo 1 Direction: North

Comments:

12" concrete bell outlet side drain on left side of drain facing upstream. Erosion at the mouth. Picture facing north from center of drain.

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe62

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 24

Condition: Good

Photo 1 Direction: Facing Upstream

Comments:
24" CMP surface outlet pipe with rip rap. Picture facing upstream.

Observation Location:

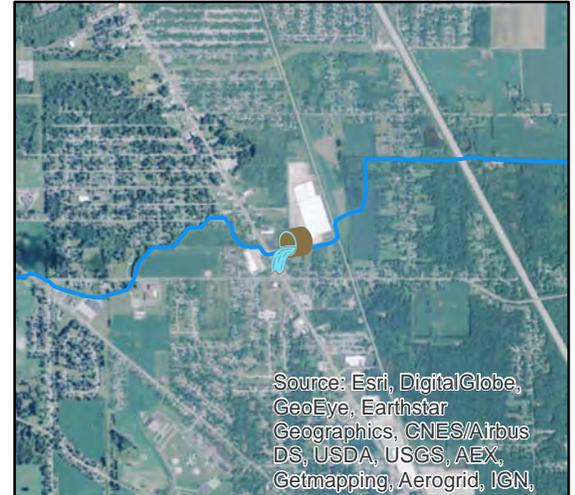


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe63

Material Type: CMP

Location: Left Side Facing Upstream

Diameter (inches): 12

Condition: Good

Photo 1 Direction: Facing Upstream

Comments:

12" CMP surface outlet pipe coming into drain on left side facing upstream. Picture facing upstream.

Observation Location:

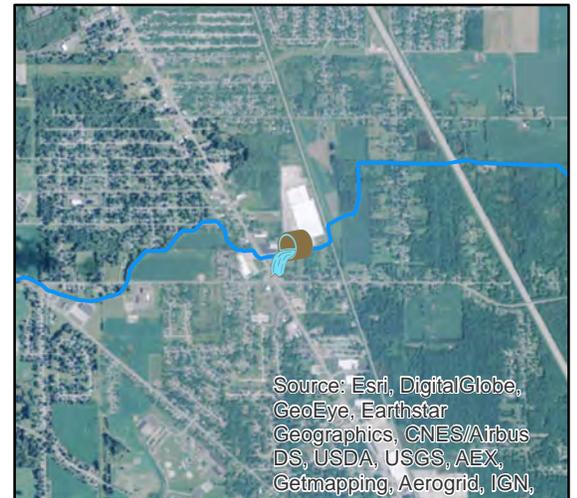


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe64

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 6

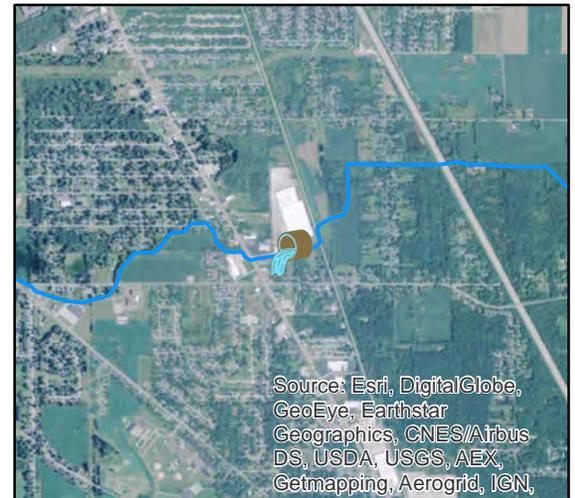
Condition: Good

Photo 1 Direction: South

Comments:

Surface outlet pipe on the right side. 6" HDPE. Picture facing south from drain.

Observation Location:



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN,

Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe65

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 18

Condition: Good

Photo 1 Direction: North

Comments:

18" concrete surface outlet pipe with splash pad on left side of drain facing upstream. Picture facing north from center of drain.

Observation Location:

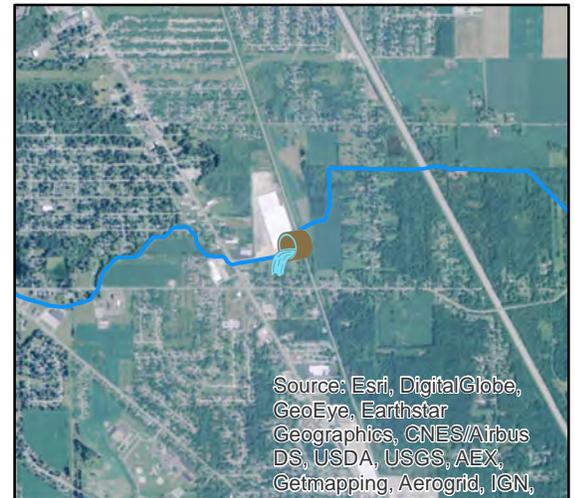


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe66

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 24

Condition:

Photo 1 Direction:

Comments:

24" RCP left side of the drain, picture facing upstream.

Observation Location:

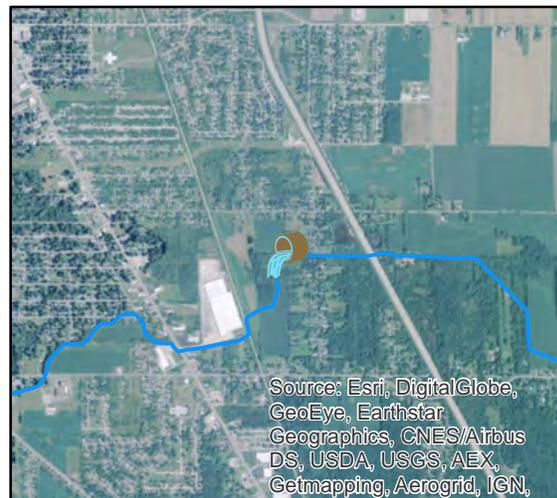


Photo 1



Photo 2

Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe67

Material Type: Concrete

Location: Left Side Facing Upstream

Diameter (inches): 30

Condition: Fair

Photo 1 Direction: Facing Upstream

Comments:

30" RCP left side of the drain. Picture facing upstream.

Observation Location:

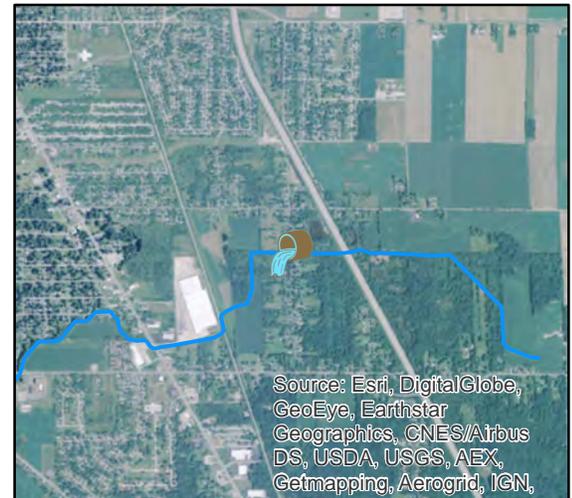


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe68

Material Type: HDPE

Location: Right Side Facing Upstream

Diameter (inches): 10

Condition: Failed

Photo 1 Direction: Facing Upstream

Comments:

10" HDPE right side of drain. Picture facing upstream.

Observation Location:

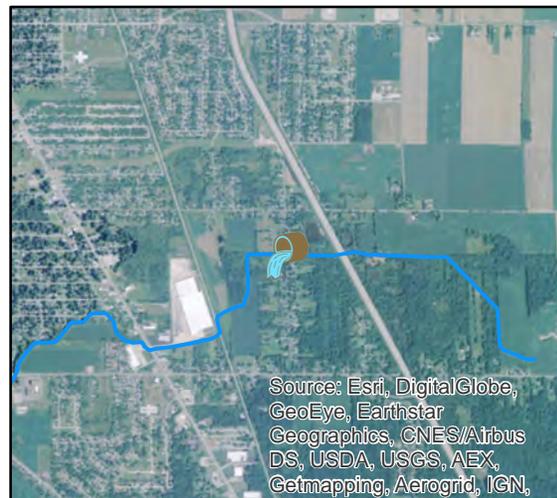


Photo 1



Photo 2

Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe69

Material Type: HDPE

Location: Left Side Facing Upstream

Diameter (inches): 12

Condition: Good

Photo 1 Direction: South

Comments:

Surface outlet pipe located on left side of drain facing upstream. Picture one is of inlet end of pipe facing south across drain. Picture two is outlet end facing south. Unable to locate outlet end.

Observation Location:

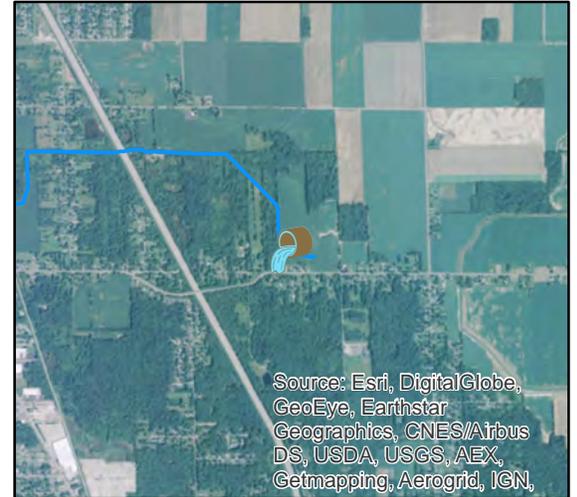


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
SurfaceOutletPipe70

Material Type: CMP

Location:

Diameter (inches): 10

Condition: Fair

Photo 1 Direction: Facing Downstream

Comments:

10" cmp draning swale from the south into beehive catch basin approx 20' Northwest. Picture facing downstream

Observation Location:

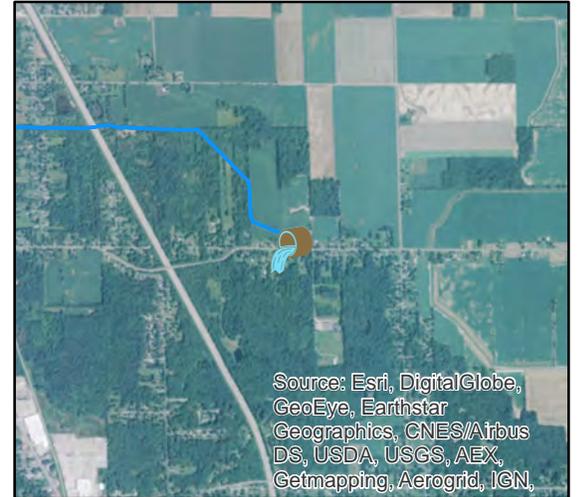


Photo 1



Photo 2

Photo 3

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				JOB #:	20160331