

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage200

Type: Non-Vegetative Debris

Blockage Length (feet): 300

Debris Length (feet):

Location: Center

Photo 1 Direction:

Comments:

Trash and concrete blocks in drain next 300 ft. Photo facing upstream.

Observation Location:

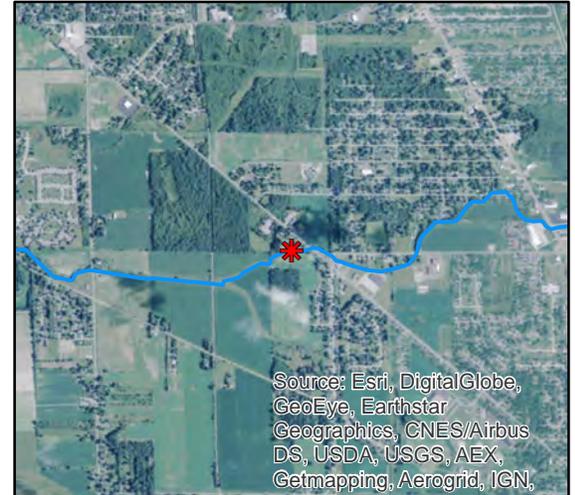


Photo 1



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:
Blockage201

Type: Fallen Tree

Blockage Length (feet): 10

Debris Length (feet): 30

Location:

Photo 1 Direction:

Comments:

Huge fallen tree from right side of drain extending across drain. About 50" diameter, 30 ft tree. Photo 1 taken facing upstream. Photo 2 taken facing southeast.

Observation Location:

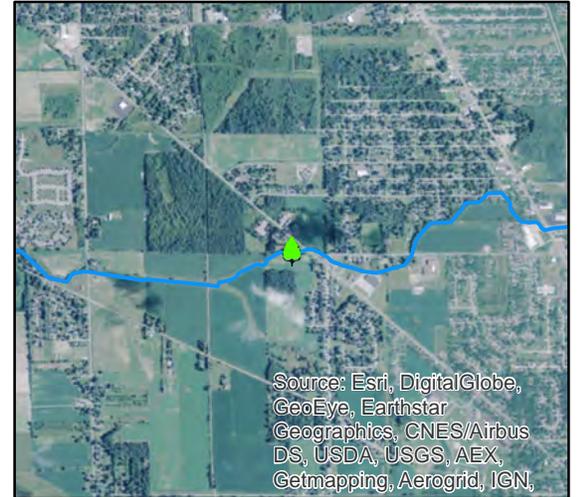


Photo 1



Photo 2



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage202

Type: Log Jam

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction:

Comments:

Log jam next 50 ft. Includes trash and woody debris. Photo1 facing upstream. Photo2 facing downstream.

Observation Location:

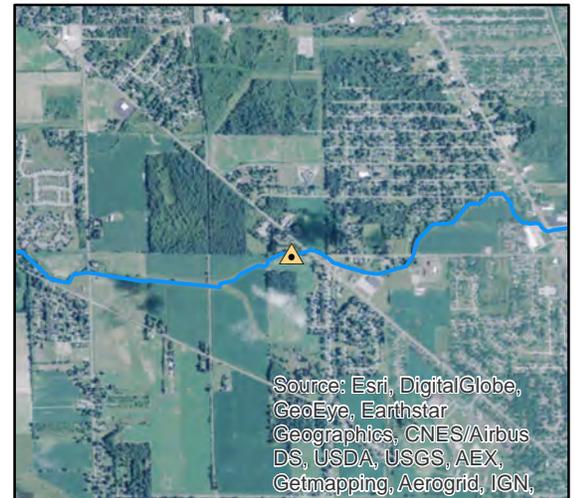


Photo 1



Photo 2



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage203

Type: Sediment

Blockage Length (feet): 4

Debris Length (feet):

Location: Center

Photo 1 Direction:

Comments:

Sediment bar in center of drain. Photo facing upstream.

Observation Location:

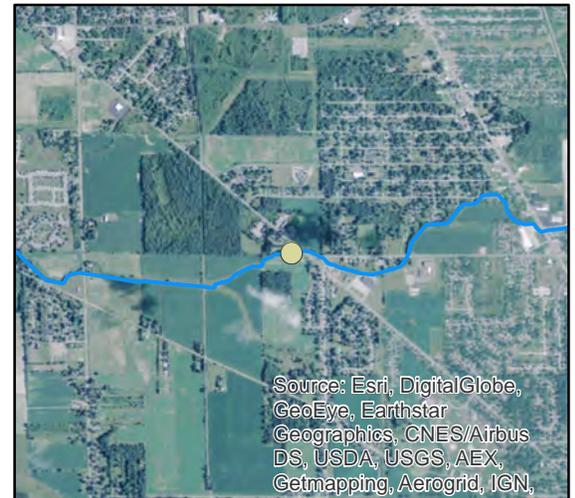


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage204

Type: Excessive Vegetation

Blockage Length (feet): 200

Debris Length (feet):

Location:

Photo 1 Direction:

Comments:

Excessive vegetation from trees on banks overhanging the drain. Next 200 ft up williamson rd. Photo facing upstream.

Observation Location:

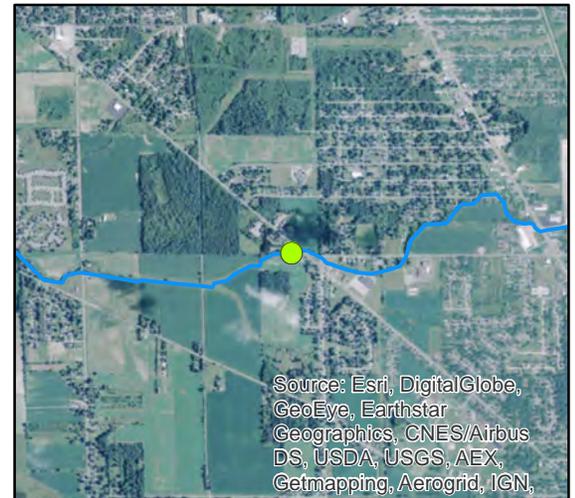


Photo 1

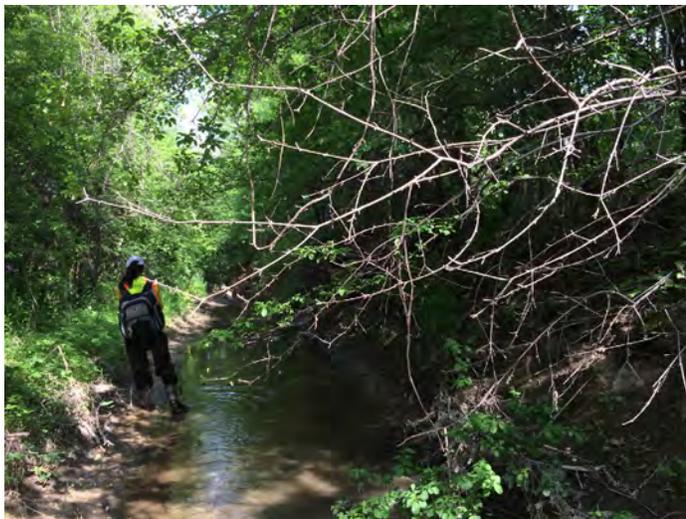


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage205

Type: Sediment

Blockage Length (feet): 20

Debris Length (feet):

Location: Left

Photo 1 Direction:

Comments:

Sediment bar on left side. Photo facing upstream.

Observation Location:

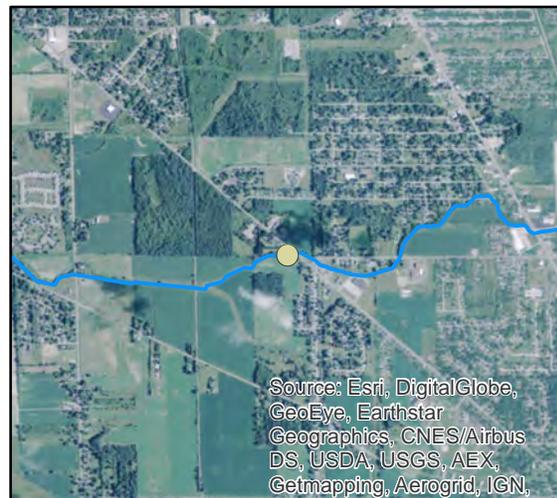


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage206

Type: Log Jam

Blockage Length (feet):

Debris Length (feet): 25

Location:

Photo 1 Direction:

Comments:

4" diam tree fell on right side of drain and is overhanging drain. Photo facing upstream.

Observation Location:

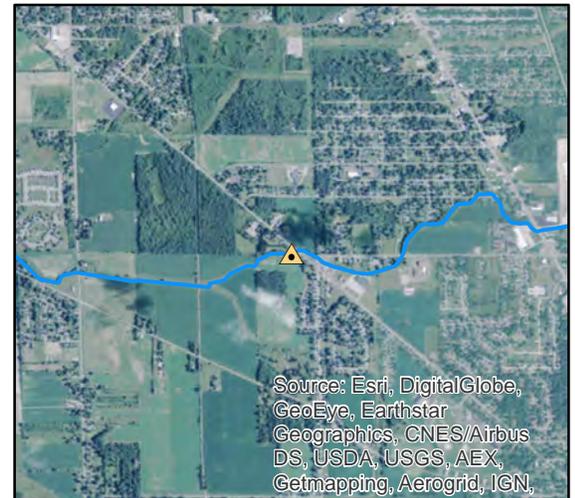


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage207

Type: Non-Vegetative Debris

Blockage Length (feet): 80

Debris Length (feet):

Location:

Photo 1 Direction:

Comments:

Trash debris on both sides of drain. Photo taken facing upstream.

Observation Location:

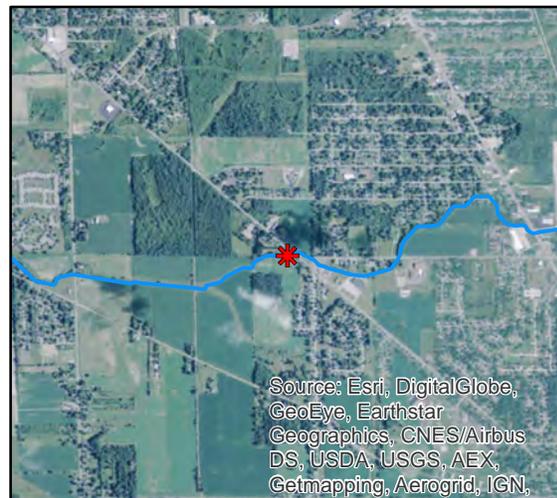


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage208

Type: Fallen Tree

Blockage Length (feet): 15

Debris Length (feet): 20

Location: Left

Photo 1 Direction:

Comments:

Fallen tree from left side of drain extending across to the other side.
Photo taken facing upstream.

Observation Location:

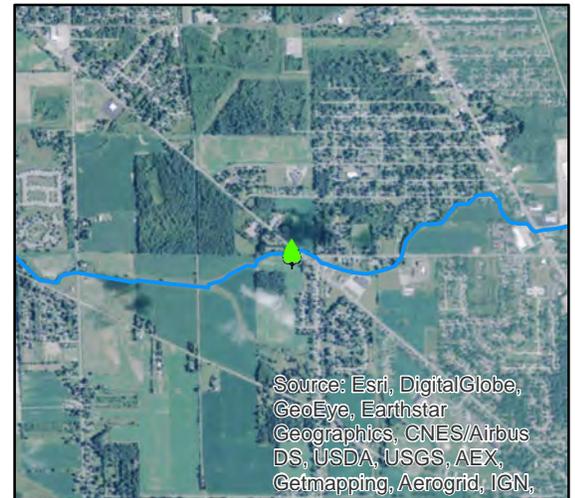


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage209

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation along the drain from this location approx. 500' upstream to end. Picture facing upstream

Observation Location:

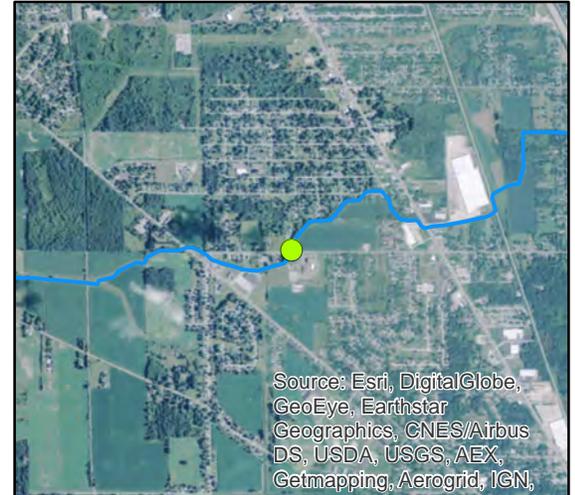


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage210

Type: Log Jam

Blockage Length (feet): 25

Debris Length (feet):

Location:

Photo 1 Direction: Facing Upstream

Comments:

Log jam . Picture facing upstream

Observation Location:

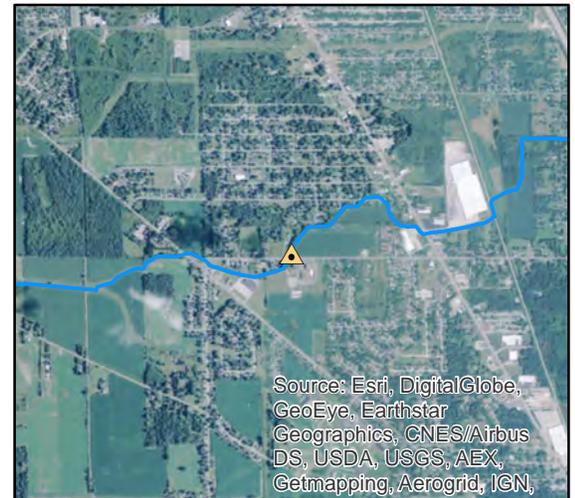


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Inspection Report for Observation:
Blockage211

Type: Non-Vegetative Debris

Blockage Length (feet): 10

Debris Length (feet):

Location:

Photo 1 Direction: Facing Upstream

Comments:

Wood 4x4 's and other lumber in the drain . Picture facing upstream.

Observation Location:

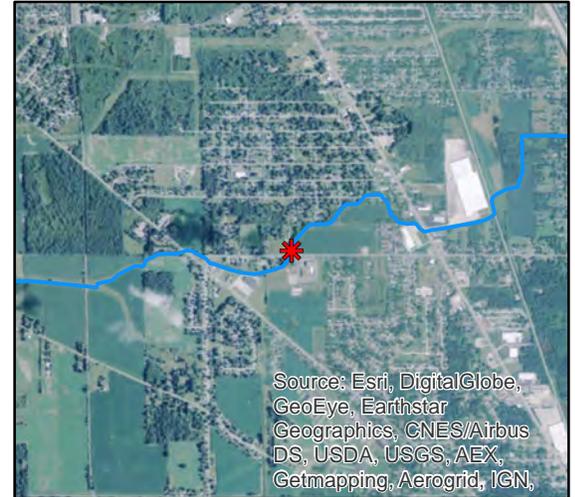


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage212

Type: Sediment

Blockage Length (feet): 24

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar just downstream of log jam and side drain from this location approx 25' upstream to end.

Observation Location:

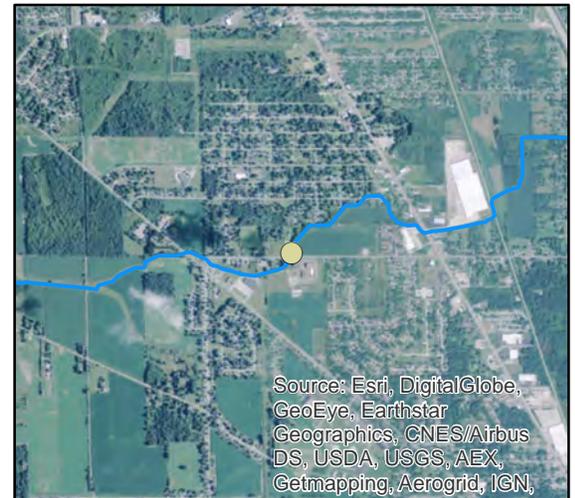


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage213

Type: Sediment

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar in drain from this location approx 20' upstream to end.
Picture facing upstream

Observation Location:

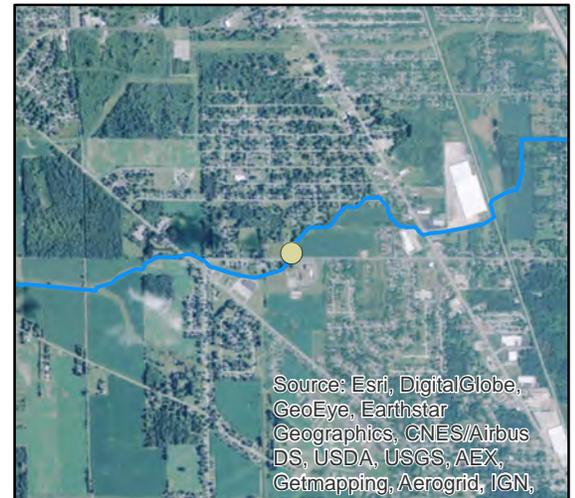


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage214

Type: Sediment

Blockage Length (feet): 75

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar left side of the drain from this location approx 75' upstream to end. Picture facing upstream

Observation Location:

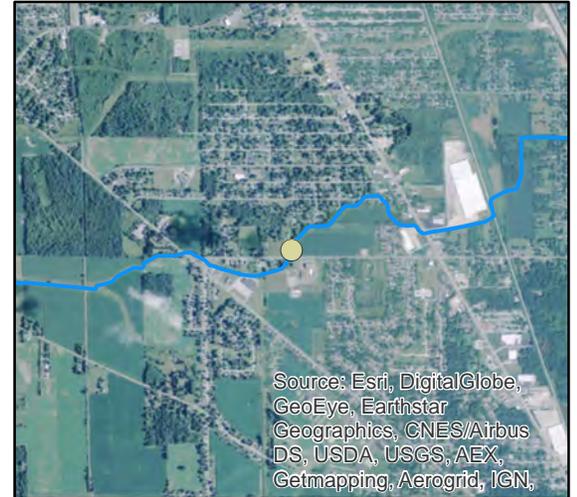


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage215

Type: Sediment

Blockage Length (feet):

Debris Length (feet): 200

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side of the drain from this location approx 200'upstream to end. Picture facing upstream

Observation Location:

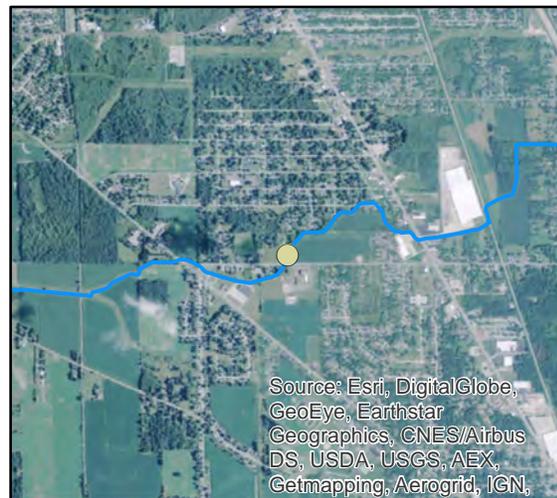


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage216

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 40

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Misc garbage in drain mattress shovel etc. from this location approx 40' upstream to to end. Picture facing upstream

Observation Location:

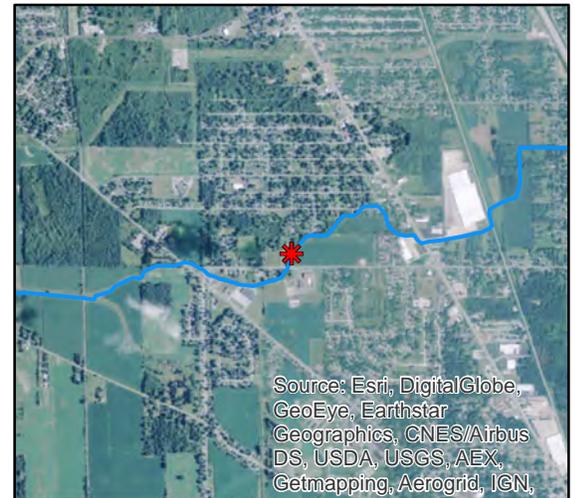


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage217

Type: Sediment

Blockage Length (feet): 50

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar left side of the drain from this location approx 50' upstream to end. Picture facing upstream

Observation Location:

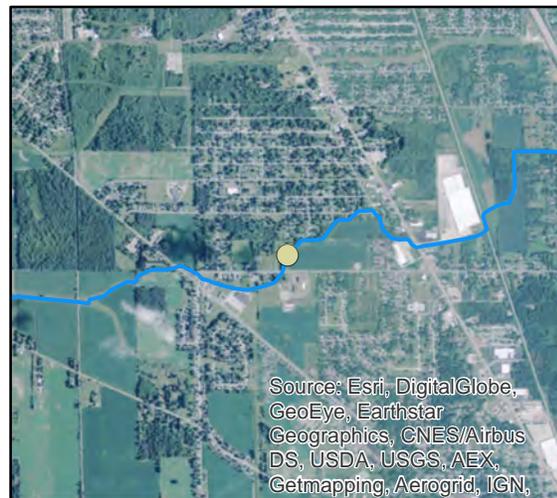


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage218

Type: Non-Vegetative Debris

Blockage Length (feet): 25

Debris Length (feet): 0

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Misc lumber and garbage in the drain causing logjam from this location approx 25' upstream to end. Picture facing upstream

Observation Location:

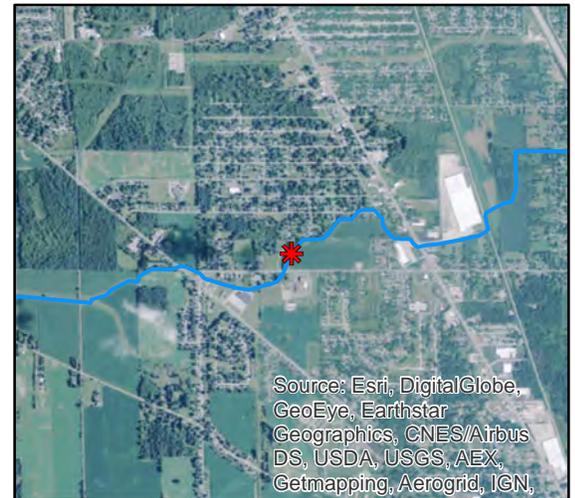


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage219

Type: Excessive Vegetation

Blockage Length (feet): 350

Debris Length (feet):

Location: Both

Photo 1 Direction:

Comments:

Excessive vegetation from this location approx 500' upstream to end.
Picture facing upstream

Observation Location:

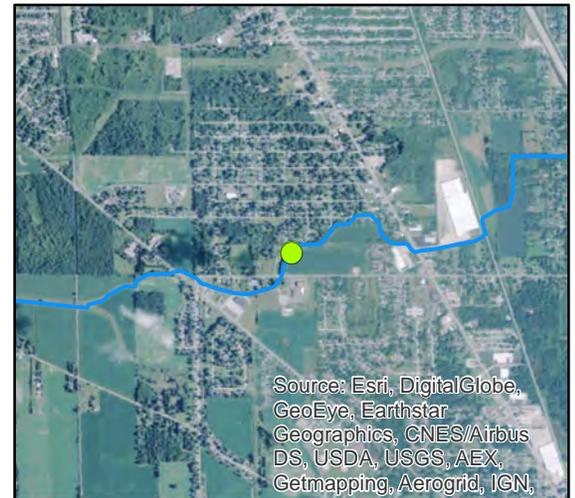


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage220

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Mattress right side of the drain picture facing upstream .

Observation Location:

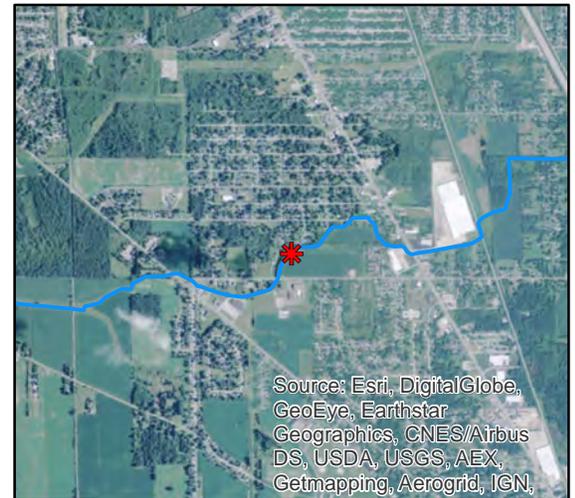


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage221

Type: Sediment

Blockage Length (feet): 125

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar right side of the drain from this location approx 125' upstream to end . Picture facing upstream

Observation Location:

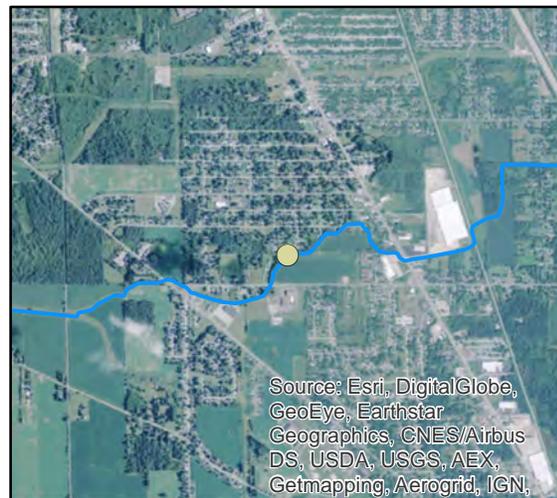


Photo 1

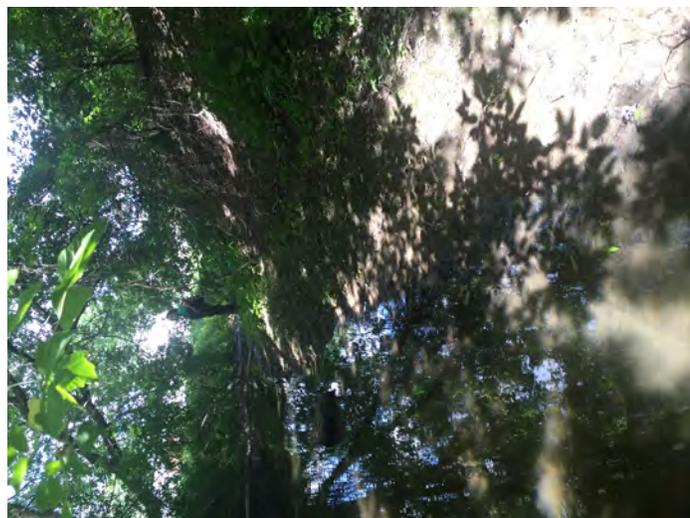


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage222

Type: Sediment

Blockage Length (feet): 100

Debris Length (feet):

Location: Left

Photo 1 Direction:

Comments:

Sediment bar left side of the drain from this location approx 100' upstream to end. Picture facing upstream

Observation Location:

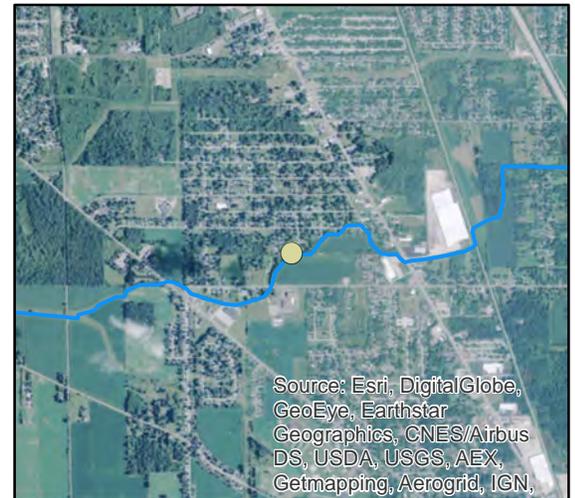


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage223

Type: Excessive Vegetation

Blockage Length (feet): 300

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation right side of the drain from this location approx 300' upstream to end . Picture facing upstream

Observation Location:

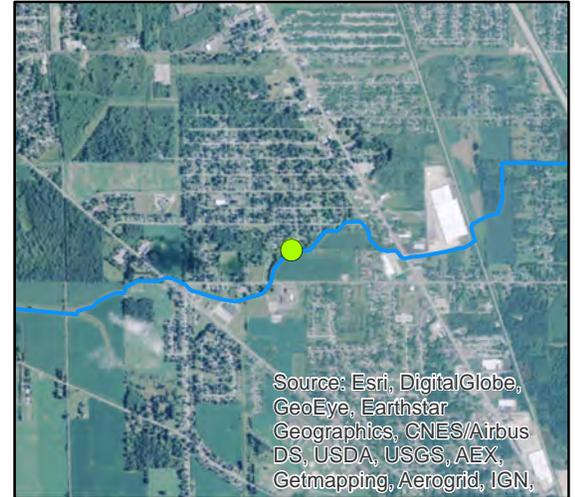


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage224

Type: Excessive Vegetation

Blockage Length (feet): 200

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive a vegetation. Overgrowth on banks is overhanging drain next 200 ft.

Observation Location:

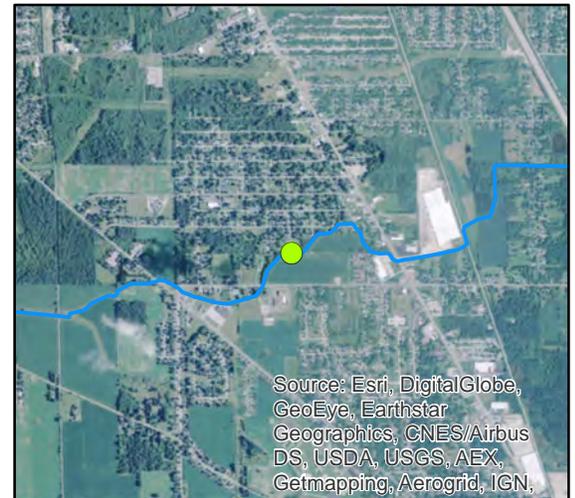


Photo 1

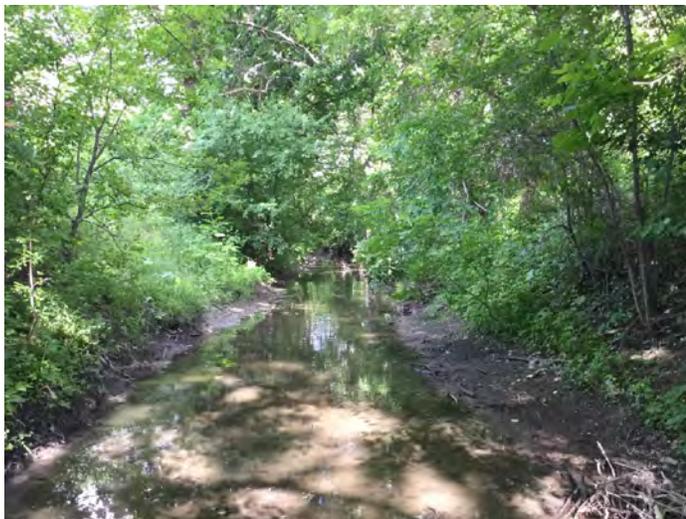


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage225

Type: Fallen Tree

Blockage Length (feet): 150

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Woody debris up to 3" diam. Minor. Next 150 ft.

Observation Location:

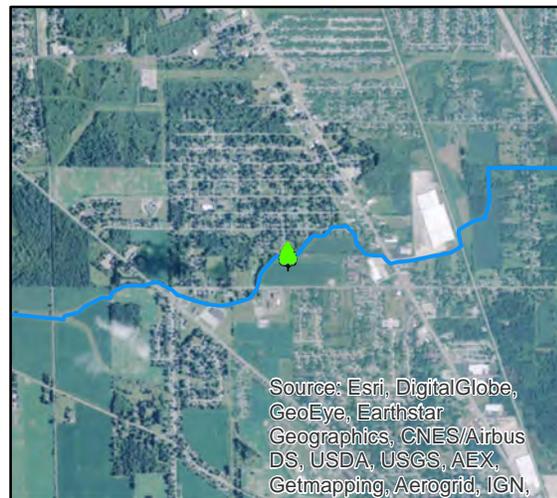


Photo 1



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:
Blockage226

Type: Excessive Vegetation

Blockage Length (feet): 100

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Overhanging vegetation from banks on both sides next 100 ft.

Observation Location:

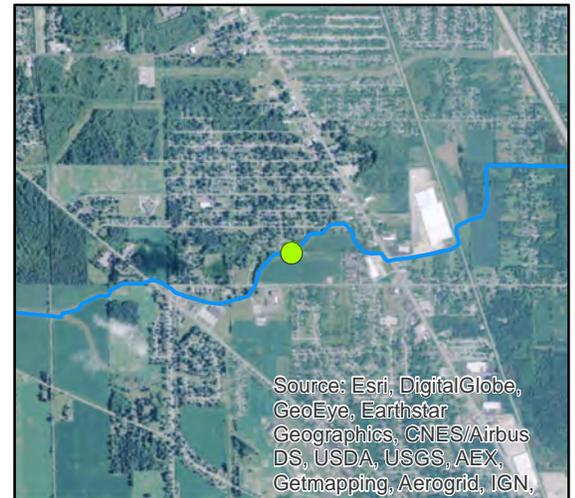


Photo 1



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Photo 3

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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage227

Type: Non-Vegetative Debris

Blockage Length (feet): 50

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sediment buildup on left side of drain. Visible that most flow is on tight side of channel.

Observation Location:

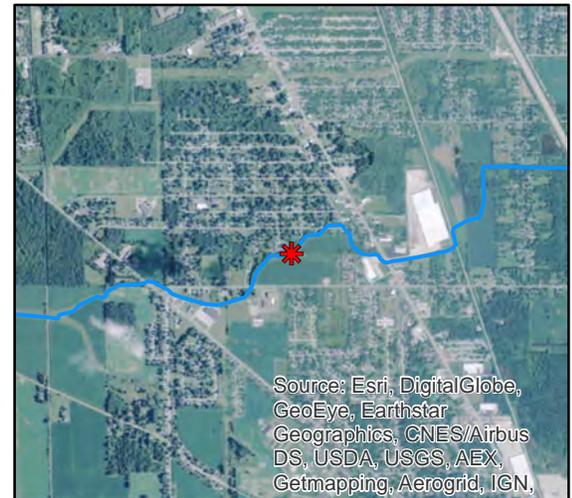


Photo 1



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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage228

Type: Log Jam

Blockage Length (feet): 25

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Log jam on left side of drain impeding flow and directing to right side. Led to sediment buildup downstream and bank erosion. 25 ft.

Observation Location:

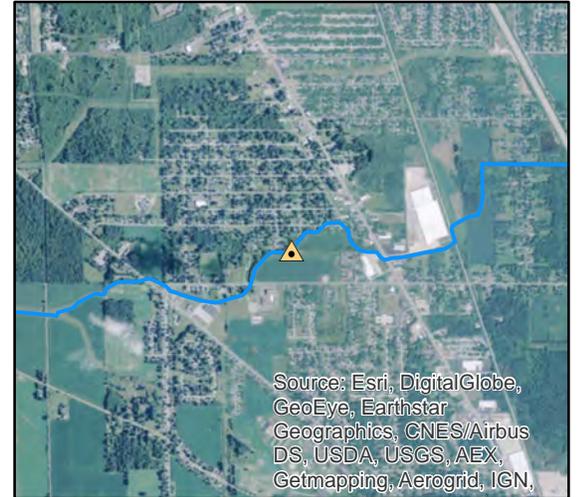


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage229

Type: Non-Vegetative Debris

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Scattered pieces of trash in drain over next 50 ft.

Observation Location:

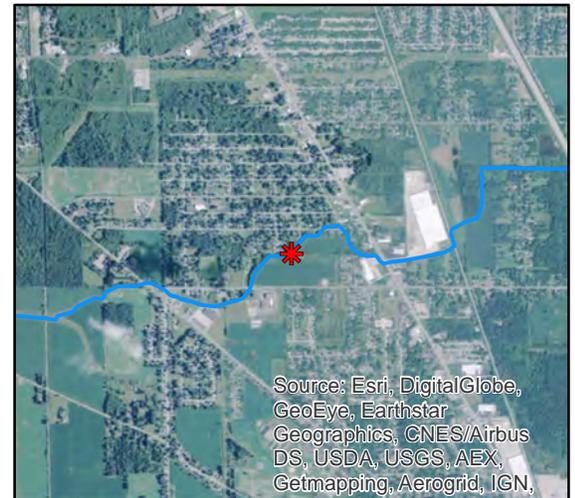


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage230

Type: Excessive Vegetation

Blockage Length (feet): 400

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Overhanging from banks on both sides. Next 400 ft.

Observation Location:

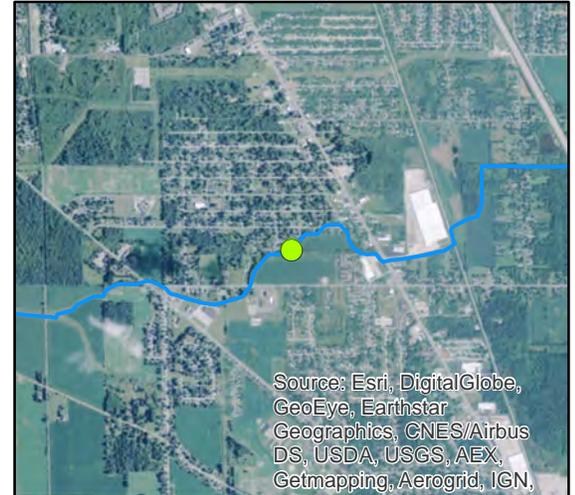


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage231

Type: Sediment

Blockage Length (feet): 40

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on tight extends on both sides of log jam. 40 ft. 5 ft wide.

Observation Location:

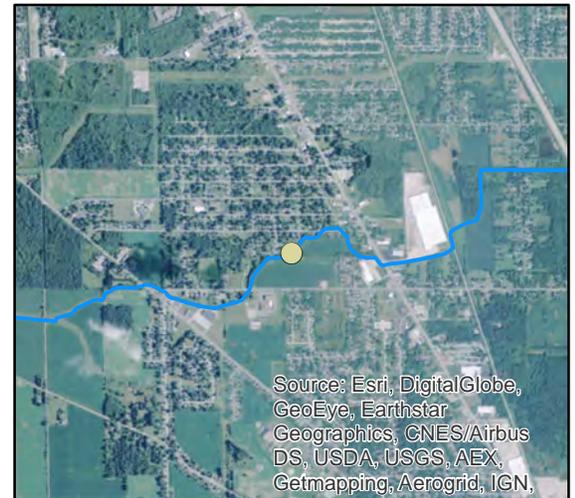


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage232

Type: Log Jam

Blockage Length (feet): 10

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam due to fallen tree from right side. 6" diam. Significant amounts of trash as well.

Observation Location:

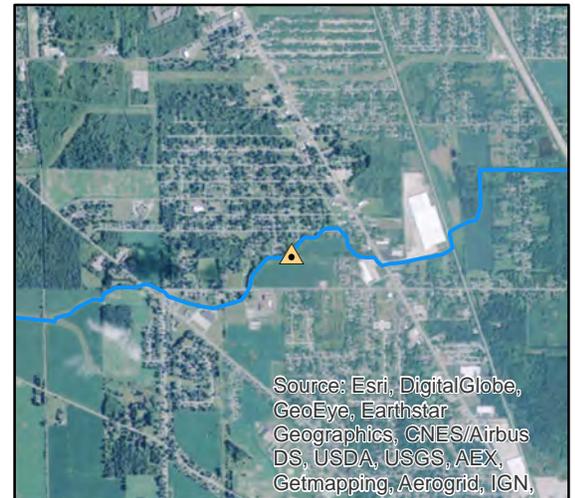


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage233

Type: Non-Vegetative Debris

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Significant amounts of trash over next 50 ft at log jam including a folding chair and fire extinguisher.

Observation Location:

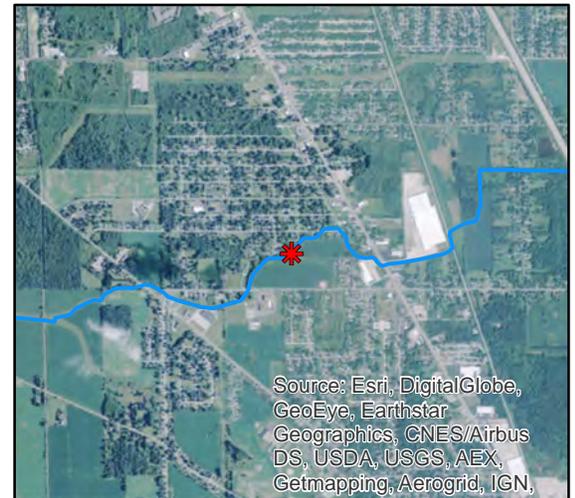


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage234

Type: Sediment

Blockage Length (feet): 50

Debris Length (feet):

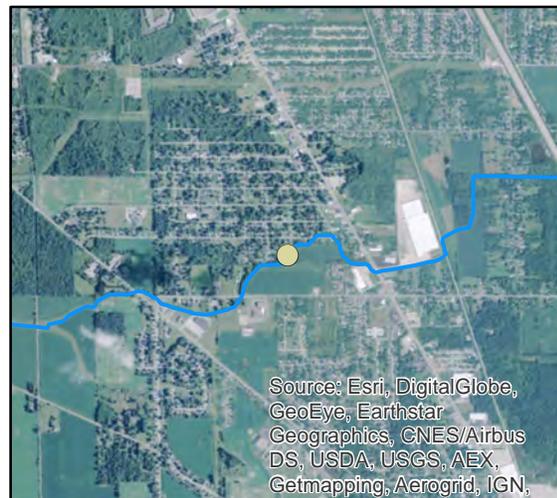
Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side for 50 ft.

Observation Location:



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

Photo 1

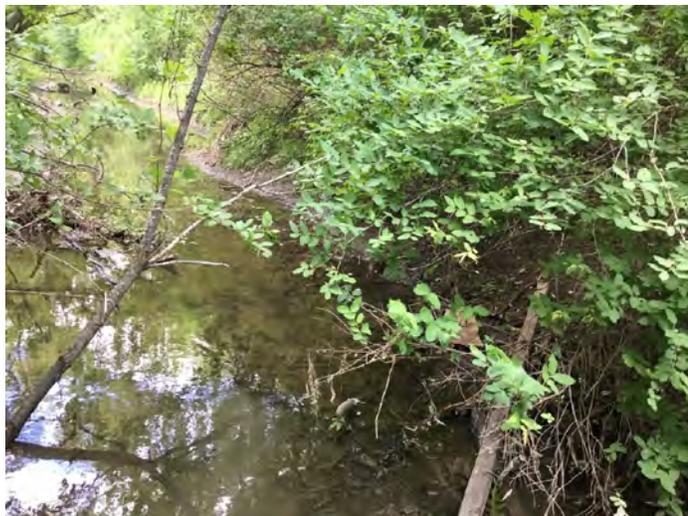


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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage235

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing in center of drain. Loose sediment and stagnant water.

Observation Location:

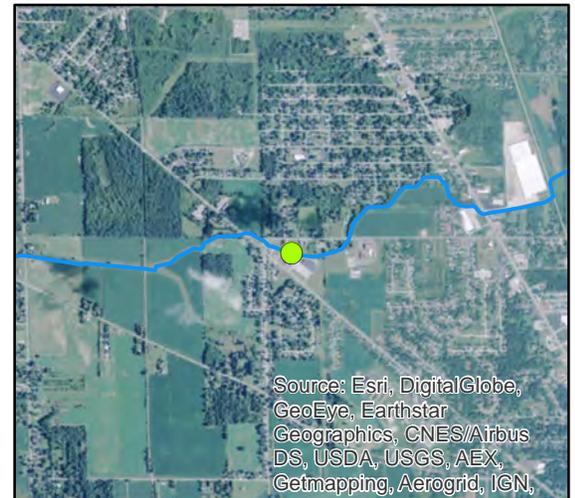


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage236

Type: Excessive Vegetation

Blockage Length (feet): 10

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Clump on left side.

Observation Location:

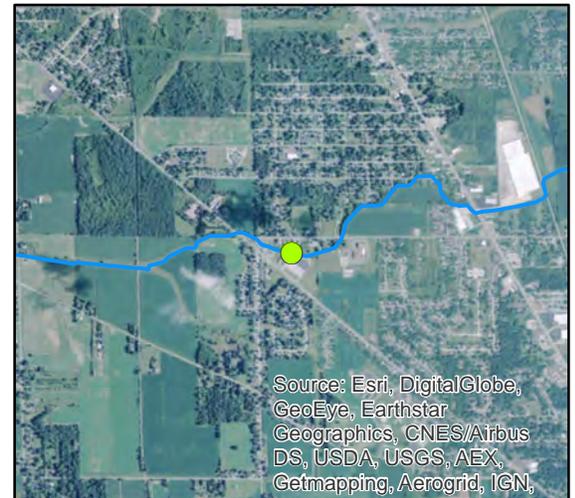


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage237

Type: Non-Vegetative Debris

Blockage Length (feet): 20

Debris Length (feet):

Location: Right

Photo 1 Direction: South

Comments:

Large pieces of broken concrete on right bank of drain.

Observation Location:

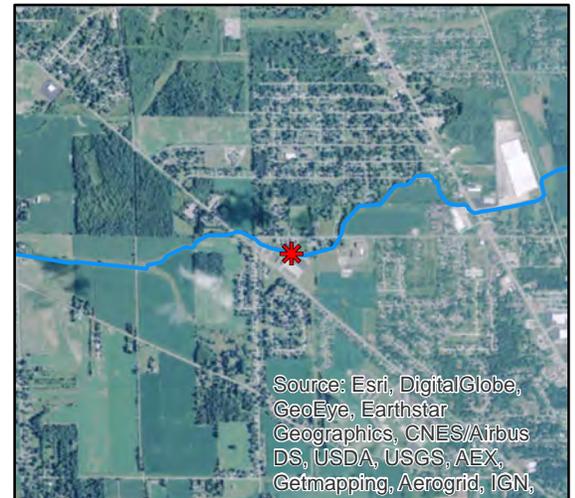


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage238

Type: Excessive Vegetation

Blockage Length (feet): 250

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation in bottom of drain channel. Cattails and grass. Next 250 ft.

Observation Location:

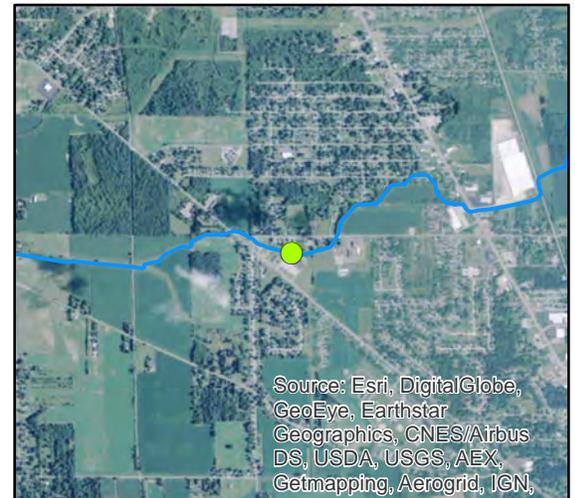


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage239

Type: Fallen Tree

Blockage Length (feet): 250

Debris Length (feet):

Location: Center

Photo 1 Direction: South

Comments:

Woody debris scattered in bottom of drain channel next 250 ft.

Observation Location:

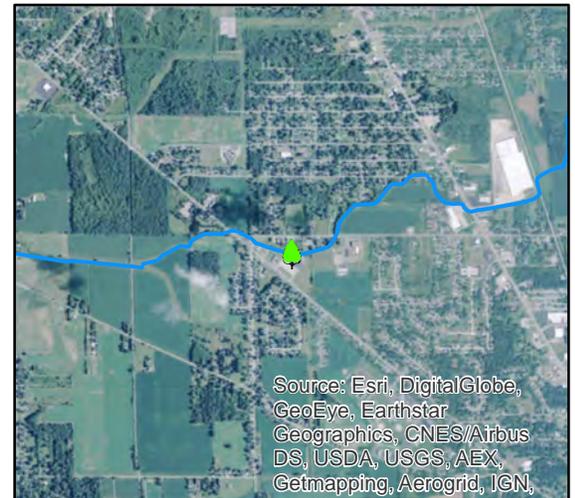


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage240

Type: Excessive Vegetation

Blockage Length (feet): 600

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation. Heavy grass growing in bottom of drain channel.

Observation Location:

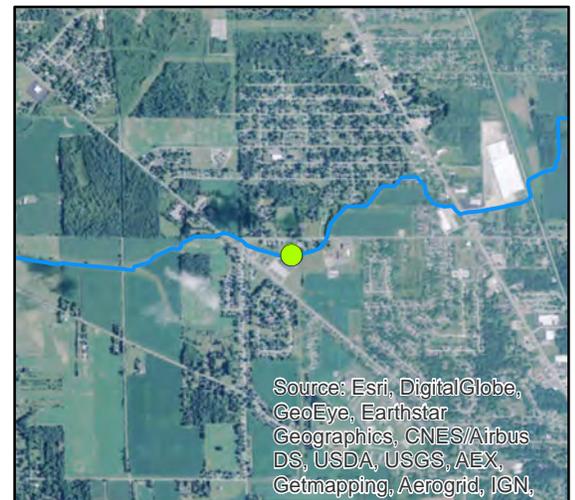


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage241

Type: Excessive Vegetation

Blockage Length (feet): 10

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Clump on right side overhanging drain.

Observation Location:

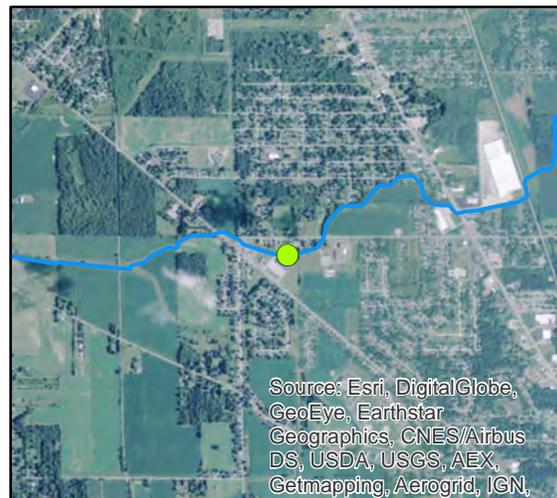


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage242

Type: Fallen Tree

Blockage Length (feet): 8

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

3" diam branch on right side.

Observation Location:

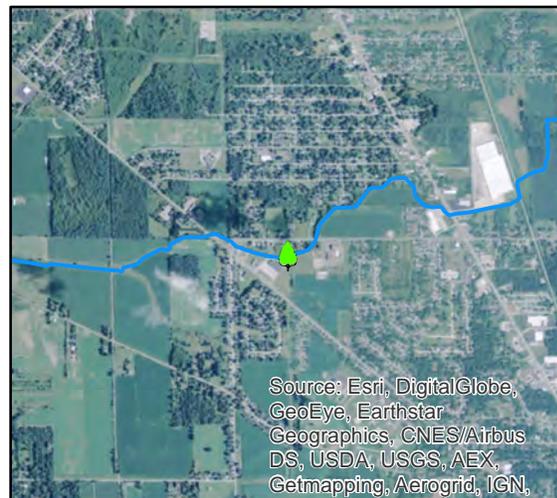


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage243

Type: Log Jam

Blockage Length (feet): 8

Debris Length (feet): 30

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam across the drain. Fallen tree and other woody debris. Up to 8" diam. Lots of trash as well.

Observation Location:

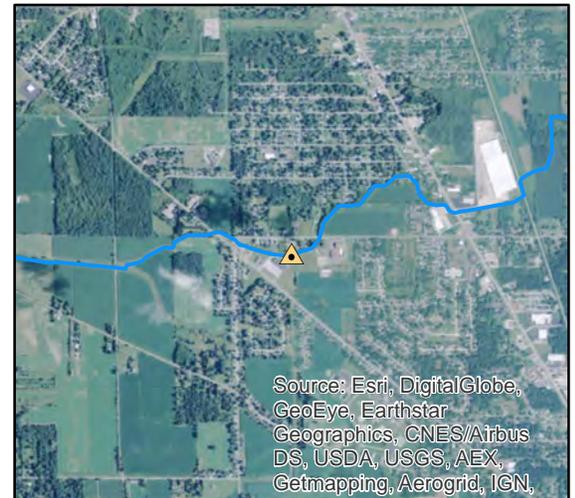


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage244

Type: Excessive Vegetation

Blockage Length (feet): 300

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Overhanging vegetation growing off left bank next 300 ft.

Observation Location:

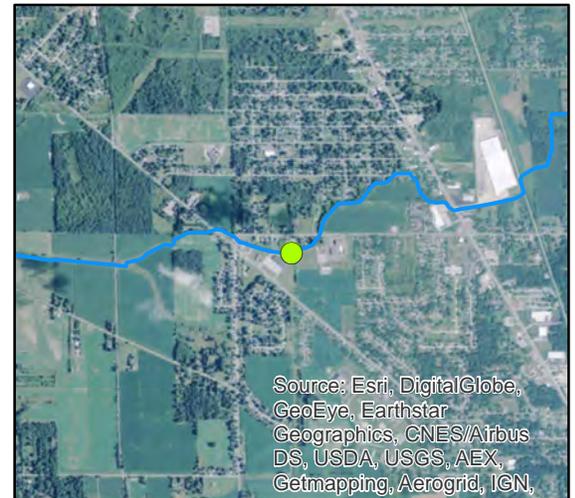


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage245

Type: Sediment

Blockage Length (feet): 5

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

3 ftx5ft midchannel sediment bar just downstream of log jam.

Observation Location:

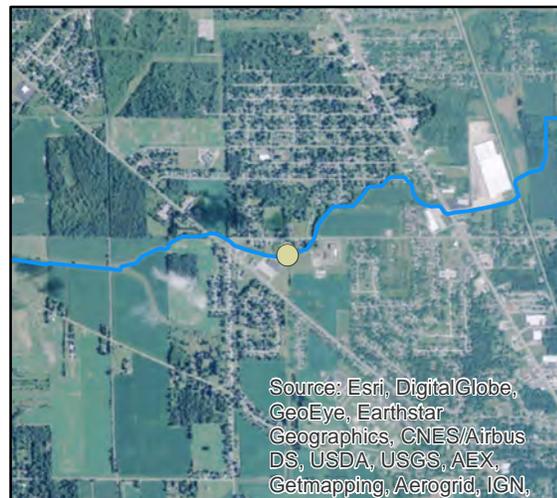


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage246

Type: Sediment

Blockage Length (feet): 8

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side of drain. At field tile outlet.

Observation Location:

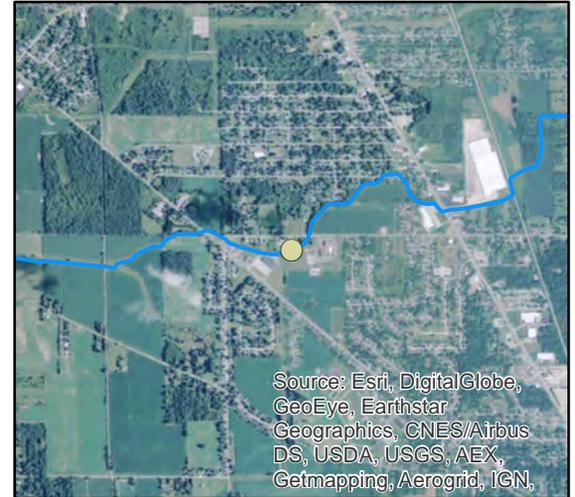


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage247

Type: Sediment

Blockage Length (feet): 8

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Mid channel sediment bar. 8 ft long.

Observation Location:

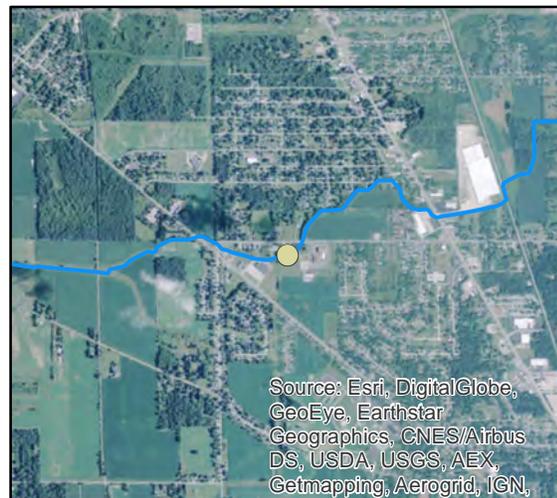


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage248

Type: Fallen Tree

Blockage Length (feet): 100

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree with 8" diam and other woody debris over next 100 ft up to log jam.

Observation Location:

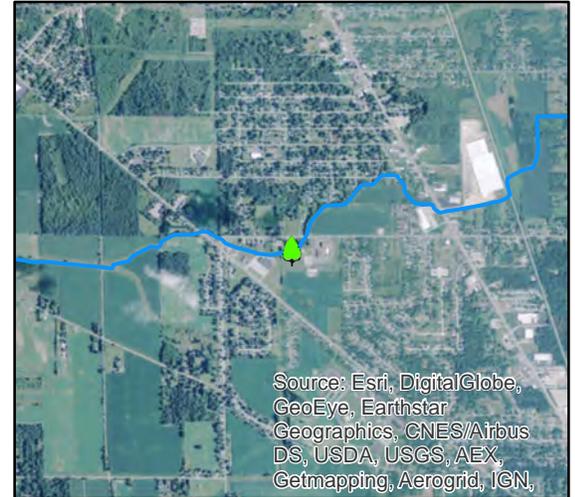


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage249

Type: Excessive Vegetation

Blockage Length (feet): 150

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing on right banks next 150 ft overhanging the drain.

Observation Location:

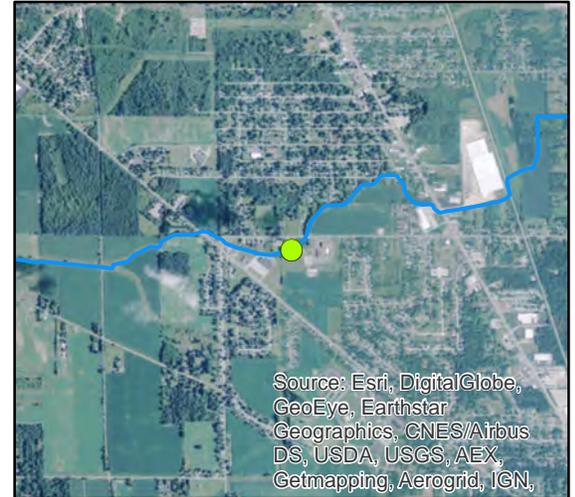


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage250

Type: Log Jam

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Downstream

Comments:

Significant log jam impeding flow in center of drain. 50 ft long. Photo facing downstream.

Observation Location:

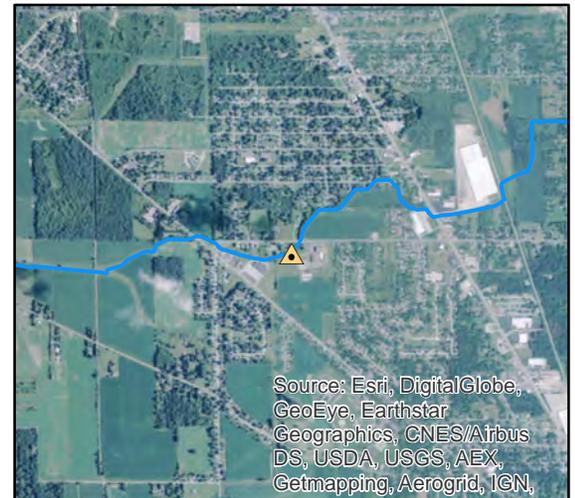


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage251

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Downstream

Comments:

Garbage bin and other trash in center of drain.

Observation Location:

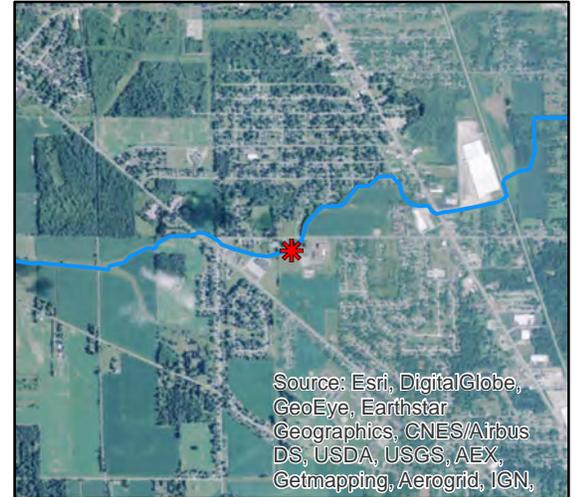


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage252

Type: Sediment

Blockage Length (feet): 250

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Continuous sediment buildup on left side.

Observation Location:

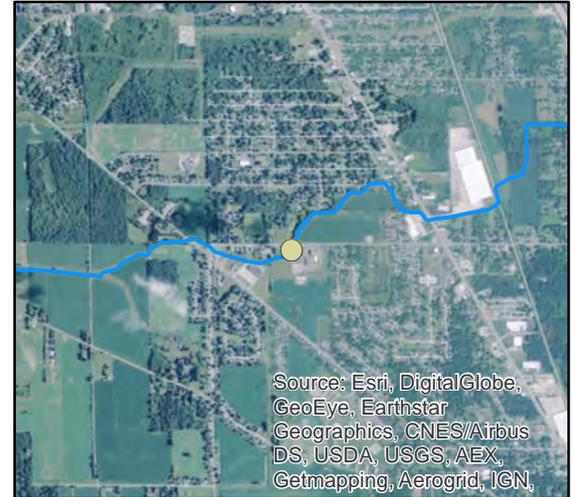


Photo 1



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
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage253

Type: Fallen Tree

Blockage Length (feet): 40

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on left side of drain over 40 ft. Up to 3" diam.

Observation Location:

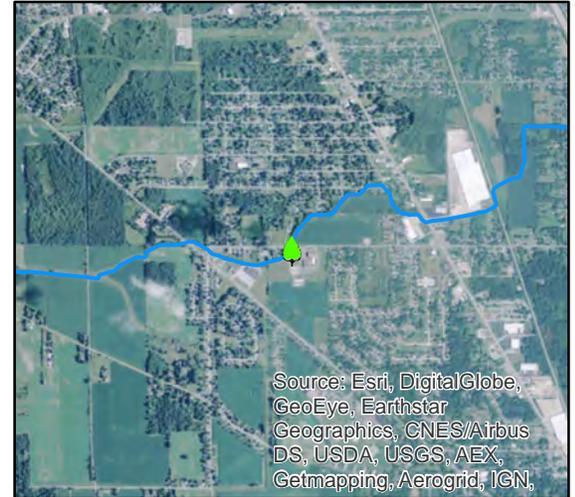


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage254

Type: Sediment

Blockage Length (feet): 0

Debris Length (feet): 15

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side of drain extends for next 15'. Contains established vegetation.

Observation Location:

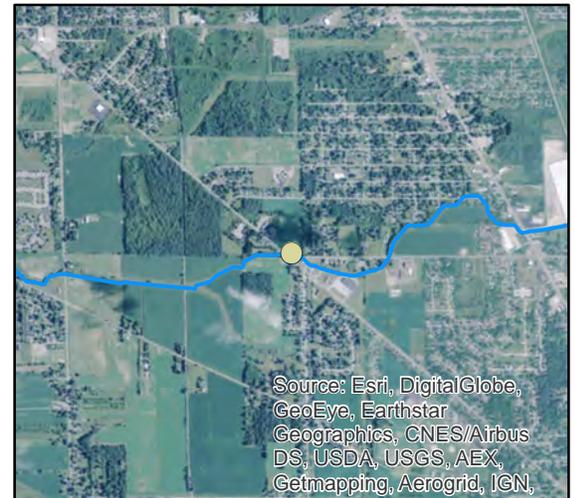


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage255

Type: Non-Vegetative Debris

Blockage Length (feet): 2

Debris Length (feet): 2

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Mailbox in the middle of the drain with trash on both banks.

Observation Location:

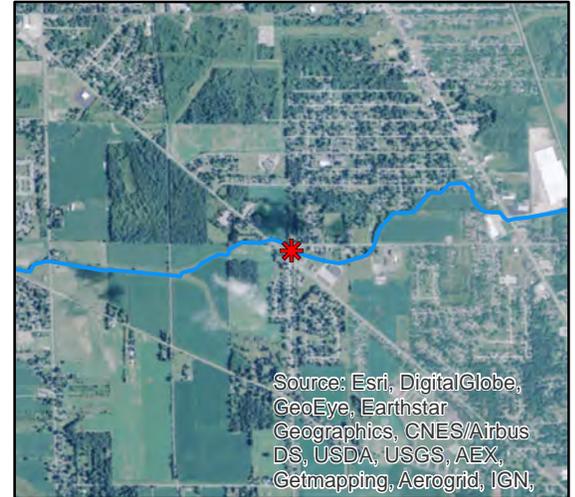


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage256

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on both sides of drain for the next 500'.

Observation Location:

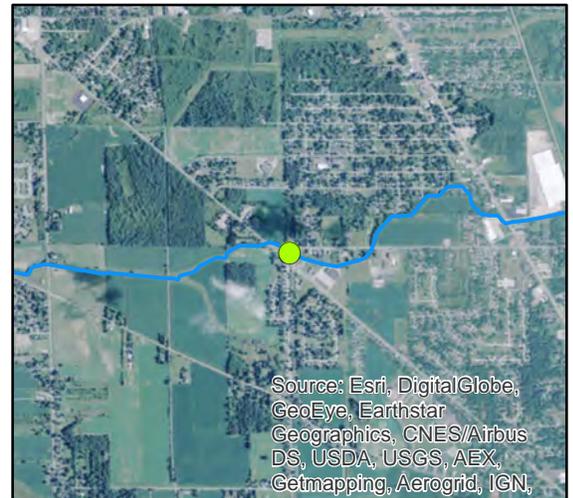


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage257

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation in the drain for the next 500'.

Observation Location:

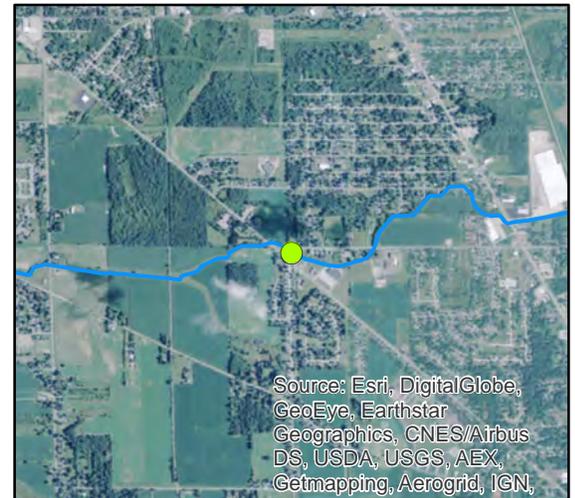


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage258

Type: Non-Vegetative Debris

Blockage Length (feet): 0

Debris Length (feet): 10

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Wood plank on left side of drain with scattered trash on both sides of drain.

Observation Location:

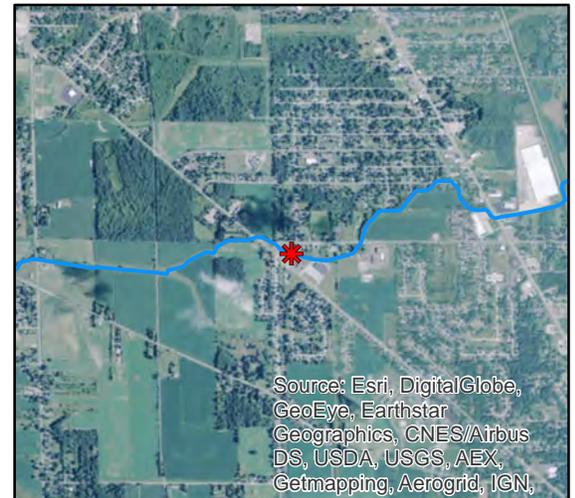


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage259

Type: Non-Vegetative Debris

Blockage Length (feet): 10

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Old signs in the drain along the left bank for approximately 10' and 5' across.

Observation Location:

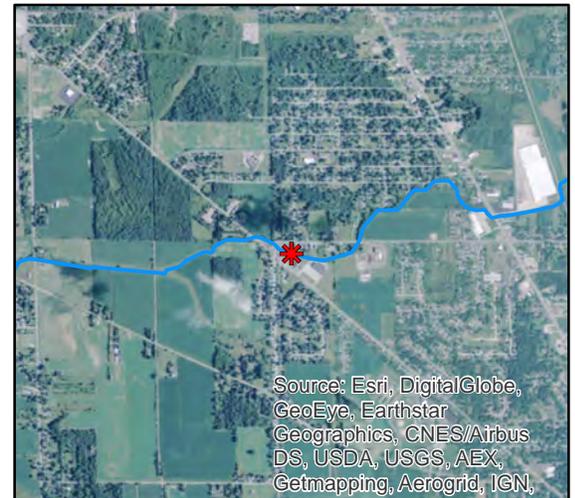


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage260

Type: Fallen Tree

Blockage Length (feet): 10

Debris Length (feet): 10

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Woody debris buildup about 10' long and 10' wide on the left side of drain.

Observation Location:

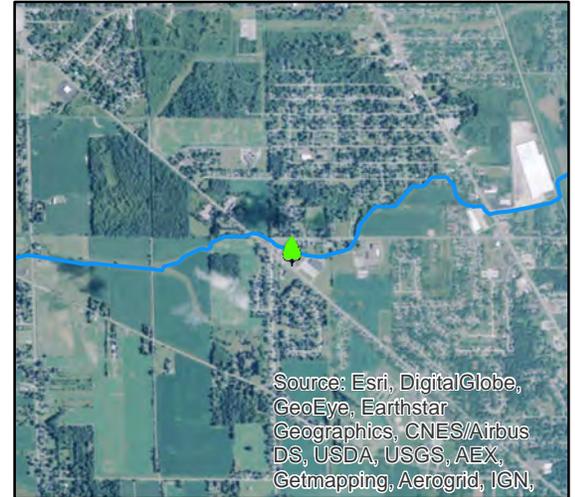


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage261

Type: Non-Vegetative Debris

Blockage Length (feet): 7

Debris Length (feet): 9

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Mattress on left side of drain with trash on either side of drain.

Observation Location:

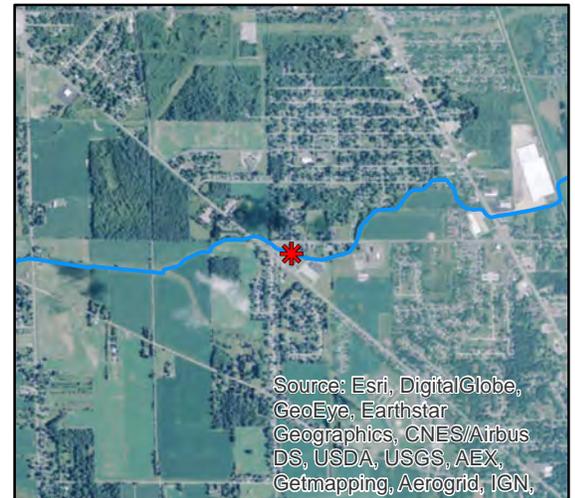


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage262

Type: Fallen Tree

Blockage Length (feet): 25

Debris Length (feet): 10

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Several fallen trees and logs on left side of drain ranging from 4-6" about 10' long.

Observation Location:

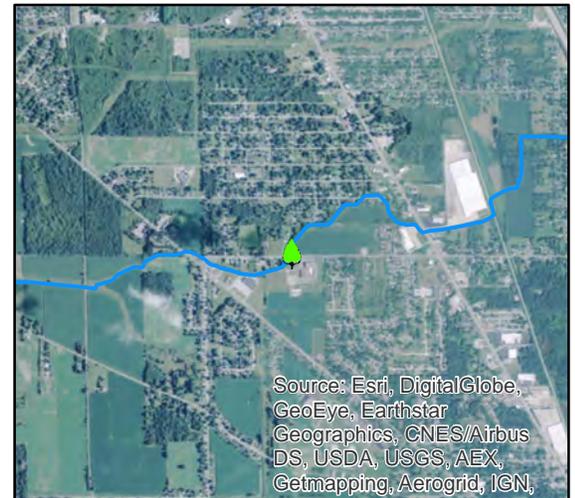


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage263

Type: Fallen Tree

Blockage Length (feet): 60

Debris Length (feet): 20

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Fallen trees and over hanging debris for next 60' with diameters ranging from 4-12".

Observation Location:

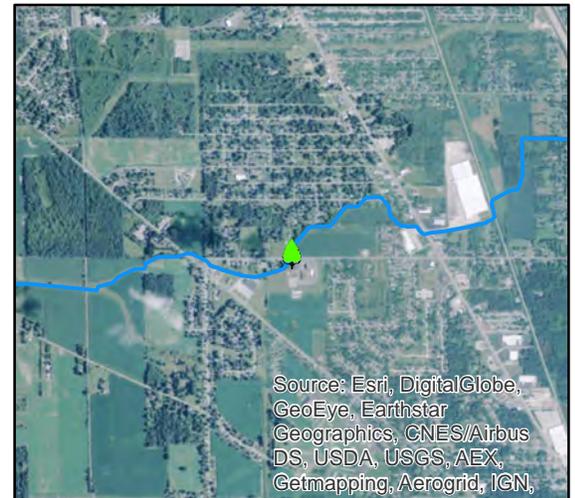


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage264

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 3

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Woody debris hung up in the middle of the drain on a sediment bar. Tree is about 10' long.

Observation Location:

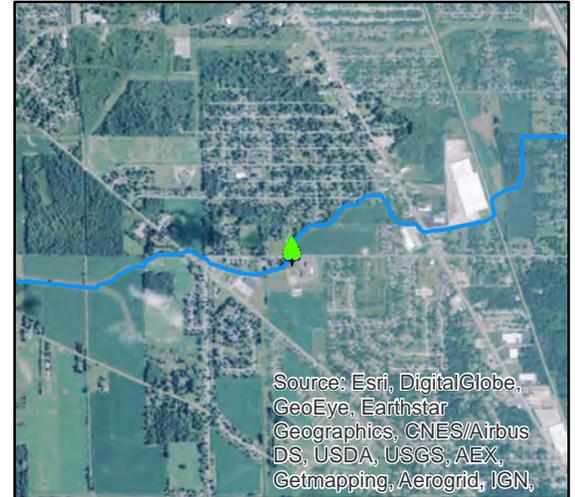


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage265

Type: Fallen Tree

Blockage Length (feet): 25

Debris Length (feet): 15

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Fallen trees on left side of drain creating a blockage for next 45'.

Observation Location:

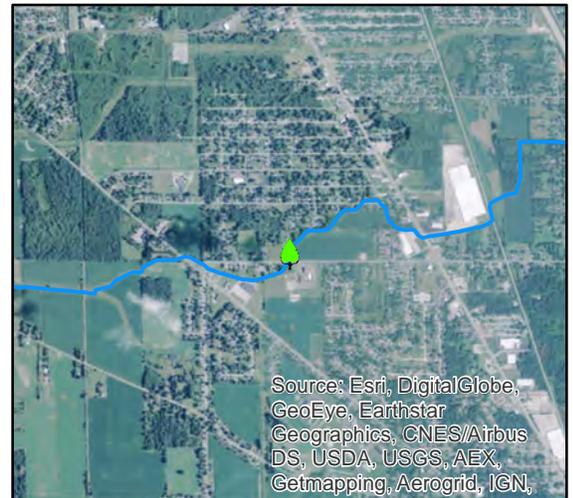


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage266

Type: Log Jam

Blockage Length (feet): 15

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Log jam on left side of drain for approximately 15' long and 12" in diameter.

Observation Location:

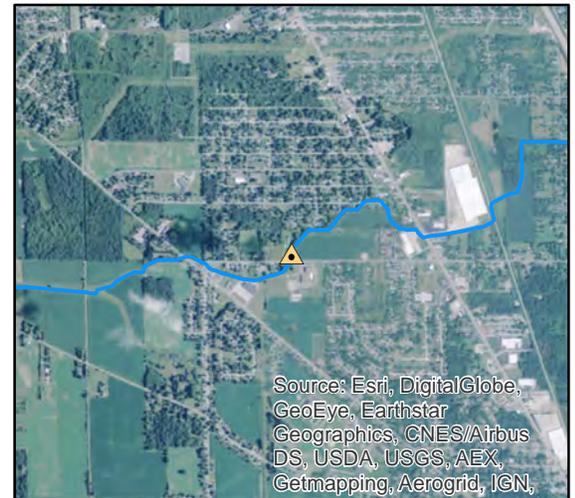


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage267

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 12

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Fiberglass mesh tarp in the drain for about 10'.

Observation Location:

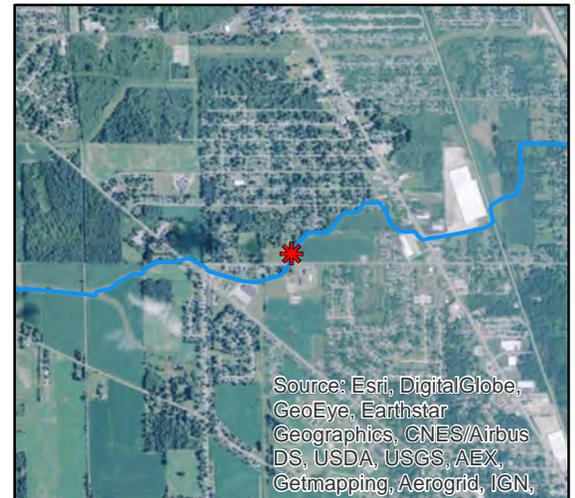


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage268

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 15

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Woody debris hung up behind non-vegetative debris on the left side of drain for 10'.

Observation Location:

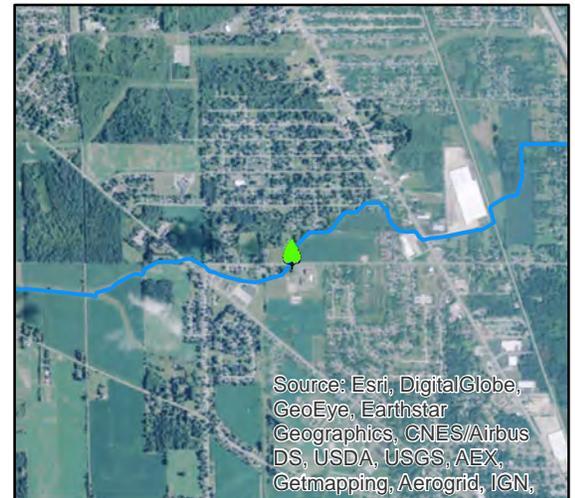


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage269

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 300

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Fallen trees on both sides of drain for next 300'. Tree diameters range in size from 6-12".

Observation Location:

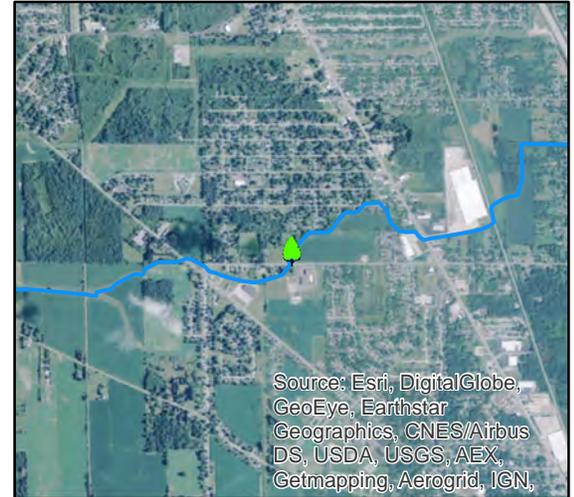


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage270

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 1

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Bucket in the drain on the right side of the drain.

Observation Location:

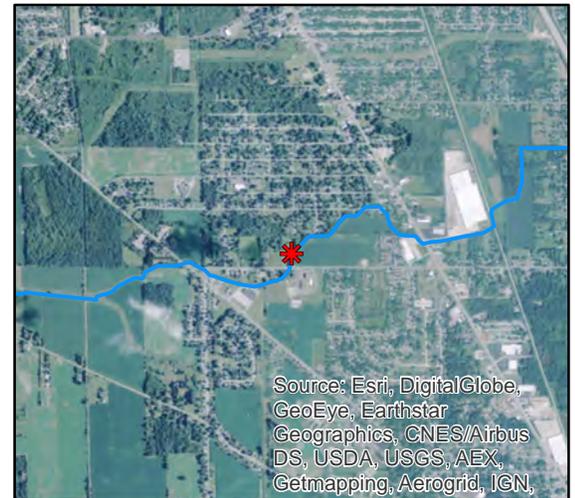


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage271

Type: Log Jam

Blockage Length (feet): 25

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam across drain for next 25' with logs ranging in size from 4-6" containing a lot of non-woody debris.

Observation Location:

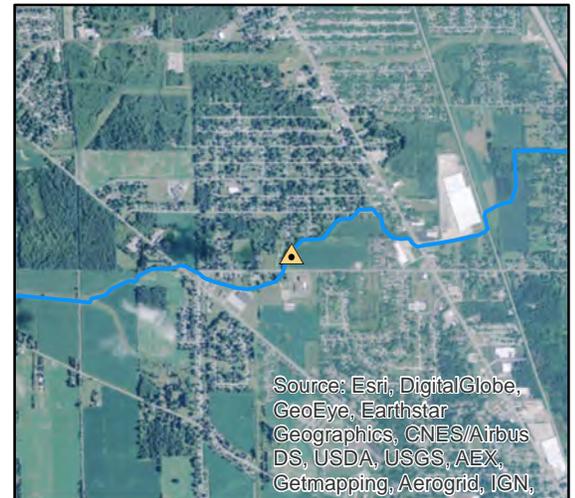


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage272

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 25

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Fallen trees for next 25' on both sides of drain ranging in size from 6-10".

Observation Location:

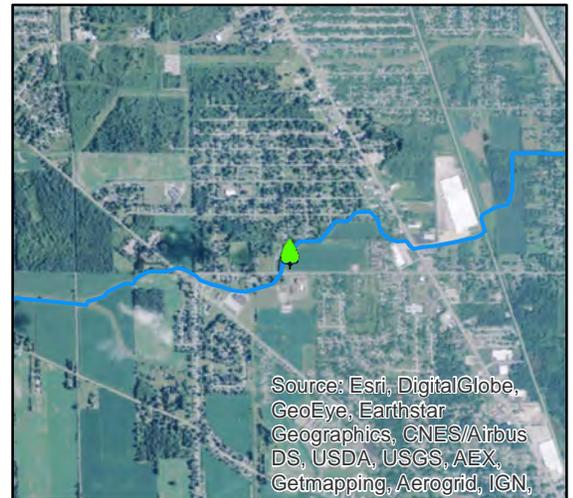


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage273

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 200

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain for the next 250' ranging in diameter from 4-8".

Observation Location:

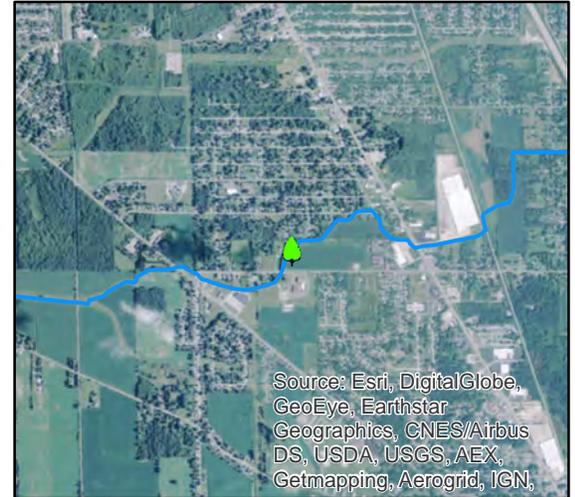


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage274

Type: Excessive Vegetation

Blockage Length (feet): 2

Debris Length (feet): 50

Location: Both

Photo 1 Direction:

Comments:

Excessive vegetation on both sides of drain after crossing. Especially right side extends further into drain, about 1 ft. Photo taken facing upstream.

Observation Location:

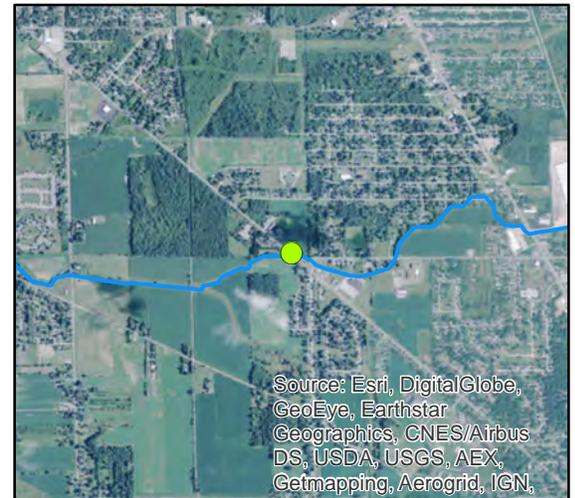


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage275

Type: Excessive Vegetation

Blockage Length (feet): 2

Debris Length (feet): 200

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing in drain from bottom. Starts about 20 ft after crossing.

Observation Location:

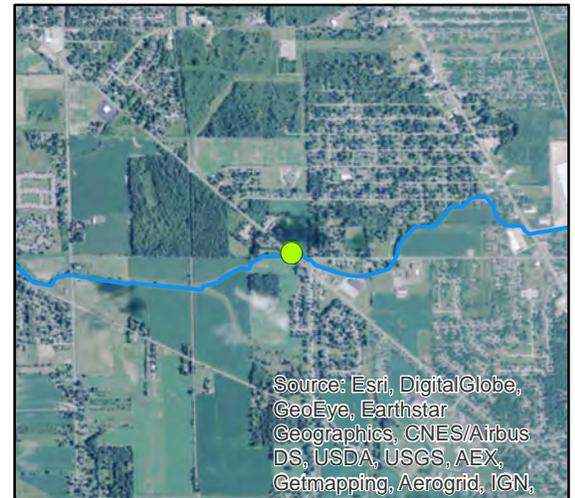


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage276

Type: Excessive Vegetation

Blockage Length (feet): 10

Debris Length (feet): 5

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing over drain on both sides. About 20 ft from crossing.

Observation Location:

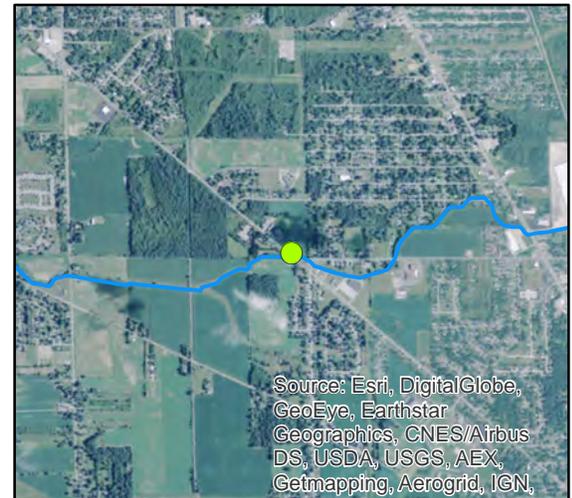


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage277

Type: Fallen Tree

Blockage Length (feet): 5

Debris Length (feet): 17

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Woody debris in drain under water on left side. 3 pieces of wood about 20 ft from crossing. Then 10 ft down is a piece of wood across drain under water.

Observation Location:

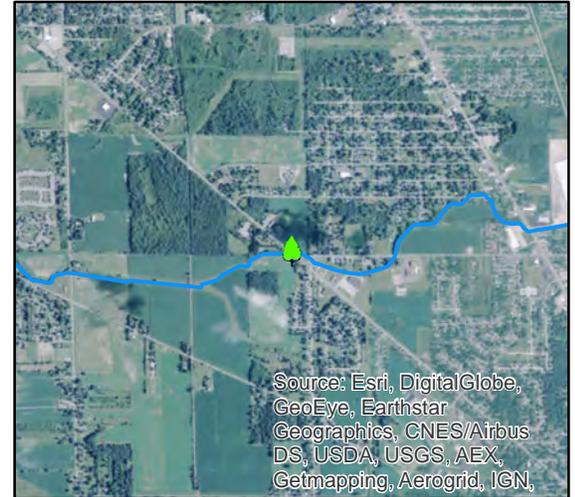


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage278

Type: Sediment

Blockage Length (feet): 3

Debris Length (feet): 420

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Blockage from sediment on both sides of drain. Starts about 20 ft after crossing. Picture taken 20 ft after point. Throughout whole drain.

Observation Location:

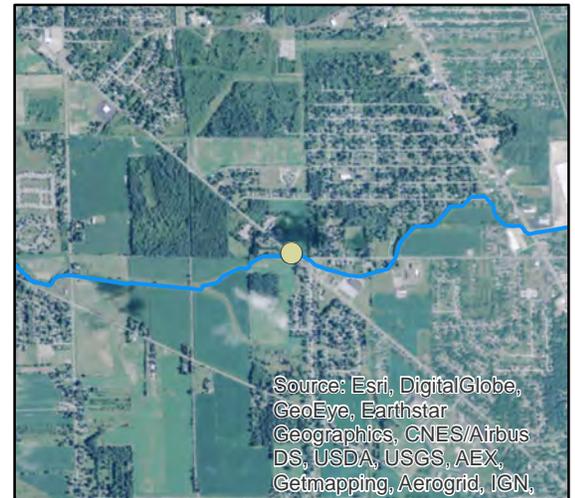


Photo 1



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:
Blockage279

Type: Excessive Vegetation

Blockage Length (feet): 15

Debris Length (feet): 5

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation overhanging on left side of drain. Then 15 ft down overhanging on both sides.

Observation Location:

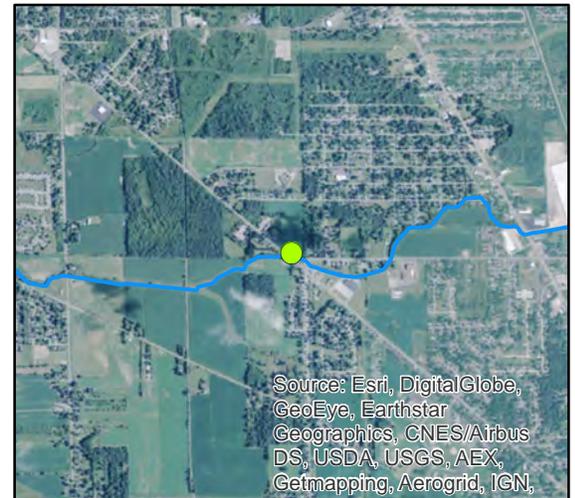


Photo 1



Photo 2

Photo 3

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				SCALE:	
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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage280

Type: Fallen Tree

Blockage Length (feet): 220

Debris Length (feet): 3

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris extending from right side of drain into center. About 3 ft long. Then 10 ft farther down drain is more woody debris on both sides of drain. 10 ft farther down are logs on left side of drain. Afterwards throughout entire drain on both sides.

Observation Location:

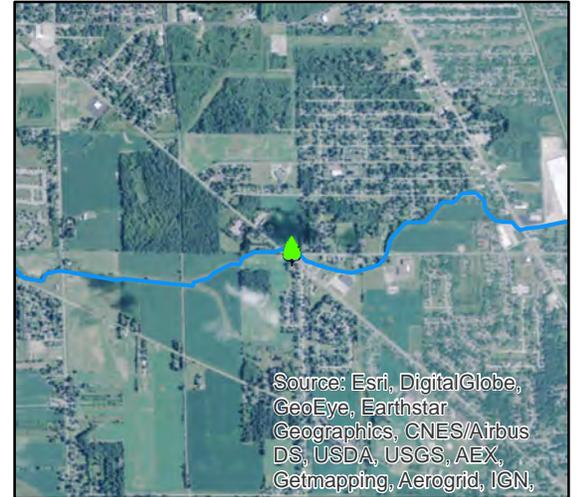


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage281

Type: Non-Vegetative Debris

Blockage Length (feet): 1

Debris Length (feet): 1

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Tire on left side of drain.

Observation Location:

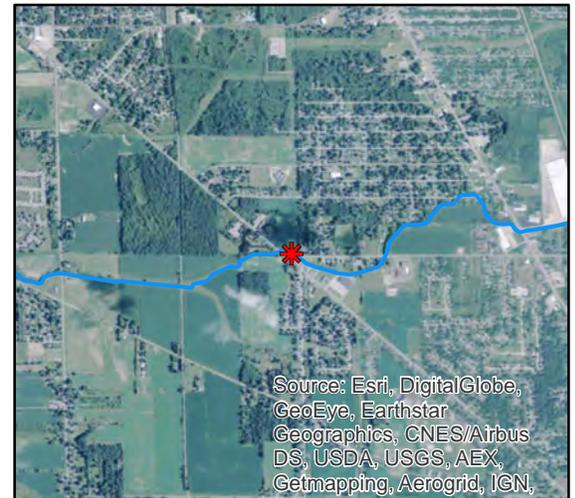


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage282

Type: Excessive Vegetation

Blockage Length (feet): 20

Debris Length (feet): 30

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Overhanging excessive vegetation. Huge tree on left side and smaller trees on right side. Huge tree about 30 ft long.

Observation Location:

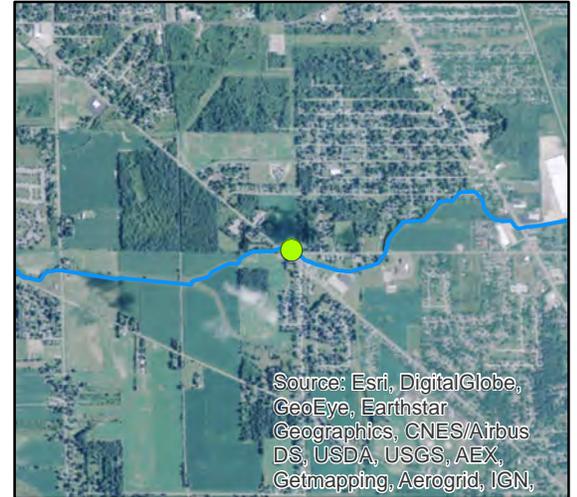


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage283

Type: Fallen Tree

Blockage Length (feet): 2

Debris Length (feet): 10

Location:

Photo 1 Direction: Facing Upstream

Comments:

Tree branch from left side of drain falls into drain.

Observation Location:

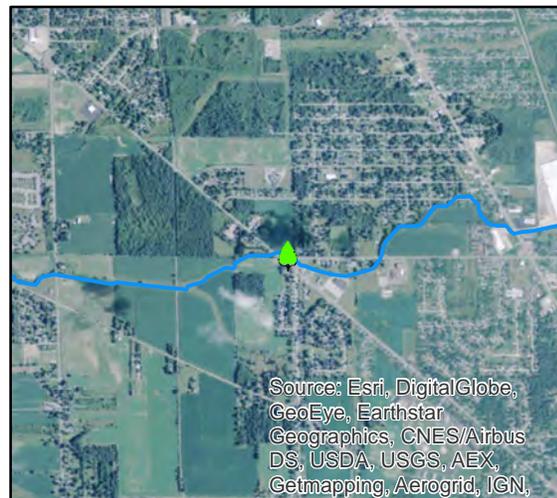


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage284

Type: Non-Vegetative Debris

Blockage Length (feet): 1

Debris Length (feet): 0

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Small rusted debris in drain (first photo). About 30 in. 1 ft down is tire in drain (second photo).

Observation Location:

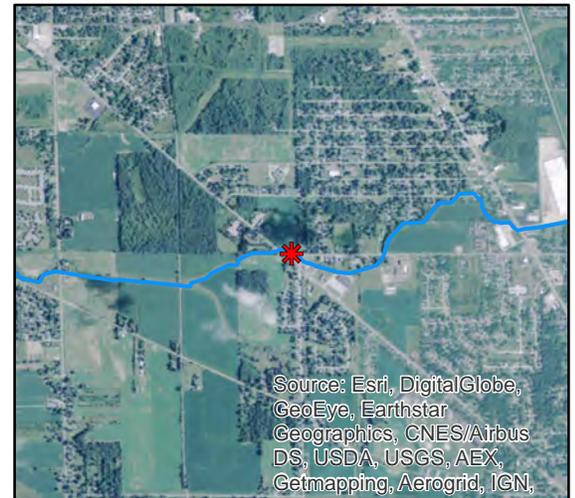


Photo 1

Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage285

Type: Log Jam

Blockage Length (feet): 2

Debris Length (feet): 2

Location:

Photo 1 Direction: Facing Upstream

Comments:

Log/debris blocking flow. From left side of drain extending into center. About 2 ft long.

Observation Location:

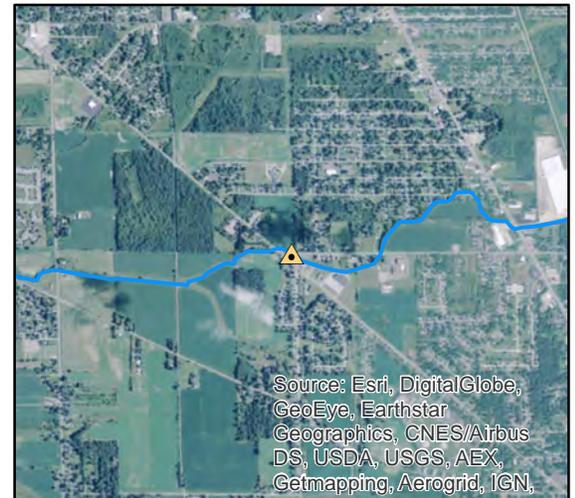


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage286

Type: Non-Vegetative Debris

Blockage Length (feet): 3

Debris Length (feet): 2

Location: Left

Photo 1 Direction: Northeast

Comments:

Metal piece on left side of drain. Second piece under water. Total 3 ft in length.

Observation Location:

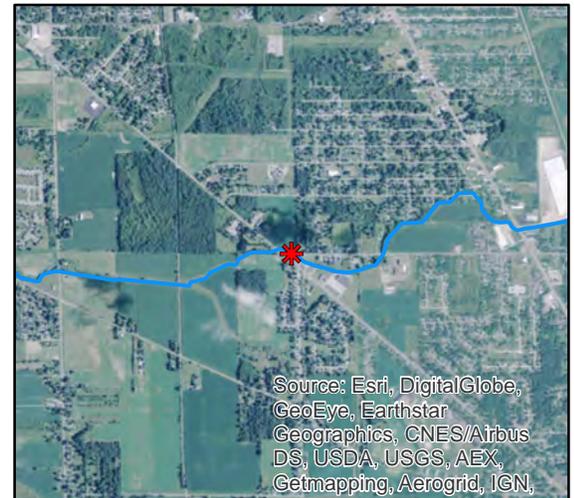


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage287

Type: Fallen Tree

Blockage Length (feet): 20

Debris Length (feet): 5

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on right side of drain. About 20 ft.

Observation Location:

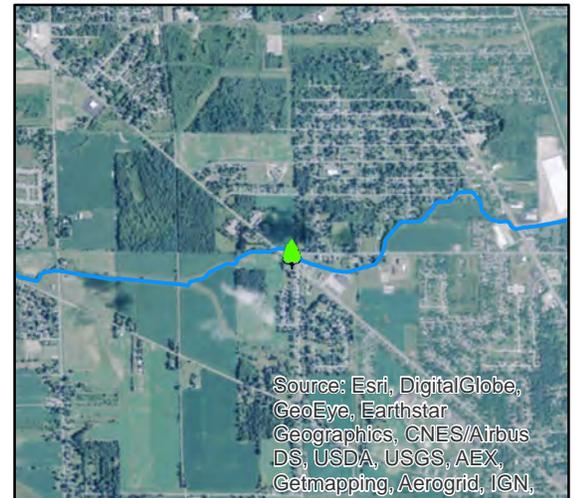


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage288

Type: Non-Vegetative Debris

Blockage Length (feet): 12

Debris Length (feet): 5

Location: Right

Photo 1 Direction: South

Comments:

Piece of wood on right side of drain (photo 1). About 5 ft. About 10 ft down is another piece of wood and a styrofoam cup (photo 2).

Observation Location:

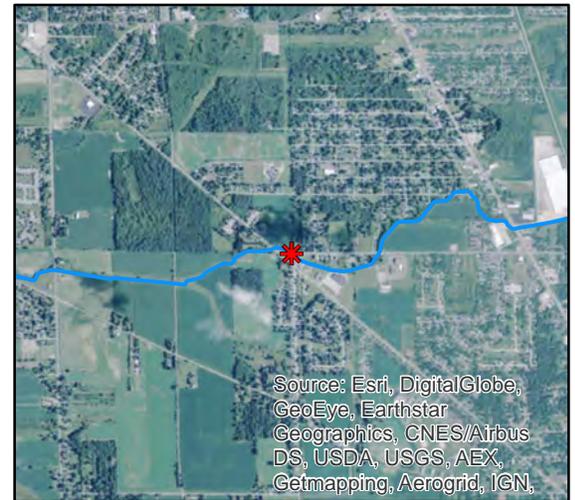


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage289

Type: Excessive Vegetation

Blockage Length (feet): 10

Debris Length (feet): 5

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Excessive overhanging vegetation on left side of drain extending across. About 10 ft down.

Observation Location:

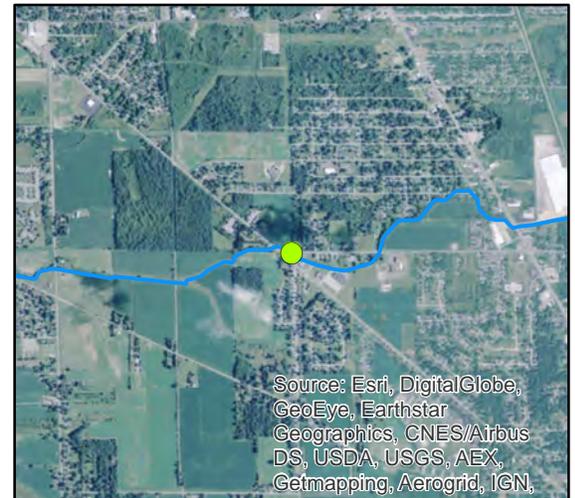


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage290

Type: Non-Vegetative Debris

Blockage Length (feet): 3

Debris Length (feet): 3

Location: Right

Photo 1 Direction: Facing Downstream

Comments:

Hidden debris behind sediment bar on right side of drain. About 3 ft.

Observation Location:

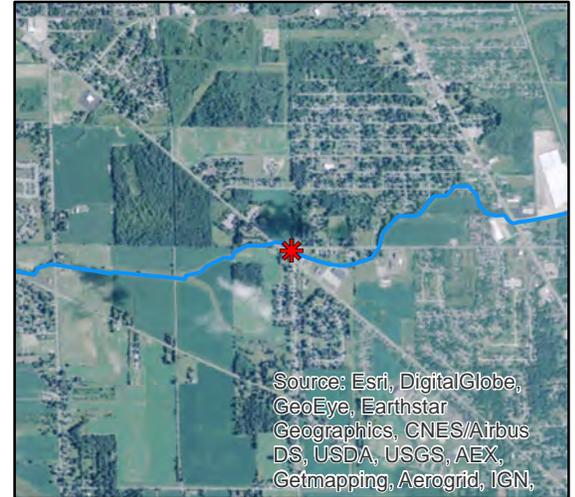


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage291

Type: Non-Vegetative Debris

Blockage Length (feet): 2

Debris Length (feet): 3

Location: Left

Photo 1 Direction: North

Comments:

Old rusted pipe with holes. Left side of drain. About 3 ft long.

Observation Location:

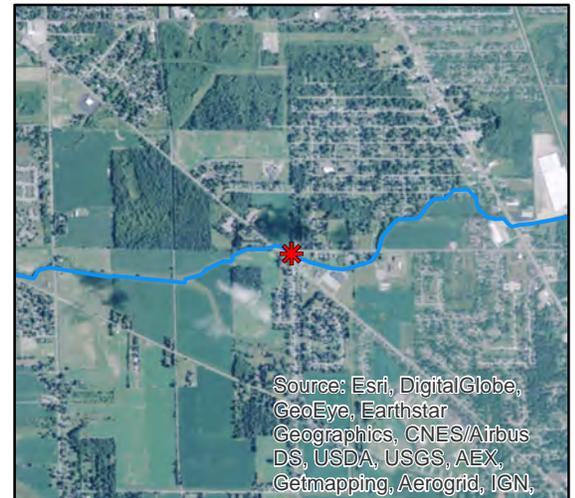


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage292

Type: Fallen Tree

Blockage Length (feet): 500

Debris Length (feet): 10

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive woody debris on both sides of drain.

Observation Location:

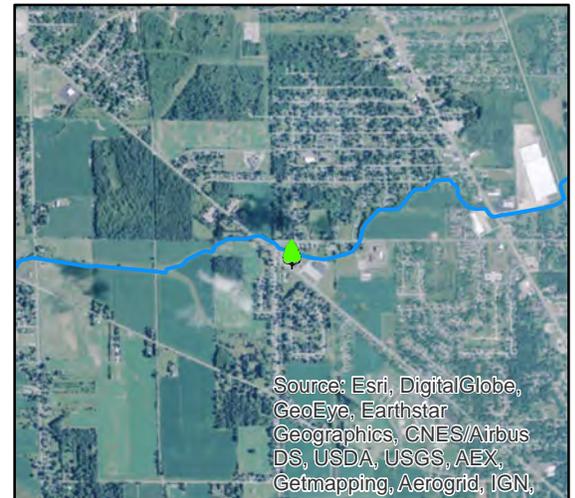


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage293

Type: Sediment

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sedimentation on both sides of drain. About 500 ft.

Observation Location:

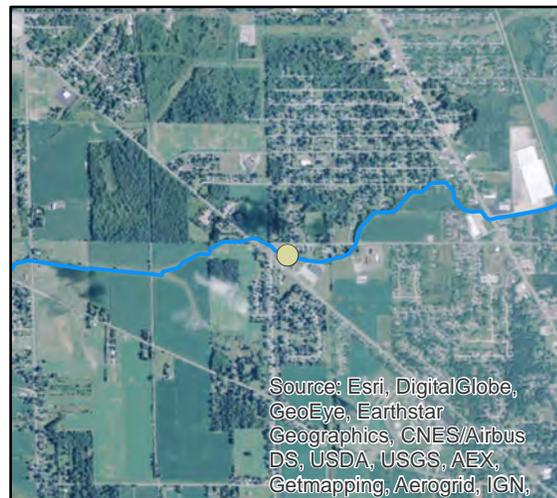


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage294

Type: Log Jam

Blockage Length (feet): 4

Debris Length (feet): 4

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Log jam blocking flow on left side of drain. About 3 ft long.

Observation Location:

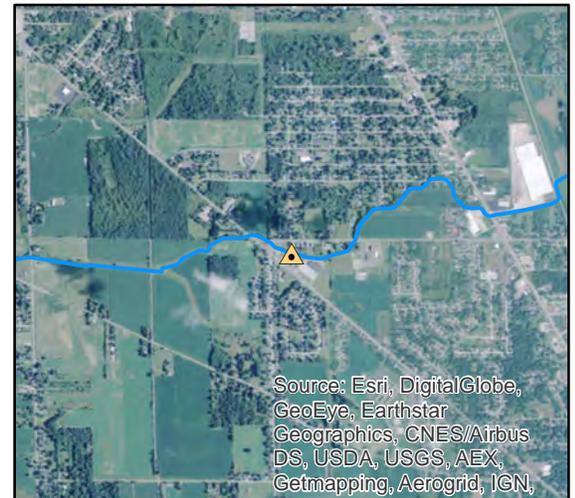


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage295

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing from bottom of drain. About 500 ft.

Observation Location:

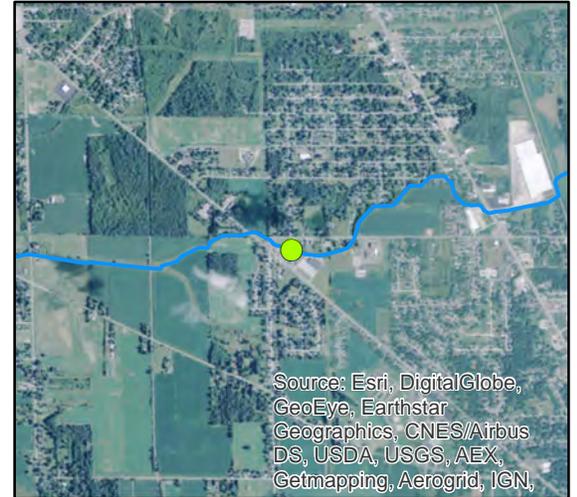


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage296

Type: Excessive Vegetation

Blockage Length (feet): 3

Debris Length (feet): 500

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on right side of drain. About 500 ft.

Observation Location:

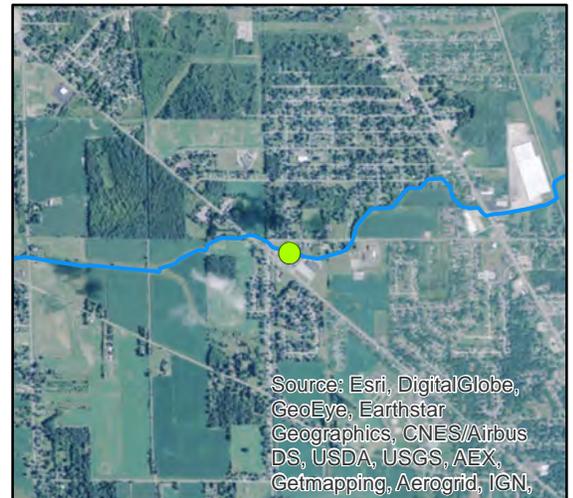


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage297

Type: Excessive Vegetation

Blockage Length (feet): 20

Debris Length (feet): 5

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Excessive overhanging vegetation on right side of drain. About 20 ft down.

Observation Location:

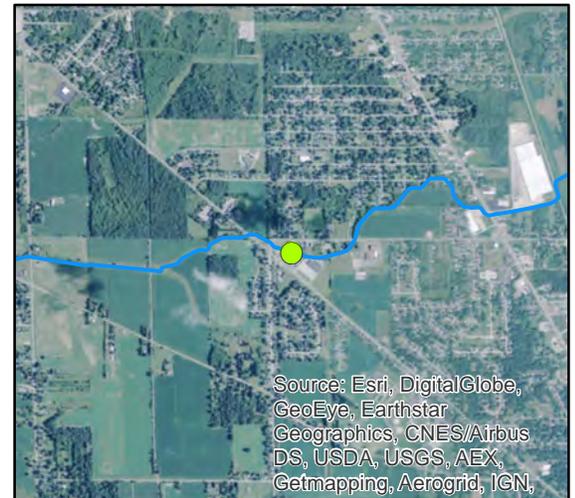


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage298

Type: Non-Vegetative Debris

Blockage Length (feet): 1

Debris Length (feet): 1

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Shopping cart in center of drain. Woody debris on top. About 1 ft long.

Observation Location:

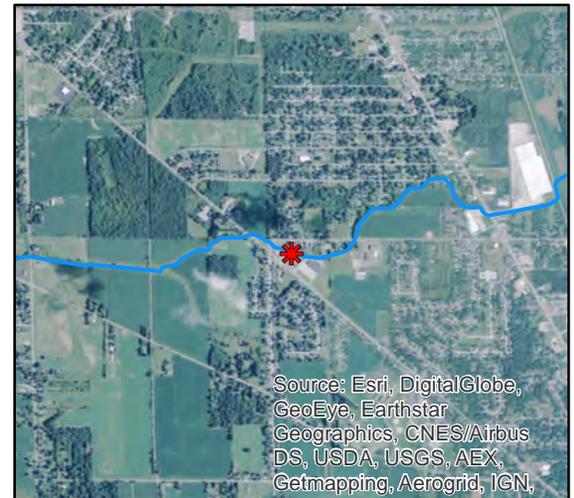


Photo 1



Photo 2

Photo 3

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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage299

Type: Non-Vegetative Debris

Blockage Length (feet): 10

Debris Length (feet): 3

Location: Right

Photo 1 Direction: East

Comments:

Non-vegetative debris on right side of drain. Concrete broken blocks then 10 ft down on right side are 2 tires.

Observation Location:

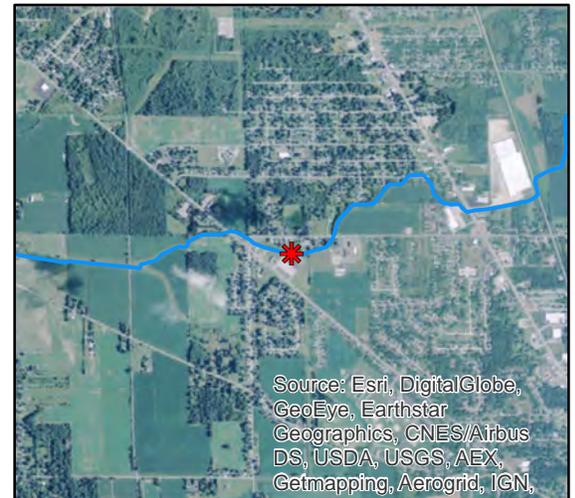


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage300

Type: Non-Vegetative Debris

Blockage Length (feet): 1

Debris Length (feet): 1

Location: Both

Photo 1 Direction: East

Comments:

Trash on both sides of drain. Mattress on right side of drain. Plastic equipment on left side. Then 10 ft farther is another tire and mattress on right side of drain.

Observation Location:

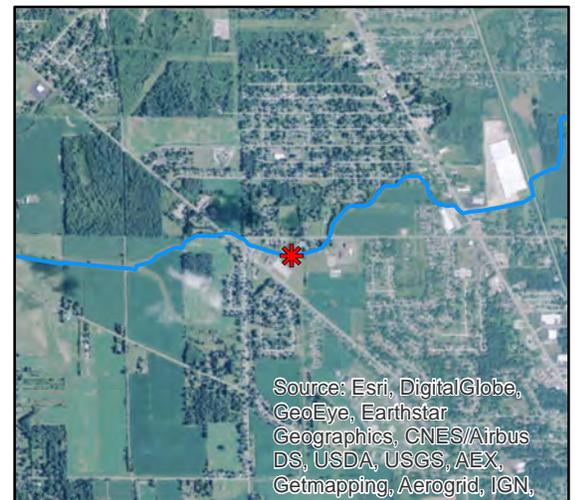


Photo 1



Photo 2



Photo 3

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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage301

Type: Non-Vegetative Debris

Blockage Length (feet): 3

Debris Length (feet): 3

Location: Center

Photo 1 Direction: Facing Downstream

Comments:

Excessive trash near log jam. Styrofoam square and cups, etc.

Observation Location:

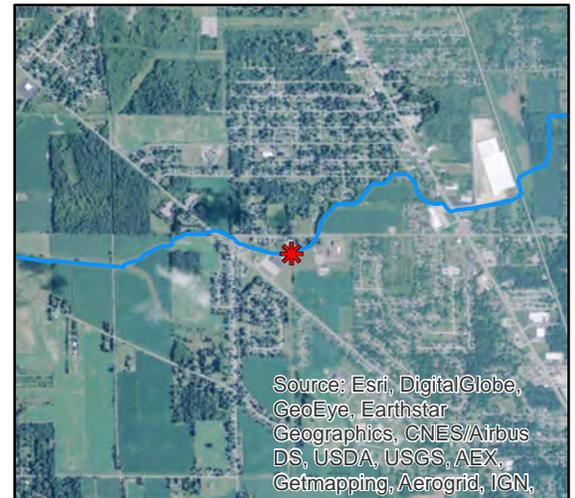


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage302

Type: Non-Vegetative Debris

Blockage Length (feet): 2

Debris Length (feet): 2

Location: Left

Photo 1 Direction: North

Comments:

Non-vegetative debris on left side of drain. 2 ft metal square.

Observation Location:

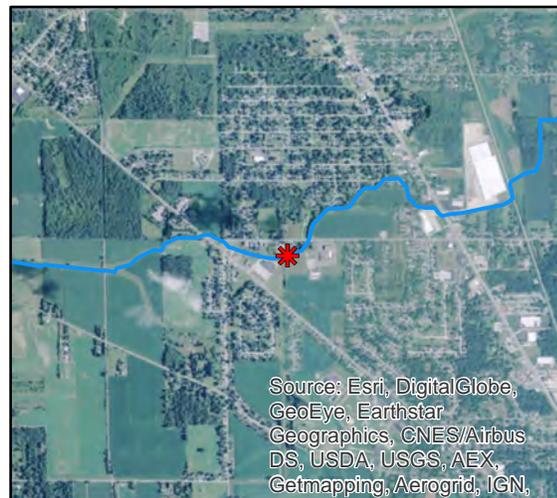


Photo 1



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
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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage303

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 1

Location: Right

Photo 1 Direction: North

Comments:

Blocks of concrete on right side of drain on bank. Hidden behind tree.

Observation Location:

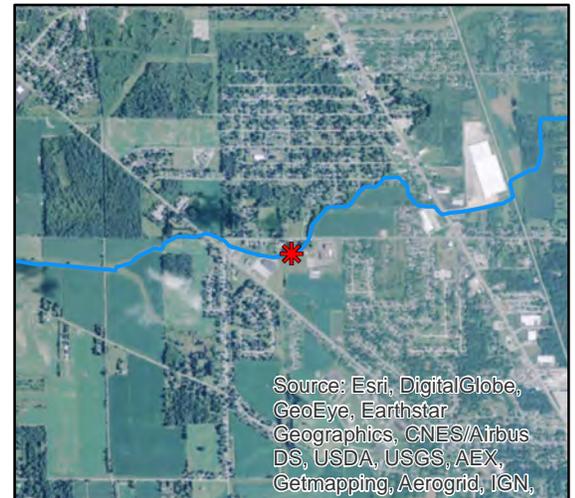


Photo 1



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 #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage304

Type: Excessive Vegetation

Blockage Length (feet): 5

Debris Length (feet): 300

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive overhanging vegetation on both sides of drain. About 300 ft down.

Observation Location:

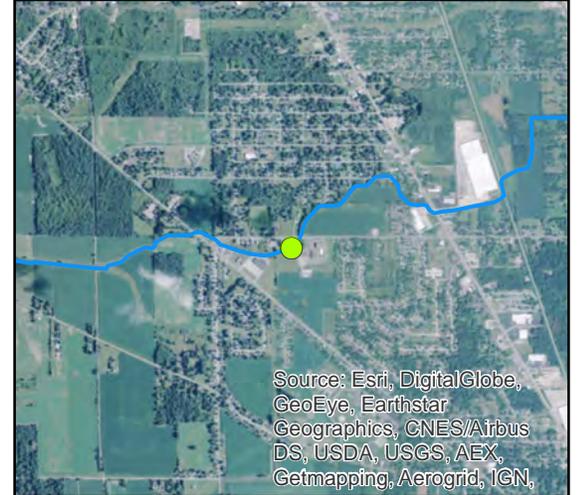


Photo 1



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
	NOTE				SCALE:
				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage305

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 100

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing from bottom of drain. About 100 ft.

Observation Location:

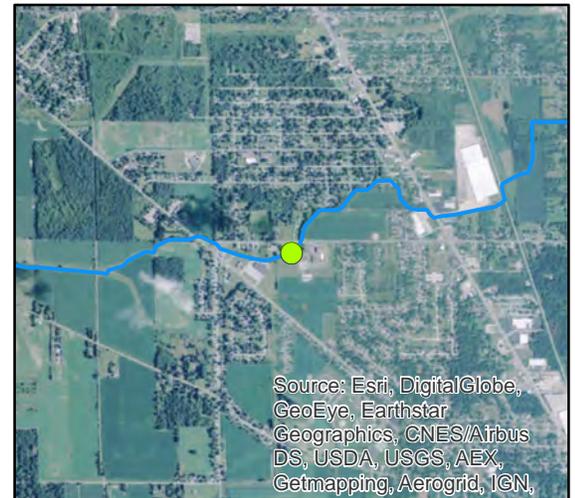


Photo 1



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:
Blockage306

Type: Sediment

Blockage Length (feet): 2

Debris Length (feet): 300

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive sedimentation on both sides of drain for about 300 ft to crossing.

Observation Location:

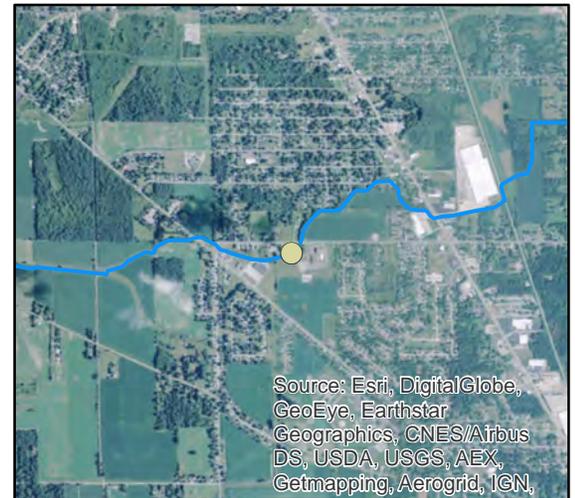


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage307

Type: Fallen Tree

Blockage Length (feet): 1

Debris Length (feet): 20

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain. Especially large log on right side about 10 ft in length.

Observation Location:

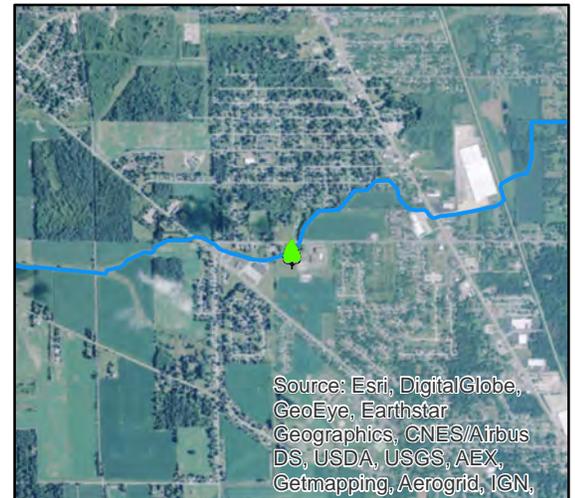


Photo 1



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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage308

Type: Fallen Tree

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

6" diam log in center of drain and other woody debris over next 50 ft.

Observation Location:

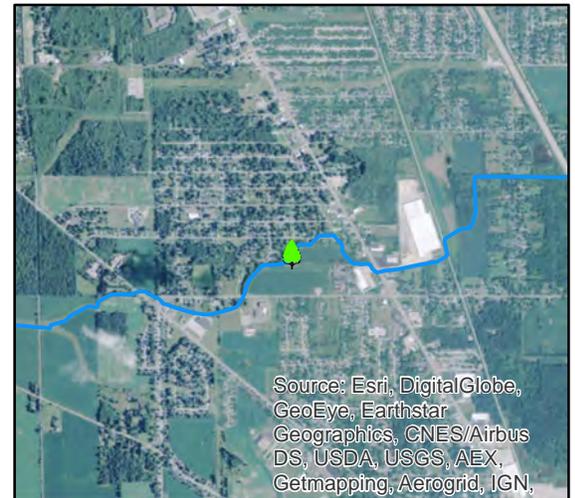


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage309

Type: Sediment

Blockage Length (feet): 10

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

On left side at outlet of sop. Also downstream of riffle.

Observation Location:

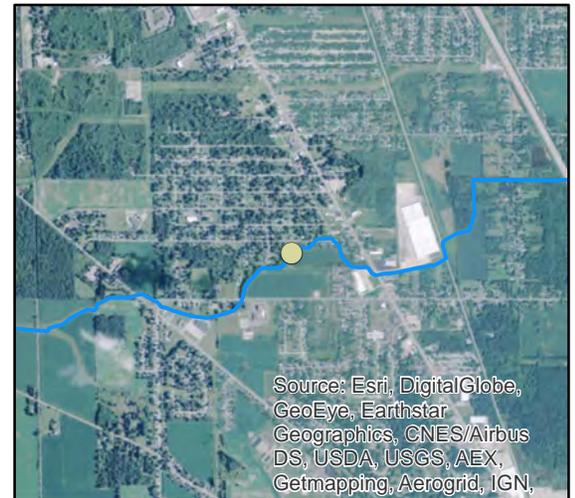


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage310

Type: Non-Vegetative Debris

Blockage Length (feet): 100

Debris Length (feet):

Location:

Photo 1 Direction: Facing Upstream

Comments:

Stones on left side and in center of drain over 100 ft. Also trash scattered.

Observation Location:

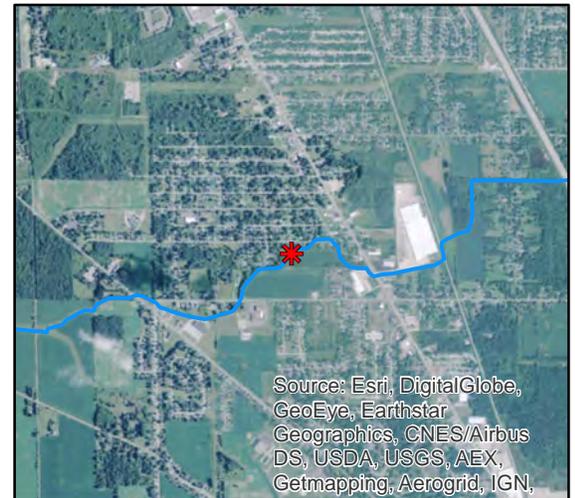


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage311

Type: Fallen Tree

Blockage Length (feet): 50

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Downstream

Comments:

Woody debris on right bank and bottom of drain channel.

Observation Location:

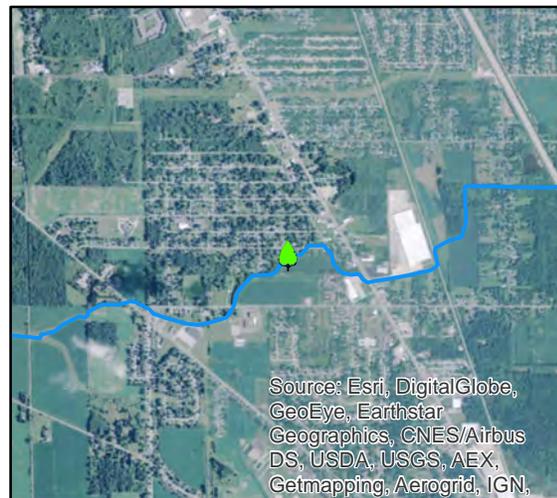


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage312

Type: Sediment

Blockage Length (feet): 40

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment deposits on right side of drain cutting channel width by 50%.
40 ft long.

Observation Location:

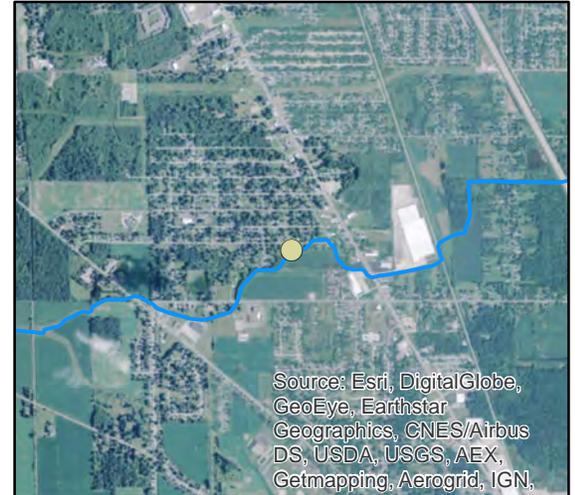


Photo 1



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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage313

Type: Sediment

Blockage Length (feet): 30

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side next 30 ft.

Observation Location:

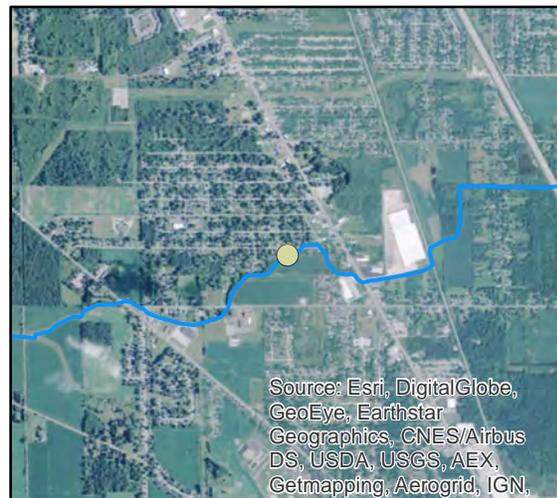


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage314

Type: Non-Vegetative Debris

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Large pieces of debris next 50 ft.

Observation Location:

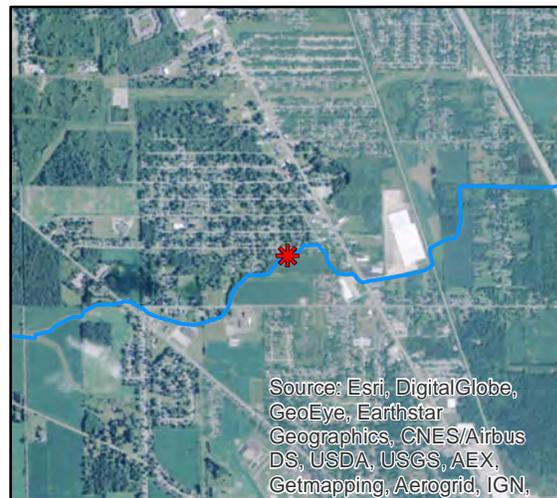


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage315

Type: Sediment

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Mid channel sediment bar approx 20 ft long.

Observation Location:

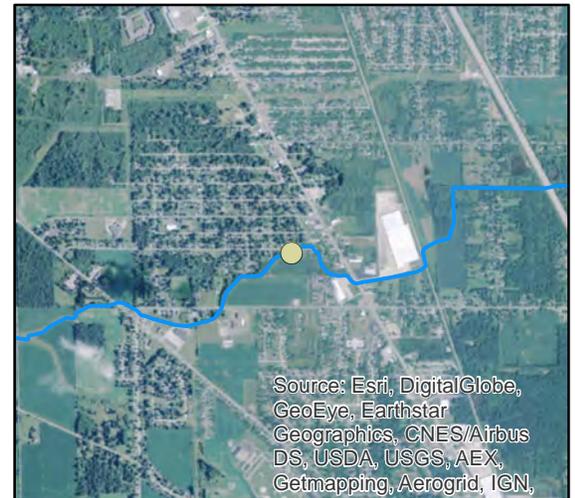


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage316

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 500

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation along the drain from this location approx 500' upstream to end. Picture facing upstream

Observation Location:

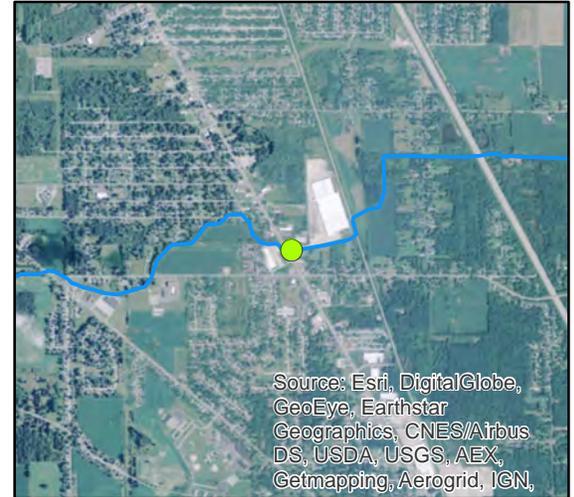


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage317

Type: Sediment

Blockage Length (feet): 150

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar left side of the drain from this location approx 150' upstream to end. Picture facing upstream.

Observation Location:

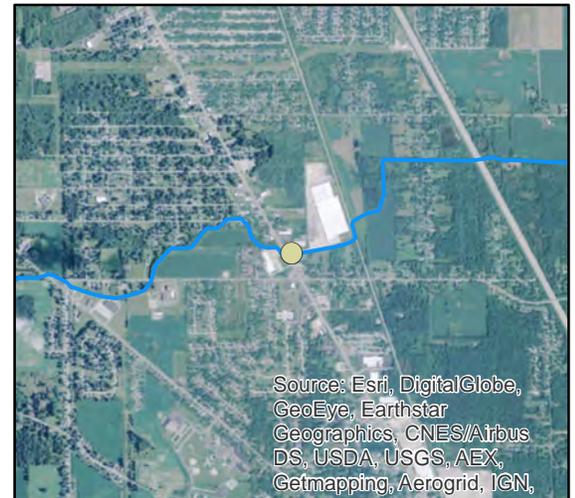


Photo 1



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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage318

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 200

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation right side of the drain from this location approx 200' upstream to end. Picture facing upstream

Observation Location:

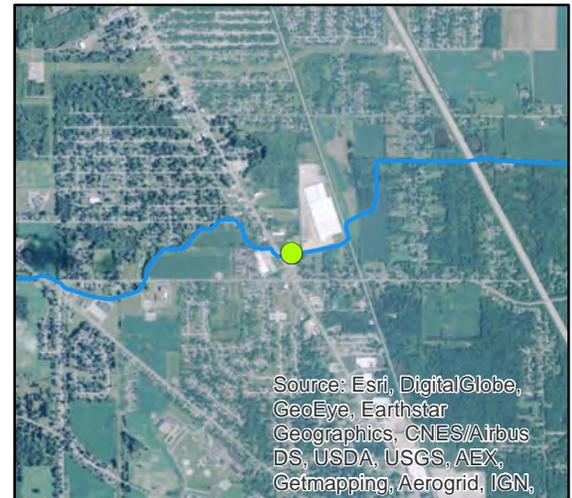


Photo 1

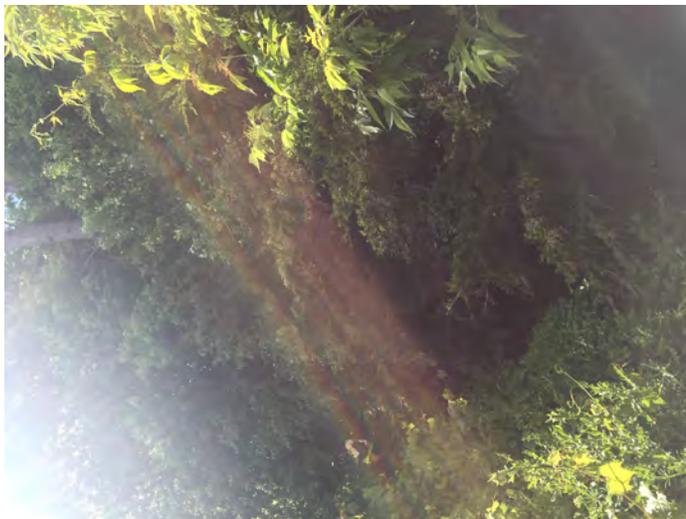


Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage319

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 5

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Misc concrete in the drain. Picture facing upstream

Observation Location:

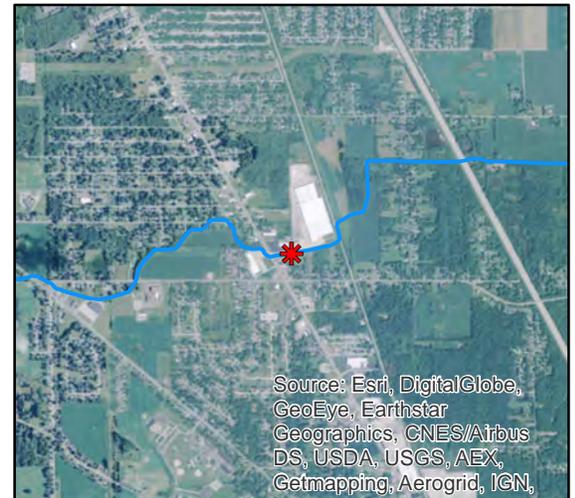


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage320

Type: Sediment

Blockage Length (feet): 400

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar with established vegetation left side of the drain from this location approx 400' upstream to end. Picture facing upstream

Observation Location:

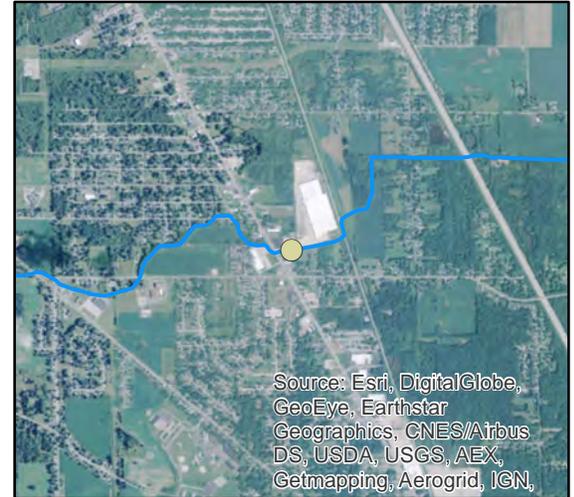


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage321

Type: Sediment

Blockage Length (feet): 900

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar with established vegetation right side of the drain from this location approx 900' upstream to end. Picture facing upstream

Observation Location:

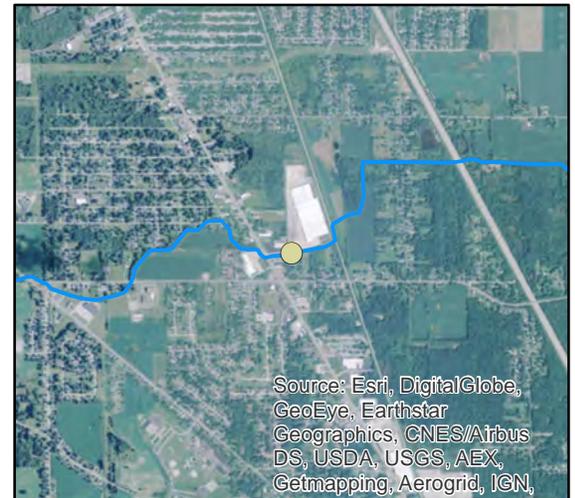


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage322

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation right side of the drain from this location approx 900' upstream to end. Picture facing upstream

Observation Location:

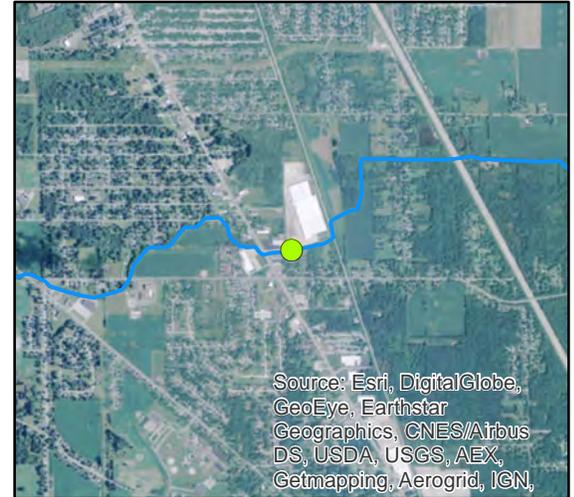


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage323

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Downstream

Comments:

Concrete pipe end section and pieces of clay tile on right side of drain, but no outlets were located. Upstream side of Kansas st culvert.

Observation Location:

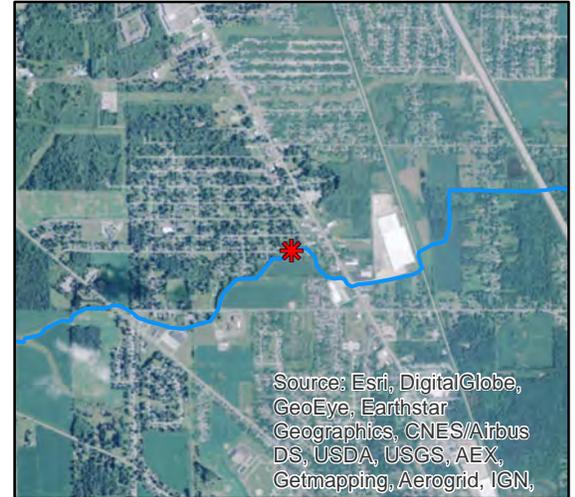


Photo 1



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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
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage324

Type: Sediment

Blockage Length (feet): 700

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar with established vegetation left side of the drain from this location approx 700' upstream to end. Picture facing upstream.

Observation Location:

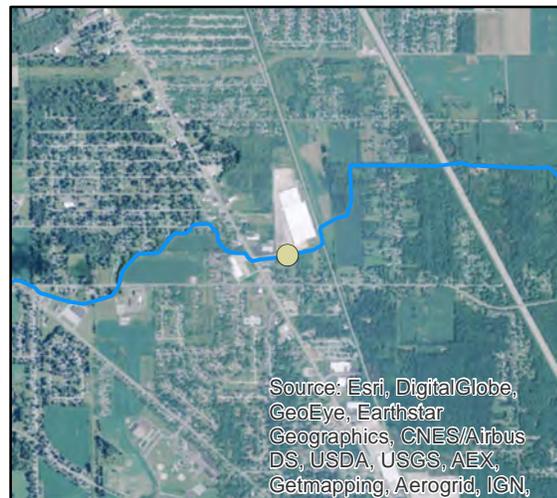


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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage325

Type: Excessive Vegetation

Blockage Length (feet): 300

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation left side of the drain from this location approx 300' upstream to end. Picture facing upstream

Observation Location:

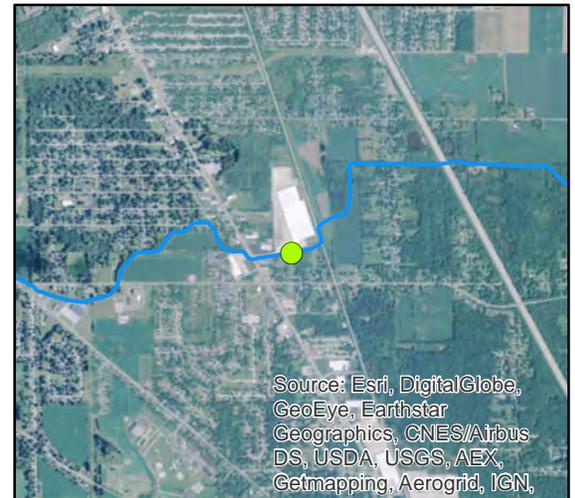


Photo 1



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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
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage326

Type: Excessive Vegetation

Blockage Length (feet): 150

Debris Length (feet):

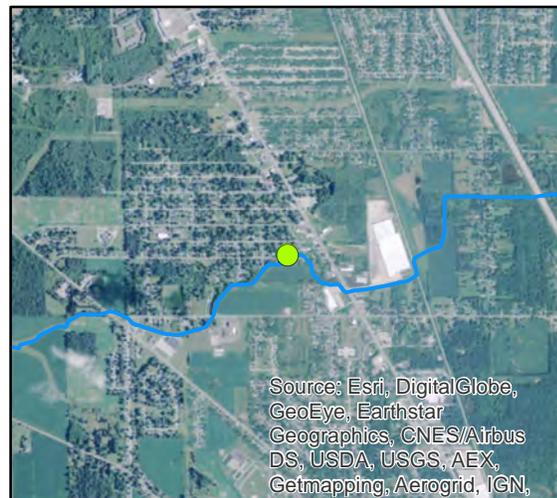
Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Heavy grassy growth in bottom of drain channel next 150 ft.

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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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage327

Type: Excessive Vegetation

Blockage Length (feet): 300

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Overhanging vegetation and small trees in v over next 300 ft.

Observation Location:

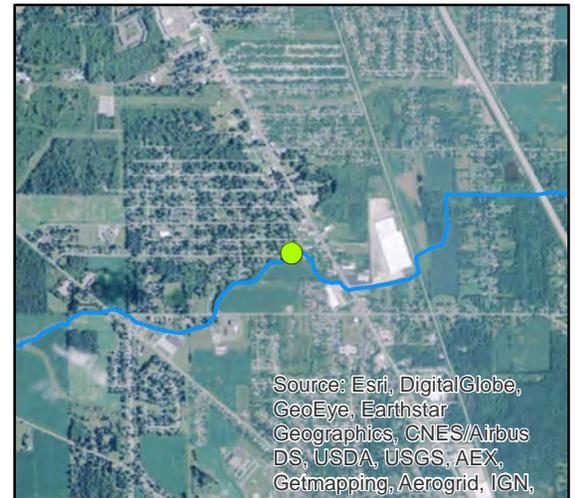


Photo 1

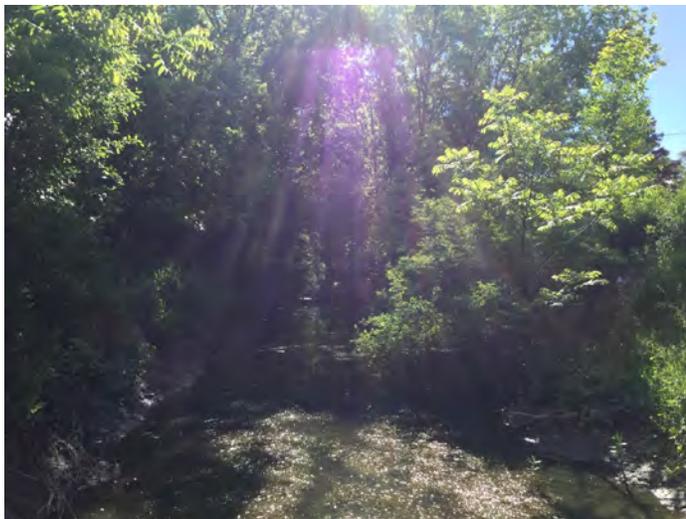


Photo 2

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
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage328

Type: Sediment

Blockage Length (feet): 100

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment deposits continuous on right side around bend for 100 ft.

Observation Location:

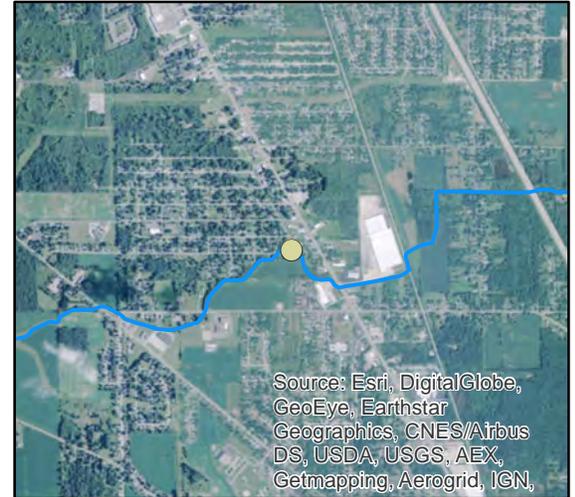


Photo 1



Photo 2

Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage329

Type: Non-Vegetative Debris

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

2 6" steel pipes just lying in drain. Picture facing upstream

Observation Location:

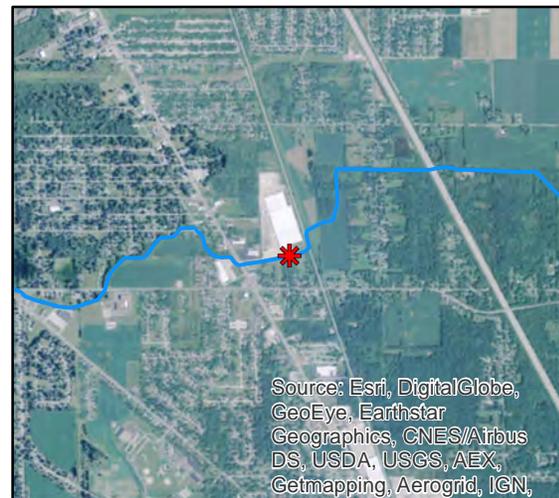


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage330

Type: Non-Vegetative Debris

Blockage Length (feet): 26

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Misc concrete and rr tie in drain. Picture facing upstream

Observation Location:

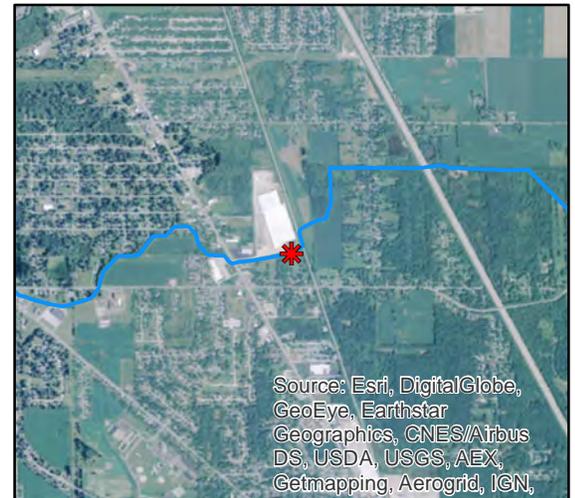


Photo 1



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:
Blockage331

Type: Sediment

Blockage Length (feet): 15

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side with vegetation growing on it. Downstream of Kansas Broadway crossing. Northwest corner of intersection.

Observation Location:

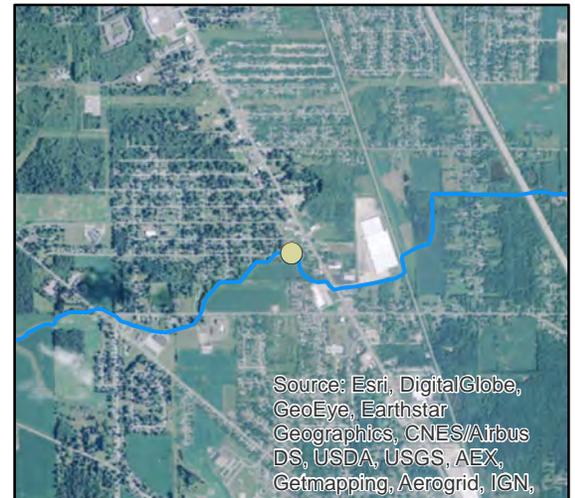


Photo 1



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:
Blockage332

Type: Log Jam

Blockage Length (feet): 10

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam in center of drain, just downstream of Kansas Broadway crossing. 10 ft. Also with non vegetative debris.

Observation Location:

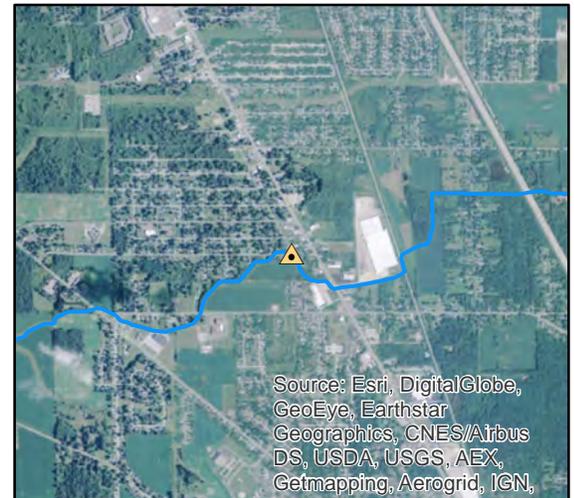


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage333

Type: Non-Vegetative Debris

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Chunks of concrete mixed in with log jam on downstream side of Kansas Broadway crossing. Might be part of head walls.

Observation Location:

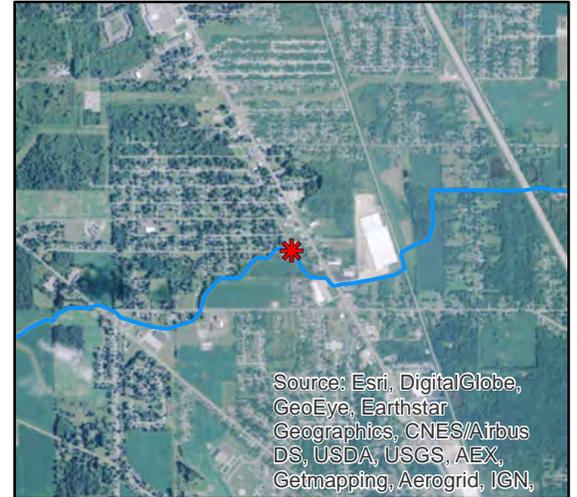


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage334

Type: Non-Vegetative Debris

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Railroad ties in the drain blocking flow fri this location approx 50 upstream to box culvert . Picture facing upstream

Observation Location:

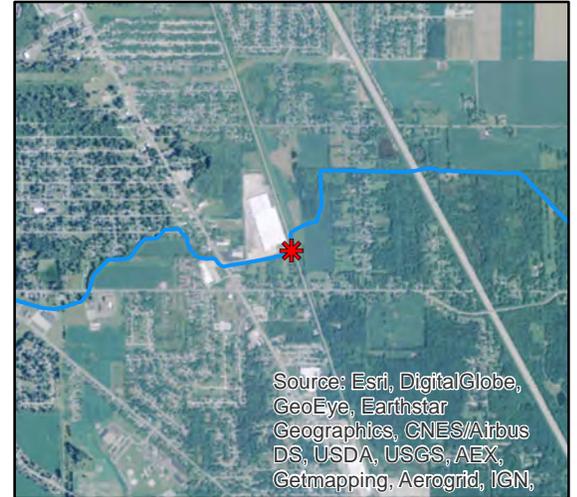


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage335

Type: Excessive Vegetation

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Grassy growth in bottom of drain channel for about 50 ft.

Observation Location:

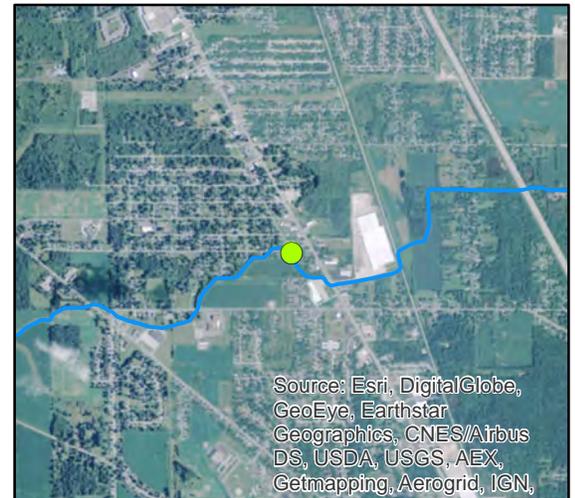


Photo 1



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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage336

Type: Sediment

Blockage Length (feet): 200

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment bars along the drain with established vegetation from this location approx 200'upstream to end. Picture facing upstream

Observation Location:

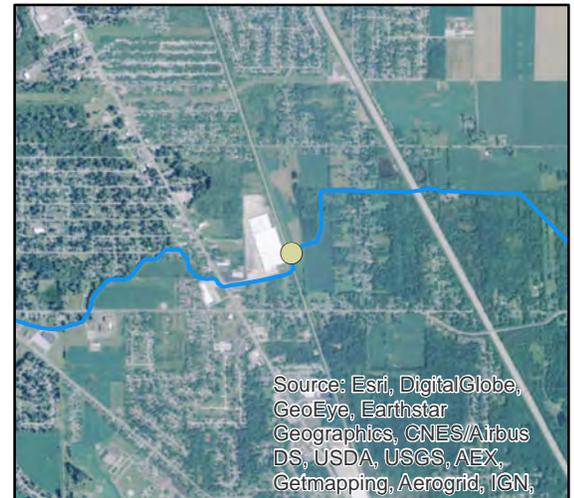


Photo 1



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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 #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage337

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Growth on banks overhanging drain. Next 500 ft.

Observation Location:

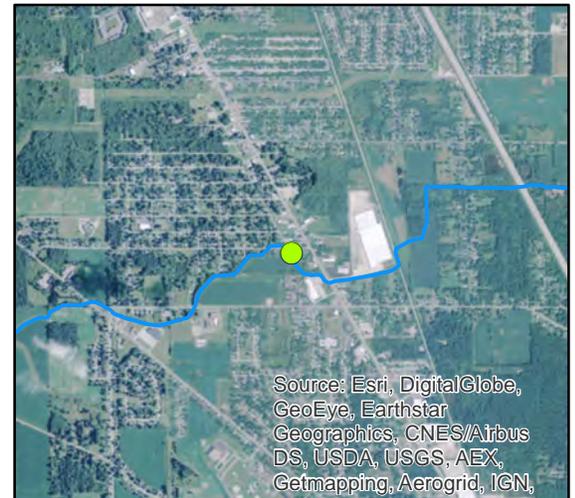


Photo 1



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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:
Blockage338

Type: Non-Vegetative Debris

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Stones, bricks, and trash in center of drain.

Observation Location:

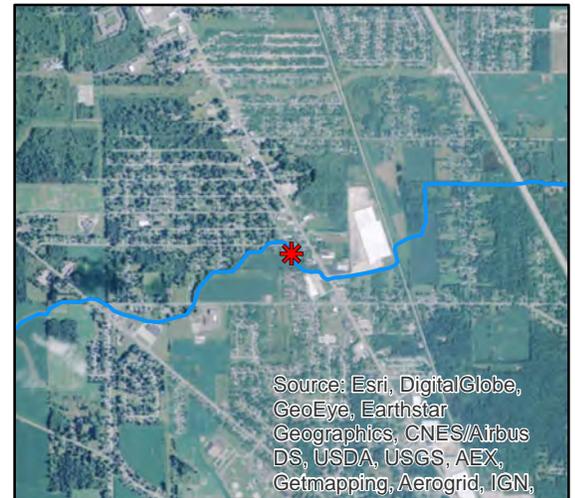


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage339

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Rubber tire in center of drain.

Observation Location:

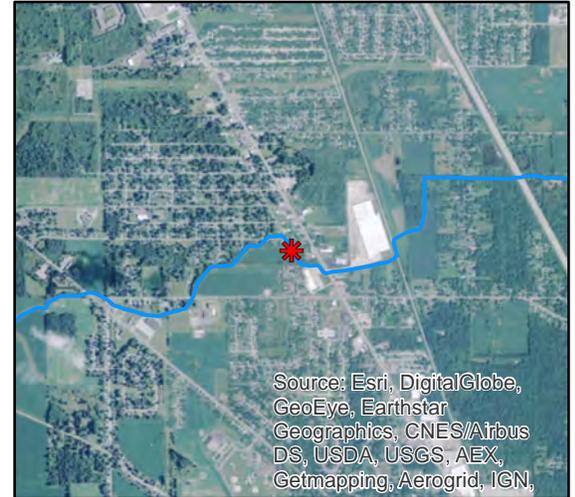


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage340

Type: Sediment

Blockage Length (feet): 500

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment build up with established vegetation in the drain from this location approx 500' upstream to end. Picture facing upstream

Observation Location:

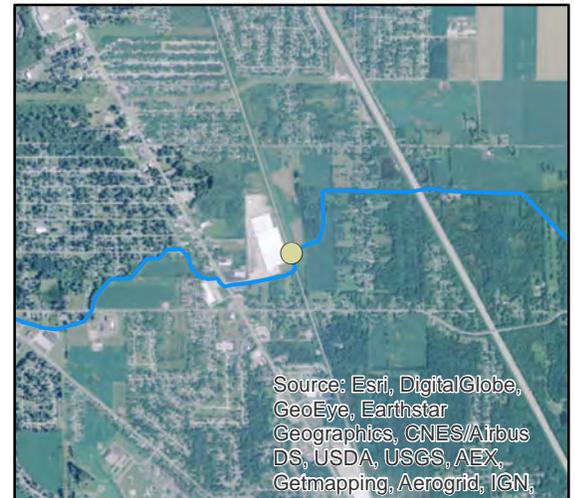


Photo 1

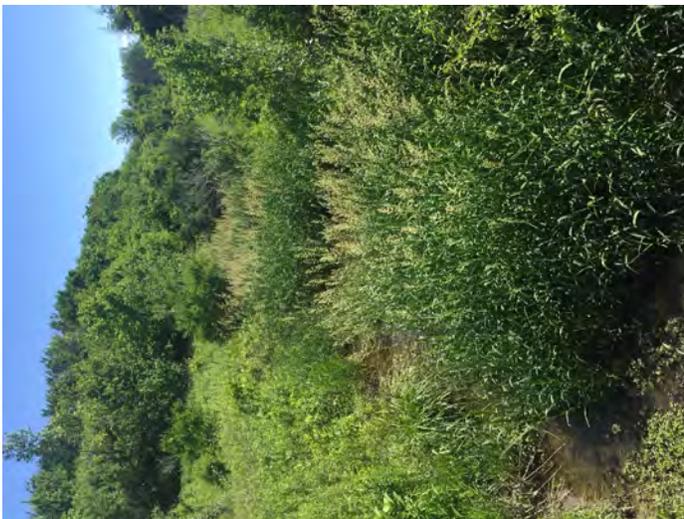


Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage341

Type: Non-Vegetative Debris

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Shopping cart and other debris mixed in with log jam.

Observation Location:

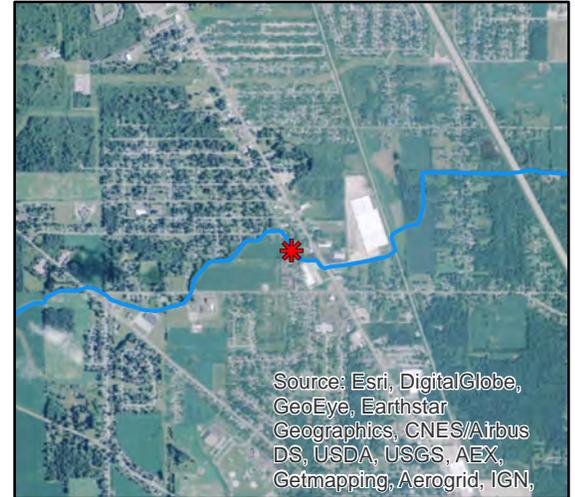


Photo 1



Photo 2

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage342

Type: Non-Vegetative Debris

Blockage Length (feet): 15

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Trash in bottom of drain and in grate of sop.

Observation Location:

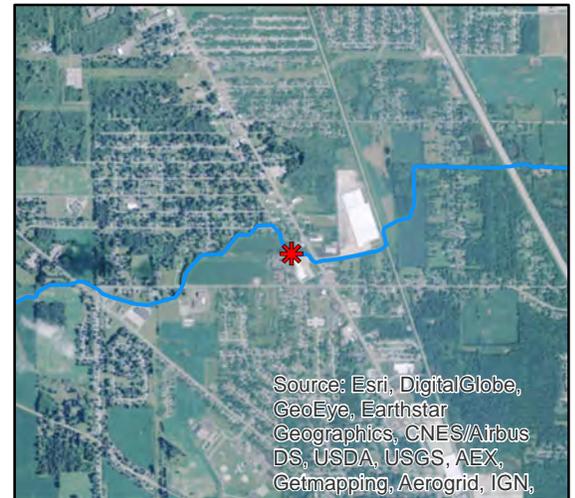


Photo 1

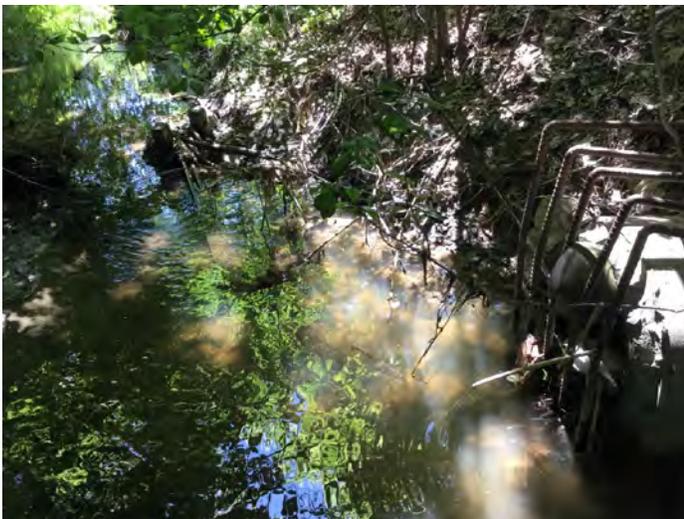


Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage343

Type: Excessive Vegetation

Blockage Length (feet): 20

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Leaning tree of left bank is overhanging drain significantly.

Observation Location:

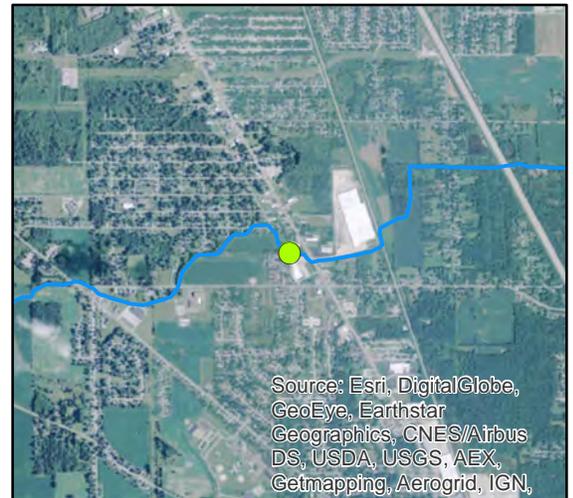


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage344

Type: Excessive Vegetation

Blockage Length (feet): 400

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Grassy overgrowth in bottom of drain channel. Next 400 ft.

Observation Location:

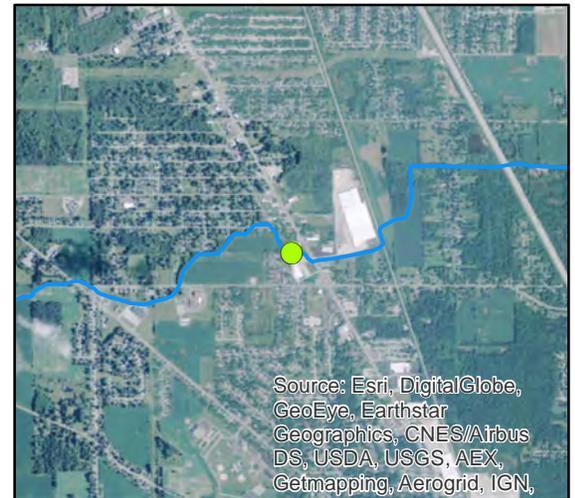


Photo 1



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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:
Blockage345

Type: Excessive Vegetation

Blockage Length (feet): 200

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Overhanging growth from both banks next 200 ft.

Observation Location:

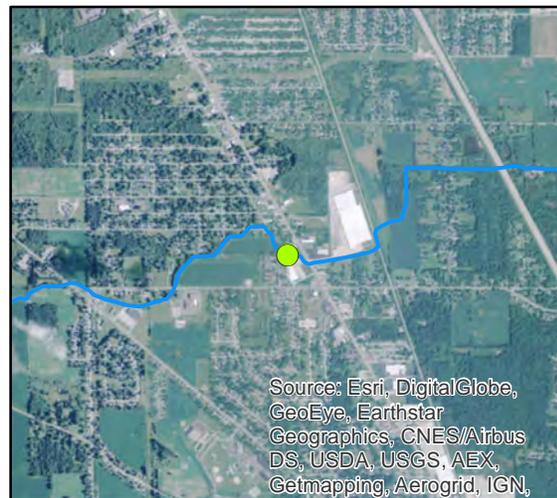


Photo 1



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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:	
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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage346

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Leaning tree with leaves causing blockage and overhanging drain.

Observation Location:

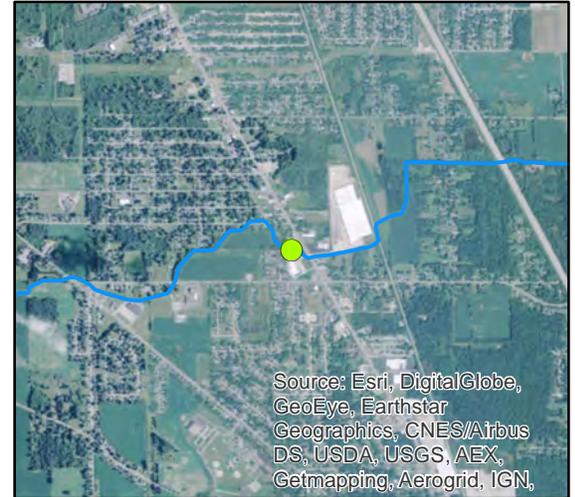


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage347

Type: Excessive Vegetation

Blockage Length (feet): 30

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Growth from trees on banks is overhanging drain.

Observation Location:

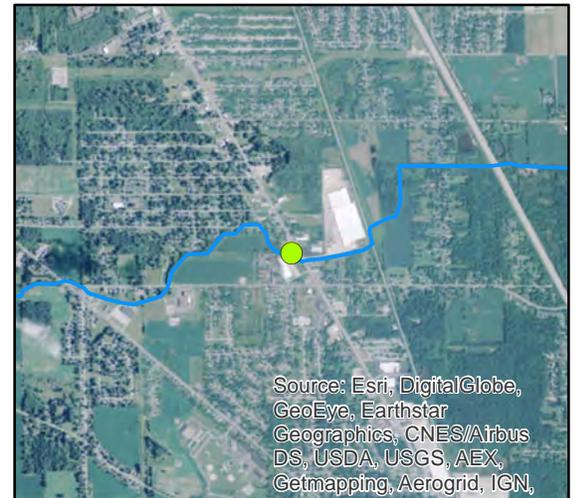


Photo 1



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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage348

Type: Excessive Vegetation

Blockage Length (feet): 150

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation off of both banks is reducing channel width over next 150 ft.

Observation Location:

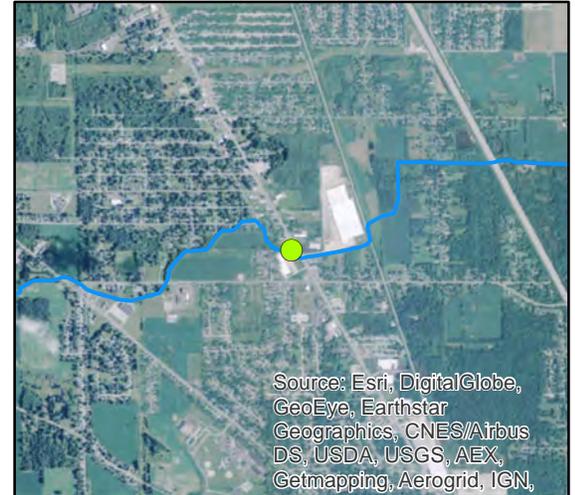


Photo 1



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Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage349

Type: Fallen Tree

Blockage Length (feet): 10

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Logs on rights side of drain. 8" diam.

Observation Location:

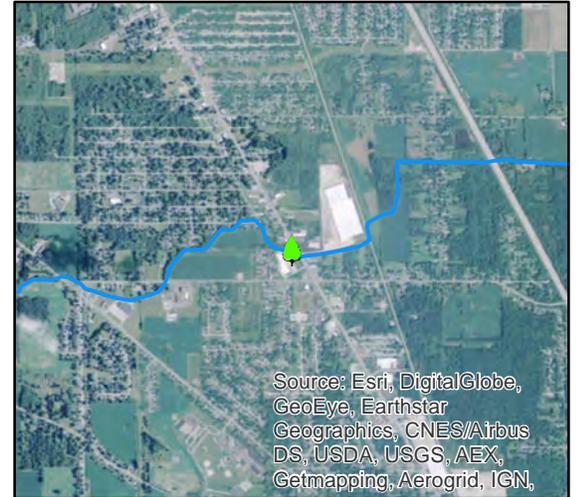


Photo 1



Photo 2

Photo 3

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				SCALE:	
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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage350

Type: Log Jam

Blockage Length (feet): 1

Debris Length (feet):

Location: Center

Photo 1 Direction: North

Comments:

Log going across the drain creating some sediment to back up for about 1'. Picture facing north across the drain.

Observation Location:

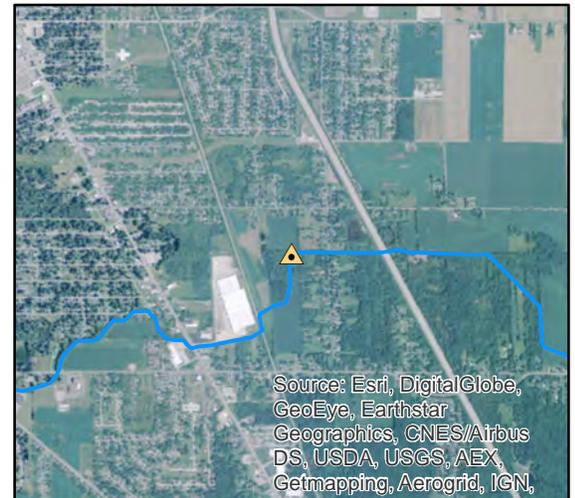


Photo 1



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Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage351

Type: Non-Vegetative Debris

Blockage Length (feet): 5

Debris Length (feet): 1

Location:

Photo 1 Direction: Facing Upstream

Comments:

Stones look to be placed to make a path from one side of drain to the other. Produces riffle.

Observation Location:

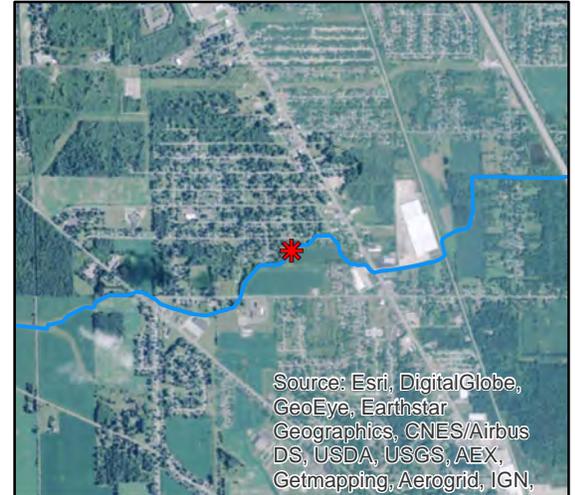


Photo 1



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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage352

Type: Excessive Vegetation

Blockage Length (feet): 10

Debris Length (feet): 5

Location: Both

Photo 1 Direction: Facing Downstream

Comments:

Excessive vegetation hanging on both sides of drain. About 5" branches.

Observation Location:

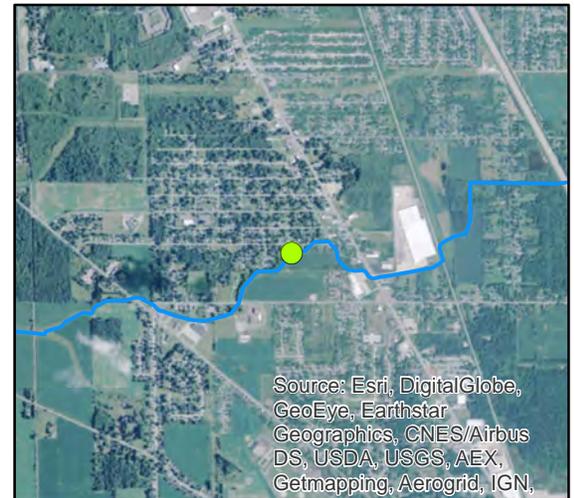


Photo 1

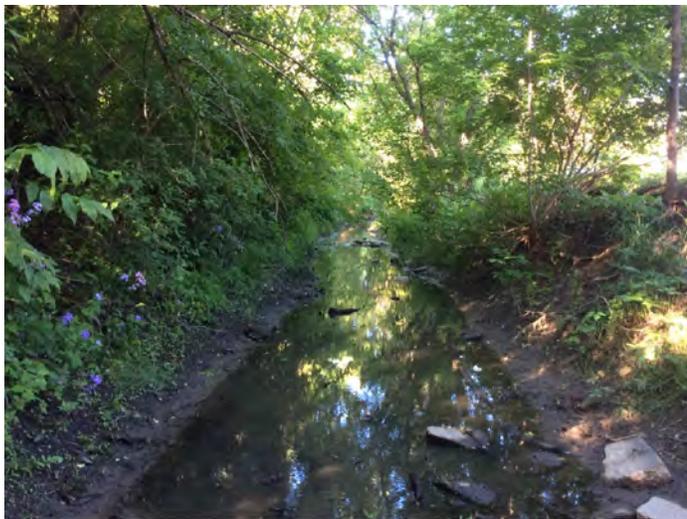


Photo 2

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage353

Type: Excessive Vegetation

Blockage Length (feet): 20

Debris Length (feet): 10

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation overhanging on both sides of drain. About 10 ft long branches.

Observation Location:

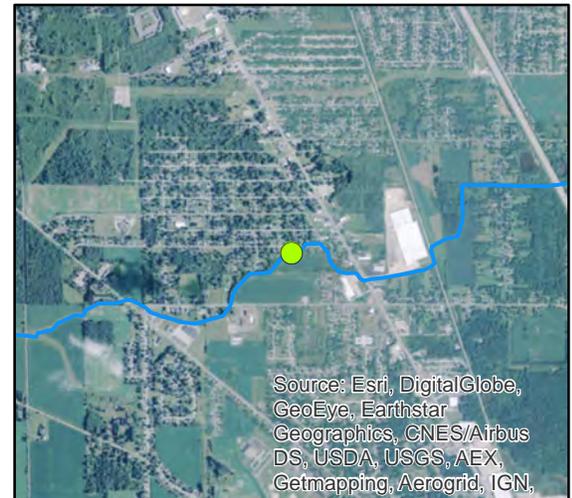


Photo 1

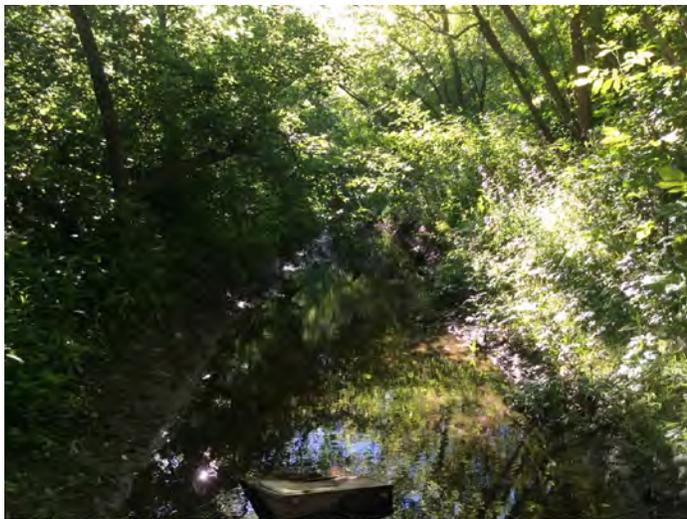


Photo 2

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:
Blockage354

Type: Fallen Tree

Blockage Length (feet): 20

Debris Length (feet): 1

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain. Excessive on right side. About 20 ft farther is more windy debris on right side.

Observation Location:

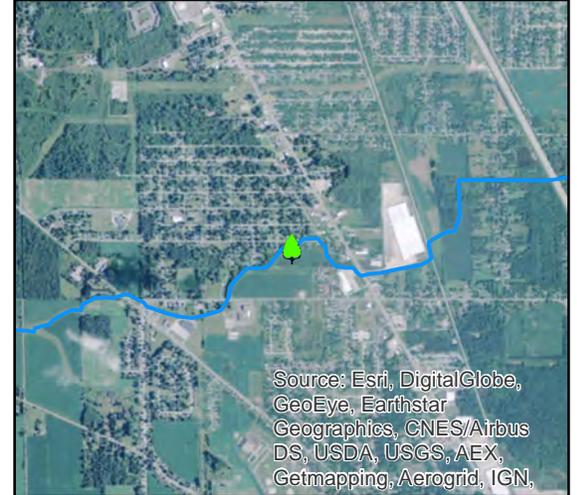


Photo 1



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:
Blockage355

Type: Excessive Vegetation

Blockage Length (feet): 150

Debris Length (feet):

Location:

Photo 1 Direction: Facing Upstream

Comments:

Grassy excessive vegetation growing from bottom of drain for 150 ft.

Observation Location:

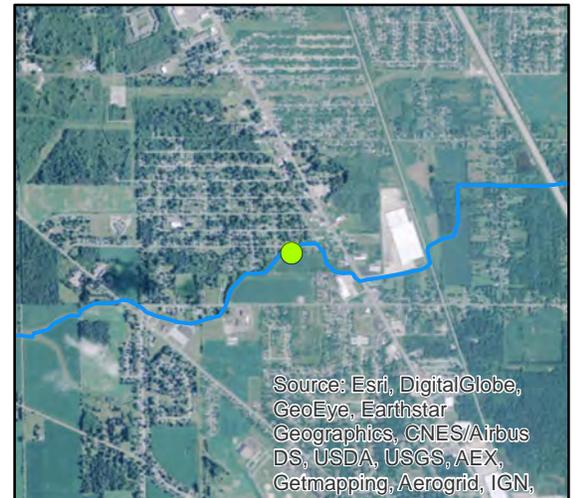


Photo 1



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:
Blockage356

Type: Sediment

Blockage Length (feet): 5

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side of drain. Woody debris on top. About 5 ft long.

Observation Location:

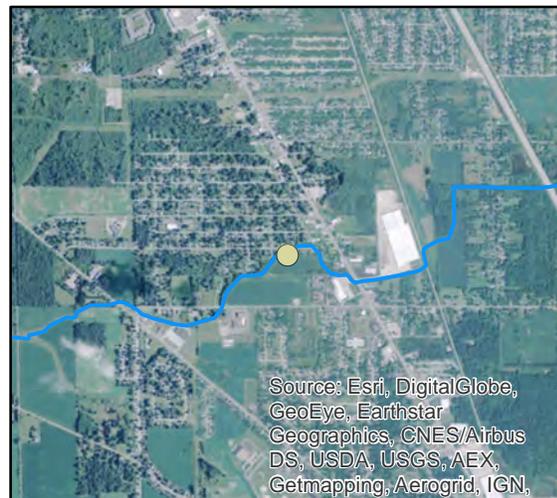


Photo 1



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:
Blockage357

Type: Non-Vegetative Debris

Blockage Length (feet): 5

Debris Length (feet): 1

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Trash on both sides of drain for about 5 ft. Looks like old gutters.

Observation Location:

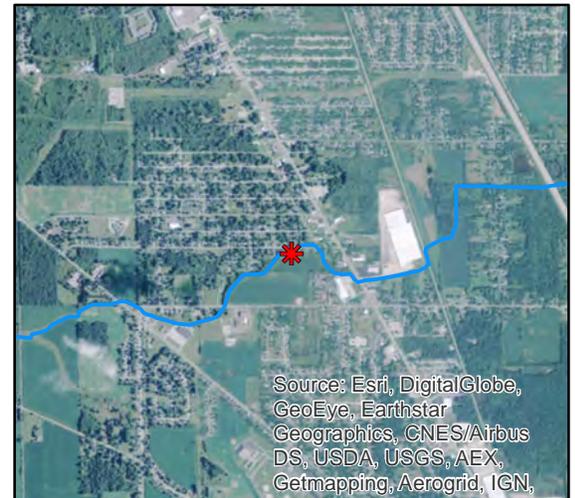


Photo 1



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:
Blockage358

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 20

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation overhanging on both sides of drain for about 20 ft. 5 ft branches.

Observation Location:

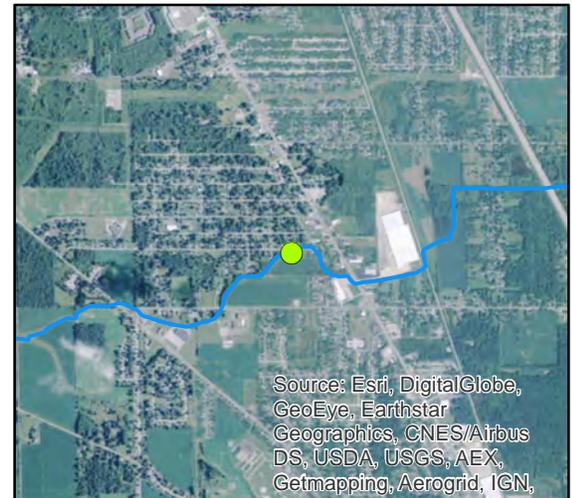


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage359

Type: Sediment

Blockage Length (feet): 20

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side of drain for about 20 ft.

Observation Location:

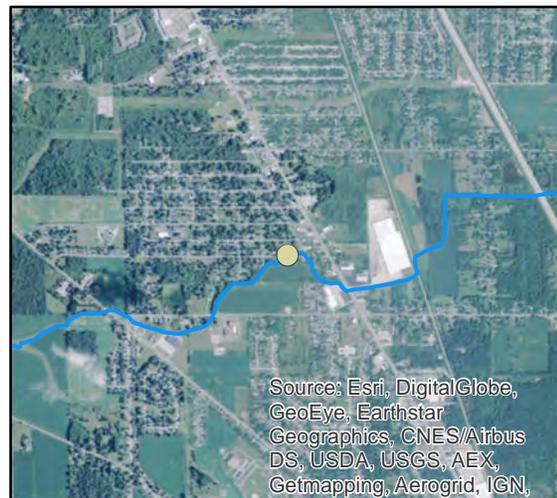


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage360

Type: Sediment

Blockage Length (feet): 10

Debris Length (feet):

Location:

Photo 1 Direction: South

Comments:

Sediment bar in center of drain and also on left side. Windy debris on top. About 10 ft long.

Observation Location:

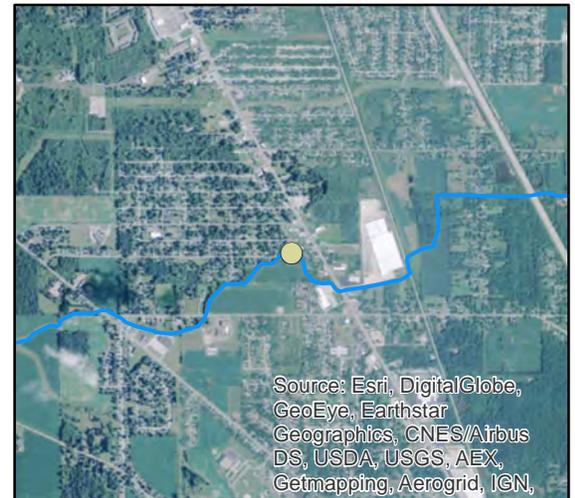


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage361

Type: Fallen Tree

Blockage Length (feet): 7

Debris Length (feet): 5

Location: Both

Photo 1 Direction: South

Comments:

Woody debris on both sides of drain. About 5 ft long.

Observation Location:

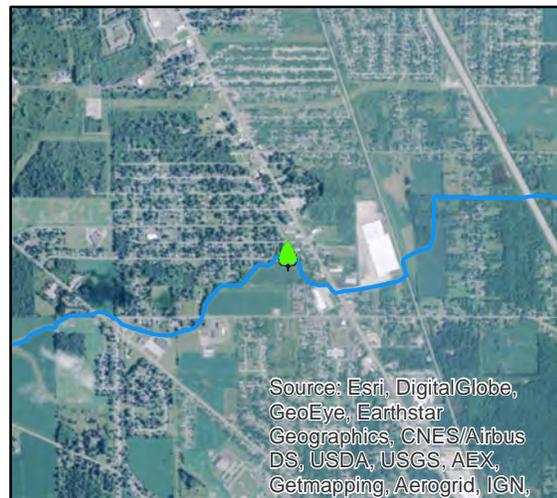


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage362

Type: Sediment

Blockage Length (feet): 1100

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bars on both sides of drain for about 1100 ft.

Observation Location:

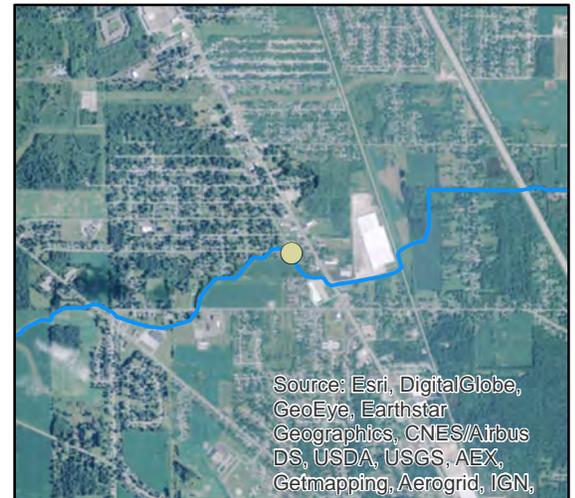


Photo 1

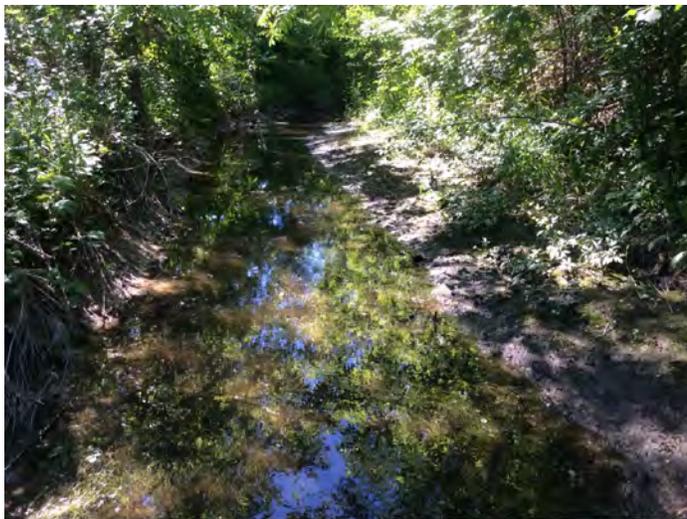


Photo 2

Photo 3

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				SCALE:		
NOTE					SHEET #:	
					JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage363

Type: Excessive Vegetation

Blockage Length (feet): 5

Debris Length (feet): 7

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Overhanging vegetation on left side of drain. About 5 ft long. Branch about 7 ft long.

Observation Location:

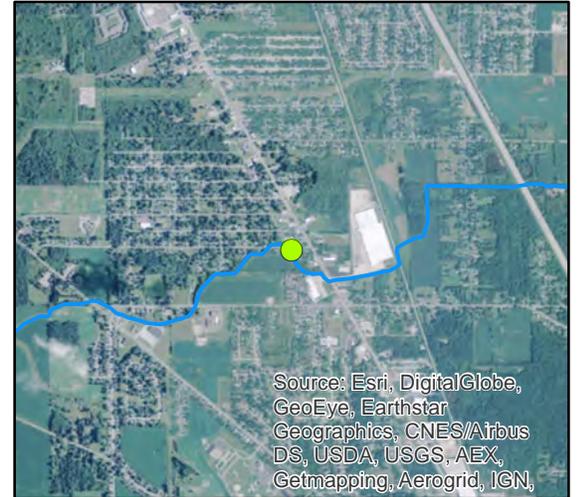


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage364

Type: Fallen Tree

Blockage Length (feet): 50

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Scattered woody debris on both sides of drain for 50 ft.

Observation Location:

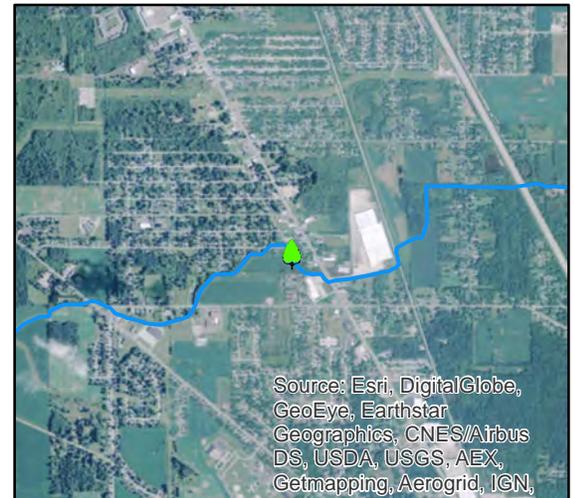


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage365

Type: Fallen Tree

Blockage Length (feet): 5

Debris Length (feet): 30

Location:

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree on right side of drain extending across.

Observation Location:

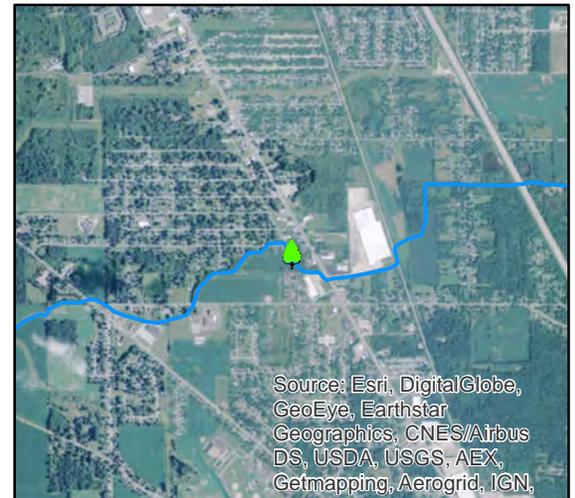


Photo 1



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:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage366

Type: Sediment

Blockage Length (feet): 50

Debris Length (feet):

Location:

Photo 1 Direction: Facing Upstream

Comments:

Massive sediment bar on left side of drain extending into center causing major blockage for about 50 ft.

Observation Location:

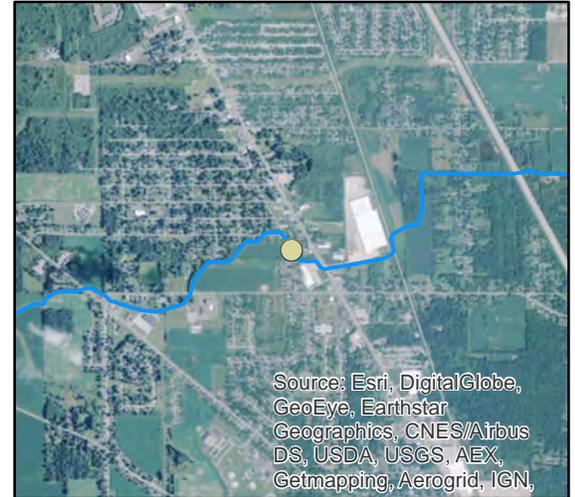


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage367

Type: Log Jam

Blockage Length (feet): 10

Debris Length (feet): 7

Location:

Photo 1 Direction: Facing Upstream

Comments:

Major log jam with trash. Extending across whole drain for about 10 ft.

Observation Location:

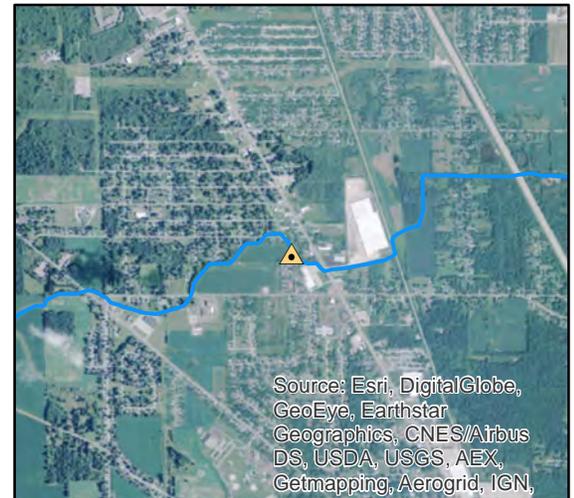


Photo 1



Photo 2



Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage368

Type: Sediment

Blockage Length (feet): 100

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment bars on either side of drain for about 100 ft. Water depth is only inch and a half.

Observation Location:

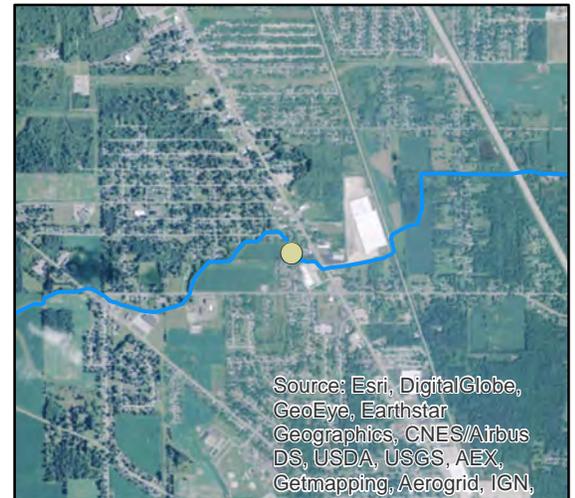


Photo 1



Photo 2

Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage369

Type: Sediment

Blockage Length (feet): 15

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar in center of drain because water depth is only an inch.

Observation Location:

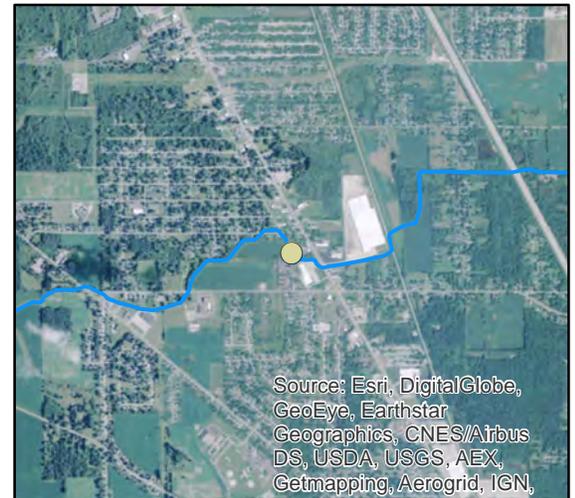


Photo 1



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Photo 3

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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage370

Type: Fallen Tree

Blockage Length (feet): 4

Debris Length (feet): 7

Location: Right

Photo 1 Direction: Facing Downstream

Comments:

Woody debris on right side of drain for about 4 ft.

Observation Location:

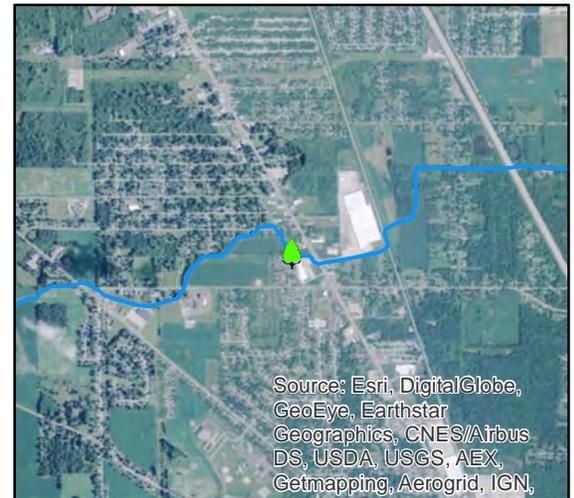


Photo 1



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Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage371

Type: Sediment

Blockage Length (feet): 20

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side of drain before pipe. Then 10 ft down is sediment bar on left side of drain.

Observation Location:

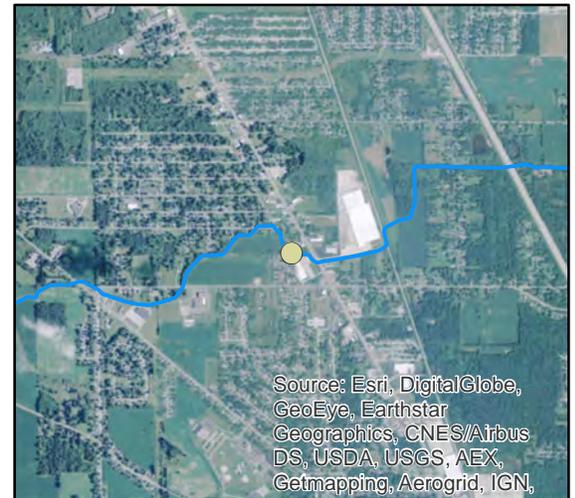


Photo 1



Photo 2

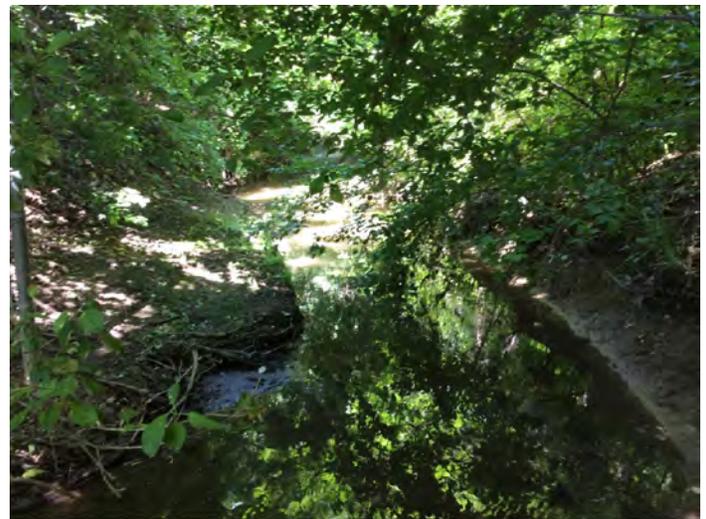


Photo 3

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:
Blockage372

Type: Log Jam

Blockage Length (feet): 5

Debris Length (feet): 6

Location:

Photo 1 Direction: Facing Upstream

Comments:

Log jam from fallen tree on left side of drain coming into center and blocking flow. About 5 ft long.

Observation Location:

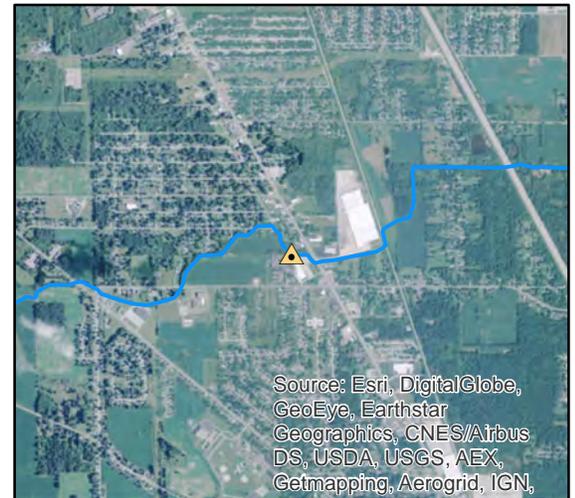


Photo 1



Photo 2

Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage373

Type: Fallen Tree

Blockage Length (feet): 20

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on left side of drain for about 20 ft.

Observation Location:

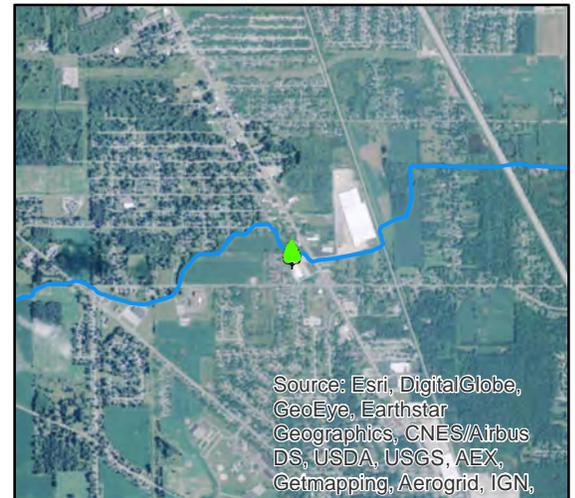


Photo 1



Photo 2

Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage374

Type: Sediment

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on left side of drain for about 50 ft.

Observation Location:

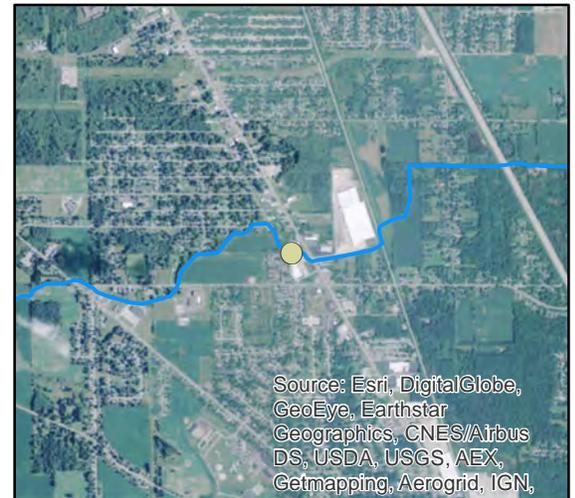


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage375

Type: Non-Vegetative Debris

Blockage Length (feet): 7

Debris Length (feet): 7

Location:

Photo 1 Direction: Facing Downstream

Comments:

Concrete curb across drain blocking flow and causing riffles.

Observation Location:

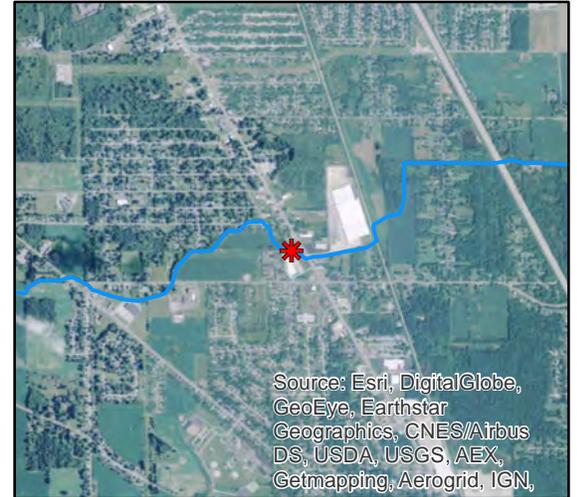


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage376

Type: Sediment

Blockage Length (feet): 250

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment deposits making drain width smaller.

Observation Location:

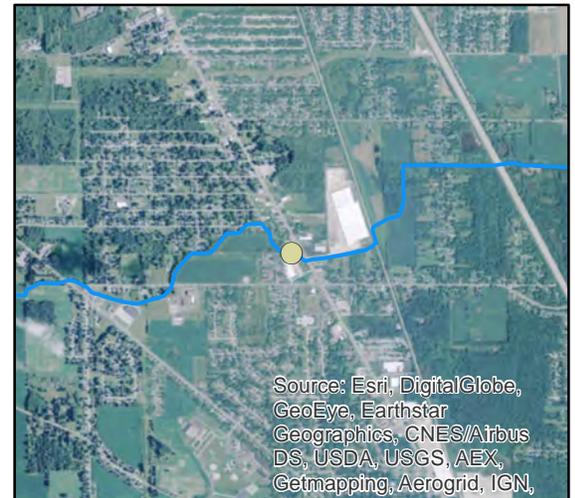


Photo 1

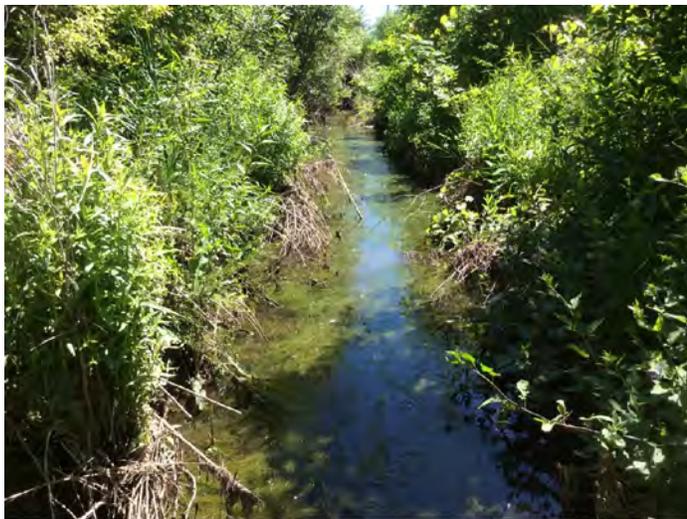


Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage377

Type: Fallen Tree

Blockage Length (feet): 10

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on right side of drain on bank for about 10 ft.

Observation Location:

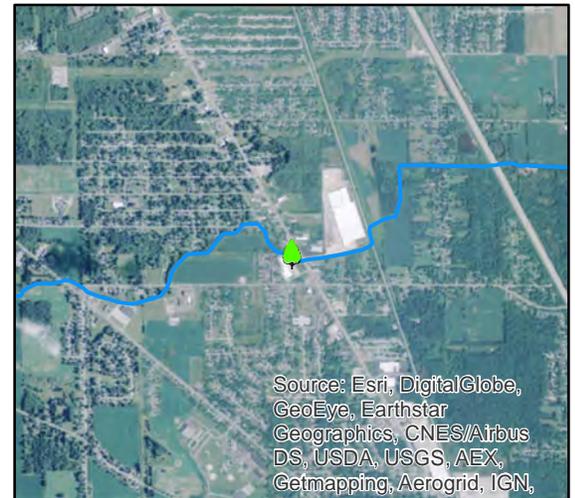


Photo 1



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				SCALE:	
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				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage378

Type: Non-Vegetative Debris

Blockage Length (feet): 2

Debris Length (feet): 2

Location: Right

Photo 1 Direction: Facing Downstream

Comments:

Square block of wood. About 2 ft width. With concrete stones on top.

Observation Location:

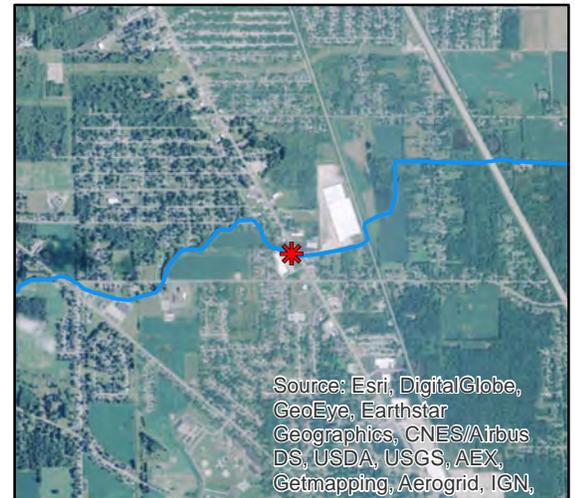


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage379

Type: Sediment

Blockage Length (feet): 800

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment bars on both sides of drain for about 800 ft.

Observation Location:

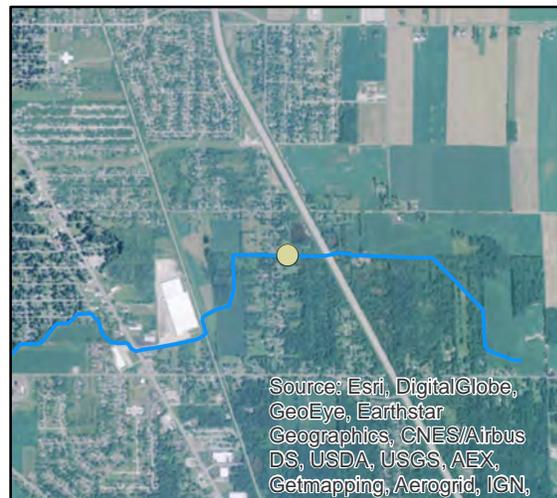


Photo 1



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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
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage380

Type: Fallen Tree

Blockage Length (feet): 800

Debris Length (feet): 0

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain for about 800 ft.

Observation Location:

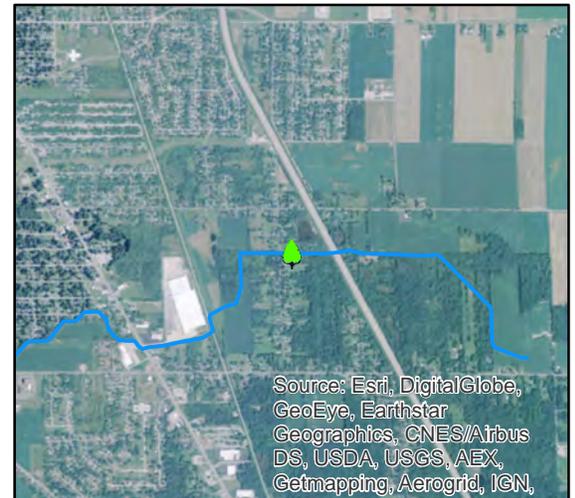


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage381

Type: Excessive Vegetation

Blockage Length (feet): 250

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Growth from banks overhanging drain next 250 ft.

Observation Location:

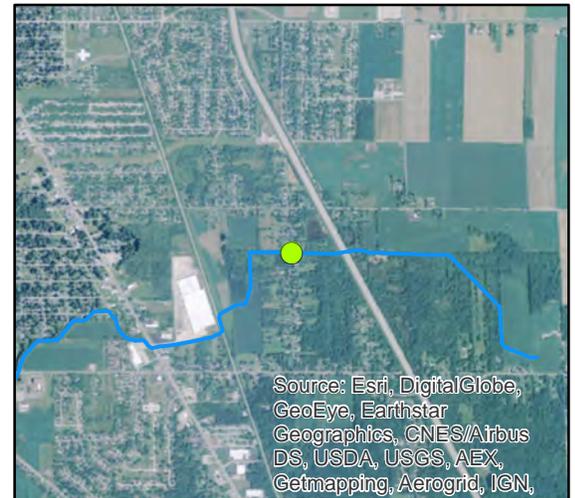


Photo 1

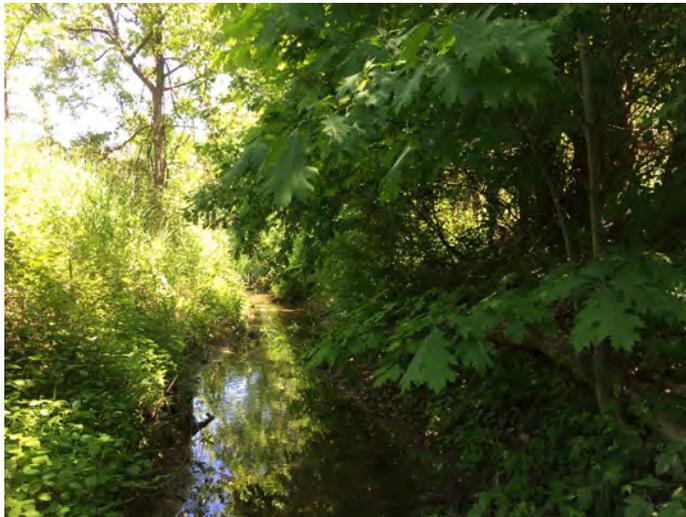


Photo 2

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage382

Type: Excessive Vegetation

Blockage Length (feet): 300

Debris Length (feet): 5

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Overhanging excessive vegetation on both sides of drain for about 300ft. Branches about 5 ft long.

Observation Location:

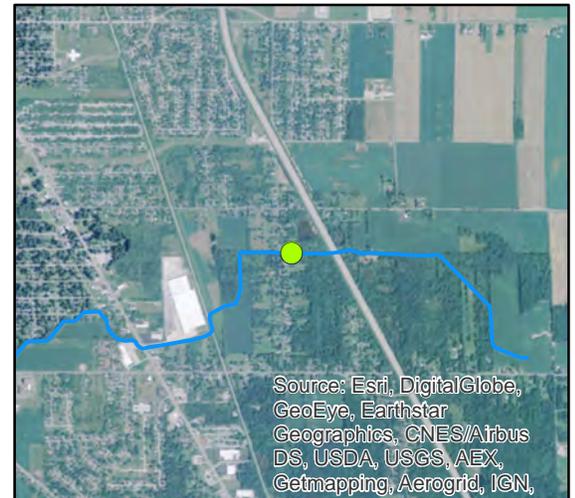


Photo 1



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:
Blockage383

Type: Log Jam

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

2 log jams mixed in with woody debris and trash over next 50 ft.

Observation Location:

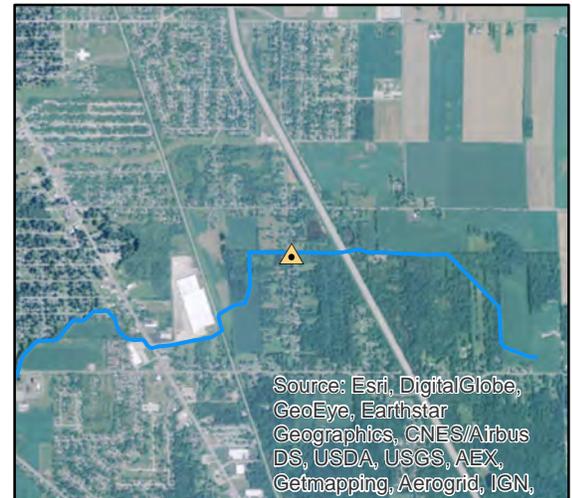


Photo 1

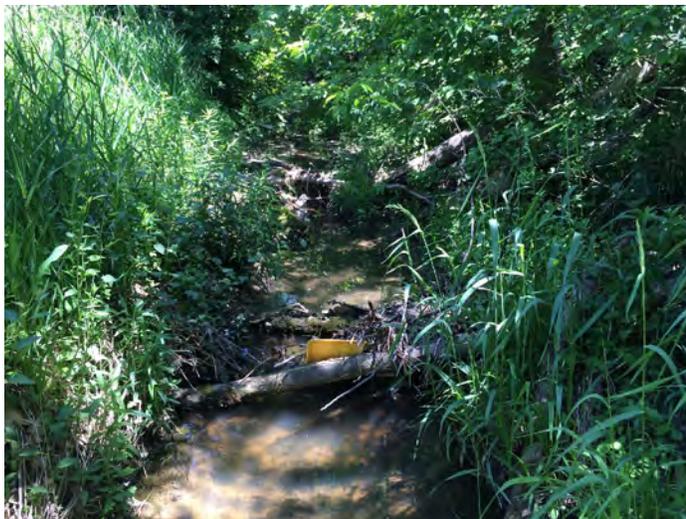


Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage384

Type: Non-Vegetative Debris

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Trash mixed in with log jam.

Observation Location:

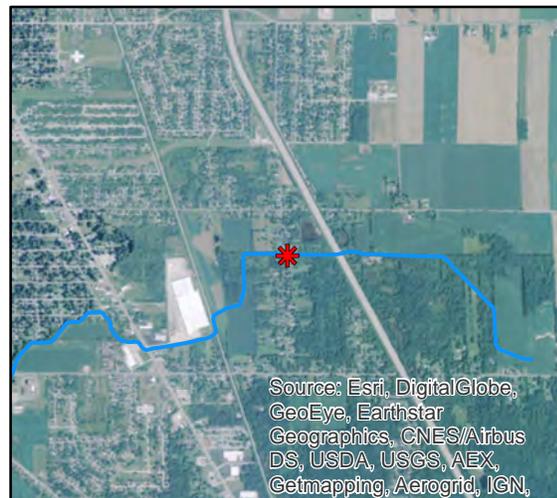


Photo 1



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Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage385

Type: Sediment

Blockage Length (feet): 20

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar and reduced channel width upstream of log jam.

Observation Location:

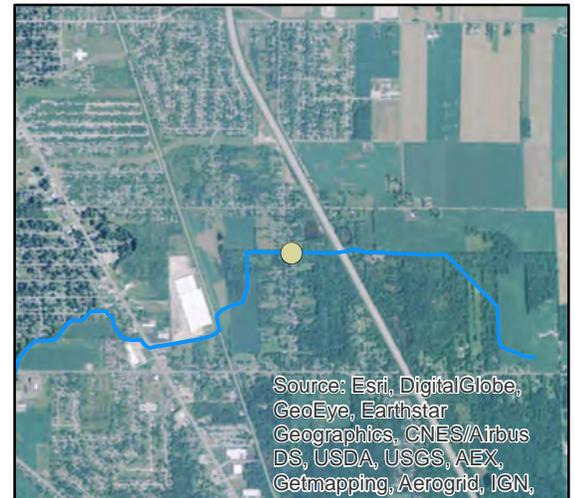


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage386

Type: Fallen Tree

Blockage Length (feet): 2

Debris Length (feet): 7

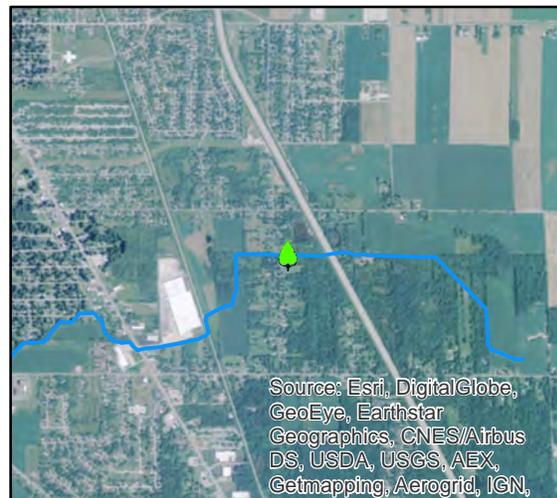
Location:

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree on left side extending into drain. About 7 ft long.

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:
Blockage387

Type: Fallen Tree

Blockage Length (feet): 100

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Two large fallen trees overhanging the drain. 12" diam. Also, woody debris scattered next 100 ft.

Observation Location:

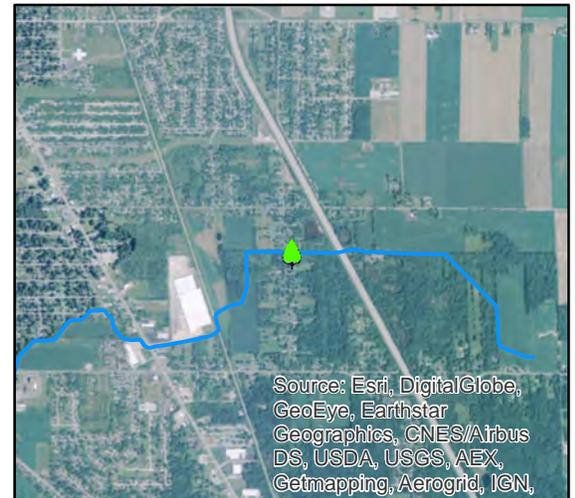


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage388

Type: Sediment

Blockage Length (feet): 30

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar on right side for 30 ft. Vegetation and woody debris.

Observation Location:

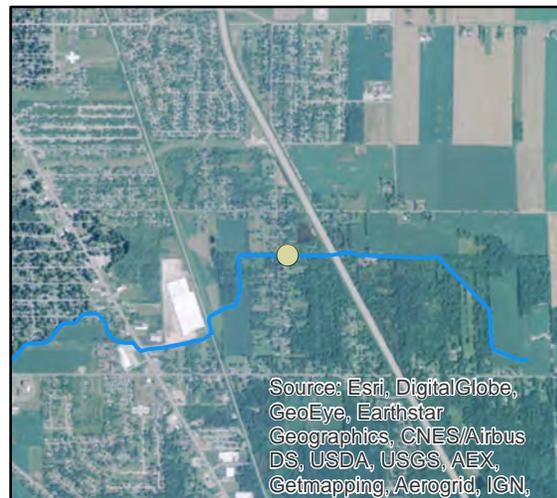


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage389

Type: Excessive Vegetation

Blockage Length (feet): 30

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing on sediment bars.

Observation Location:

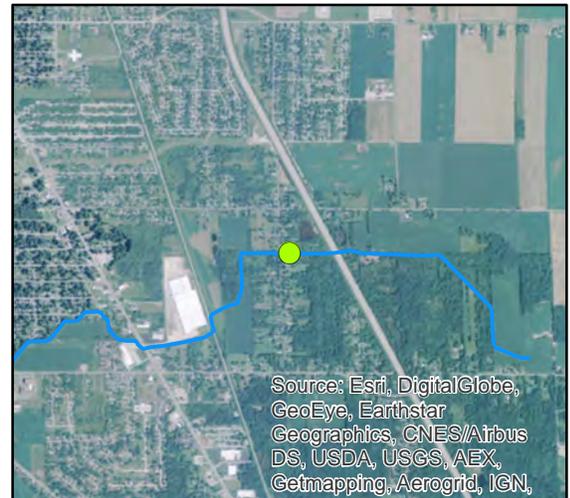


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage390

Type: Log Jam

Blockage Length (feet): 4

Debris Length (feet): 5

Location:

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree from right side into center of drain. Log jam in surrounding area. Sediment bar on left side of drain connecting too. Trash in jam too. Field tile is 3 ft to the left of jam.

Observation Location:

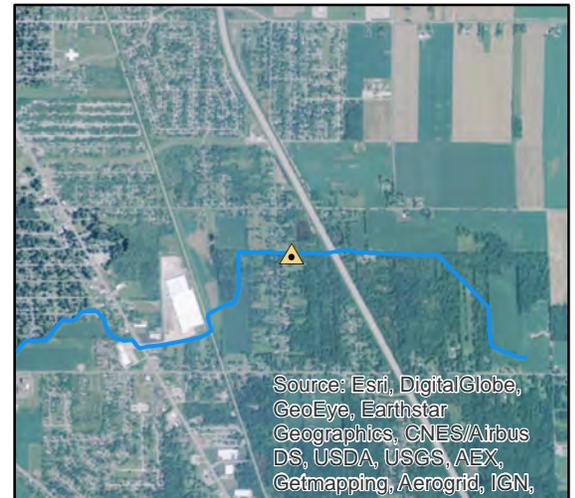


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage391

Type: Fallen Tree

Blockage Length (feet): 4

Debris Length (feet): 8

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree on right side extending into drain. About 7 ft long.

Observation Location:

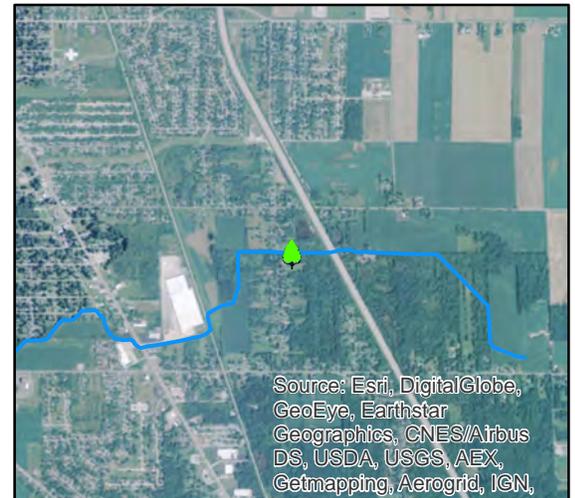


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage392

Type: Excessive Vegetation

Blockage Length (feet): 10

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Vegetation growing in drain on sediment bars.

Observation Location:

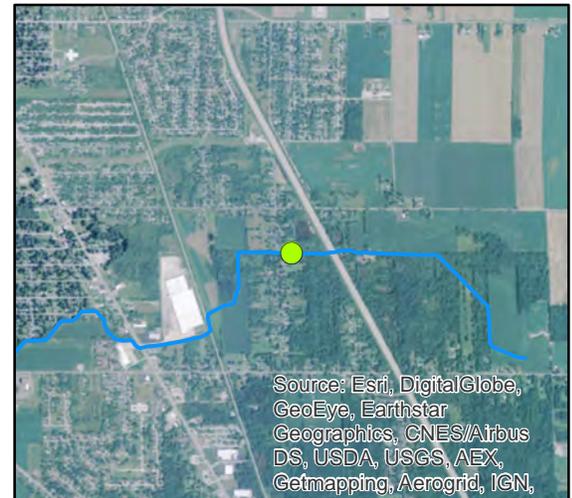


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage393

Type: Sediment

Blockage Length (feet): 230

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment bars reduce width of drain. 230 ft down reduces width even more. Photo 2 is taken facing downstream 230 ft from where data point starts. Width becomes about 1 foot wide. 100 ft farther down drain width goes back to around 5 ft.

Observation Location:

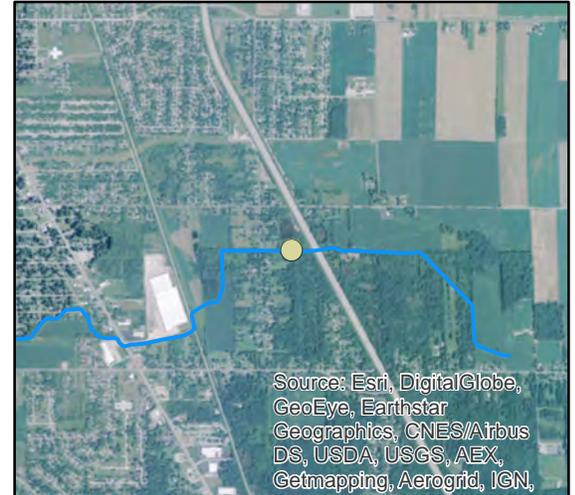


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage394

Type: Fallen Tree

Blockage Length (feet): 30

Debris Length (feet): 20

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree on right side extending into drain. About 20 ft long branch. 15 ft further down drain is huge fallen tree. About 100" diameter. 20 ft long tree.

Observation Location:

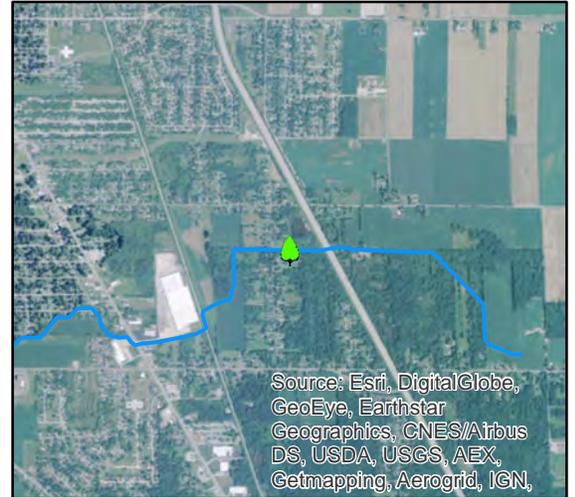


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage395

Type: Log Jam

Blockage Length (feet): 40

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam and sediment buildup in center of drain for 40 ft.

Observation Location:

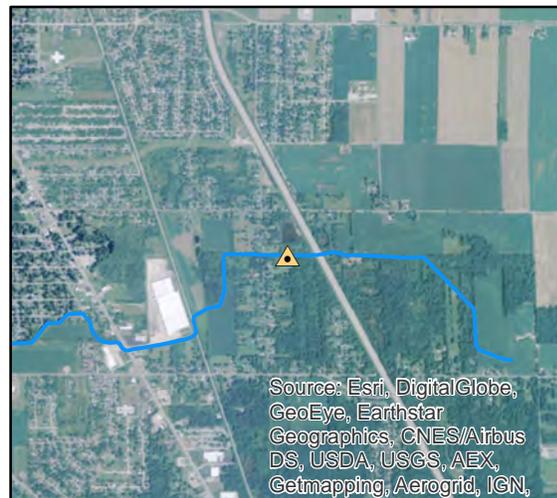


Photo 1



Photo 2

Photo 3

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				SCALE:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage396

Type: Excessive Vegetation

Blockage Length (feet): 150

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing on sediment bar. Reduces channel width by 75%.

Observation Location:

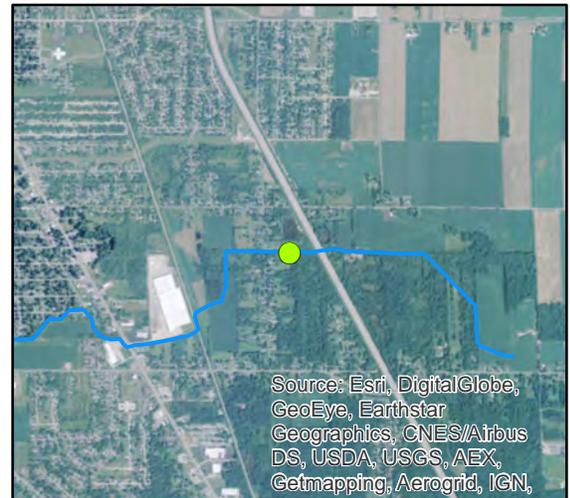


Photo 1



Photo 2



Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage397

Type: Excessive Vegetation

Blockage Length (feet): 150

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Tree on right with heavy overgrowth from branches.

Observation Location:

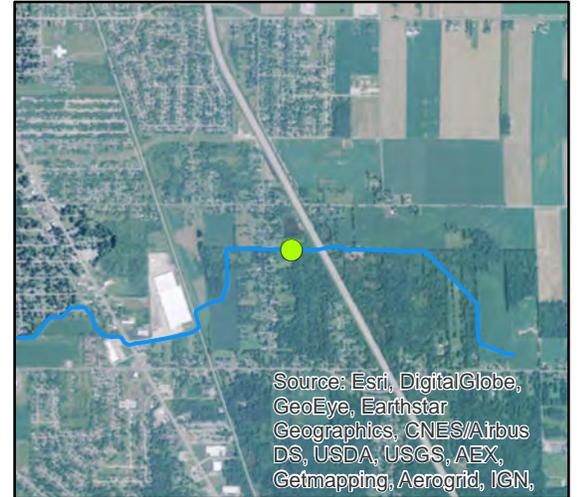


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage398

Type: Log Jam

Blockage Length (feet): 5

Debris Length (feet): 3

Location:

Photo 1 Direction: Facing Downstream

Comments:

Log jam from fallen tree and woody debris. About 5 ft long.

Observation Location:

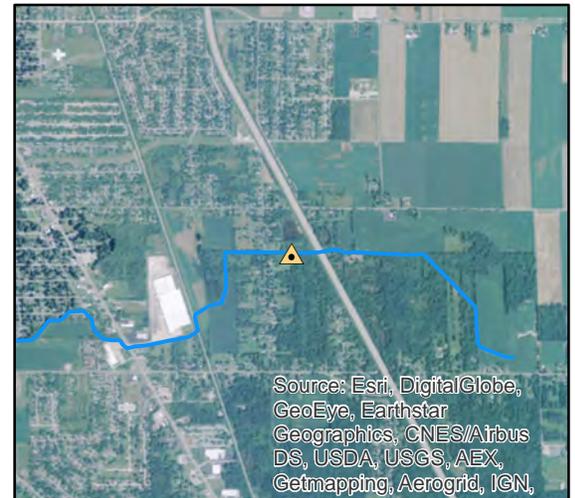


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage399

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 20

Location: Right

Photo 1 Direction: South

Comments:

About 3 fallen dead trees on right side of drain. About 20 ft long.

Observation Location:

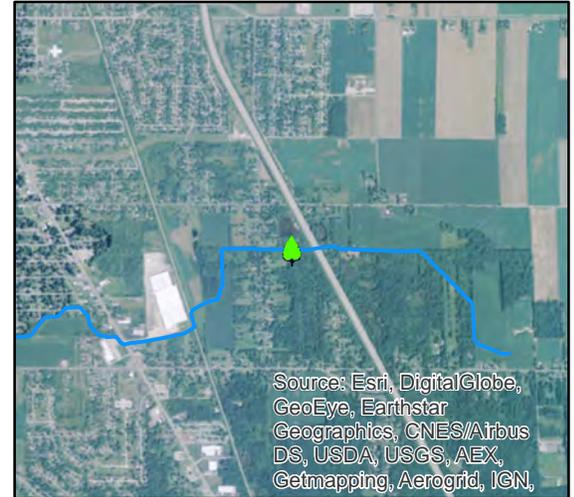


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage400

Type: Log Jam

Blockage Length (feet): 30

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam for 40 ft. Up to 3" diam.

Observation Location:

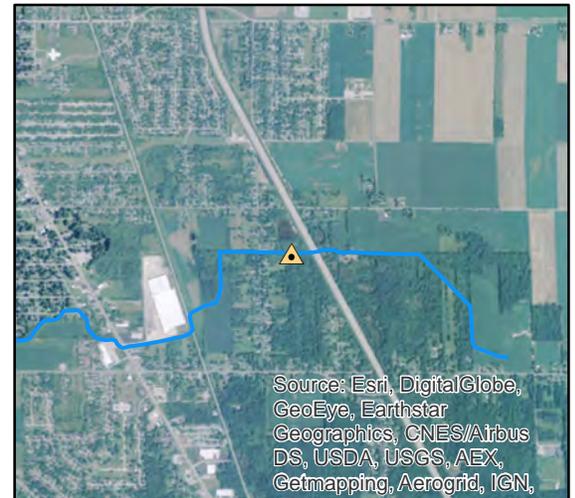


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage401

Type: Excessive Vegetation

Blockage Length (feet): 300

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Growth from banks overhanging drain next 300 ft.

Observation Location:

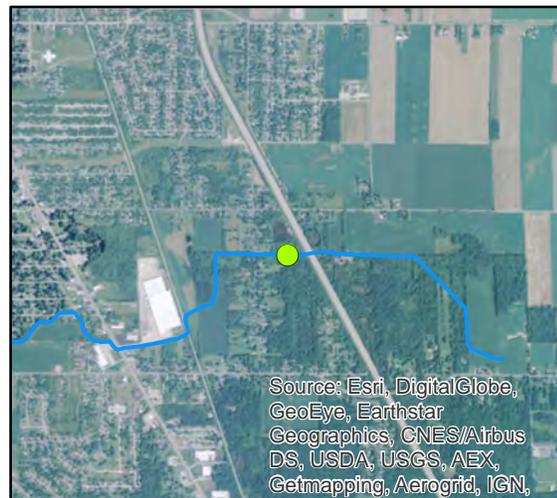


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage402

Type: Fallen Tree

Blockage Length (feet): 50

Debris Length (feet): 8

Location:

Photo 1 Direction: Facing Upstream

Comments:

Excessive fallen trees in drain for about 50 ft.

Observation Location:

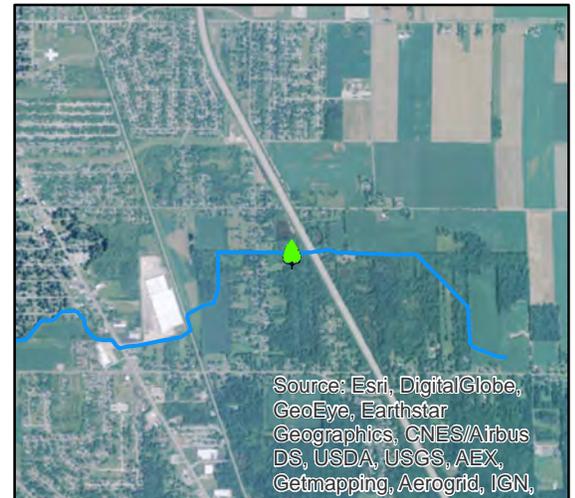


Photo 1



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Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage403

Type: Excessive Vegetation

Blockage Length (feet): 250

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on both sides of drain around smaller drain width for about 250 ft.

Observation Location:

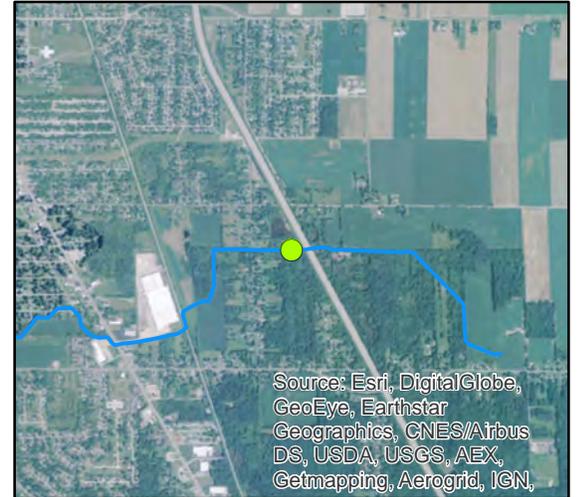


Photo 1



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Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage404

Type: Fallen Tree

Blockage Length (feet): 20

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Logs 8" diam on either side of drain just downstream of I75 crossing.

Observation Location:

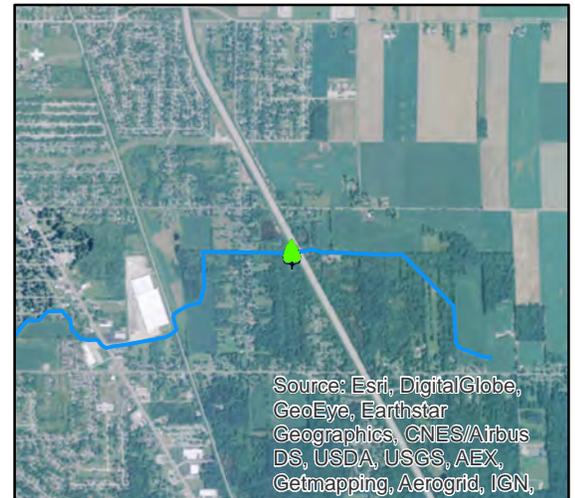


Photo 1



Photo 2

Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage405

Type: Fallen Tree

Blockage Length (feet): 86

Debris Length (feet): 7

Location:

Photo 1 Direction: Facing Upstream

Comments:

Woody debris around surface outlet pipe for about 6 ft. One log protruding out of pipe. 40 ft farther down drain are more logs. Photo 2 facing downstream 40 ft farther than data point. 40 ft farther down drain are more logs on left side.

Observation Location:

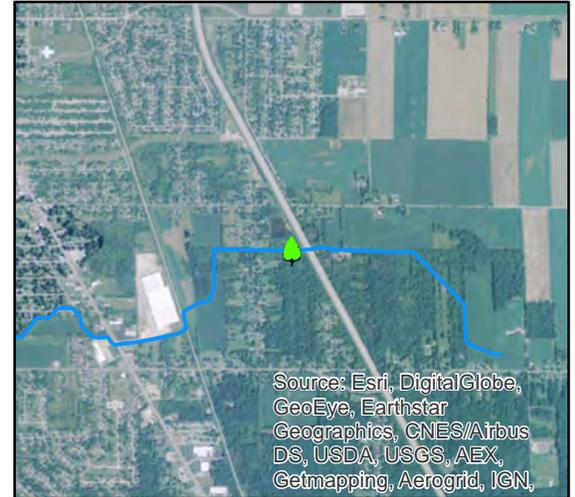


Photo 1



Photo 2



Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage406

Type: Sediment

Blockage Length (feet): 250

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Smaller width of channel to about 1 foot wide for 250 ft.

Observation Location:

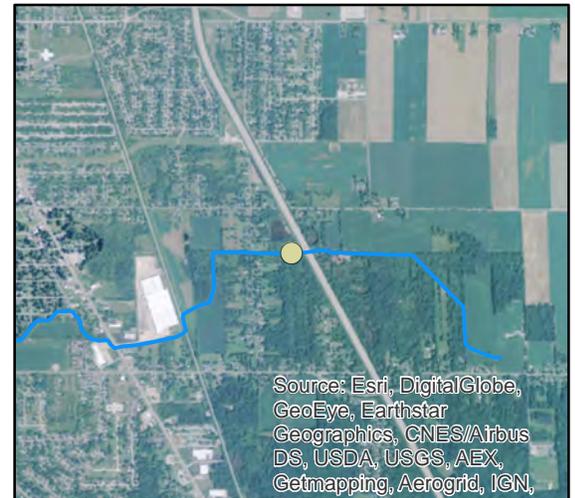


Photo 1



Photo 2

Photo 3

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				SCALE:	
NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage407

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 450

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain for next 450' to end. Picture facing upstream.

Observation Location:

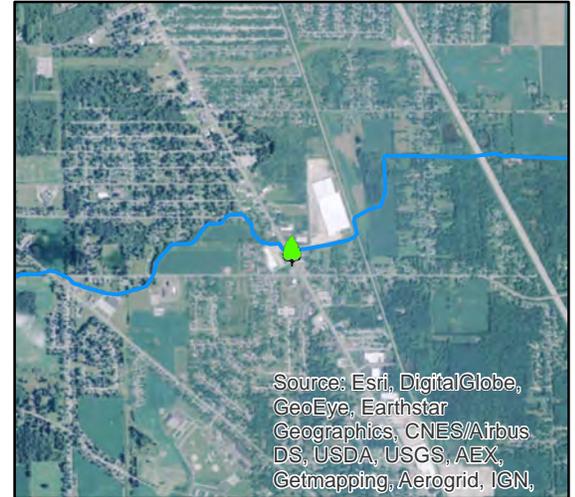


Photo 1



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:
Blockage408

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 450

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Non-vegetative debris scattered throughout drain. Minor. Next 50' to end.

Observation Location:

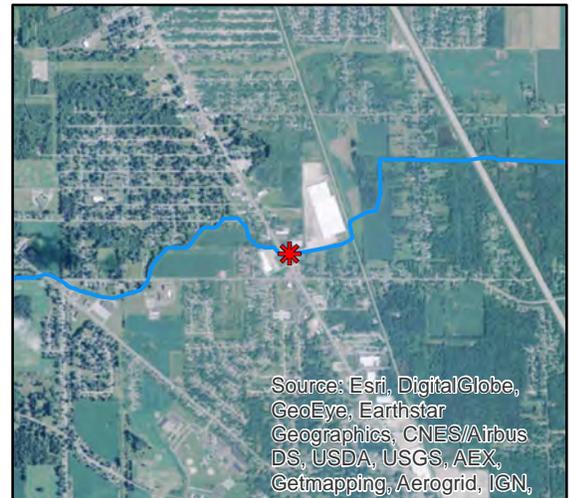


Photo 1

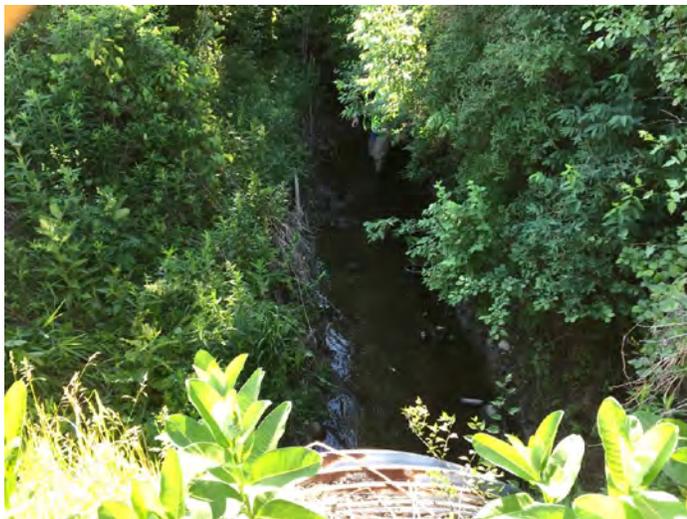


Photo 2

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
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NOTE				SHEET #:	
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage409

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 10

Location: Left

Photo 1 Direction: North

Comments:

A lot of scattered non-vegetative debris scattered for 5-10' at the mouth of outlet pipe into drain. Picture facing north from drain.

Observation Location:

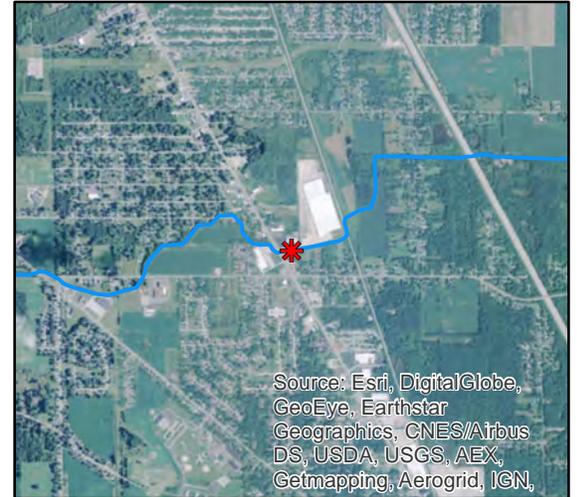


Photo 1



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Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage410

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 1

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sign and post in the drain on the left side. Picture facing upstream.

Observation Location:

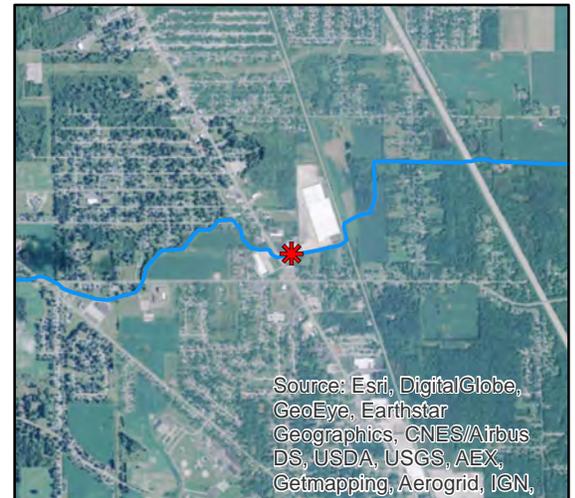


Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage411

Type: Fallen Tree

Blockage Length (feet): 5

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

Woody debris blockage for 10' on right side of drain facing upstream.
Picture facing upstream.

Observation Location:

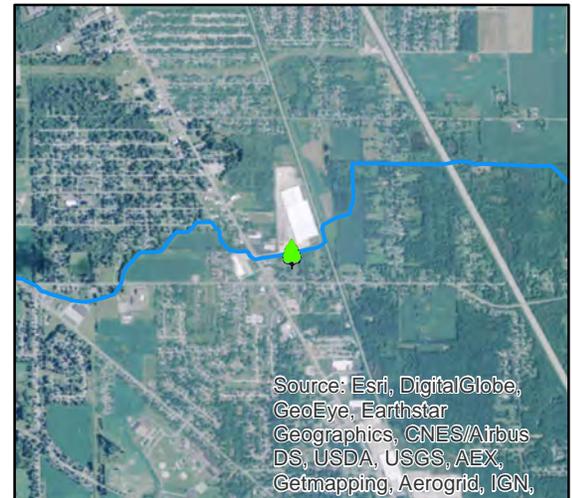


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage412

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 5

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Woody debris for next 5' in center of drain. Picture facing upstream.

Observation Location:

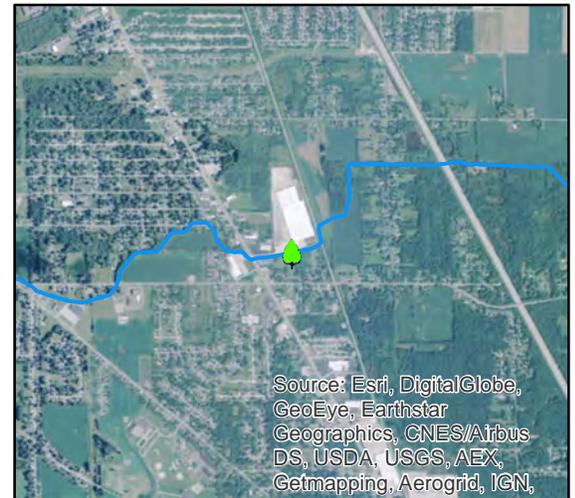


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage413

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 500

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Scattered woody debris throughout both sides of drain for the next 500' to end. Picture facing upstream.

Observation Location:

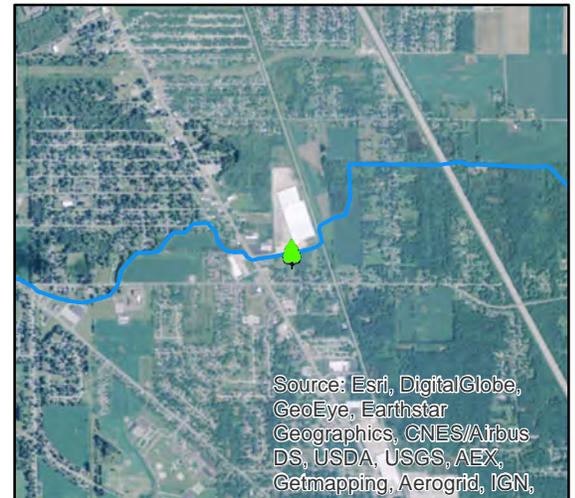


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage414

Type: Excessive Vegetation

Blockage Length (feet): 350

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on both sides of drain impeding any flow for next 350' to end.

Observation Location:

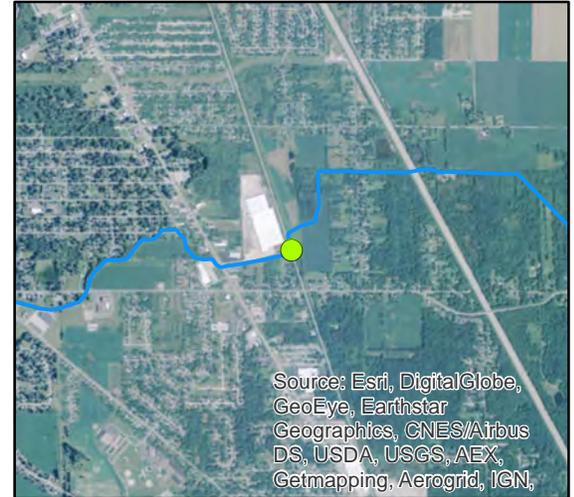


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage415

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 350

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Fallen trees and scattered woody debris for the next 350' on both sides of drain to end. Picture facing upstream.

Observation Location:

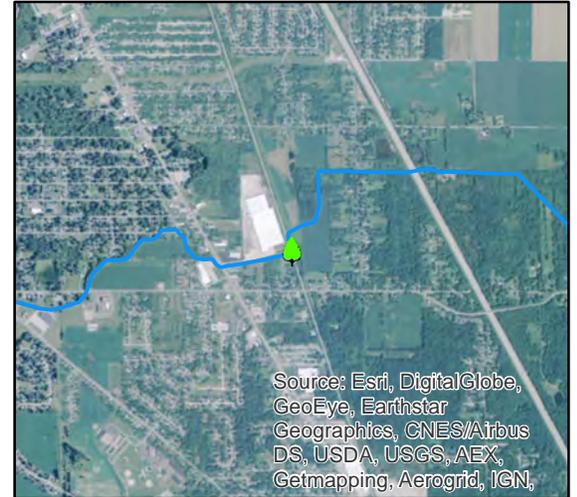


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage416

Type: Sediment

Blockage Length (feet): 350

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment blockage impeding flow for next 350' to end throughout drain.
Picture facing upstream.

Observation Location:

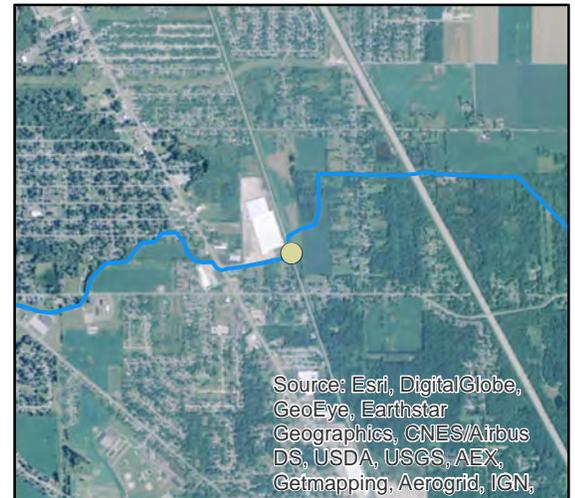


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage417

Type: Non-Vegetative Debris

Blockage Length (feet): 350

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Scattered railroad beams throughout the drain for previous 250' and next 150' throughout abandoned portion of drain. Picture facing upstream.

Observation Location:

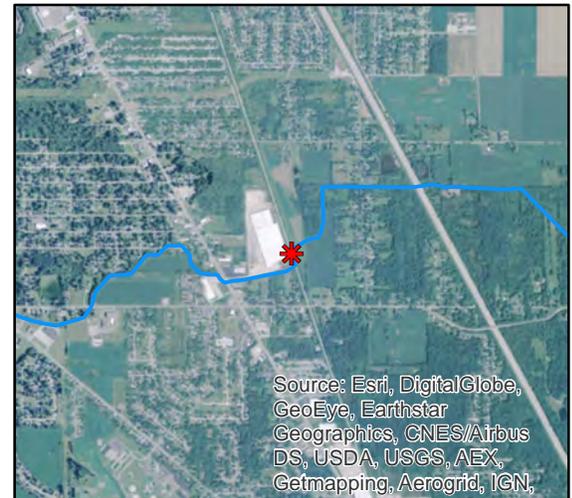


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage418

Type: Excessive Vegetation

Blockage Length (feet): 650

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on both sides and throughout drain for next 650' to end. Picture facing upstream.

Observation Location:

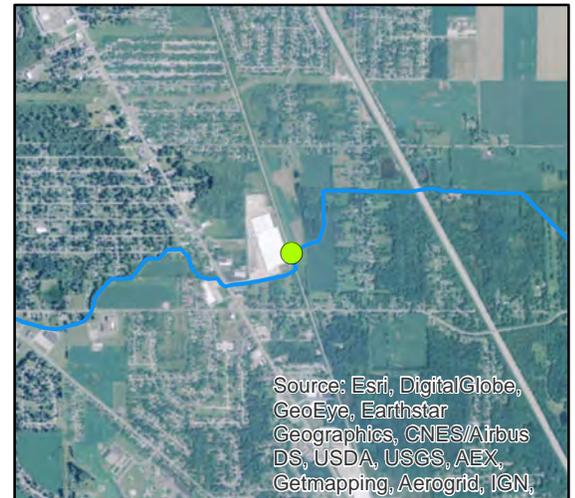


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage419

Type: Non-Vegetative Debris

Blockage Length (feet): 10

Debris Length (feet):

Location: Center

Photo 1 Direction: North

Comments:

Large 10'x4' piece of metal or CMP laying in the middle of the drain causing a blockage. Picture facing north across the drain.

Observation Location:

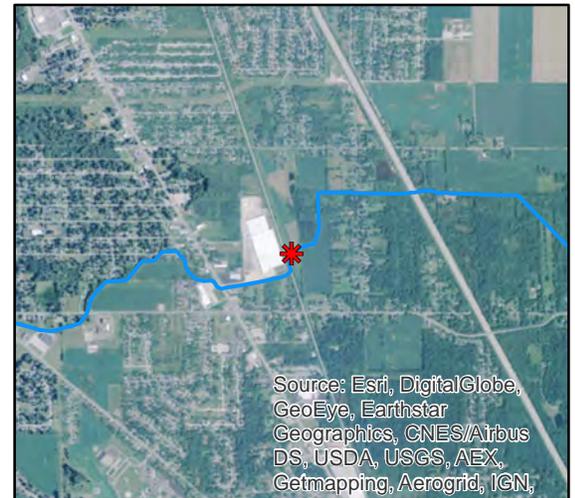


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage420

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 2000

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on both sides, along and throughout the drain for the next 2000' to the road. Picture facing upstream.

Observation Location:

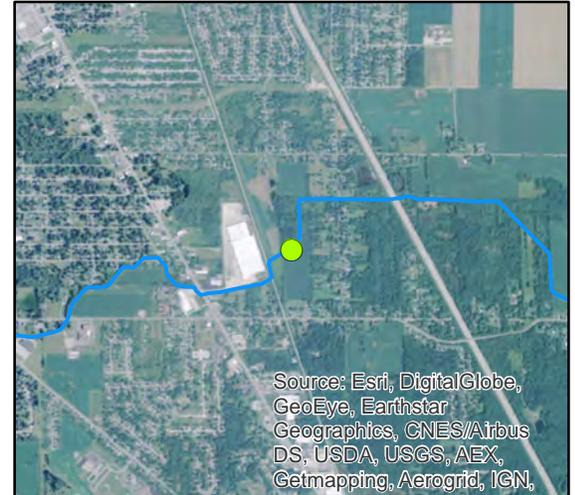


Photo 1



Photo 2

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage421

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet): 5

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

A couple 5' concrete blocks in the drain on the right side. Picture facing upstream

Observation Location:

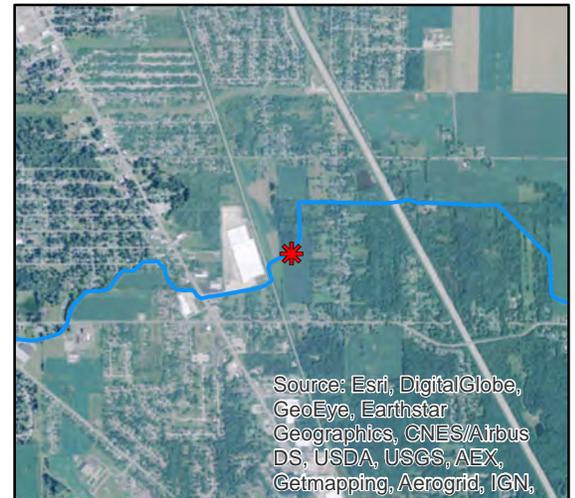


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage422

Type: Sediment

Blockage Length (feet):

Debris Length (feet): 850

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment on both banks of drain for next 850' to road. Picture facing upstream.

Observation Location:

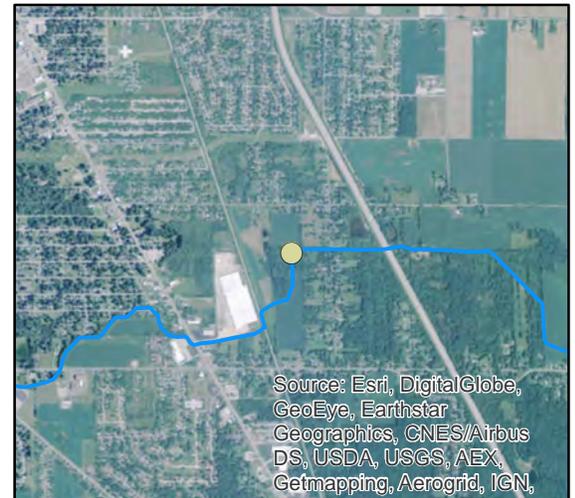


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage423

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 2000

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Scattered fallen trees and woody debris throughout drain and on both sides for next 2000' to road. Picture facing upstream.

Observation Location:

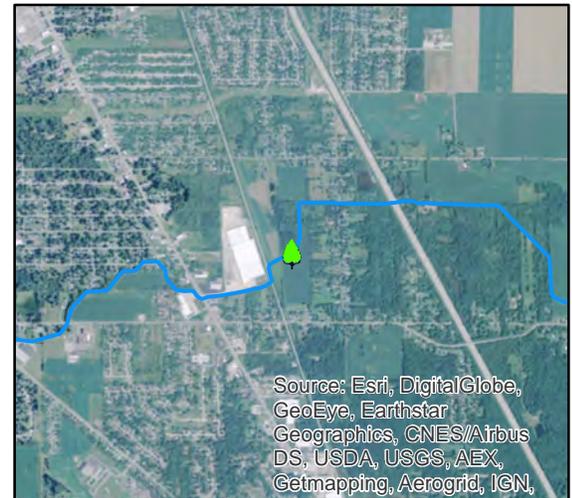


Photo 1

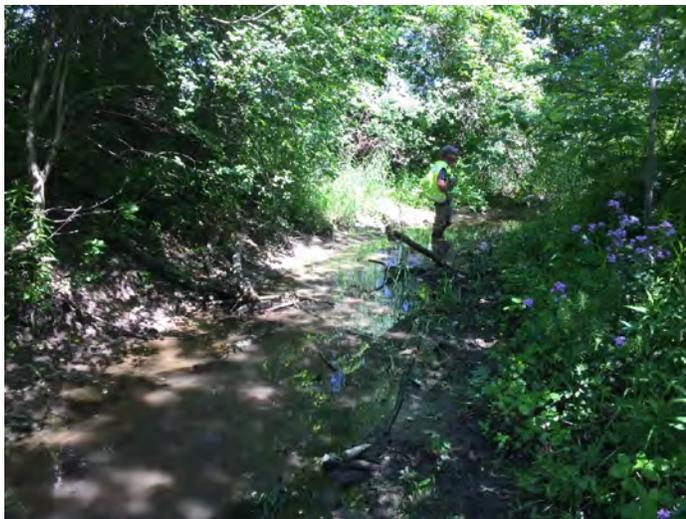


Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage424

Type: Sediment

Blockage Length (feet): 60

Debris Length (feet):

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar left side of the drain from this location approximately 60' upstream to end. Picture facing upstream

Observation Location:

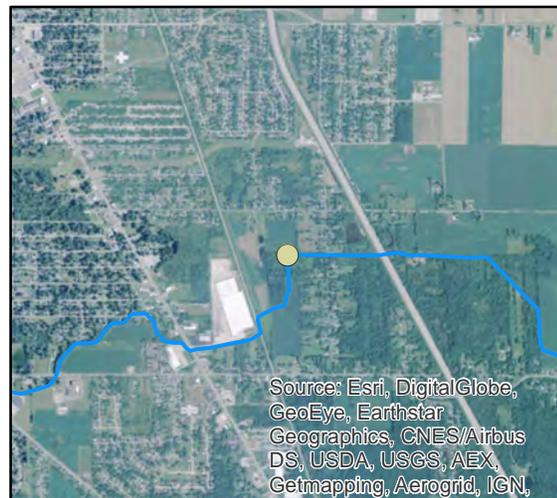


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage425

Type: Non-Vegetative Debris

Blockage Length (feet):

Debris Length (feet):

Location: Center

Photo 1 Direction:

Comments:

Tire in drain.

Observation Location:

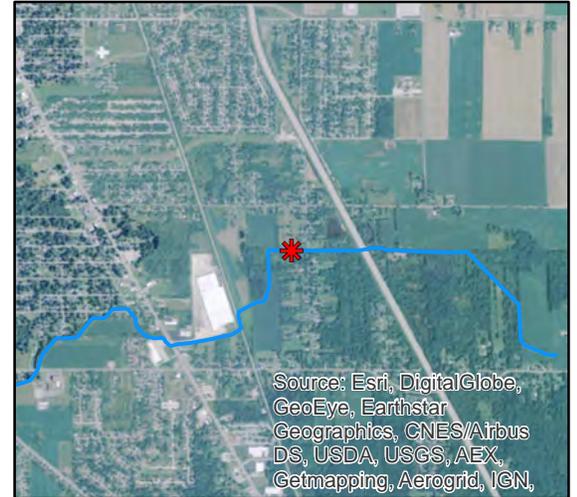


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage426

Type: Non-Vegetative Debris

Blockage Length (feet): 2

Debris Length (feet): 2

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Metal round possible planter on left side of drain.

Observation Location:

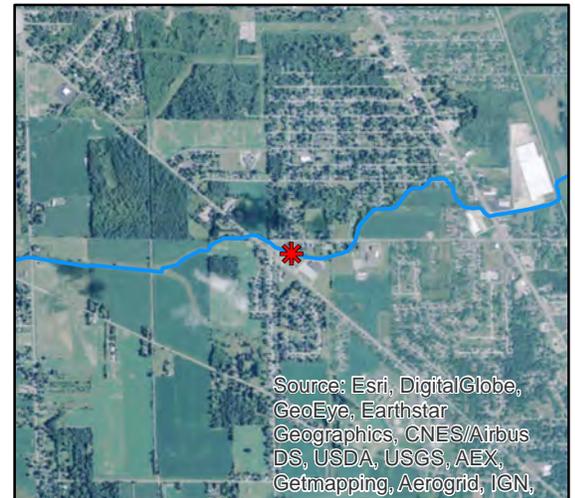


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage427

Type: Non-Vegetative Debris

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Mattress and box spring debris and crate left of center of drain causing a blockage for 15'.

Observation Location:

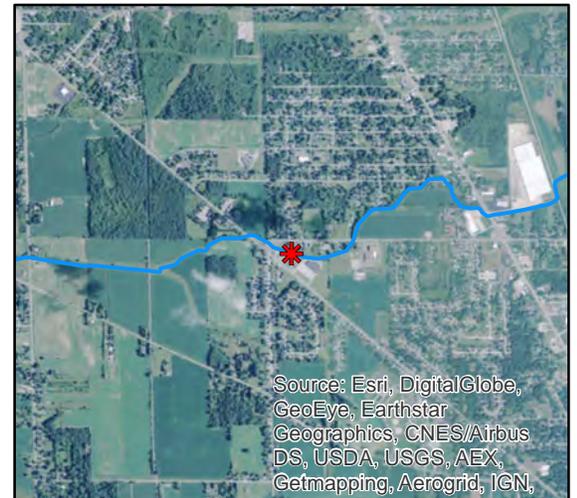


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage428

Type: Log Jam

Blockage Length (feet): 5

Debris Length (feet): 7

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam in center of drain from both sides. About 5 ft of blockage.

Observation Location:

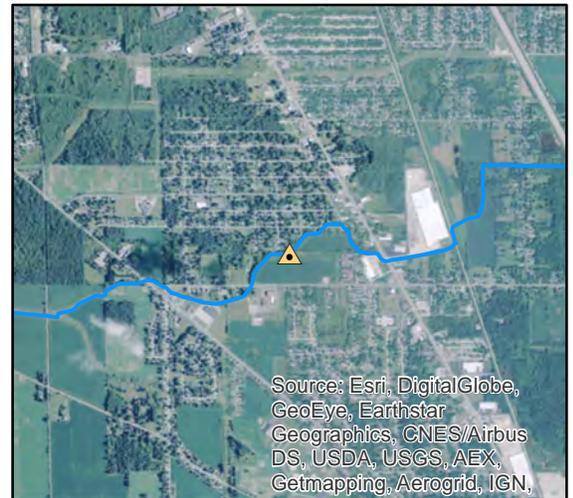


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage429

Type: Non-Vegetative Debris

Blockage Length (feet): 10

Debris Length (feet):

Location:

Photo 1 Direction: Facing Upstream

Comments:

Trash in drain for about 10 ft.

Observation Location:

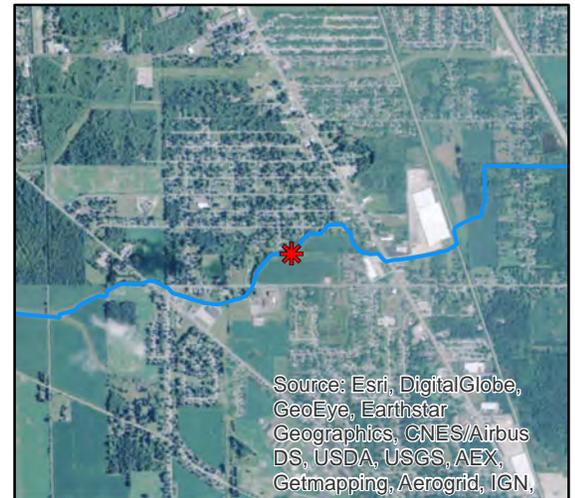


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage430

Type: Fallen Tree

Blockage Length (feet): 10

Debris Length (feet): 10

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain.

Observation Location:

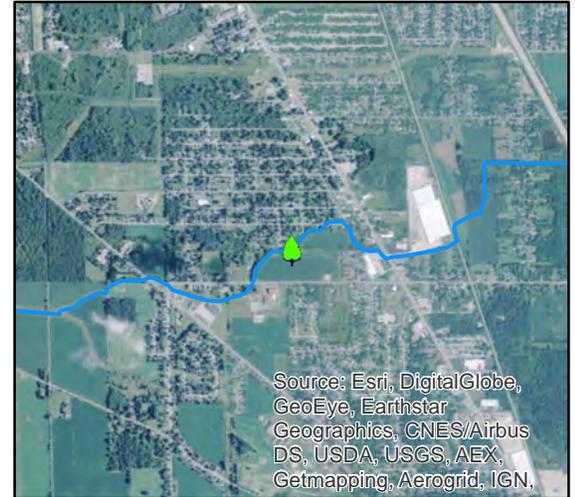


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage431

Type: Fallen Tree

Blockage Length (feet): 3

Debris Length (feet): 24

Location: Right

Photo 1 Direction: South

Comments:

2 fallen trees on right side of drain extending about 3 ft into drain.

Observation Location:

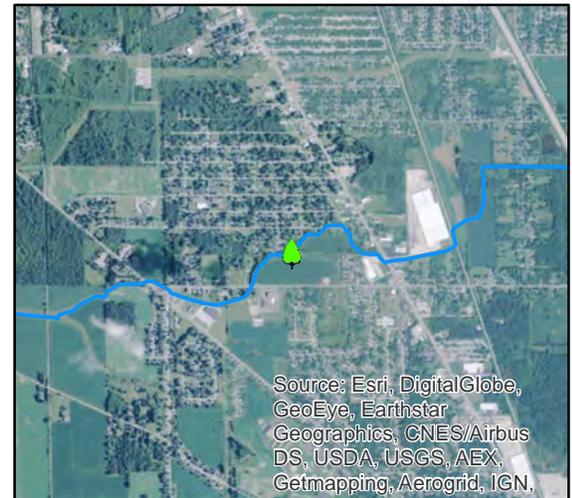


Photo 1



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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
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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage432

Type: Fallen Tree

Blockage Length (feet): 2

Debris Length (feet): 100

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain. About 50 ft down.

Observation Location:

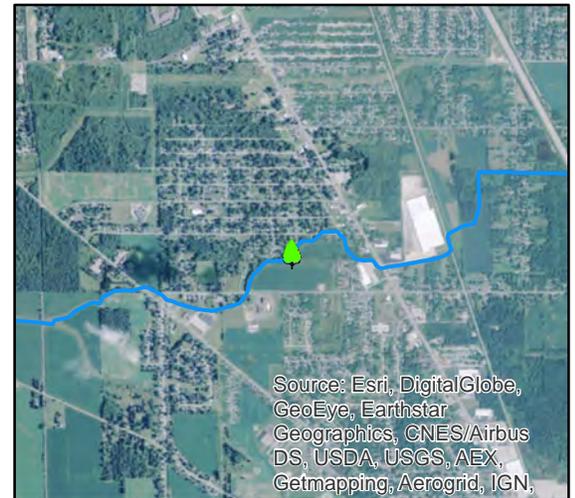


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage433

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on banks over next 500 ft.

Observation Location:

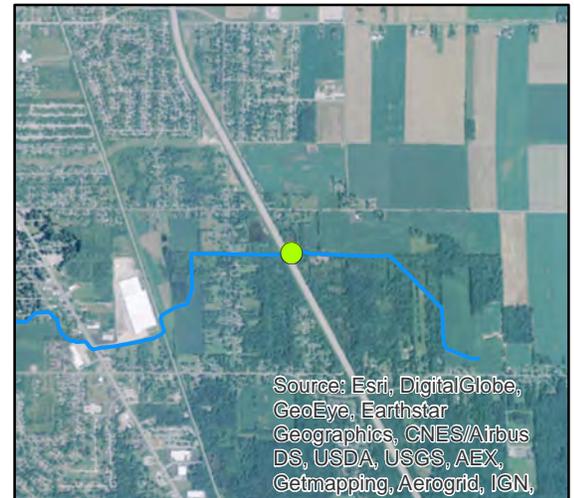


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage434

Type: Sediment

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation on both sides of drain. Barely any water. Depth may be 2 inches deep.

Observation Location:

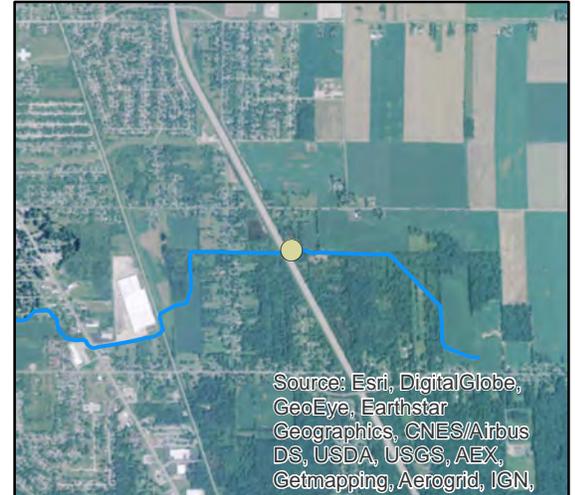


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage435

Type: Fallen Tree

Blockage Length (feet): 500

Debris Length (feet): 7

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain for 500 ft.

Observation Location:

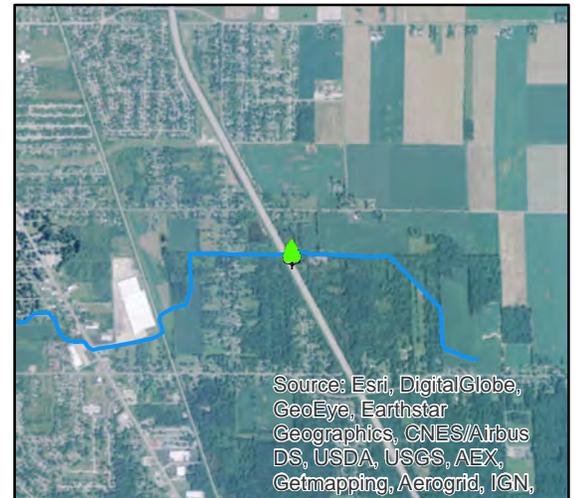


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage436

Type: Log Jam

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Fallen trees and excessive vegetation are causing blockage in center of drain impeding flow. Next 50 ft.

Observation Location:

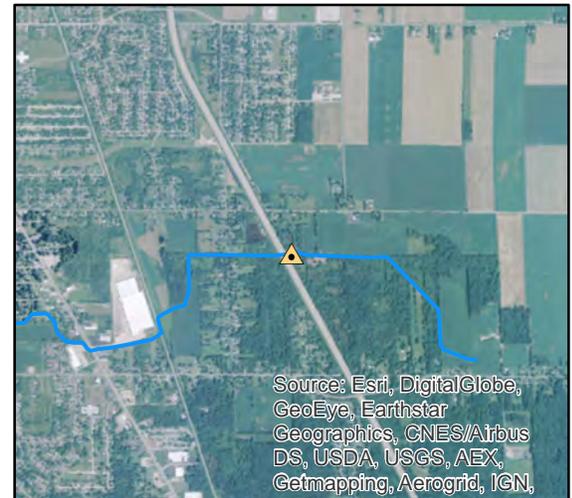


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage437

Type: Fallen Tree

Blockage Length (feet): 20

Debris Length (feet): 20

Location: Left

Photo 1 Direction: North

Comments:

Excessive tree logs on left side of drain on bank. About 20 ft long.

Observation Location:

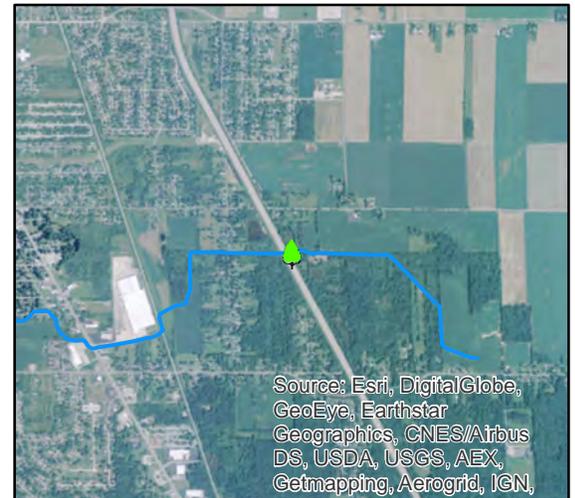


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage438

Type: Log Jam

Blockage Length (feet): 10

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Woody debris and sediment causing blockages drain and impeding flow. Next 10 ft.

Observation Location:

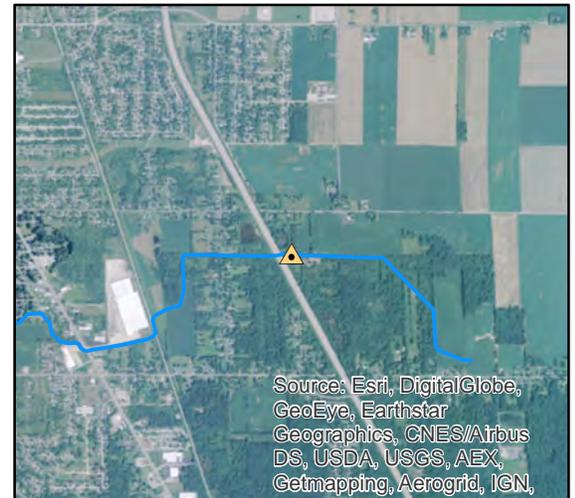


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage439

Type: Log Jam

Blockage Length (feet): 15

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam next 15 ft.

Observation Location:

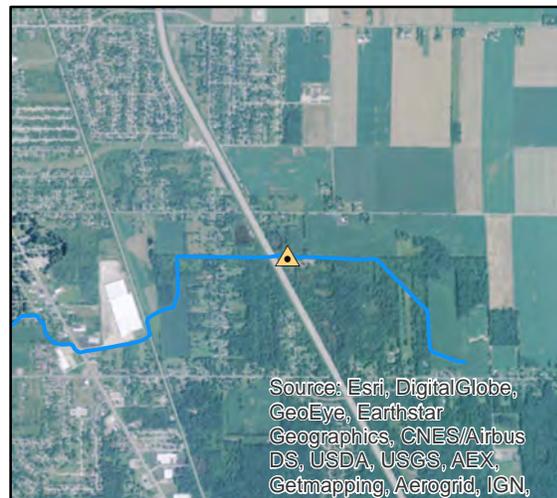


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage440

Type: Non-Vegetative Debris

Blockage Length (feet): 2

Debris Length (feet): 2

Location: Left

Photo 1 Direction: Facing Upstream

Comments:

Tire on left side of drain on bank up about 10 ft.

Observation Location:

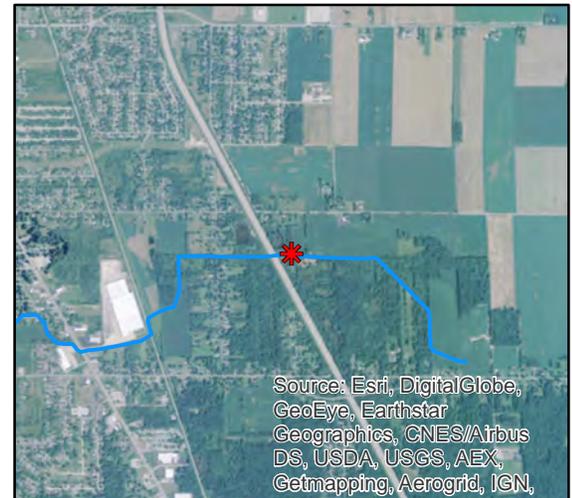


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage441

Type: Sediment

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment bar downstream of side drain and log jam. Drain is wider here than downstream.

Observation Location:

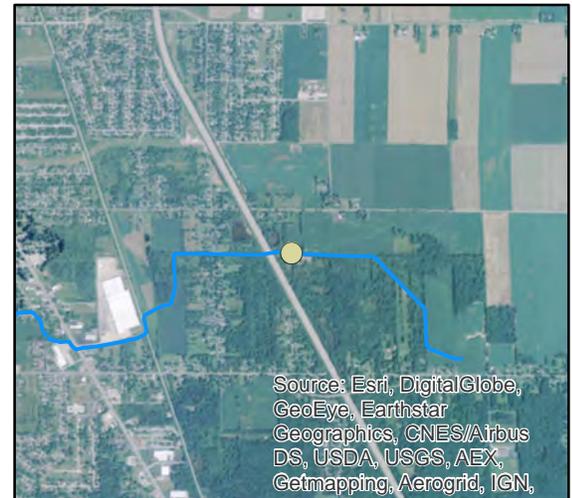


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage442

Type: Log Jam

Blockage Length (feet): 15

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Fallen woody debris and sediment causing log jam and impeding flow. 15 ft.

Observation Location:

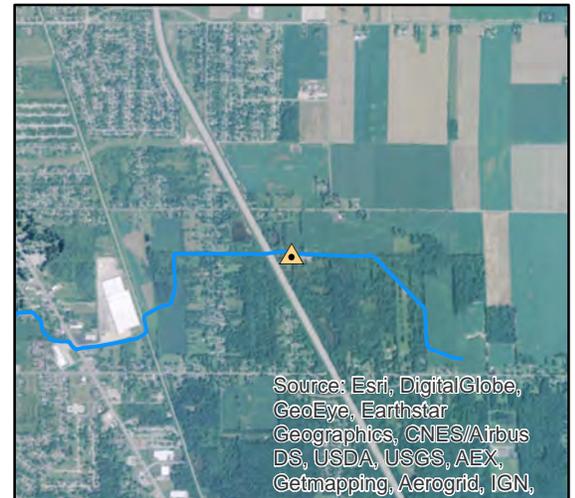


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage443

Type: Non-Vegetative Debris

Blockage Length (feet): 4

Debris Length (feet):

Location: Center

Photo 1 Direction: South

Comments:

Large tire in center of drain.

Observation Location:

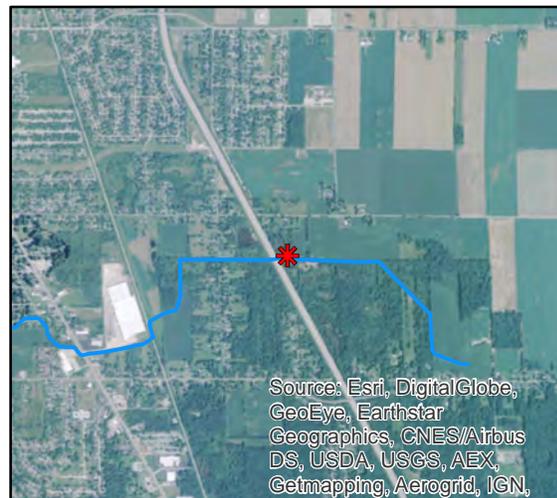


Photo 1



Photo 2

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage444

Type: Fallen Tree

Blockage Length (feet): 2

Debris Length (feet): 8

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Major woody debris on left side of culvert falling over culvert. Also on right side.

Observation Location:

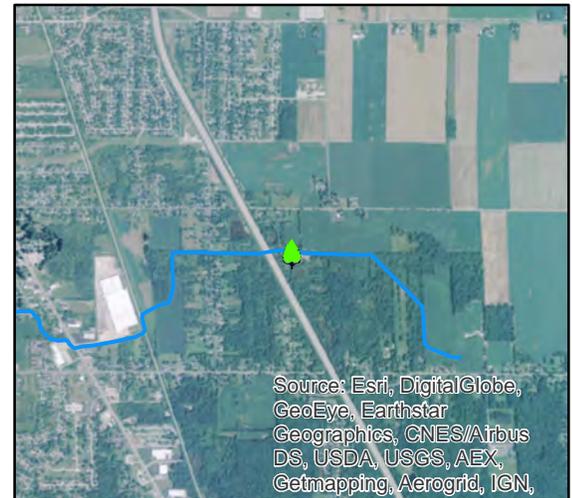


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage445

Type: Non-Vegetative Debris

Blockage Length (feet): 5

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Downstream

Comments:

Debris on upstream side of farm crossing.

Observation Location:

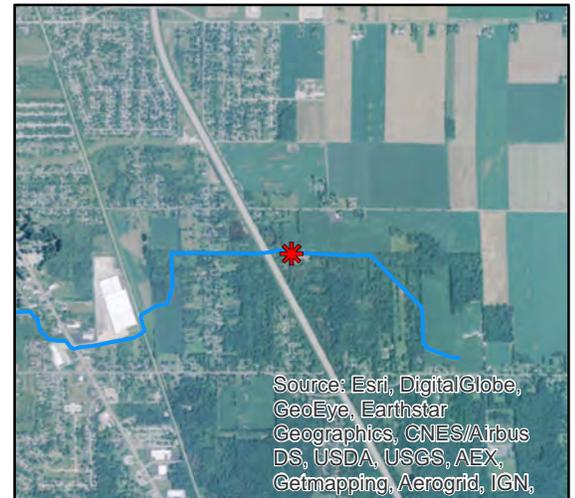


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage446

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet):

Location: Right

Photo 1 Direction: Facing Upstream

Comments:

8" diam fallen tree on right overhanging drain.

Observation Location:

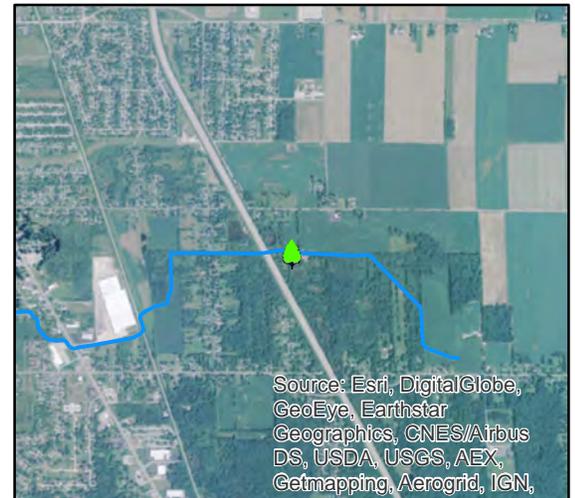


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage447

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation grown on both sides of the drain. Small trees growing vertical, and sometimes horizontal overhanging drain. Next 500 ft.

Observation Location:

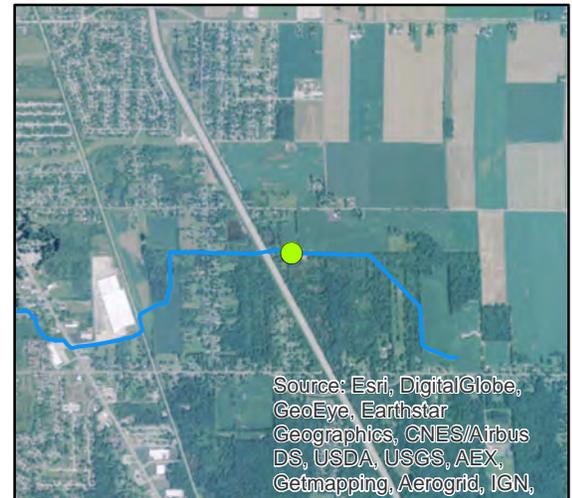


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage448

Type: Fallen Tree

Blockage Length (feet): 500

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Fallen woody debris, trees, branches next 500 ft. Pretty consistent throughout this stretch.

Observation Location:

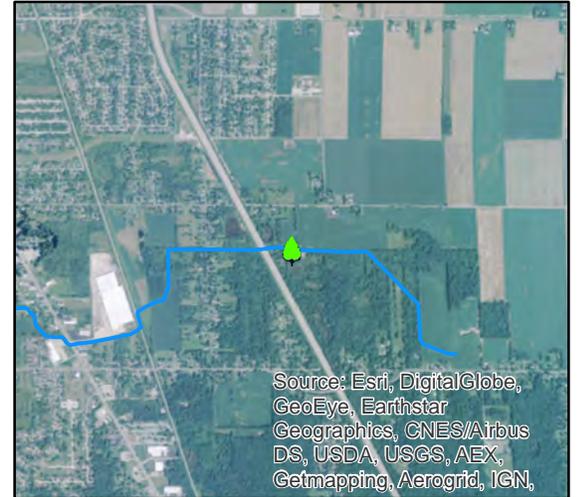


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage449

Type: Sediment

Blockage Length (feet): 500

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment bars on both sides and center over next 500 ft. Drain channel meanders.

Observation Location:

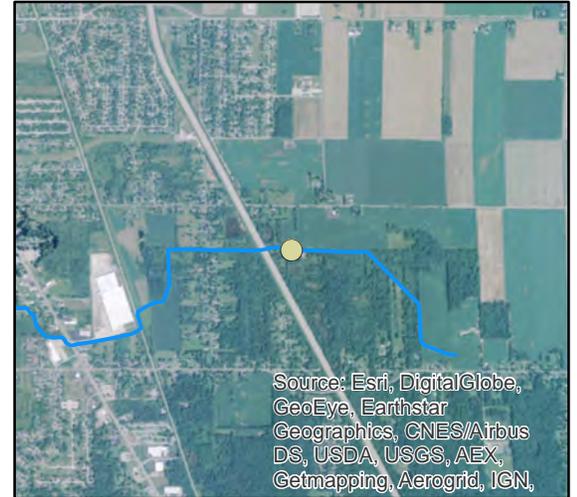


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage450

Type: Fallen Tree

Blockage Length (feet): 80

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

2 logs jams over next 80 ft caused by fallen woody debris.

Observation Location:



Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage451

Type: Non-Vegetative Debris

Blockage Length (feet): 1

Debris Length (feet): 1

Location: Left

Photo 1 Direction: North

Comments:

Tire on left side of drain. About 1 ft.

Observation Location:

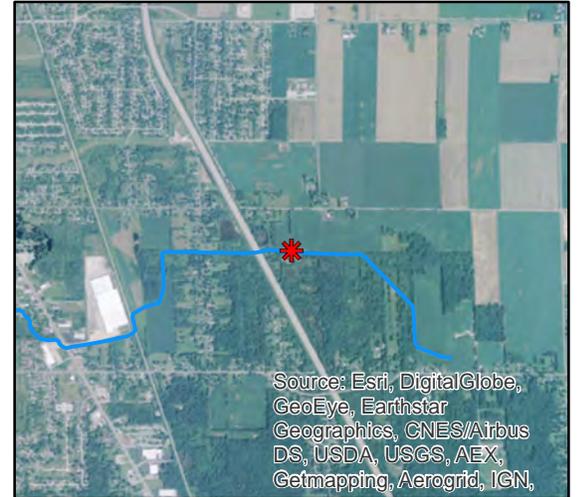


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage452

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 20

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

10" diam log in two pieces in center of drain.

Observation Location:

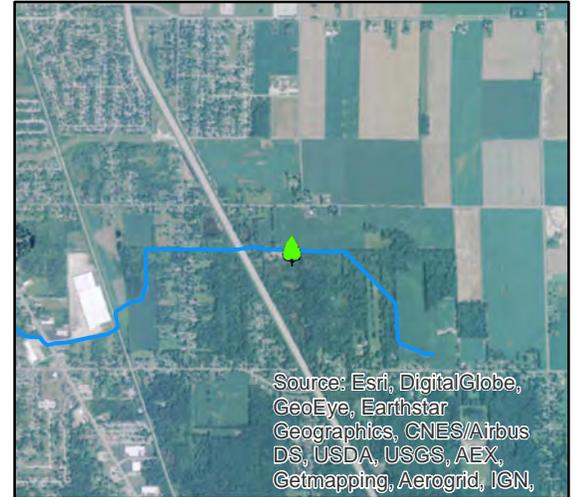


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage453

Type: Excessive Vegetation

Blockage Length (feet): 1000

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Heavy vegetation growing on both banks. Think vines, small trees. Next 1000 ft to bend.

Observation Location:

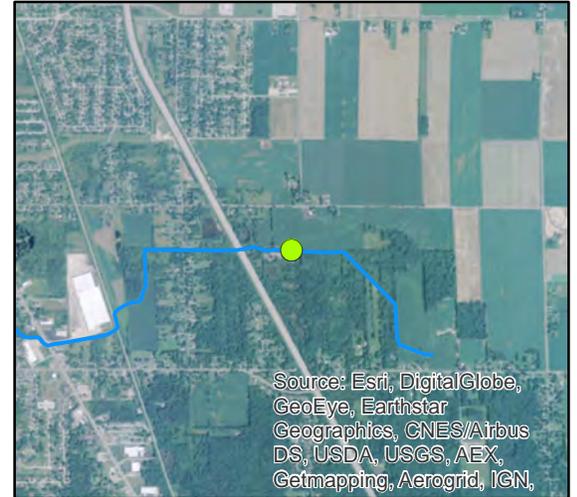


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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage454

Type: Fallen Tree

Blockage Length (feet): 500

Debris Length (feet):

Location:

Photo 1 Direction: Facing Downstream

Comments:

Scattered woody debris including fallen trees, logs, and branches over next 500 ft.

Observation Location:

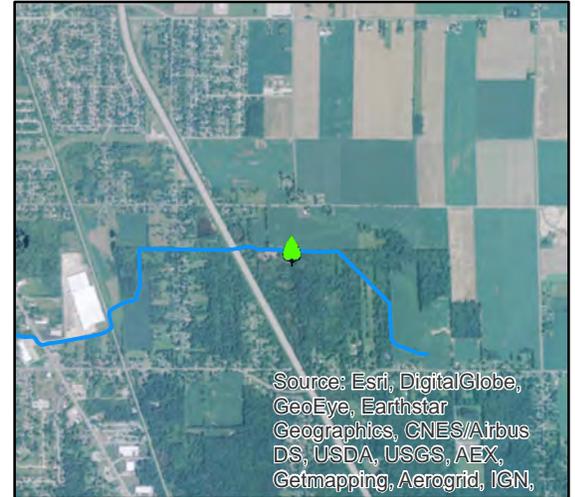


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage455

Type: Excessive Vegetation

Blockage Length (feet): 15

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing from bottom of drain on both sides for about 15-20 ft.

Observation Location:



Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage456

Type: Excessive Vegetation

Blockage Length (feet): 250

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Extremely heavy vegetation on both banks overhanging drain. 250 ft around the bend.

Observation Location:

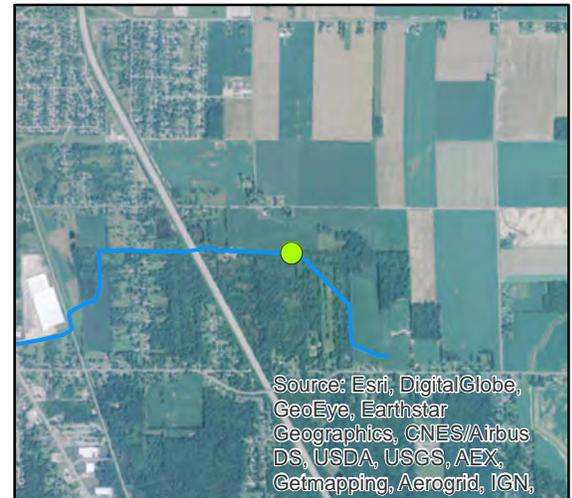


Photo 1



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Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage457

Type: Sediment

Blockage Length (feet): 250

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment buildup through drain. Small drain channel. Difficult to see through vegetation. 250 ft around the bend.

Observation Location:

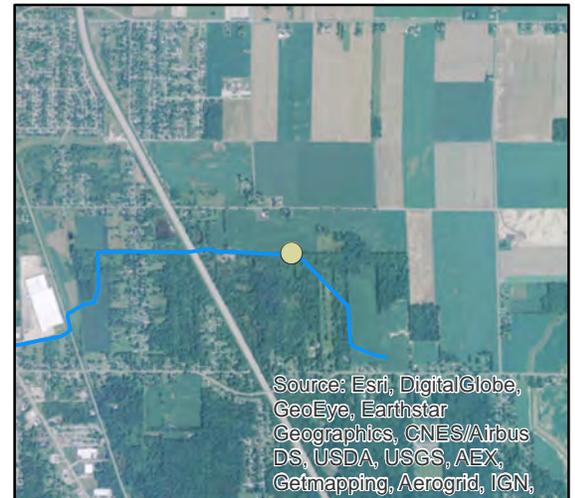


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage458

Type: Log Jam

Blockage Length (feet): 10

Debris Length (feet): 3

Location: Both

Photo 1 Direction: Facing Downstream

Comments:

Log jam at bank turn on both sides. Massive sediment around flow meanders. About 10 ft long.

Observation Location:

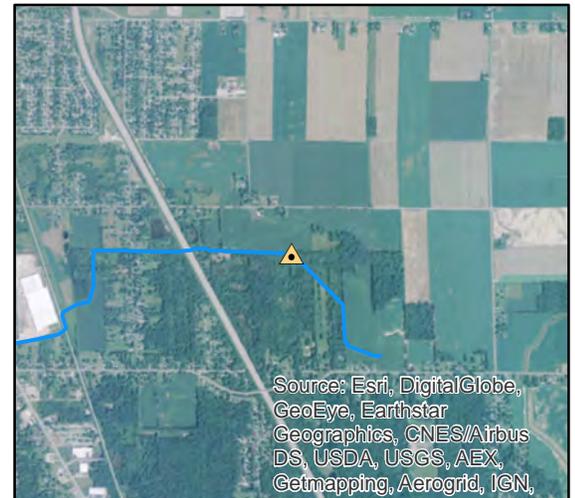


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage459

Type: Fallen Tree

Blockage Length (feet): 250

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Woody debris scattered next 250 ft around the bend. Low flow due to sediment buildup.

Observation Location:



Photo 1



Photo 2

Photo 3

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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage460

Type: Excessive Vegetation

Blockage Length (feet): 700

Debris Length (feet): 7

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive overhanging vegetation on both sides of drain for about 700 ft.

Observation Location:

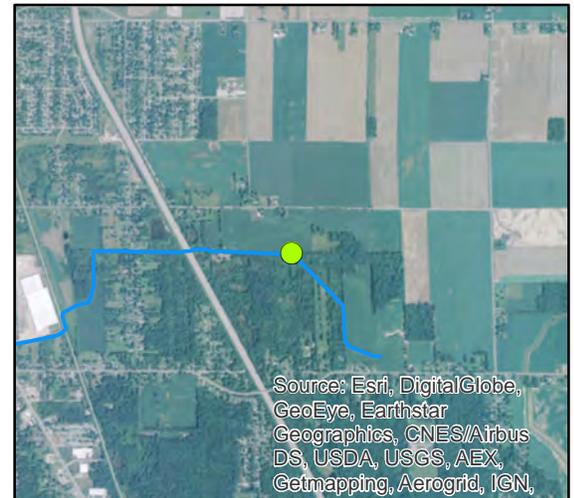


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage461

Type: Sediment

Blockage Length (feet): 700

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment bars on both sides of drain for about 700 ft. Water depth is only a few inches deep. Loose sediment.

Observation Location:

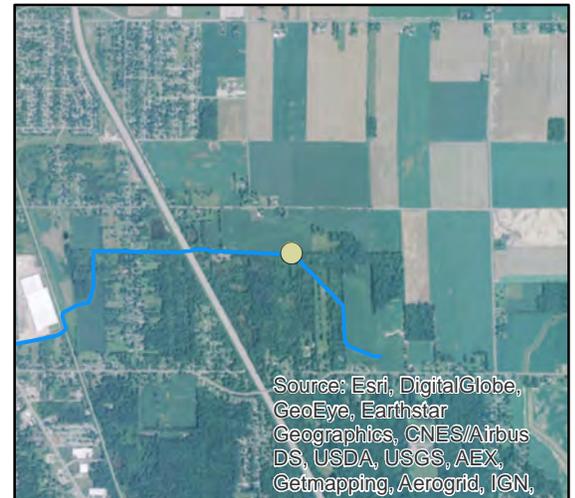


Photo 1



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:
Blockage462

Type: Excessive Vegetation

Blockage Length (feet): 700

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing on both banks next 700.

Observation Location:

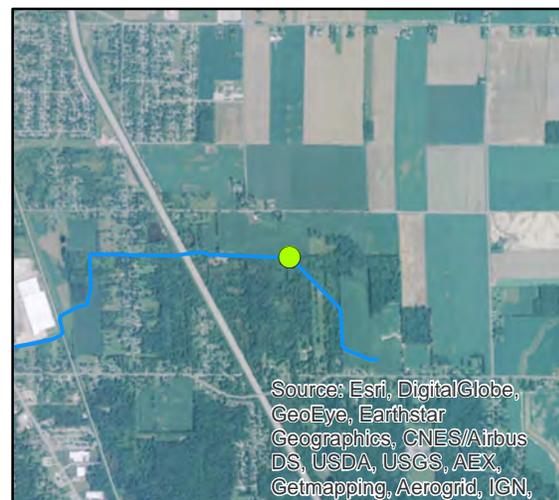


Photo 1



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Photo 3

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NOTE				SHEET #:	
				JOB #:	20160331

King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage463

Type: Fallen Tree

Blockage Length (feet): 700

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Scattered woody debris over next 700 ft.

Observation Location:

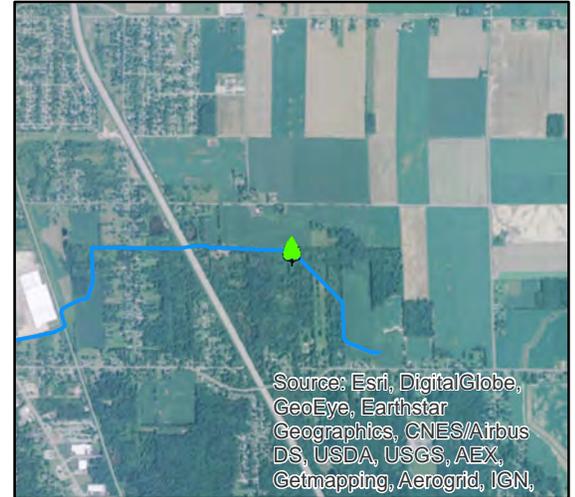


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage464

Type: Log Jam

Blockage Length (feet): 5

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Downstream

Comments:

Log jam with woody debris, sediment, and vegetation in center of drain impeding flow.

Observation Location:

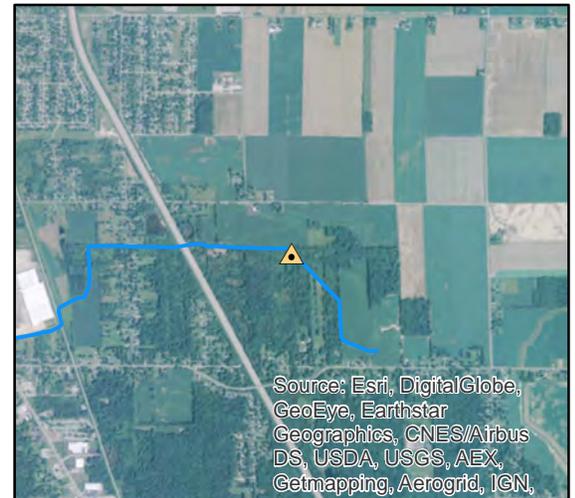


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage465

Type: Fallen Tree

Blockage Length (feet): 10

Debris Length (feet): 30

Location:

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree crossing over drain. About 30 ft tree.

Observation Location:

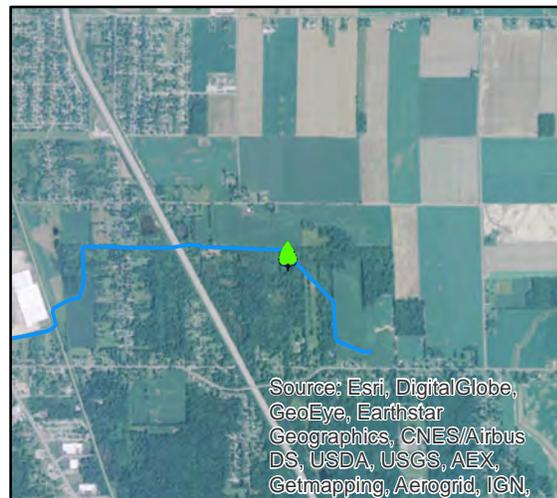


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage466

Type: Log Jam

Blockage Length (feet): 50

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam from fallen trees and other woody debris.

Observation Location:

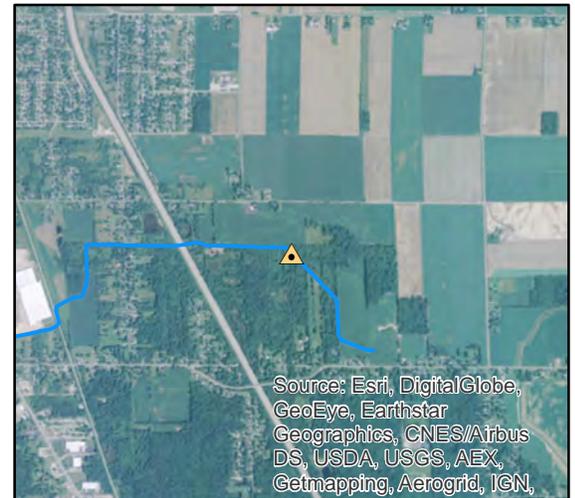


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage467

Type: Fallen Tree

Blockage Length (feet): 30

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Downstream

Comments:

6" diam fallen tree as well as multiple logs in drain.

Observation Location:

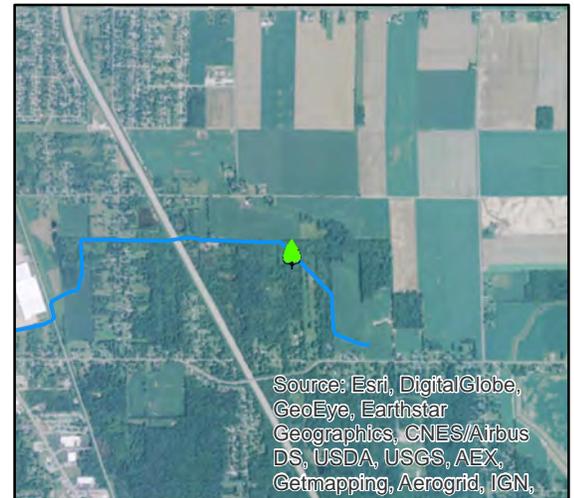


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage468

Type: Log Jam

Blockage Length (feet): 20

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam with fallen branches and sediment in center of drain.

Observation Location:

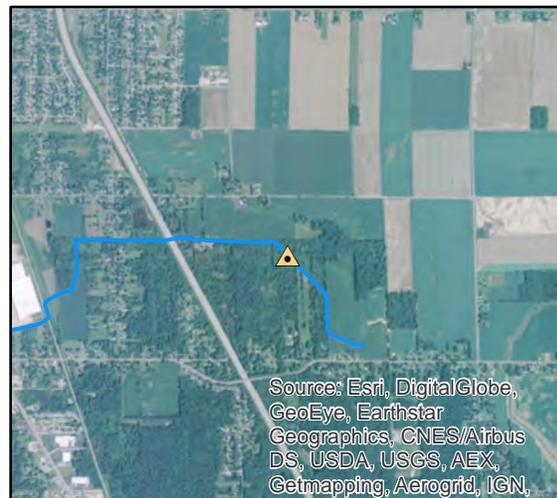


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage469

Type: Non-Vegetative Debris

Blockage Length (feet): 2

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Downstream

Comments:

Piece of headwall from upstream side in center of drain. Just upstream of farm crossing.

Observation Location:

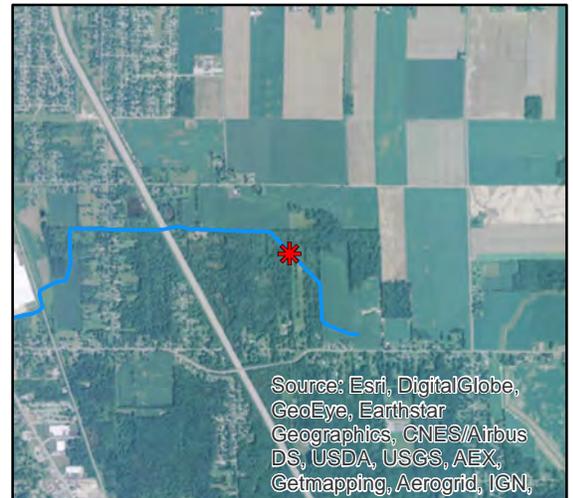


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage470

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet):

Location:

Photo 1 Direction: Facing Downstream

Comments:

Excessive vegetation growing on farm crossing structure at downstream end.

Observation Location:

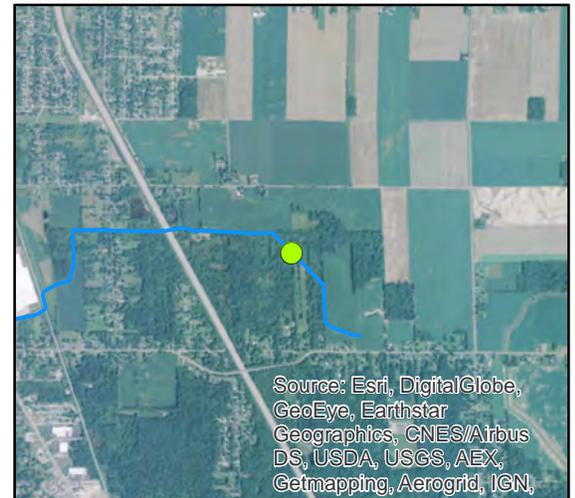


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage471

Type: Fallen Tree

Blockage Length (feet): 500

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Woody debris including fallen trees, logs, and branches scattered over next 500 ft.

Observation Location:

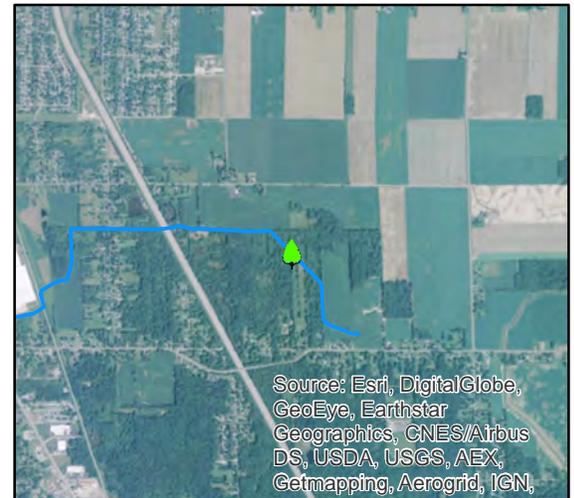


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage472

Type: Excessive Vegetation

Blockage Length (feet): 15

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Downstream

Comments:

Excessive vegetation around downstream end of farm crossing.

Observation Location:

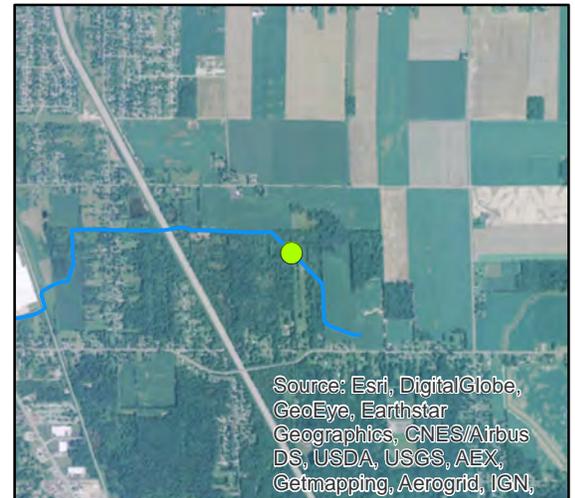


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage473

Type: Excessive Vegetation

Blockage Length (feet): 500

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive overhanging vegetation on both sides for 500 ft.

Observation Location:

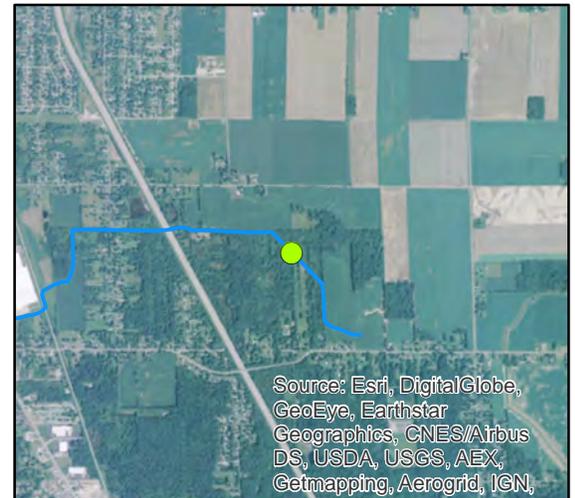


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage474

Type: Log Jam

Blockage Length (feet): 100

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Branches, veg, and sediment causing log jam in this stretch.

Observation Location:

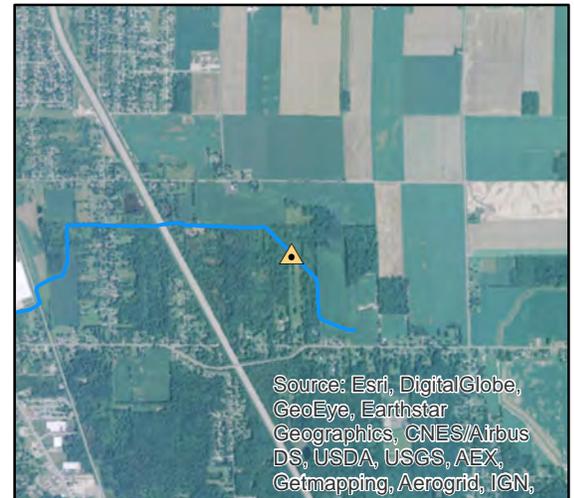


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage475

Type: Sediment

Blockage Length (feet): 100

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment build up along with woody debris is causing blockage in drain.

Observation Location:

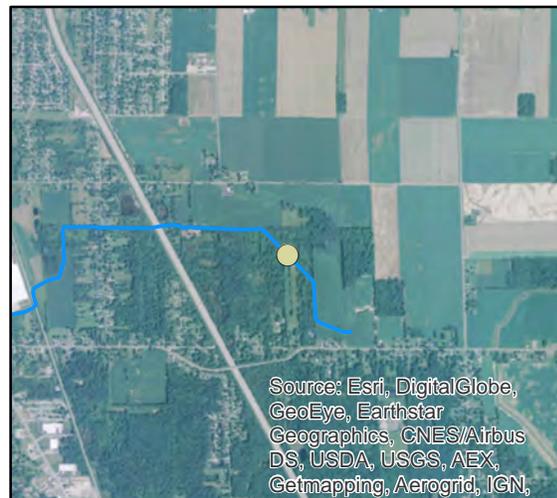


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage476

Type: Excessive Vegetation

Blockage Length (feet): 20

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive grass growing on both sides of drain.

Observation Location:

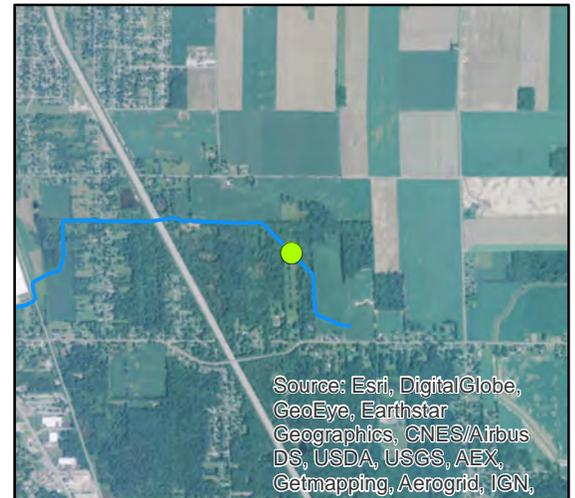


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage477

Type: Sediment

Blockage Length (feet): 100

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Sediment on both sides making width of drain smaller. About 100 ft.

Observation Location:

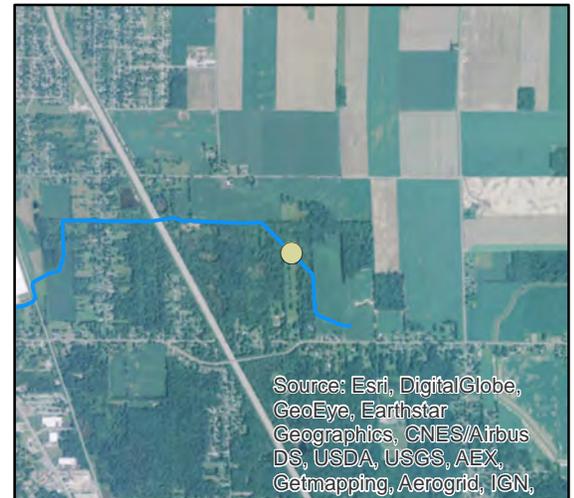


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage478

Type: Sediment

Blockage Length (feet): 100

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Sediment in center of drain with excessive vegetation.

Observation Location:

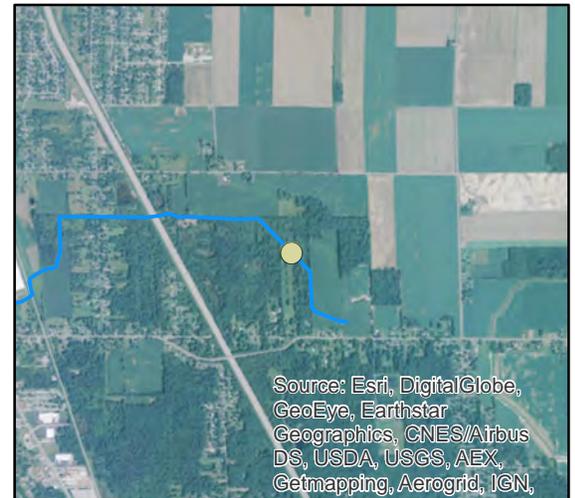


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage479

Type: Excessive Vegetation

Blockage Length (feet): 100

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing on sediment buildup in center of drain.

Observation Location:

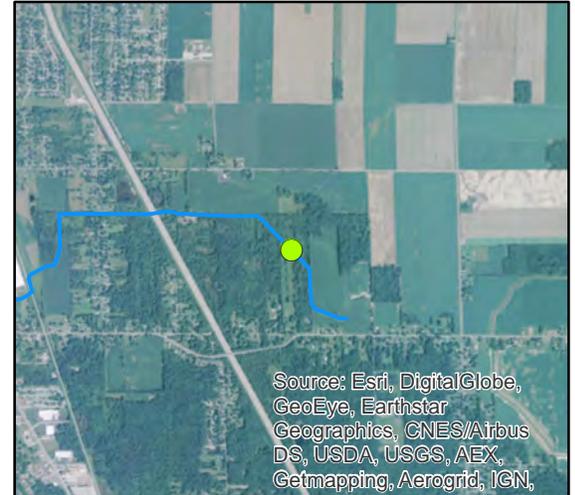


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage480

Type: Excessive Vegetation

Blockage Length (feet): 40

Debris Length (feet):

Location:

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation around both upstream and downstream sides of crossing as well on surface.

Observation Location:

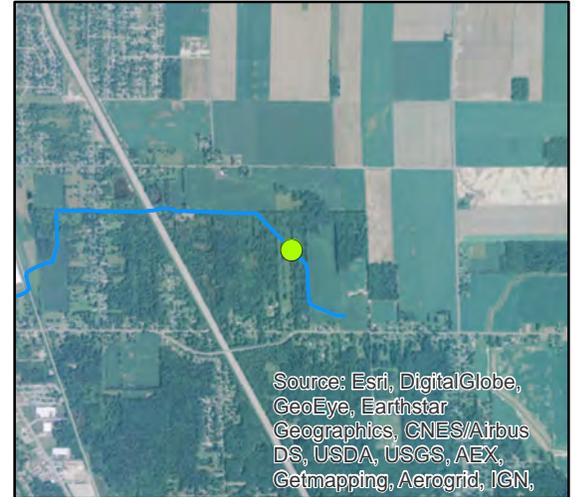


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage481

Type: Log Jam

Blockage Length (feet): 8

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Log jam just downstream of farm crossing impeding flow.

Observation Location:

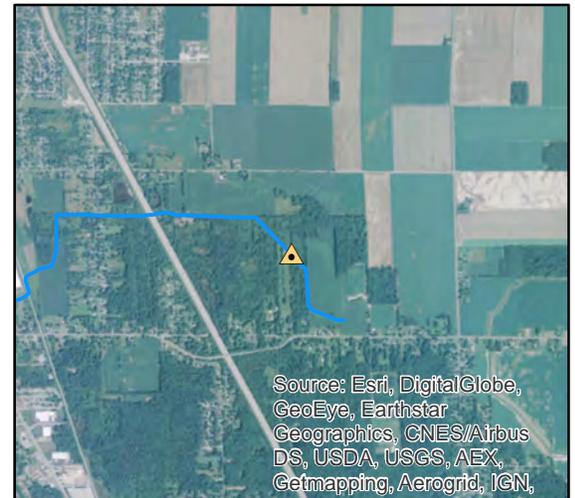


Photo 1



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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage482

Type: Non-Vegetative Debris

Blockage Length (feet): 4

Debris Length (feet):

Location: Right

Photo 1 Direction: Southwest

Comments:

Metal debris. Top of a grill or a metal drum. Just downstream of farm crossing.

Observation Location:

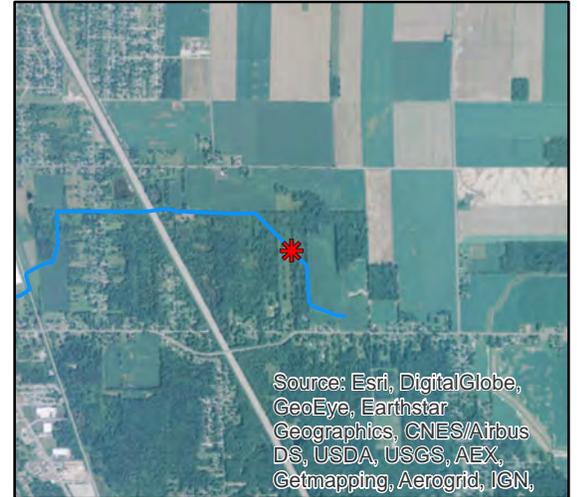


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage483

Type: Excessive Vegetation

Blockage Length (feet): 400

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Extremely heavy excessive vegetation on both banks. Difficult to access. Overhanging drain. Next 400 ft up to bend.

Observation Location:

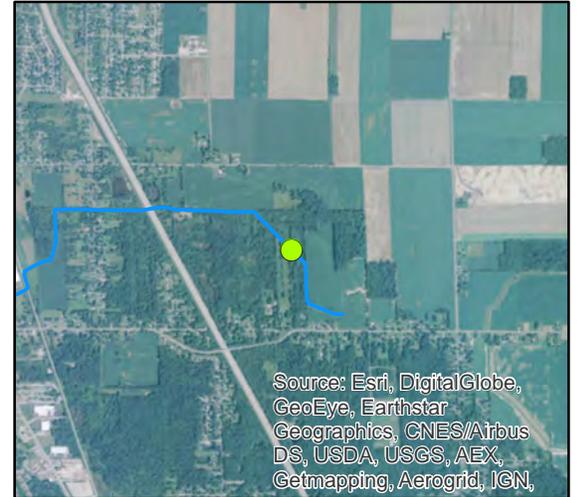


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage484

Type: Fallen Tree

Blockage Length (feet): 400

Debris Length (feet):

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive woody debris on both sides of drain for 400 ft.

Observation Location:

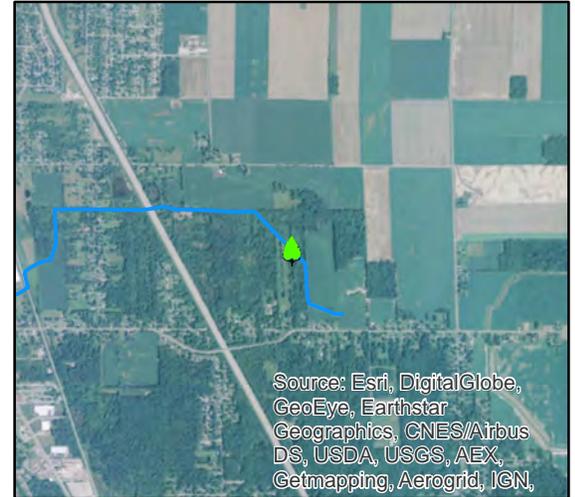


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage485

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 1200

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation along the drain from the location approximately 1200' 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:
Blockage486

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 1300

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Vegetation and sporadic cattail growing in drain channel from this location approximately 1300' upstream to end. Picture facing upstream.

Observation Location:

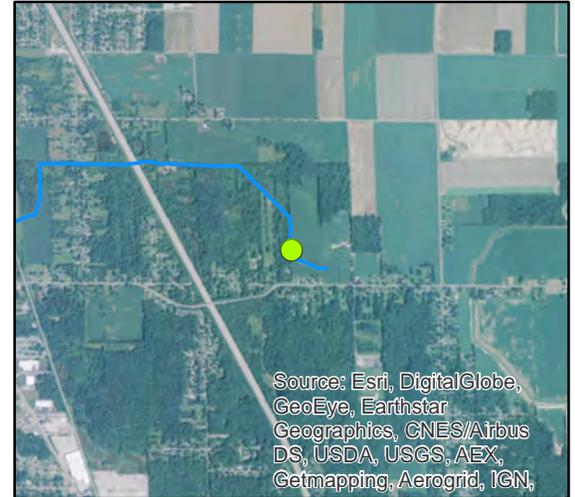


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage487

Type: Fallen Tree

Blockage Length (feet):

Debris Length (feet): 1200

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Woody debris on both sides of drain along the drain for next 1200 feet.

Observation Location:

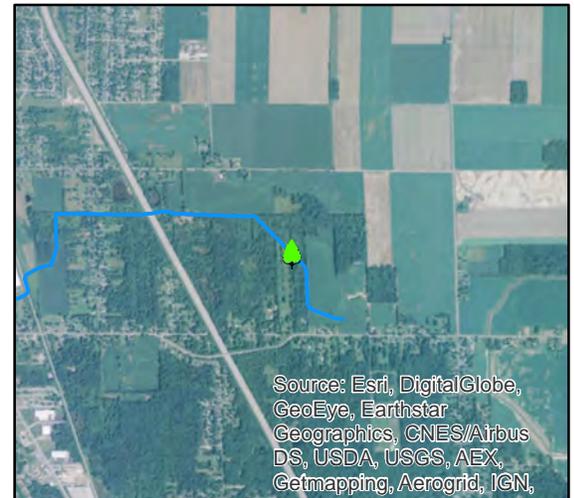


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King Street Tile Drain Inspections

Inspection Report for Observation:
Blockage488

Type: Excessive Vegetation

Blockage Length (feet):

Debris Length (feet): 700

Location: Both

Photo 1 Direction: Facing Upstream

Comments:

Excessive vegetation growing on both sides of drain for next 700' to end.
Picture facing upstream.

Observation Location:

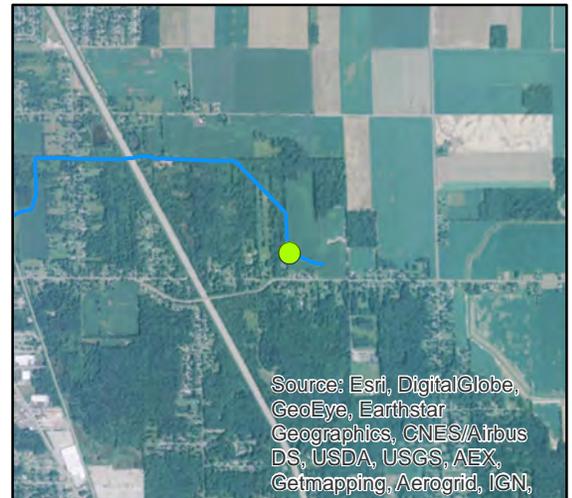


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Photo 3

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:
Blockage489

Type: Fallen Tree

Blockage Length (feet): 10

Debris Length (feet):

Location: Center

Photo 1 Direction: Facing Upstream

Comments:

Fallen tree originating from center of drain and falling on left bank is blocking drain for approximately 10'. Picture facing upstream.

Observation Location:

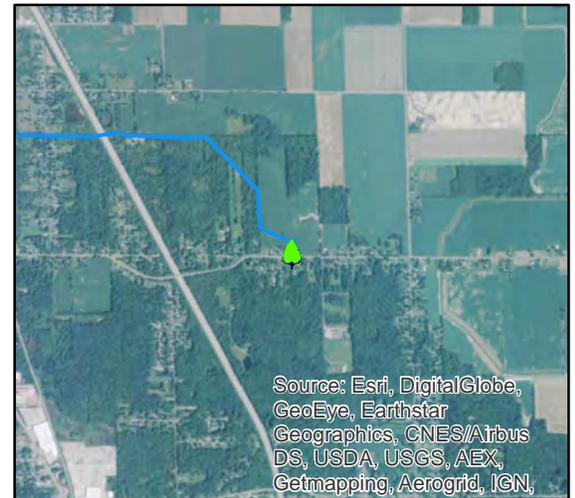


Photo 1



Photo 2

Photo 3

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