ATTACHMENT 3

STORM/COMBINED DRAIN STRUCTURE INSPECTION SHEET

CULVERT INSPECTION FORM

OPEN CHANNEL INSPECTION FORM

DETENTION RETENTION BASIN INSPECTION FORM

Form DC-224

Storm/Combined Drain Structure Inspection Sheet

(**Bold** fields are required)

Surveyed By (1): _____ **Certificate Number (2):**_____

Work Order (8): _____ **Survey Date (YYYYMMDD) (11):** _____

Manhole Number (LegacyID) (22): _____ **Page Number (if hand written) (13):** _____

Drain Name: _____

Street Number and Name (Address) (23): _____

Purpose of Survey (17):

- ☐ F – Routine Assessment
- ☐ A – Maintenance Related
- ☐ B – Infiltration and Inflow Investigation
- ☐ C – Post-rehabilitation Survey
- ☐ D – Pre-rehabilitation Survey
- ☐ E – Pre-acceptance
- ☐ G – Capital Improvement Program Assessment
- ☐ H – Resurvey
- ☐ I – Sewer System Evaluation Survey
- ☐ R – Pre-existing Video or Photographs
- ☐ S – SAW Grant Conditional Assessment
- ☐ X – Not Known

Inspection Level (18):

- ☐ 3 – Level 1+ (Hybrid)
- ☐ 1 – Level 1
- ☐ 2 – Level 2

Inspection Status (19):

- ☐ SI – Surface Inspection
- ☐ DI – Descent Inspection
- ☐ RI – Remote Inspection
- ☐ BM – Buried and Marked
- ☐ NA – No Access
- ☐ NF – Not Found
- ☐ NI – Traffic
- ☐ NO – Not Opened
- ☐ SD – Surcharged/Debris

Location Code (25):

- ☐ A – Primary Major Arterial Roads
- ☐ B – Secondary Roads
- ☐ C – Local Rural Roads
- ☐ D – Easement/Right of Way
- ☐ E – Woods
- ☐ F – Sidewalk
- ☐ F1 – Driveway (Sidewalk)
- ☐ G – Parking Lot
- ☐ H – Alley
- ☐ I – Ditch
- ☐ J – Building
- ☐ K – Creek (includes any waterway)
- ☐ L – Railway
- ☐ M – Airport
- ☐ N – Levee/Floodwall
- ☐ O – Dam
- ☐ P – Levee Pump Statin
- ☐ Y – Yard
- ☐ Z – Other (Enter in Field 28)

Surface Type (26):

- ☐ A – Asphalt
- ☐ B – Concrete/Pavement
- ☐ C – Concrete Collar
- ☐ D – Grass/Dirt
- ☐ D1 – Landscaping (Grass/Dirt)
- ☐ E – Gravel
- ☐ Z – Other (Enter in Field 28)

Manhole Use (29):

- ☐ SW – Stormwater
- ☐ CB – Combined
- ☐ DP – Dam
- ☐ FM – Force Main
- ☐ PR – Processes
- ☐ XX – Not Known
- ☐ ZZ – Other (Enter in Field 44)

Traffic Control:

- ☐ N – No
- ☐ Y - Yes

Location Details (28):_____

_____

_____

Access Type (30):
- ☐ AMH – Manhole
- ☐ ACB – Catch Basin
- ☐ ACOH – Cleanout House
- ☐ ACOM – Cleanout Mainline
- ☐ ACOP – Cleanout Property
- ☐ AJB – Junction Box
- ☐ AM – Meter
- ☐ AOC – Other Special Structure
- ☐ AWA – Wastewater Access
- ☐ AWW – Wet Well

List Type if not above:_____

For Repairs, is any Restoration Work Needed?:
- ☐ N – No
- ☐ Y – Yes

Rim to Outgoing Invert (FEET) (34): _____

Rim to Outgoing Grade (FEET) (35):_____

Evidence of Surcharge (33):
- ☐ N – No
- ☐ Y – Yes

Evidence of I/I:
- ☐ N – No
- ☐ Y – Yes

Evidence of Illicit Discharge/Connection:
- ☐ S – Sanitary Connection /Debris/Floatables
- ☐ B – Bacterial Sheen/Algae/Slime
- ☐ D – Soap/Detergents
- ☐ G – Gas/Diesel/Oil
- ☐ C – Unusual Color /Turbidity/Deposits/Stains
- ☐ O – Unusual Odor
- ☐ X – Sediment/Soil Erosion
- ☐ Z – Other (Enter in Field 44)

Sump Present:
- ☐ N – No
- ☐ Y – Yes

Lowest Invert to Sediment (FEET):_____
(use negative number to show buried depth – depth above lowest invert)

Additional Information (44):
_____
_____
_____

Cover Condition (56):
- ☐ Sound
- ☐ Bolts Missing
- ☐ Broken
- ☐ Corroded (Pitted)
- ☐ Cracked
- ☐ Missing
- ☐ Restraint Missing
- ☐ Restraint Defective
- ☐ N/A
- ☐ XXX – Not Known
- ☐ ZZZ – Other (Enter in Field 106)

Chimney Condition (81):
- ☐ S – Sound
- ☐ D – Defective (Enter notes in Field 106)
- ☐ X – Not Known
- ☐ N/A

Adjustment Ring Condition (61):
- ☐ Sound
- ☐ Broken
- ☐ Corroded
- ☐ Cracked
- ☐ Leaking
- ☐ Poor Installation
- ☐ N/A

Frame Condition (68):
- ☐ Sound
- ☐ Broken
- ☐ Coated
- ☐ Corroded (Pitted/Worn)
- ☐ Cracked
- ☐ Missing
- ☐ N/A

Cone Condition (87):
- ☐ S – Sound
- ☐ D – Defective (Enter notes in Field 106)
- ☐ X – Not Known
- ☐ N/A

Wall Diameter-Length (INCHES) (88):
_____

Wall by Size-Width (INCHES) (89):
_____

Step Condition:
- ☐ S – Sound
- ☐ D – Defective (Enter notes in Field 106)
- ☐ X – Not Known
- ☐ N/A

Bench Condition (98):
- ☐ S – Sound
- ☐ D – Defective (Enter notes in Field 106)
- ☐ X – Not Known
- ☐ N/A

Wall Condition (94):
- ☐ S – Sound
- ☐ D – Defective (Enter notes in Field 106)
- ☐ X – Not Known
- ☐ N/A

Channel Condition (103):
- ☐ S – Sound
- ☐ D – Defective (Enter notes in Field 106)
- ☐ X – Not Known
- ☐ N/A

Verify Map: Are there any unmapped connections of pipe ≥ 8”?:
- ☐ No
- ☐ Yes – complete New Pipe information and sketch new connection in box provided (required)

Additional Component Information (106): _____
_____
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_____

Pipe Number (107): NEW PIPE

Rim to Invert (FEET) (109): _____

Material (111):

- ☐ ABS – Acrylonitrile Butadiene Styrene
- ☐ AC – Asbestos Cement
- ☐ BR – Brick
- ☐ CAS – Cast Iron
- ☐ CMP – Corrugated Metal Pipe
- ☐ CP – Concrete (Non-Reinforced)
- ☐ CT – Clay Tile (Not Vitrified Clay)
- ☐ DIP – Ductile Iron Pipe
- ☐ FRP – Fiberglass Reinforced Pipe
- ☐ PCCP – Pre-Stressed Concrete Cylinder Pipe
- ☐ PCP – Polymer Concrete Pipe
- ☐ PE – Polyethylene
- ☐ PP – Polypropylene
- ☐ PSC – Plastic/Steel Composite
- ☐ PVC – Polyvinyl Chloride
- ☐ RCP – Reinforced Concrete Pipe
- ☐ RPM – Reinforced Plastic Pipe (Truss Pipe)
- ☐ SP – Steel Pipe
- ☐ VCP – Vitrified Clay Pipe
- ☐ XXX – Not Known
- ☐ ZZZ – Other (Enter in Comments)

Pipe Type (117):

- ☐ FM – Force Main
- ☐ GR – Gravity Connection
- ☐ IL – Inside Drop Lower
- ☐ IU – Inside Drop Upper
- ☐ LB – Lateral to Building (Service Line)
- ☐ OL – Outside Drop Lower
- ☐ OU – Outside Drop Upper
- ☐ XX – Not Known
- ☐ ZZ – Other (Enter in Comments Field)

Pipe Seal Condition (116):

- ☐ S – Sound
- ☐ D - Defective (Enter in Comments)
- ☐ N/A

Direction of Flow (110):

- ☐ I – In
- ☐ O – Out
- ☐ N/A

Shape (112):

- ☐ C – Circular
- ☐ A – Arched (With Flat Bottom)
- ☐ O – Oval (Elliptical)
- ☐ H – Horseshoe (i.e. Inverted U with Curved Sidewalls)
- ☐ E – Egg Shaped
- ☐ B – Barrel (e.g. Beer Barrel Shape)
- ☐ R – Rectangle
- ☐ S – Square
- ☐ T – Trapezoidal
- ☐ U – U-Shaped with Flat Top (Straight Walls)
- ☐ Z – Other (Enter in Comments)
- ☐ XXX – Not Known

Height Or Diameter (INCHES) (113): _____

Width (INCHES) (114): _____

Pipe Condition (115):

- ☐ S – Sound
- ☐ D – Defective (Enter in Comments)
- ☐ N/A

Sketch proper layout:

Comments: _____
_____
_____
_____
_____
_____

Form DC-XXX

Storm Drain Culvert Inspection Sheet

(**Bold** fields are required)

Surveyed By (1): _____ **Certificate Number (2):**_____

Work Order (8): _____ **Survey Date (YYYYMMDD) (11):** _____

Project (10)**:** _____ **Page Number (if hand written) (13):** _____

Drain Name: _____

Street Number and Name (Address) (23): _____

Purpose of Survey (17):

- ☐ F – Routine Assessment
- ☐ A – Maintenance Related
- ☐ B – Infiltration and Inflow Investigation
- ☐ C – Post-rehabilitation Survey
- ☐ D – Pre-rehabilitation Survey
- ☐ E – Pre-acceptance (new system)
- ☐ G – Capital Improvement Program Assessment
- ☐ H – Resurvey
- ☐ I – Sewer System Evaluation Survey (SSES)
- ☐ R – Pre-existing Video or Photographs
- ☐ S – SAW Grant Conditional Assessment
- ☐ X – Not Known

Inspection Method:

- ☐ Shined
- ☐ Walked

Location**:**_____

_____

_____

_____

Accessibility:

- ☐ Shined
- ☐ Walked
- ☐ Giant Hogweed

Accessibility Comments**:**_____

_____

_____

_____

Inspection Status:

- ☐ Found
- ☐ Not Found
- ☐ Submerged
- ☐ Buried/Detected

Surface Type (Surface Over Pipe):

- ☐ Grass/Lawn
- ☐ Vegetation
- ☐ Gravel/Dirt
- ☐ Concrete
- ☐ Bituminous
- ☐ Other (Enter in Comments)

Surface Type Comments**:**_____

_____

_____

_____

_____

Culvert Deformation:

- ☐ None
- ☐ 1% - 10%
- ☐ > 10%

Culvert Material:

- ☐ Concrete
- ☐ Metal
- ☐ PVC
- ☐ HDPE
- ☐ Clay
- ☐ Unknown
- ☐ Other (Enter in Comments)

Culvert Material Comments**:**_____

_____

_____

_____

_____

Storm Drain Culvert Inspection Sheet
(**Bold** fields are required)

Sediment Observed:
- ☐ No
- ☐ Yes

Sediment Percent of Clear Opening:
- ☐ 0% - 10%
- ☐ 11% – 25%
- ☐ 26% – 50%
- ☐ > 50%

Blockage Observed:
- ☐ No
- ☐ Yes

Blockage Type:
- ☐ None
- ☐ Excessive Vegetation
- ☐ Woods/Logs
- ☐ Other (Enter in Comments)

Blockage Type Comments:_____
_____
_____

Blockage Percent of Clear Opening:
- ☐ 0% - 10%
- ☐ 11% – 25%
- ☐ 26% – 50%
- ☐ > 50%

Culvert Defects (1):
- ☐ None
- ☐ Excessive Corrosion
- ☐ Hole
- ☐ Fractured
- ☐ Joint/Seam Separation
- ☐ Scoured
- ☐ Other (Enter in Comments)

Culvert Defects (2):
- ☐ None
- ☐ Excessive Corrosion
- ☐ Hole
- ☐ Fractured
- ☐ Joint/Seam Separation
- ☐ Scoured
- ☐ Other (Enter in Comments)

Culvert Defects (3):
- ☐ None
- ☐ Excessive Corrosion
- ☐ Hole
- ☐ Fractured
- ☐ Joint/Seam Separation
- ☐ Scoured
- ☐ Other (Enter in Comments)

Culvert Defect Comments:_____
_____
_____
_____
_____

Culvert Condition:
- ☐ Good
- ☐ Fair
- ☐ Poor

Immediate Maintenance Required:
- ☐ None
- ☐ Culvert Deformation
- ☐ Sediment Removal
- ☐ Blockage Removal
- ☐ Culvert Defect (See Defect Fields Above)
- ☐ Engineer's Evaluation Needed
- ☐ Other Repair (Enter in Comments)

Immediate Maintenance Comments:_____
_____
_____
_____
_____

General Notes/Access Notes:_____
_____
_____
_____
_____
_____
_____
_____

Form DC-XXX

Storm Drain Open Channel Inspection Sheet

(**Bold** fields are required)

Surveyed By (1): _____ **Certificate Number (2):**_____

Work Order (8): _____ **Survey Date (YYYYMMDD) (11):** _____

Project (10)**:** _____ **Page Number (if hand written) (13):** _____

Drain Name: _____

Street Number and Name (Address) (23): _____

Purpose of Survey (17):

- ☐ F – Routine Assessment
- ☐ A – Maintenance Related
- ☐ B – Infiltration and Inflow Investigation
- ☐ C – Post-rehabilitation Survey
- ☐ D – Pre-rehabilitation Survey
- ☐ E – Pre-acceptance (new system)
- ☐ G – Capital Improvement Program Assessment
- ☐ H – Resurvey
- ☐ I – Sewer System Evaluation Survey (SSES)
- ☐ R – Pre-existing Video or Photographs
- ☐ S – SAW Grant Conditional Assessment
- ☐ X – Not Known

Invasive Species Present (Coverage from Top of Bank to Top of Bank):

- ☐ N/A or None
- ☐ Common Buckthorn
- ☐ Giant Hogweed
- ☐ Phragmites
- ☐ Purple Loosestrife
- ☐ Other (Enter in Comments)

Location**:**_____

_____

_____

_____

_____

Invasive Species Comments**:**_____

_____

_____

_____

_____

Excessive Vegetation Present:

- ☐ No
- ☐ Yes

Excessive Vegetation Type:

- ☐ N/A or None
- ☐ Cattails
- ☐ Heavy Brush
- ☐ Trees
- ☐ Other (Enter in Comments)

Percent Invasive (Coverage Area):

- ☐ None
- ☐ 1% - 10%
- ☐ 11% - 25%
- ☐ >= 26%

Channel Stability:

- ☐ Flow centralized in channel
- ☐ Minimal diversion of flow to banks
- ☐ Excessive diversion of flow to banks

Excessive Vegetation Comments:_____

_____

_____

_____

_____

Channel Stability Comments**:**_____

_____

_____

_____

_____

Storm Drain Open Channel Inspection Sheet
(**Bold** fields are required)

Erosion:

- ☐ N/A or None
- ☐ Minor Bank Erosion
- ☐ Major Bank Erosion

Erosion Comments:_____
_____
_____
_____
_____

Blockages/Obstructions Present:

- ☐ No
- ☐ Yes

Blockages/Obstructions Type:

- ☐ N/A or None
- ☐ Sediment
- ☐ Fallen Tree(s)
- ☐ Woody Debris
- ☐ Log Jam/Beaver Dam
- ☐ Non-Vegetative Debris
- ☐ Bridge Crossing
- ☐ Dock
- ☐ Damn
- ☐ Weir
- ☐ Other (Enter in Comments)

Blockages/Obstructions Comments:_____
_____
_____
_____
_____

Exposed Utility:

- ☐ No
- ☐ Yes

Exposed Utility Comments:_____
_____
_____
_____
_____

Evidence of Illicit Discharge/Connection:

- ☐ N/A or None
- ☐ Sanitary Connection/Debris/Floatables
- ☐ Soap/Detergents
- ☐ Gas/Diesel/Oil
- ☐ Unusual Color/Turbidity/Deposits/Stains
- ☐ Unusual Odor
- ☐ Sediments/Soil Erosion
- ☐ Other (Enter in Comments)

Illicit Discharge/Connection Comments:_____
_____
_____
_____
_____

Immediate Maintenance Required:

- ☐ No
- ☐ Obstruction Removal
- ☐ Erosion Repair/Prevention
- ☐ Sediment Removal
- ☐ Debris Removal
- ☐ Blockage Removal
- ☐ Vegetation and/or Tree Maintenance
- ☐ Access Route Maintenance
- ☐ Engineer's Evaluation Needed
- ☐ Other Repair (Enter in Comments)

Immediate Maintenance Comments:_____
_____
_____
_____
_____

General Notes/Access Notes:_____
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Form DC-XXX

Storm Drain Retention/Detention Pond Channel Inspection Sheet

(**Bold** fields are required)

Surveyed By (1): _____ **Certificate Number (2):**_____

Work Order (8): _____ **Survey Date (YYYYMMDD) (11):** _____

Project (10)**:** _____ **Page Number (if hand written) (13):** _____

Drain Name: _____

Street Number and Name (Address) (23): _____

Purpose of Survey (17):

- ☐ F – Routine Assessment
- ☐ A – Maintenance Related
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- ☐ C – Post-rehabilitation Survey
- ☐ D – Pre-rehabilitation Survey
- ☐ E – Pre-acceptance (new system)
- ☐ G – Capital Improvement Program Assessment
- ☐ H – Resurvey
- ☐ I – Sewer System Evaluation Survey (SSES)
- ☐ R – Pre-existing Video or Photographs
- ☐ S – SAW Grant Conditional Assessment
- ☐ X – Not Known

Invasive Species Present:

- ☐ N/A or None
- ☐ Common Buckthorn
- ☐ Giant Hogweed
- ☐ Phragmites
- ☐ Purple Loosestrife
- ☐ Other (Enter in Comments)

Percent Invasive (Coverage Area):

- ☐ None
- ☐ 1% - 10%
- ☐ 11% - 25%
- ☐ >= 26%

Location:_____

_____

_____

Vegetation Coverage (For Stabilization of Upland and Bank):

- ☐ Good – Full Vegetation
- ☐ Fair – Some Bare Spots
- ☐ Poor – Significant Bare Spots/Vegetation Sparse

Vegetation Coverage (For Stabilization of Dry Basin Bottom):

- ☐ Good – Full Vegetation
- ☐ Fair – Some Bare Spots
- ☐ Poor – Significant Bare Spots/Vegetation Sparse

Animal Burrows Present:

- ☐ No
- ☐ Yes

Tree Management:

- ☐ N/A or None – No Fallen or Overgrown Trees
- ☐ Minimal – Few Fallen or Overgrown Trees
- ☐ Excessive – Significant Fallen or Overgrown Trees

Bank/Side Slope Condition:

- ☐ N/A or No Failure of Bank/Side Slope
- ☐ Minor Failure of Bank/Side Slope
- ☐ Significant Failure of Bank/Side Slope

Basin Bottom Condition:

- ☐ N/A or No Sedimentation/Erosion; Proper Drainage
- ☐ Minor Sedimentation/Erosion; Minor Drainage Issues
- ☐ Significant Sedimentation/Erosion; Major Drainage Issues

Evidence of Illicit Discharge/Connection:

- ☐ N/A or None
- ☐ Sanitary Connection/Debris/Floatables
- ☐ Soap/Detergents
- ☐ Gas/Diesel/Oil
- ☐ Unusual Color/Turbidity/Deposits/Stains
- ☐ Unusual Odor
- ☐ Sediments/Soil Erosion
- ☐ Other (Enter in Comments)

Immediate Maintenance Required:

- ☐ No
- ☐ Obstruction Removal
- ☐ Erosion Repair/Prevention
- ☐ Sediment Removal
- ☐ Debris Removal
- ☐ Blockage Removal
- ☐ Vegetation and/or Tree Maintenance
- ☐ Access Route Maintenance
- ☐ Engineer's Evaluation Needed
- ☐ Other Repair (Enter in Comments)

Immediate Maintenance
Comments:_____
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General Notes/Access
Notes:_____
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