CIPO BOWC PRESENTATION- DECEMBER 2019

PROCESS, PROJECT SELECTION AND CIP DEVELOPMENT

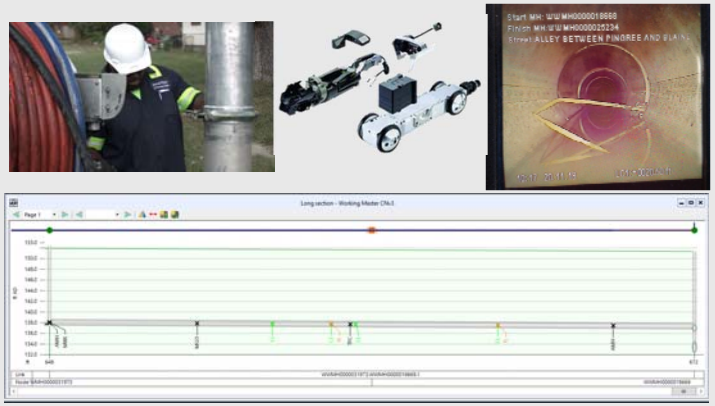
DECEMBER 4, 2019

MONICA DANIELS, FINANCE ASSET MANAGER

Condition Assessment to CIP Workflow Summary Overview - Sewer

Inspection Activities

- CCTV (PACP) Inspection
- Manhole (MACP) Inspection



TEAM

- Data Management
- Field
- Sewer Modeling
- Planning / Design

DWSD Database

Data Inputs

Process

Step A

- Field data are processed
- QA/QC is performed
- Geometric elements of network are updated

Step B

- Access tool is run on CCTV inspections
- Repair-worthy defects are set on manhole survey and CCTV user fields in InfoAsset Manager (IAM)
- Intervention recommendations are set based on defect quantities in IAM

Step C

- Engineer compares Tool and IAM suggested interventions
- Engineer reviews CCTV and manhole surveys to verify interventions
- Engineer recommends interventions

Step D

- Capacity analysis from hydraulic model is performed

Step E

- Interventions are reviewed holistically
- Final deliverable is prepared

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Condition Assessment to CIP Workflow Summary Overview - Water

Inspection Activities

- Leak Detection
- Valve Exercising
- Hydrant Testing
- C-factor Testing

Step A

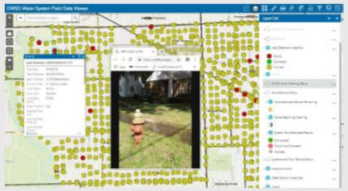
- Field data are processed
- QA/QC is performed
- Geometric elements of network are updated

Step B-1

- C-factors are updated in hydraulic model based upon results and extrapolated to neighboring pipes in the same cohort
- Hydraulic model is calibrated based upon C-factor tests and hydrant flow tests

Step B-2

- Leaks are investigated by DWSD and actual breaks are recorded in CityWorks
- Newly found breaks are added to break data-set for evaluation of five breaks per 1,000 LF threshold



TEAM

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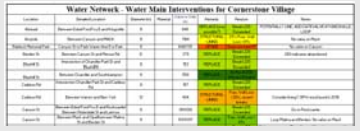
- Field
- Water Modeling
- Planning / Design

DWSD Database

Data Inputs

Process



Step C

- Engineer incorporates break history, C-factors, available fire flow and valve condition into analysis
- Engineer reviews available data and prioritizes interventions
- Engineer recommends treatment types for various interventions

Step D

- Interventions are reviewed holistically
- Final deliverable is prepared

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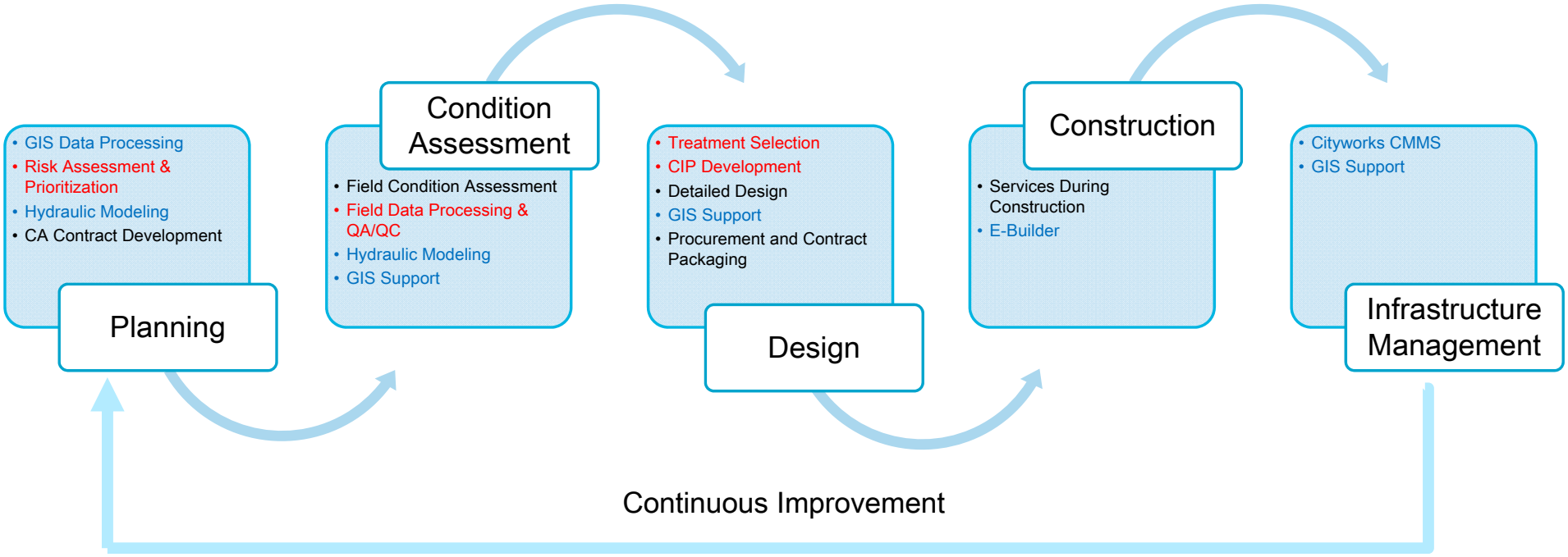
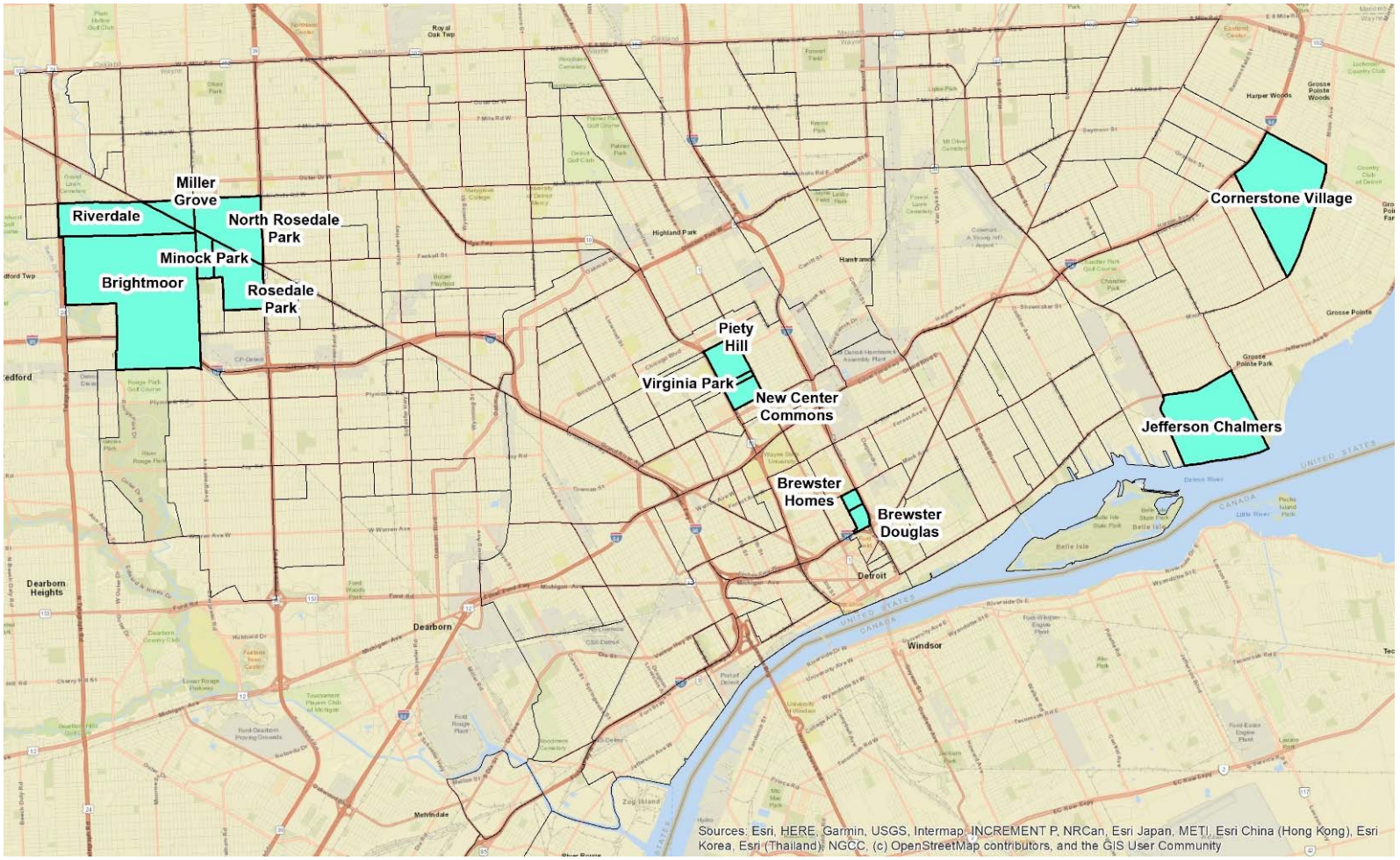
Overall Capital Delivery within CIPMO



AECOM

Condition Assessment Performed



Neighborhood	W	S
Cornerstone Village	✓	✓
N. Rosedale Park	✓	✓
Jefferson Chalmers	✓	
Brightmoor	✓	✓
Miller Grove	✓	✓
Minock Park	✓	✓
Riverdale	✓	✓
Rosedale Park	✓	✓
Brewster Douglass	✓	✓
Brewster Homes		✓
New Center Commons		✓
Piety Hill	✓	✓
Virginia Park	✓	✓