



McKenna Blvd./Park Edge- Park Ridge Flood Mitigation

BOARD OF PUBLIC WORKS - APRIL 17, 2019

Overview

- ▶ Flash Flooding Background
- ▶ Proposed Public Works Project
 - ▶ Project Location and Features
 - ▶ Layout
 - ▶ Construction Schedule





Background Information

FLASH FLOODING

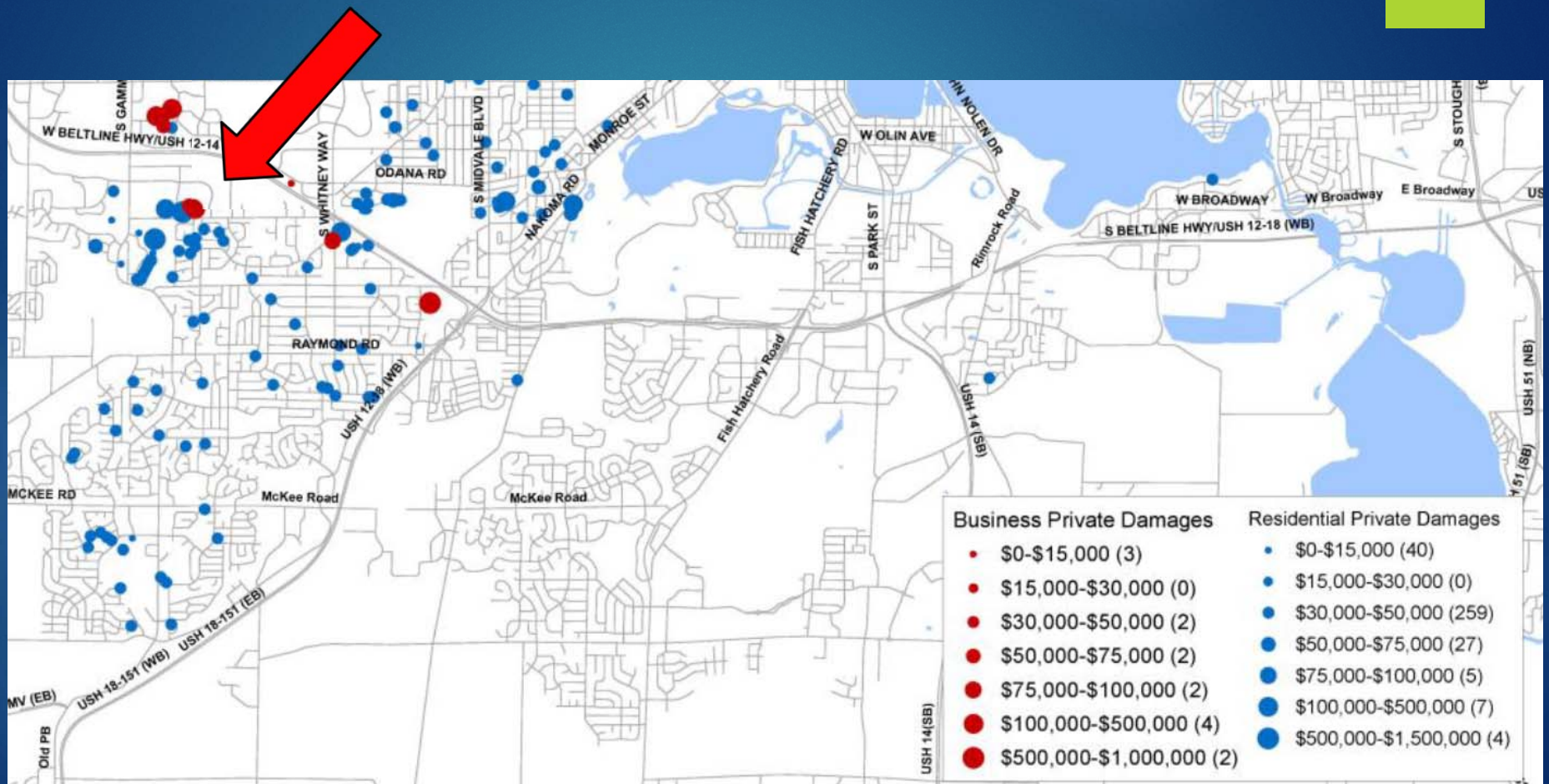
Rainfall in Elver Park Watershed

- ▶ July 21, 2016 – 2.75" in 2 hrs
 - ▶ **10-25 year event**
- ▶ July 10, 2017 – 4.33" in 4.5 hrs
 - ▶ **~50 year event**
- ▶ June 16, 2018 – 4.03" in 2 hrs
 - ▶ **>100 year event**
- ▶ August 20, 2018 – 11.75" in 14 hrs
 - ▶ **>1000 year event** – off the defined chart



July 2016 flooding

REPORTED Property Damage in August 2018





COMMON SIGHT – ENTIRE LOWER LEVELS GUTTED



THOUSANDS OF
SANDBAGS PLACED
BY NATIONAL
GUARD

SANDBAGS 3-4FT
TALL – SAME
HEIGHT AS
FLOOD WATERS



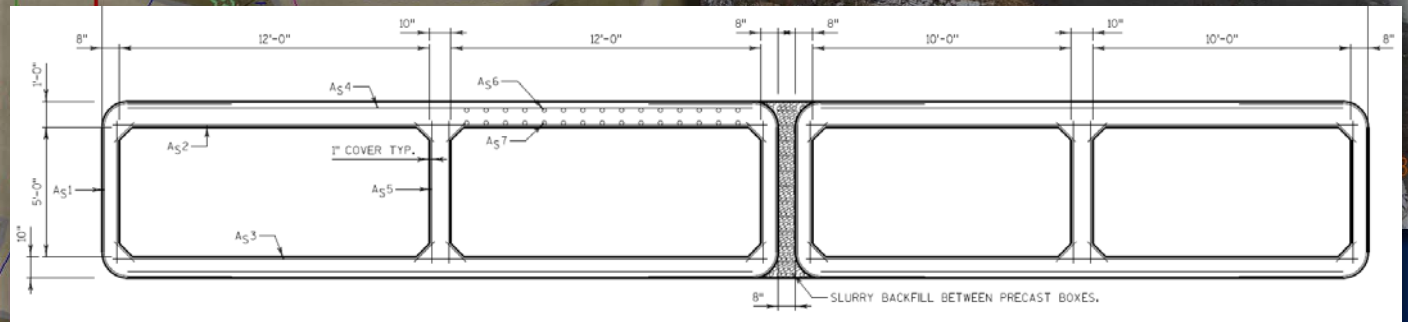
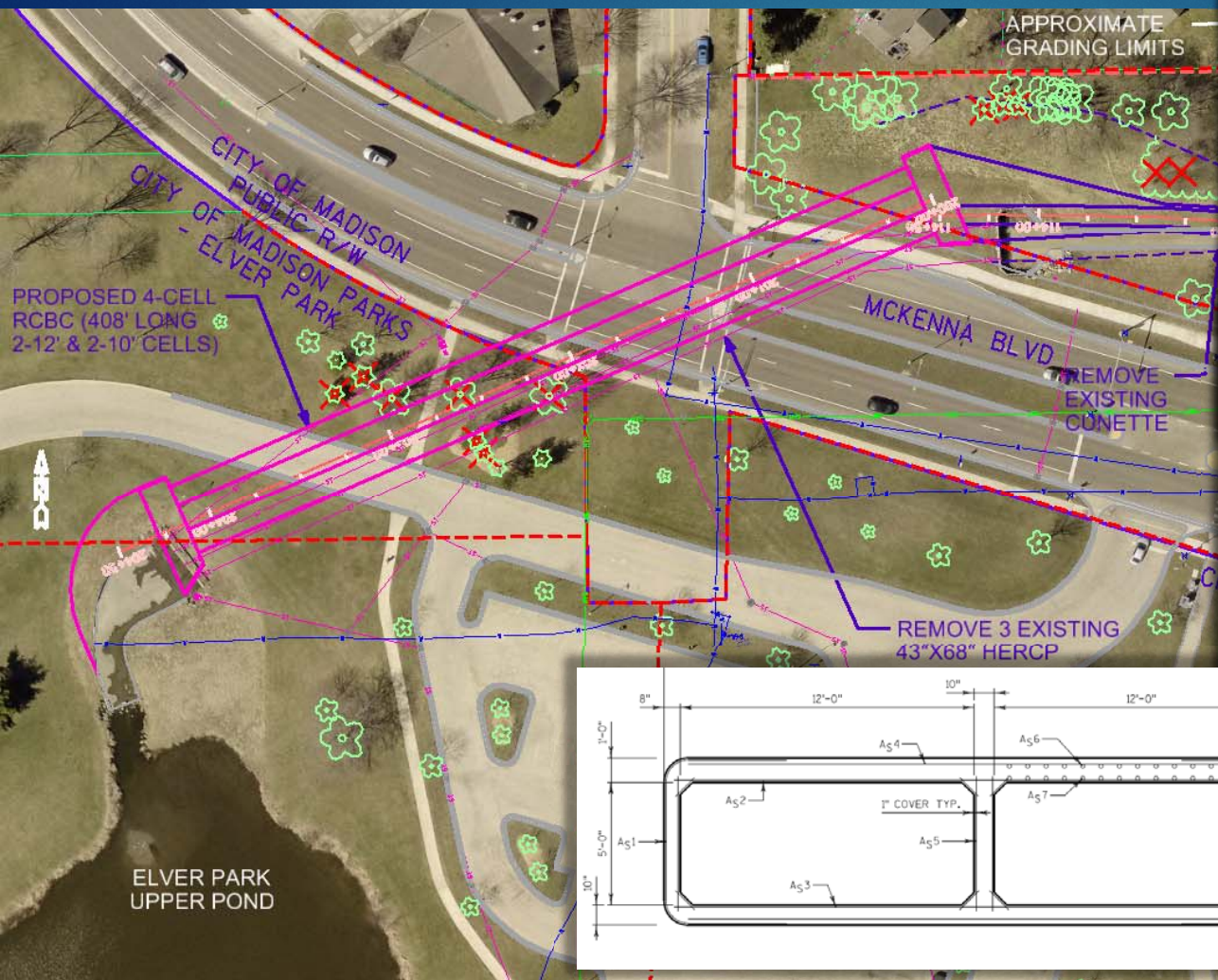
Proposed Public Works Project Design

Project Features

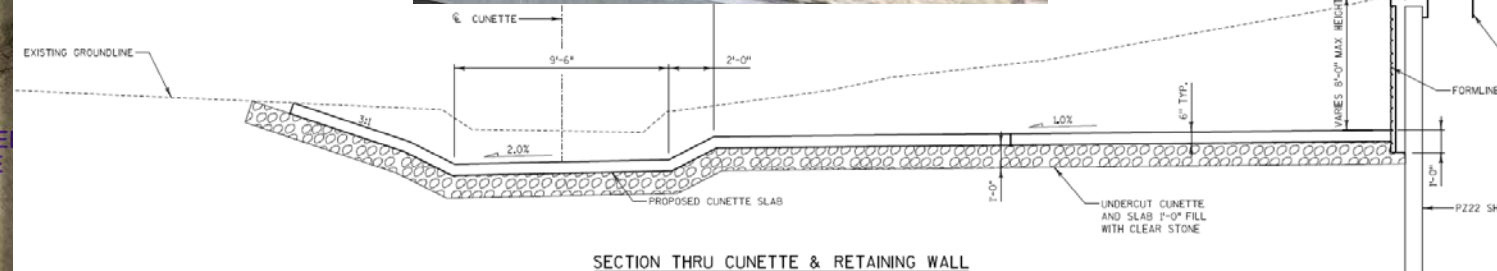
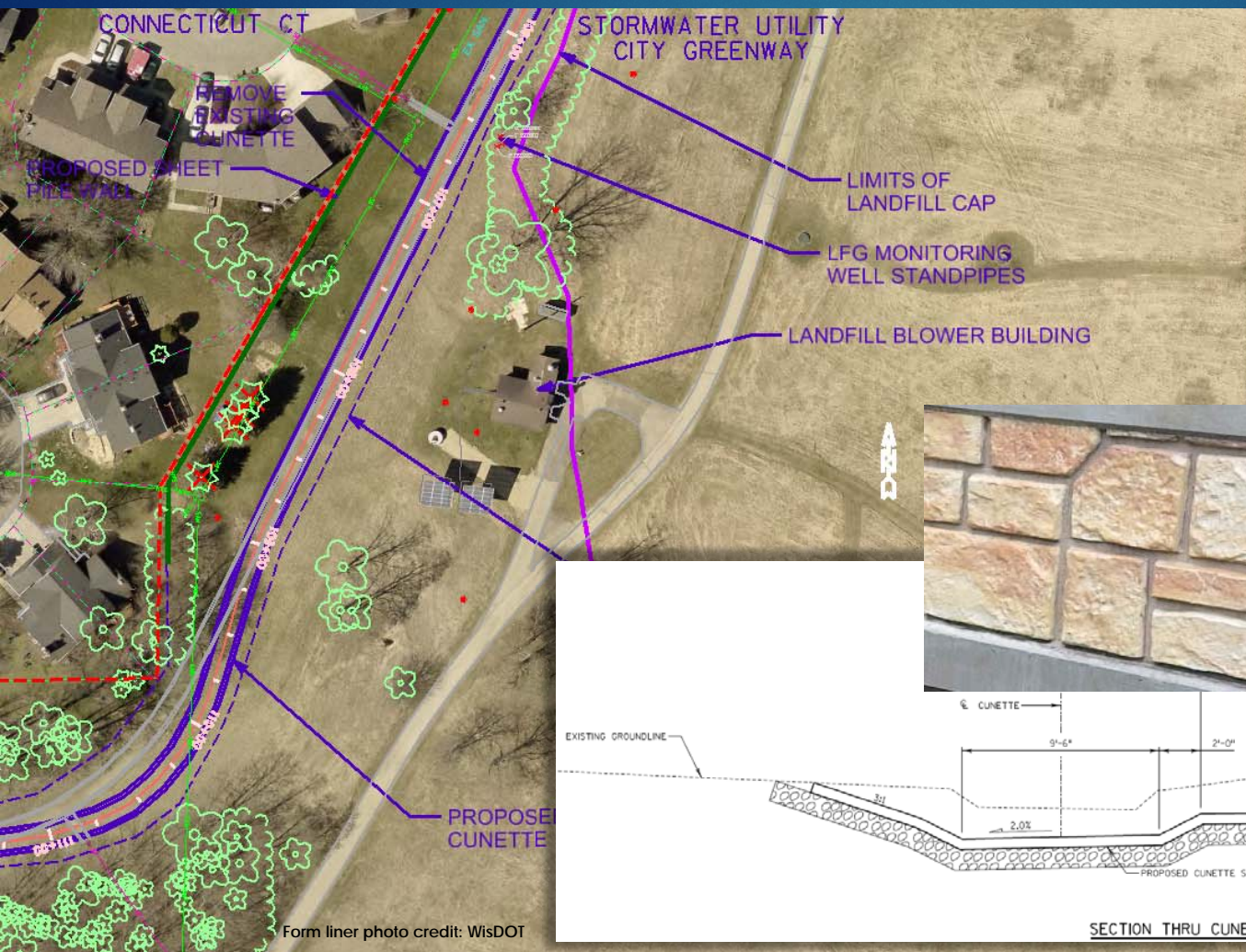
- ▶ Large box culverts (2-5'x12' & 2-5'x10') at McKenna Blvd. to carry flood flows
- ▶ Replace concrete channel lining
 - ▶ Re-align and lower cunette
 - ▶ Retaining wall with protective railing
- ▶ Remove and replace culverts at Greentree Pond
 - ▶ Lower pipe invert elevations by 1.5'
 - ▶ Modify bike path in Greentree Landfill
- ▶ Lower channel upstream of Greentree Pond
 - ▶ Extend greenway modification upstream past Schroeder Road
 - ▶ Proposed grading match into existing ground
 - ▶ Remove and replace culverts under Schroeder



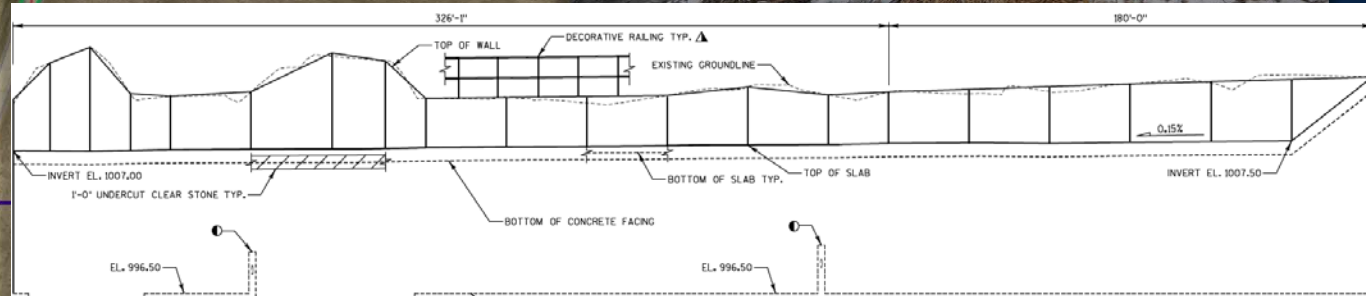
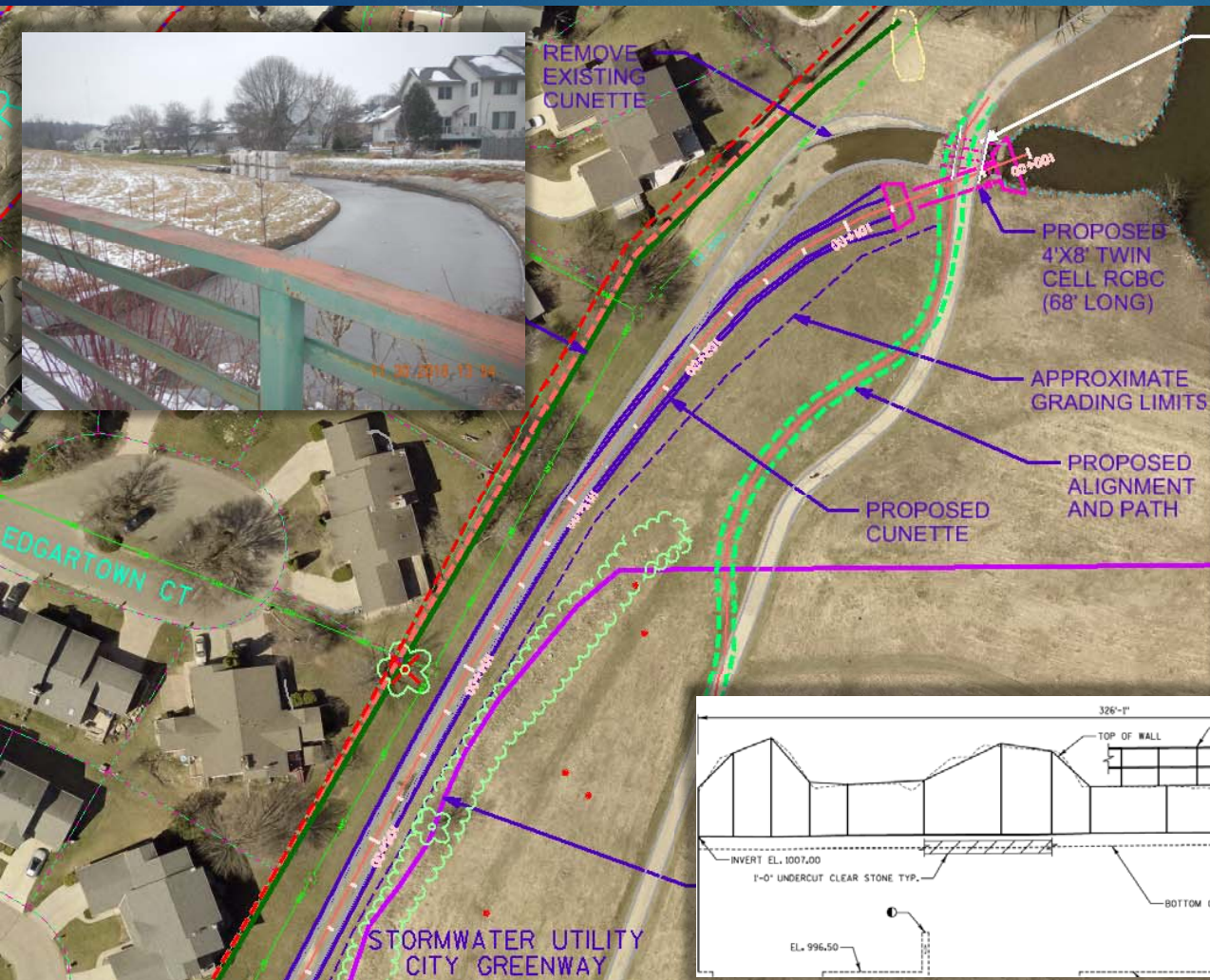
McKenna Blvd. Segment



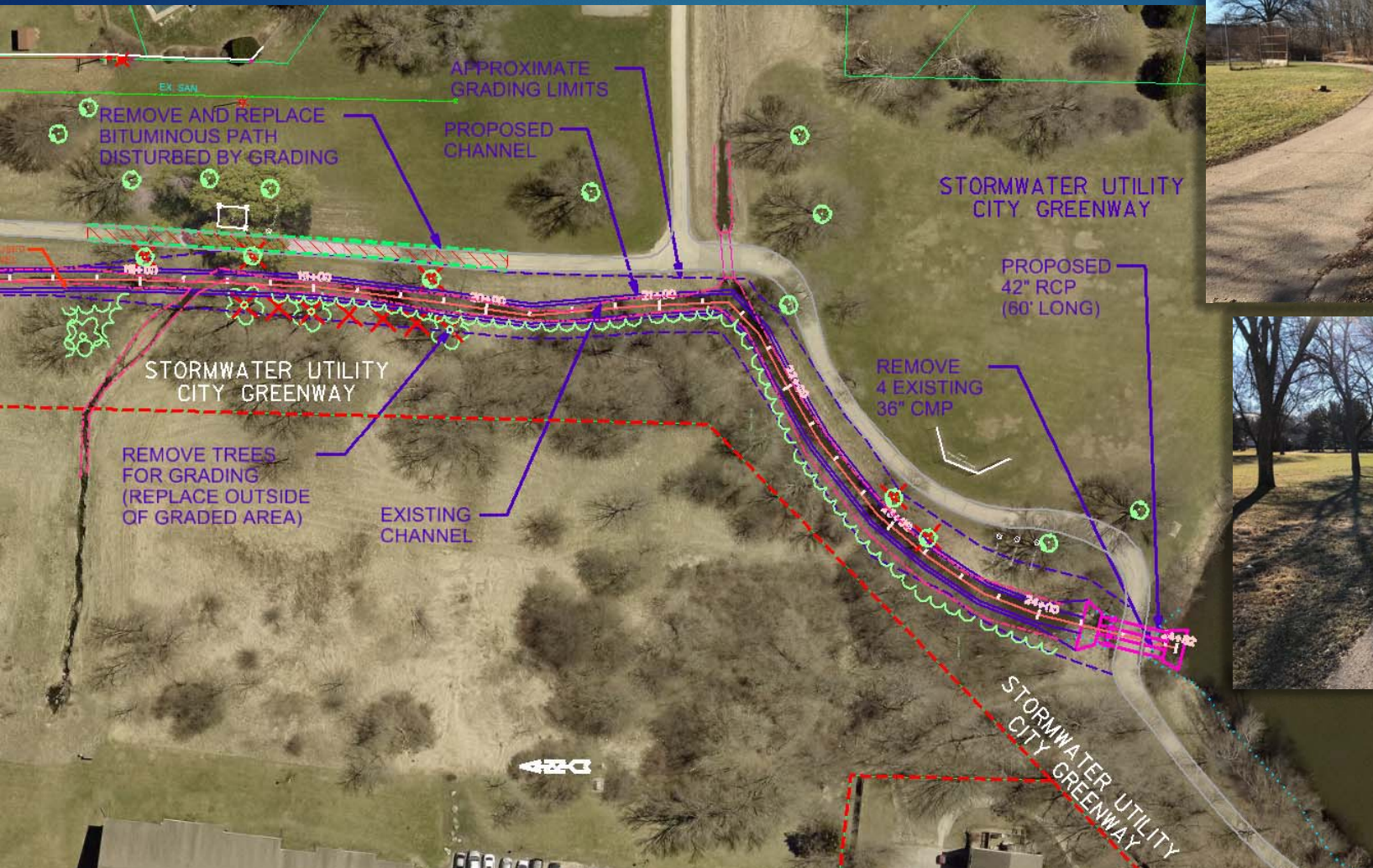
Greentree Mid Segment



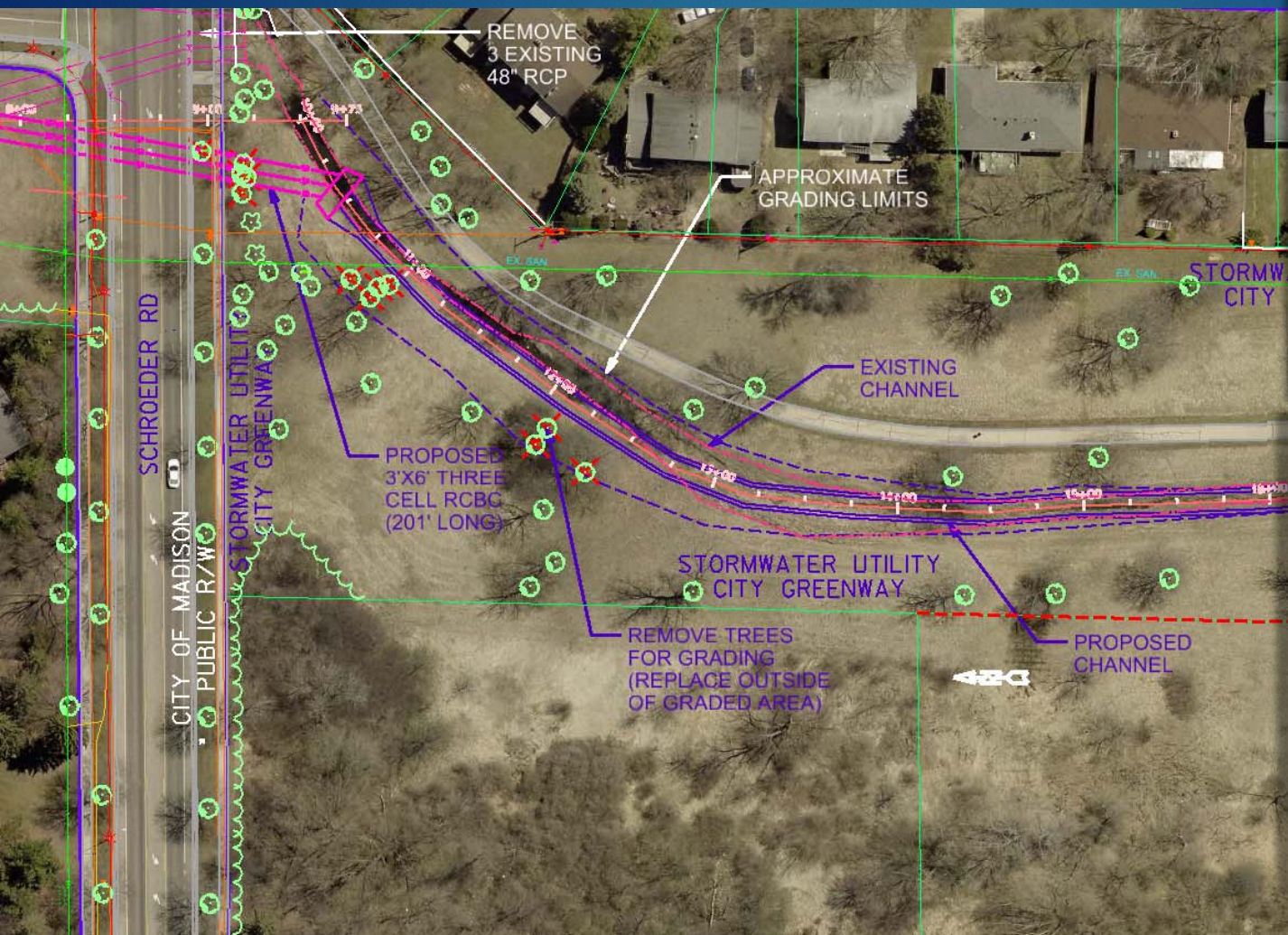
Pond Outlet Segment



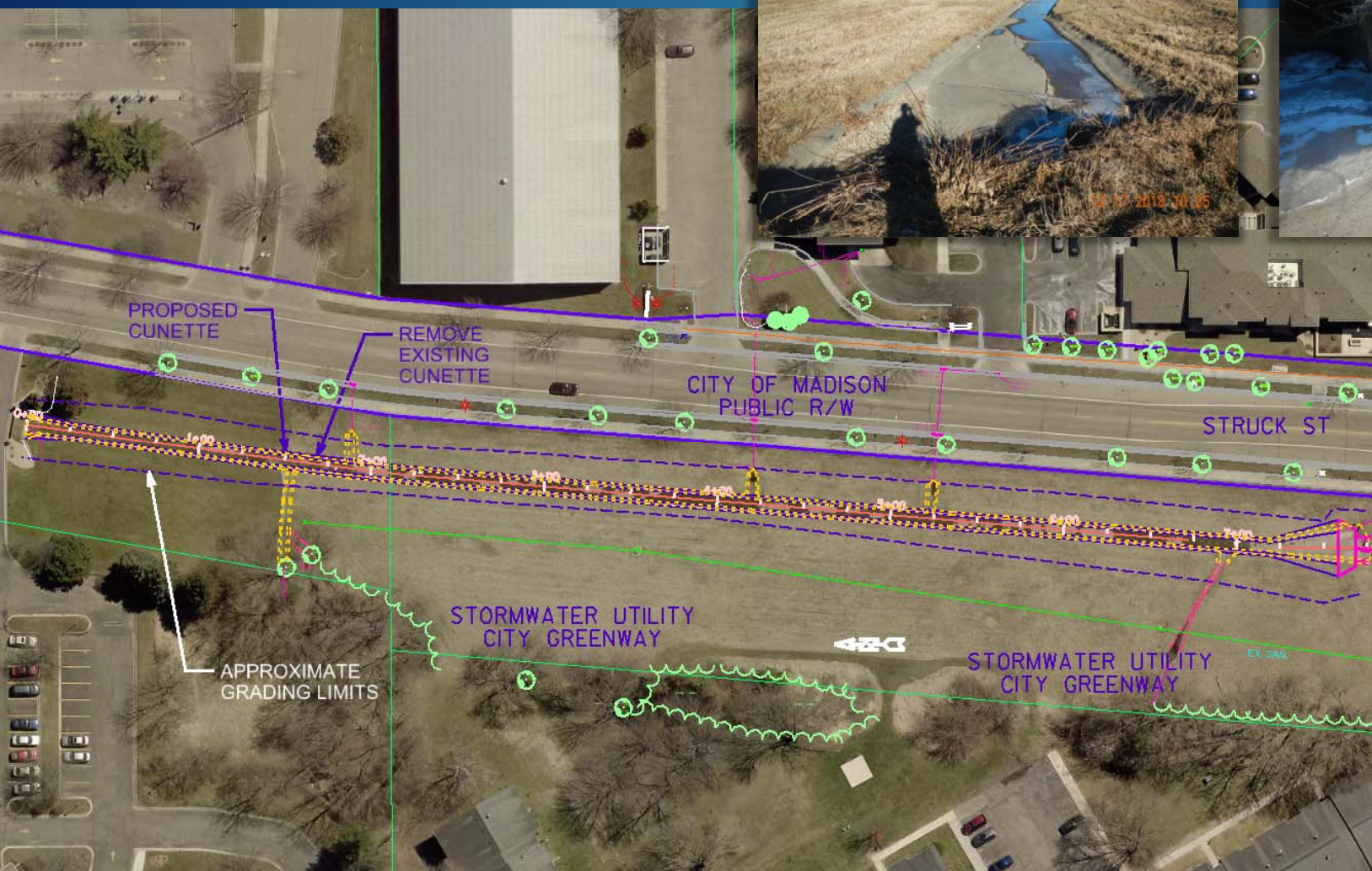
Pond Inlet Segment



Schroeder Segment



Watts Segment



Tentative Construction Schedule

- ▶ Bidding:
 - ▶ Late Spring -Summer 2019
- ▶ Construction:
 - ▶ Late Summer through late Fall 2019
 - ▶ Street Construction on Struck and upper reach may be moved to 2020 depending on contractor availability
 - ▶ Culvert:
 - ▶ 6 stages, alter traffic pattern on McKenna Blvd.
 - ▶ Maintain Elver Park west parking lot access
 - ▶ Channel:
 - ▶ Drive sheet pile from south to north
 - ▶ Pour channel concrete from south to north
 - ▶ Temporary flow diversion



QUESTIONS?

