Proposed Regional Stormwater Basin

Proposed Regional Stormwater Basin on Parcel 473-24-014
Parma Heights, OH
Parma Heights City Council Meeting - April 12, 2021
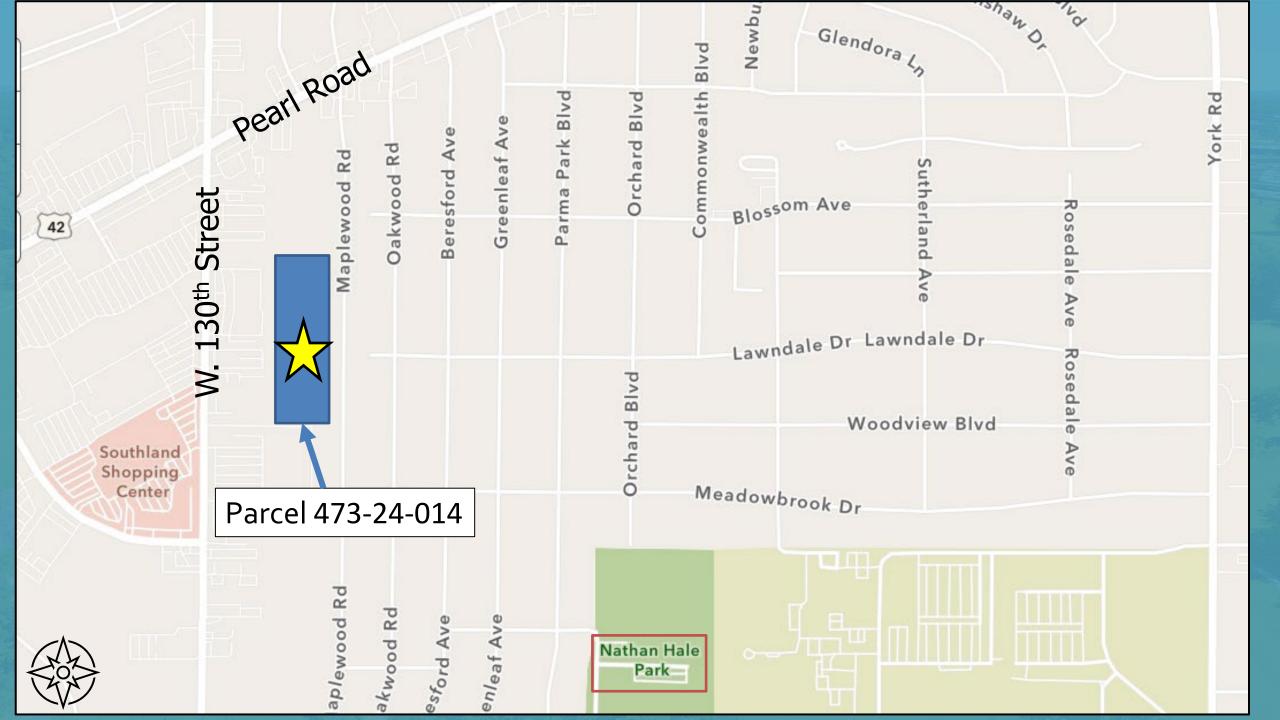
Northeast Ohio
Regional Sewer District

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Background Information

- The District & Parma Heights is working collaboratively to acquire Parcel 473-24-014, to build a regional stormwater basin to reduce residential and street flooding along the Regional Stormwater System (Big Creek)

- District would finance the purchase through the Regional Stormwater Management Program

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Pearl Road

W. 130th Street

42

Southland
Shopping
Center

Parcel 473-24-014

Maplewood Rd

Oakwood Rd

Beresford Ave

Greenleaf Ave

Parma Park Blvd

Orchard Blvd

Commonwealth Blvd

Newbu

Glendora Ln

shaw Dr

Blvd

York Rd

Blossom Ave

Sutherland Ave

Rosedale Ave

Lawndale Dr Lawndale Dr

Rosedale Ave

Orchard Blvd

Woodview Blvd

Meadowbrook Dr

Maplewood Rd

akwood Rd

esford Ave

enleaf Ave

Nathan Hale
Park

Current Conditions

- Yearly, reported basement flooding in the southwest portion of Parma Heights.
  - Predicted flooding shown in the stormwater master planning and the Sewer System Evaluation Study models.

- Stormwater and sanitary sewer system capacity issues

Example Project: Chevrolet Stormwater Basin Parma, OH

- Residents nearby experienced basement flooding during storms

- Basin was designed and storm sewers were installed to divert stormwater to basin

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Zoom out
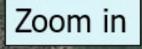
32 acre-feet of storage

Abraham Dr

Chevrolet Blvd

How it works

- Stormwater from local streets flows into the basin and is then slowly released

- Since installation, basement flooding has been controlled

Zoom in

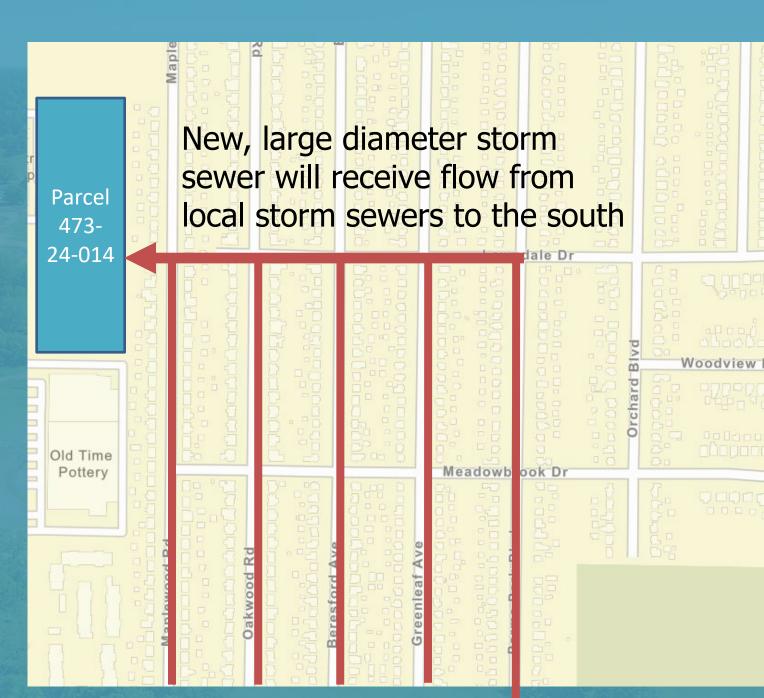Flow of water is slowed through basin. Basin is dry is dry weather.

Gentle slope into basin, planted with grasses and sedges.

Proposed Basin: How it will work

- 8.8-acre lot will be location of basin
- New and existing storm sewers will empty into the basin

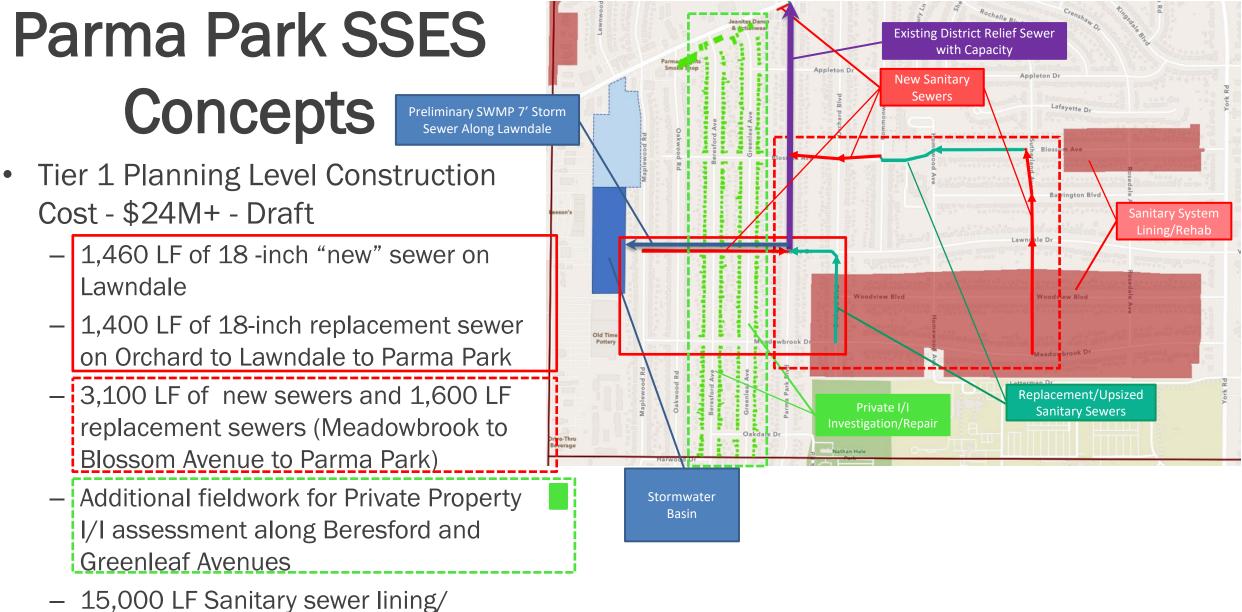- Basin will store stormwater during rain events and will be dry during dry weather

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New, large diameter storm sewer will receive flow from local storm sewers to the south

Parcel 473-24-014

Old Time Pottery

Next steps to relieve flooding: Stormwater and Sanitary Sewer Work

- Coordinate with City on phasing and funding of infrastructure planning and design

- Sanitary sewer system in this area of Parma Heights was a focus of LSSES; strong candidate for a District grant through the Member Community Infrastructure Program

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Parma Park SSES Concepts

- Tier 1 Planning Level Construction Cost - $24M+ - Draft

  – 1,460 LF of 18 -inch "new" sewer on Lawndale

  – 1,400 LF of 18-inch replacement sewer on Orchard to Lawndale to Parma Park

  – 3,100 LF of new sewers and 1,600 LF replacement sewers (Meadowbrook to Blossom Avenue to Parma Park)

  – Additional fieldwork for Private Property I/I assessment along Beresford and Greenleaf Avenues

  – 15,000 LF Sanitary sewer lining/ rehabilitation work

Map labels:
- Existing District Relief Sewer with Capacity
- New Sanitary Sewers
- Preliminary SWMP 7' Storm Sewer Along Lawndale
- Sanitary System Lining/Rehab
- Private I/I Investigation/Repair
- Replacement/Upsized Sanitary Sewers
- Stormwater Basin

Questions?

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