Laurene Taylor Drain
Preliminary Engineering Summary

Laurene Taylor Drain
Board of Determination

October 15, 2015

Brenda M. Moore
Muskegon County Drain Commissioner
Laurene Taylor Drain Overview

History of the Drain
- Constructed in 1975
- Established as a County Drain April 19, 1976

Recent Maintenance History
- No documented maintenance / repairs

Current Petition: Dated October 15, 2014
Work Performed

- Review of Drain Commissioner’s historic files.
- Meet with Muskegon County Road Commission Engineer
- Research existing map data (GIS, aerial photographs, topographic information, district boundaries, etc.)
- Review prior construction work.
- Identify the proposed Drainage District boundary for the Laurene Taylor Drain
- Survey and inspect the Laurene Taylor Drain Study Area to review and assess existing stormwater conditions.
- Compile all analysis in a Preliminary Engineering Summary and report those findings at a Board of Determination.
Summary of Drain System

**County Drain.** An existing drain on which the County Drain Commissioner maintains and oversees any improvements.

**Muskegon County Road Commission Roadside Ditches.** Roadside ditches owned and maintained by the Muskegon County Road Commission.
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Preliminary Engineering Summary

Drainage District Boundary

- Site Inspections
- Muskegon County GIS
- Topographic Maps
- Review of Drainage Maps

Drainage District Boundary Information

- Existing Drainage District Boundary: 554 acres
- Proposed Drainage District Boundary: 416 acres
- Approximately 200 properties within Proposed Drainage District Boundary
What is a Drainage District?

- Watershed Boundary for the drain.

- The Boundary is defined by hydrographic and topographic criteria that delineate an area of land upstream of the drain.

- The Boundary can be influenced by man-made improvements, such as roads and aboveground structures, but generally do not follow property or government lines.

- Watersheds can vary in size depending on the waterbody. Often watersheds are part of a larger watershed, just as waterbodies are part of a larger network of surface water features. For example, the Laurene Taylor Drain’s network would look like:

  Laurene Taylor Drain → Hurlbut Drain → Barnes Drain → Little Black Creek → Mona Lake → Lake Michigan
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Existing Conditions

- Poor Drainage / Standing Water
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Existing Conditions

- Restricted Flows
Laurene Taylor Drain
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Existing Conditions

- Restricted Flows
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Existing Conditions

- Restricted Flows

Cross-Section Showing Reversed Slope
Existing Conditions

- Vegetative Overgrowth
Existing Conditions

- Vegetative Overgrowth / Debris Obstructions
Laurene Taylor Drain
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Existing Conditions

- Sedimentation / Restricted Flows
- Vegetative Overgrowth
Existing Conditions

- ATV Damage / Restricted Flows
Existing Conditions

- ATV Damage / Bank Erosion
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Questions?