
TECHNICAL MEMORANDUM

PREPARED FOR: Mr. Adam Wit, Clerk
Charter Township of Harrison

PREPARED BY: David M. Nummer, PE, Wade Trim
Martin K. Hoemke, Wade Trim

DATE: April 21, 2022

RE: Huron Pointe 1 Street Paving SAD
Charter Township of Harrison

FILE: HSN 1020-22T, Task 110

Residents of the Huron Pointe Homeowners Association have inquired about creating Special Assessment Districts (SAD) to resurface their streets. This SAD refers to the following Streets: Lakeshore Drive, Riverdale St, Pardee St, Huron Pointe Dr, Circle, Dr, Crane St, Bridge Rd, and Lakeville St. The streets are approximately 20 feet wide and include 21,186 feet of asphalt paving with no shoulders, shallow ditches, and minimal storm sewer. The existing pavement is in poor condition with excessive cracking.

The Township has developed a combined cost estimate for resurfacing the streets listed above. The limits are included on the attached map. The estimate was developed based on the construction cost estimates prepared by the Macomb County Department of Roads, and actual costs from other recent SADs within Harrison Township for similar proposed paving projects. The estimated cost and a brief project description are presented below.

PROJECT SCOPE

The proposed project consists of crushing and reshaping the existing pavement to create a new base material with the addition of a new four-inch-thick asphalt surface. The work would also include minor drainage work and driveway patching as necessary to match the drives with the new roadway surface. The manholes will also have to be brought to grade and sealed, which has been added to the total construction cost. Two bridges also exist within the SAD boundary, this SAD does cover improvements to the bridge shoulders but does not include ditching and drainage improvements other than the minor work noted above.

The bridge shoulder work is limited to the bridge approach, this SAD does not include work on the bridge structure itself. The bridge approach shoulders will include the addition of a shoulder to match the width of the existing shoulder on the bridge and use the same paving material as the adjacent road. Both bridges include adjustments to the guardrail, grading, restoration, and spillway adjustments. Additionally, the north bridge will likely need three retaining walls on the west side of the road due to the adjacent driveways.

SPECIAL ASSESSMENT DISTRICT

The Special Assessment will be financed on a per lot basis over 656 lots. Special Assessments are typically financed over a period of ten years.

MACOMB COUNTY SUBDIVISION RECONSTRUCTION PROGRAM

In previous years, the Macomb County Department of Roads had a program that provides 50% participation in the cost of reconstructing local subdivision streets, up to a maximum of \$500,000. To qualify for this program, a project must be complete reconstruction including new base material,

pavement, and a complete drainage system. The County will also allow pavement to crush/reshape paving projects if they include "significant drainage improvements." We do not know if the County will offer this program again for 2023.

The Township is limited to three projects each year. If the residents of Huron Pointe are interested in exploring the subdivision reconstruction program, the application would have to be submitted in the fall of 2022 for 2023 construction (provided the County offers this program in 2023). In addition, the scope of the work would have to be expanded to include "significant drainage improvements" so the cost of the project with the County cost participation may or may not be less than the cost to do the crush and reshape project as proposed.

PROJECT COST ESTIMATE

Road Resurfacing

Unit Cost (based on the DOR estimated average for crushing and reshaping pavement in Harrison Township)	\$ 200 per LF
Length of Road	22,186 LF
<i>Road Resurfacing Cost</i>	<u>\$ 4,437,200</u>
Addition of a 3' wide asphalt shoulder on each side of Lakeshore Drive**	
Unit Cost	\$ 16.78 LF
Length of shoulders	20,060 LF
<i>Shoulder Cost</i>	<u>\$ 336,606.80</u>
Addition of a concrete shoulder on each side of Lakeshore Drive at the South bridge approach	
Length of Shoulders	730 LF
<i>Shoulder Cost</i>	<u>\$ 155,549.44</u>
Addition of a concrete shoulder on each side of Lakeshore Drive at the North bridge approach	
Length of Shoulders	1,098 LF
<i>Shoulder Cost</i>	<u>\$ 317,859.58</u>
Solar Radar Speed Signs	
Unit Cost	\$ 3,000
Total Requested	4
<i>Signage Cost</i>	<u>\$ 12,000</u>
Estimated Construction Cost	\$ 5,259,240
20% Contingency	<u>\$ 1,051,848</u>
<i>Construction Subtotal</i>	<u>\$ 6,311,088</u>
1% Township Administrative Costs*	\$ 63,111
5% Bonding Cost	\$ 315,555
3% County Preliminary Engineering	\$ 189,333
10% County Construction Engineering	\$ 631,109
3% County Administrative Fee	<u>\$ 189,333</u>
<i>Estimated Project Costs</i>	<u>\$ 7,699,527</u>

Cost Per Lot (656 Lots Total) = \$11,737.08
 Annual Assessment Payment* = \$1,760.56

*One percent administrative cost assumes the Township would use available funds to finance the project rather than bonding. Should the project be bonded, an additional five percent should be added for bonding costs.

*Based on ten-year assessment at five percent interest.

**Does not include bridge approaches

MKH:DMN:vhe
 HSN 1020-22T

[20222104_Huron Pointe SAD 1 Tech Memo_Final.pdf](#)

Attachment (Proposed Special Assessment District Map)