



MEMORANDUM

Date: July 16, 2026

To: City of Madison Heights Planning Commission [July 20th, 2026 Meeting]

From: Matt Lonnerstater, AICP – City Planner

Subject: Residential Impervious Surface Maximums – Initial Discussion on Potential Text Amendment(s)

Introduction

At the July 20th, 2026 Planning Commission meeting, staff would like to discuss a potential zoning text amendment to regulate the maximum amount of impervious surface allowed in single-family residential areas. With the exception of dimensional driveway standards, the current Zoning Ordinance does not regulate the location or size of impervious surfaces (e.g. concrete patios, terraces, etc.) in residential areas. If the Planning Commission determines that a zoning ordinance text amendment is warranted, a public hearing can be set for an upcoming meeting.

Background

Large amounts of impervious surface on residential properties can create excessive storm water runoff which, in turn, leads to inundation of the city's stormwater sewers and increased flooding events. The Madison Heights Zoning Ordinance does not contain regulations limiting the total amount of impervious surface (such as driveways, patios, terraces) on a residential parcel. Section 10.04.01 regulates landscaping and stormwater within parking lots, the largest driver of impervious surface for commercial uses; however, this standard does not apply to single-family residential uses. Further, Section 7.03.10 contains regulations for residential driveway locations and sizes but, again, does not apply to paved patios, terraces, or other types of impervious surface.

Additionally, while the Schedule of Regulations sets maximum lot coverage standards for residential parcels, lot coverage only accounts for roofed buildings or structures, not un-roofed paved areas like patios, terraces, driveways, or rear parking pads.



Impervious surfaces covering the vast majority of a parcel can lead to unmitigated stormwater runoff.



A lack of setbacks can cause sheets of water to flow onto neighboring properties.

Regulations from Nearby Municipalities

Impervious coverage standards are fairly commonplace in zoning ordinances throughout the state. Staff analyzed the zoning standards of several other Michigan municipalities to research how they regulate impervious surface coverage in residential areas. Summaries of these zoning standards are provided below:

Clawson:

- **DEFINITION:** “IMPERVIOUS SURFACE” means any surface or structure incapable or highly resistant to penetration by water including, but not limited to, roofs of any type, concrete, asphalt, or bituminous paving, flagstone, brick and compacted gravel or earth.
- R1 low-density single-family zoning: impervious surface maximums of 70% on lots up to 5,500 sq. ft., 65% on lots of 5,501-8,000 sq. ft., and 55% on lots of 8,001 sq. ft. and greater.
- R2 medium density single-family zoning: impervious surface maximums of 70% on lots up to 5,500 sq. ft., 65% in lots of 5,501-8,000 sq. ft., and 60% in lots of 8,001 and greater.

Ferndale:

- Ferndale utilizes a “minimum greenspace” requirement rather than a maximum impervious surface standard.
- **DEFINITION:** “GREENSPACE” means an area of a parcel to be maintained as permeable, natural vegetation such as trees, grass, and plants.
- Minimum 25% Greenspace Coverage for properties with 1-4 dwelling units.
- In addition the greenspace coverage requirements, uncovered patios, decks, and terraces may project into the front yard up to 50% of the minimum setback requirement; at-grade patios do not have to meet side or rear setback requirements.

Marquette:

- **DEFINITION:** “Impervious Surface” means any surface that cannot be effectively and easily penetrated by water, thereby resulting in runoff. Examples include, but are not limited to, “Lot Coverage” (as defined in this Ordinance) and any material (asphalt, concrete, compacted stone and gravel, etc.) used in roads, driveways, decks, terraces, patios, porches, or sidewalks that cannot be effectively and easily penetrated by water. Impervious surfaces shall exclude roads, driveways, and sidewalks that are composed of materials that will allow infiltration and prevent runoff, such as permeable pavers, permeable pavement, or crushed stone or pea stone that does not bind. The definition of an impervious surface shall also exclude decks, terraces, patios, or porches that are composed of pervious materials and/or designed to allow for easy infiltration and underlain with materials that will allow infiltration and prevent runoff. Natural and artificial water bodies, including swimming pools, shall not be classified as impervious surfaces.
- Maximum Impervious Surface Coverage of a Lot in the Low-Density Residential (LDR) and Medium-Density Residential (MDR) districts, and single-family and two-family dwelling units in other zoning districts:
 - 60% of a lot up to 8,712 sq. ft.
 - 50% of a lot between 8,713 sq. ft. and 21,780 sq. ft.
 - 40% of a lot between 21,781 sq. ft. and 43,560 sq. ft.
 - 30% of a lot over 1 acre.

Eastpointe:

- **DEFINITION:** “Impervious Surface” means a man-made material that covers the surface of land and substantially reduces the infiltration of storm water to a rate of 5% or less. Impervious surfaces include, but are not limited to, pavement, buildings and structures.
- Maximum Impervious Lot Coverage:
 - R-1, Low Density Residential (single-family only; up to 4,000 sq. ft. lots): 60% of lot area
 - R-2, Medium Density Residential (multi-family; up to 4,500 sq. ft. lots): 70% of lot area
 - MUI-1, Neighborhood Mixed Use: 70% of lot area.

Kalkaska:

- **DEFINITION:** “Impervious Surface” means any material which prevents, impedes, or slows infiltration or absorption of storm water directly into the ground at the rate of absorption of vegetation-bearing soils, including building, asphalt, concrete, gravel, and other surfaces.
- Maximum Impervious Coverage:
 - Single-Family Traditional (up 10,000 sq. ft. lots): 50%
 - Single-Family Conventional (up 8,000 sq. ft. lots): 50%
 - Flexible Residential (up to 5,000 sq. ft. lots): 55%
- Uncovered and unenclosed ground story decks, patios, or terraces less than thirty (30) inches above grade may project into a required side or rear yard a maximum of 50% of the required yard, and a maximum of ten (10) feet into the required front yard setback.

Waterford Township:

- **DEFINITION:** “Impervious Surfaces” means any material, such as concrete, asphalt, brick, or metal, constructed or erected on landscaped or natural buffer areas which creates a structural barrier than impedes the infiltration of surface water into the ground. All buildings, structures, parking areas, driveways, streets, sidewalks, and any areas in concrete, asphalt, and densely packed stone shall be considered impervious surfaces within this definition.

- Single-Family Districts: 50% impervious surface maximum. Additionally, the total impervious surface within the required front yard shall not exceed a maximum of 35% of the total required front yard area.

Definition Considerations

A definition for “impervious surface” and “impervious surface coverage” should be added to the Definitions chapter. For example:

IMPERVIOUS SURFACE: Any material which prevents, impedes, or slows infiltration or absorption of storm water directly into the ground at the rate of absorption of vegetation-bearing soils. Impervious surfaces include, but are not limited to, pavement (both asphalt and concrete), buildings and structures. Natural and artificial water bodies, including swimming pools, shall not be classified as impervious surfaces.

IMPERVIOUS SURFACE COVERAGE: The part or percentage of a lot occupied by impervious surfaces.

Maximum Impervious Surface Percentage Considerations

When parcels have a high percentage of impervious surface coverage, stormwater cannot infiltrate into the ground on-site; instead, stormwater sheetflows off site, either to adjacent properties or to the nearest catch basin, potentially overpowering storm sewer capacity. By limiting the amount of impervious lot coverage allowed on residential parcels, these impacts can be mitigated. If a maximum is considered, staff advises taking a sliding-scale approach similar to the city of Clawson or Marquette where the maximum percentage is dictated by lot size regardless of the zoning district. This approach recognizes that smaller parcels are naturally limited in their building footprint and development potential.

A table could be added as a footnote to the Schedule of Regulations. For example:

FOOTNOTE X: Maximum Impervious Surface Coverage of a Lot in the R-1, R-2, R-3, R-MN districts, and single-family, duplex, and multi-plex buildings in other zoning districts in which they are permitted:

Lot Size	Maximum Impervious Surface Coverage
Up to 4,000 sq. ft.	75%
4,001 to 7,200 sq. ft.	70%
7,201 sq. ft. to 10,000 sq. ft.	65%
10,000+ sq. ft.	55%

Further, while lot size patterns typically correspond to the zoning district, a uniform maximum percentage based on lot size rather than zoning district accounts for lot combinations. For example, a property owner that owns three consecutive parcels in the R-3 district has the ability to combine the lots into a single, large parcel. The sliding scale would ensure that the property owner could not pave 70% of a 10,000 square foot combined parcel, even if it retained an R-3 zoning designation.

Setback Considerations

Currently, Section 7.03.10.C.(3) requires driveways to be set back a minimum of one (1) foot from side and rear lot lines. The intent behind this standard is to allow for stormwater to infiltrate into a grass strip at the property line instead of sheet flowing directly onto adjacent properties. However, this standard does not apply to other types of impervious surfaces such as patios or terraces. Additionally, the Zoning Ordinance allows for a front-yard setback encroachment for covered or uncovered porches and terraces,

but is again silent on other forms of impervious surfaces – most notably, at-grade patios – and silent on any permitted side or rear yard encroachments.

A text amendment relating to setbacks could read as follows:

Uncovered and unenclosed decks, patios, or terraces, or other impervious surfaces less than thirty (30) inches above grade may project into a required front, side, street side, or rear yard up to 50% of the minimum required setback. Uncovered and at-grade patios, terraces, and other at-grade impervious surfaces may project further into a required side, rear, or street side yard, but shall at all times maintain a minimum setback of one (1) foot from property lines. This section does not apply to residential driveways which are regulated separately.

Roofed and unenclosed porches, patios, terraces, or other impervious surface (i.e. one which is not enclosed by walls) and unroofed porches, terraces, decks, patios, and other impervious surfaces 30 inches or greater above grade, may project into a required front yard or street side-yard setback for a distance not to exceed six (6) feet and into a required rear yard setback for a distance not to exceed ten (10) feet, but shall not project into required side yards. However, such features shall at all times maintain a minimum setback of five (5) feet from front, street side-yard and rear property lines.

While this text is fairly lengthy, it is comprehensive and covers a variety of situations and potentially reduces the need for an interpretation from the Zoning Board of Appeals.

Planning Commission Discussion and Next Steps

Staff believes that zoning text amendments are warranted in order to reduce the amount of storm water runoff occurring in residential areas. Staff recommends consideration of both impervious surface maximums and revised setback standards. Provided the Planning Commission elects to move forward with text amendments to limit the amount of impervious surface in residential areas, staff could set a public hearing for an upcoming Planning Commission meeting and begin the public notice process. If desired, staff could present more defined language to the Planning Commission prior to setting a public meeting date. Additionally, input from the Madison Heights Environmental Citizens Committee may be useful to guide discussion prior to formally acting on any proposed text amendments