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City of Metroit
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TO: The Honorable Detroit City Council

FROM: David Whitaker, Director

Legislative Policy Division Staff

DATE: May 25, 2023

RE: DRAFT BIRD-FRIENDLY BUILDING DESIGN ORDINANCE

Council Member Whitfield-Calloway directed the Legislative Policy Division (LPD) to draft a bird-friendly building design ordinance. The attached was drafted primarily based on a model code posted on the internet by a wild bird protection organization. It is obviously in draft form, as to where it should be inserted into the City code if adopted, and also notably insofar as implementation and enforcement provisions are needed to translate the legislative directive for wildlife protection into actual, cost-effective building design and construction features at scale.

If Council wishes to move this draft ordinance forward, LPD recommends that it be provided to the Buildings, Safety, Engineering and Environment Department (BSEED) and the Law Department, for their input, particularly as to implementation and enforcement. If additional research and analysis is required, LPD will be happy to address such needs upon request.

## SUMMARY

AN ORDINANCE to amend Chapter of the 2018 Detroit City Code,
, by adding Article, titled Bird-Friendly Building Design Requirements,
which consists of Sections through, to address the role of the City of Detroit's
built environment in the annual estimated loss of up to 1 billion birds due to glass collisions in the
United States; to require that for building permits for new construction or alterations involving the
replacement of all or substantially all exterior glazing issued after, 202_, the facade
of the building's exterior wall envelope and exterior fenestration largely use bird friendly materials;
to prescribe other building elements that must be constructed using bird friendly materials; to
require that bird hazard installations be installed with bird friendly materials; and to require that
the Buildings, Safety Engineering, and Environmental Department (BSEED) (The Department)
implement the ordinance.

	AN ORDINANCE to amend Chapter of the 2018 Detroit City Code,, by
	adding Article, titled Bird-Friendly Building Design Requirements, which consists of Sections
	through, to address the role of the City of Detroit's built environment in the
	annual loss of up to 1 billion birds due to glass collisions in the United States.
1	IT IS HEREBY ORDAINED BY THE PEOPLE OF THE CITY OF DETROIT THAT:
2	Section 1. Chapter of the 2018 Detroit City Code,, is amended
3	by adding Article, Bird-Friendly Building Design Requirements, which consists of Sections
4	through, to read as follows:
5	CHAPTER . Buildings
6	ARTICLE . Bird-Friendly Building Design Requirements
7 8 9 10 11	<ul> <li>Sec Purpose</li> <li>The Detroit City Council makes the following findings and declarations:</li> <li>1) The City of Detroit is home to many species of migratory and resident bird species who share our common ecosystem with people, plants and other animals;</li> </ul>
13 14 15 16 17 18	<ul> <li>2) Birds provide the City of Detroit and its residents with valuable and important ecological services;</li> <li>3) Birding or bird-watching is a hobby enjoyed by 46 million Americans with an annual \$107 billion total industry output in the United States;</li> </ul>
19 20 21 22	4) As many as 1 billion birds may be killed by collisions with windows every year in the United States;
23 24	5) New buildings can be designed to reduce bird deaths from collisions without significant additional cost;
<ul><li>25</li><li>26</li><li>27</li></ul>	6) There exist strategies to mitigate bird collisions on existing buildings;
28 29	7) Bird collisions with buildings generate avoidable wildlife death, potential spread of disease, unsightly and upsetting presence of dead animals in public spaces where

people's enjoyment of daily life may be adversely affected by these deaths, and where no one wants to live or work in a building that unnecessarily kills wildlife; 8) More than 30% glass on a building façade usually increases costs for heating and cooling as well as bird mortality; and therefore 9) Bird-friendly building design practices often go hand-in-hand with energy efficiency improvements. Sec. . Definitions For purposes of this ordinance: 1. Glazing shall mean all glass, including spandrel glass, as well as any other building materials, including but not limited to: plexiglass, polished metal, or materials that are transparent or highly reflective. 2. Bird Activity Zone shall mean the zone on a building's façade that that falls between 0-100' feet above street level. 3. High-Risk Auxiliary Structures shall mean building structures that pose significant collision risks to birds wherever they are found, including but not limited to: a. Transparent or highly-reflective railings, including balconies; b. Noise barriers; c. Wind barriers (including parking structures); d. Transportation (e.g., bus stops) or weather shelters; and e. Small, stand-alone buildings that present conditions that can be both transparent and reflective and are often located in bird flight paths, such as Gazebos, External ticket booths, or any other free-standing glass, plexiglass, or other clear, transparent, or highly-reflective free-standing structure. 4. High-Risk Building Features shall mean Skyways/skywalks, building connectors (regardless of the number of floors), all outside corners where a bird can see in one side of the building and out the other ("fly-through conditions") within 30 feet of the corner, all interior corners within 30 feet of the corner. parallel glass walls no more than 50 feet apart, courtyards, including internal and external atria, open and enclosed, and the three floors of glazing adjacent to and above any green roof. 

1 2	4. <i>Major Renovations Involving Glass</i> shall mean any renovation in the Bird Activity Zone that:
3 4 5	a. Replaces at least 50% of a structure's existing glass or other transparent or reflective materials; or
6 7	b. Adds any new glass or transparent or reflective materials
8 9 10	5. <i>Bird-Friendly Glass</i> shall mean glass or materials that meet any of the following conditions:
11 12 13 14 15 16 17 18 19	a. Any product with an American Bird Conservancy Material Threat Factor Rating of 30 or less. (Visit www.birdsmartglass.org to view the continuously-updated database.);
	b. Glass with exterior surface (surface 1) obstructed and effectively covered by building-integrated structures that do not have gaps larger than 12" in any dimension, including non-glass double-skin facades, metal screens, fixed solar shading, exterior insect or solar screens, and other features as determined by the Department of Buildings, Safety, Engineering and Environment (BSEED) (The Department) that meet these conditions;
20 21 22 23 24 25 26 27	c. Un-tinted glass with an outer total reflectance of no more than 15% that contains a pattern of visual markers that are on surface 1 (preferred) or surface 2 of the glass that conforms to the following rules: a) dots or other isolated solid shapes that are at least ½" in diameter and are no more than two-inches (2") apart in any direction or b) lines that are at least ½" in width and spaced no more than 2" apart. (Note to designers: The greater the width or diameter, the better the collisions deterrence. The pattern should contrast with what is behind the glass and with what is reflected in it.)
28 29	Sec REQUIREMENTS
30 31	Beginning on, 202_, and thereafter, 100% of the glazing for all building types receiving permits from the Department must be Bird-Friendly Glass for the following projects:
32 33	1. New construction in the Bird Activity Zone;
34 35 36	2. Major Renovations Involving Glass in the Bird Activity Zone;
37 38	3. All High-Risk Auxiliary Structures; and
39 40	4. All High-Risk Building Features.
41 42	Transparent and highly-reflective materials are not permitted in any exterior application.
43	This ordinance is hereby declared necessary to preserve the public peace, health, safety, and
44	welfare of the People of the City of Detroit.

1	All ordinances, or parts of ordinances, that conflict with this ordinance are repealed.
2	In the event this ordinance is passed by two-thirds (2/3) majority of City Council Members serving,
3	it shall be given immediate effect and become effective upon publication in accordance with
4	Section 4-118 of the 2012 Detroit City Charter. Where this ordinance is passed by less than a two-
5	thirds (2/3) majority of City Council Members serving, it shall become effective on the thirtieth
6	(30) day after enactment, or on the first business day thereafter, in accordance with Section 4-118
7	of the 2012 Detroit City Charter.
	Approved as to form:
8	Corporation Counsel