

**Environmental Assessment
Determinations and Compliance Findings
for HUD-assisted Projects
24 CFR Part 58**

Project Information

Project Name: Brush-Park-Apartments

HEROS Number: 900000010255459

Responsible Entity (RE): DETROIT, PLANNING AND DEVELOPMENT DEPARTMENT
DETROIT MI, 48226

RE Preparer: Kim Siegel

State / Local Identifier: Detroit, Michigan

Certifying Officer: Julie Schneider

Grant Recipient (if different than Responsible Entity):

Point of Contact:

Consultant (if applicable): Christy Bakos

Point of Contact: GRand Environmental, LLC

Project Location: Multiple, Detroit, MI 48201

Additional Location Information:

269, 281, 291 Winder Street and 2515 Brush Street, Detroit, Michigan 48201

Direct Comments to: Penny Dwoinen, Environmental Review Officer, Housing & Revitalization Department, City of Detroit.
Email: dwoinenp@detroitmi.gov; Phone: 313-224-2933

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:

The proposed project includes the construction of a four-story tall apartment building containing first floor retail spaces at the northwest corner of Winder and Brush Streets in the Brush Park neighborhood. The building has an L-shaped footprint with the building facing Brush Street. A 29-space parking lot with landscaping and lighting is proposed to the west of the building and will be accessed via the alley. A green lawn with trees, a gazebo and walkway are proposed south of the parking lot along Winder Street. The building will consist of 53 affordable apartment units made up of four studios and 49 one-bedroom units of 500 and 600 square feet, respectively. This project will require acquisition of the property.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:

The project would provide much needed affordable retail space and private-unit residential housing in the Brush Park neighborhood of Detroit. The development is designed to meet the income distribution and household size needs identified by the City of Detroit as well as provide desirable community retail space. The Development will offer 8 units of Project Based Rental Assistance, 2 units targeted at or below 30%AMI, 20 units targeted at or below 40% Area Median Income (AMI), and 23 units targeted at or below 80% AMI. Furthermore, the project will generate approximately 75 temporary construction related jobs, two full time and one part-time position that will be created at the time of occupancy.

Existing Conditions and Trends [24 CFR 58.40(a)]:

The project site is currently underutilized vacant land located in the Brush Park neighborhood of the City of Detroit. The site is located on the north side of Winder Street and west of Brush Street and is within the Brush Park Historic District of Detroit. The area would likely remain vacant without the proposed project and funding availability. Surrounding properties are a mix of vacant land and multi-family residential uses. The Subject Property is within two blocks of the stadiums and arena for all four of Detroit's professional sports teams. It has a municipal bus route stop along Woodward Avenue at Winder Street and is within easy walking distance of a municipal park and a variety of business, retail, educational and religious opportunities. The area is also planned for millions of dollars of future investment. As described above, the market study documented a shortage of affordable housing locally for community members with incomes at or below 60% to 80% of AMI and trend factors indicating that this shortage will become even greater in the near, medium, and long term. Private sector housing development in this area is infeasible in the foreseeable future. The new development will incorporate much needed affordable residential living units as well as commercial space. Failure to redevelop the vacant land would not address the current shortage of such housing and community retail opportunities or the projected long term continued shortage.

Maps, photographs, and other documentation of project location and description:

Determination:

✓	Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.13] The project will not result in a significant impact on the quality of human environment
	Finding of Significant Impact

Approval Documents:

[ED - Brush Park Apartments.pdf](#)

7015.15 certified by Certifying Officer on:

7015.16 certified by Authorizing Officer on:

Funding Information

Grant / Project Identification Number	HUD Program	Program Name
M1001	Public Housing	Project-Based Voucher Program
M20MC260202	Community Planning and Development (CPD)	HOME Program

Estimated Total HUD Funded, Assisted or Insured Amount: \$1,458,452.00

Estimated Total Project Cost [24 CFR 58.2 (a) (5)]: \$14,991,059.00

Compliance with 24 CFR §50.4, §58.5 and §58.6 Laws and Authorities

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.6		

<p>Airport Hazards Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The property is located approximately 6.25 miles from the Windsor International Airport and 4.46 miles from the Coleman A. Young International Airport, which is the nearest US military, civil or commercial service airport. The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport and therefore not in an Airport Clear Zone or Accident Potential Zone. No military airfields are located in Wayne County or the nearby vicinity (Attachment A).</p>
<p>Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The project site is not within a Coastal Barrier Resource System (CBRS) Unit, or CBRS buffer zone, as defined under the Coastal Barrier Improvement Act of 1990 [16 Resources Act of 1982 (PL 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (PL 101-591) (Attachment B).</p>
<p>Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The project site is not located within a Special Flood Hazard Area as depicted on the Flood Insurance Rate Map panel 26163C0285E, dated February 2, 2012. The project would not involve either direct or indirect support of development in a floodplain (Attachment C).</p>
<p>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.5</p>		
<p>Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>Wayne County is designated as being in 'attainment' for carbon monoxide, lead, nitrogen dioxide, particulate matter (PM10 & PM2.5). Southeast Michigan is in a Nonattainment area for ozone, and the eastern portion of Wayne County is in a Nonattainment area for Sulfur Dioxide. The State of Michigan has a State Implementation Plan (SIP) in place and continues to monitor the concentrations of Sulfur Dioxide in portions of Wayne County. Local and Regional air quality will not be significantly affected. Additionally, the project was submitted to the</p>

		Department of the Environment, Great Lakes and Energy (EGLE) Air Quality Division. A response was received on December 16, 2020, indicating that the project is in conformance with the SIP and does not require a detailed conformity analysis (Attachment D).
Coastal Zone Management Act Coastal Zone Management Act, sections 307(c) & (d)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The Property is not located in a coastal zone per State of Michigan Office of the Great Lakes or the National Oceanic and Atmospheric Administration (Attachment E).
Contamination and Toxic Substances 24 CFR 50.3(i) & 58.5(i)(2)]	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	A Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 and/or MSHDA Environmental Review for Requirements the Subject Property was completed by AKT Peerless in 2021. The Phase I ESA also documents previous environmental site assessments (see Attachment 1 for 2021 Phase I ESA). ASTI completed Phase II subsurface soil investigations in July 2017 and November 2018 and documented the presence of metals in the soil above Michigan Part 201 EGLE's Generic Residential Cleanup Criteria (GRCC). Soil gas samples were also collected for analysis. ESGPW conducted additional Phase II ESA activities including the completion of 28 soil borings for the collection of 83 discreet soil samples to a depth of 12 feet across the four parcels of the Subject Property. Of the 83 samples collected, 55 were submitted for laboratory analysis. Additionally, 10 soil gas wells were installed and screened at five feet below grade level (BGL) for collection and analysis of 10 soil gas samples. The analytical results revealed mercury, lead, benzo(a)pyrene, naphthalene, phenanthrene, 2-methylnaphthalene, ethylbenzene and/or arsenic in the soil samples above various GRCC's in the shallow fill material generally less than two feet deep with the exception of one

		<p>location at five feet deep. No exceedances of site specific criteria were identified in the soil gas samples. A Response Activity Plan - Remedial Action Plan (RAP) was prepared and submitted to EGLE for review. The report documented the developer intends to remove the fill material across the entire footprint of the Property until native and non-contaminated silty clay soils are encountered, with the exception of a small 11' by 11' area in the northern portion due to a historical feature that must be isolated and maintained. EGLE approved the RAP in a letter dated April 26, 2022. Asbestos and Lead Based Paint: There are no buildings Radon: The proposed project is located in Wayne County, which is designated as Zone 3 by the EPA. Zone 3 counties have a predicted average indoor radon screening level below 2 pCi/L. No further assessment is required for this project. See Attachment 1 for ESA reports and Attachment 6 for Radon Map</p>
<p>Endangered Species Act Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>The project is located within a historically developed environment where the vegetation and wildlife have adapted. The project has been developed for commercial and residential uses since the late 1800's. A list of Endangered species in the Subject Property area, as identified by the US Fish & Wildlife Service (USFWS) was reviewed in conjunction with the USFWS screening to determine if there is an impact to any threatened or endangered species. Based on the Determination Key, there is No Effect on the identified species. The US FWS also indicates "There are no Critical Habitats at this Location" (Attachment G).</p>

<p>Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The project does not involve explosive or flammable materials or operations. There is no visual evidence or indication of unobstructed or unshielded above ground storage tanks (fuel oil, gasoline, propane, etc.) or operations utilizing explosive/flammable material at or in close proximity to the property (Attachment H).</p>
<p>Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The project site consists of urban land; therefore the project would not affect farmlands. According to the Local Farmland Preservation Programs Qualified under the Michigan Agricultural Preservation Fund there are no farmland preservation programs in the City of Detroit (Attachment I).</p>
<p>Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<p>The is not located within a Special Flood Hazard Area as depicted on the Flood Insurance Rate Map panel 26163C0285E, dated February 2, 2012. The project would not involve either direct or indirect support of development in a floodplain (Attachment C).</p>
<p>Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p>An Application for Section 106 review was submitted to the City of Detroit Housing and Revitalization Department (HRD). It was determined that Historic Properties will be affected. Based on this finding, a Phase I archeological trench excavation was performed on May 17 through 20, 2021 on the Subject Property. Results of the excavation identified two features interpreted as parts of foundations of stables-turned-auto-garages in the northern portion of the parcel. Only feature 1 was deemed significant. The developer has developed an Archeological Site Avoidance Plan to protect the feature. This project has been given a Conditional No Adverse Effect determination (Federal Regulations 36 CFR Part 800.5(b)) on properties that are listed or eligible for listing in the</p>

		National Register of Historic Places, as long at the following conditions are met: 1) Construction monitoring and site avoidance plan approved by SHPO on 3/14/22 is followed 2) Any additional changes to the scope of work for the project shall be submitted to the Preservation Specialist for review and approval prior to the start of any work. 3) Photos of the completed work are submitted to the Preservation Specialist (Attachment J).
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	A noise assessment was conducted for the property by ASTI Environmental as part of the Phase I ESA in January 2020 and the measurements found exterior combined noise levels on the site to be up to a Day-Night Average Sound Level (DNL) of 70.8dB. HUD regulations at 24 CFR Part 51 Subpart B consider the range between 65 and 75 DNL to be normally unacceptable and above 75 DNL to be unacceptable. Two STraCAT evaluations were completed for the east and south elevations by the architect documenting the planned construction methods meet the required STC rating of less than 30. This includes using wall, door and window attenuation measures into the project as detailed in the STraCAT (Attachment K).
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There are no US EPA designated sole-source aquifers in Michigan. The proposed property is not located within a sole source aquifer watershed and would not affect a sole-source aquifer or negatively impact the water quality or any aquifers in the area (Attachment L).
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project site is not located near, or within, a wetland area. Therefore, the project would not affect wetland or riparian areas (Attachment M).
Wild and Scenic Rivers Act Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No Wild and Scenic Rivers are located within the City of Detroit (Attachment N).

HUD HOUSING ENVIRONMENTAL STANDARDS		
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The building will serve low-income and minority populations. The project would not result in disproportionately adverse environmental effects on minority or low-income populations. New facilities and residences are intended to enhance the quality of life for new and existing residents and the community (Attachment O).

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

Impact Codes: An impact code from the following list has been used to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement.

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	1	This redevelopment project is in agreement with both the City of Detroit Master Plan and Zoning Ordinances. The site is currently zoned PD-H (planned development district - historic) with the same zoned areas adjacent to the north, west and south and with planned development to the east across Brush Street. This development is compatible with the City's goals for residential development and will have a positive impact on the area within which it exists. The developer has worked extensively with the City of Detroit to ensure the development complements the neighborhood and aligns with the City's design requirements.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	2	<p>Site topography - The development site consists of virtually level ground, at an equal elevation to adjoining properties. After construction, the site will have slopes of less than 2% (see Figure 2). Soil borings conducted in several past documented investigations indicate the site consists of fill material to a depth of approximately two to six feet BGL underlain by silt and silty clay above brown and gray mottled clay to at least 30 feet BGL. Groundwater was not encountered to a depth of 30 feet BGL. The Response Activity Plan - Remedial Action Plan (RAP) indicates that all the impacted soils will be removed to depths of approximately seven feet BGL in the eastern portion, five feet BGL in the areas of former basements and 2.5 feet BGL in the western portion. The soils will be screened during the excavation to determine the final extent and verification of soil remediation sampling will be conducted. Clean sand backfill will be placed in the excavation prior to further development (see Attachment F).</p> <p>Erosion - Erosion by natural forces is not anticipated to be of concern following development of the site. During excavation of the impacted soils and construction, the project site will be surrounded by approved soil erosion and sedimentation control systems. These systems shall be maintained throughout the construction phases of the project to minimize the potential for water borne migration of soils off site to protect adjacent and downstream storm water inlets.</p> <p>Stormwater - Stormwater runoff at the project site will enter the municipal storm sewer system. The project will add some impervious surfaces on the project site that are</p>	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		connected to municipal storm sewer, but the development also includes green space to reduce the amount of stormwater flow and infiltration. Appropriate permits will be obtained, and the City of Detroit has enough availability to service the Subject Property.	
Hazards and Nuisances including Site Safety and Site-Generated Noise	3	A noise assessment was conducted for the property and the measurements found exterior noise levels on the site to be up to a Day-Night Average Sound Level (DNL) of 70.8 dB. Through the use of improved building insulation and windows an acceptable interior threshold will be achieved. Noise intensive construction activities will be limited to the days and hours specified under the City's noise ordinance. These days and hours shall also apply to any servicing of equipment and to the delivery and removal of materials to and from the site. All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an unmuffled exhaust. Stationary equipment shall be placed so as to maintain the greatest possible distance from sensitive uses. Road hazards during construction will be mitigated as needed, although the Project does not cross any roadways. Road hazards upon completion will be addressed through installation and updating of crosswalk signs and control systems as needed, which are under the city's control. Air Quality is not expected to be affected by the project though short term dust during construction is a potential concern and will be addressed by utilizing all best	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		practices approach with dust control measures in place during construction activities. Any emissions would be short-term and localized and would not result in any significant adverse effects on overall ambient air quality (See Attachment K - Noise Assessment).	
Energy Consumption/Energy Efficiency	2	The project will meet current State and local codes concerning energy consumption. It is not anticipated to have a substantial effect on the use, extraction, or depletion of a natural resource. Energy utilization during construction is expected to be consistent with typical construction equipment. The location is served by local utility providers. The development will be completed in accordance with Enterprise Green Environmental Criteria. The project site will incorporate energy efficient home performance standards to decrease consumption of energy. The structure will include modern features including efficient windows, insulation and have high efficiency furnaces and appliances and LED lighting (see Project Narrative).	
SOCIOECONOMIC			
Employment and Income Patterns	1	The proposed project is expected to positively alter the demographic nature and character of the Brush Park community due to the increase in the local population. The project will provide up to 75 temporary construction jobs during the construction phase and two continuing full time and one part time employment for maintenance and management of the development. The construction firm will make efforts to the fullest extent possible to employ local workers. Future residents of this development will help to support existing and future commercial enterprises in the	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		area and the project will also increase long term tax base by placing the existing vacant and unused property into productive use (Attachment Q).	
Demographic Character Changes / Displacement	1	The proposed project would not induce a substantial amount of unplanned growth and is in fact part of the City's planned growth. The project will increase the number of available residential units and thus would result in a slight increase to population. The renovation into additional low income housing will assist in stabilizing and diversifying the neighborhood and minimizing demographic character changes. The proposed project would not result in physical barriers or reduced access that would isolate a particular neighborhood or population group. The project will provide over 1,000 square feet of accessible community/commercial space with 10% barrier free and 100% visitable units. This residential renovation project will occur on a vacant lot; therefore, no persons will be displaced due to this project (Attachment Q).	
COMMUNITY FACILITIES AND SERVICES			
Educational and Cultural Facilities (Access and Capacity)	1	This housing development will have a positive effect on the local educational facilities. Public education is offered in the area by Detroit Public Schools. Preschools, elementary, middle and high schools are located within ten miles of the Subject Property. Wayne State University and Lawrence Technological University are also within approximately ten miles. With the project bringing in new tenants and families, additional children in the school system will potentially increase the amount of educational funding the school system receives. The City of Detroit maintains multiple museums, arenas, performance	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		halls, theatres and libraries, many of which are within one mile. The Detroit Institute of Art, Motown Museum, Opera House, Comerica Park, Ford Field and Little Caesars Arena, among others, are all within two miles of the Property. The proposed project is not expected to significantly impact the capacity of the existing cultural facilities. The project will potentially bring new residents to the area that may attend cultural facilities in the surrounding areas (Attachment R).	
Commercial Facilities (Access and Proximity)	1	The project will add to the current residential base and available commercial space and is not expected to negatively impact existing commercial facilities that are located around the project site. The project is expected to bring in new residents, which will benefit the neighboring commercial establishments. New commercial space will be available on the first floor of the building to allow additional needed businesses to serve the community(Attachment R).	
Health Care / Social Services (Access and Capacity)	2	The area of the project site has adequate health care service providers for the city and surrounding communities. The project site is less than one mile away from Detroit Medical Center including Harper University Hospital and Children's Hospital of Michigan complex and several senior care and urgent care facilities are located within five miles. Adequate social services are available to residents of the City of Detroit. Area organizations provide a wide range of services to low-income persons. The area wide services include homeless programs, community support services, employment services, legal aid, planned parenthood, Catholic Social Services, adoption services and American Red Cross (Attachment R).	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
Solid Waste Disposal and Recycling (Feasibility and Capacity)	2	The project site will be served by the existing local utility service (Advanced Disposal, part of Waste Management) and the redevelopment is not expected to negatively impact the solid waste disposal service. Following construction, the project site will utilize solid waste dumpsters that will be serviced by the local contractor on a weekly basis. The City of Detroit Public Works is committed to a fully integrated solid waste management system. The system includes waste reduction, reuse, recycling, incineration, energy recovery and land filling (Attachment R).	
Waste Water and Sanitary Sewers (Feasibility and Capacity)	2	The Stormwater and Sewer system is operated by the City of Detroit. Wastewater generated at the project site would be collected and processed by the city system in accordance with the Post-Construction Stormwater Ordinance. The City of Detroit has adequate facilities to handle any waste water generated from this project. The project site is not anticipated to generate significant quantities of waste water (Attachment R).	
Water Supply (Feasibility and Capacity)	2	The project site area receives water from the City of Detroit. The City of Detroit is in compliance with State and Federal Drinking Water Acts and has adequate facilities to supply water to the project site, even with the increase to residential density. The drinking water meets or exceeds the water quality requirements of the EPA (Attachment R).	
Public Safety - Police, Fire and Emergency Medical	1	The project site is served by the City of Detroit Police and Fire Department. The Police Department has a dedicated Neighborhood Police Officer assigned to the area in addition to standard emergency police services. Detroit firefighters are trained as emergency	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		<p>medical technicians, and some firefighters are also paramedics. Detroit Fire Department operates 46 firehouses with between 4 and 12 firefighters per station. They are licensed and outfitted with medical first response equipment. EMT and ambulance services are also available with private services. Furthermore, Detroit ensures fire safety and emergency accessibility within new and existing developments through provisions of its Building and Fire Codes. The development of the project site will improve the safety of walking routes as well as the overall public safety of the community. Since the site was historically developed, no significant increased demands are anticipated for the public services (Attachment R).</p>	
Parks, Open Space and Recreation (Access and Capacity)	2	<p>There are parks, recreational and cultural facilities accessible by public transportation or within walking distance. Brush-Adelaide Park is adjacent to the north of the project. Several other parks are located within walking distance or on bus lines. The project site will not significantly impact the availability of existing quality open space or recreational facilities and may generate higher attendance at recreational events in the area (Attachment R).</p>	
Transportation and Accessibility (Access and Capacity)	2	<p>This project site is adequately served by pedestrian, bicycle, transit and parking facilities. It is located near several city bus lines, which maintain stops near the Property. Sidewalks and crosswalks will be provided throughout the project area. The site is accessible to emergency vehicles and disabled persons. The project includes accessibility designs (accessible ramps, accessible parking spaces, accessibility features to units) which would have a beneficial effect. The</p>	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
LAND DEVELOPMENT			
		use of automobiles and bus service as transportation is not expected to be negatively impacted by the proposed project. Bussing throughout the City of Detroit is provided by The Detroit Department of Transportation (DDOT). SMART bus routes also service the Subject Property. The Detroit Metropolitan Wayne County Airport and Coleman A. Young International Airport are also located in Wayne County, which provides domestic and international transportation (Attachment R).	
NATURAL FEATURES			
Unique Natural Features /Water Resources	2	The existing natural landscape is not unique and no water features are present onsite or adjoining. The Detroit River is less than two miles south. Implementation of the project would not affect water resources, nor would it increase demands on groundwater resources. As noted above water service would be provided by City of Detroit. The project was checked for unique natural features and endangered species in Wayne County and did not find any that would apply to the project or impact the project site.	
Vegetation / Wildlife (Introduction, Modification, Removal, Disruption, etc.)	2	The project site is located within an urban environment where the vegetation and wildlife have adapted. The site has been previously developed since the late 1800's, with no indication of unique vegetation or wildlife. This project will not disrupt any existing natural landscape or wildlife.	
Other Factors	2	N/A	

Supporting documentation

[Attachment R - Waste Water - Sanitary - Water Supply.pdf](#)

[Attachment R - Transportation.pdf](#)

[Attachment R - Retail Map.pdf](#)

[Attachment R - Public Safety.pdf](#)

[Attachment R - Medical Map Map.pdf](#)

[Attachment R - Educational Facilities Map.pdf](#)

[Attachment R - Cultural Facilities Map.pdf](#)

[Attachment P - Zoning Map.pdf](#)

Additional Studies Performed:

Field Inspection [Optional]: Date and completed

by:

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:

Environmental Protection Agency, The Michigan Department of the Environment, Great Lakes & Energy, U.S. Fish & Wildlife Service, Michigan Department of Natural Resources, United States Department of Agriculture, Michigan State Historic Preservation Office, City of Detroit Preservation Specialist Tiffany Ciavattone, Federal Emergency Management Agency

List of Permits Obtained:

Public Outreach [24 CFR 58.43]:

All historical, local and federal contacts on the City of Detroit 2022 Interest Parties List were sent a copy of the Notice of Intent to Request for Release of Funds to use HUD funding for the project and were asked to comment on the project.

Cumulative Impact Analysis [24 CFR 58.32]:

The cumulative impacts anticipated for this project are primarily associated with increased residential density such as increased traffic and use of resources and services (roads, schools, police, etc.). The project is consistent with the anticipated growth of the immediate and surrounding neighborhoods and therefore not considered detrimental. Other cumulative impacts include generation and consumption of materials during construction and waste generated during construction which are expected to be minimized through the use of industry best practices, Enterprise Green Environmental Criteria and high efficiency appliances. The proposed project will have a positive effect within the City of Detroit by placing

the inactive property back into productive use; reducing property vacancies; providing additional, affordable and low-income modern housing as well as commercial space; and eliminating the decline of neighborhood housing values. Improvement of this portion of the community may spur additional renovations in the area, address identified community revitalization plan goals, and add residential tenants in an important area of the community. No significant adverse impacts to the human environment are anticipated.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]

The layout of the building was designed and modified to achieve the highest and best use, therefore previous plans were changed to allow for this, with no adverse impacts to the human environment. The number and layout of the units has been modified to provide for eight project-based voucher units as well as rents at or below 40% and 80% AMI units. The redevelopment plans have been carefully proposed to allow the thoughtful redevelopment of a vacant area within the City of Detroit Midtown Brush Park Neighborhood. Private Development - Redevelopment using private funds is not economically feasible considering current rental rates within the target area. More Units - Option for construction of a larger development was considered but not selected due to market conditions anticipated at this time. Fewer Units - Development and operating costs are not feasible for a facility with fewer units. Alternate Site - The market study and related research did not identify any sites within the market area of comparable size that are currently vacant or with similar proximity to resources. Redevelopment of occupied alternative sites with suitable characteristics would require the displacement of current residents or businesses that is not consistent with the community's focus on growth and sustainability.

No Action Alternative [24 CFR 58.40(e)]

The no action alternative would fail to stabilize the neighborhood and property values. The project site would remain vacant and unused, which does not benefit the City of Detroit community. The no action alternative would fail to address the documented critical need for low-income modern housing or fulfill the goals of the community revitalization. Because no adverse impacts have been identified, the alternative of No Action is not reasonable.

Summary of Findings and Conclusions:

The project would provide much needed affordable, private-unit residential housing and retail commercial space in a transitional area of Detroit. The development is designed to meet the income distribution and household size needs identified in the market study as well as provide desirable community and commercial space. The property has been vacant and unused for several years, and the proposed end use will provide important community engagement and living area in a vital area of the city. The project is located within an Opportunity Zone and the services offered will focus on services that improve the lives of community residents. The no action alternative

would fail to stabilize the neighborhood and property values. The project site would remain vacant and unused, which does not benefit the City of Detroit community. Furthermore, the impacts of the development are minimal and can be managed by typical mitigation measures. Overall, the project is a benefit to the City of Detroit.

Mitigation Measures and Conditions [CFR 1505.2(c)]:

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed Measures	Mitigation Plan	Complete
Historic Preservation	On 3/7/2022, plans for construction monitoring and site avoidance were submitted to SHPO. On 4/18/22, SHPO indicated these plans would result in no adverse effect on the historic feature, assigned site number 20WN123. The site avoidance plan calls for the area of the feature to be fenced during construction and capped by the placement of a demarcation fabric or snow fencing over the feature and then capping it with approximately 8 inches of limestone base and topped with a 5-inch-thick layer of asphalt. The limestone and asphalt are to be laid by hand. A consulting archaeologist will be on-site to observe the construction over the feature. For the long-term preservation of the feature, the asphalt will remain in place and a copy of the Site Avoidance Plan will be kept onsite.	N/A	The project will follow the mitigation measures outlined in the attached Mitigation Plan.	

Contamination and Toxic Substances	A Response Activity Plan - Remedial Action Plan was approved by EGLE on April 26, 2022. The plan includes removal of fill material across the entire footprint of the Property until native and non-contaminated silty clay soils are encountered, with the exception of a small 11' by 11' area in the northern portion due to a historical feature that must be isolated and maintained. See mitigation plan for additional information.	N/A	The project will follow the mitigation measures outlined in the approved RAP.	
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Project Mitigation Plan

40 CFR 1505.2(c) outlines decision making for Environmental Impact Statements. This project review is an Environmental Assessment and the mitigation measures will be carried out by the Developer's environmental consultant. The progress will be monitored by the consultant and the City of Detroit's Housing & Revitalization Department's (HRD) Construction and Environmental Review teams. Mitigation measures are expected to be completed. Attached is a copy of the Mitigation Plan, which outlines in detail who is responsible for which activity, when the activity will be carried out and documentation that the City of Detroit's HRD Environmental Review Team should receive when the measure is completed.

[HRD Mitigation Plan - Brush Park.pdf](#)

Supporting documentation on completed measures

APPENDIX A: Related Federal Laws and Authorities

Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

✓ No

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

Screen Summary

Compliance Determination

The property is located approximately 6.25 miles from the Windsor International Airport and 4.46 miles from the Coleman A. Young International Airport, which is the nearest US military, civil or commercial service airport. The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport and therefore not in an Airport Clear Zone or Accident Potential Zone. No military airfields are located in Wayne County or the nearby vicinity (Attachment A).

Supporting documentation

[Attachment A - RCZ Map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

1. Is the project located in a CBRS Unit?

No

Document and upload map and documentation below.

Yes

Compliance Determination

The project site is not within a Coastal Barrier Resource System (CBRS) Unit, or CBRS buffer zone, as defined under the Coastal Barrier Improvement Act of 1990 [16 Resources Act of 1982 (PL 97- 348), as amended by the Coastal Barrier Improvement Act of 1990 (PL 101-591) (Attachment B).

Supporting documentation

[Attachment B - Coastal Barrier Map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?

No. This project does not require flood insurance or is excepted from flood insurance.

Yes

2. Upload a FEMA/FIRM map showing the site here:

[Attachment C - FIRMette Map.pdf](#)

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

No

Based on the response, the review is in compliance with this section.

Yes

4. While flood insurance is not mandatory for this project, HUD strongly recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Will flood insurance be required as a mitigation measure or condition?

Yes

✓ No

Screen Summary

Compliance Determination

The project site is not located within a Special Flood Hazard Area as depicted on the Flood Insurance Rate Map panel 26163C0285E, dated February 2, 2012. The project would not involve either direct or indirect support of development in a floodplain (Attachment C).

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

✓ No

Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?

Yes

No

Air Quality Attainment Status of Project's County or Air Quality Management District

2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?

No, project's county or air quality management district is in attainment status for all criteria pollutants.

Yes, project's management district or county is in non-attainment or maintenance status for the following criteria pollutants (check all that apply):

Carbon Monoxide

Lead

Nitrogen dioxide

Sulfur dioxide

- ✓ Ozone
- Particulate Matter, <2.5 microns
- Particulate Matter, <10 microns

3. What are the *de minimis* emissions levels (40 CFR 93.153) or screening levels for the non-attainment or maintenance level pollutants indicated above

Ozone 100.00 ppb (parts per million)

Provide your source used to determine levels here:

The source used to determine the level of ozone is the EPA's National Ambient Air Quality Standards table. Since the project is outside of the ozone transport region, the project is in the "other" category.

4. Determine the estimated emissions levels of your project. Will your project exceed any of the *de minimis* or threshold emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?

- ✓ No, the project will not exceed *de minimis* or threshold emissions levels or screening levels.

Enter the estimate emission levels:

Ozone 0.00 ppb (parts per million)

Based on the response, the review is in compliance with this section.

Yes, the project exceeds *de minimis* emissions levels or screening levels.

Screen Summary

Compliance Determination

Wayne County is designated as being in 'attainment' for carbon monoxide, lead, nitrogen dioxide, particulate matter (PM10 & PM2.5). Southeast Michigan is in a Nonattainment area for ozone, and the eastern portion of Wayne County is in a Nonattainment area for Sulfur Dioxide. The State of Michigan has a State Implementation Plan (SIP) in place and continues to monitor the concentrations of

Sulfur Dioxide in portions of Wayne County. Local and Regional air quality will not be significantly affected. Additionally, the project was submitted to the Department of the Environment, Great Lakes and Energy (EGLE) Air Quality Division. A response was received on December 16, 2020, indicating that the project is in conformance with the SIP and does not require a detailed conformity analysis (Attachment D).

Supporting documentation

[Attachment D - Nonattainment Map.pdf](#)

[Attachment D - Gen Conformity Letter Brush and Winder 12-16-2020.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes

No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

The Property is not located in a coastal zone per State of Michigan Office of the Great Lakes or the National Oceanic and Atmospheric Administration (Attachment E).

Supporting documentation

[Attachment E - Coastal Zone Map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Contamination and Toxic Substances

General requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)

1. How was site contamination evaluated? Select all that apply. Document and upload documentation and reports and evaluation explanation of site contamination below.

- American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment (ESA)
- ASTM Phase II ESA
- Remediation or clean-up plan
- ASTM Vapor Encroachment Screening
- None of the Above

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

No

- Yes

3. Mitigation

Document and upload the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental effects cannot be mitigated, then HUD assistance may not be used for the project at this site.

Can adverse environmental impacts be mitigated?

Adverse environmental impacts cannot feasibly be mitigated.

- ✓ Yes, adverse environmental impacts can be eliminated through mitigation. Document and upload all mitigation requirements below.

4. Describe how compliance was achieved in the text box below. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls, or use of institutional controls.

A Response Activity Plan - Remedial Action Plan was approved by EGLE on April 26, 2022. The plan includes removal of fill material across the entire footprint of the Property until native and non-contaminated silty clay soils are encountered, with the exception of a small 11' by 11' area in the northern portion due to a historical feature that must be isolated and maintained. See mitigation plan for additional information.

If a remediation plan or clean-up program was necessary, which standard does it follow?

- ✓ Complete removal

Risk-based corrective action (RBCA)

Screen Summary

Compliance Determination

A Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 and/or MSHDA Environmental Review for Requirements the Subject Property was completed by AKT Peerless in 2021. The Phase I ESA also documents previous environmental site assessments (see Attachment 1 for 2021 Phase I ESA). ASTI completed Phase II subsurface soil investigations in July 2017 and November 2018 and documented the presence of metals in the soil above Michigan Part 201 EGLE's Generic Residential Cleanup Criteria (GRCC). Soil gas samples were also collected for analysis. ESGPW conducted additional Phase II ESA activities including the completion of 28 soil borings for the collection of 83 discrete soil samples to a depth of 12 feet across the four parcels of the Subject Property. Of the 83 samples collected, 55 were submitted for laboratory analysis. Additionally, 10 soil gas wells were installed and screened at five feet below grade level (BGL) for collection and analysis of 10 soil gas samples. The analytical results revealed mercury, lead, benzo(a)pyrene, naphthalene, phenanthrene, 2-methylnaphthalene, ethylbenzene and/or arsenic in the soil samples above various GRCC's in the shallow fill material generally less than two feet deep with the exception of one location at five feet deep. No exceedances of site specific criteria were identified

in the soil gas samples. A Response Activity Plan - Remedial Action Plan (RAP) was prepared and submitted to EGLE for review. The report documented the developer intends to remove the fill material across the entire footprint of the Property until native and non-contaminated silty clay soils are encountered, with the exception of a small 11' by 11' area in the northern portion due to a historical feature that must be isolated and maintained. EGLE approved the RAP in a letter dated April 26, 2022. Asbestos and Lead Based Paint: There are no buildings Radon: The proposed project is located in Wayne County, which is designated as Zone 3 by the EPA. Zone 3 counties have a predicted average indoor radon screening level below 2 pCi/L. No further assessment is required for this project. See Attachment 1 for ESA reports and Attachment 6 for Radon Map

Supporting documentation

[Attachment F - Phase I ESA.pdf](#)

[Attachment F - Response Activity Plan.pdf](#)

[Attachment F - RAP Approval Letter.pdf](#)

[Attachment F - Radon Map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Endangered Species

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service (“FWS” and “NMFS” or “the Services”).	The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i>); particularly section 7 (16 USC 1536).	50 CFR Part 402

1. Does the project involve any activities that have the potential to affect species or habitats?

- ✓ No, the project will have No Effect due to the nature of the activities involved in the project.

This selection is only appropriate if none of the activities involved in the project have potential to affect species or habitats. Examples of actions without potential to affect listed species may include: purchasing existing buildings, completing interior renovations to existing buildings, and replacing exterior paint or siding on existing buildings.

Based on the response, the review is in compliance with this section.

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office

Yes, the activities involved in the project have the potential to affect species and/or habitats.

Screen Summary

Compliance Determination

The project is located within a historically developed environment where the vegetation and wildlife have adapted. The project has been developed for commercial and residential uses since the late 1800's. A list of Endangered species in the Subject Property area, as identified by the US Fish & Wildlife Service (USFWS) was reviewed in conjunction with the USFWS screening to determine if there is an impact to any

threatened or endangered species. Based on the Determination Key, there is No Effect on the identified species. The US FWS also indicates "There are no Critical Habitats at this Location" (Attachment G).

Supporting documentation

[Attachment G - Brush Park Species List.pdf](#)

[Attachment G - Consistiney Letter.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

Explosive and Flammable Hazards

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C

1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

No

Yes

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

No

Yes

3. Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:

- Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR

- Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 or later version of National Fire Protection Association (NFPA) Code 58.

If all containers within the search area fit the above criteria, answer "No." For any other type of aboveground storage container within the search area that holds one of the flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "Yes."

No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Yes

Screen Summary

Compliance Determination

The project does not involve explosive or flammable materials or operations. There is no visual evidence or indication of unobstructed or unshielded above ground storage tanks (fuel oil, gasoline, propane, etc.) or operations utilizing explosive/flammable material at or in close proximity to the property (Attachment H).

Supporting documentation

[Attachment H - NPMS Public Viewer.pdf](#)

[Attachment H - EDR AST Map.pdf](#)

[Attachment H - EDR AST findings.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Farmlands Protection

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	7 CFR Part 658

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

Yes

No

If your project includes new construction, acquisition of undeveloped land or conversion, explain how you determined that agricultural land would not be converted:

There are no farmland programs in the City of Detroit. The project is in the heavily urbanized area.

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Screen Summary

Compliance Determination

The project site consists of urban land; therefore the project would not affect farmlands. According to the Local Farmland Preservation Programs Qualified under the Michigan Agricultural Preservation Fund there are no farmland preservation programs in the City of Detroit (Attachment I).

Supporting documentation

[Attachment I - Farmland Map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Floodplain Management

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988	24 CFR 55

1. Do any of the following exemptions apply? Select the applicable citation? [only one selection possible]

55.12(c)(3)

55.12(c)(4)

55.12(c)(5)

55.12(c)(6)

55.12(c)(7)

55.12(c)(8)

55.12(c)(9)

55.12(c)(10)

55.12(c)(11)

None of the above

2. Upload a FEMA/FIRM map showing the site here:

[Attachment C - FIRMette Map.pdf](#)

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use **the best available information** to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

Does your project occur in a floodplain?

No

Based on the response, the review is in compliance with this section.

Yes

Screen Summary**Compliance Determination**

The is not located within a Special Flood Hazard Area as depicted on the Flood Insurance Rate Map panel 26163C0285E, dated February 2, 2012. The project would not involve either direct or indirect support of development in a floodplain (Attachment C).

Supporting documentation**Are formal compliance steps or mitigation required?**

Yes

✓ No

Historic Preservation

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties" https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf

Threshold

Is Section 106 review required for your project?

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the PA Database to find applicable PAs.)

No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

- ✓ Yes, because the project includes activities with potential to cause effects (direct or indirect).

Step 1 – Initiate Consultation

Select all consulting parties below (check all that apply):

- ✓ State Historic Preservation Offer (SHPO) Completed
- ✓ Advisory Council on Historic Preservation Not Required
- ✓ Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)
- ✓ Other Consulting Parties

✓ City of Detroit Preservation Specialist

Completed

Describe the process of selecting consulting parties and initiating consultation here:

The City of Detroit has a Programmatic Agreement (PA) with the Michigan State Historic Preservation Office (SHPO). The project is larger than 0.50 acres in size; therefore, coordination with the SHPO for archeology was required. The City of Detroit Preservation Specialist was provided a Section 106 application and issued a determination letter per the rules of the PA.

Document and upload all correspondence, notices and notes (including comments and objections received below).

Was the Section 106 Lender Delegation Memo used for Section 106 consultation?

Yes

No

Step 2 – Identify and Evaluate Historic Properties

- 1. Define the Area of Potential Effect (APE), either by entering the address(es) or uploading a map depicting the APE below:**

See Section 106 Application and map (Attachment J).

In the chart below, list historic properties identified and evaluated in the APE. Every historic property that may be affected by the project should be included in the chart.

Upload the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination below.

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information
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Additional Notes:

- 2. Was a survey of historic buildings and/or archeological sites done as part of the**

project? Yes

Document and upload surveys and report(s) below.

For Archeological surveys, refer to HP Fact Sheet #6, Guidance on Archeological Investigations in HUD Projects.

Additional Notes:

No

Step 3 –Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5)] Consider direct and indirect effects as applicable as per guidance on direct and indirect effects.

Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.

No Historic Properties Affected

 No Adverse Effect

Based on the response, the review is in compliance with this section.

Document reason for finding:

The project is located within the Brush Park Local Historic District and six historic properties are included in the area of potential effect. Additionally, The project is located within the Brush Park Local Historic District and six historic properties are included in the area of potential effect. Also, the results of the Phase I & II archeology revealed one in-tact features during excavation.

Does the No Adverse Effect finding contain conditions?

✓ Yes (check all that apply)

✓ Avoidance

Modification of project

Other

Describe conditions here:

On 3/7/2022, plans for construction monitoring and site avoidance were submitted to SHPO. On 4/18/22, SHPO indicated these plans would result in no adverse effect on the historic feature, assigned site number 20WN123. The site avoidance plan calls for the area of the feature to be fenced during construction and capped by the placement of a demarcation fabric or snow fencing over the feature and then capping it with approximately 8 inches of limestone base and topped with a 5-inch-thick layer of asphalt. The limestone and asphalt are to be laid by hand. A consulting archaeologist will be on-site to observe the construction over the feature. For the long-term preservation of the feature, the asphalt will remain in place and a copy of the Site Avoidance Plan will be kept onsite.

No

Adverse Effect

Screen Summary**Compliance Determination**

An Application for Section 106 review was submitted to the City of Detroit Housing and Revitalization Department (HRD). It was determined that Historic Properties will be affected. Based on this finding, a Phase I archeological trench excavation was performed on May 17 through 20, 2021 on the Subject Property. Results of the excavation identified two features interpreted as parts of foundations of stables-turned-auto-garages in the northern portion of the parcel. Only feature 1 was deemed

significant. The developer has developed an Archeological Site Avoidance Plan to protect the feature. This project has been given a Conditional No Adverse Effect determination (Federal Regulations 36 CFR Part 800.5(b)) on properties that are listed or eligible for listing in the National Register of Historic Places, as long as the following conditions are met: 1) Construction monitoring and site avoidance plan approved by SHPO on 3/14/22 is followed 2) Any additional changes to the scope of work for the project shall be submitted to the Preservation Specialist for review and approval prior to the start of any work. 3) Photos of the completed work are submitted to the Preservation Specialist (Attachment J).

Supporting documentation

[Attachment J - Section 106 Letter.pdf](#)

[Attachment J - Section 106 Application \(including Archeology\).pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Noise Abatement and Control

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972 General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B

1. What activities does your project involve? Check all that apply:

- New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

Rehabilitation of an existing residential property

A research demonstration project which does not result in new construction or reconstruction

An interstate land sales registration

Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

None of the above

4. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).

Indicate the findings of the Preliminary Screening below:

There are no noise generators found within the threshold distances above.

- ✓ Noise generators were found within the threshold distances.

5. **Complete the Preliminary Screening to identify potential noise generators in the**

Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

- ✓ Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Is your project in a largely undeveloped area?

- ✓ No

Indicate noise level here: 70.8

Document and upload noise analysis, including noise level and data used to complete the analysis below.

Yes

Unacceptable: (Above 75 decibels)

HUD strongly encourages conversion of noise-exposed sites to land uses compatible with high noise levels.

Check here to affirm that you have considered converting this property to a non-residential use compatible with high noise levels.

Indicate noise level here: 70.8

Document and upload noise analysis, including noise level and data used to complete the analysis below.

6. HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review.

Mitigation as follows will be implemented:

✓ No mitigation is necessary.

Explain why mitigation will not be made here:

Wall, door and window attenuation measures will be incorporated into the construction of the building.

Based on the response, the review is in compliance with this section.

Screen Summary

Compliance Determination

A noise assessment was conducted for the property by ASTI Environmental as part of the Phase I ESA in January 2020 and the measurements found exterior combined noise levels on the site to be up to a Day-Night Average Sound Level (DNL) of 70.8dB. HUD regulations at 24 CFR Part 51 Subpart B consider the range between 65 and 75 DNL to be normally unacceptable and above 75 DNL to be unacceptable. Two STraCAT evaluations were completed for the east and south elevations by the architect documenting the planned construction methods meet the required STC rating of less than 30. This includes using wall, door and window attenuation measures into the project as detailed in the STraCAT (Attachment K).

Supporting documentation

[Attachment K - Noise Assessment.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

Sole Source Aquifers

General requirements	Legislation	Regulation
The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149

1. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

Yes

No

2. Is the project located on a sole source aquifer (SSA)?

A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

No

Based on the response, the review is in compliance with this section. Document and upload documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area, below.

Yes

Screen Summary

Compliance Determination

There are no US EPA designated sole-source aquifers in Michigan. The proposed property is not located within a sole source aquifer watershed and would not affect a sole-source aquifer or negatively impact the water quality or any aquifers in the area (Attachment L).

Supporting documentation

[Attachment L - Sole Source Aquifer.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

Wetlands Protection

General requirements	Legislation	Regulation
Executive Order 11990 discourages direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance? The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order

No

Yes

2. Will the new construction or other ground disturbance impact an on- or off-site wetland? The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

"Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands."

No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.

Based on the response, the review is in compliance with this section. Document and upload a map or any other relevant documentation below which explains your determination

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

Screen Summary

Compliance Determination

The project site is not located near, or within, a wetland area. Therefore, the project would not affect wetland or riparian areas (Attachment M).

Supporting documentation

[Attachment M - Wetland Map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Wild and Scenic Rivers Act

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297

1. Is your project within proximity of a NWSRS river?

No

Yes, the project is in proximity of a Designated Wild and Scenic River or Study Wild and Scenic River.

Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

Screen Summary**Compliance Determination**

No Wild and Scenic Rivers are located within the City of Detroit (Attachment N).

Supporting documentation

[Attachment N - Wild and Scenic River Map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

Environmental Justice

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?

Yes

No

Based on the response, the review is in compliance with this section.

Screen Summary

Compliance Determination

The building will serve low-income and minority populations. The project would not result in disproportionately adverse environmental effects on minority or low-income populations. New facilities and residences are intended to enhance the quality of life for new and existing residents and the community (Attachment O).

Supporting documentation

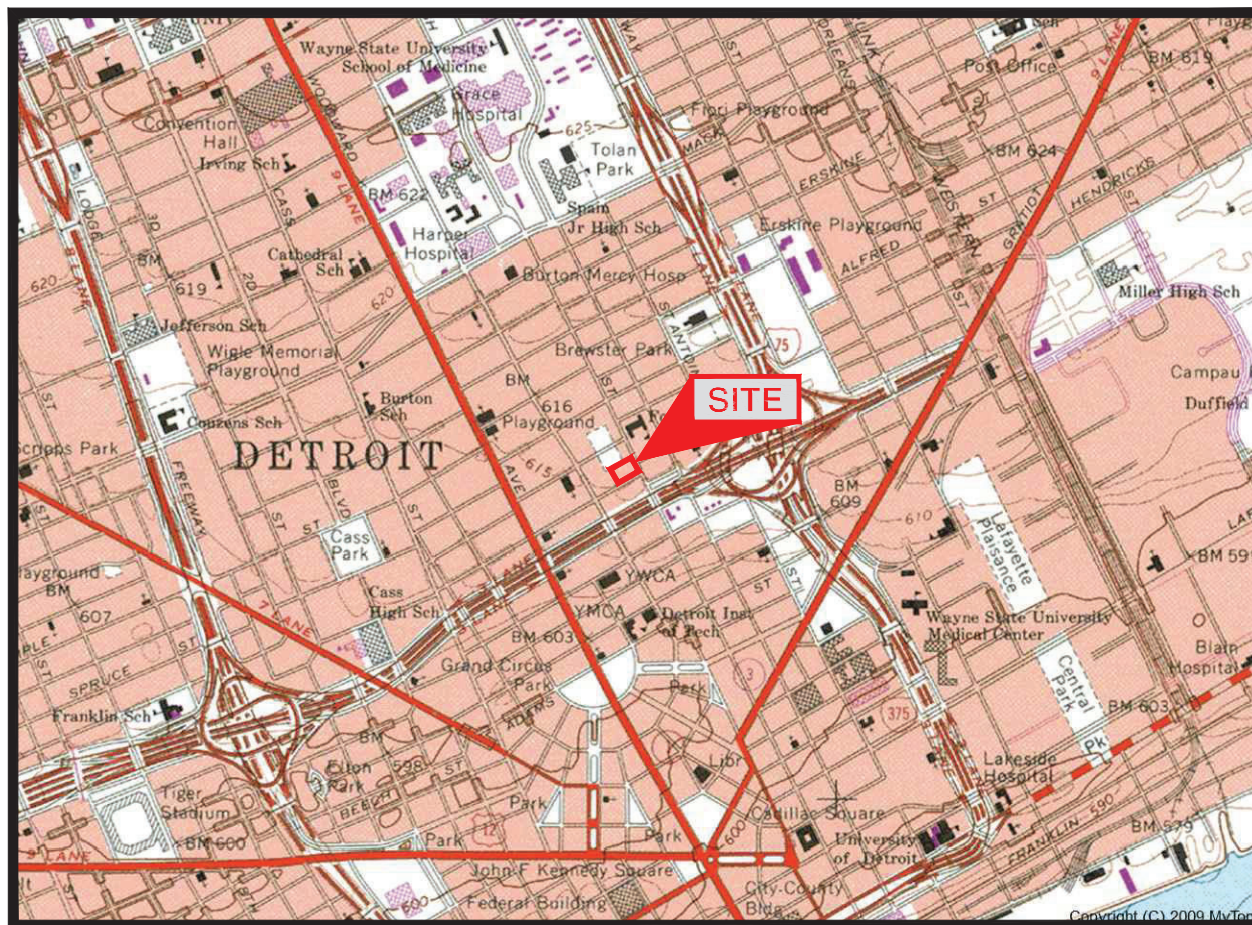
[Attachment O - EJScreen Report.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

DETROIT QUADRANGLE
MICHIGAN - WAYNE COUNTY
7.5 MINUTE SERIES (TOPOGRAPHIC)



T.2 S.-R.12 E.



IMAGE TAKEN FROM 1968 U.S.G.S. TOPOGRAPHIC MAP
 PHOTOREVISED 1973 & 1980

MICHIGAN
 QUADRANGLE LOCATION



AKTPEERLESS

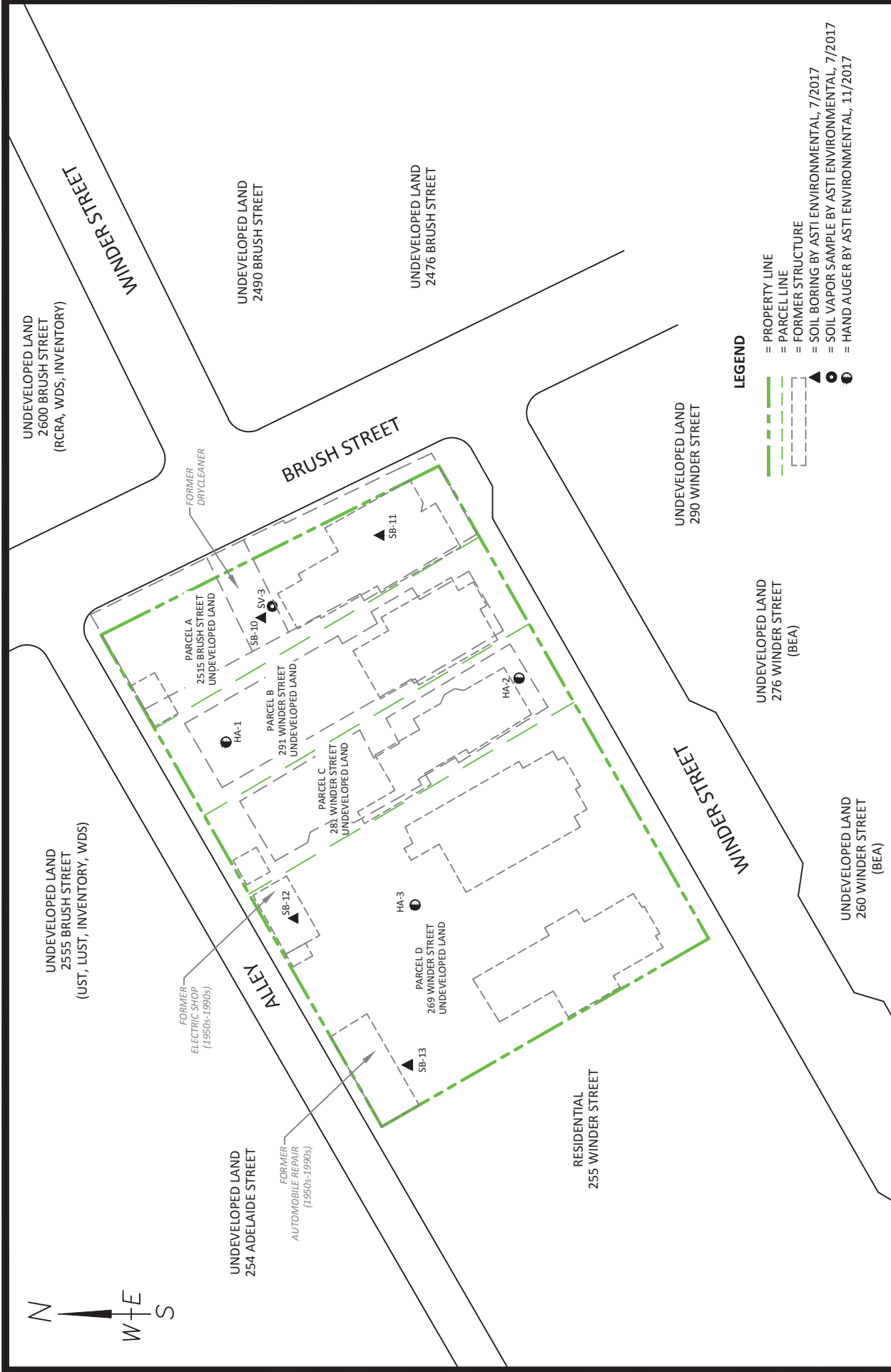
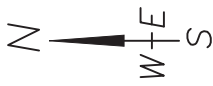
www.aktpeerless.com

TOPOGRAPHIC LOCATION MAP

269-291 WINDER STREET AND 2515 BRUSH STREET
 DETROIT, MICHIGAN
 PROJECT NUMBER: 15490F-3-17

DRAWN BY: OGO
 DATE: 12/10/2020

FIGURE 1

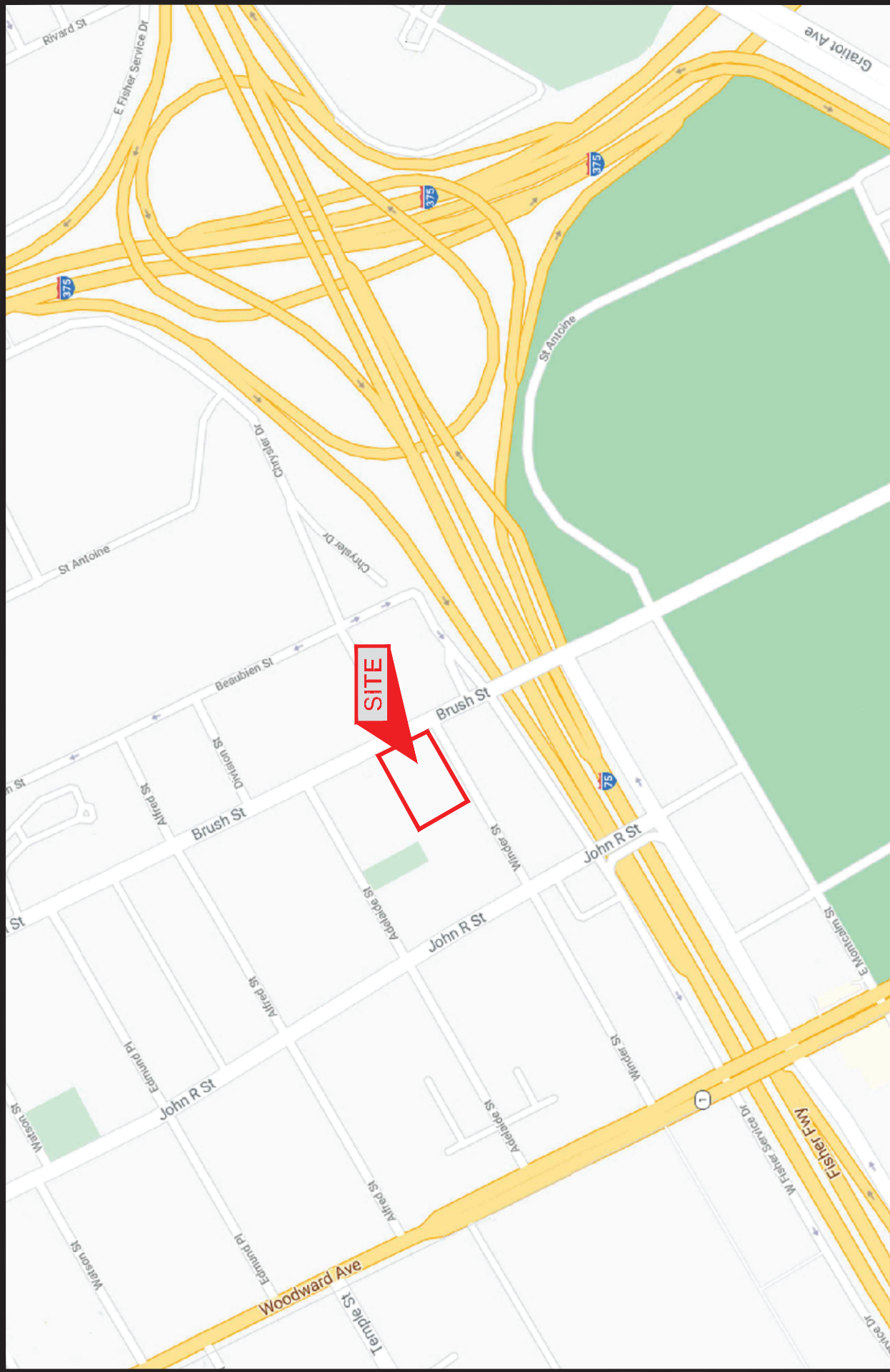


DRAWN BY: OGO
 DATE: 12/10/2020
 0 30 60
 SCALE: 1" = 60'

SUBJECT PROPERTY MAP
 269-291 WINDER STREET AND 2515 BRUSH STREET
 DETROIT, MICHIGAN
 PROJECT NUMBER: 15490F-3-17

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FIGURE 2



DRAWN BY: OGO
 DATE: 12/10/2020

FIGURE 3

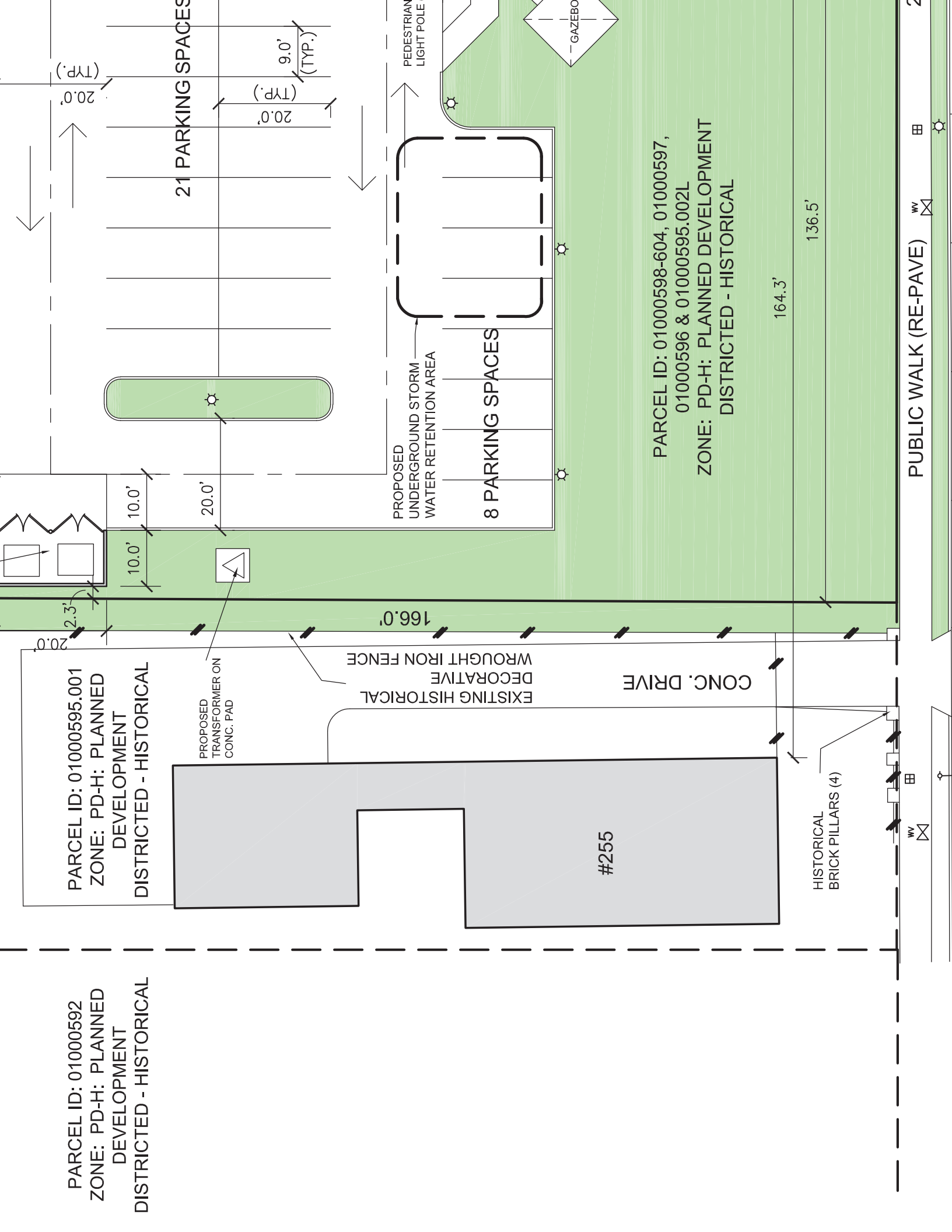
LEGEND
 N
 W-E
 S

SUBJECT PROPERTY LOCATION MAP
 269-291 WINDER STREET AND 2515 BRUSH STREET
 DETROIT, MICHIGAN
 PROJECT NUMBER: 15490F-3-17

AKTPEERLESS
 www.aktpeerless.com

PARCEL ID: 01000592
ZONE: PD-H: PLANNED
DEVELOPMENT
DISTRICTED - HISTORICAL

PARCEL ID: 01000595.001
ZONE: PD-H: PLANNED
DEVELOPMENT
DISTRICTED - HISTORICAL



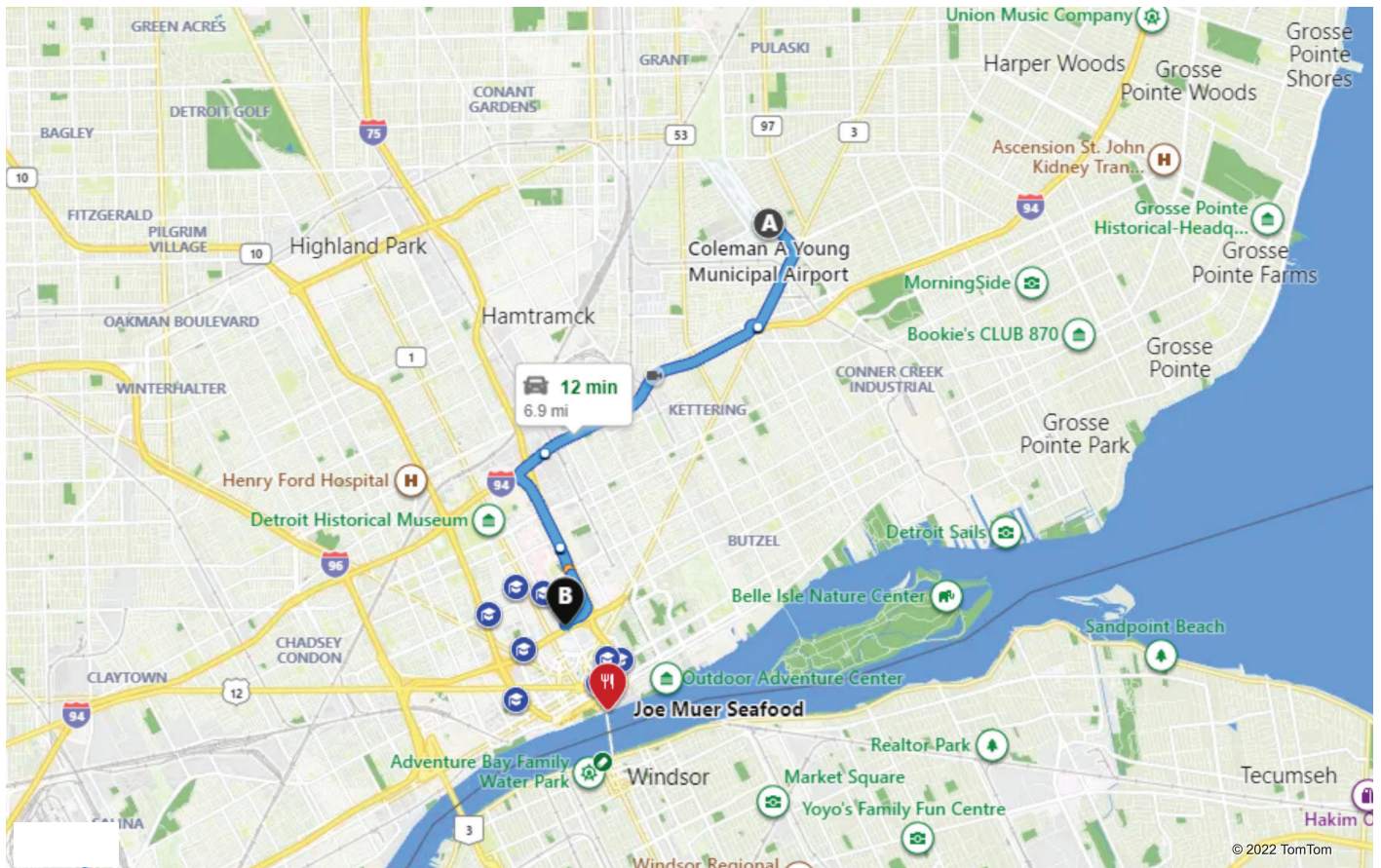
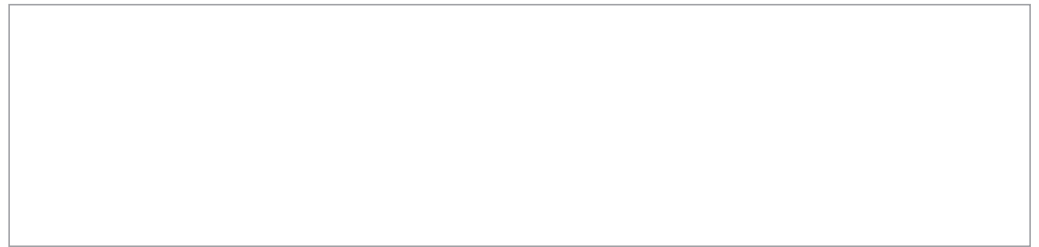
PARCEL ID: 01000598-604, 01000597,
01000596 & 01000595.002L
ZONE: PD-H: PLANNED DEVELOPMENT
DISTRICTED - HISTORICAL

PUBLIC WALK (RE-PAVE)

2

A Coleman A Young Municipal Airport, Detroit, MI
B 269 Winder St, Detroit, MI 48201

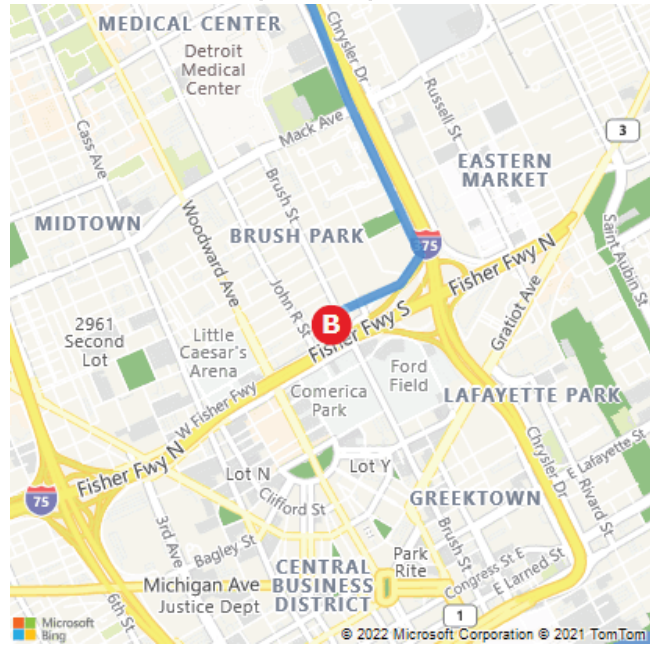
12 min , 6.9 miles
Light traffic (Leave at 2:03 PM)
Via M-3, I-94 W



A Coleman A Young Municipal Airport, Detr...



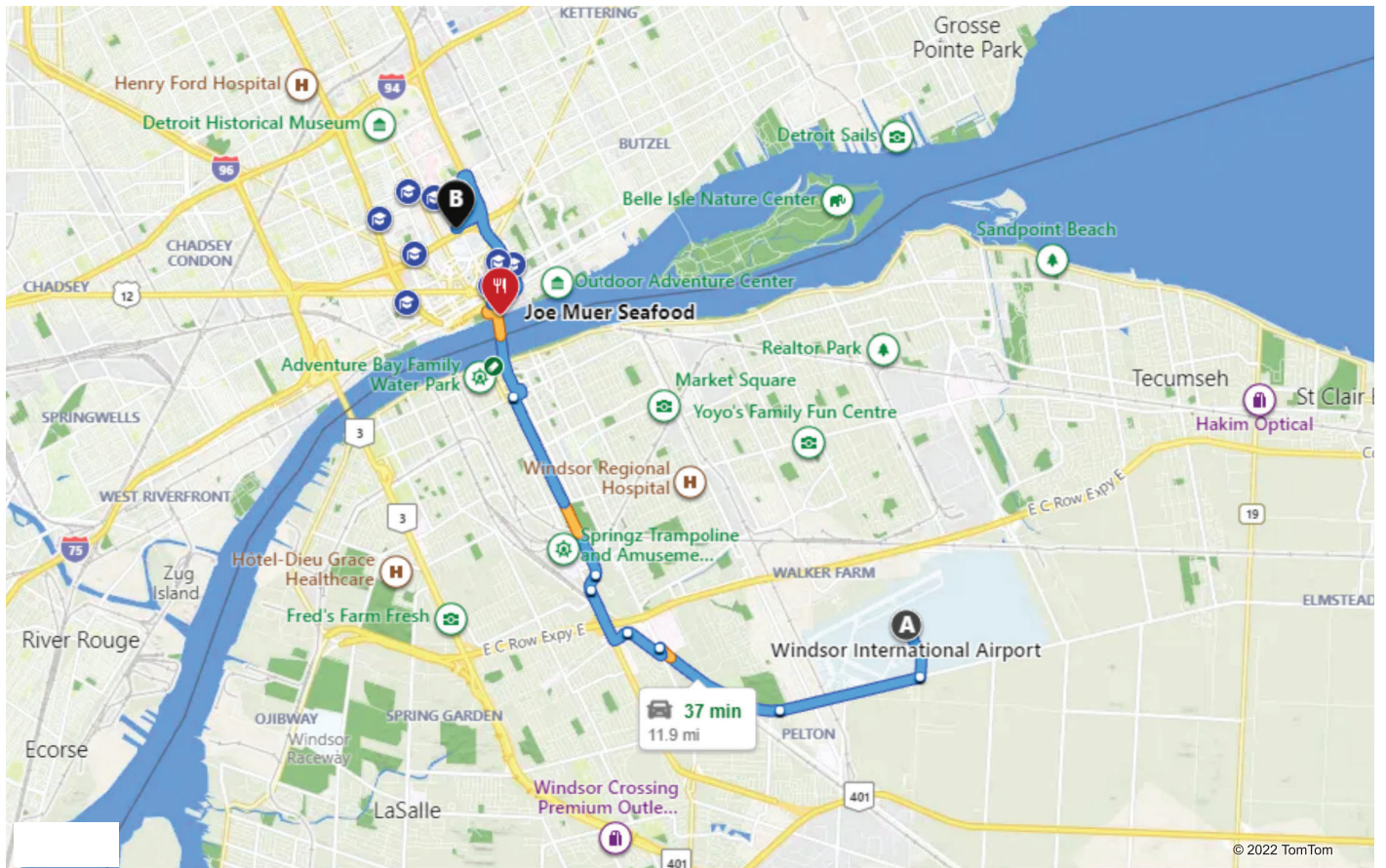
B 269 Winder St, Detroit, MI 48201



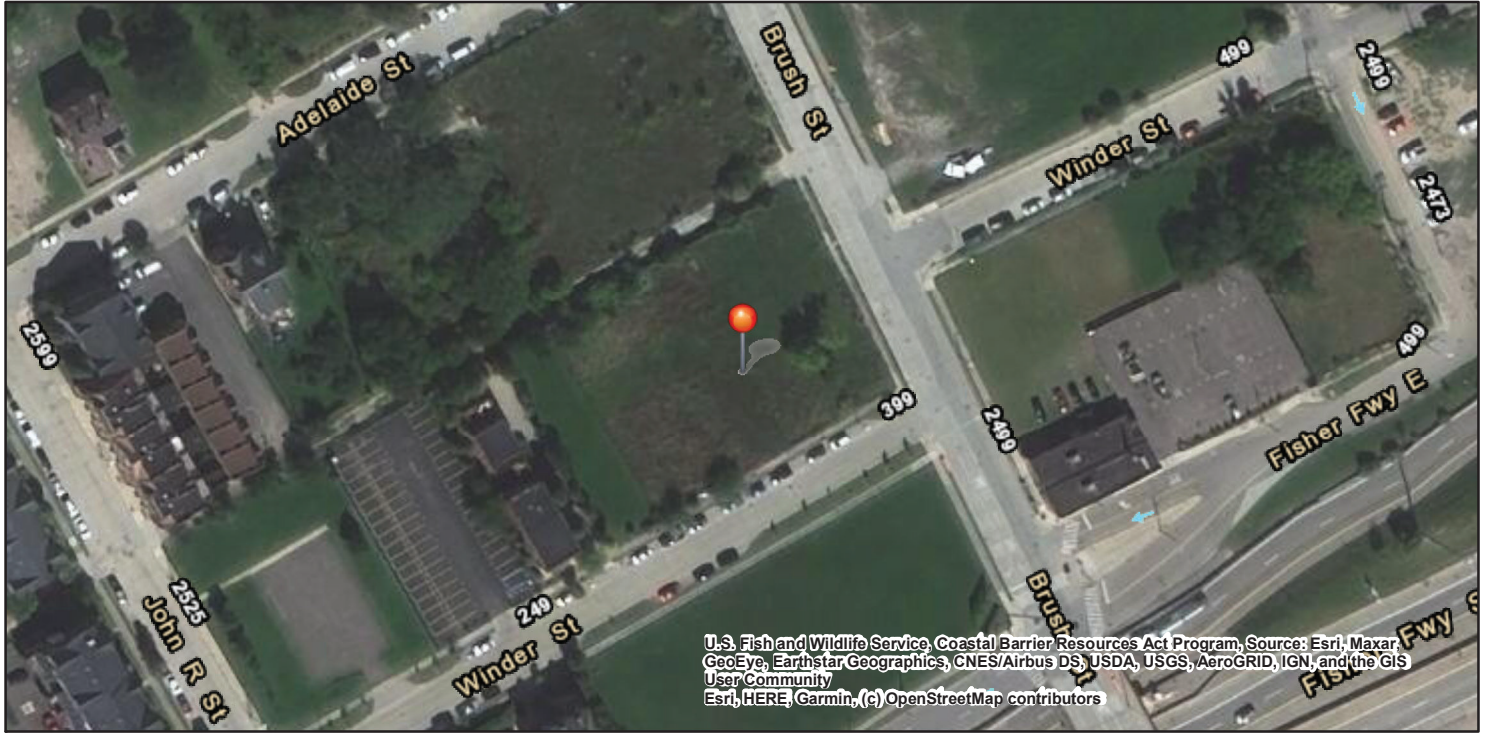
These directions are subject to the Microsoft® Service Agreement and are for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2022 TomTom.

- A** Windsor International Airport, 3200 County Road 42 Unit #200,
Windsor ON N8V 0A1
- B** 269 Winder St, Detroit, MI 48201

37 min , 11.9 miles
Light traffic (Leave at 2:05 PM)
Via County Rd-42, Ouellette Ave
· Toll on route



Coastal Barrier Resources System Mapper Documentation




CBRS Units

-  Otherwise Protected Area
-  CBRS Buffer Zone
-  System Unit
-  -83.049692, 42.342598



1:2,257

 The pin location displayed on the map is a point selected by the user. Failure of the user to ensure that the pin location displayed on this map correctly corresponds with the user supplied address/location description may result in an invalid federal flood insurance policy. **The U.S. Fish and Wildlife Service (Service) has not validated the pin location with respect to the user supplied address/location description below. The Service recommends that all pin locations be verified by federal agencies prior to use of this map for the provision or denial of federal funding or financial assistance.** Please note that a structure bisected by the Coastal Barrier Resources System (CBRS) boundary (i.e., both "partially in" and "partially out") is within the CBRS and therefore affected by CBRA's restrictions on federal flood insurance. A pin placed on a bisected structure must be placed on the portion of the structure within the unit (including any attached features such as a deck or stairs).

User Name: Christy Bakos
User Organization: GRand Environmental, LLC
User Supplied Address/Location Description: 269 Winder Street, Detroit, MI
Pin Location: Outside CBRS
Pin Flood Insurance Prohibition Date: N/A
Pin System Unit Establishment Date: N/A

The user placed pin location is not within the CBRS. The official CBRS maps are accessible at <https://www.fws.gov/cbra/maps/index.html> .

The CBRS information is derived directly from the CBRS web service provided by the Service. This map was exported on 5/3/2022 and does not reflect changes or amendments subsequent to this date. The CBRS boundaries on this map may become superseded by new boundaries over time.

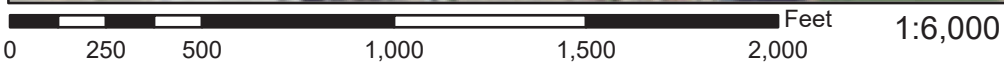
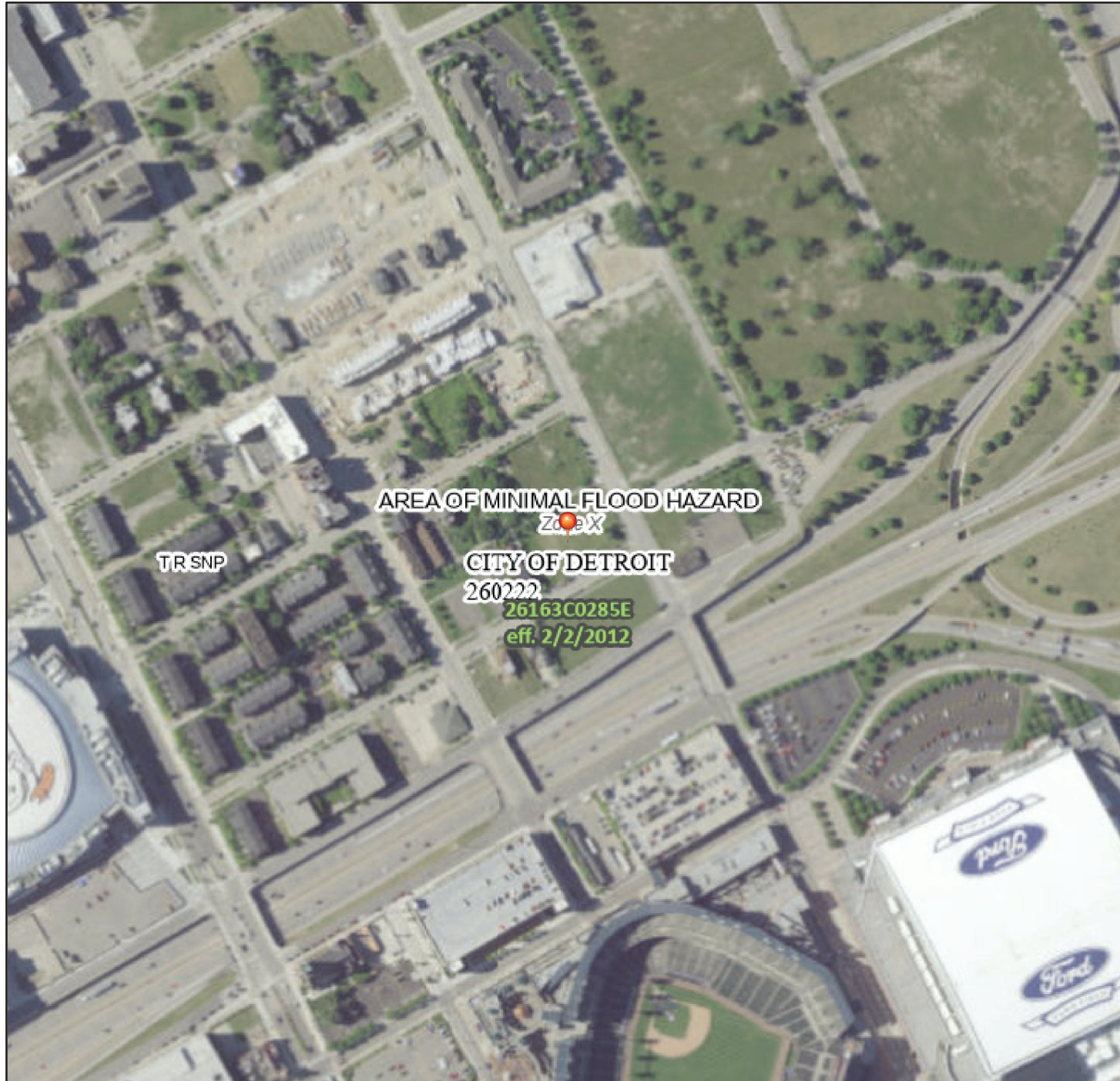
This map image may be void if one or more of the following map elements do not appear: basemap imagery, CBRS unit labels, prohibition date labels, legend, scale bar, map creation date. For additional information about flood insurance and the CBRS, visit: <https://www.fws.gov/cbra/Flood-Insurance.html> .



National Flood Hazard Layer FIRMMette



83°3'18"W 42°20'47"N



83°2'41"W 42°20'20"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|------------------------------------|--|--|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
<i>Zone A, V, A99</i> |
| | | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i> |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
| | | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i> |
| | | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i> |
| | | Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS | | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i> |
| | | Effective LOMRs |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard <i>Zone D</i> |
| | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | 20.2 Cross Sections with 1% Annual Chance |
| | | 17.5 Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| MAP PANELS | | Jurisdiction Boundary |
| | | Coastal Transect Baseline |
| | | Profile Baseline |
| | | Hydrographic Feature |
| | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **1/19/2021 at 10:40 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



LIESL EICHLER CLARK
DIRECTOR

December 16, 2020

Ms. Julie Barton, Project Manager
AKT Peerless
333 West Fort Street
Detroit, Michigan 48226

Dear Ms. Barton:

Subject: 2515 Brush and 269-91 Winder Street, Detroit, MI

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has reviewed the federal regulations related to general conformity of projects with state implementation plans (SIP) for air quality. In particular, 40 Code of Federal Regulations (CFR) Section 93.150 et seq, which states that any federally funded project in a nonattainment or maintenance area must conform to the Clean Air Act requirements, including the State's SIP, if they may constitute a significant new source of air pollution.

On August 3, 2018, Wayne County was designated nonattainment for the 2015 ozone standard; and thus, general conformity must be evaluated when completing construction projects of a given size and scope. EGLE is currently working to complete the required SIP submittals for this area; therefore, an alternative evaluation was completed to assess conformity. Specifically, EGLE considered the following information from the United States Environmental Protection Agency's (USEPA) general conformity guidance, which states "historical analysis of similar actions can be used in cases where the proposed projects are similar in size and scope to previous projects."

EGLE has reviewed the Brush and Winder Streets project located in Detroit, Michigan, which is proposed to be completed with federal grant monies, including the construction of a new, mixed-use, four story building, with 53 affordable apartments and approximately 1,200 square feet of commercial space. The 11,368 square foot building will be located at 2515 Brush and 269-91 Winder Street, Detroit, Michigan. Construction is anticipated to begin in August 2021 and will be completed by October 2022.

In reviewing the "*Air Quality and Greenhouse Gas Study: Uptown Orange Apartments in Orange, California*," dated December 2012, prepared for KTG Group, Inc. by UltraSystems Environmental, Inc., it was determined that emission levels for the project were below the de minimis levels for general conformity.

The Uptown Orange Apartments project and related parking structure construction was estimated to take 33 months to complete, would encompass an area of 5.57 acres, and included two four-story residential units with a total of 334 apartments, and two parking structures with a total of 494 and 679 parking stalls, respectively.

Ms. Julie Barton
Page 2
December 16, 2020

The size, scope, and duration of the proposed Wayne County construction project is much smaller in scale than the Uptown Orange Apartments project described above and should not exceed the de minimis levels included in the federal general conformity requirements. Therefore, it does not require a detailed conformity analysis.

If you have any further questions regarding this matter, please contact me at 517-648-6314; BukowskiB@Michigan.gov; or EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

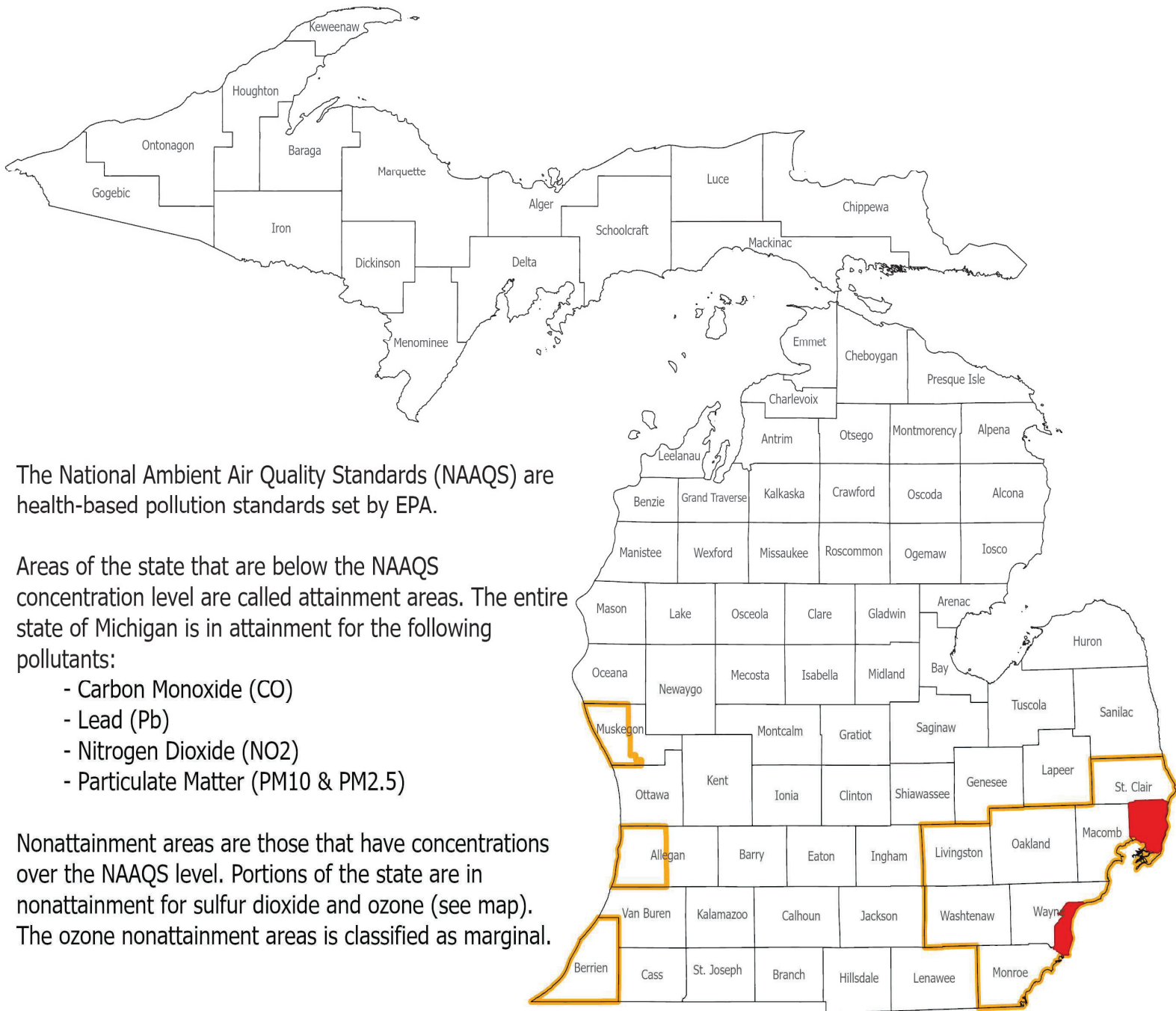
Sincerely,

A handwritten signature in blue ink that reads "Breanna Bukowski". The signature is written in a cursive, slightly slanted style.

Breanna Bukowski
Environmental Quality Analyst

cc: Mr. Michael Leslie, USEPA Region 5
Ms. Carmen E. Reverón-Rondón, U.S. Department of Housing and Urban Development
Mr. Donald Rencher, Director of Housing and Revitalization, City of Detroit
Ms. Penny Dwoinen, Environmental Compliance Manager, City of Detroit

Attainment Status for the National Ambient Air Quality Standards



The National Ambient Air Quality Standards (NAAQS) are health-based pollution standards set by EPA.

Areas of the state that are below the NAAQS concentration level are called attainment areas. The entire state of Michigan is in attainment for the following pollutants:

- Carbon Monoxide (CO)
- Lead (Pb)
- Nitrogen Dioxide (NO₂)
- Particulate Matter (PM₁₀ & PM_{2.5})

Nonattainment areas are those that have concentrations over the NAAQS level. Portions of the state are in nonattainment for sulfur dioxide and ozone (see map). The ozone nonattainment areas is classified as marginal.

LEGEND

- Sulfur Dioxide Nonattainment Area
- Ozone Nonattainment Area

See Page 2 for close-up maps of partial county nonattainment areas.

Updated February 5, 2021

Prepared by EGLE, Air Quality Division, State Implementation Plan Development Unit



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
WARREN DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

April 26, 2022

Brush Park MHT Limited Dividend Housing Association, LLC
c/o T. Van Fox, President
32500 Telegraph Road, Suite 100
Bingham Farms, Michigan 48025

Dear T. Van Fox:

SUBJECT: Notice of Approval of the Response Activity Plan – Remedial Action Plan for: Brush Park Development, 269 Winder Street (except portion of), 281 Winder Street, 291 Winder Street, and 2515 Brush Street, Detroit, Wayne County
Tax Identification Numbers: 01000595.002L, 01000596, 01000597, and 1000598-604; EGLE Site ID No. 82008686

The Michigan Department of Environment, Great Lake, and Energy (EGLE), Remediation and Redevelopment Division, has reviewed the Response Activity Plan – Remedial Action Plan for response activities to be undertaken at the properties identified as 269 Winder Street (except portion of), 281 Winder Street, 291 Winder Street, and 2515 Brush Street, Detroit, Wayne County, Michigan. The ResAP was submitted by ESGPW, LLC on behalf of Brush Park MHT Limited Dividend Housing Association, LLC on April 20, 2022, pursuant to Section 20114b(3) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). Based upon representations and information contained in the submittal, the response activities as proposed in the Response Activity Plan -Remedial Action Plan are approved.

This approval of the Response Activity Plan – Remedial Action Plan is for the undertaking of response activities to remediate contaminated soils and associated risk for the relevant pathways at the four parcels that comprise the Subject Property as identified in Section 6.0 of the response activity plan, received by EGLE on April 20, 2022, and is based upon the representations and information contained in this submittal.

EGLE expresses no opinion as to whether other conditions that may exist will be adequately addressed by the response activities that are proposed. Notwithstanding this approval, if environmental contamination is found to exist that is not addressed by the Response Activity Plan and you are otherwise liable for the contamination, additional response activities may be necessary.

If you should have further questions or concerns, please contact Ms. Jeanne Schlaufman, EGLE, RRD, Warren District Office, SchlaufmanJ1@Michigan.gov.

Sincerely,

Paul Owens, District Supervisor
Warren District Office
Remediation and Redevelopment Division

Enclosure

cc: Steve Guyot, ESGPW, LLC
Beth Vens, EGLE
Jeanne Schlaufman, EGLE



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Michigan Ecological Services Field Office
2651 Coolidge Road Suite 101
East Lansing, MI 48823-6360
Phone: (517) 351-2555 Fax: (517) 351-1443
<http://www.fws.gov/midwest/EastLansing/>

In Reply Refer To:
Project code: 2022-0038817
Project Name: Brush Park Apartments

May 03, 2022

Subject: Consistency letter for 'Brush Park Apartments' for threatened and endangered species that may occur in your proposed project location consistent with the Michigan Endangered Species Determination Key (Michigan DKey)

Dear Christy Bakos:

The U.S. Fish and Wildlife Service (Service) received on **May 03, 2022** your effect determination(s) for the 'Brush Park Apartments' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based on your answers and the assistance of the Service's Michigan DKey, you determined the proposed Action will have "No Effect" on the following species.

Species	Listing Status	Determination
Eastern Massasauga (=rattlesnake) (<i>Sistrurus catenatus</i>)	Threatened	No effect
Eastern Prairie Fringed Orchid (<i>Platanthera leucophaea</i>)	Threatened	No effect
Indiana Bat (<i>Myotis sodalis</i>)	Endangered	No effect
Northern Long-eared Bat (<i>Myotis septentrionalis</i>)	Threatened	No effect
Northern Riffleshell (<i>Epioblasma torulosa rangiana</i>)	Endangered	No effect
Piping Plover (<i>Charadrius melodus</i>)	Endangered	No effect
Red Knot (<i>Calidris canutus rufa</i>)	Threatened	No effect

Your agency has met consultation requirements for these species by informing the Service of the "No Effect" determinations. Please email a copy of this letter to MIFO_Dkey@fws.gov for our record keeping (include "No Effect for Project Name" in the subject line).

For non-Federal representatives: Please note that when a project requires consultation under section 7 of the Act, the Service must consult directly with the Federal action agency unless that

agency formally designates a non-Federal representative (50 CFR 402.08). Non-Federal representatives may prepare analyses or conduct informal consultations; however, the ultimate responsibility for section 7 compliance under the Act remains with the Federal agency. If the Federal agency concurs with your determination, the project as proposed has completed section 7 consultation. All documents and supporting correspondence should be provided to the Federal agency for their records.

Please provide sufficient project details on your project homepage in IPaC (Define Project, Project Description) to support your conclusions. Failure to disclose important aspects of your project that would influence the outcome of your effects determinations may negate your determinations and invalidate this letter. If you have site-specific information that leads you to believe a different determination is more appropriate for your project than what the Dkey concludes, you can and should proceed based on the best available information.

The Service recommends that you contact the Service or re-evaluate the project in IPaC if: 1) the scope or location of the proposed Action is changed; 2) new information reveals that the action may affect listed species or designated critical habitat in a manner or to an extent not previously considered; 3) the Action is modified in a manner that causes effects to listed species or designated critical habitat; or 4) a new species is listed or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project changes are final or resources committed.

Bald and Golden Eagles:

Bald eagles, golden eagles, and their nests are protected under the Bald and Golden Eagle Protection Act (54 Stat. 250, as amended, 16 U.S.C. 668a-d) (Eagle Act). The Eagle Act prohibits, except when authorized by an Eagle Act permit, the “taking” of bald and golden eagles and defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” The Eagle Act’s implementing regulations define disturb as “...to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

If the Action may impact bald or golden eagles, additional coordination with the Service under the Eagle Act may be required. For more information on eagles and conducting activities in the vicinity of an eagle nest, please visit <https://www.fws.gov/midwest/eagle/>. In addition, the Service developed the National Bald Eagle Management Guidelines (May 2007) in order to assist landowners in avoiding the disturbance of bald eagles. The full Guidelines are available at <http://www.fws.gov/midwest/eagle/pdf/NationalBaldEagleManagementGuidelines.pdf>.

If you have further questions regarding potential impacts to eagles, please contact Chris Mensing, Chris_Mensing@fws.gov or 517-351-2555.

Wetland impacts:

Section 404 of the Clean Water Act of 1977 (CWA) regulates the discharge of dredged or fill material into waters (including wetlands) of the United States. Regulations require that activities permitted under the CWA (including wetland permits issued by the Michigan Department of Environment, Great Lakes, and Energy (EGLE)) not jeopardize the continued existence of

species listed as endangered or threatened. Permits issued by the U.S. Army Corps of Engineers must also consider effects to listed species pursuant to section 7 of the Endangered Species Act. The Service provides comments to the agencies that may include permit conditions to help avoid or minimize impacts to wildlife resources including listed species. For this project, we consider the conservation measures you agreed to in the determination key and/or as part of your proposed action to be non-discretionary. If you apply for a wetland permit, these conservation measures should be explicitly incorporated as permit conditions. Include a copy of this letter in your wetland permit application to streamline the threatened and endangered species review process.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

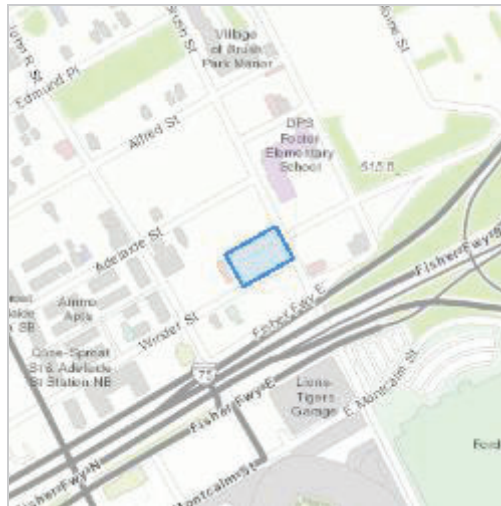
Brush Park Apartments

2. Description

The following description was provided for the project 'Brush Park Apartments':

The proposed project includes the construction of a four-story tall apartment building containing first floor retail spaces at the northwest corner of Winder and Brush Streets in the Brush Park neighborhood of Detroit. The building has an L-shaped footprint with the building facing Brush Street. A 29-space parking lot with landscaping and lighting is proposed to the west of the building and will be accessed via the alley. A green lawn with trees, a gazebo and walkway are proposed south of the parking lot along Winder Street.

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.3425531,-83.04973532270691,14z>



Qualification Interview

1. This determination key is intended to assist the user in the evaluating the effects of their actions on Federally listed species in Michigan. It does not cover other prohibited activities under the Endangered Species Act (e.g., for wildlife: import/export, Interstate or foreign commerce, possession of illegally taken wildlife, purposeful take for scientific purposes or to enhance the survival of a species, etc.; for plants: import/export, reduce to possession, malicious destruction on Federal lands, commercial sale, etc.) or other statutes. Click yes to acknowledge that you must consider other prohibitions of the ESA or other statutes outside of this determination key.

Yes

2. Is the action the approval of a long-term (i.e., in effect greater than 10 years) permit, plan, or other action?

No

3. Is the action being funded, authorized, or carried out by a Federal agency?

Yes

4. Does the action involve the installation or operation of wind turbines?

No

5. Does the action involve purposeful take of a listed animal?

No

6. Does the action involve a new communication tower?

No

7. Does the activity involve aerial or other large-scale application of any chemical (including insecticide, herbicide, etc.)?

No

8. Will your action permanently affect local hydrology by impacting 1/2 acre or more of wetland; or by increasing or decreasing groundwater or surfacewater elevations?

No

9. Will your action temporarily affect local hydrology by impacting 1/2 acre or more of wetland; or by increasing or decreasing groundwater or surfacewater elevations?

No

10. Will your project have any direct impacts to a stream or river (e.g., Horizontal Directional Drilling (HDD), hydrostatic testing, stream/road crossings, new storm-water outfall discharge, dams, other in-stream work, etc.)?

No

11. Does your project have the potential to indirectly impact the stream/river or the riparian zone (e.g., cut and fill, horizontal directional drilling, hydrostatic testing, construction, vegetation removal, discharge, etc.)?

No

12. Will your action disturb the ground or existing vegetation? This includes any off road vehicle access, soil compaction, digging, seismic survey, directional drilling, heavy equipment, grading, trenching, placement of fill, pesticide application, vegetation management (including removal or maintenance using equipment or chemicals), cultivation, development, etc.

Yes

13. Does your action area occur entirely within an already developed area with no natural habitat or trees present? For the purposes of this question, "already developed areas" are already paved, covered by existing structures, manicured lawns, industrial sites, or cultivated cropland, AND do not contain trees that could be roosting habitat. Be aware that listed species may occur in areas with natural, or semi-natural, vegetation immediately adjacent to existing utilities (e.g. roadways, railways) or within utility rights-of-way such as overhead transmission line corridors, and can utilize suitable trees, bridges, or culverts for roosting even in urban dominated landscapes (so these are NOT considered "already developed areas" for the purposes of this question).

Yes

14. Does the action have potential indirect effects to listed species or the habitats they depend on (e.g., water discharge into adjacent habitat or waterbody, changes in groundwater elevation, introduction of an exotic plant species)?

No

15. [Hidden Semantic] Does the action area intersect the Indiana bat AOI?

Automatically answered

Yes

16. Federally listed bats infrequently use anthropogenic structures for roosting, such as buildings, barns, sheds, and bat boxes. Are bats known to be roosting in a structure that occurs within your action area?

No

17. [Hidden Semantic] Does the action intersect the Eastern massasauga rattlesnake area of influence?

Automatically answered

Yes

18. [Semantic] Does the action area intersect the northern riffelshell area of influence?

Automatically answered

Yes

19. [Hidden Semantic] Does the action area intersect the piping plover area of influence?

Automatically answered

Yes

20. [Hidden Semantic] Does the action area intersect the rufa red knot area of influence?

Automatically answered

Yes

21. [Hidden Semantic] Does the action area intersect the area of influence for Eastern prairie fringed orchid?

Automatically answered

Yes

22. [Hidden Semantic] Does the action area intersect the Indiana bat area of influence?

Automatically answered

Yes

23. [Hidden Semantic] Does this project intersect the northern long-eared bat area of influence?

Automatically answered

Yes

IPaC User Contact Information

Agency: GRand Environmental, LLC

Name: Christy Bakos

Address: 3315 3 Mile Road NW

City: Walker

State: MI

Zip: 49534

Email: christy@grandenv.com

Phone: 6167323600

Lead Agency Contact Information

Lead Agency: Department of Housing and Urban Development



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Michigan Ecological Services Field Office
2651 Coolidge Road Suite 101
East Lansing, MI 48823-6360
Phone: (517) 351-2555 Fax: (517) 351-1443
<http://www.fws.gov/midwest/EastLansing/>

In Reply Refer To:
Project Code: 2022-0038817
Project Name: Brush Park Apartments

May 03, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

Official Species List

The attached species list identifies any Federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Under 50 CFR 402.12(e) (the regulations that implement section 7 of the Endangered Species Act), the accuracy of this species list should be verified after 90 days. You may verify the list by visiting the IPaC website (<https://ipac.ecosphere.fws.gov/>) at regular intervals during project planning and implementation. To update an Official Species List in IPaC: from the My Projects page, find the project, expand the row, and click Project Home. In the What's Next box on the Project Home page, there is a Request Updated List button to update your species list. Be sure to select an "official" species list for all projects.

Consultation requirements and next steps

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize Federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-Federal representative) must consult with the Fish and Wildlife Service if they determine their project may affect listed species or critical habitat.

There are two approaches to evaluating the effects of a project on listed species.

Approach 1. Use the All-species Michigan determination key in IPaC. This tool can assist you in

making determinations for listed species for some projects. In many cases, the determination key will provide an automated concurrence that completes all or significant parts of the consultation process. Therefore, we strongly recommend screening your project with the **All-Species Michigan Determination Key (Dkey)**. For additional information on using IPaC and available Determination Keys, visit https://www.fws.gov/midwest/EastLansing/te/pdf/MIFO_IPAC_instructions_v1_Jan2021.pdf. Please carefully review your Dkey output letter to determine whether additional steps are needed to complete the consultation process.

Approach 2. Evaluate the effects to listed species on your own without utilizing a determination key. Once you obtain your official species list, you are not required to continue in IPaC, although in most cases using a determination key should expedite your review. If the project is a Federal action, you should review our section 7 step-by-step instructions before making your determinations: <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. If you evaluate the details of your project and conclude “no effect,” document your findings, and your listed species review is complete; you do not need our concurrence on “no effect” determinations. If you cannot conclude “no effect,” you should coordinate/consult with the Michigan Ecological Services Field Office. The preferred method for submitting your project description and effects determination (if concurrence is needed) is electronically to EastLansing@fws.gov. Please include a copy of this official species list with your request.

For all **wind energy projects** and **projects that include installing communications towers that use guy wires**, please contact this field office directly for assistance, even if no Federally listed plants, animals or critical habitat are present within your proposed project area or may be affected by your proposed project.

Migratory Birds

Please see the “Migratory Birds” section below for important information regarding incorporating migratory birds into your project planning. Our Migratory Bird Program has developed recommendations, best practices, and other tools to help project proponents voluntarily reduce impacts to birds and their habitats. The Bald and Golden Eagle Protection Act prohibits the take and disturbance of eagles without a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <https://www.fws.gov/midwest/eagle/permits/index.html> to help you avoid impacting eagles or determine if a permit may be necessary.

Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/administrative-orders/executive-orders.php>.

We appreciate your consideration of threatened and endangered species during your project planning. Please include a copy of this letter with any request for consultation or correspondence

about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Michigan Ecological Services Field Office

2651 Coolidge Road Suite 101

East Lansing, MI 48823-6360

(517) 351-2555

Project Summary

Project Code: 2022-0038817

Event Code: None

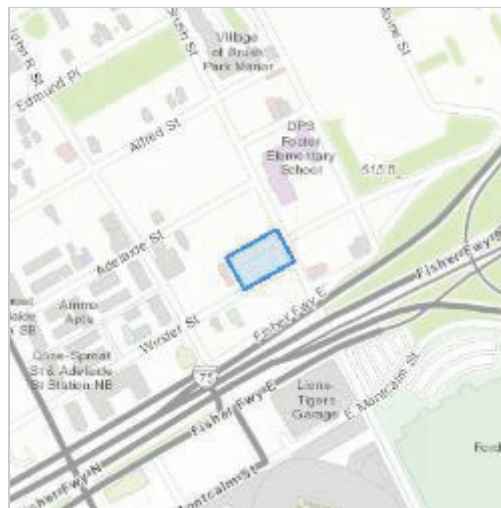
Project Name: Brush Park Apartments

Project Type: Commercial Development

Project Description: The proposed project includes the construction of a four-story tall apartment building containing first floor retail spaces at the northwest corner of Winder and Brush Streets in the Brush Park neighborhood of Detroit. The building has an L-shaped footprint with the building facing Brush Street. A 29-space parking lot with landscaping and lighting is proposed to the west of the building and will be accessed via the alley. A green lawn with trees, a gazebo and walkway are proposed south of the parking lot along Winder Street.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@42.3425531,-83.04973532270691,14z>



Counties: Wayne County, Michigan

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949 General project design guidelines: https://ipac.ecosphere.fws.gov/project/QTQ36M3XOVAZ3FNKUNCI5JNVEI/documents/generated/5663.pdf	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 General project design guidelines: https://ipac.ecosphere.fws.gov/project/QTQ36M3XOVAZ3FNKUNCI5JNVEI/documents/generated/5664.pdf	Threatened

Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> Population: [Great Lakes watershed DPS] - Great Lakes, watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.) There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6039	Endangered
Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

Reptiles

NAME	STATUS
Eastern Massasauga (=rattlesnake) <i>Sistrurus catenatus</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> For all Projects: Project is within EMR Range Species profile: https://ecos.fws.gov/ecp/species/2202 General project design guidelines: https://ipac.ecosphere.fws.gov/project/QTQ36M3XOVAZ3FNKUNCI5JNVEI/documents/generated/5280.pdf	Threatened

Clams

NAME	STATUS
Northern Riffleshell <i>Epioblasma torulosa rangiana</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/527	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid <i>Platanthera leucophaea</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31

NAME	BREEDING SEASON
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see

below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

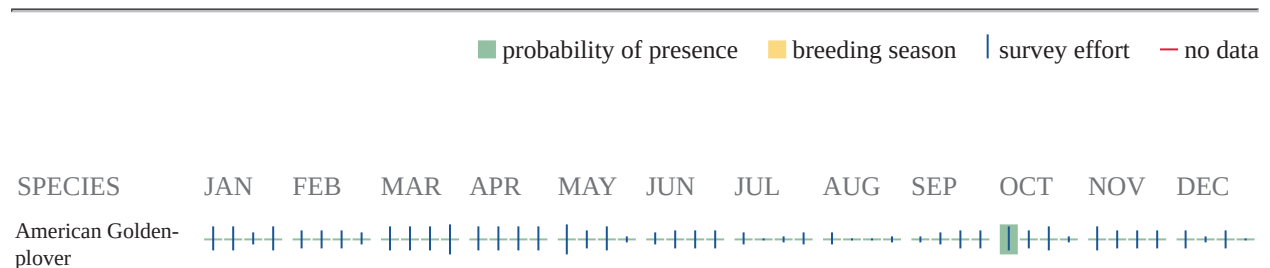
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very

helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPaC User Contact Information

Agency: GRand Environmental, LLC

Name: Christy Bakos

Address: 3315 3 Mile Road NW

City: Walker

State: MI

Zip: 49534

Email: christy@grandenv.com

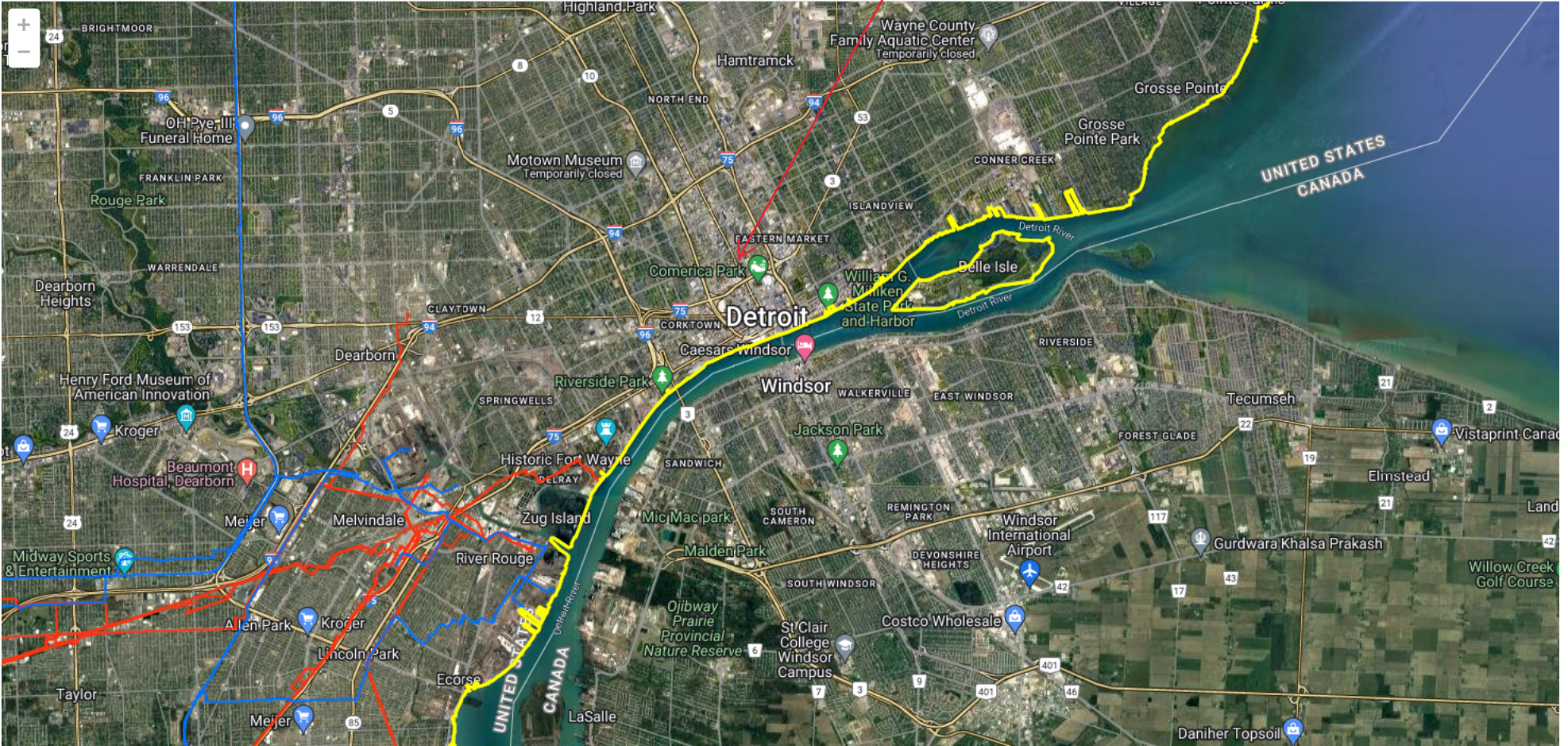
Phone: 6167323600

Lead Agency Contact Information

Lead Agency: Department of Housing and Urban Development

Subject Property

Map Layers | Query Tools



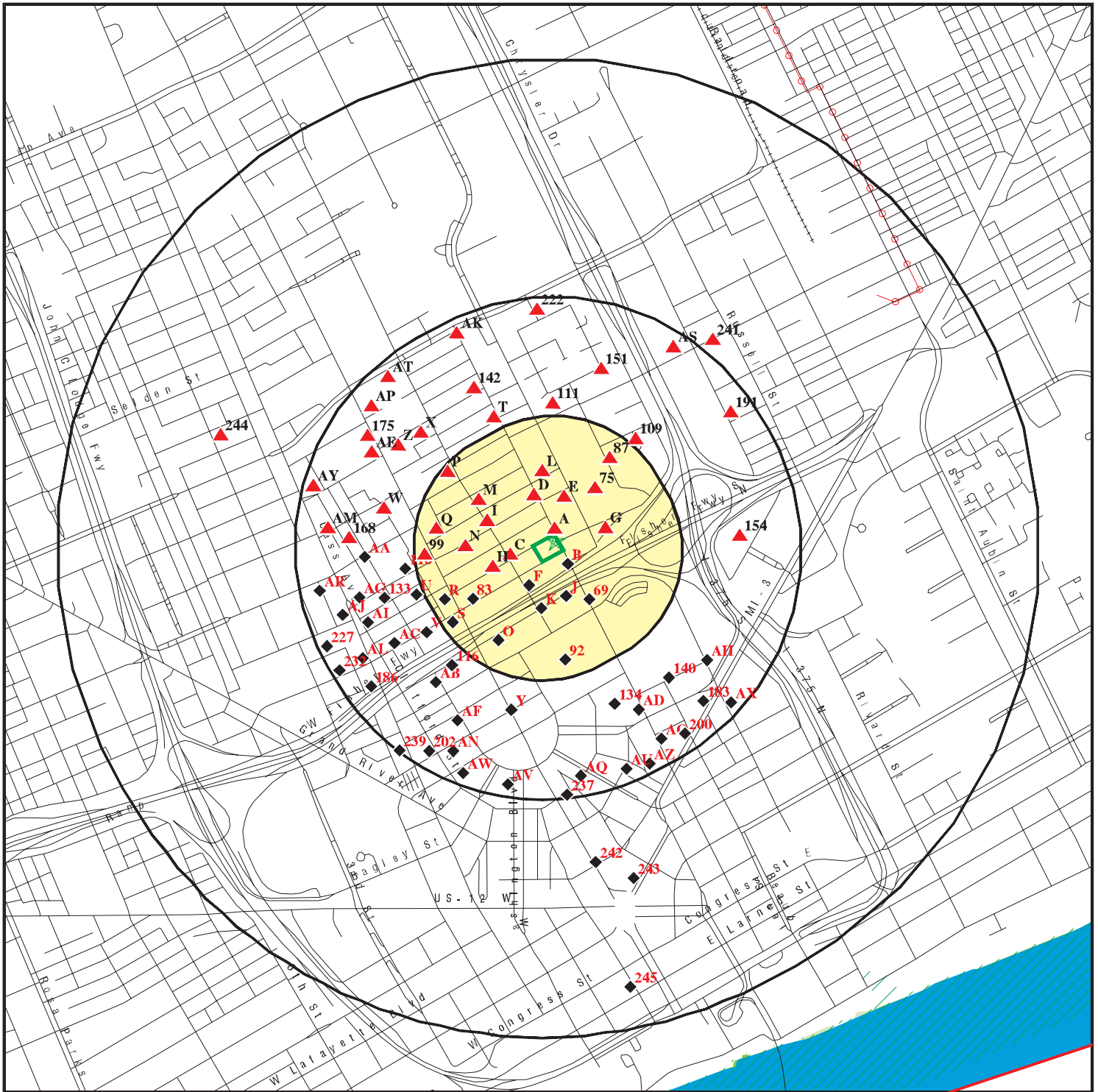
2 mi

Google

Ready | Zoom Level: 12 of 19 (1:108,336) | (lat, long): 42.404153, -82.657675

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OVERVIEW MAP - 6280137.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

County Boundary

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 2515 Brush and 255, 269, 281, and 291 Winder
 ADDRESS: 2515 Brush and 255, 269, 281, and 291 Winder
 Detroit MI 48201
 LAT/LONG: 42.342752 / 83.049477

CLIENT: AKT Peerless Env. Services
 CONTACT: Julie Barton
 INQUIRY #: 6280137.2S
 DATE: November 25, 2020 8:35 am

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250		5	6	NR	NR	NR	11
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AUL	0.500		0	1	3	NR	NR	4
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	1	6	NR	NR	7
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	3	NR	NR	3
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	0	NR	NR	0
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
PART 201	1.000		0	1	2	5	NR	8
INVENTORY	0.500		6	15	91	NR	NR	112
CDL	TP		NR	NR	NR	NR	NR	0
DEL PART 201	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		4	2	NR	NR	NR	6
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0



Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 908
Detroit, Michigan 48226

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

April 18, 2022

Penny Dwoinen
City of Detroit Housing & Revitalization Department
Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 908
Detroit, MI 48226

RE: Section 106 Review of a City of Detroit HOME-Funded Brush Park Apartment Project Located at 269 Winder in the City of Detroit, Wayne County, Michigan (Section 106 ID# 42815)

Dear Mrs. Dwoinen,

Under the authority of the National Historic Preservation Act (NHPA) of 1966, as amended, and the "Programmatic Agreement between the Michigan State Historic Preservation Office and the City of Detroit, Michigan..." dated November 9, 2016, the City of Detroit has reviewed the above-cited project and has determined it to be an undertaking as defined by 36 CFR 800.16(y).

Based on the information submitted to this office on 12/17/2020, we have determined a Historic Property is located within in the Area of Potential Effects (APE) for this project. The project is located within the Brush Park Local Historic District and six historic properties are included in the area of potential effect. Therefore, per Stipulation V.B of the Programmatic Agreement (PA), the project shall be carried out in accordance with the *Secretary of the Interior's Standards for Rehabilitation*.

Additionally, per Stipulation VI.C and VII of Programmatic Agreement (PA), the proposed undertaking qualifies for review by the State Historic Preservation Office (SHPO) archaeologist since the site is larger than ½-acre and will include ground disturbing activities. On 9/22/2021 an Archaeological Phase I and II Trench Excavation Report, completed by Misty M. Jackson, Ph.D., was submitted to SHPO.

On 3/7/2022, plans for construction monitoring and site avoidance were submitted to SHPO. On 4/18/22, SHPO indicated these plans would result in no adverse effect on the historic feature, assigned site number 20WN123. The site avoidance plan calls for the area of the feature to be fenced during construction and capped by the placement of a demarcation fabric or snow fencing over the feature and then capping it with approximately 8 inches of limestone base and topped with a 5-inch-thick layer of asphalt. The limestone and asphalt are to be laid by hand. A consulting archaeologist will be on-site to observe the construction over the feature. For the long-term preservation of the feature, the asphalt will remain in place and a copy of the Site Avoidance Plan will be kept onsite.



Housing and Revitalization
Department

Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 908
Detroit, Michigan 48226

Phone: 313.224.6380
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This project has been given a **Conditional No Adverse Effect** determination (Federal Regulations 36 CFR Part 800.5(b)) on properties that are listed or eligible for listing in the National Register of Historic Places, as long at the following conditions are met:

- Construction monitoring and site avoidance plan approved by SHPO on 3/14/22 is followed
- Any additional changes to the scope of work for the project shall be submitted to the Preservation Specialist for review and approval prior to the start of any work.
- Photos of the completed work are submitted to the Preservation Specialist

Please note that the Section 106 Review process will not be complete until the above-mentioned conditions are met. If you have any questions, you may contact the Preservation Specialist at Ciavattone@detroitmi.gov.

Sincerely,

A handwritten signature in blue ink that reads "Tiffany Ciavattone". The signature is written in a cursive, flowing style.

Tiffany Ciavattone
Preservation Specialist
City of Detroit
Housing & Revitalization Department

Noise Assessment
Brush Park South-West of Brush
Adelaide, Brush and Winder Streets
Detroit, Michigan

MHT Housing, Inc.

January 20, 2020

ASTI ENVIRONMENTAL



Noise Assessment
Brush Park South - West of Brush
Adelaide, Brush, and Winder Streets
Detroit, Michigan

January 20, 2020

Report Prepared For:

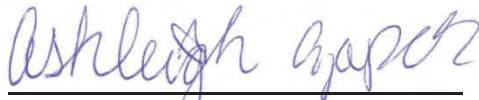
MHT Housing, Inc.
32600 Telegraph Road, Suite 102
Bingham Farms, Michigan 48025

Report Prepared By:

ASTI Environmental
10448 Citation Drive, Suite 100
Brighton, Michigan 48116
800-395-ASTI

ASTI Project No. 3-9819

Report Prepared by:



Ashleigh Czapek
Associate I

Report Reviewed by:



Pamela Chapman, PE, EP
Phase I Group Leader



TABLE OF CONTENTS

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ATTACHMENTS

- A** NAL Location Map
- B** Airport Noise Contour Map
- C** AADT Information
- D** Day-Night Level Electronic Assessments

1.0 INTRODUCTION

MHT Housing, Inc. proposes the new construction utilizing federal source(s) of funding provided from the Michigan State Housing Development Authority (MSHDA) for the proposed "Brush Park South - West of Brush" located on Adelaide, Brush, and Winder Streets in Detroit, Wayne County, Michigan, referred to herein as "Subject Property".

This assessment was conducted to provide the noise level and associated noise category at each designated Noise Assessment Location (NAL) at the Subject Property. This assessment does not include an evaluation of noise attenuation but general guidance is provided at the end of this assessment.

This evaluation was conducted per guidelines set forth in 24 CFR 51B. This noise analysis evaluates the Subject Property's exposure to three major sources of noise: aircraft, roadways, and railways. If identified, additional non-transportation noise sources such as loud impulse sounds from nearby industry are also evaluated.

The following three sources of transportation noise and their applicable search distances are outlined below when evaluating noise at a site.

1. Aircraft - All military and FAA-regulated civil airfields within 15 miles of the Subject Property.
2. Roadways - Major roadways and limited access highways/freeways within 1,000 feet of the Subject Property utilizing a 10-year projection. Roadways considered are generally based on number of lanes, speed limit, presence of stop signs or lights, overall traffic counts, and/or number of medium or heavy trucks.
3. Railroad - All active railroads within 3,000 feet of the Subject Property.

The noise level calculated at a NAL is known as the day-night average sound level or DNL. A calculated DNL can fall within three categories as follow.

1. Acceptable - DNL not exceeding 65 decibels (dB)
2. Normally Unacceptable - DNL above the 65 dB threshold but not exceeding 75 dB
3. Unacceptable - DNL above 75 dB

One NAL (NAL #1) on the Subject Property was used for this analysis based on proximity to noise sources. A map with the Subject Property boundaries, buildings, and NAL is included as Attachment A.

The following is a summary of the applicable noise sources identified at the NAL.

NAL #1

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A Young International Airport	4.46 miles
	Windsor International Airport	6.25 miles
Busy Road(s)	I-75/I-375 Ramp	515 feet
	John R	540 feet
	I-75	625 feet
Railroad(s)	None	NA
Non-Transportation	None	NA

2.0 EVALUATION OF NOISE SOURCES

2.1 Airports

Coleman A. Young International Airport is located approximately 4.46 miles distant. Based on the Noise Contour Map for the airport (Attachment B), the site is not within a distance of concern.

Windsor International Airport is located approximately 6.25 miles distant. Noise contour maps are not available but based on the distance, this airport is not considered a noise concern.

Other small airfields were identified within 15 miles but these airfields have no commercial traffic and are not likely FAA-regulated. They are not considered to represent a noise concern.

2.2 Busy Roadways

The major roadways near the site are:

- I-75/I-375 Ramp
- John R
- Fisher Freeway (I-75)

The Fisher Freeway (I-75) and I-375 interchange has a number of ramps and lanes to the east, south and southeast of the property. The posted speed limit is 55 mph. Directly south of the property, I-75 is a sunken freeway which will provide some noise attenuation based on the presence of the barrier wall. However, directly to the east-southeast of the property, the highway is not sunken. The highest noise levels at the property are presumed to be from areas to the east-southeast. Measurements the NAL were taken from the at-grade portions of the freeway instead of the sunken areas that are closer. John R is a four-lane road and the speed limit is 25 mph near the Subject Property. Traffic counts for all roadways were obtained through MDOT and projections were done through 2030. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable or decrease slightly. Traffic projections are included in Attachment C.

2.3 Railroads

Not applicable.

2.4 Non-Transportation Sources

Not applicable.

3.0 CALCULATIONS

A noise DNL calculator worksheet for each of the NALs is provided in Attachment D.

Using the HUD DNL calculator, the noise level at NAL #1, as predicted in 2030, is calculated to be 70.8 dB and within the Normally Unacceptable range.

4.0 CONCLUSIONS

The following is a summary of the findings of this assessment.

NAL #	Combined Source DNL (dB)	Category
1	70.8	Normally Unacceptable

5.0 REFERENCES

- 24 CFR Part 51 Subpart B
- The Noise Guidebook, U.S. Department of Housing and Urban Development
- U.S. DOT
- <https://mdot.ms2soft.com>
- <https://www.hudexchange.info/programs/environmental-review/dnl-calculator/>

HUD ATTENUATION GUIDANCE

<https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/>

All sites whose environmental or community noise exposure exceeds the day night average sound level (DNL) of 65 decibels (dB) are considered noise-impacted areas. For new construction that is proposed in high noise areas, grantees shall incorporate noise attenuation features to the extent required by HUD environmental criteria and standards contained in Subpart B (Noise Abatement and Control) of 24 CFR Part 51. The interior standard is 45 dB.

The "Normally Unacceptable" noise zone includes community noise levels from above 65 dB to 75 dB. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dB but does not exceed 70 dB, or a minimum of 10 dB of additional sound attenuation if the day-night average sound level is greater than 70 dB but does not exceed 75 dB.

Locations with day-night average noise levels above 75 dB have "Unacceptable" noise exposure. For new construction, noise attenuation measures in these locations require the approval of the Assistant Secretary for Community Planning and Development (for projects reviewed under Part 50) or the Responsible Entity's Certifying Officer (for projects reviewed under Part 58). The acceptance of such locations normally requires an environmental impact statement.

The environmental review record should contain **one** of the following:

- Documentation the proposed action is not within 1000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated civil airfield.
- If within those distances, documentation showing the noise level is *Acceptable* (at or below 65 DNL).
- If within those distances, documentation showing that there's an effective noise barrier (i.e., that provides sufficient protection).

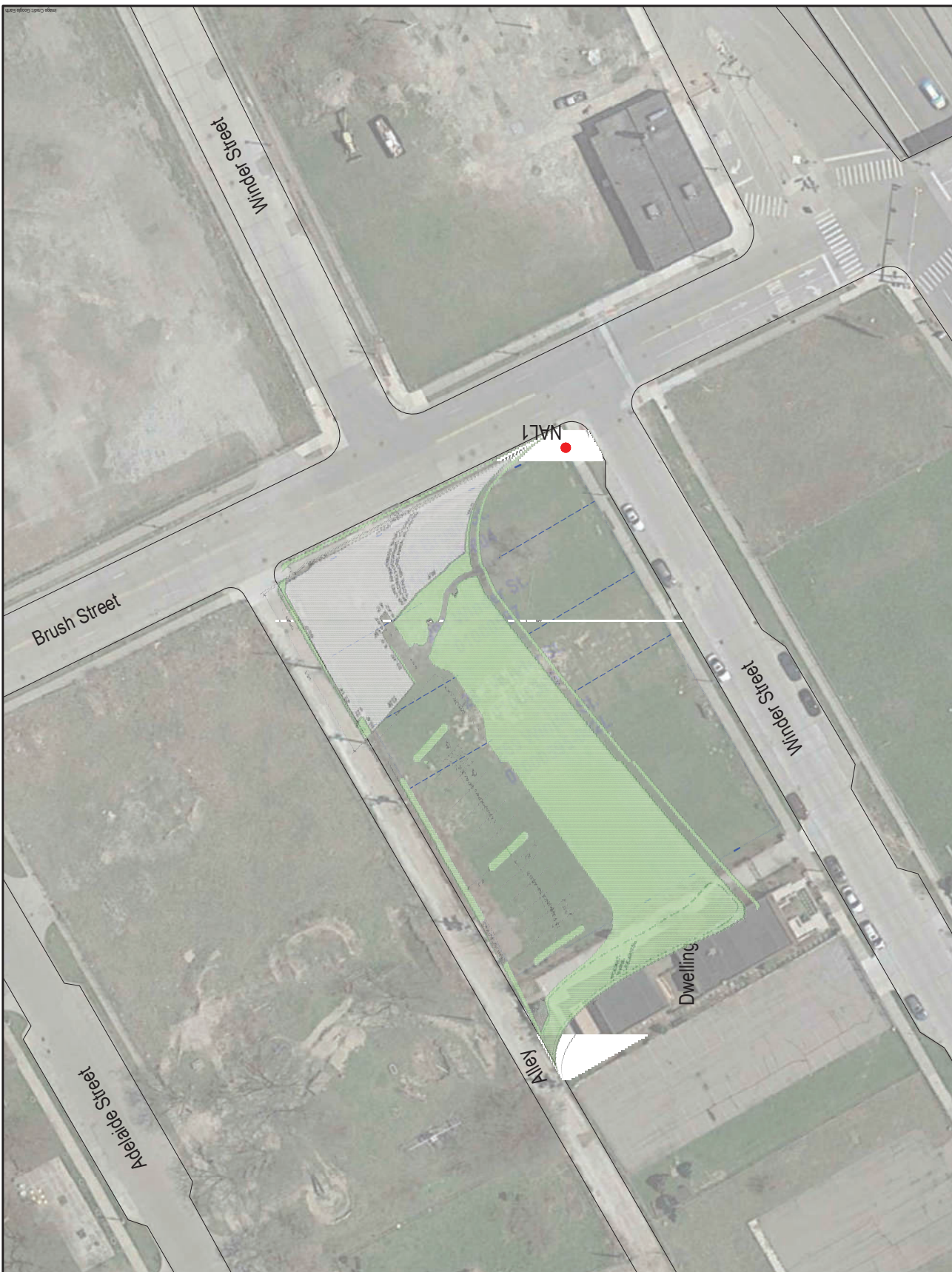
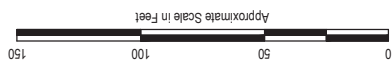
- Documentation showing the noise generated by the noise source(s) is *Normally Unacceptable* (66 – 75 DNL) and identifying noise attenuation requirements that will bring the interior noise level to 45 DNL and/or exterior noise level to 65 DNL.

ATTACHMENT A

NAL Location Map

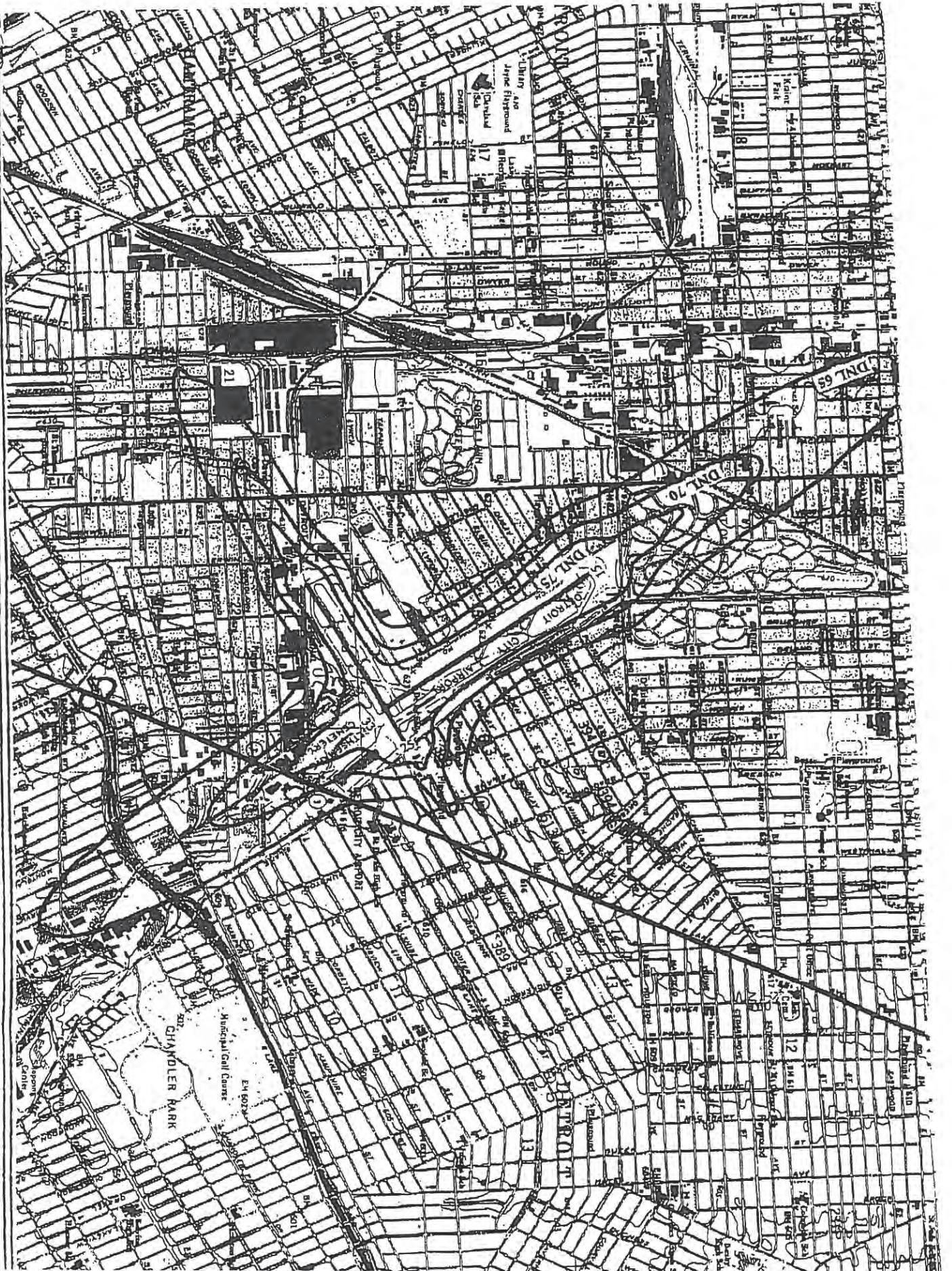


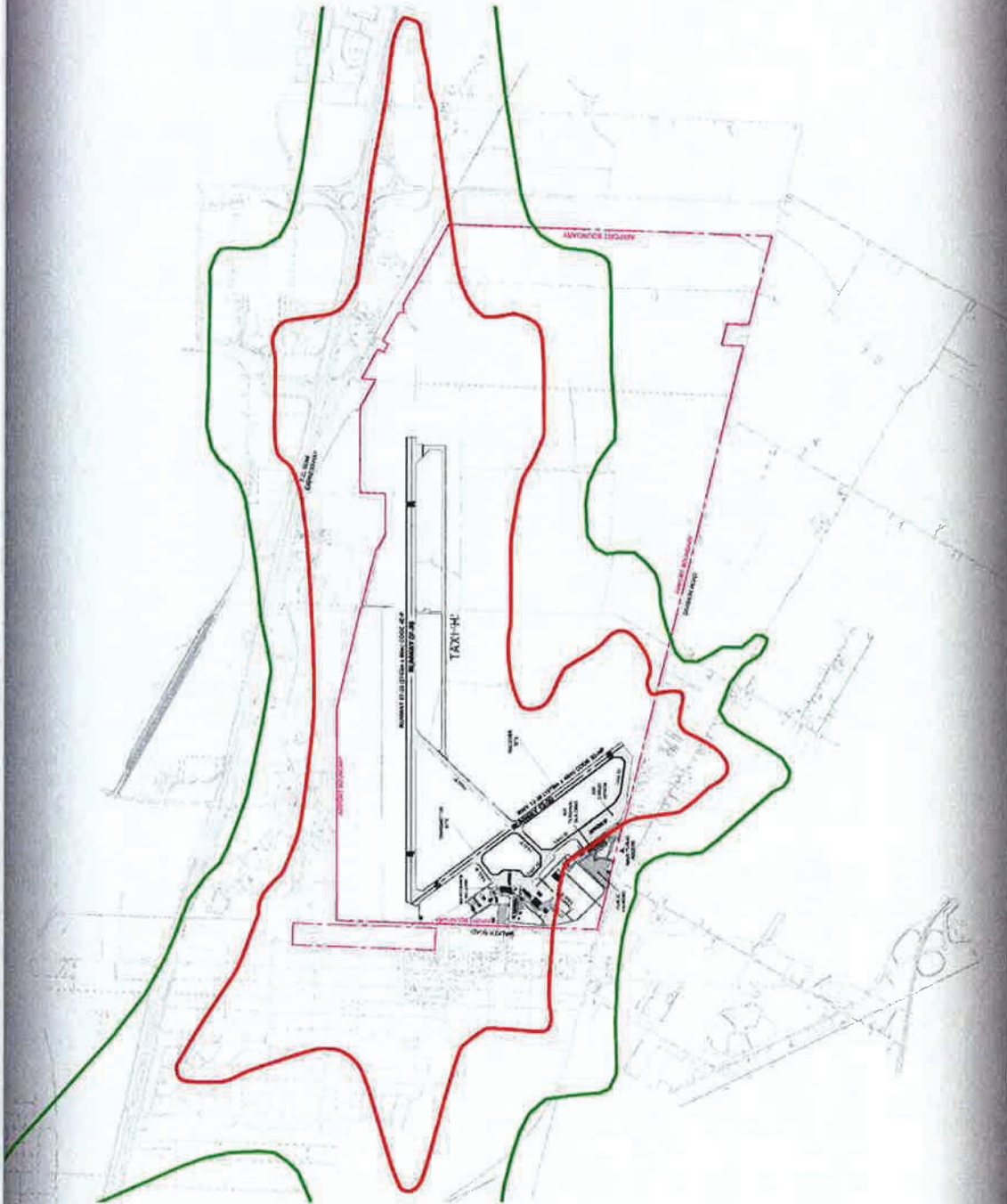
LEGEND
Property Line
Parcel Line
Noise Assessment Location



ATTACHMENT B

Airport Noise Contour Maps





**WINDSOR AIRPORT
MASTER PLAN**

**FIGURE 3-4 - AIRPORT NOISE
EXPOSURE FORECAST CONTOURS**



— 30 NEF (NOISE EXPOSURE FORECAST)
— 25 NEF

- Notes
1. Conceptual Layout
 2. All dimensions approximate
 3. Noise Exposure Forecast provided by Windsor Airport Management

Base data provided by City of Windsor Official Plan
 Map created by EDH
 Map checked by EDL

File Location: \\20dillon.dillon.ca\toronto_data\PROJECTS\DRIFT\091092665 Windsor Airport Master Plan

Map Projection: n/a TAXI 'H'

Project #: 09-2665
 Status: N/A
 Date: December 2019



ATTACHMENT C
AADT Information

Auto and Heavy Truck 10-year ADT Projections

I-75 Off Ramp

	Cars	% Change	Trucks	% Change
2016	30585		3780.15	
2017	30921	1.1	3821.73	1.1
	% Change/Year Assumption	1	%/Year Change Assumption	1

2030 Projections

	Cars	Trucks
2017	30921	3822
2018	31230	3860
2019	31543	3899
2020	31858	3938
2021	32177	3977
2022	32499	4017
2023	32824	4057
2024	33152	4097
2025	33483	4138
2026	33818	4180
2027	34156	4222
2028	34498	4264
2029	34843	4306
2030	35191	4349

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
35191	4349

Auto and Heavy Truck 10-year ADT Projections

John R

	Cars	% Change	Trucks	% Change
2016	5248		456.32	
2017	5463	4.1	475.04	4.1
2018	5463	0.0	475.04	0.0
Avg % change:		2.1	Avg % change:	
% Change/Year Assumption		1	% /Year Change Assumption	
				1

2030 Projections

	Cars	Trucks
2018	5463	475
2019	5518	480
2020	5573	485
2021	5628	489
2022	5685	494
2023	5742	499
2024	5799	504
2025	5857	509
2026	5916	514
2027	5975	520
2028	6035	525
2029	6095	530
2030	6156	535

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
6156	535

Auto and Heavy Truck 10-year ADT Projections

F-75

	Cars	% Change	Trucks	% Change
2012	70399		8701	
2014	78104	10.9	9653.27	10.9
2016	76540	-2.0	9460	-2.0
2017	69572	-9.1	8598.81	-9.1
2018	63155	-9.2	7805.71	-9.2
	Avg % change: -2.3		Avg % change: -2.35	
	Avg % change (Last 5-yr Trend): -2.3		Avg % change (Last 5-yr Trend): -2.35	
	% Change/Year Assumption 1		%Year Change Assumption 1	

2030 Projections

	Cars	Trucks
2018	63155	7806
2019	63787	7884
2020	64425	7963
2021	65069	8042
2022	65720	8123
2023	66377	8204
2024	67041	8286
2025	67711	8369
2026	68388	8452
2027	69072	8537
2028	69763	8622
2029	70460	8709
2030	71165	8796

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
71165	8796

ATTACHMENT D

Day-Night Level Electronic Assessments

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	3-9819
Record Date	01/20/2020
User's Name	ASTI Environmental NAL1
Road # 1 Name:	I-75/I-375 Ramp

Road #1

Vehicle Type	Cars ■	Medium Trucks ■	Heavy Trucks ■
Effective Distance	515	515	515
Distance to Stop Sign			
Average Speed	55	55	55
Average Daily Trips (ADT)	35191	791	3558
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	58.5051	52.0226	65.8671
Calculate Road #1 DNL	66.7754	Reset	

Road # 2 Name:

Road #2

Vehicle Type	Cars ■	Medium Trucks ■	Heavy Trucks ■
Effective Distance	540	540	540
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	6156	268	267
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	43.7766	40.1649	53.5041
Calculate Road #2 DNL	54.093	Reset	

Road # 2 Name:

Road # 3 Name:

Road #3

Vehicle Type	Cars <input type="checkbox"/>	Medium Trucks <input type="checkbox"/>	Heavy Trucks <input type="checkbox"/>
Effective Distance	<input type="text" value="625"/>	<input type="text" value="625"/>	<input type="text" value="625"/>
Distance to Stop Sign	<input type="text"/>	<input type="text"/>	<input type="text"/>
Average Speed	<input type="text" value="55"/>	<input type="text" value="55"/>	<input type="text" value="55"/>
Average Daily Trips (ADT)	<input type="text" value="71165"/>	<input type="text" value="1599"/>	<input type="text" value="7197"/>
Night Fraction of ADT	<input type="text" value="15"/>	<input type="text" value="15"/>	<input type="text" value="15"/>
Road Gradient (%)	<input type="text"/>	<input type="text"/>	<input type="text" value="2"/>
Vehicle DNL	<input type="text" value="60.3024"/>	<input type="text" value="53.8182"/>	<input type="text" value="67.6655"/>
<input type="button" value="Calculate Road #3 DNL"/>	<input type="text" value="68.5735"/>	<input type="button" value="Reset"/>	

Airport Noise Level

Loud Impulse Sounds? Yes No

Combined DNL for all Road and Rail sources

Combined DNL including Airport

Site DNL with Loud Impulse Sound

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - **Contact your Field or Regional Environmental Officer** (</programs/environmental-review/hud-environmental-staff-contacts/>)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers. See *The Noise Guidebook* (</resource/313/hud-noise-guidebook/>)
 - Construct noise barrier. See the **Barrier Performance Module** (</programs/environmental-review/bpm-calculator/>)

Tools and Guidance

[Day/Night Noise Level Assessment Tool User Guide \(/resource/3822/day-night-noise-level-assessment-tool-user-guide/\)](/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

[Day/Night Noise Level Assessment Tool Flowcharts \(/resource/3823/day-night-noise-level-assessment-tool-flowcharts/\)](/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Home (/) > STraCAT

Sound Transmission Classification Assessment Tool (STraCAT)

Overview

The Sound Transmission Classification Assessment Tool (STraCAT) is an electronic version of Figures 17 and 19 in The HUD Noise Guidebook. The purpose of this tool is to document sound attenuation performance of wall systems. Based on wall, window, and door Sound Transmission Classification (STC) values, the STraCAT generates a composite STC value for the wall assembly as a whole. Users can enter the calculated noise level related to a specific Noise Assessment Location in front of a building façade and STraCAT will generate a target required attenuation value for the wall assembly in STC. Based on wall materials, the tool will state whether the composite wall assembly STC meets the required attenuation value.

How to Use This Tool

Location, Noise Level and Wall Configuration to Be Analyzed

STraCAT is designed to calculate the attenuation provided by the wall assembly for one wall of one unit. If unit exterior square footage and window/door configuration is identical around the structure, a single STraCAT may be sufficient. If units vary, at least one STraCAT should be completed for each different exterior unit wall configuration to document that all will achieve the required attenuation. Additionally, if attenuation is not based on a single worst-case NAL, but there are multiple NALs which require different levels of attenuation around the structure, a STraCAT should be completed for each differing exterior wall configuration associated with each NAL.

Exterior wall configurations associated with an NAL include those with parallel (facing) or near-parallel exposure as well as those with perpendicular exposure. When a façade has parallel or perpendicular exposure to two or more NALs, you should base the required attenuation on the NAL with the highest calculated noise level. For corner units where the unit interior receives exterior noise through two facades, the STraCAT calculation should incorporate the area of wall, window and door materials pertaining to the corner unit's total exterior wall area (i.e., from both walls).

Information to Be Entered

Users first enter basic project information and the NAL noise level that will be used as the basis for required attenuation. This noise level must be entered in whole numbers. STraCAT users then enter information on wall, window and door component type and area. Again, as noted above, the wall, window and door entries are based on one unit, and one wall (except for corner units as discussed above). The tool sums total wall square footage based on the combined area of walls, doors and windows for the façade being evaluated.

Users may input STC values for materials in one of two ways. The tool includes a dropdown menu

of common construction materials with STC values prefilled. If selected construction materials are not included in this dropdown menu, the user may also enter the STC for a given component manually. Verification of the component STC must be included in the ERR. Documentation includes the architect or construction manager's project plans showing wall material specifications. For new construction or for components that will be newly installed in an existing wall, documentation also includes the manufacturer's product specification sheet (cut sheet) documenting the STC rating of selected doors and windows.

Required STC Rating and Determination of Compliance

Finally, based on project information entered the tool will indicate the required STC rating for the wall assembly being evaluated and whether or not the materials specified will produce a combined rating that meets this requirement. Note that for noise levels above 75 dB DNL, either HUD (for 24 CFR Part 50 reviews) or the Responsible Entity (for 24 CFR Part 58 reviews) must approve the level and type of attenuation, among other processing requirements. Required attenuation values generated by STraCAT for NALs above 75 dB DNL should therefore be considered tentative pending approval by HUD or the RE.

Part I - Description

Project

Brush Park Apartments

Sponsor/Developer

MHT Construction

Location

Detroit, MI

Prepared by

Kem-Tec & Associates

Noise Level

71

Date

3/25/2022



Primary Source(s)

ASTI Environmental

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail

Area

STC

1" Fiberglass reinforced concrete panels, 1/2" air space, 3/4" insulation board, 2"x6" wood studs 16" o.c., 1/2" gypsum board on resilient channels, 3 1/2" fiberglass insulation.

8397

56

Add new wall

8,397 Sq. Feet 56

Window Construction Detail

Quantity

Sq Ft/Unit

STC

32"x24"x24" wood-framed aluminum clad double-hung window each sash has one 3/32" and one 1/8" glass panel 13/16" air space

60

10.67

29

6'x5' wood-framed picture window single panel glazed double strength with storm sash 3 3/4" air space

37

30

38

Add new window

Door Construction Detail

Quantity

Sq Ft/Unit

STC

3'x7' hollow-core wood door 1 3/4" thick 30% glazed with 1/8" glass

3

21

19

Add new door

Part III - Results

Part III - Results**Wall Statistics**

Stat	Value
Area:	8397 ft ²
Wall STC:	56

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	97	ft ²	20.84%
Doors:	3	63 ft²	0.75%

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	71
Combined STC for wall assembly:	36.71
Required STC rating:	30
Does wall assembly meet requirements?	Yes

Print

Part 4 - Tins

FACT TIPS

What do you do if the preferred wall design is not sufficient to achieve the required attenuation? Another wall design with more substantial materials will work, but may not be the most cost-effective solution. Try adding some other elements for just a little more attenuation.

For example:

- Staggering the studs in a wall offers approximately 4dB of additional protection.
- Increasing the stud spacing from 16" on center to 24" can increase the STC from 2-5dB.
- Adding a 2" air space can provide 3dB more attenuation.
- Increasing a wall's air space from 3" to 6" can reduce noise levels by an additional 5dB.
- Adding a layer of ½" gypsum board on "Z" furring channels adds 2dB of attenuation.
- Using resilient channels and clips between wall panels and studs can improve the STC from 2-5dB.
- Adding a layer of ½" gypsum board on resilient channels adds 5dB of attenuation.
- Adding acoustical or isolation blankets to a wall's airspace can add 4-10dB of attenuation.
- A 1" rockwool acoustical blanket adds 3dB to the wall's STC.
- Filling the cells of lightweight concrete masonry units with expanded mineral loose-fill insulation adds 2dB to the STC.

[Home \(/\)](#) > STraCAT

Sound Transmission Classification Assessment Tool (STraCAT)

Overview

The Sound Transmission Classification Assessment Tool (STraCAT) is an electronic version of Figures 17 and 19 in The HUD Noise Guidebook. The purpose of this tool is to document sound attenuation performance of wall systems. Based on wall, window, and door Sound Transmission Classification (STC) values, the STraCAT generates a composite STC value for the wall assembly as a whole. Users can enter the calculated noise level related to a specific Noise Assessment Location in front of a building façade and STraCAT will generate a target required attenuation value for the wall assembly in STC. Based on wall materials, the tool will state whether the composite wall assembly STC meets the required attenuation value.

How to Use This Tool

Location, Noise Level and Wall Configuration to Be Analyzed

STraCAT is designed to calculate the attenuation provided by the wall assembly for one wall of one unit. If unit exterior square footage and window/door configuration is identical around the structure, a single STraCAT may be sufficient. If units vary, at least one STraCAT should be completed for each different exterior unit wall configuration to document that all will achieve the required attenuation. Additionally, if attenuation is not based on a single worst-case NAL, but there are multiple NALs which require different levels of attenuation around the structure, a STraCAT should be completed for each differing exterior wall configuration associated with each NAL.

Exterior wall configurations associated with an NAL include those with parallel (facing) or near-parallel exposure as well as those with perpendicular exposure. When a façade has parallel or perpendicular exposure to two or more NALs, you should base the required attenuation on the NAL with the highest calculated noise level. For corner units where the unit interior receives exterior noise through two facades, the STraCAT calculation should incorporate the area of wall, window and door materials pertaining to the corner unit's total exterior wall area (i.e., from both walls).

Information to Be Entered

Users first enter basic project information and the NAL noise level that will be used as the basis for required attenuation. This noise level must be entered in whole numbers. STraCAT users then enter information on wall, window and door component type and area. Again, as noted above, the wall, window and door entries are based on one unit, and one wall (except for corner units as discussed above). The tool sums total wall square footage based on the combined area of walls, doors and windows for the façade being evaluated.

Users may input STC values for materials in one of two ways. The tool includes a dropdown menu

of common construction materials with STC values prefilled. If selected construction materials are not included in this dropdown menu, the user may also enter the STC for a given component manually. Verification of the component STC must be included in the ERR. Documentation includes the architect or construction manager's project plans showing wall material specifications. For new construction or for components that will be newly installed in an existing wall, documentation also includes the manufacturer's product specification sheet (cut sheet) documenting the STC rating of selected doors and windows.

Required STC Rating and Determination of Compliance

Finally, based on project information entered the tool will indicate the required STC rating for the wall assembly being evaluated and whether or not the materials specified will produce a combined rating that meets this requirement. Note that for noise levels above 75 dB DNL, either HUD (for 24 CFR Part 50 reviews) or the Responsible Entity (for 24 CFR Part 58 reviews) must approve the level and type of attenuation, among other processing requirements. Required attenuation values generated by STraCAT for NALs above 75 dB DNL should therefore be considered tentative pending approval by HUD or the RE.

Part I - Description

Project

Brush Park Apartments

Sponsor/Developer

MHT Construction

Location

Detroit, MI

Prepared by

Kem-Tec & Associates

Noise Level

71

Date

3/25/2022



Primary Source(s)

ASTI Environmental

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail

Area

STC

1" Fiberglass reinforced concrete panels, 1/2" air space, 3/4" insulation board, 2"x6" wood studs 16" o.c., 1/2" gypsum board on resilient channels, 3 1/2" fiberglass insulation.

4931

56

Add new wall

4,931 Sq. Feet 56

Window Construction Detail

Quantity

Sq Ft/Unit

STC

32"x24"x24" wood-framed aluminum clad double-hung window each sash has one 3/32" and one 1/8" glass panel 13/16" air space

33

10.67

29

6'x5' wood-framed picture window single panel glazed double strength with storm sash 3 3/4" air space

19

30

38

Add new window

Door Construction Detail

Quantity

Sq Ft/Unit

STC

3'x7' hollow-core wood door 1 3/4" thick 30% glazed with 1/8" glass

2

21

19

Add new door

Part III - Results

Part III - Results**Wall Statistics**

Stat	Value
Area:	4931 ft ²
Wall STC:	56

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	52	922.11 ft ²	18.7%
Doors:	2	42 ft ²	0.85%

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	71
Combined STC for wall assembly:	36.63
Required STC rating:	30
Does wall assembly meet requirements?	Yes

[Print](#)

Part 4 - Tins

FACT TIPS

What do you do if the preferred wall design is not sufficient to achieve the required attenuation? Another wall design with more substantial materials will work, but may not be the most cost-effective solution. Try adding some other elements for just a little more attenuation.

For example:


- Staggering the studs in a wall offers approximately 4dB of additional protection.
- Increasing the stud spacing from 16" on center to 24" can increase the STC from 2-5dB.
- Adding a 2" air space can provide 3dB more attenuation.
- Increasing a wall's air space from 3" to 6" can reduce noise levels by an additional 5dB.
- Adding a layer of ½" gypsum board on "Z" furring channels adds 2dB of attenuation.
- Using resilient channels and clips between wall panels and studs can improve the STC from 2-5dB.
- Adding a layer of ½" gypsum board on resilient channels adds 5dB of attenuation.
- Adding acoustical or isolation blankets to a wall's airspace can add 4-10dB of attenuation.
- A 1" rockwool acoustical blanket adds 3dB to the wall's STC.
- Filling the cells of lightweight concrete masonry units with expanded mineral loose-fill insulation adds 2dB to the STC.

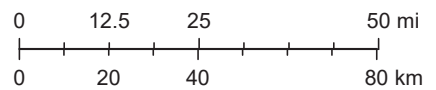
ArcGIS Web AppBuilder



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1:2,311,162

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Esri, HERE, Garmin, NGA, USGS, NPS



January 19, 2021

Wetlands

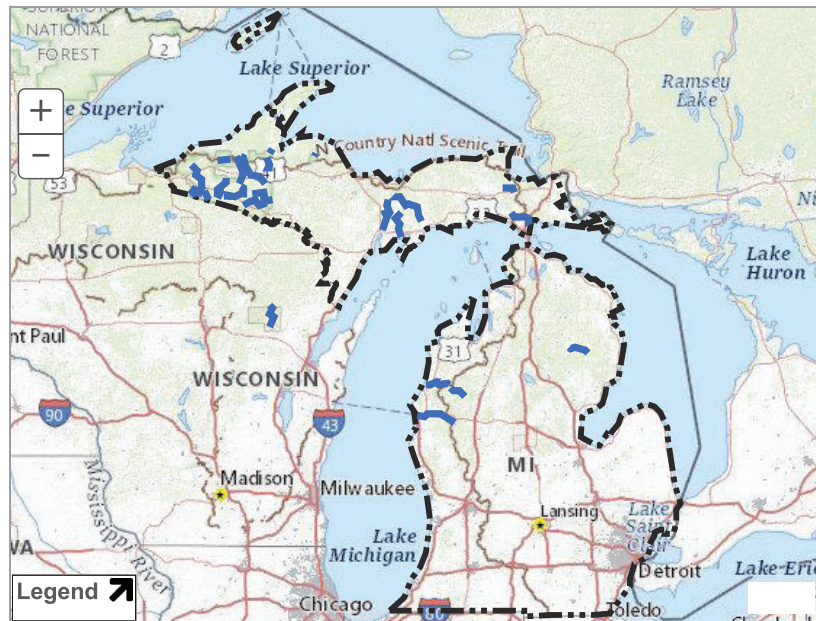
- Estuarine and Marine Deepwater
- Freshwater Emergent Wetland
- Lake
- Estuarine and Marine Wetland
- Freshwater Forested/Shrub Wetland
- Other
- Freshwater Pond
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



MICHIGAN

Michigan has approximately 51,438 miles of river, of which 656.4 miles are designated as wild & scenic—just a bit more than 1% of the state's river miles.



Choose A State

Choose A River

Nourished by the fertile soils of the region, rivers of the Midwest explode with life, from great avian migrations to ancient fishes.

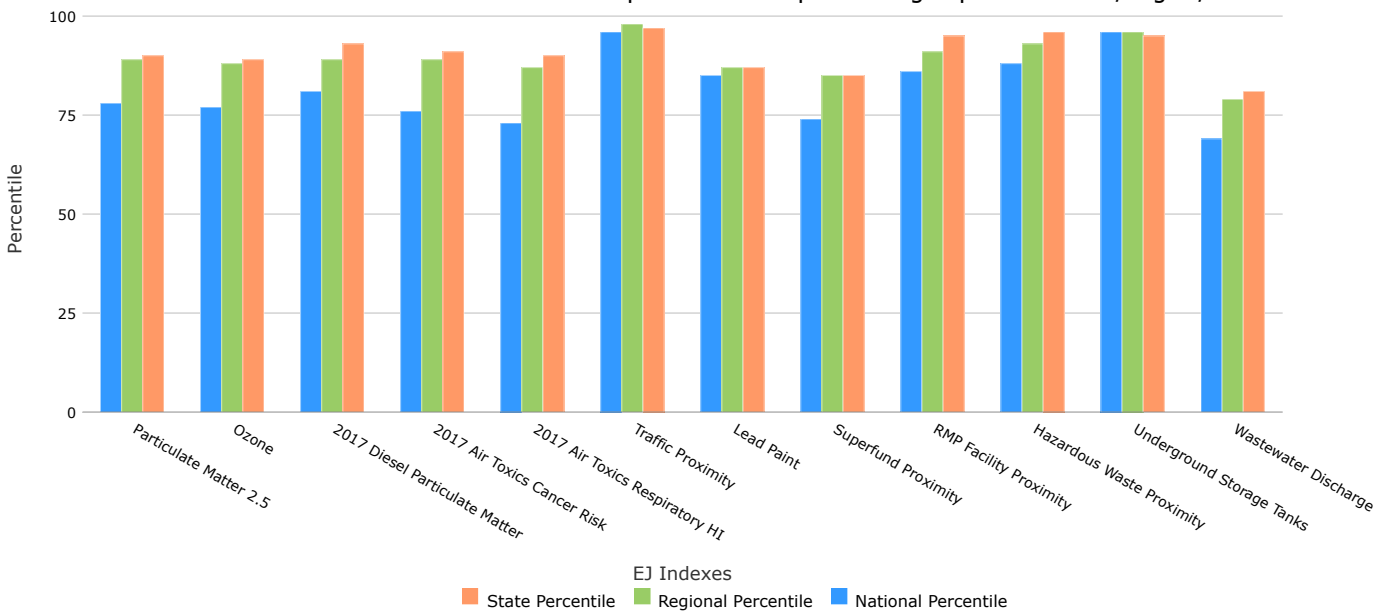
[+ View larger map](#)

- AuSable River
- Bear Creek
- Black River
- Carp River
- Indian River
- Manistee River
- Ontonagon River
- Paint River
- Pere Marquette River
- Pine River
- Presque Isle River
- Sturgeon River (Hiawatha National Forest)
- Sturgeon River (Ottawa National Forest)
- Tahquamenon River (East Branch)
- Whitefish River
- Yellow Dog River

EJScreen Report (Version 2.0)
1 mile Ring Centered at 42.342258,-83.049903
MICHIGAN, EPA Region 5
Approximate Population: 18,472
Input Area (sq. miles): 3.14
 Brush Park Apartments

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	90	89	78
EJ Index for Ozone	89	88	77
EJ Index for 2017 Diesel Particulate Matter*	93	89	81
EJ Index for 2017 Air Toxics Cancer Risk*	91	89	76
EJ Index for 2017 Air Toxics Respiratory HI*	90	87	73
EJ Index for Traffic Proximity	97	98	96
EJ Index for Lead Paint	87	87	85
EJ Index for Superfund Proximity	85	85	74
EJ Index for RMP Facility Proximity	95	91	86
EJ Index for Hazardous Waste Proximity	96	93	88
EJ Index for Underground Storage Tanks	95	96	96
EJ Index for Wastewater Discharge	81	79	69

EJ Index for the Selected Area Compared to All People's Blockgroups in the State/Region/US



This report shows the values for environmental and demographic indicators and EJScreen indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports.

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>. (<https://www.epa.gov/haps/air-toxics-data-update>)

For additional information, see: www.epa.gov/environmentaljustice (<https://www.epa.gov/environmentaljustice>)

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.





An affordable non-profit housing corporation serving Michigan's housing needs

Brush Park Apartments Project Narrative

MHT Housing, Inc. (“MHT”) is excited to move forward with the new construction of a four-story, mixed-use, affordable apartment community located at 269 Winder Street, Detroit, Michigan. The property will feature 53 affordable apartment units managed by MHT Housing’s affiliated managing agent MHT Management, LLC, together with just over roughly 1,200 square feet of commercial space. MHT plans to target a wide range of residents in this development and has worked closely with the City of Detroit on a development that complements the neighborhood and aligns with the City’s design requirements. With MHT’s 30+ years of affordable housing development experience and MHT Management’s 15+ years of affordable management experience, there will be sufficient strength and expertise to get this development completed. In looking at the landscape for those needing affordable housing options, the team feels that this housing development offers a great opportunity to provide affordable units in an area that is experiencing tremendous growth, creating a great outcome by allowing lower income wage earners to have access to amenities that they otherwise might not have. MHT will be submitting a 9% Low Income Housing Tax Credit application for this property in the proposed **February 2021 funding round**.

Project Location

The Property will be located at 269 Winder Street, Detroit, Michigan 48201, within the Brush Park area of Detroit. This location will provide access to all of the best amenities the City of Detroit has to offer for the residents living in the development. Within approximately two blocks in any direction are the arena and stadiums for all four of Detroit’s professional sports teams, which will also allow residents easy access to many of the commercial amenities located nearby. Due to its exceptional location, residents of Brush Park Apartments will have access to full-service grocery store, pharmacy, general practice doctor’s office, clinic, and park, among other amenities. Further, the property will have access to all of the City’s public transit options, allowing for access to the available services and amenities to the residents as needed, should they need to access something a bit further away from the site. In addition to all of the amenities and opportunities that exist in this location for prospective low income residents today, there are many millions of planned future investment for this area as well, making this not only a great location to live in, but a great location to use Federal, State, and Local affordable housing resources.

Affordability & Unit Mix

The Project will consist of 3 studios and 50 one-bedroom units. All units will have one-bathroom and unit sizes are projected to be 500 square feet for a studio and 600 square feet for a one-bedroom unit. All units will be available for individuals and families regardless of their age. Brush Park Apartments is planned to be completed as a 9% LIHTC development, which will also incorporate



An affordable non-profit housing corporation serving Michigan's housing needs

income averaging. As a testament to MHT's goal of offering a wide range of affordability, the development will offer 8 units of Project Based Rental assistance provided by the Detroit Housing Commission, 19 units targeted at or below 40% AMI, and 26 units targeted at or below 80% AMI. Enclosed is a letter from DHC dated May 14, 2020, confirming their award of 8 Project-Based Vouchers to the project. As currently contemplated, ownership will be responsible for payment of all utilities in the development. Additional details related to the overall financing plan for the development can be found in the enclosed proforma.

Planned Financing Sources

- \$9,736,026 - 9% Low Income Housing Tax Credit Equity
- \$2,612,574 - Conventional Permanent Mortgage
- \$1,000,000 - City of Detroit HOME Funds
- \$7,239,288 - Conventional Construction Loan
- \$178,367 - Deferred Developer Fee

Amenities

The development team, contractor, and architect plan to certify to complete the development in accordance with Enterprise Green Environmental Criteria, accessible community space over 1,000 square feet, 10% barrier free and 100% visitable units. The Project will feature first class amenities for its residents. Each unit will feature energy efficient appliances including washers and dryers, frost free refrigerators, ovens, ranges with hoods, disposals, microwaves, and central air conditioning. The development will also feature a combination of private parking, with an attached parking lot, and street parking, allowing for adequate parking availability to meet both the resident needs and the City's requirements. In addition, the Partnership has worked closely with the City of Detroit, the local Historic District Commission, and other local partners to build and construct the property in accordance with neighborhood features and local design requirements.

Developer & Management

MHT has over 30 years of affordable housing development experience in the State of Michigan and is a 501(c)(3) nonprofit organization. MHT serves as the general or managing member of nearly 6,500 elderly and family units and has been successful in obtaining multiple funding sources for preservation, adaptive reuse, and new construction projects, that include HOME and NSP funding, Brownfield and Historic tax credits, HUD221(d)4 and Fannie Mae loans. The property will be managed by MHT's affiliated management company, MHT Management. MHT Management was formed in 2017 and has a shared service agreement with Continental Management. Continental Management was formed in 2003 and now oversees 122 affordable housing developments which are unsurpassed in terms of quality and efficiency. In fact, Continental Management was just named Property Management Company of the Year by the Detroit Metropolitan Apartment Association in 2020 and also received the award in 2016. Continental Management has no unresolved compliance



An affordable non-profit housing corporation serving Michigan's housing needs

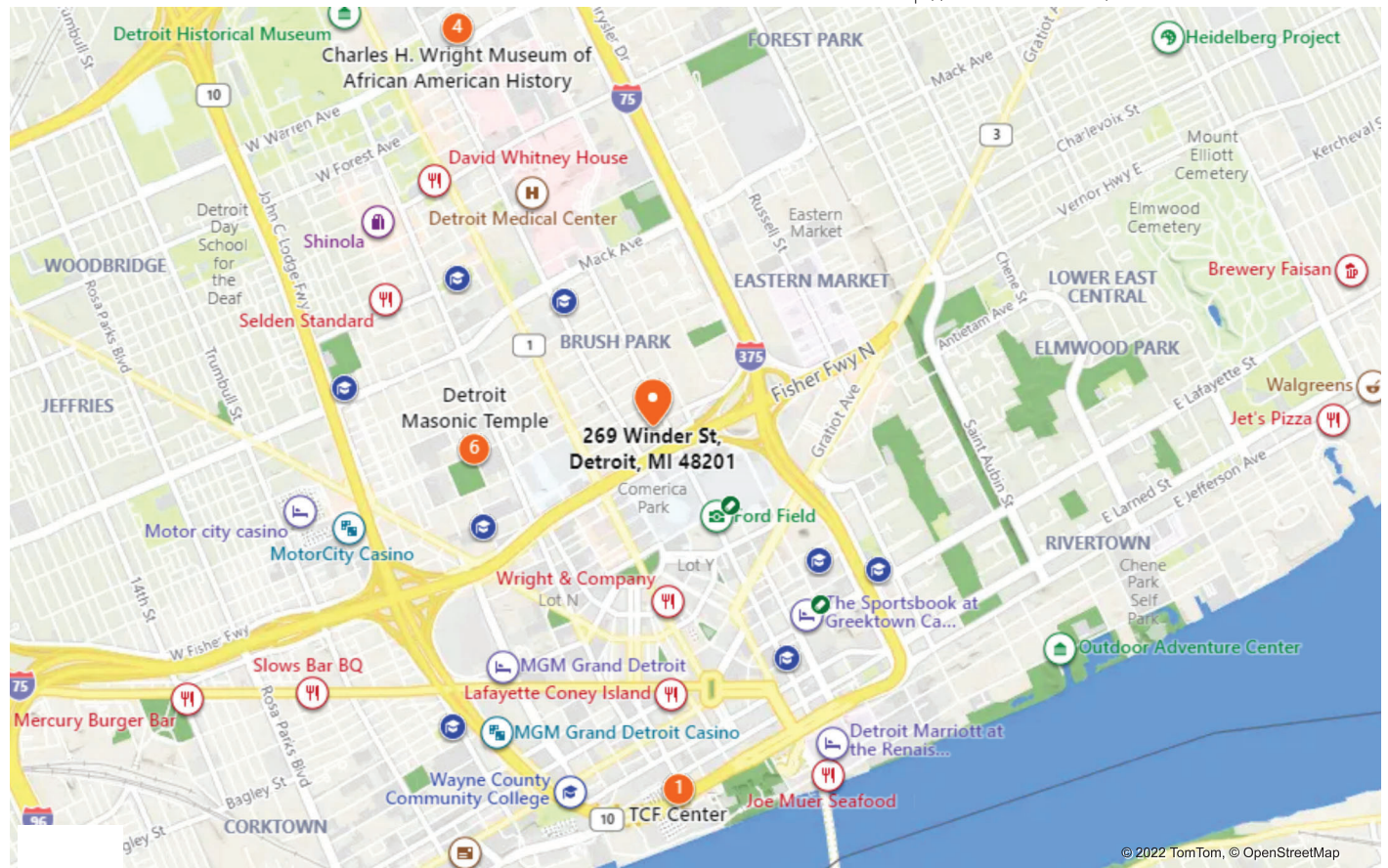
audit findings and all federally assisted properties have REAC scores that average 93.9. All management and occupancy reviews are satisfactory and above.

Jobs Created

Based on previous projects completed by MHT Housing, it is estimated that 75 temporary construction related jobs will be generated, and two full time and one part-time position that will be created at time of occupancy.

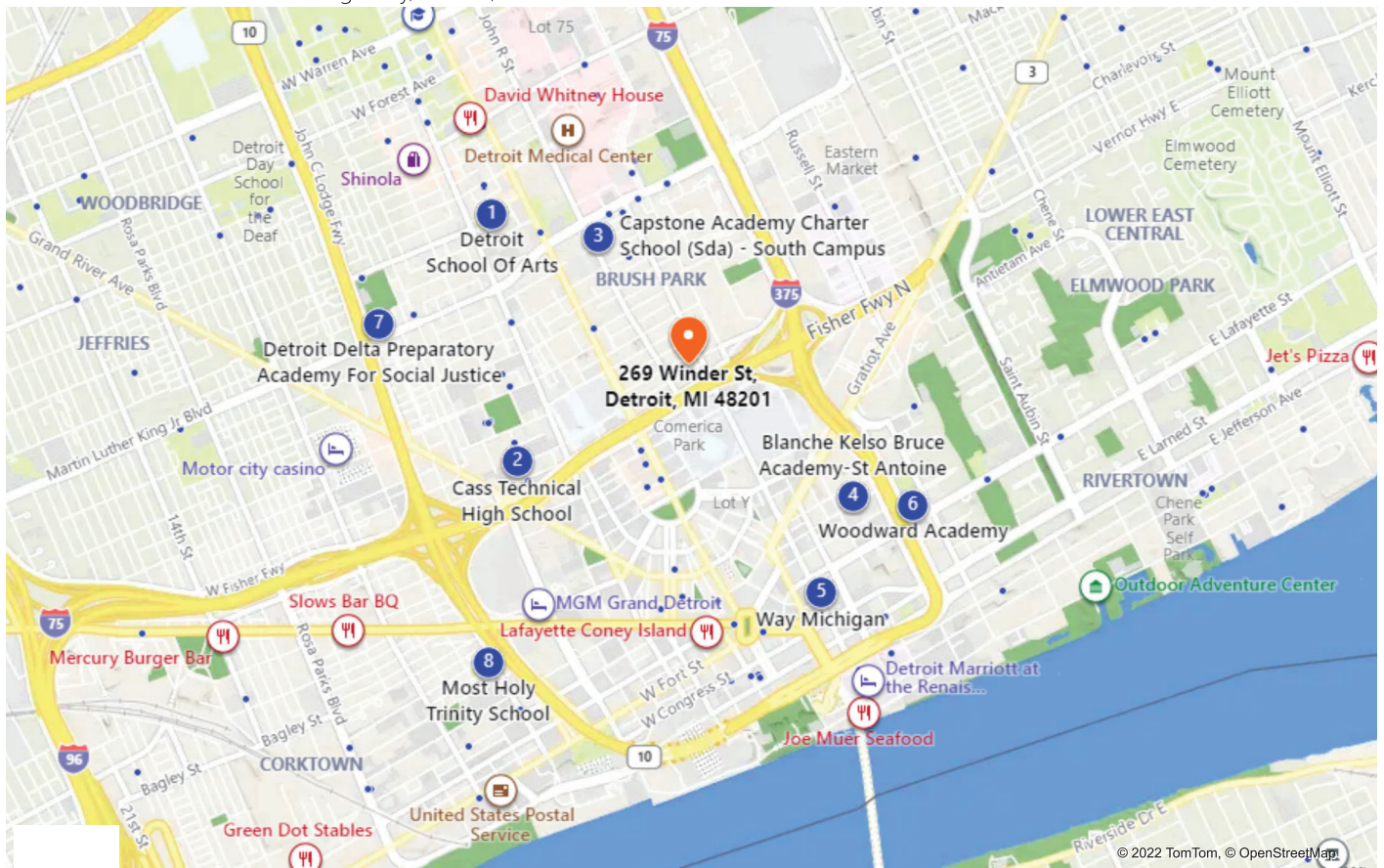
cultural facilities

- ① **TCF Center**
Address: 1 Washington Blvd, Detroit, MI 48226
Phone: (313) 877-8777
Website: <https://www.tcfcenterdetroit.com/>
- ③ **Bint Jebail Cultural Center**
Address: 6220 Miller Rd, Dearborn, MI 48126
Phone: (313) 584-0011
Website: <https://thebjcc.org/>
- ⑤ **Dearborn's Ford Community and Performing Arts Center**
Address: 15801 Michigan Ave, Dearborn, MI 48126
Phone: (313) 943-2350
Website: <http://www.dearbornfordcenter.com/>
- ⑦ **Portugese Recreation & Cultural Centre**
Address: 1884 Lappan Ave, Windsor ON N8W 5G3
Phone: 519-250-0059
- ② **Mackenzie Hall**
Address: 3277 Sandwich St, Windsor ON N9C 1A9
Phone: 519-255-7600
Website: <https://citywindsor.ca/residents/culture/mackenzie-hall/pages/mackenzie-hall.aspx>
- ④ **Charles H. Wright Museum of African American History**
Address: 315 E Warren Ave, Detroit, MI 48201
Phone: (313) 494-5800
Website: <https://www.thewright.org/>
- ⑥ **Detroit Masonic Temple**
Address: 500 Temple St, Detroit, MI 48201
Phone: (313) 832-7100
Website: <https://www.themasonic.com/>
- ⑧ **St Vladimir's Cultural Centre**
Address: 2000 Tecumseh Rd E, Windsor ON N8W1E2
Phone: 519-254-8067
Website: <http://stvladimirs.com/>



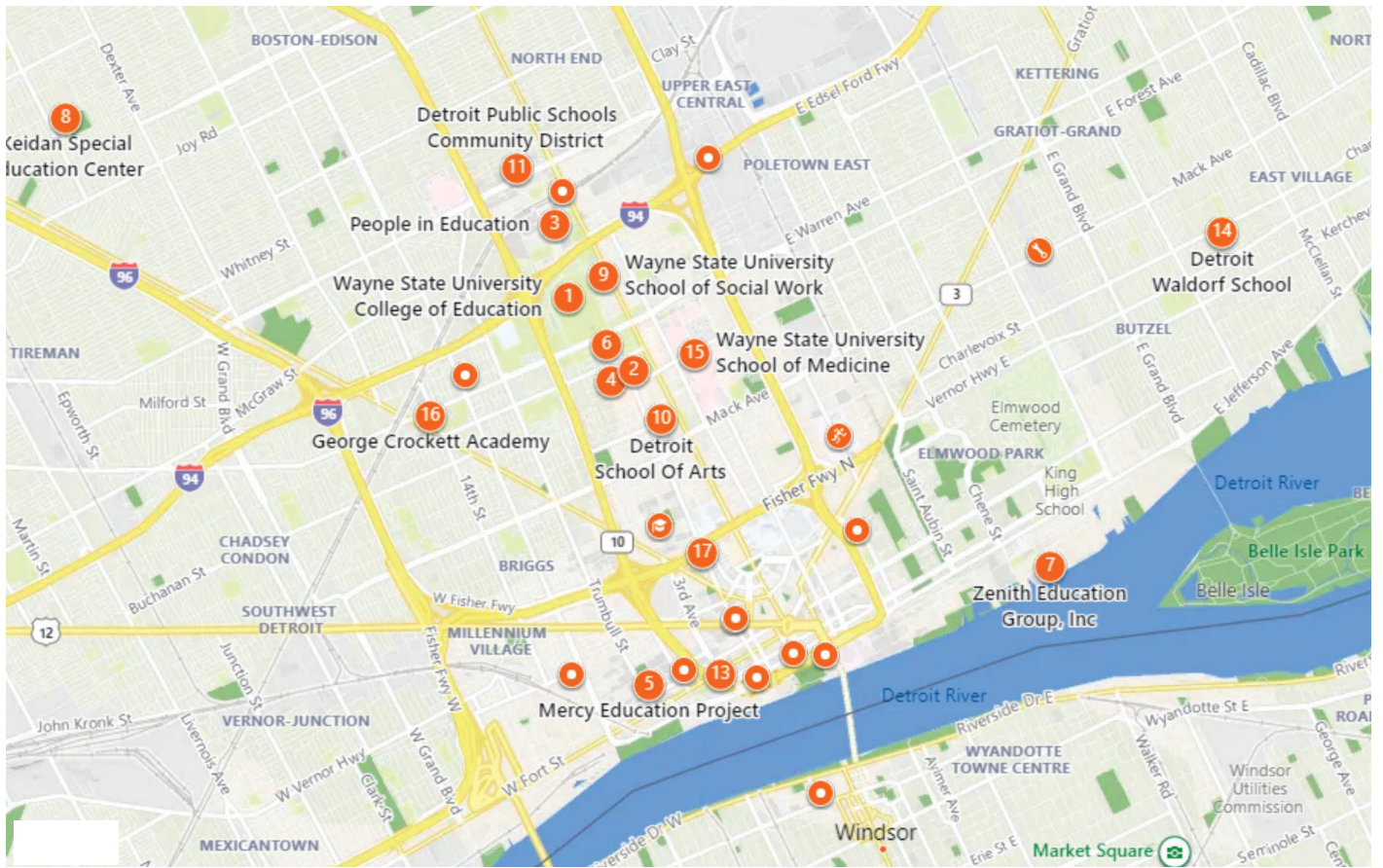
schools

- ① **Detroit School Of Arts**
Address: 123 Selden St, Detroit, MI 48201
- ③ **Capstone Academy Charter School (Sda) - South Campus**
Address: 3500 John R St, Detroit, MI 48201
- ⑤ **Way Michigan**
Address: 407 E Fort St, Detroit, MI 48226
- ⑦ **Detroit Delta Preparatory Academy For Social Justice**
Address: 3550 John C Lodge Fwy, Detroit, MI 48201
- ② **Cass Technical High School**
Address: 2501 2nd Ave, Detroit, MI 48201
- ④ **Blanche Kelso Bruce Academy-St Antoine**
Address: 1326 Saint Antoine St, Detroit, MI 48226
- ⑥ **Woodward Academy**
Address: 951 E Lafayette St, Detroit, MI 48207
- ⑧ **Most Holy Trinity School**
Address: 1229 Labrosse St, Detroit, MI 48226



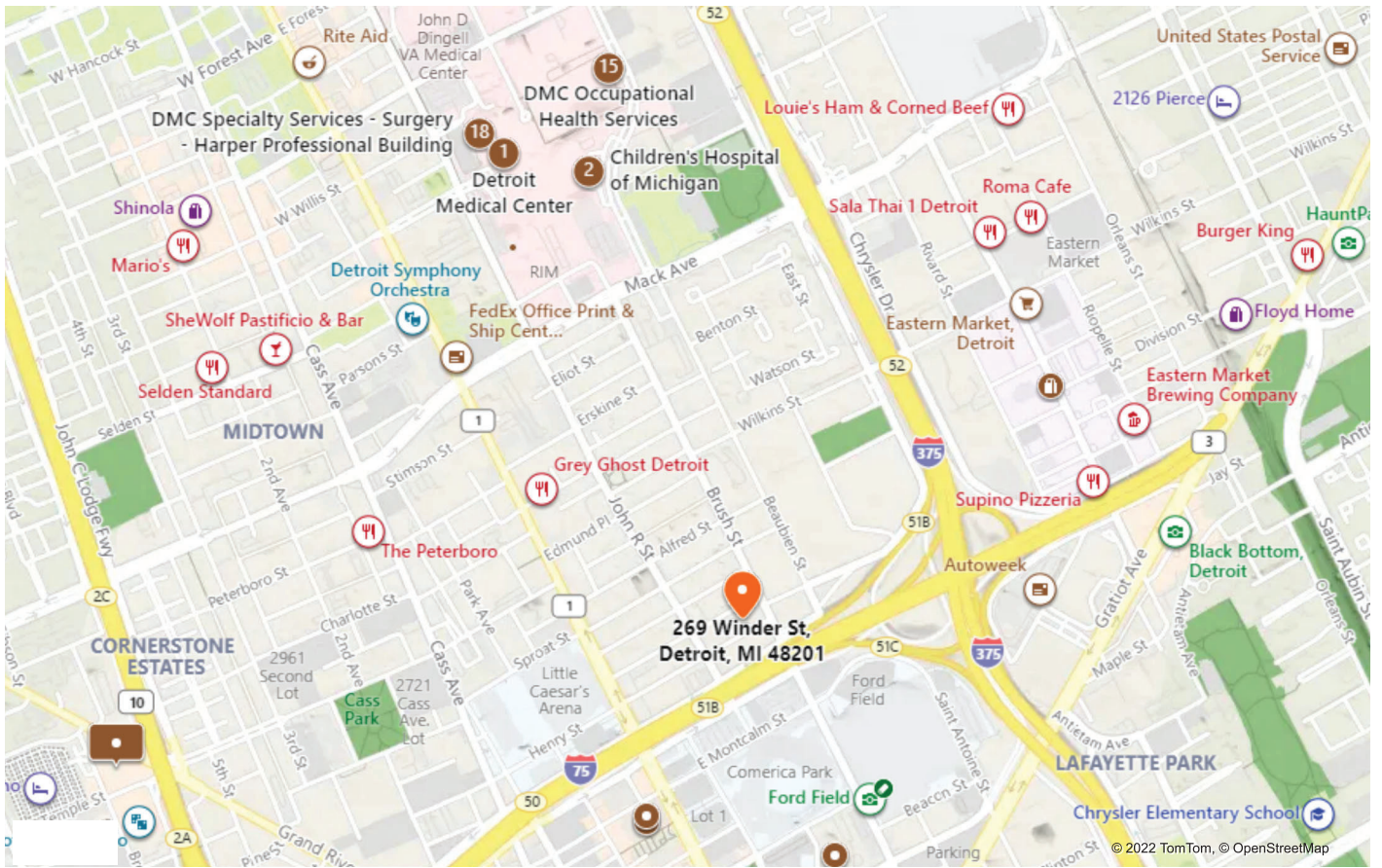
education me

- 1 Wayne State University College of Education**
Address: 5425 Gullen Mall, Detroit, MI 48202
Phone: (313) 577-1601
Website: <http://www.education.wayne.edu/>
- 3 People in Education**
Address: 440 Burroughs St, Detroit, MI 48202
Website: <https://www.peopleineducation.org/>
- 5 Mercy Education Project**
Address: 1450 Howard St, Detroit, MI 48216
Phone: (313) 963-5881
Website: <https://www.mercyed.net/>
- 7 Zenith Education Group, Inc**
Address: 300 River Place Dr Ste 1000, Detroit, MI 48207
Website: <http://www.zenith.org/>
- 9 Wayne State University School of Social Work**
Address: 5447 Woodward Ave, Detroit, MI 48202
Phone: (313) 577-4409
Website: <http://socialwork.wayne.edu/>
- 11 Detroit Public Schools Community District**
Address: 3011 W Grand Blvd, Detroit, MI 48202
Phone: (313) 240-4377
Website: <https://www.detroitk12.org/>
- 13 Wayne County Community College District**
Address: 1001 W Fort St, Detroit, MI 48226
Phone: (313) 496-2758
Website: https://www.wcccd.edu/wcccdcampus/downtown/contact_us.php
- 15 Wayne State University School of Medicine**
Address: 540 E Canfield St Ste 9374, Detroit, MI 48201
Phone: (313) 577-1102
Website: <https://www.med.wayne.edu/>
- 17 Payne-Pulliam School of Trade**
Address: 2345 Cass Ave, Detroit, MI 48201
Phone: (313) 963-4710
Website: <https://paynepulliam.org/contact-us>
- 2 College Education Learning Center**
Address: 4500 Cass Ave, Detroit, MI 48201
Phone: (313) 577-1686
- 4 Detroit Food Academy**
Address: 4444 2nd Ave, Detroit, MI 48201
Website: <https://detroitfoodacademy.org/>
- 6 Unearthing Detroit**
Address: 4841 Cass Ave, Detroit, MI 48201
Phone: (313) 577-2598
Website: <http://unearthdetroit.wordpress.com/>
- 8 Keidan Special Education Center**
Address: 4441 Collingwood St, Detroit, MI 48204
Phone: (313) 873-9400
Website: <https://www.detroitk12.org/>
- 10 Detroit School Of Arts**
Address: 123 Selden St, Detroit, MI 48201
Phone: (313) 494-6000
Website: <https://www.detroitk12.org/dsa>
- 12 Adult Education Center**
Address: 13840 Lappin St, Detroit, MI 48205
Phone: (313) 579-7109
Website: <http://detroitk12.org/>
- 14 Detroit Waldorf School**
Address: 2555 Burns St, Detroit, MI 48214
Phone: (313) 822-0300
Website: <http://www.detroitwaldorf.org/>
- 16 George Crockett Academy**
Address: 4851 14th St, Detroit, MI 48208
Phone: (313) 896-6078
Website: <http://www.crockettacademy.com/>
- 18 Warren Woods Adult Education**
Address: 12900 Frazho Rd, Warren, MI 48089
Phone: (586) 439-4408
Website: <https://www.warrenwoods.misd.net/our-schools/adultcommunity-education/>



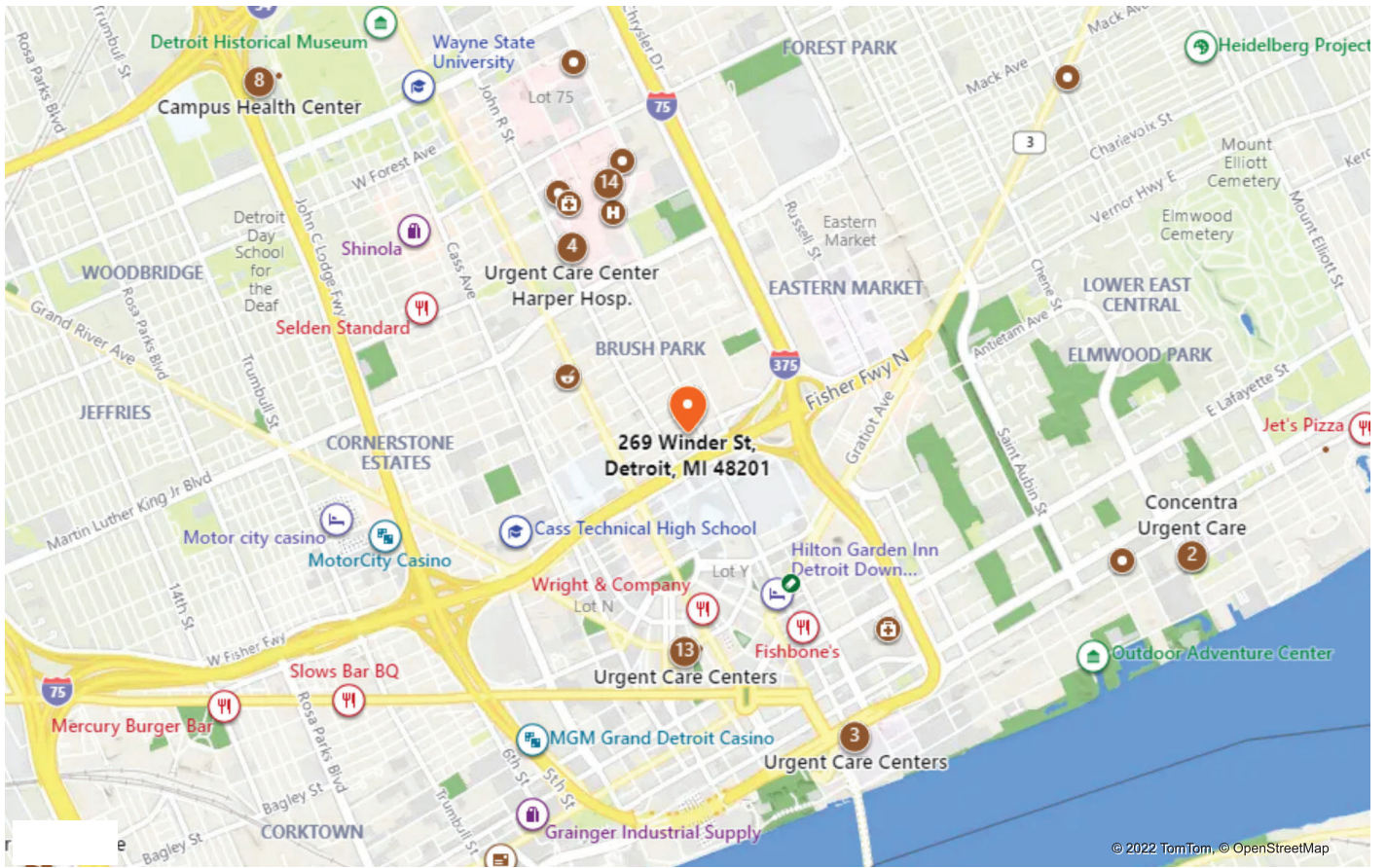
medical

- 1 Detroit Medical Center**
Address: 3990 John R St, Detroit, MI 48201
Phone: (313) 745-6035
Website: <http://www.dmc.org/>
- 3 Henry Ford Hospital**
Address: 2799 W Grand Blvd, Detroit, MI 48202
Phone: (800) 436-7936
Website: https://www.henryford.com/locations/henry-ford-hospital?utm_campaign=website-link&utm_medium=organic&utm_source=local-listing
- 5 Associated Medical**
Address: 7633 E Jefferson Ave, Detroit, MI 48214
Phone: (313) 824-2724
Website: <http://sp.bestflowers.com/?FACCATID=521347&FACID=2375050193&NAME=Associated%20Medical%20Clinic%20PC&ADDR1=7633%20E%20Jefferson%20Ave%2C%20Ste%20200&ADDR2=&CITY=Detroit&STATE=MI&ZIP=48214&PHONE=3138242>
- 7 Blue Cross Blue Shield of Michigan**
Address: 600 E Lafayette Blvd, Detroit, MI 48226
Phone: (888) 605-6461
Website: <http://bcbsm.com/>
- 9 Concentra Urgent Care**
Address: 2630 East Jefferson Ave., Detroit, MI 48207
Phone: (313) 259-7990
Website: https://www.concentra.com/urgent-care-center/s/michigan/detroit/downtown-detroit-urgent-care/?utm_source=Yext&utm_medium=Referral&utm_campaign=LocalPage
- 11 Detroit Medical Group**
Address: 6455 Gratiot Ave, Detroit, MI 48207
Phone: (313) 921-8600
Website: <http://www.dmc.org/>
- 13 One Step Medical Billing**
Address: 1930 Seward St, Detroit, MI 48206
Phone: (313) 899-5110
Website: <https://www.yelp.ca/biz/one-step-medical-billing-detroit>
- 15 DMC Occupational Health Services**
Address: 4201 Saint Antoine St, Detroit, MI 48201
Phone: (313) 745-4522
Website: <http://www.dmc.org/>
- 17 Health Alliance Plan - HAP**
Address: 2850 W Grand Blvd, Detroit, MI 48202
Phone: (800) 422-4641
Website: <https://www.hap.org/>
- 2 Children's Hospital of Michigan**
Address: 3901 Beaubien St, Detroit, MI 48201
Phone: (313) 745-5437
Website: <https://www.childrensdmc.org/location/detail/childrens-hospital-of-michigan>
- 4 Henry Ford Health System 1 Ford Place**
Address: 1 Ford Pl, Detroit, MI 48202
Phone: (800) 436-7936
Website: <https://www.henryford.com/locations/1-ford-place>
- 6 The Wellness Plan**
Address: 2888 W Grand Blvd, Detroit, MI 48202
Phone: (313) 875-4200
Website: <https://wellplan.com/contact-locations>
- 8 Alsan Medical Clinic**
Address: 3130 Gratiot Ave, Detroit, MI 48207
Phone: (313) 579-1860
Website: <https://alsanmedicalclinic.com/contact-us>
- 10 Professional Medical Center**
Address: 3956 Mount Elliott St, Detroit, MI 48207
Phone: (313) 925-4540
Website: <http://professionalmedicalcenter.org/privacy-policy>
- 12 Jackson Health Services Inc**
Address: 4727 Saint Antoine St, Detroit, MI 48201
Phone: (313) 831-8805
Website: <https://jacksonhealthcare.com/>
- 14 Hamtramck Medical Center**
Address: 6100 Dorothy St, Detroit, MI 48211
Phone: (313) 921-5881
Website: <https://fr.yelp.ca/biz/hamtramck-medical-center-detroit>
- 16 Health Center Detroit Medical Group**
Address: 7633 E Jefferson Ave Ste 340, Detroit, MI 48214
Phone: (313) 822-9801
Website: <http://hcdmg.org/>
- 18 DMC Specialty Services - Surgery - Harper Professional Building**
Address: 4160 John R St Ste 615, Detroit, MI 48201
Phone: (313) 745-4195
Website: <http://dmcmmedicalgroup.com/>



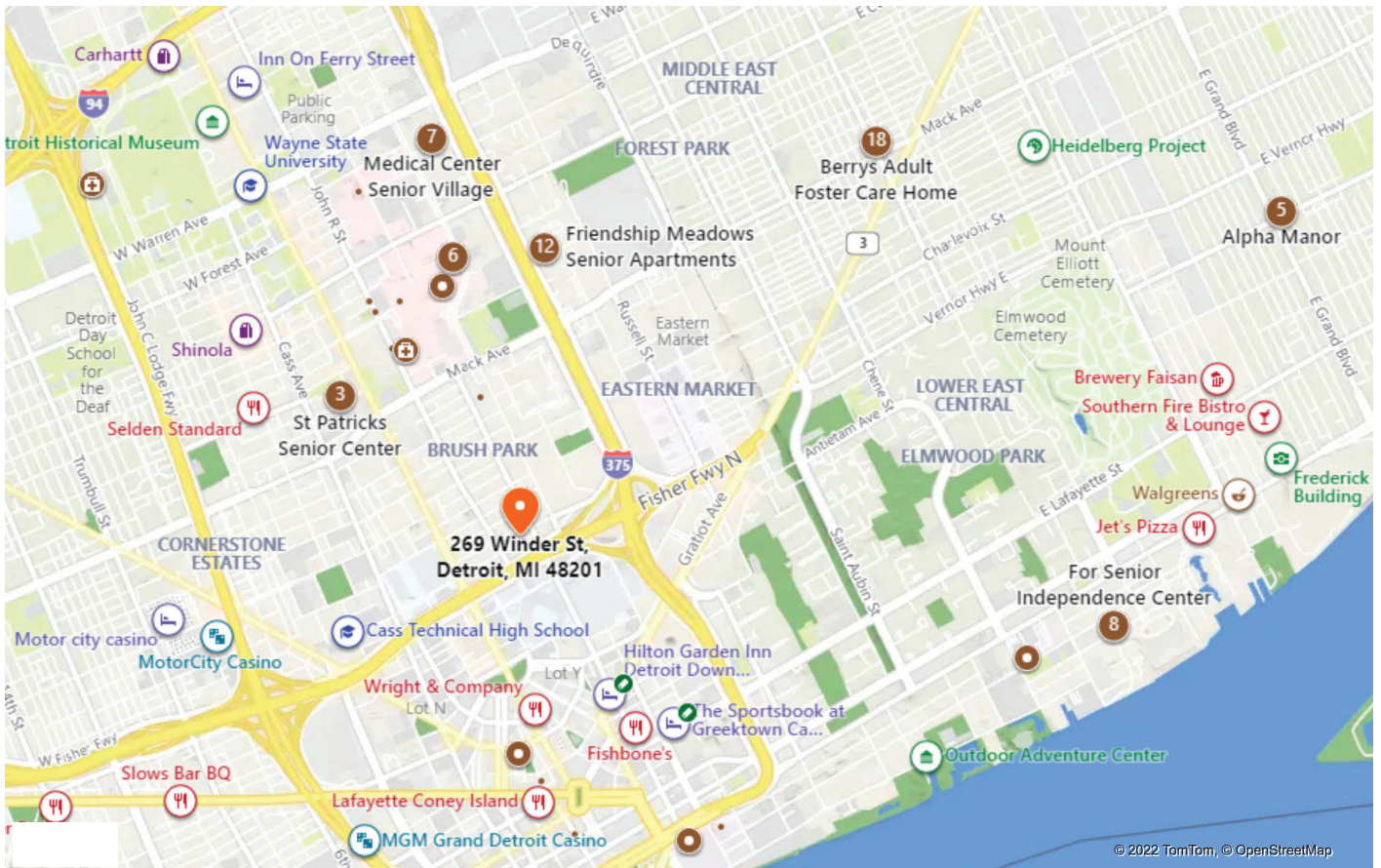
urgent care

- 1 Vernor Urgent Care**
Address: 3456 W Vernor Hwy, Detroit, MI 48216
Phone: (313) 254-9693
Website: <http://www.vernorurgentcare.com/>
- 3 Urgent Care Centers**
Address: 400 Renaissance Center Ste 1402, Detroit, MI 48235
Phone: (313) 324-8100
Website: <http://urgentcarelocations.org/>
- 5 BMC Urgent Care-Mi**
Address: 8282 Woodward Ave, Detroit, MI 48202
Phone: (313) 874-3440
Website: <https://www.dmc.org/>
- 7 Hamtramck Medical Urgent Care**
Address: 9740 Conant St, Hamtramck, MI 48212
Phone: (313) 265-3140
Website: <http://hamtramckmedicalurgentcare.com/first-aid-tips>
- 9 Premier Medicine Urgent Care**
Address: 9550 Dix, Dearborn, MI 48120
Phone: (313) 843-6375
Website: <https://premiermedicine.com/dearborn>
- 11 HMC Urgent Care**
Address: 7542 Wyoming St, Dearborn, MI 48126
Website: <http://hmcurgentcare.com/>
- 13 Urgent Care Centers**
Address: 45 Grand River Ave, Detroit, MI 48226
Phone: (313) 324-8177
Website: <http://urgentcarelocations.org/>
- 15 Michigan Urgent Care - Ferndale**
Address: 641 W 9 Mile Rd Ste C, Ferndale, MI 48220
Phone: (248) 206-1600
Website: <http://michiganurgentcare.com/ferndale/>
- 17 Urgent Care Centers**
Address: 5728 Schaefer Rd 103, Dearborn, MI 48126
Phone: (313) 581-8080
Website: <http://urgentcarelocations.org/>
- 2 Concentra Urgent Care**
Address: 2630 East Jefferson Ave., Detroit, MI 48207
Phone: (313) 259-7990
Website: https://www.concentra.com/urgent-care-center/s/michigan/detroit/downtown-detroit-urgent-care/?utm_source=Yext&utm_medium=Referral&utm_campaign=LocalPage
- 4 Urgent Care Center Harper Hosp.**
Address: 3990 John R St, Detroit, MI 48201
Phone: (313) 745-1465
Website: <http://www.dmc.org/>
- 6 Elite Health Urgent Care**
Address: 5901 Vernor Highway, Detroit, MI
Website: <https://www.elitehealthdetroit.com/contact>
- 8 Campus Health Center**
Address: 5285 Anthony Wayne Dr, Detroit, MI 48202
Phone: (313) 577-5041
Website: <https://health.wayne.edu/>
- 10 Am Medical Center Urgent Care**
Address: 13031 Conant St, Detroit, MI 48212
Phone: (313) 893-5493
Website: <http://www.dmc.org/>
- 12 Advanced Urgent Care**
Address: 13510 Michigan Ave, Dearborn, MI 48126
Phone: (313) 582-0100
Website: <https://www.urgentcaredearborn.com/>
- 14 Urgent Care Centers**
Address: 4201 Saint Antoine St, Detroit, MI 48201
Phone: (313) 745-3000
Website: <http://urgentcarelocations.org/>
- 16 Wyandotte Urgent Care Clinic**
Address: 1768 Ford Ave, Wyandotte, MI 48192
Phone: (734) 299-0712
Website: <https://wyandotteuc.com/>
- 18 City Urgent Care, P.C.**
Address: 13403 W Seven Mile Rd Ste A, Detroit, MI 48235
Phone: (313) 308-2444
Website: <http://urgentcarelocations.org/>



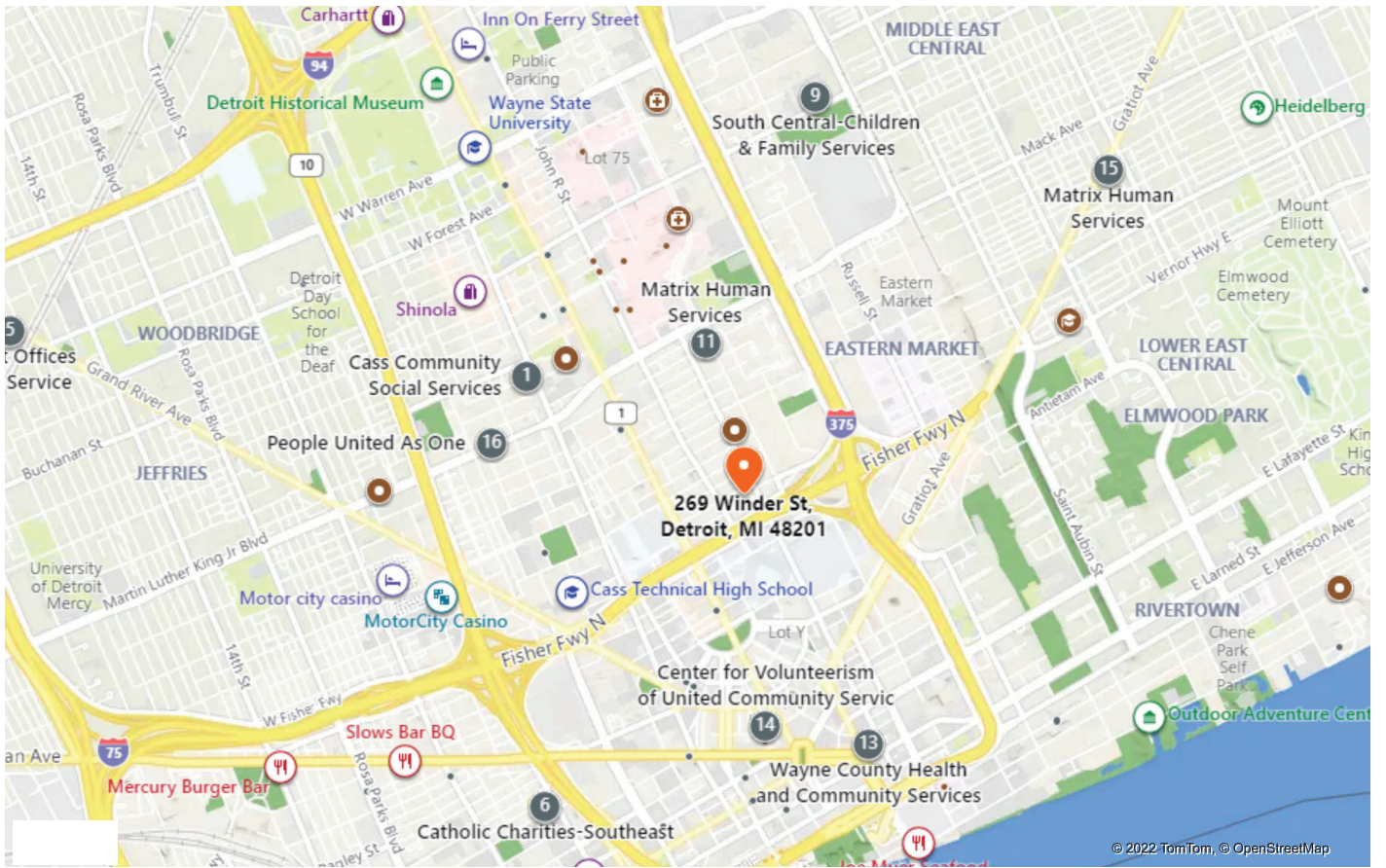
senior care

- 1 Dolce Vita Retirement Living**
Address: 854 Erie St E, Windsor ON N9A 3Y6
Phone: 519-253-3329
Website: <https://www.dolcevitaretirement.com/>
- 3 St Patricks Senior Center**
Address: 58 Parsons St, Detroit, MI 48201
Phone: (313) 833-7080
Website: <http://stpatsrctr.org/>
- 5 Alpha Manor**
Address: 440 E Grand Blvd, Detroit, MI 48207
Phone: (313) 579-2900
Website: <https://www.cienahhealthcare.com/>
- 7 Medical Center Senior Village**
Address: 4701 Chrysler Dr, Detroit, MI 48201
Phone: (313) 833-2466
Website: <https://www.facebook.com/Medical-Center-Senior-Village-265198475427/>
- 9 iAIDcare Home Health Care Services, Senior Care, Elder Care, Windsor ON, London ON**
Address: 2475 McDougall Street, Windsor ON N8X 3N9
Phone: 519-997-2728
Website: <https://iaidcare.com/>
- 11 Home Instead**
Address: 20100 Mack Ave, Grosse Pointe Woods, MI 48236
Phone: (313) 647-9682
Website: https://www.homeinstead.com/location/682?utm_source=bing&utm_medium=organic&utm_campaign=bmb
- 13 Senior Citizen Day Care Center**
Address: 2339 Caniff St, Hamtramck, MI 48212
Phone: (313) 365-6260
- 15 Hope Senior Care**
Address: 724 Notre Dame St, Grosse Pointe, MI 48230
Phone: (313) 881-3132
Website: <http://hopeseniorhomecare.com/>
- 17 Fairlane Senior Care & Rehab Center**
Address: 15750 Joy Road, Detroit, MI 48228
Phone: (313) 273-6850
Website: <https://nexcarehealth.com/search-locations/fairlane>
- 2 Devonshire Seniors Residence**
Address: 901 Riverside Dr W, Windsor ON N9A 7J6
Phone: 519-252-2273
Website: <http://devonshireretirement.ca/>
- 4 Chateau Masson**
Address: 415 University Ave E, Windsor ON N9A 2Z3
Phone: 519-254-1681
Website: <http://www.wechc.com/>
- 6 Senior Health Center**
Address: 4201 Saint Antoine St, Detroit, MI 48201
Phone: (313) 993-0639
- 8 For Senior Independence Center**
Address: 250 Mcdougall St Ste 1000, Detroit, MI 48207
Phone: (313) 288-7223
Website: <http://www.pacesemi.org/>
- 10 Dedicated Senior Medical Center**
Address: 13210 East Jefferson Avenue, Detroit, MI 48215
Phone: (313) 335-3444
Website: <https://www.dedicated.care/find-a-location/detroit-michigan/detroit-east>
- 12 Friendship Meadows Senior Apartments**
Address: 1001 Leland St, Detroit, MI 48207
Phone: (313) 832-9908
- 14 Senior Care Medical Group**
Address: 15400 Michigan Ave Ste 1, Dearborn, MI 48126
Phone: (313) 584-3359
Website: <https://fr.yelp.ca/biz/senior-care-medical-group-dearborn-2>
- 16 Hope Senior Home Care**
Address: 79 Kercheval Ave Ste 105, Grosse Pointe Farms, MI 48236
Phone: (248) 686-3901
Website: <https://hopeseniorhomecare.com/contact/>
- 18 Berrys Adult Foster Care Home**
Address: 3640 Mcdougall St, Detroit, MI 48207
Phone: (313) 579-1881
Website: <https://berrysadultfostercarehomes.com/>



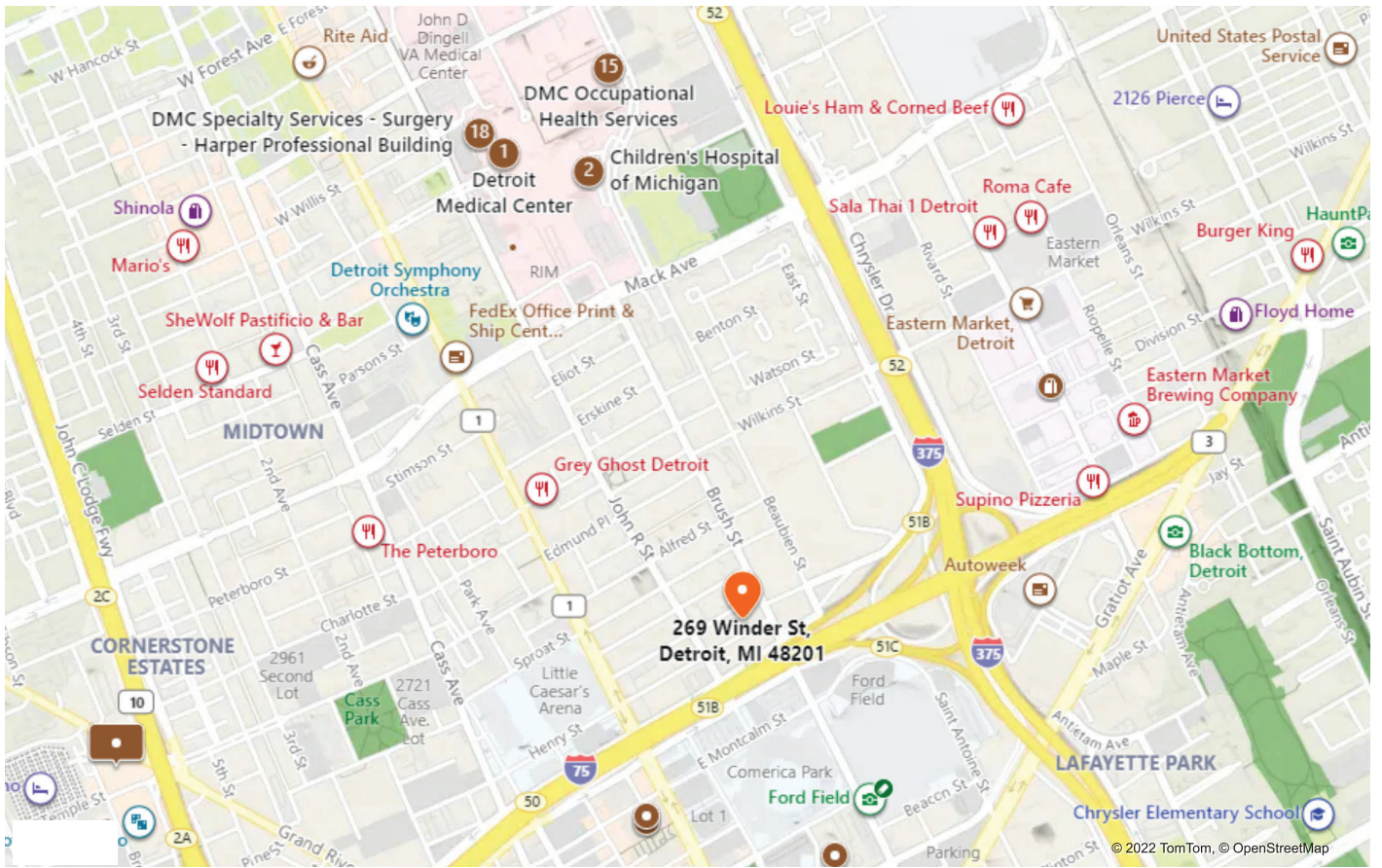
social services

- 1 Cass Community Social Services**
Address: 3745 Cass Ave, Detroit, MI 48201
Phone: (313) 883-2277
Website: <https://casscommunity.org/>
- 3 Pcc Social Services**
Address: 8627 Woodward Ave, Detroit, MI 48202
Phone: (313) 870-9422
Website: <http://www.peoplescommunitychurchdetroit.org/>
- 5 District Offices Social Service**
Address: 5131 Grand River Ave, Detroit, MI 48208
Phone: (313) 361-7300
Website: <http://www.michigan.gov/>
- 7 Peoples Community Services**
Address: 8625 Joseph Campau St, Hamtramck, MI 48212
Phone: (313) 875-2261
Website: <http://www.pecose.org/>
- 9 South Central-Children & Family Services**
Address: 1801 E Canfield St, Detroit, MI 48207
Phone: (313) 578-5100
Website: https://www.michigan.gov/mdhhs/0,5885,7-339-73970_5461_7387-288339--,00.html
- 11 Matrix Human Services**
Address: 461 Eliot St, Detroit, MI 48201
Phone: (313) 283-8887
Website: <https://www.matrixhumanservices.org/our-story/>
- 13 Wayne County Health and Community Services**
Address: 600 Randolph St, Detroit, MI 48226
Phone: (313) 224-0810
Website: <http://waynecounty.com/>
- 15 Matrix Human Services**
Address: 3000 Gratiot Ave, Detroit, MI 48207
Phone: (313) 265-3731
Website: <http://www.matrixhumanservices.org/>
- 17 Arab American & Chaldean Council**
Address: 9019 Joseph Campau St, Hamtramck, MI 48212
Phone: (313) 875-4685
Website: <http://www.myacc.org/>
- 2 Lutheran Social Services of Michigan**
Address: 8131 E Jefferson Ave, Detroit, MI 48214
Phone: (313) 823-7700
Website: <http://www.lssm.org/>
- 4 Social Svc**
Address: 400 City Hall Sq E, Windsor ON N9A 7K6
Phone: 519-255-7619
Website: <http://citywindsor.ca/>
- 6 Catholic Charities-Southeast**
Address: 1234 Porter St, Detroit, MI 48226
Phone: (248) 548-4044
Website: <http://ccsem.org/>
- 8 Community Health & Social**
Address: 5635 W Fort St, Detroit, MI 48209
Phone: (313) 849-3920
Website: <http://chasscenter.org/>
- 10 Ministry of Community and Social Services - Ontario Disability Support Program**
Address: 270 Erie St E, Windsor ON N9A3X1
Phone: 519-254-1651
Website: <http://www.mcass.gov.on.ca/>
- 12 Spectrum Human Services Inc**
Address: 7430 2nd Ave Ste 9, Detroit, MI 48202
Phone: (313) 309-3831
Website: <https://www.spectrumhuman.org/>
- 14 Center for Volunteerism of United Community Servic**
Address: 1212 Griswold St, Detroit, MI 48226
Phone: (313) 226-9430
Website: <http://unitedway.org/>
- 16 People United As One**
Address: 644 Martin Luther King Jr Blvd, Detroit, MI 48201
Phone: (313) 586-4349
Website: <http://puao.org/>
- 18 Catholic Charities**
Address: 9851 Hamilton Ave, Detroit, MI 48202
Phone: (313) 883-2100
Website: <http://www.csswayne.org/>



medical

- 1** **Detroit Medical Center**
Address: 3990 John R St, Detroit, MI 48201
Phone: (313) 745-6035
Website: <http://www.dmc.org/>
- 3** **Henry Ford Hospital**
Address: 2799 W Grand Blvd, Detroit, MI 48202
Phone: (800) 436-7936
Website: https://www.henryford.com/locations/henry-ford-hospital?utm_campaign=website-link&utm_medium=organic&utm_source=local-listing
- 5** **Associated Medical**
Address: 7633 E Jefferson Ave, Detroit, MI 48214
Phone: (313) 824-2724
Website: <http://sp.bestflowers.com/?FACCATID=521347&FACID=2375050193&NAME=Associated%20Medical%20Clinic%20PC&ADDR1=7633%20E%20Jefferson%20Ave%2C%20Ste%20200&ADDR2=&CITY=Detroit&STATE=MI&ZIP=48214&PHONE=3138242>
- 7** **Blue Cross Blue Shield of Michigan**
Address: 600 E Lafayette Blvd, Detroit, MI 48226
Phone: (888) 605-6461
Website: <http://bcbsm.com/>
- 9** **Concentra Urgent Care**
Address: 2630 East Jefferson Ave., Detroit, MI 48207
Phone: (313) 259-7990
Website: https://www.concentra.com/urgent-care-center/s/michigan/detroit/downtown-detroit-urgent-care/?utm_source=Yext&utm_medium=Referral&utm_campaign=LocalPage
- 11** **Detroit Medical Group**
Address: 6455 Gratiot Ave, Detroit, MI 48207
Phone: (313) 921-8600
Website: <http://www.dmc.org/>
- 13** **One Step Medical Billing**
Address: 1930 Seward St, Detroit, MI 48206
Phone: (313) 899-5110
Website: <https://www.yelp.ca/biz/one-step-medical-billing-detroit>
- 15** **DMC Occupational Health Services**
Address: 4201 Saint Antoine St, Detroit, MI 48201
Phone: (313) 745-4522
Website: <http://www.dmc.org/>
- 17** **Health Alliance Plan - HAP**
Address: 2850 W Grand Blvd, Detroit, MI 48202
Phone: (800) 422-4641
Website: <https://www.hap.org/>
- 2** **Children's Hospital of Michigan**
Address: 3901 Beaubien St, Detroit, MI 48201
Phone: (313) 745-5437
Website: <https://www.childrensdmc.org/location/detail/childrens-hospital-of-michigan>
- 4** **Henry Ford Health System 1 Ford Place**
Address: 1 Ford Pl, Detroit, MI 48202
Phone: (800) 436-7936
Website: <https://www.henryford.com/locations/1-ford-place>
- 6** **The Wellness Plan**
Address: 2888 W Grand Blvd, Detroit, MI 48202
Phone: (313) 875-4200
Website: <https://wellplan.com/contact-locations>
- 8** **Alsan Medical Clinic**
Address: 3130 Gratiot Ave, Detroit, MI 48207
Phone: (313) 579-1860
Website: <https://alsanmedicalclinic.com/contact-us>
- 10** **Professional Medical Center**
Address: 3956 Mount Elliott St, Detroit, MI 48207
Phone: (313) 925-4540
Website: <http://professionalmedicalcenter.org/privacy-policy>
- 12** **Jackson Health Services Inc**
Address: 4727 Saint Antoine St, Detroit, MI 48201
Phone: (313) 831-8805
Website: <https://jacksonhealthcare.com/>
- 14** **Hamtramck Medical Center**
Address: 6100 Dorothy St, Detroit, MI 48211
Phone: (313) 921-5881
Website: <https://fr.yelp.ca/biz/hamtramck-medical-center-detroit>
- 16** **Health Center Detroit Medical Group**
Address: 7633 E Jefferson Ave Ste 340, Detroit, MI 48214
Phone: (313) 822-9801
Website: <http://hcdmg.org/>
- 18** **DMC Specialty Services - Surgery - Harper Professional Building**
Address: 4160 John R St Ste 615, Detroit, MI 48201
Phone: (313) 745-4195
Website: <http://dmcmedicalgroup.com/>



parks

- 1 Grand Circus Park

Address:

- 3 Cass Park

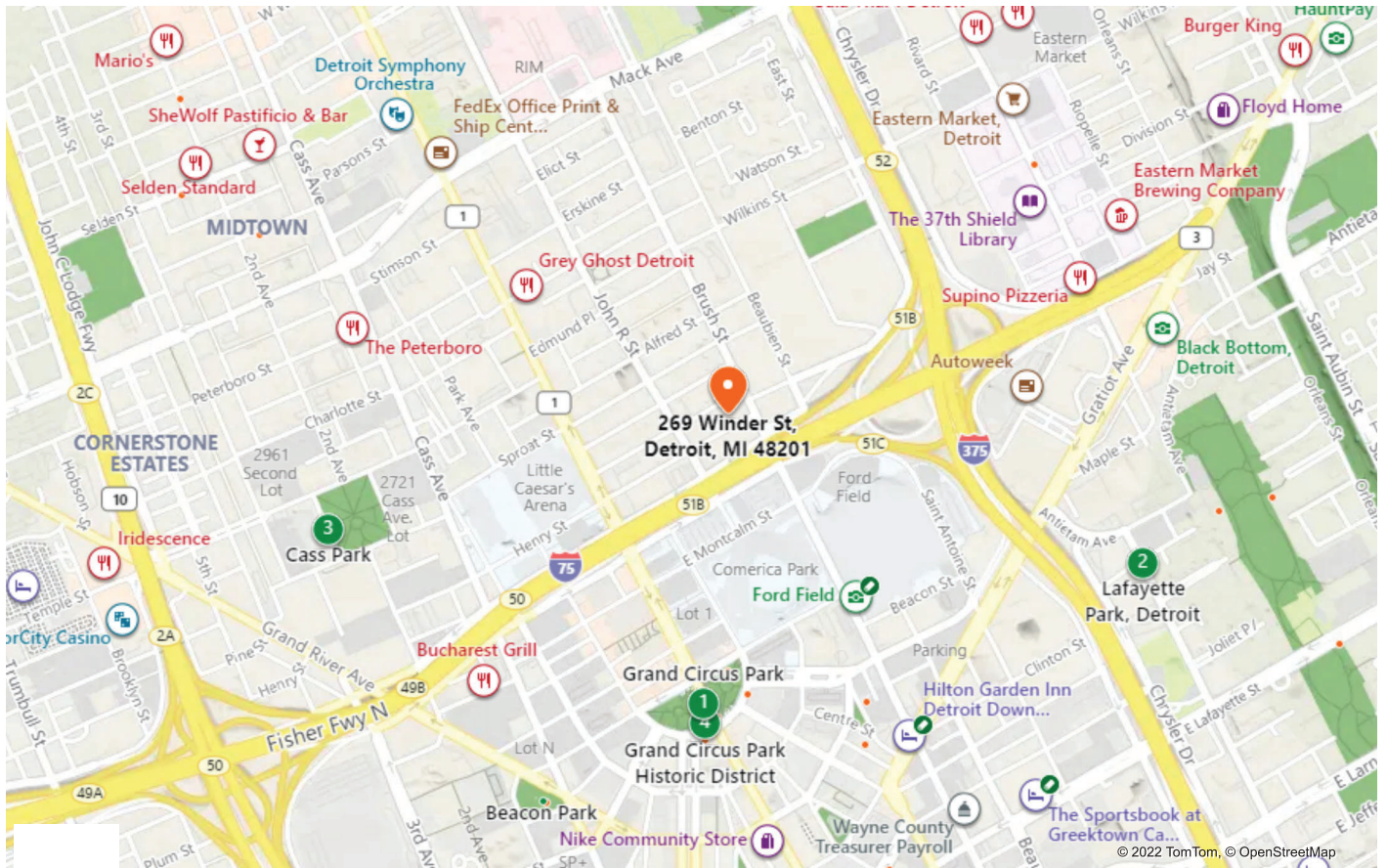
Address: 2733 2nd Ave, Detroit, MI 48201

- 2 Lafayette Park, Detroit

Address:

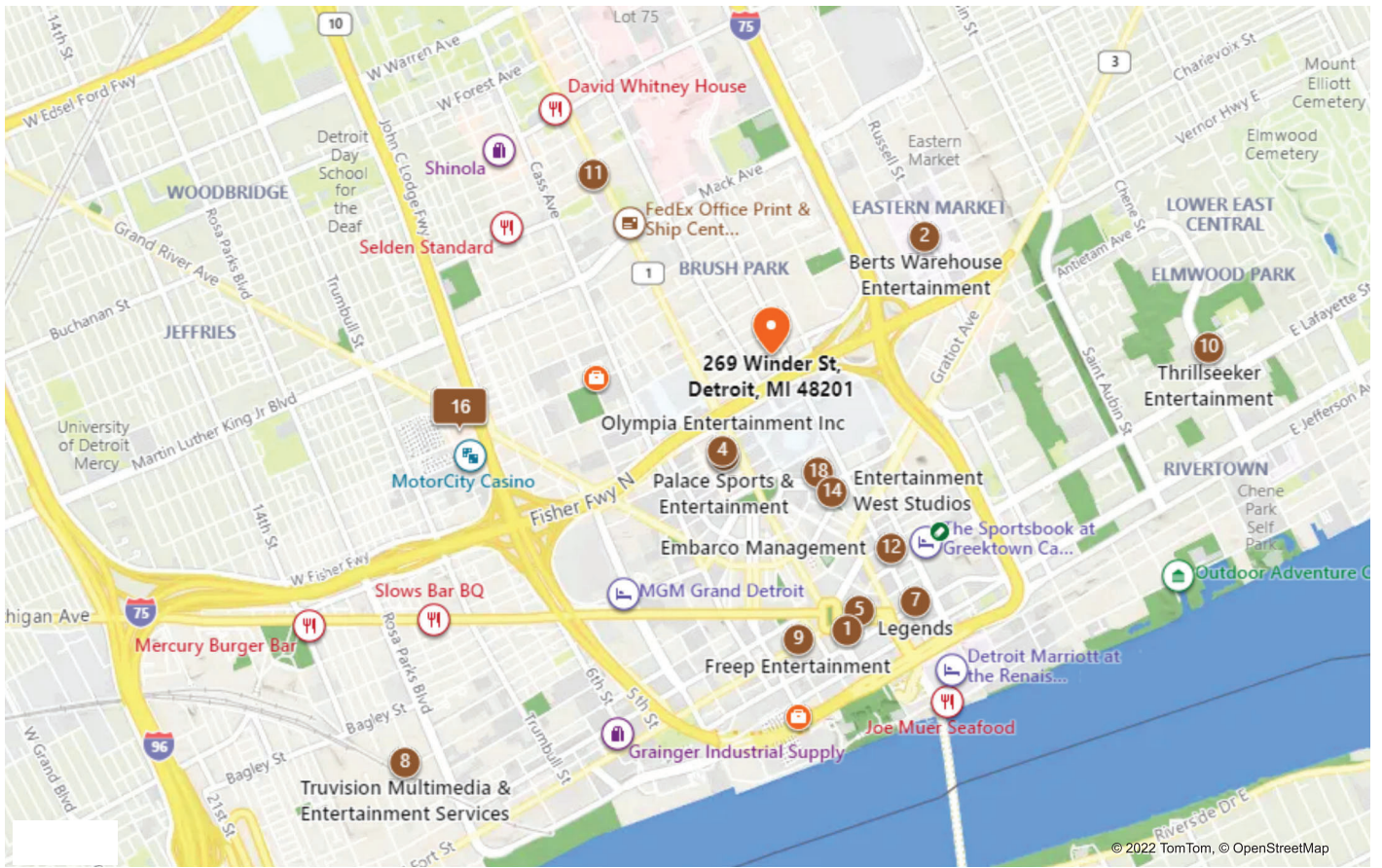
- 4 Grand Circus Park Historic District

Address: Woodward Ave, Detroit, MI 48226



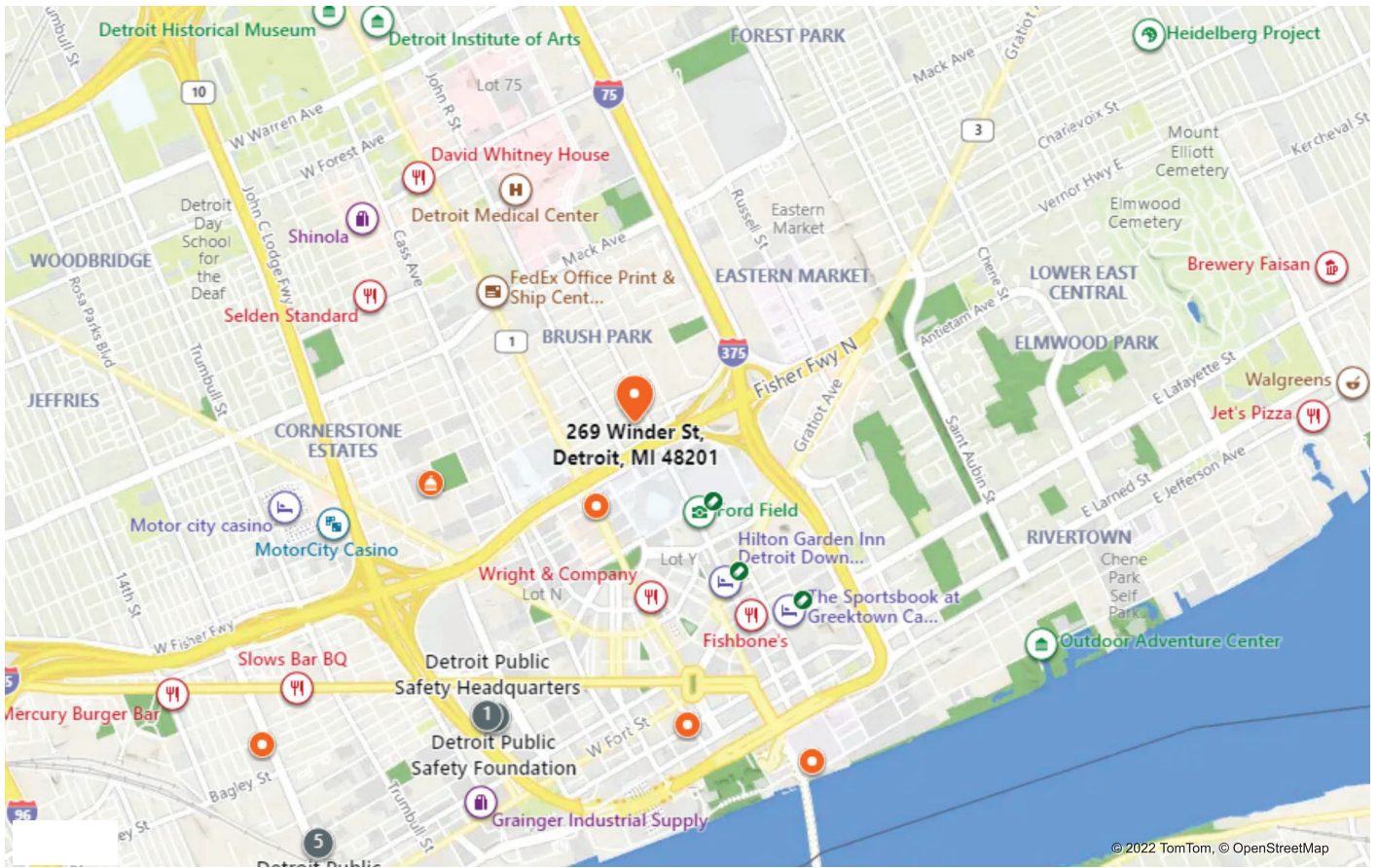
entertainment

- 1 Phoenix Entertainment**
Address: 660 Woodward Ave, Detroit, MI 48226
Phone: (313) 962-5100
- 3 Caesars Windsor**
Address: 377 Riverside Drive East, Windsor ON N9A 7H7
Phone: 800-991-7777
Website: https://www.caesars.com/caesars-windsor?utm_campaign=Yext&utm_source=yext&utm_medium=local&utm_term=Caesars%20Windsor&utm_content=Hotel
- 5 M-Class Entertainment**
Address: 65 Cadillac Sq, Detroit, MI 48226
Website: <https://www.facebook.com/M-Class-Entertainment-135980796434087/>
- 7 Legends**
Address: 415 E Congress St, Detroit, MI 48226
Phone: (313) 961-5005
Website: <https://legendsindetroit.com/>
- 9 Freep Entertainment**
Address: 160 W Fort St, Detroit, MI 48226
Phone: (313) 222-6620
Website: <http://freep.com/entertainment>
- 11 Moskillz Entertainment**
Address: Private Address in Detroit, MI
Phone: (313) 694-8178
- 13 Intertwined Entertainment LLC**
Address: Private Address in Detroit, MI
Phone: (517) 708-2020
Website: <http://www.intertwinedent.com/>
- 15 AlleyKatz Windsor**
Address: 25 Chatham St E, Windsor Ontario N9A 2W1
Phone: 519-253-0123
Website: <https://alleykatzwindsor.com/>
- 17 MME Karaoke & DJ Services (Matriarch Music & Entertainment)**
Address: 2785 E Grand Blvd Unit 160, Detroit, MI 48211
Phone: (313) 282-1675
Website: <http://matriarchmusicent.com/>
- 2 Berts Warehouse Entertainment**
Address: 2727 Russell St, Detroit, MI 48207
Phone: (313) 567-2030
Website: <http://www.bertsentertainmentcomplex.com/>
- 4 Olympia Entertainment Inc**
Address: 2211 Woodward Ave, Detroit, MI 48201
Phone: (313) 471-3200
Website: <http://www.olympiaentertainment.com/about-olympia-entertainment/contact-us>
- 6 Palace Sports & Entertainment**
Address: 2645 Woodward Ave, Detroit, MI 48201
Phone: (313) 471-7929
Website: <https://www.313presents.com/accessibility>
- 8 Truision Multimedia & Entertainment Services**
Address: 1401 Vermont St, Detroit, MI, MI 48216
Phone: (248) 331-9878
Website: <https://www.facebook.com/truisionmultimedia/>
- 10 Thrillseeker Entertainment**
Address: 1090 Chene, Detroit, MI
Website: <http://www.thrillseekerentertainment.com/>
- 12 Embarco Management**
Address: 400 Monroe St, Detroit, MI 48226
Phone: (313) 782-4145
- 14 Entertainment West Studios**
Address: 45 E Grand River Ave, Detroit, MI
- 16 Detroit Entertainment LLC**
Address: 2901 Grand River Ave, Detroit, MI 48201
Phone: (313) 237-7711
Website: <https://www.motorcitycasino.com/default.aspx>
- 18 Entertainment District Association**
Address: 241 Madison St, Detroit, MI 48226
Phone: (313) 963-9220



public safety

- 1** **Detroit Public Safety Headquarters**
Address: 1301 3rd St, Detroit, MI 48226
Phone: (313) 596-2900
Website: <https://detroitmi.gov/node/916>
- 3** **Detroit Public Safety Foundation**
Address: 1301 3rd St Ste 547, Detroit, MI 48226
Phone: (313) 628-2169
Website: <https://www.detroitpublicsafety.org/board-of-trustees>
- 5** **Detroit Public Safety Academy**
Address: 1250 Rosa Parks Blvd, Detroit, MI 48216
Phone: (313) 587-0956
Website: <https://www.detroitpsa.com/>
- 7** **Highland Park Public Safety**
Address: 25 Gerald St, Highland Park, MI 48203
Phone: (313) 252-5000
Website: <http://highlandparkcity.us/>
- 9** **Public Safety Canada**
Address: 780 Huron Church Rd, WINDSOR ONTARIO N9C 2K2
Phone: 519-257-6609
- 11** **Public Safety Records Bureau**
Address: 10600 W Jefferson Ave, River Rouge, MI 48218
Phone: (313) 842-5602
Website: <https://cityofriverrouge.com/treasurer/>
- 2** **Public Safety Canada**
Address: 251 Goyeau St Suite 502, WINDSOR ONTARIO N9A 6V2
Phone: 519-258-5741
Website: <http://www.portwindsor.com/>
- 4** **Public Safety Canada**
Address: 555 Goyeau St, WINDSOR ONTARIO N9A 1H1
Phone: 519-257-6473
- 6** **Grosse Pointe Woods Department Of Public Safety**
Address: 20025 Mack Plaza Dr, Grosse Pointe Woods, MI 48236
Phone: (313) 343-2400
Website: <http://www.gpwmi.us/>
- 8** **Southwest Public Safety Center**
Address: 4700 W Fort St, Detroit, MI 48209
Phone: (313) 596-5300
- 10** **Grosse Pointe City Public Safety**
Address: 17145 Maumee Ave, Grosse Pointe, MI 48230
Phone: (313) 886-3200
Website: https://www.grossepointecity.org/departments/public_safety/index.php

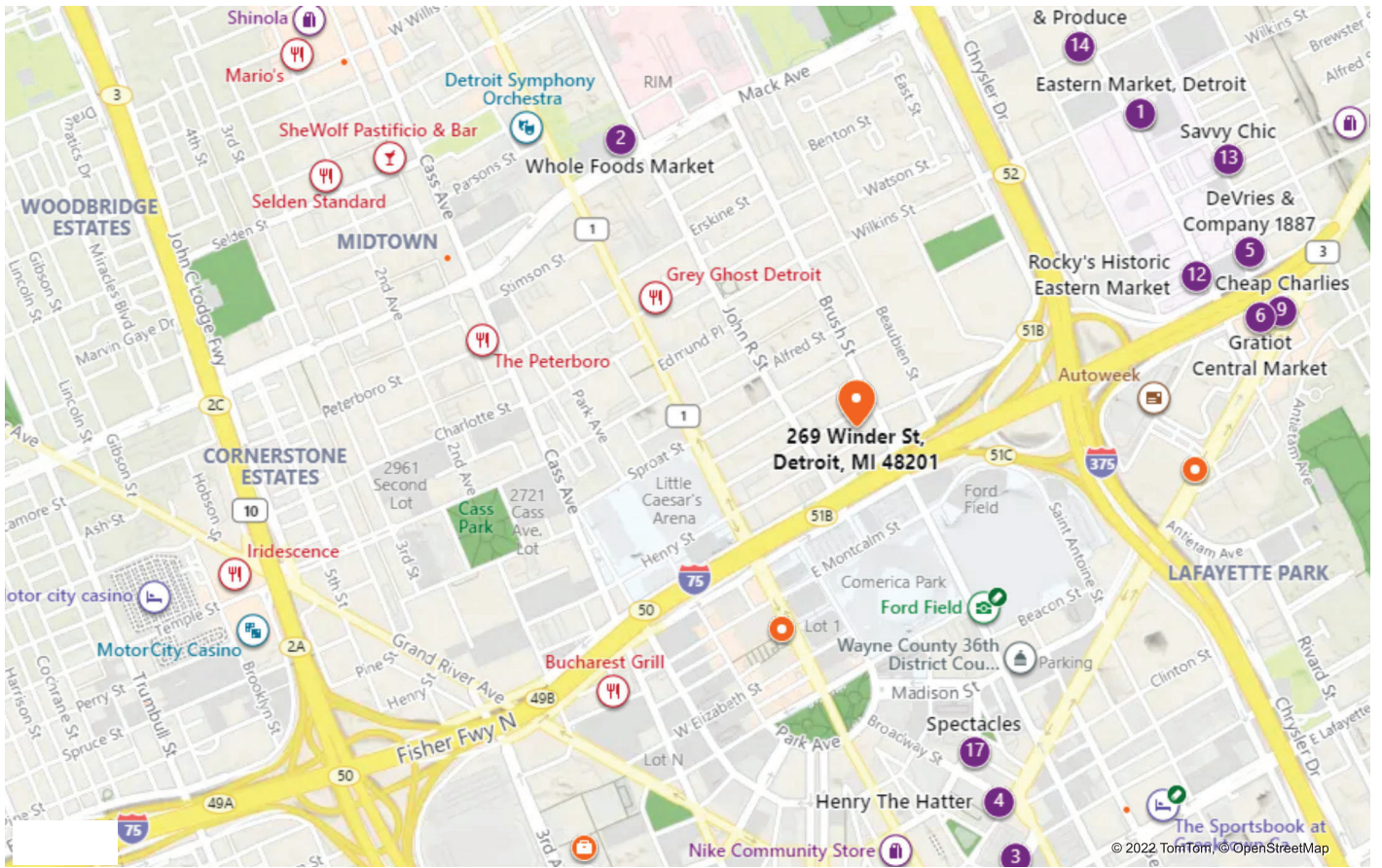


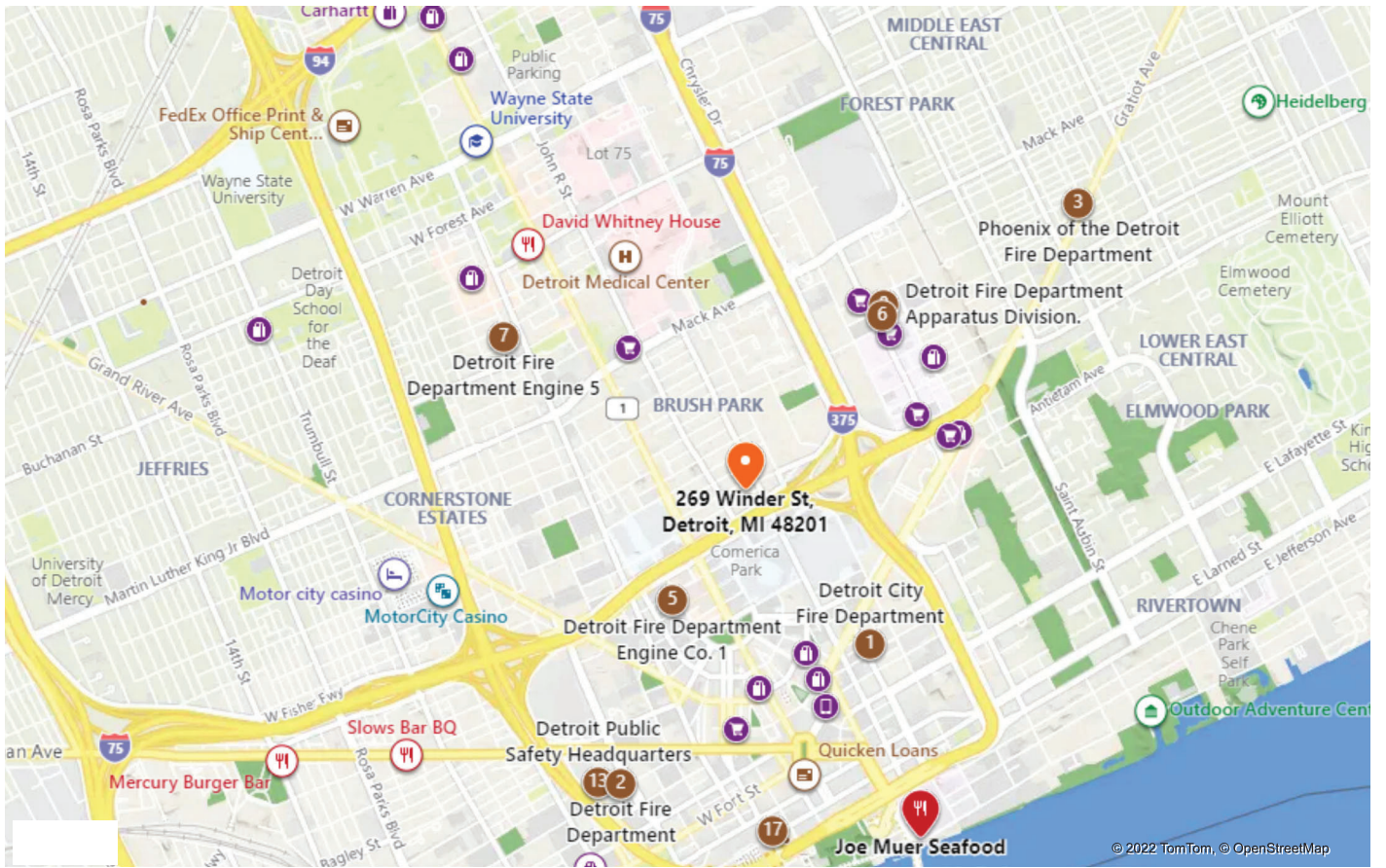
fire dept

- 1 Detroit City Fire Department**
Address: 1300 Beaubien St, Detroit, MI 48226
Phone: (313) 967-0874
Website: <http://detroitmi.gov/>
- 3 Phoenix of the Detroit Fire Department**
Address: 2733 Gratiot Ave, Detroit, MI 48207
Phone: (313) 888-9946
Website: <https://detroitfirefighter.com/>
- 5 Detroit Fire Department Engine Co. 1**
Address: 111 W Montcalm St, Detroit, MI 48201
Phone: (313) 964-9577
- 7 Detroit Fire Department Engine 5**
Address: 433 W Alexandrine St, Detroit, MI 48201
Phone: (313) 832-9853
- 9 Windsor Fire & Rescue**
Address: 815 Goyeau Street, Windsor ON N9A 1H7
Phone: 519-253-6573
Website: <http://www.windsorfire.com/>
- 11 Detroit Fire Dept Training Division**
Address: 2775 W Warren Ave, Detroit, MI 48208
Phone: (313) 237-2775
- 13 Detroit Public Safety Headquarters**
Address: 1301 3rd St, Detroit, MI 48226
Phone: (313) 596-2900
Website: <https://detroitmi.gov/node/916>
- 15 Windsor Fire Station 4**
Address: 2600 College Ave, Windsor ON
Website: <https://www.windsorfire.com/contact-us/>
- 17 City of Detroit Fire Marshall Division**
Address: 250 W Larned St, Detroit, MI 48226
Phone: (313) 962-7766
Website: <http://www.detroitmi.gov/departments/firedepartment/tabid/104/default.aspx>
- 2 Detroit Fire Department**
Address: 1301 3rd St, Detroit, MI 48226
Phone: (313) 596-2920
Website: <https://www.firedepartment.net/directory/michigan/wayne-county/detroit/detroit-fire-department>
- 4 Hamtramck Fire Department**
Address: 2625 Caniff St, Hamtramck, MI 48212
Phone: (313) 305-4503
Website: <http://hamtramckfirefighters.com/>
- 6 Detroit Fire Department**
Address: 3050 Russell St, Detroit, MI 48207
Phone: (313) 832-9281
- 8 Detroit Fire Department Apparatus Division.**
Address: 1400 Erskine St, Detroit, MI 48207
Phone: (313) 596-2912
- 10 Engine 17/Ladder 7 Of Detroit Fire Department**
Address: 6100 2nd Ave, Detroit, MI 48202
- 12 Detroit Fire Department Engine 9/Ladder 6/Chief 1**
Address: 3793 E Lafayette St, Detroit, MI 48207
- 14 Detroit Fire Department Medic 1**
Address: 2070 Blaine St, Detroit, MI 48206
- 16 Dearborn Fire Department**
Address: 6501 Schaefer Rd, Dearborn, MI 48126
Phone: (313) 943-4145
Website: <http://dearbornff.org/mobile/index.cfm>
- 18 City of Highland Park Fire Department**
Address: 25 Gerald St, Highland Park, MI 48203
Phone: (313) 252-5000

retail

- 1 Eastern Market, Detroit**
Address: 2934 Russell St, Detroit, MI 48207
Phone: (313) 833-9300
Website: <https://www.easternmarket.org/>
- 3 AT&T Store**
Address: 111 Monroe St, Detroit, MI 48226
Phone: (313) 964-2000
Website: <https://www.att.com/stores/michigan/detroit/120999>
- 5 DeVries & Company 1887**
Address: 2468 Market St, Detroit, MI 48207
Phone: (313) 568-7777
Website: <https://www.devries1887.com/cheese-meat>
- 7 City Bird**
Address: 460 W Canfield St, Detroit, MI 48201
Phone: (313) 831-9146
Website: <https://www.citybirddetroit.com/>
- 9 Cheap Charlies**
Address: 1461 Gratiot Ave, Detroit, MI 48207
Phone: (313) 567-7788
Website: <https://www.easternmarket.org/district/cheap-charlies>
- 11 State Deli & Grocery**
Address: 1200 Washington Blvd, Detroit, MI 48226
Phone: (313) 963-5141
Website: <http://statedelignocery.dinehere.us/>
- 13 Savvy Chic**
Address: 2712 Riopelle St, Detroit, MI 48207
Phone: (313) 833-8769
Website: <http://www.savvychictrends.com/stores>
- 15 National Dry Goods**
Address: 1200 Trumbull St, Detroit, MI 48216
Phone: (313) 961-3656
Website: <https://www.nationaldrygoods.com/terms-of-use>
- 17 Spectacles**
Address: 230 E Grand River Ave, Detroit, MI 48226
Phone: (313) 963-6886
Website: <https://specdet.com/>
- 2 Whole Foods Market**
Address: 115 Mack Ave, Detroit, MI 48201
Phone: (313) 576-5300
Website: <https://www.wholefoodsmarket.com/stores/detroit>
- 4 Henry The Hatter**
Address: 2472 riopelle street, Detroit, MI 48207
Phone: (313) 962-0970
Website: <https://www.henrythehatterdetroit.com/>
- 6 Gratiot Central Market**
Address: 1429 Gratiot Ave, Detroit, MI 48207
Phone: (313) 259-4486
Website: <https://www.easternmarket.org/district/gratiot-central-meat-market>
- 8 Pure Detroit**
Address: 3011 W Grand Blvd Ste #101, Detroit, MI 48202
Phone: (313) 873-7873
Website: <http://shop.puredetroit.com/>
- 10 The Peacock Room**
Address: 15 E Kirby St, Detroit, MI 48202
Phone: (313) 559-5500
Website: <https://www.facebook.com/peacockroom>
- 12 Rocky's Historic Eastern Market**
Address: 2489 Russell St, Detroit, MI 48207
Phone: (313) 567-6871
- 14 Wigley's Meats & Produce**
Address: 3405 Russell St, Detroit, MI 48207
Phone: (313) 832-4299
Website: <https://www.facebook.com/Wigleys-Meats-Produce-111669022221657/>
- 16 Value Dollar Store**
Address: 4539 Trumbull St, Detroit, MI 48208
Phone: (313) 831-2140
Website: <http://valuedollarstore.placeweb.site/>
- 18 Showtime Clothing**
Address: 5708 Woodward Ave, Detroit, MI 48202
Phone: (313) 875-9280
Website: <https://showtimedetroit.com/>





waste

- 1 Waste Management**

Address: 1550 Harper Ave, Detroit, MI 48211
Phone: (800) 963-4776
Website: <https://www.wmsolutions.com/locations/details/id/725>
- 3 Waste Management - City Disposal Transfer Station**

Address: 1550 Harper Ave, Detroit, MI 48211
Phone: (866) 797-9018
Website: <https://www.wm.com/>
- 5 Detroit Disposal & Recycling**

Address: 1475 E Milwaukee Ave, Detroit, MI 48211
Phone: (313) 664-0200
Website: <https://www.detroit-disposal.com/contact.html>
- 7 Priority Waste**

Address: 6451 E McNichols Rd, Detroit, MI 48212
Phone: (313) 893-6656
Website: <https://www.prioritywaste.com/>
- 9 Riteway Dumpster Rental Service**

Address: 3325 29th St, Detroit, MI 48210
Phone: (313) 318-5829
Website: <http://ritewaydumpster.com/>
- 11 Republic Services**

Address: 14620 Dequindre St, Detroit, MI 48212
Phone: (313) 868-2937
Website: <http://republicservices.com/>
- 13 Standard Waste**

Address: 9680 Grinnell St, Detroit, MI 48213
Phone: (313) 571-1212
- 15 Easy Dumpster Rental**

Address: 1927 Rosa Parks Blvd Ste 9, Detroit, MI 48216
Phone: (313) 462-2203
Website: <https://easydumpsterrental.com/michigan/dumpster-rental-detroit-mi/>
- 17 Budget Dumpster Rental**

Address: 3265 Gladstone St, Detroit, MI 48206
Phone: (313) 989-0320
Website: <https://www.budgetdumpster.com/detroit-mi-dumpster-rental-michigan.php>
- 2 Zero Waste Detroit**

Address: 2727 2nd Ave Ste 112, Detroit, MI 48201
Phone: (313) 986-2990
Website: <http://zerowastedetroit.org/>
- 4 US Ecology**

Address: 1923 Frederick St, Detroit, MI 48211
Phone: (313) 923-0080
Website: <http://usecology.com/>
- 6 Priority Waste**

Address: 3900 Christopher St, Hamtramck, MI 48211
Phone: (313) 579-7000
Website: <https://www.prioritywaste.com/transfer-stations/wolverine-transfer-station/>
- 8 BSC Trash and Dumpster**

Address: 14350 Cloverdale St, Detroit, MI 48238
Phone: (313) 834-2534
Website: <https://www.bscwaste.com/>
- 10 Advanced Disposal**

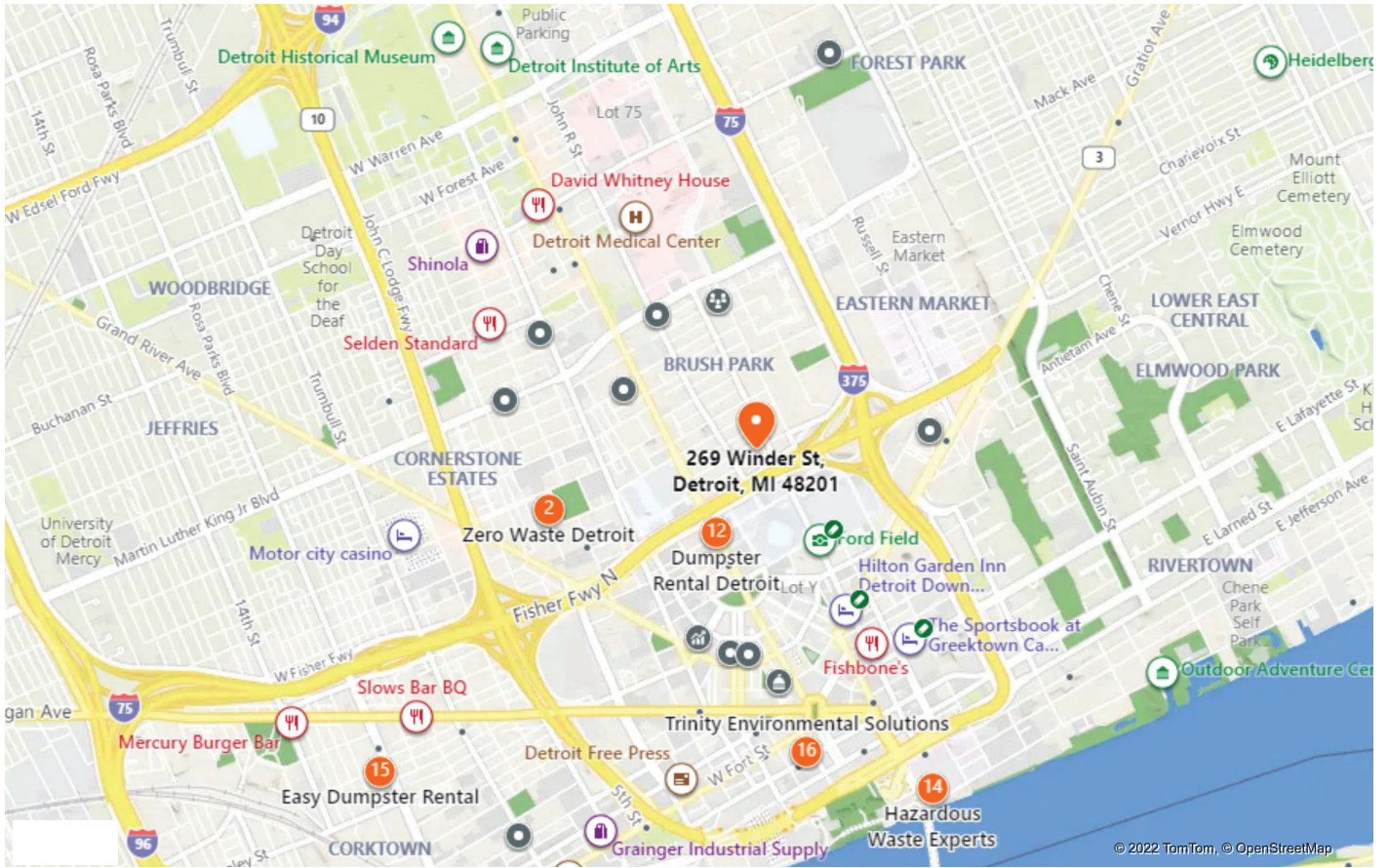
Address: 12255 Southfield Road, Detroit, MI 48228
Phone: (844) 233-8764
Website: <http://www.advanceddisposal.com/mi/detroit/detroit-residential-collection>
- 12 Dumpster Rental Detroit**

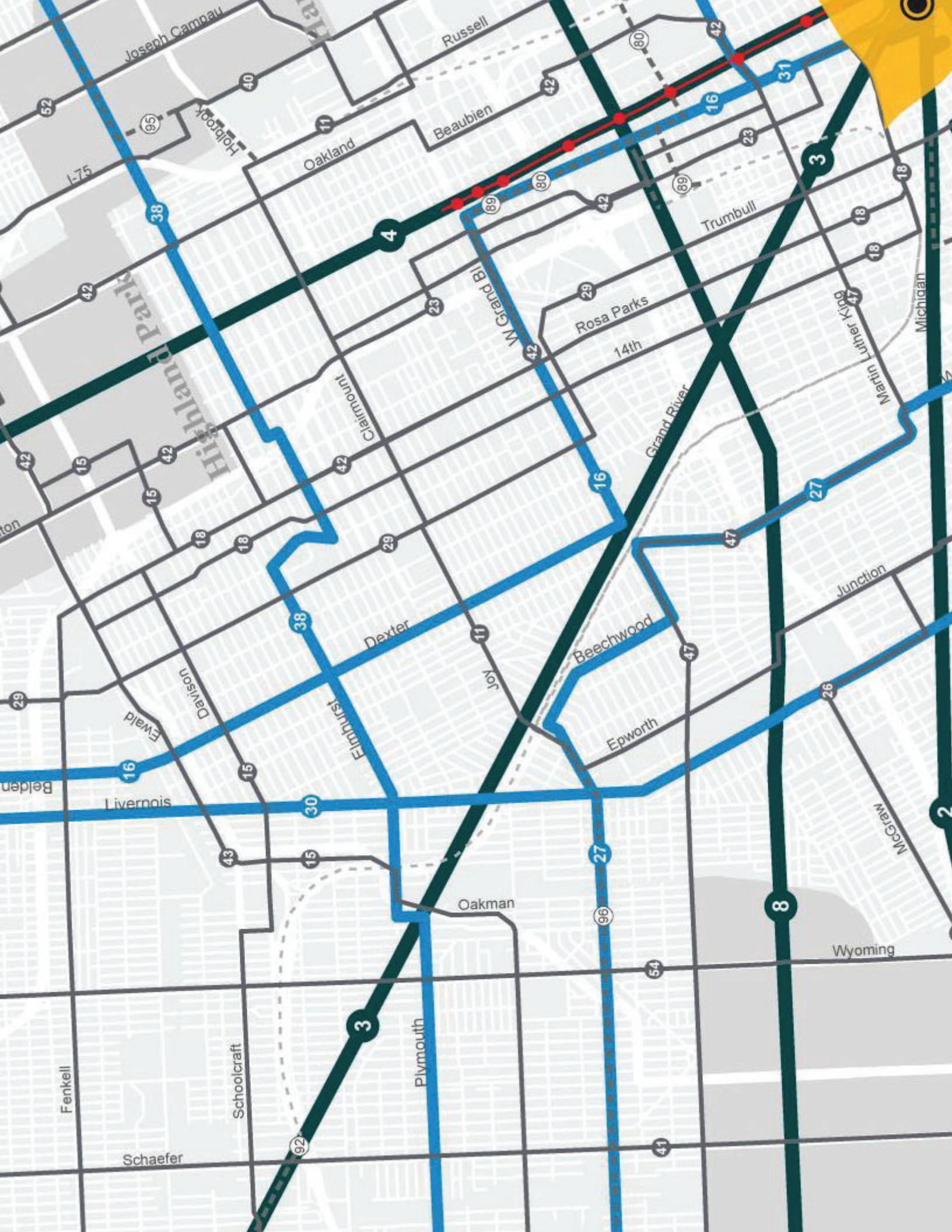
Address: 2306 Woodward Ave, Detroit, MI 48201
Phone: (313) 312-9605
Website: <http://dumpsterdetroit.net/>
- 14 Hazardous Waste Experts**

Address: 400 Renaissance Ctr Ste 2600, Detroit, MI 48243
Phone: (313) 649-7674
Website: <http://www.hazardouswasteexperts.com/>
- 16 Trinity Environmental Solutions**

Address: 615 Griswold St, Detroit, MI 48226
Phone: (313) 285-5221
- 18 Advanced Disposal**

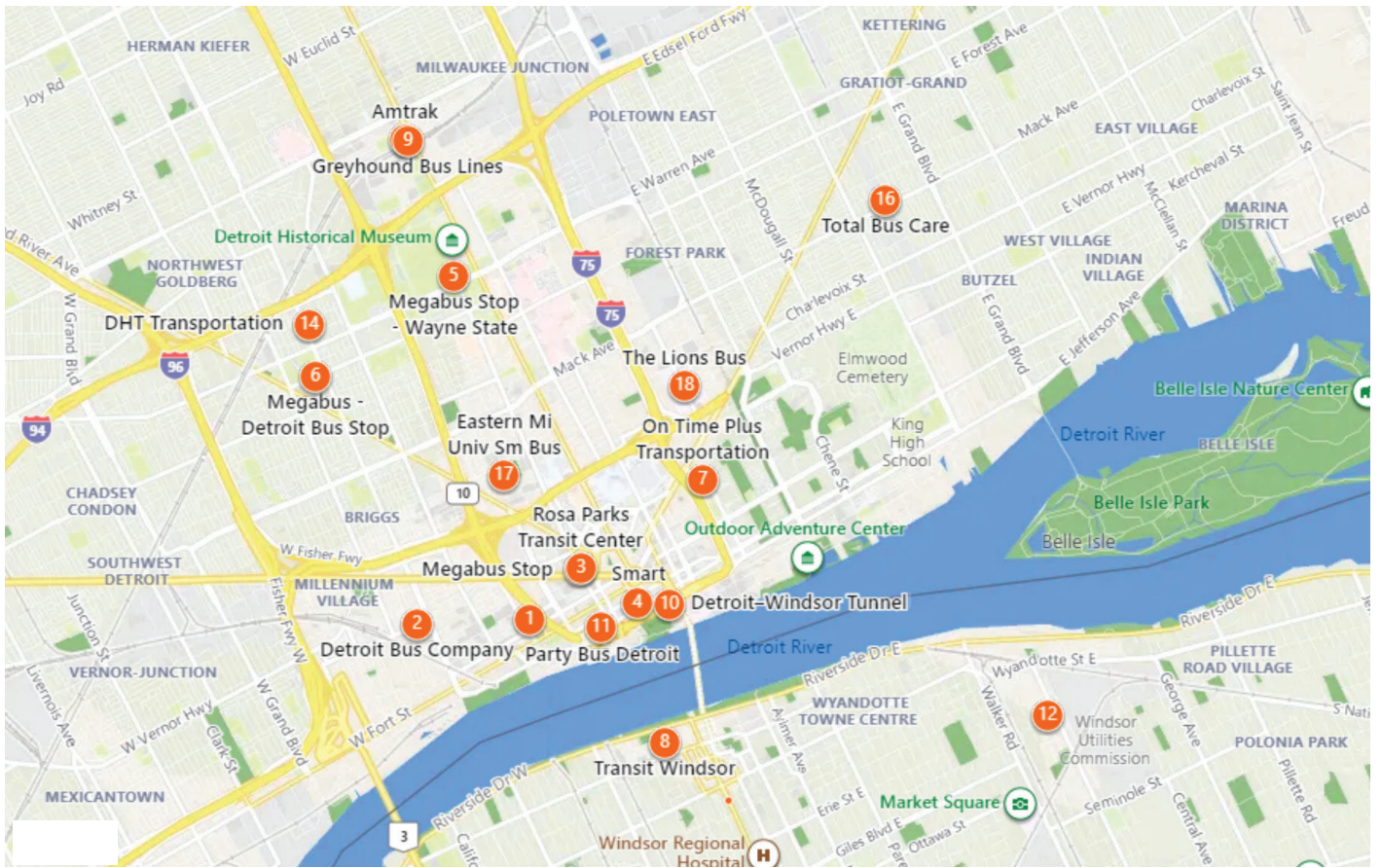
Address: 3051 Schaefer Rd, Dearborn, MI 48126
Phone: (313) 436-8333
Website: <http://www.advanceddisposal.com/>





bus

- 1 Greyhound Bus Lines**
Address: 1001 Howard St, Detroit, MI 48226
Phone: (313) 961-8011
Website: <https://www.greyhound.com/en-us/bus-station-240317>
- 3 Rosa Parks Transit Center**
Address: 1310 Cass Ave, Detroit, MI 48226
Phone: (313) 933-1300
Website: <http://www.detroitmi.gov/ddot>
- 5 Megabus Stop - Wayne State**
Address: 5056 Cass Ave, Detroit, MI 48202
Website: <http://us.megabus.com/>
- 7 On Time Plus Transportation**
Address: 1010 Antietam Ave, Detroit, MI 48207
Phone: (313) 567-4945
Website: <http://ontimeplus.com/>
- 9 Greyhound Bus Lines**
Address: 11 W Baltimore St, Detroit, MI 48202
Phone: (800) 231-2222
Website: <http://www.greyhound.com/>
- 11 Party Bus Detroit**
Address: 442 W Larned St, Detroit, MI 48226
Phone: (313) 312-5466
Website: <http://www.limodetroit.com/>
- 13 Amtrak**
Address: 11 W Baltimore Ave, Detroit, MI 48202
Phone: (313) 873-3442
Website: <https://www.amtrak.com/stations/det>
- 15 Megabus Stop**
Address: 360 Michigan Ave, Detroit, MI 48226
Phone: (877) 462-6342
Website: <http://us.megabus.com/>
- 17 Eastern Mi Univ Sm Bus**
Address: 2727 2nd Ave, Detroit, MI 48201
Phone: (313) 967-9296
- 2 Detroit Bus Company**
Address: 1990 Bagley St, Detroit, MI 48216
Phone: (313) 444-2871
Website: <http://thedetroitbus.com/>
- 4 Smart**
Address: 535 Griswold St Ste 600, Detroit, MI 48226
Phone: (313) 223-2100
Website: <https://www.smartbus.org/>
- 6 Megabus - Detroit Bus Stop**
Address: W Forest Ave, Detroit, MI
Website: <http://www.megabus.com/>
- 8 Transit Windsor**
Address: 300 Chatham Street West, Windsor ON N9A 0A8
Phone: 519-944-4111
Website: <https://citywindsor.ca/residents/transitwindsor/Pages/Transit-Windsor.aspx>
- 10 Detroit-Windsor Tunnel**
Address: 100 E Jefferson Ave, Detroit, MI 48226
Phone: (313) 567-4422
Website: <http://dwtunnel.com/>
- 12 First Student Charter Bus Rental**
Address: Private Address in Windsor, ON
Phone: 800-955-4660
Website: <http://firstcharterbus.com/>
- 14 DHT Transportation**
Address: 5150 Rosa Parks Blvd, Detroit, MI 48208
Phone: (313) 895-1300
- 16 Total Bus Care**
Address: 3601 Bellevue St, Detroit, MI 48207
Phone: (313) 923-0204
- 18 The Lions Bus**
Address: 2734 Russell St, Detroit, MI 48207
Website: <https://www.facebook.com/TheLionsBus/>



Number	Location
1	Smart
2	Detroit Bus Company
3	Rosa Parks Transit Center
4	Smart
5	Megabus Stop - Wayne State
6	Megabus - Detroit Bus Stop
7	On Time Plus Transportation
8	Transit Windsor
9	Amtrak
10	Smart
11	Smart
12	Windsor Utilities Commission
13	Market Square
14	DHT Transportation
15	Outdoor Adventure Center
16	Total Bus Care
17	Eastern Mi Univ Sm Bus
18	The Lions Bus

2020

RESULTS

DETROIT WATER QUALITY REPORT



Water & Sewerage
Department

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NOTICE: The 2020 Water Quality Report contains important information about your drinking water. Please have someone translate this document for you if you are unable to read the report.

AVISO: Este Informe de calidad del agua de 2020 contiene información importante sobre su agua potable. Haga que alguien le traduzca este documento si no puede leer el informe.

إشعار : يحتوي تقرير جودة المياه لعام
على معلومات مهمة حول مياه الشرب. يرجى 2020
أن يقوم شخص ما بترجمة هذا المستند
لك إذا كنت غير قادر على قراءة التقرير

CITY OF DETROIT

Mike Duggan, Mayor

DETROIT CITY COUNCIL

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Mary Sheffield, President Pro-Tem (District 5)

Janeé Ayers (citywide)

James Tate (District 1)

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André Spivey (District 4)

Raquel Castañeda-López (District 6)

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DETROIT WATER AND SEWERAGE DEPARTMENT

Gary A Brown, Director

Palencia Mobley, P.E., Deputy Director and Chief Engineer

The Detroit Water & Sewerage Department does not discriminate on the basis of race, color, national origin, sex, age or disability in any of our services, programs or activities.



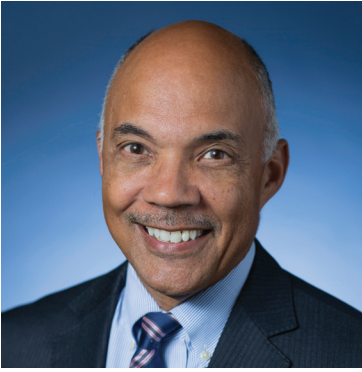
HOW TO REPORT AN EMERGENCY

To report emergencies, such as water main breaks, flooded streets, missing manhole covers, leaking or broken fire hydrants and water in basement, call DWSD at **313-267-8000**. Mobile users may download the **Improve Detroit app (SeeClickFix)** for Apple and Android devices to take a photo and report an issue, or report it online at detroitmi.gov/DWSD.



PUBLIC PARTICIPATION

The Board of Water Commissioners meets on the first Wednesday of each month at 1 p.m. for committees and the third Wednesday of each month at 2 p.m. for the regular meeting at the Water Board Building, located at 735 Randolph Street, unless otherwise noticed. All meetings are open to the public, which at the time of printing this report continue to be virtual due to the COVID-19 Pandemic health orders and guidelines. For more information, please contact the DWSD board secretary at **313-224-4704** or visit detroitmi.gov/DWSD for meeting dates, times, locations and agendas.



GARY A BROWN, DIRECTOR

Detroit Water and Sewerage Department

Dear Valued Customers,

Detroit has some of the cleanest, best drinking water in the nation. As we continue to replace lead service lines for our customers, the Detroit Water and Sewerage Department (DWSD) is making improvements and adding value to customers' homes, as well as addressing the aging infrastructure throughout our city.

In this Water Quality Report, you will see the required lead in drinking water testing results were 9 parts per billion (ppb) measured in the 51 homes at the 90th percentile, well below the action level of 15 ppb set by the Environmental Protection Agency (EPA) and the Michigan Department of Environment, Great Lakes and Energy (EGLE). The action level will decrease to 12 ppb in 2025 under Michigan's revised Lead and Copper Rule. Per the 2018 revised rule, all water utilities are to test a sampling of homes and share the results annually.

If you have a lead service line and/or lead-based plumbing components, there are everyday steps you can take to help reduce the lead in your home. Read the tips on page 11.

The DWSD Lead Service Line Replacement Program, launched in 2018 as part of our Asset Management Program, has 100 percent compliance in homeowners/occupants, allowing our crews to replace the private portion when we are already on the street replacing the water main. Read about this program on page 10.

During the COVID-19 Pandemic, nearly 1,300 households had water restored after previously being interrupted for nonpayment and we have utilized nearly \$20 million of federal funding through the CARES Act to provide low-income Detroit households with water bill assistance – to help pay down their balances – and fix minor and major private plumbing issues. And, we are committed to not interrupt water service at residential households through 2022 while we work with our local, state and federal partners on a long-term affordability solution.

Together, let's be the difference.



A MESSAGE TO OUR CUSTOMERS

Drinking water quality is important to our community and the region. The Detroit Water and Sewerage Department (DWSD) and the Great Lakes Water Authority (GLWA) are committed to meeting state and federal water quality standards including the Lead and Copper Rule. This 2020 Water Quality Report highlights the performance of GLWA and DWSD water professionals in delivering some of the nation's best drinking water.

Together, we are committed to protecting public health and maintaining open communication with the community about our drinking water. To stay informed, we encourage you to register for water alerts via email at detroitmi.gov/DWSD. Our water quality standards are mandated by the Environmental Protection Agency (EPA) and the Michigan Department of Environment, Great Lakes, and Energy (EGLE).

Correction to the 2019 Detroit Water Quality Report: Required language was omitted from the 2019 Detroit Water Quality Report on page 11, which is as follows. ***"Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure."***

HOW WE PROVIDE WATER SERVICES TO YOU

The Great Lakes Water Authority (GLWA) treats drinking water and transports it to the City of Detroit's distribution system through transmission lines. The Detroit Water and Sewerage Department (DWSD) delivers the treated water to the community through more than 2,700 miles of water mains within the city to the service line of your home or business.

The system uses source water drawn from three intakes. Two source water intakes are located in the

Detroit River: one to the north, near the inlet of Lake St. Clair, and one to the south, near Lake Erie. The third intake is located in Lake Huron.

Four of the plants treat source water drawn from the Detroit River intakes. The fifth water treatment plant, located in St. Clair County, uses source water drawn from Lake Huron. Detroit customers are provided service from four plants that treat source water drawn from the Detroit River.



HEALTH CONCERNS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, and people with HIV/AIDS or other immune system disorders. Some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **1-800-426-4791**.

GLWA voluntarily monitored our source water for the presence of *Cryptosporidium* and *Giardia*. In 2020, the presence of *Cryptosporidium* and *Giardia* were detected in the source (untreated) water at the Belle Isle Detroit River Intake serving Water Works Park, Springwells and the Northeast water treatment plants. *Cryptosporidium* was detected once in March and *Giardia* once in April. All other samples monitored in 2020 were absent the presence of *Cryptosporidium* and *Giardia*. Current test methods do not enable us to determine if these organisms are dead or if they can cause disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. *Cryptosporidium* must be ingested for it to cause disease and may be passed through means other than drinking water. Surface water treatment systems must provide treatment so that 99.9% *Giardia* is removed or inactivated.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. DWSD is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been



sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you have a service line that is lead, galvanized previously connected to lead, or unknown but likely to be lead, it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at **1-800-426-4791** or at <http://water.epa.gov/drink/info/lead>.

CUSTOMER AFFORDABILITY PROGRAMS

Water Residential Assistance Program (WRAP)

The Water Residential Assistance Program (WRAP) is a two-year program that provides funding to eligible, low-income homeowners and renters to assist with water bills, water conservation, and self-sufficiency initiatives through the Wayne Metropolitan Community Action Agency. WRAP offers many benefits including up to \$1,000 annually in bill assistance and minor plumbing repairs averaging \$1,500 for eligible households. You must be at or below 200% of the federal poverty level (\$52,400 maximum annual income for a family of four). Since WRAP was launched in 2016, more than 20,000 households have been assisted in Detroit.



10/30/50 Plan

The 10/30/50 Plan is developed for Detroit water customers who experience difficulty in paying their past-due bills. There are no income restrictions to qualify. Customers must make a down payment of either 10%, 30% or 50% of the past due balance, dependent on the account status. The balance of the past due amount is equally spread over 6-24 months, which the customer pays in addition to the normal monthly bill. All payments must be made in full and on time to stay enrolled.

CARES Act Funding

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act), provided more than \$14 million in direct bill assistance to more than 40,000 qualifying DWSD residential accounts in October 2020. The relief went toward accounts that accrued past due balances during the pandemic.

DWSD assisted in Wayne Metro Community Action Agency's Emergency Plumbing Repair Program, which resulted in more than \$6 million toward lead service line replacement, sewer service replacement and other major plumbing repairs for 600 Detroit households.

To find additional affordability programs through DWSD's community partners, visit www.detroitmi.gov/water.

DWSD offers safe, convenient ways to pay

We're working hard to deliver clean water to nearly 700,000 residents just like you. It's what we do in the community, every day! Here are easy ways to access your account and pay your water bill, including using convenient, self-service options.

Due to the COVID-19 Pandemic, all three DWSD Customer Care Centers remain closed to protect the safety of our employees and customers. All transactions are now contactless. Customers with water or sewer bill inquiries can email Customer Care at mydwsd@detroitmi.gov or call **313-267-8000**.



Access your account and pay online at www.detroitmi.gov/PayMyWaterBill and set up auto-pay, enroll in a payment arrangement, if needed, and track your real-time usage.



Visit one of the more than 60 no-fee kiosks in and around Detroit and use cash, check or debit/credit card to pay your bill. Find your nearby kiosk at www.detroitmi.gov/DWSDkiosk.



Call our automated pay-by-phone system at **313-267-8000** and ask for current balance and due date.



Send your payment by mail with check or money order payable to the "Board of Water Commissioners."

Mail to:
Board of Water Commissioners
Detroit Water and Sewerage Department
PO Box 554899
Detroit, MI 48255-4899



WORKING HARD FOR YOU

Your water and sewer bill payments make it possible for us to keep the work going. Your continued payments make all the difference. Thanks to you, we can keep making critical improvements to upgrade our 100-year-old systems for all of us.

All across Detroit, DWSD employees — most of whom are Detroit residents — are working hard for you and your neighbors, even during the COVID-19 Pandemic.



In 2018, DWSD began replacing lead service lines with copper, with owner/occupant permission, while on the same street replacing the water main.

MICHIGAN'S REVISED LEAD & COPPER RULE AND DETROIT'S TEST RESULTS

Under Michigan's revised Lead and Copper Rule, DWSD lead and drinking water testing results have been 10 parts per billion (ppb) in 2019 and 9 ppb in 2020, which are both under the state action level for lead remediation.

Detroit has an estimated 77,197 lead service lines based on a total of 311,000 water service lines. There are 28,922 service lines with unknown pipe material. Since 2018, DWSD has replaced 1,155 lead service lines while on the same street replacing the water main.

All communities with lead service lines must sample tap water in homes with lead service lines as required by EGLE and the EPA. In the summer of 2020, DWSD collected water samples from 51 homes with lead service lines. The 90th percentile of samples was 9 ppb, which is under the action level of 15 ppb. DWSD's last report of 10 ppb in 2019 was with the same sampling methodology that was required by EGLE beginning in 2019. A water supply exceeds the action level if more than 10 percent of all samples is over the action level.

"We want to reassure Detroiters, especially during the COVID-19 Pandemic, the water supplied by DWSD is safe for drinking," said Gary Brown, DWSD director. "The water leaving Detroit's water treatment plants, operated by the Great Lakes Water Authority, does not contain

lead. The primary sources of lead in water are lead service lines, lead solder, and/or fixtures containing lead in the home. Even before the State of Michigan enacted the most stringent Lead and Copper Rule in the nation, DWSD began replacing lead service lines at DWSD's cost with owner/occupant permission during water main replacement projects and providing pitcher filters to those residents and businesses as a precautionary measure. We have replaced more than 1,000 lead service lines since 2018, have 100% resident response rate for replacement when on the street replacing the water main, and our program was recently cited as a model for other communities in the Journal of the American Water Works Association."

The Chief Public Health Officer for the City of Detroit Denise Fair said, "I am pleased with the results of the lead and copper testing, which have followed stricter guidelines from the state. We know that the presence of lead in decaying paint and dust is the number one source of lead poisoning in children living in homes that were built before 1978. Therefore, we recommend that if you have any concerns regarding lead exposure inside your home – to request a lead test from your child's primary health care provider or contact the Detroit Health Department."

The new Michigan Lead and Copper Rule Testing Method

The revised Michigan Lead and Copper Rule enacted in June 2018 – the most stringent in the nation – changed the way lead samples are collected at Detroit homes and all Michigan communities. In the past, DWSD collected only the first liter of water out of the tap. Under the new rule – used in testing in the past two years – both the first and fifth liter are collected. The first liter represents water from household plumbing and fixtures, and the fifth liter is more likely to represent water from the lead service line. The service line is the pipe which brings water from the water main in the street to inside the home or business. In Detroit, most service lines are either lead, copper or galvanized steel. Lead service lines are under two inches in diameter and are mostly at single family or duplex homes and some small businesses. The new sampling technique more accurately represents the range of lead in the drinking water in Detroit homes.

Lead in Drinking Water

The water leaving Detroit water treatment plants, operated by GLWA, does not contain lead, but lead can be released into drinking water from lead service lines and home plumbing as the water moves from the water mains to your tap. Beginning in 1945, Detroit stopped allowing the installation of lead piping for water service lines. Homes before 1945 are most likely to have a lead pipe that connects the home to the water main, known as a lead service line. The lead in lead service lines, household plumbing and fixtures can dissolve or break off into water and end up in tap water. The water provided to DWSD customers contains a corrosion inhibitor to reduce leaching from lead service lines and other lead components, but lead can still be present in water at the tap.



Health Effects of Lead

Lead can cause serious health and development problems. The greatest risk of lead exposure is to infants, young children, and pregnant women. Older homes can have many sources of lead exposure including paint, dust and soil. If you have questions about other sources of lead exposure, please contact the Detroit Health Department at [313-876-0133](tel:313-876-0133).

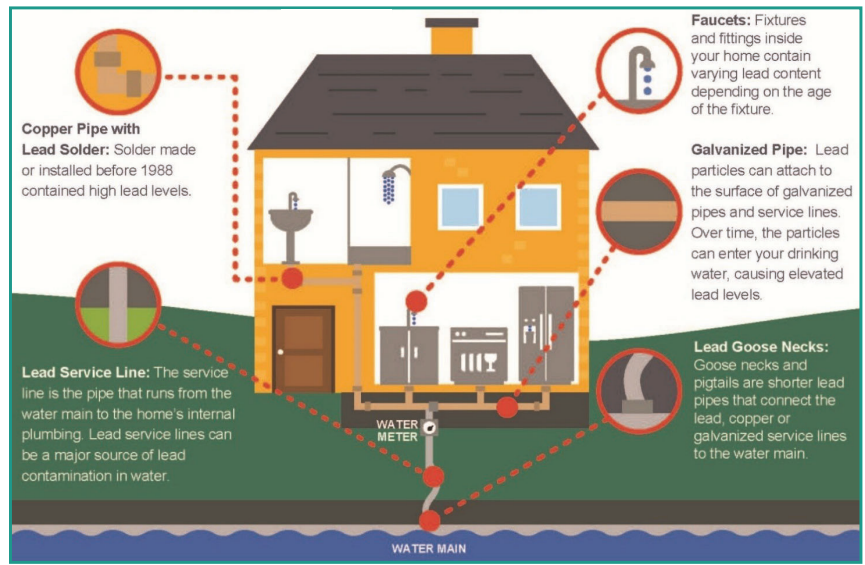
Sources of Lead

Drinking water is only one source of lead exposure. Some of the most significant sources, especially for children six years old and under, include lead-based paint and lead contaminated dust and soil. Because lead can be carried on hands, clothing, and shoes, sources of exposure to lead can include the workplace and certain hobbies. Wash your children's hands and toys often as they can come in contact with dirt and dust containing lead. In addition, lead can be found in certain types of pottery, pewter, food and cosmetics. If you have questions about other sources of lead exposure, please contact the health department.

Most plumbing products such as service lines, pipes, fixtures, and plumbing materials manufactured before 2014 contain up to 8% lead. The infographic (see graphic) demonstrates where sources of lead in drinking water could be in your home. Older homes may have more lead unless the service line and/or plumbing has been replaced. Lead-based solder and lead-based fittings and fixtures are still available in stores to use for non-drinking water applications. Be careful to select the appropriate products for repairing or replacing drinking water plumbing in your home. Even materials currently marked "lead free" have up to 0.25% lead by weight.

Lead Service Line Replacement Program

In 2018, prior to the revised Michigan Lead and Copper Rule, DWSD began replacing lead service lines as part of its asset management program when on the same street replacing the water main. Extensive outreach, including neighborhood meetings and information packets, to the owner/occupant is done prior to construction. The City owns the portion of the service line from the water main to the stop box (turn-on/off valve typically in the front yard). The property owner is responsible for the service line from the stop box to inside the house (see page 5). Therefore, DWSD gets owner/occupant permission to replace lead service lines when its crews encounter them after visually verifying service line material at each house by excavating around the stop box during scheduled water main replacement. With owner/occupant permission, the lead service line is replaced with copper at DWSD's expense through its Capital Improvement Program.



Galvanized plumbing can be a potential source of lead. Galvanized plumbing can absorb lead from upstream sources like a lead service line. Even after the lead service line has been removed, galvanized plumbing can continue to release lead into drinking water over time. Homes that are served by a lead service line should consider replacing galvanized plumbing inside the home.

A white paper on DWSD's Lead Service Line Replacement Program was in the October 2020 issue of the Journal of the American Water Works Association, titled "Detroit's Robust Full Lead Service Line Replacement Program," as a best practice for other water utilities in America.

DWSD Deputy Director and Chief Engineer Palencia Mobley, P.E., said, "The most effective and cost efficient method for replacing lead service lines is when we already have crews on the street replacing a water main. Our program uses mapping technology to track service line material and indicate the date of replacement if in fact we confirmed the service line is lead through the exploratory digging. Due to DWSD's extensive community outreach on this program, done in advance of the project, we have a 100% resident response rate when we offer to replace their portion of a lead service line while replacing the water main on their block."

Source: EPA

Additional information regarding lead, including "Frequently Asked Questions about Lead in Drinking Water," can be found on the City of Detroit's website at www.detroitmi.gov/leadsafe, or visit EGLE's website at www.michigan.gov/MILeadSafe.

Steps You Can Take to Reduce Your Exposure to Lead in Your Water



Run your water to flush out lead. The more time water has been sitting in your home's pipes, the more lead it may contain. Therefore, if your water has not been used for several hours, run the water before using it for drinking or cooking. This flushes lead-containing water from the pipes. If you do not have a lead service line, run the water for 30 seconds to two minutes, or until it becomes cold or reaches a steady temperature. If you do have a lead service line, run the water for at least five minutes to flush water from both the interior building plumbing and the lead service line.



Consider using a filter to reduce lead in drinking water. The Detroit Health Department recommends that any household with a child or pregnant woman use a certified lead filter to reduce lead from their drinking water. Look for filters that are tested and certified to NSF/ANSI Standard 53 for lead reduction. Some filter options include a pour-through pitcher or faucet-mount systems. If the label does not specifically mention lead reduction, check the Performance Data Sheet included with the device. Be sure to maintain and replace the filter device in accordance with the manufacturer's instructions to protect water quality.



Clean your aerators. The aerator is the screen at the end of your faucet. It catches debris. This debris could include particulate lead. The aerator should be removed monthly to rinse out any debris.



Identify older plumbing fixtures that likely contain lead. Older faucets, fittings, and valves sold before 2014 may contain higher levels of lead, even if marked "lead-free." Faucets, fittings, and valves sold after January 2014 are required to meet a more restrictive "lead-free" definition but may still contain up to 0.25 percent lead. When purchasing new plumbing materials, it is important to look for materials that are certified to meet NSF standard 61.



Use only cold water for drinking and cooking. Do not cook with or drink water from the hot water tap; lead dissolves more easily into hot water.



Use only filtered water or bottled water for preparing baby formula.



Do not boil water to remove lead. Boiling water will not reduce lead levels. In the event DWSD issues a boil water advisory due to low water pressure (such as caused by a large water main break), water users in the designated advisory area will be advised to boil water before using for cooking, drinking and brushing your teeth. Residents with lead service lines should only boil filtered water — not water directly from the tap.



Get your child tested. Contact the Detroit Health Department at [313-876-0133](tel:313-876-0133) or your healthcare provider to find out how you can get your child tested for lead if you are concerned about exposure.



Verify your lead service line. If you know you have a lead service line let us know by following the online instructions and submitting the form at www.detroitmi.gov/dwsl. This information helps DWSD plan for future lead service line replacements.



Test your water for lead. To request for your water to be tested, please visit www.detroitmi.gov/leadsafe and search "lead and copper sample request form." If you do not have Internet access, please call the Detroit Lead Safe Resource Line at [313-964-9300](tel:313-964-9300).

Additional information regarding lead, including "Frequently Asked Questions about Lead in Drinking Water," can be found on the City of Detroit's website at www.detroitmi.gov/leadsafe or visit EGLE's website at www.michigan.gov/MILeadSafe.



Infants and children who drink water containing lead could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.



IMPROVING STORMWATER MANAGEMENT

DWSD is now managing **61 million gallons of stormwater annually** through 16 GSI projects.

Community Input Led to Beautiful Medians that Manage Stormwater on Oakman Boulevard

Back in 2017, DWSD began hosting meetings with the Aviation Sub, sharing design options for the Green Stormwater Infrastructure (GSI) in the medians along Oakman Boulevard between Joy Road and Tireman Avenue. Residents in the community provided feedback on trees, plantings, and other features during these meetings. They also considered passive versus active, park like settings. The final design included their input of a passive setting. A final pre-construction meeting was held in 2020 before the COVID-19 Pandemic at Rippling Hope to share the project plans and timeline with the community, and it included the primary construction contractor, Detroit-based and minority-owned Blaze Contracting.

During the official project announcement in 2020, Mayor Mike Duggan praised the DWSD Oakman Boulevard project as an example of, “Detroiters rebuilding Detroit,” with the announcement of Detroit-based Blaze Contracting as the primary contractor for the project.

Oakman Boulevard GSI Overview

The \$8.6 million Oakman Boulevard construction project is the city’s largest investment to date in GSI.

The most common method to improve stormwater management is through GSI practices. It replicates natural systems to reduce runoff volume, filter pollutants, and cut down on flooding by slowing the movement of water into the combined sewer system and channeling it into the ground.

During construction, DWSD’s contractor converted 10 medians into bioretention gardens, including the median shown above on Oakman Boulevard south of Mackenzie. Those gardens will manage an estimated 37 million gallons of stormwater annually, and reduce the flow into our combined sewer system.

“Even after the delayed start due to COVID-19 stay-at-home orders, Blaze and its subcontractors were able to complete major construction by the end of 2020. And, they did so with 48 Detroit residents working on the project. This historic Detroit neighborhood will see the beauty these gardens bring while benefiting mostly from reduced street flooding,” said Palencia Mobley, P.E., DWSD Deputy Director & Chief Engineer.

Visit www.detroitstormwater.org to see both the public and private GSI projects in Detroit.

DWSD's GOALS

DWSD's goal is to improve service delivery and quality of life by:

- Reducing water main breaks;
- Reducing street flooding and sewer system failures;
- Reducing future investment in new CSO facilities (wet weather treatment);
- Increasing acres managed by green stormwater infrastructure;
- Coordinating with other public and private agencies to maximize dollars invested and minimize disruption from construction activity;
- Increasing job opportunities for Detroiters; and
- Upgrading and maintaining facilities, equipment and systems for effective operations.

UPGRADING DETROIT'S WATER AND SEWER SYSTEMS

DWSD is in its second year of its \$500 million Capital Improvement Program (CIP) to begin to upgrade the city's aging water infrastructure by replacing water mains, lead service lines and fire hydrants, relining sewer pipes, and installing green stormwater infrastructure. In 2018, DWSD began assessing water and sewer systems by neighborhood using condition assessments, rather than by the number of water main breaks and basement backups to avoid taking a scattered approach.

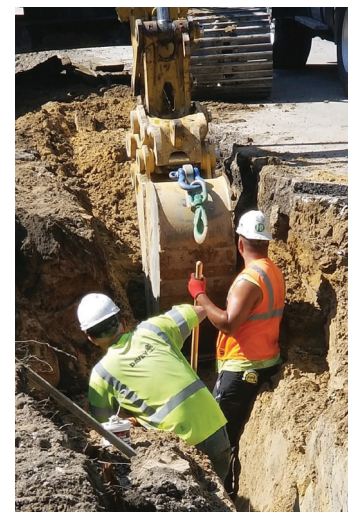
Since 2019 through the CIP, DWSD has replaced 66 miles of water main, upgraded 50 miles of sewer piping, replace more than 1,155 lead service lines and installed 11 bioretention gardens.

Despite the pause in construction due to Governor Gretchen Whitmer's COVID-19 Stay Home, Stay Safe Order, DWSD CIP projects have stayed on schedule. The Oakman Boulevard Stormwater and Water

System Upgrade Project was mostly completed in November 2020. This \$8.6 million project transformed 10 medians into bioretention to manage 37 million gallons of stormwater annually (see Stormwater article on page 12).

The \$44.3 million invested into Cornerstone Village and North Rosedale Park, the first two neighborhoods under the new approach, is on track to finish in December 2022.

Since 2019, DWSD has assessed the water and sewer systems in more than 20 neighborhoods, resulting in water and sewer upgrades in neighborhoods such as the North End. In 2021, DWSD will complete an additional 225 miles of water main condition assessment work across 39 neighborhoods to test hydrant flow, leak detection and more to identify neighborhoods in need of water main upgrades.



These photographs were taken prior to the COVID-19 outbreak.

SUBSTANCES FOUND IN SOURCE WATER

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells.

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances resulting from the presence of animal or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses;
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, which also can come from gas stations, urban stormwater runoff and septic systems; and
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for human health.

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at **800-426-4791**.

SOURCE WATER PROTECTION

Your source water comes from the Detroit River, situated within the Lake St. Clair, Clinton River, Detroit River, Rouge River, Ecorse River, watersheds in the U.S. and parts of the Thames River, Little River, Turkey Creek and Sydenham watersheds in Canada. The Michigan Department of Environmental Quality in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage Department, and the Michigan Public Health Institute performed a source water assessment in 2004 to determine the susceptibility of GLWA's Detroit River source water for potential contamination. The susceptibility rating is based on a seven-tiered scale and ranges from very low to very high determined primarily using geologic sensitivity, water chemistry, and potential contaminant sources. The report described GLWA's Detroit river intakes as highly susceptible to potential contamination. However, all four GLWA water treatment plants that service the city of Detroit and draw water from the Detroit River have historically provided satisfactory treatment and meet drinking water standards.

GLWA has initiated source-water protection activities that include chemical containment, spill response, and a mercury reduction program. GLWA participates in the National Pollutant Discharge Elimination System permit discharge program and has an emergency response management plan. In 2016, the Michigan Department of Environmental, Great Lakes and Energy approved the GLWA's Surface Water Intake Protection plan for the Belle Isle intake and Fighting island intakes. The plan has seven elements that include: roles and duties of government units and water supply agencies, delineation of a source water protection areas, identification of potential sources of contamination, management approaches for protection, contingency plans, siting of new water sources, public participation, and public education activities. GLWA is in the process of updating the plans which should be completed by September 2021. If you would like to know more information about the Source Water Assessment report please, contact GLWA at **313-926-8102**.

Key to the Detected Contaminants

> Greater Than	µmhos Micromhos Measure of electrical conductance of water.
N/A Not Applicable	NTU Nephelometric Turbidity Units Measure of cloudiness of water.
ND Not Detected	pCi/L Picocuries Per Liter Measure of radioactivity.
ppm Parts Per Million (one in a million) The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.	ppb Parts Per Billion (one in a billion) The ppb is equivalent to micrograms per liter. A microgram = 1/1000 gram.
AL Action Level The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.	°C Celsius A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
HAAS Haloacetic Acids HAAS is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.	RAA Running Annual Average The average of all analytical results for all samples during the previous four quarters.
LRAA Locational Running Annual Average The average of analytical results for samples at a particular monitoring location during the previous four quarters.	TT Treatment Technique A required process intended to reduce the level of a contaminant in drinking water.
MCL Maximum Contaminant Level The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.	MRDL Maximum Residual Disinfectant Level The highest level of disinfectant allowed in drinking water. There is convincing evidence that additional of a disinfectant is necessary for control of microbial contaminants.
SMCL Secondary Maximum Contaminant Level An MCL which involves a biological, chemical or physical characteristic of water that may adversely affect the taste, odor, color or appearance (aesthetics), which may thereby affect public confidence or acceptance of the drinking water.	MRDLG Maximum Residual Disinfectant Level Goal The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MCLG Maximum Contaminant Level Goal The level of contaminant in drinking water below which there is no known or expected risk to health.	Level 1 Level 1 Assessment A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.
TTHM Total Trihalomethanes Total Trihalomethanes is the sum of chloroform, dibromochloromethane, bromodichloromethane and bromoform. Compliance is based on the total.	Level 2 Level 2 Assessment A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if necessary) why an E. coli MCL violation occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

REGULATED CONTAMINANTS

Inorganic Chemicals Monitoring at Plant Finished Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water
Fluoride	3/10/20	ppm	4	4	0.80	0.63-0.80	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate	3/10/20	ppm	10	10	0.61	0.36-0.61	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium	5/16/17	ppm	2	2	0.01	0.01-0.01	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Disinfection Residual Monitoring in the Detroit Distribution System

Regulated Contaminant	Test Date	Unit	Health Goal MRDLG	Allowed Level MRDL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Total Chlorine Residual	2020	ppm	4	4	0.77	0.49-0.87	no	Water additive used to control microbes

Disinfection By-Products Stage 2 Disinfection By-Products Monitoring in the Distribution System

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level LRAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
(TTHM) Total Trihalomethanes	2020	ppb	n/a	80	29.0	12.0-39.0	no	By-product of drinking water chlorination
(HAA5) Haloacetic Acids	2020	ppb	n/a	60	19.0	7.4-29.0	no	By-product of drinking water chlorination

Disinfectant By-Product Monitoring at the Waterworks Park Plant Finished Tap

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level RAA	Range of Quarterly Results	Violation	Major Sources in Drinking Water
Bromate	2020	ppb	0	10	ND	ND-ND	no	By-product of drinking water ozonation

Turbidity Monitored Every 4 Hrs at the Plant Finished Water Tap

Highest Single Measurement Cannot Exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation	Major Sources in Drinking Water
0.21 NTU	100%	no	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Special Monitoring

Contaminant	Test Date	Unit	MCLG	MCL	Highest Level Detected	Source of Contaminant
Sodium	3/10/20	ppm	n/a	n/a	6.81	Erosion of natural deposits

Lead and Copper Monitoring at the Consumer's Tap in 2020

Data reported in this table is from 2019. For more information on the testing of Lead and Copper, please refer to page 8.

Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Action Level AL	90 th Percentile Value*	Number of Sites Over AL	Range of Individual Samples	Violation	Major Sources in Drinking Water
Lead	2020	ppb	0	15	9	2	0-32	no	Lead services lines, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits
Copper	2020	ppm	1.3	1.3	0.1	0	0.0-0.2	no	Corrosion of household plumbing system; Erosion of natural deposits; leaching from wood preservatives

* The 90th percentile value means 90 percent of the homes tested have lead and copper levels below the given 90th percentile value. If the 90th percentile value is above the AL additional requirements must be met.

Regulated Contaminant	Treatment Technique	Typical Source of Contaminant
Total Organic Carbon ppm	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC is measured each quarter and because the level is low, there is no requirement for TOC removal.	Erosion of natural deposits

Radionuclides Monitored at the Plant Finished Tap in 2014

Regulated Contaminant	Test Date	Unit	MCLG	MCL	Level Detected	Violation	Major Sources in Drinking Water
Combined Radium Radium 226 and 228	5/13/14	pCi/L	0	5	0.65 ± 0.54	no	Erosion of natural deposits

GLWA conducts tests throughout the year. Tests that show the presence of a substance or require special monitoring are presented in these tables. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

UNREGULATED CONTAMINANTS

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Before EPA regulates a contaminant, it considers adverse health effects, the occurrence of the contaminant in drinking water, and whether the regulation would reduce health risk.

2015 Unregulated Contaminants Monitored at the Plant Finished Taps

Unregulated Contaminant	Test Date	Unit	Average Level Detected	Range of Detection	Health Advisory	MCLG	MCL	Source of Contaminant
Strontium	2015	ppb	106	98.7-124	4000	n/a	n/a	Erosion of natural deposits
Total Chromium	2015	ppb	0.28	0.21-0.42	n/a	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Chromium +6	2015	ppb	0.13	0.082-0.24	n/a	n/a	n/a	Discharge from steel and pulp mills; Erosion of natural deposits
Vanadium	2015	ppb	0.21	ND-0.66	n/a	n/a	n/a	Erosion of natural deposits

2015 Unregulated Contaminants Monitored in the Distribution System

Unregulated Contaminant	Test Date	Unit	Average Level Detected	Range of Detection	Health Advisory	MCLG	MCL	Source of Contaminant
Strontium	2015	ppb	109	102-124	4000	n/a	n/a	Erosion of natural deposits
Total Chromium	2015	ppb	0.21	ND-0.45	n/a	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
Chromium +6	2015	ppb	0.11	0.086-0.18	n/a	n/a	n/a	Discharge from steel and pulp mills; Erosion of natural deposits
Vanadium	2015	ppb	0.20	ND-0.53	n/a	n/a	n/a	Erosion of natural deposits

2019 Unregulated Contaminants Monitored at the Plant Finished Taps

Unregulated Contaminant	Test Date	Unit	Highest Level Detected	SMCL	Range of Detection	Noticeable Effects Above the SMCL	Source of Contaminant
Manganese	2019	ppb	0.48	50	0.0-0.48	black to brown color; black staining; bitter metallic taste	Erosion of natural deposits and corrosion of iron pipes

2019 Unregulated Contaminants Monitored in the Distribution System Haloacetic Acids

Unregulated Contaminant	Test Date	Unit	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water
Haloacetic Acid 9 (HAA9)	2019	ppb	n/a	31.41	6.72-31.41	n/a	By-product of drinking water chlorination
Haloacetic Acid 5 (HAA5)	2019	ppb	60	22.5	4.5-22.5	no	By-product of drinking water chlorination
Haloacetic Acid Brominated 6 (HAA6BR)	2019	ppb	n/a	11.34	2.22-11.34	n/a	By-product of drinking water chlorination

2020 CITY OF DETROIT TAP WATER MINERAL ANALYSIS

Parameter	Units	Max.	Min.	Avg.
Turbidity	NTU	0.70	0.03	0.11
Total Solids	ppm	177	46	137
Total Dissolved Solids	ppm	162	77	123
Aluminum	ppm	0.197	0.014	0.071
Iron	ppm	0.183	ND	0.112
Copper	ppm	0.012	ND	0.000
Magnesium	ppm	8.36	5.93	7.40
Calcium	ppm	34.8	23.5	27.6
Sodium	ppm	7.78	4.43	5.14
Potassium	ppm	1.31	0.89	1.00
Manganese	ppm	ND	ND	ND
Lead	ppm	ND	ND	ND
Zinc	ppm	ND	ND	ND
Silica	ppm	19.5	ND	2.3
Sulfate	ppm	43.0	14.5	25.1

Parameter	Units	Max.	Min.	Avg.
Phosphorus	ppm	1.40	0.11	0.51
Free Carbon Dioxide	ppm	16.7	5.7	8.0
Total Hardness	ppm	118	95	103
Total Alkalinity	ppm	80	66	72
Carbonate Alkalinity	ppm	ND	ND	ND
Bi-Carbonate Alkalinity	ppm	80	66	72
Non-Carbonate Hardness	ppm	40	22	30
Chemical Oxygen Demand	ppm	13.5	ND	2.4
Dissolved Oxygen	ppm	17.0	7.8	11.1
Chloride	ppm	13.9	8.1	9.6
Nitrate Nitrogen	ppm	ND	ND	ND
Fluoride	ppm	0.81	0.49	0.65
pH		7.41	6.97	7.26
Specific Conductance @ 25 °C	µmhos	274	195	224
Temperature	°C	25.8	1.8	13.7

These tables are based on tests conducted by GLWA in the year 2019 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables.

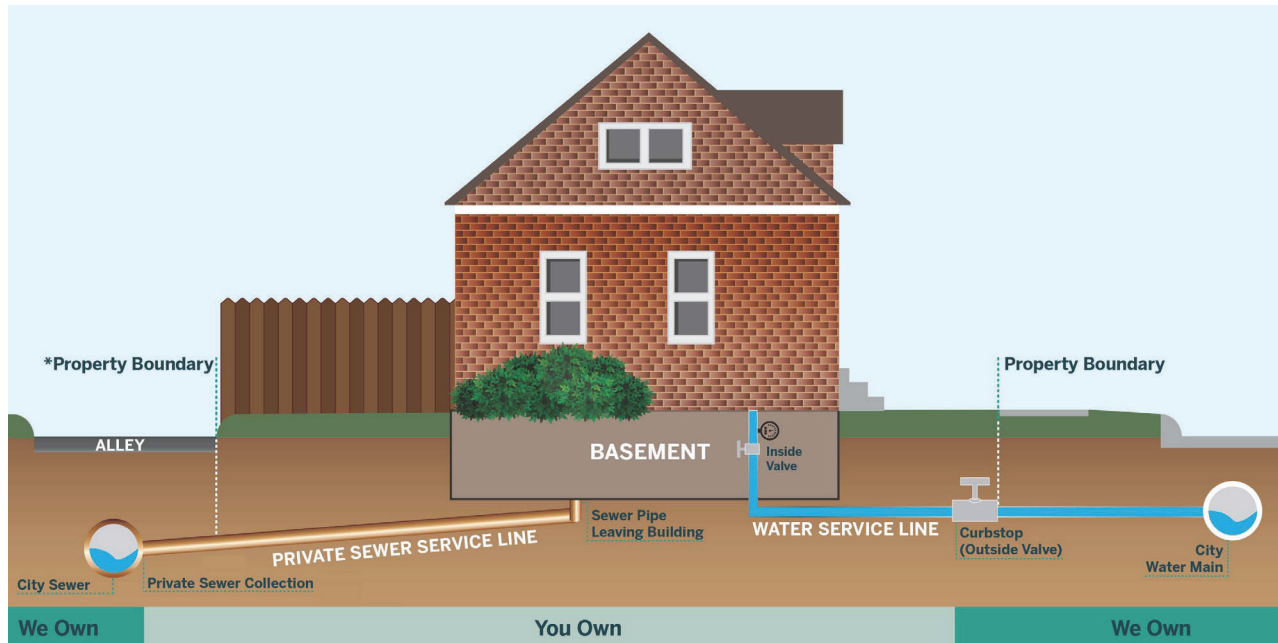
DID YOU KNOW?

Did you know the water service line connects your house to the water main?

The water main that brings treated drinking water to your neighborhood is either under the street or located under the right-of-way (berm) between the sidewalk and the street. Homes and businesses are connected to the water main by a service line. DWSD is responsible for the portion from the water main to the stop box (turn-on/off valve) in the front of the house or business. Property owners are responsible for the service line from the stop box to the water meter. DWSD is in the process of replacing lead service lines while on the street replacing the water main. Go to www.detroitmi.gov/dwsd and click on "Lead Service Line Verification" to verify if you have a lead service line.

Did you know property owners are responsible for the sewer service pipe from the point at which it leaves the house (beneath the basement) and connects to the City sewer?

Most of the City's sewer pipes are located in the rear of the property; a few are located in the street. Sewers are typically in the alley or the easement in your backyard. The property owner is responsible for the sewer pipe from the drain inside the house or structure to the connection at the City's sewer collection pipe, even if it's past the property line. DWSD is responsible for the collection pipe that runs in the alley or street, serving each customer. DWSD recommends residents, especially those with trees in the backyard, hire a licensed plumber every spring to have the sewer line snaked all the way to the connection of the City sewer. Roots and other debris can clog the sewer line and cause basement backups.



This report is available on the City of Detroit website at detroitmi.gov/2020waterqualityreport

We welcome your comments and opinions about this report. Please direct your comments or questions to the DWSD Public Affairs Group.

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