U.S. Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410
www.hud.gov
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Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Project Name: Greystone-Senior-Apartments

HEROS Number: 900000010414424

Start Date: 07/25/2024

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): ASTI Environmental

Point of Contact: Christopher Yelonek

40 CFR 1506.5(b)(4): The lead agency or, where appropriate, a cooperating agency shall prepare a disclosure statement for the contractor's execution specifying that the contractor has no financial or other interest in the outcome of the action. Such statement need not include privileged or confidential trade secrets or other confidential business information.

By checking this box, I attest that as a preparer, I have no financial or other interest in the outcome of the undertaking assessed in this environmental review.

Project Location: 440 Martin Luther King Jr Blvd, Detroit, MI 48201

Additional Location Information:
440-460 Martin Luther King, Junior Boulevard, Detroit, Michigan 48201

Direct Comments to: Penny Dwoinen, Environmental Review Officer, City of Detroit
E-mail: Dwoinenp@detroitmi.gov

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:
The proposed project seeks to purchase and construct a new four-story, 49-unit, multi-family residential building for seniors at the location 440-460 Martin Luther King Junior Boulevard, Detroit, Wayne County, Michigan 48201 (Subject Property). The unit makeup of the proposed project is to consist of 24 one-bedroom units of approximately 659 square feet each and 25 two-bedroom units approximately 984 square feet each. All 49 units are planned to be affordable housing units. Additionally, 12 of the units are to be barrier free units. The 49 units will be made available to senior households with incomes at 30 percent, 40 percent, and 60 percent AMI. The proposed new construction is to include an elevator, community room, library, and a computer center. There will also be green space with outside tables for use by the tenants and 37 parking spaces." The Cass Corridor Neighborhood Development Corporation (CCNDC) plans to provide essential services to future residents of the proposed project. Saint Patrick's Senior Center (SPSC) will be the on-site coordinator for on-site essential services. The SPSC will help provide essential services by assisting in providing hot meals to residents, emergency food, on-site health screening, prescription delivery, and grocery delivery to the residents' respective apartments. The on-site coordinator will assist future residents in applying for entitlements and arranging for other support services. The proposed project is for $1,626,988.00 in HOME 2024. This review is valid for five years.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:
The senior population of 65 years or older is one of Detroit fastest growing demographics and the Subject Property located in the Cass Corridor neighborhood near the Midtown neighborhood, which is the City of Detroit's fastest growing neighborhoods. While the City of Detroit has experienced population decline, the city's senior population and the Midtown neighborhood have experienced growth. Detroit's senior population has increased by 50 percent and the Midtown neighborhood has increased by 10 percent since 2010. The Subject Property is located within the Cass Corridor neighborhood which is in-between Detroit's Midtown and Downtown neighborhoods. The proposed project seeks to construct a new 4-story, 49-unit affordable, senior apartment complex within the Cass Corridor neighborhood,

which is surrounded by numerous services and amenities. All 49 apartment units are planned to be affordable housing units to serve senior households at 30 percent, 40 percent, and 60 percent AMI. The proposed project can help meet the demand for affordable senior housing near the Midtown neighborhood. Through the proposed project, low-income seniors could live in the Cass Corridor neighborhood and enjoy the amenities surrounding the neighborhood.

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

The Market Study (Tab Attachment 1) conducted by Shaw Research and Consulting states that affordable housing is in high demand in the Project Market Area (PMA). The PMA is in the Midtown Neighborhood of Detroit and 22 senior rental properties were reviewed. The overall occupancy rate for senior housing in the PMA is at 98 percent, which excluded one property under rehab during the market study. Nineteen of the properties in the PMA reported having a waiting list. The senior demographic in the PMA is one of the fastest growing demographics with an increase of 50 percent between 2010 and 2021. It is anticipated the proposed project will help meet the demand for senior housing, particularly affordable senior housing. The population in the PMA is estimated to have increased by 10 percent between 2010 and 2021, while other areas of Detroit have experienced decreases in population with an overall decline of 8 percent since 2010. The PMA is anticipated to increase by 6 percent between 2021 and 2026. Based on the market study the proposed project is anticipated to have high occupancy rates with at least 93 percent occupancy.

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

T1-Market_Data_2022.pdf
B2-C3Site Plan_Part4of4.pdf
B2-C3Site Plan_Part3of4.pdf
B2-C3Site Plan_Part2of4.pdf
B2-C3Site Plan_Part1of4.pdf
B1-Project_Narrative_20221003152749002.pdf
A2-SFM.pdf
A1-SLM.pdf

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:

Signature Page - Greystone Senior.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	Funding Amount
M22MC260202	Community Planning and Development (CPD)	HOME Program	$1,626,988.00

Estimated Total HUD Funded, Assisted or Insured Amount: $1,626,988.00

Estimated Total Project Cost [24 CFR 58.2 (a) (5)]: $21,085,298.00

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		
Airport Hazards Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	☐ Yes ☑ No	There are two airports within 15 miles of the Subject Property. The two airports are Coleman A. Young International Airport which is 4.6 miles away and Windsor International Airport is 6.8 miles away from the Subject Property. The Subject Property is outside of all airports' clear zones and accident potential zones. The proposed project is in compliance with this regulation. See Appendix P for the airport location map.

Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	☐ Yes ☑ No	The Subject Property is located in Detroit, Wayne County, Michigan. There is only one coastal barrier resource in Wayne County, which is MI-04. The Subject Property is located significantly north of MI-04. The proposed project is in compliance with this statute. See Appendix Q for the John H. Chafee Coastal Barrier Resources System map of Michigan.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	☐ Yes ☑ No	The Subject Property is located in Zone X, the area of minimal flood hazard of FEMA flood map 26163C0285F, effective October 21, 2021. Flood insurance is not necessary for the Subject Property. The proposed project is in compliance with this statute. See Appendix D for the FIRMette map.
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 & § 58.5		
Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	☐ Yes ☑ No	The Subject Property is located in Detroit, Wayne County, Michigan and in an ozone maintenance/attainment area. The proposed project is anticipated to begin in October 2024 and is expected to last 18 months. The proposed project was submitted to EGLE: Air Quality Division for review. A response from EGLE was received, stating the proposed project is not expected to exceed the de minimis levels included in the federal general conformity requirements. Therefore, the proposed project does not require a detailed conformity analysis. The proposed project is in compliance with this statute. See Appendix J for the general conformity letter.
Coastal Zone Management Act Coastal Zone Management Act, sections 307(c) & (d)	☐ Yes ☑ No	The Subject Property is located north of I-75 and west of Woodward Avenue, which is outside of the Coastal Zone Management area in the City of Detroit. The proposed project is not anticipated to have an adverse impact on coastal zone management areas and is in compliance with this statute. See

		Appendix F for the coastal zone management map of Northern Wayne County.
Contamination and Toxic Substances 24 CFR 50.3(i) & 58.5(i)(2)]	☑ Yes ☐ No	The 2021 Phase I ESA assessment revealed recognized environmental conditions (RECs) in connection with the Subject Property. The 2021 Phase II ESA soil sample results indicate that a potential direct contact and volatilization to indoor air exposure risk is present for the Subject Property and a Response Activity Plan (ResAP) for EGLE approval is recommended for MSHDA low-income tax credits. Additional sampling for the ResAP will likely be needed for the design of any mitigation/response activity. The 2022 Phase I ESA assessment has revealed no evidence of RECs in connection with the Subject Property, except for the following: Based on the concentrations of metals, VOCs, and PNAs detected in the soil above GRCC, the Subject Property's status as a ''facility'' as defined in Part 201 is considered to be a REC. Historic fill materials on the Subject Property contained glass, ceramic, brick, coal, and concrete, and a release of hazardous substances and/or petroleum products. The north adjoining property of 449 Brainard Street operated an auto repair from at least 1921 to at least 1940. The east adjoining property of 3535 Cass Avenue historically operated an auto garage and auto body repair shop on the west portion of the building from at least 1921 to at least 1961. The east adjoining property of 3523 Cass Avenue historically operated an auto repair shop on the west portion of the site. The east adjoining property of 3535 Cass Avenue currently operates as an ''Ocelot Print Shop.'' The additional 2021 Limited Phase II ESA soil sample results indicate that a potential direct contact and volatilization to indoor air

		exposure risk is present for the Subject Property and a Response Activity Plan (ResAP) for EGLE approval is recommended for Michigan State Housing Development Authority (MSHDA) low-income tax credits. Additional sampling for the ResAP will likely be needed for the design of any mitigation/response activity. Response Activity Plan 2024 The proposed project plans to cover the majority of the Subject Property with building slab and paved parking areas. The type of exposure barriers to be installed over the Subject Property are as follows: Building floor slab; Hardscape - This barrier will consist of parking areas, concrete sidewalks, and driveways; softscape maintained lawns areas are to be comprised of an orange fabric demarcation barrier; and softscape planter beds are to consist of an orange fabric demarcation barrier. The October 2023 mercury vapor sampling documented that the VIAP with respect to mercury does not pose a significant risk, therefore does not require mitigation or remedial action. The VIAP is complete and requires mitigation for the VOCs that were detected in soil vapor during the February 2024 soil vapor sampling. To mitigate the potentially unacceptable exposure via the volatilization to indoor air inhalation pathway, a vapor mitigation system consisting of a passive sub-slab system will be installed beneath the first level floor slab of the proposed new construction. Sub-grade utilities and the Vapor Mitigation System (VMS) that will be installed in contaminated soils will require the contaminated soils be disposed of, with the excavation backfilled with clean fill soil. The Subject Property is not believed to be located within 1,000 feet

		of buried high-pressure gas transmission lined per the map obtained from the U.S. DOT National Pipeline Mapping System as seen in Appendix 10.7 of the 2022 Phase I ESA (Tab Attachment 4). The site is vacant land. Therefore, lead and asbestos surveys are not required. The City has average test results of 0.75 pCi/L radon. Therefore, radon testing is not required.
Endangered Species Act Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	☐ Yes ☑ No	The Indiana Bat, Northern Long-eared Bat, Rufa Red Knot, Eastern Massasauga, and the Eastern Prairie Fringed Orchid are all species listed in the Federally-listed Endangered and Threatened Species of Michigan. On October 14, 2022, ASTI conducted a threatened and endangered species assessment of the Subject Property. ASTI has determined that the Subject Property does not contain any preferred or suitable habitat for any species listed on the Federally-listed Endangered and Threatened Species of Michigan list, known to have critical habitats in Wayne County. ASTI has concluded that the proposed project is anticipated to have ''No Effect'' on threatened and endangered species. The proposed project is in compliance with this statute. See Appendix H for the Threatened and Endangered Species Report.
Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C	☐ Yes ☑ No	There are 14 Above-ground Storage Tanks (AST) within one mile of the Subject Property, based on the EDR Radius Map Report on 460 Martin Luther King Boulevard, dated February 24, 2022. The AST located at 666 Selden Street has a capacity of 1,000 gallons, that was emptied and cleaned with a closed date of June 14, 2011. An AST was reported at 2950 Rosa Parks Boulevard but was removed from the premises on September 14, 1994. * The AST located at 100 Mack Avenue

		has a capacity of 2,000 gallons with an Acceptable Separation Distance for Thermal Radiation for People (ASDPPU) of 369.16 feet, and the AST is 1,763 feet from the Subject Property. * At 1351 Spruce Street is an 8,000-gallon AST with an ASDPPU of 657.70 feet and is 3,544 feet from the Subject Property. * A 20,000-gallon AST is present at 3990 John R Street has an ASDPPU of 963.41 feet and is 2,304 feet from the Subject Property. There are four ASTs at 2000 2nd Avenue. Each AST has a capacity of 1,650-gallons, an ASDPPU of 340.72 feet per AST, and is 3,730 feet from the Subject Property. * A 6,000-gallon AST is present at 1 Energy Plaza with an ASDPPU of 583.42 feet and is 4,281 feet from the Subject Property. * Two 6,500-gallon ASTs located at 1777 3rd Avenue that each have a ASDPPU of 603.20 feet are 3,624 feet from the Subject Property. * At 3200 Hobson Street is an AST with a capacity of 13,500 gallons, has an ASDPPU of 814.89 feet and is 2,052 feet from the Subject Property. * Two non-registered, 1,000-gallon ASTs are present at 2950 Rosa Parks Boulevard with an ASDPPU of 276.57 feet for each AST and is 4,482 feet from the Subject Property. The Subject Property is at or exceeds the Acceptable Separation Distance for all extant ASTs. The proposed project is not anticipated to be adversely impacted by explosive hazards and is in compliance with this regulation. See Appendix O for more information on Acceptable Separation Distances.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	☐ Yes ☑ No	The soil on the Subject Property consists of Midtown-Urban land complex, which is not classified as prime farmland. Additionally, the Subject Property is located in the City of Detroit. The proposed project is not anticipated to

		have an adverse impact on prime farmland and is in compliance with this statute. See Appendix K for the USDA soil survey report.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	☐ Yes ☑ No	The Subject Property is located in Zone X, the area of minimal flood hazard of FEMA flood map 26163C0285F, effective October 21, 2021. The proposed project is not anticipated to be adversely impacted by flood hazards and is in compliance with this executive order. See Appendix F for the FIRMette map.
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	☑ Yes ☐ No	Based on Section 106 consultation the project will have No Adverse Effect on historic properties. Conditions: Other. Upon satisfactory implementation of the conditions, which should be monitored, the project is in compliance with Section 106.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	☑ Yes ☐ No	A noise assessment on the proposed project was conducted January 18, 2021. The noise assessment found the noise levels to be in the Normally Unacceptable range at 70 dB for Noise Assessment Location (NAL) #1 and in the Normally Unacceptable range at 69 dB for NAL #2. STraCAT The wall assembly of the proposed project is to include brick, cement fiber panels, brick wall CMU, cement fiber panel CMU, windows with at least a Sound Transmission Classification (STC) rating of 27, and doors with a STC rating of 26. The combined wall assembly has a combined STC rating of 45.71. With a normally unacceptable noise range of 70 dB, the required STC for the proposed project is 28, and the combined wall assembly STC rating is 45.71. See Appendix M for the Noise Assessment and STraCAT calculations.
Sole Source Aquifers Safe Drinking Water Act of 1974, as	☐ Yes ☑ No	The Subject Property is located within the State of Michigan. There are no sole source aquifers within the State of

amended, particularly section 1424(e); 40 CFR Part 149		Michigan. The proposed project is not anticipated to have an adverse impact on sole source aquifers and is in compliance with this statute. See Appendix G for the Designated Sole Source Aquifers of Region 5 map.
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	☐ Yes ☑ No	There are no wetlands or bodies of water present on the Subject Property. Nor are there wetlands or bodies of water nearby the Subject Property. The proposed project is in compliance with this executive order. See Appendix E for the National Wetlands Inventory map.
Wild and Scenic Rivers Act Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	☐ Yes ☐ No	The Subject Property is located in Detroit, Wayne County, Michigan. There are no designated Wild and Scenic Rivers within Wayne County. Nor is there a nearby river listed on the Nationwide Rivers Inventory near the Subject Property. The proposed project is in compliance with this statute. See Appendix I.
HUD HOUSING ENVIRONMENTAL STANDARDS		
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	☐ Yes ☑ No	The proposed project seeks to construct a senior apartment complex, which seeks to address the housing concerns of low-income seniors in the City of Detroit. The selected pollution variables by the EPA, are above the State of Michigan averages within a one mile radius of the Subject Property, except for Superfund proximity. The population demographics surrounding the Subject Property indicate that 70 percent are people of color, 59 percent are low-income, 9 percent are unemployed, 2 percent are limited English speaking households, 14 percent hold an education less than a high school education, 4 percent are under five years of age, 13 percent are over 64 years of age, 17 percent have a low life expectancy, 20.3 percent are persons

		with disabilities, 19 percent lack access to broadband internet, 6 percent lack health insurance, and 12 percent of households are owner occupied. Of the limited English-speaking households, Spanish is the single most spoken language, followed by other Indo-European, Chinese, other Asian/Pacific, and Arabic languages. A housing burden and a transportation access critical service gap are documented to be present in the area of the Subject Property. A food desert is not known to exist near the Subject Property. The proposed project will not cause displacement, since the project is to occur on a vacant lot. The proposed project is intended to access affordable housing for Detroit's low-income senior residents. The proposed project is not anticipated to have an adverse impact on vulnerable residents and is in compliance with this executive order. See Appendix L for the EJ Screen report.

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	2	The Subject Property is zoned SD2: Special Development District, Mixed-use. The land use of the proposed project is a compatible land use for the mixed-use zoning of the Subject Property. The City of Detroit seeks to increase housing stock and housing	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		options for its residents. The proposed project seeks to construct an apartment complex in the Cass Corridor neighborhood of Detroit which will provide more housing stock and options. The scale and urban design will be Neo-traditionist in its architecture, invoking traditional design elements with modern materials. However, the new construction of the proposed project will be compatible with the scale and urban design of the surrounding structures. No adverse effects are anticipated through the proposed project concerning zoning and design.	
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	2	The soil of the Subject Property is suitable for development since development was extant on the Subject Property from circa 1889 to circa 1983. The slope of the soil is 0 to 4 percent. Erosion is not anticipated to have an adverse effect on the proposed project. The soil does have a somewhat poorly drained drainage class and a very low runoff class. No adverse effects are anticipated concerning the soil on the proposed project. See Appendix K for the USDA web soil survey report.	
Hazards and Nuisances including Site Safety and Site-Generated Noise	2	The proposed project is not anticipated to be a noise generator in the neighborhood. There are no known hazards or nuisances present at the Subject Property that is not addressed in the Response Activity Plan. Security features to be included in the proposed project are security cameras and key fob entry. No adverse effects are anticipated concerning hazards and nuisances through the proposed project.	
SOCIOECONOMIC			
Employment and Income Patterns	1	There is an anticipated and temporary increase in construction employment. Otherwise, there is no anticipated increase in employment through the proposed project. No income patterns are anticipated	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		to be altered after completion of the proposed project.	
Demographic Character Changes / Displacement	2	The proposed project is anticipated to increase the population in the Cass Corridor neighborhood. The proposed project is not anticipated to significantly alter the demographic character of the Cass Corridor neighborhood of Detroit. No displacement is anticipated to occur through the proposed project, since the Subject Property is a vacant lot.	
Environmental Justice EA Factor	2	The proposed project seeks to construct a senior apartment complex to address the housing concerns of low-income seniors in the City of Detroit. The selected pollution variables by the EPA, are above the State of Michigan averages within a one-mile radius of the Subject Property, except for Superfund proximity. The population demographics surrounding the Subject Property indicates that 70 percent are people of color, 59 percent are low-income, 9 percent are unemployed, 2 percent are limited English speaking households, 14 percent hold an education less than a high school education, 4 percent are under five years of age, 13 percent are over 64 years of age, 17 percent have a low life expectancy, 20.3 percent are persons with disabilities, 19 percent lack access to broadband internet, 6 percent lack health insurance, and 12 percent of households are owner occupied. Out to the limited English-speaking households, Spanish is the single most spoken language, followed by other Indo-European, Chinese, other Asian/Pacific, and Arabic languages. A housing burden and a transportation access critical service gap are documented to be present in the area of Subject Property. A food desert is not known to exist near the Subject Property. The proposed project will not cause displacement, since the project is	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		to occur on a vacant lot. The proposed project is intended to access affordable housing for Detroit's low-income senior residents. The proposed project is not anticipated to have an adverse impact on vulnerable residents and is in compliance with this executive order. See Appendix L for the EJ Screen report.	
COMMUNITY FACILITIES AND SERVICES			
Educational and Cultural Facilities (Access and Capacity)	2	The proposed project is to construct low-income housing for senior Detroit residents, who are unlikely to have school aged children. However, there are a number of schools near the Subject Property. Spain Elementary-Middle School at 3700 Beaubien Street is 2,975 feet from the Subject Property, that serves students from Pre-K to the eighth grade. The nearest high school to the Subject Property is Cass Technical High School at 2501 Second Avenue, 2,158 feet from the Subject Property. The Benjamin Carson High School of Science and Medicine at 571 Mack Avenue is 3,138 feet from the Subject Property and provides high school students specialized education in the medical and sciences fields. Wayne County Community College District (WCCCD) branch in downtown Detroit is the nearest WCCCD branch to the Subject Property, is 1.30 miles away at 801 West Fort Street, and offers the Silver Circle Program to senior residents of Wayne County for leisure and continuing education. No education facilities are anticipated to be adversely affected by the proposed project. See Appendix R. The Subject Property is located in the Cass Corridor neighborhood of the City of Detroit, which borders the Midtown and Downtown neighborhoods, where there are numerous cultural facilities. Some of the nearby cultural facilities include: * The Old Miami at 3930	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Cass Avenue is a music venue, which is approximately 1,071 feet from the Subject Property. * Max M. and Marjorie S. Fisher Music Center at 3711 Woodward Avenue is approximately 1,174 feet from the Subject Property. * Fox Theatre at 2211 Woodward Avenue is approximately 3,437 feet from the Subject Property. * Wayne State University Planetarium at 4841 Cass Avenue is approximately 3,486 feet from the Subject Property. * Detroit Institute of Arts at 5200 Woodward Avenue is approximately 4,650 feet from the Subject Property. No cultural facilities are anticipated to be adversely affected by the proposed project.	
Commercial Facilities (Access and Proximity)	2	The Subject Property is located in the Cass Corridor neighborhood of the City of Detroit, which is nearby to multiple commercial corridors. The first commercial corridor is on 3rd Avenue from Brainard Street to West Willis Street and is 965 feet from the Subject Property. The 3rd Avenue commercial corridor contains several restaurants, Cinema Detroit, a hardware store, and Detroit Public Theatre. The second commercial corridor is on Woodward Avenue from West Forest Avenue to Charlotte Street, which is 1,184 feet from the Subject Property. The Cass Corridor Woodward Avenue commercial corridor contains theatres, retail, restaurants, art galleries, and pharmacies. Additionally, the Subject Property is 3,251 feet from the northern portion of Downtown Detroit, which contains retail stores, restaurants, and entertainment options throughout the neighborhood. The nearest grocery store to the Subject Property is Whole Foods Market at 115 Mack Avenue, which is 1,614 feet from the Subject Property. The increase in	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		population through the proposed project may be beneficial to local businesses.	
Health Care / Social Services (Access and Capacity)	2	The nearest hospital to the Subject Property is the Detroit Medical Center (DMC): Central Campus at 4201 Saint Antoine. The DMC is 1,918 feet from the Subject Property. Additionally, the John D. Dingell VA Medical Center at 4646 John R Street is 3,273 feet from the Subject Property. The nearest pharmacy to the Subject Property is Doctor's Medical Pharmacy located at 3169 Woodward Avenue, which is 1,218 feet from the Subject Property. No health care facilities are anticipated to be adversely impacted by the proposed project. There are two social services providers near the Subject Property. Cass Community Social Services is 535 feet away and Central City Integrated Health is 1,108 feet away from the Subject Property. The proposed project seeks to provide low-income housing for seniors, which may reduce the demand for social services. No social services providers are anticipated to be adversely affected by the proposed project.	
Solid Waste Disposal and Recycling (Feasibility and Capacity)	2	The proposed project's solid waste disposal is to be serviced by a private contractor. The City of Detroit: Department of Public Works: Refuse Collection provides recycling services to multifamily properties via an application through the City of Detroit's recycling coordinator. No adverse effects are anticipated solid waste disposal and recycling through the proposed project.	
Waste Water and Sanitary Sewers (Feasibility and Capacity)	2	Waste water / sanitary sewer services are provided by the City of Detroit: Water and Sewerage Department. The proposed project plans to connect the City of Detroit's sewer system and the section of Martin Luther King Jr. Boulevard where the Subject Property is located has the capacity to provide sewer services to the Subject	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Property. The proposed project is a new construction project which plans to install new waste water service lines. No adverse effects are anticipated through the proposed project concerning sanitary sewers.	
Water Supply (Feasibility and Capacity)	2	Water is supplied by the City of Detroit: Water and Sewerage Department. The section of Martin Luther King Jr. Boulevard, where the Subject Property has the capacity to supply water services to the proposed project. The proposed project plans to install water service lines to the proposed residential building. No adverse effects are anticipated concerning water supply through the proposed project.	
Public Safety - Police, Fire and Emergency Medical	2	The Subject Property is serviced by the Detroit Police Department: Downtown Services precinct located at 20 Atwater Street. The Downtown Services precinct is 1.56 miles from the Subject Property. The City of Detroit: Fire Department provides fire and emergency medical services to the Subject Property. The nearest fire station is Ladder 20, Squad 2, Medic 6 at 477 West Alexandrine Street, which is 1,041 feet from the Subject Property. No public safety services are anticipated to be adversely affected by the proposed project. See Appendix R.	
Parks, Open Space and Recreation (Access and Capacity)	2	There are multiple parks near the Subject Property. Wigle Park at 931 Selden Street is 1,344 feet from the Subject Property. Cass Park at 2733 2nd Avenue is 1,598 feet from the Subject Property. The 4th-Charlotte Park at 3008 4th Street, features a basketball court and is 1,479 feet from the Subject Property. Tolan Park at 701 Mack Avenue, which is 3,466 feet from the Subject Property features a basketball court, fitness equipment, picnic shelters, a picnic area, a play area, a swimming pool, and a walking path. Finally, the North Cass	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Community Garden at the corner of West Willis Street and 2nd Avenue is 1,540 feet from the Subject Property. The North Cass Community Garden features 88 plots for Detroit residents who volunteer at least 4 hours for the Garden's support each season. No adverse effect is anticipated through the proposed project on parks and recreation areas.	
Transportation and Accessibility (Access and Capacity)	2	The Subject Property is on the 42 route and is nearby route 16 of the Detroit Department of Transportation (DDOT) System. The nearest bus stop is #1607, which is 105 feet from the Subject Property. There are three SMART bus routes on Woodward Avenue which are 461/462, 610, and 445. The nearest SAMRT bus stop is Stop #14252, which is 1,148 feet from the Subject Property. An increase in population may be beneficial for public transportation services. No adverse effects are anticipated concerning public transportation through the proposed project. Woodward Avenue, M-10/John C. Lodge Freeway, and I-75 are the nearby major roadways that connect the Subject Property to the rest of the State of Michigan. The proposed project is anticipated to increase urban density. However, the proposed project is a senior housing project, who are less likely to travel via motor vehicle and is not anticipated to significantly increase traffic near the Subject Property. No adverse effects are anticipated on transportation through the proposed project. See Appendix R.	
NATURAL FEATURES			
Unique Natural Features /Water Resources	2	There are no unique natural features or water resources present on the Subject Property. The Subject Property is located in a highly urbanized area in the City of Detroit. No adverse effects are anticipated	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		on unique natural features and water resources through the proposed project.	
Vegetation / Wildlife (Introduction, Modification, Removal, Disruption, etc.)	2	The Subject Property is a vacant lot with some vegetation present with a tree. The Subject Property has been a vacant lot since circa 1983. The vegetation present on the Subject Property is a result of being a vacant lot for at least 40 years. Additionally, the Subject Property is located in a highly urbanized area in the City of Detroit, where wildlife is anticipated to have a minimal presence. The proposed project seeks to plant some vegetation after principal construction. No adverse effects are anticipated on vegetation and wildlife through the proposed project.	
Other Factors 1			
Other Factors 2			
CLIMATE AND ENERGY			
Climate Change	2	The Subject Property is located in Detroit, Wayne County, Michigan. Wayne County has a risk index of relatively high to be adversely impacted by natural disasters by FEMA. The expected annual loss rating is relatively high, the social vulnerability rating is very high, and the community resilience rating of relatively moderate for Wayne County. The natural disasters likely to occur in Wayne County with a very high-risk index rating are cold waves, strong wind, and tornadoes. The natural disasters heat wave, lightning, riverine flooding, and winter weather have a relatively high-risk index rating in Wayne County. The average daily maximum temperature for Detroit in the 2050s is predicted to be 65.1 degrees Fahrenheit with higher emissions and 63.8 degrees with lower emissions, when compared to the 1961-1990 observed average of 58.6 degrees. At a predicted sea level rise of 10 feet, the City of Detroit is not anticipated to be adversely impacted by the sea level rise. Based on the USGS	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		quaternary fault data, there are no quaternary faults in the State of Michigan. The proposed project is not anticipated to be significantly adversely impacted by climate change impacts. The proposed project is designed to protect potential future residents from most adverse climate change impacts. See Appendix R for more information on climate change impacts.	
Energy Efficiency	2	Electric and gas utilities are supplied by DTE Energy. The proposed project is seeking NGBS Silver and Net Zero certification. The Net Zero certification combines energy efficiency and renewable energy generation onsite of the Subject Property. The proposed project plans to install high efficiency lighting, NFRC certified windows, apply dynamic glazing, Energy Star appliances, water-efficient plumbing, and heat pump for the HVAC. Although the proposed project is anticipated to increase urban density, the NGBS Silver and Net Zero certification is anticipated to reduce the demand on the energy infrastructure of Southeast Michigan.	

Supporting documentation

R11-Community Report - Wayne County Michigan _ National Risk Index.pdf
L-EJScreen Community Report(1).pdf
K-Soil_Report(1).pdf
R10-MI_Detroit_20191218_TM_geo.pdf
R5-3-11745_EA Factors - Health Care.pdf
R4-3-11745_EA Factors - Commercial Facilities.pdf
R3-3-11745_EA Factors - Cultural Facilities.pdf
R2-3-11745_EA Factors - Education.pdf
R15-USGS_Fault_Map.pdf
R14-Sea_Level_Rise.pdf
R13-Climate_Map.pdf
R12-Climate_Graph.pdf
R9-SMART_Map.pdf
R8-DDOT-SystemMap_Nov21_012022A.pdf
R7-3-11745_EA Factors - Parks.pdf
R6-3-11745_EA Factors - Public Safety.pdf

Greystone-Senior-Apartments	Detroit, MI	900000010414424

R1-zmap3 corktown rezoning.pdf

Additional Studies Performed:

1. Noise Assessment: Graystone Senior Apartments. 440, 446, & 460 Martin Luther King Jr. Blvd., Detroit, Michigan. Graystone Senior LDHA, LP. ASTI Environmental. January 18, 2021. 2. Phase I Environmental Site Assessment: Graystone Senior. 440, 446, & 460 Martin Luther King Jr. Boulevard, Detroit, Michigan. Graystone Senior LDHA, LP. ASTI Environmental. January 27, 2021. 3. Limited Phase II Environmental Site Assessment: 440-460 Martin Luther King Jr. Boulevard, Detroit, Michigan. Graystone Senior Limited Dividend Housing Association, LLC. ASTI Environmental. June 9, 2021. 4. Additional Limited Phase II Environmental Site Assessment: 440-460 Martin Luther King Jr. Boulevard, Detroit, Michigan. Greystone Senior Limited Dividend Housing Association LLC. ASTI Environmental. October 8, 2021. 5. Phase I Environmental Site Assessment: Graystone Senior. 440, 446, & 460 Martin Luther King Jr. Boulevard, Detroit, Michigan. Graystone Senior LDHA, LP. ASTI Environmental. March 28, 2022. 6. Threatened and Endangered Species No Effect Rationale: Greystone Senior Apartments, 440-460 Martin Luther King Boulevard, Detroit, Wayne County, Michigan. Greystone Senior Limited Dividend Housing Association, Limited Partnership. ASTI Environmental. October 21, 2022. 7. Response Activity Plan: Greystone Senior: 440-460 Martin Luther King Jr. Boulevard, Detroit, Michigan. Greystone Senior Limited Dividend Housing Association LLC. ASTI Environmental. April 22, 2024.

Field Inspection [Optional]: Date and completed by:

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

See attachment.

List of Sources.pdf

List of Permits Obtained:

Public Outreach [24 CFR 58.43]:

Public outreach will be conducted by the Responsible Entity at a later date via the City of Detroit's Public Notice page.

Cumulative Impact Analysis [24 CFR 58.32]:

The proposed project is anticipated to provide an additional 49 apartment units of affordable housing to the City of Detroit's senior residents, located within the Cass Corridor neighborhood. The Subject Property is currently a vacant lot near the Midtown neighborhood of Detroit, which has been experiencing population growth. Additionally, the senior population is one of the City of Detroit's fastest growing populations. The City of Detroit is seeking to provide additional housing, housing options to its residents, and to infill vacant lots where there was historically urban density. The Subject Property is serviced by several amenities including public transit, a grocery store, retail, restaurants, cultural facilities, healthcare, and pharmacies. The proposed project can help meet the demand for affordable housing for Detroit's senior residents and maintain a high quality of life within the Cass Corridor neighborhood.

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

No other sites were considered for the proposed project. The proposed project did consider family tenancy alongside senior tenancy for the new construction. However, since the senior population is one of the fastest growing populations within the City of Detroit, senior tenancy was selected.

No Action Alternative [24 CFR 58.40(e)]

The no action alternative is not desirable for the Subject Property. By not pursuing the proposed project, the Subject Property will remain as a vacant lot in a neighborhood that was characterized for its urban density. The Cass Corridor neighborhood has the capacity to become a dense neighborhood with numerous amenities. The location of the Subject Property is ideal for Detroit residents since the Cass Corridor neighborhood borders the Midtown and Downtown neighborhoods of Detroit, which are experiencing growing residential populations. The proposed project is anticipated to provide housing for low-income seniors in an area of Detroit experiencing population growth, who would be excluded from the Cass Corridor neighborhood at market rates.

Summary of Findings and Conclusions:

The proposed project is in compliance with several of the statutes and Executive Orders of the Statutory Checklist. No adverse effects on the human and natural environment are anticipated through the proposed project. The proposed project seeks to construct a new 4-story, 49-unit, affordable senior housing building. The proposed project does help the high demand for affordable housing for seniors in Detroit, particularly in the Cass Corridor neighborhood, which is near the Midtown neighborhood, which is experiencing population growth. Additionally, the City of Detroit's goal is to create more housing stock, housing options, and to infill vacant lots where urban density was once present. The proposed project is nearby several

amenities, including retail, restaurants, cultural facilities, healthcare, pharmacies, and a grocery store. The proposed project is anticipated to provide housing meeting the City of Detroit's goals, where senior residents have the potential to have a high quality of life.

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	All work on the proposed project is performed in accordance to the materials submitted to the City of Detroit HRD on February 13, 2024 and if any alterations to the proposed project's scope of work shall be reviewed by the City of Detroit HRD for approval prior to implementation. *tIn the event an unanticipated discovery occurs, the unanticipated discoveries plan is followed. *tPhotographs of the completed work are submitted to the City of Detroit HRD.	N/A		
Contamination and Toxic Substances	EGLE approval of the Response Activity Plan (ResAP) for risk-based corrective action. No lead and asbestos surveys were conducted since there are no structures present at the Subject Property. No high-pressure gas lines were found during environmental investigations.	N/A	Soil Removal and Direct Contact Barrier: A. Removal of contaminated fill material and disposal at a proper landfill. B.	

			Installation of demarcation barrier. C. Deposit of clean fill material over the demarcation barrier. Vapor Mitigation System: Installation of sub-slab passive vapor mitigation system. Hardscape Direct Contact Barrier: Installation of hardscape surfaces to be used as direct contact barriers, e.g., building slab, parking lot, and sidewalks.	
Noise Abatement and Control	Install brick wall, cement fiber panels, brick wall cmu, cement fiber panel cmu, windows with at least a STC rating of 27, and doors with at least a STC rating of 26 into the building construction.	N/A		

Project Mitigation Plan

See Attached HRD Model Mitigation Plan for the Greystone Senior Apartments.

Detroit_City_of_HRD Model Mitigation Plan-Greystone_Apts.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

There are two airports within 15 miles of the Subject Property. The two airports are Coleman A. Young International Airport which is 4.6 miles away and Windsor International Airport is 6.8 miles away from the Subject Property. The Subject Property is outside of all airports' clear zones and accident potential zones. The proposed project is in compliance with this regulation. See Appendix P for the airport location map.

Supporting documentation

P-3-11745_ALM.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 Subject Property is located in Detroit, Wayne County, Michigan. There is only one coastal barrier resource in Wayne County, which is MI-04. The Subject Property is located significantly north of MI-04. The proposed project is in compliance with this statute. See Appendix Q for the John H. Chafee Coastal Barrier Resources System map of Michigan.

Supporting documentation

Q-Coastal Barrier Resource 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.

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 Subject Property is located in Zone X, the area of minimal flood hazard of FEMA flood map 26163C0285F, effective October 21, 2021. Flood insurance is not necessary for the Subject Property. The proposed project is in compliance with this statute. See Appendix D for the FIRMette map.

Supporting documentation

D-FIRMETTE.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Greystone-Senior-Apartments	Detroit, MI	900000010414424

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

Greystone-Senior-Apartments	Detroit, MI	900000010414424

✓ 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 0.70 ppb (parts per million)

Provide your source used to determine levels here:
EPA. "Fact Sheet: EPA to Finalize 2015 Ozone Standard Clean Data Determination for the Detroit Metro Area." Accessed July 25, 2024. https://www.epa.gov/mi/fact-sheet-epa-finalize-2015-ozone-standard-clean-data-determination-detroit-metro-area#:~:text=On%20October%201%2C%202015%2C%20EPA,Detroit%20area%20has%20declined%20significantly.

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 0.70 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
The Subject Property is located in Detroit, Wayne County, Michigan and in an ozone maintenance/attainment area. The proposed project is anticipated to begin in October 2024 and is expected to last 18 months. The proposed project was submitted to EGLE: Air Quality Division for review. A response from EGLE was received, stating

the proposed project is not expected to exceed the de minimis levels included in the federal general conformity requirements. Therefore, the proposed project does not require a detailed conformity analysis. The proposed project is in compliance with this statute. See Appendix J for the general conformity letter.

Supporting documentation

J2-Gen Conformity Letter_MLK Revised_0724.pdf
J1-2023_naaqs-ambient-status-map.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 Subject Property is located north of I-75 and west of Woodward Avenue, which is outside of the Coastal Zone Management area in the City of Detroit. The proposed project is not anticipated to have an adverse impact on coastal zone management areas and is in compliance with this statute. See Appendix F for the coastal zone management map of Northern Wayne County.

Supporting documentation

F-2020_Wayne_County-Grosse_Point_Coastal_Management_Zone.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)
Reference		
https://www.onecpd.info/environmental-review/site-contamination		

1. How was site contamination evaluated?* Select all that apply.

ASTM Phase I ESA

ASTM Phase II ESA

Remediation or clean-up plan

ASTM Vapor Encroachment Screening.

None of the above

* HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site.
For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances* (excluding radon) 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?)

Provide a map or other documentation of absence or presence of contamination** and explain evaluation of site contamination in the Screen Summary at the bottom of this screen.

No

Explain:

✓ Yes

* This question covers the presence of radioactive substances excluding radon. Radon is addressed in the Radon Exempt Question.
** Utilize EPA's Enviromapper, NEPAssist, or state/tribal databases to identify nearby dumps, junk yards, landfills, hazardous waste sites, and industrial sites, including EPA National Priorities List Sites (Superfund sites), CERCLA or state-equivalent sites, RCRA Corrective Action sites with release(s) or suspected release(s) requiring clean-up action and/or further investigation. Additional supporting documentation may include other inspections and reports.

3. Evaluate the building(s) for radon. Do all buildings meet any of the exemptions* from having to consider radon in the contamination analysis listed in CPD Notice CPD-23-103?

Yes

Explain:

✓ No

* Notes:
- Buildings with no enclosed areas having ground contact.
- Buildings containing crawlspaces, utility tunnels, or parking garages would not be exempt, however buildings built on piers would be exempt, provided that there is open air between the lowest floor of the building and the ground.
- Buildings that are not residential and will not be occupied for more than 4 hours per day.
- Buildings with existing radon mitigation systems - document radon levels are below 4 pCi/L with test results dated within two years of submitting the application for HUD assistance and document the system includes an ongoing maintenance plan that includes periodic testing to ensure the system continues to meet the current EPA recommended levels. If the project does not require an application, document test results dated within two years of the date the environmental review is certified. Refer to program office guidance to ensure compliance with program requirements.
- Buildings tested within five years of the submission of application for HUD assistance: test results document indoor radon levels are below current the EPA's recommended action levels of 4.0 pCi/L. For buildings with test data older than five years, any new environmental review must include a consideration of radon using one of the methods in Section A below.

4. Is the proposed project new construction or substantial rehabilitation where testing will

be conducted but cannot yet occur because building construction has not been completed?

Yes

Compliance with this section is conditioned on post-construction testing being conducted, followed by mitigation, if needed. Radon test results, along with any needed mitigation plan, must be uploaded to the mitigation section within this screen.

✓ No

5. Was radon testing or a scientific data review conducted that provided a radon concentration level in pCi/L?

✓ Yes

No

If no testing was conducted and a review of science-based data offered a lack of science-based data for the project site, then document and upload the steps taken to look for documented test results and science-based data as well as the basis for the conclusion that testing would be infeasible or impracticable.

Explain:

File Upload:

Based on the response, the review is in compliance with this section. Continue to the Screen Summary at the bottom of this screen.

Non-radon contamination was found in a previous question.

6. How was radon data collected?

All buildings involved were tested for radon

✓ A review of science-based data was conducted

Enter the Radon concentration value, in pCi/L, derived from the review of science-based data:

0.74

Provide the documentation* used to derive this value:

Per the HUD CPD-23-103 Policy for Addressing Radon, the City of Detroit has elected to follow Consideration III A ii. 3) Scientific Data Review to determine whether the project site is located in an area that has average documented radon levels at or above 4 pCi/L. The Housing and Revitalization Department (HRD) has collected radon samples throughout the City of Detroit. According to the HRD Indoor Radon Map, the City is in a geographic area with radon under the levels suggested for mitigation. Since November 2023, fifty-nine (59) tests were taken throughout the City. The average results of the tests are 0.74 pCi/L. Based on the samples taken in the City and the results averaging under 4 pCi/L, no additional testing is required. List what type(s) of contamination are on site and the pathway.

File Upload:

HRD Indoor Radon Map 04-18-24.pdf

Based on the response, the review is in compliance with this section. Continue to the Screen Summary at the bottom of this screen.

Radon concentration value is greater than or equal to 4.0 pCi/L and/or non-radon contamination was found in a previous question. Continue to Mitigation.

* For example, if you conducted radon testing then provide a testing report (such as an ANSI/AARST report or DIY test) if applicable (note: DIY tests are not eligible for use in multifamily buildings), or documentation of the test results. If you conducted a scientific data review, then describe and cite the maps and data used and include copies of all supporting documentation. Ensure that the best available data is utilized, if conducting a scientific data review.

8. Mitigation

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

For instances where radon mitigation is required (i.e. where test results demonstrated

radon levels at 4.0 pCi/L and above), then you must include a radon mitigation plan*.

Can all adverse environmental impacts be mitigated?

No, all adverse environmental impacts cannot feasibly be mitigated. Project cannot proceed at this location.

✓ Yes, all adverse environmental impacts can be eliminated through mitigation, and/or consideration of radon and radon mitigation, if needed, will occur following construction.
Provide all mitigation requirements** and documents in the Screen Summary at the bottom of this screen.

* Refer to CPD Notice CPD-23-103 for additional information on radon mitigation plans.
** Mitigation requirements include all clean-up requirements required by applicable federal, state, tribal, or local law. Additionally, please upload, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

9. Describe how compliance was achieved. 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.**

EGLE approval of the Response Activity Plan (ResAP) for risk-based corrective action. No lead and asbestos surveys were conducted since there are no structures present at the Subject Property. No high-pressure gas lines were found during environmental investigations.

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

Complete removal

Risk-based corrective action (RBCA)

Other

* Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, caps, covers, dikes, trenches, leachate collection systems, radon mitigation systems, signs, fences, physical

access controls, ground water monitoring systems and ground water containment systems including, slurry walls and ground water pumping systems.
** Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

Screen Summary

Compliance Determination

The 2021 Phase I ESA assessment revealed recognized environmental conditions (RECs) in connection with the Subject Property. The 2021 Phase II ESA soil sample results indicate that a potential direct contact and volatilization to indoor air exposure risk is present for the Subject Property and a Response Activity Plan (ResAP) for EGLE approval is recommended for MSHDA low-income tax credits. Additional sampling for the ResAP will likely be needed for the design of any mitigation/response activity. The 2022 Phase I ESA assessment has revealed no evidence of RECs in connection with the Subject Property, except for the following: Based on the concentrations of metals, VOCs, and PNAs detected in the soil above GRCC, the Subject Property's status as a ''facility'' as defined in Part 201 is considered to be a REC. Historic fill materials on the Subject Property contained glass, ceramic, brick, coal, and concrete, and a release of hazardous substances and/or petroleum products. The north adjoining property of 449 Brainard Street operated an auto repair from at least 1921 to at least 1940. The east adjoining property of 3535 Cass Avenue historically operated an auto garage and auto body repair shop on the west portion of the building from at least 1921 to at least 1961. The east adjoining property of 3523 Cass Avenue historically operated an auto repair shop on the west portion of the site. The east adjoining property of 3535 Cass Avenue currently operates as an ''Ocelot Print Shop.'' The additional 2021 Limited Phase II ESA soil sample results indicate that a potential direct contact and volatilization to indoor air exposure risk is present for the Subject Property and a Response Activity Plan (ResAP) for EGLE approval is recommended for Michigan State Housing Development Authority (MSHDA) low-income tax credits. Additional sampling for the ResAP will likely be needed for the design of any mitigation/response activity. Response Activity Plan 2024 The proposed project plans to cover the majority of the Subject Property with building slab and paved parking areas. The type of exposure barriers to be installed over the Subject Property are as follows: Building floor slab; Hardscape - This barrier will consist of parking areas, concrete sidewalks, and driveways; softscape maintained lawns areas are to be comprised of an orange fabric demarcation barrier; and softscape planter beds are to consist of an orange fabric demarcation barrier. The October 2023 mercury vapor sampling documented that the

VIAP with respect to mercury does not pose a significant risk, therefore does not require mitigation or remedial action. The VIAP is complete and requires mitigation for the VOCs that were detected in soil vapor during the February 2024 soil vapor sampling. To mitigate the potentially unacceptable exposure via the volatilization to indoor air inhalation pathway, a vapor mitigation system consisting of a passive sub-slab system will be installed beneath the first level floor slab of the proposed new construction. Sub-grade utilities and the Vapor Mitigation System (VMS) that will be installed in contaminated soils will require the contaminated soils be disposed of, with the excavation backfilled with clean fill soil. The Subject Property is not believed to be located within 1,000 feet of buried high-pressure gas transmission lined per the map obtained from the U.S. DOT National Pipeline Mapping System as seen in Appendix 10.7 of the 2022 Phase I ESA (Tab Attachment 4). The site is vacant land. Therefore, lead and asbestos surveys are not required. The City has average test results of 0.75 pCi/L radon. Therefore, radon testing is not required.

Supporting documentation

1-11745 BEA - FINAL REPORT.pdf
HRD Indoor Radon Map 04-18-24(1).pdf
T4-2-11745 - MSHDA Phase I ESA 2022 - FINAL UPDATED_Reduced_Core_Part5of5.pdf
T4-2-11745 - MSHDA Phase I ESA 2022 - FINAL UPDATED_Reduced_Core_Part4of5.pdf
T4-2-11745 - MSHDA Phase I ESA 2022 - FINAL UPDATED_Reduced_Core_Part3of5.pdf
T4-2-11745 - MSHDA Phase I ESA 2022 - FINAL UPDATED_Reduced_Core_Part2of5.pdf
T4-2-11745 - MSHDA Phase I ESA 2022 - FINAL UPDATED_Reduced_Core_Part1of5.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part6of8.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part8of8.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part7of8.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part5of8.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part4of8.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part3of8.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part2of8.pdf
T6-A24-174505 ResAP- FINAL REPORT_Part1of8.pdf
T2-11745 MSHDA Phase I ESA FINAL_Part6of6.pdf
T2-11745 MSHDA Phase I ESA FINAL_Part4of6.pdf
T2-11745 MSHDA Phase I ESA FINAL_Part5of6.pdf
T2-11745 MSHDA Phase I ESA FINAL_Part3of6.pdf
T2-11745 MSHDA Phase I ESA FINAL_Part2of6.pdf
T2-11745 MSHDA Phase I ESA FINAL_Part1of6.pdf
T5-440-460 MLK Additional Investigation Phase II ESA Report Final.pdf

T3-ASTI 1-11745 MLK Phase II ESA Report Final.pdf
N2-ResAP 7a1b Approval Letter_Greystone Apartments Detroit.pdf
N1-Michigan 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 *et seq*.); particularly section 7 (16 USC 1536).	50 CFR Part 402

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

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

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.

2. Are federally listed species or designated critical habitats present in the action area?

✓ No, the project will have No Effect due to the absence of federally listed species and designated critical habitat

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below. Documentation may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.

Yes, there are federally listed species or designated critical habitats present in the action area.

Screen Summary

Compliance Determination

The Indiana Bat, Northern Long-eared Bat, Rufa Red Knot, Eastern Massasauga, and the Eastern Prairie Fringed Orchid are all species listed in the Federally-listed Endangered and Threatened Species of Michigan. On October 14, 2022, ASTI conducted a threatened and endangered species assessment of the Subject Property. ASTI has determined that the Subject Property does not contain any preferred or suitable habitat for any species listed on the Federally-listed Endangered and Threatened Species of Michigan list, known to have critical habitats in Wayne County. ASTI has concluded that the proposed project is anticipated to have ''No Effect'' on threatened and endangered species. The proposed project is in compliance with this statute. See Appendix H for the Threatened and Endangered Species Report.

Supporting documentation

H2-4-11745 TE Rationale 10-20-2022 FINAL.pdf
H1-2024_Listed_Endangered_Species.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

✓ Yes

4. Based on the analysis, is the proposed HUD-assisted project located at or beyond the required separation distance from all covered tanks?

✓ Yes

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

No

Screen Summary

Compliance Determination

There are 14 Above-ground Storage Tanks (AST) within one mile of the Subject Property, based on the EDR Radius Map Report on 460 Martin Luther King Boulevard, dated February 24, 2022. The AST located at 666 Selden Street has a capacity of 1,000 gallons, that was emptied and cleaned with a closed date of June 14, 2011. An AST was reported at 2950 Rosa Parks Boulevard but was removed from the premises on September 14, 1994. * The AST located at 100 Mack Avenue has a capacity of 2,000 gallons with an Acceptable Separation Distance for Thermal Radiation for People (ASDPPU) of 369.16 feet, and the AST is 1,763 feet from the Subject Property. * At 1351 Spruce Street is an 8,000-gallon AST with an ASDPPU of 657.70 feet and is 3,544 feet from the Subject Property. * A 20,000-gallon AST is present at 3990 John R Street has an ASDPPU of 963.41 feet and is 2,304 feet from the Subject Property. There are four ASTs at 2000 2nd Avenue. Each AST has a capacity of 1,650-gallons, an ASDPPU of 340.72 feet per AST, and is 3,730 feet from the Subject Property. * A 6,000-gallon AST is present at 1 Energy Plaza with an ASDPPU of 583.42 feet and is 4,281 feet from the Subject Property. * Two 6,500-gallon ASTs located at 1777 3rd Avenue that each have a ASDPPU of 603.20 feet are 3,624 feet from the Subject Property. * At 3200 Hobson Street is an AST with a capacity of 13,500 gallons, has an ASDPPU of 814.89 feet and is 2,052 feet from the Subject Property. * Two non-registered, 1,000-gallon ASTs are present at 2950 Rosa Parks Boulevard with an ASDPPU of 276.57 feet for each AST and is 4,482 feet from the Subject Property. The Subject Property is at or exceeds the Acceptable Separation Distance for all extant ASTs. The proposed project is not anticipated to be adversely impacted by explosive hazards and is in compliance with this regulation. See Appendix O for more information on Acceptable Separation Distances.

Supporting documentation

O1-3-11745_ASD.pdf
O2-PONY EXPRESS COURIER CORP- EDR Lightbox.pdf
O9-2950_Rosa_Parks_Blvd_Acceptable Separation Distance (ASD) Electronic Assessment Tool.pdf
O8-3200_Hobson_ST_Acceptable Separation Distance (ASD) Electronic Assessment Tool.pdf
O7-1777_3rd_Ave_Acceptable Separation Distance (ASD) Electronic Assessment Tool.pdf
O6-1_Energy_Plz_Acceptable Separation Distance (ASD) Electronic Assessment Tool.pdf
O5-2000_2nd_Ave_Acceptable Separation Distance (ASD) Electronic Assessment Tool.pdf
O4-3990_John_R_St_Acceptable Separation Distance (ASD) Electronic Assessment Tool.pdf
O3-1351_Spruce_St_Acceptable Separation Distance (ASD) Electronic Assessment Tool.pdf
O2-AIRGAS USA LLC - EDR Lightbox.pdf
O2-100_Mack_Ave_Acceptable Separation Distance (ASD) Electronic Assessment Tool - HUD Exchange.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

2. Does your project meet one of the following exemptions?

- Construction limited to on-farm structures needed for farm operations.
- Construction limited to new minor secondary (accessory) structures such as a garage or storage shed
- Project on land already in or committed to urban development or used for water storage. (7 CFR 658.2(a))

Yes

✓ No

3. Does "important farmland," including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?

- Utilize USDA Natural Resources Conservation Service's (NRCS) Web Soil Survey http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
- Check with your city or county's planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center http://offices.sc.egov.usda.gov/locator/app?agency=nrcs or your NRCS state soil scientist https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states/ for assistance

✓ 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 soil on the Subject Property consists of Midtown-Urban land complex, which is not classified as prime farmland. Additionally, the Subject Property is located in the City of Detroit. The proposed project is not anticipated to have an adverse impact on prime farmland and is in compliance with this statute. See Appendix K for the USDA soil survey report.

Supporting documentation

K-Soil_Report.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Greystone-Senior-Apartments	Detroit, MI	900000010414424

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 * Executive Order 13690 * 42 USC 4001-4128 * 42 USC 5154a * only applies to screen 2047 and not 2046	24 CFR 55

1. Does this project meet an exemption at 24 CFR 55.12 from compliance with HUD's floodplain management regulations in Part 55?

Yes

(a) HUD-assisted activities described in 24 CFR 58.34 and 58.35(b).

(b) HUD-assisted activities described in 24 CFR 50.19, except as otherwise indicated in § 50.19.

(c) The approval of financial assistance for restoring and preserving the natural and beneficial functions and values of floodplains and wetlands, including through acquisition of such floodplain and wetland property, where a permanent covenant or comparable restriction is place on the property's continued use for flood control, wetland projection, open space, or park land, but only if:
(1) The property is cleared of all existing buildings and walled structures; and
(2) The property is cleared of related improvements except those which:
(i) Are directly related to flood control, wetland protection, open space, or park land (including playgrounds and recreation areas);
(ii) Do not modify existing wetland areas or involve fill, paving, or other ground disturbance beyond minimal trails or paths; and
(iii) Are designed to be compatible with the beneficial floodplain or wetland function of the property.

(d) An action involving a repossession, receivership, foreclosure, or similar acquisition of property to protect or enforce HUD's financial interests under previously approved loans, grants, mortgage insurance,

or other HUD assistance.

(e) Policy-level actions described at 24 CFR 50.16 that do not involve site-based decisions.

(f) A minor amendment to a previously approved action with no additional adverse impact on or from a floodplain or wetland.

(g) HUD's or the responsible entity's approval of a project site, an incidental portion of which is situated in the FFRMS floodplain (not including the floodway, LiMWA, or coastal high hazard area) but only if: (1) The proposed project site does not include any existing or proposed buildings or improvements that modify or occupy the FFRMS floodplain except de minimis improvements such as recreation areas and trails; and (2) the proposed project will not result in any new construction in or modifications of a wetland .

(h) Issuance or use of Housing Vouchers, or other forms of rental subsidy where HUD, the awarding community, or the public housing agency that administers the contract awards rental subsidies that are not project-based (i.e., do not involve site-specific subsidies).

(i) Special projects directed to the removal of material and architectural barriers that restrict the mobility of and accessibility to elderly and persons with disabilities.

Describe:

✓ No

2. Does the project include a Critical Action? Examples of Critical Actions include projects involving hospitals, fire and police stations, nursing homes, hazardous chemical storage, storage of valuable records, and utility plants.

Yes

Describe:

✓ No

3. Determine the extent of the FFRMS floodplain and provide mapping documentation in support of that determination

The extent of the FFRMS floodplain can be determined using a Climate Informed Science Approach (CISA), 0.2 percent flood approach (0.2 PFA), or freeboard value approach (FVA). For projects in areas without available CISA data or without FEMA Flood Insurance Rate Maps (FIRMs), Flood Insurance Studies (FISs) or Advisory Base Flood Elevations (ABFEs), use the best available information[1] to determine flood elevation. Include documentation and an explanation of why this is the best available information[2] for the site. Note that newly constructed and substantially improved[3] structures must be elevated to the FFRMS floodplain regardless of the approach chosen to determine the floodplain.

Select one of the following three options:

CISA for non-critical actions. If using a local tool , data, or resources, ensure that the FFRMS elevation is higher than would have been determined using the 0.2 PFA or the FVA.

✓ 0.2-PFA. Where FEMA has defined the 0.2-percent-annual-chance floodplain, the FFRMS floodplain is the area that FEMA has designated as within the 0.2-percent-annual-chance floodplain.

FVA. If neither CISA nor 0.2-PFA is available, for non-critical actions, the FFRMS floodplain is the area that results from adding two feet to the base flood elevation as established by the effective FIRM or FIS or — if available — a FEMA-provided preliminary or pending FIRM or FIS or advisory base flood elevations, whether regulatory or informational in nature. However, an interim or preliminary FEMA map cannot be used if it is lower than the current FIRM or FIS.

[1] Sources which merit investigation include the files and studies of other federal agencies, such as the U. S. Army Corps of Engineers, the Tennessee Valley Authority, the Soil Conservation Service and the U. S. Geological Survey. These agencies have prepared flood hazard studies for several thousand localities and, through their technical assistance programs, hydrologic studies, soil surveys, and other investigations have collected or developed other floodplain information for numerous sites and areas. States and communities are also sources of information on past flood 'experiences within their boundaries and are particularly knowledgeable about areas subject to high-risk flood hazards such as alluvial fans, high velocity flows, mudflows and mudslides, ice jams, subsidence and liquefaction.

[2] If you are using best available information, select the FVA option below and provide supporting documentation in the screen summary. Contact your local environmental officer with additional compliance questions.

[3] Substantial improvement means any repair or improvement of a structure which costs at least 50 percent of the market value of the structure before repair or improvement or results in an increase of more than 20 percent of the number of dwelling units. The full definition can be found at 24 CFR 55.2(b)(12).

5. Does your project occur in the FFRMS floodplain?

Yes

✓ No

Screen Summary

Compliance Determination

The Subject Property is located in Zone X, the area of minimal flood hazard of FEMA flood map 26163C0285F, effective October 21, 2021. The proposed project is not anticipated to be adversely impacted by flood hazards and is in compliance with this executive order. See Appendix F for the FIRMette map.

Supporting documentation

D-FIRMETTE(1).pdf

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

✓ Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)

✓ Bay Mills Indian Community Completed
✓ Forest County Potawatomi Community Completed

✓ Grand Traverse Band of Ottawa and Chippewa Indians	Completed
✓ Hannahville Indian Community	Completed
✓ Keweenaw Bay Indian Community of Chippewa Indians	Completed
✓ Lac du Flambeau Band of Chippewa Indians	Completed
✓ Lac Vieux Desert Band of Chippewa Indians	Completed
✓ Little River Band of Ottawa Indians	Completed
✓ Little Traverse Bay Bands of Odawa Indians	Completed
✓ Match-E-Be-Nash-She-Wish Band	Completed
✓ Menominee Indian Tribe	Completed
✓ Miami Tribe of Oklahhoma	Completed
✓ Michigan Anishinaabek Preservation	Completed
✓ Nottawaseppi Huron Band	Completed
✓ Pokagon Band of Potawatomi Indians	Completed
✓ Saginaw Chippewa Indian Tribe	Completed
✓ Sault Ste. Marie Tribe	Completed
✓ Seneca Cayuga Nation	Completed

Other Consulting Parties

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

Consulting parties were selected through the TDAT database.

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:
Direct APE: A vacant lot at 440-460 Martin Luther King Boulevard.
Indirect APE: The vacant site at 440-460 Martin Luther King Boulevard and the properties immediately to the South, North, East, and West.

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
Architects Building	Listed	Yes	✓ Not Sensitive
Cass Davenport Historic District	Listed	Yes	✓ Not Sensitive
Clay School	Listed	Yes	✓ Not Sensitive

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:

Copies of the archaeology trenching report are available by request, please reach out to Tiffany Ciavattone or Penny Dwoinen for additional information.

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 proposed project is not anticipated to adversely impact or diminish any historical cultural resource nearby the Subject Property.

Does the No Adverse Effect finding contain conditions?

✓ Yes (check all that apply)

Avoidance

Modification of project

✓ Other

Describe conditions here:

All work on the proposed project is performed in accordance to the materials submitted to the City of Detroit HRD on February 13, 2024 and if any alterations to the proposed project's scope of work shall be reviewed by the City of Detroit HRD for approval prior to implementation.
*tIn the event an unanticipated discovery occurs, the unanticipated discoveries plan is followed.
*tPhotographs of the completed work are submitted to the City of Detroit HRD.

No

Adverse Effect

Screen Summary

Compliance Determination

Based on Section 106 consultation the project will have No Adverse Effect on historic properties. Conditions: Other. Upon satisfactory implementation of the conditions, which should be monitored, the project is in compliance with Section 106.

Supporting documentation

[EXTERNAL] RE_ Greystone Senior Living Project- Request for Consultation FCPC NHPA.pdf
[EXTERNAL] RE_ Greystone Senior Living Project- Request for Consultation.pdf
City of Detroit Greystone project_MBPI Response 112222.pdf
Detroit Unanticipated Discoveries Plan_Greystone Senior (002).pdf
GREYST~1.PDF
Greystone Senior Living Project- Request for Consultation.pdf
Pokagon 106 No Historic Properties in APE - Greystone Senior Living Project_Detroit MI (002).pdf
SHPO_Response_ER96_1_23_440_460_MLK.pdf
C8-Greystone SeniorCNAE Section 106 Letter21324.pdf
C4-GreystoneSection106Letter10322.pdf
C2-Greystone Section 106 report.pdf
C1-9222022 Greystone DETROIT Section 106 Application.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

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.

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:

Install brick wall, cement fiber panels, brick wall cmu, cement fiber panel cmu, windows with at least a STC rating of 27, and doors with at least a STC rating of 26 into the building construction.

Based on the response, the review is in compliance with this section. Document and upload drawings, specifications, and other materials as needed to describe the project's noise mitigation measures below.

No mitigation is necessary.

Screen Summary

Compliance Determination

A noise assessment on the proposed project was conducted January 18, 2021. The noise assessment found the noise levels to be in the Normally Unacceptable range at 70 dB for Noise Assessment Location (NAL) #1 and in the Normally Unacceptable range at 69 dB for NAL #2. STraCAT The wall assembly of the proposed project is to include brick, cement fiber panels, brick wall CMU, cement fiber panel CMU, windows with at least a Sound Transmission Classification (STC) rating of 27, and doors with a STC rating of 26. The combined wall assembly has a combined STC rating of 45.71. With a normally unacceptable noise range of 70 dB, the required STC for the proposed project is 28, and the combined wall assembly STC rating is 45.71. See Appendix M for the Noise Assessment and STraCAT calculations.

Supporting documentation

M2-Greystone-STraCAT Analysis.pdf
M1-Noise Assessment-Final.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

The Subject Property is located within the State of Michigan. There are no sole source aquifers within the State of Michigan. The proposed project is not anticipated to have

an adverse impact on sole source aquifers and is in compliance with this statute. See Appendix G for the Designated Sole Source Aquifers of Region 5 map.

Supporting documentation

G-Sole Source Aquifers Map.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

There are no wetlands or bodies of water present on the Subject Property. Nor are there wetlands or bodies of water nearby the Subject Property. The proposed project is in compliance with this executive order. See Appendix E for the National Wetlands Inventory map.

Supporting documentation

E-NWI.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

The Subject Property is located in Detroit, Wayne County, Michigan. There are no designated Wild and Scenic Rivers within Wayne County. Nor is there a nearby river listed on the Nationwide Rivers Inventory near the Subject Property. The proposed project is in compliance with this statute. See Appendix I.

Supporting documentation

I2-Inventory_Rivers.pdf
I1-2021_Wild_and_Scenic_Rivers_Michigan.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 proposed project seeks to construct a senior apartment complex, which seeks to address the housing concerns of low-income seniors in the City of Detroit. The selected pollution variables by the EPA, are above the State of Michigan averages within a one mile radius of the Subject Property, except for Superfund proximity. The population demographics surrounding the Subject Property indicate that 70 percent are people of color, 59 percent are low-income, 9 percent are unemployed, 2 percent are limited English speaking households, 14 percent hold an education less than a high school education, 4 percent are under five years of age, 13 percent are over 64 years of age, 17 percent have a low life expectancy, 20.3 percent are persons with disabilities, 19 percent lack access to broadband internet, 6 percent lack health insurance, and 12 percent of households are owner occupied. Of the limited English-speaking households, Spanish is the single most spoken language, followed by other Indo-European, Chinese, other Asian/Pacific, and Arabic languages. A housing burden and a transportation access critical service gap are documented to be present in the area of the Subject Property. A food desert is not known to exist near the Subject

Property. The proposed project will not cause displacement, since the project is to occur on a vacant lot. The proposed project is intended to access affordable housing for Detroit's low-income senior residents. The proposed project is not anticipated to have an adverse impact on vulnerable residents and is in compliance with this executive order. See Appendix L for the EJ Screen report.

Supporting documentation

L-EJScreen Community Report.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No

Greystone Senior

440, 446 & 460
Martin Luther King Jr. Boulevard,
Detroit, MI

2,000 1,000 0 2,000 Feet

N

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, February 24, 2022, ASTI Project 3-11745

Site Location Map

Y:\Project Files\Current and Closed\11000-11999\11700-11799\11745 Greystone Sr, 440, 446 & 460 MLK Blvd, Detroit\2-11745 MSHDA Phase I ESA 2022\CAD\2-11745.dwg, 3/28/2022 10:10 AM,

GRAPHIC SCALE

0 30 60 120

1 inch = 60 ft.
Paper Size = (8.5x11)

LEGEND

Property Line

Pole Mounted Transformer

N

Greystone Senior

440, 446 & 460 Martin Luther King Jr. Blvd

Detroit, MI

ASTI Environmental

Client: Greystone Senior LDHA, LP

Site Features Map

ASTI Project 3-11745, JRN, March 28, 2022

CASS CORRIDOR NEIGHBORHOOD DEVELOPMENT CORP.

GREYSTONE SENIOR LIVING

MSHDA LIHTC APPLICATION APR 2022

EXHIBIT 1

PROJECT NARRATIVE

EXHIBIT 1

NARRATIVE PROJECT DESCRIPTION

GREYSTONE SENIOR LIVING - 440 MARTIN LUTHER KING BOULEVARD ET AL., DETROIT, MI 48201

Narrative:

Cass Corridor Neighborhood Development Corp. (CCNDC) is proposing to build a new 4-story, 49-unit, multi-family residential building exclusively for seniors. Greystone Senior Living will consist of 24 one-bedroom units averaging 659 square feet each and 25 two-bedroom units averaging 984 square feet each. The building exterior will have a cast stone base, composite panel infill, a cast stone triangular arch, and other design characteristics as detailed in the Concept and Floor Plans prepared by Fusco, Shaffer & Pappas, Inc.

There will be an elevator, community room, library, and computer center. There will also be green space with outside tables for use by the tenants and 37 parking spaces.

CCNDC has completed several affordable multi-family housing developments.

- Ansonia Apts- 22 units
- Brainard Street- 120 units
- Chesterfield Apts- 24 units
- Coronado- 24 units
- Mt. Vernon Apts.- 45 units
- Architects Building- 51 units
- Cass Plaza- 47 units
- Vernon Murphy- 23 units

CCNDC has also developed several commercial buildings (Rocco Deli, a bike shop, Karate Studio, a retail clothing shop, and a print shop). At the request of the neighborhood, CCNDC developed a community building for use at no charge by all of CCNDC's developments and the neighborhood.

IMPORTANT: Annual tax credit amount

The sponsor has obtained additional funding that will reduce the amount of equity needed. The eligible basis supports $1,176,223 in annual credits. However, the total annual tax credit request in this application is $918,051.

Tenant Services

CCNDC is right in between Downtown and Mid-Town Detroit. This is a service-rich area, but CCNDC has not been able to locate a service provider within a mile of the site that can provide services needed by the senior tenants who will live in Greystone.

CCNDC will provide essential services in a unique way for the senior tenants at Greystone. An on-site Greystone Senior Coordinator (GSC) will assist the senior tenants in getting daily hot meals, emergency food, and grocery shopping and prescriptions delivered to their apartments. The GSC will provide on-site assistance in applying for entitlements and arranging for other needed support services.

	The food services and health screening will be provided in collaboration with St. Patrick's Senior Center (St. Pat's). All services listed below and in Exhibit 27 are voluntary. This level of on-site services is not available within one mile of the site. • emergency food services • prescription pick-up and drop-off • grocery shopping • on-site assistance with entitlement programs • on-site health screening Please see Exhibit 27 for more details about services to be provided, a service provision letter from St. Pat's, background on the Senior Center, and appropriate commitment letters.
Site Control	Greystone Senior LDHA LP has purchase agreements from CCNDC and the City of Detroit for all land needed for the development. As noted in the City site control exhibit, CCNDC will assign the City purchase agreement to the partnership. This is being done because the city of Detroit would enter into a purchase agreement only with CCNDC, not the partnership, but will assign it per Section 2.1 of the purchase agreement.
Site Plan Approval	The City of Detroit approved the site plan effective April 23, 2021. On March 21, 2022,the City issued a letter that extended its approval to February 23, 2023. Please see Exhibit 28 for the original approval and the extension letters.
CHDO Status	CCNDC is a CHDO, but since HUD and the city of Detroit stopped reviewing and re-issuing CHDO certifcations, CCNDC does not have a current CHDO letter. For this reason, the CHDO exhibit is marked as Not Applicable.
Green	The development will meet NGBS for Silver, Gold, or Emerald. It will also have a picnic area with tables for resident use.
Units:	49 total units
Construction Type:	49 (100%) new construction units
Affordable / Market Rate Units:	49 (100%) new affordable housing units
Construction Style:	49 (100.0%) apartment units
Project location:	440 Martin Luther King Boulevard, Detroit, MI 48201 West Warren Avenue, I-75/Fisher Freeway, Woodward Avenue, M-10 Lodge Freeway. All of the following lots are included in the site: *440 Martin Luther King Boulevard, Detroit, MI 48201*

EXHIBIT 1

NARRATIVE PROJECT DESCRIPTION

GREYSTONE SENIOR LIVING - 440 MARTIN LUTHER KING BOULEVARD ET AL., DETROIT, MI 48201

446 Martin Luther King Boulevard, Detroit, MI 48201
460 Martin Luther King Boulevard, Detroit, MI 48201

WalkScore	90
Proximate to:	• Minutes from Downtown Detroit • Less than half a mile from the Detroit Medical Center • Right next to the sponsor's main office • Within 45 minutes of several suburban working areas • Various stores and restaurants within walking distance • Several hundred feet from Wick Park. • 13 grocery stores and markets within 300 feet to 1 mile • 16 pharmacies within 0.2 to 1 mile • Various clinics within 0.2 to 1 mile • Less than a hundred feet from DDOT bus stops • Less than a hundred feet from a SMART bus route.
Amenities:	Blinds Cable TV hook-up Centrally-monitored fire system Coat closet Community room Courtyard Dishwasher Disposal Elevator Fire suppression Forced air heating and A/C Granite countertops High speed internet and telephone connections In-unit laundry Lawn irrigation On-site management Patio / balcony Range Refrigerator - frost-free (14 cubic ft. min.) Security system Self-cleaning oven
Employee units	0
Senior citizen units	49
Total rent subsidy units:	0
Tenant services provider:	St. Patrick Senior Center
Total # of barrier free units:	12

EXHIBIT 1

NARRATIVE PROJECT DESCRIPTION

GREYSTONE SENIOR LIVING - 440 MARTIN LUTHER KING BOULEVARD ET AL., DETROIT, MI 48201

Total # of visitable units:	49
Total number of buildings:	1
Square Footage	
Total	53,396
Residential	*40,416*
Common Room	*592*
Community Area	*2,450 (50.0 sq ft per unit)*
Common Area	*9,938*
Office/Commercial	
NOTE: Total Non-Residential Square Footage	*12,980*
Highest # of Stories:	4
Type of Financing:	Cinnaire Investment Corporation construction loan; Cinnaire Investment perm loan; Detroit HOME; Detroit HTF; Spnsr Subrd Land Nt; Cinnaire LIHTC; Greystone Senior, Inc. - dfrd fee; CCNDC - GP contr
Tenants served:	26.5% (13 units) at 30% of AMI 6.1% (3 units) at 40% of AMI 67.3% (33 units) at 60% of AMI
Bedroom mix:	24 1-BR units; 25 2-BR units
Total annual credits requested	$918,051

EXHIBIT 1

NARRATIVE PROJECT DESCRIPTION

GREYSTONE SENIOR LIVING - 440 MARTIN LUTHER KING BOULEVARD ET AL., DETROIT, MI 48201

Development Team:

Sponsor: Patrick Dorn, Executive Director
Cass Corridor Neighborhood Development Corp.
3535 Cass Ave., Detroit, MI 48201
Ph: 313-831-0199
Eml: casscorr3535@yahoo.com

Architect: James T. Pappas, President
Fusco, Shaffer & Pappas, Inc.
550 E. Nine Mile Rd., Ferndale, MI 48220
Ph: 248-543-4100
Eml: jpappas@fsparch.com

General Contractor: Glen Fisher, President
G. Fisher Construction Company
31313 Northwestern Hwy., Suite 206, Farmington Hills, MI 48334
Ph: 248-855-3500
Eml: info@gfisherconst.com

Property Management: Karen Mead, Vice President of Business Development
KMG Prestige, Inc.
102 South Main Street, Mt. Pleasant, MI 48858
Ph: 989-400-4828
Eml: karen@kmgprestige.com

Tenant Serv Plan Provider #1: SaTrice Coleman-Betts, President
St. Patrick Senior Center
59 Parsons St., Detroit, MI 48201
Ph: 313-833-7080
Eml: src.betts@StPatSrCtr.org

Partnership Attorney: Ted Rozeboom, Attorney at Law
Clark Hill
212 East Cesar E Chavez, Lansing, MI 48906
Ph: 517-318-3019
Eml: trozeboom@clarkhill.com

Consultant: Robert Zinser, Principal
Union Capital Development LLC
3535 Cass Ave., Detroit, MI 48201
Ph: 734-330-1185
Eml: bobzinser@gmail.com

Job Creation:

Construction: 28
Permanent part-time: 2

Attachments:

Exhibit 1-A Map
Exhibit 1-B Job Creation
Exhibit 1-C Staffing Plan

EXHIBIT 1

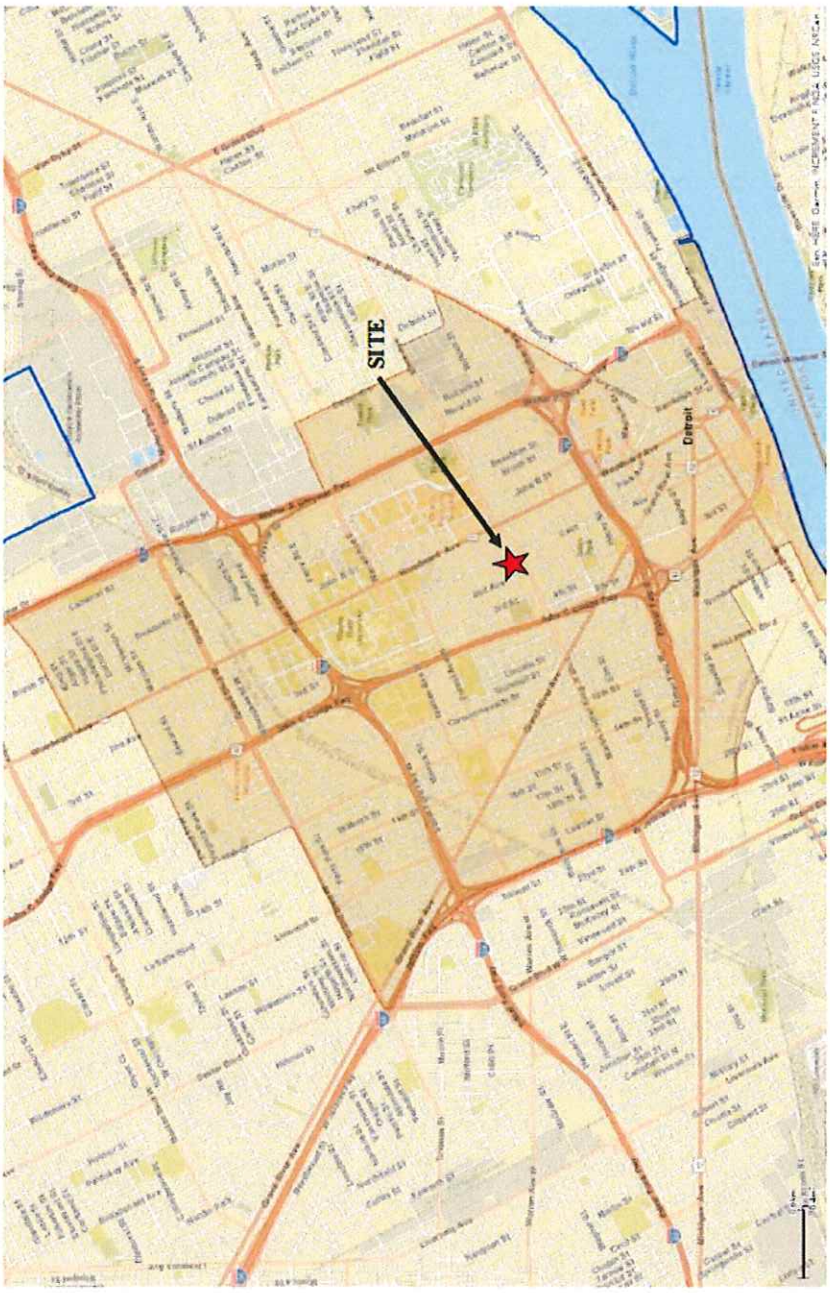
NARRATIVE PROJECT DESCRIPTION

GREYSTONE SENIOR LIVING - 440 MARTIN LUTHER KING BOULEVARD ET AL., DETROIT, MI 48201

Exhibit 1-A - Map

Greystone Senior Apartments — Detroit, Michigan

Map 3: Greystone Senior PMA – Detroit, MI



NOTE: Shaded area is PMA; Blue boundary is city of Detroit.

Shaw Research & Consulting, LLC — Page 15

Exhibit 1-B - Job Creation

G. Fisher Construction Company

31313 Northwestern Hwy., Suite 206, Farmington Hills, MI 48334 (248) 855-3500 Fax (248) 855-2420

January 26, 2021

Greystone LDHA LP

Attn: Bob Zinser

Based on our prior experience self-performing many functions for this type of project and discussion with subcontractors we estimate that the following number of employees will be needed to complete this project:

Superintendent	1	Concrete	1
Site Development	1	Painting	1
Mechanical	2	Masonry	1
Roofing	1	Paving	1
Siding	1	Carpentry/Labor	10
Electrical	1	Fire Protection	1
Plumbing	2	Insulation	1
Flooring	1	Drywall	2
			28

Regards

Glen Fisher

President

General Contracting - Construction Management

KMG PRESTIGE
Strategic Property Management Solutions

STAFFING PLAN

KMG Prestige, Inc. has made the following staffing recommendations based upon the comparable projects in the market.

All employees receive on-the-job orientation and training according to the KMG Prestige established policies and procedures. In addition, the Property Manager will oversee the entire training process and will be on-site at least once a week, or more as required. Copies of the KMG Prestige Policy and Procedures Operating Manual, and other training manuals, will be provided to assist the Community Manager in various daily operational procedures. KMG Prestige, Inc. believes the Community Manager is key to the successful operation of the community. We have developed several training modules including Marketing, Accounting, Compliance and others that are designed to increase the knowledge of the Community Manager. Employees at KMG Prestige, Inc. who have become proficient in a given area complete most of the training. KMG Prestige, Inc. also sponsors training seminars by outside contractors who offer specialties in specific areas where a training need has been identified.

ANTICIPATED STAFFING PLAN

Greystone Senior is recommended as follows:

Job Title

(1) Permanent Part-Time Community Manager
(1) Permanent Part -Time Maintenance Technician

102 S. Main Street ♦ Mt. Pleasant, Michigan 48858
Phone: (989) 772-3261 ♦ Fax: (989) 772-3842 ♦ TDD/TTY: 711

Housing and Revitalization Department
CITY OF DETROIT

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

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

October 3, 2022

Cass Corridor Neighborhood Development Corporation
3535 Cass Avenue
Detroit, MI 48201

RE: Section 106 Review of a CDBG-Funded Project Located at 440 Martin Luther King Blvd. in the City of Detroit, Wayne County, Michigan

Dear Mr. Zinser,

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).

The Greystone Senior Living project includes the construction of a four-story tall, 49-unit apartment building and 15 space parking lot on the north side of Martin Luther King Boulevard, west of Cass Avenue in Midtown Detroit.

Based on the Application for Section 106 Consultation, submitted to this office on 10/3/2022, we have determined Historic Properties are located within in the Area of Potential Effects (APE) for this project. The Clay School and Architects Building are both listed in the National Register of Historic Places; and the Cass Davenport Historic District and Willis Selden Historic District are listed in the National Register of Historic Places and are locally designated historic districts. 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 the Treatment of Historic Properties.

Additionally, this project is in an area of archaeological sensitivity. A technical report authored by Misty M. Jackson, Ph.D., of Arbre Croche Cultural Resources was provided with the application. This report concluded that more information is needed and an archaeological phase I trenching investigation or construction monitoring should be conducted.

This project requires additional information in order to make a determination of effect (Federal Regulations 36 CFR Part 800.5(b)) on properties that are listed or eligible for listing in the National Register of Historic Places. Please provide the following information in order to complete the Section 106 Review:

- A study plan for phase I archaeological investigation; and,
- Construction drawings/site plans. Any 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; and,
- Photos of the completed work should be submitted to the Preservation Specialist, prior to final project closeout.

Housing and Revitalization Department

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

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

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 Ciavattonet@detroitmi.gov.

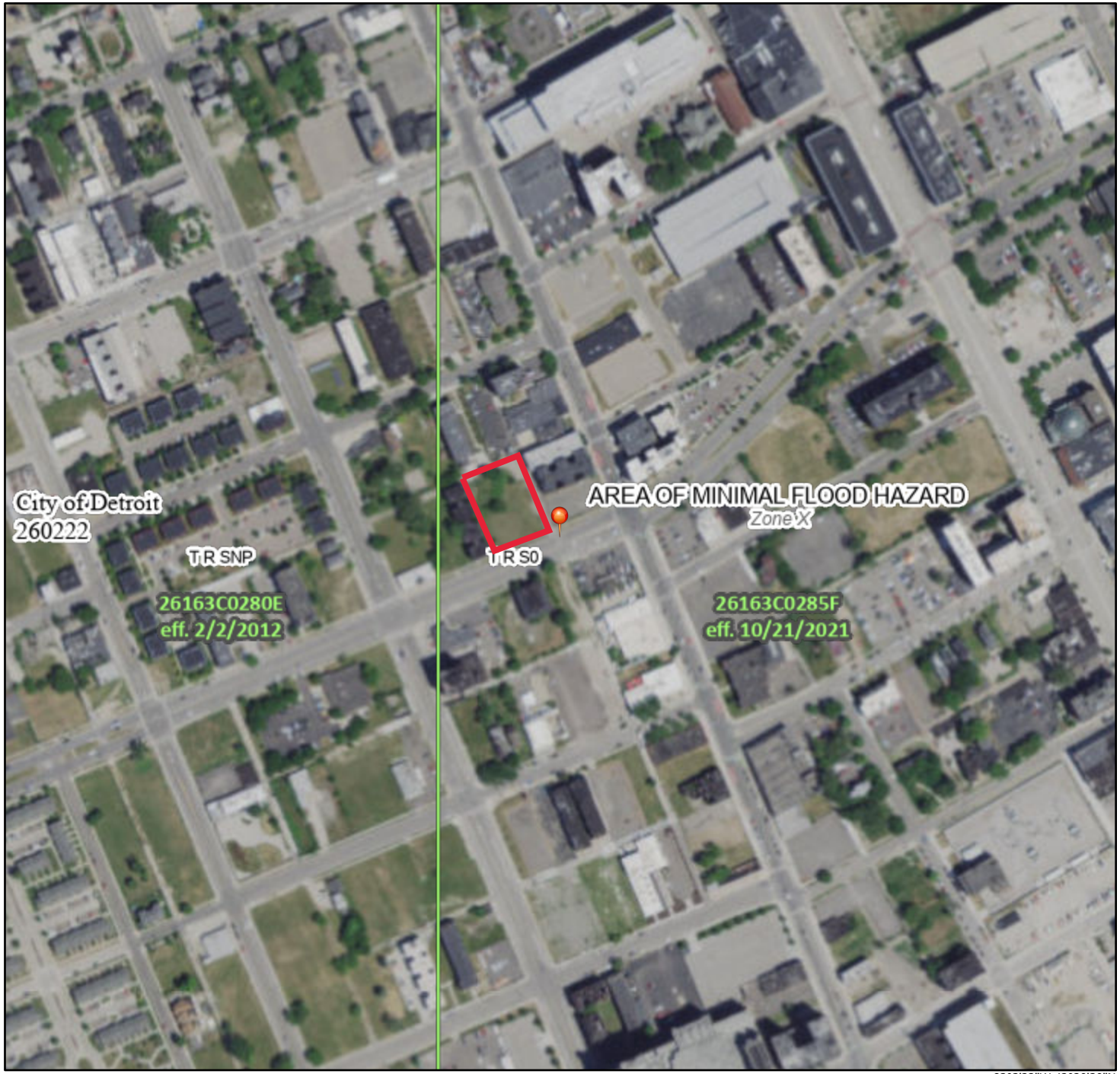
Sincerely,

Tiffany Ciavattone
Preservation Specialist
City of Detroit
Housing & Revitalization Department

National Flood Hazard Layer FIRMette

FEMA

83°4'W 42°20'57"N



0 250 500 1,000 1,500 2,000 Feet

1:6,000

83°3'22"W 42°20'30"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) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- 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 *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- 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
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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

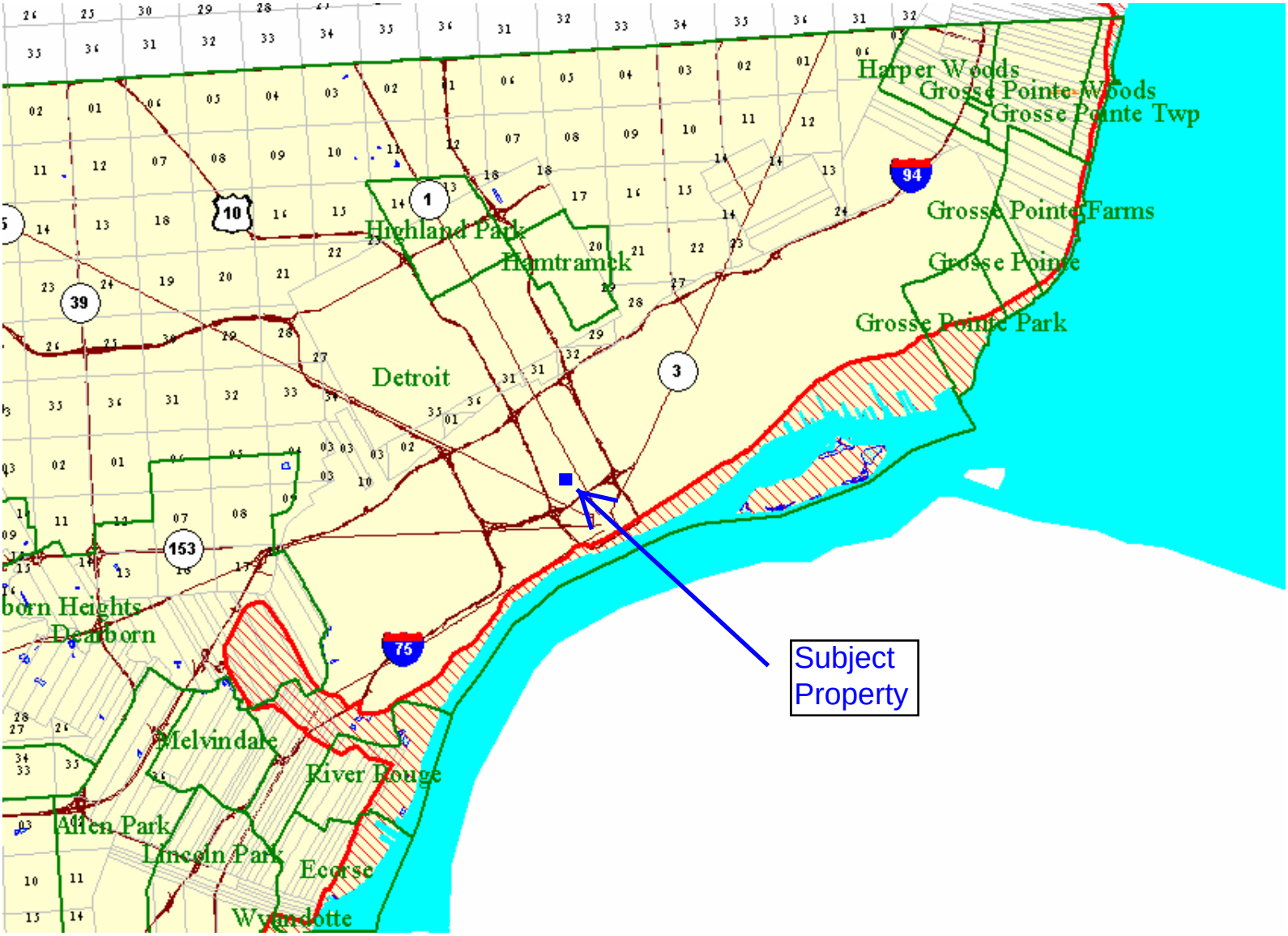
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/26/2022 at 9:06 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.

Wayne County
Grosse Point Township, Grosse Point Woods, Grosse Point Farms
Grosse Point, Grosse Point Park, and Detroit, T1S R14E
Detroit, T1S R14E, T2S R13E, andT2S R12E
River Rouge, T2S R11E

The heavy red line is the ***Coastal Zone Management Boundary***
The red hatched area is the ***Coastal Zone Management Area***.



U.S. Fish and Wildlife Service
National Wetlands Inventory

Graystone Senior Apartments

September 26, 2022

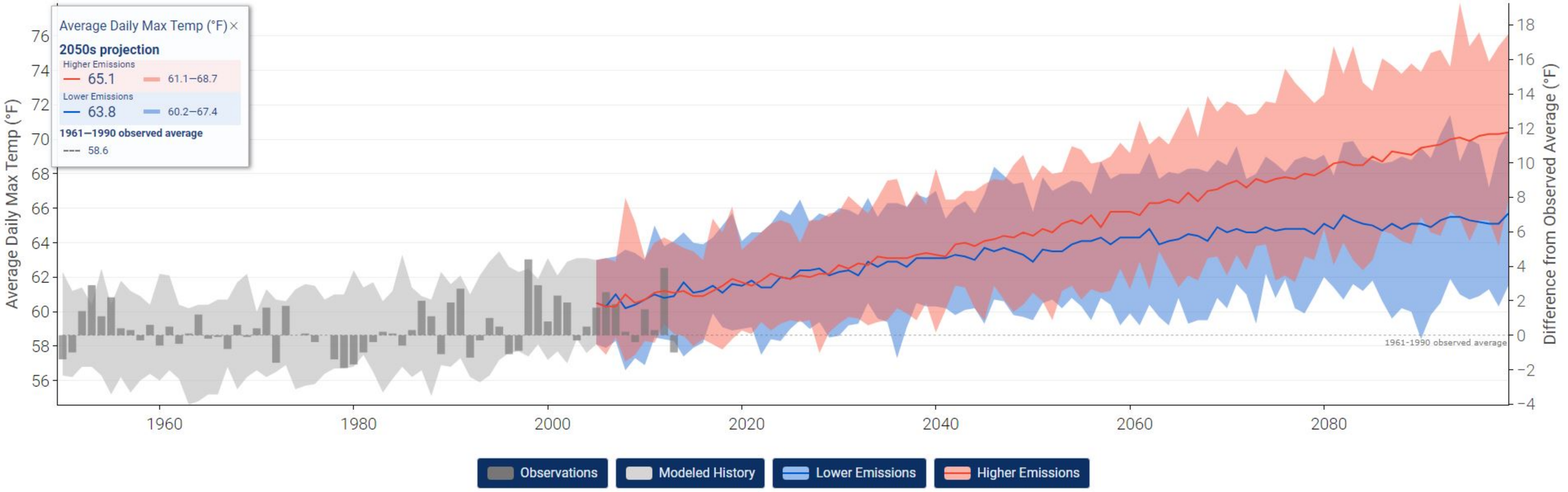
Wetlands

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

Wayne County - Average Daily Maximum Temp (°F)

Average Daily Maximum Temperature (°F) | Graph | Map | Annual | Monthly | Downloads | About



National Risk Index

June 26, 2024

Wayne County, Michigan

Summary

Risk Index is **Relatively High**

Score **96.7**

Expected Annual Loss is **Relatively High**

Score **96.6**

Social Vulnerability is **Very High**

Score **87.1**

Community Resilience is **Relatively Moderate**

Score **56.6**

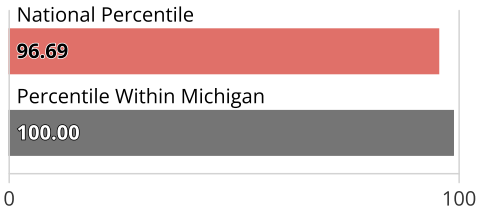
While reviewing this report, keep in mind that low risk is driven by lower loss due to natural hazards, lower social vulnerability, and higher community resilience.

For more information about the National Risk Index, its data, and how to interpret the information it provides, please review the **About the National Risk Index** and **How to Take Action** sections at the end of this report. Or, visit the National Risk Index website at hazards.fema.gov/nri/learn-more to access supporting documentation and links.

Risk Index

The Risk Index rating is **Relatively High** for **Wayne County, MI** when compared to the rest of the U.S.

Score **96.69**



97% of U.S. counties have a lower Risk Index

100% of counties in Michigan have a lower Risk Index

Hazard Type Risk Index

Hazard type Risk Index scores are calculated using data for only a single hazard type, and reflect a community's Expected Annual Loss value, community risk factors, and the adjustment factor used to calculate the risk value.

Hazard Type	Risk Index Rating	Risk Index Score	National Percentile
Avalanche	Not Applicable	--	
Coastal Flooding	Relatively Low	62.2	0 100
Cold Wave	Very High	99.9	0 100
Drought	No Rating	0	0 100
Earthquake	Relatively Low	89.1	0 100
Hail	Relatively Low	53	0 100
Heat Wave	Relatively High	99.4	0 100
Hurricane	Relatively Low	64.2	0 100
Ice Storm	Relatively Moderate	82.8	0 100
Landslide	Relatively Moderate	83.9	0 100
Lightning	Relatively High	98.7	0 100
Riverine Flooding	Relatively High	99.5	0 100
Strong Wind	Very High	99.9	0 100
Tornado	Very High	99.2	0 100
Tsunami	Insufficient Data	--	
Volcanic Activity	Not Applicable	--	
Wildfire	Relatively Low	65.5	0 100
Winter Weather	Relatively High	86.3	0 100

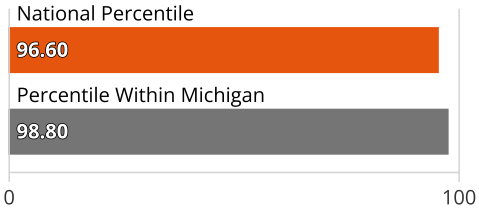
Risk Factor Breakdown

Hazard Type	EAL Value	Social Vulnerability	Community Resilience	CRF	Risk Value	Risk Index Score
Riverine Flooding	$45,776,220	Very High	Relatively Moderate	1.17	$51,213,805	99.5
Tornado	$39,003,027	Very High	Relatively Moderate	1.17	$46,272,409	99.2
Heat Wave	$15,206,700	Very High	Relatively Moderate	1.17	$18,284,942	99.4
Strong Wind	$14,474,540	Very High	Relatively Moderate	1.17	$17,081,580	99.9
Cold Wave	$9,723,972	Very High	Relatively Moderate	1.17	$11,692,544	99.9
Earthquake	$2,336,822	Very High	Relatively Moderate	1.17	$2,808,325	89.1
Lightning	$2,063,005	Very High	Relatively Moderate	1.17	$2,471,431	98.7
Hurricane	$632,187	Very High	Relatively Moderate	1.17	$745,686	64.2
Coastal Flooding	$343,167	Very High	Relatively Moderate	1.17	$389,707	62.2
Ice Storm	$293,182	Very High	Relatively Moderate	1.17	$348,278	82.8
Winter Weather	$255,771	Very High	Relatively Moderate	1.17	$301,900	86.3
Landslide	$122,400	Very High	Relatively Moderate	1.17	$132,535	83.9
Hail	$104,135	Very High	Relatively Moderate	1.17	$124,082	53
Wildfire	$121,792	Very High	Relatively Moderate	1.17	$122,134	65.5
Drought	$0	Very High	Relatively Moderate	1.17	$0	0
Avalanche	--	Very High	Relatively Moderate	1.17	--	--
Tsunami	--	Very High	Relatively Moderate	1.17	--	--
Volcanic Activity	--	Very High	Relatively Moderate	1.17	--	--

Expected Annual Loss

In **Wayne County, MI**, expected loss each year due to natural hazards is **Relatively High** when compared to the rest of the U.S.

Score	**96.6**



97% of U.S. counties have a lower Expected Annual Loss

99% of counties in Michigan have a lower Expected Annual Loss

Expected Annual Loss Legend

Very High | Relatively High | Relatively Moderate | Relatively Low | Very Low

No Expected Annual Losses | Not Applicable | Insufficient Data

Composite Expected Annual Loss	**$130,456,920.37**
Composite Expected Annual Loss Rate National Percentile	**11.5**

Building EAL	**$66,046,737.90**	Population EAL	**5.55** fatalities
Building EAL Rate	**$1 per $4.81K of building value**	Population EAL Rate	**1 per 323.20K people**
Agriculture EAL	**$74,464.71**	Population Equivalence EAL	**$64,335,717.75**
Agriculture EAL Rate	**$1 per $356.28 of agriculture value**		

Expected Annual Loss for Hazard Types

Expected Annual Loss scores for hazard types are calculated using data for only a single hazard type, and reflect a community's relative expected annual loss for only that hazard type.

15 of 18 hazard types contribute to the expected annual loss for **Wayne County, MI**.

Hazard Type	Expected Annual Loss Rating	EAL Value	Score
Riverine Flooding	Very High	$45,776,220	99.5
Tornado	Very High	$39,003,027	99.1

Hazard Type	Expected Annual Loss Rating	EAL Value	Score
Heat Wave	Relatively High	$15,206,700	99.5
Strong Wind	Very High	$14,474,540	99.8
Cold Wave	Very High	$9,723,972	99.9
Earthquake	Relatively Low	$2,336,822	87.2
Lightning	Very High	$2,063,005	98.1
Hurricane	Relatively Low	$632,187	62.6
Coastal Flooding	Relatively Low	$343,167	63.9
Ice Storm	Relatively Moderate	$293,182	82.3
Winter Weather	Relatively High	$255,771	86.4
Landslide	Relatively Moderate	$122,400	85.2
Wildfire	Relatively Low	$121,792	66.9
Hail	Relatively Low	$104,135	53.9
Drought	No Expected Annual Losses	$0	0.0
Avalanche	Not Applicable	--	--
Tsunami	Insufficient Data	--	--
Volcanic Activity	Not Applicable	--	--

Expected Annual Loss Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	$343,167	$340,886	$2,281	0.00	n/a
Cold Wave	$9,723,972	$917	$9,722,961	0.84	$95
Drought	$0	n/a	n/a	n/a	$0
Earthquake	$2,336,822	$1,822,753	$514,069	0.04	n/a
Hail	$104,135	$630	$103,344	0.01	$161
Heat Wave	$15,206,700	$454	$15,204,614	1.31	$1,633
Hurricane	$632,187	$629,594	$2,213	0.00	$380
Ice Storm	$293,182	$256,725	$36,458	0.00	n/a
Landslide	$122,400	$105,000	$17,400	0.00	n/a
Lightning	$2,063,005	$54,164	$2,008,841	0.17	n/a
Riverine Flooding	$45,776,220	$34,851,340	$10,853,314	0.94	$71,566

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Strong Wind	$14,474,540	$8,702,262	$5,771,920	0.50	$359
Tornado	$39,003,027	$18,941,673	$20,061,161	1.73	$194
Tsunami	n/a	n/a	n/a	n/a	n/a
Volcanic Activity	--	--	--	--	--
Wildfire	$121,792	$111,608	$10,182	0.00	$2
Winter Weather	$255,771	$228,734	$26,961	0.00	$76

Exposure Values

Hazard Type	Total	Building Value	Population Equivalence	Population	Agriculture Value
Avalanche	--	--	--	--	--
Coastal Flooding	$133,082,442,357	$2,381,391,904	$130,701,050,453	11,267.33	n/a
Cold Wave	$21,111,085,227,410	$317,490,691,843	$20,793,568,004,964	1,792,548.97	$26,530,603
Drought	$0	n/a	n/a	n/a	$0
Earthquake	$21,122,792,681,000	$317,485,081,000	$20,805,307,600,000	1,793,561.00	n/a
Hail	$21,111,085,626,233	$317,490,695,630	$20,793,568,400,000	1,792,549.00	$26,530,603
Heat Wave	$21,111,085,227,410	$317,490,691,843	$20,793,568,004,964	1,792,548.97	$26,530,603
Hurricane	$21,082,773,744,465	$317,227,162,061	$20,765,520,051,800	1,790,131.04	$26,530,603
Ice Storm	$21,110,277,410,905	$317,476,534,553	$20,792,800,876,352	1,792,482.83	n/a
Landslide	$473,220,150,895	$12,642,166,181	$460,577,984,714	39,705.00	n/a
Lightning	$21,111,059,095,630	$317,490,695,630	$20,793,568,400,000	1,792,549.00	n/a
Riverine Flooding	$473,310,608,670	$6,116,553,936	$467,191,252,270	40,275.11	$2,802,463
Strong Wind	$21,111,085,626,233	$317,490,695,630	$20,793,568,400,000	1,792,549.00	$26,530,603
Tornado	$21,111,085,626,233	$317,490,695,630	$20,793,568,400,000	1,792,549.00	$26,530,603
Tsunami	n/a	n/a	n/a	n/a	n/a
Volcanic Activity	--	--	--	--	--
Wildfire	$1,712,692,299,570	$27,902,120,261	$1,684,777,294,662	145,239.42	$12,884,647
Winter Weather	$21,111,085,227,410	$317,490,691,843	$20,793,568,004,964	1,792,548.97	$26,530,603

Annualized Frequency Values

Hazard Type	Annualized Frequency	Events on Record	Period of Record
Avalanche	--	--	--

Hazard Type	Annualized Frequency	Events on Record	Period of Record
Coastal Flooding	0 events per year	n/a	Various (see documentation)
Cold Wave	0.6 events per year	9	2005-2021 (16 years)
Drought	0 events per year	0	2000-2021 (22 years)
Earthquake	0.029% chance per year	n/a	2021 dataset
Hail	3.1 events per year	100	1986-2021 (34 years)
Heat Wave	1.1 events per year	18	2005-2021 (16 years)
Hurricane	0 events per year	2	East 1851-2021 (171 years) / West 1949-2021 (73 years)
Ice Storm	1.9 events per year	120	1946-2014 (67 years)
Landslide	0 events per year	0	2010-2021 (12 years)
Lightning	46.1 events per year	943	1991-2012 (22 years)
Riverine Flooding	2.5 events per year	61	1996-2019 (24 years)
Strong Wind	5.4 events per year	171	1986-2021 (34 years)
Tornado	0.2 events per year	23	1950-2021 (72 years)
Tsunami	n/a	n/a	1800-2021 (222 years)
Volcanic Activity	--	--	--
Wildfire	Less than 0.001% chance per year	n/a	2021 dataset
Winter Weather	2.5 events per year	40	2005-2021 (16 years)

Historic Loss Ratios

Hazard Type	Overall Rating
Avalanche	--
Coastal Flooding	Relatively Moderate
Cold Wave	Very Low
Drought	No Rating
Earthquake	Very Low
Hail	Very Low
Heat Wave	Relatively Low
Hurricane	Very Low
Ice Storm	Very Low
Landslide	Very Low
Lightning	Very Low

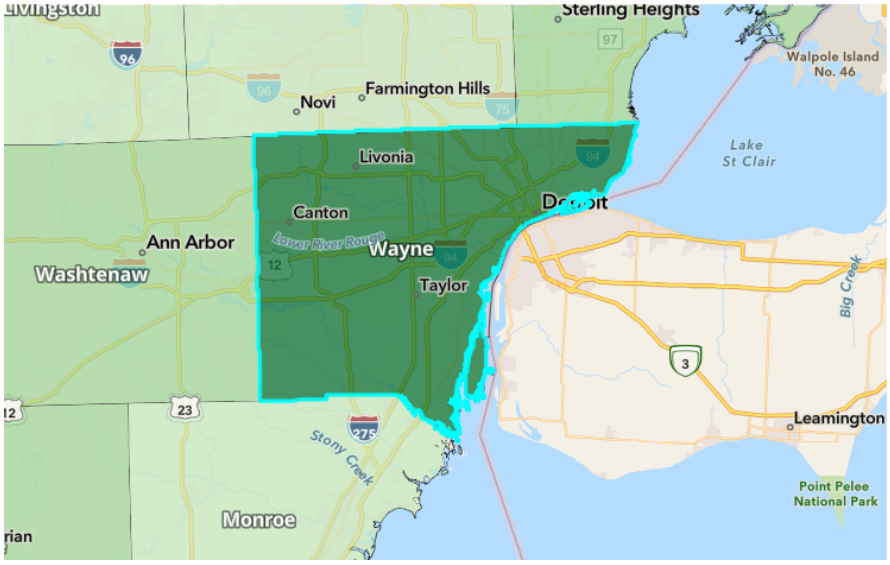
Hazard Type	Overall Rating
Riverine Flooding	Very Low
Strong Wind	Very Low
Tornado	Relatively Low
Tsunami	Insufficient Data
Volcanic Activity	--
Wildfire	Relatively Low
Winter Weather	Very Low

Expected Annual Loss Rate

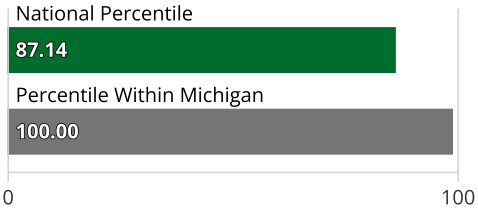
Hazard Type	Building EAL Rate (per building value)	Population EAL Rate (per population)	Agriculture EAL Rate (per agriculture value)
Avalanche	--	--	--
Coastal Flooding	$1 per $931.37K	1 per 9.11B	--
Cold Wave	$1 per $346.39M	1 per 2.14M	$1 per $279.19K
Drought	--	--	--
Earthquake	$1 per $174.18K	1 per 40.45M	--
Hail	$1 per $503.94M	1 per 201.21M	$1 per $164.60K
Heat Wave	$1 per $699.86M	1 per 1.37M	$1 per $16.25K
Hurricane	$1 per $504.28K	1 per 9.40B	$1 per $69.85K
Ice Storm	$1 per $1.24M	1 per 570.35M	--
Landslide	$1 per $3.02M	1 per 1.20B	--
Lightning	$1 per $5.86M	1 per 10.35M	--
Riverine Flooding	$1 per $9.11K	1 per 1.92M	$1 per $370.72
Strong Wind	$1 per $36.48K	1 per 3.60M	$1 per $73.98K
Tornado	$1 per $16.76K	1 per 1.04M	$1 per $137.08K
Tsunami	--	--	--
Volcanic Activity	--	--	--
Wildfire	$1 per $2.84M	1 per 2.04B	$1 per $15.16M
Winter Weather	$1 per $1.39M	1 per 771.26M	$1 per $348.83K

Social Vulnerability

Social groups in **Wayne County, MI** have a **Very High** susceptibility to the adverse impacts of natural hazards when compared to the rest of the U.S.



Score	87.14



87% of U.S. counties have a lower Social Vulnerability

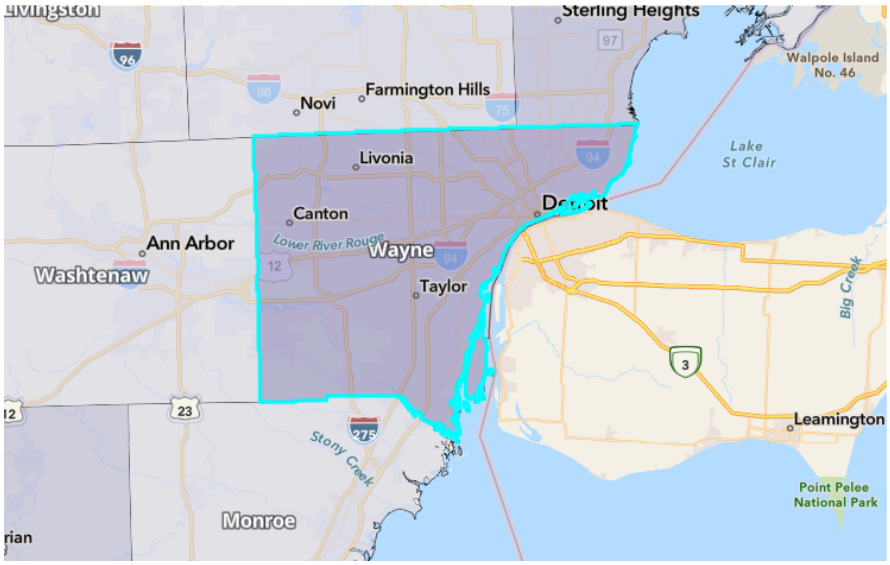
100% of counties in Michigan have a lower Social Vulnerability

Social Vulnerability Legend

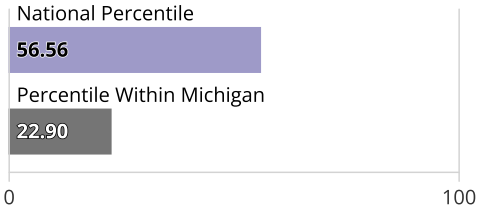
Very High | Relatively High | Relatively Moderate | Relatively Low | Very Low | Data Unavailable

Community Resilience

Communities in **Wayne County, MI** have a **Relatively Moderate** ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S.



Score **56.56**



44% of U.S. counties have a higher Community Resilience

77% of counties in Michigan have a higher Community Resilience

Community Resilience Legend

Very High | Relatively High | Relatively Moderate | Relatively Low | Very Low | Data Unavailable

About the National Risk Index

The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather.

The National Risk Index leverages available source data for Expected Annual Loss due to these 18 hazard types, Social Vulnerability, and Community Resilience to develop a baseline relative risk measurement for each United States county and Census tract. These measurements are calculated using average past conditions, but they cannot be used to predict future outcomes for a community. The National Risk Index is intended to fill gaps in available data and analyses to better inform federal, state, local, tribal, and territorial decision makers as they develop risk reduction strategies.

Explore the National Risk Index Map at **hazards.fema.gov/nri/map**.

Visit the National Risk Index website at **hazards.fema.gov/nri/learn-more** to access supporting documentation and links.

Calculating the Risk Index

Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability and Community Resilience:

$$\text{Risk Index} = \text{Expected Annual Loss} \times \text{Social Vulnerability} \div \text{Community Resilience}$$

Risk Index scores are presented as a composite score for all 18 hazard types, as well as individual scores for each hazard type.

For more information, visit **hazards.fema.gov/nri/determining-risk**.

Calculating Expected Annual Loss

Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios for 18 hazard types:

$$\text{Expected Annual Loss} = \text{Exposure} \times \text{Annualized Frequency} \times \text{Historic Loss Ratio}$$

Expected Annual Loss scores are presented as a composite score for all 18 hazard types, as well as individual scores for each hazard type.

For more information, visit **hazards.fema.gov/nri/expected-annual-loss**.

Calculating Social Vulnerability

Social Vulnerability is measured using the Social Vulnerability Index (SVI) published by the Centers for Disease Control and Prevention (CDC).

For more information, visit **hazards.fema.gov/nri/social-vulnerability**.

Calculating Community Resilience

Community Resilience is measured at the County level using the Baseline Resilience Indicators for Communities (HVRI BRIC) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI).

For more information, visit **hazards.fema.gov/nri/community-resilience**.

How to Take Action

There are many ways to reduce natural hazard risk through mitigation. Communities with high National Risk Index scores can take action to reduce risk by decreasing Expected Annual Loss due to natural hazards, decreasing Social Vulnerability, and increasing Community Resilience.

For information about how to take action and reduce your risk, visit **hazards.fema.gov/nri/take-action**.

Disclaimer

The National Risk Index (the Risk Index or the Index) and its associated data are meant for planning purposes only. This tool was created for broad nationwide comparisons and is not a substitute for localized risk assessment analysis. Nationwide datasets used as inputs for the National Risk Index are, in many cases, not as accurate as available local data. Users with access to local data for each National Risk Index risk factor should consider substituting

the Risk Index data with local data to recalculate a more accurate risk index. If you decide to download the National Risk Index data and substitute it with local data, you assume responsibility for the accuracy of the data and any resulting data index. Please visit the **Contact Us** page if you would like to discuss this process further.

The methodology used by the National Risk Index has been reviewed by subject matter experts in the fields of natural hazard risk research, risk analysis, mitigation planning, and emergency management. The processing methods used to create the National Risk Index have produced results similar to those from other natural hazard risk analyses conducted on a smaller scale. The breadth and combination of geographic information systems (GIS) and data processing techniques leveraged by the National Risk Index enable it to incorporate multiple hazard types and risk factors, manage its nationwide scope, and capture what might have been missed using other methods.

The National Risk Index does not consider the intricate economic and physical interdependencies that exist across geographic regions. Keep in mind that hazard impacts in surrounding counties or Census tracts can cause indirect losses in your community regardless of your community's risk profile.

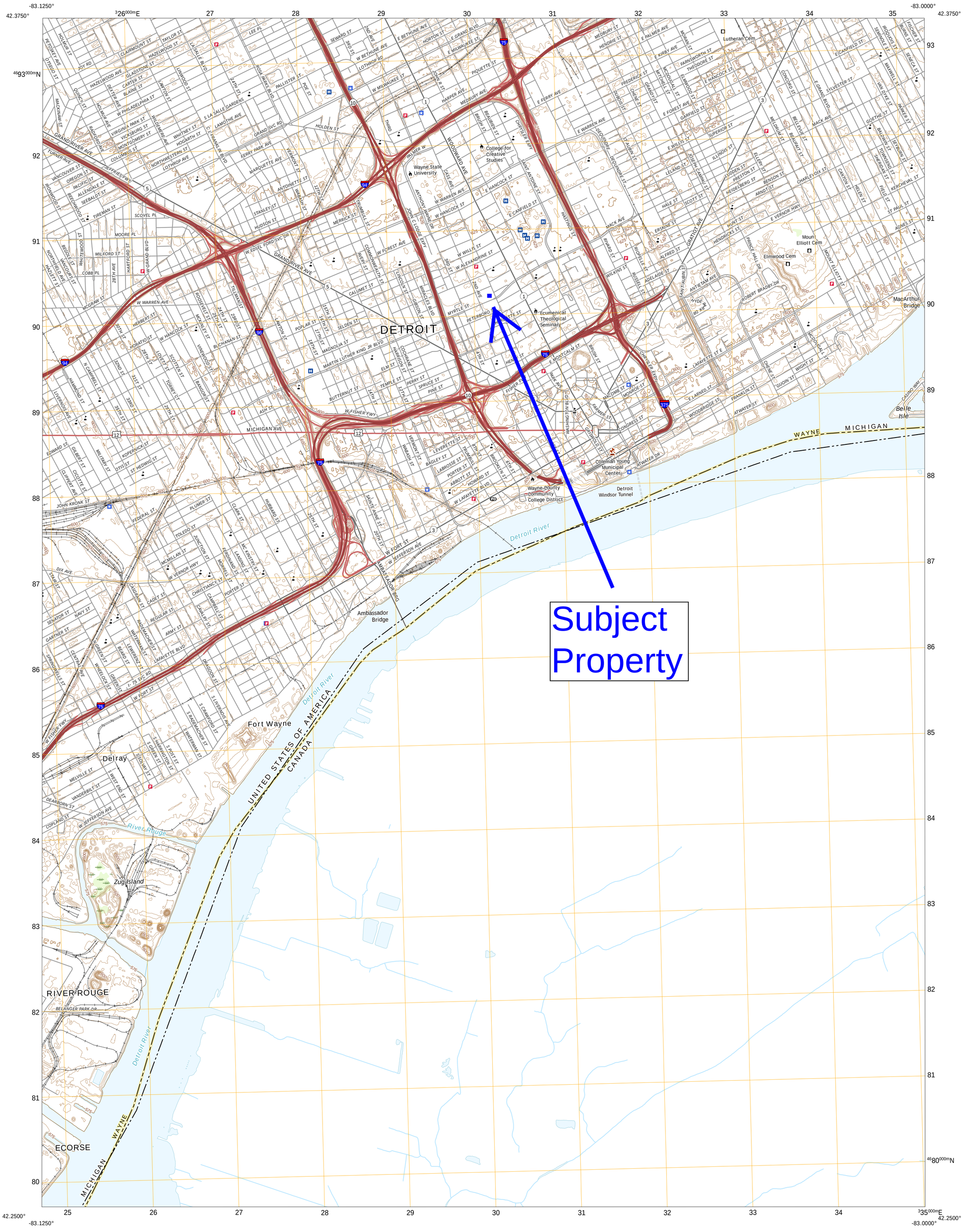
Nationwide data available for some risk factors are rudimentary at this time. The National Risk Index will be continuously updated as new data become available and improved methodologies are identified.

The National Risk Index Contact Us page is available at **hazards.fema.gov/nri/contact-us**.

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

DETROIT QUADRANGLE
MICHIGAN - WAYNE COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 17T

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery	NAIP,	August 2016 - October 2016
Roads	U.S. Census Bureau,	2016
Names	GNIS,	1980 - 2019
Hydrography	National Hydrography Dataset,	2006 - 2019
Contours	National Elevation Dataset,	2018 - 2019
Boundaries	Multiple sources; see metadata file	2015
Public Land Survey System	BLM,	2018
Wetlands	FWS National Wetlands Inventory	2005

MN
GN
7°35'
135 MILS
1°23'
25 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
LG
Grid Zone Designation
17T

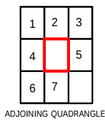
SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 5 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18

QUADRANGLE LOCATION



ADJOINING QUADRANGLES

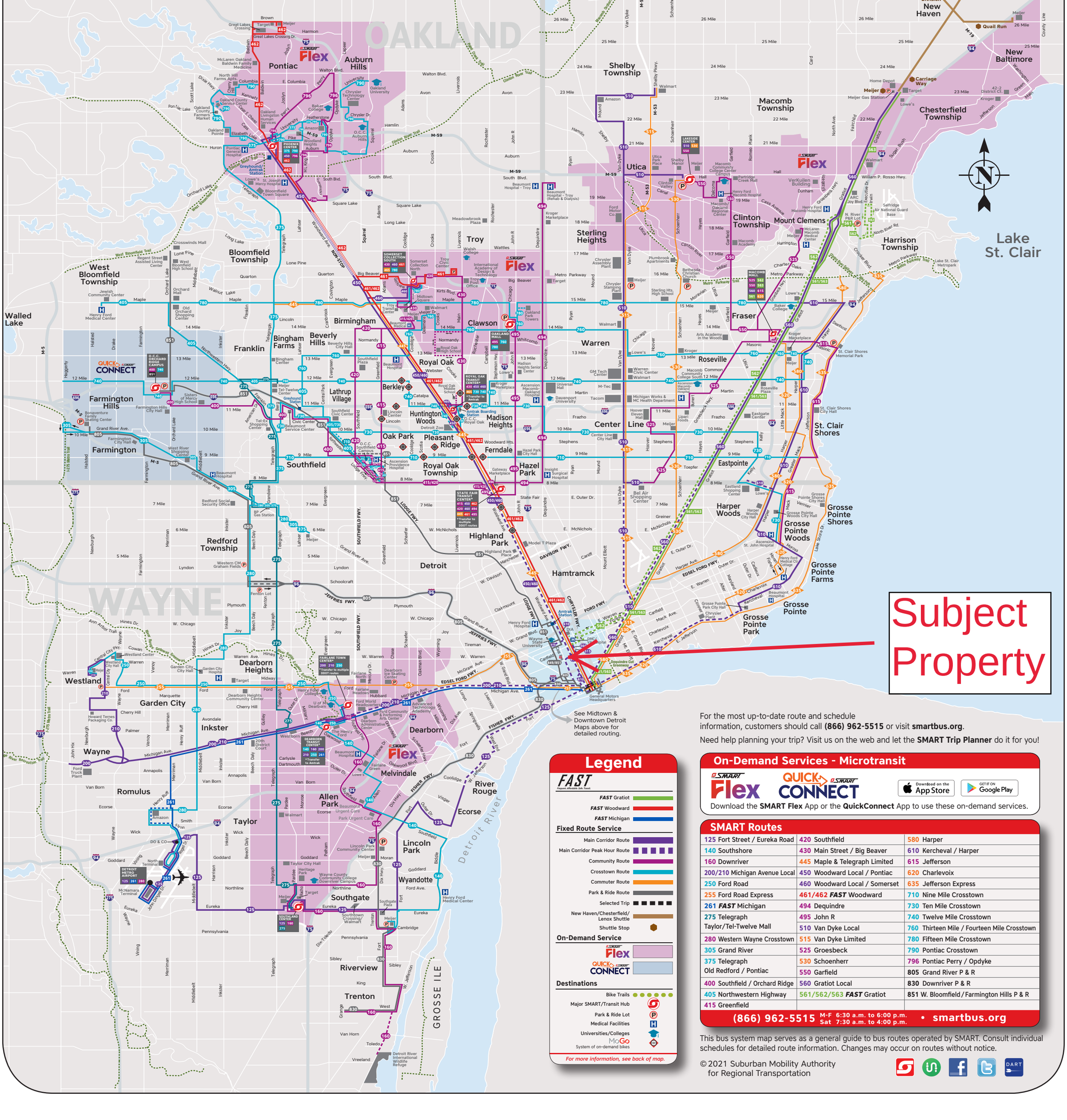
1 Royal Oak
2 Highland Park
3 Grosse Pointe
4 Dearborn
5 Belle Isle
6 Wyandotte
7 Wyandotte OE E

ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
State Route	

DETROIT, MI, ON
2019

NSN 7643016370917
NGA REF NO. USGSX24K12070



SMART

SYSTEM MAP

Effective: August 9, 2021

(866) 962-5515 • smartbus.org

RideSMART-FAST.org

North Macomb Services

Several transit services are available north of Hall Road to connect you to many Macomb County communities and SMART fixed routes.

- **SMART Connector** service is a curb-to-curb, advance reservation service open to the general public. For more information or to schedule a ride, call **(866) 962-5515**
- Locally operated **Community Transit**:
  - Richmond/Lenox EMS offers Community Transit and Assisted Medical Transportation: Call **(586) 749-7713**
  - STAR Transportation: Call **(586) 752-9010**
  - Shelby/Utica: Call **(586) 739-7540**

See Midtown & Downtown Detroit Maps above for detailed routing.

Legend

FAST Frequent. Affordable. Safe. Transit.

FAST Gratiot	🟩
FAST Woodward	🟥
FAST Michigan	🟦

Fixed Route Service

Main Corridor Route	🟪
Main Corridor Peak Hour Route	■ ■ ■ ■ ■
Community Route	🟪
Crosstown Route	🟦
Commuter Route	🟧
Park & Ride Route	⬛
Selected Trip	■ ■ ■ ■ ■
New Haven/Chesterfield/ Lenox Shuttle	🟫
Shuttle Stop	⬢

On-Demand Service

SMART Flex	🟪
QuickConnect SMART	🟦

Destinations

Bike Trails	● ● ● ● ● ●
Major SMART/Transit Hub	◎
Park & Ride Lot	Ⓟ
Medical Facilities	H
Universities/Colleges	🎓
MoGo System of on-demand bikes	◆

For more information, see back of map.

For the most up-to-date route and schedule information, customers should call **(866) 962-5515** or visit **smartbus.org**.

Need help planning your trip? Visit us on the web and let the **SMART Trip Planner** do it for you!

On-Demand Services - Microtransit

SMART Flex QUICK CONNECT SMART

Download on the App Store GET IT ON Google Play

Download the **SMART Flex** App or the **QuickConnect** App to use these on-demand services.

SMART Routes

125 Fort Street / Eureka Road	420 Southfield	580 Harper
140 Southshore	430 Main Street / Big Beaver	610 Kercheval / Harper
160 Downriver	445 Maple & Telegraph Limited	615 Jefferson
200/210 Michigan Avenue Local	450 Woodward Local / Pontiac	620 Charlevoix
250 Ford Road	460 Woodward Local / Somerset	635 Jefferson Express
255 Ford Road Express	461/462 ***FAST*** Woodward	710 Nine Mile Crosstown
261 ***FAST*** Michigan	494 Dequindre	730 Ten Mile Crosstown
275 Telegraph Taylor/Tel-Twelve Mall	495 John R	740 Twelve Mile Crosstown
	510 Van Dyke Local	760 Thirteen Mile / Fourteen Mile Crosstown
280 Western Wayne Crosstown	515 Van Dyke Limited	780 Fifteen Mile Crosstown
305 Grand River	525 Groesbeck	790 Pontiac Crosstown
375 Telegraph Old Redford / Pontiac	530 Schoenherr	796 Pontiac Perry / Opdyke
	550 Garfield	805 Grand River P & R
400 Southfield / Orchard Ridge	560 Gratiot Local	830 Downriver P & R
405 Northwestern Highway	561/562/563 ***FAST*** Gratiot	851 W. Bloomfield / Farmington Hills P & R
415 Greenfield		

(866) 962-5515 M-F 6:30 a.m. to 6:00 p.m. Sat 7:30 a.m. to 4:00 p.m. • **smartbus.org**

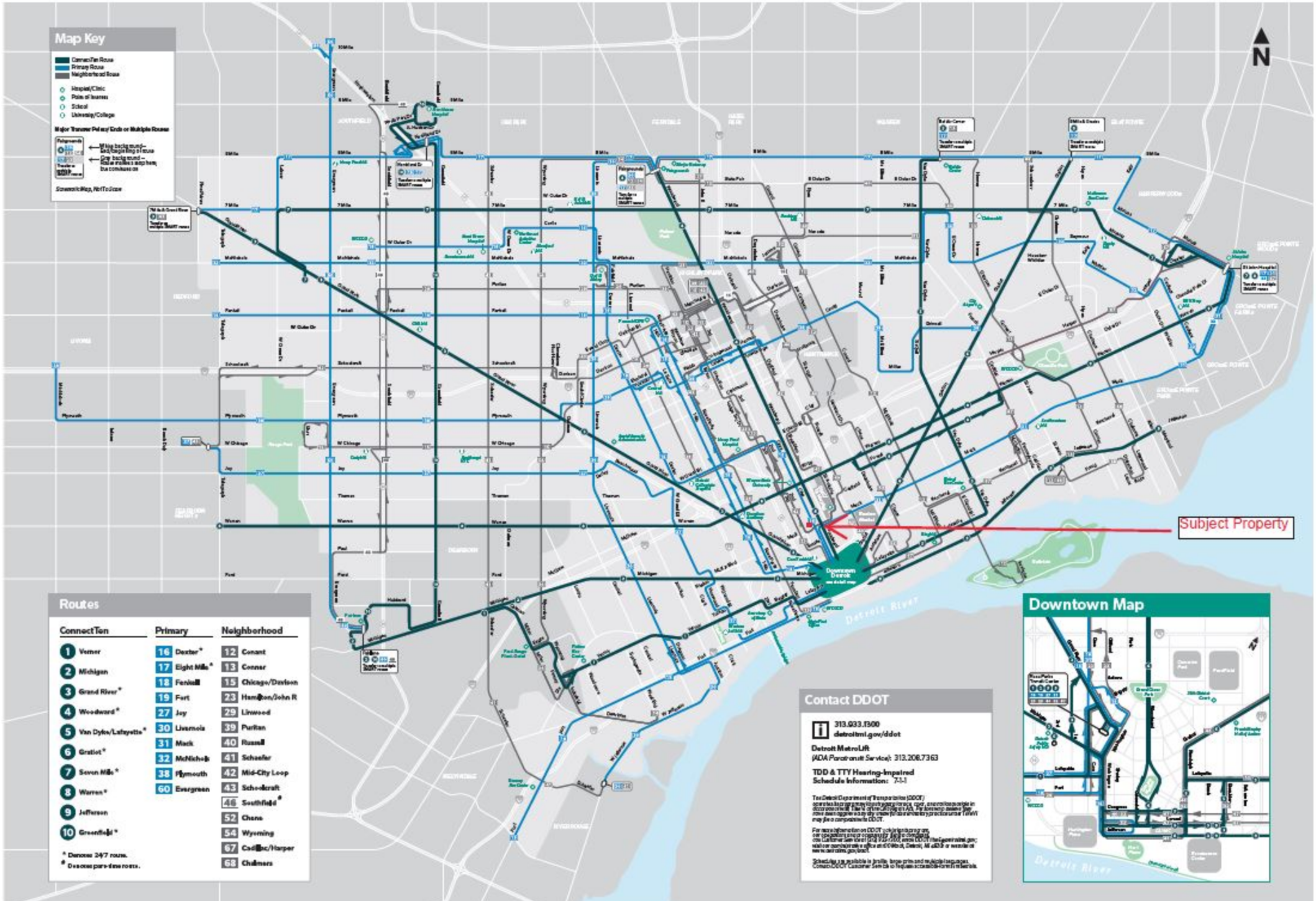
This bus system map serves as a general guide to bus routes operated by SMART. Consult individual schedules for detailed route information. Changes may occur on routes without notice.

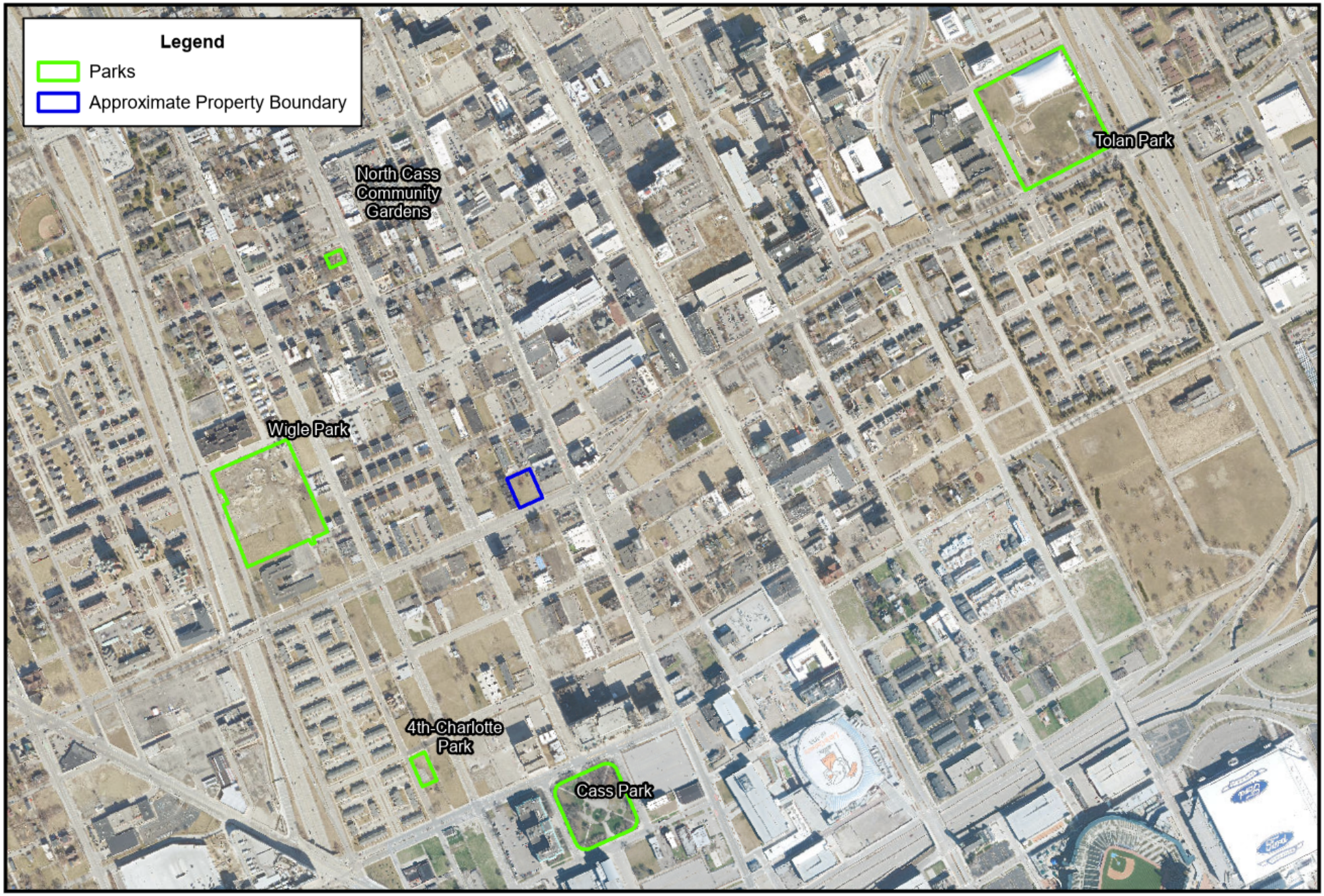
DART

Subject Property

DDOT System Map

Last Revised: November 15, 2021





Greystone Senior

440-460 Martin Luther King Jr. Blvd, Detroit, MI

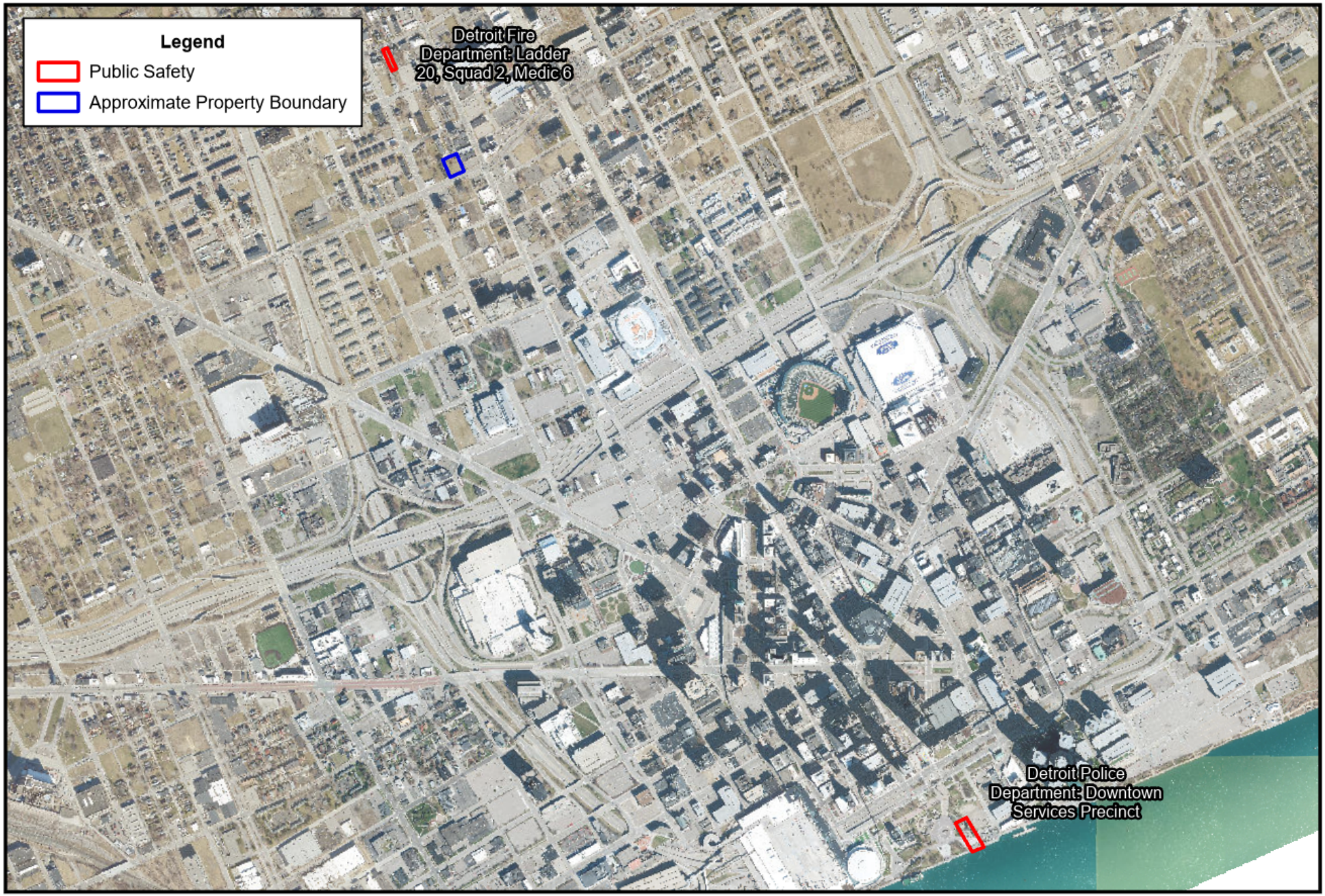
1,000 500 0 1,000 Feet

N

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

EA Factors - Parks



Greystone Senior

440-460
Martin Luther King Jr. Blvd,
Detroit, MI

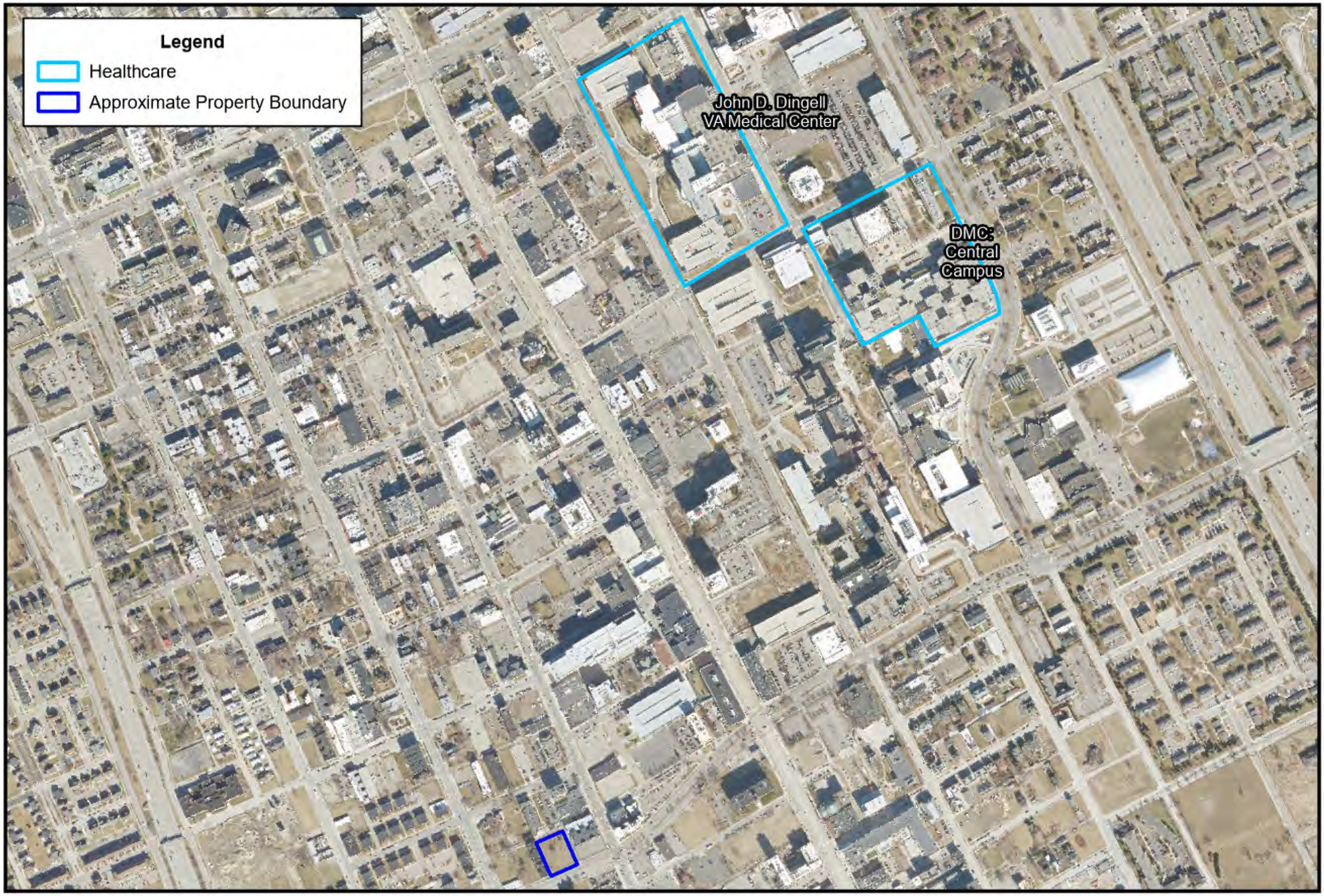
2,000 1,000 0 2,000
Feet

N

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

EA Factors - Public Safety



Greystone Senior

440-460
Martin Luther King Jr. Blvd,
Detroit, MI

1,000 500 0 1,000
Feet

N

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

EA Factors - Health Care

Greystone Senior

440-460
Martin Luther King Jr. Blvd,
Detroit, MI

1,000 500 0 1,000
Feet

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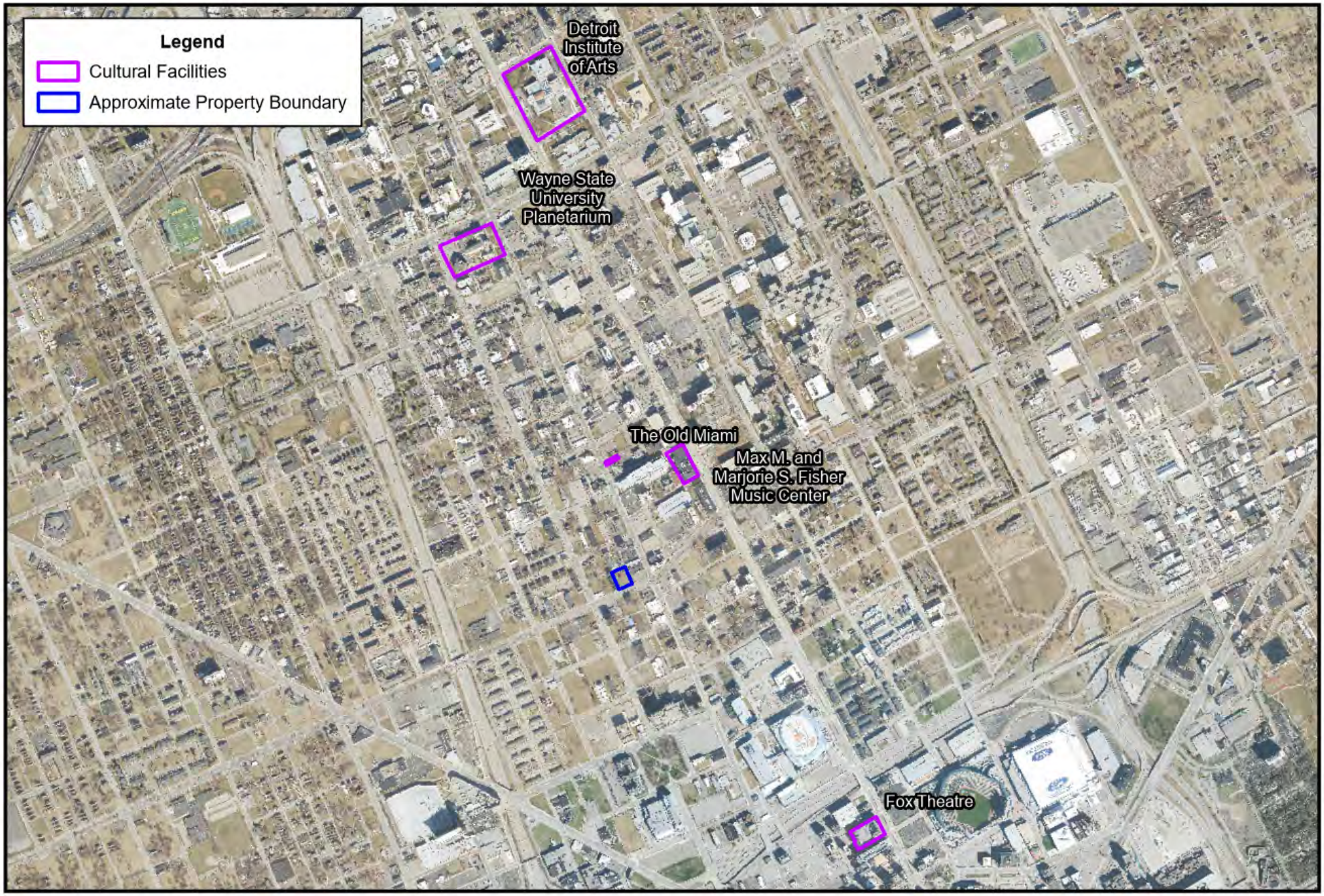
ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

EA Factors - Commercial Facilities



Greystone Senior

440-460
Martin Luther King Jr. Blvd,
Detroit, MI

2,000 1,000 0 2,000 Feet

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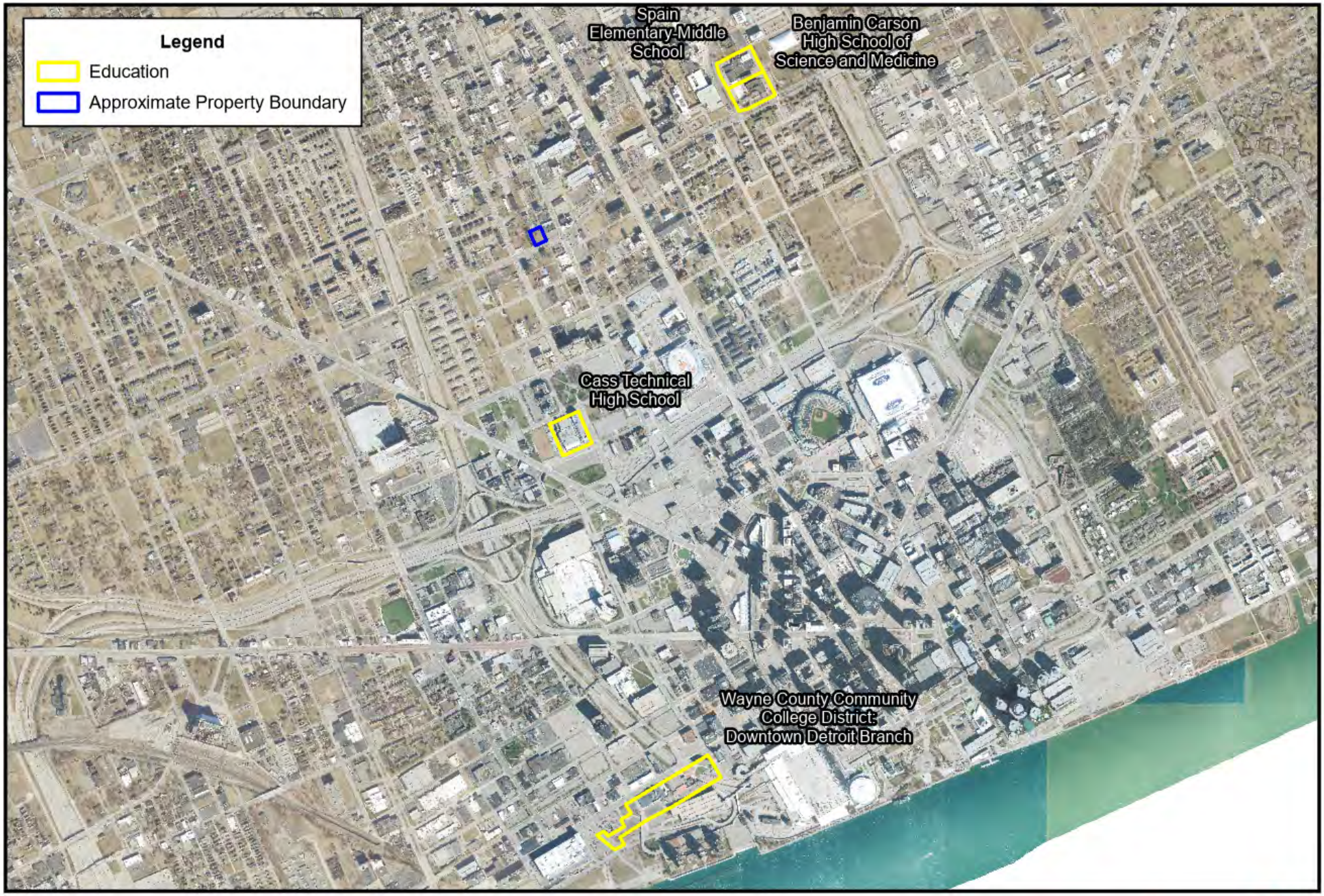
ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

EA Factors - Cultural Facilities



Greystone Senior

440-460
Martin Luther King Jr. Blvd,
Detroit, MI

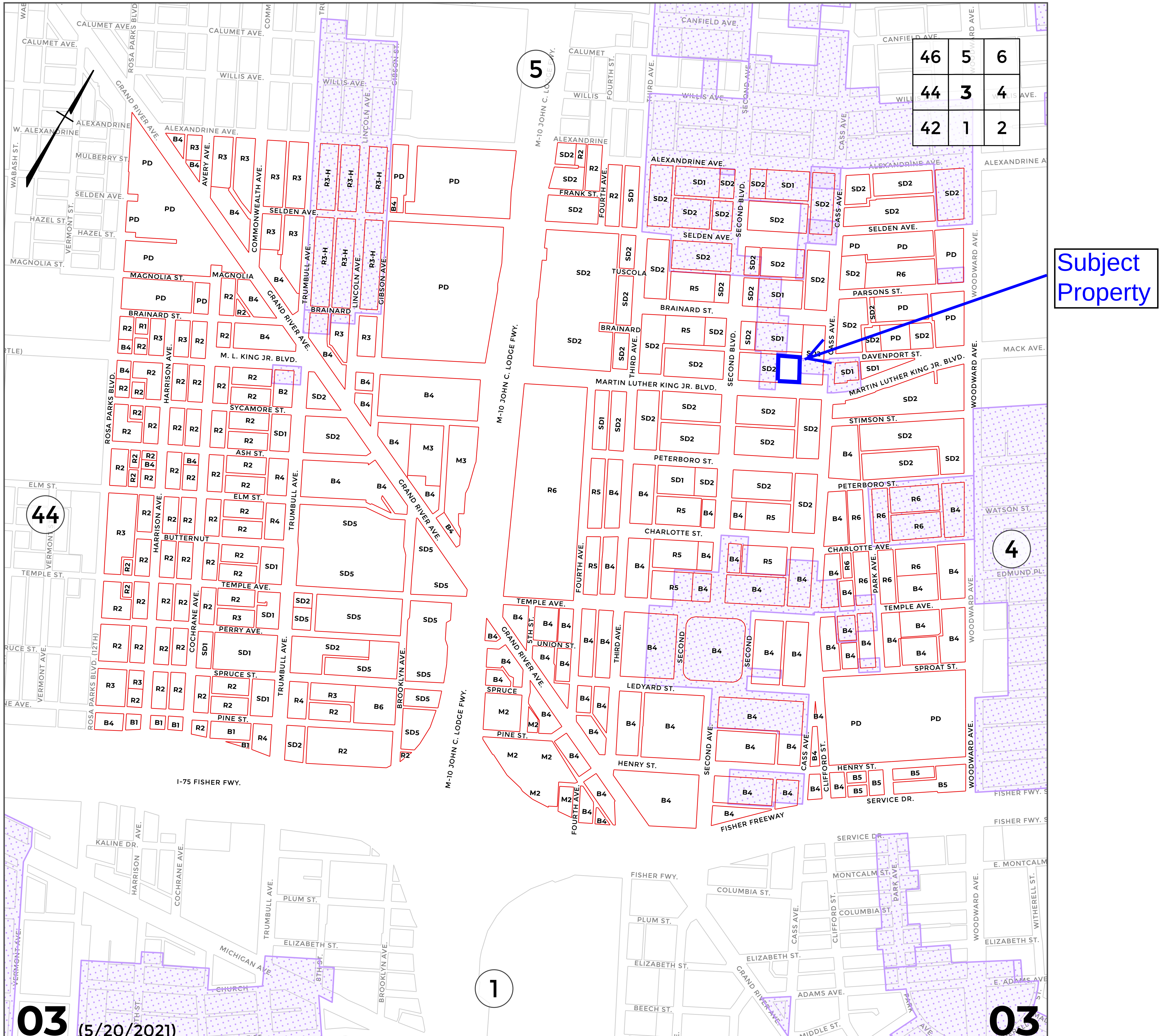
2,500 1,250 0 2,500 Feet

N

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

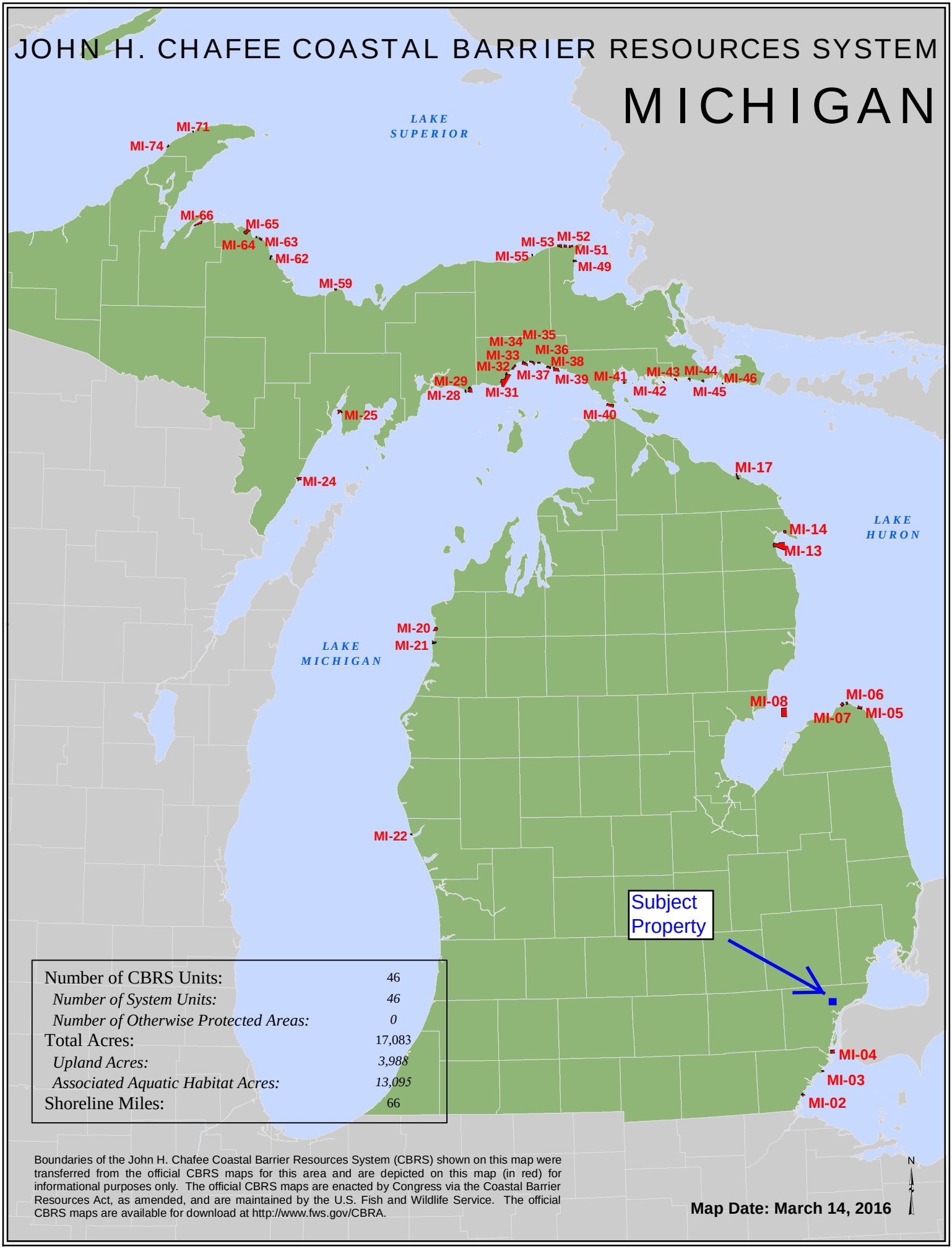
EA Factors - Education



46
5
6
44
3
4
42
1
2
Subject Property
5
44
4
1
CALUMET AVE.
WILLIS AVE.
ALEXANDRINE AVE.
SELDEN AVE.
MAGNOLIA ST.
BRAINARD ST.
M. L. KING JR. BLVD.
MARTIN LUTHER KING JR. BLVD.
SYCAMORE ST.
ASH ST.
ELM ST.
BUTTERNUT
TEMPLE AVE.
PERRY AVE.
SPRUCE ST.
PINE ST.
I-75 FISHER FWY.
M-10 JOHN C. LODGE FWY.
GRAND RIVER AVE.
TRUMBULL AVE.
ROSA PARKS BLVD.
HARRISON AVE.
COCHRANE AVE.
BROOKLYN AVE.
FOURTH ST.
THIRD AVE.
SECOND BLVD.
CASS AVE.
PARK AVE.
WOODWARD AVE.
TUSCOLA
DAVENPORT ST.
STIMSON ST.
PETERBORO ST.
CHARLOTTE ST.
TEMPLE AVE.
SPROAT ST.
LEDYARD ST.
HENRY ST.
SERVICE DR.
FISHER FREEWAY
MICHIGAN AVE.
MACK AVE.
WATSON ST.
EDMUND PL.
03
(5/20/2021)
03

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

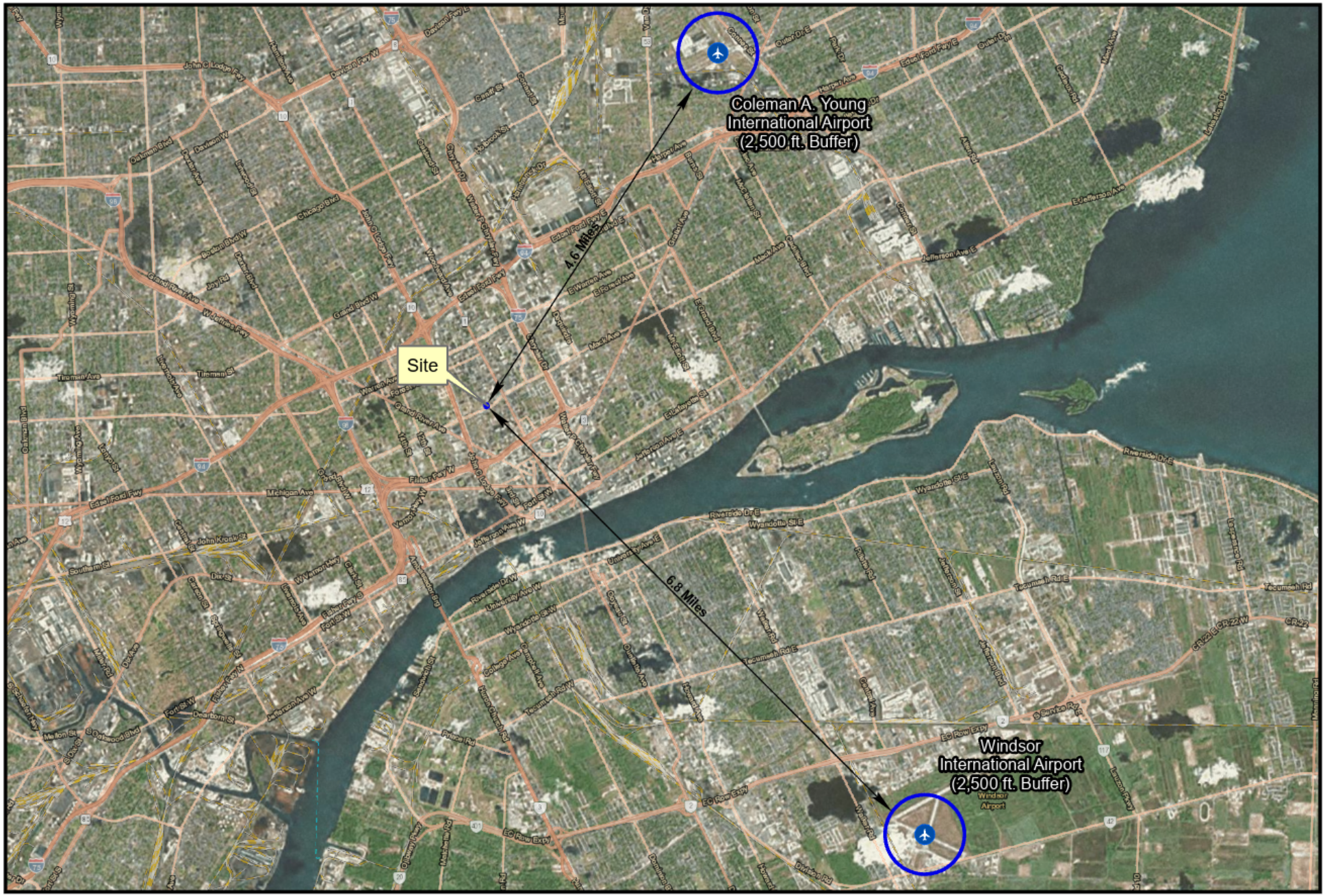
MICHIGAN



Number of CBRS Units:	46
Number of System Units:	*46*
Number of Otherwise Protected Areas:	*0*
Total Acres:	17,083
Upland Acres:	*3,988*
Associated Aquatic Habitat Acres:	*13,095*
Shoreline Miles:	66

Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this map were transferred from the official CBRS maps for this area and are depicted on this map (in red) for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and are maintained by the U.S. Fish and Wildlife Service. The official CBRS maps are available for download at http://www.fws.gov/CBRA.

Map Date: March 14, 2016



Greystone Senior

440-460
Martin Luther King Jr. Blvd,
Detroit, MI

2 1 0 2 Miles

N

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

Airport Location Map

2950 Rosa Parks Boulevard

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	1000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	276.57
ASD for Thermal Radiation for Buildings (ASDBPU)	50.28
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

3200 Hobson Street

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	13500
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	817.89
ASD for Thermal Radiation for Buildings (ASDBPU)	167.48
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

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1777 3rd Avenue

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	6500
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	603.20
ASD for Thermal Radiation for Buildings (ASDBPU)	119.46
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

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- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

1 Energy Plaza

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	6000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	583.42
ASD for Thermal Radiation for Buildings (ASDBPU)	115.12
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

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Related Information

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- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

2000 2nd Avenue

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	1650
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	340.72
ASD for Thermal Radiation for Buildings (ASDBPU)	63.38
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

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Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

3990 John R Street

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	20000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	963.41
ASD for Thermal Radiation for Buildings (ASDBPU)	200.85
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

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Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

1351 Spruce Street

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	8000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	657.70
ASD for Thermal Radiation for Buildings (ASDBPU)	131.49
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

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Related Information

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- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

PONY EXPRESS COURIER CORP.
2950 ROSA PARKS BLVD,
DETROIT, MI 48216

SHOW MAP ()

Map ID: 282
Direction: SW
Distance (mi.): 0.867
Distance (ft.): 4578
Relative: Lower
Actual: 601 FT A SL

Database(s): AST

EDR ID: A100207321
EPA ID: -

AST

Name:	PONY EXPRESS COURIER CORP.
Address:	2950 ROSA PARKS BLVD
City:	DETROIT
Zip:	48216-1217
Facility ID:	92082259
Owner Name:	PONY EXPRESS COURIER CORP
Owner Address:	2950 ROSA PARKS BLVD
Owner City,St,Zip:	DETROIT, MI 48216-1217
District:	1
Date of Collection:	01/11/2001
Accuracy:	100 FEET
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Description Category:	Plant Entrance (Freight)
Method of Collection:	Address Matching-House Number
Horizontal Datum:	NAD83
Latitude:	42.3370250
Longitude:	-83.075163
Tank Id:	ATK-023680-15
Tank Status:	Removed from Premises
Capacity (in gallons):	Not reported
Installation Date:	Not reported
Substance Stored:	Other
Removed/Closed Date:	09/14/1994

AIRGAS USA LLC
666 SELDEN ST,
DETROIT, MI 48201

SHOW MAP ()

Map ID: 90
Direction: WNW
Distance (mi.): 0.199
Distance (ft.): 1053
Relative: Higher
Actual: 619 FT A SL

Database(s): AST

EDR ID: A100003342
EPA ID: -

AST

Name:	AIRGAS USA LLC
Address:	666 SELDEN ST
City:	DETROIT
Zip:	48201-2246
Facility ID:	92082530
Owner Name:	AIRGAS USA LLC
Owner Address:	644 SELDON
Owner City,St,Zip:	DETROIT, MI 48201
District:	1
Date of Collection:	01/11/2001
Accuracy:	100 FEET
Source:	STATE OF MICHIGAN
Point Line Area:	POINT
Description Category:	Plant Entrance (Freight)
Method of Collection:	Address Matching-House Number
Horizontal Datum:	NAD83
Latitude:	42.3473180
Longitude:	-83.065471
Tank Id:	ATK-053328-15
Tank Status:	Emptied and Cleaned
Capacity (in gallons):	1000
Installation Date:	07/26/1994
Substance Stored:	Other
Removed/Closed Date:	06/14/2011

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	2000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	

ASD for Thermal Radiation for People (ASDPPU)	369.16
ASD for Thermal Radiation for Buildings (ASDBPU)	69.27
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

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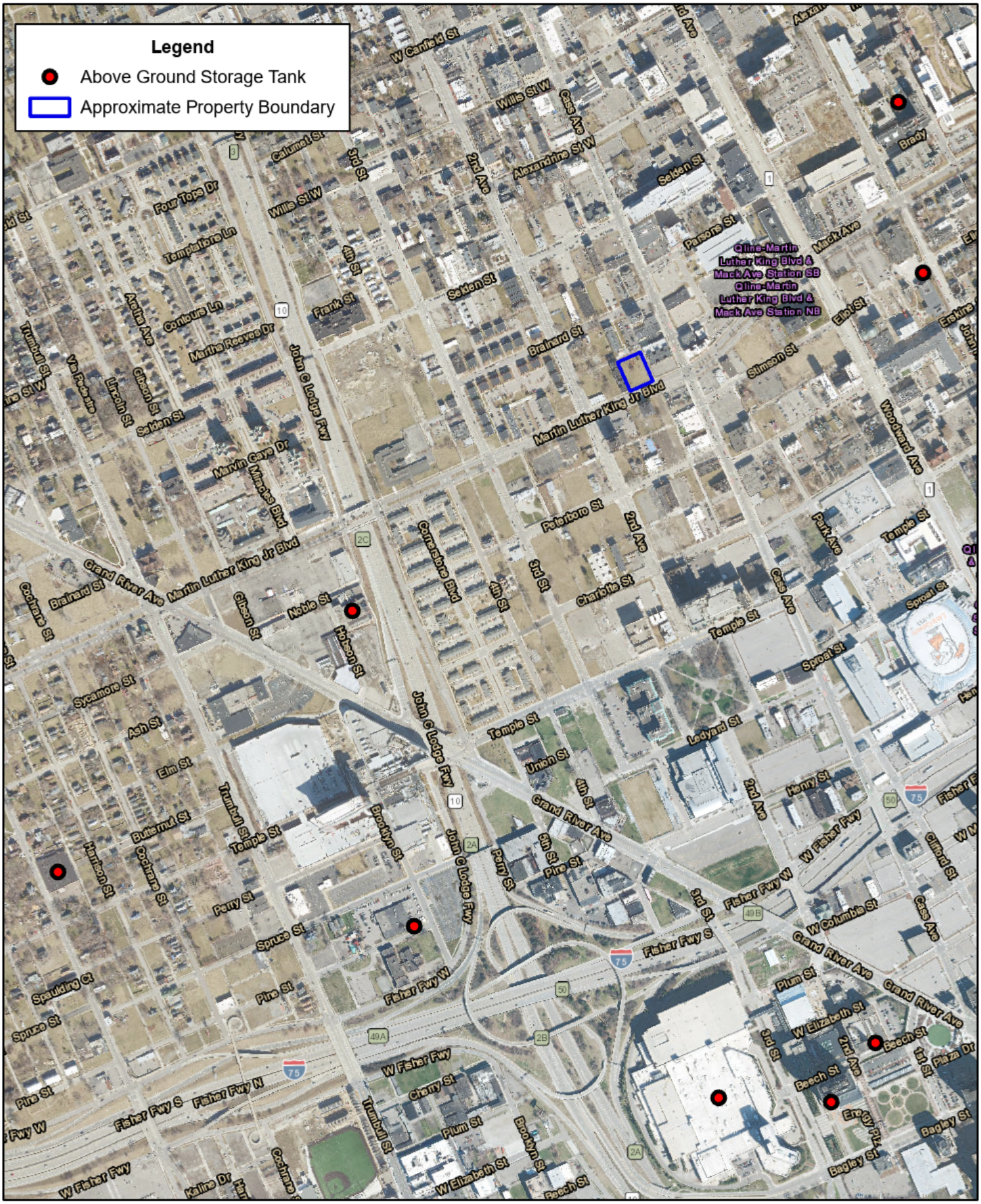


Greystone Senior

440-460
Martin Luther King Jr. Blvd,
Detroit, MI

0 250 500 1,000 Feet

N

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, October 24, 2022, ASTI Project 3-11745

Acceptable Separation Distance Map

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

GRETCHEN WHITMER
GOVERNOR

PHILLIP D. ROOS
DIRECTOR

June 25, 2024

VIA EMAIL

Patrick Dorn
Greystone Senior LDHA, LP
3539 Cass Avenue
Detroit, Michigan 48201

Dear Patrick Dorn:

SUBJECT: Notice of Approval of the Response Activity Plan to Comply with 7a(1)(b)
Greystone Senior Apartments
440, 446, & 460 Martin Luther King Jr. Boulevard, Detroit,
Wayne County, Michigan
Parcel ID Numbers: 02000735, 02000736, and 02000737
Facility ID Number: 82008799

The Department of Environment, Great Lakes, and Energy (EGLE) Remediation and Redevelopment Division (RRD) has reviewed the Response Activity Plan (ResAP) to Comply with Section 20107a(1)(b) of Part 201 Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) for the above-referenced property known as Greystone Senior Apartments. The ResAP outlines the response activities to be undertaken at the above-referenced address and was submitted on your behalf pursuant to Section 20114b of the NREPA on April 23, 2024, by Jeremy Efros of ASTI. The final revised version was received by EGLE on June 19, 2024.

Based upon the representations and information contained in the submittal, the ResAP is approved. EGLE expresses no opinion as to whether other conditions that may exist will be adequately addressed by the response activities that are proposed in the plan. If environmental contamination is found to exist that is not addressed by the ResAP and you are otherwise liable for the contamination, additional response activities may be necessary.

The owner and operator of this property may also have responsibility under applicable state and federal laws, including but not limited to, Part 201, Environmental Remediation; Part 111, Hazardous Waste Management; Part 211, Underground Storage Tank Regulations; Part 213, Leaking Underground Storage Tanks; Part 615, Supervisor of Wells, of the NREPA; and the Michigan Fire Prevention Code, 1941 PA 207, as amended.

This approval is pursuant to the applicable requirements of the NREPA. The Michigan State Housing Development Authority may have additional site selection requirements beyond the NREPA statutory obligations for site characterization and remedial actions or response activities necessary to prevent, minimize, or mitigate injury to public health, safety, or welfare, or to the environment.

If you should have further questions or concerns, please contact Jay Eichberger, RRD, Brownfield Assessment and Redevelopment Section, at 616-446-4043 or by email at EichbergerJ@Michigan.gov.

Sincerely,

Carrie A. Geyer

Carrier Geyer, Manager
Brownfield Assessment and Redevelopment Section
Remediation and Redevelopment Division
GeyerC1@Michigan.gov

cc: Jeremey Efros, ASTI
Paul Owens, EGLE
Jay Eichberger, EGLE
Jarrett McFeters, EGLE

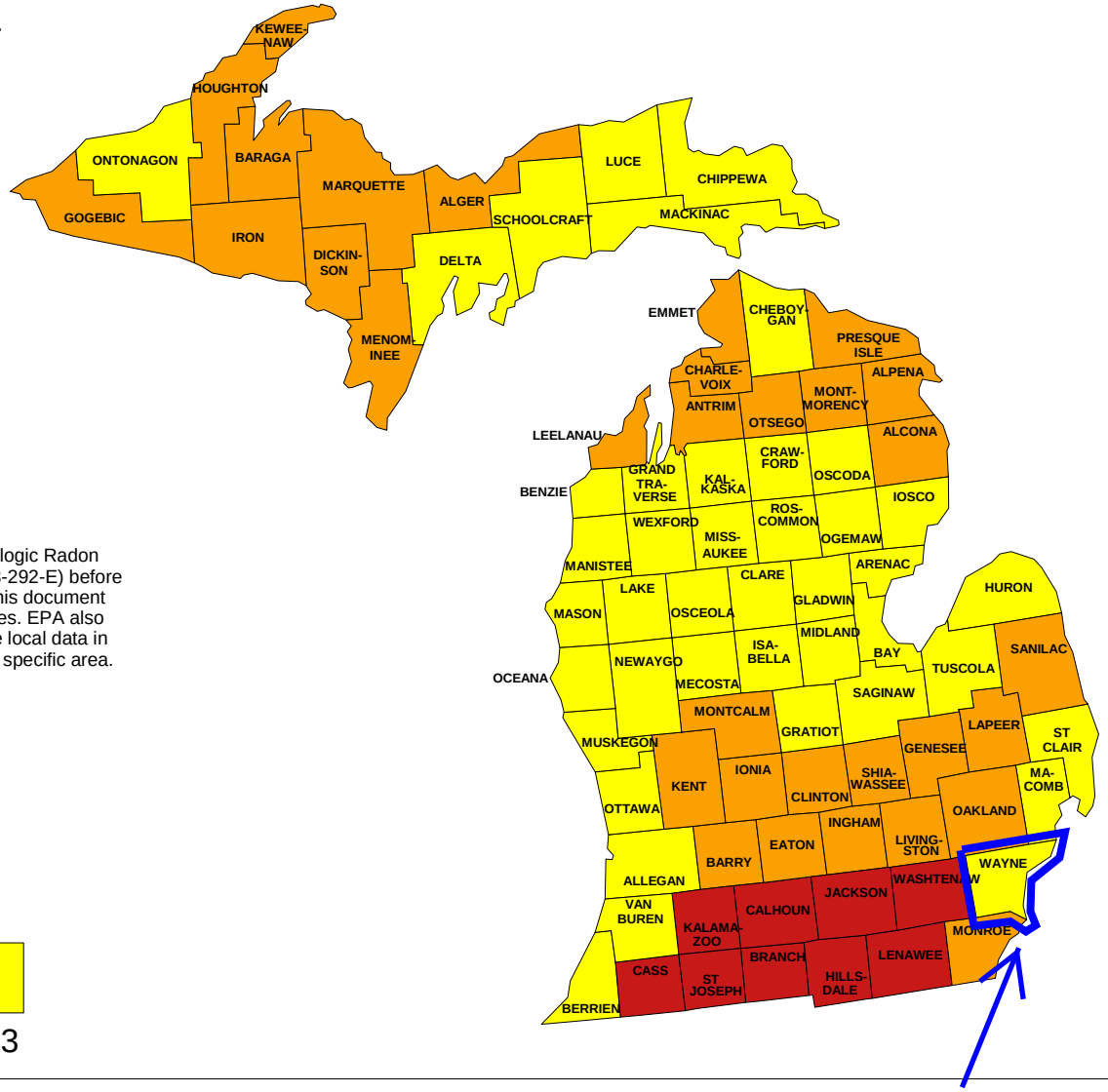
MICHIGAN - EPA Map of Radon Zones

http://www.epa.gov/radon/zonemap.html

The purpose of this map is to assist National, State and local organizations to target their resources and to implement radon-resistant building codes.

This map is not intended to determine if a home in a given zone should be tested for radon. Homes with elevated levels of radon have been found in all three zones.

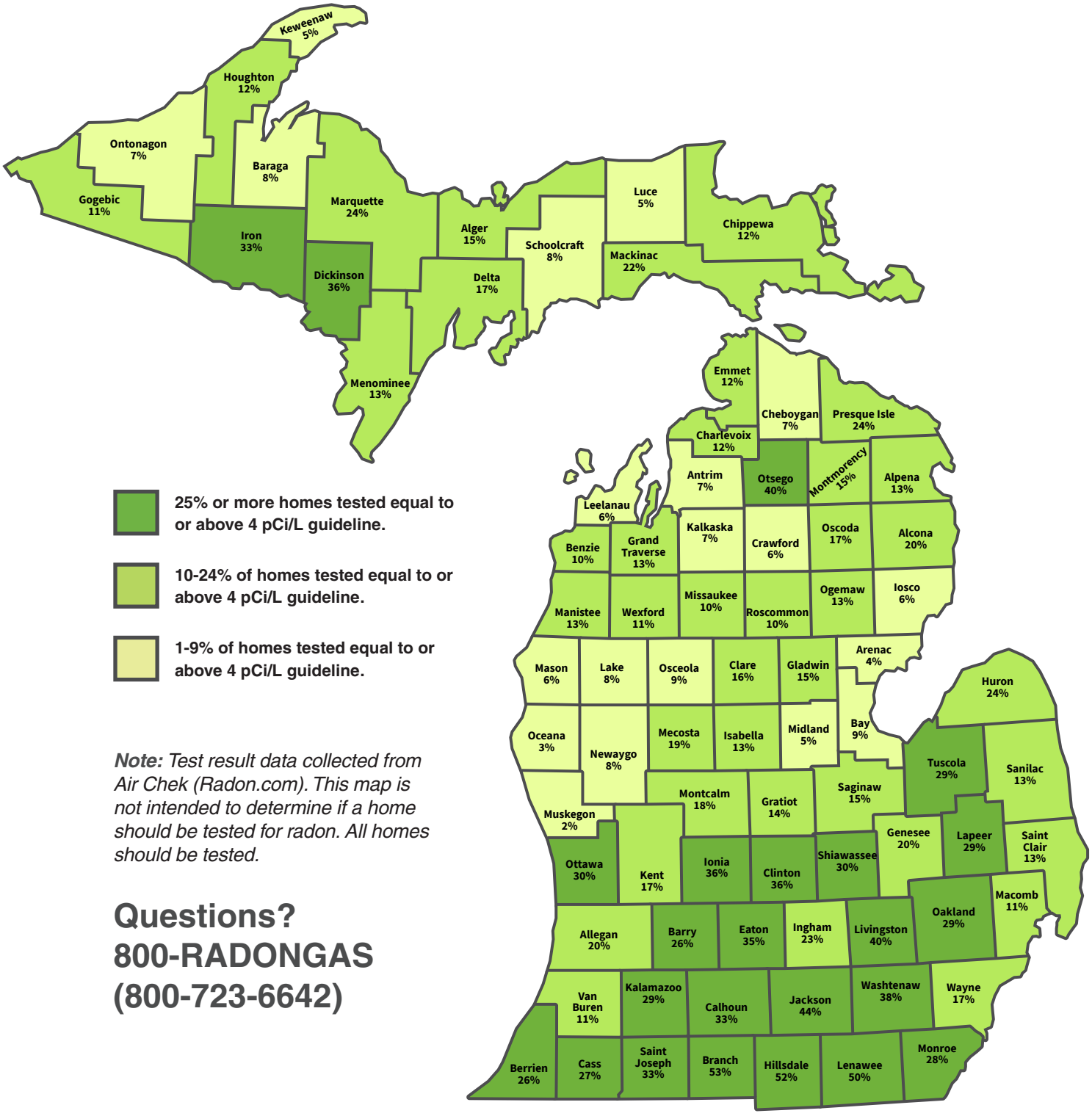
All homes should be tested, regardless of zone designation.



IMPORTANT: Consult the publication entitled "Preliminary Geologic Radon Potential Assessment of Michigan" (USGS Open-file Report 93-292-E) before using this map. http://energy.cr.usgs.gov/radon/grpinfo.html This document contains information on radon potential variations within counties. EPA also recommends that this map be supplemented with any available local data in order to further understand and predict the radon potential of a specific area.

Zone 1 Zone 2 Zone 3

Percentage of Elevated Radon Test Results by County



25% or more homes tested equal to or above 4 pCi/L guideline.

10-24% of homes tested equal to or above 4 pCi/L guideline.

1-9% of homes tested equal to or above 4 pCi/L guideline.

Note: *Test result data collected from Air Chek (Radon.com). This map is not intended to determine if a home should be tested for radon. All homes should be tested.*

Questions?
800-RADONGAS
(800-723-6642)

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

800-662-9278 | Michigan.gov/radon

12/2019

Part I - Description

Project

GREYSTONE APT

Sponsor/Developer

CASS CORRIDOR

Location

NORTH WALL

Prepared by

FUSCO SHAFFER AND PAPPAS

Noise Level

70

Date

11/03/2023

Primary Source(s)

NAL #1

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail	Area	STC
BRICK WALL	2420	85
CEMENT FIBER PANEL	2110	42
BRICK WALL CMU	83	104
CEMENT FIBER PANEL CMU	348	63

Add new wall

4,961 Sq. Feet **45.71**

Window Construction Detail	Quantity	Sq Ft/Unit	STC
WINDOW TYPE C	0	13	27
WINDOW TYPE B	8	30	27
WINDOW TYPE A	12	15	27
STORE FRONT	0	40	30

Add new window

Door Construction

Detail	Quantity	Sq Ft/Unit	STC
WOOD	0	24	30
METAL HOLLOW	0	24	26

Add new door

Part III - Results

Part III - Results

Wall Statistics

Stat	Value
Area:	4961 ft^2
Wall STC:	45.71

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	20	**420 ft^2**	**8.47%**
Doors:	0	**0 ft^2**	**0%**

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	**70**
Combined STC for wall assembly:	**37.13**
Required STC rating:	**28**
Does wall assembly meet requirements?	**Yes**

Print

Part 4 - Tips

Part I - Description

Project

GREYSTONE APT

Sponsor/Developer

CASS CORRIDOR

Location

SOUTH WALL

Prepared by

FUSCO SHAFFER AND PAPPAS

Noise Level

70

Date

11/03/2023

Primary Source(s)

NAL #1

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail	Area	STC
BRICK WALL	1674	85
CEMENT FIBER PANEL	3349	42
BRICK WALL CMU	0	104
CEMENT FIBER PANEL CMU	0	63

Add new wall

5,023 Sq. Feet **43.76**

Window Construction Detail	Quantity	Sq Ft/Unit	STC
WINDOW TYPE C	16	13	27
WINDOW TYPE B	18	30	27
WINDOW TYPE A	3	15	27
STORE FRONT	1	40	30

Add new window

Door Construction

Detail	Quantity	Sq Ft/Unit	STC
WOOD	15	24	30
METAL HOLLOW	3	24	26

Add new door

Part III - Results

Part III - Results

Wall Statistics

Stat	Value
Area:	5023 ft^2
Wall STC:	43.76

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	38	**833 ft^2**	**16.58%**
Doors:	18	**432 ft^2**	**8.6%**

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	**70**
Combined STC for wall assembly:	**33.35**
Required STC rating:	**28**
Does wall assembly meet requirements?	**Yes**

Print

Part 4 - Tips

Part I - Description

Project

GREYSTONE APT

Sponsor/Developer

CASS CORRIDOR

Location

EAST WALL

Prepared by

FUSCO SHAFFER AND PAPPAS

Noise Level

70

Date

11/03/2023

Primary Source(s)

NAL #1

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail	Area	STC
BRICK WALL	2903	85
CEMENT FIBER PANEL	5316	42
BRICK WALL CMU	0	104
CEMENT FIBER PANEL CMU	0	63

Add new wall

8,219 Sq. Feet **43.89**

Window Construction Detail	Quantity	Sq Ft/Unit	STC
WINDOW TYPE C	19	13	27
WINDOW TYPE B	26	30	27
WINDOW TYPE A	4	15	27
STORE FRONT	0	40	30

Add new window

Door Construction

Detail	Quantity	Sq Ft/Unit	STC
WOOD	19	24	30
METAL HOLLOW	3	24	26

Add new door

Part III - Results

Part III - Results

Wall Statistics

Stat	Value
Area:	8219 ft^2
Wall STC:	43.89

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	49	**ft^2**	**13.23%**
Doors:	22	**528 ft^2**	**6.42%**

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	**70**
Combined STC for wall assembly:	**34.27**
Required STC rating:	**28**
Does wall assembly meet requirements?	**Yes**

Print

Part 4 - Tips

Part I - Description

Project

GREYSTONE APT

Sponsor/Developer

CASS CORRIDOR

Location

WEST WALL

Prepared by

FUSCO SHAFFER AND PAPPAS

Noise Level

69

Date

11/03/2023

Primary Source(s)

NAL #1

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail	Area	STC
BRICK WALL	3396	85
CEMENT FIBER PANEL	4346	42
BRICK WALL CMU	83	104
CEMENT FIBER PANEL CMU	306	63

Add new wall

8,131 Sq. Feet **44.72**

Window Construction Detail	Quantity	Sq Ft/Unit	STC
WINDOW TYPE C	15	13	27
WINDOW TYPE B	22	30	27
WINDOW TYPE A	11	15	27
STORE FRONT	1	40	30

Add new window

Door Construction

Detail	Quantity	Sq Ft/Unit	STC
WOOD	15	24	30
METAL HOLLOW	2	24	26

Add new door

Part III - Results

Part III - Results

Wall Statistics

Stat	Value
Area:	8131 ft^2
Wall STC:	44.72

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	49	**ft^2**	**13.04%**
Doors:	17	**408 ft^2**	**5.02%**

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	**69**
Combined STC for wall assembly:	**34.66**
Required STC rating:	**27**
Does wall assembly meet requirements?	**Yes**

Print

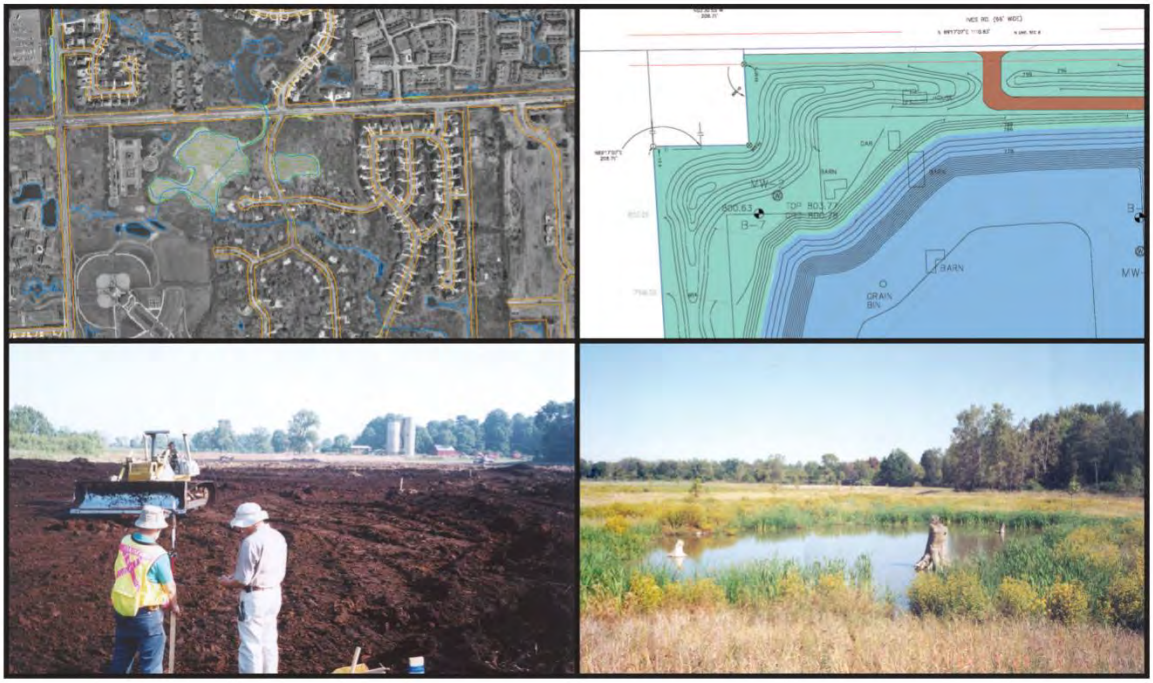
Part 4 - Tips

Noise Assessment
Greystone Senior Apartments
440, 446, & 460 Martin Luther King Jr. Blvd.
Detroit, Michigan

Greystone Senior LDHA, LP

January 18, 2021

ASTI ENVIRONMENTAL



ASTI ENVIRONMENTAL

Noise Assessment
Greystone Senior Apartments
440, 446, 460 Martin Luther King Jr. Blvd.
Detroit, Michigan

January 18, 2021

Report Prepared For:

Greystone Senior limited Dividend Housing Association, Limited Partnership
3535 Cass Avenue
Detroit, Michigan 48201

Report Prepared By:

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

ASTI Project No. 11745

Report Prepared by:

Ashleigh Czapek
Associate I

Report Reviewed by:

Pamela Chapman, PE, EP
Phase I Group Leader

ENVIRONMENTAL

TABLE OF CONTENTS

1.0 INTRODUCTION

Greystone Senior Limited Dividend Housing Association, Limited Partnership (LDHA, LP) proposes the new construction, utilizing funding provided from the Michigan State Housing Development Authority (MSHDA), of the Greystone Senior Apartments at 440, 446 & 460 Martin Luther King (MLK) Jr. Blvd., Detroit, 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

Two NALs (NAL #1 and NAL #2) were selected on the Subject Property for this analysis based on proximity to noise sources. A map with the Subject Property boundaries and NAL locations is included as Attachment A.

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

NAL #1

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A Young International Airport	4.6 miles
	Windsor International Airport	6.8 miles
Busy Road(s)	MLK Jr. Blvd.	52 feet
	Cass Avenue	214 feet
Railroad(s)	None	NA
Non-Transportation	None	NA

NAL #2

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A Young International Airport	4.6 miles
	Windsor International Airport	6.8 miles
Busy Road(s)	MLK Jr. Blvd.	60 feet
	Cass Avenue	328 feet
	Third Street	984 feet
Railroad(s)	None	NA
Non-Transportation	None	NA

2.0 EVALUATION OF NOISE SOURCES

2.1 Airports

Coleman A. Young International Airport is approximately 4.6 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 approximately 6.8 miles distant. Based on the Noise Contour Map for the airport (Attachment B), the site is not within a distance of 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 are:

- MLK Jr. Blvd.
- Cass Avenue
- Third Street

MLK Jr. Blvd. is a six-lane road and the speed limit is 25mph near the Subject Property. The roadway is an approximate effective distance of 52 feet from the south eastern corner of the proposed building (NAL #1). Traffic counts for MLK Jr. Blvd. were obtained through MDOT. Projections were done through 2031. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Cass Ave. is a two-lane road and the speed limit is 25mph near the Subject Property. The roadway is an approximate effective distance of 214 feet from the south eastern corner of the proposed building (NAL #1). Traffic counts for Cass Ave. were obtained through MDOT. Projections were done through 2031. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable.

Third Street is a two-lane road with a center turn lane. The speed limit is 25mph near the Subject Property. The roadway is an approximate effective distance of 984 feet from the

south western corner of the proposed building (NAL #2). Traffic counts for Third Street were obtained through MDOT. Projections were done through 2031. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable or increase slightly. Traffic projections are included in Attachment C.

2.3 Railroads

Not applicable.

2.4 Non-Transportation Sources

Not applicable.

3.0 CALCULATIONS

Noise DNL calculator worksheets for the NALs are provided in Attachment D.

Using the HUD DNL calculator, the noise level at NAL #1, as predicted in 2031, is calculated to be 70 dB and within the Normally Unacceptable range.

Using the HUD DNL calculator, the noise level at NAL #2, as predicted in 2031, is calculated to be 69 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	Normally Unacceptable
2	69	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

Y:\Project Files\Current and Closed\11000-11999\11700-11799\11745 Greystone Sr, 440, 446 & 460 MLK Blvd, Detroit\Phase 1\CAD\11745.dwg, 1/22/2021 10:47 AM;

GRAPHIC SCALE

0 75 150 300

1 inch = 150 ft.
Paper Size = (8.5x11)

LEGEND

Property Line

Noise Assessment Location

N

Greystone Senior

440, 446 & 460 Martin Luther King Jr. Blvd

Detroit, MI

ASTI Environmental

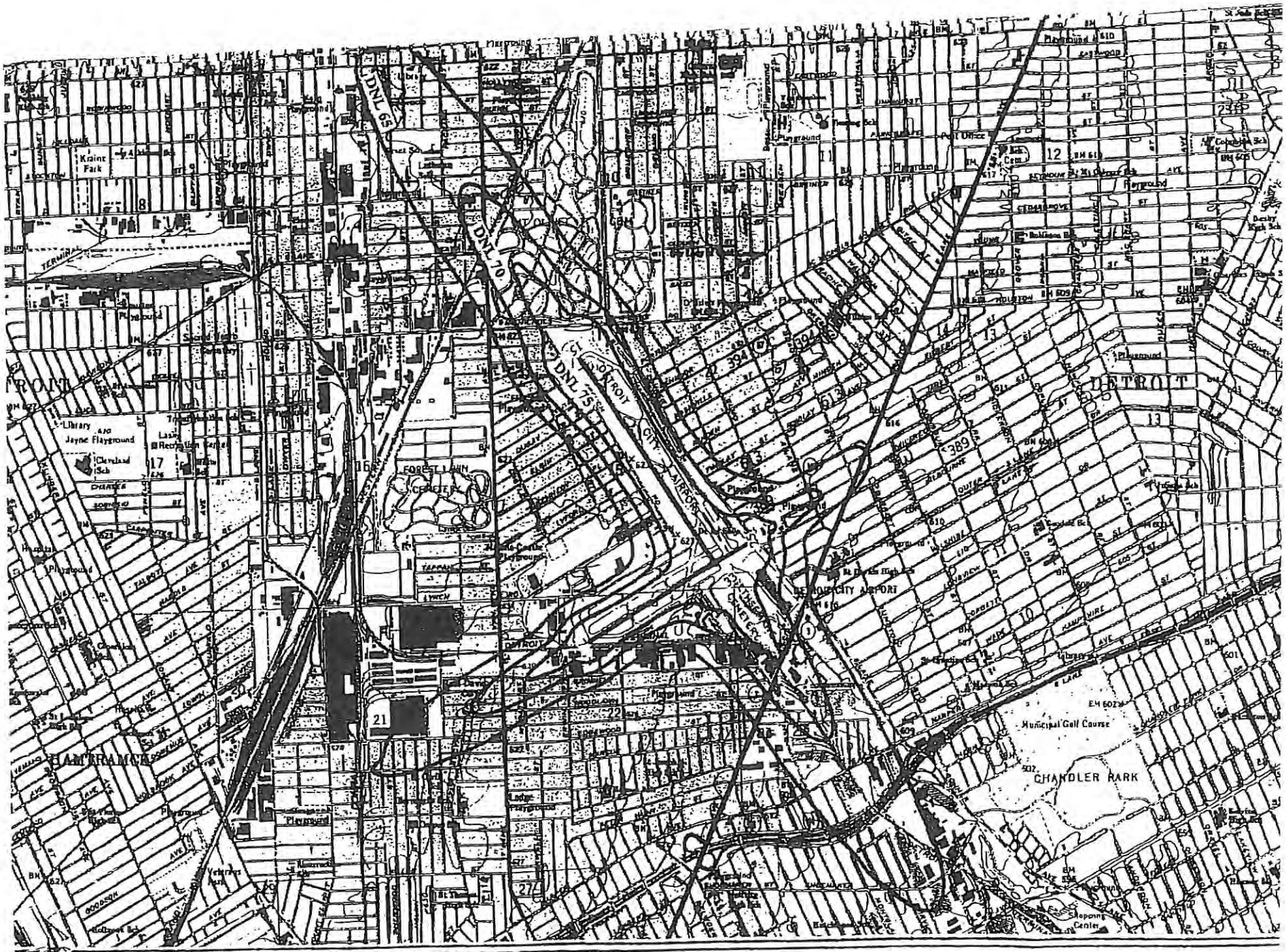
Client: Greystone Senior LDHA, LP

Noise Assessment Location Map

ASTI Project 11745, JRN, January 22, 2021

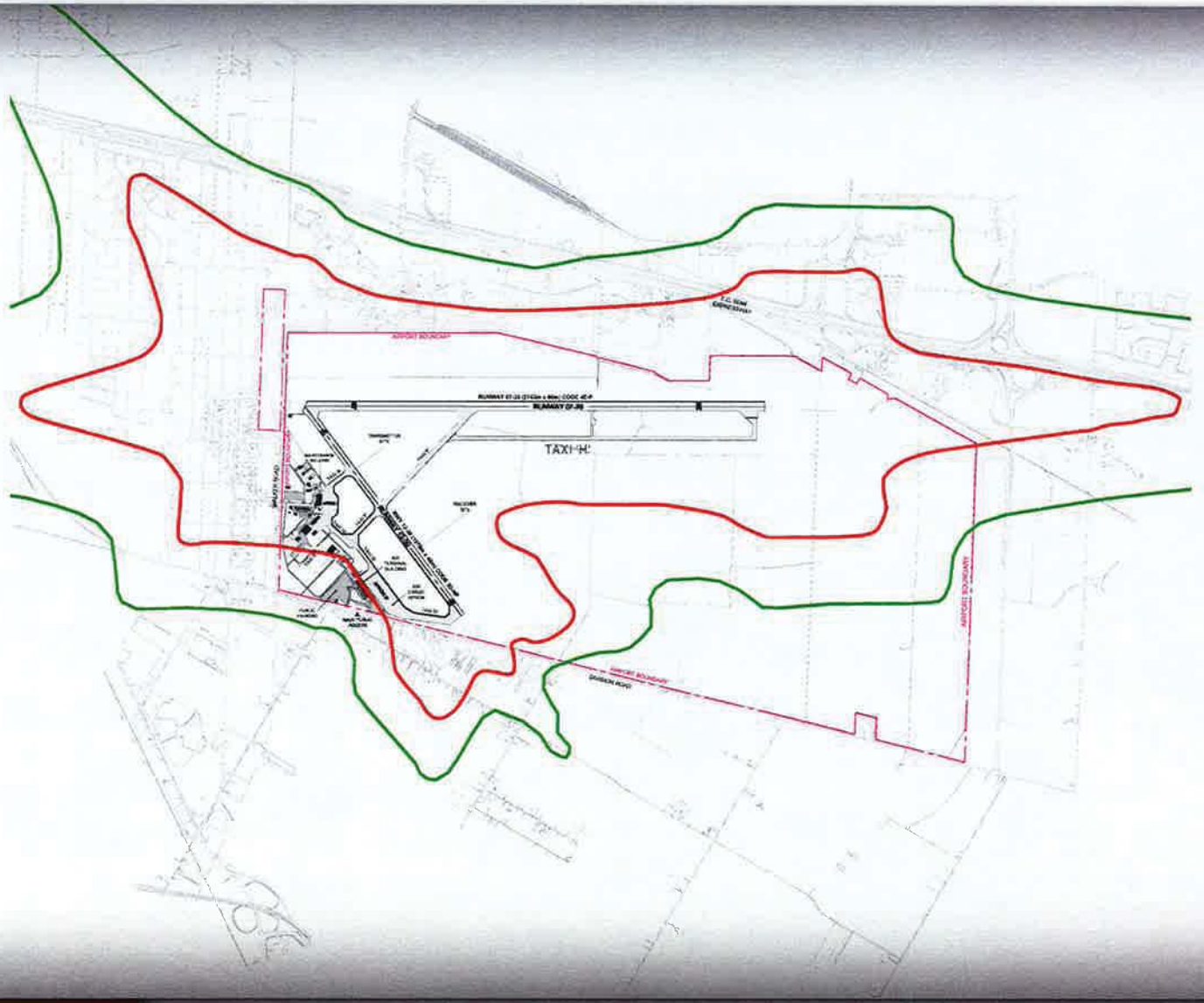
ATTACHMENT B

Airport Noise Contour Maps



CITY OF DETROIT
AIRPORT DEPARTMENT

1996 BASE
NOISE EXPOSURE CONTOURS



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

YQG YOUR QUICK GATEWAY
WINDSOR INTERNATIONAL AIRPORT

DILLON CONSULTING

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

File Location: \\20dillon.dillon.ca\toronto data\PROJECTS\DRAFT\09\092665 Windsor Airport Master Plan

Map Projection: n/aTAXI 'H'

Project #: 09-2665
Status: n/a
Date: December 2010

N E W S

ATTACHMENT C

AADT Information

Auto and Heavy Truck 10-year ADT Projections

Martin Luther King Jr. Blvd.

	Cars	% Change	Trucks	% Change
2016	12140		276	
2017	12097	-0.4	828	200.0
2018	12588	4.1	337	-59.3
2019	12371	-1.7	489	45.1
	Avg % change:	0.7	Avg % change:	61.93
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2031 Projections

	Cars	Trucks
2019	12371	489
2020	12495	494
2021	12620	499
2022	12746	504
2023	12873	509
2024	13002	514
2025	13132	519
2026	13263	524
2027	13396	530
2028	13530	535
2029	13665	540
2030	13802	546
2031	13940	551

Predicted 2031 Auto ADT	Predicted 2031 Truck ADT
13940	551

Auto and Heavy Truck 10-year ADT Projections

Cass Ave.

	Cars	% Change	Trucks	% Change
2016	10626		924	
2017	5626	-47.1	489.2	-47.1
2018	5626	0.0	489.2	0.0
2019	5597	-0.5	486.72	-0.5
	Avg % change:	-15.9	Avg % change:	-15.85
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2031 Projections

	Cars	Trucks
2019	5597	487
2020	5653	492
2021	5710	497
2022	5767	501
2023	5825	506
2024	5883	512
2025	5942	517
2026	6001	522
2027	6061	527
2028	6122	532
2029	6183	538
2030	6245	543
2031	6307	548

Predicted 2031 Auto ADT	Predicted 2031 Truck ADT
6307	548

Auto and Heavy Truck 10-year ADT Projections

3rd Street

	Cars	% Change	Trucks	% Change
2016	10608		922.4	
2017	11043	4.1	960.24	4.1
2018	11043	0.0	960.24	0.0
2019	10988	-0.5	955.44	-0.5
	Avg % change:	1.2	Avg % change:	1.20
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2031 Projections

	Cars	Trucks
2019	10988	955
2020	11097	965
2021	11208	975
2022	11320	984
2023	11434	994
2024	11548	1004
2025	11664	1014
2026	11780	1024
2027	11898	1035
2028	12017	1045
2029	12137	1055
2030	12258	1066
2031	12381	1077

Predicted 2031 Auto ADT	Predicted 2031 Truck ADT
12381	1077

ATTACHMENT D

Day-Night Level Electronic Assessments

DNL 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/)**.

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	11745
Record Date	01/18/2021
User's Name	ASTI Environmental NAL 1

Road # 1 Name:	**Martin Luther King Jr. Blvd.**

Road #1

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	52	52	52
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	13940	276	275
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	62	55	68
Calculate Road #1 DNL	69	Reset	

Road # 2 Name:	**Cass Ave.**

Road #2

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	214	214	214
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	6307	274	274
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	49	46	59
Calculate Road #2 DNL	60	Reset	

Add Road Source Add Rail Source	
Airport Noise Level	
Loud Impulse Sounds?	○ **Yes** ◉ **No**
Combined DNL for all Road and Rail sources	**70**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate Reset

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/)

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

DNL 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/)**.

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	11745
Record Date	01/18/2021
User's Name	ASTI Environmental NAL 2

Road # 1 Name:	**Martin Luther King Jr. Blvd.**

Road #1

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	60	60	60
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	13940	276	275
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	61	54	67
Calculate Road #1 DNL	69	Reset	

Road # 2 Name:	**Cass Ave.**

Road #2

Vehicle Type	Cars ☑	Medium Trucks ☑	Heavy Trucks ☑
Effective Distance	328	328	328
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	6307	274	274
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	47	43	56
Calculate Road #2 DNL	57	Reset	

Road # 3 Name:	**3rd Street**

Road #3

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	984	984	984
Distance to Stop Sign			
Average Speed	25	25	25
Average Daily Trips (ADT)	12381	539	538
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	42	39	52
Calculate Road #3 DNL	53	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○**Yes** ◉**No**
Combined DNL for all Road and Rail sources	**69**
Combined DNL including Airport	**N/A**
Site DNL with Loud Impulse Sound	

Calculate Reset

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/)

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

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

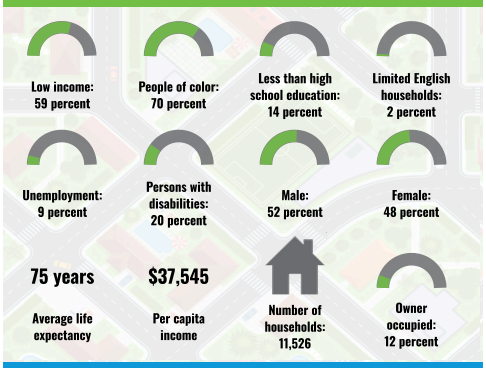
Detroit, MI

1 mile Ring around the Area
Population: 22,875
Area in square miles: 3.27

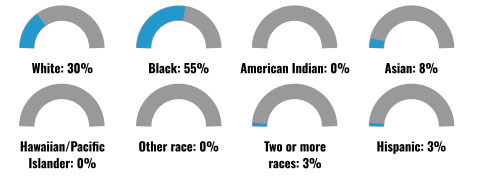
LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	90%
Spanish	2%
Other Indo-European	4%
Chinese (including Mandarin, Cantonese)	1%
Other Asian and Pacific Island	1%
Arabic	1%
Other and Unspecified	1%
Total Non-English	10%

COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE

LIMITED ENGLISH SPEAKING BREAKDOWN

Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race.
Source: U.S. Census Bureau, American Community Survey (ACS) 2017 -2021. Life expectancy data comes from the Centers for Disease Control.

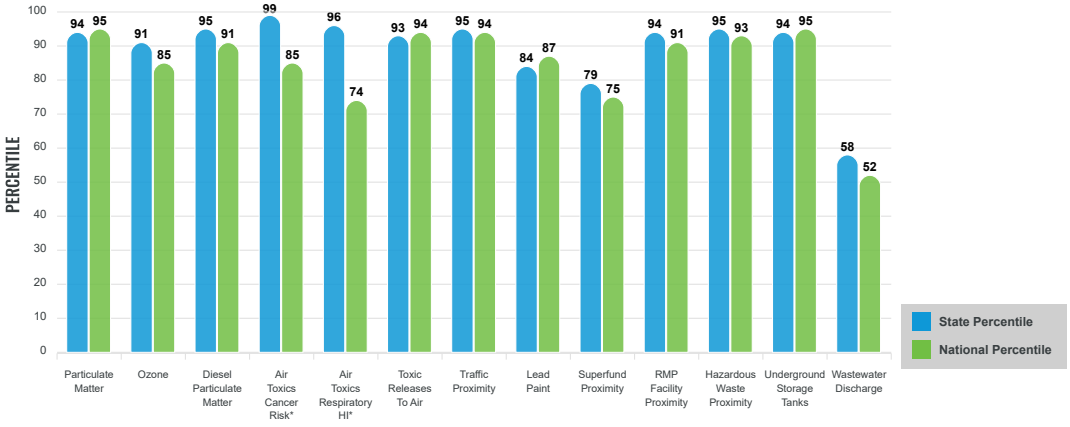
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the EJScreen website.

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

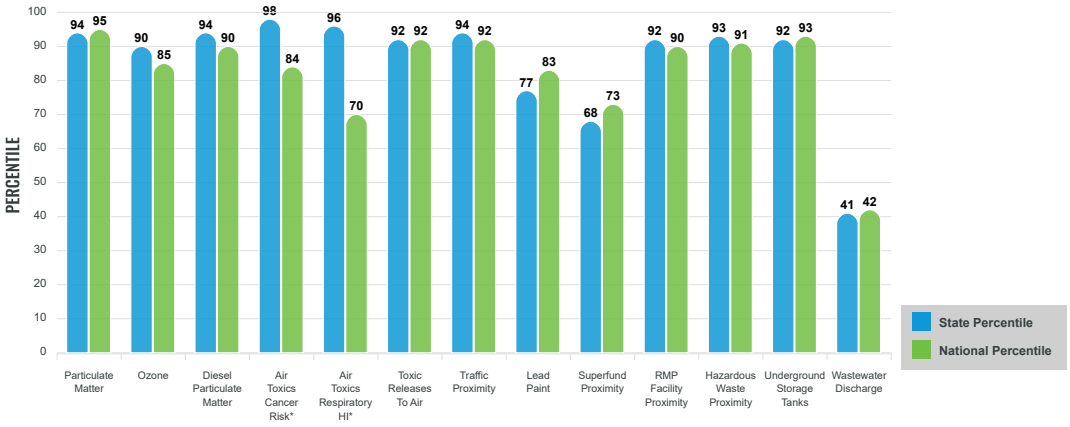
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for 1 mile Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter (µg/m^3)	10.6	8.51	98	8.08	97
Ozone (ppb)	62.8	60	74	61.6	61
Diesel Particulate Matter (µg/m^3)	0.376	0.183	99	0.261	80
Air Toxics Cancer Risk* (lifetime risk per million)	29	19	14	25	5
Air Toxics Respiratory HI*	0.3	0.2	88	0.31	31
Toxic Releases to Air	4,600	2,500	89	4,600	85
Traffic Proximity (daily traffic count/distance to road)	660	120	97	210	93
Lead Paint (% Pre-1960 Housing)	0.47	0.38	64	0.3	71
Superfund Proximity (site count/km distance)	0.049	0.15	37	0.13	42
RMP Facility Proximity (facility count/km distance)	0.75	0.31	88	0.43	83
Hazardous Waste Proximity (facility count/km distance)	4.6	1.1	97	1.9	88
Underground Storage Tanks (count/km^2)	44	8	98	3.9	99
Wastewater Discharge (toxicity-weighted concentration/m distance)	2.1E-05	0.13	21	22	21
SOCIOECONOMIC INDICATORS					
Demographic Index	64%	28%	90	35%	86
Supplemental Demographic Index	22%	14%	86	14%	83
People of Color	70%	26%	88	39%	78
Low Income	59%	31%	87	31%	88
Unemployment Rate	9%	7%	77	6%	79
Limited English Speaking Households	2%	2%	80	5%	63
Less Than High School Education	14%	9%	80	12%	70
Under Age 5	4%	5%	44	6%	42
Over Age 64	13%	18%	35	17%	40
Low Life Expectancy	17%	20%	19	20%	28

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 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.

Sites reporting to EPA within defined area:

Superfund 0
Hazardous Waste, Treatment, Storage, and Disposal Facilities 3
Water Dischargers 3
Air Pollution 5
Brownfields 10
Toxic Release Inventory 2

Other community features within defined area:

Schools 8
Hospitals 10
Places of Worship 8

Other environmental data:

Air Non-attainment ..... Yes
Impaired Waters ..... No

Selected location contains American Indian Reservation Lands* ..... No
Selected location contains a "Justice40 (CEJST)" disadvantaged community ..... Yes
Selected location contains an EPA IRA disadvantaged community ..... Yes

Report for 1 mile Ring around the Area

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	17%	20%	19	20%	28
Heart Disease	7.4	6.6	68	6.1	74
Asthma	15	11.6	91	10	99
Cancer	4.6	6.6	8	6.1	19
Persons with Disabilities	20.3%	14.6%	83	13.4%	87

CLIMATE INDICATORS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	2%	7%	26	12%	24
Wildfire Risk	0%	0%	0	14%	0

CRITICAL SERVICE GAPS

INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	19%	14%	72	14%	72
Lack of Health Insurance	6%	5%	64	9%	44
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for 1 mile Ring around the Area

www.epa.gov/ejscreen

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Wayne County, Michigan

Graystone Senior Apartments

September 26, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:498 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 5 10 20 30

Feet
0 20 40 80 120

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Wayne County, Michigan
Survey Area Data: Version 7, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 5, 2020—Aug 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
MiduaB	Midtown-Urban land complex, 0 to 4 percent slopes	0.7	99.6%
UrbarB	Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes	0.0	0.4%
Totals for Area of Interest		**0.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Wayne County, Michigan

MiduaB—Midtown-Urban land complex, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2v13t
Elevation: 570 to 670 feet
Mean annual precipitation: 28 to 38 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 135 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Midtown and similar soils: 55 percent
Urban land: 35 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Midtown

Setting

Landform: Wave-worked till plains, water-lain moraines
Down-slope shape: Linear
Across-slope shape: Convex, linear, concave
Parent material: Loamy human-transported material over loamy lodgment till

Typical profile

^Au - 0 to 8 inches: gravelly-artifactual sandy loam
^Cu - 8 to 37 inches: very gravelly-artifactual clay loam
BCgb - 37 to 45 inches: clay loam
C - 45 to 55 inches: clay loam
Cd - 55 to 80 inches: loam

Properties and qualities

Slope: 0 to 4 percent
Depth to restrictive feature: 38 to 79 inches to densic material
Drainage class: Somewhat poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 20 to 61 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 30 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: F099XY007MI - Lake Plain Flats
Hydric soil rating: No

Description of Urban Land

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Parkhill, human transported surface

Percent of map unit: 6 percent
Landform: Wave-worked till plains, water-lain moraines
Microfeatures of landform position: Open depressions
Down-slope shape: Linear, concave
Across-slope shape: Convex, concave, linear
Hydric soil rating: No

Avoca, human transported surface

Percent of map unit: 2 percent
Landform: Water-lain moraines, wave-worked till plains
Down-slope shape: Linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Riverfront, steep

Percent of map unit: 1 percent
Landform: Wave-worked till plains, water-lain moraines
Down-slope shape: Linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Riverfront

Percent of map unit: 1 percent
Landform: Wave-worked till plains, water-lain moraines
Down-slope shape: Linear
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

UrbarB—Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2whsx
Elevation: 560 to 720 feet
Mean annual precipitation: 28 to 38 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 135 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 80 percent
Riverfront, dense substratum, and similar soils: 19 percent
Minor components: 1 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: No

Description of Riverfront, Dense Substratum

Setting

Landform: Deltas, water-lain moraines, wave-worked till plains
Down-slope shape: Linear
Across-slope shape: Convex, linear
Parent material: Loamy human-transported material over clayey lodgment till

Typical profile

^Au - 0 to 6 inches: sandy loam
^Cu1 - 6 to 16 inches: very artifactual sandy loam
^Cu2 - 16 to 46 inches: gravelly-artifactual loam
^Cu3 - 46 to 68 inches: very artifactual loam
2Cd - 68 to 80 inches: clay

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: 56 to 78 inches to densic material
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 28 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: B
Ecological site: F099XY007MI - Lake Plain Flats
Hydric soil rating: No

Minor Components

Riverfront, dense substratum, steep

Percent of map unit: 1 percent
Landform: Deltas, water-lain moraines, wave-worked till plains
Down-slope shape: Linear
Across-slope shape: Convex, linear
Hydric soil rating: No

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

GRETCHEN WHITMER
GOVERNOR

PHILLIP D. ROOS
DIRECTOR

July 17, 2024

Kim Siegel, Environmental Compliance Specialist
Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 908
Detroit, Michigan 48226

Via Email Only

Dear Kim Siegel:

Subject: 440 Martin Luther King Jr. Blvd Project

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 has completed the required SIP submittals for this area and on May 19, 2023, the United States Environmental Protection Agency (USEPA) redesignated the seven-county southeast Michigan area (including Wayne County) from nonattainment to attainment / maintenance. General conformity, however, still requires an evaluation during the maintenance period. For this evaluation, EGLE considered the following information from the 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 440 Martin Luther King Jr. Blvd Project proposed to be completed with federal grant monies, including the construction of a four-story, 49-unit, affordable senior living apartment building. The apartment complex will consist of 24 one-bedroom apartment units approximately 659 square feet in size, and 25 two-bedroom apartments of approximately 984 square feet in size, with 12 of the apartments being barrier-free. The building will include an elevator, community room, library, and a computer room. The project site is located at 440 – 460 Martin Luther King Jr. Boulevard, Detroit, Michigan in Wayne County. The proposed project is anticipated to begin in October 2024 and is expected to last 18 months.

In reviewing the *"Air Quality and Greenhouse Gas Study: Uptown Orange Apartments in Orange, California,"* dated December 2012, prepared for KTGY 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.

The size, scope, and duration of the 440 Martin Luther King Jr. Blvd Project proposed for completion in Detroit, Michigan 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,

Breanna Bukowski
Environmental Quality Analyst
Air Quality Division

cc: Michael Leslie, USEPA Region 5
Patrick Dorn, Cass Corridor Neighborhood Development Corp.
Robert Zinser, Cass Corridor Neighborhood Development Corp.
Christopher Yelonek, ASTI Environmental

Attainment Status for the National Ambient Air Quality Standards

EGLE
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

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

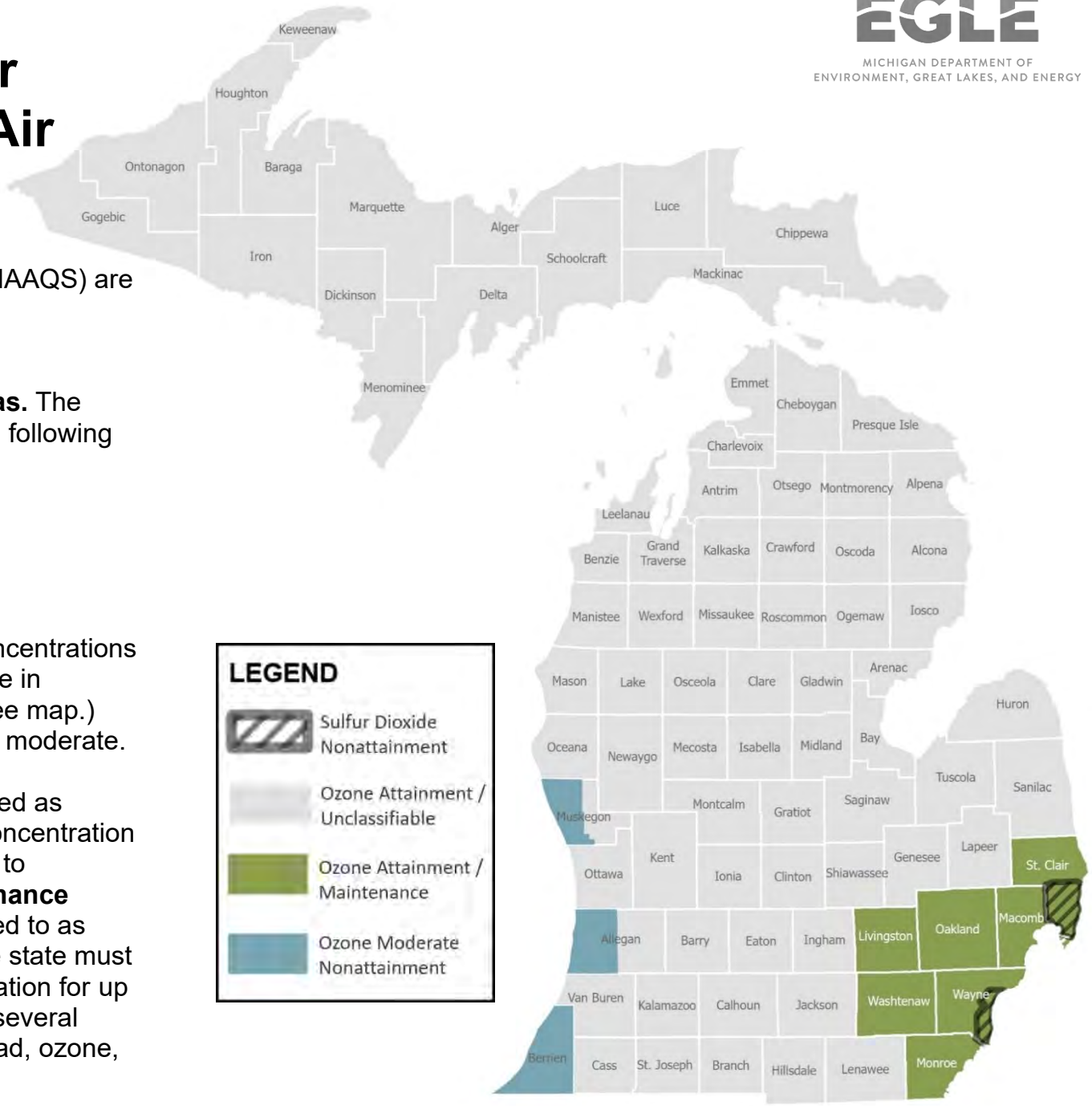
Areas of the state that are below the NAAQS concentration level are called **attainment areas.** The entire state of Michigan is in attainment for the following pollutants:

- Carbon Monoxide (CO)
- Lead (Pb)
- Nitrogen Dioxide (NO2)
- Particulate Matter (PM10 & PM2.5)

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 area is classified as moderate.

Areas of the state that were previously classified as nonattainment but have since reduced their concentration levels below the NAAQS can be redesignated to attainment and are called **attainment/maintenance areas**. These areas are also commonly referred to as “attainment” after reclassification, however the state must continue monitoring and submitting documentation for up to 20 years after the redesignated. There are several maintenance areas throughout the state for lead, ozone, and particulate matter.

**For readability purposes the map only includes the most recently reclassified ozone maintenance area in southeast Michigan. For more information, please consult the Michigan.gov/AIR webpage or contact the division directly.*



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

Updated July 2023

Close-Up Maps of Partial County Nonattainment Areas

Sulfur Dioxide Nonattainment Areas

St. Clair County

Wayne County

Ozone Moderate Nonattainment Areas

Allegan County

Muskegon County

EGLE

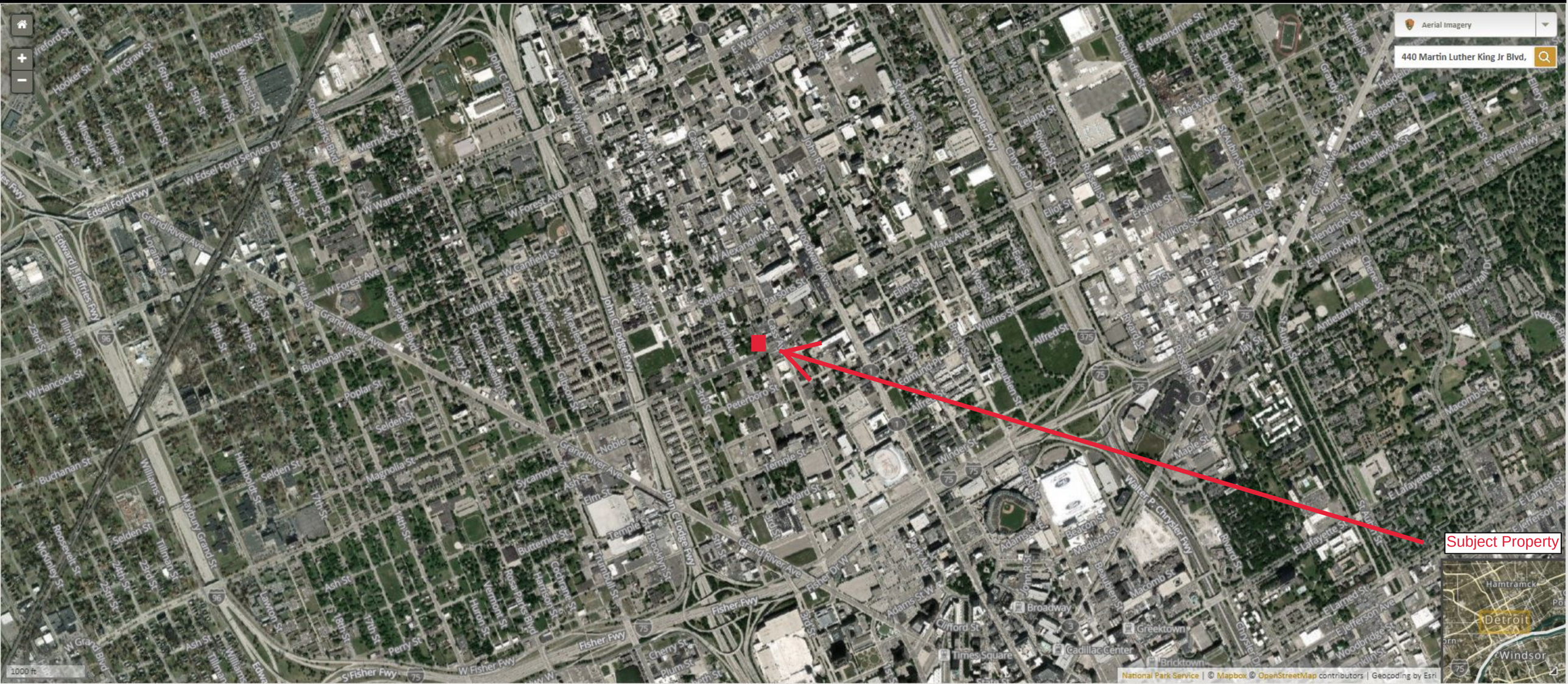
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Updated July 2023

Nationwide Rivers Inventory

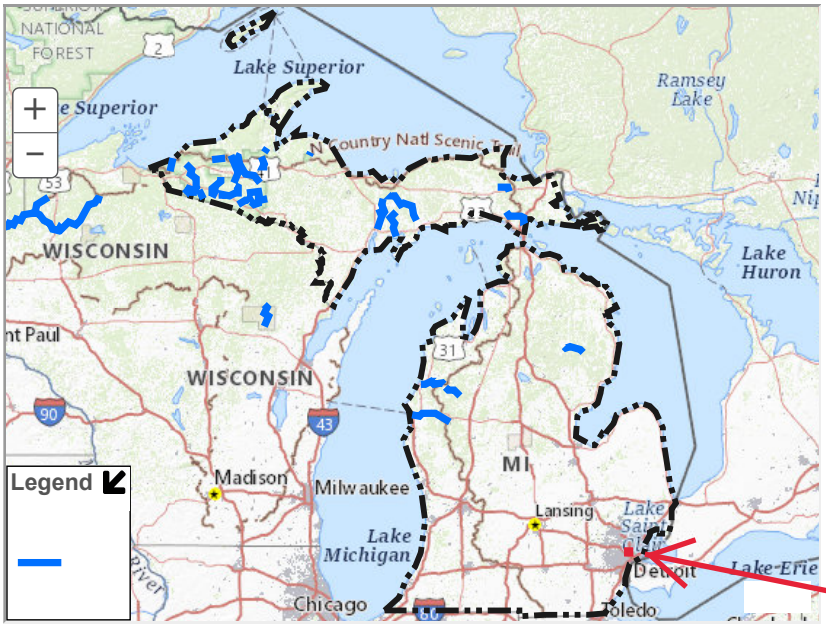
This is a listing of more than 3,200 free-flowing river segments in the U.S. that are believed to possess one or more "outstandingly remarkable" values.

National Park Service
U.S. Department of the Interior



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.



Subject Property

+ View larger map

Choose A State Go

Choose A River Go

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

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

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10448 Citation Drive, Suite 100
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www.asti-env.com

Sent Via Email Only

October 21, 2022

Patrick Dorn
Greystone Senior LDHA, LP
3535 Cass Avenue
Detroit, MI 48201

RE: Threatened and Endangered Species No Effect Rationale
Greystone Senior Apartments, 440-460 Martin Luther King Blvd,
Detroit, Wayne County, Michigan
ASTI File No. 4-11745

On October 14, 2022, ASTI Environmental (ASTI) conducted a threatened and endangered species assessment for those plant and animal species protected by the US Fish and Wildlife Service (USFWS) under the federal Endangered Species Act of 1973, as amended, at 440-460 Martin Luther King Blvd, Detroit, County, Michigan (Subject Property). An Information for Planning and Consultation (IPaC) review was obtained by ASTI to determine which federal species may be of concern for this project.

Existing Property Conditions
ASTI searched for potential bat trees and, as appropriate, directly searched for species from the IPaC generated species list (attached). The Subject Property is primarily maintained lawn with one section of mature and amateur trees located near the northern portion of the Subject Property. No buildings exist within the Subject Property. A map depicting the location of the Subject Property is attached (Site Location Map).

Proposed activities include the new construction of 49 affordable housing units (Project).

Assessment Methods and Results
Table 2, *Listed Species and Rationale for No Effect* summarizes ASTI's rationale for a No Effect rating for each species identified by IPaC as having potential to be associated with the Subject Property.

ASTI ENVIRONMENTAL

Table 2. Listed Species and Rationale for No Effect

Species/Natural Feature	Ranking	Habitat	Rationale for No Effect
Indiana Bat *(Myotis sodalis)*	Federally Endangered	Utilize an array of forested habitats, but exclusively roost in exposed trees with sloughing bark, cracks, or crevices. May also be found roosting in human-made structures.	No suitable bat trees identified within the Subject Property. No buildings to be demolished. The Project will have no effect on this species.
Northern Long-eared Bat (Myotis septentrionalis)	Federally Threatened	Utilize an array of forested habitats, but exclusively roost in exposed trees with sloughing bark, cracks, or crevices. May also be found roosting in human-made structures.	No suitable bat trees identified within the Subject Property. No buildings to be demolished. The Project will have no effect on this species.
Piping Plover (*Charadrius melodus)*	Federally Endangered	Primarily utilize sparsely vegetated sandy beaches.	Highly urbanized, no coastal habitat, no habitat present for this species. The Project will have no effect on this species.
Red Knot (*Calidris canutus rufa)*	Federally Threatened	Primarily utilize sandy or muddy coastal areas.	Highly urbanized, no coastal habitat, no habitat present for this species. The Project will have no effect on this species.
Eastern Massasauga Rattlesnake *(Sistrurus catenatu)s*	Federally Threatened	Open, sunny areas intermixed with high quality wetland.	No nearby or on-site wetland, highly urbanized. The Project will have no effect on this species.
Northern Riffleshell (*Epioblasma rangiana)*	Federally Endangered	Inhabit rivers and streams, can bury in sediment.	No watercourses nearby or on-site. The Project will have no effect on this species.
Eastern Prairie Fringed Orchid *(Platanthera leucophaea)*	Federally Threatened	Inhabits wet prairies and bogs.	No preferred or suitable habitat nearby or on-site. The Project will have no effect on this species.

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Conclusions

The Property does not contain preferred or suitable habitat for any of the federally listed species as identified by IPaC. It is ASTI's opinion that the Project will have "No Effect" on any federally protected species and that further Section 7 consultation with the USFWS is not necessary for this Project. This letter should serve as the Project's rationale for ASTI's opinion of "No Effect."

ASTI ENVIRONMENTAL

Emmett Smrcka
Ecologist

Dianne C. Martin
Vice President
Professional Wetland Scientist #1313
MDNR T&E Permit TE060

Attachments:
Site Location Map
IPaC Species List

Greystone Senior

440, 446 & 460
Martin Luther King Jr. Boulevard,
Detroit, MI

ASTI Environmental

Created for: Greystone Senior LDHA, LP
Created by: RMH, January 14, 2021, ASTI Project 11745

Site Location Map

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

In Reply Refer To: October 03, 2022
Project Code: 2023-0000274
Project Name: Greystone Senior - 440,446, 460 MLK Blvd, Detroit MI

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/media/mifo-ipac-instructions (and click on the attachment). 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: https://www.fws.gov/office/midwest-region-headquarters/midwest-section-7-technical-assistance. 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/program/eagle-management/eagle-permits 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/partner/council-conservation-migratory-birds.

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: 2023-0000274
Project Name: Greystone Senior - 440,446, 460 MLK Blvd, Detroit MI
Project Type: Residential Construction
Project Description: New construction of 49 affordable housing units
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.3456358,-83.06185076371581,14z

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 Fisheries[1], 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.

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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 *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949 General project design guidelines: https://ipac.ecosphere.fws.gov/project/KJKUYOKFEJDWPEIC35RLF6UXIA/documents/generated/6982.pdf	Endangered
Northern Long-eared Bat *Myotis septentrionalis* 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/KJKUYOKFEJDWPEIC35RLF6UXIA/documents/generated/6983.pdf	Threatened

Birds

NAME	STATUS
Piping Plover *Charadrius melodus*	Endangered

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. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/6039

Red Knot *Calidris canutus rufa*	Threatened

There is **proposed** critical habitat for this species.
This species only needs to be considered under the following conditions:

- 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

Reptiles

NAME	STATUS
Eastern Massasauga (=rattlesnake) *Sistrurus catenatus*	Threatened

No critical habitat has been designated for this species.
This species only needs to be considered under the following conditions:

- 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/KJKUYOKFEJDWPEIC35RLF6UXIA/documents/generated/5280.pdf

Clams

NAME	STATUS
Northern Riffleshell *Epioblasma rangiana*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/527

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid *Platanthera leucophaea*	Threatened

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/601

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 Act[1] and the Bald and Golden Eagle Protection Act[2].

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
Bald Eagle *Haliaeetus leucocephalus* 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. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Black-billed Cuckoo *Coccyzus erythropthalmus* 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

NAME	BREEDING SEASON
Canada Warbler *Cardellina canadensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Red-headed Woodpecker *Melanerpes erythrocephalus* 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 *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* 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.

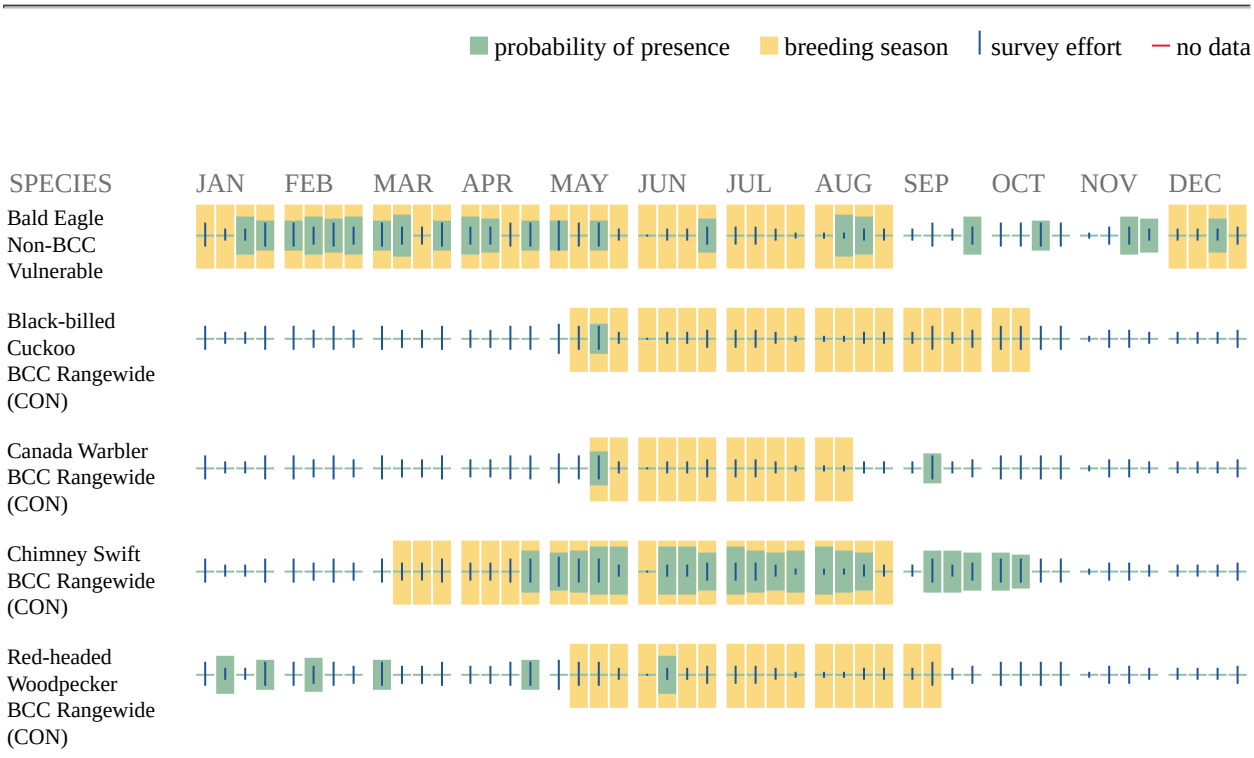
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

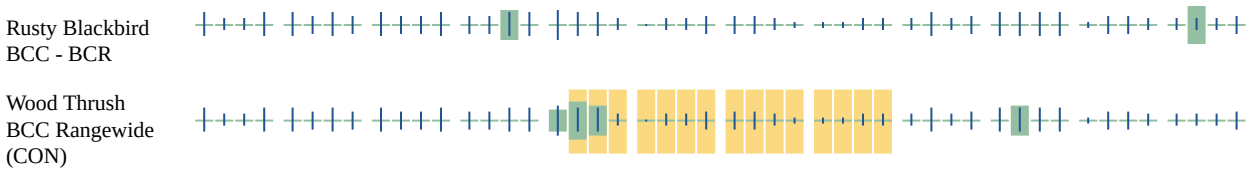
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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-incidental-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 list of migratory birds that potentially occur 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 Rapid Avian Information Locator (RAIL) 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 or migrating in my 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 query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. 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.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPaC User Contact Information

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State:	MI
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Email	esmrcka@asti-env.com
Phone:	8102252800

U.S. Fish & Wildlife Service

ECOS

Listed species with spatial current range believed to or known to occur in Michigan

Notes:

- This report includes species only if they have a **Spatial Current Range** in ECOS.
- **As of 02/13/2015 the data in this report has been updated to use a different set of information.** Results are based on where the species is believed to or known to occur. The FWS feels utilizing this data set is a better representation of species occurrence. Note: there may be other federally listed species that are not currently known or expected to occur in this state but are covered by the ESA wherever they are found; Thus if new surveys detected them in this state they are still covered by the ESA. The FWS is using the best information available on this date to generate this list.
- This report shows listed species or populations believed to or known to occur in MI
- This list does not include experimental populations and similarity of appearance listings.
- Click on the highlighted scientific names below to view a Species Profile.

Listed Species

Sort by group: ☑

CSV

Show All entries Search:

26 Species Listings

Scientific Name	Common Name	Where Listed	Region ℹ	ESA Listing Status ℹ
Birds				

Scientific Name	Common Name	Where Listed	Region	ESA Listing Status
Charadrius melodus	Piping Plover	[Great Lakes watershed DPS] - Great Lakes, watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.)	3	Endangered
Calidris canutus rufa	rufa red knot	Wherever found	5	Threatened
Grus americana	Whooping crane	U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY)	2	Experimental Population, Non-Essential
Clams				
Pleurobema clava	Clubshell	Wherever found; Except where listed as Experimental Populations	5	Endangered
Epioblasma rangiana	Northern riffleshell	Wherever found	5	Endangered
Villosa fabalis	Rayed Bean	Wherever found	3	Endangered
Obovaria subrotunda	Round hickorynut	Wherever found	3	Threatened
Epioblasma triquetra	Snuffbox mussel	Wherever found	3	Endangered
Ferns and Allies				

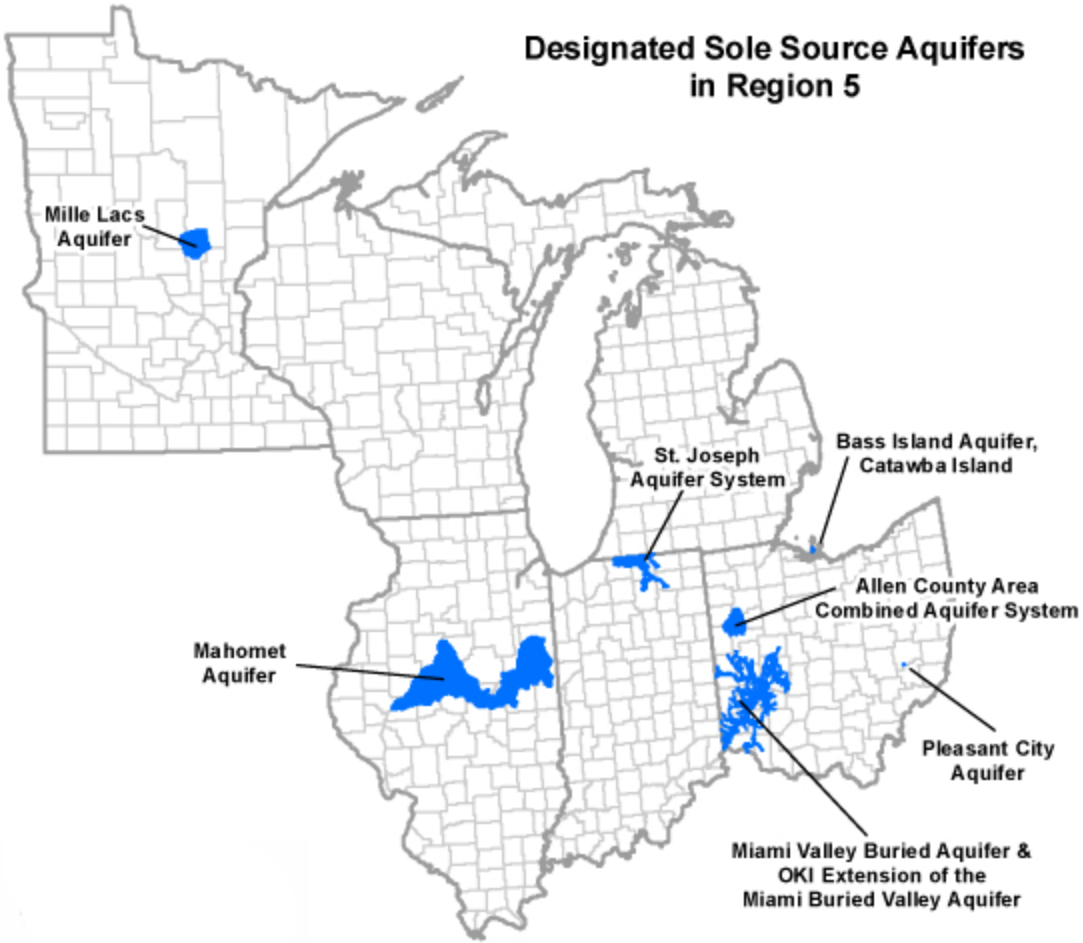
Scientific Name	Common Name	Where Listed	Region	ESA Listing Status
Asplenium scolopendrium var. americanum	American hart's-tongue fern	Wherever found	5	Threatened
Flowering Plants				
Iris lacustris	Dwarf lake iris	Wherever found	3	Threatened
Platanthera leucophaea	Eastern prairie fringed orchid	Wherever found	3	Threatened
Solidago houghtonii	Houghton's goldenrod	Wherever found	3	Threatened
Hymenoxys herbacea	Lakeside daisy	Wherever found	3	Threatened
Mimulus michiganensis	Michigan monkey-flower	Wherever found	3	Endangered
Cirsium pitcheri	Pitcher's thistle	Wherever found	3	Threatened
Insects				
Somatochlora hineana	Hine's emerald dragonfly	Wherever found	3	Endangered
Brychius hungerfordi	Hungerford's crawling water Beetle	Wherever found	3	Endangered
Lycaeides melissa samuelis	Karner blue butterfly	Wherever found	3	Endangered

Scientific Name	Common Name	Where Listed	Region	ESA Listing Status
Neonympha mitchellii mitchellii	Mitchell's satyr Butterfly	Wherever found	3	Endangered
Oarisma poweshiek	Poweshiek skipperling	Wherever found	3	Endangered
Mammals				
Lynx canadensis	Canada Lynx	Wherever Found in Contiguous U.S.	6	Threatened
Canis lupus	Gray wolf	U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico.	6	Endangered
Myotis sodalis	Indiana bat	Wherever found	3	Endangered
Myotis septentrionalis	Northern Long-Eared Bat	Wherever found	3	Endangered
Reptiles				
Nerodia erythrogaster neglecta	Copperbelly water snake	Indiana north of 40 degrees north latitude, Michigan, Ohio	3	Threatened

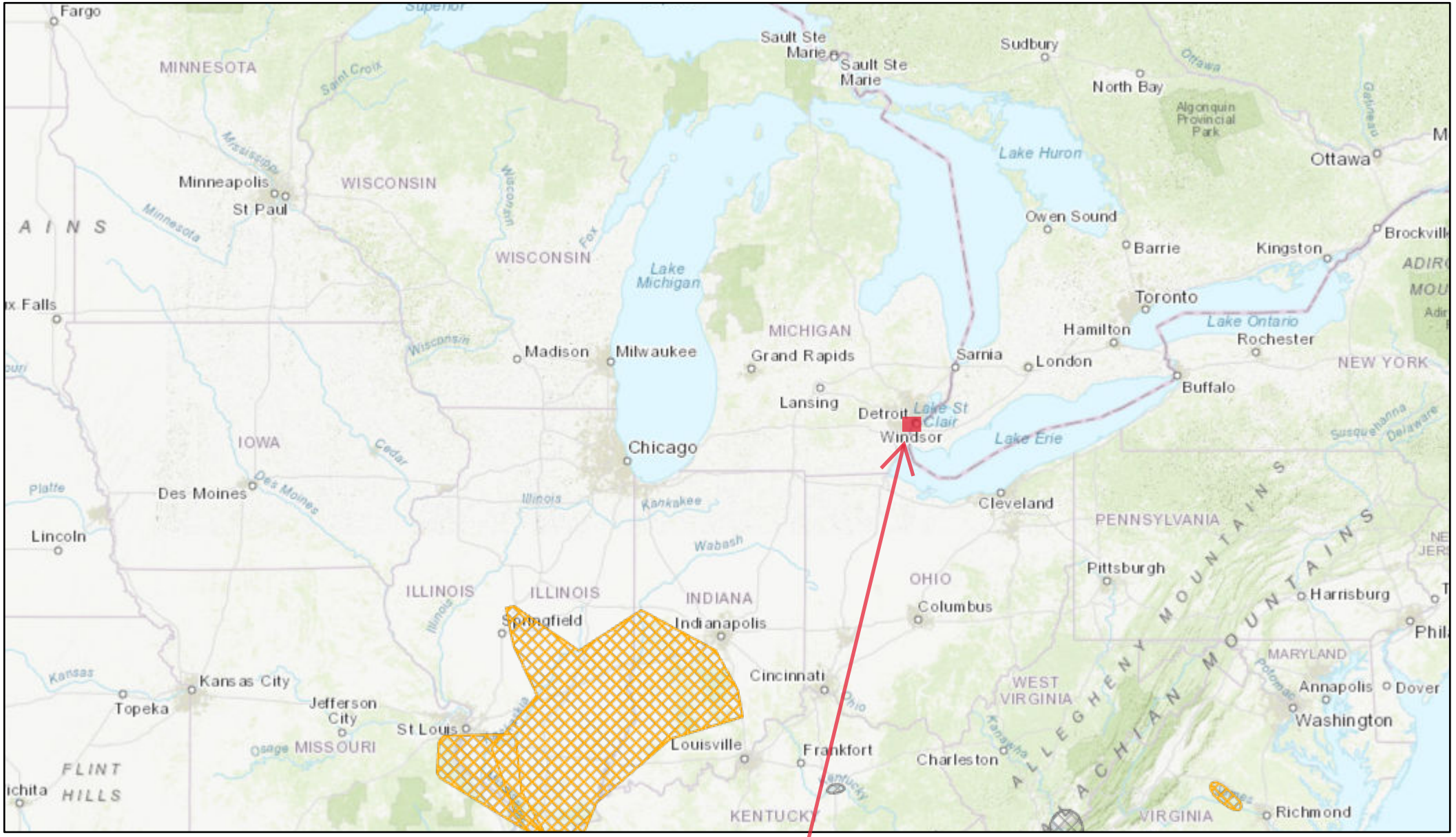
Scientific Name	Common Name	Where Listed	Region	ESA Listing Status
Sistrurus catenatus	Eastern Massasauga (=rattlesnake)	Wherever found	3	Threatened

Showing 1 to 26 of 26 entries

Previous 1 Next


Designated Sole Source Aquifers
in Region 5
Mille Lacs
Aquifer
St. Joseph
Aquifer System
Bass Island Aquifer,
Catawba Island
Allen County Area
Combined Aquifer System
Mahomet
Aquifer
Pleasant City
Aquifer
Miami Valley Buried Aquifer &
OKI Extension of the
Miami Buried Valley Aquifer

U.S. Geological Survey Quaternary Faults



7/8/2024, 10:29:33 AM

Fault Areas

Class B

late Quaternary

latest Quaternary

1:9,244,649

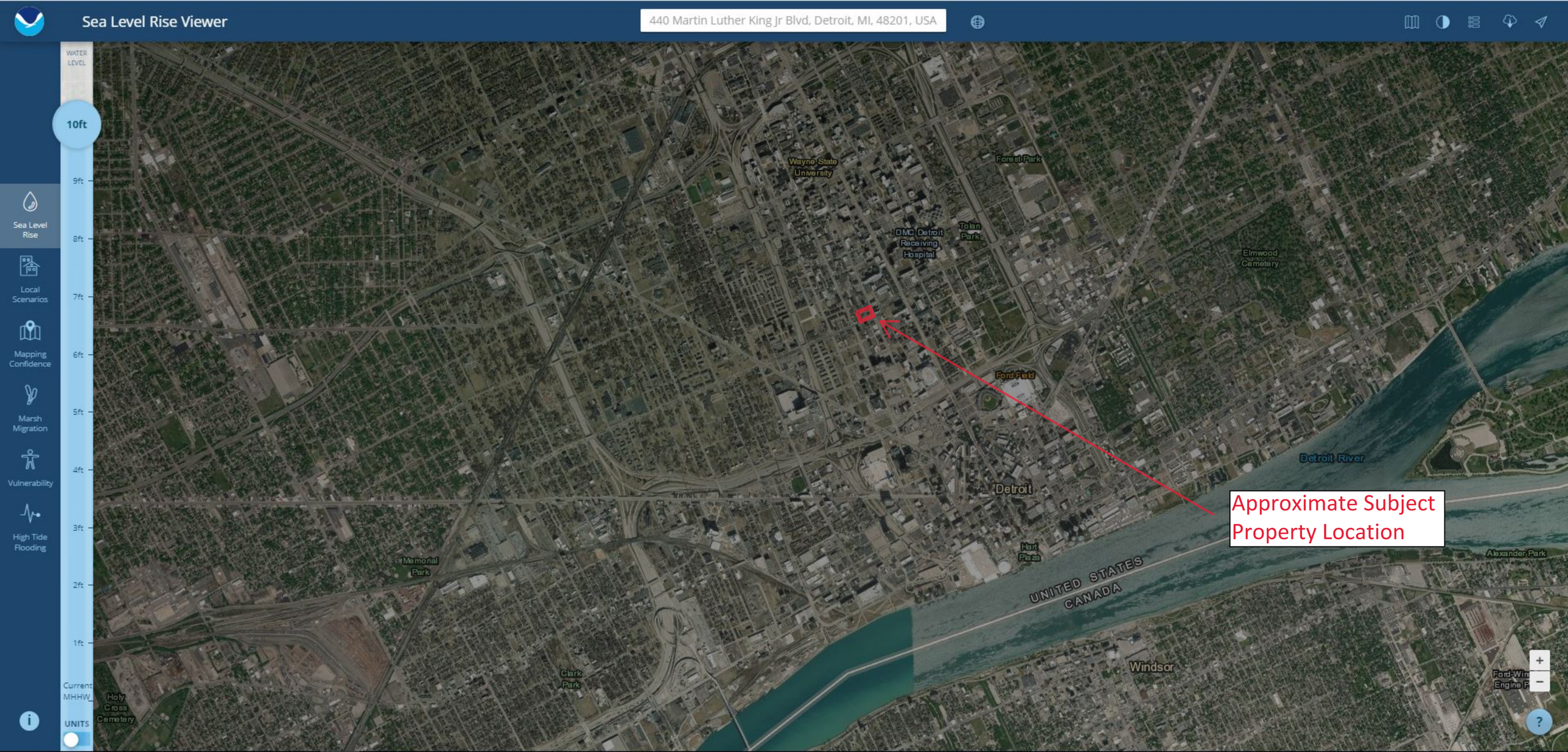
0 55 110 220 mi

0 90 180 360 km

Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

USGS

USGS | Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS |


Sea Level Rise Viewer
440 Martin Luther King Jr Blvd, Detroit, MI, 48201, USA
WATER LEVEL
10ft
9ft
8ft
7ft
6ft
5ft
4ft
3ft
2ft
1ft
Current MHHW
UNITS
Sea Level Rise
Local Scenarios
Mapping Confidence
Marsh Migration
Vulnerability
High Tide Flooding
Wayne State University
Forest Park
DMC Detroit Receiving Hospital
Tolan Park
Elmwood Cemetery
Ford Field
Detroit River
Detroit
Approximate Subject Property Location
Hart Plaza
Memorial Park
UNITED STATES
CANADA
Windsor
Alexander Park
Clark Park
Holy Cross Cemetery

The Climate Explorer

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Detroit, MI

Stations

Wayne County - Average Daily Maximum Temp (°F)

Average Daily Maximum Temp (°F) | Graph | Map | Annual | Spring | Summer | Fall | Winter | Downloads

Cards Home | Climate Maps | Climate Graphs | Historical Weather Data | Historical Thresholds | High-Tide Flooding | Take Action