

Project Information

Project Name: Benjamin-O.-Davis-Veterans-Village

HEROS Number: 900000010309439

Point of Contact:

Consultant (if applicable): PM Environmental

Point of Contact: Jackie Schafer

Project Location: 4777 Outer Drive, Detroit, MI

Additional Location Information:

The property consists of the northwestern 2.69-acres of 4777 Outer Drive East, Detroit, Michigan. The property is currently occupied by a parking lot associated with the Connor Creek Health Center campus located southeast of the subject property.

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

The subject property consists of the northwestern 2.69-acres of 4777 Outer Drive East, Detroit, Michigan. The property is currently occupied by a parking lot associated with the Connor Creek Health Center campus located southeast of the subject property. The proposed development, hereafter the Project, includes construction of a two-story apartment building for the homeless with a veteran's preference and containing 50 one-bedroom apartments. The L-shaped building with a total of 48,557 square feet will be located in the northwest portion of the property in the northern portion of the Connor Creek Health Center campus. Amenities offered will include an interior camera system, administrative office, two supportive service offices, an elevator, five handicap accessible units, a community room, dining room, kitchen, resident lounge, barber shop, exercise room, indoor bike rack and outdoor patio, along with access to a dog park. The facade materials will consist of masonry and fiber cement siding. The roof will be pitched and finished in asphalt shingles. Windows will typically consist of Fibrex single-hung and fixed units. The surface parking areas and drive aisles will be located to the east and south of the apartment building. New natural gas, sanitary, storm, and water lines will be installed as part of the development as well as installation of new sidewalks, removal of existing pavement and landscaping, and installation of new landscape plantings. The project originally received an Authority to Use Grant Funds for 25 Detroit Housing Commission project-based vouchers on May 24, 2021.

This project is for \$300,000 in HUD HOME-ARP funding and \$1,425,000 in ARPA funding. This review is valid for up to five years.

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

The Benjamin O. Davis Veterans Village is a planned apartment community for the homeless with a veteran's preference that features 50 one-bedroom apartments. Twenty-five units, 50 percent of the total units, will be set aside for Permanent Supportive Housing tenants. The target population for those units are individuals from the most vulnerable population, which is the top 10 percent of the local Continuum of Care's prioritized list, whose income is 30 percent or below the area median income for Wayne County, Michigan, with a preference for veterans. The development will also provide case management on-site for 20 hours per week and supportive services for this population. Recognizing the high support needs of the target population, the development is prepared to deliver, directly and through linkage, a full complement of services and supports. The Project case manager will be available on-site to coordinate tenant selected supportive services for a minimum of twenty hours on-site per week. The supportive services component will meet the multi-faceted needs of the tenants. Supportive Services may be provided by the development and include therapeutic services, nursing services, adult case management, hospital liaison services, substance abuse services, including outpatient and dual diagnosis intensive outpatient treatment, psychosocial rehabilitation services, employment services, and other services, as appropriate. The development will also deliver mental health and substance use disorder services on-site. If the tenant prefers another service provider or if specialized service agencies are needed, they will be incorporated into the service component. The supportive services are voluntary, and the tenant can opt-out at any time.

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

Detroit is located in the southeast part of Michigan in Wayne County. To the west and southwest of the subject property are commercial and multi-family residential properties. To the immediate south of the subject property is the Conner Creek Health Center. To the north of the subject property are single-family residential properties. To the east are light industrial use properties. As with many areas throughout Detroit, the Project Market Area, PMA, has continued to decrease in population by 15.8 percent between 2000 and 2010. Future projections indicate declines will continue to slow within the PMA to just one percent over the next five years. The PMA also decreased in population by 4.6 percent between 2010 to 2019. Household growth trends follow similar patterns to those observed in the overall population. Households within the PMA decreased by 13.2 percent between 2000 and 2010 with a decrease of 3.8 percent between 2010 and 2019. However, forecasts indicate an additional decrease of less than one percent over the next five years. The renter propensity has a larger ratio throughout the Southwest Detroit market with the

PMA calculated at 37.6 percent of all occupied units in 2010, which is only slightly higher than the county's ratio of 35.3 percent. Renter percentages are projected to increase in both the PMA and the county through 2023 and will reach 41.3 percent in the PMA and 38.7 percent in the county. Among the properties included in the area, overall occupancy rate is stable at 99.9 percent. Low income housing tax credit projects reported 100 percent occupancy. Strong demand is evident for subsidized projects including wait lists. Credit restrictions particularly for lower income buyers, as well as upfront money costs, have made purchasing a home outside the reach of potential buyers who would fall within the qualified income range. Thus, competition between rental and ownership options are limited within the qualified income range making rental housing the most viable option for low to moderate income families.

Maps, photographs, and other documentation of project location and description:[Civil Set 2023.pdf](#)[2 - Property Map.pdf](#)[1 - General site location.pdf](#)[3 - Onsite photos.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

Funding Information

Grant / Project Identification Number	HUD Program	Program Name
MI001	Public Housing	Project-Based Voucher Program
M-21-MP-26-0202	Community Planning and Development (CPD)	HOME American Rescue Plan (HOME-ARP)

Estimated Total HUD Funded, \$1,725,000.00
Assisted or Insured Amount:

Estimated Total Project Cost [24 CFR 58.2 (a) (5)]: \$11,540,067.00

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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements. (Attachment 4)
Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Review of the John H. Chafee Coastal Barrier Resources System Map and the U.S. Fish and Wildlife Service online Coastal Barrier Resources System mapper, documents the subject property is not located within a designated coastal zone boundary. (Attachment 5)
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	According to the Federal Emergency Management Agency (FEMA) floodplain map, dated February 2, 2012 (Panel Number 26163C0125E), the subject property is not located within the 100-year flood zone. Furthermore, topographical features present in the subject property area are not representative of a flood plain. (Attachment 6)
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	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The entire state of Michigan is designated as attainment for carbon monoxide, lead, nitrogen dioxide, and particulate matter, PM10. Wayne County is within a larger area in southeast Michigan for ozone nonattainment and the southwestern portion of Detroit is within a sulfur dioxide nonattainment area. The Project was reviewed by the Michigan Department of Environment, Great Lakes, and Energy, EGLE, for conformance with the State

		Implementation Plan ,SIP. EGLE determined the Project should not exceed the de minimis levels included in the federal general conformity requirements and therefore, does not require a detailed conformity analysis. (Attachment 7)
Coastal Zone Management Act Coastal Zone Management Act, sections 307(c) & (d)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Review of the Wayne County Coastal Zone Management Boundary and Coastal Zone Management Area map documents the subject property is not located within a designated Coastal Zone Management area. (Attachment 8)
Contamination and Toxic Substances 24 CFR 50.3(i) & 58.5(i)(2)]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Site contamination was evaluated as follows: ASTM Phase I ESA. On-site or nearby toxic, hazardous, or radioactive substances that could affect the health and safety of project occupants or conflict with the intended use of the property were not found. The project is in compliance with contamination and toxic substances requirements.
Endangered Species Act Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The U.S. Fish and Wildlife Service provided information on locations of threatened and endangered species for the Project. In addition, a review using the U.S. Fish and Wildlife Service IPAC online system was completed. Species listed for Wayne County include: Indiana Bat, Northern Long-eared Bat, Piping Plover, Red Knot, Eastern Massasauga, Northern Riffleshell, and the Eastern Prairie Fringed Orchid. None of the state-listed threatened or endangered species were observed at the subject property. No federally listed threatened or endangered species or unique features are present at the subject property and no Critical Habitats are present. The Project will not have an adverse effect on endangered/threatened species or critical habitats. (Attachment 10)

Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Review of reasonably ascertainable standard and other historical sources, and site observations, have not identified the current or historical presence of above ground storage tanks (ASTs) or 55-gallon drum storage on the subject property. PM searched a one-mile radius around the subject property for ASTs containing flammable materials. PM identified five sites with ASTs that required the calculation of acceptable separation distances (ASD) for thermal radiation and/or blast overpressure. The sites include: 4777 Outer Drive East, located approximately 150 feet southeast (one 30,000-gallon liquid oxygen) and approximately 360 feet southeast (one 8,000-gallon diesel); 11036 East 8 Mile Road located approximately 2,175 feet east (two 6,000-gallon diesel) and approximately 2,811 feet east (one 15,000-gallon diesel); 11900 East 8 Mile Road located approximately 1.0 mile east (one 3,000-gallon flammable liquid); 20101 Hoover Street located approximately 3,400 feet east (one 20,000-gallon unknown contents); and, 20000 Conner Street located approximately 1,000 feet east (one 6,000-gallon gasoline). The subject property is outside the calculated ASDs for both people and buildings with the exception of the oxygen AST located at 4777 Outer Drive East. The current occupant of 4777 Outer Drive East, Conner Creek Health Center, has plans to remove the oxygen AST prior to construction activities on the property. Therefore, the Project will no longer be within an ASD from any above-ground explosive or flammable fuels or chemical containers according to 24 CFR 51C that are located within one-mile of the subject property. (Attachment 11)
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Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Review of the USDA Web Soil Survey indicates the Project does not affect any prime or unique farmland and the subject property is located within an urbanized area. Therefore, the Project is not subject to the statutory or regulatory requirements. (Attachment 12)
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	According to the Federal Emergency Management Agency (FEMA) floodplain map, dated February 2, 2012 (Panel Number 26163C0125E), the subject property is not located within the 100-year flood zone. Furthermore, topographical features present in the subject property area are not representative of a flood plain. (Attachment 6)
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	This section contains sensitive information relating to this project. For that reason, documentation is withheld from the public environmental review record.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The subject property is located approximately 3.0 miles north of Coleman A. Young International Airport, 10.0 miles southeast of Oakland County Troy Airport, and 12.0 miles north of Windsor Airport. Review of the noise contour maps indicates the subject property is located outside the airport's 65 DNL contours. The subject property is located approximately 2,887 feet northwest of the active Grand Trunk Western Railroad. Inventory information from U.S. D.O.T. indicated that typically there are an average of approximately 12 train movements daily, six of which are during day-time hours and six of which are at night. The subject property is located approximately 730 feet north from Outer Drive East and approximately 713 feet east from Van Dyke Avenue, both of which are considered busy roadways.

		The HUD Site Day/Night Noise Level (DNL) Calculator was utilized to obtain a combined DNL for the potential roadway noise sources. The noise assessment location (NAL) was located closest to the potential roadway noise sources, which was the southwestern portion of the subject property. For all roads, PM completed a ten-year projection for 2030, assuming a 1% traffic increase per year. The combined calculated noise level is 62 decibels (dB), which is within HUD's Acceptable range (less than 65 dB). (Attachment 13)
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There are no sole source aquifers located in Detroit or Wayne County. (Attachment 14)
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Areas potentially associated with wetlands were not observed on the subject property during the site reconnaissance. In addition, review of the National Wetlands Inventory (NWI) Map from the U.S. Fish and Wildlife Service and EGLE Part 302 wetland map, did not identify any wetlands on the subject property. (Attachment 15)
Wild and Scenic Rivers Act Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The National Wild and Scenic Rivers System map (maintained and managed by the Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service and U.S. Forest Service) were reviewed to determine if the subject property is within a designated wild and scenic river area. There are no wild or scenic rivers located within the City of Detroit or Wayne County. (Attachment 16)
HUD HOUSING ENVIRONMENTAL STANDARDS		
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This Project will not have a disproportionately high adverse effect on human health or environment of

		minority populations and/or low-income populations. The buildings will serve low-income and homeless residents. The development is in the City of Detroit, which is made up of 87% ethnic minorities. New facilities and residences are intended to enhance the quality of life for new and existing residents and the community. No persons will be displaced due to this Project. The Project is in compliance with Executive Order 12898. (Attachment 17)
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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 currently zoned R5, Medium Density Residential District and the Project will conform with the current comprehensive plan and zoning requirements. The Project is not anticipated to negatively impact the urban environment and be compatible with surrounding land uses. The surrounding land is zoned multi-family, single-family and commercial. The Project is compatible with the surrounding land use.	
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	2	Review of the national Resources Conservation Service (NRCS) Custom Soil Resource Report for Wayne County, Michigan demonstrates there are three soil types mapped for the site - Colwood-Urban land complex, dense substratum, 0 to 2	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		percent slopes; Shebeon-Urban land-Avoca complex 0 to 4 percent slopes; and Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes. The soil is suitable for the planned new construction based on the Wayne County Soil Survey. Land within the subject property is generally flat. The Project will include new construction of a low-income multi-family apartment building. With the exception of the new construction activities, there are no anticipated changes in the slope. The Project is not located near an erosion sensitive area and will not create slopes. The proposed grading work at the site will allow for very little erosion. A minor increase in storm water flow is expected. The existing municipal storm water system will meet the increased demand and the Project is not expected to increase pollutant loads in the storm water.	
Hazards and Nuisances including Site Safety and Site-Generated Noise	2	Noise intensive construction activities will be limited to the days and hours specified under the City's noise ordinance. These days and hours shall also apply to any servicing of equipment and to the delivery and removal of materials to and from the site. All construction equipment shall be equipped with mufflers and sound control devise (i.e., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust. Stationary equipment shall be placed so as to maintain the greatest possible distance from sensitive uses. There will be adequate on-site parking and lighting for residents and visitors.	
SOCIOECONOMIC			
Employment and Income Patterns	2	There will be a temporary increase in jobs related to the construction of the Project, totaling 56 jobs during the construction period. Other than construction related	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		changes, the Project will create three permanent positions following the construction phase. The three permanent positions will consist of one administrative personnel operating out of the site office, one case management worker operating out of a separate office exclusively for the service provider and one maintenance technician. The Project will not result in a change to employment and income patterns in the area. The Project could be beneficial to local businesses though because there will be an increase in households requiring goods and services.	
Demographic Character Changes / Displacement	2	The Project will not result in physical barriers or reduced access that would isolate a particular neighborhood or population group. The Project will not induce a substantial amount of unplanned growth. Construction would result in temporary construction job growth at the subject property. It is anticipated that construction employees not already living in Detroit would commute from elsewhere rather than relocating to the neighborhood for a temporary construction assignment. Thus, the new construction is not anticipated to generate an unplanned population increase. The permanent positions are Project related activity and will be supported from the administrative budget created for the Project operations in addition to the budget supported by the service provider. The Project involves new construction on a vacant site. No displacement will take place.	
Environmental Justice EA Factor	1	The Project is not likely to negatively effect a community with potential EJ concerns. The community has been meaningfully informed and involved in the Project planning via the means of public outreach. The Project will not expose the community to disproportionate adverse environmental	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		or human health conditions. The Project will not adversely affect areas of local or cultural significance. Based on the Project's location, climate change will have not alter the impact the Project has on marginalized community. There will be not secondary affect or future implications that would have environmental just ramifications.	
COMMUNITY FACILITIES AND SERVICES			
Educational and Cultural Facilities (Access and Capacity)	2	The area is served by the Detroit Public Schools Community District. The district has a little over 50,000 students and 2,000 teachers. There are approximately 106 schools located within the district. The neighborhood is supported by three successful charter schools - located just blocks from the project. Various schools (private and public) and churches are located throughout this submarket. Educational facilities such as the Voyageur Consortium High School, Hope of Detroit Academy, Southwest Detroit Community School, Southwest Detroit Lighthouse Charter School, New Paradigm College Prep, Academy of the Americas, Academy of the Americas at Logan, Escuela Avancemos, and Our Lady Queen Angels School are all located in the Project area. The Conely Branch Library is also les than one mile to the west. The Project will not impact the capacity of any of these schools. Several cultural facilities including the Fox Theater, The Fillmore Detroit, Y-Arts Detroit, Detroit Opera House, Detroit Main Public Library, the Detroit Institute of Art, Michigan Science Center, Museum of Contemporary Art Detroit, Charles H Wright Museum and Detroit Historical Museum are located within the city. The Project is not expected to have an adverse effect on cultural facilities in the area.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
Commercial Facilities (Access and Proximity)	1	No commercial facilities will be negatively affected because of the Project. This Project could potentially increase retail expenditures from new residents in the community resulting in increased commercial sales. Numerous commercial facilities including grocery stores and pharmacies are located within walking distance to the subject property, primarily along Michigan Avenue.	
Health Care / Social Services (Access and Capacity)	2	The City of Detroit also has a large listing of health programs and child services are also available through the state and private groups. Three medical clinics and one urgent care are located within two miles of the Project area and the Detroit Medical Center Campus is 3.5 miles to the east. No health care facilities will be negatively affected because of the Project activities. Social services throughout Detroit are available to residents through a variety of non-profits, government agencies, and other entities throughout Wayne County and the Project Sponsor. Project Clean Slate is one of these services that helps residents expunge criminal convictions and improve access to better employment, housing, and educational opportunities. PCS is a free expungement program for Detroit residents. There is also a variety of youth programs that are available to residents in the Project area such as Grow Detroit's Young Talent, this program offers citywide jobs to young adults between the ages of 14 and 24 for up to 120 hours. A Social Security Office is located across the street from the Project. Social services will not be negatively impacted by this Project.	
Solid Waste Disposal and Recycling (Feasibility and Capacity)	1	The Project will not significantly impact solid waste management facilities and services. Solid waste generated during construction activities will be removed by a private contractor. Solid waste generated	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		by occupants of the development will be removed by the municipal waste hauler. No contracts for waste removal are in place currently. The Project will achieve a National Green Building Standard -Silver Certification.	
Waste Water and Sanitary Sewers (Feasibility and Capacity)	2	The Project will be connected to the City of Detroit Water and Sewerage Department (DWSD) for sanitary sewer service. The sanitary and storm sewers in the Project area are combined. A minor increase in wastewater flow is expected. The existing municipal wastewater system will meet the increased demand.	
Water Supply (Feasibility and Capacity)	2	The Project will be connected to the City of Detroit water system. Water mains were likely installed sometime in the late 1800s/early 1900s and water is supplied to the area via 6-inch and 24-inch water mains under Michigan Avenue. The Project will not adversely impact the current capacity of the city water system. There is sufficient water capacity for the Project, as well as additional development in the area.	
Public Safety - Police, Fire and Emergency Medical	1	The Detroit Police Department covers the city limits of Detroit and has 2,200 officers. Wayne County covers areas outside of the city limits and has a full staff capable of handling a large region. The Southwestern District station is six minutes south and the Eighth Precinct is located seven minutes east. The Project will have no adverse effect in the need for police services due to the additional inhabitants. The Project will have no adverse effect in the need for fire department services due to the additional inhabitants. The DFD operates 47 fire companies out of 36 fire stations located throughout the city, with a total sworn personnel complement of 1000 members with 821 firefighters in all ranks. The Detroit Fire Department Ladder 22 is three minutes northwest and Engine Company 34	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		is five minutes to the north. The Project will have no adverse effect in the need for fire department services due to the additional inhabitants. The City of Detroit has over 900 licensed individuals in the Detroit Fire Department providing care at the MFR, EMT, and Paramedic level, staffing over sixty medically licensed Fire and EMS vehicles, responding to over 120,000 calls for service annually. Superior Ambulance Detroit Station is seven minutes southwest and Hart Medical EMS is eight minutes southwest. The Detroit Fire Engine 39 Medic 1 is 12 minutes northeast. The Project will have no adverse effect in the need for emergency medical services due to the additional inhabitants. City of Detroit Fire Department (313) 596-2920/City of Detroit Police Department (313) 267-4639 City of Detroit Emergency Medical Services, 313.596.5180	
Parks, Open Space and Recreation (Access and Capacity)	2	Detroit Parks and Recreation Department maintains 309 parks and 11 recreation centers. Many classes are offered at the recreation's centers and outdoor plazas for youth, seniors, and adults. The Project is located approximately 8.0 miles away from Belle Isle in Detroit. The area is surrounded by the Detroit River and borders the country of Canada. This area has a local beach, conservatory, nature center, and lighthouse among other features. Two community centers are located within three miles of the Project area. Numerous parks and playgrounds are in the general vicinity including Saint Hedwig Park, Dingeman Park, Wingle Park, Atkinson Park, Malish Playground, and Rudolph Szafraniec Playground, Roberto Clemente Recreation Center, and Patton Recreation Area/Park. The Project is not located on currently open or recreation space. This Project is not expected to have any impact on parks or	

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		open spaces. Detroit Parks and Recreation Department maintains 309 parks and 11 recreation centers. Many classes are offered at the recreation's centers and outdoor plazas for youth, seniors, and adults. The Project is located approximately 8.0 miles away from Belle Isle in Detroit. The area is surrounded by the Detroit River and borders the country of Canada. This area has a local beach, conservatory, nature center, and lighthouse among other features. Two community centers are located within 3 miles of the Project area. Numerous parks and playgrounds are in the general vicinity including Saint Hedwig Park, Dingeman Park, Wingle Park, Atkinson Park, Malish Playground, and Rudolph Szafraniec Playground, Roberto Clemente Recreation Center, and Patton Recreation Area/Park. The Project is not located on currently open or recreation space. This Project is not expected to have any impact on recreation.	
Transportation and Accessibility (Access and Capacity)	2	Public transportation is provided by the Detroit Department of Transportation (DDOT) and provides access throughout Detroit. A public bus stop is located 400 feet from the subject property. The People Mover is an elevated monorail transportation system that travels in a loop throughout the downtown area. Additional transportation along a limited portion of Woodward Avenue is provided by the Q-Line. Train services are provided by Amtrak and nearby stations are found in Ann Arbor, Birmingham, Dearborn, Detroit, Pontiac, and Royal Oak. The Project is not expected to have an adverse effect on transportation in the area.	
NATURAL FEATURES			
Unique Natural Features /Water Resources	2	The City of Detroit is a highly urbanized area. Construction activities will be limited to the Property and none of the surrounding properties will be affected.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Additionally, there are no unique natural features on the Property. The Project will not have an adverse effect on any unique natural features within Detroit. The Project will not have an adverse effect on any water resources. Construction activities will be limited to the Property. Additionally, there are no water resources near the Property. The City of Detroit provides municipal water service to the Project area and there are no sole source aquifers in the State of Michigan.	
Vegetation / Wildlife (Introduction, Modification, Removal, Disruption, etc.)	2	The Project is not anticipated to impact unique natural habitats, ecosystems, or any threatened and endangered wildlife. The location of the Project does not support any critical habitats and is within a highly urbanized location.	
Other Factors 1		No other natural features were identified	
Other Factors 2		No other natural features were identified	
CLIMATE AND ENERGY			
Climate Change	2	Given the scope and location of the Project, the Project is not likely to have an adverse effect regarding climate impact on resident's safety, wellbeing and Property. The Project is not within a floodplain or coastal area where hurricanes, rising sea levels, extreme heat or drought, wildfires, or landslides are a significant factor. The Project area does occasionally have periods of extreme cold, but these a short-term and sufficient heating will be provided utilizing energy efficient systems to reduce the carbon footprint.	
Energy Efficiency	1	The Project will meet current State and local codes concerning energy consumption. Other than natural gas and/or coal used to generate the electricity for the Project, it is not anticipated to have a substantial effect on the use, extraction, or depletion of a natural resource. Energy utilization during construction is expected to be consistent with typical construction	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		equipment. The location will be served by a local utility provider.	

Supporting documentation

[Social Services.pdf](#)

[Transportation - bus stops.pdf](#)

[Police.pdf](#)

[Fire Stations.pdf](#)

[Emergency medical.pdf](#)

[Retail - Commercial.pdf](#)

[Schools and Cultural.pdf](#)

[NEPAssist_Hospitals.pdf](#)

Additional Studies Performed:

Benjamin O. Davis Veterans Village Market Update, Real Property Research Group, dated April 21, 2019. Phase I Environmental Site Assessment (ESA), 4777 East Outer Drive, Detroit, Michigan, PM Environmental Inc., dated June 15, 2020.

Field Inspection [Optional]: Date and completed

by:

David Balash

4/24/2020 12:00:00 AM

[3 - Onsite photos.pdf](#)

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

1. U.S. Fish and Wildlife Service (FWS) National Wetlands Inventory (NWI) Map, referenced May 2020. 2. Part 303 Final Wetlands Inventory Map, Michigan Department of Environment, Great Lakes, and Energy (EGLE), referenced June 2020. 3. National Wild and Scenic Rivers System map, Bureau of Land Management, National Park Service, U.S. Fish and Wildlife Service, and U.S. Forest Service, referenced May 2020. 4. U.S. Fish and Wildlife Service online Coastal Barrier Resources System Mapper, referenced May 2020. 5. John H. Chafee Coastal Barrier Resources System Map - Michigan, referenced June 2020. 6. Designated Sole Source Aquifers Map, U.S. Environmental Protection Agency (EPA), referenced May 2020. 7. U.S. Fish and Wildlife (FWS) Federally Listed Threatened, Endangered, Proposed, and Candidate Species List of Michigan, referenced May 2020. 8. National Ambient Air Quality Standards (NAAQS) Attainment Status Map, referenced May 2020. 9. Ms. Breanna Bukowski of EGLE - Air Quality Division, May 20, 2020. 10. Radon Zones Map, U.S. Environmental Protection Agency (EPA), referenced May 2020. 11. Percentage of Elevated Radon Test Results by County Map, EGLE, referenced May 2020. 12.

National Park Service (NPS) National Register of Historic Places, referenced May 2020. 13. Michigan State Historic Preservation Office (SHPO) National Register of Historic places in Michigan, referenced May 2020. 14. U.S. Department of Commerce Urbanized Area Outline Map of Wyoming, Michigan, referenced May 2020. 15. U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) Custom Soil Resource Report for Kent County, Michigan, referenced May 2020. 16. NEPAAssist: www.nepassisttool.epa.gov, referenced May 2020. 17. FEMA Flood Map Service Center online mapper, referenced May 2020. 18. Wayne County Coastal Zone Management Map, referenced May 2020. 19. Environmental Justice Screening and Mapping Tool, EPA, referenced May 2020. 20. PM Environmental, Inc. MSHDA Phase I ESA dated June 2020. 21. PM Environmental, Inc. Desktop Noise Assessment dated June 2020.

List of Permits Obtained:

There are currently no permits obtained. All required permits will be obtained prior to construction.

Public Outreach [24 CFR 58.43]:

A number of organizations within the area were contacted about the Project and numerous positive responses and Letters of Support were received beginning in 2017 and continuing into 2020 through meetings and/or telephone/email communications. Responses were received from Patricia Bosch - Nortown CDC (January and February 2019), Quincy Jones - Osborn Neighborhood Alliance (May 2018, February and September 2019), Alex Allen and Nicole Perry - Detroit Eastside Community Collaborative and The Milbank Conner Creek Greenway (March 2019), Ronald Stallworth - External Affairs of the Fiat Chrysler Viper Plant (March and April 2019), Daniel Czaplicki and Jessica Geracz - The Salvation Army (February 2017-March 2019), Bishop Anthony Russell - Detroit Community Collaborative and The MAN Network (2017 thru June 2020), Rashida Colley - VA Domiciliary (ongoing), Councilman Scott Benson - City of Detroit (2019), Mr. & Mrs. Warren - It Takes a Village Adult Day Care (ongoing), and residents in the area from Connor Creek I, NDNI Senior Housing, and senior buildings located on the hospital campus. All historical, local and federal contacts on City of Detroit 2023 Interest Parties List were sent a copy of the Notice of Intent to Request for Release of Funds to use HUD funding for the project and were asked to comment on the project. Additionally, the EA was published in the Detroit News and the Detroit Free Press for public comment.

Cumulative Impact Analysis [24 CFR 58.32]:

The cumulative impacts anticipated for this Project are primarily associated with increased residential density such as increased traffic and use of resources and services (roads, schools, police, etc.). The Project is consistent with the City's master plan and anticipated growth of the immediate and surrounding neighborhoods and therefore not considered detrimental. The Project includes conversion of vacant land and new construction. The Project will have many benefits as outlined earlier, as well as reduce blight, increase safety in the area, convert vacant land, and provide housing to an underserved area. Other cumulative impacts include generation and consumption of materials during construction and waste generated during construction.

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

The Project is a new construction of a supportive housing development; other sites were not identified as the Sponsor was already in possession of the land that was being underused. The only alternative to the proposed Project would be not building the new construction on the current vacant land and parking lot. This alternative would not provide housing for the individuals in need in the area. There is a strong demand for affordable, veteran housing in the area.

No Action Alternative [24 CFR 58.40(e)]

The Project is a new construction of a supportive housing development; other sites were not identified as the Sponsor was already in possession of the land that was being underused. The only alternative to the proposed Project would be not building the new construction on the current vacant land and parking lot. This alternative would not provide housing for the individuals in need in the area. There is a strong demand for affordable, veteran housing in the area.

Summary of Findings and Conclusions:

Based on the information provided, there is a need for affordable housing for the homeless veterans in this area of Detroit. The Project will not adversely impact the City of Detroit or neighborhoods surrounding the site. The activity is compatible with the existing uses in the area and will have minimal impact on existing resources or services in the area. No adverse impacts have been identified with the Project.

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
Explosive and Flammable Hazards	A 30,000-gallon liquid oxygen aboveground storage tank (AST) is located approximately 150 feet southeast of the subject property.	N/A	The AST will be removed prior to construction activities on the subject property. (Mitigation Plan attached)	
Section 106 Compliance Steps	Prior to the start of any work, final construction drawings, a scope of work, and detail photos of the proposed work items shall be submitted to the Preservation Specialist for review and approval; and, although no archaeological sites were found on file, during ground disturbing activities, if artifacts or bones are discovered, work will be halted and the Preservation Specialist will be contacted immediately for further guidance on how to proceed.	N/A	Notification of Preservation Specialist (Mitigation Plan attached)	

Project Mitigation Plan

See attached Mitigation Plan document

[BOD Model Mitigation Plan.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

Screen Summary

Compliance Determination

The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements. (Attachment 4)

Supporting documentation

[4 - Airport map.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

Coastal Barrier Resources

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

Compliance Determination

Review of the John H. Chafee Coastal Barrier Resources System Map and the U.S. Fish and Wildlife Service online Coastal Barrier Resources System mapper, documents the subject property is not located within a designated coastal zone boundary.
(Attachment 5)

Supporting documentation

[5 - Costal Barriers.pdf](#)

Are formal compliance steps or mitigation required?

Yes

✓ No

Flood Insurance

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

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

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

Yes

Screen Summary

Compliance Determination

According to the Federal Emergency Management Agency (FEMA) floodplain map, dated February 2, 2012 (Panel Number 26163C0125E), the subject property is not located within the 100-year flood zone. Furthermore, topographical features present in the subject property area are not representative of a flood plain. (Attachment 6)

Supporting documentation

[6 - Flood.pdf](#)

Are formal compliance steps or mitigation required?

Yes

- ✓ No

Air Quality

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

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

☒ Yes

☐ No

Screen Summary

Compliance Determination

The entire state of Michigan is designated as attainment for carbon monoxide, lead, nitrogen dioxide, and particulate matter, PM10. Wayne County is within a larger area in southeast Michigan for ozone nonattainment and the southwestern portion of Detroit is within a sulfur dioxide nonattainment area. The Project was reviewed by the Michigan Department of Environment, Great Lakes, and Energy, EGLE, for conformance with the State Implementation Plan ,SIP. EGLE determined the Project should not exceed the de minimis levels included in the federal general conformity requirements and therefore, does not require a detailed conformity analysis. (Attachment 7)

Supporting documentation

[7 - Air Quality.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

Screen Summary

Compliance Determination

Review of the Wayne County Coastal Zone Management Boundary and Coastal Zone Management Area map documents the subject property is not located within a designated Coastal Zone Management area. (Attachment 8)

Supporting documentation

[8 - Coastal Zone Mgt.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)

Endangered Species

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

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

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

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

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

Screen Summary

Compliance Determination

Supporting documentation

[10 - Threatened Endangered Species.pdf](#)

Are formal compliance steps or mitigation required?

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

Screen Summary

Compliance Determination

Supporting documentation

[11 - Explosive and Flammable Hazards.pdf](#)

Are formal compliance steps or mitigation required?

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

Screen Summary

Compliance Determination

Supporting documentation

[12 - Farmland Protection.pdf](#)

Are formal compliance steps or mitigation required?

Floodplain Management

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

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

55.12(c)(3)

55.12(c)(4)

55.12(c)(5)

55.12(c)(6)

55.12(c)(7)

55.12(c)(8)

55.12(c)(9)

55.12(c)(10)

55.12(c)(11)

None of the above

Screen Summary

Compliance Determination

Supporting documentation

[6 - Flood\(2\).pdf](#)

Are formal compliance steps or mitigation required?

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

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

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

Screen Summary

Compliance Determination

Supporting documentation

[13 - Noise.pdf](#)

Are formal compliance steps or mitigation required?

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

Screen Summary

Compliance Determination

Supporting documentation

[14 - Sole Source Aquifers.pdf](#)

Are formal compliance steps or mitigation required?

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

Screen Summary

Compliance Determination

Supporting documentation

[15 - Wetlands.pdf](#)

Are formal compliance steps or mitigation required?

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

Supporting documentation

[16 - Wild and Scenic Rivers.pdf](#)

Are formal compliance steps or mitigation required?

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

Screen Summary

Compliance Determination

Supporting documentation

[17 - Environmental Justice.pdf](#)

Are formal compliance steps or mitigation required?



U.S. Department of Housing and Urban Development
 451 Seventh Street, SW
 Washington, DC 20410
www.hud.gov
espanol.hud.gov

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

Project Information

Project Name: Benjamin-O.-Davis-Veterans-Village

HEROS Number: 900000010309439

Project Location: 4777 Outer Drive, Detroit, MI

Additional Location Information:

The property consists of the northwestern 2.69-acres of 4777 Outer Drive East, Detroit, Michigan. The property is currently occupied by a parking lot associated with the Connor Creek Health Center campus located southeast of the subject property.

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

The subject property consists of the northwestern 2.69-acres of 4777 Outer Drive East, Detroit, Michigan. The property is currently occupied by a parking lot associated with the Connor Creek Health Center campus located southeast of the subject property. The proposed development, hereafter the Project, includes construction of a two-story apartment building for the homeless with a veteran's preference and containing 50 one-bedroom apartments. The L-shaped building with a total of 48,557 square feet will be located in the northwest portion of the property in the northern portion of the Connor Creek Health Center campus. Amenities offered will include an interior camera system, administrative office, two supportive service offices, an elevator, five handicap accessible units, a community room, dining room, kitchen, resident lounge, barber shop, exercise room, indoor bike rack and outdoor patio, along with access to a dog park. The facade materials will consist of masonry and fiber cement siding. The roof will be pitched and finished in asphalt shingles. Windows will typically consist of Fibrex single-hung and fixed units. The surface parking areas and drive aisles will be located to the east and south of the apartment building. New natural gas, sanitary, storm, and water lines will be installed as part of the development as well as installation of new sidewalks, removal of existing pavement and landscaping, and installation of new landscape plantings. The project originally received an Authority to Use Grant Funds for 25 Detroit Housing Commission project-based vouchers on May 24, 2021. This project is for \$300,000 in HUD HOME-ARP funding and \$1,425,000 in ARPA funding. This review is valid for up to five years.

Funding Information

Grant Number	HUD Program	Program Name
MI001	Public Housing	Project-Based Voucher Program
M-21-MP-26-0202	Community Planning and Development (CPD)	HOME American Rescue Plan (HOME-ARP)

Benjamin-O.-Davis-Veterans-
Village

Detroit, MI

900000010309439

Estimated Total HUD Funded Amount: \$1,725,000.00**Estimated Total Project Cost [24 CFR 58.2 (a) (5)]:** \$11,540,067.00**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.

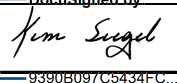
Law, Authority, or Factor	Mitigation Measure or Condition
Explosive and Flammable Hazards	A 30,000-gallon liquid oxygen aboveground storage tank (AST) is located approximately 150 feet southeast of the subject property.
Section 106 Compliance Steps	Prior to the start of any work, final construction drawings, a scope of work, and detail photos of the proposed work items shall be submitted to the Preservation Specialist for review and approval; and, although no archaeological sites were found on file, during ground disturbing activities, if artifacts or bones are discovered, work will be halted and the Preservation Specialist will be contacted immediately for further guidance on how to proceed.

Project Mitigation Plan

See attached Mitigation Plan document

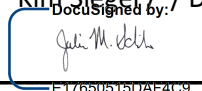
[BOD Model Mitigation Plan.pdf](#)**Determination:**

<input checked="" type="checkbox"/>	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
<input type="checkbox"/>	Finding of Significant Impact

Preparer Signature:


DocuSigned by:
9390B097C5434FC...
Date: 4/24/2023**Name / Title/ Organization:**

Kim Siegel / / DETROIT

Certifying Officer Signature:


DocuSigned by:
E17650515DAF4C9...
Date: 4/25/2023**Name/ Title:** Julie Schneider, Director, Housing and Revitalization Department

Benjamin-O.-Davis-Veterans-
Village

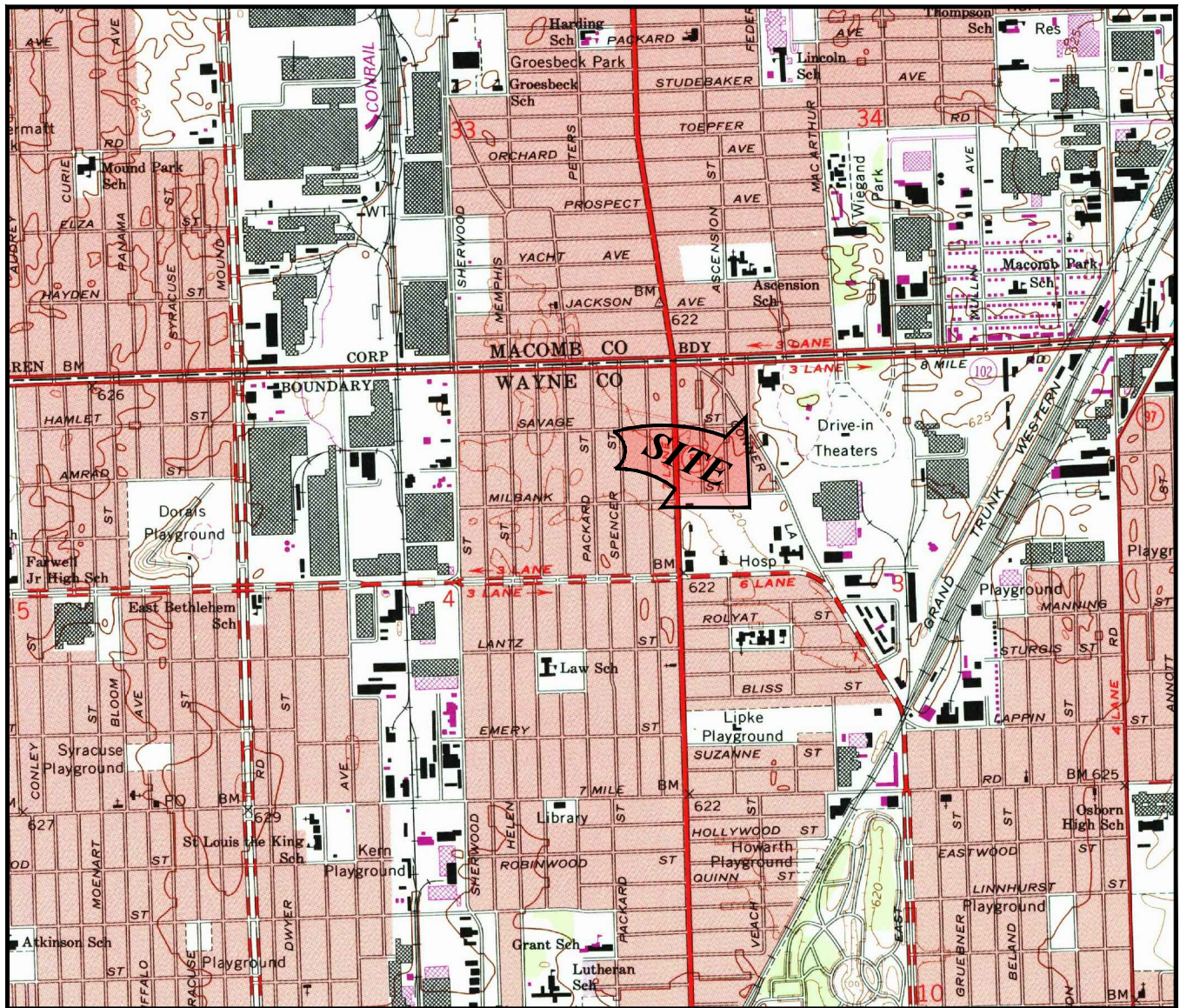
Detroit, MI

900000010309439

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environment Review Record (ERR) for the activity / project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

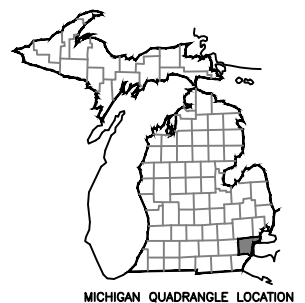
Benjamin O. Davis Veterans Village
PM Environmental
March 17, 2023

Response Activity or Continuing Obligation	Required Activities	Party Responsible for Completing Activity	Timing of Activity	Cost	Required Follow-up or Reporting
Removal of AST	<ul style="list-style-type: none"> Remove 30,000-gallon above ground storage tank (AST) from south adjoining property (located approximately 150 feet from the subject property). 	Owner/Developer	Prior to construction	\$0 (According to the developer, the AST is leased and will be removed at no cost by the oxygen company)	Provide removal documents/photos
Section 106 – Conditional No Adverse Effect Requirements	<ul style="list-style-type: none"> Prior to the start of any work, final construction drawings, a scope of work, and detail photos of the proposed work items shall be submitted to the Preservation Specialist for review and approval; and, Although no archaeological sites were found on file, during ground disturbing activities, if artifacts or bones are discovered, work will be halted and the Preservation Specialist will be contacted immediately for further guidance on how to proceed. Although no archaeological sites were found on file, during ground disturbing activities, if artifacts or bones are discovered, work will be halted and the Preservation Specialist will be contacted immediately for further guidance on how to proceed. 	<p>General Contractor</p> <p>General Contractor</p>	<p>Prior to Construction</p> <p>At any time</p>	Not Applicable	<p>Submit work to Preservation Specialist.</p> <p>Notify Preservation Specialist</p>



WAYNE COUNTY

SCALE 1:24,000



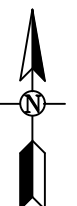
MICHIGAN QUADRANGLE LOCATION

FIGURE 1

PROPERTY VICINITY MAP

USGS, 7.5 MINUTE SERIES

HIGHLAND PARK, MI QUADRANGLE, 1968. PHOTO REVISED 1983.



**Environmental
& Engineering
Services**

PROJ:
BENJAMIN O. DAVIS VETERANS
VILLAGE
4777 EAST OUTER DRIVE
DETROIT, MI

THIS IS NOT A LEGAL
SURVEY

VERIFY SCALE

0 2,000'

IF NOT 1" ON THIS
SHEET, ADJUST
SCALES ACCORDINGLY.

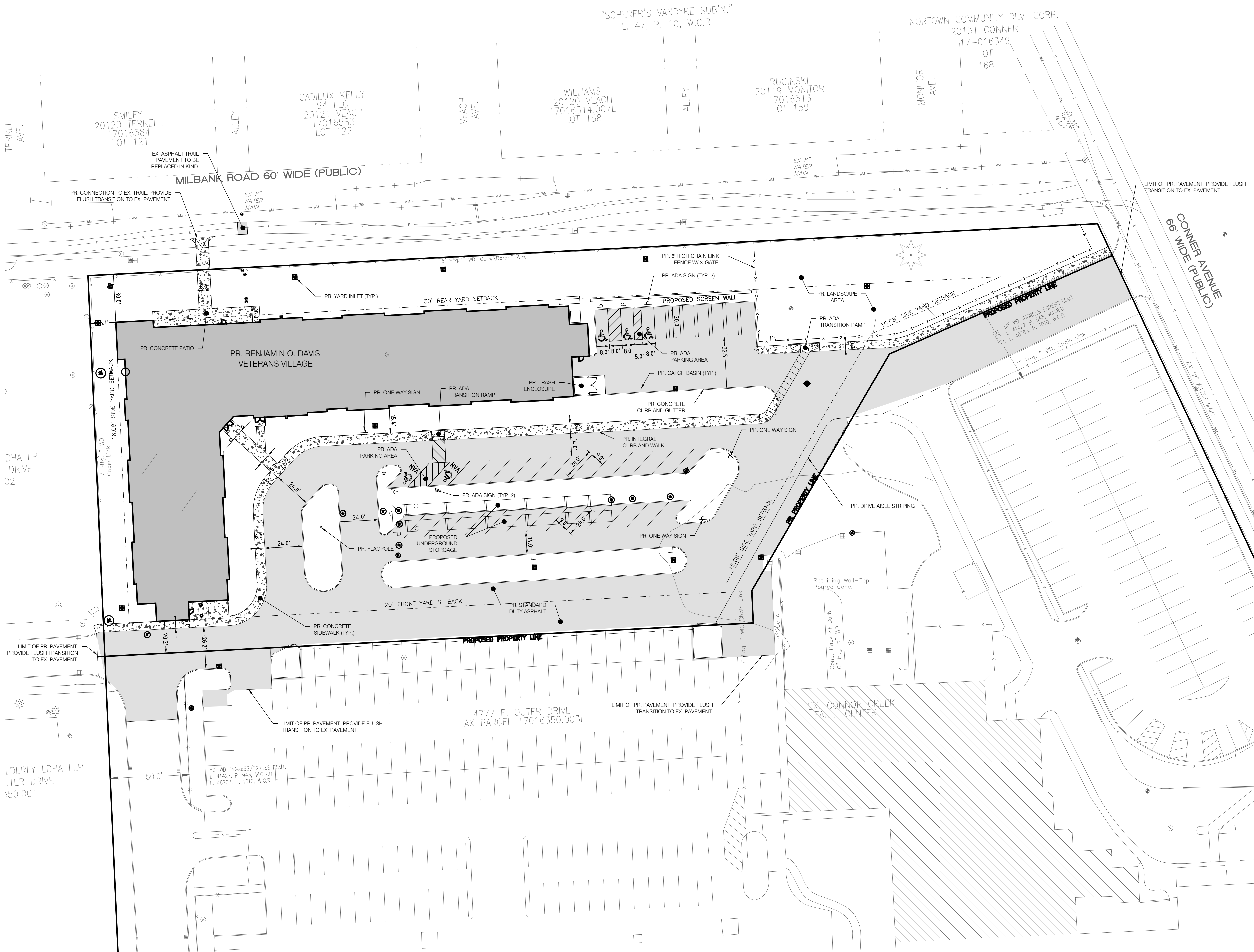
DRN BY: CS

DATE: 4/24/2020

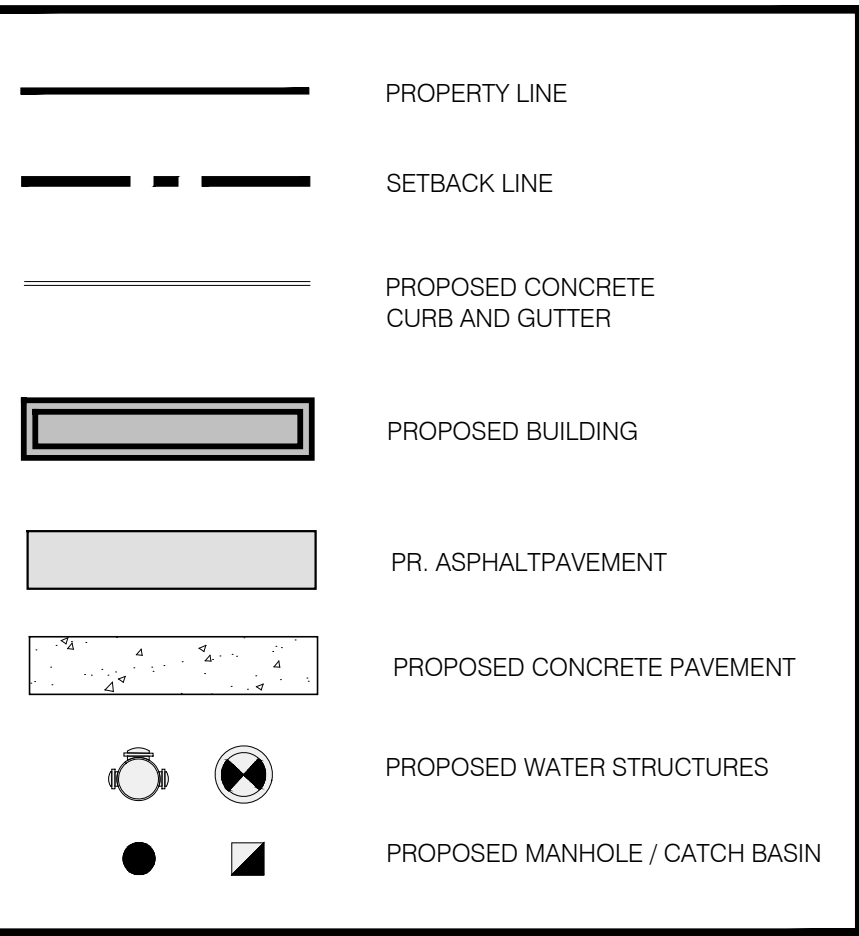
CHKD BY: JS/DB

SCALE: 1" = 2,000'

FILE NAME:
01-6232-0-006F01R00



SITE LEGEND



SITE NOTES

1. ALL LIGHTING SHALL BE SHIELDED AND DIRECTED DOWNWARD AND AWAY FROM ADJACENT PROPERTIES. LIGHTING SHALL MEET REQUIREMENTS OF THE LOCAL ZONING ORDINANCE. SEE LIGHTING PLAN FOR ADDITIONAL INFORMATION.
2. GROUND MOUNTED TRANSFORMERS AND ROOF MOUNTED MECHANICAL EQUIPMENT SHALL BE SCREENED AS REQUIRED IN THE LOCAL ZONING ORDINANCE.
3. ALL SIGNS TO MEET REQUIREMENTS OF CITY CODE OF ORDINANCES AND BE APPROVED BY BUILDING DEPARTMENT
4. PARKING SPACES SHALL BE STRIPPED PER LOCAL ZONING ORDINANCE

ZONING SUMMARY

ZONING DISTRICT:		RS
USE:		MULTIPLE FAMILY
BUILDING FOOTPRINT:	24,854 SF	
BUILDING GROSS AREA:	48,557 GSF	
BUILDING HT.:	2 STORIES	
QUANTITY OF UNITS:	50	
DESCRIPTION	REQUIRED	PROVIDED
LOT AREA (MIN.)	7,000 SF	117,035 SF
MIN. WIDTH	70'	627.25'
SETBACKS		
FRONT	20'	28.2'
REAR	30'	30.0'
SIDE		
FORMULA "A" **	16.08'	16.10'
MAX. HT.	NONE	41.75'
MAX. F.A.R. **	1.5	0.42
OPEN SPACE	0.85 RSR 8,294 SF	21,000 SF +
PARKING	1.25/D.U. = 63 SPACES	39 SPACES
OFF STREET LOADING	(1) 12X35 SPACE	(1) 12X35 SPACE

**FORMULA A' CALCULATION

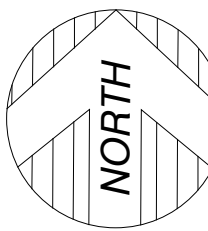
$$\frac{157.66 + 2(41.75)}{15} = 16.08'$$

**F.A.R. CALCULATION

$$\frac{\text{BUILDING AREA}}{\text{LOT AREA}} = \frac{48,557}{115,678} = 0.42$$

SITE CONDITIONS

TOTAL DEVELOPMENT AREA = 117,036 SF (± 2.88 AC)
TOTAL CONSTRUCTION ACTIVITY / REGULATED AREA = 128,529 SF (± 2.95 AC)

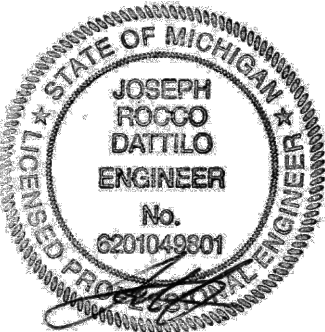


SITE LAYOUT PLAN
SCALE: 1"= 30'

S.M.
ENGINEERS

CIVIL ENGINEER/ SURVEY /
LAND PLANNER /
LANDSCAPE ARCHITECT

1939 LINCOLNSHIRE DR.
ROCHESTER HILLS, MI 48309
T: 248.835.3553



6	ENGINEERING SET	11.17.2022
5	ENGINEERING SET	09.15.2022
4	SPA SUBMISSION	09.09.2022
3	ENGINEERING SET	08.23.2022
2	ENGINEERING SET	08.05.2022
1	SPA SUBMISSION	07.15.2022
NO.	ISSUE	DATE

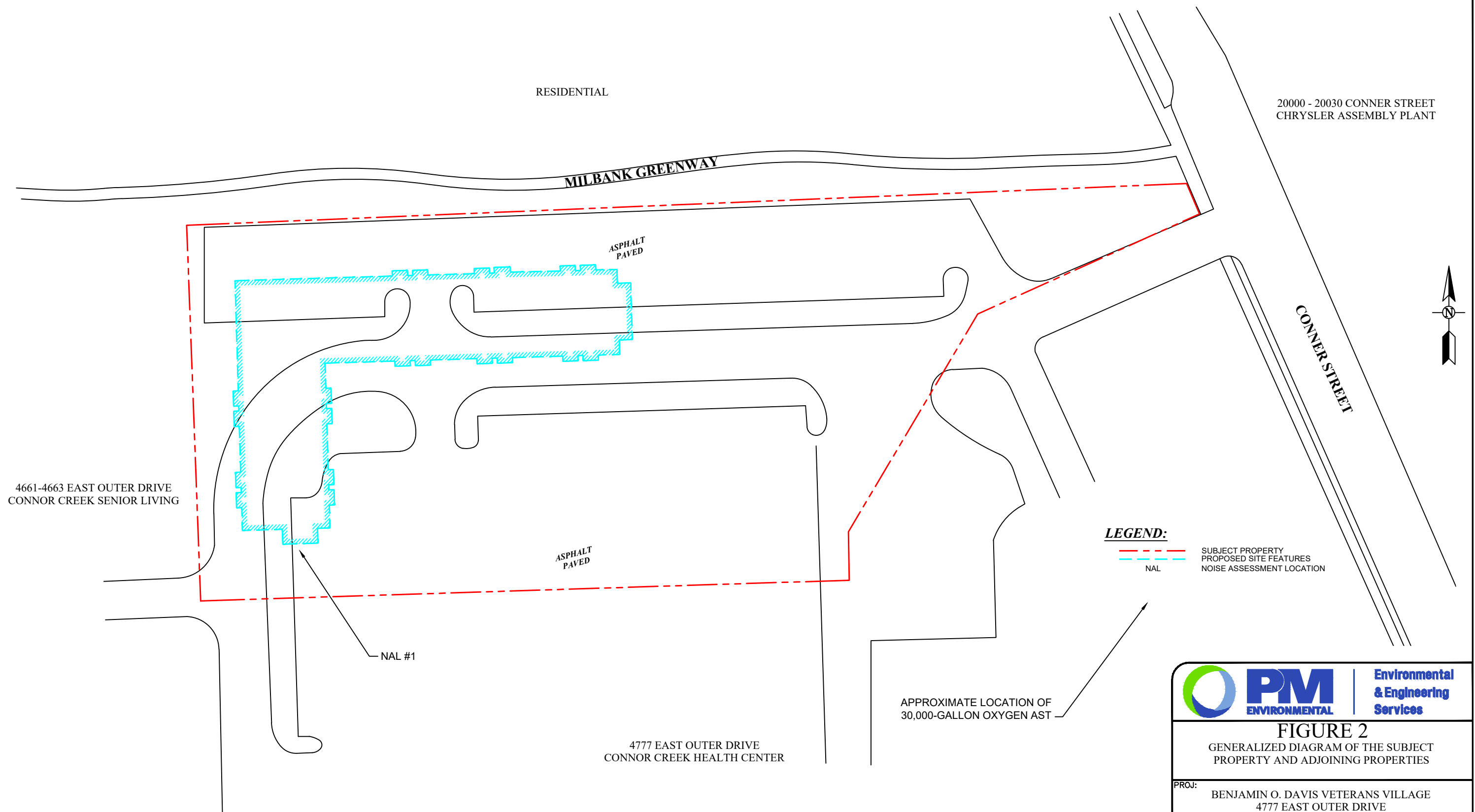
BENJAMIN O. DAVIS
VETERANS VILLAGE


CITY OF DETROIT
WAYNE COUNTY, MICHIGAN

SITE LAYOUT
PLAN

C3.0

22017



**PM**
ENVIRONMENTAL

Environmental
& Engineering
Services

FIGURE 2
GENERALIZED DIAGRAM OF THE SUBJECT
PROPERTY AND ADJOINING PROPERTIES

PROJ: BENJAMIN O. DAVIS VETERANS VILLAGE
4777 EAST OUTER DRIVE
DETROIT, MI

THIS IS NOT A LEGAL SURVEY	DRN BY: CS	DATE: 4/24/2020
VERIFY SCALE	CHKD BY: JS/DB	SCALE: 1" = 60'
0 60'	FILE NAME: 01-6232-0-006F00R00	

IF NOT 1" ON THIS
SHEET, ADJUST
SCALES ACCORDINGLY.



Photographs From Site Reconnaissance
PM Project No. 01-6232-2-0001
Location: 4777 East Outer Drive, Detroit, Michigan

Photograph 1



The subject property, facing north

Photograph 2



The subject property, facing east



Photographs From Site Reconnaissance
PM Project No. 01-6232-2-0001
Location: 4777 East Outer Drive, Detroit, Michigan

Photograph 3



The subject property, facing south

Photograph 4



The subject property, facing west



Photographs From Site Reconnaissance
PM Project No. 01-6232-2-0001
Location: 4777 East Outer Drive, Detroit, Michigan

Photograph 5



The north adjoining residential properties

Photograph 6



The east adjoining property, 20000-20030
Conner Street



Photographs From Site Reconnaissance
PM Project No. 01-6232-2-0001
Location: 4777 East Outer Drive, Detroit, Michigan

Photograph 7



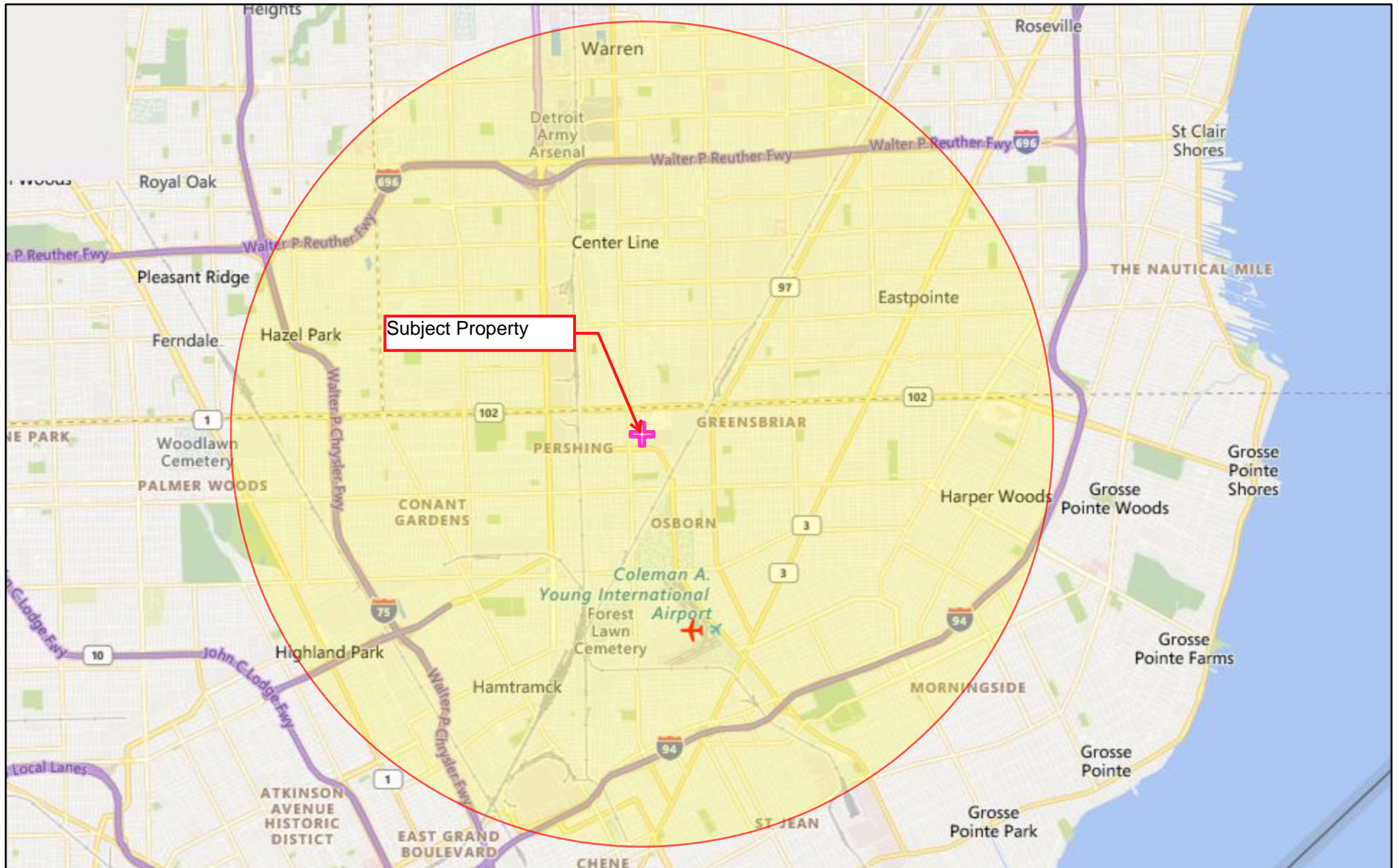
The south adjoining property, also addressed
as 4777 East Outer Drive

Photograph 8



The west adjoining property, 4661-4663 East
Outer Drive

Airport Map

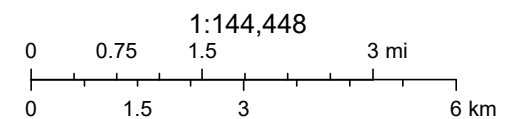


May 11, 2020

 Project Buffer

 Airport Points

 Search Result (point)

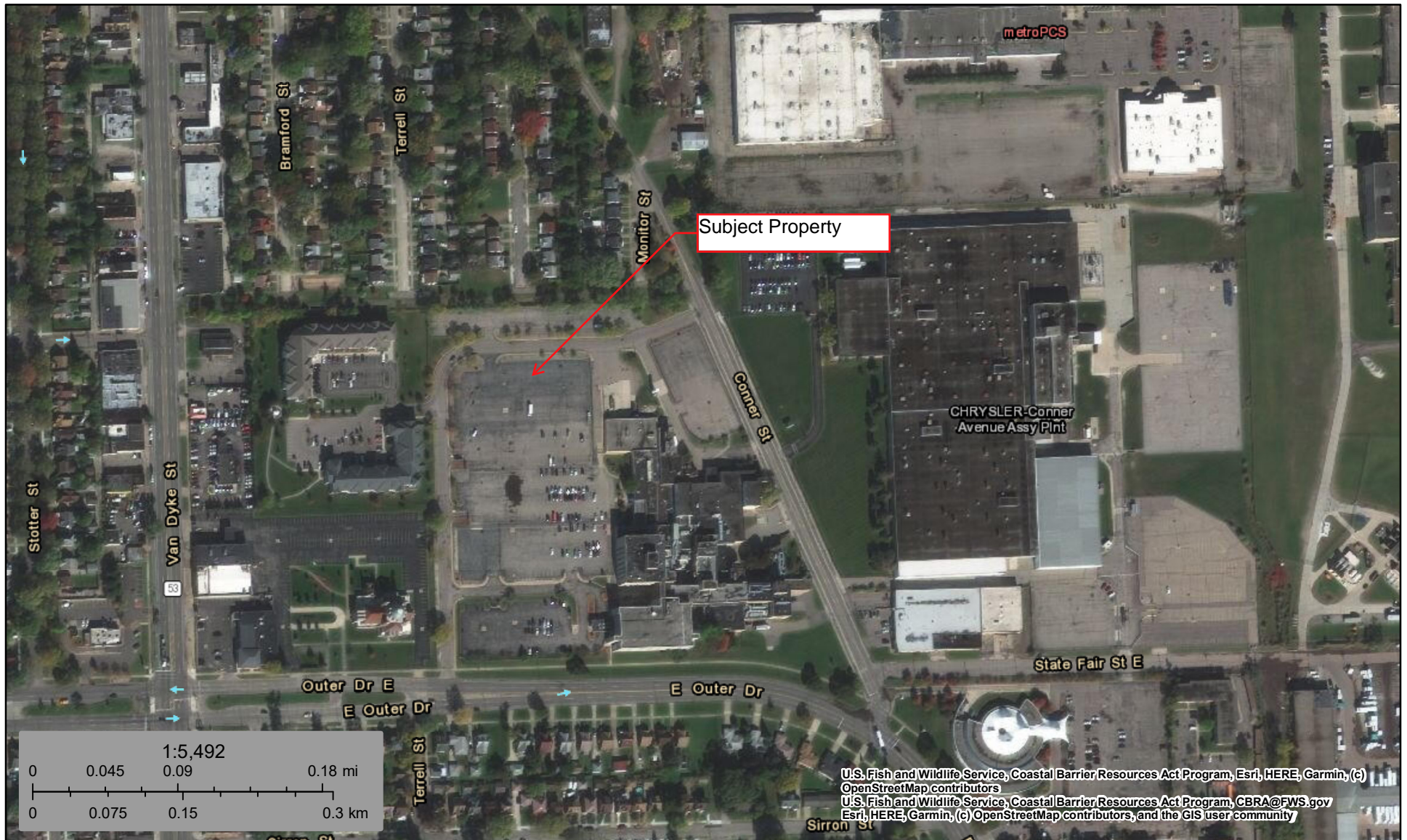


© 2020 Microsoft Corporation © 2020 HERE, EPA OEI



U.S. Fish and Wildlife Service Coastal Barrier Resources System

CBRS



May 5, 2020

 CBRS Buffer Zone  System Unit

CBRS Units

 Otherwise Protected Area

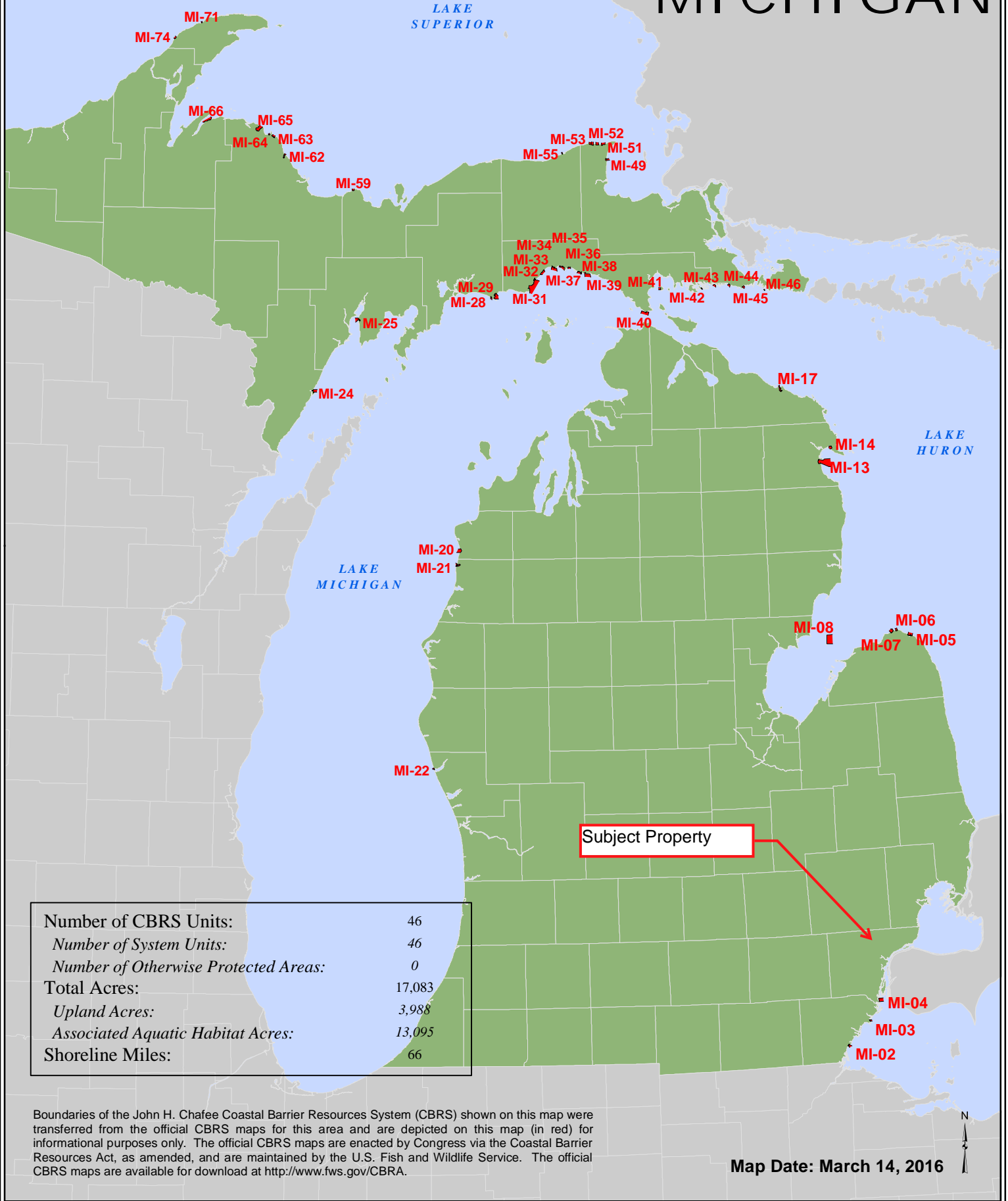
This map is for general reference only. The Coastal Barrier Resources System (CBRS) boundaries depicted on this map are representations of the controlling CBRS boundaries, which are shown on the official maps, accessible at <https://www.fws.gov/cbra/maps/index.html>. All CBRS related data should be used in accordance with the layer metadata found on the CBRS Mapper website.

The CBRS Buffer Zone represents the area immediately adjacent to the CBRS boundary where users are advised to contact the Service for an official determination (<http://www.fws.gov/cbra/Determinations.html>) as to whether the property or project site is located "in" or "out" of the CBRS.

CBRS Units normally extend seaward out to the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS mapper.

JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM

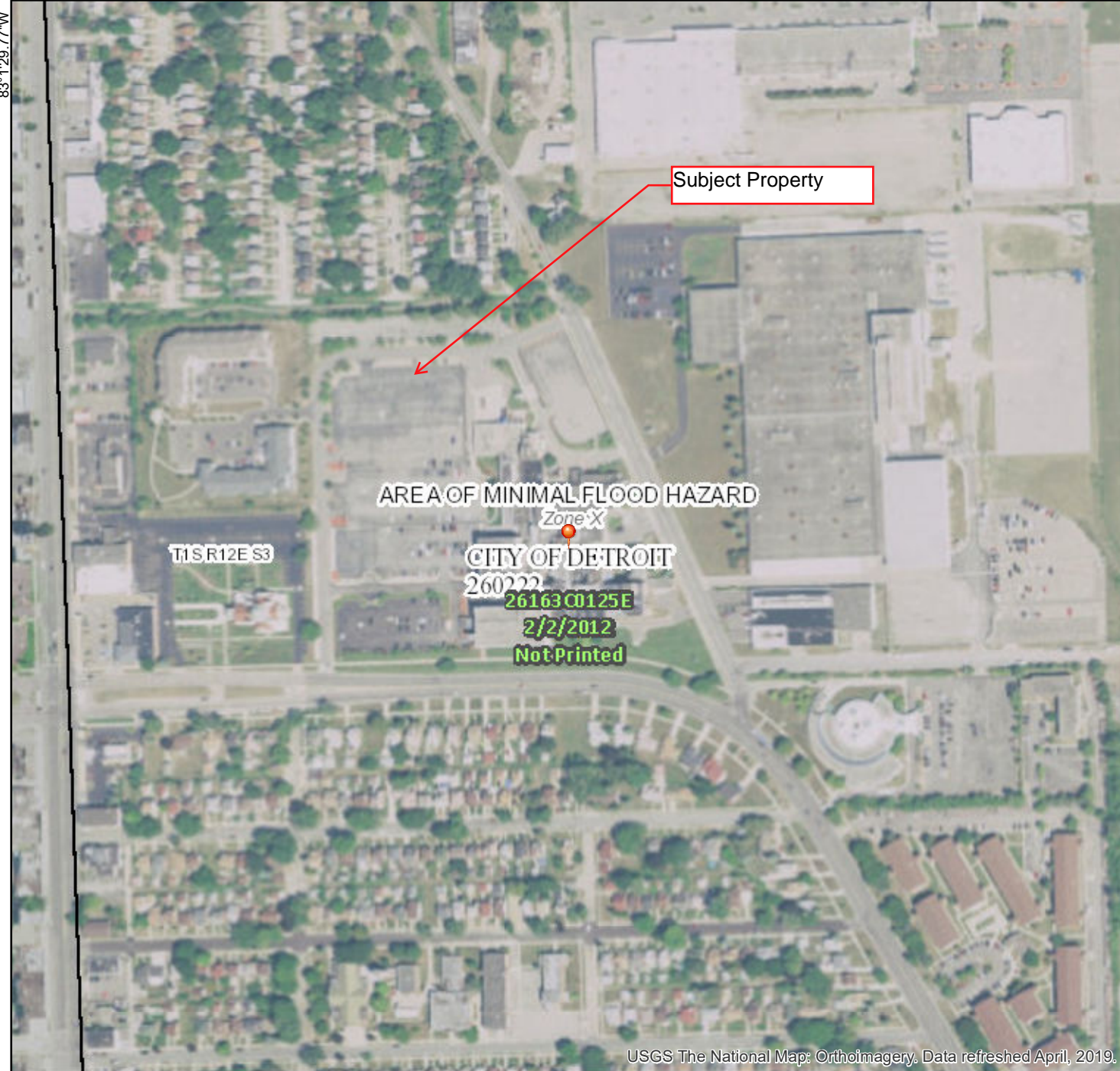
MICHIGAN



National Flood Hazard Layer FIRMette



42°26'45.75"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

USGS The National Map: Orthoimagery, Data refreshed April, 2019.

42°26'19.20"N

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
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5
		513 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



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

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

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **5/5/2020 at 1:32:36 PM** 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.



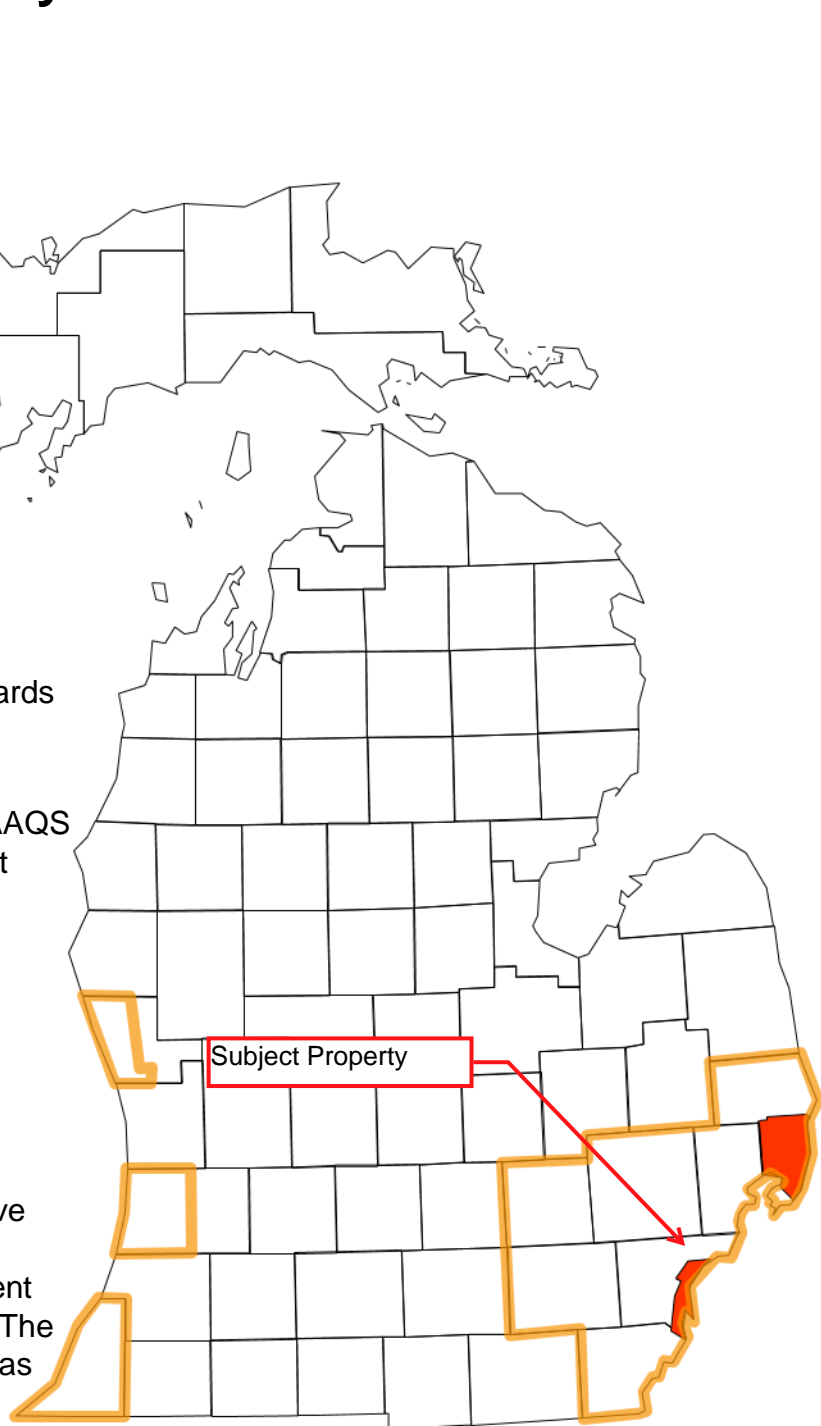
Attainment Status for the National Ambient Air Quality Standards

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

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

- Carbon Monoxide
- Lead
- Nitrogen Dioxide
- Particulate Matter

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



LEGEND



Sulfur Dioxide
Nonattainment Area



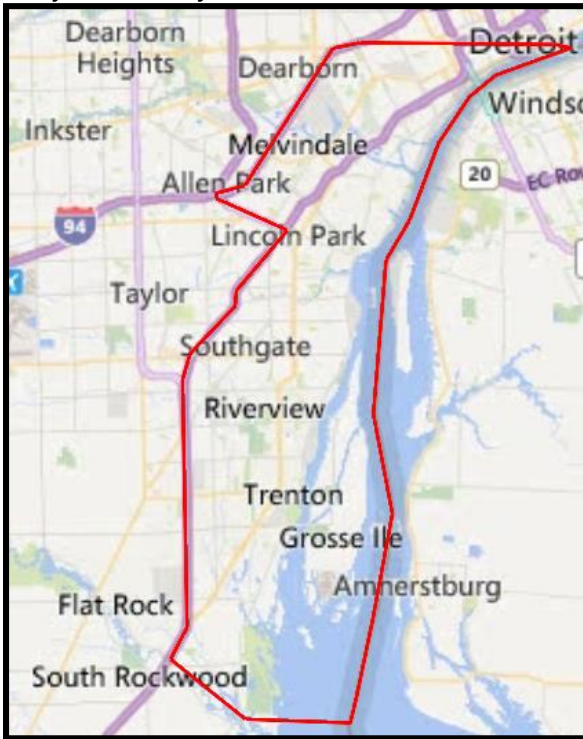
Ozone
Nonattainment Area

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

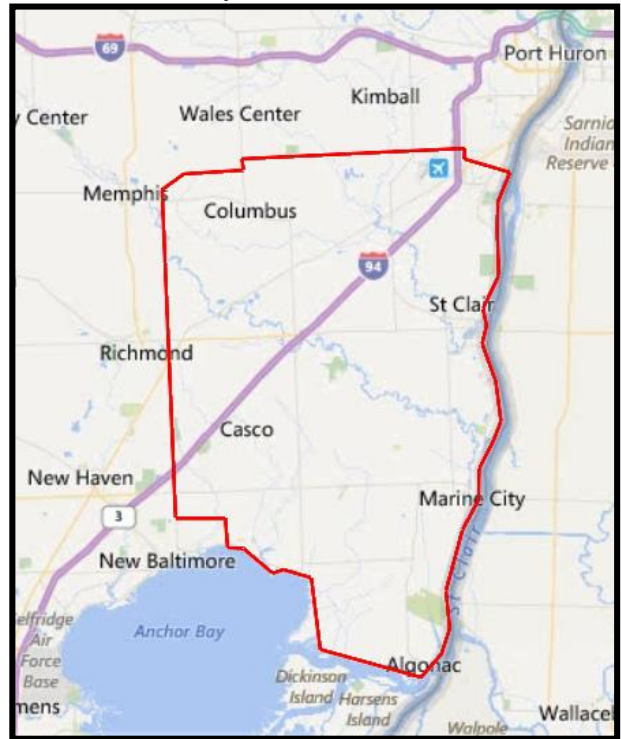
Close-Up Maps of Partial County Nonattainment Areas

Sulfur Dioxide Nonattainment Areas

Wayne County Area

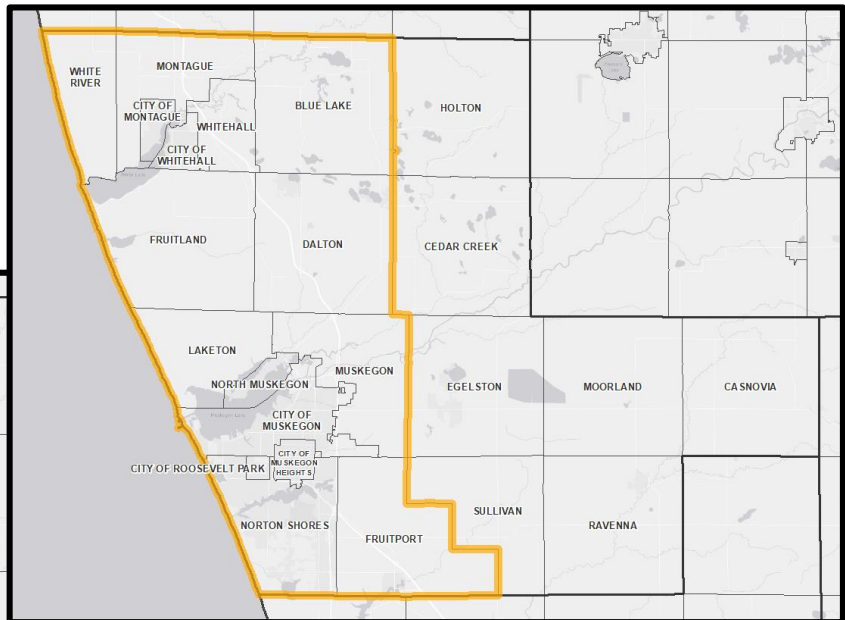
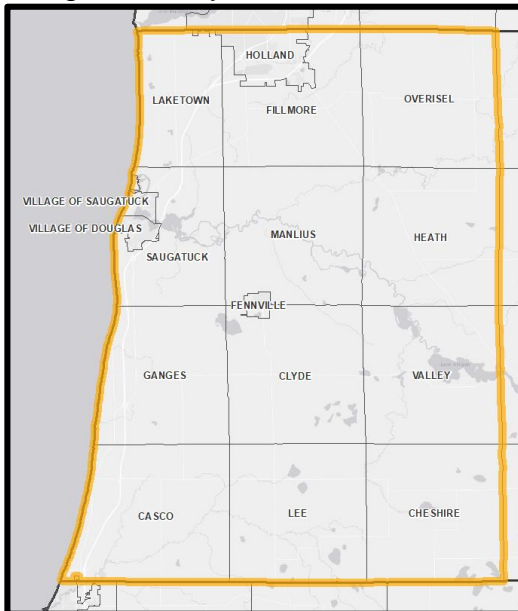


St. Clair County Area



Ozone Nonattainment Areas

Allegan County Area



Muskegon County Area



GRETCHEN WHITMER
GOVERNOR

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



LIESL EICHLER CLARK
DIRECTOR

May 20, 2020

Ms. Mary-Margaret Miller, Staff Consultant
PM Environmental, Inc.
30060 23 Mile Road
Chesterfield Township, Michigan 48047

Dear Ms. Miller:

Subject: Benjamin O. Davis Veteran's Village Project located in the city of Detroit

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.

In July 2013, a portion of Wayne County was designated nonattainment for the 2010 1-hour sulfur dioxide National Ambient Air Quality Standard (NAAQS). Subsequently, on August 3, 2018, the county was designated nonattainment for the 2015 NAAQS ozone standard; and thus, general conformity must be evaluated when completing construction projects of a given size and scope. EGLE is currently working to complete the required SIP submittals for this area; and therefore, an alternative evaluation was completed to assess conformity. Specifically, EGLE considered the following information from the United States Environmental Protection Agency's (USEPA) general conformity guidance, which states, "historical analysis of similar actions can be used in cases where the proposed projects are similar in size and scope to previous projects."

EGLE has reviewed the Benjamin O. Davis Veteran's Village project proposed to be completed with federal grant monies, including an apartment community for the homeless with preference given to veterans. The complex will consist of one three-story apartment building made up of 50 one-bedroom apartments, a community room, dining room, kitchen, resident lounge, barber shop, exercise room, and outdoor patio. The project site is currently vacant and bounded to the south by Outer Drive, to the west by Van Dyke, to the north by Eight Mile Road, and to the east by Conner Street and located on the east side of Detroit, Michigan. When completed the building will be situated on the northern edge of the Conner Creek Health Care campus and the address will be 4777 Outer Drive East, Detroit, Michigan. Project construction is expected to commence in the summer of 2020 and is expected to be completed in Autumn 2021.

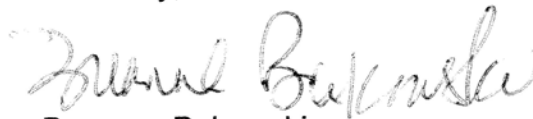
Ms. Mary-Margaret Miller
May 20, 2020
Page 2

In reviewing the "*Air Quality and Greenhouse Gas Study: Uptown Orange Apartments in Orange, California*," dated December 2012, prepared for KTG Group, Inc. by UltraSystems Environmental, Inc., it was determined that emission levels for the project were below the de minimis levels for general conformity. The Uptown Orange Apartments project and related parking structure construction was estimated to take 33 months to complete, would encompass an area of 5.57 acres, and included two four-story residential units with a total of 334 apartments, and two parking structures with a total of 494 and 679 parking stalls, respectively.

The size, scope, and duration of the Benjamin O. Davis Veteran's Village project proposed 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 517-284-6737; BukowskiB@Michigan.gov; or EGLE, P.O. Box 30260, Lansing, Michigan 48909-7760.

Sincerely,

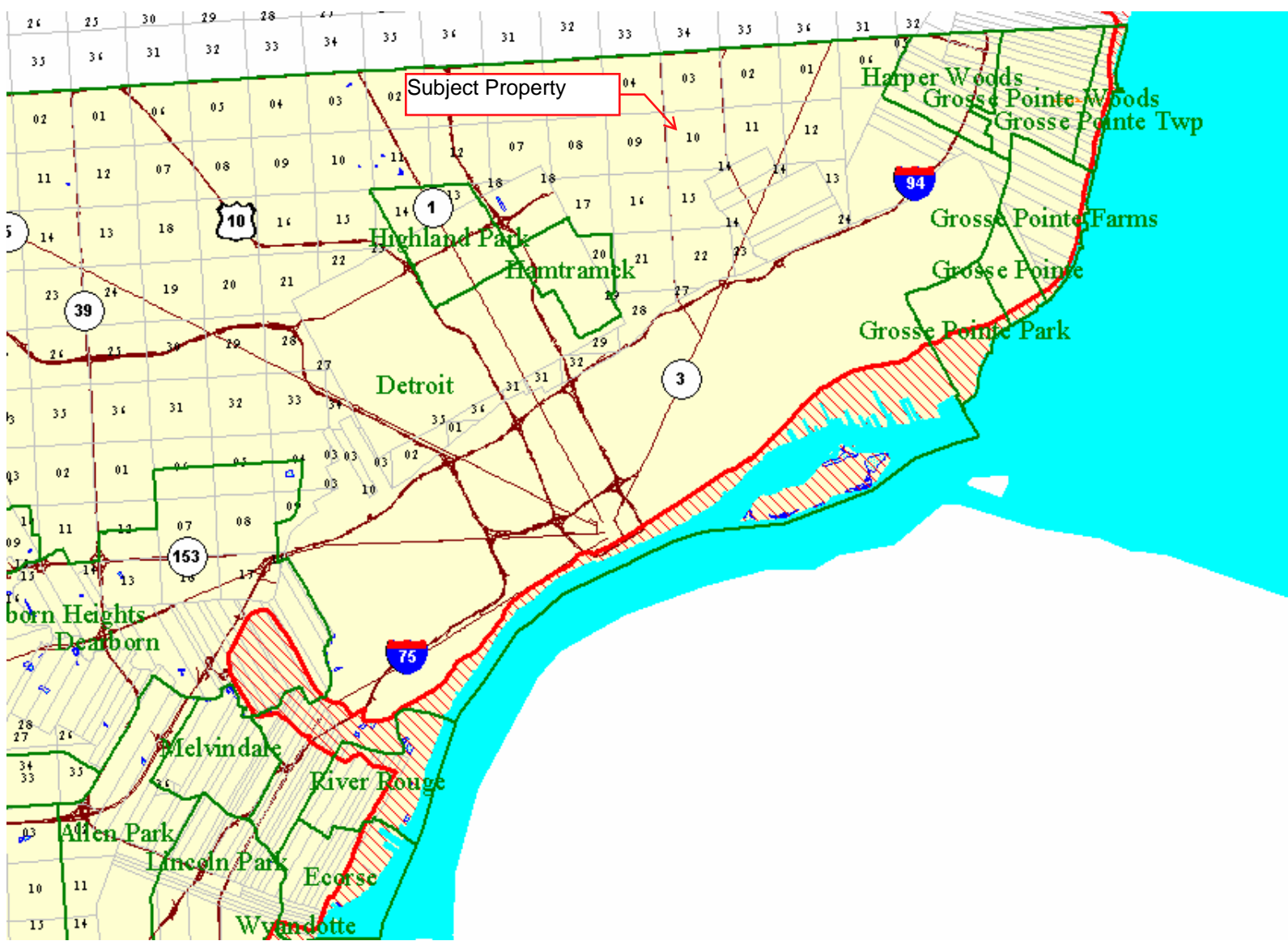
A handwritten signature in black ink, appearing to read "Breanna Bukowski".

Breanna Bukowski
Environmental Quality Analyst
EGLE - Air Quality Division

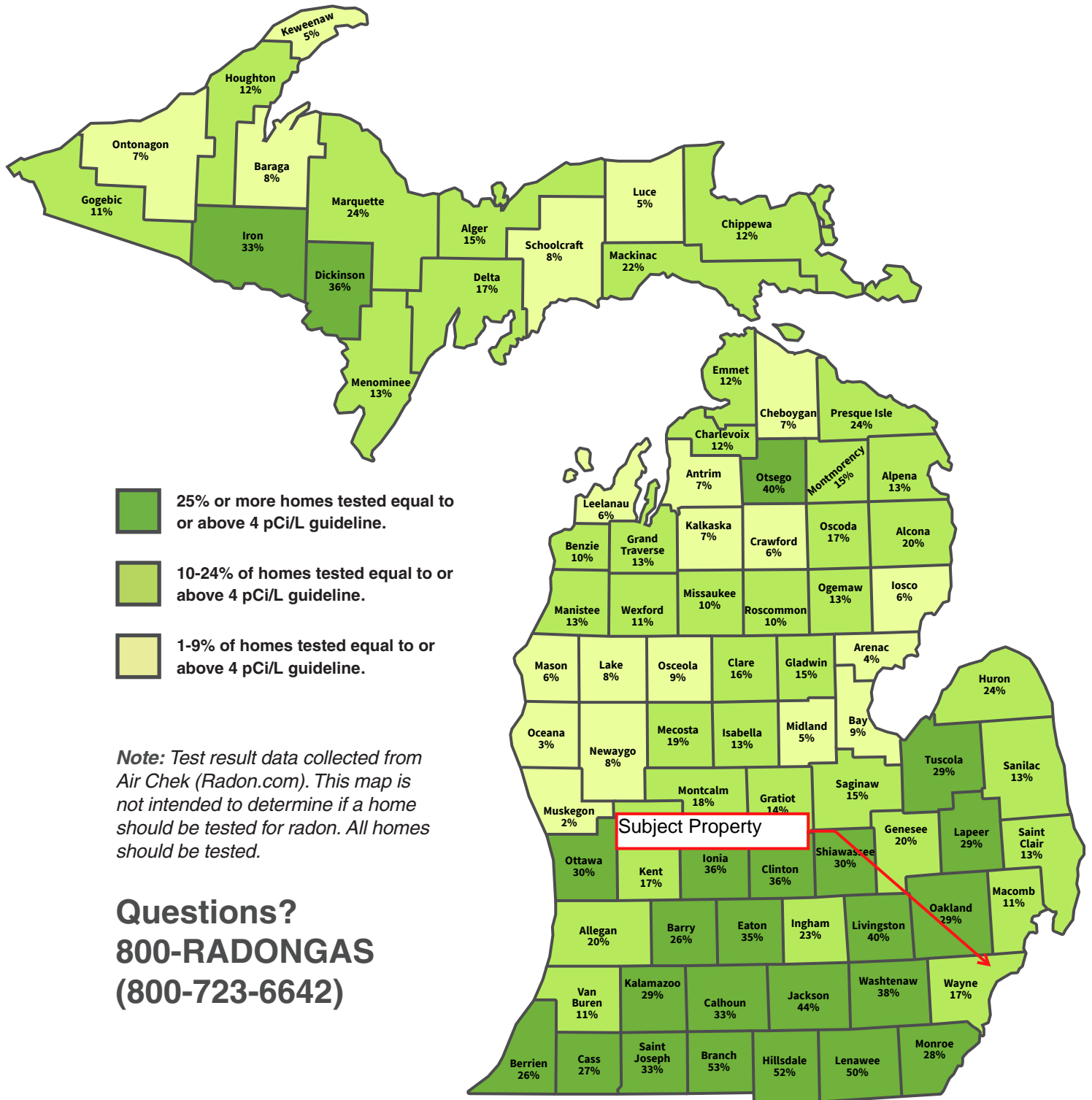
cc: Mr. Michael Leslie, USEPA Region 5
Ms. Carmen E. Reverón-Rondón, U.S. Department of Housing and Urban Development

Wayne County
Grosse Pointe Township, Grosse Pointe Woods, Grosse Pointe Farms
Grosse Pointe, Grosse Pointe Park, and Detroit, T1S R14E
Detroit, T1S R14E, T2S R13E, and T2S 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**.



Percentage of Elevated Radon Test Results by County



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.



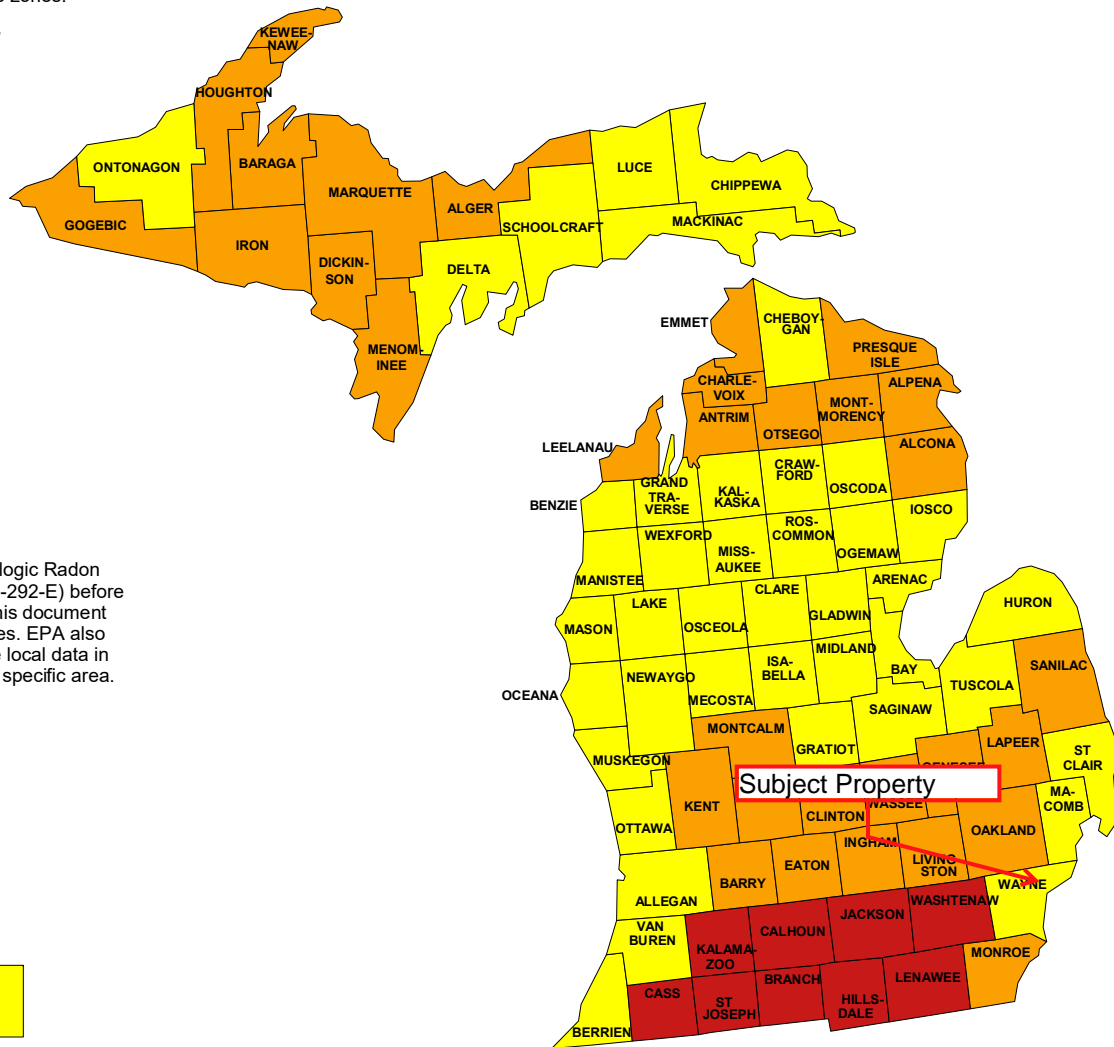
Zone 1



Zone 2



Zone 3



IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Wayne County, Michigan



Local office

Michigan Ecological Services Field Office

☎ (517) 351-2555

📠 (517) 351-1443

2651 Coolidge Road Suite 101
East Lansing, MI 48823-6360

<http://www.fws.gov/midwest/endangered/section7/s7process/step1.html>

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.
2. [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.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

Indiana Bat <i>Myotis sodalis</i>	Endangered
There is final critical habitat for this species. Your location is outside the critical habitat.	
https://ecos.fws.gov/ecp/species/5949	

Northern Long-eared Bat <i>Myotis septentrionalis</i>	Threatened
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/9045	

Birds

NAME	STATUS
Piping Plover <i>Charadrius melodus</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6039	Endangered
Red Knot <i>Calidris canutus rufa</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"> Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30. No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1864	Threatened

Reptiles

NAME	STATUS
Eastern Massasauga (=rattlesnake) <i>Sistrurus catenatus</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"> All Projects: Project is Within EMR Range No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2202	Threatened

Clams

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

Flowering Plants

NAME	STATUS
------	--------

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/601>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

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

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

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

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 (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

Breeds Dec 1 to Aug 31

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>

Wood Thrush *Hylocichla mustelina*

Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its 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.

To view a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)


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

Timeframe

Data 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 available data, since data in these areas is currently much more sparse.

The chart displays two rows of data representing different bird species or groups. The x-axis lists the months from JAN to DEC. A legend at the top indicates four categories: 'probability of presence' (green square), 'breeding season' (yellow square), 'survey effort' (vertical black line), and 'no data' (red dash).
The first row shows breeding seasons (yellow bars) primarily in JAN through SEP, with some green segments indicating probability of presence. Survey efforts (black vertical lines) are present throughout most of the year.
The second row shows breeding seasons starting around MAY and continuing through AUG. It also features several red dashes indicating periods with no data, particularly in JUL, AUG, and parts of other months.

- [illegible]



Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its 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.

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No Data (-)
A week is marked as having no data if there were no survey events for that week.

Timeframe
Data 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 available data, since data in these areas is currently much more sparse.

Legend:
 probability of presence
 breeding season
| survey effort
- no data

The chart displays two rows of data across months JAN to DEC:

- Top Row (Bird A - Vulnerable):** Shows probability of presence (green bars), breeding season (yellow bars), survey effort (vertical lines), and no data (red dashes).
- Bottom Row (Thrush):** Shows similar metrics for Thrush.

Detailed Description: The visualization consists of a horizontal timeline divided by month (JAN to DEC). Two rows represent different bird species. Each row contains four types of indicators: green vertical bars representing the probability of presence; yellow vertical bars representing the breeding season; vertical black lines indicating survey effort ranges; and red minus signs indicating weeks with no data. The top row corresponds to a 'Vulnerable' bird, while the bottom row corresponds to a 'Thrush'. The legend at the top clarifies the symbols used.

[illegible][illegible]

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its 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.

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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 of available data, since data in these areas is currently much more sparse.

Legend: ■ probability of presence ■ breeding season | survey effort - no data

Species: S, eagle, C Vulnerable, not a Bird of, ration, n (BCC) in this, ut warrants, n because of, le Act or for, al, abilities in, e areas from, types of, ment or, s.), Thrush, ngewide, This is a Bird, ervation, n (BCC), ous & the range

Months: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its 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.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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Legend: ■ probability of presence ■ breeding season | survey effort - no data

Species: S, eagle, C Vulnerable, not a Bird of, ration, n (BCC) in this, ut warrants, n because of, le Act or for, al, abilities in, e areas from, types of, ment or, s.), Thrush, ngewide, This is a Bird, ervation, n (BCC), ous & the range

Months: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its 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.

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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 of available data, since data in these areas is currently much more sparse.

Legend: ■ probability of presence ■ breeding season | survey effort - no data

Species: S, eagle, C Vulnerable, not a Bird of, ration, n (BCC) in this, ut warrants, n because of, le Act or for, al, abilities in, e areas from, types of, ment or, s.), Thrush, ngewide, This is a Bird, ervation, n (BCC), ous & the range

Months: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its 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.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

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

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 of available data, since data in these areas is currently much more sparse.

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Months: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC

Breeding Season (■)

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Survey Effort (|)

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To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (-)

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

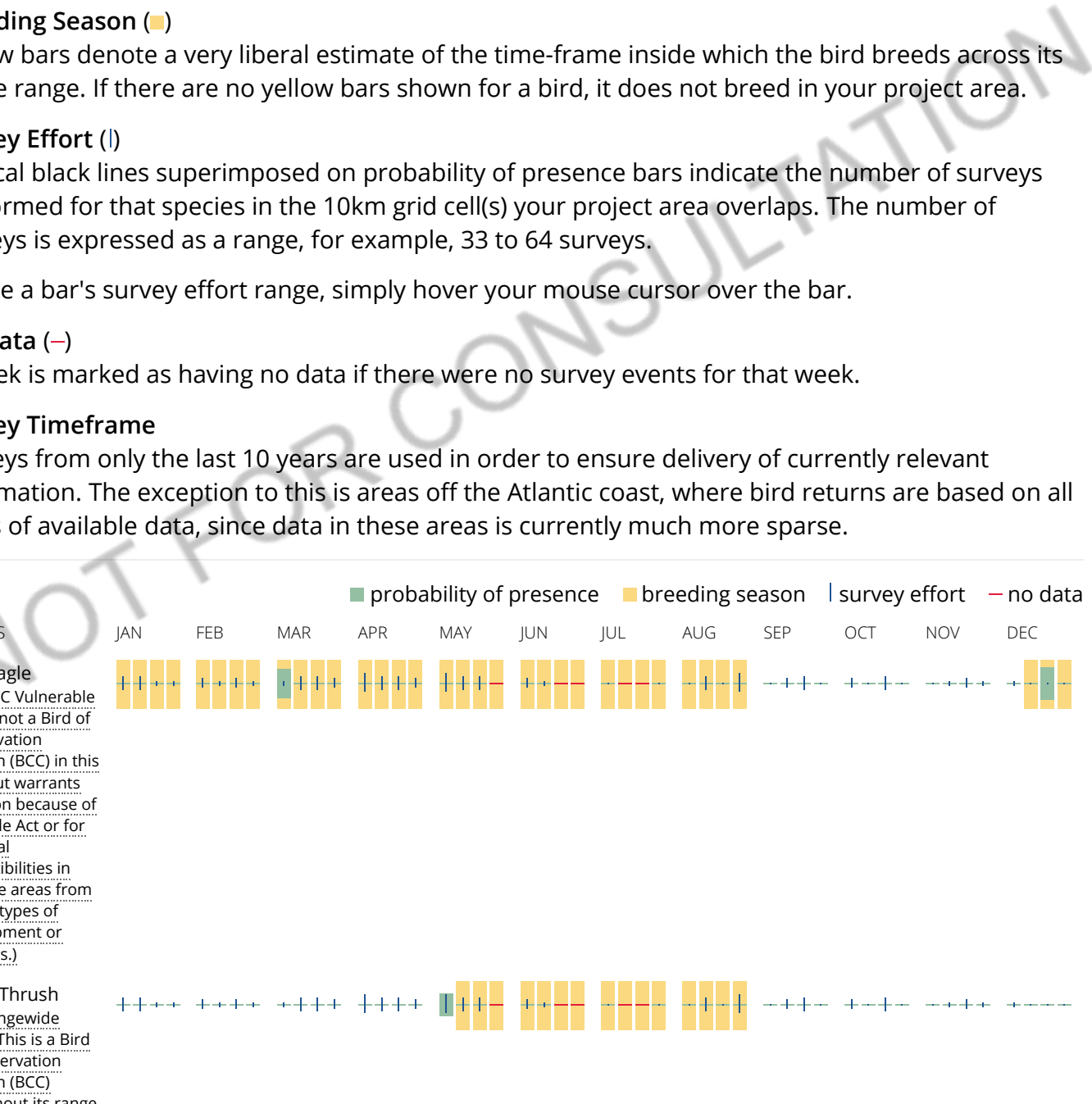
Timeframe

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 of available data, since data in these areas is currently much more sparse.

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Months: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC



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](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

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

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

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

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

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

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

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

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

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

What are the levels of concern for migratory birds?

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

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

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

Details about birds that are potentially affected by offshore projects

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

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

What if I have eagles on my list?

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

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

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 AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

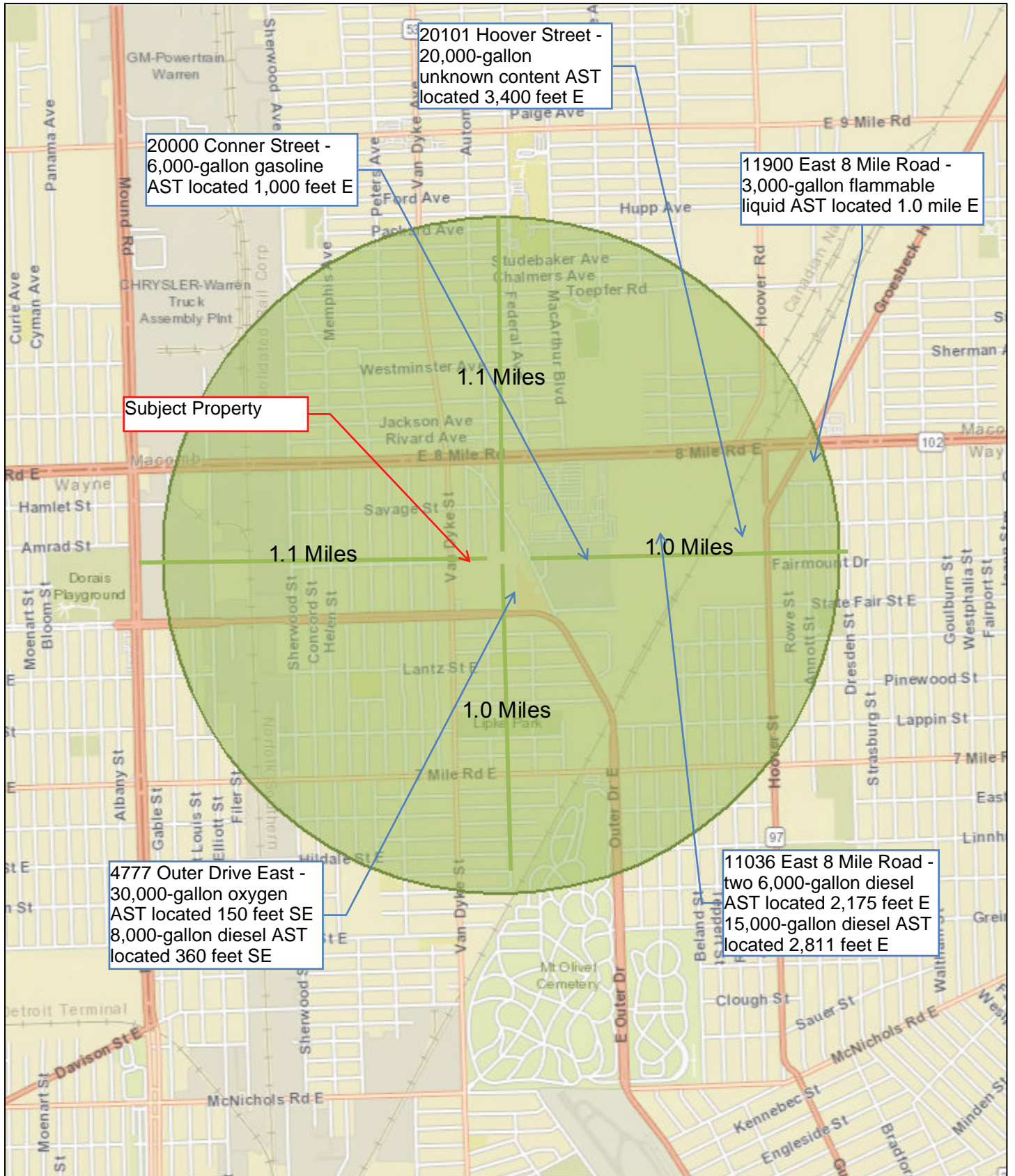
Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

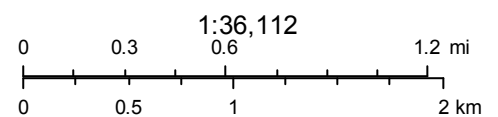
Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

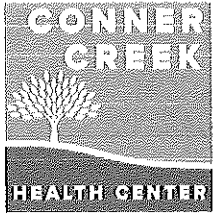
Blast Map



May 5, 2020



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



4777 E. Outer Dr.
Detroit, Michigan

48234

313.369.5800

January 5, 2021

Daniel Lince
Environmental Manager
Michigan State Housing Development Authority
735 E. Michigan Ave.
Lansing, MI 48912.

Re: Benjamin O. Davis Vet. Village Oxygen tank remediation

Mr Lince,


Regarding the tank remediation, the existing 6000 Gallon Oxygen tank located on the Conner Creek Center site is leased legacy equipment dating back to when the facility was St. Johns Northeast Hospital. At that time the facility was classified and functioned as a Short-Term Acute Care Hospital. The facility was constructed as a full service 400 beds hospital, with a surgery center, maternity ward, and Trauma Emergency Room. The current programs operating in the facility are focused on behavioral health and substance use disorder recovery, as well as some community service organizations. The resident/patient demand for oxygen by the current programs is almost none and the oxygen tank has not seen any usage since prior to 2018.

The tank was tested, certified, and filled in April 2020 as part of Conner Creek's preparedness as an emergency relief center during the early months of the COVID 19 crisis. To date Conner Creek Center has not had to be activated as an emergency relief site, and with the implementation of the vaccines we anticipate being able to fully stand down from our current state of readiness by late in the second quarter 2021. At that time PraxAir will drain the tank of liquid Oxygen and remove the tank and controls from the pad on our site as there is no other demand for oxygen at the facility. If required, I can request PraxAir provide a written copy of their internal decommissioning procedure.

If you have any further questions, please feel free to contact me.

Very truly yours,

CONNER CREEK CENTER, LLC


Andrew G. McLemore, Sr.
Member-Manager
(313) 434-3100

Hospital,
Medical, Office
Space
&
Property
Management

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > ASD Calculator

4777 Outer Drive East
30,000-gallon oxygen AST

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/ft² - hr - people and 10,000 BTU/ft² - 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, Siting 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?

30000

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)	1140.69
ASD for Thermal Radiation for Buildings (ASDBPU)	242.26
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 \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/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 **Ask A Question (/ask-a-question/my-question/)**. Enter "Environmental Review" in the "My question is related to" field.

Related Information

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

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > ASD Calculator

4777 Outer Drive East
8,000-gallon diesel AST

Acceptable Separation Distance (ASD) Electronic Assessment Tool

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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 \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

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- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)

Home (/) > Programs (/programs/) > Environmental Review (/programs/environmental-review/) > ASD Calculator

11036 East 8 Mile Road
6,000-gallon diesel ASTs (2)

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 \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

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Related Information

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- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)

Home (/) > Programs (/programs/) > Environmental Review (/programs/environmental-review/) > ASD Calculator

11036 East 8 Mile Road
15,000-gallon diesel AST

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: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Is the container under pressure?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
Does the container hold a cryogenic liquified gas?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>
Is the container diked?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
What is the volume (gal) of the container?	<input type="text" value="15000"/>
What is the Diked Area Length (ft)?	<input type="text"/>
What is the Diked Area Width (ft)?	<input type="text"/>
<input type="button" value="Calculate Acceptable Separation Distance"/>	
Diked Area (sqft)	<input type="text"/>
ASD for Blast Over Pressure (ASDBOP)	<input type="text"/>

ASD for Thermal Radiation for People (ASDPPU)	854.59
ASD for Thermal Radiation for Buildings (ASDBPU)	175.84
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 \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

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

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > ASD Calculator

11900 East 8 Mile Road
3,000-gallon flammable liquid AST

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/ft² - hr - people and 10,000 BTU/ft² - 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, Siting 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?

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)	437.09
ASD for Thermal Radiation for Buildings (ASDBPU)	83.56
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 \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/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 \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
- [ASD Flow Chart \(/resource/3840/acceptable-separation-distance-asd-flowchart/\)](/resource/3840/acceptable-separation-distance-asd-flowchart/)

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > ASD Calculator

20000 Conner Street
6,000-gallon gasoline AST

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 \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

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Related Information

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[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > ASD Calculator

20101 Hoover Street
20,000-gallon unknown content AST

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 \(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/\)](/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)

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Please send comments or other input using [Ask A Question \(/ask-a-question/my-question/\)](/ask-a-question/my-question/). Enter "Environmental Review" in the "My question is related to" field.

Related Information

- [ASD User Guide \(/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/\)](/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)
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United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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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**



May 5, 2020

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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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

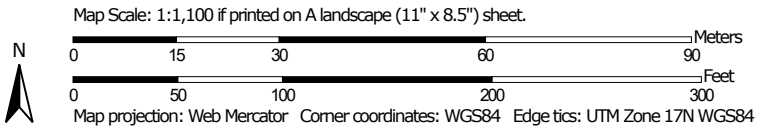
Custom Soil Resource Report

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



Custom Soil Resource Report


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 5, Sep 16, 2019

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

Date(s) aerial images were photographed: May 31, 2014—Jun 15, 2014

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
ColucA	Colwood-Urban land complex, dense substratum, 0 to 2 percent slopes	0.0	1.1%
ShbubB	Shebeon-Urban land-Avoca complex, 0 to 4 percent slopes	0.2	5.7%
UrbarB	Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes	3.0	93.2%
Totals for Area of Interest		3.2	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.

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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

ColucA—Colwood-Urban land complex, dense substratum, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2v14n
Elevation: 570 to 630 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

Colwood, human transported surface, and similar soils: 60 percent
Urban land: 35 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colwood, Human Transported Surface

Setting

Landform: Till-floored lake plains, nearshore zones (relict)
Down-slope shape: Linear
Across-slope shape: Linear, concave
Parent material: Loamy human-transported material over loamy glaciolacustrine deposits over clayey lodgment till

Typical profile

^Au - 0 to 9 inches: sandy loam
^Cu - 9 to 12 inches: loam
Bgb - 12 to 35 inches: silty clay loam
C - 35 to 65 inches: silt loam
2Cd - 65 to 80 inches: clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 56 to 70 inches to densic material
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 24 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 42 percent
Gypsum, maximum in profile: 1 percent
Salinity, maximum in profile: Nonsaline (0.1 to 1.5 mmhos/cm)
Available water storage in profile: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: Lake Plain Flats (F099XY007MI)

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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

Anthroportic udorthents, dense substratum

Percent of map unit: 3 percent

Landform: Till-floored lake plains, nearshore zones (relict)

Down-slope shape: Linear

Across-slope shape: Linear, convex, concave

Hydric soil rating: No

Kibbie, human transported surface

Percent of map unit: 2 percent

Landform: Till-floored lake plains, nearshore zones (relict)

Down-slope shape: Linear

Across-slope shape: Linear, concave

Hydric soil rating: No

ShhubB—Shebeon-Urban land-Avoca complex, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2v13q

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

Shebeon, human transported surface, and similar soils: 40 percent

Urban land: 35 percent

Avoca, human transported surface, and similar soils: 15 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Shebeon, Human Transported Surface

Setting

Landform: Water-lain moraines, wave-worked till plains

Down-slope shape: Linear

Across-slope shape: Convex, linear

Parent material: Loamy human-transported material over loamy lodgment till

Typical profile

^Au - 0 to 9 inches: sandy loam

^Cu - 9 to 12 inches: loam

Bwb - 12 to 27 inches: loam

BC - 27 to 31 inches: clay loam

C - 31 to 55 inches: clay loam

Cd - 55 to 80 inches: loam

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: 51 to 65 inches to densic material

Natural drainage class: Somewhat poorly 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: About 33 to 47 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Gypsum, maximum in profile: 1 percent

Salinity, maximum in profile: Nonsaline (0.1 to 1.5 mmhos/cm)

Available water storage in profile: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: C

Ecological site: Lake Plain Flats (F099XY007MI)

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

Description of Avoca, Human Transported Surface

Setting

Landform: Water-lain moraines, wave-worked till plains

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Down-slope shape: Linear

Across-slope shape: Convex, linear

Parent material: Sandy and loamy human-transported material over sandy glaciolacustrine deposits over loamy lodgment till

Typical profile

^Au - 0 to 9 inches: sandy loam

^Cu - 9 to 12 inches: sandy loam

Ab - 12 to 18 inches: sand

Bwb - 18 to 31 inches: sand

2Cg - 31 to 49 inches: clay loam

2Cd - 49 to 80 inches: loam

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: 37 to 64 inches to densic material

Natural 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 19 to 46 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Gypsum, maximum in profile: 1 percent

Salinity, maximum in profile: Nonsaline (0.1 to 1.5 mmhos/cm)

Available water storage in profile: Low (about 5.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: C

Ecological site: Warm Moist Sandy Depression (F099XY003MI)

Hydric soil rating: No

Minor Components

Parkhill, human transported surface

Percent of map unit: 5 percent

Landform: Water-lain moraines, wave-worked till plains

Microfeatures of landform position: Open depressions

Down-slope shape: Linear, concave

Across-slope shape: Convex, linear

Hydric soil rating: No

Midtown

Percent of map unit: 3 percent

Landform: Water-lain moraines, wave-worked till plains

Down-slope shape: Linear

Across-slope shape: Linear, convex

Hydric soil rating: No

Belleville, human transported surface

Percent of map unit: 2 percent

Landform: Water-lain moraines, wave-worked till plains

Microfeatures of landform position: Open depressions

Down-slope shape: Linear, concave

Custom Soil Resource Report

Across-slope shape: Linear, convex
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: Water-lain moraines, deltas, wave-worked till plains
Down-slope shape: Linear
Across-slope shape: Linear, convex
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 artificial sandy loam
^Cu2 - 16 to 46 inches: gravelly-artificial loam
^Cu3 - 46 to 68 inches: very artificial loam

Custom Soil Resource Report

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

Natural 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 in profile: 28 percent

Gypsum, maximum in profile: 1 percent

Salinity, maximum in profile: Nonsaline (0.1 to 1.5 mmhos/cm)

Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: B

Ecological site: Lake Plain Flats (F099XY007MI)

Hydric soil rating: No

Minor Components

Riverfront, dense substratum, steep

Percent of map unit: 1 percent

Landform: Wave-worked till plains, water-lain moraines, deltas

Down-slope shape: Linear

Across-slope shape: Linear, convex

Hydric soil rating: No

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.


Custom Soil Resource Report Map—Farmland Classification



Custom Soil Resource Report









MAP LEGEND








Area of Interest (AOI)






 Area of Interest (AOI)








Soils



Soil Rating Polygons

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season









-  Prime farmland if subsoiled, completely removing the root inhibiting soil layer
-  Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
-  Prime farmland if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance
-  Farmland of statewide importance, if drained
-  Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated

-  Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if irrigated and drained
-  Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer
-  Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60



































-  Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium
-  Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season
-  Farmland of statewide importance, if warm enough
-  Farmland of statewide importance, if thawed
-  Farmland of local importance
-  Farmland of local importance, if irrigated

-  Farmland of unique importance
-  Not rated or not available

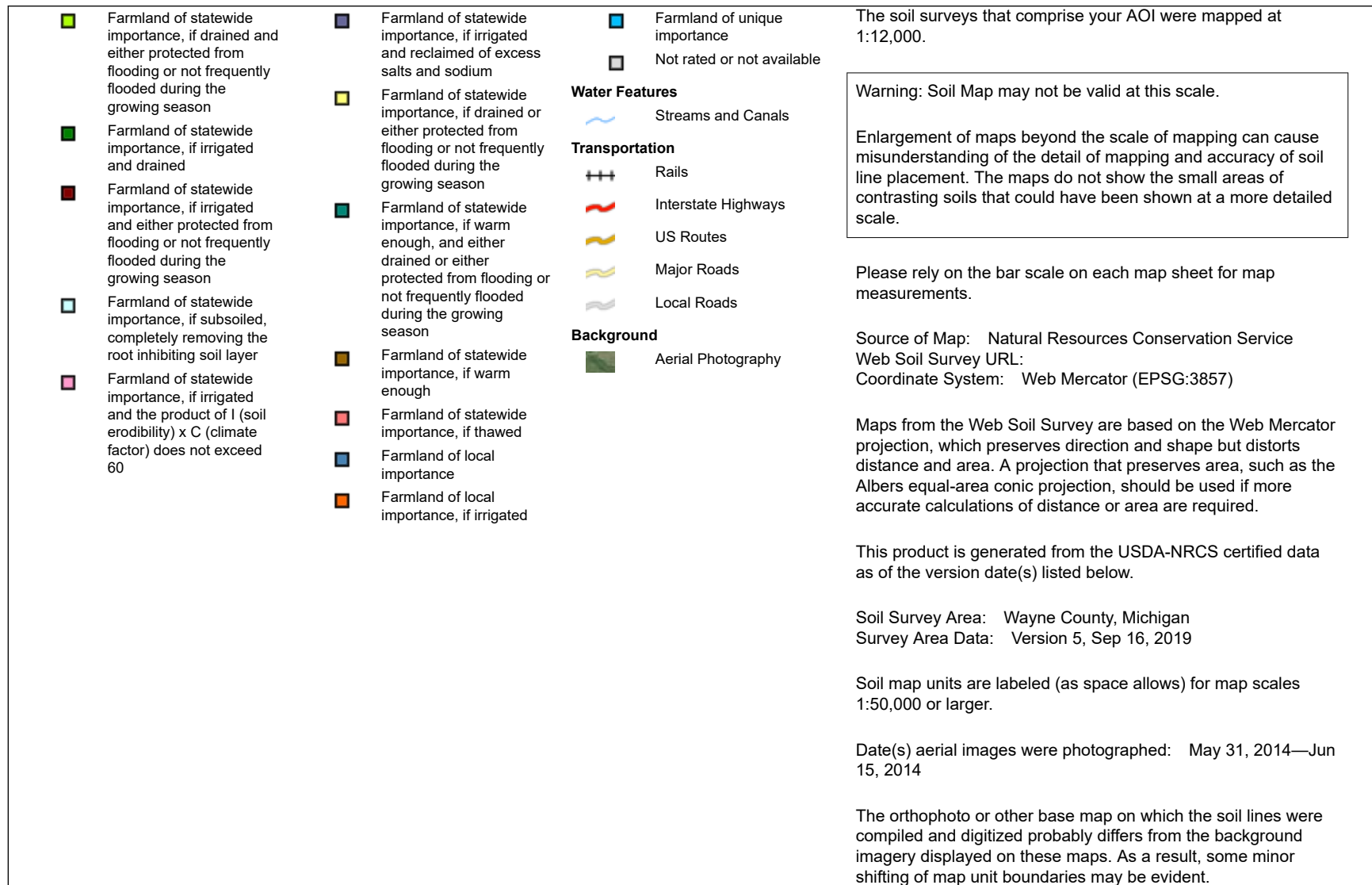
Soil Rating Lines

-  Not prime farmland
-  All areas are prime farmland
-  Prime farmland if drained
-  Prime farmland if protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated
-  Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
-  Prime farmland if irrigated and drained
-  Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Custom Soil Resource Report

	Prime farmland if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium		Farmland of unique importance		Prime farmland if subsoiled, completely removing the root inhibiting soil layer
	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of statewide importance, if irrigated and drained		Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season	Soil Rating Points			Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
	Prime farmland if irrigated and reclaimed of excess salts and sodium		Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season		Not prime farmland		Prime farmland if irrigated and reclaimed of excess salts and sodium
	Farmland of statewide importance		Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer		Farmland of statewide importance, if thawed		Prime farmland if drained		Farmland of statewide importance
	Farmland of statewide importance, if drained		Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60		Farmland of local importance		Prime farmland if protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if drained
	Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season		Farmland of local importance, if irrigated		Farmland of local importance, if irrigated		Prime farmland if irrigated		Farmland of statewide importance, if protected from flooding or not frequently flooded during the growing season
	Farmland of statewide importance, if irrigated						Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season		Farmland of statewide importance, if irrigated
							Prime farmland if irrigated and drained		
							Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season		

Custom Soil Resource Report



Table—Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ColucA	Colwood-Urban land complex, dense substratum, 0 to 2 percent slopes	Not prime farmland	0.0	1.1%
ShbubB	Shebeon-Urban land-Avoca complex, 0 to 4 percent slopes	Not prime farmland	0.2	5.7%
UrbarB	Urban land-Riverfront complex, dense substratum, 0 to 4 percent slopes	Not prime farmland	3.0	93.2%
Totals for Area of Interest			3.2	100.0%

Rating Options—Farmland Classification

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

References

- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelpdb1043084>

Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf



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

Phone: 313.224.6380
Fax: 313.224.1629
www.detroitmi.gov

August 27, 2020

Megan Zidar
PM Environmental
4080 West Eleven Mile Road
Berkley, Michigan 48072

**RE: Section 106 Review of the Detroit Housing Commission Project Based
Voucher-Funded Benjamin O. Davis Veterans Village Project Located at 4777
East Outer Drive in the City of Detroit, Wayne County, Michigan**

Dear Ms. Zidar,

In accordance with 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, as amended by a First Amendment to Programmatic Agreement dated May 4, 2020, 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 project is funded using Project Based Vouchers (PBV) funds from the Detroit Housing Commission (DHC).

Based on the information submitted to this office on June 29, 2020 by PM Environmental, we have concurred with their recommendation that the Saint Lazarus Serbian Orthodox Church (4575 Outer Drive East) is eligible of listing in the National Register of Historic Places (NRHP) and is located with the Area of Potential Effects (APE) for this project. However, we disagree with the determination that the 20030 Conner Street is not eligible for listing on the NRHP. Upon completing additional research, the Conner Center property is an excellent, intact example of industrial architecture done in the International Style. The building also has historical associations with the automotive industry in Detroit, being the former location of the Campion Spark Plug Company-Ceramic Division. Therefore, we recommend this building as eligible for listing in the NRHP under Criterion A and C.

Additionally, per Stipulation VI.C and VII of Programmatic Agreement (PA), the proposed undertaking qualifies for review by the State Historic Preservation Office (SHPO) archaeologist since the site is larger than 1/2-acre and will include ground disturbing activities. A report was submitted to the SHPO for review electronically on August 5, 2020. In an email dated August 25, 2020, the SHPO Archaeologist determined the following:

"Thank you for the opportunity to review the Benjamin O. Davis Veterans Village Project. We show no previously reported archaeological sites or surveys in or near the project area. Based on the information provided for review, we have no known or expected archaeological concerns."



**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

Since the APE for this project includes Historic Properties, the project has been given a Conditional Approval and will have no adverse 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 (NRHP), as long as the following condition was met:

- Prior to the start of any work, final construction drawings, a scope of work, and detail photos of the proposed work items shall be submitted to the Preservation Specialist for review and approval; and,
- Although no archaeological sites were found on file, during ground disturbing activities, if artifacts or bones are discovered, work will be halted and the Preservation Specialist will be contacted immediately for further guidance on how to proceed.

Please note that a Conditional Approval means that the Section 106 Review process will not be complete until the above mentioned condition is met and the completed work is approved by the Preservation Specialist. Additionally, once the work is complete, "After" photos will need to be submitted to the Preservation Specialist so that the project can comply with the requirements of the Section 106 review. An Approval of Completed Work may be issued for the project once photos of the completed work are received and reviewed.

Please be advised that this Section 106 review is not a substitute for a review for the Local Historic District Commission or for projects applying for Federal Historic Preservation Tax Credits. These reviews are conducted independently of the Section 106 review process. If you have any questions you may contact the Preservation Specialist by phone at (313) 224-1508 or email at rschumak@detroitmi.gov. Please reference the project name and the Section 106 identification number in all communications with this office.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. M. Schumaker", with a long horizontal flourish extending to the right.

Ryan M. Schumaker
Lead Preservation Specialist
City of Detroit
Housing & Revitalization Department

Cc: File
Penny Dwoinen, HRD
Kim Siegel, HRD
Tiffany Rakotz, HRD



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ENVIRONMENTAL SERVICES

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INCENTIVES CONSULTING

NOISE ASSESSMENT

Two Acres of Land

4777 East Outer Drive | Detroit, Michigan

PM Project Number 01-6232-0-0006

Prepared for:

Conner Creek Center LLC

892 West Boston Boulevard

Detroit, Michigan 48202

Prepared by:

PM Environmental, Inc.

4080 West Eleven Mile Road

Berkley, Michigan 48072

Know Your Risk.
Take Control.
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www.pmenv.com

June 15, 2020

Mr. Raymond McLemore
Conner Creek Center, LLC
892 West Boston Boulevard
Detroit, Michigan 48202

**Re: Desktop Noise Assessment of the Benjamin O. Davis Veterans Village
Located at 4777 East Outer Drive, Detroit, Michigan
PM Environmental, Inc. Project No. 01-6232-0-0006**

Dear Mr. McLemore:

PM Environmental, Inc. (PM) has completed the Desktop Noise Assessment of the above referenced property. This Desktop Noise Assessment was conducted in general accordance with the US Department of Housing and Urban Development (HUD) Noise Abatement and Control standards contained in 24 CFR 51B. This report was also prepared for MSHDA requirements.

The purpose of the Desktop Noise Assessment was to gather sufficient information to develop an independent professional opinion regarding possible noise concerns associated with the subject property through designated Noise Assessment Locations (NALs) on the subject property.

The Desktop Noise Assessment for the above referenced property represents the product of PM's professional expertise and judgment in the environmental consulting industry, and it is reasonable for BENJAMIN O'DAVIS VETERAN'S VILLAGE LDHA, LP, THE CITY OF DETROIT, THE CITY OF DETROIT HOUSING COMMISSION, CITIZEN'S BANK, RBC CAPITAL MARKETS, AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY to rely on PM's Desktop Noise Assessment report.

If you have any questions related to this report please do not hesitate to contact our office at 248.336.988.

Sincerely,
PM ENVIRONMENTAL, INC.



David Balash
Staff Consultant



Carey Kratz, EP
Regional Manager – Due Diligence



Peter S. Bosanic, P.E., EP
Principal

TABLE OF CONTENTS

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APPENDICES

- Appendix A: NAL Location Map
- Appendix B: Airport Noise Contour Map
- Appendix C: Noise Source Information
- Appendix D: Day-Night Level Electronic Assessments

1.0 INTRODUCTION

PM Environmental, Inc. (PM) was retained to conduct a Desktop Noise Assessment of the Benjamin O. Davis Veterans Village located at 4777 East Outer Drive, Detroit, Wayne County, Michigan (hereafter referred to as the “subject property”). This Desktop Noise Assessment was conducted in general accordance with the US Department of Housing and Urban Development (HUD) Noise Abatement and Control standards contained in 24 CFR 51B.

THIS REPORT WAS PREPARED FOR THE EXCLUSIVE USE OF BENJAMIN O'DAVIS VETERAN'S VILLAGE LDHA, LP, THE CITY OF DETROIT, THE CITY OF DETROIT HOUSING COMMISSION, CITIZEN'S BANK, RBC CAPITAL MARKETS, AND THE MICHIGAN STATE HOUSING DEVELOPMENT AUTHORITY, EACH OF WHOM MAY RELY ON THE REPORT'S CONTENTS.

The proposed development/rehabilitation will utilize a MSHDA source of funding. 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.

MSHDA requires that a noise assessment be completed at properties that are located within 1,000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated airports.

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:

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

One NAL (NAL #1, located at the southwestern portion of the proposed subject building) on the subject property was used for this analysis based on proximity to noise sources. A map with the subject property boundaries, buildings, and NAL location is included as Appendix A.

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

NAL #1

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A. Young International Airport	1.6 miles
	Oakland County Troy Airport	10.2 miles
	Windsor International Airport	11.8 miles
Busy Road(s)	Conner Street	643 feet
	East Outer Drive	704 feet
	Van Dyke Avenue	713 feet
Railroad(s)	Grand Trunk Western Railroad	2,850 feet

The noise sources identified within the table are further discussed below.

2.0 EVALUATION OF NOISE SOURCES

2.1: Airports

Coleman A. Young International Airport is located approximately 1.6 miles south of the subject property. Based on the Noise Contour Map for the airport (Appendix B), the airport is not within a distance of concern.

Oakland Troy Airport (Y47) is located approximately 10.2 miles northwest of the subject property. This airport is the county's executive airport with business travelers and tourists using private, corporate, and charter aircraft. Based on the small size and lack of commercial jet traffic, the airport is not within a distance of concern.

Windsor Airport is located approximately 11.8 miles south of the subject property. Based on the Noise Contour Map for the airport (Appendix B), the airport is not within a distance of concern.

2.2: Major Roadways

The major roadways near the subject property are:

- Conner Street
- Van Dyke Avenue
- East Outer Drive

Conner Street has one-lane north and southbound sections with a center turn lane. The speed limit is 35 miles per hour (mph) near the subject property. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts for Conner Street were obtained through the Michigan Department of Transportation (MDOT) and projections were calculated through 2030. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable. Annual Average Daily Traffic (AADT) and the MDOT traffic data for Conner Street are provided in Appendix C.

East Outer Drive is a four-lane road with two-lane east and westbound sections. The speed limit is 35 mph near the subject property. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts for East Outer Drive were obtained through the MDOT and projections were calculated through 2030. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable. AADT and the MDOT traffic data for East Outer Drive are provided in Appendix C.

Van Dyke Avenue is a five-lane road with two-lane north and southbound sections and a center turn lane. The speed limit is 35 mph near the subject property. There are no stop signs or stop lights within 600 feet of the subject property. Traffic counts for Van Dyke Avenue were obtained through MDOT and projections were calculated through 2030. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable. AADT and MDOT traffic data for Van Dyke Avenue are provided in Appendix C.

2.3: Railroads

One active railroad is located 2,850 feet to the southeast of the subject property and is owned and operated by Grand Trunk Western Railroad. Inventory information from U.S. Department of

Transportation (US DOT) indicates that typically there are an average of approximately 12 train movements daily, six of which are during normal day-time hours and six of which are at night. Inventory information is provided in Appendix C.

3.0 CALCULATIONS

Using the HUD DNL calculator, the combined noise level from Conner Street, East Outer Drive, and Van Dyke Avenue, as predicted for operations in 2030, and the nearby railroad at NAL #1 is 62 dB. This result is Acceptable.

A noise DNL calculator worksheet for the NAL is provided in Appendix D.

4.0 CONCLUSIONS

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

NAL #	Combined Source DNL (dB)	Category
1	62	Acceptable

HUD ATTENUATION GUIDANCE

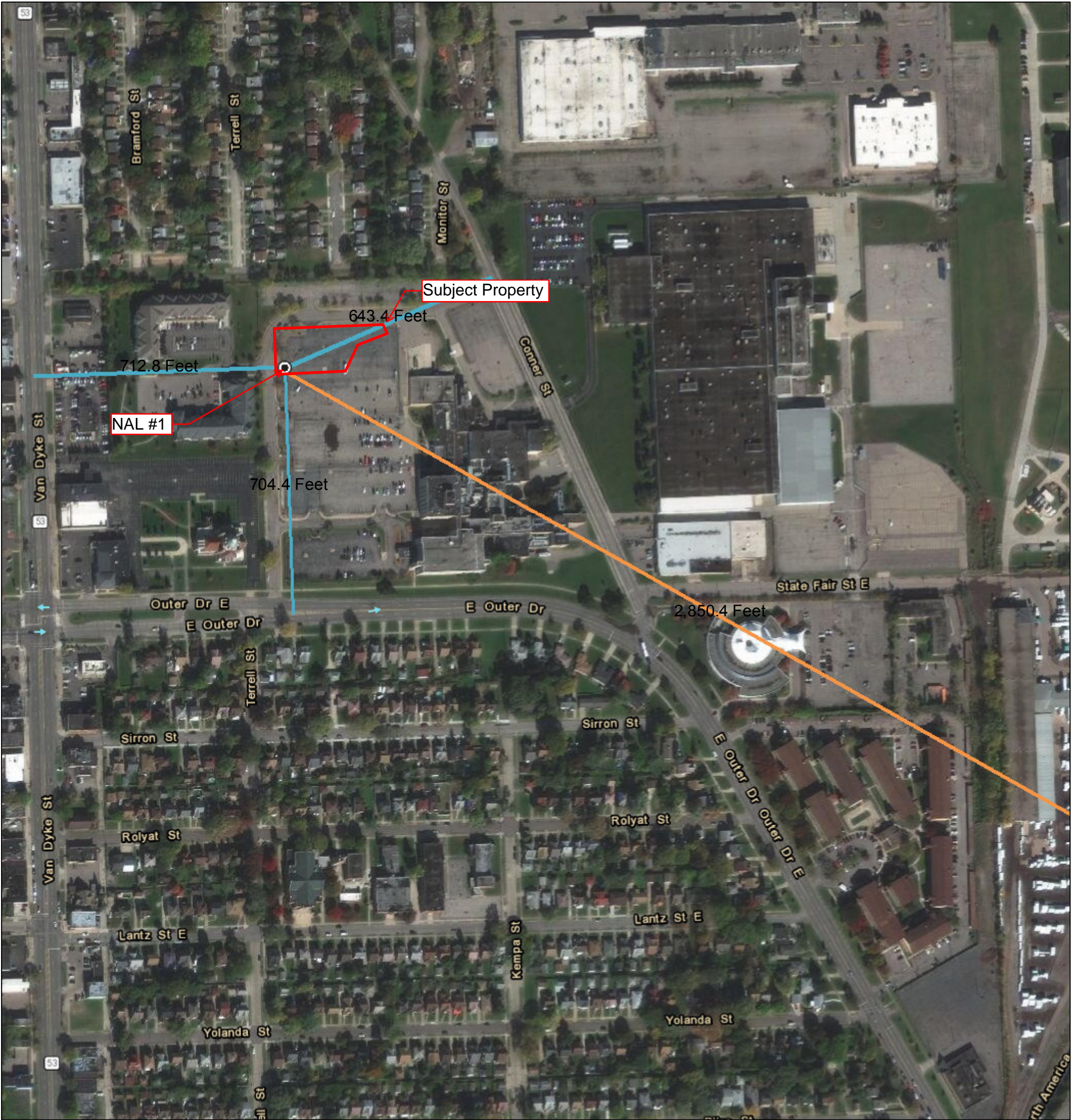
All sites whose environmental or community noise exposure do not exceed the day night average sound level (DNL) of 65 decibels (dB) are not considered-impacted, therefore, no noise attenuation is required.

5.0 REFERENCES

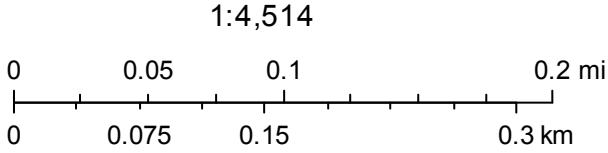
- 24 CFR Part 51 Subpart B
- The Noise Guidebook, U.S. Department of Housing and Urban Development
- Michigan Department of Transportation (MDOT)
- <https://www.hudexchange.info/programs/environmental-review/dnl-calculator/>

Appendix A

ArcGIS Web Map

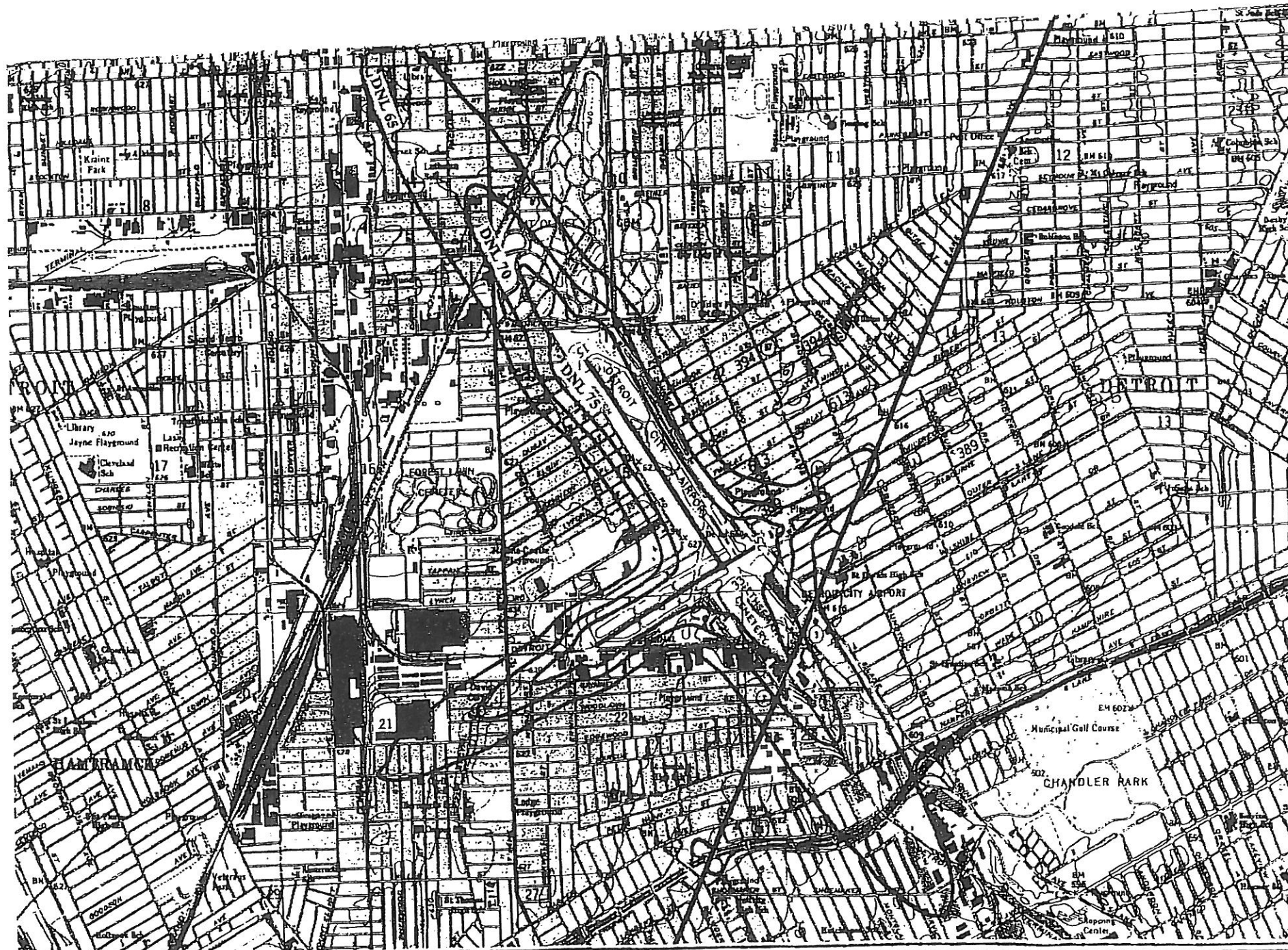


June 5, 2020



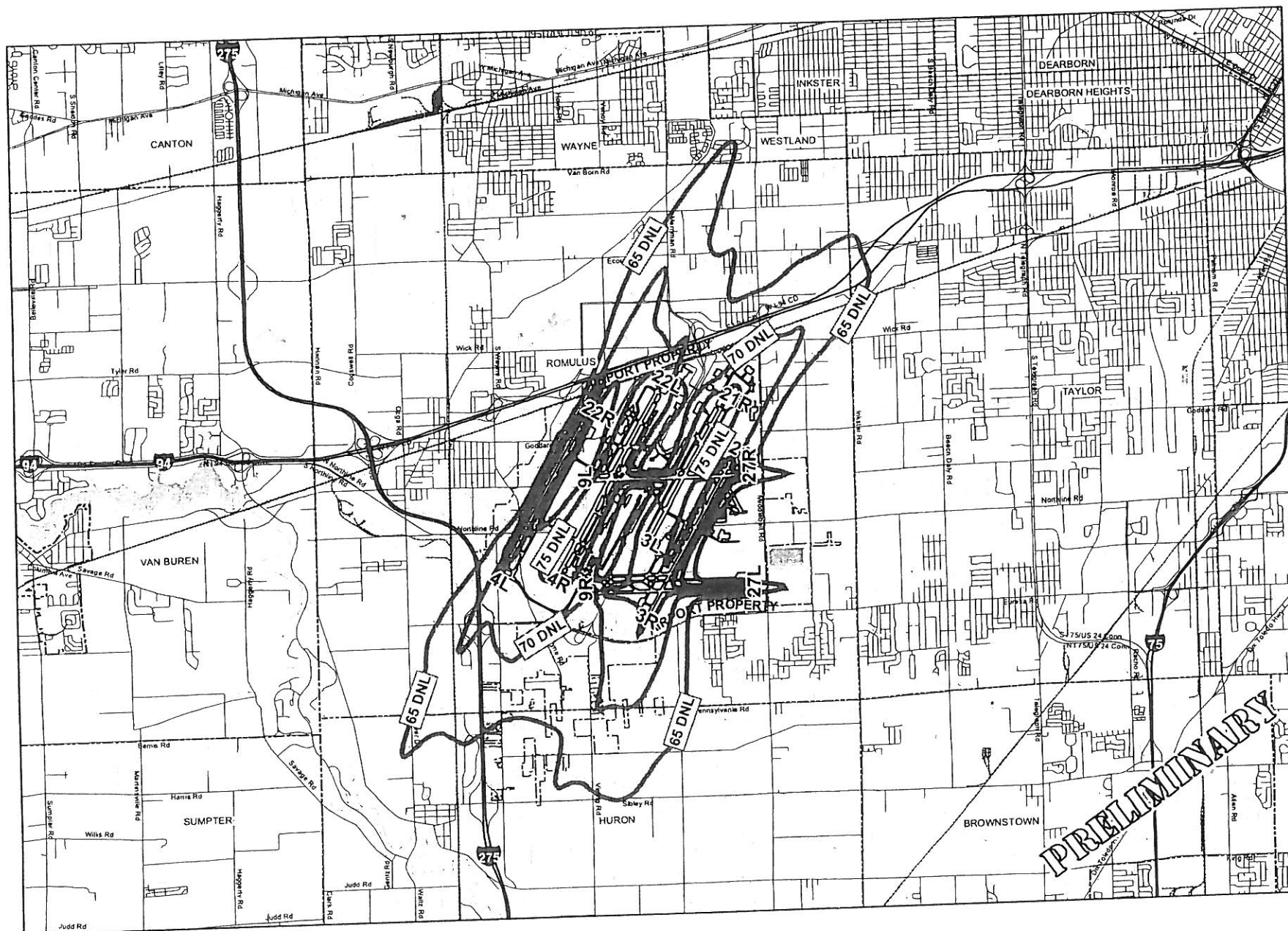
Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User
Community

Appendix B



CITY OF DETROIT
 AIRPORT DEPARTMENT

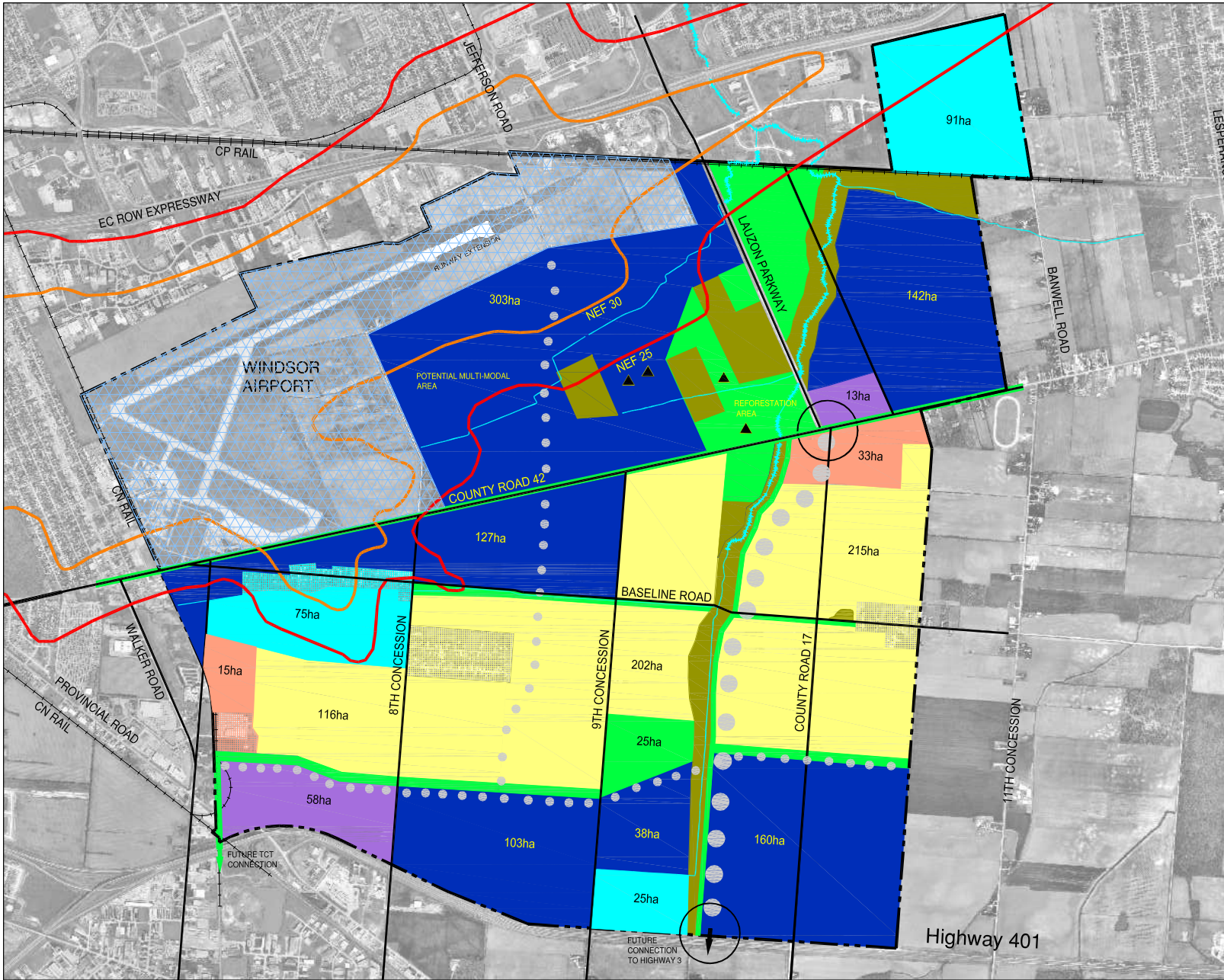
1996 BAS
 NOISE EXPOSURE CONTOURS



Existing (2004) Noise Contour

Source: Michigan Department of Natural Resources, SEMCOG

DETROIT METROPOLITAN WAYNE COUNTY AIRPORT



LEGEND:

- Residential
- Commercial
- Mixed Use
- Industrial
- Business Park
- Natural Heritage/EPA
- Open Space
- Airport Lands
- Future Roads (potential location*)
- Potential Interchange
- Natural Corridor Linkage Opportunities

* Final location to be determined through the Class EA process.

LAND USE:

Residential	550ha
Mixed Use	50ha
Commercial	70ha
Business Park	190ha
Industrial	875ha
Airport	420ha

Stantec Consulting Limited

N6A 5J7
Tel. (519)645-2007
Fax. (519)645-6575
www.stantec.com

CITY OF WINDSOR

**WINDSOR ANNEXED AREA
MASTER PLAN STUDY**

CONCEPT 1

September 2006 | 614-01073CP1.dwg

0 250 750 1250m
1:25000



Appendix C

Disclaimer: The Michigan Department of Transportation (MDOT) works with individual agencies (cities/villages, counties, metropolitan planning organizations (MPOs), regional planning organizations (RPOs), and other areas of MDOT) to identify existing traffic count programs and/or traffic data. [... more](#)

List View All DIRs

Record	1	of 1	Goto Record	go
Location ID	82-2360	MPO ID	56611	
Type	SPOT	HPMS ID		
On NHS	No	On HPMS		
LRS ID	1588005	LRS Loc Pt.	6.341	
SF Group	Urban Non State	Route Type		
AF Group	NoFactor	Route		
GF Group	Urban Non State	Active	Yes	
Class Dist Grp	NTL_5	Category	Primary	
Seas Class Grp				
WIM Group				
QC Group	Default			
Funct'l Class	(5) Major Collector	Milepost		
Located On	CONNER			
Loc On Alias	0.3 MILE N OF OUTER (IN DETROIT)			
More Detail				

STATION DATA

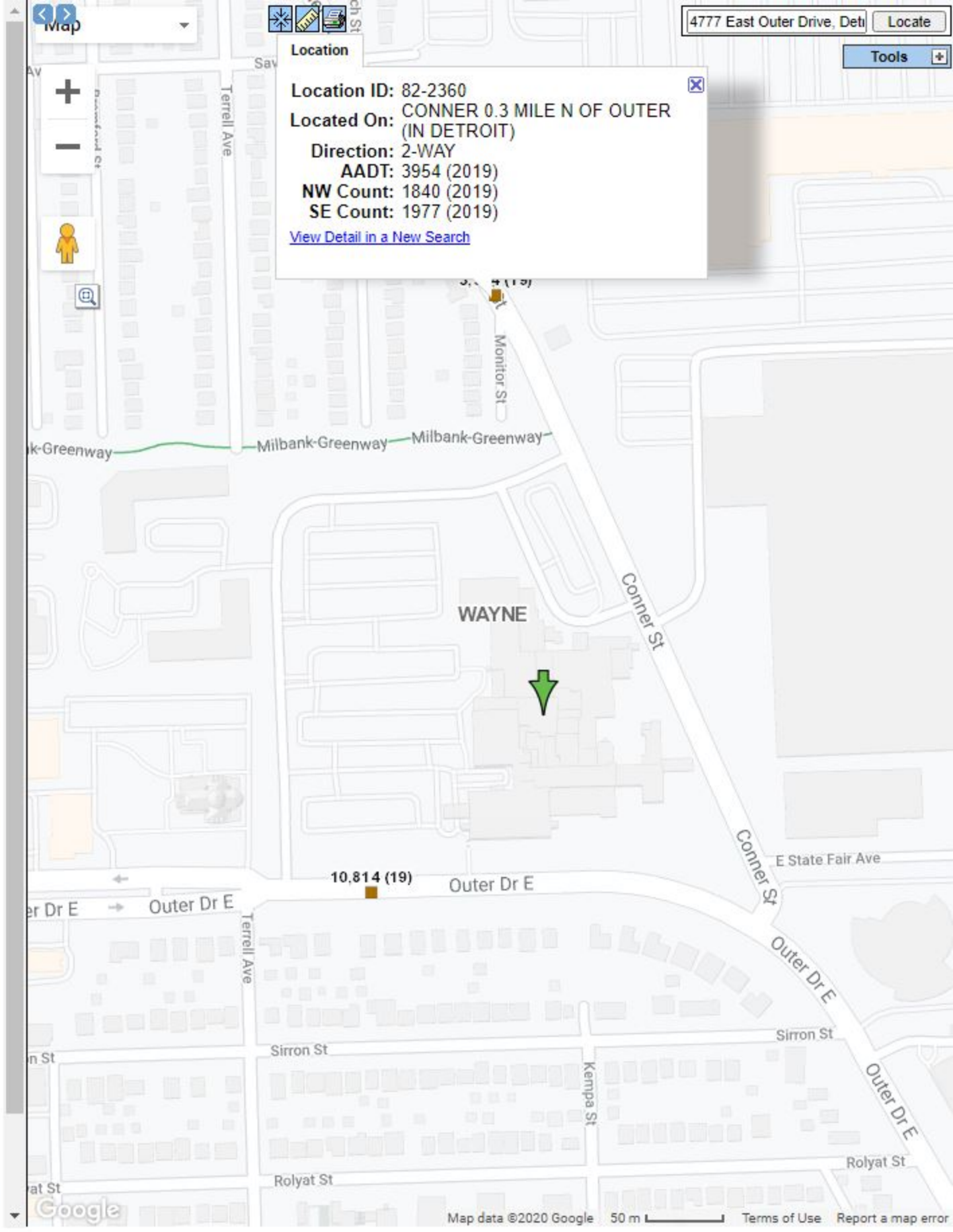
Directions: 2-WAY NW SE ?

AADT ?	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2019	3,954 ³		9	54	3,795 (96%)	159 (4%)	Grown from 2018
	2018	3,974 ¹²		9	54	3,870 (97%)	104 (3%)	
	2017	3,657	319	9	54	3,549 (97%)	108 (3%)	
	2016	4,874				4,874 (100%)	0 (0%)	SEMCOG

VOLUME COUNT	Date	Int	Total
	Tue 10/31/2017	15	3,817
	Mon 10/30/2017	15	3,497
	Tue 9/21/2010	60	4,740
	Mon 9/20/2010	60	4,547

VOLUME TREND ?	Year	Annual Growth
	2019	-1%
	2018	9%
	2017	-25%

CLASSIFICATION	Date	Int	Total
----------------	------	-----	-------



Auto and Heavy Truck 10-year ADT Projections

Conner Street

	Cars	% Change	Trucks	% Change
2016	4484		389.92	
2017	3364	-25.0	292.56	-25.0
2018	3656	8.7	317.92	8.7
2019	3638	-0.5	316.32	-0.5
	Avg % change:	-5.6	Avg % change:	-5.60
	Avg % change (Last 5-yr Trend):	#REF!	Avg % change (Last 5-yr Trend):	#REF!
	% Change/Year Assumption	1	%/Year Change Assumption	1

ENTER DATA HERE	
Year	AADT
2016	4874
2017	3657
2018	3974
2019	3954
% auto	92
% truck	8

2030 Projections

	Cars	Trucks
2016	4484	390
2017	3364	293
2018	3656	348
2019	3638	316
2020	3674	319
2021	3711	322
2022	3748	326
2023	3786	329
2024	3824	332
2025	3862	335
2026	3900	339
2027	3939	342
2028	3979	346
2029	4019	349
2030	4059	353

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
4059	353

Disclaimer: The Michigan Department of Transportation (MDOT) works with individual agencies (cities/villages, counties, metropolitan planning organizations (MPOs), regional planning organizations (RPOs), and other areas of MDOT) to identify existing traffic count programs and/or traffic data....[more](#)

List View All DIRs

Record	1	of 1	Goto Record	go
Location ID	82-1790	MPO ID	82712	
Type	SPOT	HPMS ID		
On NHS	No	On HPMS	No	
LRS ID	1587207	LRS Loc Pt.	0.162	
SF Group	Urban Non State	Route Type		
AF Group	NoFactor	Route		
GF Group	Urban Non State	Active	Yes	
Class Dist Grp	NTL_4	Category	Primary	
Seas Class Grp				
WIM Group				
QC Group	Default			
Funct'l Class	(4) Minor Arterial	Milepost		
Located On	OUTER DR			
Loc On Alias				
EAST OF	Terrell Ave			
More Detail				

STATION DATA

Directions: 2-WAY EB WB ?

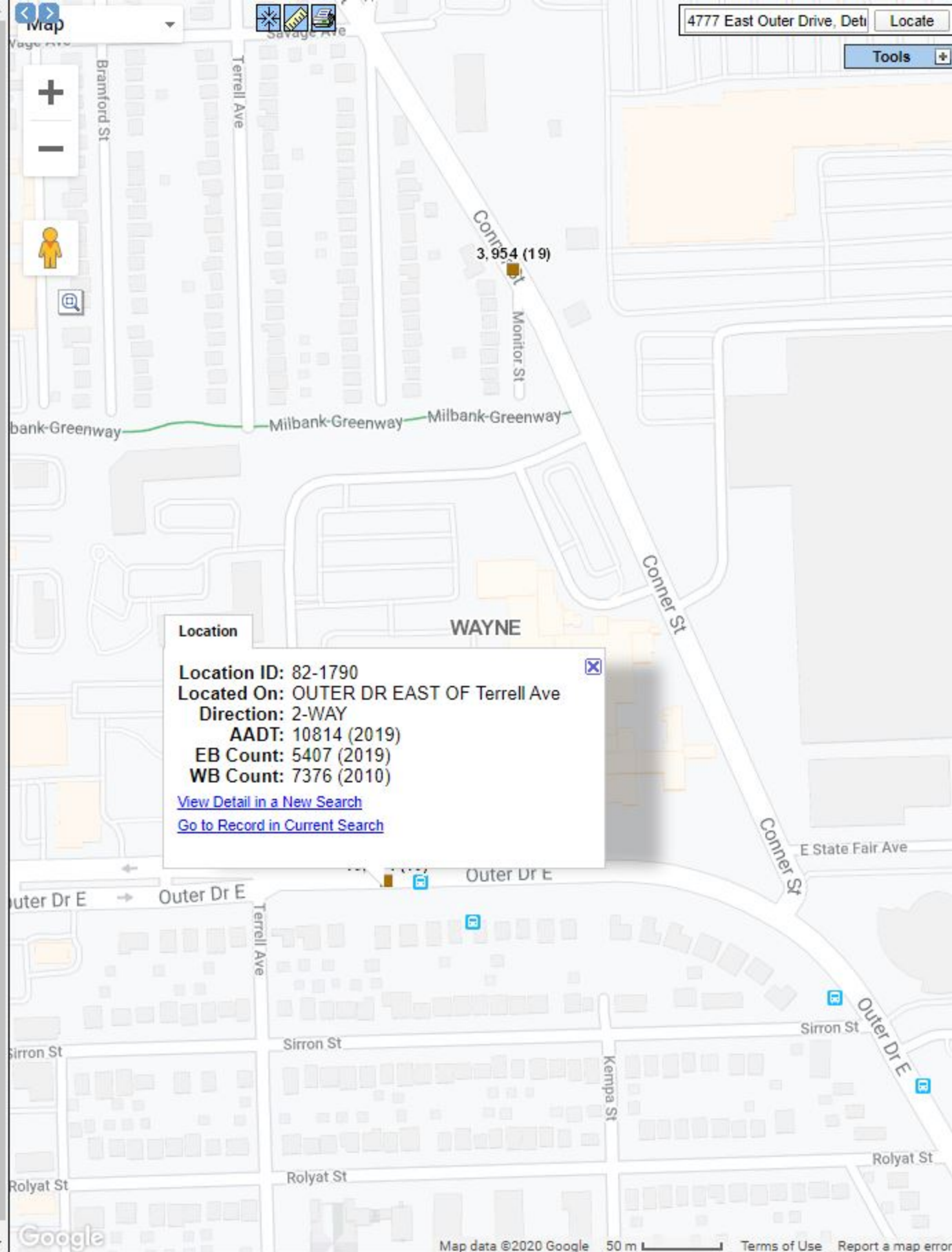
AADT ?								
	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2019	10,814 ³				10,392 (96%)	422 (4%)	Grown from 2018
	2018	10,868 ¹²				10,574 (97%)	294 (3%)	

VOLUME COUNT			
	Date	Int	Total
	Tue 9/21/2010	60	13,130
	Mon 9/20/2010	60	12,622

VOLUME TREND ?	
Year	Annual Growth
2019	0%

CLASSIFICATION			
	Date	Int	Total
			No Data

NOTES/FILES			
	Note	Date	



Auto and Heavy Truck 10-year ADT Projections

East Outer Drive

	Cars	% Change	Trucks	% Change
2018	9999		869.44	
2019	9949	-0.5	865.12	-0.5
	Avg % change:	-0.5	Avg % change:	-0.50
	Avg % change (Last 5-yr Trend):	#REF!	Avg % change (Last 5-yr Trend):	#REF!
	% Change/Year Assumption	1	%/Year Change Assumption	1

2030 Projections

	Cars	Trucks
2018	9999	869
2019	9949	865
2020	10048	874
2021	10149	882
2022	10250	891
2023	10353	900
2024	10456	909
2025	10561	918
2026	10667	927
2027	10773	937
2028	10881	946
2029	10990	955
2030	11100	965

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
11100	965

ENTER DATA HERE	
Year	AADT
2018	10868
2019	10814
% auto	92
% truck	8

Disclaimer: The Michigan Department of Transportation (MDOT) works with individual agencies (cities/villages, counties, metropolitan planning organizations (MPOs), regional planning organizations (RPOs), and other areas of MDOT) to identify existing traffic count programs and/or traffic data. [more](#)

List View All DIRs

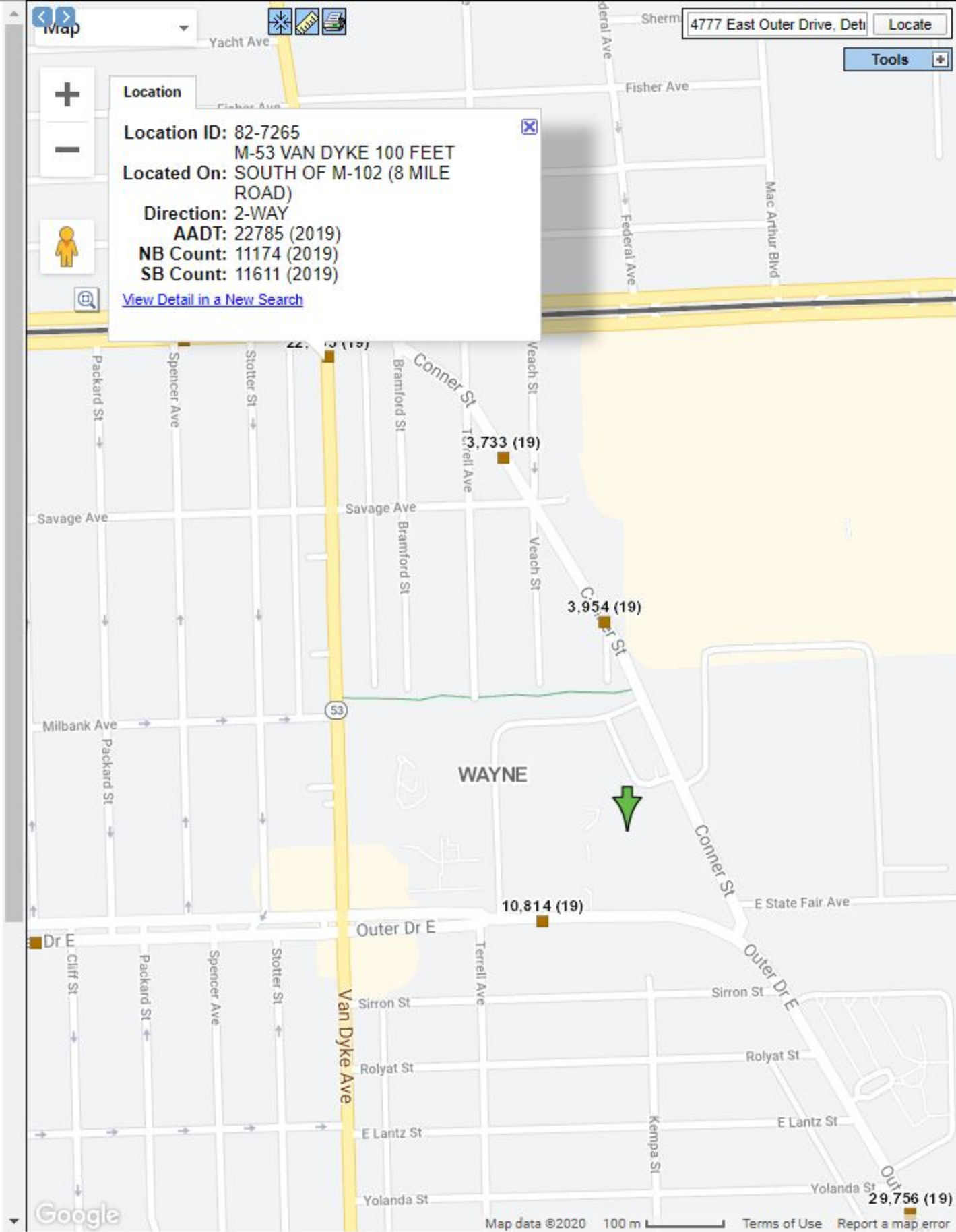
Record	1	of 1	Goto Record	go
Location ID	82-7265	MPO ID	85360	
Type	SPOT	HPMS ID		
On NHS	No	On HPMS		
LRS ID	1577904	LRS Loc Pt.	4.868	
SF Group	Urban	Route Type	Interstate Routes	
AF Group	South	Route	53	
GF Group	Urban	Active	Yes	
Class Dist Grp	2_053_002	Category	Primary	
Seas Class Grp				
WIM Group				
QC Group	Default			
Funct'l Class	(3) Other Principal Arterial	Milepost		
Located On	M-53 VAN DYKE			
Loc On Alias				
	100 FEET SOUTH OF M-102 (8 MILE ROAD)			
More Detail				

STATION DATA

Directions: 2-WAY NB SB ?

AADT ?								
	Year	AADT	DHV-30	K %	D %	PA	BC	Src
	2019	22,785	2,239	10	58	21,041 (92%)	1,744 (8%)	
	2018	22,986 ³		11	58	20,848 (91%)	2,138 (9%)	Grown from 2017
	2017	22,986 ³		11	58	21,307 (93%)	1,679 (7%)	Grown from 2016
	2016	22,736		11	58	20,953 (92%)	1,783 (8%)	MDOT
	2014	18,971 ³	2,049	11	58	17,203 (91%)	1,768 (9%)	MDOT
1-5 of 8								

VOLUME COUNT				VOLUME TREND ?	
	Date	Int	Total	Year	Annual Growth
	Mon 8/26/2019	15	25,266	2019	-1%
	Wed 7/13/2016	60	28,043	2018	0%
	Tue 7/12/2016	60	26,474	2017	1%
	Tue 5/7/2013	15	23,892	2016	9%
	Mon 5/6/2013	15	23,935	2014	2%
	Tue 4/23/2013	60	22,016		



Auto and Heavy Truck 10-year ADT Projections

Van Dyke Avenue

	Cars	% Change	Trucks	% Change
2016	20917		1818.88	
2017	21147	1.1	1838.88	1.1
2018	21147	0.0	1838.88	0.0
2019	20962	-0.9	1822.8	-0.9
	Avg % change:	0.1	Avg % change:	0.08
	Avg % change (Last 5-yr Trend):	#REF!	Avg % change (Last 5-yr Trend):	#REF!
	% Change/Year Assumption	1	%/Year Change Assumption	1

ENTER DATA HERE	
Year	AADT
2016	22736
2017	22986
2018	22986
2019	22785
% auto	92
% truck	8

2030 Projections

	Cars	Trucks
2016	20917	1819
2017	21147	1839
2018	21147	1839
2019	20962	1823
2020	21172	1841
2021	21383	1860
2022	21597	1878
2023	21813	1897
2024	22031	1916
2025	22252	1935
2026	22474	1955
2027	22699	1974
2028	22926	1994
2029	23155	2014
2030	23387	2034

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
23387	2034

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 09 / 12 / 2017	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 284055W
---	--	--	--

Part I: Location and Classification Information

1. Primary Operating Railroad GRAND TRUNK WESTERN RAILROAD INC. [GTW]		2. State MICHIGAN		3. County WAYNE	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near DETROIT		5. Street/Road Name & Block Number EAST OUTER DRIVE (Street/Road Name) * (Block Number)		6. Highway Type & No. CITY	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None DETROIT		10. Railroad Subdivision or District <input type="checkbox"/> None MT CLEMENS		11. Branch or Line Name <input type="checkbox"/> None MAIN	
12. RR Milepost 0009.120 (prefix) (nnnn.nnn) (suffix)					
13. Line Segment * SC00023062		14. Nearest RR Timetable Station * WAYNE		15. Parent RR (if applicable) <input type="checkbox"/> N/A CN	
16. Crossing Owner (if applicable) <input type="checkbox"/> N/A GTW					
17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	
20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.436610		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -83.014630	
29. Lat/Long Source <input checked="" type="checkbox"/> Actual <input type="checkbox"/> Estimated					
30.A. Railroad Use *			31.A. State Use *		
30.B. Railroad Use *			31.B. State Use *		
30.C. Railroad Use *			31.C. State Use *		
30.D. Railroad Use *			31.D. State Use *		
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-465-9239		34. Railroad Contact (Telephone No.) 888-888-5909		35. State Contact (Telephone No.) 517-335-2592	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 6	1.B. Total Night Thru Trains (6 PM to 6 AM) 6	1.C. Total Switching Trains 4	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? 0
2. Year of Train Count Data (YYYY) 2015		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 2 Siding 0 Yard 1 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input checked="" type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 09/12/2017		PAGE 2		D. Crossing Inventory Number (7 char.) 284055W	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 2		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count) 0	2.D. Advance Warning Signs (Check all that apply; include count) <input checked="" type="checkbox"/> None <input type="checkbox"/> W10-1 0 <input type="checkbox"/> W10-3 0 <input type="checkbox"/> W10-11 0 <input type="checkbox"/> W10-2 0 <input type="checkbox"/> W10-4 0 <input type="checkbox"/> W10-12 0	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count 0) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	
2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No		2.I. ENS Sign (I-13) Displayed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
2.J. Other MUTCD Signs Specify Type _____ Count 0 Specify Type _____ Count 0 Specify Type _____ Count 0		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No		2.L. LED Enhanced Signs (List types)	
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian 0		3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates <input type="checkbox"/> 4 Quad		3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 2 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED	
3.D. Mast Mounted Flashing Lights (count of masts) 2 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included		3.E. Total Count of Flashing Light Pairs 8			
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____ / _____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) _____ / _____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3.I. Bells (count) 1		3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None		3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No		4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs		4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	
5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * 0 Stop Line Distance * 0		6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None			
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 4 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No		5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) _____ / _____ Width * 4 Length * 3 <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____			
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input checked="" type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4. Highway Speed Limit 35 MPH <input checked="" type="checkbox"/> Posted <input type="checkbox"/> Statutory		5. Linear Referencing System (LRS Route ID) *			
6. LRS Milepost *		7. Annual Average Daily Traffic (AADT) Year 2010 AADT 015678			
8. Estimated Percent Trucks 10 %		9. Regularly Used by School Buses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Average Number per Day 3		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

Appendix D

[Home \(/\)](#) > [Programs \(/programs/\)](#) > [Environmental Review \(/programs/environmental-review/\)](#) > DNL Calculator

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	Brnjamin O. Davis Veteran's Village
Record Date	04/28/2020
User's Name	NAL #1

Road # 1 Name:	Conner Street
----------------	---------------

Road #1

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	<input type="text" value="643"/>	<input type="text" value="643"/>	<input type="text" value="643"/>
Distance to Stop Sign	<input type="text"/>	<input type="text"/>	<input type="text"/>
Average Speed	<input type="text" value="35"/>	<input type="text" value="35"/>	<input type="text" value="35"/>
Average Daily Trips (ADT)	<input type="text" value="4059"/>	<input type="text" value="177"/>	<input type="text" value="177"/>
Night Fraction of ADT	<input type="text" value="15"/>	<input type="text" value="15"/>	<input type="text" value="15"/>
Road Gradient (%)	<input type="text"/>	<input type="text"/>	<input type="text" value="2"/>
Vehicle DNL	<input type="text" value="43"/>	<input type="text" value="40"/>	<input type="text" value="50"/>
<div>Calculate Road #1 DNL</div>	<input type="text" value="51"/>	<div>Reset</div>	

Road # 2 Name:

East Outer Drive

Road #2

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	<input type="text" value="704"/>	<input type="text" value="704"/>	<input type="text" value="704"/>
Distance to Stop Sign	<input type="text"/>	<input type="text"/>	<input type="text"/>
Average Speed	<input type="text" value="35"/>	<input type="text" value="35"/>	<input type="text" value="35"/>
Average Daily Trips (ADT)	<input type="text" value="11100"/>	<input type="text" value="483"/>	<input type="text" value="483"/>
Night Fraction of ADT	<input type="text" value="15"/>	<input type="text" value="15"/>	<input type="text" value="15"/>
Road Gradient (%)	<input type="text"/>	<input type="text"/>	<input type="text" value="2"/>
Vehicle DNL	<input type="text" value="47"/>	<input type="text" value="43"/>	<input type="text" value="54"/>
<div>Calculate Road #2 DNL</div>	<input type="text" value="55"/>	<div>Reset</div>	

Road # 3 Name:

Van Dyke Avenue

Road #3

Vehicle Type	Cars <input checked="" type="checkbox"/>	Medium Trucks <input checked="" type="checkbox"/>	Heavy Trucks <input checked="" type="checkbox"/>
Effective Distance	713	713	713
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	23387	1017	1017
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	50	47	57
Calculate Road #3 DNL	58	Reset	

Railroad #1 Track Identifier:

Grand Trunk Western

Rail # 1

Train Type	Electric <input type="checkbox"/>	Diesel <input checked="" type="checkbox"/>
Effective Distance		2850
Average Train Speed		25
Engines per Train		2
Railway cars per Train		50
Average Train Operations (ATO)		12

Night Fraction of ATO		50
Railway whistles or horns?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Bolted Tracks?	Yes: <input type="checkbox"/> No: <input type="checkbox"/>	Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>
Train DNL	0	57
Calculate Rail #1 DNL	57	Reset
<div>Add Road Source</div> <div>Add Rail Source</div>		
Airport Noise Level		
Loud Impulse Sounds?	<input type="radio"/> Yes <input type="radio"/> No	
Combined DNL for all Road and Rail sources	62	
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/>)

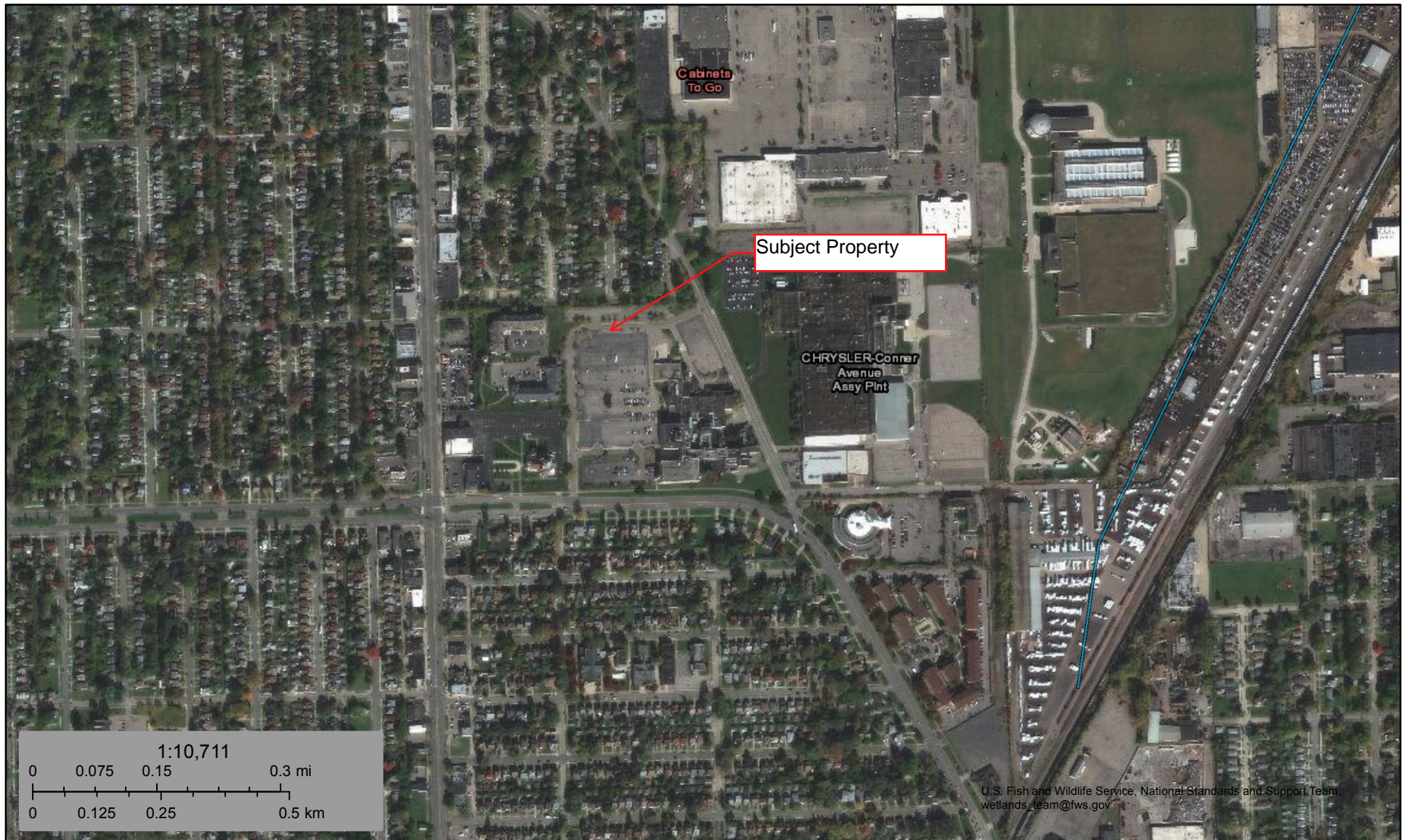
Day/Night Noise Level Assessment Tool Flowcharts (</resource/3823/day-night-noise-level-assessment-tool-flowcharts/>)



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands



May 5, 2020

Wetlands

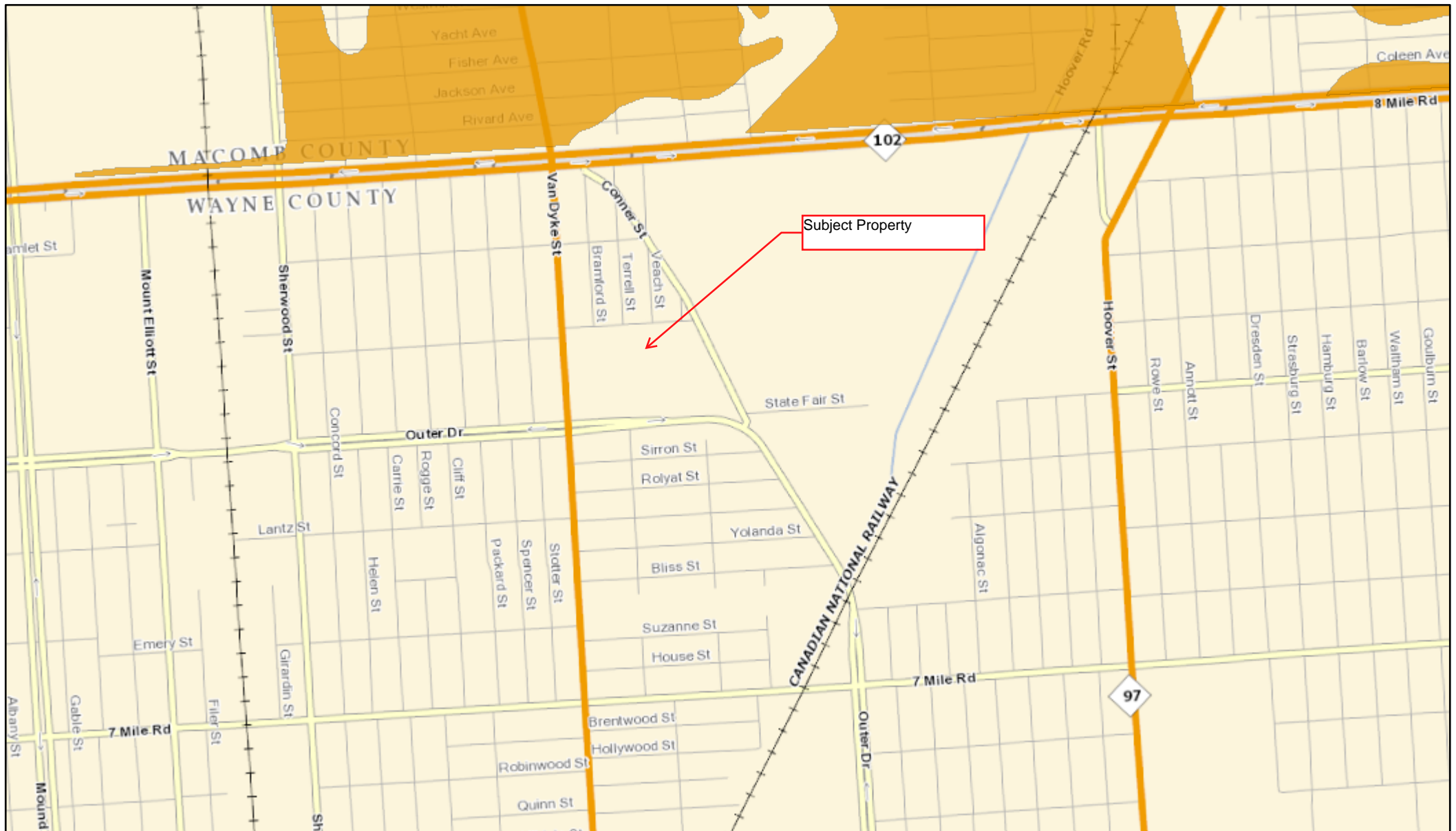
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- 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.

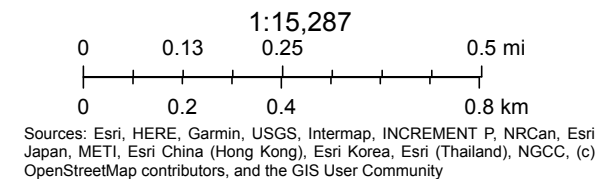
Wetlands Map Viewer



June 4, 2020

Part 303 Final Wetlands Inventory

- Wetlands as identified on NWI and MIRIS maps
- Soil areas which include wetland soils
- Wetlands as identified on NWI and MIRIS maps and soil areas which include wetland soils



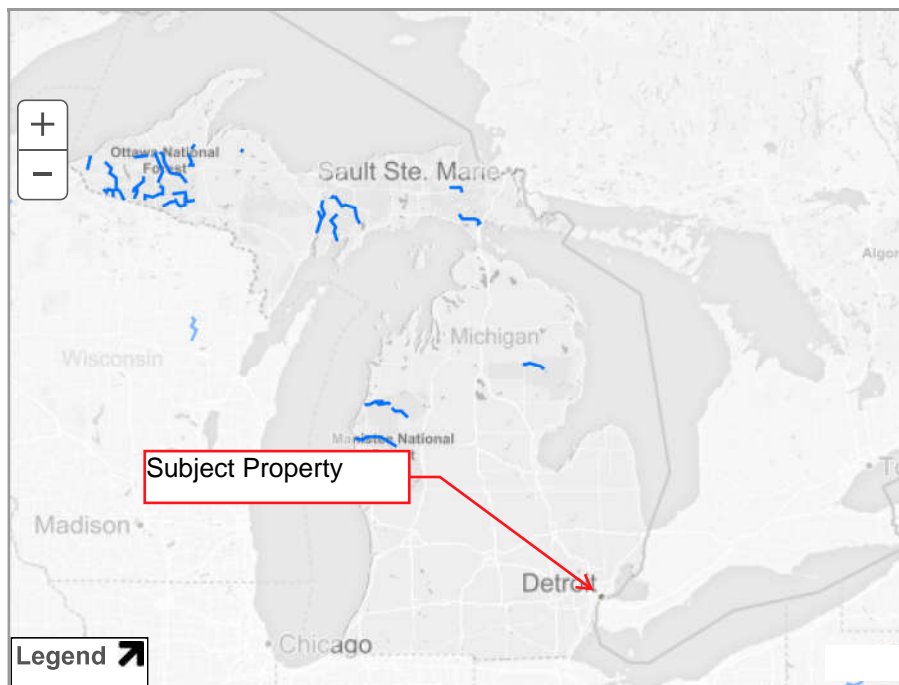
Disclaimer: This map is not intended to be used to determine the specific



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.

Wild and Scenic Rivers Map



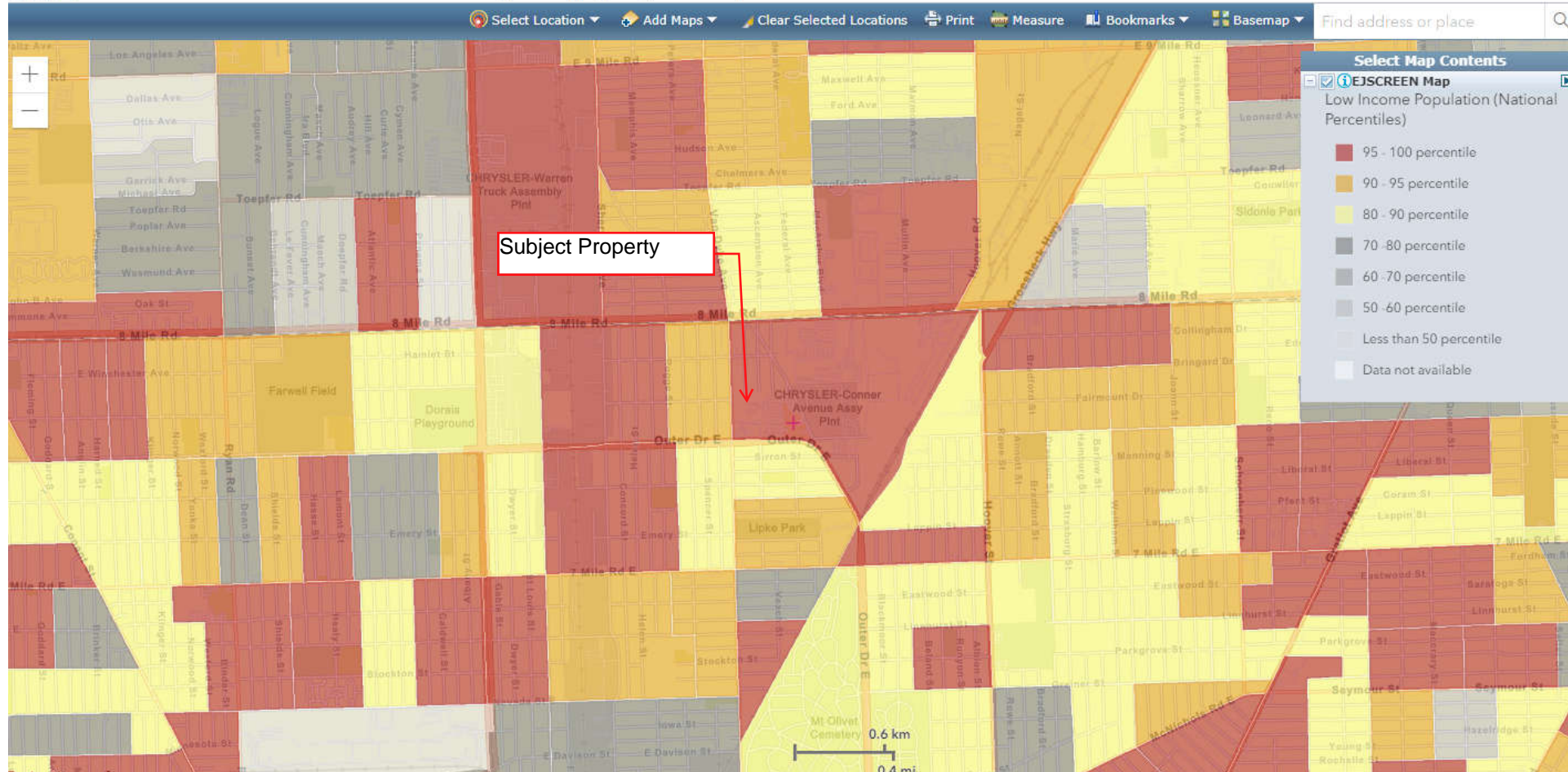
Choose A State ▼ Go

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.

[+ View larger map](#)

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

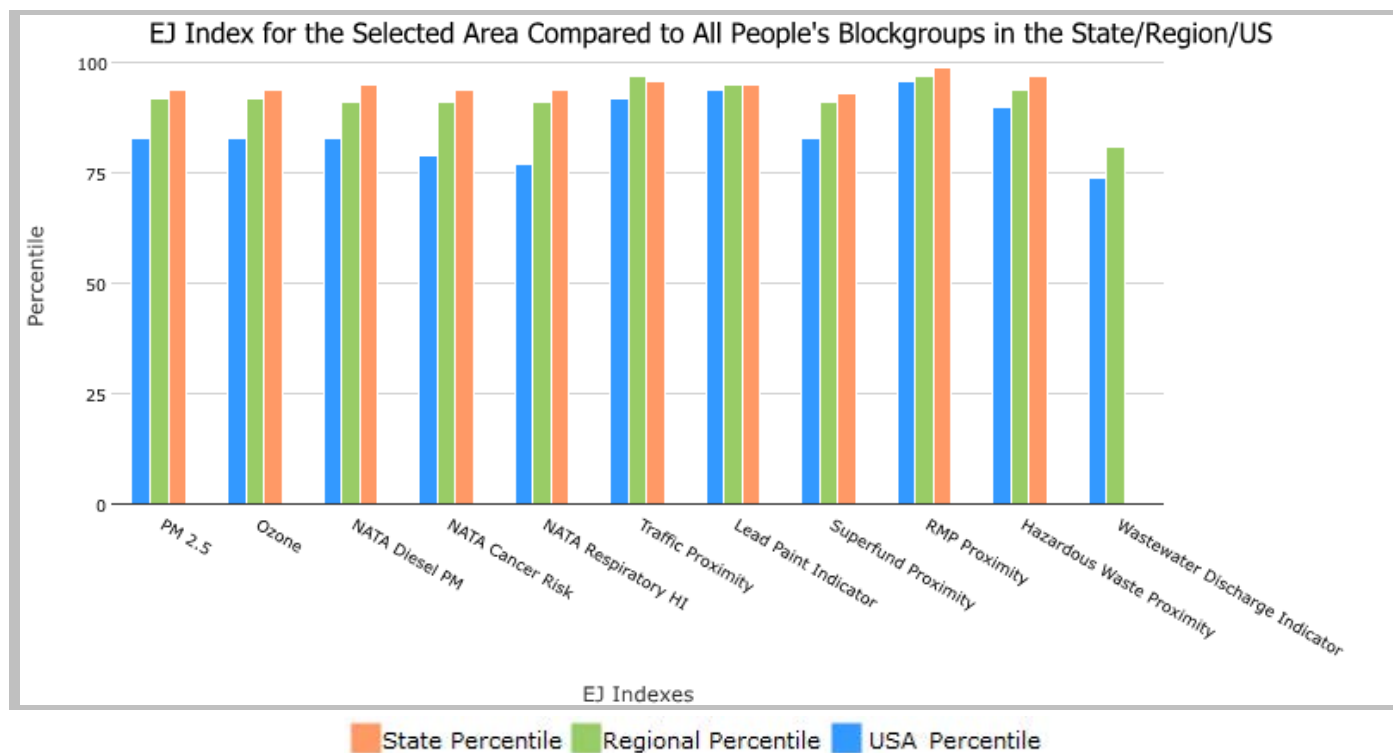


1 miles Ring Centered at 42.443634,-83.021521, MICHIGAN, EPA Region 5

Approximate Population: 14,505

Input Area (sq. miles): 3.14

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	94	92	83
EJ Index for Ozone	94	92	83
EJ Index for NATA* Diesel PM	95	91	83
EJ Index for NATA* Air Toxics Cancer Risk	94	91	79
EJ Index for NATA* Respiratory Hazard Index	94	91	77
EJ Index for Traffic Proximity and Volume	96	97	92
EJ Index for Lead Paint Indicator	95	95	94
EJ Index for Superfund Proximity	93	91	83
EJ Index for RMP Proximity	99	97	96
EJ Index for Hazardous Waste Proximity	97	94	90
EJ Index for Wastewater Discharge Indicator	N/A	81	74



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



Input Area (sq. miles): 3.14



2/3

EJSCREEN Report (Version 2019)

1 miles Ring Centered at 42.443634,-83.021521, MICHIGAN, EPA Region 5

Approximate Population: 14,505

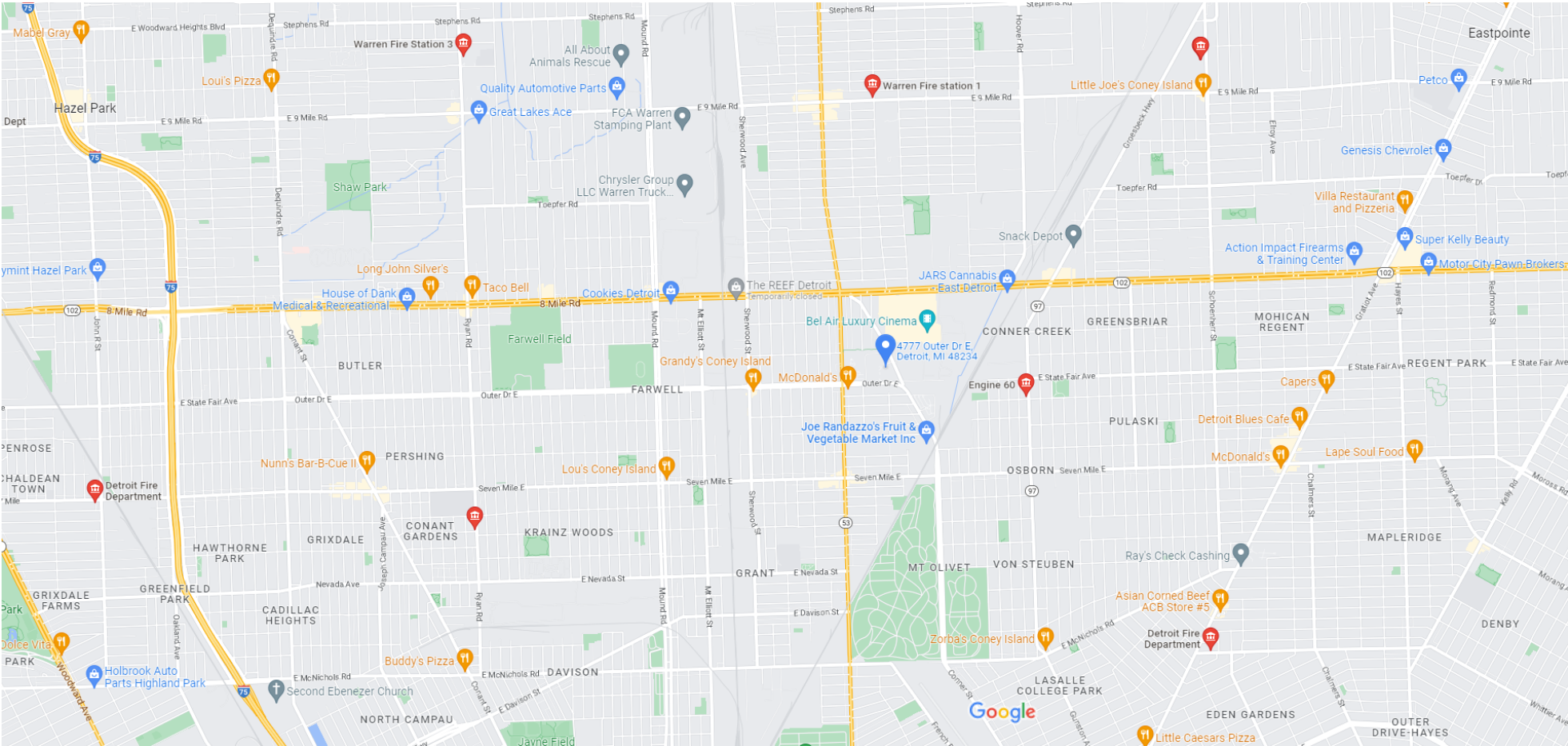
Input Area (sq. miles): 3.14

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$)	9.57	8.56	87	8.63	82	8.3	82
Ozone (ppb)	46	44	92	43.4	85	43	73
NATA* Diesel PM ($\mu\text{g}/\text{m}^3$)	0.588	0.338	87	0.446	70-80th	0.479	70-80th
NATA* Cancer Risk (lifetime risk per million)	30	24	93	26	70-80th	32	<50th
NATA* Respiratory Hazard Index	0.36	0.29	87	0.34	60-70th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	1800	660	90	530	93	750	89
Lead Paint Indicator (% Pre-1960 Housing)	0.83	0.38	88	0.38	90	0.28	94
Superfund Proximity (site count/km distance)	0.089	0.15	63	0.13	66	0.13	62
RMP Proximity (facility count/km distance)	3.6	0.53	99	0.82	96	0.74	97
Hazardous Waste Proximity (facility count/km distance)	3.7	1	94	1.5	88	4	86
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	0	0.23	N/A	0.82	28	14	37
Demographic Indicators							
Demographic Index	77%	29%	94	28%	95	36%	93
Minority Population	84%	25%	92	25%	92	39%	86
Low Income Population	69%	33%	92	31%	93	33%	93
Linguistically Isolated Population	1%	2%	67	2%	62	4%	47
Population With Less Than High School Education	21%	10%	90	10%	87	13%	79
Population Under 5 years of age	10%	6%	90	6%	88	6%	86
Population over 64 years of age	10%	16%	21	15%	25	15%	29

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: www.epa.gov/environmentaljustice

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



Map data ©2023 Google 2000 ft

- Rating

Hours

All filters
- Engine 60

4.3 (6)

Fire station · 19701 Hoover St

Directions
- Engine Co 56 / Medic 16

5.0 (1)

Fire station · 18601 Ryan Rd

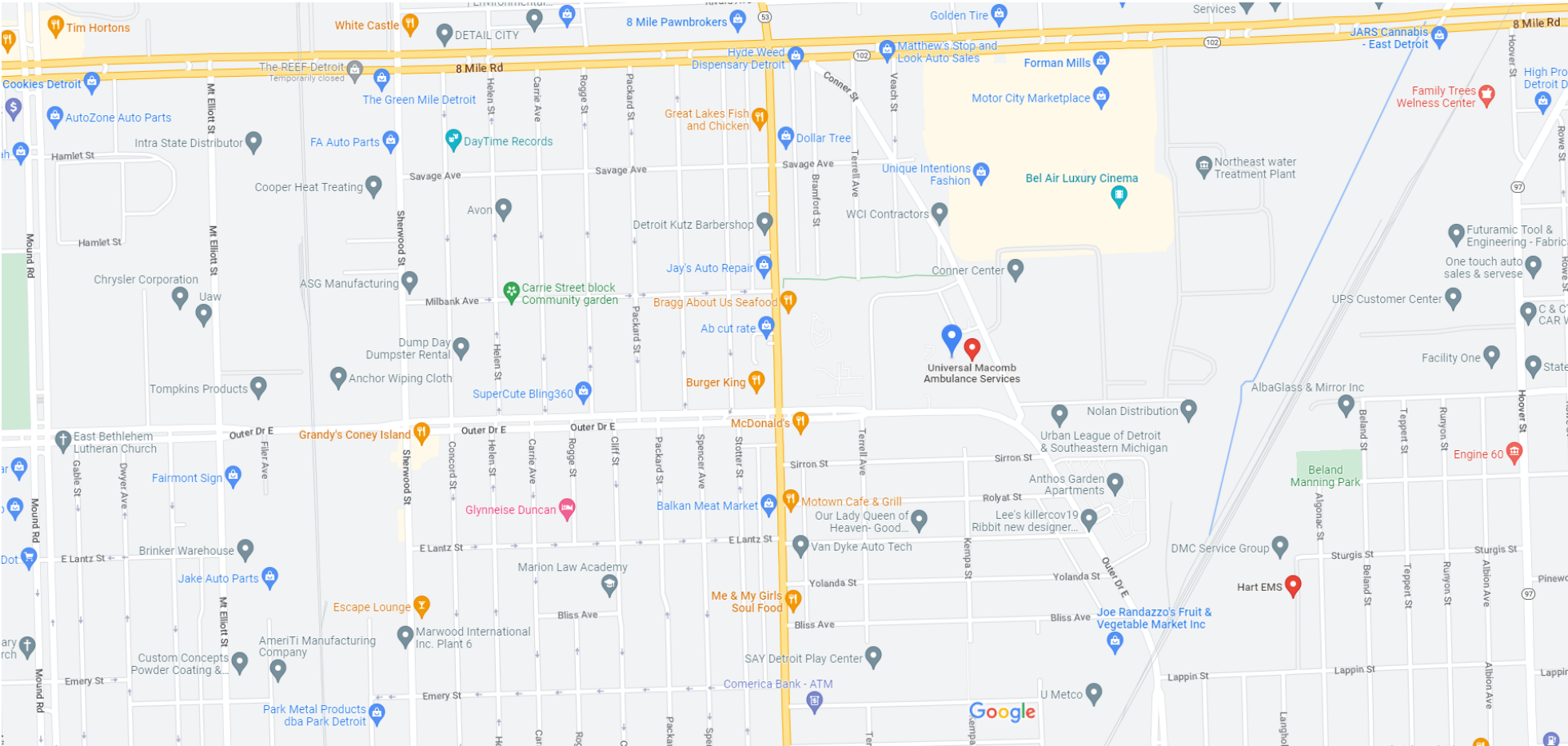
Directions
- Hamtramck Fire Department

4.0 (4)

Fire station · 2625 Caniff St

Website

Directions



Map data ©2023 500 ft

Rating

Hours

All filters

Superior Emergency Medical

Services

No reviews

Medical clinic · 2000 Centerwood Dr

Open now · (248) 595-8890



Website



Directions

Medical Center Emergency

Services

No reviews

Medical clinic · 4201 St Antoine # 3R

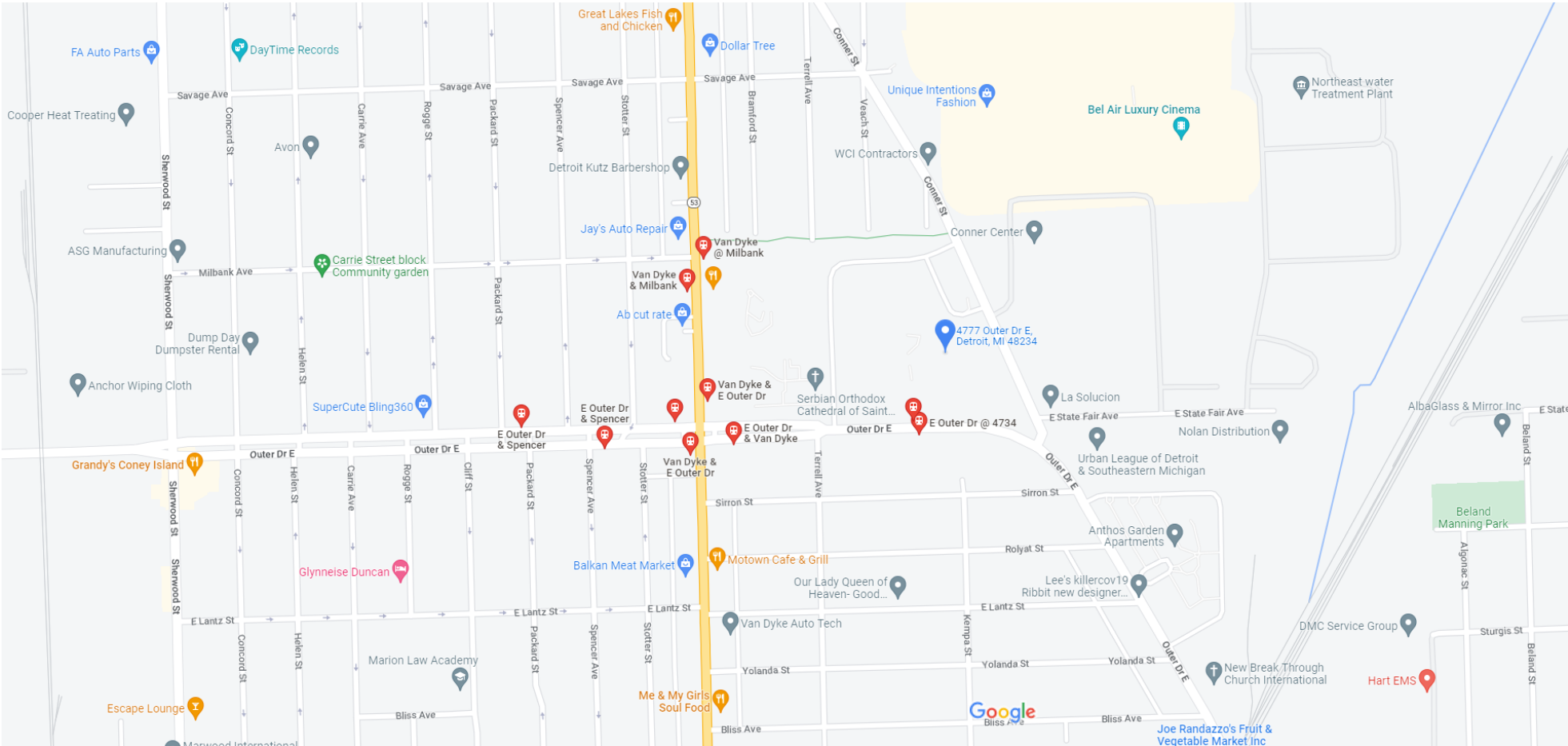
(313) 745-3330



Website



Directions



Map data ©2023 200 ft

Van Dyke & E Outer Dr
Bus stop



Directions

E Outer Dr & Van Dyke
Bus stop

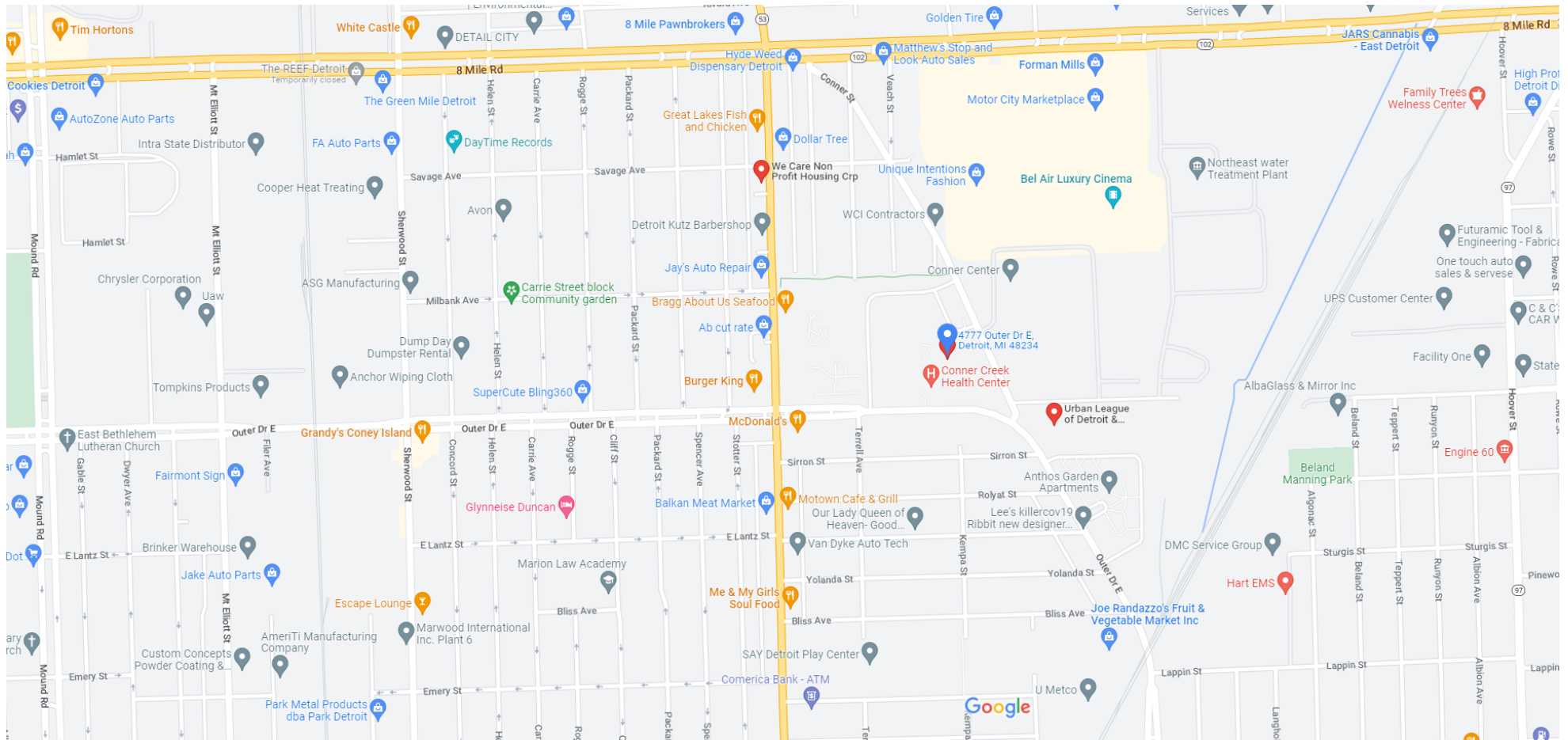


Directions

E Outer Dr & Van Dyke
Bus stop



Directions



Map data ©2023 500 ft

Rating

Hours

All filters

Social Service Organization

No reviews

Social services organization · 12541 McDougall
(800) 936-1437



[Directions](#)

A Baby's Life, LLC

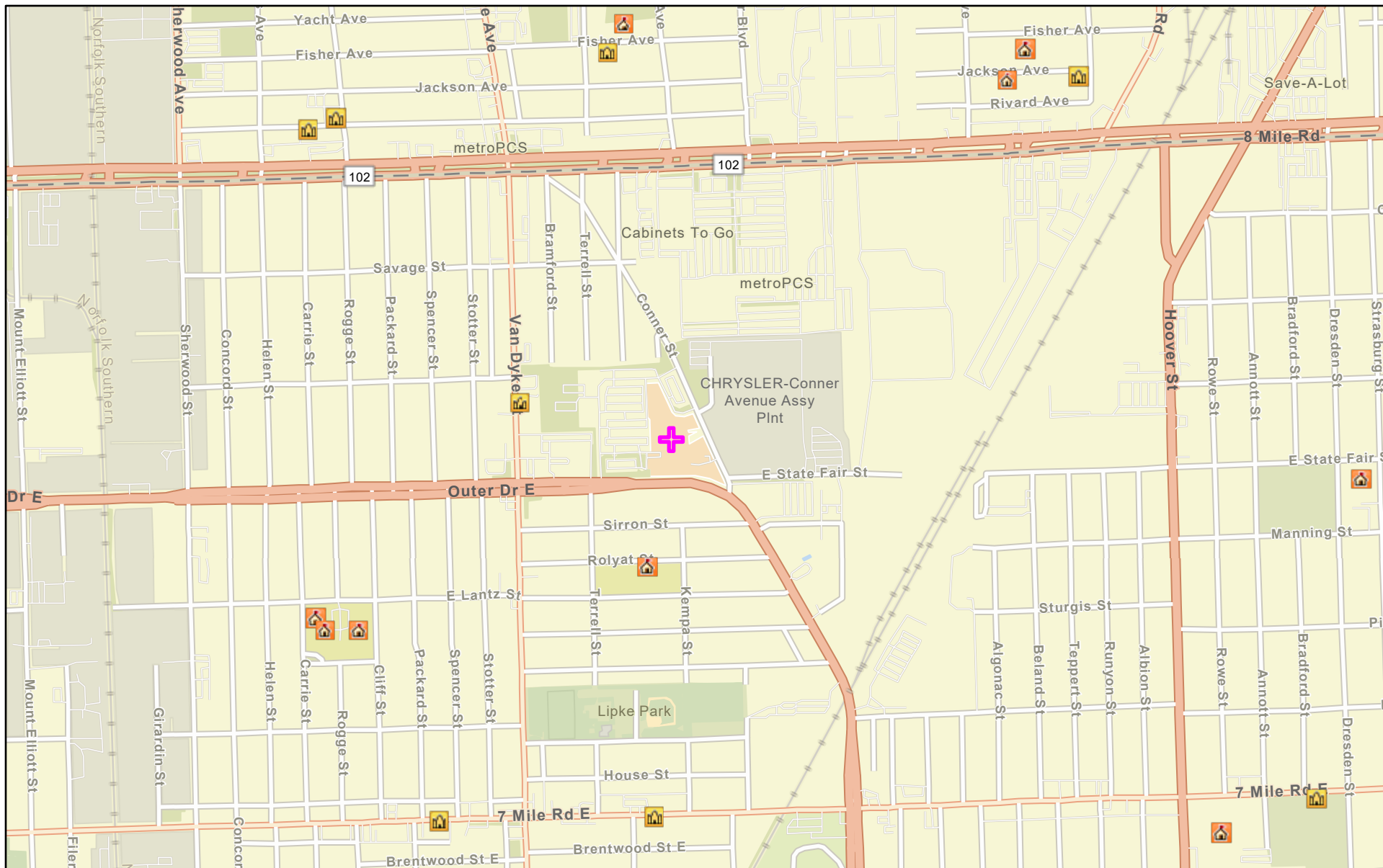
No reviews

Social services organization · 4777 Outer Dr E
Open · Closes 7 PM



[Directions](#)

Schools and Cultural



March 17, 2023



Search Result (point)

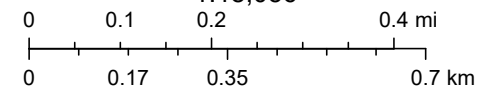


Places of Worship

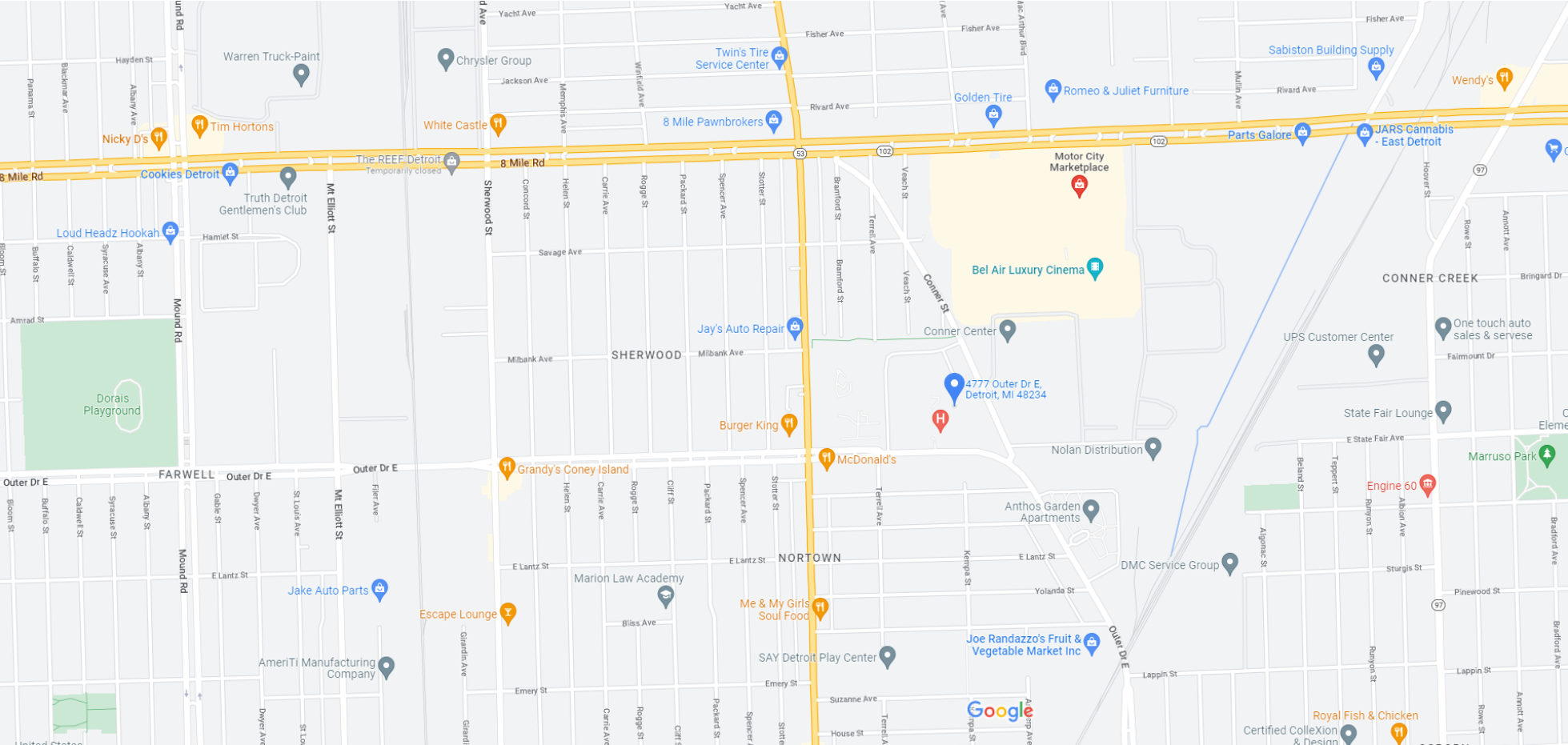


Schools

1:18,056



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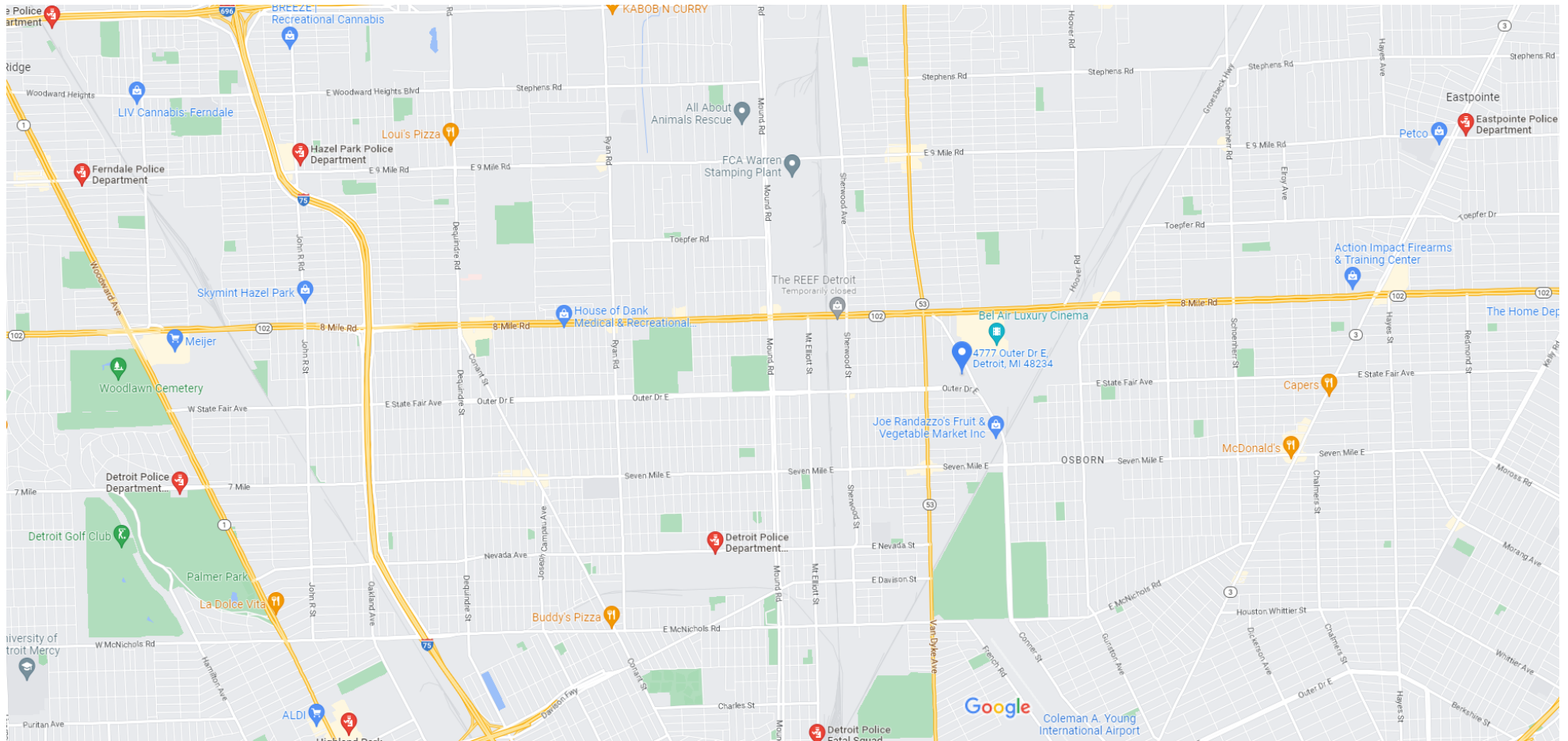
Rating Hours All filters

OnLine Retail Catalog Shopping
No reviews
Food store · 14993 Eastburn St
Open · Closes 5PM · (313) 526-7280
In-store shopping



Retail Sales Connect
No reviews
Cell phone store · 615 Griswold St
Opens soon · 11 AM · (800) 207-4103





Map data ©2023 Google 2000 ft

Rating

All filters

Detroit Police Department Eleventh Precinct

3.8 (20)

Police department · 5100 Nevada Ave
(313) 596-1100



Directions

Hamtramck Police Department

2.5 (41)

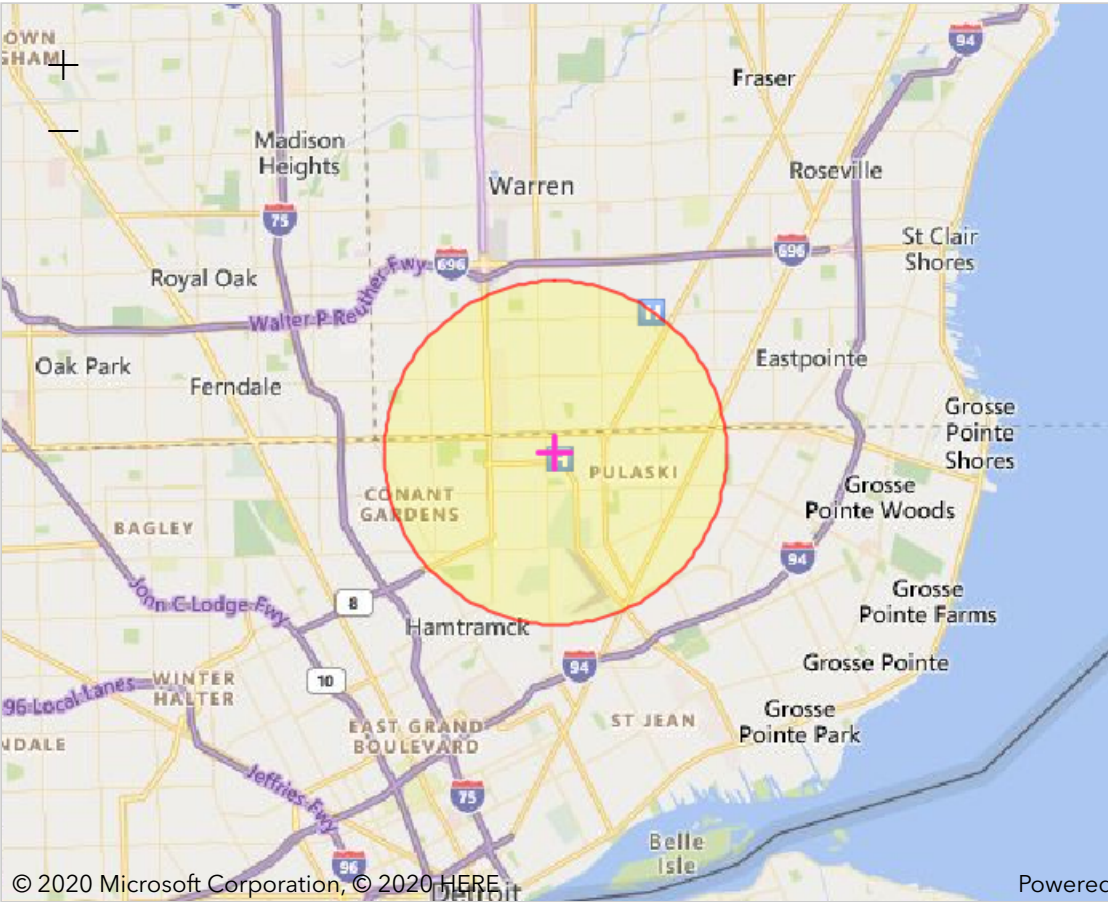
Police department · 3401 Evaline St
Open 24 hours · (313) 800-5281



Website



Directions



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Report question: *Within 0.5 miles of a hospital?* **yes**

Modify question by entering a new buffer distance and unit for the selected study area:

miles

▼

Submit

Features within Study Area

Features found: 5

Name	Distance	Units
Triumph Hospital - Detroit	.13	miles
Saint John Northeast Community Hospital	.13	miles
Kindred Hospital - Detroit	.14	miles
Henry Ford Macomb Hospital - Warren Campus	2.97	miles
Bi - County Community Hospital	2.99	miles