U.S. Department of Housing and Urban Development
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Washington, DC 20410
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Environmental Assessment
Determinations and Compliance Findings for HUD-assisted Projects
24 CFR Part 58

Project Information

Project Name: Woodward Apartments

Responsible Entity: City of Detroit

Grant Recipient (if different than Responsible Entity): NA

State/Local Identifier: City of Detroit, Michigan

Preparer: Kim Siegel, Environmental Compliance Specialist, City of Detroit

Certifying Officer Name and Title: Julie Schneider, Director of Housing and Revitalization Department, City of Detroit

Consultant (if applicable): Christy Bakos, GRand Environmental, LLC

Direct Comments to:

Penny Dwoinen
Environmental Review Officer, City of Detroit
Penny.Dwoinen@detroitmi.gov

Project Location:
10201 Woodward, 10227 Woodward and 10236 Woodward Avenue, 39 Calvert Street and 30 Glynn Court in Detroit, Wayne County, Michigan

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]**:**
The proposed project includes the construction of a 62,497 square foot, four-story tall apartment building containing first floor retail spaces at the southeast corner of Woodward Avenue and Glynn Court in the north end of Detroit. The development will include 53 two-bedroom units; 26 units as 9% LIHTC and 27 units as 4% LIHTC. A parking lot is proposed to the north and rear of the new building. New curb cuts are proposed from the two side streets, Glynn Court and Calvert Avenue.

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:
The project would provide much needed affordable retail space and private-unit residential housing in the North End neighborhood of Detroit. The development is designed to meet the income distribution and household size needs identified in the market study as well as provide desirable community retail space on Woodward Avenue. The project is located within a federally designated Qualified Census Tract.

Existing Conditions and Trends [24 CFR 58.40(a)]:
The project site is currently underutilized vacant land. The site is located on the west side of Woodward Avenue and is adjacent to the Boston-Edison Historic District and across from the Cathedral of the Most Blessed Sacrament. The area would likely remain vacant without the proposed project.

Surrounding land is a mix of apartments, single family residential, commercial, and community uses. The Subject Property has a municipal bus route stop along Woodward Avenue and is within easy walking distance of a municipal park and a variety of business, retail, educational and religious opportunities. The adjoining Cathedral of the Most Blessed Sacrament serves as the seat of the Archbishop of the Archdiocese. The Archdiocese has been an active community engager in the neighborhood for over 100 years and continues to invest and promote cultural activities in the neighborhood for the local residents and statewide population.

As described above, the market study documented a shortage of affordable housing locally for community members with incomes at or below 60% of Area Median Income (AMI) and trend factors indicating that this shortage will become even greater in the near, medium, and long term.

Private sector housing development in this area is infeasible in the foreseeable future. The new development will incorporate much needed residential living units at as well as commercial space. Failure to redevelop the vacant land would not address the current shortage of such housing and community retail opportunities or the projected long term continued shortage.

Funding Information

Federal Funding Program	9% Phase Funding Amount	4% Phase Funding Amount
Low Income Housing Tax Credit (LIHTC) Equity 4%	$0	$3,558,644
Tax-Exempt Bond Permanent Mortgage	$0	$1,918,179
Taxable Bond Permanent Mortgage	$1,562,267	$0
LIHTC Equity 9%	$9,214,816	$ 0
HOME funds	$ 0	$ 0
HTF Funds	$ 0	$2,440,103
DHC PBVs	8 PBVs	8 PBVs
Total Project Cost	$11,318,856	$8,296,709
Deferred Fee	$162,399	$154,583
Sponsor Note	$379,174	$225,000

Estimated Total HUD Funded Amount: A total of 16 Vouchers - Each has 8 Project Based Vouchers

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]**:**
See above

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

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	**Compliance determinations**
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes ☐ No ☒	The property is located approximately 8 miles from the Coleman A Young Municipal Airport, 16 miles from the Windsor International Airport and 20 miles from the Detroit Metropolitan Wayne County Airport, which are the nearest US military, civil or commercial service airports. The project site is not within an Airport Clear Zone or Accident Potential Zone. No military airfields are located in Wayne County or the nearby vicinity. See Attachment 1 -Phase I ESA (Appendix 10.8) and Attachment 2 for location maps and Partner Worksheet
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes ☐ No ☒	The project site is not within a Coastal Barrier Resource System (CBRS) Unit, or CBRS buffer zone, as defined under the Coastal Barrier Improvement Act of 1990 [16 Resources Act of 1982 (PL 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (PL 101-591). See Attachment 3 for coastal zone maps
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes ☐ No ☒	The property is not located within a Special Flood Hazard Area as depicted on the Flood Insurance Rate Map panel 26163C0280E Panel 280 of 575, dated February 2, 2012. The project would not involve either direct or indirect support of development in a floodplain. See Attachment 4 for the Floodplain Map
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5		
Clean Air Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	Yes ☐ No ☒	Clean Air Act – Wayne County is designated as being in 'attainment' for carbon monoxide, lead, nitrogen dioxide, particulate matter (PM10 & PM2.5). Southeast Michigan is in a Nonattainment area for ozone, and the eastern portion of Wayne County is in a Nonattainment area for Sulfur Dioxide. The State of Michigan has a State Implementation Plan in place and continues to monitor the concentrations of Sulfur Dioxide in portions of Wayne County. Local and Regional air quality will not be significantly affected. A General Conformance Letter was received from EGLE.

		<u>Fugitive Dust</u> Measures to control fugitive dust will be utilized during construction to ensure that construction projects do not result in erosion and formation of dust. The Best Management Practices (BMPs) employed will comply with the City's site plan approval process and will be effective in controlling construction related fugitive dust. See Attachment 5 – NAAQS Maps and General Conformity Letter
Coastal Zone Management Coastal Zone Management Act, sections 307(c) & (d)	Yes ☐ No ☒	The Property is not located in a coastal zone per State of Michigan Office of the Great Lakes or the National Oceanic and Atmospheric Administration. See Attachment 3 for Coastal Zone Boundaries Maps
Contamination and Toxic Substances 24 CFR Part 50.3(i) & 58.5(i)(2)	Yes ☒ No ☐	A Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 and MSHDA Environmental Review for Requirements the Subject Property was completed on August 28, 2020 by Environmental Services, GPW, LLC. The Phase I ESA revealed several recognized environmental conditions (RECs) across the Subject Property. Phase II subsurface soil investigations confirmed the presence of contaminants in the soil on-site exceeding Michigan Part 201 Generic Residential Cleanup Criteria (GRCC). The contaminants include: lead, arsenic, mercury, benzene, ethylbenzene, xylenes, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, isopropylbenzene, n-propylbenzene, sec-butylbenzene, n-butylbenzene, tert-butylbenzene, naphthalene, 2-methylnaphthalene, phenanthrene, 1,2,4-trimethylbenzene (TMB), 1,3,5-TMB and 1,2,3-TMB. A BEA report was prepared on October 7, 2022, submitted and received by the Michigan Department of Environment, Great Lakes & Energy (EGLE). The acknowledgement letters are attached. Furthermore, to address the site contamination concerns, three Final Assessment Reports (FARs) and Corrective Action Plans (CAPs) were prepared, submitted and reviewed by EGLE. EGLE approved the reports on October 20, 2022. The plans outline the removal of all impacted soil to protect residents from exposures to contamination remaining onsite. Following the implementation of the actions included in the FARs and CAPs, a Closure Report or Documentation of Due Care Compliance (DDCC) report will be prepared and submitted to EGLE for approval if needed. The approved DDCC will establish that the site is in compliance with Part 201 for the intended mixed commercial and residential use. <u>Asbestos and Lead Based Paint</u> There are no buildings <u>Radon</u> The proposed project is located in Wayne County which is designated as Zone 3 by the EPA. Zone 3 counties have a predicted average indoor radon screening level below 2 pCi/L. No further assessment is required for this project. See Attachment 1 for environmental reports and Attachment 6 for Radon map

Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes ☐ No ☒	The project is located within a historically densely developed environment where the vegetation and wildlife have adapted. The project has been developed for commercial and residential uses since the late 1800's. An Official Species List was obtained from the USFWS that identifies potential Threatened and Endangered (T&E) species in the area of the proposed project. Based on observations and additional data gathered in this assessment, there are no T&E species or critical habitats along the Woodward Avenue corridor. Therefore, the project would have "No Effect" on listed species and no Best Management Practices would be required to mitigate potential effects to them. The USFWS indicates "There are no Critical Habitats at this Location". See Attachment 7
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes ☐ No ☒	The project does not involve explosive or flammable materials or operations. There is no visual evidence or indication of unobstructed or unshielded above ground storage tanks (fuel oil, gasoline, propane, etc.) or operations utilizing explosive/flammable material at or in close proximity to the property. See Attachment 8 for Pipelines Map and Partner Worksheet
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes ☐ No ☒	The project site consists of urban land; therefore, the project would not affect farmlands. According to the US Department of Agriculture Natural Resources Conservation Service Resource Assessment Division Map for Michigan there are no protected farmlands in the City of Detroit. The soils are classified as Shebeon-Urban land – Avoca complex, which are not prime farmland. See Attachment 9
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes ☐ No ☒	The project is not located within a Special Flood Hazard Area as depicted on the FEMA Floodplain map. The project would not involve either direct or indirect support of development in a floodplain. See Attachment 4
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes ☒ No ☐	<u>Section 106</u> An Application for Section 106 review was submitted to the State Historic Preservation Office (SHPO). SHPO provided a finding of No Adverse Effect on July 9, 2021. See Attachment 10
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes ☒ No ☐	<u>HUD Noise Standards</u> A noise assessment was conducted for the property by ESGPW, LLC as part of the Phase I ESA and the assessment found exterior noise levels on the site to be up to a Day-Night Average Sound Level (DNL) of 72 dB. HUD regulations at 24 CFR Part 51 Subpart B consider the range between 65 and 75 DNL to be normally unacceptable and above 75 DNL to be unacceptable. Excessive noise at the site is due to road traffic on the adjacent Woodward Avenue. The developer evaluated how interior noise will be mitigated to achieve HUD noise standards. A STraCAT was completed by the developer / architect documenting the planned construction methods meet the required STC rating of less than 30. <u>Construction Noise</u> City Ordinance prohibits construction work between 10:00 pm and 7:00 am unless a special permit or waiver is granted. Construction is

		not anticipated to affect indoor uses associated with the nearest sensitive receptors surrounding the project site. <u>Operational Noise</u> The new structure is not anticipated to introduce new permanent noise sources which would interfere with surrounding residential uses. See Attachment 11
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes ☐ No ☒	There are no US EPA designated sole-source aquifers in Michigan. The proposed site is not located within a sole source aquifer watershed and would not affect a sole-source aquifer or negatively impact the water quality or any aquifers in the area. See Attachment 12
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes ☐ No ☒	The project site is not located near, or within, a wetland area. Therefore, the project would not affect wetland or riparian areas. See Attachment 13 for the Wetland Map
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes ☐ No ☒	No Wild and Scenic Rivers are located within the City of Detroit. See Attachment 14 for the State National Scenic Rivers Map
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes ☐ No ☒	The building will serve low-income and minority populations. The project would not result in disproportionately adverse environmental effects on minority or low income populations. New facilities and residences are intended to enhance the quality of life for new and existing residents and the community. See Attachment 15 for the Partner Worksheet

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: Use an impact code from the following list 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
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	2	This redevelopment project is in agreement with both the City of Detroit Master Plan and Zoning Ordinances. The site is currently zoned B4 (general business district) and adjoins R1 (Single-family residential district) and R5 (Medium density residential district) to the west. A historic district is to the south. This development is compatible with the City's goals for residential and commercial development and will have a positive impact on the area within which it exists The proposed development activities are anticipated to help revitalize the area immediately surrounding the project. The buildings will maintain compatible characteristics with the surrounding neighborhood. The design has been completed to be compatible with the surrounding area in use and scale and has been approved by the city. See Attachment 16 for the Zoning Map
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	2	<u>Topography</u> The development site consists of virtually level ground, at an equal elevation to adjoining properties. After construction, the site will have slopes of less than 2% (see Figures). <u>Site Geology</u> Soil borings conducted in several past documented investigations indicate the site consists of sandy fill material to a depth of approximately 8 – 10 feet deep. A native dry clay was reported beneath the sandy fill materials. The CAP indicates that all the impacted soils will be removed to a depth of approximately 16 feet in the area of the former UST excavation and to a depth of 12 feet in the area of the former building. The soils will be screened during the excavation to determine the final extent. Clean sand backfill will be placed in the excavation prior to further development. <u>Erosion</u> Erosion by natural forces is not anticipated to be of concern following development of the site. During excavation of the impacted soils and construction, the project site will be surrounded by approved soil erosion and sedimentation control systems. These systems shall be maintained throughout the construction phases of the project to minimize the potential for water borne migration of soils off site to protect adjacent and downstream storm water inlets. <u>Stormwater</u> Stormwater runoff at the project site will enter the municipal storm sewer system. The project will add impervious surfaces on the project site that are connected to municipal storm sewer. Appropriate permits will be obtained and the City of Detroit has enough availability to service the Subject Property. See Attachments 1 and 21 and Figure 1

Hazards and Nuisances including Site Safety and Noise	3	A noise assessment was conducted for the property and the measurements found exterior noise levels on the site to be up to a Day-Night Average Sound Level (DNL) of 72 dB. Through the use of improved building insulation and windows an interior threshold of 45 will be achieved (see above). Noise intensive construction activities will be limited to the days and hours specified under the City's noise ordinance. These days and hours shall also apply to any servicing of equipment and to the delivery and removal of materials to and from the site. All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust. Stationary equipment shall be placed so as to maintain the greatest possible distance from sensitive uses. Road hazards will be addressed through installation and updating of crosswalk signs and control systems which are under the city's control. Air Quality is not expected to be affected by the project though short term dust during construction is a potential concern and will be addressed by utilizing all best practices approach with dust control measures in place during construction activities. Any emissions would be short-term and localized and would not result in any significant adverse effects on overall ambient air quality. See Attachments 5 and 11
Energy Consumption	1	The project will meet current State and local codes concerning energy consumption. It is not anticipated to have a substantial effect on the use, extraction, or depletion of a natural resource. Energy utilization during construction is expected to be consistent with typical construction equipment. The location is served by local utility providers. The development will be completed in accordance with Enterprise Green Environmental Criteria. The project site will incorporate energy efficient home performance standards to decrease consumption of energy. The structure will include modern features including efficient windows, insulation and have high efficiency furnaces and appliances and LED lighting. See Attachment 17 for Project Narrative
SOCIOECONOMIC		
Employment and Income Patterns	1	The proposed project is expected to positively alter the demographic nature and character of the community due to the increase in the local population. The project will provide temporary construction jobs during the construction phase and continuing full time employment for maintenance and management of the development. The construction firm will make efforts to the fullest extent possible to employ local

		workers. Future residents of this development will help to support existing and future commercial enterprises in the area and the project will also increase long term tax base by placing the existing vacant and unused property into productive use. See Attachment 17
Demographic Character Changes, Displacement	1	Demographics The proposed project would not result in physical barriers or reduced access that would isolate a particular neighborhood or population group. The proposed project would not induce a substantial amount of unplanned growth and is in fact part of the City's planned growth. The project will increase the number of available residential units and thus would result in a slight increase to population. The renovation into additional low income housing will assist in stabilizing and diversifying the neighborhood. Displacement This residential renovation project will occur on a vacant lot, therefore no persons will be displaced due to this project. See Attachment 17 and Figures 1 and 2
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	1	This housing development will have a positive effect on the local educational facilities. Public education is offered in the area by Detroit Public Schools. Several preschools, elementary, middle and high schools are located within ten miles of the Subject Property, the closest elementary school is about two blocks west. Wayne State University and Lawrence Technological University are also within 10 miles. With the project bringing in new tenants and families, additional children in the school system will potentially increase the amount of educational funding the school system receives. The City of Detroit maintains multiple museums, arenas, performance halls, theatres and libraries. The Detroit Institute of Art, Motown Museum, Opera House, Comerica Park, and Little Caesars Arena among others are all within five miles of the Subject Property. The proposed project is not expected to significantly impact the capacity of the existing cultural facilities. The project will potentially bring new residents to the area that may attend cultural facilities in the surrounding areas. See Attachment 18
Commercial Facilities	2	The project will add to the current residential base and available commercial space and is not expected to negatively impact existing commercial facilities that are located around the project site. The project is expected to bring in new residents, which will benefit the neighboring commercial establishments. New commercial space will be available on the first floor of the building to allow additional needed businesses to serve the community. See Figure 2 and Attachment 18

Health Care and Social Services	2	The area of the project site has adequate health care service providers for the city and surrounding communities. The project site is less than two miles away from Henry Ford Hospital and several senior care and urgent care facilities are located within five miles. See Attachment 19 for maps and lists documenting the neighboring hospitals, senior care facilities and urgent care facilities. Adequate social services are available to residents of the City of Detroit. Area organizations provide a wide range of services to low income persons. The area wide services include homeless programs, community support services, employment services, legal aid, planned parenthood, Catholic Social Services, adoption services and American Red Cross. See Attachment 19
Solid Waste Disposal / Recycling	2	The project site will be served by the existing local utility service (Advanced Disposal, part of Waste Management) and the redevelopment is not expected to negatively impact the solid waste disposal service. Following construction, the project site will utilize solid waste dumpsters that will be serviced by the local contractor on a weekly basis. The City of Detroit Public Works is committed to a fully integrated solid waste management system. The system includes waste reduction, reuse, recycling, incineration, energy recovery and land filling. See Attachment 20
Waste Water / Sanitary Sewers	2	The Stormwater and Sewer system is operated the by the City of Detroit. Wastewater generated at the project site would be collected and processed by the city system in accordance with the Post-Construction Stormwater Ordinance. The City of Detroit has adequate facilities to handle any waste water generated from this project. The project site is not anticipated to generate significant quantities of waste water. See Attachment 21
Water Supply	2	The project site area receives water from the City of Detroit. The City of Detroit is in compliance with State and Federal Drinking Water Acts and has adequate facilities to supply water to the project site, even with the increase to residential density. The drinking water meets or exceeds the water quality requirements of the EPA. See Attachment 21
Public Safety - Police, Fire and Emergency Medical	1	The project site is served by the City of Detroit Police and Fire Department. The Police Department has a dedicated Neighborhood Police Officer assigned to the area in addition to standard emergency police services. Detroit firefighters are trained as emergency medical technicians, and some firefighters are also paramedics. Detroit FD operates 46 firehouses with between 4 and 12 firefighters per station. They are licensed and outfitted with medical first response equipment. EMT and ambulance services are also available with private services.

		Furthermore, Detroit ensures fire safety and emergency accessibility within new and existing developments through provisions of its Building and Fire Codes. The development of the project site will improve the safety of walking routes as well as the overall public safety of the community. Since the site was previously developed, no significant increased demands are anticipated for the public services. See Attachment 22
Parks, Open Space and Recreation	1	There are parks, recreational and cultural facilities accessible by public transportation or within walking distance. The project site is adjacent to The Cathedral of the Most Blessed Sacrament which includes a community center and Chicago and Maiullo Parks one block to the south. The project site will not significantly impact the availability of existing quality open space or recreational facilities and may generate higher attendance at recreational events in the area. A children's recreational area is planned for the Subject Property development. See Attachment 23
Transportation and Accessibility	1	This project site is adequately served by pedestrian, bicycle, transit and parking facilities. It is near several city bus lines which maintain stops near the Subject Property. Sidewalks and crosswalks are provided throughout the project area on all surrounding roadways. The site is accessible to emergency vehicles and disabled persons. The project includes accessibility designs (accessible ramps, accessible parking spaces, accessibility features to units) which would have a beneficial effect. The use of automobiles and bus service as transportation is not expected to be negatively impacted by the proposed project. The Subject Property provides access to six transit routes within 500 feet. Bussing throughout the City of Detroit is provided by The Detroit Department of Transportation (DDOT). SMART bus routes also service the Subject Property. The Detroit Metropolitan Wayne County Airport and Coleman A. Young International Airport are also located in Wayne County, which provides domestic and international transportation. See Attachment 24
NATURAL FEATURES		
Unique Natural Features, Water Resources	2	The existing natural landscape is not unique, no water features are present onsite or adjoining. Implementation of the project would not affect water resources, nor would it increase demands on groundwater resources. As noted above water service would be provided by City of Detroit. No surface waters (e.g., lakes, rivers, ponds) are located on or adjacent to the project site. Stormwater at the project would be collected and treated by the City. The project was checked for unique natural features and endangered species in Wayne County and did not find any that would apply to the project or impact the project site. See Attachment 7

Vegetation, Wildlife	2	The project site is located within an urban environment where the vegetation and wildlife have adapted. The site has been previously developed since the late 1800's, with no indication of unique vegetation or wildlife. This project will not disrupt any existing natural landscape or wildlife.
Other Factors		No additional project impacts are anticipated.

Additional Studies Performed:

1. Phase I Environmental Site Assessment, 10201 Woodward Avenue, Detroit, MI. Environmental Services, GSPW, LLC. September 26, 2017.
2. Baseline Environmental Assessment, 10201 Woodward Avenue, Detroit, MI. Environmental Services, GSPW, LLC. October 7, 2022.
3. Final Assessment Reports / Corrective Action Plans, 10201 Woodward Avenue, 30 Glynn Court and 10227 Woodward Avenue, Detroit, MI. Environmental Services, GSPW, LLC. September, 2022.

ATTACHMENTS

Figure 1: Subject Property Location Map
Figure 2: Site Development Plan

1. Phase I Environmental Site Assessment, 10201 Woodward Avenue, Detroit, MI., Environmental Services, GSPW, LLC. September 26, 2017.; Baseline Environmental Assessment, 10201 Woodward Avenue, Detroit, MI. Environmental Services, GSPW, LLC. October 7, 2022; Final Assessment Reports / Corrective Action Plans, 10201 Woodward Avenue30 Glynn Court and 10227 Woodward Avenue, Detroit, MI. Environmental Services, GSPW, LLC., September 2022
2. Airport Hazards Partner worksheet, distance maps
3. Coastal Zone Barrier and Boundary Maps
4. FEMA Map
5. Air Attainment Status Map – MI
6. Michigan EPA Radon Map
7. Endangered Species List
8. Explosives Partner Worksheet
9. Farmland map and Soils Survey Map
10. Section 106 Application, and SHPO NAE Letter
11. Noise Assessment report and STraCAT evaluation
12. Sole Source Aquifer Map
13. Wetland Map
14. National Scenic Rivers Map
15. Environmental Justice Partner Worksheet and Social Services map
16. Zoning Map
17. Project Narrative
18. Maps for Educational facilities, cultural and entertainment facilities and commercial facilities

19. Maps for Medical, urgent care and senior care facilities
20. Waste Service Providers map
21. Water Quality Report and Storm Sewer Project Report
22. Police and Fire Department maps
23. Public parks map and Entertainment map
24. Bus Route maps
25. HRD Mitigation Plan

List of Permits Obtained:
None

Cumulative Impact Analysis [24 CFR 58.32]**:**
The cumulative impacts anticipated for this project are primarily associated with increased residential density such as increased traffic and use of resources and services (roads, schools, police, etc). The project is consistent with the anticipated growth of the immediate and surrounding neighborhoods and therefore not considered detrimental. Other cumulative impacts include generation and consumption of materials during construction and waste generated during construction which are expected to be minimalized through the use of industry best practices, Enterprise Green Environmental Criteria and high efficiency appliances.

The proposed project will have a positive effect within the City of Detroit by placing the inactive property back into productive use; reducing property vacancies; providing additional, affordable and low-income modern housing; and eliminating the decline of neighborhood housing values. Improvement of this portion of the community may spur additional renovations in the area, address identified community revitalization plan goals, and add residential tenants in an important area of the community. No significant adverse impacts to the human environment are anticipated.

Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]
The layout of the building was designed and modified to achieve the highest and best use, therefore previous plans were changed to allow for this, with no adverse impacts to the human environment. The number and layout of the units has been modified to provide for project-based voucher units as well as rents at 30%, 40%, 50%, 60% and 80% AMI units. The redevelopment plans have been carefully proposed to allow the thoughtful redevelopment of a vacant area within the City of Detroit North End Neighborhood.

Private Development – Redevelopment using private funds is not economically feasible considering current rental rates within the target area.

More Units – Option for construction of a larger development was considered but not selected due to market conditions anticipated at this time.

Fewer Units – Development and operating costs are not feasible for a facility with fewer units.

Alternate Site – The market study and related research did not identify any sites within the market area of comparable size that are currently vacant or with similar proximity to resources. Redevelopment of occupied alternative sites with suitable characteristics would require the displacement of current residents or businesses that is not consistent with the community's focus on growth and sustainability.

No Action Alternative [24 CFR 58.40(e)]:
The no action alternative would fail to stabilize the neighborhood and property values. The project site would remain vacant and unused, which does not benefit the City of Detroit community. The no action alternative would fail to address the documented critical need for low-income modern housing or fulfill the goals of the community revitalization. Because no adverse impacts have been identified, the alternative of No Action is not reasonable.

Summary of Findings and Conclusions:

The project would provide much needed affordable, private-unit residential housing, community gathering space and retail commercial space in a transitional area of Detroit. The development is designed to meet the income distribution and household size needs identified in the market study as well as provide desirable community and commercial space. The property has been vacant and unused for several years, and the proposed end use will provide important community engagement and living area in a vital area of the city. The project is located within a Qualified Census Tract and the services offered will focus on services that improve the lives of community residents. The no action alternative would fail to stabilize the neighborhood and property values. The project site would remain vacant and unused, which does not benefit the City of Detroit community. Furthermore, the impacts of the development are minimal and can be managed by typical mitigation measures. Overall, the project is a benefit to the City of Detroit.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarized below are 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
Historic Preservation	Should any human remains or historical or unique archaeological resources be discovered during site development work, the provisions of CEQA Guidelines, Section 15064.5.(e) and (f) will be followed to reduce impacts to a non-significant level.
Noise	Noise intensive construction activities shall be restricted to the days and hours specified under the City's noise ordinance. These days and hours shall also apply to any servicing of equipment and to the delivery and removal of materials to and from the site.

	All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust. Stationary equipment shall be placed so as to maintain the greatest possible distance from sensitive uses. The building construction methods and materials will result in the interior envelope achieving HUD noise DNL threshold of 45. A combination of exterior wall sheathing (brick), insulation and noise rated windows will be sufficient to meet the desired interior level. A summary of the building materials and design to meet the noise standard has been signed by the project architect and included in source documents (see Attachment 8).
Dust Control	Dust generated on the project site shall be controlled by watering all exposed areas daily as needed during excavation, and especially during clearing and grading operations. Additional watering on windy or hot days may be required to reduce dust emissions. Stockpiles of sand, soil and similar materials will be required to be covered with a tarp if dust is a concern. All trucks hauling dirt, sand, soil or other loose materials to and from the site will be required to be covered with a fabric cover and maintain a freeboard height of 12 inches. The general contractor will be responsible for implementing dust control measures.
Contamination and Toxic Substances	A Phase II subsurface soil investigation confirmed the presence of contaminants on-site exceeding Michigan Part 201 Generic Residential Cleanup Criteria (GRCC) for direct contact exposure. A Baseline Environmental Assessment (BEA) has been prepared and received by EGLE. Three FAR / CAP reports have been prepared by the environmental consultant and approved by Michigan EGLE. The plan outlines the removal of all of the impacted soil and the use of barriers to protect residents from exposures to contamination remaining onsite (if needed). Following the implementation of the actions included in the FAR / CAPs, a Documentation of Due Care Compliance (DDCC) report will be prepared and submitted to EGLE for approval, if contamination remains on site. If all contaminated soils are removed, a Closure Report / No Further Action (NFA) report will be completed. The approved Closure / NFA or DDCC will establish that the site is in compliance with Part 201 for the intended residential use (see Attachment 1).

Determination:

☒ **Finding of No Significant Impact** [24 CFR 58.40(g)(1); 40 CFR 1508.27]
The project will not result in a significant impact on the quality of the human environment.

☐ **Finding of Significant Impact** [24 CFR 58.40(g)(2); 40 CFR 1508.27]
The project may significantly affect the quality of the human environment.

Preparer Signature: _____ Date: 11/2/2022

Name/Title/Organization: Christina Bakos / Project Manager / GRand Environmental, LLC

Certifying Officer Name/Title: Julie Schneider, Director of Housing and Revitalization Department, City of Detroit

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

Woodward Ave. Apartments
ESGPW
October 24, 2022

Response Activity or Continuing Obligation	Required Activities	Party Responsible for Completing Activity	Timing of Activity	Required Follow-up or Reporting
NEPA Posting	Need to submit a NEPA Environmental Assessment for the DHC PBV's on the property to the City of Detroit.	Developer/ Environmental Consultant	Pre-Construction	Need HUD Authority to Use Grant Funds for closing.
Final Assessment Report- Excavation of Contamination	Remove the contaminated material across the entire subject property.	General Contractor	During Construction	Document in Closure Report
Final Assessment Report- Verification of Soil Remediation (VSR) Sampling	VSR sampling will be conducted following the remedial actions.	Environmental Consultant	During Construction	Document in Closure Report
Section 106 –No Adverse Effect Requirements	If the scope of work changes in any way, or if artifacts or bones are discovered, notify the Preservation Specialist immediately.	Development	During Construction	No action needed unless changes to the scope are made or bones/artifacts are discovered.
Noise	Appropriate construction materials will be incorporated in the building to mitigate noise levels within the acceptable range.	Architect, Construction, Developer	Before/During Construction	Performed Noise Assessment, STraCAT, Specs
Closure Report	A Closure Report is expected to be prepared and submitted to EGLE upon the completion of the proposed corrective action plan.	Environmental Consultant	Post Construction	Closure Report with analytical results. Provide a copy to City of Detroit, MSHDA and EGLE.

PROJECT: WOODWARD APARTMENTS
OWNERS: MHT HOUSING & ARCHDIOCESE OF DETROIT
LOCATION: 10201 WOODWARD AVENUE, DETROIT

Scope of Work:
THE FIRST FLOOR WILL HAVE RESIDENTIAL UNITS, COMMUNITY SPACE & OTHER AMENITIES FOR THE APARTMENTS. THE FIRST FLOOR WILL ALSO HAVE 5,972 SF OF RETAIL SPACE ON THE EAST END OF THE BUILDING. THE SECOND TO FOURTH FLOORS WILL BE DEDICATED TO UNITS. PARKING FOR BOTH RESIDENTS & RETAIL WILL BE PROVIDED ON SITE. RESIDENTS WILL HAVE ACCESS TO GAZEBO AND PLAYGROUND AREA. RETAIL WILL HAVE ACCESS TO OUTDOOR PATIO AREA.

Legal Description:
LAND SITUATED IN THE CITY OF DETROIT, COUNTY OF WAYNE, STATE OF MICHIGAN, DESCRIBED AS:

39 CALVERT STREET - TAX NUMBER: 02001536.002L
WEST 100 FEET OF LOTS 119 & 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94
AND
NORTH 9.17 FEET OF THE WEST 100 FEET OF LOT 47; ATKINSONS SUBDIVISION AS RECORDED IN LIBER 10 PAGE 82

10235 WOODWARD AVENUE - TAX NUMBER: 02001687
EAST 100 FEET OF LOT 119 & EAST 100 FEET OF THE NORTH 24 FEET OF LOT 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94

10227 WOODWARD AVENUE - TAX NUMBER: 02001688
EAST 100 FEET OF THE NORTH 40 FEET OF THE SOUTH 42.50 FEET OF LOT 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94

10201 WOODWARD AVENUE - TAX NUMBER: 02001689
EAST 100 FEET OF THE SOUTH 2.5 FEET OF LOT 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94
AND
EAST 100 FEET OF LOT 47; ATKINSONS SUBDIVISION AS RECORDED IN LIBER 10 PAGE 82

30 GLYNN COURT - TAX NUMBER: 02001536.001
SOUTH 117.50 OF THE WEST 100 FEET OF LOT 47; ATKINSONS SUBDIVISION AS RECORDED IN LIBER 10 PAGE 82

SHEET INDEX

ARCHITECTURAL	
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~~PHOTOMETRIC PLAN~~	~~1~~
SURVEY	
~~ALTA/TOPOGRAPHIC SURVEY~~	~~1~~
CIVIL	
~~STORMWATER MANAGEMENT~~	~~1~~

PROPERTY INFO:
AREA: 54,471± SF OR 1.25± ACRES

BUILDING
FLOORS: 4
HEIGHT: 53'-0"
BUILDING FOOTPRINT: 15,497 SF
BUILDING SIZE: 62,495 SF

APARTMENT UNITS: (53) 2 BEDROOM UNITS

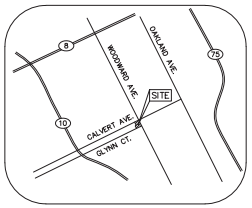
USE: MIXED USE - FIRST FLOOR RETAIL & RESIDENTIAL
SECOND TO FOURTH FLOOR RESIDENTIAL

SETBACKS
FRONT: 0 FEET
PROPOSED FRONT: 0 FEET
REAR: 35 FEET
PROPOSED REAR: 90.3 FEET
SIDE: 0 FEET
PROPOSED SIDE: 3.5 FEET & 35 FEET

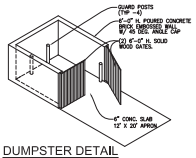
LOT COVERAGE
15,497/54,471= 28%

ZONING DESIGNATION
B4 - GENERAL BUSINESS DISTRICT

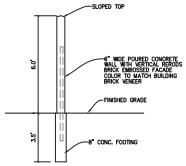
RESIDENTIAL DENSITY
53 UNITS/1.25 ACRES = 42.4 UNITS PER ACRE



VICINITY MAP
(NOT TO SCALE)



DUMPSTER DETAIL



CONCRETE WALL DETAIL

FAR
BUILDABLE LAND AREA: 44,926 SF
GROSS FLOOR AREA: 62,495 SF
62,495/44,926 = 1.39

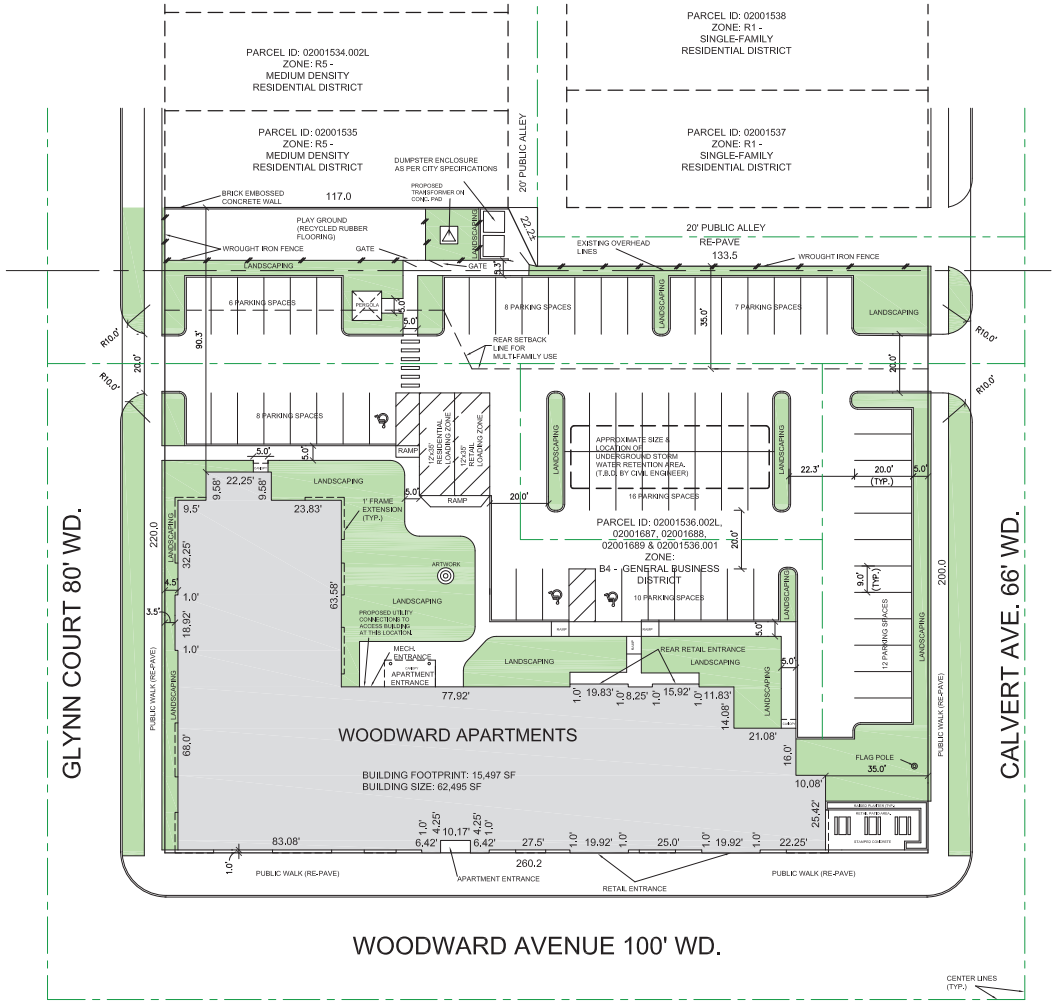
PARKING
Apartments 0.75 per dwelling unit (Bus stop within 0.5 miles of site.)
Retail: (1 per 200 SF gross floor area) x 0.75 (Bus stop within 0.5 miles of site.)

Required:
Apartments: 0.75 X 53 = 49 Spaces
Retail: (5,972 SF (FLOOR AREA) /200)x0.75 = 23 Spaces
TOTAL: 63 SPACES

PROVIDED:
On site: 67 Spaces

22,493± SF OF PARKING

SURPLUS of 5 spaces



CONCEPT SITE PLAN
SCALE: 1"=20'-0"

CONCEPT RENDERING

CONCEPT RENDERING

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

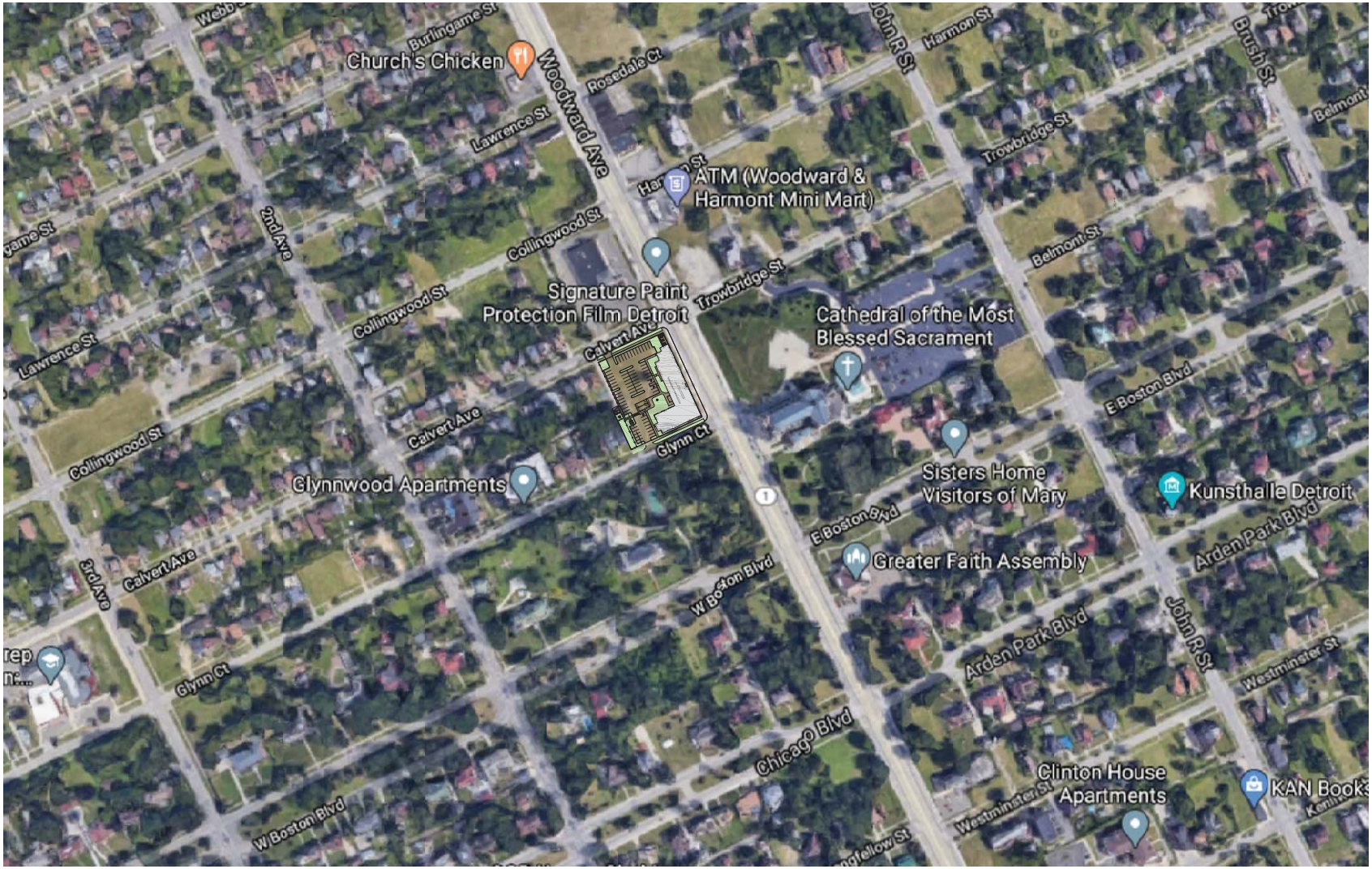
COVER SHEET & SITE PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX
KEM-TEC & ASSOCIATES

APPLICANT:
MHT HOUSING, INC.
32900 TELEGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1" = 20'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: ASP.1



NEIGHBORHOOD SITE PLAN
SCALE: NOT TO SCALE

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN

NEIGHBORHOOD SITE PLAN

KEM-TEC & ASSOCIATES
PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX

DRAWN BY: M.L.
SCALE: NOT TO SCALE
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO.
ASP.2

LANDSCAPING NOTES

- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL MATERIALS AND PLANTS SHOWN ON THE PLAN WHETHER OR NOT INCLUDED IN THE "PLANT LIST".
- ALL NURSERY STOCK TO BE WELL BRANCHED, HEALTHY, FULL, VIGOROUS, PRE INOCULATED, AND FERTILIZED. DECIDUOUS TREES TO BE FREE OF FRESH SCARS AND BRANCHES TO BE A HEIGHT OF 5' ABOVE ROOTBALL. TRUNKS SHALL BE WRAPPED, IF NECESSARY, TO PREVENT SUN SCALD AND INSECT DAMAGE. THE LANDSCAPER SHALL REMOVE SAID WRAP AT THE PROPER TIME AS PART OF HIS CONTRACT.
- ALL NURSERY STOCK SHALL BE GUARANTEED.
- TOPSOIL, 4" THICK, SHALL BE PROVIDED AND GRADED BY THE LANDSCAPE CONTRACTOR AND SUBJECT TO APPROVAL BY THE OWNER.
- ALTERNATIVES MAY ONLY BE USED IN THE EVENT OF UNAVAILABILITY OF THE SELECTED SPECIES WITHIN A REASONABLE DISTANCE OR DUE TO SEASON. PROOF MAY BE REQUESTED BY THE ENGINEER.
- EVERGREEN TREES SHALL NOT BE PLANTED DURING JUNE, JULY, OR AUGUST.
- MULCH SHALL NOT CONTAIN ANY FARM WASTE AND SHALL BE INDICATED ON PLAN FOR EACH AREA.
- A CHEMICAL WEED PREVENTATIVE BARRIER SHALL BE APPLIED IN ALL NON-GRASS AREAS WHICH DO NOT HAVE POLYETHYLENE FILM MULCH INDICATED.
- REMOVE ALL TWINE, WIRE, AND BURLAP FROM SHRUB AND TREE EARTH BALLS AND FROM TREE TRUNKS.
- LAWN TREES TO BE MULCHED WITH A 2' WIDE BY MINIMUM 6" DEEP SHREDDED BARK RING.
- SHRUB BEDS TO BE MULCHED WITH 3" OF SHREDDED WOOD BARK.
- ALL SOD AND SEED TO BE KENTUCKY BLUE BLEND.

EXAMINATION OF SITE

- THE CONTRACTOR SHALL VISIT THE JOB SITE BEFORE HE SUBMITS HIS BID TO TO BECOME FAMILIAR WITH THE ACTUAL JOB CONDITIONS AND TO CHECK FOR ANY INTERFERENCE BETWEEN THE WORK AND THAT OF OTHER TRADES AND/OR ANY APPARENT VIOLATIONS OF LOCAL OR STATE CODES, LAWS, ORDINANCES, AND REGULATIONS. IF ANY INTERFERENCE OR VIOLATIONS APPEAR AND DEPARTURE FROM THE DESIGN INTENT OF THE CONTRACT DOCUMENT S IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER BEFORE ENTERING INTO THE CONTRACT WITH THE OWNER. FAILURE TO PROVIDE THE ARCHITECT/ENGINEER WITH THE AFOREMENTIONED NOTIFICATION WILL RESULT IN THE CONTRACTOR BEING HELD RESPONSIBLE TO COMPLETE ALL WORK TO MEET THE INTENT OF THE CONTRACT DRAWINGS WITH NO ADDITIONAL EXPENSE ("EXTRAS") BEING INCURRED BY THE OWNER.

CLEANING

- PREMISES SHALL BE CLEANED UPON COMPLETION OF THE WORK.
- UPON COMPLETION OF THE WORK, THOROUGHLY CLEAN ALL SYSTEMS AND TEST TO INSURE THAT THE SYSTEMS PERFORM TO THEIR REQUIREMENTS.

MAINTENANCE

- THE PROPERTY OWNER WILL TAKE CARE OF THE LANDSCAPING.

LANDSCAPING NOTES

- ALL PLANT SIZES SHALL CONFORM WITH DETROIT'S ZONING ORDINANCE.
- MULCH SHALL BE INSTALLED AND MAINTAINED AT A MINIMUM DEPTH OF TWO (2) INCHES AND A MAXIMUM DEPTH OF FOUR (4) INCHES ON ALL PLANTED ARES.
- ALL UNPAVED AREAS WILL BE COVERED WITH GRASS UNLESS OTHERWISE SPECIFIED.
- ALL HEDGES PLACED WITHIN TWENTY (20) FEET OF THE FRONT PUBLIC SIDEWALK SHALL BE LIMITED TO THREE (3) FEET IN HEIGHT ABOVE THE GRADE OF THE PUBLIC SIDEWALK.
- INTERIOR LANDSCAPED AREAS WILL MAXIMIZE EFFECTIVE STORMWATER MANAGEMENT BY AS LISTED WITHIN THE DETROIT ZONING ORDINANCE.

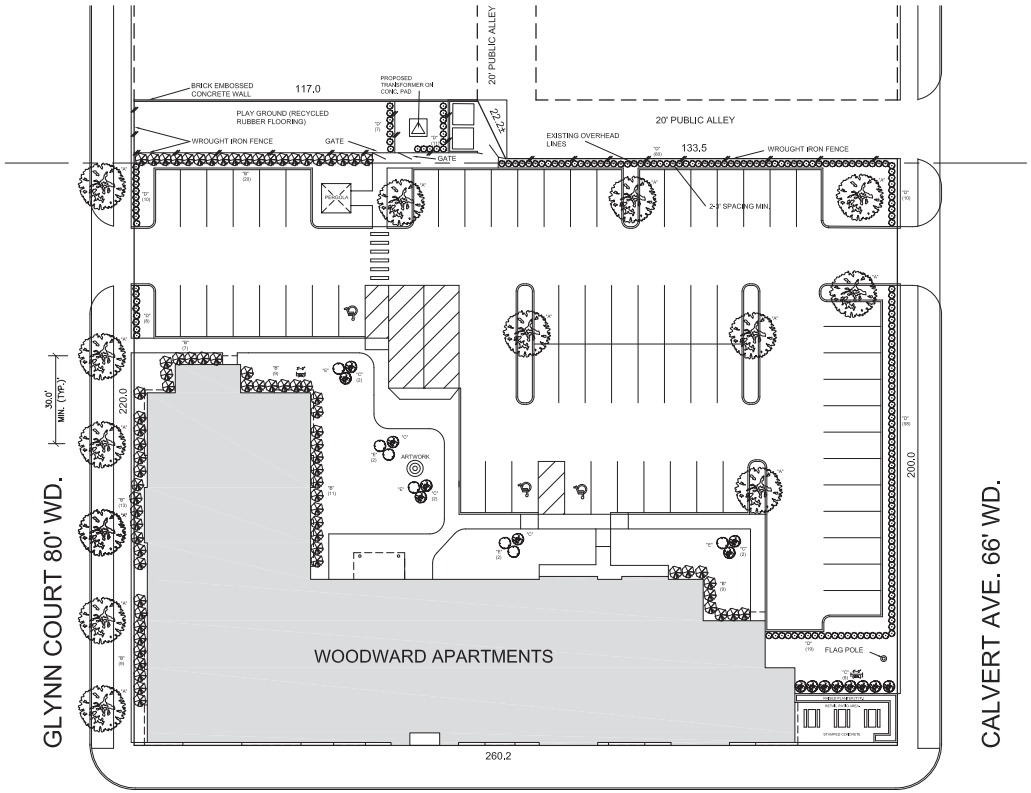
IRRIGATION

- REQUIRED LANDSCAPED AREAS SHALL BE IRRIGATED AS NECESSARY TO MAINTAIN REQUIRED PLANT MATERIALS IN GOOD AND HEALTH CONDITION.
- ALL LANDSCAPED AREAS SHALL BE PROVIDED WITH A READILY AVAILABLE WATER SUPPLY. WATER OUTLETS (HOSE BIBBS) SHALL BE PROVIDED WITHIN ONE HUNDRED (100) FEET OF ALL REQUIRED PLANT MATERIALS UNLESS SUBSURFACE IRRGATION SSYTEM IS USED AND
- IRRIGATION SYSTEMS SHALL BE CONTINUOUSLY MAINTAINED IN WORKING ORDER AND SHALL BE DESIGNED TO PREVENT OVERLAP OF WATER ZONES AND TO PREVENT WATERING OF IMPERVIOUS AREAS.

SITE LIGHTING

- NOTE THAT SITE LIGHTING HAS NOT BEEN PROPERLY DESIGNED AT THIS TIME. A PHOTOMETRIC PLAN WILL BE COMPLETED FOR THE SITE PLAN REVIEW. AFTER THE CITY'S APPROVAL, A LICENSE CIVIL ENGINEER WILL PROPERLY DESIGN THE LIGHT FIXTURE LOCATIONS.

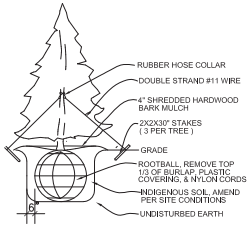
LANDSCAPING CALCULATIONS
INTERIOR LANDSCAPE REQUIRED: 63 OFF STREET PARKING SPACE = 18 SF OF LANDSCAPED AREA 63x18 = 1,134 SF PROVIDED: 1,621 SF REQUIRED: 1 SHADE TREE FOR EVERY 250 SF 1,621/250 = 7 SHADE TREES PROVIDED: 7 SHADE TREES
LANDSCAPE AREA 9,646 SF OF LANDSCAPE AREA 54,471 PROPERTY SIZE 9,646/54,471 = 18% LANDSCAPE AREA



CONCEPT LANDSCAPE PLAN

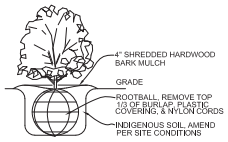
SCALE: 1"=20'-0"

LANDSCAPING SCHEDULE				
SYM.	QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE
"A"	13	SHADEMASTER HONEYLOCUST (NO THORNS)	GLEDITSIA TRICANTHOS INERMIS :SHADEMASTER"	2.5" CAL.
"B"	78	YEW	TAXUS	18" HEIGHT MIN.
"C"	16	AZALEA	RHODODENDRON	3'
"D"	183	AMERICAN ARBORVITAE	TSUGA CANADENSIS	4'-5'
"E"	7	WAYFARING TREE	VIBURNUM LANTANA	5'-7'



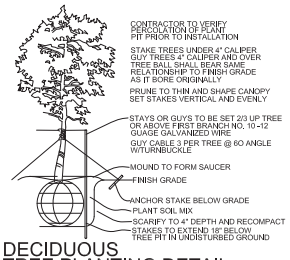
EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

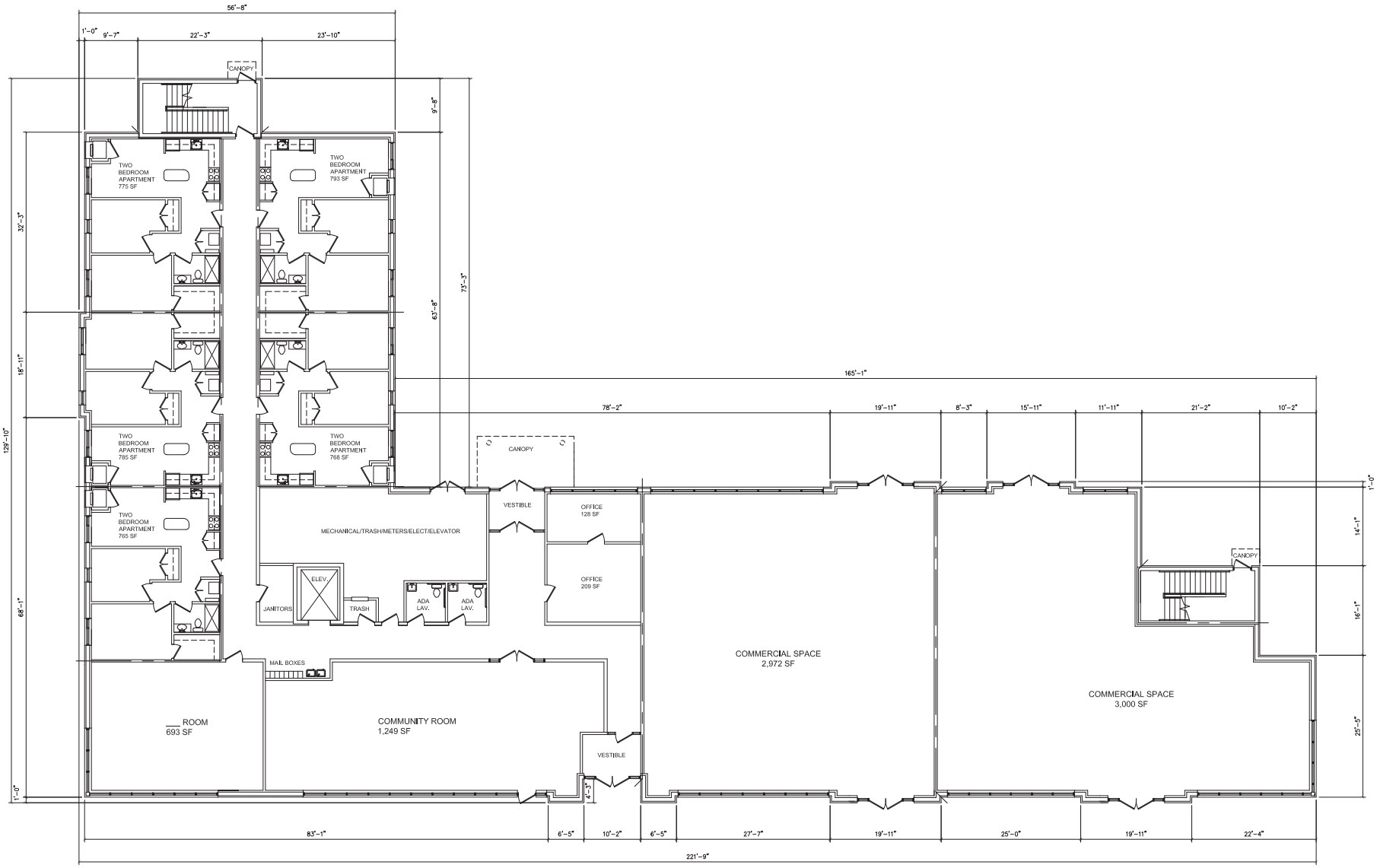
CONCEPT LANDSCAPE PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL LAND SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 OFFICE
(586)772-4048 FAX
KEM-TEC & ASSOCIATES

APPLICANT:
MHT HOUSING, INC.
3200 TELEGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1" = 20'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: LP.1



NORTH

FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

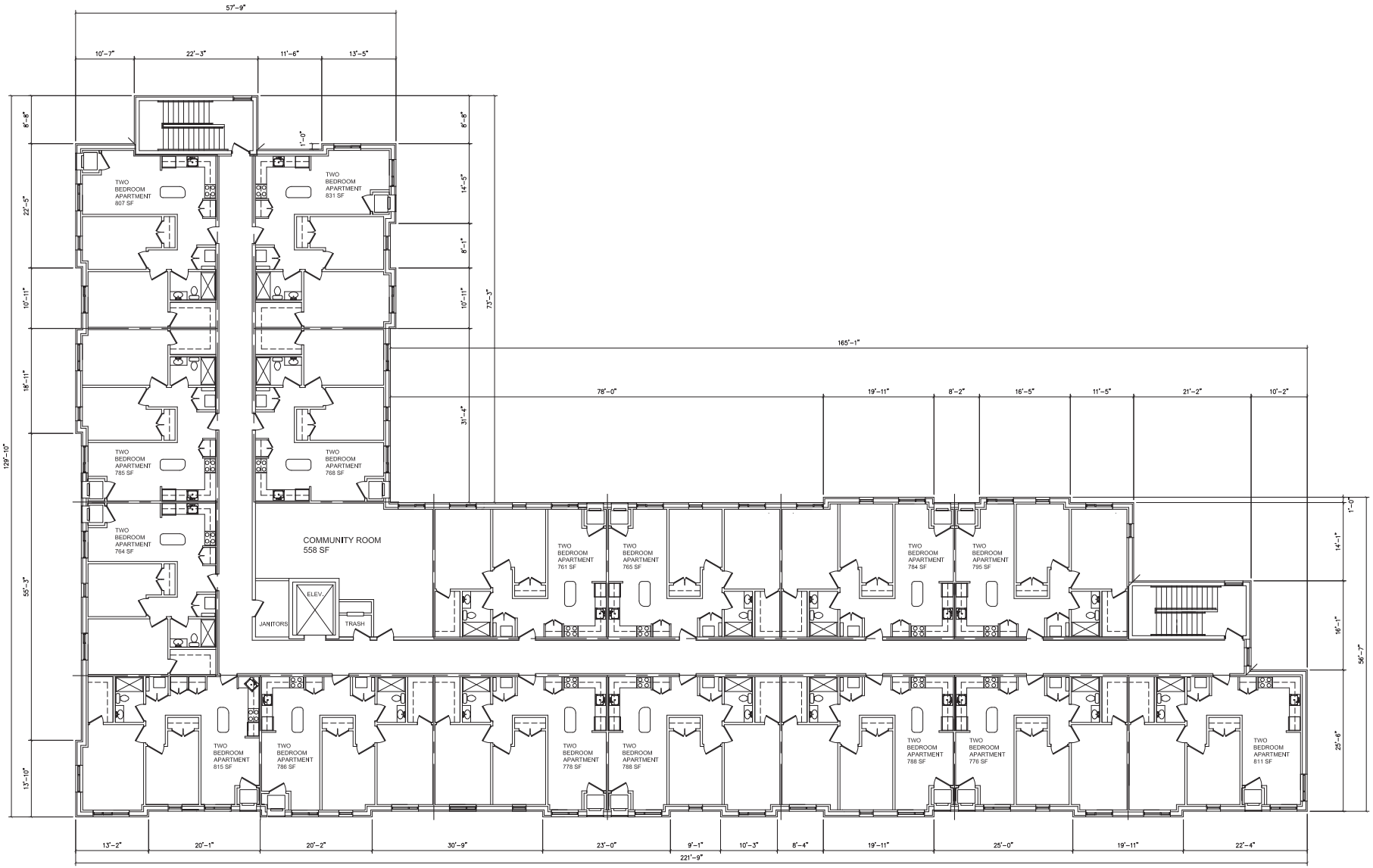
CONCEPT
FIRST FLOOR
PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX
KEM-TEC & ASSOCIATES

APPLICANT:
MHT HOUSING, INC.
3200 TELEGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1/8" = 1'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: A.1.1



SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

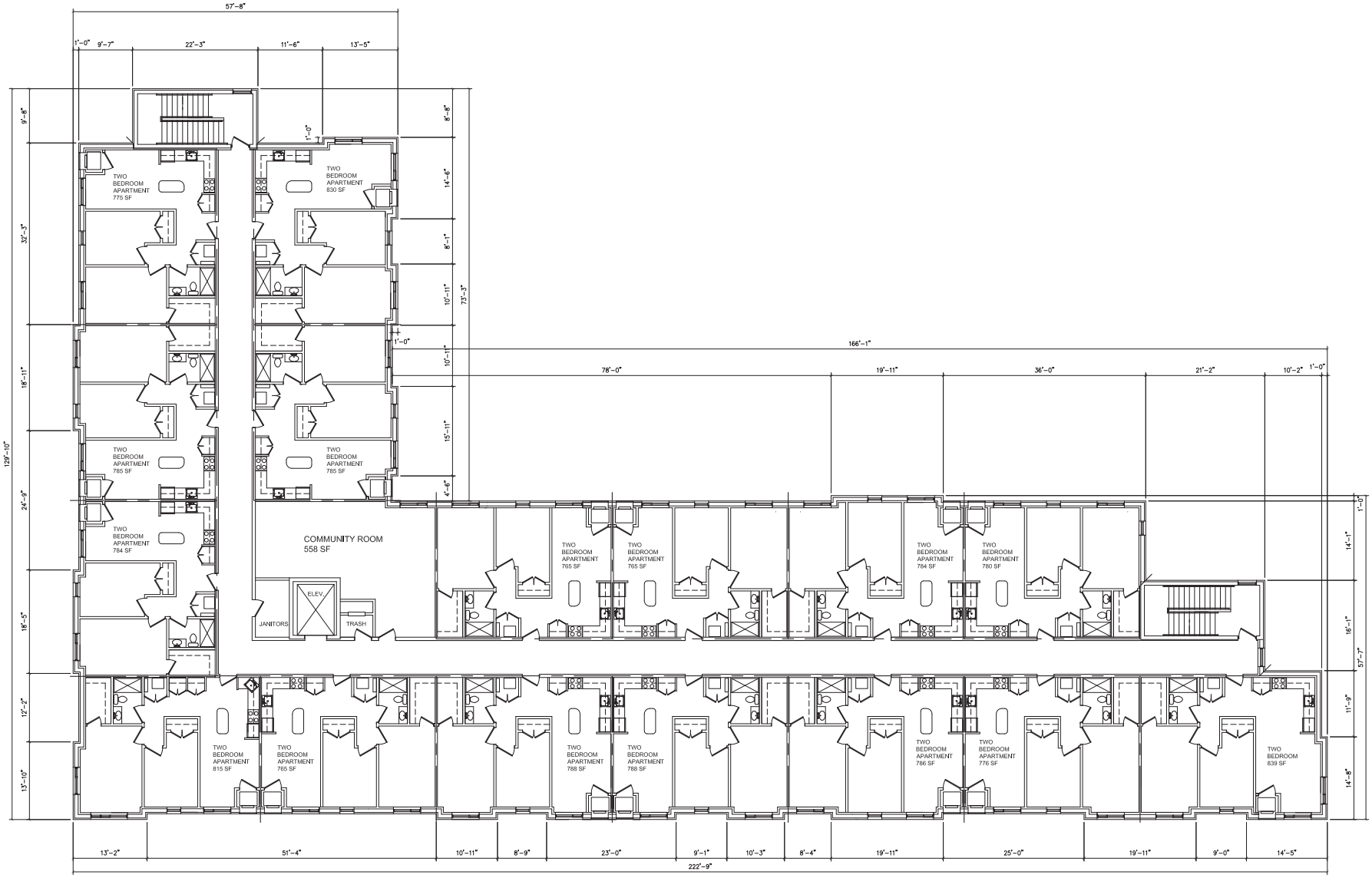
CONCEPT
SECOND FLOOR PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX
KEM-TEC & ASSOCIATES

APPLICANT:
MHT HOUSING, INC.
32600 TELEGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1/8" = 1'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: A.1.2



NORTH

THIRD FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

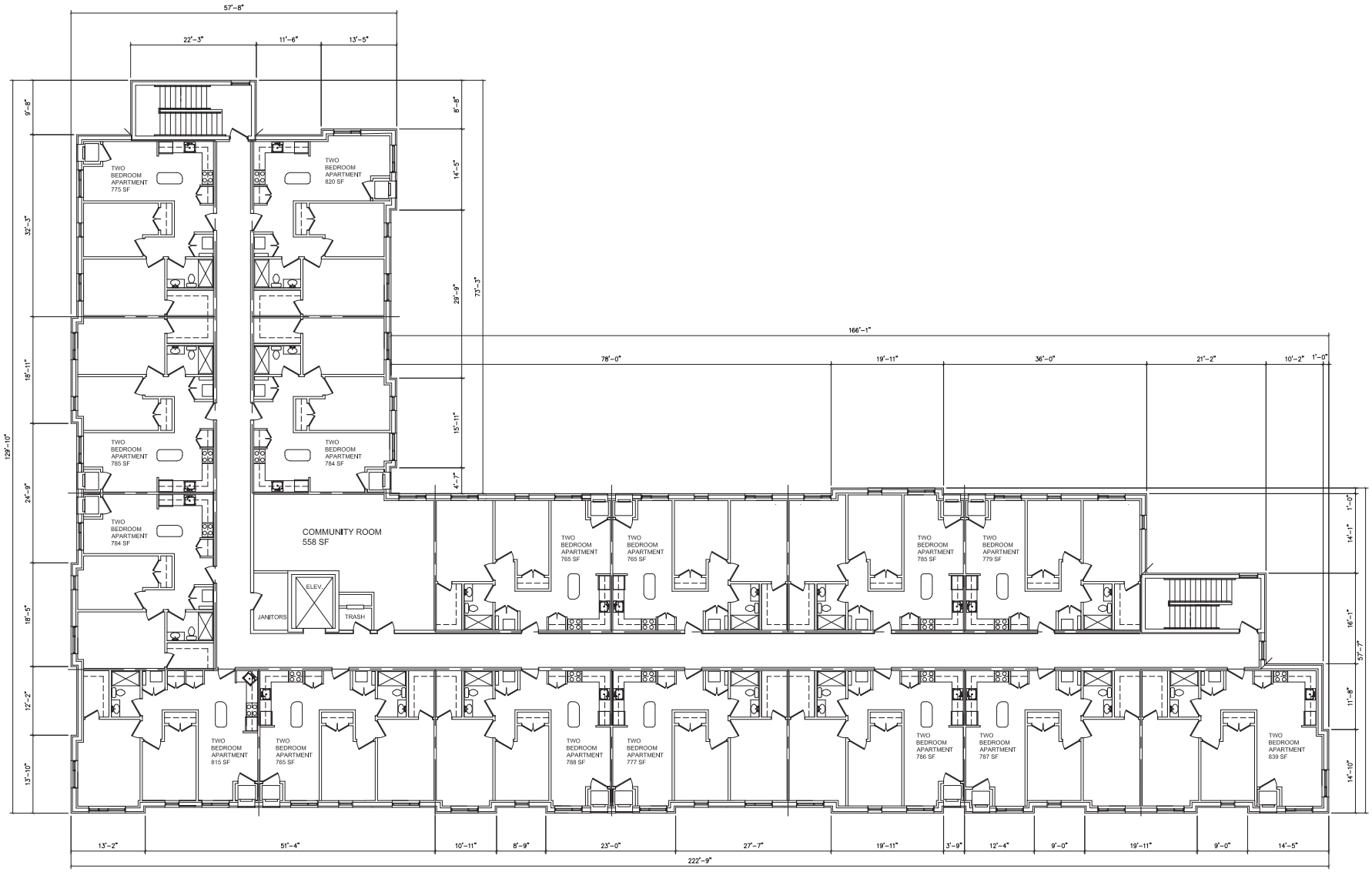
CONCEPT THIRD FLOOR PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX
KEM-TEC & ASSOCIATES

APPLICANT: MHT HOUSING, INC.
3200 TELEGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1/8" = 1'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: A.1.3



NORTH

FOURTH FLOOR PLAN

SCALE: 1/8" = 1'-0"

REVISION	DATE	BY	DESCRIPTION
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CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

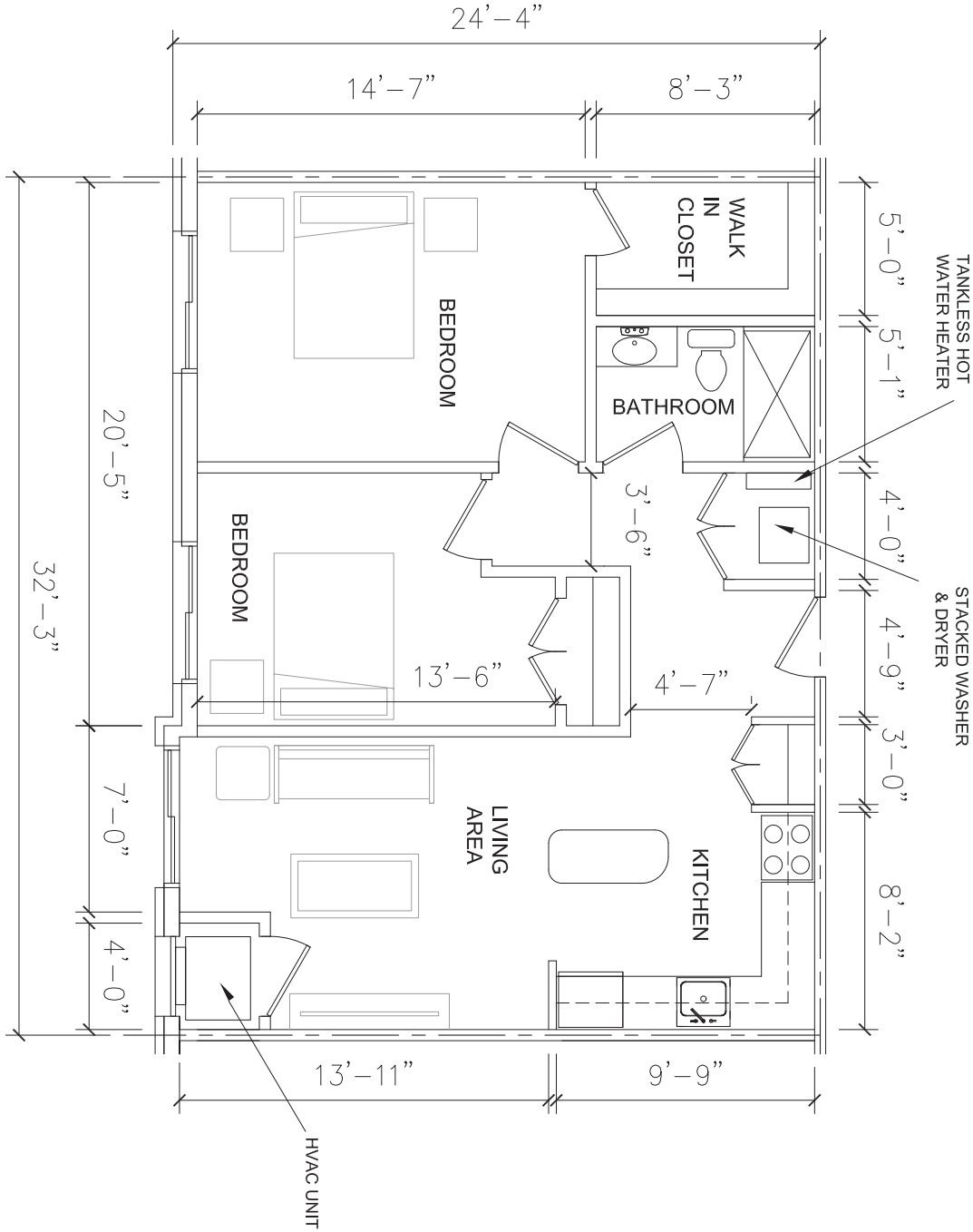
CONCEPT
FOURTH FLOOR
PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX
KEM-TEC & ASSOCIATES

APPLICANT:
MHT HOUSING, INC.
3200 TELEGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1/8" = 1'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: A.1.4



TYPICAL TWP BEDROOM UNIT

SCALE: 1/8" = 1'-0"

SHEET NO: A.1.5	DRAWN BY: M.L.	APPLICANT: MHT HOUSING, INC. 32600 TELGRAPH RD. #102 BINGHAM FARMS, MI 48025 PHONE: 586 833-0550	KEM-TEC & ASSOCIATES — PROFESSIONAL ARCHITECTS, PROFESSIONAL ENGINEERS, PROFESSIONAL SURVEYORS, 22556 GRATIOT AVENUE, EASTPOINTE, MI 48021, (586)772-2222 PHONE, (586)772-4048 FAX
	SCALE: 1/2" = 1'-0"		
	DATE: 07/28/20		
	PROJECT NO: 19-02854		

CONCEPT TYPICAL UNIT FLOOR PLAN

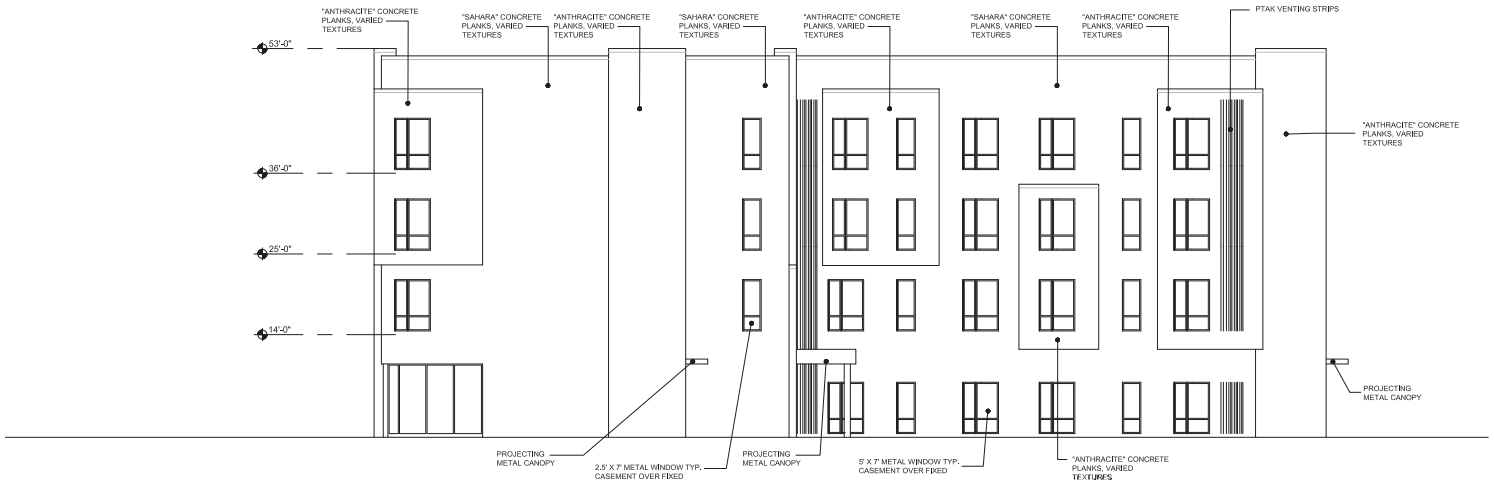
CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

EAST ELEVATION

SCALE: 1/8" = 1'-0"



NORTH ELEVATION

SCALE: 1/8" = 1'-0"

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS

10201 WOODWARD AVE., DETROIT, MICHIGAN

CONCEPT ARCHITECTURAL SITE PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX

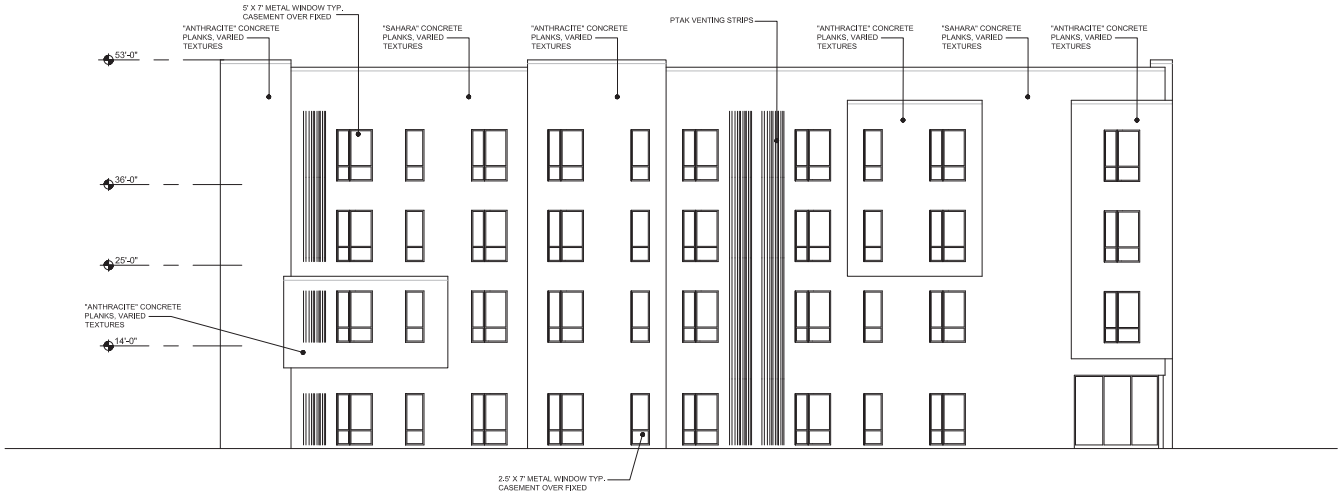
KEM-TEC & ASSOCIATES

DRAWN BY: M.L.
SCALE: 1" = 20'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: A.2.1

WEST ELEVATION

SCALE: 1/8" = 1'-0"



SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS

10201 WOODWARD AVE., DETROIT, MICHIGAN

CONCEPT ARCHITECTURAL SITE PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX

KEM-TEC & ASSOCIATES

DRAWN BY: M.L.
SCALE: 1" = 20'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: A.2.2

bing maps

A 10201 Woodward Ave, Detroit, MI 48202

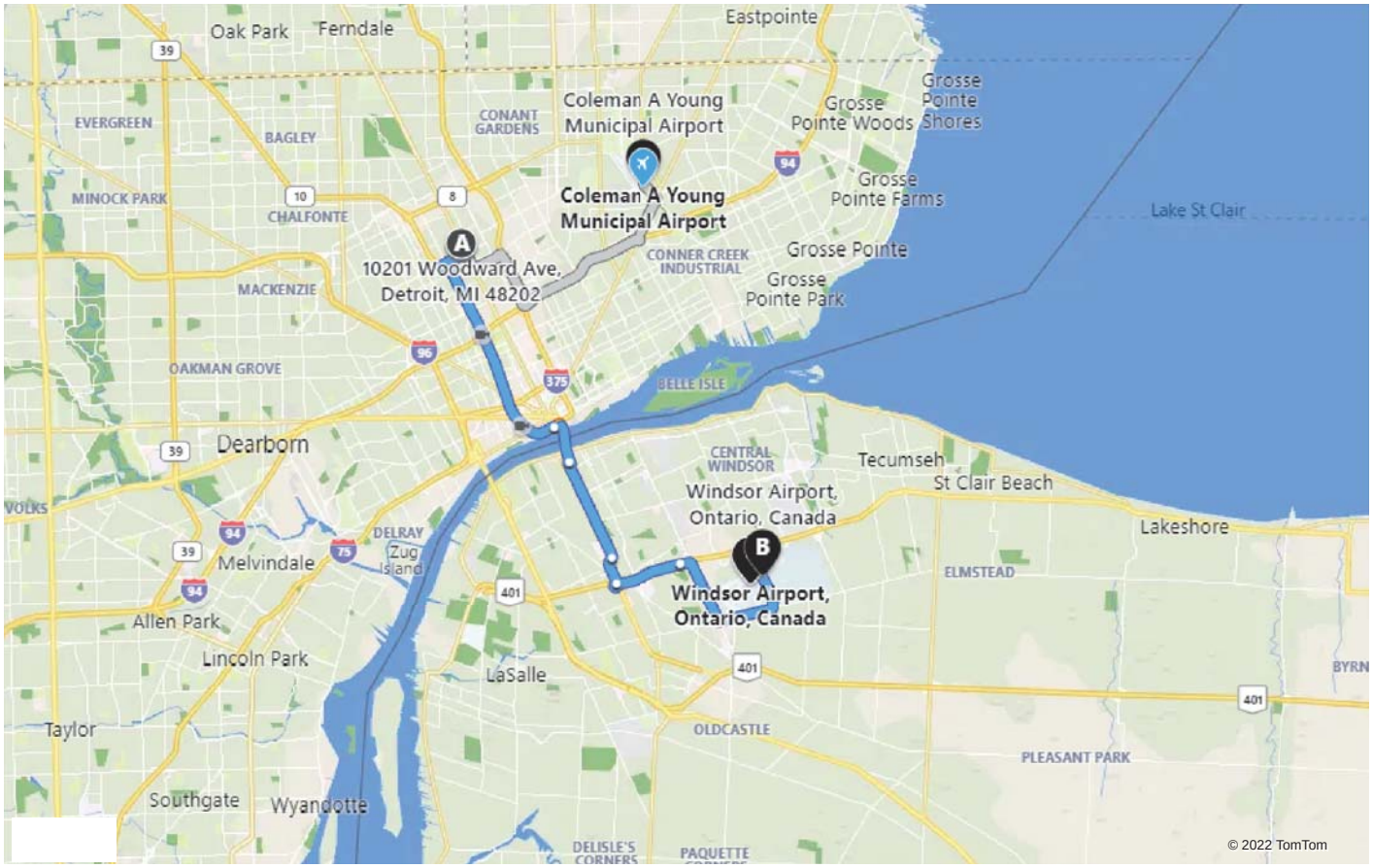
B Windsor Airport, Ontario, Canada

38 min , **16.2 miles**

Light traffic (Leave at 1:41 PM)

Via M-10 S, Ouellette Ave

· Toll on route



bing maps

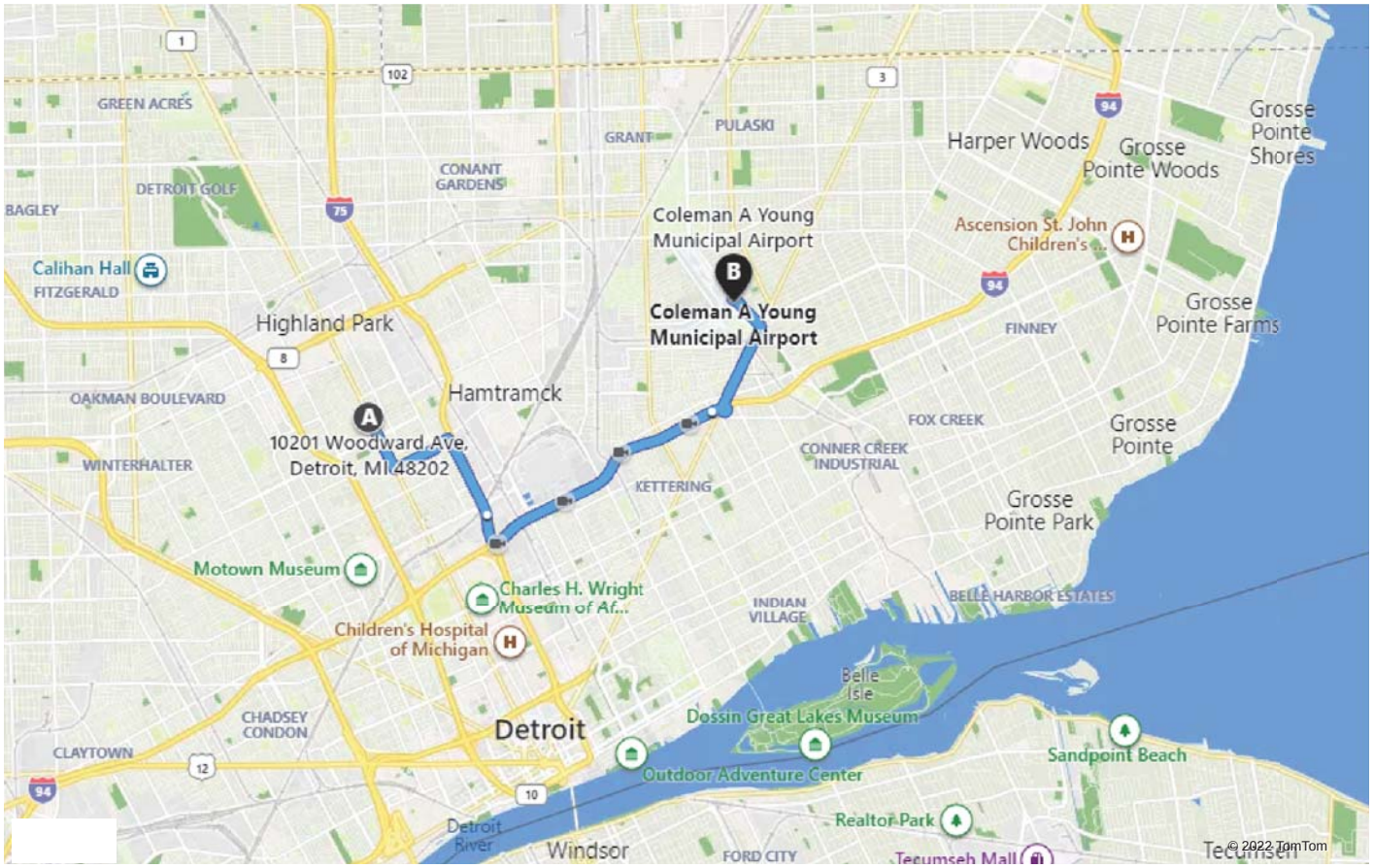
A 10201 Woodward Ave, Detroit, MI 48202

B Coleman A Young Municipal Airport, Detroit, MI

13 min , 7.6 miles

Light traffic (Leave at 1:37 PM)

Via I-75 S, I-94 E



bing maps

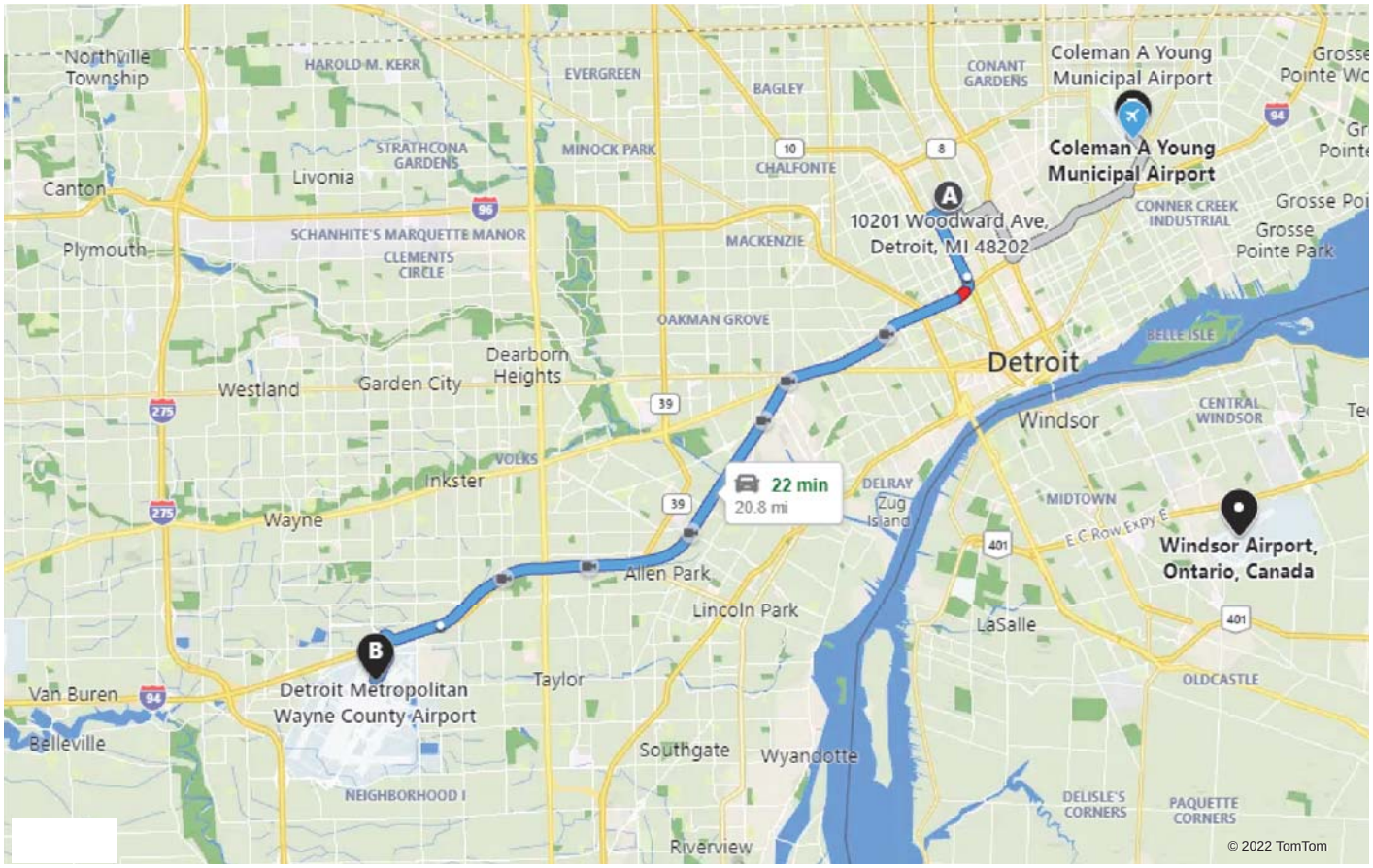
A 10201 Woodward Ave, Detroit, MI 48202

B Detroit Metropolitan Wayne County Airport, 11050 Rogell Dr Ste 602, Detroit, MI 48242

22 min , 20.8 miles

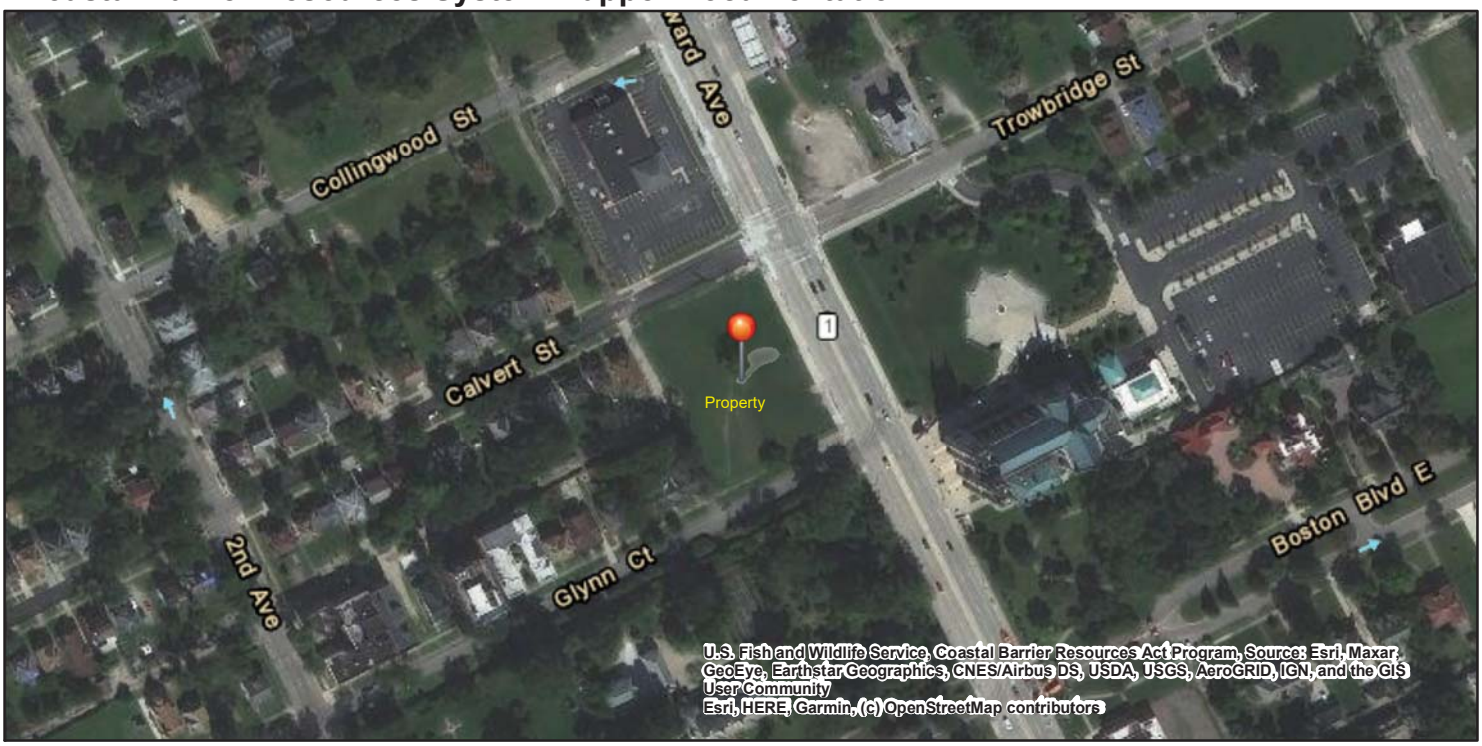
Light traffic (Leave at 1:44 PM)

Via I-94 W



U.S. Fish and Wildlife Service

Coastal Barrier Resources System Mapper Documentation



CBRS Units

- Otherwise Protected Area
- System Unit
- CBRS Buffer Zone
- -83.086395, 42.388865

0 65 130 260 390 ft

1:4,514

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

User Name: Woodward Apartments
User Supplied Address/Location Description: 10201 Woodward Avenue, Detroit, Michigan
Pin Location: Outside CBRS
Pin Flood Insurance Prohibition Date: N/A
Pin System Unit Establishment Date: N/A

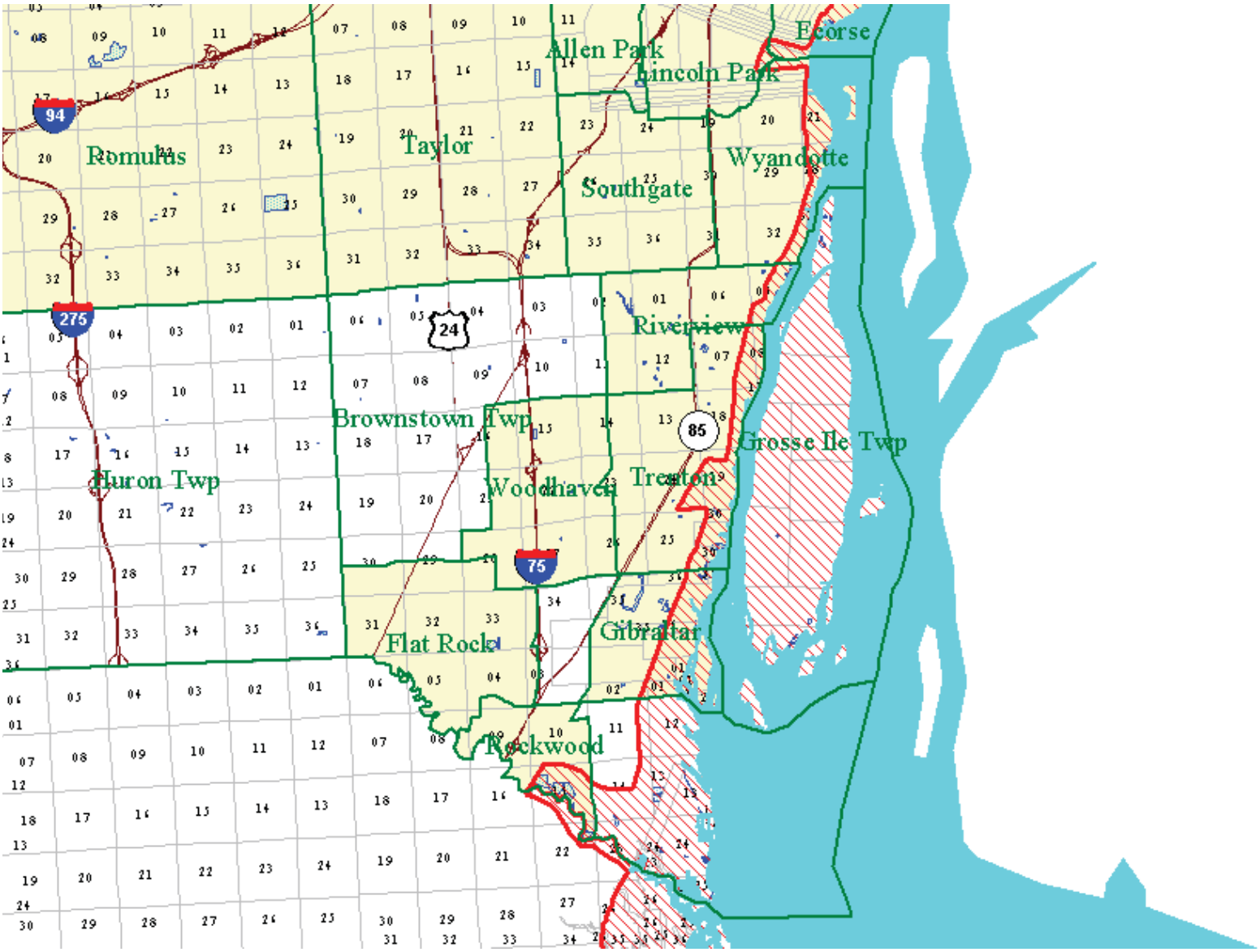
The user placed pin location is not within the CBRS. The official CBRS maps are accessible at https://www.fws.gov/library/collections/official-coastal-barrier-resources-system-maps .

The CBRS information is derived directly from the CBRS web service provided by the Service. This map was exported on 4/11/2022 and does not reflect changes or amendments subsequent to this date. The CBRS boundaries on this map may become superseded by new boundaries over time.

This map image may be void if one or more of the following map elements do not appear: basemap imagery, CBRS unit labels, prohibition date labels, legend, scale bar, map creation date. For additional information about flood insurance and the CBRS, visit: https://www.fws.gov/node/263838 .

Wayne County
Ecorse, Lincoln Park, Wyandotte and Riverview, T3S R11E
Trenton, T4S R11E
Rockwood, Gibraltar and Brownstown Township T5S R10E

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



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

The heavy red line is the ***Coastal Zone Management Boundary***
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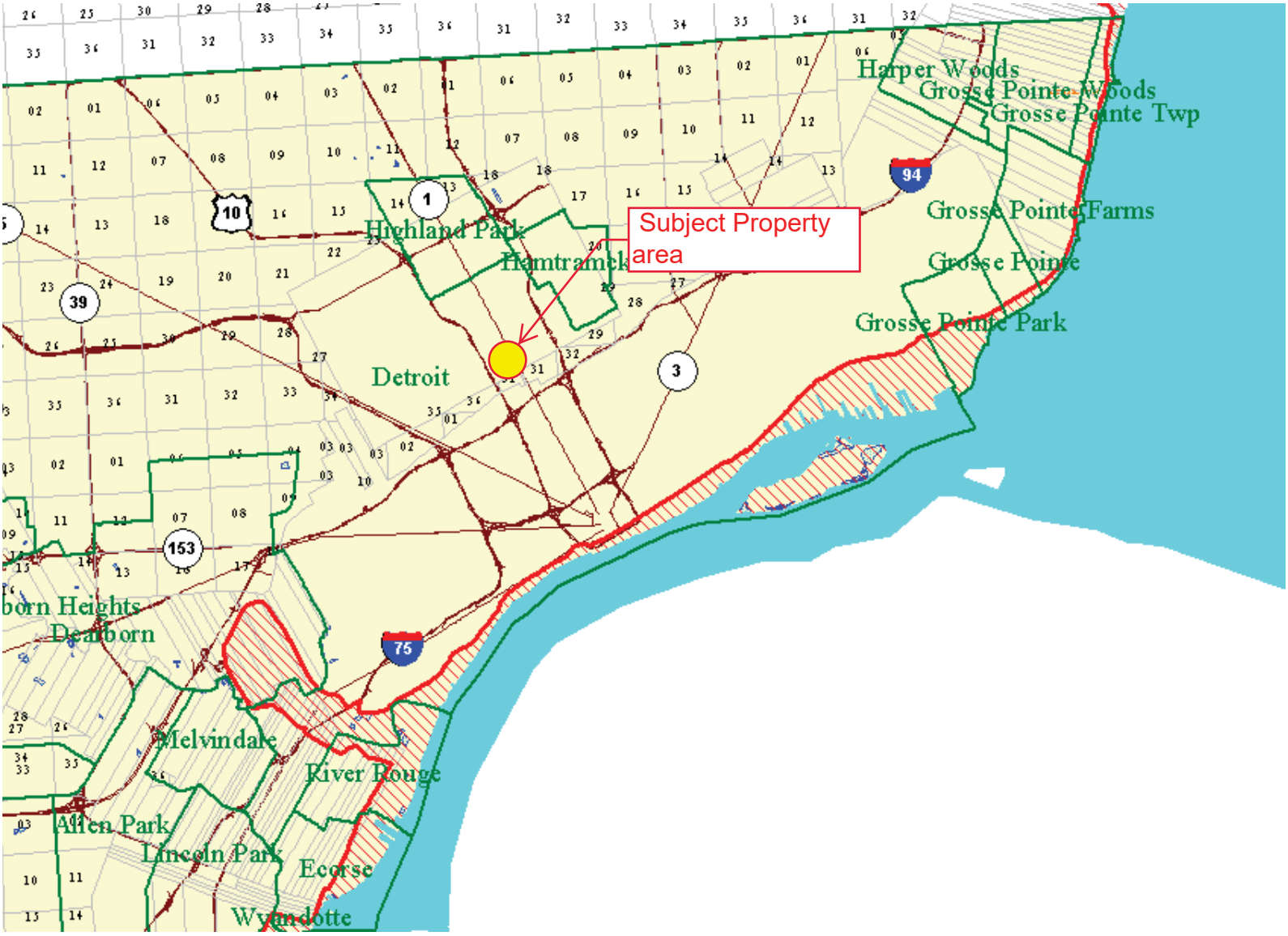
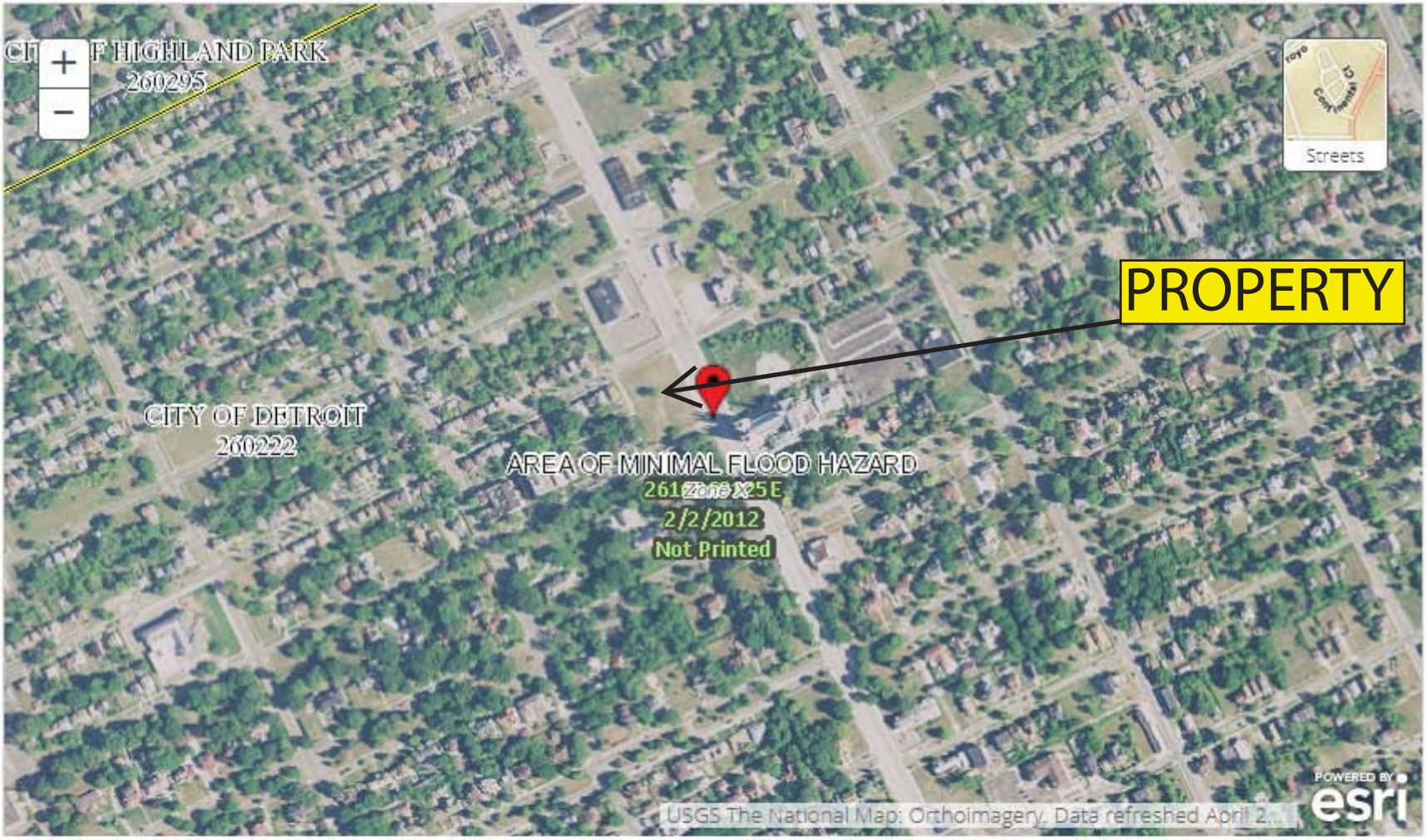




PIN

Approximate location based on user and does not represent an authorita property location

MAP PANELS

Selected FloodMap Boundary

Digital Data Available

No Digital Data Available

Unmapped

OTHER AREAS

NO SCREEN Area of Minimal Flood Hazard Zone X

Effective LOMRs

Area of Undetermined Flood Hazard

Otherwise Protected Area

Coastal Barrier Resource System Area

SPECIAL FLOOD HAZARD AREAS

Without Base Flood Elevation (BFE) Zone A, V, A99

With BFE or Depth

Regulatory Floodway Zone AE, AO, AH,

OTHER AREAS OF FLOOD HAZARD

0.2% Annual Chance Flood Hazard, of 1% annual chance flood with ave depth less than one foot or with dra areas of less than one square mile

Future Conditions 1% Annual Chance Flood Hazard Zone X

Area with Reduced Flood Risk due t Levee. See Notes. Zone X

Area with Flood Risk due to Levee Zone D

OTHER FEATURES

20.2 Cross Sections with 1% Annual Chance

17.5 Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

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

GRETCHEN WHITMER
GOVERNOR

LIESL EICHLER CLARK
DIRECTOR

November 2, 2022

T. Van Fox
MHT Housing, Inc.
32500 Telegraph Road, Suite 100
Bingham Farms, Michigan 48025

Via Email Only

Dear T. Van Fox:

Subject: 10201, 10227 and 10236 Woodward Avenue, 39 Calvert Street and 30 Glynn Court, Detroit, Michigan Project

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

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

EGLE has reviewed the Woodward Avenue, Calvert Street and Glynn Court Project proposed to be completed with federal grant monies, including the construction of a 62,497 square foot, four-story apartment building containing first floor retail spaces. The development will include 53 two-bedroom units; 26 units as 9 percent low-income housing tax credits (LIHTC) and 27 units as 4 percent LIHTC. A parking lot is proposed to the north and rear of the new building as well as new curb cuts from Glynn Court and Calvert Avenue, the two side streets. Surrounding land is a mix of apartments, single family residential, commercial, and community use areas. The project is designed to meet the income distribution and household size needs identified in a market study and provides desirable and affordable community retail space on Woodward Avenue and private-unit residential housing in the North End neighborhood of Detroit. The project site is located at 10201, 10227, and 10236 Woodward Avenue, 39 Calvert Street and 30 Glynn Court, Detroit, Michigan in Wayne County. The proposed project is anticipated to begin in January 2023 with a 15-month construction period.

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

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

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

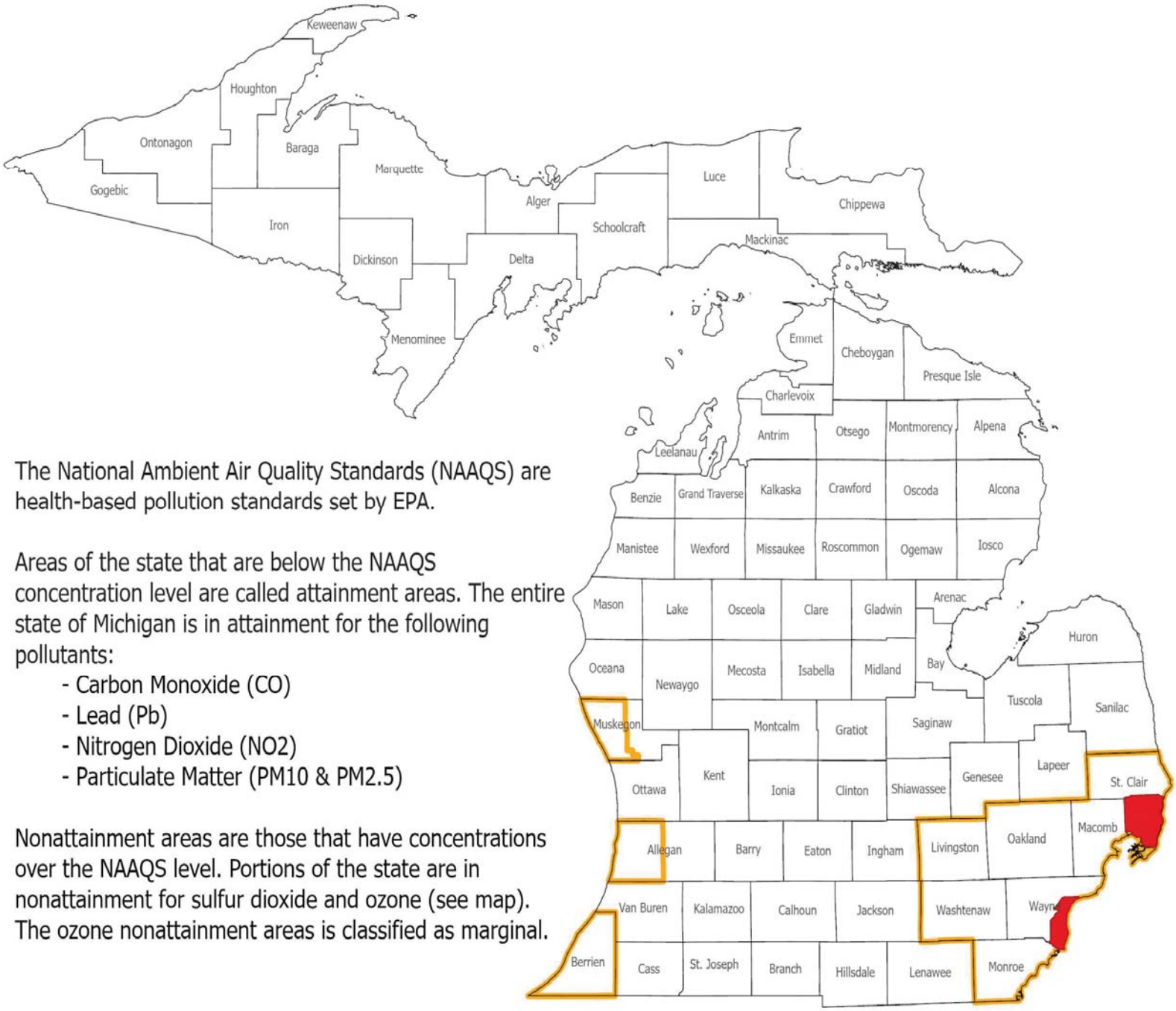
Sincerely,

Breanna Bukowski

Breanna Bukowski
Environmental Quality Analyst
Air Quality Division

cc: Michael Leslie, USEPA Region 5
Michael Vollick, Michigan State Housing Development Authority
Carmen E. Reverón-Rondón, U.S. Dept of Housing and Urban Development
Donald Rencher, City of Detroit
Penny Dwoinen, City of Detroit
Christy Bakos, Grand Environmental, LLC

Attainment Status for the National Ambient Air Quality Standards



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

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

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

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

LEGEND

- Sulfur Dioxide Nonattainment Area
- Ozone Nonattainment Area

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

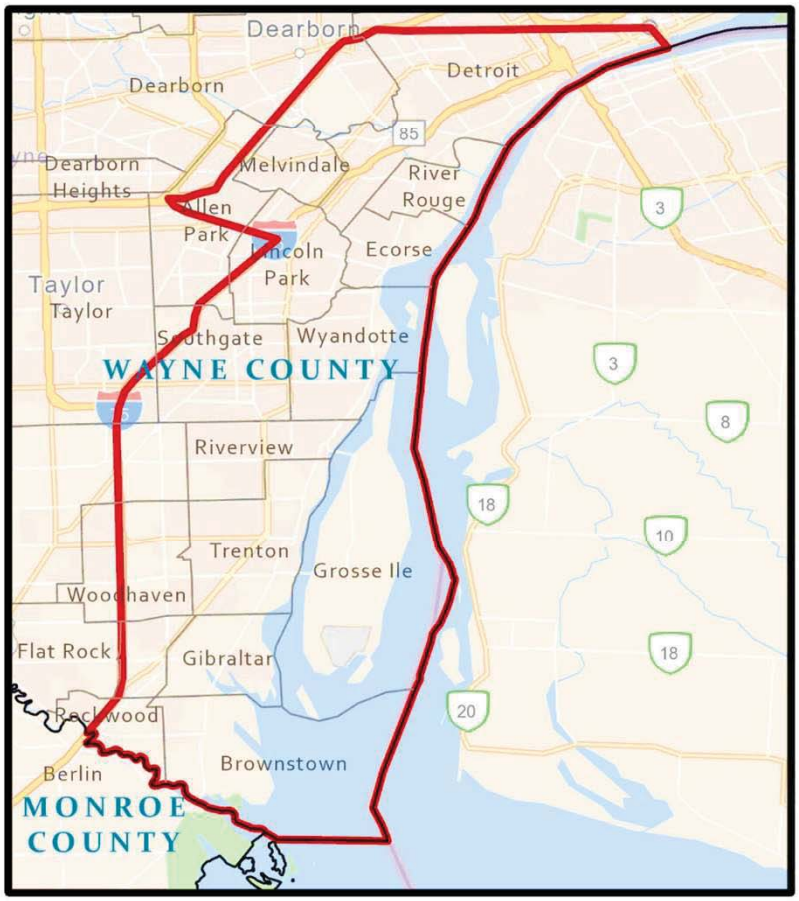
Updated February 5, 2021

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

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

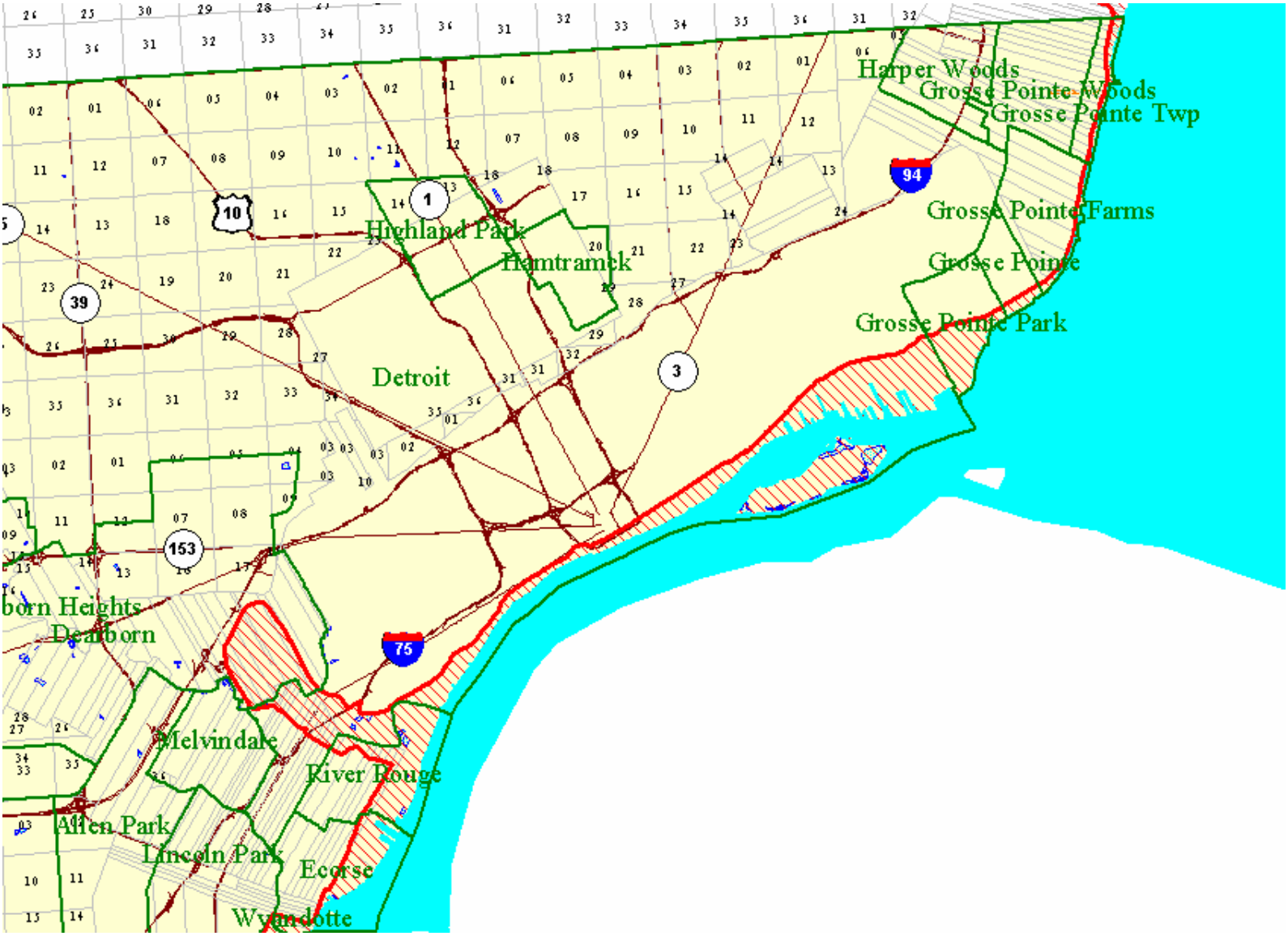
Muskegon County Area

Province of Ontario, Esri, HERE, Garmin, Safeboraph, FAO, METI/NASA, USGS, EPA, NPS, Province of Ontario, Esri, HERE, Garmin, Safedraph, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, Esri, HERE, Garmin,

Updated February 5, 2021
Prepared by EGLE, Air Quality Division, State Implementation Plan Development Unit

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

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



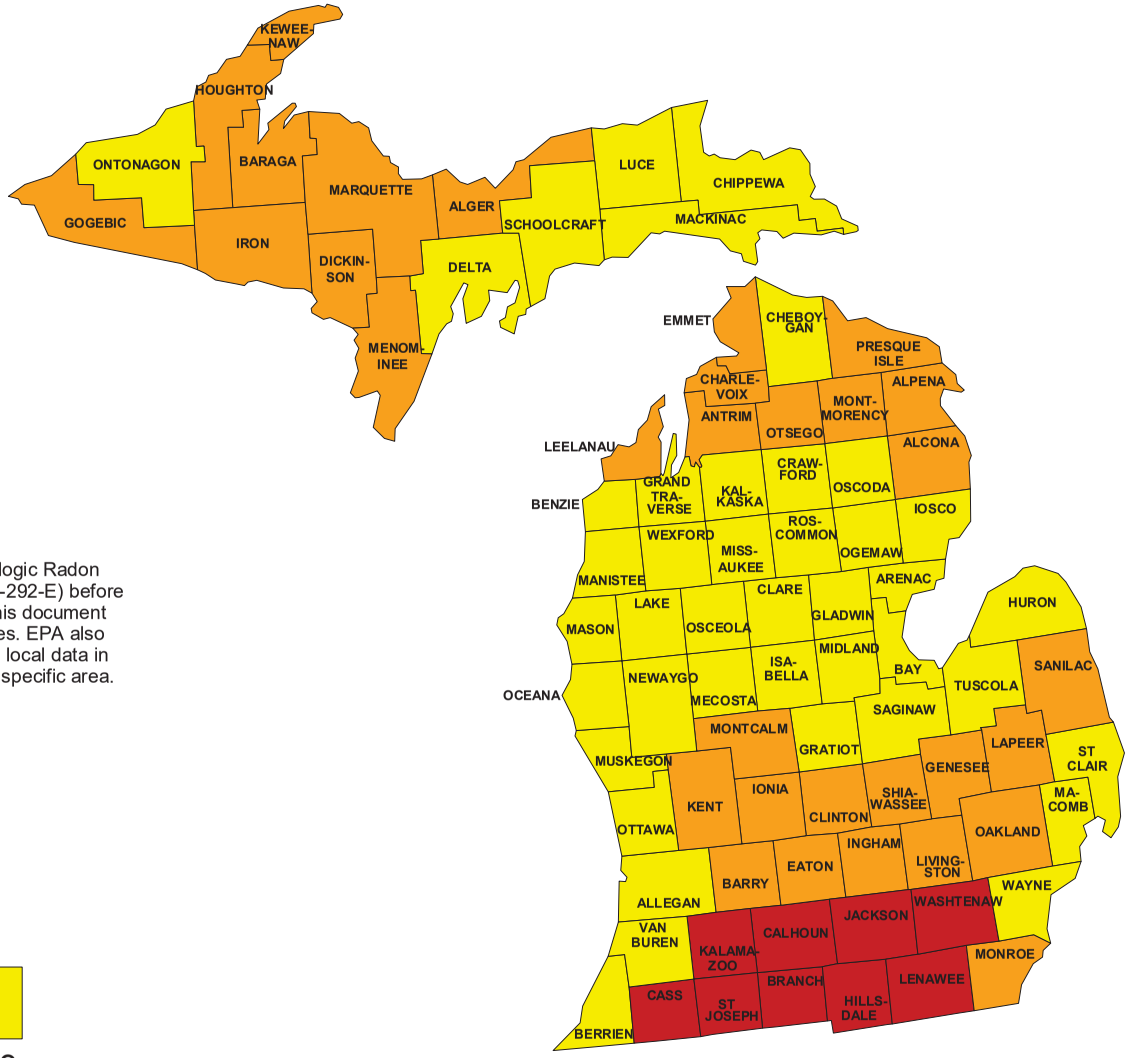
MICHIGAN - EPA Map of Radon Zones

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

GRETCHEN WHITMER
GOVERNOR

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

LIESL EICHLER CLARK
DIRECTOR

October 20, 2022

10201 Woodward Limited
Dividend Housing Association, LLC
Mr. T. Van Fox
32500 Telegraph Road, Suite 100
Bingham Farms, Michigan 48025

Dear Mr. Van Fox:

SUBJECT: Final Assessment Report Approved
Report Receipt Date: September 21, 2022
Former Dry Cleaner
30 Glynn Court, Detroit, Wayne County, Michigan
Facility ID: 00041320
Confirmed Release Number: C-0053-03

The Department of Environment, Great Lakes, and Energy (EGLE), Remediation and Redevelopment Division (RRD), has conducted an audit of the Final Assessment Report (FAR), dated September 16, 2022, submitted to address a release from an underground storage tank system at the subject site. This audit was performed pursuant to Section 21315 of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

Based on this audit, the FAR is **approved**.

If you have any questions regarding this matter or wish to discuss the findings of this audit, please contact Jeanne Schlaufman, Project Manager, Detroit District Office, RRD, at 586-753-3823, schlaufmanj1@michigan.gov; or RRD-Detroit District Office, 27700 Donald Court, Warren, Michigan 48092 or you may contact me.

Sincerely,

Paul J Owens

Paul Owens, District Supervisor
Detroit District Office
RRD
586-235-6990
owensp@michigan.gov

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

GRETCHEN WHITMER
GOVERNOR

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

LIESL EICHLER CLARK
DIRECTOR

October 20, 2022

10201 Woodward Limited
Dividend Housing Association, LLC
Mr. T. Van Fox
32500 Telegraph Road, Suite 100
Bingham Farms, Michigan 48025

Dear Mr. Van Fox:

SUBJECT: Final Assessment Report Approved
Report Receipt Date: September 21, 2022
Former Retail Development – Vacant Land
10227 Woodward Avenue, Detroit, Wayne County, Michigan
Facility ID: 00042118
Confirmed Release Number: C-0117-08

The Department of Environment, Great Lakes, and Energy (EGLE), Remediation and Redevelopment Division (RRD), has conducted an audit of the Final Assessment Report (FAR), dated September 16, 2022, submitted to address a release from an underground storage tank system at the subject site. This audit was performed pursuant to Section 21315 of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

Based on this audit, the FAR is **approved**.

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Sincerely,

Paul J Owens

Paul Owens, District Supervisor
Detroit District Office
RRD
586-235-6990
owensp@michigan.gov

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

GRETCHEN WHITMER
GOVERNOR

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

LIESL EICHLER CLARK
DIRECTOR

October 20, 2022

10201 Woodward Limited
Dividend Housing Association, LLC
Mr. T. Van Fox
32500 Telegraph Road, Suite 100
Bingham Farms, Michigan 48025

Dear Mr. Van Fox:

SUBJECT: Final Assessment Report Approved
Report Receipt Date: September 21, 2022
Former Woodward-Glynn Service Center
10201 Woodward Avenue, Detroit, Wayne County, Michigan
Facility ID: 50005901
Confirmed Release Number: C-0174-13

The Department of Environment, Great Lakes, and Energy (EGLE), Remediation and Redevelopment Division (RRD), has conducted an audit of the Final Assessment Report (FAR), dated September 16, 2022, submitted to address a release from an underground storage tank system at the subject site. This audit was performed pursuant to Section 21315 of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

Based on this audit, the FAR is **approved**.

If you have any questions regarding this matter or wish to discuss the findings of this audit, please contact Jeanne Schlaufman, Project Manager, Detroit District Office, RRD, at 586-753-3823, schlaufmanj1@michigan.gov; or RRD-Detroit District Office, 27700 Donald Court, Warren, Michigan 48092 or you may contact me.

Sincerely,

Paul J Owens

Paul Owens, District Supervisor
Detroit District Office
RRD
586-235-6990
owensp@michigan.gov

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

GRETCHEN WHITMER
GOVERNOR

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

EGLE

LIESL EICHLER CLARK
DIRECTOR

October 31, 2022

ACKNOWLEDGEMENT OF RECEIPT OF A BASELINE ENVIRONMENTAL ASSESSMENT

BEA ID: 50005901-BEA-1

Legal Entity:
10201 Woodward Limited Dividend Housing Association, LLC
Attention: Mr. T. Van Fox
32500 Telegraph Road, Suite 100
Bingham Farms Michigan 48025

Property Address:
10201, 10227 and 10235 Woodward Avenue, 30 Glynn Court and 39 Calvert Street
Detroit, Michigan 48202

On October 18, 2022, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) received a Baseline Environmental Assessment (BEA) dated October 7, 2022, for the above legal entity and property. This letter is your acknowledgement that EGLE has received and recorded the BEA. EGLE maintains an administrative record of each BEA as received.

This BEA was submitted pursuant to Section 20126(1)(c) of Part 201, Environmental Remediation and/or Section 21323a(1)(b) of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A BEA is submitted for the purpose of establishing an exemption to liability for a new owner or operator of property that has been demonstrated to be a facility or property as defined by Section 20101(1)(s) of Part 201, Environmental Remediation and/or property as defined by Section 21303(d) of Part 213, Leaking Underground Storage Tanks, of the NREPA. Pursuant to Sections 20126(1)(c) and 21323a(1)(b), the conditions of this exemption require the legal entity to disclose the BEA to a subsequent purchaser or transferee of the property.

The BEA is only for the legal entity and property, or properties identified on the BEA Submittal Form and in the BEA that have been demonstrated to be a facility. Each new legal entity that becomes the owner or operator of this facility must submit their own BEA.

EGLE is not making any findings about whether the submitter is liable or is eligible to submit. The submitted BEA does not alter liability with regard to a subsequent release, threat of release, or exacerbation of existing conditions that is the responsibility of the legal entity submitting the BEA.

EGLE does not review BEAs to determine the adequacy of the submittal. The 2020 Volatilization to Indoor Air Pathway (VIAP) Screening Levels (SLs) may be proposed as

site-specific criteria when used to determine that a property is or contains a facility or site. ELGE's approval of these numeric site-specific criteria is required. Since the BEA has not been reviewed, if the BEA relied upon the 2020 VIAP SLs then their use within the BEA is approved only for the purpose of confirming the status of the property as a facility under Part 201 or a site under Part 213.

The legal entity, as the owner and/or operator of a facility or property, may have Due Care responsibilities under Section 20107a of Part 201, Environmental Remediation and/or Section 21304c of Part 213, Leaking Underground Storage Tanks, of the NREPA.

The legal entity may also have responsibility under applicable state and federal laws, including, but not limited to, Part 201, Environmental Remediation; Part 111, Hazardous Waste Management; Part 211, Underground Storage Tank Regulations; Part 213, Leaking Underground Storage Tanks; Part 615, Supervisor of Wells, of the NREPA; and the Michigan Fire Prevention Code, 1941 PA 207, as amended. Please review the enclosed brochure on "due care." An owner or operator of contaminated property has an obligation to assure the property is safe for the intended use and is protective of the public health and safety.

Pursuant to Section 20112a(6) of Part 201, Environmental Remediation, the property(s) identified in the BEA will be placed on the inventory of facilities, which is updated daily and posted on EGLEs website: https://secure1.state.mi.us/FacilitiesInventoryQueries.

Authorized signature:

Paul Owens KB

Paul Owens, District Supervisor
Detroit District Office
Remediation and Redevelopment Division
27700 Donald Court
Warren, Michigan 48092
586-235-6990
OwensP@Michigan.gov

Enclosures
cc: Mr. Steven K. Guyot, ESGPW, LLC

GRETCHEN WHITMER
GOVERNOR

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

EGLE

LIESL EICHLER CLARK
DIRECTOR

October 31, 2022

ACKNOWLEDGEMENT OF RECEIPT OF A BASELINE ENVIRONMENTAL ASSESSMENT

BEA ID: 50005901-BEA-2

Legal Entity:
10201 Woodward 4% Limited Dividend Housing Association, LLC
Attention: Mr. T. Van Fox
32500 Telegraph Road, Suite 100
Bingham Farms Michigan 48025

Property Address:
10201, 10227 and 10235 Woodward Avenue, 30 Glynn Court and 39 Calvert Street
Detroit, Michigan 48202

On October 18, 2022, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) received a Baseline Environmental Assessment (BEA) dated October 7, 2022, for the above legal entity and property. This letter is your acknowledgement that EGLE has received and recorded the BEA. EGLE maintains an administrative record of each BEA as received.

This BEA was submitted pursuant to Section 20126(1)(c) of Part 201, Environmental Remediation and/or Section 21323a(1)(b) of Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A BEA is submitted for the purpose of establishing an exemption to liability for a new owner or operator of property that has been demonstrated to be a facility or property as defined by Section 20101(1)(s) of Part 201, Environmental Remediation and/or property as defined by Section 21303(d) of Part 213, Leaking Underground Storage Tanks, of the NREPA. Pursuant to Sections 20126(1)(c) and 21323a(1)(b), the conditions of this exemption require the legal entity to disclose the BEA to a subsequent purchaser or transferee of the property.

The BEA is only for the legal entity and property, or properties identified on the BEA Submittal Form and in the BEA that have been demonstrated to be a facility. Each new legal entity that becomes the owner or operator of this facility must submit their own BEA.

EGLE is not making any findings about whether the submitter is liable or is eligible to submit. The submitted BEA does not alter liability with regard to a subsequent release, threat of release, or exacerbation of existing conditions that is the responsibility of the legal entity submitting the BEA.

EGLE does not review BEAs to determine the adequacy of the submittal. The 2020 Volatilization to Indoor Air Pathway (VIAP) Screening Levels (SLs) may be proposed as site-specific criteria when used to determine that a property is or contains a facility or site.

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Enclosures
cc: Mr. Steven K. Guyot, ESGPW, LLC

GRETCHEN WHITMER
GOVERNOR

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

EGLE

LIESL EICHLER CLARK
DIRECTOR

October 31, 2022

ACKNOWLEDGEMENT OF RECEIPT OF A BASELINE ENVIRONMENTAL ASSESSMENT

BEA ID: 50005901-BEA-3

Legal Entity:
10201 Woodward MM, LLC
Attention: Mr. T. Van Fox
32500 Telegraph Road, Suite 100
Bingham Farms Michigan 48025

Property Address:
10201, 10227 and 10235 Woodward Avenue, 30 Glynn Court and 39 Calvert Street
Detroit, Michigan 48202

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Enclosures
cc: Mr. Steven K. Guyot, ESGPW, LLC

United States Department of the Interior

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

In Reply Refer To: April 11, 2022
Project Code: 2022-0030329
Project Name: Woodward Avenue Apartments

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

about your project that you submit to our office.

Attachment(s):

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

Official Species List

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

This species list is provided by:

Michigan Ecological Services Field Office
2651 Coolidge Road Suite 101
East Lansing, MI 48823-6360
(517) 351-2555

Project Summary

Project Code: 2022-0030329
Event Code: None
Project Name: Woodward Avenue Apartments
Project Type: Mixed-Use Construction
Project Description: Develop a four-story affordable apartment building consisting of residential apartments and approximately 6,000 square feet of commercial space. A 67-space parking lot with landscaping is proposed to teh west and north of the building. A greenspace is proposed on the west edge of the parking lot.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.388867149999996,-83.08632739872394,14z

Counties: Wayne County, Michigan

Endangered Species Act Species

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

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

Mammals

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949 General project design guidelines: https://ipac.ecosphere.fws.gov/project/HD6UAMCEHFCLRFG2LNJ27B2BSQ/documents/generated/5663.pdf	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045 General project design guidelines: https://ipac.ecosphere.fws.gov/project/HD6UAMCEHFCLRFG2LNJ27B2BSQ/documents/generated/5664.pdf	Threatened

Birds

NAME	STATUS
Piping Plover *Charadrius melodus* Population: [Great Lakes watershed DPS] - Great Lakes, watershed in States of IL, IN, MI, MN, NY, OH, PA, and WI and Canada (Ont.) There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6039	Endangered
Red Knot *Calidris canutus rufa* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. This species only needs to be considered under the following conditions: ▪ Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened

Reptiles

NAME	STATUS
Eastern Massasauga (=rattlesnake) *Sistrurus catenatus* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ For all Projects: Project is within EMR Range Species profile: https://ecos.fws.gov/ecp/species/2202 General project design guidelines: https://ipac.ecosphere.fws.gov/project/HD6UAMCEHFCLRFG2LNJ27B2BSQ/documents/generated/5280.pdf	Threatened

Clams

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

Insects

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

Flowering Plants

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

Critical habitats

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

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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

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

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

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

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

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

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

NAME	BREEDING SEASON
Canada Warbler *Cardellina canadensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the

FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

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

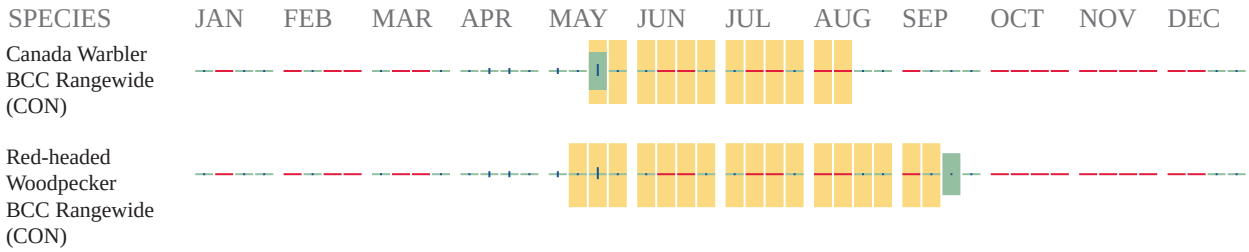
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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

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

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

■ probability of presence ■ breeding season | survey effort – no data



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

Migratory Birds FAQ

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

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

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

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

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

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

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?
The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

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

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

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

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

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

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides

birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

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

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

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

Wetlands

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

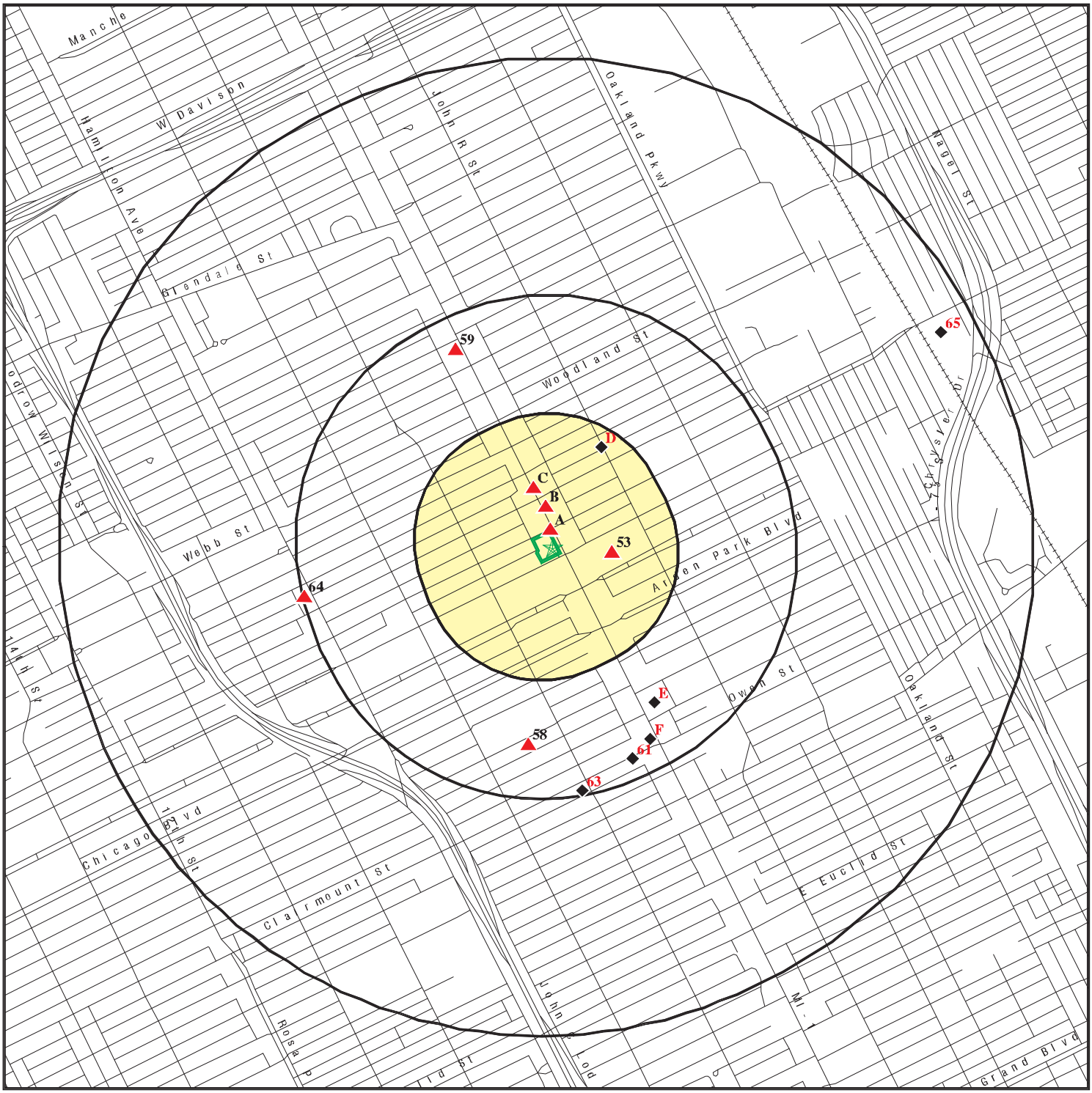
IPaC User Contact Information

Agency: GRand Environmental, LLC
Name: Christy Bakos
Address: 3315 3 Mile Road NW
City: Walker
State: MI
Zip: 49534
Email christy@grandenv.com
Phone: 6167323600

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
UST	0.250	1	5	0	NR	NR	NR	6
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		1	0	0	NR	NR	1
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
SWRCY	0.500		0	0	1	NR	NR	1
HIST LF	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
INVENTORY	0.500	4	9	0	5	NR	NR	18
PART 201	1.000		0	0	0	1	NR	1
CDL	0.001		0	NR	NR	NR	NR	0
DEL PART 201	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
SPILLS	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250	1	2	0	NR	NR	NR	3
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0

OVERVIEW MAP - 6137165.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

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

SITE NAME: Five Parcel Woodward Site	CLIENT: ESGPW LLC
ADDRESS: 10201 Woodward Avenue Detroit MI 48202	CONTACT: Steve Guyot INQUIRY #: 6137165.2s
LAT/LONG: 42.388727 / 83.086129	DATE: July 29, 2020 10:07 am

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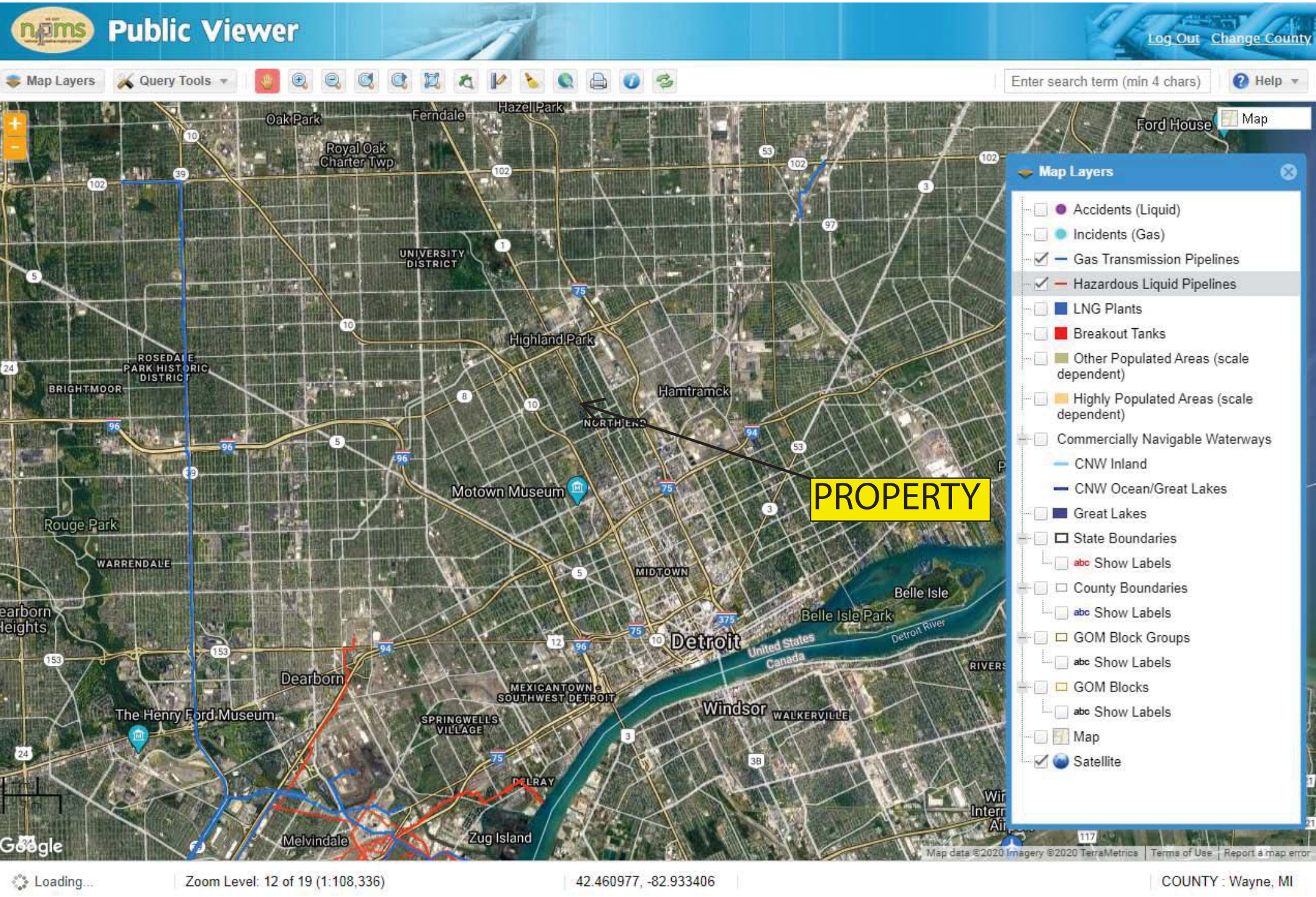
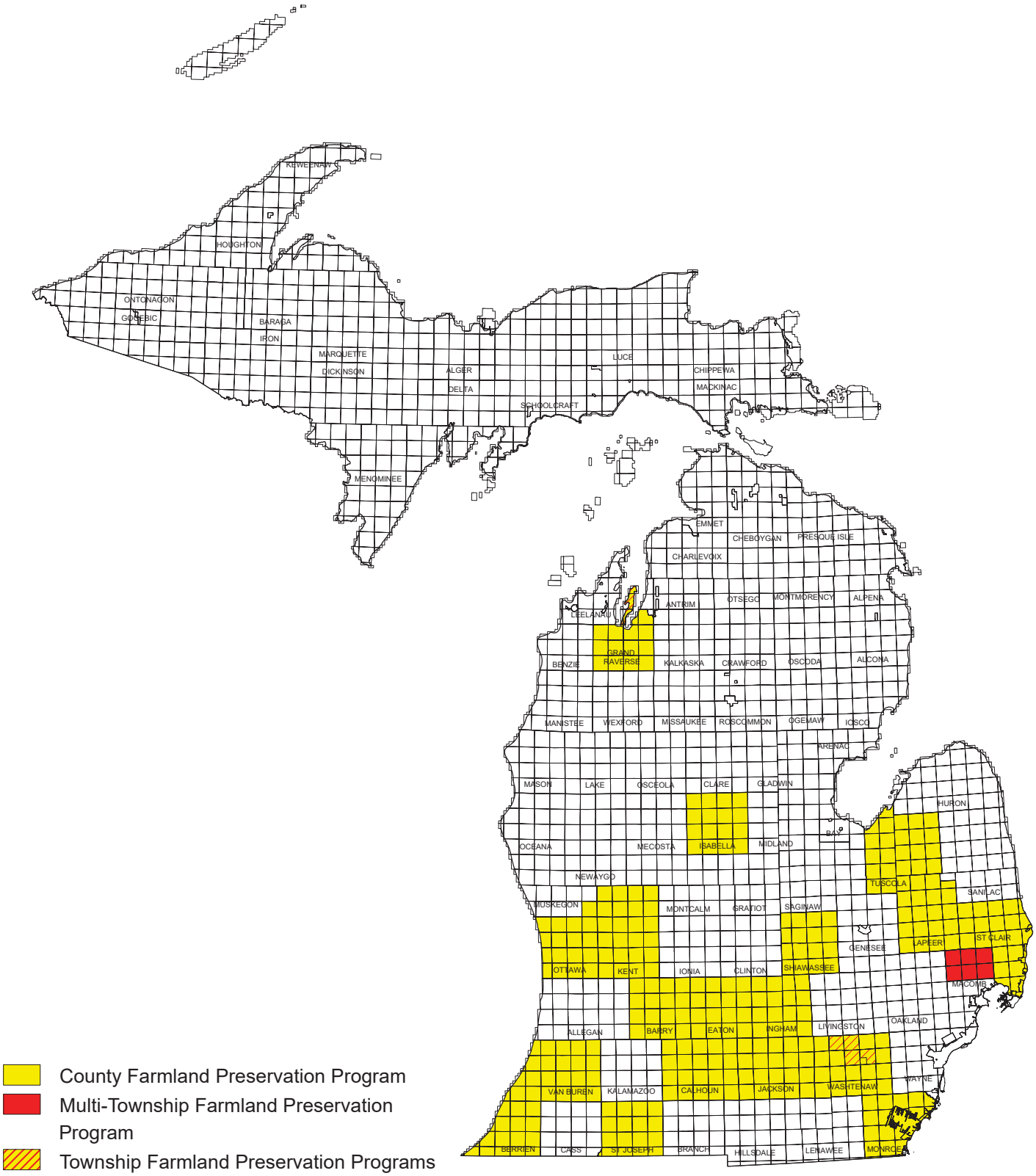

Public Viewer
Log Out
Change County
Map Layers
Query Tools
Enter search term (min 4 chars)
Help
Map
Map Layers
Accidents (Liquid)
Incidents (Gas)
Gas Transmission Pipelines
Hazardous Liquid Pipelines
LNG Plants
Breakout Tanks
Other Populated Areas (scale dependent)
Highly Populated Areas (scale dependent)
Commercially Navigable Waterways
CNW Inland
CNW Ocean/Great Lakes
Great Lakes
State Boundaries
Show Labels
County Boundaries
Show Labels
GOM Block Groups
Show Labels
GOM Blocks
Show Labels
Map
Satellite
PROPERTY
Oak Park
Ferndale
Hazel Park
Royal Oak Charter Twp
Ford House
UNIVERSITY DISTRICT
Highland Park
ROSEDALE PARK HISTORIC DISTRICT
BRIGHTMOOR
Hamtramck
NORTHEND
Motown Museum
Rouge Park
WARRENDALE
MIDTOWN
Belle Isle
Belle Isle Park
Detroit
United States
Canada
Detroit River
Dearborn
MEXICANTOWN - SOUTHWEST DETROIT
Windsor
WALKERVILLE
The Henry Ford Museum
SPRINGWELLS VILLAGE
DELRAY
Melvindale
Zug Island
Google
Map data ©2020 Imagery ©2020 TerraMetrics
Terms of Use
Report a map error
Loading...
Zoom Level: 12 of 19 (1:108,336)
42.460977, -82.933406
COUNTY : Wayne, MI

Local Farmland Preservation Programs Qualified under The Michigan Agricultural Preservation Fund



Date: 10/15/2021

APPLICATION FOR SHPO SECTION 106 CONSULTATION

Submit one application for each project for which comment is requested. Consult the *Instructions for the Application for SHPO Section 106 Consultation Form* when completing this application.

Mail form, all attachments, and check list to: Michigan State Historic Preservation Office, 300 North Washington Square, Lansing, MI 48913

I. GENERAL INFORMATION

☒ New submittal

☐ More information relating to SHPO ER# SHPO Project #

☐ Submitted under a Programmatic Agreement (PA)

PA Name/Date: PA name/date, if applicable

a. **Project Name:** Woodward Garden Apartments
b. **Project Municipality**: Detroit
c. **Project Address** (*if applicable*): 10201 Woodward Avenue
d. **County:** Wayne

II. FEDERAL AGENCY INVOLVEMENT AND RESPONSE CONTACT INFORMATION

a. **Federal Agency:** Department of Housing and Urban Redevelopment
Contact Name: Mary Wiedel
Contact Address: 477 Michigan Avenue **City:** Detroit **State:** MI **Zip:** 48226
Email: mary.t.weidel@hud.gov
Specify the federal agency involvement in the project: Federal funding is requested

b. **If HUD is the Federal Agency: 24 CFR Part 50 ☐ or Part 58 ☒**
Responsible Entity (RE): Michigan State Housing Development Authority
Contact Name: Dan Lince
Contact Address: 735 E. Michigan Avenue **City:** Lansing **State:** MI **Zip:** 48912
RE Email: linced@michigan.gov **Phone:** 517-335-8108

c. **State Agency Contact (*if applicable*):** MSHDA
Contact Name: Dan Lince
Contact Address: 735 Michigan Avenue **City:** Lansing **Zip:** 48912
Email: linced@michigan.gov **Phone:** 517-335-8108

d. **Applicant (if different than federal agency):** 10201 Woodward Limited Dividend Housing Association, LLC
Contact Name: Timothy Van Fox
Contact Address: 32600 Telegraph Road, Suite 102 **City:** Bingham Farms **State:** MI **Zip:** 48025

Email: vanfox@mhthousing.net **Phone:** 248-833-0550

e. **Consulting Firm (if applicable):** ESGPW, LLC
Contact Name: Steve Guyot
Contact Address: 18640 Mack Avenue, No. 1029 **City:** Grosse Pointe Farms **State:** MI **Zip**:48236
Email: skguyot@gmail.com Phone: 734-649-9681

III. PROJECT INFORMATION

a. **Project Location and Area of Potential Effect (APE)**

i. **Maps.** Please indicate all maps that will be submitted as attachments to this form.

☒Street map, clearly displaying the direct and indirect APE boundaries
☐Site map
☒USGS topographic map Name(s) of topo map(s): Highland Park Quadrangle (also Detroit Quad for one mile research radius)
☒Aerial map
☒Map of photographs
☐Other: Identify type(s) of map(s)

ii. **Site Photographs**

iii. **Describe the APE:**
Indirect APE – a half block radius around the project site. Direct APE – the project site.

iv. **Describe the steps taken to define the boundaries of the APE:**
Indirect APE – Construction of a four-story tall apartment building and parking lot on a vacant site on Woodward Avenue has the potential to affect views of the immediately surrounding properties and a slight increase in noise, vehicle and pedestrian traffic for the half-block area surrounding the urban site. Direct APE – effect is limited to the project site.

b. **Project Work Description**

Describe all work to be undertaken as part of the project:

Construct a 62,497 square foot, four-story tall apartment building containing first floor retail spaces at the southeast corner of Woodward Avenue and Glynn Court in the north end of Detroit. A parking lot is proposed to the north and rear of the new building. New curb cuts are proposed from the two side streets, Glynn Court and Calvert Avenue.

IV. IDENTIFICATION OF HISTORIC PROPERTIES

a. **Scope of Effort Applied**

i. **List sources consulted for information on historic properties in the project area** (including but not limited to SHPO office and/or other locations of inventory data).

SHPO records; M-1 Rail Section 106 report; City of Detroit Local Historic Districts; Reconnaissance Level Survey Report – Residential Neighborhoods in Detroit; National Register of Historic Places; State Register of Historic Sites; historic atlases, historic aerial photographs, and Sanborn Fire Insurance maps

ii. Provide documentation of previously identified sites as attachments.

iii. **Provide a map** showing the relationship between the previously identified properties and sites, your project footprint and project APE.

iv. Have you reviewed existing site information at the SHPO: ☒Yes ☐ No

v. Have you reviewed information from non-SHPO sources: ☒Yes ☐ No

b. **Identification Results**

i. **Above-ground Properties**

A. Attach the appropriate Michigan SHPO Architectural Identification Form for each resource or site 50 years of age or older in the APE. Refer to the *Instructions for the Application for SHPO Section 106 Consultation Form* for guidance on this.

B. **Provide the name and qualifications of the person who made recommendations of eligibility for the above-ground identification forms.**

Name Kristine Kidorf **Agency/Consulting Firm:** Kidorf Preservation Consulting

Is the individual a 36CFR Part 61 Qualified Historian or Architectural Historian ☒ Yes ☐ No

Are their credentials currently on file with the SHPO? ☒ Yes ☐ No

If NO attach this individual's qualifications form and resume.

ii. **Archaeology** (complete this section if the project involves temporary or permanent ground disturbance)

Submit the following information using attachments, as necessary.

A. **Attach Archaeological Sensitivity Map.**

B. **Summary of previously reported archaeological sites and surveys:**

The files of the Michigan SHPO in Lansing include no previously recorded sites and no previously conducted surveys within the proposed project property.

No sites have been recorded within one mile of the proposed project.

Six "surveys" have been previously conducted within one mile of the proposed project. Table 1 summarizes their citation data. All of the investigations comprise phase I land use histories with limited field inspection. Three of the land use studies recommended no further mitigative concern due to the level of 20th century impacts (disturbance) on historic archaeological deposits. Also, prehistoric archaeological sensitivities are generally low in these areas (Branstner 1985a, 1985b; Causier 1985). Two of the land use histories (Branstner 1987; Klinge 2010) recommended phase I or II data recovery. Branstner and Barton (1981) report for their study area that archaeological sensitivity for historic sites is high between Woodward and Cass, and moderate in most of the remaining lots. The high potential area may contain 1830s to 1860s era sites. However, the location is south of the project area.

C. **Town/Range/Section or Private Claim numbers:** in the part of Detroit with no section numbers, within the former Greenfield Township; on the east border of T1S, R11E

D. **Width(s), length(s), and depth(s) of proposed ground disturbance(s):** The proposed project parcel measures 260.2 ft north-south by 200 ft east west along Calvert Avenue and 220 ft east-west along Glynn Court. All of this will be developed (apartments, parking lot, landscaping, etc.) Depths of construction disturbance are not provided in the specifications however no basement is proposed. The first floor will be constructed on/above the ground.

E. **Will work potentially impact previously undisturbed soils?** ☐ Yes ☒ No

***If YES,* summarize new ground disturbance:**

Summary of new ground disturbance

F. **Summarize past and present land use:**

Urban development. The 1904 and 1915 atlases indicate that "Section 36", part of the Ten Thousand Acre Tract, in which the project lies, had been included into Detroit city limits while still be listed as part of Greenfield Township (Sauer 1915:2; 1904:7).

G. **Potential to adversely affect significant archaeological resources**:

☒ Low ☐ Moderate ☐ High

For moderate and high potential, is fieldwork recommended? ☐ Yes ☐ No

Briefly justify the recommendation:

Justification for recommendation of fieldwork

H. **Has fieldwork already been conducted?** ☐ Yes ☒ No

If YES:
☐ Previously surveyed; refer to A. and B. above.
☐ Newly surveyed; attach report copies and provide full report reference here:
Full report reference

I. **Provide the name and qualifications of the person who provided the information for the Archaeology section:**

Name: Misty Jackson **Agency/Firm:** Arbre Croche Cultural Resources LLC
Is the person a 36CFR Part 61 Qualified Archaeologist? ☒ Yes ☐ No
Are their credentials currently on file with the SHPO? ☒ Yes ☐ No
If NO, attach this individual's qualifications form and resume.

Archaeological site locations are legally protected.

This application may not be made public without first redacting sensitive archaeological information.

V. IDENTIFICATION OF CONSULTING PARTIES

a. **Provide a list of *all* consulting parties,** including Native American tribes, local governments, applicants for federal assistance/permits/licenses, parties with a demonstrated interest in the undertaking, and public comment:

None known

b. **Provide a summary of consultation with consultation parties:**

None

c. **Provide summaries of public comment and the method by which that comment was sought:**

None

VI. DETERMINATION OF EFFECT

Guidance for applying the Criteria of Adverse Effect can be found in *the Instructions for the Application for SHPO Section 106 Consultation Form*.

a. **Basis for determination of effect**:

Indirect APE – Construction of a new apartment building on a vacant site in an urban neighborhood setting containing a mix of residential, commercial, and religious buildings of various ages will not adversely affect the views, setting, or characteristics of the surrounding historic properties. The scale of the proposed building is compatible with the nearby historic properties.

Direct APE - ACCR recommends that a determination of 'No historic properties will be affected' be accepted for the Section 106 review. The east side of the subject property along Woodward Avenue was the location of significant nineteenth century resources on the former Pontiac Road. These included the Greenfield House, a probable blacksmith shop, and residence, which stood as late as 1876 and possibly later, as indicate on the 1876 county atlas. Construction and later demolition of the businesses (likely with residences above them) on Woodward Avenue that are recorded by the earliest available Sanborn map dating to 1915, along with the former ice plant and bowling alley/motion pictures house behind them, would have destroyed evidence of the previous nineteenth century structures.

b. **Determination of effect**

☒ **No historic properties will be affected**

☒ **Historic properties will be affected** and the project will (check one):

☒ have **No Adverse Effect** on historic properties within the APE.

☐ have an **Adverse Effect** on one or more historic properties in the APE and the federal agency, or federally authorized representative, will consult with the SHPO and other parties to resolve the adverse effect under 800.6.

☐ **More Information Needed:** We are initiating early consultation. A determination of effect will be submitted to the SHPO at a later date, pending results of survey.

Federally Authorized Signature:_____ Date:_____

Type or Print Name: _____

Title: _____

ATTACHMENT CHECKLIST

Identify any materials submitted as attachments to the form:

☐ Additional federal, state, local government, applicant, consultant contacts

☒ Maps of project location

Number of maps attached: Maps are included in the historic architecture and archaeological asssesments/letters.

☒ Site Photographs

☒Map of photographs

☒ Plans and specifications

☐ Other information pertinent to the work description: Identify the type of materials attached

☒ Documentation of previously identified historic properties

☒ Architectural Properties Identification Forms

☒ Map showing the relationship between the previously identified properties, your project footprint, and project APE

☐ Above-ground qualified person's qualification form and resume

☒ Archaeological sensitivity map

☐ Survey report

☐ Archaeologist qualifications and resume

☐ Other: Identify other attached materials

Kidorf Preservation Consulting

451 E. Ferry Street, Detroit, Michigan 48202 313-300-9376

March 23, 2021

Christy Bakos
GRand Environmental, LLC
3315 3 Mile Road, NW
Walker, MI 49534

RE: Section 106 letter report, Woodward Apartments, 10201 Woodward Avenue, Detroit, Wayne County

Dear Ms. Bakos,

Thank you for contacting me to prepare this report assessing the historic properties and the effect of the above project. My education and experience meet the qualifications required in 36 CFR 61 for an architectural historian. On March 9, 2021, I visited the project site to evaluate the project site and surrounding neighborhood. This written report will (1) define the area of potential effects (APE); (2) identify Historic Properties within the APE; (3) evaluate the historic significance of identified properties as appropriate; and (4) assess the effects of constructing an apartment building on any historic properties within the APE.

DESCRIPTION OF THE PROJECT

The proposed project is to construct a four-story tall apartment building with retail on the first floor on a vacant site on the west side of Woodward Avenue between Glynn Court and Calvert Street in the north end of Detroit, just north of Boston-Edison, approximately 4 miles north of downtown Detroit. The proposed building has an L-shaped footprint with the building facing Woodward Avenue and Glynn Court. A 67-space parking lot with landscaping and lighting is proposed to the west and north of the building and will be accessed by the two side streets. A small green lawn with trees, a gazebo, and playground is proposed on the west edge of the parking lot. A landscaped retail plaza is proposed at the north end of the building facing Woodward.

The east façade of the building is proposed to sit at the back of the Woodward Avenue sidewalk. There is a small lawn between the south elevation and the sidewalk of Glynn Court. A masonry wall embossed with a brick pattern is proposed for the west lot line next to the adjacent house on Glynn Court. There is an alley between the parking lot and the house on Calvert that will be repaved. A wrought iron fence will run along the alley and extend to Glynn Court to provide space for a playground between the fence and masonry wall. Lighting and landscaped islands are proposed for in the parking lot. A dumpster enclosure is proposed for the south end of the alley where it turns the corner.

The proposed building is 53' tall – four stories with a tall parapet around the flat roof to conceal mechanical equipment. The east facing façade has an apartment entrance near the south end. The majority of the first floor is an aluminum and glass commercial storefront system, there are retail spaces each with its own entrance door. The upper floors are clad in vertical concrete planks with columns of vents. The windows are narrow with a vent at the bottom. There are HVAC venting slats arranged vertically at various points across the façade.

The south elevation continues the storefront systems at the east corner of the first floor, the remainder of the elevation has window openings matching the upper floors. The upper floors are clad in concrete planks with columns of vents. The windows and HVAC venting match the façade. The north elevation has a small amount of storefront at the first floor, elsewhere at the first floor the vertical concrete planks continue from the upper floors.

The west elevation faces the proposed parking lot and is entirely clad in vertical concrete planks. At the first floor there is an apartment entrance door with a flat metal canopy extending over the door, and three sections of storefront.

Photo 1 Looking north at project site from Glynn Court, March 2021

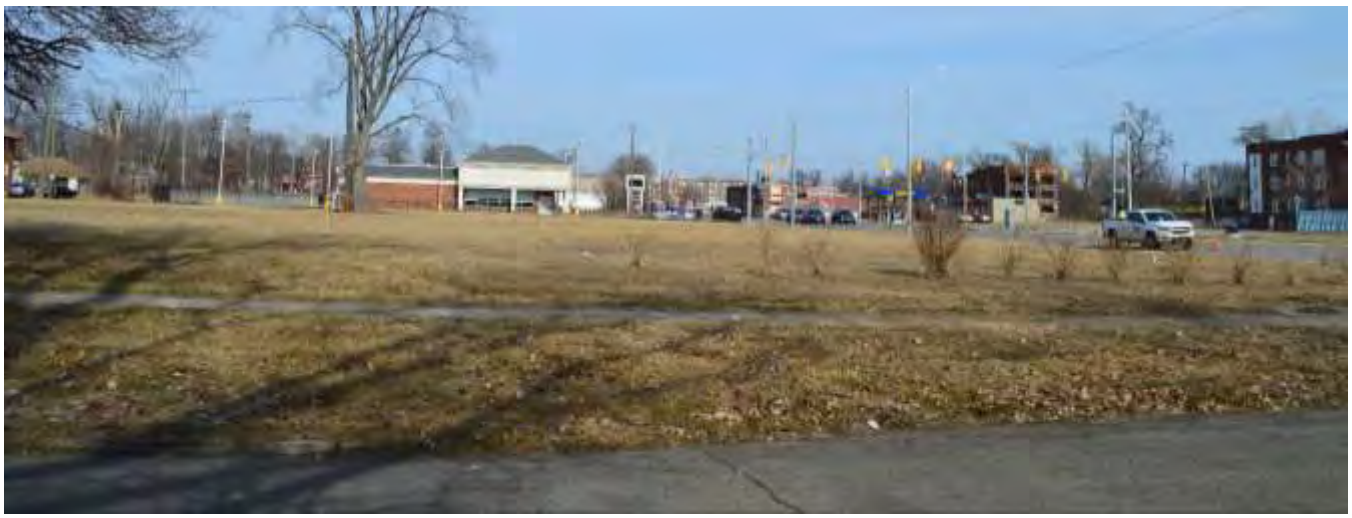


Photo 2 – Looking northeast at project site from Glynn Court, March 2021

AREA OF POTENTIAL EFFECT (APE)

The APE for indirect effects is the entire site proposed for the physical project plus a half block to the north, south, west, and east, see the attached maps. The proposed project is on a vacant parcel fronting Woodward Avenue. There are commercial and religious buildings on Woodward with residential neighborhoods to the east and west. The proposed building will not change the setting beyond the half

block surrounding the project. Other anticipated effects include a slight increase in pedestrian and vehicular traffic in the immediate neighborhood. As the surrounding area is a mix of commercial, institutional, and residential – both single and multi-family, the proposed building will fit in with surrounding uses and density.

HISTORIC PROPERTIES WITHIN THE APE

The SHPO records for the APE were requested, and the *National Register of Historic Places, State Register of Historic Sites,* and *Detroit Historic Districts* were all reviewed. There are five known above-ground historic properties within the indirect area of potential effect. The project is adjacent to the Boston-Edison Historic District, across Woodward from both the Cathedral of the Most Blessed Sacrament and the Arden Park-East Boston Historic District, all of which have been locally designated by the City of Detroit and are listed in the National Register of Historic Places. Two potentially eligible properties, Glynnwood Apartments and the Burlingame-Collingwood-Lawrence Historic District are within the APE.

According to the National Register nomination, "The Boston-Edison Historic District is significant as a large residential area of quality and substantial architecture of the first quarter of the 20th century. It is also significant for the associations of a number of persons important in the industrial, religious and cultural development of Detroit and the nation in the period between 1900 and 1930." "All of the structures (approximately 900) within this 36-block area are large single residences; and the great majority were built between l900 and 1925. While eclectic in style, they possess a uniformity in roof line, in scale, in set-back from the street, and in the use of stone or brick construction." The portion of the area closest to the project is Boston Boulevard between Woodward and Second Avenue and has large residences on large lots.

Photo 3 – Looking northeast at house on Boston Boulevard south of project site, Blessed Sacrament visible in background, March 2021.

According to the National Register nomination "Arden Park-East Boston is significant as an intact, upper class, residential development illustrating the range of domestic architectural styles popular in the early twentieth century. It is also significant as the home of many nationally and locally prominent

industrialists and professionals including several key figures in the evolution of the American automobile industry." The period of significance for the district is 1900-1950.

Photo 4 – Looking northeast in the Arden Park-East Boston HD, March 2021

The Cathedral of the Most Blessed Sacrament is a contributing property to the Arden Park-East Boston Historic District and is also individually listed in the National Register of Historic Places as part of the Religious Structures of Woodward Avenue MPS. According to the nomination, "In 1918, Bishop Michael Gallagher of Grand Rapids was installed as the fifth Roman Catholic Bishop of Detroit. In his nineteen years as bishop (1918-1937), one hundred and five parishes were established, of which thirty-three were ethnic parishes. The parish of the Blessed Sacrament for which this Neo-Gothic limestone church eventually was built had been established in 1906. In 1938, the new bishop, Edward Mooney, made the church the Cathedral of the newly created Archdiocese of Detroit. Blessed Sacrament Cathedral is one of the most architecturally significant of Detroit's Neo-Gothic churches of the early twentieth century." The church was built between 1913 and 1915, the tower was added in 1951. Henry A. Walsh of Cleveland was the original architect. It is significant for its architecture.

Photo 5 – Looking northeast at Cathedral of the Most Blessed Sacrament, March 2021

The Glynnwood Apartment building at 120 Glynn Court has been identified by the SHPO as being eligible for listing in the National Register for its Romanesque architecture. The building is identified in the *Apartment Buildings of Detroit* context as an example of the rectangular style of apartment buildings used in high rise buildings constructed in the 1910s and 1920s.

Photo 6 – Looking east at Glynnwood Apartments, March 2021

The Burlingame-Collingwood-Lawrence Historic District has been identified by the SHPO as being potentially eligible for listing in the National Register, however there are no details or exact boundaries. It is unknown when the assessment was made, however the area was included in the 2013 *Reconnaissance-level Survey Report Residential Neighborhoods in Detroit* and a potential historic district was not identified for this area. The portion of the potential district closest to the project contains vacant parcels and would likely be excluded from the district.

Photo 7 – Looking west on Collingwood closest to the project location, March 2021

ASSESSMENT OF EFFECTS

It is my opinion that the project will have No Adverse Effect on the Boston-Edison Historic District, the Blessed Sacrament Cathedral, and the Arden Park Historic District which are listed in the National Register of Historic Places or the Glynnwood Apartments and Burlingame-Collingwood-Lawrence Historic District which are eligible for listing in the National Register of Historic Places.

The proposed new building is compatible in scale, size, and location to the surrounding area. Although adjacent to several historic properties, the scale of the building is appropriate for its location on Woodward Avenue. The modern design and contemporary materials set the building apart from nearby historic properties while remaining compatible in size and location. The proposed building will not destroy any historic materials or character defining features of the surrounding historic properties which have altered urban settings.

Photo 8 – Looking south at project site with Blessed Sacrament to left, Boston Edison behind (not visible), and neighboring house to right, March 2021

Photo 9 – Looking northwest toward project site from East Boston across Woodward, March 2021

If you have any questions or require additional information, please contact me at 313-300-9376 or at kristine@kidorfpreservationconsulting.com.

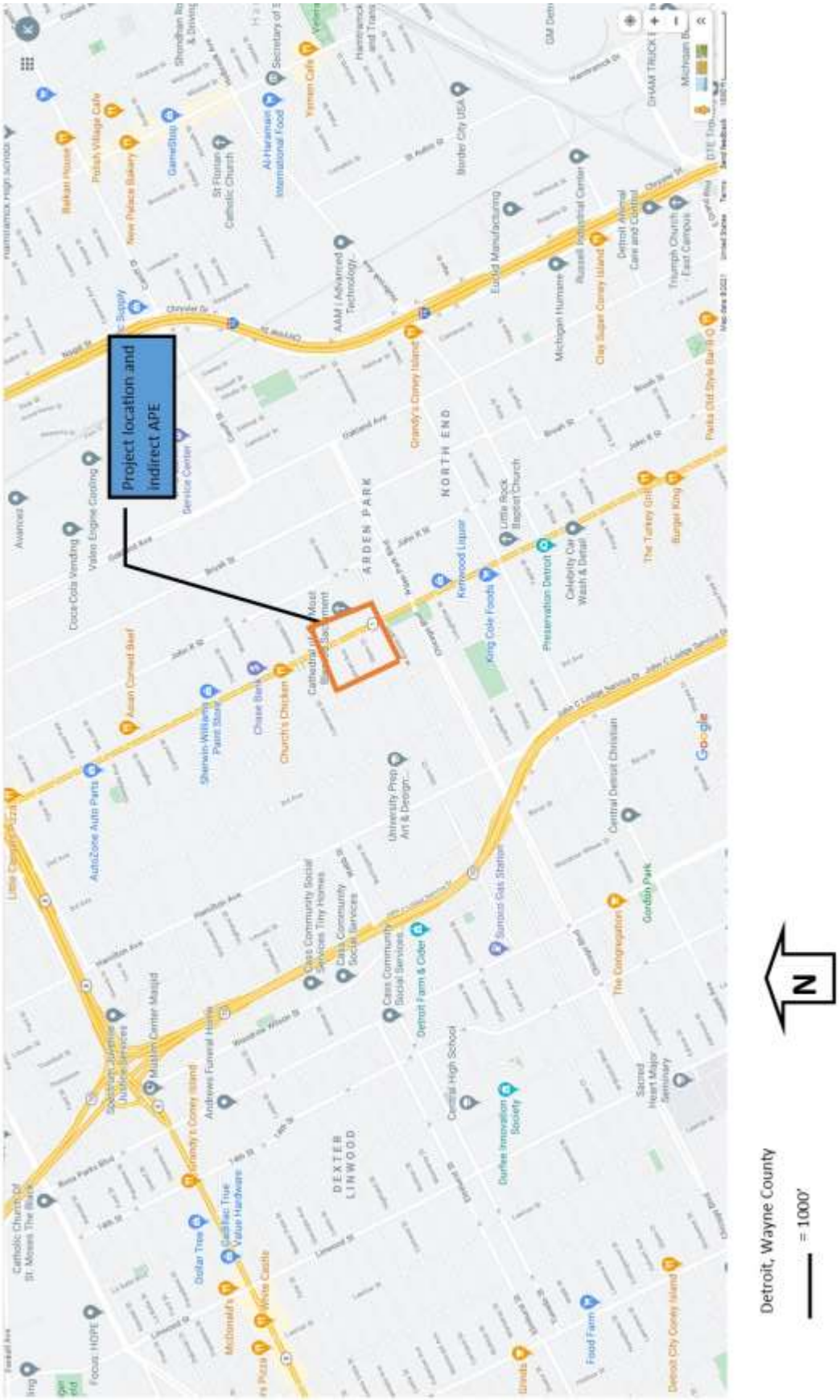
Sincerely,

Kristine M. Kidorf

Kristine M. Kidorf
Kidorf Preservation Consulting

Attachments

ATTACHMENT A – PROJECT LOCATION MAP AND APE



ATTACHMENT B –AERIAL MAP WITH REPORT PHOTO KEY

Arbre Croche Cultural Resources LLC

Misty M. Jackson, Ph.D., Proprietor and Principal Investigator
ACCR is certified as an Economically Disadvantage Woman-owned Small Business
214 South Main Street, Leslie, Michigan 49251 • 517-525-3060
mjackson@arbrecroche.com www.arbrecroche.com

March 22, 2021

MHT Housing Inc.
32600 Telegraph Road
Bingham Farms, Michigan

Archaeological Records Review and Recommendation for the Section 106 Review Application for Woodward Apartments, 10201 Woodward Avenue, Detroit, Wayne County, Michigan

This archaeological assessment is provided by Misty M. Jackson, Ph.D. of Arbre Croche Cultural Resources LLC to accompany the Section 106 review application for the proposed Woodward Apartments, Detroit, Wayne County, Michigan and to serve as explanation for the determination of effect as required by the Section 106 review application.

Project Location and Description

Environmental Services GPW, LLC (ESGPW) was retained by the MHT Housing, Inc. on behalf of proposed construction at 10201 Woodward Avenue, Detroit, of a 62,497 square foot, four-story tall (53 ft) apartment building at the southeast corner of Woodward Avenue and Glynn Court in the north end of Detroit. Retail space will also occupy the first floor. A parking lot is proposed to the north and rear of the new building, which will also contain two retail spaces. New curb cuts are proposed from the two side streets, Glynn Court and Calvert Avenue. A gazebo, patio, landscaping and play area also will be constructed behind the apartment/retail building.

The proposed property, referred to here as 10201 Woodward Avenue, consists of five contiguous, rectangular-shaped, vacant commercial parcels located at 10201, 10227, and 10235 Woodward Avenue, 30 Glynn Court, and 39 Calvert Street, Detroit, Wayne County, Michigan.

The proposed project parcel measures 260.2 ft north-south by 200 ft east west along Calvert Avenue and 220 ft east-west along Glynn Court. Depths of construction disturbance are not provided in the specifications however no basement is proposed. The first floor will be constructed on/above the ground. The southeast corner of the parcel included structures indicating former use as an automotive repair shop and/or gas station such as three service bays with underground hoist cylinders, a possible former waste oil tank pit, vent pipes and oil drums as well as storm drains. These would likely be removed

in order to mitigate any effects, necessitating deeper excavation at least in the southeast corner of the proposed projec parcel.
The apartment building footprint will cover 15,497 square feet.

The project area lies south of Highland Park and west of Hamtramck in the part of Detroit with no section numbers, within the former Greenfield Township, on the USGS 1968 (Photorevised 1983) 7.5 minute Highland Park Quadrangle. It lies on the east border of T1S, R11E adjacent the west side of Woodward Avenue. Calvert Avenue lies on the north side, Glynn Court lies on the south side of the proposed project property, and a public alley borders the north half of the west side of the proposed project parcel.

Previously Recorded Archaeological Sites and Surveys

The files of the Michigan SHPO in Lansing include no previously recorded sites and no previously conducted surveys within the proposed project property.

No sites have been recorded within one mile of the proposed project.

Six "surveys" have been previously conducted within one mile of the proposed project. Table 1 summarizes their citation data. All of the investigations comprise phase I land use histories with limited field inspection. Three of the land use studies recommended no further mitigative concern due to the level of 20th century impacts (disturbance) on historic archaeological deposits. Also, prehistoric archaeological sensitivities are generally low in these areas (Branstner 1985a, 1985b; Causier 1985). Two of the land use histories (Branstner 1987; Klinge 2010) recommended phase I or II data recovery. Branstner and Barton (1981) report for their study area that archaeological sensitivity for historic sites is high between Woodward and Cass, and moderate in most of the remaining lots. The high potential area may contain 1830s to 1860s era sites. However, the location is south of the project area.

Table 1: Previous Archaeological Surveys within One Mile of the Proposed Project

ER No.	Citation
ER8533	Branstner 1985a
ER4104	Branstner and Barton 1981
ER87066	Branstner 1987
ER8378	Branstner 1985b
ER8372	Causier 1985
ER08-462	Klinge 2010

Parcel Land Use History

The pre-Euro-American settlement vegetation of the project location consisted of beech – sugar maple forest; adjacent to the east and south lay mixed hardwood swamp (Albert and Comer 2008:18). The proposed project lies approximately 4.75 miles north/northwest of the Detroit River.

The project area remained outside of Detroit city limits in 1876 and within Greenfield Township. According to Wikipedia, Woodward Avenue ran to Pontiac, and on the 1876 atlas it is named Pontiac Road in Greenfield Township where the proposed project property is located on its west side. The project property occupied the NE ¼ of

Section 36. (Note that these sections in this part of Greenfield Township are not a full one square mile like traditional sections.) Based on a comparison with the 1904 atlas, the project property occupied the northeast corner of Section 36, and a residence, the Greenfield House, and a "BS" (probable blacksmith shop) stood on the property at that date. N. Lagorie owned the 19.5 acre parcel (Belden 1876:9,50-51; Sauer 1904:7). How much prior to 1876 the structures date cannot be determined with the available maps.

The 1904 and 1915 atlases indicate that Section 36, part of the Ten Thousand Acre Tract, had been included into Detroit city limits while still be listed as part of Greenfield Township (Sauer 1904:7; 1915:2). Section 36 within which the project occurs was part of the Ten Thousand Acre Tract. Plate 8 in the 1915 atlas, dated 1893, indicates that the project area remained part of Greenfield Township at that time.

Historically, the Subject Property contained the following addresses: 10201-10251Woodward Avenue, 2-30 Glynn Court, and 1-39 Calvert Street.

The earliest Sanborn Fire Insurance map provided by the client dates to 1925. A 1915 Sanborn is available from the Library of Congress. It provides essentially the same data as the 1925 map and indicates a solid block of at least eight contiguous (wall sharing) business on Woodward Avenue including drugs, plumbing, bakery, and plumber, as well as one with a lobby. Behind them on Glynn Court stood Pittmans and Dern Co. Ice Plant No. 1. with an Ice Storage building behind it. On Calvert Avenue behind the dwellings stood "Motion Pictures" in 1915. The northwest corner of the subject parcel appears vacant. The southwest side of the subject property had a "planked drive." In 1925 the motion pictures building is labeled "bowling alley." The 1941 Sanborn indicates the bowling alley is labeled "Motion Pictures" again, and an alley at that date ran behind it and the ice plant through to Woodward Avenue. By 1950 the Sanborn continues to depict the businesses on Woodward, the bowling alley again, and the ice plant had been replaced by a dry cleaners. The northwest and southwest corners of the subject property stood vacant of structures. The 1957 Sanborn labels the former bowling alley/motion pictures building as "Kitchen." Between 1957 and 1961 the businesses in the south half of the block on Woodward disappeared leaving the southeast portion of the subject property vacant. It is not clear what the dry cleaning building's function had become by 1977, though the remainder of the subject property's structures from 1961 still existed in 1977 and 1989. By 1991 the remaining businesses that stood on Woodward Avenue had been removed, and only the building (or part thereof) of the former ice plant and dry cleaners remained. This structure stood until at least 2002 per the available Sanborn maps and Google Earth aerial photographs dated March, April and December 2002. By 2005 the rear of the building had been demolished. Automobiles continued to occupy the lot to the east of it (northwest corner of Woodward Avenue and Glynn Court. The remaining building continued to stand until at least June 2007. By 2010 the entire parcel proposed for the project stood vacant. As indicated by the historic Google Earth aerial photographs, the parcel has remained vacant since 2010 with grass and a few trees.

The environmental assessment (EA) report provided to Kristine Kidorf of Kidorf Preservation Consulting included a map documenting possible sources of contamination in the proposed project parcel. The southeast corner of the parcel, east of the building still extant in 2002, appeared to serve as parking lot at that date and included items indicating former use as an automotive repair shop and/or gas station such as three service bays with

underground hoist cylinders, a possible former waste oil tank pit, vent pipes and oil drums as well as storm drains. The EA map documenting this is included with the maps in this archaeological assessment.

Evidence of Previous Disturbance

Past disturbance and current land use consist of urban development and demolition of the previous structure. The proposed project parcel currently stands vacant.

Summary and Recommendations for Section 106 Application Determination of Effect: No Historic Properties Will Be Affected

ACCR recommends that a determination of 'No historic properties will be affected' be accepted for the Section 106 review. The east side of the subject property along Woodward Avenue was the location of significant nineteenth century resources on the former Pontiac Road. These included the Greenfield House, a probable blacksmith shop, and residence, which stood as late as 1876 and possibly later, as indicate on the 1876 county atlas. Construction and later demolition of the businesses (likely with residences above them) on Woodward Avenue that are recorded by the earliest available Sanborn map dating to 1915, along with the former ice plant and bowling alley/motion pictures house behind them, would have destroyed evidence of the previous nineteenth century structures.

References Cited

Albert, Dennis A. and Patrick J. Comer. 2008. *Atlas of Early Michigan's Forests, Grasslands, and Wetlands.* Michigan State University Press, East Lansing.

Belden, H. and Co. 1876. *Illustrated Historical Atlas of the County of Wayne Michigan.* H. Belden and Co., Chicago.

Branstner, Mark C. 1985a. *A Phase I Detailed Land Use History and Limited Field Inspection of the North Industrial Rehabilitation District, Detroit, Michigan.* Great Lakes Research Associates, Inc. ER-8533.

_____. 1985b. A Phase I Detailed Land Use History and Limited Field Inspection of the Virginia Park Court Project Area, Detroit, Michigan. Great Lakes Research Associates, Inc. ER8378.

_____. 1987. *A Phase I Detailed Land Use History and Limited Field Inspection of the New Center/Burroughs Project Area, Detroit, Michigan.* Great Lakes Research Associates, Inc. ER-87066.

Branstner, Mark C. and David Barton. 1981. *A Literature Cultural Resource Survey and Field Inspection of the Virginia Park Rehabilitation District, Detroit, Michigan*. RAI-1456. Resource Analysts, Inc. ER4104.

Calvert Lithographing Co. 1889. *Birds eye view--showing about three miles square--of the central portion of the city of Detroit, Michigan*. [Detroit ?, 1889] Map. Electronic document https://www.loc.gov/item/76693077/, accessed December 9, 2020.

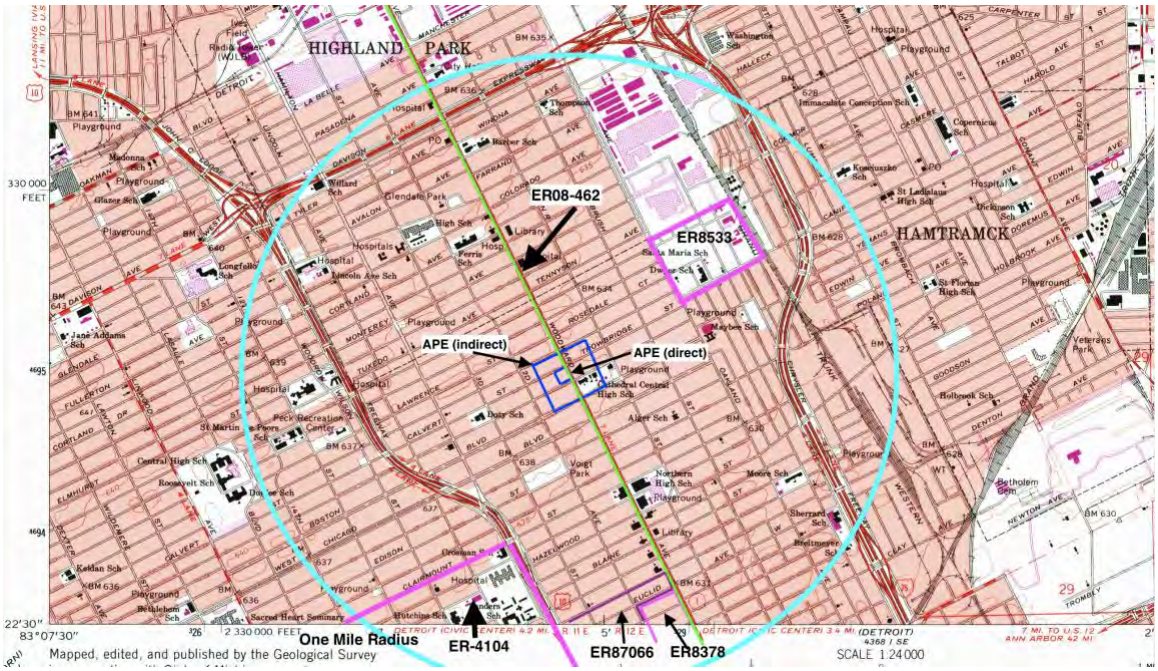
Causier, Charles W. 1985. *Land Use History of the Lothrop Avenue Parking Structure Site, Detroit, Michigan*. Howard, Needles, Tammen, and Bergendoff, Milwaukee.

Klinge, David F. 2010. Phase I Archaeological Literature Review, Land-Use History, and Disturbance Assessment, Woodward Avenue Light Rail Transit Project, City of Detroit, Wayne County, Michigan. ASC Group, Inc.

Sauer, W. C., C. E. 1904. *Detailed Official Atlas of Wayne County, Michigan.* Wm. C. Sauer, Detroit.

_____. 1915. *Detailed Official Atlas of Wayne County, Michigan.* Wm. C. Sauer, Detroit.

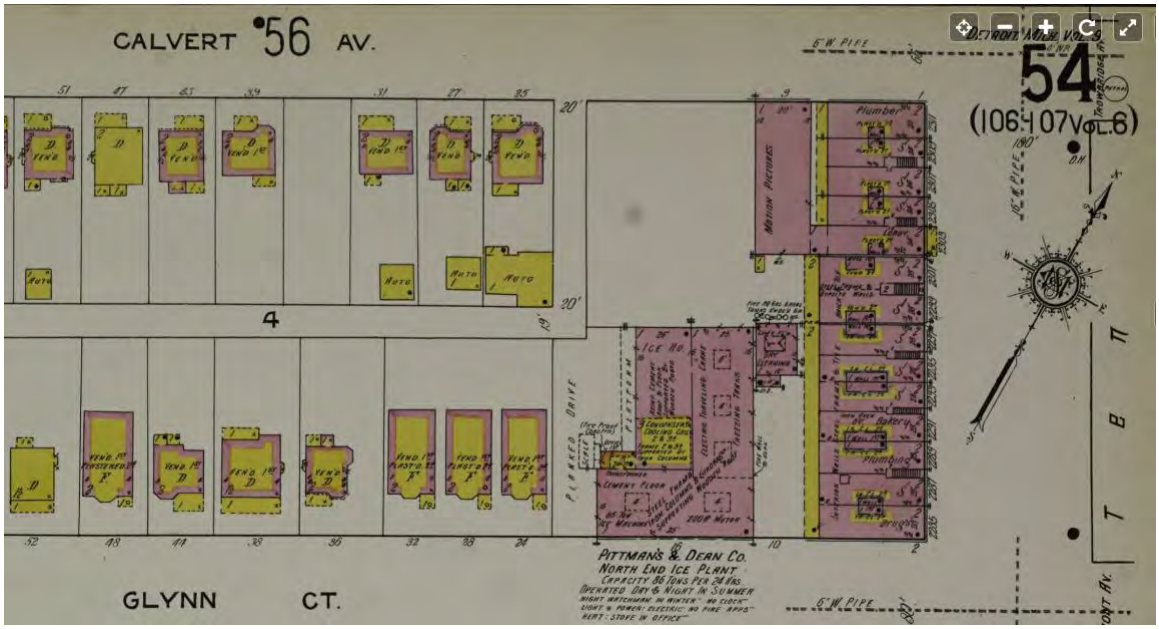
Sanborn Fire Insurance Map from Detroit, Wayne County, Michigan. 1915. Sanborn Map Company, Vol. 9. Map. https://www.loc.gov/item/sanborn03985_017/.



Archaeology Sensitivity Map
USGS 1968 (Photorevised 1983) 7.5 minute Highland Park Quadrangle.
The APE for direct effects is outlined by the blue square at the center of the APE for indirect effects.

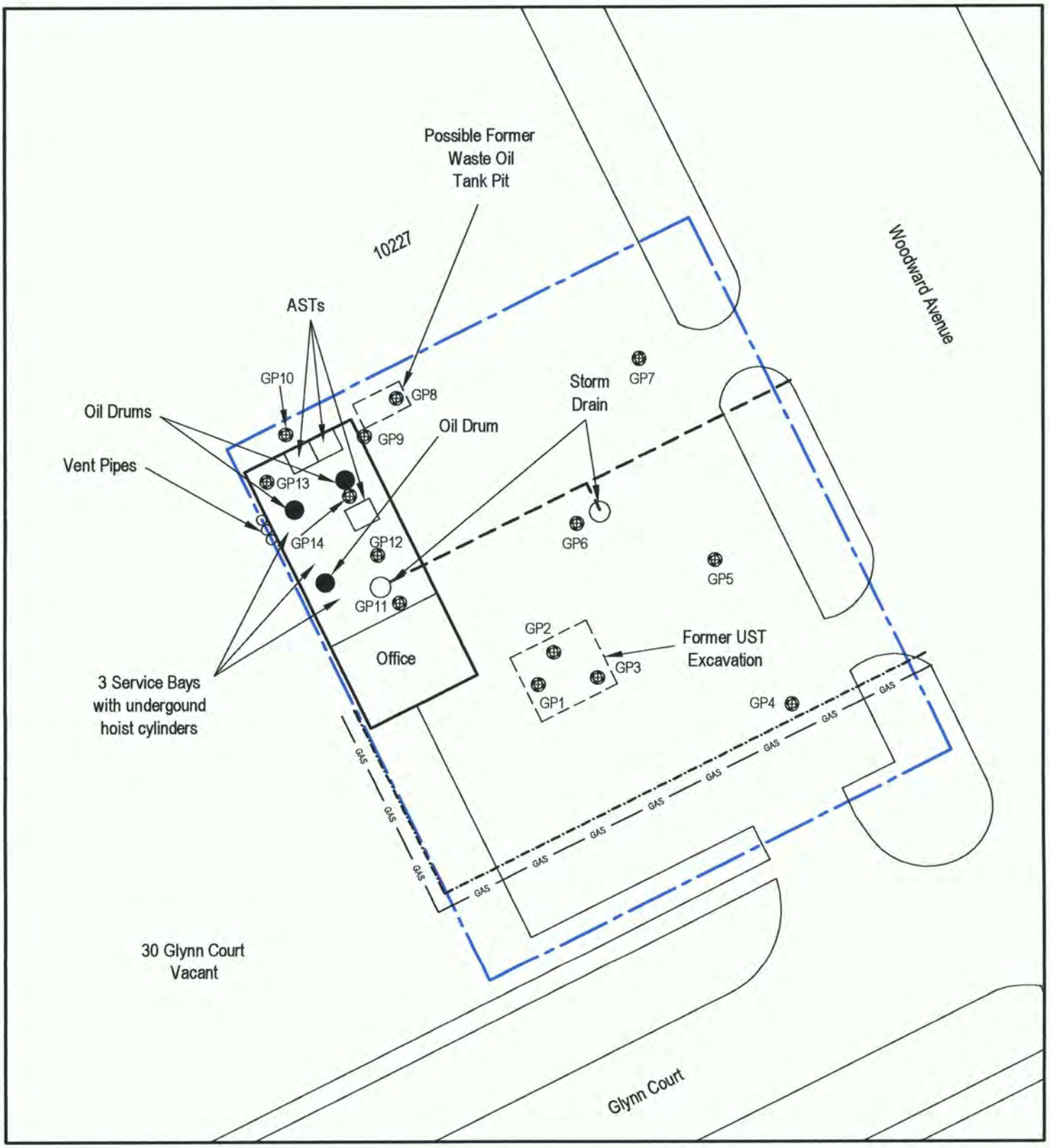
Archaeology Sensitivity Map
USGS 1968 (Photorevised 1973 and 1980) 7.5 minute Detroit Quadrangle

Belden and Co. 1876:9.
The red arrow indicates the project property, owned in 1876 by N. Lagorie, which include Greenfield House, as residence, and "BS" (probably a blacksmith shop).



***Sanborn Fire Insurance Map from Detroit, Wayne County, Michigan*. 1915. Sanborn Map Company, Vol. 9. Map. https://www.loc.gov/item/sanborn03985_017/. Sheet 54. The portion relevant to the propose project lies at the east end and comprises all those structures denoted in pink.**

Facing south toward the vacant lot/proposed project parcel from Calvert Avenue. Woodward Avenue lies on its east border. Cathedral Central High School stand on the left on the east side of Woodward Avenue, southeast of the subject parcel.



0 30 60 90

Scale in Feet

LEGEND

GAS Gas Line

Water Line

Storm Line

ASTI Environmental

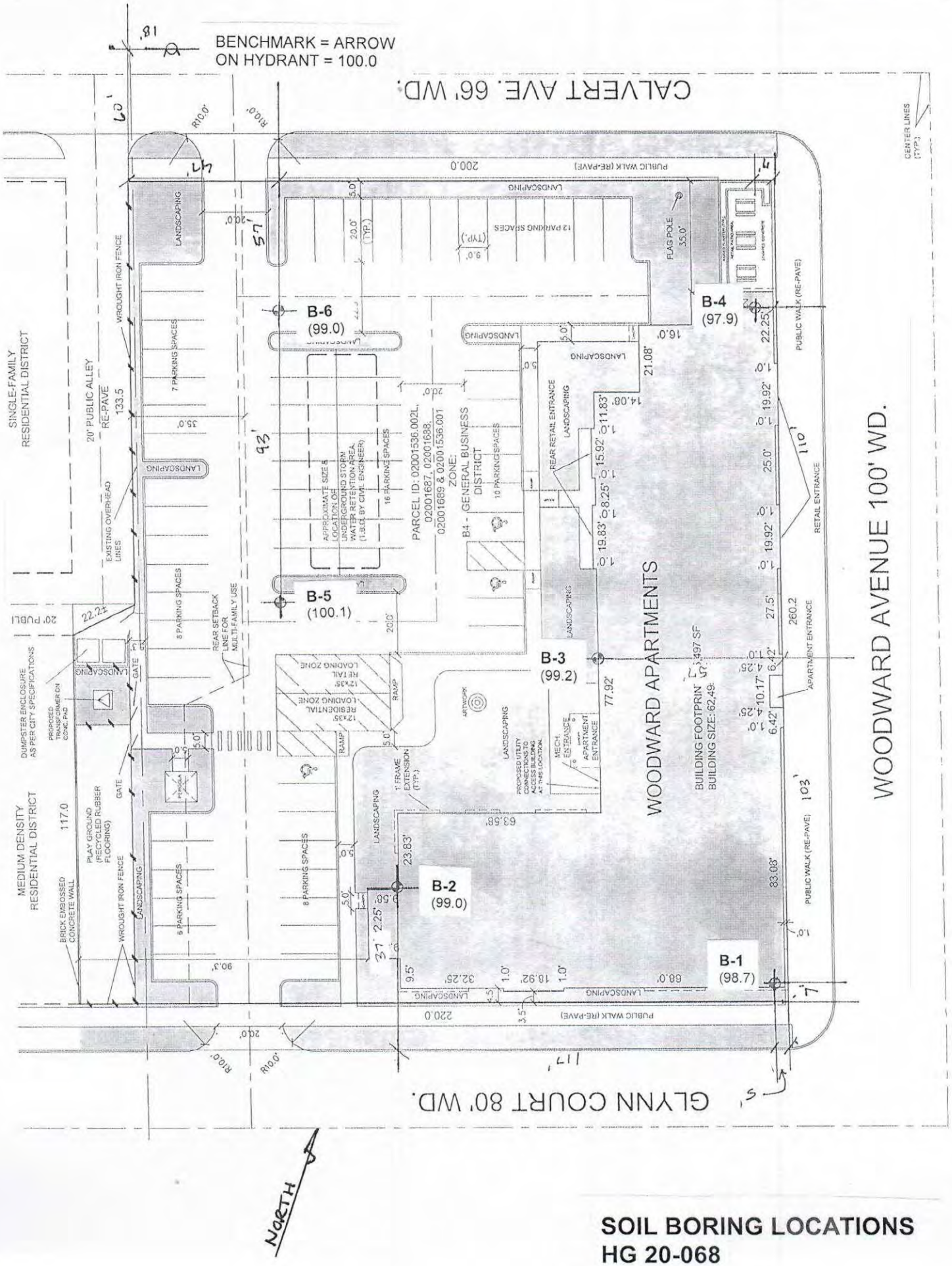
N

10201 Woodward Avenue Detroit, MI

Created for: Archdiocese of Detroit

ASTI Project 6627, ALH/NAM, December 24, 2007

Figure 2 - Site Features Map & Soil Boring Location Map



SOIL BORING LOCATIONS
HG 20-068

PROJECT: WOODWARD APARTMENTS
OWNERS: MHT HOUSING & ARCHDIOCESE OF DETROIT
LOCATION: 10201 WOODWARD AVENUE, DETROIT

Scope of Work:
THE FIRST FLOOR WILL HAVE RESIDENTIAL UNITS, COMMUNITY SPACE & OTHER AMENITIES FOR THE APARTMENTS. THE FIRST FLOOR WILL ALSO HAVE 5,972 SF OF RETAIL SPACE ON THE EAST END OF THE BUILDING. THE SECOND TO FOURTH FLOORS WILL BE DEDICATED TO UNITS. PARKING FOR BOTH RESIDENTS & RETAIL WILL BE PROVIDED ON SITE. RESIDENTS WILL HAVE ACCESS TO GAZEBO AND PLAYGROUND AREA. RETAIL WILL HAVE ACCESS TO OUTDOOR PATIO AREA.

Legal Description:
LAND SITUATED IN THE CITY OF DETROIT, COUNTY OF WAYNE, STATE OF MICHIGAN, DESCRIBED AS:

39 CALVERT STREET - TAX NUMBER: 02001536.002L
WEST 100 FEET OF LOTS 119 & 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94
AND
NORTH 9.17 FEET OF THE WEST 100 FEET OF LOT 47; ATKINSONS SUBDIVISION AS RECORDED IN LIBER 10 PAGE 82

10235 WOODWARD AVENUE - TAX NUMBER: 02001687
EAST 100 FEET OF LOT 119 & EAST 100 FEET OF THE NORTH 24 FEET OF LOT 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94

10227 WOODWARD AVENUE - TAX NUMBER: 02001688
EAST 100 FEET OF THE NORTH 40 FEET OF THE SOUTH 42.50 FEET OF LOT 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94

10201 WOODWARD AVENUE - TAX NUMBER: 02001689
EAST 100 FEET OF THE SOUTH 2.5 FEET OF LOT 120; VOIGT PARK SUBDIVISION AS RECORDED IN LIBER 22 PAGE 94
AND
EAST 100 FEET OF LOT 47; ATKINSONS SUBDIVISION AS RECORDED IN LIBER 10 PAGE 82

30 GLYNN COURT - TAX NUMBER: 02001536:001
SOUTH 117.50 OF THE WEST 100 FEET OF LOT 47; ATKINSONS SUBDIVISION AS RECORDED IN LIBER 10 PAGE 82

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EXTERIOR ELEVATIONS	A.2.2
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SURVEY	
~~ALTA/TOPOGRAPHIC SURVEY~~	~~1~~
CIVIL	
~~STORMWATER MANAGEMENT~~	~~1~~

PROPERTY INFO:
AREA: 54,471± SF OR 1.25± ACRES

BUILDING
FLOORS: 4
HEIGHT: 53'-0"
BUILDING FOOTPRINT: 15,497 SF
BUILDING SIZE: 62,495 SF

APARTMENT UNITS: (53) 2 BEDROOM UNITS

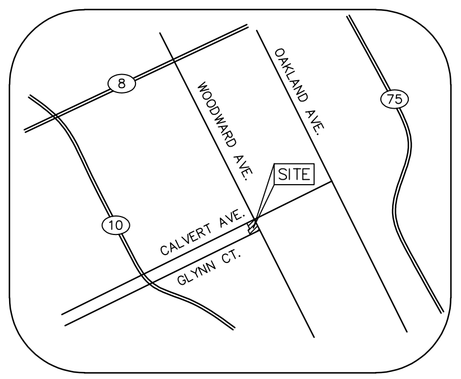
USE: MIXED USE - FIRST FLOOR RETAIL & RESIDENTIAL
SECOND TO FOURTH FLOOR RESIDENTIAL

SETBACKS
FRONT: 0 FEET
PROPOSED FRONT: 0 FEET
REAR: 35 FEET
PROPOSED REAR: 90.3 FEET
SIDE: 0 FEET
PROPOSED SIDE: 3.5 FEET & 35 FEET

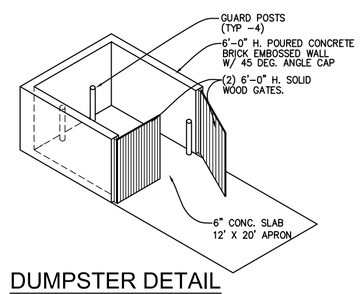
LOT COVERAGE
15,497/54,471= 28%

ZONING DESIGNATION
B4 - GENERAL BUSINESS DISTRICT

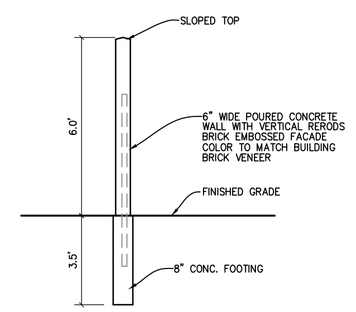
RESIDENTIAL DENSITY
53 UNITS/1.25 ACRES = 42.4 UNITS PER ACRE



VICINITY MAP
(NOT TO SCALE)



DUMPSTER DETAIL



CONCRETE WALL DETAIL

FAR
BUILDABLE LAND AREA: 44,926 SF
GROSS FLOOR AREA: 62,495 SF
62,495/44,926 = 1.39

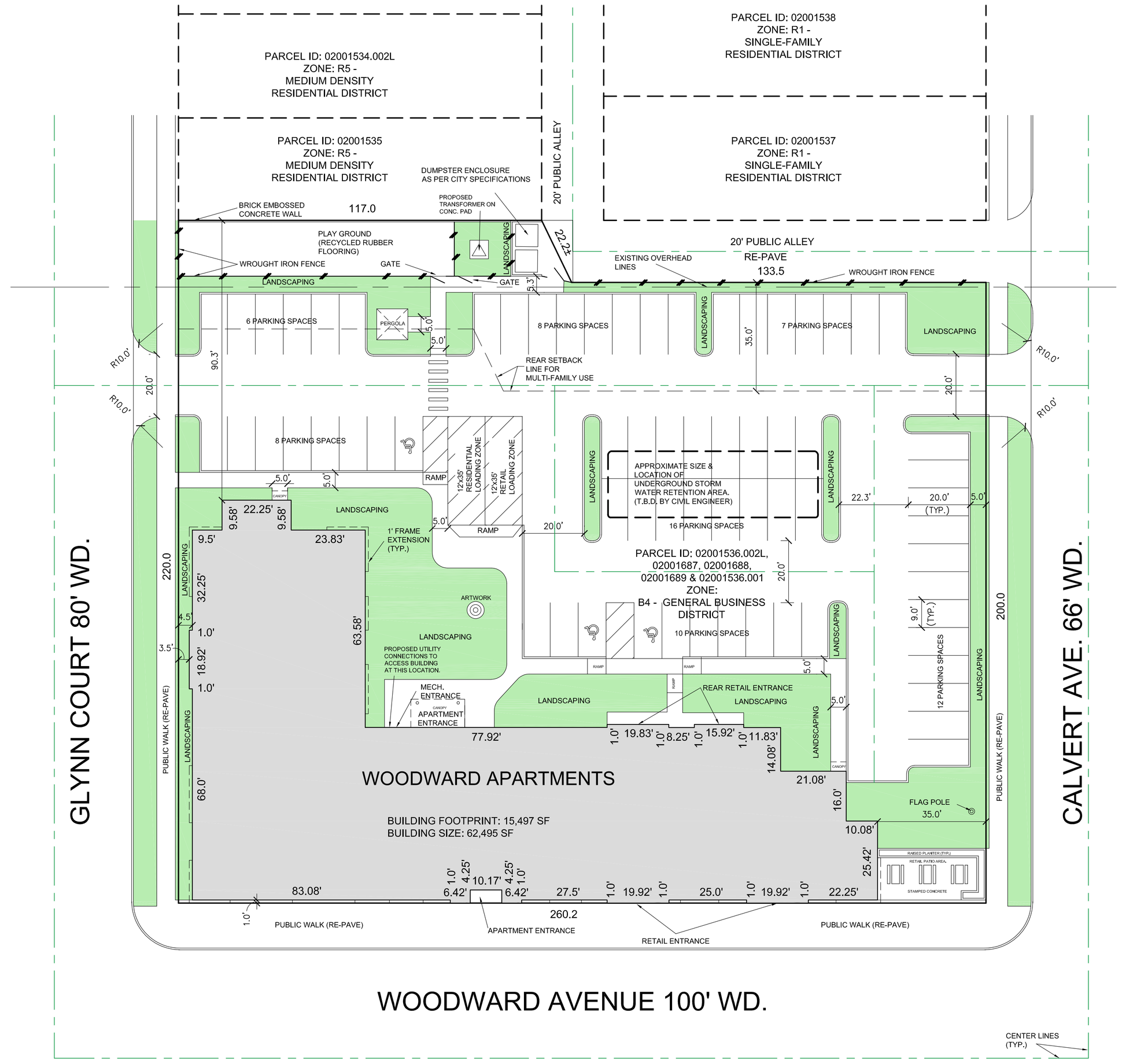
PARKING
Apartments 0.75 per dwelling unit (Bus stop within 0.5 miles of site.)
Retail: (1 per 200 SF gross floor area) x 0.75 (Bus stop within 0.5 miles of site.)

Required:
Apartments: 0.75 X 53 = 49 Spaces
Retail: (5,972 SF (FLOOR AREA) /200)x0.75 = 23 Spaces
TOTAL: 63 SPACES

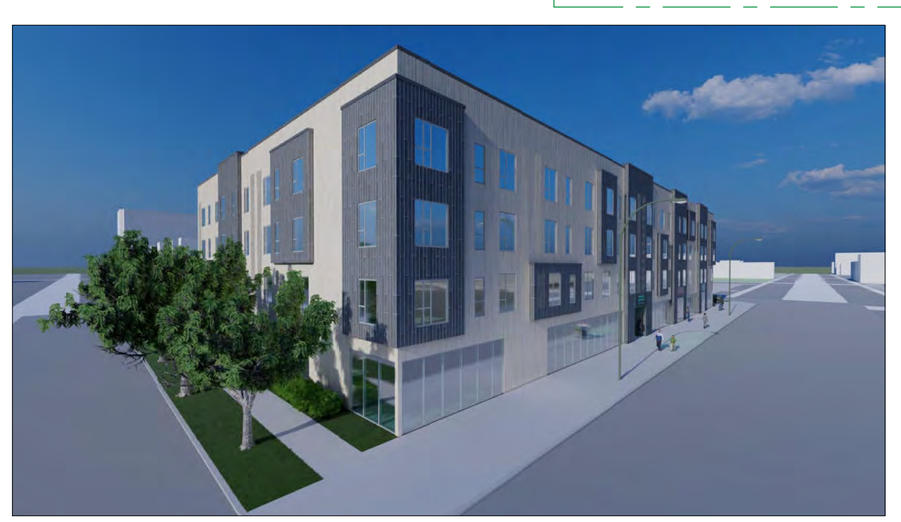
PROVIDED:
On site: 67 Spaces

22,493± SF OF PARKING

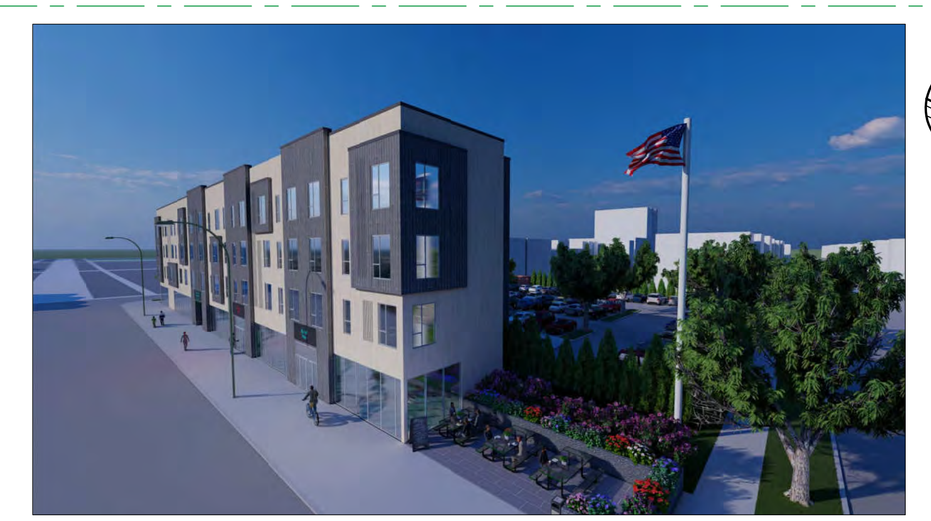
SURPLUS of 5 spaces



CONCEPT SITE PLAN
SCALE: 1"=20'-0"



CONCEPT RENDERING



CONCEPT RENDERING

REVISION #	DATE	BY	DESCRIPTION
	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

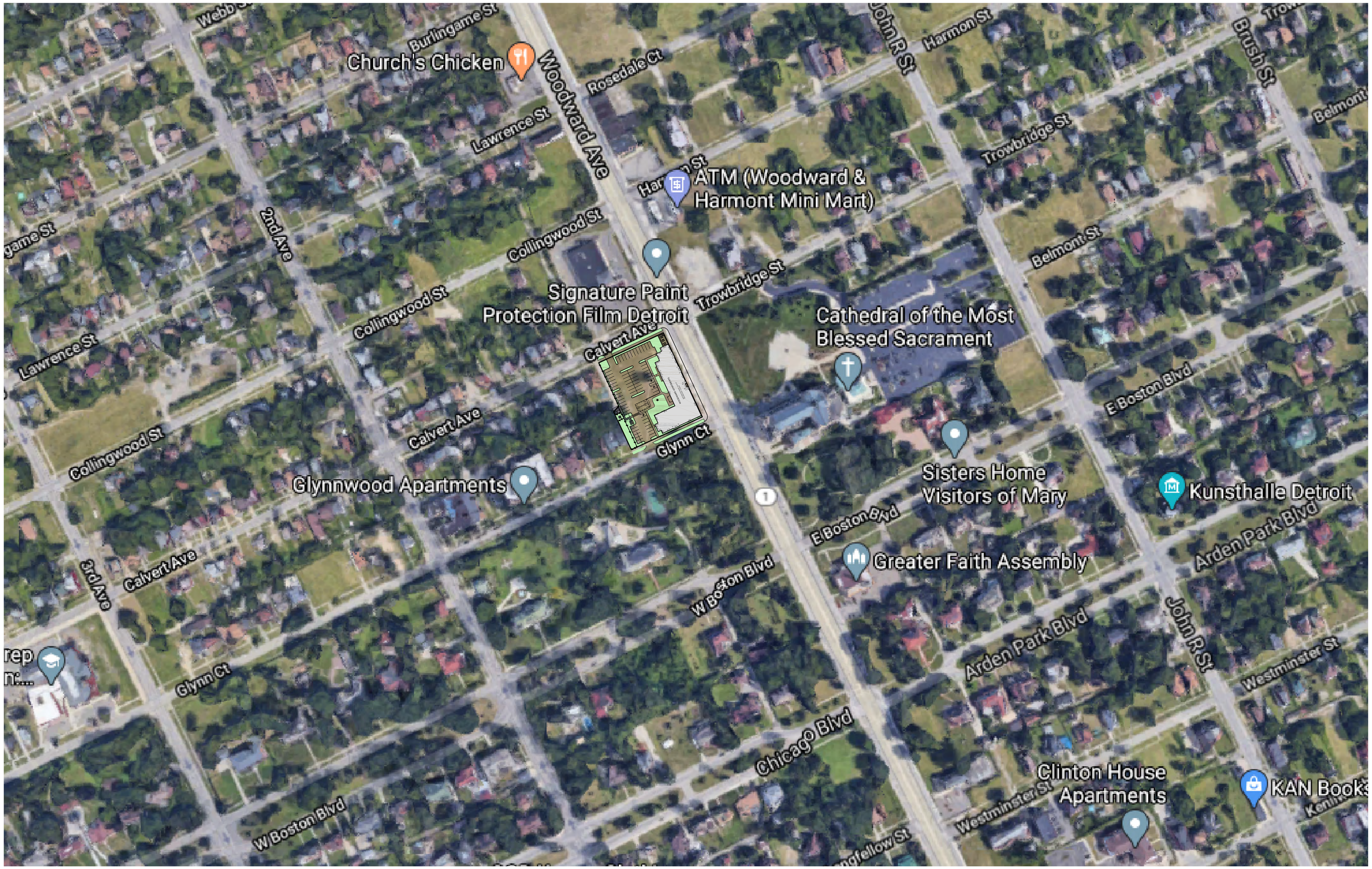
COVER SHEET & SITE PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX
KEM-TEC & ASSOCIATES

APPLICANT:
MHT HOUSING, INC.
32600 TELEGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1" = 20'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: ASP.1



NEIGHBORHOOD SITE PLAN

SCALE: NOT TO SCALE

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS

10201 WOODWARD AVE., DETROIT, MICHIGAN

NEIGHBORHOOD SITE PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX

KEM-TEC & ASSOCIATES

DRAWN BY: M.L.
SCALE: NOT TO SCALE
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: ASP.2

LANDSCAPING NOTES

- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL MATERIALS AND PLANTS SHOWN ON THE PLAN WHETHER OR NOT INCLUDED IN THE "PLANT LIST".
- ALL NURSERY STOCK TO BE WELL BRANCHED, HEALTHY, FULL, VIGOROUS, PRE INOCULATED, AND FERTILIZED. DECIDUOUS TREES TO BE FREE OF FRESH SCARS AND BRANCHES TO BE A HEIGHT OF 5' ABOVE ROOTBALL. TRUNKS SHALL BE WRAPPED, IF NECESSARY, TO PREVENT SUN SCALD AND INSECT DAMAGE. THE LANDSCAPER SHALL REMOVE SAID WRAP AT THE PROPER TIME AS PART OF HIS CONTRACT.
- ALL NURSERY STOCK SHALL BE GUARANTEED.
- TOPSOIL, 4" THICK, SHALL BE PROVIDED AND GRADED BY THE LANDSCAPE CONTRACTOR AND SUBJECT TO APPROVAL BY THE OWNER.
- ALTERNATIVES MAY ONLY BE USED IN THE EVENT OF UNAVAILABILITY OF THE SELECTED SPECIES WITHIN A REASONABLE DISTANCE OR DUE TO SEASON. PROOF MAY BE REQUESTED BY THE ENGINEER.
- EVERGREEN TREES SHALL NOT BE PLANTED DURING JUNE, JULY, OR AUGUST.
- MULCH SHALL NOT CONTAIN ANY FARM WASTE AND SHALL BE INDICATED ON PLAN FOR EACH AREA.
- A CHEMICAL WEED PREVENTATIVE BARRIER SHALL BE APPLIED IN ALL NON-GRASS AREAS WHICH DO NOT HAVE POLYETHYLENE FILM MULCH INDICATED.
- REMOVE ALL TWINE, WIRE, AND BURLAP FROM SHRUB AND TREE EARTH BALLS AND FROM TREE TRUNKS.
- LAWN TREES TO BE MULCHED WITH A 2' WIDE BY MINIMUM 6" DEEP SHREDDED BARK RING.
- SHRUB BEDS TO BE MULCHED WITH 3" OF SHREDDED WOOD BARK.
- ALL SOD AND SEED TO BE KENTUCKY BLUE BLEND.

EXAMINATION OF SITE

- THE CONTRACTOR SHALL VISIT THE JOB SITE BEFORE HE SUBMITS HIS BID TO TO BECOME FAMILIAR WITH THE ACTUAL JOB CONDITIONS AND TO CHECK FOR ANY INTERFERENCE BETWEEN THE WORK AND THAT OF OTHER TRADES AND/OR ANY APPARENT VIOLATIONS OF LOCAL OR STATE CODES, LAWS, ORDINANCES, AND REGULATIONS. IF ANY INTERFERENCE OR VIOLATIONS APPEAR AND DEPARTURE FROM THE DESIGN INTENT OF THE CONTRACT DOCUMENT S IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER BEFORE ENTERING INTO THE CONTRACT WITH THE OWNER. FAILURE TO PROVIDE THE ARCHITECT/ENGINEER WITH THE AFOREMENTIONED NOTIFICATION WILL RESULT IN THE CONTRACTOR BEING HELD RESPONSIBLE TO COMPLETE ALL WORK TO MEET THE INTENT OF THE CONTRACT DRAWINGS WITH NO ADDITIONAL EXPENSE ("EXTRAS") BEING INCURRED BY THE OWNER.

CLEANING

- PREMISES SHALL BE CLEANED UPON COMPLETION OF THE WORK.
- UPON COMPLETION OF THE WORK, THOROUGHLY CLEAN ALL SYSTEMS AND TEST TO INSURE THAT THE SYSTEMS PERFORM TO THEIR REQUIREMENTS.

MAINTENANCE

- THE PROPERTY OWNER WILL TAKE CARE OF THE LANDSCAPING.

LANDSCAPING NOTES

- ALL PLANT SIZES SHALL CONFORM WITH DETROIT'S ZONING ORDINANCE.
- MULCH SHALL BE INSTALLED AND MAINTAINED AT A MINIMUM DEPTH OF TWO (2) INCHES AND A MAXIMUM DEPTH OF FOUR (4) INCHES ON ALL PLANTED ARES.
- ALL UNPAVED AREAS WILL BE COVERED WITH GRASS UNLESS OTHERWISE SPECIFIED.
- ALL HEDGES PLACED WITHIN TWENTY (20) FEET OF THE FRONT PUBLIC SIDEWALK SHALL BE LIMITED TO THREE (3) FEET IN HEIGHT ABOVE THE GRADE OF THE PUBLIC SIDEWALK.
- INTERIOR LANDSCAPED AREAS WILL MAXIMIZE EFFECTIVE STORMWATER MANAGEMENT BY AS LISTED WITHIN THE DETROIT ZONING ORDINANCE.

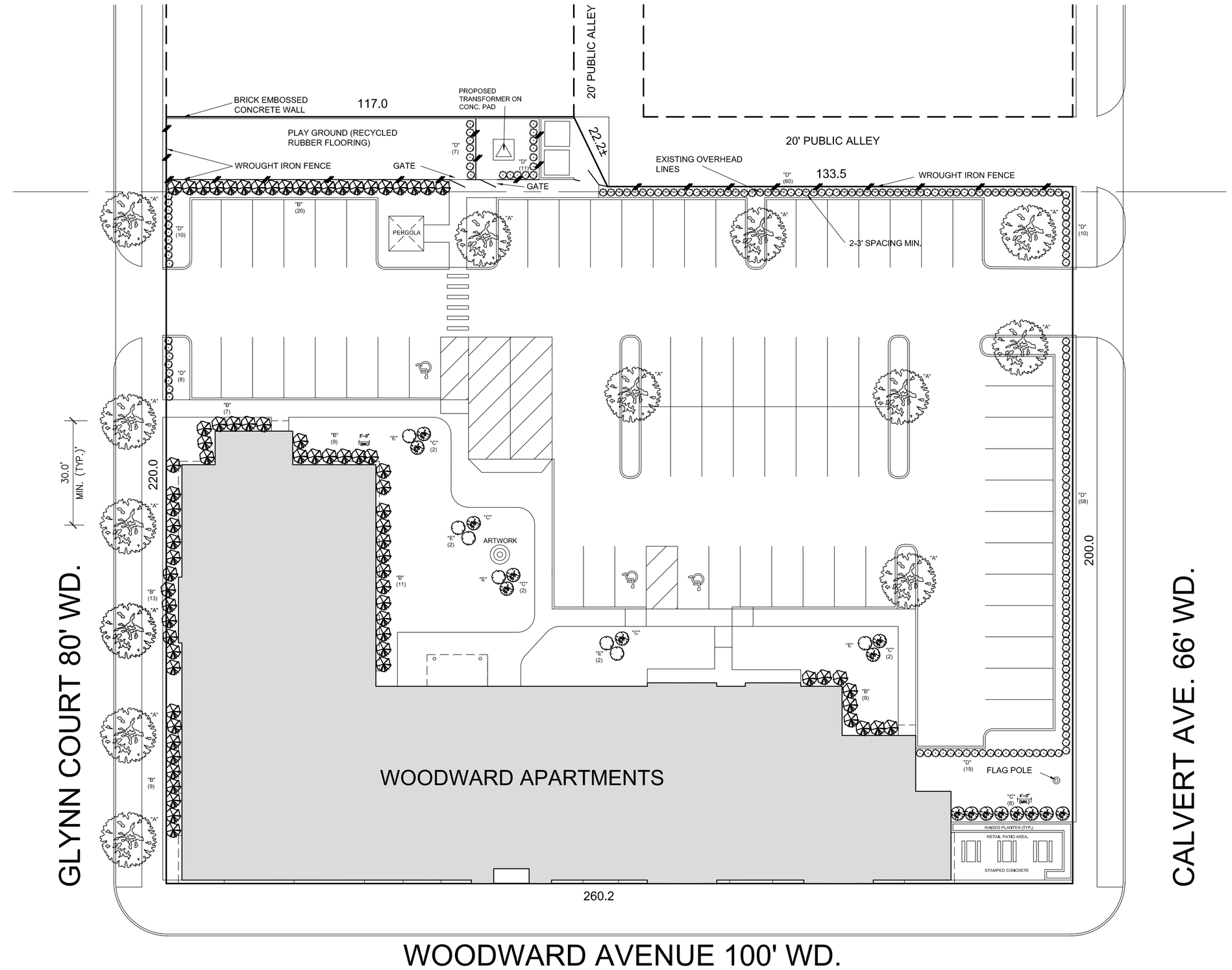
IRRIGATION

- REQUIRED LANDSCAPED AREAS SHALL BE IRRIGATED AS NECESSARY TO MAINTAIN REQUIRED PLANT MATERIALS IN GOOD AND HEALTH CONDITION.
- ALL LANDSCAPED AREAS SHALL BE PROVIDED WITH A READILY AVAILABLE WATER SUPPLY. WATER OUTLETS (HOSE BIBBS) SHALL BE PROVIDED WITHIN ONE HUNDRED (100) FEET OF ALL REQUIRED PLANT MATERIALS UNLESS SUBSURFACE IRRGATION SSYTEM IS USED AND
- IRRIGATION SYSTEMS SHALL BE CONTINUOUSLY MAINTAINED IN WORKING ORDER AND SHALL BE DESIGNED TO PREVENT OVERLAP OF WATER ZONES AND TO PREVENT WATERING OF IMPERVIOUS AREAS.

SITE LIGHTING

- NOTE THAT SITE LIGHTING HAS NOT BEEN PROPERLY DESIGNED AT THIS TIME. A PHOTOMETRIC PLAN WILL BE COMPLETED FOR THE SITE PLAN REVIEW. AFTER THE CITY'S APPROVAL, A LICENSE CIVIL ENGINEER WILL PROPERLY DESIGN THE LIGHT FIXTURE LOCATIONS.

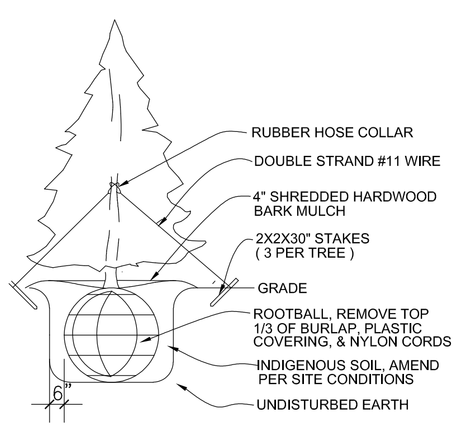
LANDSCAPING CALCULATIONS
INTERIOR LANDSCAPE REQUIRED: 63 OFF STREET PARKING SPACE = 18 SF OF LANDSCAPED AREA 63x18 = 1,134 SF PROVIDED: 1,621 SF REQUIRED: 1 SHADE TREE FOR EVERY 250 SF 1,621/250 = 7 SHADE TREES PROVIDED: 7 SHADE TREES
LANDSCAPE AREA 9,646 SF OF LANDSCAPE AREA 54,471 PROPERTY SIZE 9,646/54,471 = 18% LANDSCAPE AREA



CONCEPT LANDSCAPE PLAN

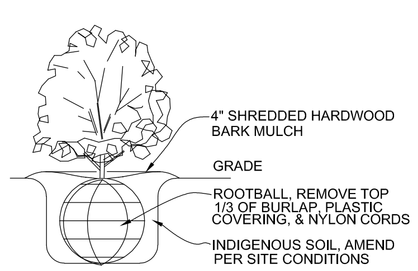
SCALE: 1"=20'-0"

LANDSCAPING SCHEDULE				
SYM.	QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE
"A"	13	SHADEMASTER HONEYLOCUST (NO THORNS)	GLEDITSIA TRICANTHOS INERMIS :SHADEMASTER"	2.5" CAL.
"B"	78	YEW	TAXUS	18" HEIGHT MIN.
"C"	16	AZALEA	RHODODENDRON	3'
"D"	183	AMERICAN ARBORVITAE	TSUGA CANADENSIS	4'-5'
"E"	7	WAYFARING TREE	VIBURNUM LANTANA	5'-7'



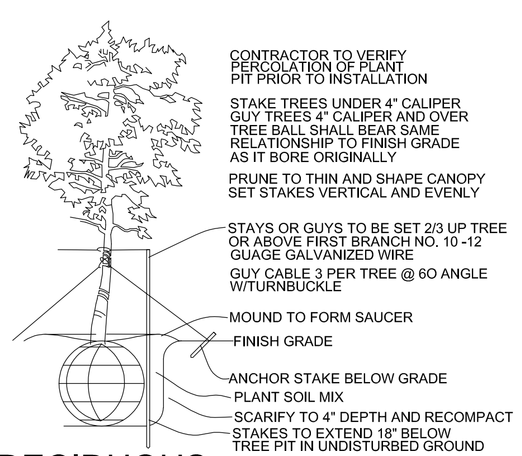
EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

REVISION	DATE	BY	DESCRIPTION
#1	07-30-20	M.L.	SITE PLAN REVIEW ONLY

CLIENT: MHT HOUSING, INC.

WOODWARD APARTMENTS
10201 WOODWARD AVE., DETROIT, MICHIGAN
SITE AREA: 54,471± SF OR 1.25± ACRES

CONCEPT LANDSCAPE PLAN

PROFESSIONAL ARCHITECTS
PROFESSIONAL ENGINEERS
PROFESSIONAL SURVEYORS
22556 GRATIOT AVENUE
EASTPOINTE, MI 48021
(586)772-2222 PHONE
(586)772-4048 FAX

KEM-TEC & ASSOCIATES

APPLICANT:
MHT HOUSING, INC.
32600 TELGRAPH RD. #102
BINGHAM FARMS, MI 48025
PHONE: 586 833-0550

DRAWN BY: M.L.
SCALE: 1" = 20'-0"
DATE: 07/28/20
PROJECT NO: 19-02854

SHEET NO: LP.1

PROJECT BIBLIOGRAPHY REPORT

PROJECT DETAILS

Project ID	ER-8533
Project Name	North Industrial Rehabilitation District, Detroit

PROJECT BIBLIOGRAPHY RECORDS

	Bibkey
Citation: Branstner, Mark C. 1985. A Phase I Detailed Land Use History and Limited Field Inspection of the North Industrial Rehabilitation District, Detroit, Michigan. Great Lakes Research Associates, Inc. **Notes**: A "detailed land use history and limited field inspection" was conducted for a small development parcel of approximately 54 acres in the north-central section of Detroit. This area, bounded by Oakland Avenue on the west, by the Grand Trunk Railroad ROW on the east, by Caniff Street on the south and by thet Detroit city limits on the north is legally defined as part of Section 23 of the Ten Thousand Acre Tract. Research established that the property, although containing limited residential development of the post-Civil War period, was not heavily developed until the early twentieth century. Based on the limited nature of the pre-1900 development and the extent of subsequent developmental impact, it was recommended that no further mitigative actions be taken per archaeological resources in the North Industrial Rehabilitation District project area.	07524

PROJECT BIBLIOGRAPHY REPORT

PROJECT DETAILS

Project ID	ER-87066
Project Name	New Center/Burroughs Project Area, Detroit

PROJECT BIBLIOGRAPHY RECORDS

	Bibkey
Citation: Branstner, Mark C. 1987. A Phase I Detailed Land Use History and Limited Field Inspection of the New Center/Burroughs Project Area, Detroit, Michigan. Great Lakes Research Associates, Inc. **Notes**: The project area is irregularly shaped, bounded on the north by Euclid, on the east by Woodward, on the west by the John Lodge and on the south by the Edsel Ford. Although part of the project area lies within fractional Section 31, T1S, R12E, the majority of the project lies within P. C. 55 (Cass Farm), Park Lots 47-49 and Ten Thousand Acre Tract Sections 56 and 45. Utilization of the project area does not appear to have been significant until the 1850s and 1860s. During those years development was strictly limited to the fronts of the park lots, those areas between Woodward and modern Cass Avenue. By the late 1880s, commercial and residential development was just beginning to occur in those project areas south of Grand Boulevard. While this area saw significant pre-1900 growth, the majority of the project area was not significantly developed until after 1900. Although subsequent redevelopment within the project area has removed many areas of archaeological potential, limited areas relating to the pre-1900 residential and commercial development of the project area retain potential archaeological significance. It was recommended that a Phase II data recovery program be developed to address those remnant archaeological values. Approximately 250 acres were examined.	07546

PROJECT BIBLIOGRAPHY REPORT

PROJECT DETAILS

Project ID	ER08-462
Project Name	Woodward / M1 Light Rail Transit / Streetcar

PROJECT BIBLIOGRAPHY RECORDS

	Bibkey
Citation: Crew, Rebecca, Denise McGeen, Aimee D'Agostini. 2010. Application for Section 106 Review. Woodward Avenue Light Rail Transit Project Phased Section 106 Submittal Downtown Detroit to Interstate I-75/Fisher Freeway. City of Detroit Department of Transportation **Notes**: ER08-462-I Section 106 application is bound together with the survey submission. The current submittal contains documentation on 29 resources within this portion of the APE. Of these, 16 were previously listed on the NRHP. Of the thirteen resources that were previously not identified and/or evaluated for NRHP eligibility, three were determined to be eligible for listing. September 2010	12227
Citation: Crew, Rebecca, Denise McGeen, Aimee D'Agostini. 2010. Application for Section 106 Review. Woodward Avenue Light Rail Transit Project Phased Section 106 Submittal Interstate I-75/Fisher Freeway to Grand Boulevard. City of Detroit Department of Transportation **Notes**: ER08-462-II Section 106 application is bound together with the survey submission. The current submittal contains documentation on 60 resources within this portion of the APE. Of these, 26 were previously listed on the NRHP. Of the 34 resources that were previously not identified and/or evaluated for NRHP eligibility, 5 were determined to be eligible for listing. September 2010	12228
Citation: Klinge, David F. 2010. Phase I Archaeological Literature Review, Land-Use History, and Disturbance Assessment, Woodward Avenue Light Rail Transit Project, City of Detroit, Wayne County, Michigan. ASC Group, Inc. **Notes**: A literature review and background study was done for a portion of Woodward Avenue in downtown Detroit, stretching from Grand Circus Park to Woodlawn Cemetery. It was found that several areas fall within existing right of way, and would not impact archaeological sites. Areas outside the ROW include the construction of three vehicle storage maintenance facilities and some areas of the LPA which could impact sites such as the National Register eligible site 20WN785. ASC Group recommends Ph I subsurface	11314

investigations for the MLK Boulevard VSMF site. The research looked at many historical maps and archival information.	
Citation: Michigan Department of Transportation (MDOT). 2012. Application for Section 106 Review: Woodward Avenue Streetcar Project. Detroit, Michigan. Michigan Department of Transportation **Notes**: ER08-462-III Section 106 form and attachments. Attachment E contains Survey Data Forms with information on specific sites identified through survey efforts. January 2013	13366
Citation: Roseboom, Tim. 2010. Application for Section 106 Review Woodward Avenue Light Rail Transit Project, Phased 106 Submittal Assessment of Effects, I-75/Fisher Freeway to Grand Boulevard, Detroit, Michigan. 3. United States Department of Transportation, Federal Highway Administration **Notes**: Additional Information regarding the assessment of effects for the Woodward Avenue Light Rail project. Includes Attachment A: Additional Information for Application for Section 106 Review.	15939
Citation: Roseboom, Tim. 2010. Application for Section 106 Review, Woodward Avenue Light Rail Transit Project, Phased 106 Submittal, Assessment of Effects, M-8/Davison Freeway to M-102/8 Mile Road, Detroit, Michigan. 4. United States Department of Transportation, Federal Highway Administration **Notes**: Additional Information regarding the assessment of effects for the Woodward Avenue Light Rail project. Includes Attachment A: Additional Information for Application for Section 106 Review; B: Project Location Maps. C: Determination of Effects Downtown Design Options 1, 2, 3	15940
Citation: Roseboom, Tim. 2010. Application for SEction 106 Review, Woodward Avenue Light Rail Transit Project, Phased 106 Submittal M-8/Davison Freeway to M-102/8-Mile Road, Part 1 of 2. 1. United States Department of Transportation, Federal Highway Administration **Notes**: Section 106 Submittal that also includes Survey Data for the Light Rail Project between M-8 and M-102.	15941
Citation: Roseboom, Tim. 2010. Application for Section 106 Review, Woodward Avenue Light Rail Transit Project, M-8/Davison Freeway to M-102/8-Mile Road, Detroit, Wayne County Part 2 of 2. 2. United States Department of Transportation, Federal Highway Administration **Notes**: Part 2 of 2 Additional Survey forms for M-8/Davison Freeway to M-102/8-Mile Road	15942

PROJECT BIBLIOGRAPHY REPORT

PROJECT DETAILS

Project ID	ER-4104
Project Name	City of Detroit CDBG Program

PROJECT BIBLIOGRAPHY RECORDS

	Bibkey
Citation: Branstner, Mark C. 1985. A Phase I Detailed Land Use History and Limited Field Inspection of the Wholesale Distribution Center Rehabilitation District, Detroit, Michigan. Great Lakes Research Associates, Inc. **Notes**: This study was conducted for a major redevelopment area on the near east side of the City of Detroit, Wayne County, Michigan and consisted of approximately 190 acres. It is bounded on the east by St. Aubin, on the west by I-75, on the south by Gratiot and on the north by Mack, Hale, Eliot, and Watson. archival analysis established that commercial and residential devvelopment of the Gratiot Avenue margin of the project area had begun prior to 1853. Residential and commercial development of the project area continued throughout the 1860s and 1870s. By the early 1880s such developments had totally saturated the project area. Although the subsequent twentieth century razing and redevelopment of this area has destroyed many archaeological deposits within the project area, the potential persistence of relatively undisturbed subsurface archaeological values led to the recommendation of a Phase II data recovery program for the project area. The former presence of the Russell Street Cemetery (20WN331) might prove to be especially troublesome.	01557
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Leland-Orleans Rehabilitation District, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: Land use history for the parcel between Leland, Mack (Rowena), Dequindre and Chrysler Expressway. The area was not developed for residential use until the 1870s. Clay soils and distance from water give this area low potential for prehistoric settlement. Potential for significant historic sites is also low.	01797
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Virginia Park Rehabilitation District, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: Land use history for the area between Clairmont, West Grand, Lodge Freeway and 14th St. The parcel was agricultural until developed for residential use in from 1890-1930. Archaeological potential for both prehistoric and historic cultural resources is low.	01010
Citation:	02819

Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Art Center Rehabilitation District, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: This land use history covers the area bounded on the north and east by a bend in the Ford Freeway, on the west by Woodward, John R and Brush, and on the south by Palmer, an alley south of Ferry, Frederick and Kirby. That portion of the area between Palmer and Hendrie streets may have potential for paleo-Indian and Archaic occupation because of a sand ridge formation. Two 1850s houses once stood near the corner of Hendrie and Woodward. Archaeological monitoring of any construction is recommended for these areas.	
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Wholesale Distribution Center Number Two, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: This land use history covers an irregularly shaped area southeast of the intersection of Mack and the Chrysler Freeway. All structures had been razed and cleared prior to the study. The area would have presented few desirable resources to prehistoric peoples, and historic development did not get underway until the 1870s. the area is considered to have low archaeological potential.	00410
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Woodbridge Project Area, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: This land use history covers the area bounded by Trumbull, Grand River, Ford Expressway and railroad tracks. Three areas associated with mid-nineteenth century farms are considered to have high archaeological potential. A few yards are also flagged as having moderate sensitivity.	03195
Citation: Branstner, Mark C. and David Barton. 1982. A Literature Cultural Resource Survey and Field Inspection of the Cass Corridor Project Area, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: Land use history for the parcel near the center of the city, bounded by Woodward, Lodge Freeway, and Warren Ave. Prehistoric sites are unlikely because of the lack of aquatic resources and clay soils. Archaeological sensitivity for historic sites is high between Woodward and Cass, and moderate in most of the remaining lots. The high potential area may contain 1830s to 1860s era sites.	01915
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Hubbard-Richard Project Area Detroit, Michigan. RAI-1450. Resource Analysts, Inc. **Notes**: The project area consists of approximately 345 acres in the City of Detroit bounded more or less by Fort Street on the south, the Penn Central Railroad on the north, West Grand Boulevard on the west and 16th Street on the east. The findings of the study were that	02018

there is a zone of sand which must be accorded a high sensitivity rating due to strong correlation of prehistoric occupations with sand, the site represented by number 20WN61 may extend into the project area and there is potential for considerable archaeological information relating to the first major Euro-American development of the area between the 1850s and the 1870s.	
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Riverside Community Project Area, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: This is a land use history for a project area in east Detroit bounded by the Detroit River, Jefferson Ave., Terminal St. and Marquette St. Only one small area is considered to be archaeologically sensitive: a parcel near the corner of Jefferson and Marquette. Remains of the mid-nineteenth century St. Armour farmstead may be preserved here.	00897
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Jefferson Chalmers and Gray Haven Project Areas, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: Land use history for the area bounded by the Detroit River, Jefferson Ave., Detroit city limits at Alter Rd., and Clairpointe. Although most of the area is of low archaeological sensitivity, a few loci of high potential exist. These are elevated sand and gravel formations along the Grand Marais, Fox Creek and Presque Isle/Windmill Pointe. The latter area also has potential for 17th through 19th century remains.	00896
Citation: Branstner, Mark C. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Mid-City Project Area, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: Land use history for the area southeast of the intersection of Woodward Avenue and E. Warren Avenue. The area is bounded on the east by Brush Street and John R. Street, and on the south by Canfield and an alley south of Willis. Although there is low potential for prehistoric sites, there were 1850s houses and a possible pre-1846 cemetery within the parcel. The cemetery appears to have been totally destroyed by commercial development. Three parking lots may cap 1850s residential deposits; construction in the lots should be monitored.	00093
Citation: Branstner, Mark C., John Gram and David Barton. 1982. A Detailed Land Use History of Five Areas in the Detroit Downtown District, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: The five parcels are: A) northwest of Grand Circus, bounded by Fisher Freeway, Adams St., Woodward Ave. and Brush St.; B) north of Rennaissance Center, bounded by Gratiot Ave., Jefferson Ave., Randolph St., Beaubien St. and the block bounded by Beaubien, St. Antoine, Lafayette and Fort St.; C) on the riverfront, bounded by St. Antoine St., Bates St., Renaissance Center Dr., Atwater St., and Detroit River; D) north of Cobo Hall, bounded by Lodge Freeway, Washington Blvd/Wayne St., Larned St. and Fort St.; and E) bounded by Abbott St., Lodge freeway, First, Second and Third streets. A detailed land use history,	02818

assessment of potential significance, likelihood of survival of intact deposits, and management recommendations are made for each area.	
Citation: City of Detroit Planning Department. 1992. Master Plan of Policies, City of Detroit. December 1992. City of Detroit Planning Department **Notes**: December 1992 version of the City of Detroit Master Plan. Historic Preservation section is on page II-11. Located in the SHPO library.	15463
Citation: Demeter, C. Stephan. 1981. An Archaeological Evaluation of the Elmwood Park No. 3 Project Site. R-2380. Commonwealth Associates, Inc. **Notes**: This report is a land use history for a project situated on Detroit's near east side and encompassing an area somewhat "T" shaped in configuration with its northern end being bounded on the north by Vernor, on the south by Waterloo, by Mt. Elliott on the east and Dequidre and the Grand Trunk rail line on the west covering approximately 175 acres. It was the finding of the report that there was no significant development of the area before the Civil War and while significant archaeolgoical remains might still be in existence, land clearance and disturbance in the area has been extensive. No sites were recorded (see Pilling 1994).	07979
Citation: Demeter, C. Stephan. 1981. An Archeological Evaluation of the Corktown Study Area. R-2408. Commonwealth Associates, Inc. **Notes**: The project area consisted of approximately 215 acres in the City of Detroit bounded by US-10 on the east, I-75 on the north, Porter, Trumbull, Labrosse, and Bagley on the south and 16th and 18th streets on the west. Approximately one half of the project area was judged to still have enough integrity to offer the likelihood of significant intact historical archaeological remains. There is little or no potential for prehistoric remains. CAI Collections are at Wayne State University. No sites were recorded (see Pilling 1994).	07977
Citation: Demeter, C. Stephan. 1981. An Archaeological Evaluation of the Kercheval-McClellan Area. R-2375. Commonwealth Associates, Inc. **Notes**: The project area consists of 14 acres in the City of Detroit bounded by Kercheval on the north, St. Paul on the south, pennsylvania on the east and the north-south running alleyway on the west side of McClellan on the west. Research consisted of a literature survey and an on-site inspection. The findings of the study were that there is very limited potential for prehistoric archaeological remains and that the relatively late historic development (largely after 1895) did not suggest a great deal of importance. No sites were recorded (see Pilling 1994). The collections are at Wayne State University.	07981
Citation: Demeter, C. Stephan and Burton Barnard. 1980. Archaeological Investigations at the Sheridan Place Development Site. R-2229. Commonwealth Associates, Inc. **Notes**: The project area consisted of approximately 3.7 acres in a two block area bounded by Congress on the north, Jefferson on the south, Baldwin on the east and Sheridan on the	00954

west. Archaeological monitoring of construction at the site resulted in the discovery of three features- a backyard trash pit, an extensive building foundation and a privy. An extensive range of artifacts were recovered, nearly all attributable to 1860-1900 time period. This locality has been assigned site number 20WN326.	
Citation: Flum, Steven. 1993. 2556 John R Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-VIII Includes information on the house, map, photos, floorplan, and rehab specs. 11/1993 ER-04104-III through ER-04104-XII are all bound together.	13533
Citation: Flum, Steven. 1993. 79 Alfred Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-VI Includes information on the house, map, photos, floorplan, and rehab specs. 10/1993	13531
Citation: Flum, Steven. 1993. 2827 John R Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-IX Includes information on the house, map, photos, floorplan, and rehab specs. 11/1993 ER-04104-III through ER-04104-XII are all bound together.	13534
Citation: Flum, Steven. 1993. 97 Winder Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-X Includes information on the house, map, photos, floorplan, and rehab specs. 11/1993 ER-04104-III through ER-04104-XII are all bound together.	13535
Citation: Flum, Steven. 1993. 234 Winder Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-XII Includes information on the house, map, photos, floorplan, and rehab specs. 10/1993 ER-04104-III through ER-04104-XII are all bound together.	13537

Citation: Flum, Steven. 1993. 224 Adelaide Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-IV Includes information on the house, map, photos, floorplan, and rehab specs. 12/1993 ER-04104-III through ER-04104-XII are all bound together.	13529
Citation: Flum, Steven. 1993. 216 Winder Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-XI Includes information on the house, map, photos, floorplan, and rehab specs. 11/1993 ER-04104-III through ER-04104-XII are all bound together.	13536
Citation: Flum, Steven. 1993. 236 Adelaide Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-III Includes information on the house, map, photos, floorplan, and rehab specs. 11/1993 ER-04104-III through ER-04104-XII are all bound together.	13528
Citation: Flum, Steven. 1993. 59 Alfred Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-V Includes information on the house, map, photos, floorplan, and rehab specs. 11/1993	13530
Citation: Flum, Steven. 1993. 82 Alfred Survey Report: Brush Park Urban Recapture Project, Detroit, Michigan. Jenkins/Walbridge **Notes**: ER-04104-VII Includes information on the house, map, photos, floorplan, and rehab specs. 11/1993	13532
Citation: Gram, John and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Brush Park Project Area, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**:	08359

The project area is roughly bounded by the Fisher Freeway on the south, Woodward on the west, Mack on the north, and Beaubien on the east, an area of approximately 100 acres. The findings of this study were that there is little potential for prehistoric materials in the area, but a fairly high potential for remains associated with the various phases of residential development in the area.	
Citation: Gram, John and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the Chrysler-Corey Industrial Project, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: This area on the east side of Detroit is bounded by East Jefferson, Corey Place, Kercheval and Conner Lane. There is a good possibility of both prehistoric and historic archaeological deposits surviving, so construction should be monitored.	00092
Citation: Gram, John and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the University City Rehabilitation Project Number Two, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: The area is south of Wayne State University bounded by Warren, Cass, Trumbull, Forest and Canfield. Disturbance by urban development and the interior location indicate a low archaeological sensitivity for both prehistoric and historic resources.	02394
Citation: Gram, John and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection of the McDougall-Hunt Project Area, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: This triangular parcel is on the near east side of Detroit. It is bounded by Gratiot, Mt. Elliott and East Vernon. The area developed in the 1850-1885 era, with post-1885 development east of Elmwood. The neighborhood was German, with small frame dwellings and a commercial district along Gratiot. The commercial area is considered of low archaeological potential. The residential areas merit sampling or monitoring to recover information about the German settlement of the area. Sand ridges in the western half of the area have potential for prehistoric resources.	00409
Citation: Gram, John M. and David Barton. 1981. A Literature Cultural Resource Survey and Field Inspection [of] the Forest Park Rehabilitation Project Number Two, Detroit, Michigan. RAI-1456. Resource Analysts, Inc. **Notes**: This near east side area of Detroit is bounded by Warren Ave., Grand Trunk Western Railroad, Leland, Chrysler Expressway and Russell. It developed as a Polish community in the 1870s. The area was cleared of most structures by 1981. Both prehistoric and historic archaeological potential is considered to be low, with the exception of post-1879 Polish working class occupation.	02052

PROJECT BIBLIOGRAPHY REPORT

PROJECT DETAILS

Project ID	ER-8372
Project Name	Proposed Grand Boulevard Revitalization Project, Detroit, Wayne Co

PROJECT BIBLIOGRAPHY RECORDS

	Bibkey
Citation: Causier, Charles W. 1986. Land Use History for Lots 14, 15, and 16 of Block 2 of the Moran and Moross Subdivision, New Center Area, Detroit, Michigan. Howard, Needles, Tammen, and Bergendoff, Milwaukee **Notes**: The subject of this report is teh history of three lots located at the SW corner of West Grand Boulevard and 2nd Avenue in Section 31, T1S, R12E, Wayne County. The project area is approdimately 2 acres. The area is assessed as having had little likelihood for prehistoric occupation due to distance from water and soil types/ There was no historic development of the site until 1905.Three apartment houses/hotels were built and demolished on the lots. A commercial building built around 1960 takes up 1.5 lots and is basemented. The remaining 1.5 lots have been excavated and regarded in constructing an urban park/plaza. No potential for site presence or survival appears to exist in this project area.	07703
Citation: Causier, Charles W. 1985. Land Use History of the Lothrop Avenue Parking Structure Site, Detroit, Michigan. Howard, Needles, Tammen, and Bergendoff, Milwaukee **Notes**: The subject of this report is a parcel of land located in the center of a block bounded by Woodward on the east, Second on the west, Bethune on the north, and Lothrop on the south. The parcel covers approximately 2 acres in what would be Section 31, T1S, R12E, Wayne County. It appears to have had low potential for prehistoric occupation, was not settled by Europeans until the late 1800's and has been disturbed several times since then. The conclusions were that there were no significant archaeological remains in the project area.	07701
Citation: Hyde, Dr. Charles K. 1986. Historic American Building Survey Basso Building, HABS No. MI-274 7338 Woodward Avenue, Detroit, Michigan. Historic American Buildings Survey/Historic American Engineering Record, Washington, D. C. **Notes**: Documentation prepared ahead of the demolition of the building in accordance with the MOA between the General Motors Corporation, SHPO and the Advisory Council on Historic Preservation.	14793

PROJECT BIBLIOGRAPHY REPORT

PROJECT DETAILS

Project ID	ER-8378
Project Name	Viginia Park Court Project Area, Detroit

PROJECT BIBLIOGRAPHY RECORDS

	Bibkey
Citation: Branstner, Mark C. 1985. A Phase I Detailed Land Use History and Limited Field Inspection of the Virginia Park Court Project Area, Detroit, Michigan. Great Lakes Research Associates, Inc. **Notes**: A Phase I detailed land use history and limited field inspection was conducted for an approximately 20 acre development parcel in central Detroit. This area is bounded on the north by Euclid St., on the south by the alleyway between Seward and Delaware sts., on the east by Woodward Ave., and on the west by Second Ave. No further mitigative concern was recommended due to the level of 20th century impacts on historic archaeological deposits. Prehistoric archaeological sensitivities are generally low in this area.	07526

Michigan SHPO Architectural Properties Identification Form

Property Overview and Location

Street Address	120 Glynn Court				
City/Township, State, Zip Code	Detroit, MI 48202				
County	Wayne				
Assessor's Parcel #					
Latitude/Longitude (to the 6th decimal point)	Lat:		Long:		
Ownership	Private ☒	Public-Local ☐	Public-State ☐	Public-Federal ☐	Multiple ☐

Property Type

Building ☒ select sub-type below Commercial ☐ Residential ☒ Industrial ☐ Other ☐	Structure ☐ Object ☐

(Insert primary photograph below.)

Architectural Information

Construction Date	c. 1920	
Architectural Style	Romanesque	
Building Form	High Rise	
Roof Form	Gable, Hip, Flat	
Roof Materials	Tile	
Exterior Wall Materials	Brick, Stone	
Foundation Materials		
Window Materials	Aluminum	
Window Type	Double-Hung	
Outbuildings	Yes ☐	No ☒
Number/Type:		

Eligibility

Individually Eligible	Criterion A ☐	Criterion B ☐	Criterion C ☒	Criterion D ☐
Criteria Considerations:		a. ☐ b. ☐ c. ☐ d. ☐ e. ☐ f. ☐ g. ☐		
Component of a Historic District	Contributing to a district ☐	Non-contributing to a district ☐	Historic District Name	
Not Eligible ☐				

Area(s) of Significance	Architecture					
Period(s) of Significance	c. 1920					
Integrity – Does the property possess integrity in all or some of the 7 aspects?						
Location ☒	Design ☒	Materials ☒	Workmanship ☒	Setting ☒	Feeling ☒	Association ☒
General Integrity:	Intact ☒	Altered ☐	Moved ☐	Date(s):		
Historic Name	Glynnwood Apartments					
Current/Common Name	Glynnwood Apartments					
Historic/Original Owner						
Historic Building Use	Apartments					
Current Building Use	Apartments					
Architect/Engineer/Designer						
Builder/Contractor						

Survey Date	March 2021	Recorded By	K. Kidorf	Agency Report #	

For SHPO Use Only	SHPO Concurrence?: Y / N	Date:

Form date: 2/28/2020

Narrative Architectural Description

Provide a detailed description of the property, including all character-defining features and any accessory resources. This is required for all properties.

Seven-and-a-half story tall rectangular form apartment building on a raised basement. The walls are clad in multi-tone dark red brick. The entrance has a limestone or terra cotta surround at the first and second floors. The front door surround has twisted columns supporting a simple entablature with decorative brackets and a dentil molding. The leaded glass windows above the door are demarcated by twisted columns supporting a blind arcade with floral decorations in the arches. The center arch has two birds flanking a shield. The entire surround is capped by a pediment with dentil molding.

The upper floors have pairs and single double-hung windows, the front windows have a six-over-one muntin pattern. The roof of the building has two gable fronts.

History of the Resource

Provide information on previous owners, land use(s), and construction and alteration dates in a narrative format. This is required for all intensive level surveys, NRPQs, and nominations, and recommended for other identification efforts.

The building is identified in the *Apartment Buildings of Detroit* context as an example of the rectangular style of apartment buildings used in high rise buildings constructed in the 1910s and 1920s.

Statement of Significance/Recommendation of Eligibility

Provide a detailed explanation of the property's eligibility for the National Register. Include an evaluation under at least one of the four National Register Criteria and one Area of Significance. Include a discussion of the seven aspects of integrity, and make a recommendation about eligibility. This is required for all properties.

The Glynnwood Apartments at 120 Glynn Court have been identified by the SHPO as being eligible for listing in the National Register as an example of Romanesque architecture. The building is identified in the *Apartment Buildings of Detroit* context as an example of the rectangular style of apartment buildings used in high rise buildings constructed in the 1910s and 1920s.

References

List references used to research and evaluate the individual property. For NRPQ's include copies of key documents.

Michigan SHPO Architectural Properties District Report

District Name	Burlingame-Collingwood-Lawrence Historic District
Site ID	P37572
Other Name(s)	
Street Boundaries	Burlingame St, Collingwood St, Lawrence St between the Lodge Freeway & Woodward Ave. survey is incomplete so specific boundaries are undetermined.
City/Township, State, Zip Code	Detroit / , MI
County	Wayne
Resource Type	District

Architectural Information

Historic Uses	
Current Uses	
Architectural Styles	
Architects	
Significant Persons	
Significant Dates	

District Resources

	Contributing	**Non-Contributing**
Totals	0	0

Eligibility

Current National Register Status	Eligible for Listing in the National Register of Historic Places
National Register Listed Date	1/1/0001
National Register Criteria	A: No B: No C: No D: No
Criteria Considerations:	a. No b. No c. No d. No e. No f. No g. No
Area(s) of Significance	
Period(s) of Significance	

Narrative Architectural Description

Statement of Significance

References

, ,

Michigan SHPO Architectural Properties Individual Property Report

Property Name	Glynnwood Apartments
Site ID	P48961
Other Name(s)	
Resource Type	Building
Street Address	120 Glynn Ct
City/Township, State, Zip Code	Detroit, MI
County	Wayne
Lat: 42.38807	**Long:** -83.08782

Architectural Information

Significant Dates	
Architectural Style	Romanesque
Foundation Materials	
Exterior Wall Materials	
Roof Materials	
Architect	
Historic Use	DOMESTIC/multiple dwelling
Current Use	DOMESTIC/multiple dwelling

Eligibility

Current National Register Status	Eligible for Listing in the National Register of Historic Places
National Register Listed Date	1/1/0001
National Register Criteria	A. No B. No C. No D. No
Criteria Considerations:	a. No b. No c. No d. No e. No f. No g. No
Area(s) of Significance	Architecture
Period(s) of Significance	

Narrative Architectural Description

8-story red and brown brick and whitish terra-cotta-trimmed apartment building with exterior finished in Italian Romanesque-inspired styling.

Statement of Significance

Notable example of 1920s apartment house design.

References

, ,,

Michigan SHPO Architectural Properties
Individual Property Report

Property Name	Peninsular State Bank
Site ID	P55480
Other Name(s)	
Resource Type	Building
Street Address	11341 Woodward Ave
City/Township, State, Zip Code	Detroit, MI
County	Wayne
Lat: 42.39079	**Long:** -83.08741

Architectural Information

Significant Dates	1916
Architectural Style	
Foundation Materials	
Exterior Wall Materials	Stone:Limestone
Roof Materials	
Architect	Donaldson and Meier
Historic Use	COMMERCE/TRADE/financial institution
Current Use	UNKNOWN

Eligibility

Current National Register Status	Eligible for Listing in the National Register of Historic Places
National Register Listed Date	1/1/0001
National Register Criteria	A. No B. No C. Yes D. No
Criteria Considerations:	a. No b. No c. No d. No e. No f. No g. No
Area(s) of Significance	
Period(s) of Significance	

Narrative Architectural Description

Corner Lot-Line Bank in the Classical Revival style. This two-story bank is located on the southwest corner of Woodward Avenue and Lawrence Street. The rectangular building has decorated facades on the north (Lawrence) and east (Woodward) elevations. The roof is flat. The decorated facades of the north and east elevation are clad in limestone. The west elevation is faced with buff brick while the south elevation is common red brick which has been partially painted. The east façade contains the main entry. The original double doors and transom have been infilled with only a single door remaining. The door surround consists of decoratively carved pilasters supporting a cornice with egg and dart molding. To either side of the door surround are sidelights partially covered with wood and partially boarded up. The second floor of the entry bay has tripartite windows separated by wood mullions. The window units are metal casement windows with glass transoms. The metal spandrel panel has geometric designs. Flanking the entry bay are two-story stone pilasters with stone bases and Doric capitals. The lower half of the elevation has been painted. The eastern bay of the north elevation projects slightly and is flanked by two-story Doric pilasters. It has a double window on the lower floor and a tripartite window on the upper floor. The next section has five windows each on the first and second floor; the lower windows are double windows while the second floor are single. To the west of this is another projecting section similar to the first bay, but with two separated windows on the first floor. At the west end of the elevation is a small rectangular window and an entry door with a stone surround and closed pediment carried on scrolled brackets on the first floor, and a single rectangular window on the second floor. The window units are generally eight light steel sash with transoms on the first floor, and double-hung six-over-one wood sash on the

second. The decorated facades are capped by a stone entablature with dentiled cornice and plain parapet; the frieze has carved wreaths above each pilaster and attic vents with metal starburst grills and the cornice has small stone gargoyles. The west elevation has two rectangular window openings and an entry door which have been boarded up.

Statement of Significance

This branch bank appears to be potentially eligible for the National Register of Historic Places under the Multiple Property Documentation Form for Branch Banks in Detroit, MI, 1889-1970. Aside from some window/door replacement and inappropriate painting, this building is one of the better-preserved of the Peninsular State Bank branches, and is in similar condition to its twin at Woodward and Hazelwood. A full evaluation of National Register eligibility will require descriptive information and photographs showing the interior.

References

Mills, Ruth E.; Stephanie Austin., Branch Banks of Detroit, Michigan 1889-1970 National Register of Historic Places Multiple Property Documentation,Michigan State Historic Preservation Office, 2017

Pettis, Emily; Timothy Smith, Greg Rainka, Shannon Dolan, Sebastian Renfield, Krysten Tesch, Dusty Nielsen, Kristine Kidorf., Reconnaissance-level Survey Report Residential Neighborhoods in Detroit,Mead & Hunt, Inc., 2013

STATE OF MICHIGAN
MICHIGAN STRATEGIC FUND
STATE HISTORIC PRESERVATION OFFICE

GRETCHEN WHITMER
GOVERNOR

QUENTIN L. MESSER, JR.
PRESIDENT

July 9, 2021

SHELLY CEASE
US DEPT OF HOUSING AND URBAN DEVELOPMENT
477 MICHIGAN AVENUE 16TH FLOOR
DETROIT MI 48226

RE: ER21-765 Woodward Apartments Construction, 10201 Woodward Avenue, T1S, R11E, City of Detroit, Wayne County (HUD)

Dear Ms. Cease:

Under the authority of Section 106 of the National Historic Preservation Act of 1966, as amended, we have reviewed the above-cited undertaking at the location noted above. Based on the information provided for our review, it is the opinion of the State Historic Preservation Officer (SHPO) that the effects of the proposed undertaking do not meet the criteria of adverse effect [36 CFR § 800.5(a)(1)]. Therefore, the project will have **no adverse effect** [36 CFR § 800.5(b)] on historic properties within the area of potential effects for the above-cited undertaking.

This letter evidences HUD's compliance with 36 CFR § 800.4 "Identification of historic properties" and 36 CFR § 800.5 "Assessment of adverse effects," and the fulfillment of HUD's responsibility to notify the SHPO, as a consulting party in the Section 106 process, under 36 CFR § 800.5(c) "Consulting party review." **If the scope of work changes in any way, or if artifacts or bones are discovered, please notify this office immediately.**

We remind you that federal agency officials or their delegated authorities are required to involve the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties per 36 CFR § 800.2(d). The National Historic Preservation Act also requires that federal agencies consult with any Indian tribe and/or Tribal Historic Preservation Officer (THPO) that attach religious and cultural significance to historic properties that may be affected by the agency's undertakings per 36 CFR § 800.2(c)(2)(ii).

Finally, the State Historic Preservation Office is not the office of record for this undertaking. You are therefore asked to maintain a copy of this letter with your environmental review record for this undertaking. Thank you for this opportunity to review and comment, and for your cooperation.

If you have any questions, please contact Brian Grennell, Cultural Resource Management Coordinator, at 517-335-2721 or by email at GrennellB@michigan.gov. **Please reference our project number in all communication with this office regarding this undertaking.**

Sincerely,

Martha MacFarlane-Faes
Deputy State Historic Preservation Officer

MMF:MJH:BGG

copy: Dan Lince, MSHDA
Timothy Van Fox, 10201 Woodward Limited Dividend Housing Association
Steve Guyot, ESGPW, LLC
Kristine Kidorf, Kidorf Preservation Consulting
Misty Jackson, Arbre Croche Cultural Resources, LLC

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	
Record Date	mm/dd/yyyy
User's Name	

Road # 1 Name:	**M-1 (Woodward)**

Road #1

Vehicle Type	**Cars** ☑	**Medium Trucks** ☐	**Heavy Trucks** ☐
Effective Distance	10		
Distance to Stop Sign			

Average Speed	30		
Average Daily Trips (ADT)	7966		
Night Fraction of ADT	15		
Road Gradient (%)			
Vehicle DNL	72	0	0
Calculate Road #1 DNL	72	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○Yes ○No
Combined DNL for all Road and Rail sources	**0**
Combined DNL including Airport	
Site DNL with Loud Impulse Sound	

Calculate | Reset

Mitigation Options

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

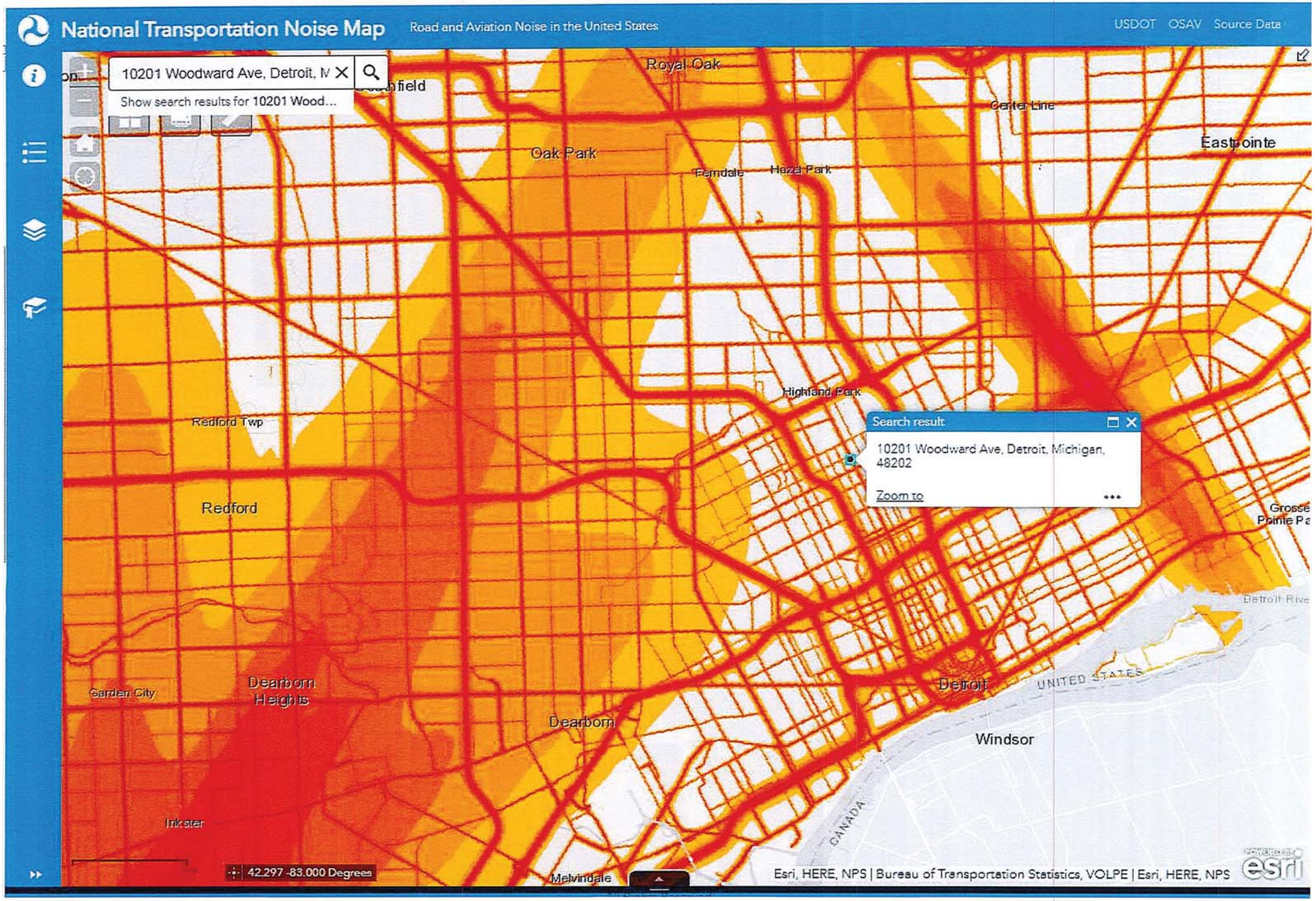
- **No Action Alternative**: Cancel the project at this location

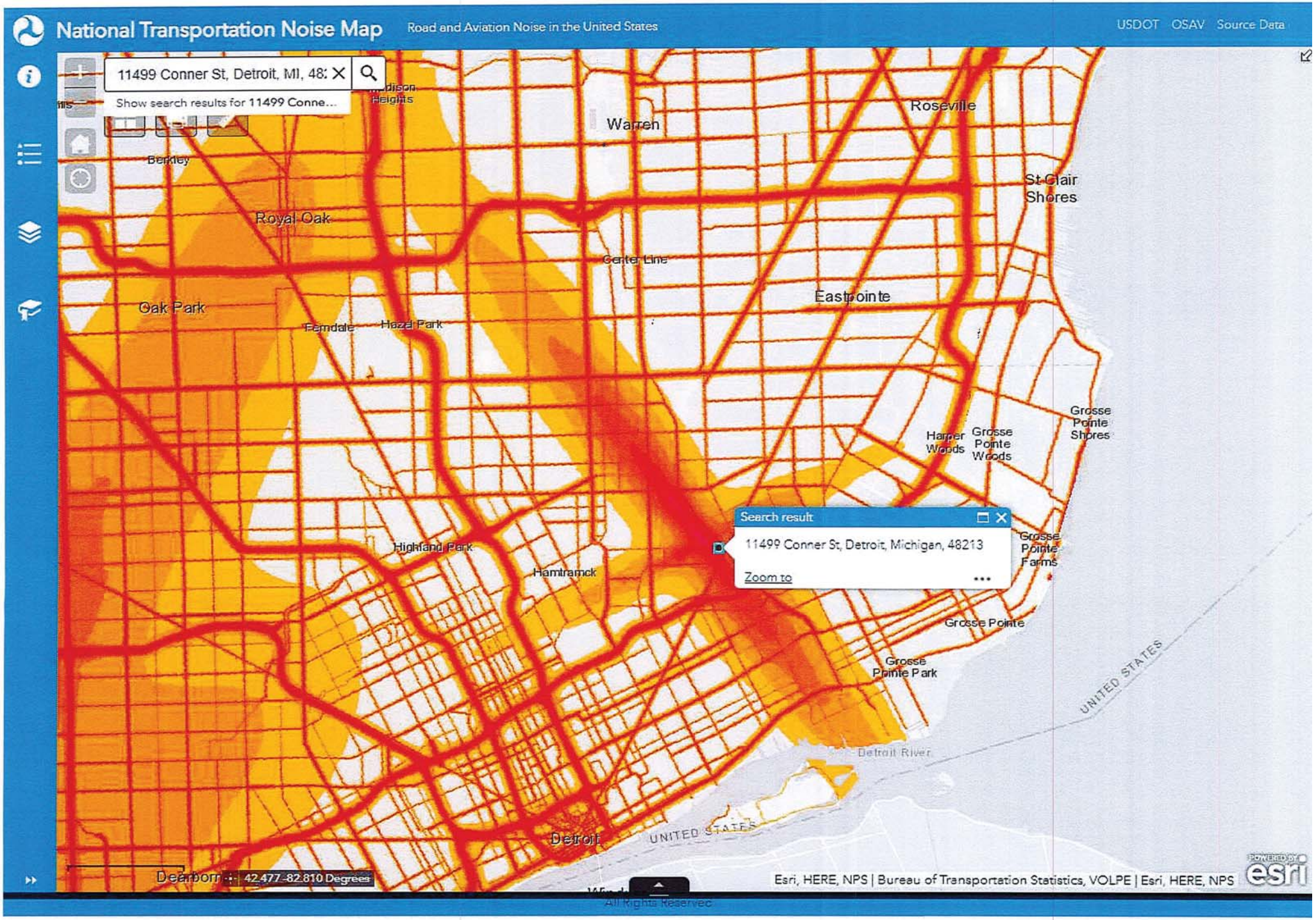
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - 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/)


National Transportation Noise Map
Road and Aviation Noise in the United States
USDOT
OSAV
Source Data
10201 Woodward Ave, Detroit, M
Show search results for 10201 Wood...
Royal Oak
Center Line
Eastpointe
Oak Park
Ferndale
Hazel Park
Highland Park
Redford Twp
Redford
Search result
10201 Woodward Ave, Detroit, Michigan, 48202
Zoom to
Grosse Pointe Pa
Detroit Rive
Garden City
Dearborn Heights
Dearborn
Detroit
UNITED STATES
Windsor
CANADA
Inkster
Melvindale
42.297 -83.000 Degrees
Esri, HERE, NPS | Bureau of Transportation Statistics, VOLPE | Esri, HERE, NPS
esri



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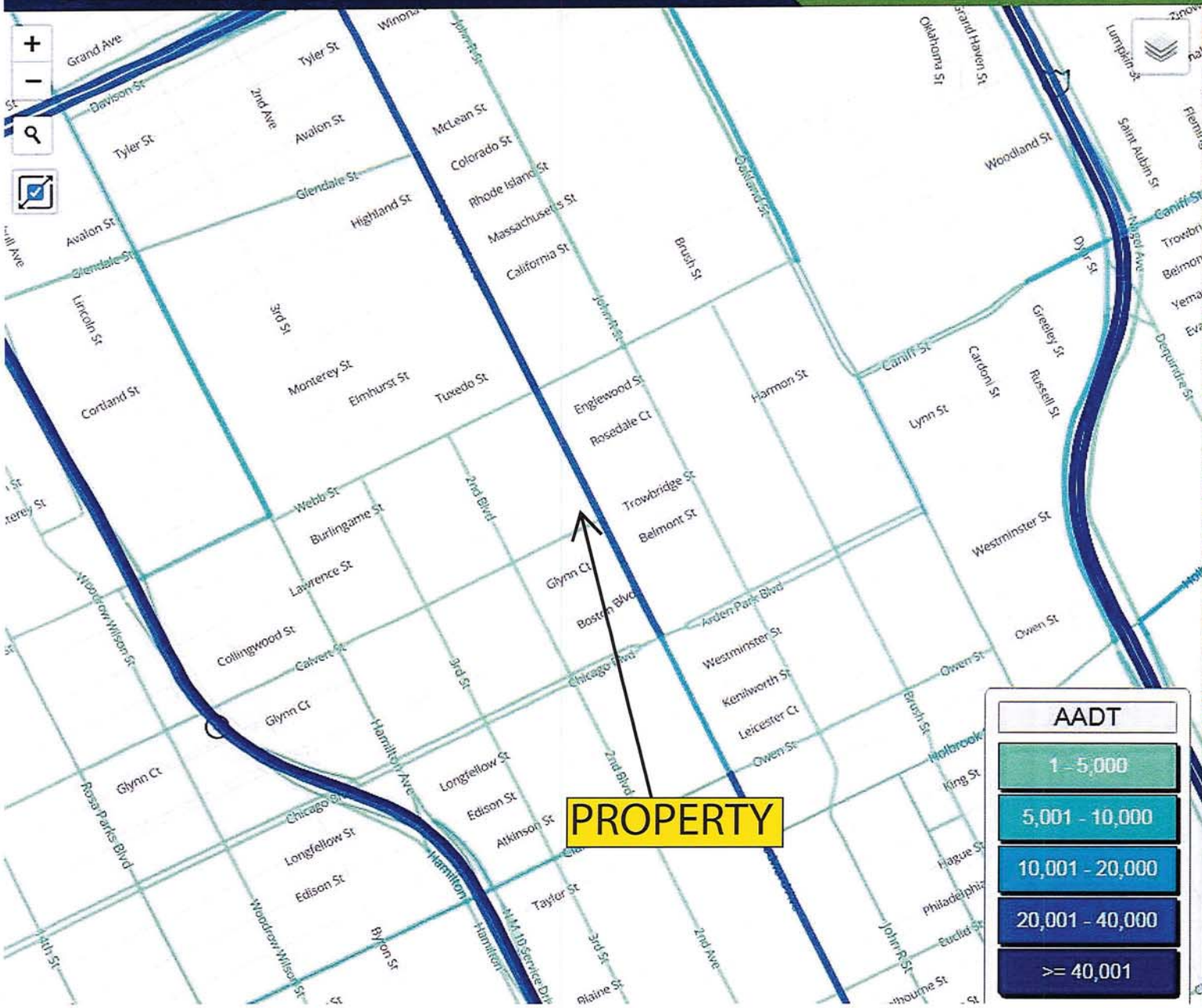
SEMCOG

Traffic Volume

MENU



Map Video Tutorial ▶

Daily VMT for segments in map view:
688,910

County/Community

7 counties selected

239 communities selected

Latest Count Year

Multiple years selected

Jurisdiction

City, County, State, Uncertified

National Functional Class

8 national functional classes selected

Number of Lanes

6 number of lanes selected

Type

Observed, Interpolated, Default

About

TRAFFIC COUNTS -

Southeast Michigan

Road Name

M-1 (Woodward)

Search Now

DOWNLOAD RESULTS (.CSV)

Road Name	Dir.	Limits	Community	Year	AADT
M-1 (Woodward)	NWB	0 2 Mile Northwest Of 8 Mile Road	Ferndale	2017	8,195
M-1 (Woodward)	SEB	0 2 Mile Northwest Of 8 Mile Road	Ferndale	2017	9,307
M-1 (Woodward)	NWB	0 2 Mile Southeast Of 11 Mile	Huntington Woods	2018	29,375
M-1 (Woodward)	SEB	0 2 Mile Southeast Of 11 Mile	Huntington Woods	2018	37,424
M-1 (Woodward)	NWB	100 Feet N W Of 15 Mile Road (Maple Ave.)	Birmingham	2018	26,821
M-1 (Woodward)	SEB	100 Feet N W Of 15 Mile Road (Maple Ave.)	Birmingham	2018	25,648
M-1 (Woodward)	NWB	100 Feet Northwest Of 6 Mile Road (Mc Nichols)	Detroit	2017	12,074
M-1 (Woodward)	SEB	100 Feet Northwest Of 6 Mile Road (Mc Nichols)	Detroit	2017	12,619
M-1 (Woodward)	NWB	100 Feet Northwest Of Chicago/Arden Park	Detroit	2019	8,251
M-1 (Woodward)	SEB	100 Feet Northwest Of Chicago/Arden Park	Detroit	2019	8,217
M-1 (Woodward)	NWB	100 Feet Northwest Of Clairmont Ave	Detroit	2017	8,154
M-1 (Woodward)	SEB	100 Feet Northwest Of Clairmont Ave	Detroit	2017	7,966
M-1 (Woodward)	NWB	100 Feet Northwest Of Davison	Highland Park	2017	11,805
M-1 (Woodward)	SEB	100 Feet Northwest Of Davison	Highland Park	2017	11,906
M-1 (Woodward)	NWB	100 Feet Northwest Of Hickory Grove Road	Bloomfield Twp	2018	11,366
M-1 (Woodward)	SEB	100 Feet Northwest Of Hickory Grove Road	Bloomfield Twp	2018	17,025
M-1 (Woodward)	NWB	100 Feet Southeast Of 12 Mile Road	Berkley	2018	30,096
M-1 (Woodward)	SEB	100 Feet Southeast Of 12 Mile Road	Berkley	2018	39,852
M-1 (Woodward)	NWB	100 Feet Southeast Of Davison Expressway	Highland Park	2017	9,194
M-1 (Woodward)	SEB	100 Feet Southeast Of Davison Expressway	Highland Park	2017	9,792
M-1 (Woodward)	NWB	100 Feet Southeast Of Lincoln(18 1/2 Mile Road)	Royal Oak	2018	25,454

Sound Transmission Classification Assessment Tool (STraCAT)

Overview

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

How to Use This Tool

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

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

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

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

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

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

Part I - Description

Part I - Description

Project

Woodward Apartments (AOD)

Sponsor/Developer

MHT Construction

Location

Detroit, MI

Prepared by

Kem-Tec & Associates

Noise Level

72

Date

3/18/2022

Primary Source(s)

Justin Wargo

Part II - Wall Components

Part II - Wall Components

Wall Construction Detail	Area	STC
4" face brick one course; 1/2" air space; 3/4" insulation board; 2"x4" wood studs 16"O.C.; 1/2" gypsum board on resilient channels; 3 1/2" fiber glass insulation	23504	**56**
	0	**0**
Add new wall		
	23,504 Sq. Feet	**56**

Window Construction Detail	Quantity	Sq Ft/Unit	STC
6'x5' wood-framed picture window single panel glazed double strength with storm sash 3 3/4" air space	73	**30**	**38**
Add new window			

Door Construction Detail	Quantity	Sq Ft/Unit	STC
6'x6' sliding glass door 3/4" insulating glass (double pane 1/8" each with 1/2" air space) one door opens and one fixed	3	**36**	**28**
3'x7' hollow-core wood door 1 3/4" thick 30% glazed with 1/8" glass	1	**21**	**19**
Add new door			

Part III - Results

Part III - Results

Wall Statistics

Stat	Value
Area:	23504 ft^2
Wall STC:	56

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	73	**ft^2**	**9.32%**
Doors:	4	**129 ft^2**	**0.55%**

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	**72**
Combined STC for wall assembly:	**44.49**
Required STC rating:	**30**
Does wall assembly meet requirements?	**Yes**

Print

Part 4 - Tips

Part 4 - Tips

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

For example:

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

ArcGIS Web AppBuilder

5/3/2022, 7:45:28 PM

1:2,311,162

0 12.5 25 50 mi

0 20 40 80 km

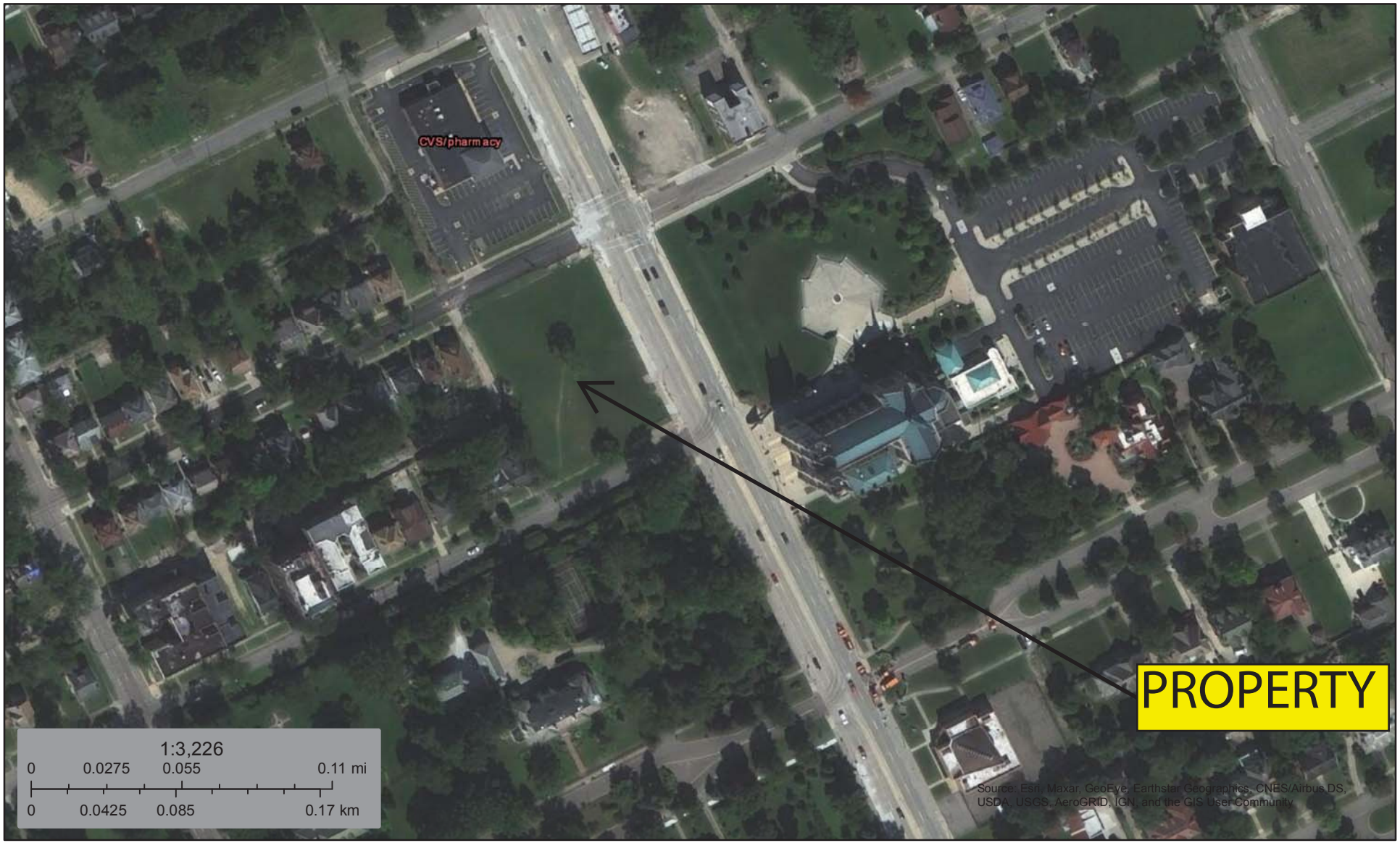
Sole_Source_Aquifers

Esri, HERE, Garmin, NGA, USGS, NPS

U.S. Fish and Wildlife Service

National Wetlands Inventory

10201 Woodward/30 Glynn Court



August 24, 2020

Wetlands

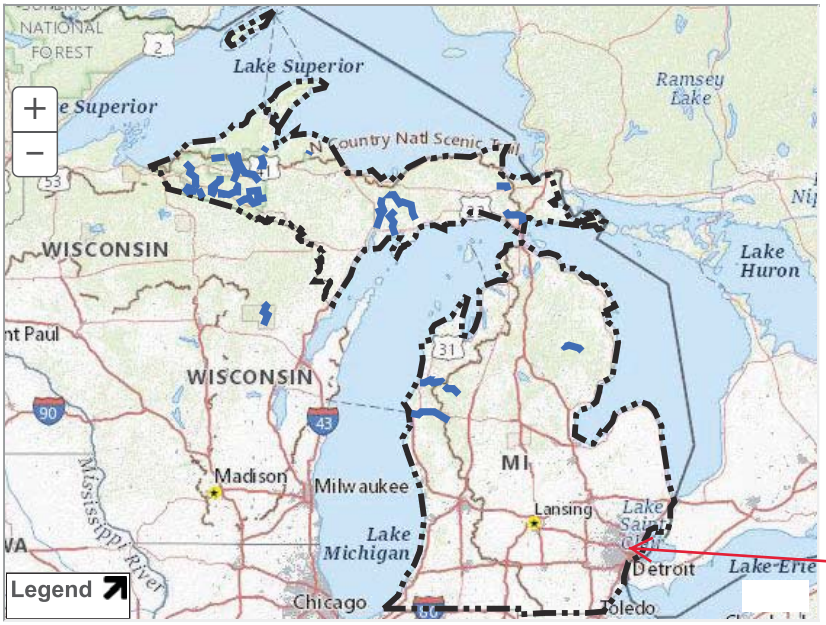
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

MICHIGAN

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



Subject Property

+ View larger map

Choose A State Go

Choose A River Go

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

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

EJScreen Report (Version 2.0)

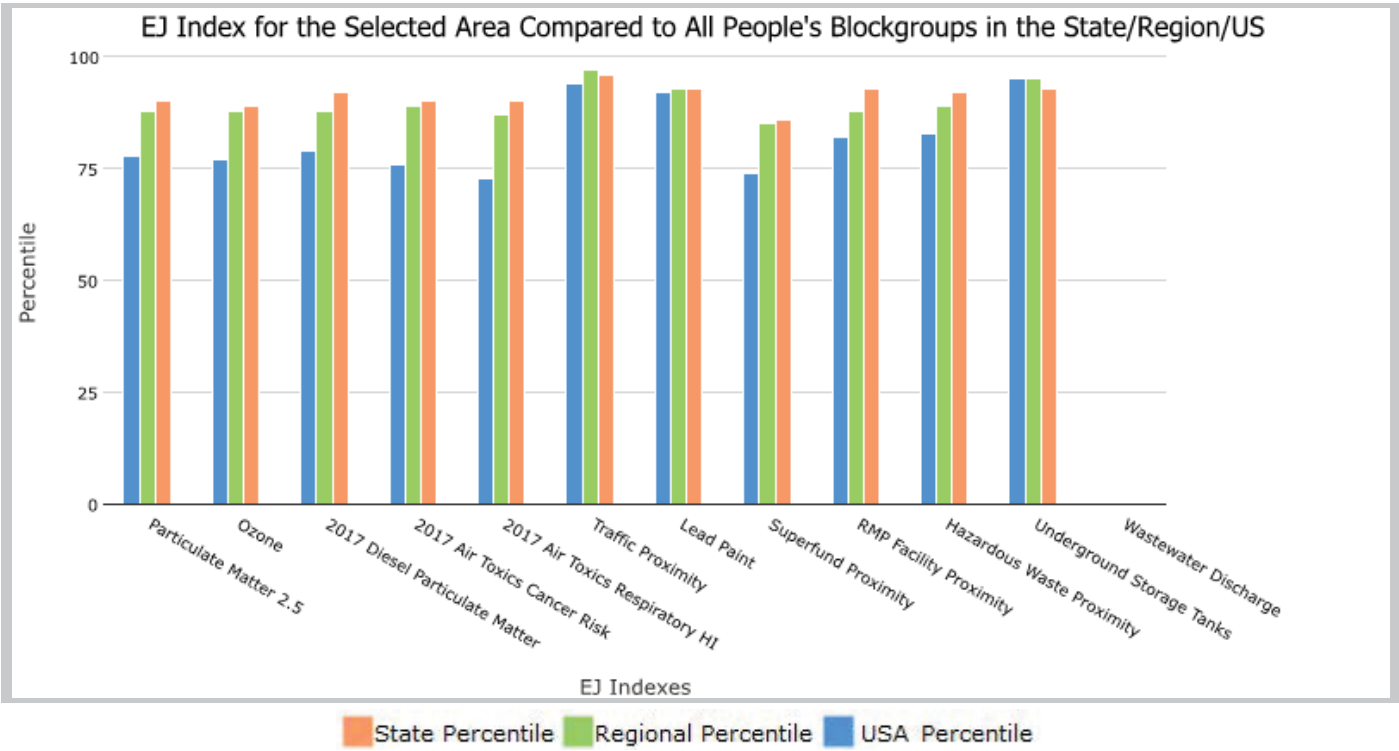
1 mile Ring Centered at 42.388913,-83.086074, MICHIGAN, EPA Region 5

Approximate Population: 12,161

Input Area (sq. miles): 3.14

Woodward Ave Apartments

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
Environmental Justice Indexes			
EJ Index for Particulate Matter 2.5	90	88	78
EJ Index for Ozone	89	88	77
EJ Index for 2017 Diesel Particulate Matter*	92	88	79
EJ Index for 2017 Air Toxics Cancer Risk*	90	89	76
EJ Index for 2017 Air Toxics Respiratory HI*	90	87	73
EJ Index for Traffic Proximity	96	97	94
EJ Index for Lead Paint	93	93	92
EJ Index for Superfund Proximity	86	85	74
EJ Index for RMP Facility Proximity	93	88	82
EJ Index for Hazardous Waste Proximity	92	89	83
EJ Index for Underground Storage Tanks	93	95	95
EJ Index for Wastewater Discharge	N/A	N/A	N/A



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.

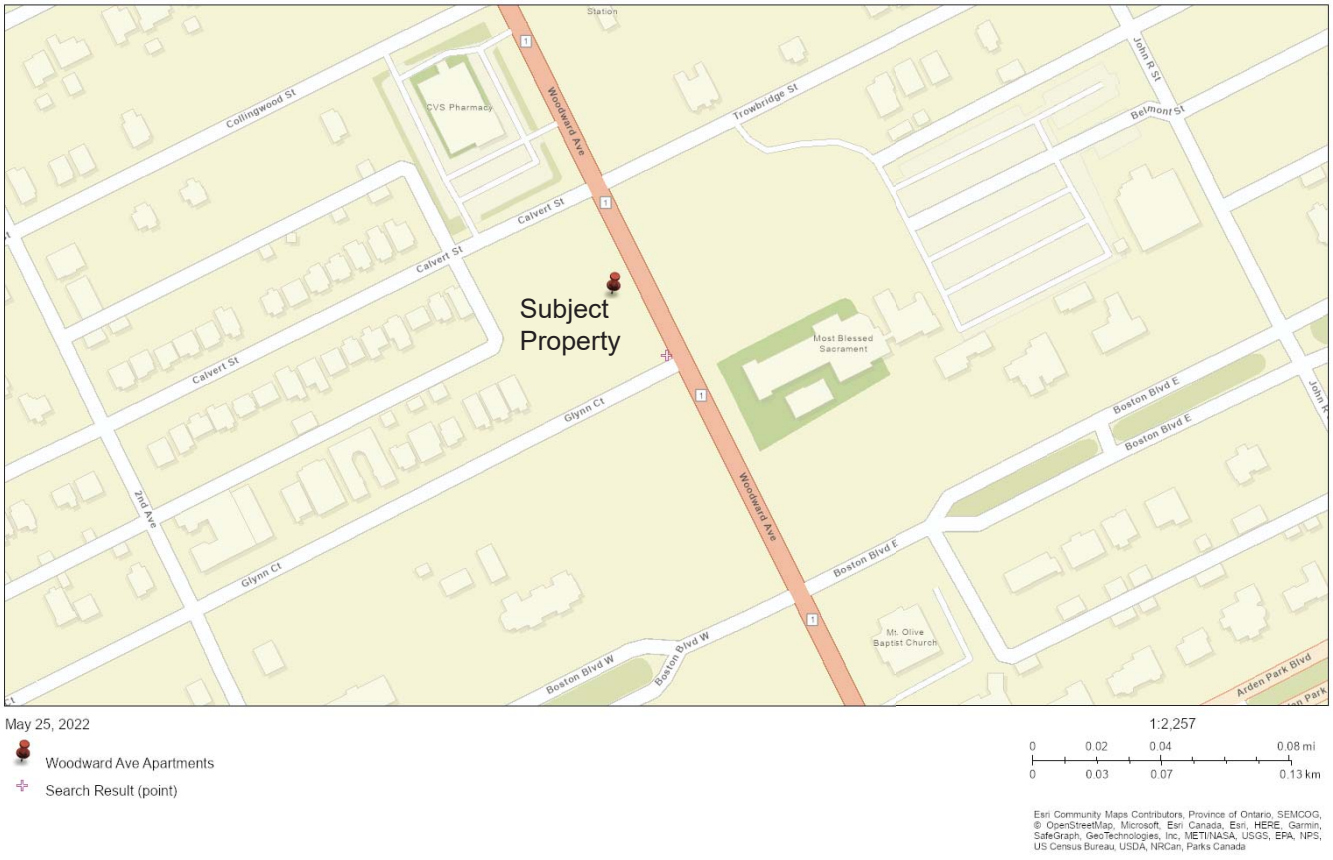
EJScreen Report (Version 2.0)

1 mile Ring Centered at 42.388913,-83.086074, MICHIGAN, EPA Region 5

Approximate Population: 12,161

Input Area (sq. miles): 3.14

Woodward Ave Apartments



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	1

EJScreen Report (Version 2.0)

1 mile Ring Centered at 42.388913,-83.086074, MICHIGAN, EPA Region 5

Approximate Population: 12,161

Input Area (sq. miles): 3.14

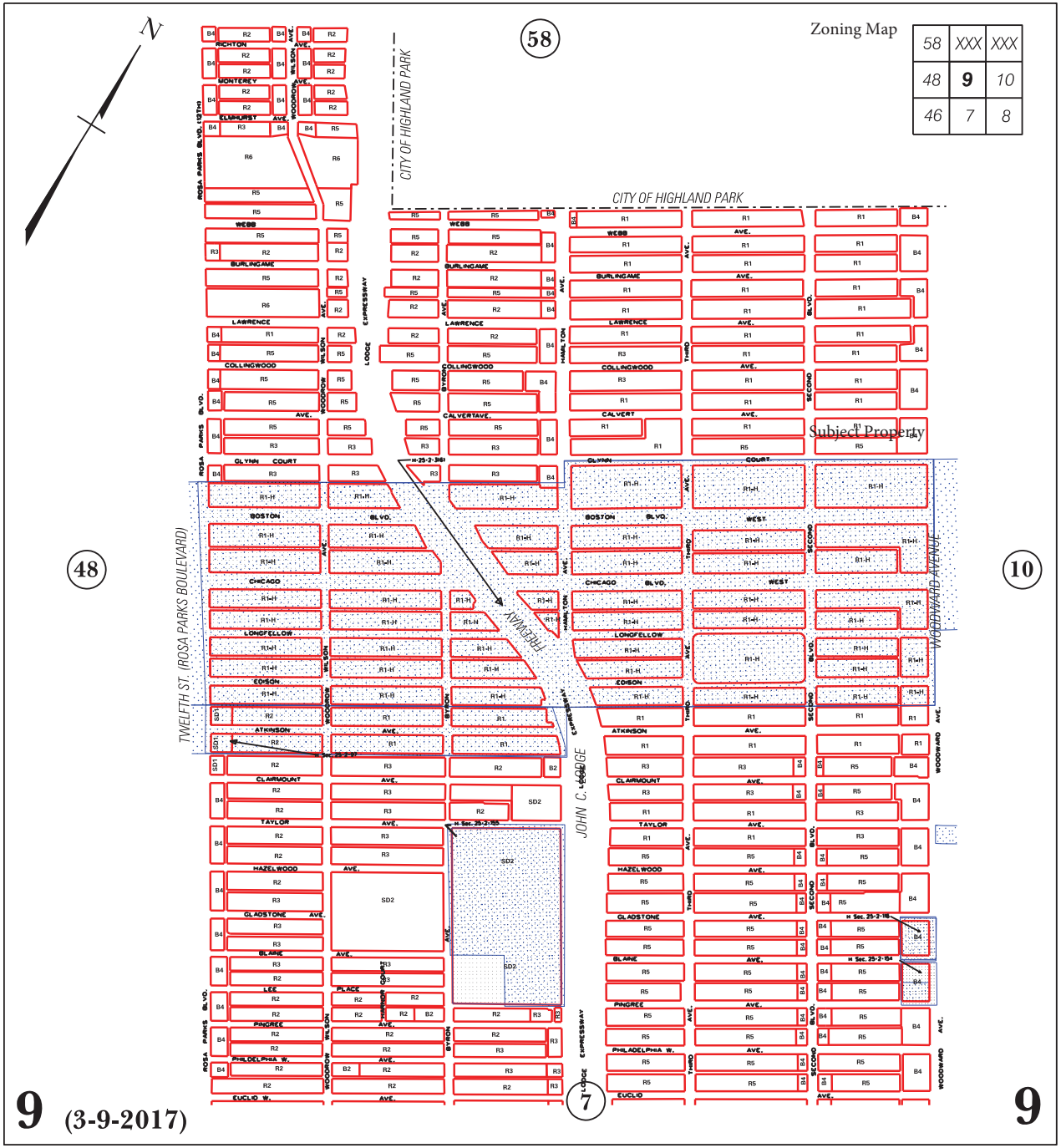
Woodward Ave Apartments

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 (µg/m^3)	10.1	8.75	98	8.96	86	8.74	85
Ozone (ppb)	44.9	43.8	62	43.5	65	42.6	74
2017 Diesel Particulate Matter* (µg/m^3)	0.376	0.209	92	0.279	70-80th	0.295	70-80th
2017 Air Toxics Cancer Risk* (lifetime risk per million)	30	23	99	24	95-100th	29	80-90th
2017 Air Toxics Respiratory HI*	0.3	0.25	99	0.3	70-80th	0.36	<50th
Traffic Proximity (daily traffic count/distance to road)	2900	830	94	610	96	710	94
Lead Paint (% Pre-1960 Housing)	0.85	0.37	91	0.37	92	0.28	95
Superfund Proximity (site count/km distance)	0.053	0.15	41	0.13	44	0.13	44
RMP Facility Proximity (facility count/km distance)	0.96	0.53	82	0.83	71	0.75	75
Hazardous Waste Proximity (facility count/km distance)	2.8	1.1	88	1.8	79	2.2	77
Underground Storage Tanks (count/km^2)	24	7.3	91	4.8	96	3.9	97
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.41	N/A	9	N/A	12	N/A
Socioeconomic Indicators							
Demographic Index	75%	28%	94	28%	95	36%	92
People of Color	89%	25%	93	26%	94	40%	88
Low Income	61%	32%	88	29%	90	31%	89
Unemployment Rate	20%	6%	95	5%	96	5%	97
Linguistically Isolated	2%	2%	73	2%	68	5%	53
Less Than High School Education	14%	9%	79	10%	78	12%	67
Under Age 5	5%	6%	52	6%	48	6%	47
Over Age 64	14%	17%	39	16%	44	16%	48

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

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.


Zoning Map
58 XXX XXX
48 9 10
46 7 8
58
48
10
7
CITY OF HIGHLAND PARK
CITY OF HIGHLAND PARK
Subject Property
TWELFTH ST. (ROSA PARKS BOULEVARD)
WOODWARD AVENUE
FREEWAY
JOHN C. LODGE
LODGE EXPRESSWAY
RICHTON
MONTEREY
ELMHURST
WEBB
BURLINGAME
LAWRENCE
COLLINGWOOD
CALVERT
GLYNN COURT
BOSTON BLVD.
CHICAGO
LONGFELLOW
EDISON
ATKINSON
CLARMOUNT
TAYLOR
HAZELWOOD
GLADSTONE
BLAINE
PLACE
PINGREE
PHILADELPHIA W.
EUCLID W.
EUCLID
WEST
SD1
SD2
R1-H
R1
R2
R3
R5
R6
B4
B2
H-25-2-165
H Sec. 25-2-118
H Sec. 25-2-154

9 (3-9-2017)

9

Attachment 17

Woodward Avenue Apartments Executive Summary

MHT Housing, Inc. ("MHT") and Mooney Real Estate Holdings, a subsidiary of the Archdiocese of Detroit ("AOD") are partnering to sponsor and develop a four-story affordable multifamily apartment community located at 10201 Woodward Avenue, Detroit, Michigan. With a working name of the "Woodward Avenue Apartments," the property will feature 53 two-bedroom apartment units together with roughly 6,000 square feet of Woodward facing commercial space and managed by MHT's affiliate managing agent MHT Management, LLC. MHT and AOD (the "Development Team") earned a Conditional Award for 16 units (30.1% coverage) of Project Based Vouchers from the Detroit Housing Commission to add much needed affordability to Detroit's North End neighborhood. As part of the submission, the Development Team plans to split the development in half and submit 26 units as a 9% LIHTC development with MSHDA taxable bond financing and the remaining 27 units as a 4% LIHTC development with MSHDA tax-exempt bond financing. Additionally, the commercial component will operate under a separately owned, third condominium of the overall development with the entity controlled by MHT and AOD. Under this structure, the Development Team is competing for "4%/9% Developments" points under Section D(1) of MSHDA's 2019-2020 LIHTC Scoring Criteria. With MHT's 30 years of affordable development experience, MHT Management's 15+ years of affordable management experience, and AOD's 200+ years as a community member in the neighborhood, the team feels that this dynamic housing platform will succeed in one of Detroit's most historic neighborhoods. The Development Team has received initial approval of Michigan State Housing Development Authority ("MSHDA") tax-exempt bond financing, MSHDA Housing Trust Fund financing, and an allocation of 4% Low-Income Housing Tax Credits; and is submitting in MSHDA's **February 2021 9% LIHTC funding round.**

Project Location

The Property will be located at 10201 Woodward Avenue, Detroit, Michigan 48202. This location is less than 1/3rd of a mile to a score of "85 – very walkable" on Walkscore.com's scale and achieves a high site selection self-score on MSHDA's scoring criteria for LIHTC investment. Exemplifying the high Walkscore, the project sits within 1-mile of a full-service grocery store, pharmacy, general practice Dr. Office/Clinic, park, a public school, and more than $50 million of private and public investment within a 1-mile radius of the property. Further, the property boasts access to six transit routes within 500 feet of the proposed front door. The Detroit Department of Transportation's ("DDOT") #004 Bus Route ("Woodward") and #038 Plymouth services the Woodward Ave. and Calvert Ave. stop, taking residents to a variety of neighborhoods and downtown Detroit landmarks. Additionally, the SMART bus routes #450, #460, #461, and #462 also services a variety of neighborhoods and allows access as far as the City of Pontiac.

Additionally, the development is located in a Federally designated Qualified Census Tract ("QCT"). A QCT is defined as a census tract that has 50 percent of households with incomes below 60 percent of the Area Median Gross Income or has a poverty rate of 25 percent or more. This QCT designation makes the development eligible to receive a LIHTC "Basis Boost" and generate more equity to pay for development costs.

Affordability & Unit Mix

The Project will consist of 53 two-bedroom, one-bathroom units that are projected to be 785 square feet. A summary of the planned unit mixes, AMIs, and underwritten rental rates is illustrated in the table below. The Development Team has been competitively awarded Project Based Vouchers from the Detroit Housing Commission to provide 16 units with Project Based assistance, and the Detroit Housing Commission has agreed to split the 16-unit award so that 8 units of rental assistance will be available for the 4% phase and 8 units of rental assistance will be available for the 9% phase. A copy of this Section 8 PBV award is viewable in Exhibit 31. Please note that the Development Team is valuing the Section 8 rents using 110% of the 2020 HUD approved FMRs for 2-Bedroom units in Wayne County. Further, it is underwritten that the Landlord will pay for all resident utilities.

4% LIHTC Condo							
Entity: 10201 Woodward 4% Limited Dividend Housing Association, LLC							
% AMI	Type	No. Units	Bedrooms	Baths	Contract Rent	Utility Allowance	Total Housing Expense
80%	LIHTC	12	2	1.0	$875	$0	$875
60%	LIHTC	5	2	1.0	$875	$0	$875
30%	DHC PBV	8	2	1.0	$1,153	$0	$1,153
30%	LIHTC	2	2	1.0	$530	$0	$530
Avg AMI:	57.78%	27					
9% LIHTC Condo							
Entity: 10201 Woodward Limited Dividend Housing Association, LLC							
% AMI	Type	No. Units	Bedrooms	Baths	Contract Rent	Utility Allowance	Total Housing Expense
80%	LIHTC	7	2	1.0	$875	$0	$875
60%	LIHTC	5	2	1.0	$875	$0	$875
50%	DHC PBV	8	2	1.0	$1,153	$0	$1,153
40%	LIHTC	6	2	1.0	$707	$0	$707
Avg AMI:	57.69%	26					

4%/9% Specifics

The overall development is planned to be split into two residential phases and a commercial component, for a total of three phases, all of which will be closed simultaneously, and allowing for the development to receive the "4%/9% Developments" points within the 9% LIHTC funding round and also allow for an efficient use of MSHDA's resources in general. Phase One will include 27 units and be financed with 4% LIHTC equity, MSHDA HTF financing, a MSHDA tax-exempt bond permanent mortgage, and a General Partner note. Phase Two will include 26 units and be financed with 9% LIHTC equity and a MSHDA taxable bond permanent mortgage. The commercial space will be separated into third component, with the costs of "white-boxing" the space prorated over the other two residential phases. A summary of the sources and uses of the development broken out by phase are as follows:

Sources				
	4%	9%	Commercial	Total
MSHDA Tax Exempt	$ 1,720,035			$ 1,720,035
MSHDA Taxable		$ 1,252,831		$ 1,252,831
LIHTC Equity	$ 3,032,076	$ 8,021,095		$ 11,053,171
MSHDA HTF	$ 2,440,103			$ 2,440,103
Detroit HOME	$ -			$ -
Deferred Fees	$ 160,000	$ 40,778		$ 200,778
GP Note	$ 38,684			$ 38,684
	$ 7,390,898	$ 9,314,704		$ 16,705,602
Uses				
Acquisition	$ 219,849	$ 280,150	$ 1	$ 500,000
Construction	$ 4,935,080	$ 6,296,675		$ 11,231,755
Soft Costs	$ 854,410	$ 1,042,330		$ 1,896,739
Contingency	$ 246,754	$ 314,834		$ 561,588
Reserves	$ 198,028	$ 196,863		$ 394,891
Developer Fee	$ 936,777	$ 1,183,852		$ 2,120,629
	$ 7,390,898	$ 9,314,704		$ 16,705,602
NET	$ -	$ -	$ -	$ -

Further details of each phase of the development and the respective cost breakdowns can be found in the enclosed proformas illustrating the 4%/9% financing structure. Please note that the development team consulted with Tax Counsel at Applegate & Thorne-Thomsen for a review and recommendation of the cost breakdown structure of the three condominiums in the development. A copy of the letter is available for MSHDA's review.

Construction Features & Projected Amenities

Construction of the project is projected to last 14 months to build the new approximately 62,495 square foot structure and to complete all three phases. The development team, contractor, and architect plan to certify to complete the development in accordance with Enterprise Green Environmental Criteria, accessible community space over 1,000 square feet, 10% barrier free and 100% Visitable units. In addition, the Development Team has worked closely with the Project Architect, Kem-Tec to design the structure in accordance with local neighborhood design elements and zoning codes. Please note that as part of the "split" submission the Development Team has submitted a trade payment breakdown specifying the hard costs for the completion of this 4% LIHTC phase. The construction costs for each phase of the project, as well as all other soft costs, have been determined based on the square footage size of each phase and confirmed by the project architect, Kem-Tec.

The Project will feature first class amenities for its residents. Each unit will feature energy efficient appliances including washers and dryers, frost free refrigerators, ovens, ranges with hoods, disposals, microwaves, and central air conditioning. Other community features will include a sizable community room and business center, as well as outdoor features for recreational activities.

Development Team

MHT has over 30 years of affordable housing development experience in the State of Michigan and is a 501(c)(3) nonprofit organization. MHT serves as the general partner or managing member of over 6,500 elderly and family units and has been successful in obtaining multiple funding sources for preservation, adaptive reuse, and new construction projects, that include HOME and NSP funding, Brownfield and Historic tax credits, HUD221(d)4 and Fannie Mae loans. In addition, MHT's principal T. Van Fox is on the Board of Directors of both MHT and Shelter America Group ("SAG") whose portfolio of properties are located in the states of Washington, Oregon and Arizona.

The property will be managed by MHT's owner captive management agent, MHT Management, LLC. MHT is a nonprofit housing corporation whose mission is to provide & develop affordable housing. MHT also has been recognized for providing services within the Detroit community including a nationally recognized Summer Workforce program for City of Detroit teens, after school tutoring and after school meals, backpacks for kids, eviction diversion program, a gun buy back, Detroit vacant land clean up, Detroit Police Department Support and coordination with Meals on Wheels and PACE SE Michigan.

The Archdiocese of Detroit was founded in 1833 and serves the Michigan counties of Lapeer, Macomb, Monroe, Oakland, St. Clair, and Wayne. In addition, it is the metropolitan archdiocese for the Roman Catholic Ecclesiastical Province of Detroit which includes all dioceses in the State of Michigan. The Cathedral of the Most Blessed Sacrament serves as the seat of the Archbishop of the Archdiocese and is located at 9844 Woodward Avenue in Detroit's historic Boston-Edison neighborhood. The Archdiocese has been an active community engager in the neighborhood for over 100 years and continues to invest and promote cultural activities in the neighborhood for the local residents and statewide population.

The proposed Project structures are as follows:

- 9% LIHTC Condo:
  - Ownership Entity: 10201 Woodward Limited Dividend Housing Association, LLC
  - Managing Member: 10201 Woodward MM, LLC
    - 50% Member: TBD Subsidiary of Mooney Real Estate Holdings
    - 50% Managing Member: MHT Housing, Inc.
  - Investment Member: CREA Entity, TBD
- 4% LIHTC Condo:
  - Ownership Entity: 10201 Woodward 4% Limited Dividend Housing Association, LLC
  - Managing Member: 10201 Woodward MM, LLC

        - 50% Member: TBD Subsidiary of Mooney Real Estate Holdings
        - 50% Managing Member: MHT Housing, Inc.
    - Investment Member: CREA Entity, TBD
- Commercial Condo:
    - Ownership Entity: 10201 Woodward MM, LLC
        - 50% Member: TBD Subsidiary of Mooney Real Estate Holdings
        - 50% Managing Member: MHT Housing, Inc.

Jobs Created

Based on previous projects of similar size and scope completed by MHT, it is estimated that 75 temporary construction related jobs will be generated and two full time positions will be created at time of occupancy. Full time positions include a property manager/leasing official and maintenance supervisor.

Development Team

Co-Managing Member & Sponsor:
Michael McInerney – TBD Subsidiary of Mooney Real Estate Holdings
Ph: 248-709-3535 Email: mcinerney.michael@aod.org

Co-Managing Member & Sponsor:
Van Fox – MHT Housing, Inc.
Ph: 248-833-0550 Email: vanfox@mhthousing.net

Management Agent:
Van Fox – MHT Management, LLC
Ph: 248-833-0550 Email: vanfox@mhthousing.net

General Contractor:
Chad Joseph – MHT Construction, LLC
Ph: 248-833-0550 Email: bgallaher@mhthousing.net

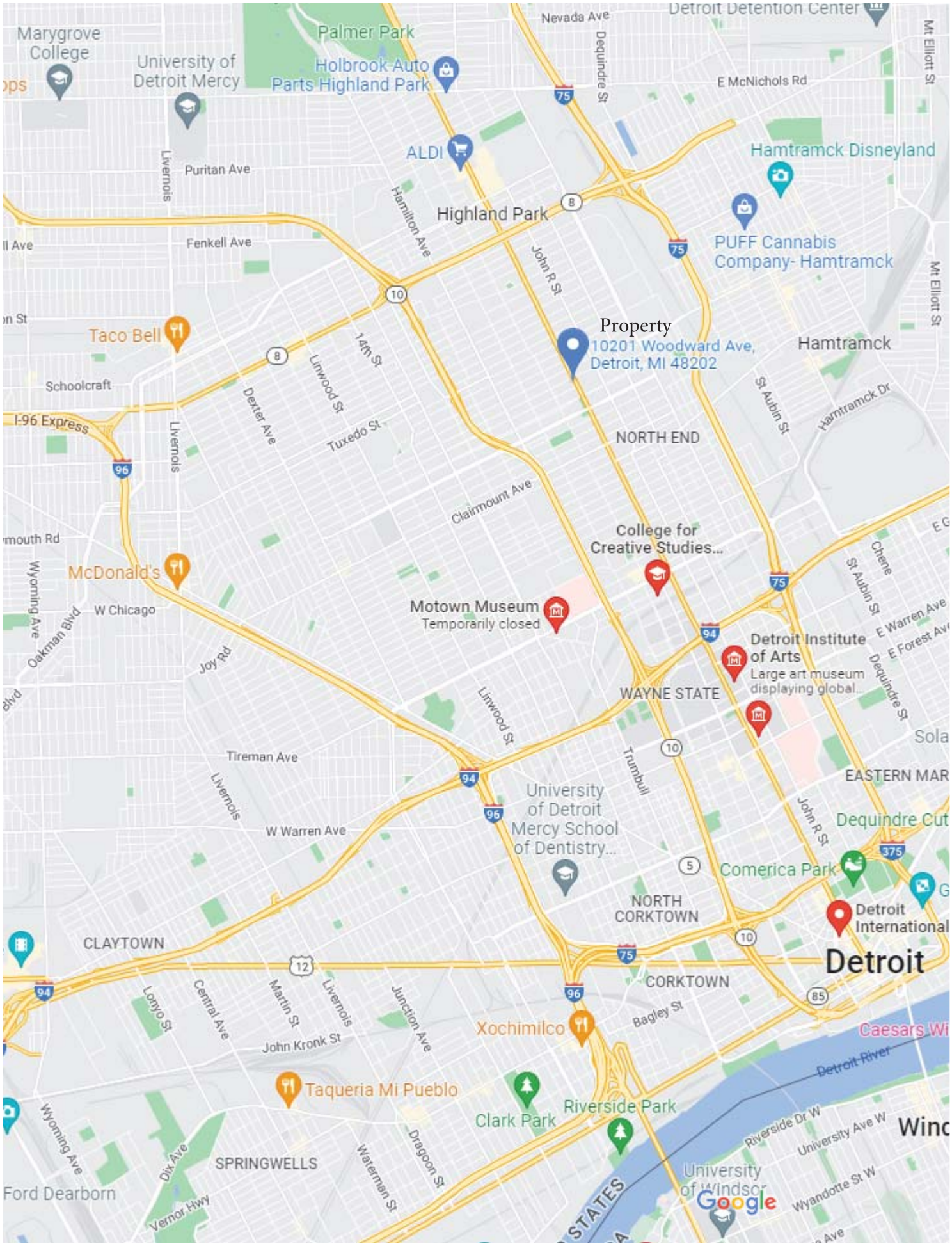
Lead Architect:
Jeffrey Graham - Kem-Tec
Ph: 586-772-2222 Email: jgraham@kemtec-survey.com

Attorney:
Andrew Massmann - Applegate & Thorne-Thomsen, P.C.
Ph: 312-491-4433 Email: amassmann@att-law.com

Accountant:
Patrick Fuelling, CPA - Doeren Mayhew
Ph: 248-244-3104, Email: fuelling@doeren.com

Attachment 18

Cultural Facilities



Map data ©2022 Google 1 mi

Rating | Hours | All filters

Mackenzie Hall Cultural Centre

4.3 (239)
Cultural center · 3277 Sandwich St. W
Closed · Opens 10AM Tue

"Beautiful **facility**, staff pleasant."

Finnish Center Association

4.6 (87)
Cultural center · 35200 Eight Mile Rd

"A well maintained **facility**, very big hall."

St Mary's Cultural Center

4.5 (455)
Cultural center · 18100 Merriman Rd

"Very nice **facilities**, good food and staff."

Lorenzo Cultural Center

4.5 (67)
Cultural center · 44575 Garfield Rd

"Very clean and well managed **facility**."

Detroit Institute of Arts

4.8 (8,783)
Tourist attraction · 5200 Woodward Ave
Large art museum displaying global works
Closed · Opens 9AM Tue

"Culture and history in one place"

MacKenzie Fine Arts Center

4.5 (27)
Art center · MacKenzie Fine Arts Center - Building F, 5101 Evergreen Road
Open · Closes 10PM

Italian American Cultural Society and Banquet Center

4.6 (487)

Cultural center · 43843 Romeo Plank Rd

Open · Closes 5PM

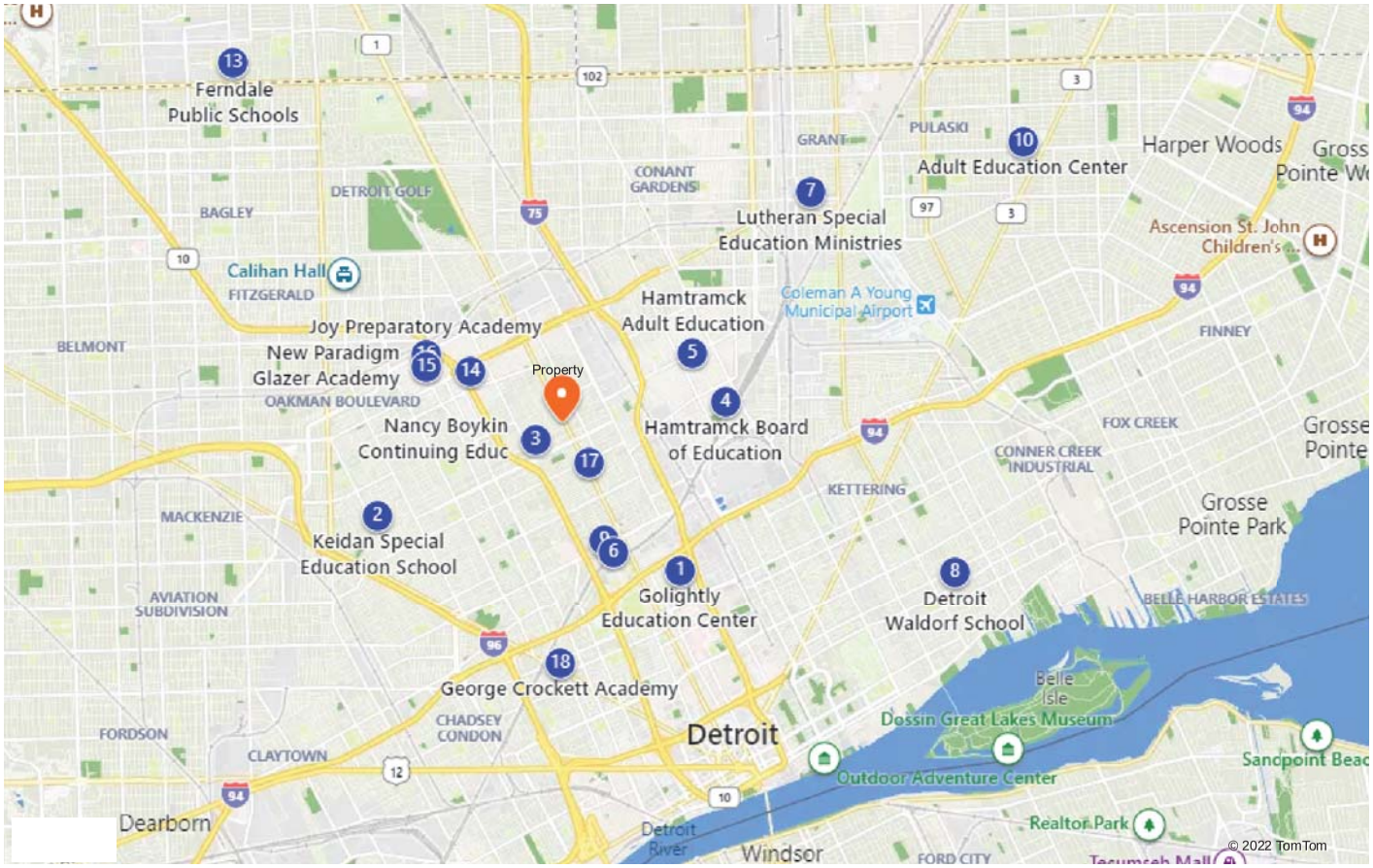
"Very nice **facilities**."

Showing results 1 - 20

Attachment 19

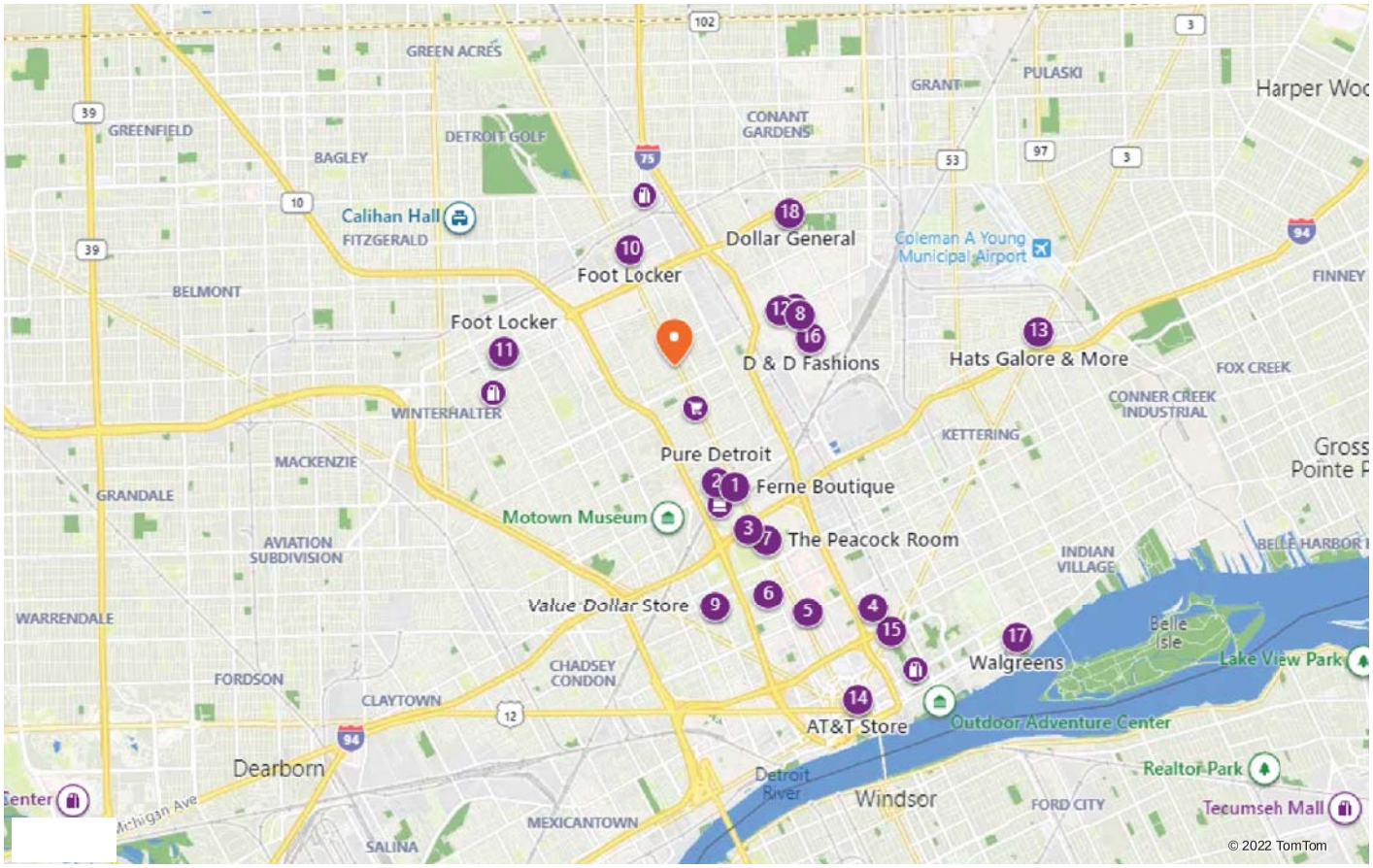
education schools

1. **Golightly Education Center**
   Address: 5536 Saint Antoine St, Detroit, MI 48202
   Phone: (313) 494-2538
   Website: https://www.detroitk12.org/GolightlyEducationCenter
2. **Keidan Special Education School**
   Address: 4441 Collingwood St, Detroit, MI 48204
   Phone: (313) 873-9400
   Website: http://www.detroitk12.org/
3. **Nancy Boykin Continuing Educ**
   Address: 10225 3rd St, Detroit, MI 48202
   Phone: (313) 866-0524
4. **Hamtramck Board of Education**
   Address: 3201 Roosevelt St, Hamtramck, MI 48212
   Phone: (313) 872-9270
   Website: http://www.hamtramck.k12.mi.us/
5. **Hamtramck Adult Education**
   Address: 3225 Caniff St, Hamtramck, MI 48212
   Phone: (313) 893-2214
6. **U Prep Schools**
   Address: 485 W Milwaukee St, Detroit, MI 48202
   Phone: (313) 887-1613
   Website: https://uprepschools.com/contact
7. **Lutheran Special Education Ministries**
   Address: 6861 E Nevada St, Detroit, MI 48234
   Phone: (313) 368-1220
   Website: http://www.luthsped.org/
8. **Detroit Waldorf School**
   Address: 2555 Burns St, Detroit, MI 48214
   Phone: (313) 822-0300
   Website: https://www.detroitwaldorf.org/contact-us
9. **Detroit Public Schools Community District**
   Address: 3011 W Grand Blvd, Detroit, MI 48202
   Phone: (313) 240-4377
   Website: https://www.detroitk12.org/
10. **Adult Education Center**
    Address: 13840 Lappin St, Detroit, MI 48205
    Phone: (313) 579-7109
    Website: http://www.detroitk12.org/
11. **Hazel Park Adult Education**
    Address: 420 W 9 Mile Rd, Hazel Park, MI 48030
    Phone: (248) 658-5600
    Website: http://www.hazelparkschools.org/
12. **Center Line Special Education**
    Address: 26334 Arsenal, Center Line, MI 48015
    Phone: (586) 510-2050
    Website: https://www.clps.org/
13. **Ferndale Public Schools**
    Address: 21131 Garden Ln, Ferndale, MI 48220
    Phone: (248) 548-1950
    Website: http://www.ferndaleschools.org/
14. **Ace Academy (Sda)**
    Address: 1961 Lincoln St, Highland Park, MI 48203
    Phone: (313) 868-8368
    Website: http://aceacademysda.com/
15. **New Paradigm Glazer Academy**
    Address: 2001 La Belle St, Detroit, MI 48238
    Phone: (313) 833-1100
    Website: http://npglazeracademy.org/
16. **Joy Preparatory Academy**
    Address: 1129 Oakman Blvd, Detroit, MI 48238
    Phone: (313) 867-7828
    Website: http://www.joyprep.com/
17. **Detroit International Academy For Young Women**
    Address: 9026 Woodward Ave, Detroit, MI 48202
    Phone: (313) 873-3050
    Website: http://www.detroitk12.org/
18. **George Crockett Academy**
    Address: 4851 14th St, Detroit, MI 48208
    Phone: (313) 896-6078
    Website: http://www.crockettacademy.com/


13
Ferndale
Public Schools
BAGLEY
DETROIT GOLF
Calihan Hall
FITZGERALD
BELMONT
Joy Preparatory Academy
New Paradigm
Glazer Academy
OAKMAN BOULEVARD
15
14
Property
Nancy Boykin
Continuing Educ
3
17
2
Keidan Special
Education School
MACKENZIE
AVIATION
SUBDIVISION
FORDSON
CLAYTON
Dearborn
CHADSEY
CONDON
18
George Crockett Academy
6
1
Golightly
Education Center
Detroit
Detroit
River
Windsor
CONANT
GARDENS
GRANT
7
Lutheran Special
Education Ministries
Hamtramck
Adult Education
5
4
Hamtramck Board
of Education
Coleman A Young
Municipal Airport
PULASKI
10
Adult Education Center
Harper Woods
Ascension St. John
Children's
FINNEY
FOX CREEK
CONNER CREEK
INDUSTRIAL
KETTERING
8
Detroit
Waldorf School
Grosse
Pointe Park
BELLE HARBOR ESTATES
Belle
Isle
Dossin Great Lakes Museum
Outdoor Adventure Center
Sandpoint Beac
Realtor Park
FORD CITY
© 2022 TomTom

retail

1. **Ferne Boutique**
   Address: 6529 Woodward Ave, Detroit, MI 48202
   Phone: (313) 285-8427
   Website: http://www.ferneboutique.com/
2. **Pure Detroit**
   Address: 3011 W Grand Blvd Ste #101, Detroit, MI 48202
   Phone: (313) 873-7873
   Website: http://shop.puredetroit.com/
3. **Carhartt**
   Address: 5800 Cass Avenue, Detroit, MI 48202
   Phone: (313) 831-1274
   Website: https://stores.carhartt.com/mi/detroit/5800-cass-avenue-4211510.html
4. **Eastern Market, Detroit**
   Address: 2934 Russell St, Detroit, MI 48207
   Phone: (313) 833-9300
   Website: https://www.easternmarket.org/
5. **Whole Foods Market**
   Address: 115 Mack Ave, Detroit, MI 48201
   Phone: (313) 576-5300
   Website: https://www.wholefoodsmarket.com/stores/detroit
6. **City Bird**
   Address: 460 W Canfield St, Detroit, MI 48201
   Phone: (313) 831-9146
   Website: https://www.citybirddetroit.com/
7. **The Peacock Room**
   Address: 15 E Kirby St, Detroit, MI 48202
   Phone: (313) 559-5500
   Website: https://www.facebook.com/peacockroom
8. **G Mart Men's & Boys Clothing**
   Address: 10012 Joseph Campau St, Hamtramck, MI 48212
   Phone: (313) 874-4666
   Website: https://fr.yelp.ca/biz/g-mart-mens-and-boys-clothing-hamtramck
9. **Value Dollar Store**
   Address: 4539 Trumbull St, Detroit, MI 48208
   Phone: (313) 831-2140
   Website: http://valuedollarstore.placeweb.site/
10. **Foot Locker**
    Address: 14108 Woodward Avenue, Highland Park, MI 48203
    Phone: (313) 869-6981
    Website: https://stores.footlocker.com/us/mi/highland-park/14108-woodward-avenue.html
11. **Foot Locker**
    Address: 2942 West Davison Plaza, Detroit, MI 48238
    Phone: (313) 868-2621
    Website: https://stores.footlocker.com/us/mi/detroit/2942-west-davison-plaza.html
12. **Caniff Gift & Variety**
    Address: 2611 Caniff St, Hamtramck, MI 48212
    Phone: (313) 365-9881
    Website: https://www.facebook.com/Caniff-Gift-Variety-328200970535589/
13. **Hats Galore & More**
    Address: 10061 Gratiot Ave, Detroit, MI 48213
    Phone: (313) 579-1761
    Website: https://shophatsgalore.com/pages/terms-conditions
14. **AT&T Store**
    Address: 3496 E Jefferson, Suite A, Detroit, MI 48207
    Phone: (313) 964-2000
    Website: https://www.att.com/stores/michigan/detroit/120999?source=E-lls10000000000L
15. **Cheap Charlies**
    Address: 1461 Gratiot Ave, Detroit, MI 48207
    Phone: (313) 567-7788
    Website: https://www.easternmarket.org/district/cheap-charlies
16. **D & D Fashions**
    Address: 9336 Joseph Campau St, Hamtramck, MI 48212
    Phone: (313) 874-1218
17. **Walgreens**
    Address: 6331 E Jefferson Ave, Detroit, MI 48207
    Phone: (313) 567-4239
    Website: https://www.walgreens.com/locator/walgreens-6331+e+jefferson+ave-detroit-mi-48207/id=4797
18. **Dollar General**
    Address: 3812 E Davison St, Detroit, MI 48212
    Phone: (313) 725-4605
    Website: http://dollargeneral.com/


GREEN ACRES
GRANT
PULASKI
Harper Woo
GREENFIELD
DETROIT GOLF
CONANT GARDENS
BAGLEY
Calihan Hall
FITZGERALD
Dollar General
Coleman A Young Municipal Airport
Foot Locker
BELMONT
FINNEY
Foot Locker
D & D Fashions
Hats Galore & More
FOX CREEK
WINTERHALTER
CONNER CREEK INDUSTRIAL
KETTERING
Pure Detroit
MACKENZIE
Gross Pointe F
GRANDALE
Ferne Boutique
Motown Museum
The Peacock Room
AVIATION SUBDIVISION
INDIAN VILLAGE
BELLE HARBOR
Value Dollar Store
WARRENDALE
Belle Isle
Walgreens
Lake View Park
CHADSEY CONDON
FORDSON
CLAYTOWN
AT&T Store
Outdoor Adventure Center
Dearborn
Detroit River
Windsor
Realtor Park
Center
Michigan Ave
MEXICANTOWN
FORD CITY
Tecumseh Mall
SALINA
© 2022 TomTom

Map data ©2022 Google 2000 ft

Rating Hours All filters

University Prep Art & Design: Elementary School
4.0 (28)
Elementary school · 10225 3rd Ave
Open · Closes 5PM · (313) 826-1159
Website Directions

Cortland Public School
4.5 (2)
Head start center · 138 Cortland St · (313) 252-2037
Directions

Dwyer School
No reviews
School
Directions

New Paradigm Loving Academy
3.3 (16)
Elementary school · 1000 Lynn St · (313) 252-3028
Website Directions

Northern Senior High School
5.0 (3)
High school
Directions

Ace Academy
4.0 (4)
High school · 330 Glendale Ave · (313) 868-8300
Directions

Moore School
No reviews
School
Directions

Highland Park Renaissance Academy
3.5 (13)
School · 45 E Buena Vista St
Closes soon · 4PM · Opens 8:30AM Tue · (313) 957-3005
Directions

Durfee Elementary-Middle School

3.7 (17)
Public educational institution · 2425 Tuxedo St
Closes soon · 4:23PM · Opens 7AM Tue · (313) 252-3070

Website Directions

Dickinson West Elementary School

2.8 (6)
Elementary school · 2333 Burger St
Closed · Opens 12AM Thu · (313) 365-5861

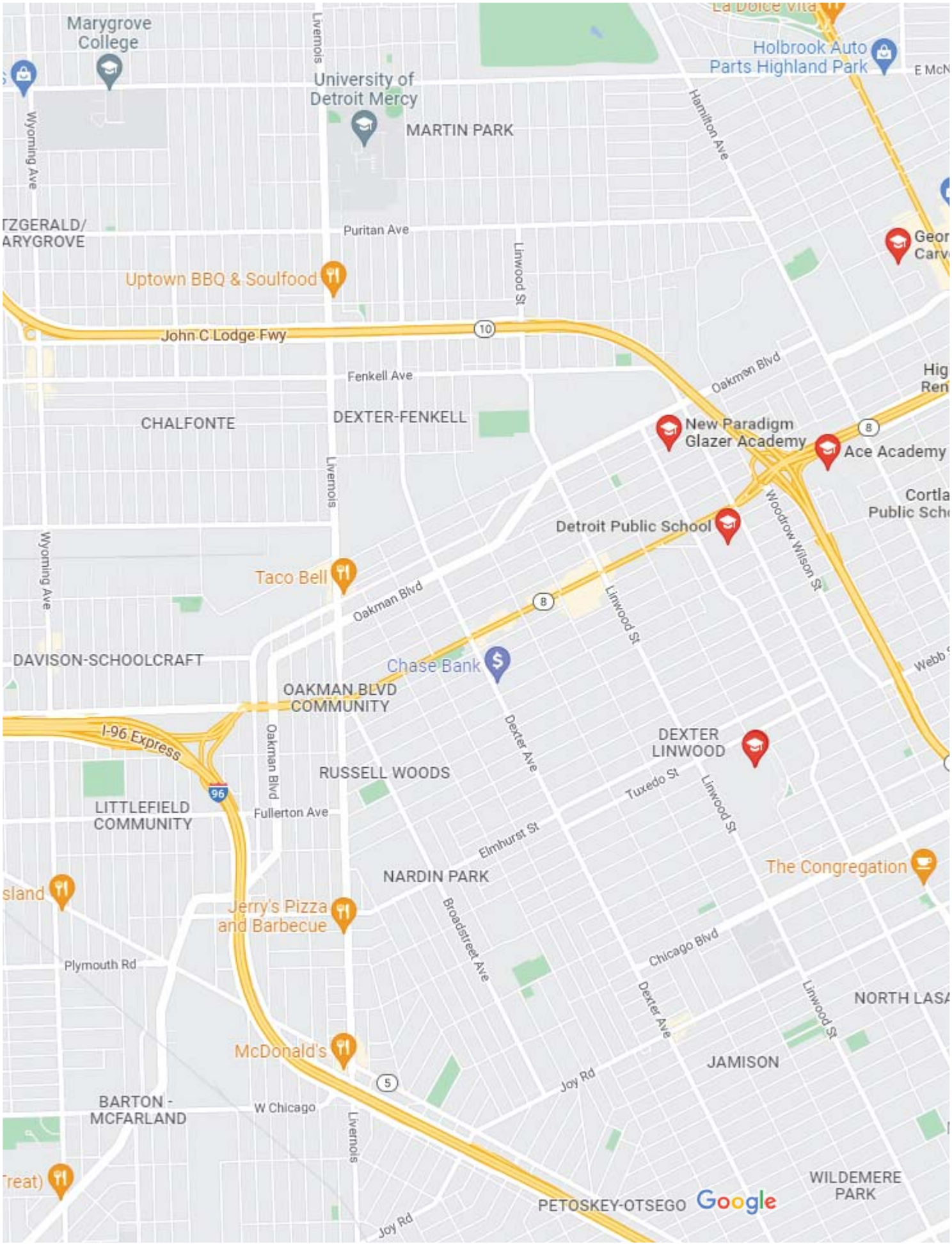
Website Directions

Detroit Public Schools

3.8 (24)
High school · 3011 E Grand Blvd
Open · Closes 5PM · (313) 576-0100

Website Directions

Showing results 1 - 20


Marygrove College
University of Detroit Mercy
MARTIN PARK
Holbrook Auto Parts Highland Park
Wyoming Ave
Livernois
Hamilton Ave
Puritan Ave
Linwood St
Uptown BBQ & Soulfood
John C Lodge Fwy
Fenkell Ave
Oakman Blvd
CHALFONTE
DEXTER-FENKELL
New Paradigm Glazer Academy
Ace Academy
Detroit Public School
Woodrow Wilson St
Taco Bell
DAVISON-SCHOOLCRAFT
Chase Bank
OAKMAN BLVD COMMUNITY
I-96 Express
Dexter Ave
DEXTER LINWOOD
RUSSELL WOODS
Tuxedo St
LITTLEFIELD COMMUNITY
Fullerton Ave
Elmhurst St
NARDIN PARK
The Congregation
Jerry's Pizza and Barbecue
Broadstreet Ave
Chicago Blvd
Plymouth Rd
NORTH LASA
McDonald's
JAMISON
Joy Rd
BARTON - MCFARLAND
W Chicago
WILDEMERE PARK
PETOSKEY-OTSEGO
Google

Attachment 19

Map data ©2022 Google 2000 ft

Rating Hours All filters

Hamtramck Family Healthcare
5.0 (1)
· 9740 Conant St APT 3
· (313) 556-9900
Website Directions

Health Care Medical Center
3.0 (2)
Medical clinic · 23700 Van Dyke Ave
· (586) 759-6300
Directions

US Healthcare Michigan
No reviews
Home health care service · 1600 Antietam Ave
Open now · (313) 784-9453
Directions

Total Health Care
1.9 (122)
Insurance agency · 3011 W Grand Blvd #1600
Closes soon · 5PM · Opens 8AM Tue
· (800) 826-2862
Website Directions

Noble Home Health Care LLC
No reviews
Home health care service
Closes soon · 5PM · Opens 9AM Tue · (586) 224-7311
Directions

CHERUBIM HOME HEALTH CARE LLC. - 24 Hour Home Care
5.0 (4)
Home health care service · 4020 Buena Vista St
Open · Closes 6PM · (313) 720-3021
Website Directions

Kings Home Health Care
No reviews
Home health care service · 675 Seward Ave
Open now
Directions

United Home Health Care Inc

3.0 (1)

Home health care service · 751 E 9 Mile Rd #2

Open now · (248) 543-8900

Directions

Elsmar Home Health Care

5.0 (2)

Home health care service · 2727 2nd Ave #156

Closes soon · 5PM · Opens 9AM Tue · (313) 961-5500

Directions

Cardinal Home Healthcare Group

No reviews

Home health care service · 3165 Oakman Blvd

Closes soon · 5PM · Opens 9AM Tue · (586) 203-8118

Website

Directions

Family First Home Health Care

No reviews

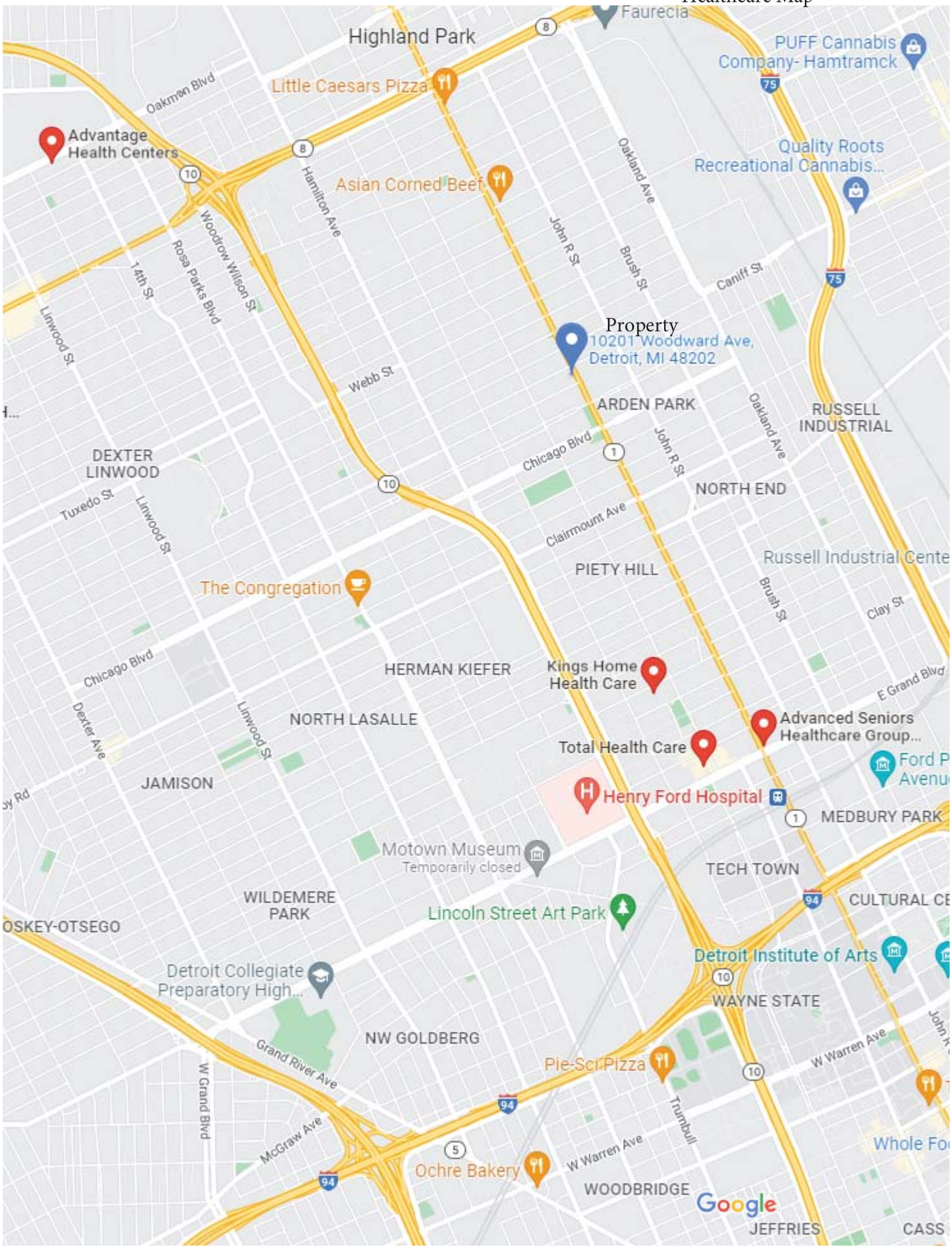
Home health care service · 6455 Gratiot Ave

Open now · (313) 922-8885

Directions

Showing results 1 - 20

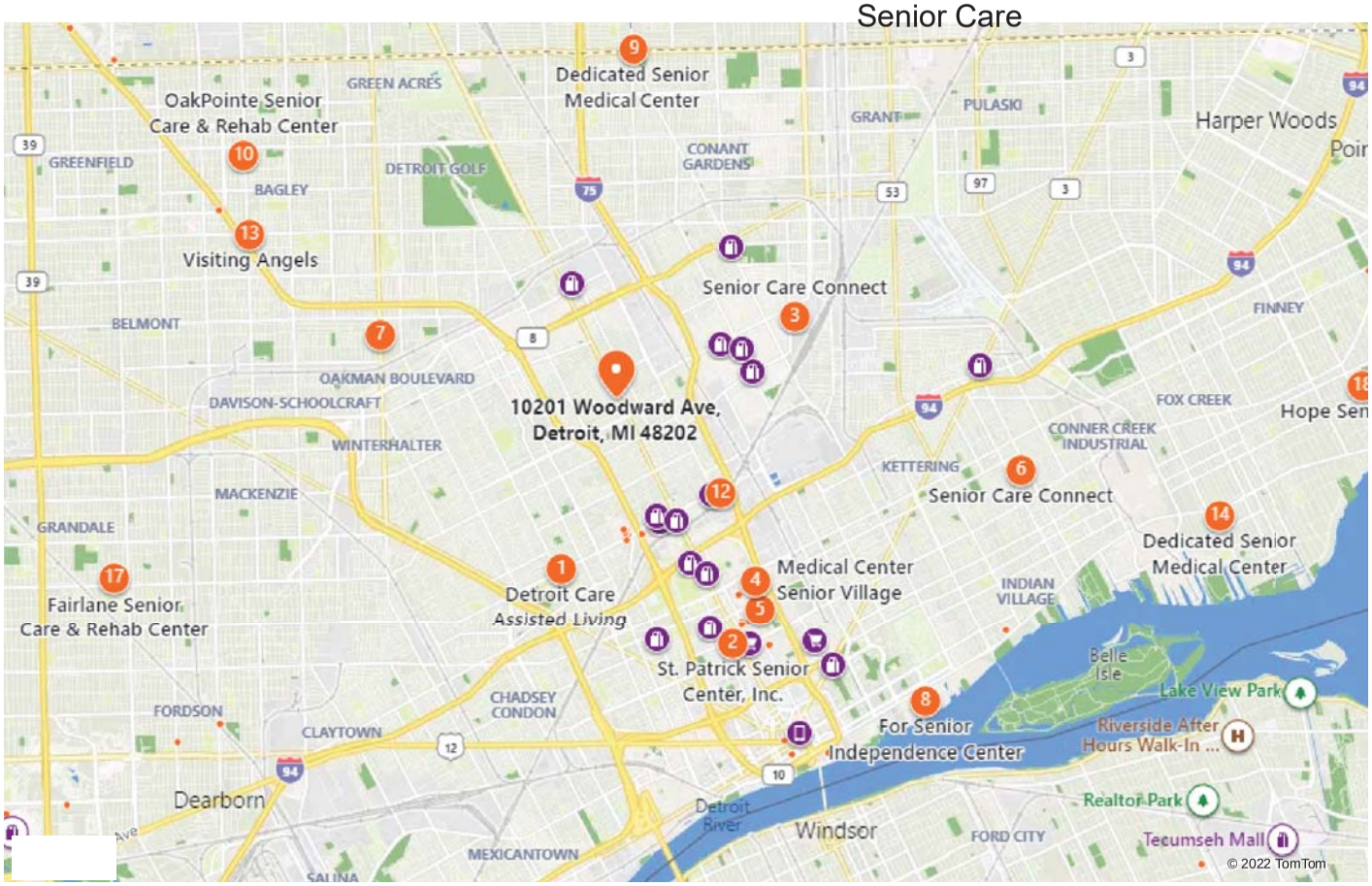
Healthcare Map



senior care

1. **Detroit Care Assisted Living**
   Address: 2329 W Grand Blvd, Detroit, MI 48208
   Phone: (313) 818-0340
   Website: https://www.facebook.com/Detroit-Care-Assisted-Living-1402812246711472/
2. **St. Patrick Senior Center, Inc.**
   Address: 58 Parsons St, Detroit, MI 48201
   Phone: (313) 833-7080
   Website: http://stpatsrctr.org/history0.aspx
3. **Senior Care Connect**
   Address: 5146 Belmont Ave, Buffalo, NY 14201
   Phone: (844) 514-3149
   Website: http://www.seniorcareconnect.net/buffalo-new-york/
4. **Medical Center Senior Village**
   Address: 4701 Chrysler Dr, Detroit, MI 48201
   Phone: (313) 833-2466
   Website: https://www.facebook.com/Medical-Center-Senior-Village-265198475427/
5. **Senior Health Center**
   Address: 4201 Saint Antoine St, Detroit, MI 48201
   Phone: (313) 993-0639
6. **Senior Care Connect**
   Address: 4378 Penn St, Detroit, MI 48201
   Phone: (844) 514-3149
   Website: http://www.seniorcareconnect.net/detroit-michigan/
7. **Acti-Kare In Home Care of Livonia, MI**
   Address: Private Address in Detroit, MI
   Phone: (313) 437-8749
   Website: https://livonia.actikare.com/
8. **For Senior Independence Center**
   Address: 250 Mcdougall St Ste 1000, Detroit, MI 48207
   Phone: (313) 288-7223
   Website: http://www.pacesemi.org/
9. **Dedicated Senior Medical Center**
   Address: 1921 East 8 Mile Road, Warren, MI 48091
   Phone: (586) 840-1333
   Website: https://www.dedicated.care/detroit-coming-soon
10. **OakPointe Senior Care & Rehab Center**
    Address: 18901 Meyers Rd, Detroit, MI 48235
    Phone: (313) 864-8481
    Website: http://oakpointescr.com/
11. **Home Instead**
    Address: 20100 Mack Ave, Grosse Pointe Woods, MI 48236
    Phone: (313) 647-9682
    Website: https://www.homeinstead.com/location/682?utm_source=bing&utm_medium=organic&utm_campaign=bmb
12. **Modern Care Homes LLC Assisted Living/Senior Group Homes**
    Address: 2785 E Grand Blvd, Detroit, MI 48211
    Phone: (313) 952-9163
13. **Visiting Angels**
    Address: 11000 W McNichols Rd Ste 217, Detroit, MI 48221
    Phone: (313) 272-8282
    Website: http://www.visitingangels.com/detroit/home
14. **Dedicated Senior Medical Center**
    Address: 13210 East Jefferson Avenue, Detroit, MI 48215
    Phone: (313) 335-3444
    Website: https://www.dedicated.care/find-a-location/detroit-michigan/detroit-east
15. **Michigan Senior Care**
    Address: 27136 Delton St, Madison Heights, MI 48071
    Phone: (248) 207-6511
    Website: https://seniorcaremichigan.com/location.html
16. **Hope Senior Home Care**
    Address: 79 Kercheval Ave Ste 105, Grosse Pointe Farms, MI 48236
    Phone: (248) 686-3901
    Website: https://hopeseniorhomecare.com/contact/
17. **Fairlane Senior Care & Rehab Center**
    Address: 15750 Joy Road, Detroit, MI 48228
    Phone: (313) 273-6850
    Website: https://nexcarehealth.com/search-locations/fairlane
18. **Hope Senior Care**
    Address: 724 Notre Dame St, Grosse Pointe, MI 48230
    Phone: (313) 881-3132
    Website: http://hopeseniorhomecare.com/

Senior Care


9
Dedicated Senior
Medical Center
OakPointe Senior
Care & Rehab Center
10
GREEN ACRES
GREENFIELD
BAGLEY
DETROIT GOLF
CONANT
GARDENS
GRANT
PULASKI
Harper Woods
13
Visiting Angels
Senior Care Connect
3
BELMONT
7
OAKMAN BOULEVARD
DAVISON-SCHOOLCRAFT
10201 Woodward Ave,
Detroit, MI 48202
WINTERHALTER
FINNEY
FOX CREEK
Hope Sen
CONNER CREEK
INDUSTRIAL
KETTERING
6
Senior Care Connect
MACKENZIE
12
GRANDALE
14
Dedicated Senior
Medical Center
17
Fairlane Senior
Care & Rehab Center
1
Detroit Care
Assisted Living
4
Medical Center
Senior Village
5
INDIAN
VILLAGE
2
St. Patrick Senior
Center, Inc.
Belle
Isle
Lake View Park
CHADSEY
CONDON
FORDSON
CLAYTOWN
8
For Senior
Independence Center
Riverside After
Hours Walk-In ...
Dearborn
Detroit
River
Windsor
Realtor Park
FORD CITY
Tecumseh Mall
MEXICANTOWN
© 2022 TomTom

Map data ©2022 Google 1000 ft

Rating Hours All filters

Cass Community Social Services

4.0 (101)

Social services organization · 11850 Woodrow Wilson St

Closed · Opens 9AM Tue · (313) 883-2277

Website Directions

"... d Tell Any One About Your Program That's In Need Of Your Service."

Harper House

No reviews

Social services organization · 69 Burlingame St · (313) 869-0101

Directions

Cass Community Social Services - World Building

4.6 (38)

Non-profit organization · 11745 Rosa Parks Blvd

Closes soon · 5PM · Opens 9AM Tue · (313) 883-2277

Website Directions

Matrix Human Services - Youth Services

4.2 (5)

Social services organization · 680 Virginia Park St

Closed · Opens 8AM Tue · (313) 873-0678

Website Directions

Cass Community Social Services - Food Distribution Center

4.0 (1)

Food bank · 11850 Woodrow Wilson St

Open · Closes 6PM · (313) 883-2277

Website Directions

Cass Community Social Services - Bath-Thomasson

Apartments
No reviews
Non-profit organization · 1534 Webb St
· (313) 883-2277

Website Directions

Social Service Organization
No reviews
Social services organization · 12541 McDougall St
· (800) 936-1437

Directions

District Offices Social Services
3.3 (148)
Social services organization · 5131 Grand River Ave
Closes soon · 5PM · Opens 8AM Tue
· (313) 361-7300

"My service was quick."

Website Directions

Children's Aid Society
1.5 (2)
Social services organization · 7375 Woodward Ave # 2700
Closes soon · 5PM · Opens 9AM Tue · (313) 961-8100

Directions

Heidi House Inc
No reviews
Social services organization · 15811 Normandy St
· (313) 341-6055

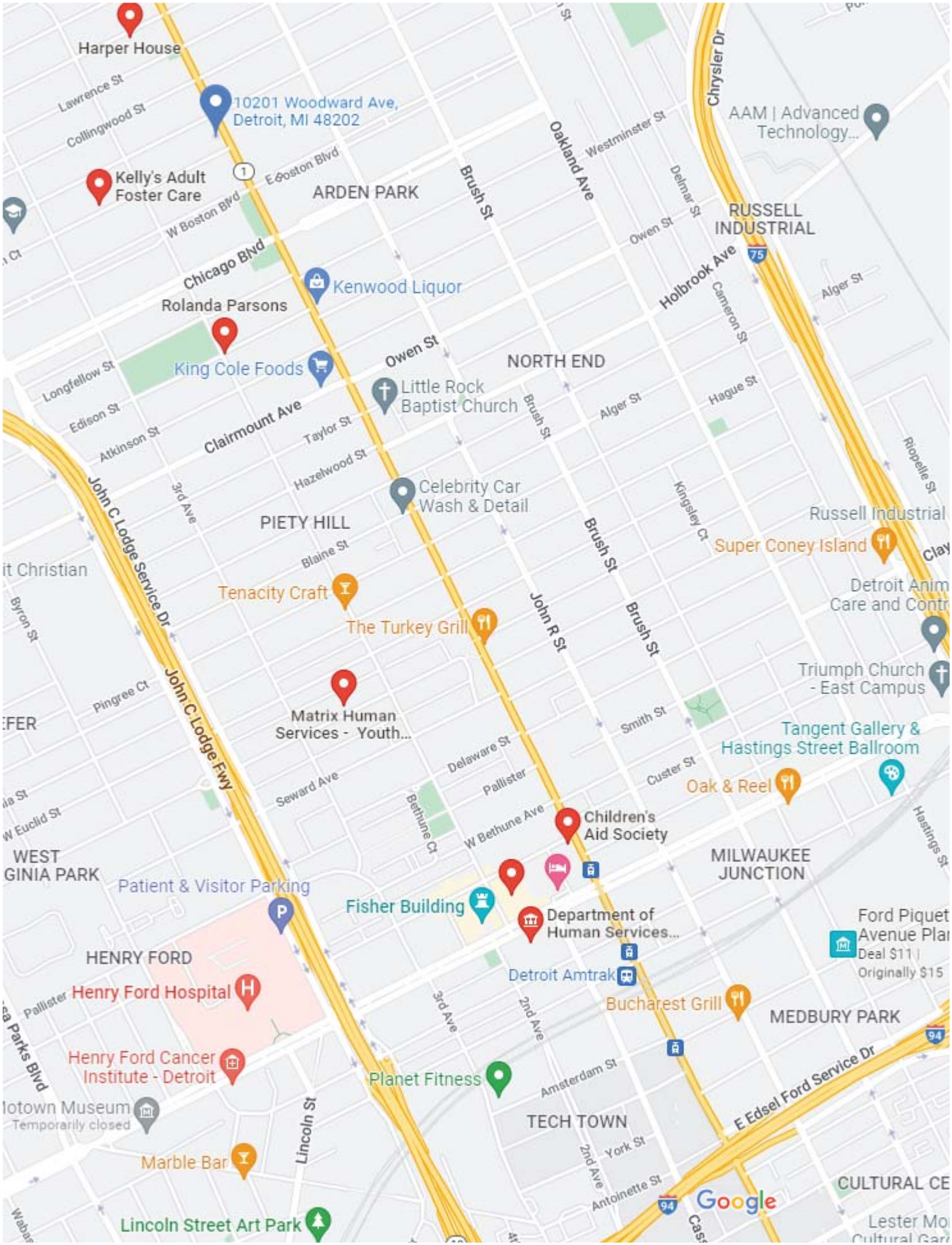
Directions

Child & Family Services Department
3.8 (41)
Social services organization · 1801 E Canfield St
Closes soon · 5PM · Opens 8AM Tue
· (313) 578-5100

"Prompt service took a friend to pick up a clearance."

Website Directions

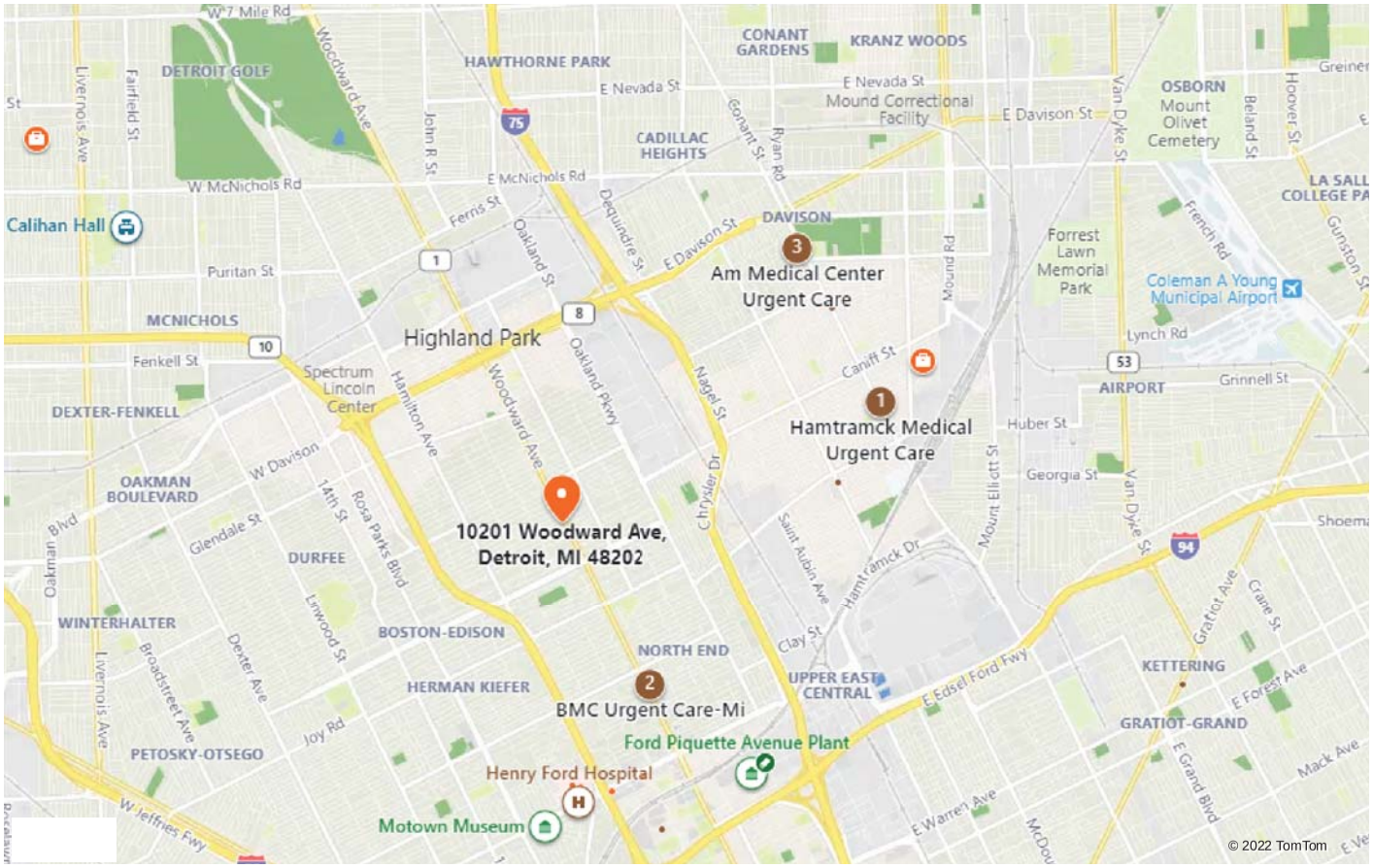
Showing results 1 - 20


Harper House
10201 Woodward Ave, Detroit, MI 48202
Kelly's Adult Foster Care
ARDEN PARK
Kenwood Liquor
Rolanda Parsons
King Cole Foods
Little Rock Baptist Church
NORTH END
Celebrity Car Wash & Detail
PIETY HILL
Tenacity Craft
The Turkey Grill
Matrix Human Services - Youth...
AAM | Advanced Technology...
RUSSELL INDUSTRIAL
Russell Industrial
Super Coney Island
Detroit Anim Care and Contr
Triumph Church - East Campus
Tangent Gallery & Hastings Street Ballroom
Oak & Reel
Children's Aid Society
MILWAUKEE JUNCTION
Patient & Visitor Parking
Fisher Building
Department of Human Services...
Ford Piquet Avenue Plan
Deal $11 | Originally $15
HENRY FORD
Henry Ford Hospital
Detroit Amtrak
Bucharest Grill
MEDBURY PARK
Henry Ford Cancer Institute - Detroit
Planet Fitness
TECH TOWN
Motown Museum
Temporarily closed
Marble Bar
Lincoln Street Art Park
CULTURAL CE
Lester Mo
WEST GINIA PARK
Chicago Blvd
Clairmount Ave
Owen St
Holbrook Ave
Oakland Ave
Brush St
John C Lodge Service Dr
John C Lodge Fwy
John R St
Chrysler Dr
E Edsel Ford Service Dr
Lincoln St
Google

urgent care

1. **Hamtramck Medical Urgent Care**
   Address: 9740 Conant St, Hamtramck, MI 48212
   Phone: (313) 556-9900
   Website: http://hamtramckmedicalurgentcare.com/location.html
3. **Am Medical Center Urgent Care**
   Address: 13031 Conant St, Detroit, MI 48212
   Phone: (313) 893-5493
   Website: http://www.dmc.org/
5. **Vernor Urgent Care**
   Address: 3456 W Vernor Hwy, Detroit, MI 48216
   Phone: (313) 254-9693
   Website: http://www.vernorurgentcare.com/
7. **Concentra Urgent Care**
   Address: 2630 East Jefferson Ave., Detroit, MI 48207
   Phone: (313) 259-7990
   Website: https://www.concentra.com/urgent-care-centers/michigan/detroit/downtown-detroit-urgent-care/?utm_source=Yext&utm_medium=Referral&utm_campaign=LocalPage
9. **Detroit Urgent Care**
   Address: 13403 W 7 Mile Rd, Detroit, MI 48235
   Phone: (313) 308-2444
   Website: http://urgentcarelocations.org/
11. **Get Well Urgent Care of Madison Heights**
    Address: 350 E 12 Mile Rd, Madison Heights, MI 48071
    Phone: (248) 716-8600
    Website: https://getwellurgent.com/locations/madison-heights/
13. **HMC Urgent Care**
    Address: 7542 Wyoming St, Dearborn, MI 48126
    Phone: (313) 415-1515
    Website: http://hmcurgentcare.com/
15. **Advanced Urgent Care**
    Address: 13510 Michigan Ave, Dearborn, MI 48126
    Phone: (313) 582-0100
    Website: https://www.urgentcaredearborn.com/
17. **Beaumont Urgent Care - Downtown Royal Oak**
    Address: 309 E 11 Mile Rd, Royal Oak, MI 48067
    Phone: (248) 965-8806
    Website: https://www.wellstreet.com/office-locations/beaumont-downtown-royal-oak-urgent-care/?utm_source=bing&utm_medium=yext
2. **BMC Urgent Care-Mi**
   Address: 8282 Woodward Ave, Detroit, MI 48202
   Phone: (313) 874-3440
   Website: https://www.dmc.org/
4. **Hazel Park Urgent Care**
   Address: 348 E 9 Mile Rd, Hazel Park, MI 48030
   Phone: (248) 268-2566
   Website: http://www.hazelparkurgentcare.com/
6. **Neu Urgent Care**
   Address: 624 E 9 Mile Rd, Hazel Park, MI 48030
   Phone: (248) 629-7497
   Website: https://www.neuurgentcare.com/urgent-care
8. **Michigan Urgent Care**
   Address: 641 W 9 Mile Rd, Ferndale, MI 48220
   Phone: (248) 206-1600
   Website: https://nextcare.com/locations/mi/ferndale/
10. **Sherwood Urgent Care**
    Address: 20176 Livernois Ave, Detroit, MI 48221
    Phone: (313) 864-1600
    Website: https://www.detroitsherwoodurgentcare.com/
12. **Conner Creek Urgent Care**
    Address: 4777 E Outer Dr, Detroit, MI 48234
    Phone: (313) 369-5690
    Website: http://urgentcarelocations.org/
14. **Hoover Urgent Care Of Warren**
    Address: 26000 Hoover Rd, Warren, MI 48089
    Phone: (586) 722-0707
    Website: http://www.hooverurgentcareofwarren.com/
16. **Medpost Urgent Care**
    Address: Private Address in Grosse Pointe Woods, MI
    Phone: (313) 264-0270
    Website: https://www.carespot.com/medpost-urgent-care/grosse-pointe-mi/
18. **Urgent Care Center Harper Hosp.**
    Address: 3990 John R St, Detroit, MI 48201
    Phone: (313) 745-1465
    Website: http://www.dmc.org/

Urgent Care


W 7 Mile Rd
DETROIT GOLF
HAWTHORNE PARK
CONANT GARDENS
KRANZ WOODS
E Nevada St
Mound Correctional Facility
E Davison St
OSBORN
Mount Olivet Cemetery
CADILLAC HEIGHTS
W McNichols Rd
E McNichols Rd
Calihan Hall
Ferris St
DAVISON
Am Medical Center Urgent Care
Forrest Lawn Memorial Park
Coleman A Young Municipal Airport
Puritan St
MCNICHOLS
Highland Park
Fenkell St
Spectrum Lincoln Center
DEXTER-FENKELL
Caniff St
Hamtramck Medical Urgent Care
AIRPORT
Grinnell St
Huber St
Georgia St
OAKMAN BOULEVARD
W Davison
Glendale St
DURFEE
10201 Woodward Ave, Detroit, MI 48202
WINTERHALTER
BOSTON-EDISON
NORTH END
Clay St
UPPER EAST CENTRAL
KETTERING
HERMAN KIEFER
BMC Urgent Care-Mi
E Edsel Ford Fwy
GRATIOT-GRAND
PETOSKY-OTSEGO
Ford Piquette Avenue Plant
Henry Ford Hospital
Motown Museum
W Jeffries Fwy
E Warren Ave
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Attachment 20

Map data ©2022 Google 1 mi

Rating Hours All filters

Above All Rubbish & Trash Removal
5.0 (24)
Waste management service · 8817 Lyndon St
Open 24 hours · (313) 207-1191

Website Directions

Hamtramck Recycling and Transfer Station
4.7 (45)
Recycling center · 3333 Hamtramck Dr
Closes soon · 5PM · Opens 5AM Tue · (313) 871-5000

"... and it always great service and speedy service"

Website Directions

Detroit Junk Busters
4.9 (157)
Garbage collection service · 4300 Cabot St
Closes soon · 5PM · Opens 7AM Tue · (313) 505-6611

"The best service, provided prompt same delivery of dumpster."

Website Directions

Junk Starz LLC
4.9 (85)
Garbage collection service · 3648 E 9 Mile Rd
Open · Closes 6PM · (248) 845-8653

Onsite services not available

Website Directions

A & B Junk Removal
4.9 (64)
Debris removal service · 1583 Franklin St
Open · Closes 7PM · (248) 800-5865

"... of the only responsive companies who would

Website Directions

remove yard **waste**."

Deerbrook Disposal LLC

5.0 (31)

Waste management service · 2075 Kenney Ave

Open · Closes 6PM · (586) 303-6669

Onsite services · Online estimates

Website Directions

Motor City Disposal

5.0 (175)

Waste management service · 16482 13 Mile Rd

Open · Closes 10PM · (586) 842-2750

"Would use services again in the future."

Website Directions

Junk King Detroit Metro

4.9 (679)

Garbage collection service · 1260 Rankin Dr A

Open · Closes 10PM · (248) 216-0655

Onsite services · Online estimates

Website Directions

Runco Waste Industries

4.7 (17)

Garbage collection service · 21151 Meyers Rd

Closes soon · 5PM · Opens 8AM Tue · (248) 336-2333

Website Directions

ERG Environmental Services

4.6 (37)

Waste management service · 13040 Merriman Rd

Closes soon · 5PM · Opens 9AM Tue · (734) 437-9650

Onsite services

Website Directions

Detroit Disposal & Recycling

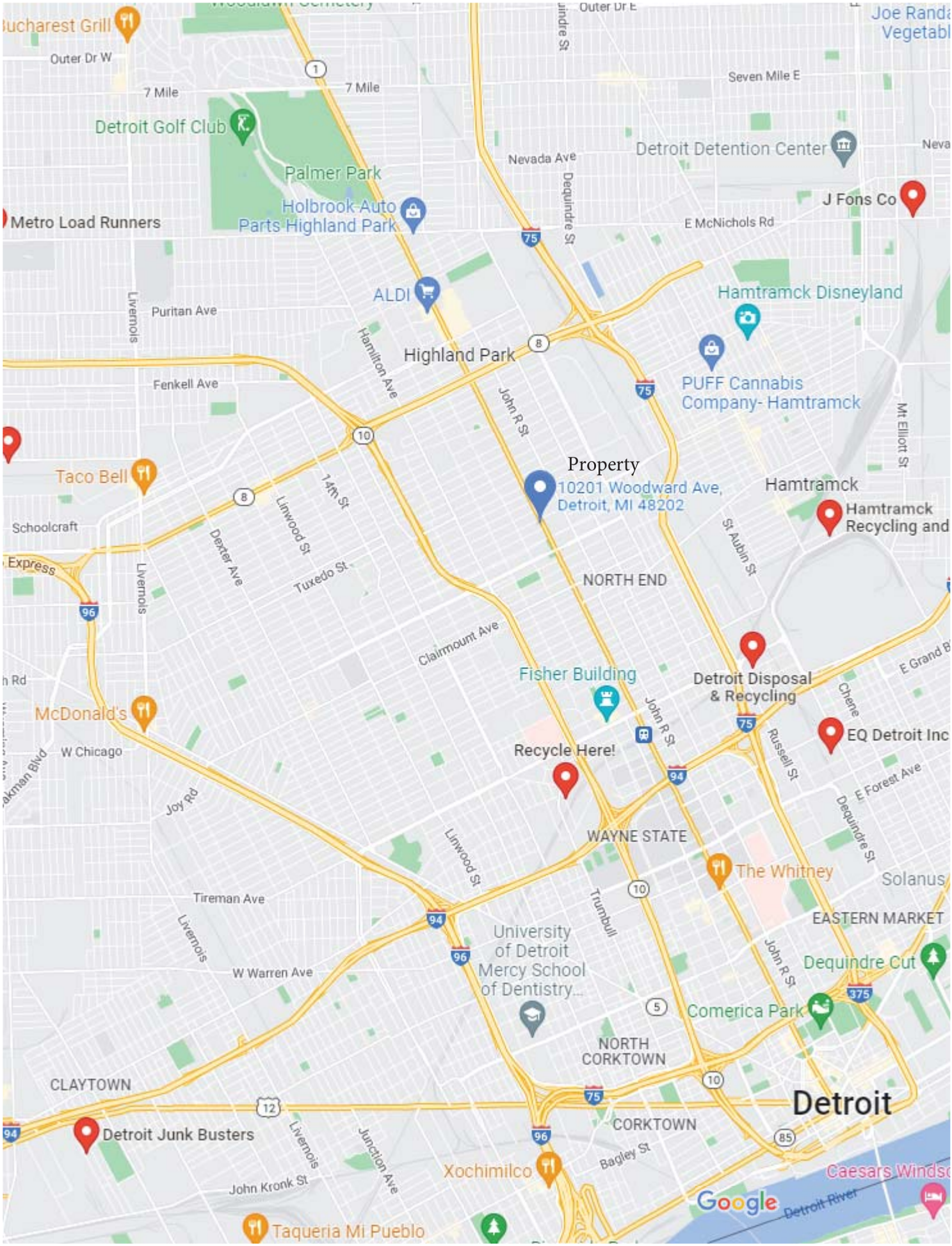
3.7 (16)

Waste management service · 1475 E Milwaukee Ave
Closes soon · 5PM · Opens 7AM Tue · (313) 664-0200

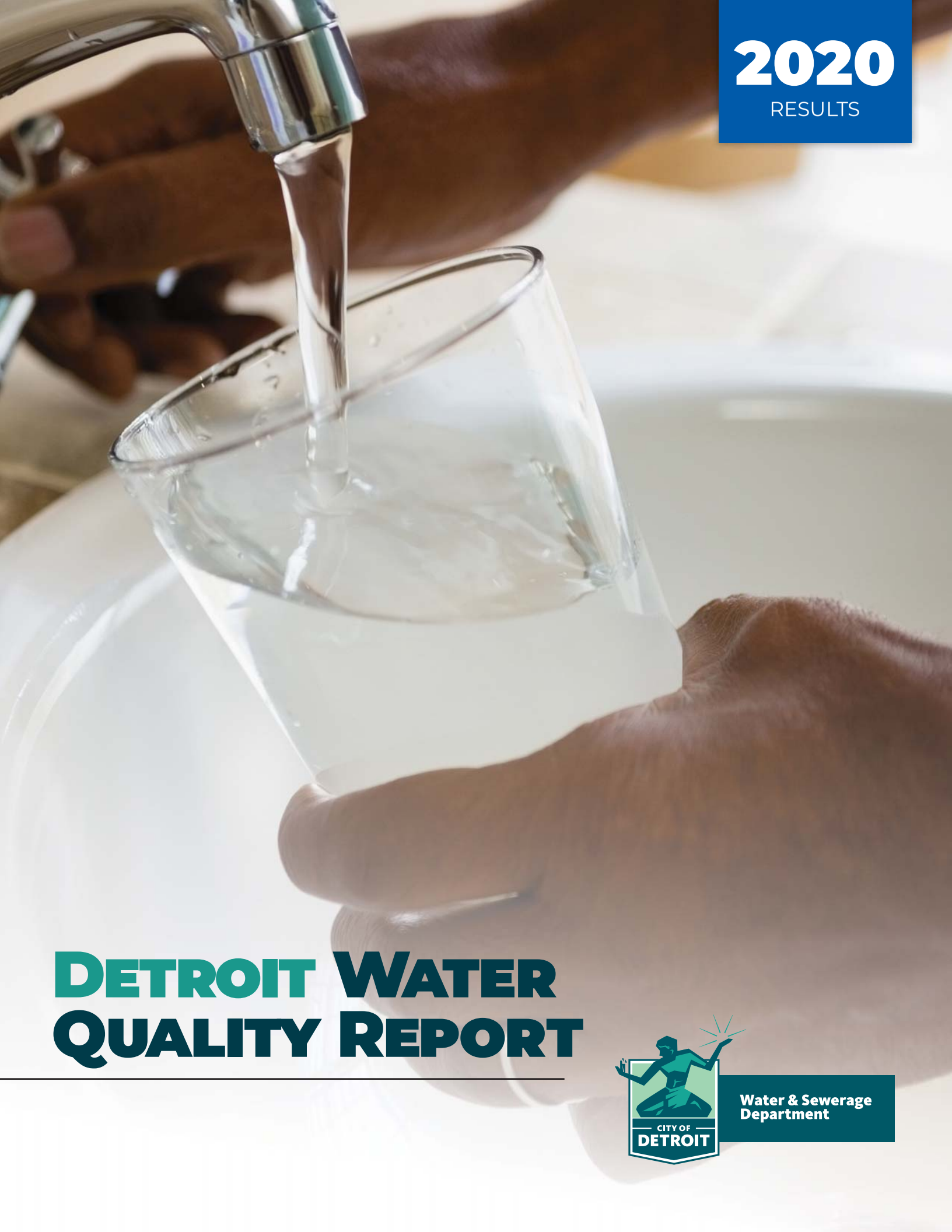
Website Directions

Showing results 1 - 20

Waste Services



Attachment 21



2020
RESULTS

Detroit Water Quality Report

Water & Sewerage Department

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How We Provide Services 4
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Lead & Copper Rule 8
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Key to the Detected Contaminants 15
Regulated Contaminants 16
Unregulated Contaminants 18
Tap Water Mineral Analysis 19
Did you know? 20

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

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

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

CITY OF DETROIT

Mike Duggan, Mayor

DETROIT CITY COUNCIL

Brenda Jones, President (citywide)
Mary Sheffield, President Pro-Tem (District 5)
Janeé Ayers (citywide)
James Tate (District 1)
Roy McCalister, Jr. (District 2)
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DETROIT WATER AND SEWERAGE DEPARTMENT

Gary A Brown, Director
Palencia Mobley, P.E., Deputy Director and Chief Engineer

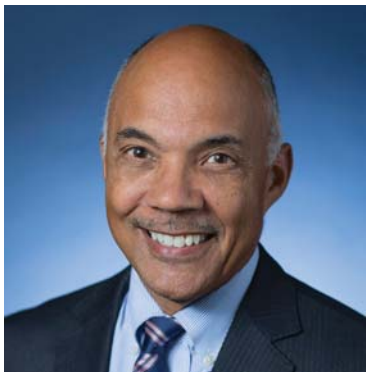
The Detroit Water & Sewerage Department does not discriminate on the basis of race, color, national origin, sex, age or disability in any of our services, programs or activities.

24/7 HOW TO REPORT AN EMERGENCY

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

PUBLIC PARTICIPATION

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



Gary A Brown, Director
Detroit Water and Sewerage Department

Dear Valued Customers,

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

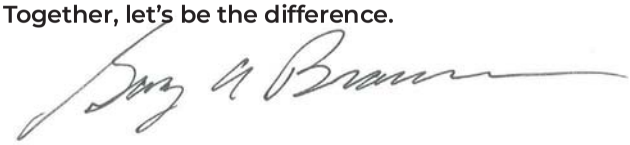
In this Water Quality Report, you will see the required lead in drinking water testing results were 9 parts per billion (ppb) measured in the 51 homes at the 90th percentile, well below the action level of 15 ppb set by the Environmental Protection Agency (EPA) and the Michigan Department of Environment,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

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

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

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

Together, let's be the difference.



A MESSAGE TO OUR CUSTOMERS

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

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

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

How We Provide Water Services to You

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

The system uses source water drawn from three intakes. Two source water intakes are located in the Detroit River: one to the north, near the inlet of Lake St. Clair, and one to the south, near Lake Erie. The third intake is located in Lake Huron.

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

Health Concerns

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

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

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. DWSD is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you have a service line that is lead, galvanized previously connected to lead, or unknown but likely to be lead, it is recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at **1-800-426-4791** or at **http://water.epa.gov/drink/info/lead**.

Customer Affordability Programs

Water Residential Assistance Program (WRAP)

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

10/30/50 Plan

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

CARES Act Funding

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

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

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

DWSD offers safe, convenient ways to pay

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

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

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

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

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

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

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

WORKING HARD FOR YOU

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

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

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

Michigan's Revised Lead & Copper Rule and Detroit's Test Results

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

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

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

"We want to reassure Detroiters, especially during the COVID-19 Pandemic, the water supplied by DWSD is safe for drinking," said Gary Brown, DWSD director. "The water leaving Detroit's water treatment plants, operated by the Great Lakes Water Authority, does not contain lead. The primary sources of lead in water are lead service lines, lead solder, and/or fixtures containing lead in the home. Even before the State of Michigan enacted the most stringent Lead and Copper Rule in the nation, DWSD began replacing lead service lines at DWSD's cost with owner/occupant permission during water main replacement projects and providing pitcher filters to those residents and businesses as a precautionary measure. We have replaced more than 1,000 lead service lines since 2018, have 100% resident response rate for replacement when on the street replacing the water main, and our program was recently cited as a model for other communities in the Journal of the American Water Works Association."

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

The new Michigan Lead and Copper Rule Testing Method

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

Lead in Drinking Water

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

Health Effects of Lead

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

Sources of Lead

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

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

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

Lead Service Line Replacement Program

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Improving Stormwater Management

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

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

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

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

Oakman Boulevard GSI Overview

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

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

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

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

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

DWSD's Goals

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

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

Upgrading Detroit's Water and Sewer Systems

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

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

Despite the pause in construction due to Governor Gretchen Whitmer's COVID-19 Stay Home, Stay Safe Order, DWSD CIP projects have stayed on schedule. The Oakman Boulevard Stormwater and Water System Upgrade Project was mostly completed in November 2020. This $8.6 million project transformed 10 medians into bioretention to manage 37 million gallons of stormwater annually (see Stormwater article on page 12).

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

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

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

Substances Found in Source Water

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

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

Contaminants that may be present in source water include:

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

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

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

Source Water Protection

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

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

Key to the Detected Contaminants

>	**Greater Than**	µmhos	**Micromhos** Measure of electrical conductance of water.
N/A	**Not Applicable**	NTU	**Nephelometric Turbidity Units** Measure of cloudiness of water.
ND	**Not Detected**	pCi/L	**Picocuries Per Liter** Measure of radioactivity.
ppm	**Parts Per Million** (one in a million) The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.	ppb	**Parts Per Billion** (one in a billion) The ppb is equivalent to micrograms per liter. A microgram = 1/1000 gram.
AL	**Action Level** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.	°C	**Celsius** A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
HAA5	**Haloacetic Acids** HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.	RAA	**Running Annual Average** The average of all analytical results for all samples during the previous four quarters.
LRAA	**Locational Running Annual Average** The average of analytical results for samples at a particular monitoring location during the previous four quarters.	TT	**Treatment Technique** A required process intended to reduce the level of a contaminant in drinking water.
MCL	**Maximum Contaminant Level** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.	MRDL	**Maximum Residual Disinfectant Level** The highest level of disinfectant allowed in drinking water. There is convincing evidence that additional of a disinfectant is necessary for control of microbial contaminants.
SMCL	**Secondary Maximum Contaminant Level** An MCL which involves a biological, chemical or physical characteristic of water that may adversely affect the taste, odor, color or appearance (aesthetics), which may therby affect public confidence or acceptance of the drinking water.	MRDLG	**Maximum Residual Disinfectant Level Goal** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MCLG	**Maximum Contaminant Level Goal** The level of contaminant in drinking water below which there is no known or expected risk to health.	Level 1	**Level 1 Assessment** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.
TTHM	**Total Trihalomethanes** Total Trihalomethanes is the sum of chloroform, dibromochloromethane, bromodichloromethane and bromoform. Compliance is based on the total.	Level 2	**Level 2 Assessment** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if necessary) why an E. coli MCL violation occured and/or why total coliform bacteria have been found in our water system on multiple occasions.

Regulated Contaminants

Inorganic Chemicals
Monitoring at Plant Finished Tap

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

Disinfection Residual
Monitoring in the Detroit Distribution System

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

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

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

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

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

Turbidity
Monitored Every 4 Hrs at the Plant Finished Water Tap

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

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

Special Monitoring

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

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

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

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

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

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

Radionuclides
Monitored at the Plant Finished Tap in 2014

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

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

Unregulated Contaminants

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

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

2015 Unregulated Contaminants Monitored at the Plant Finished Taps

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

2015 Unregulated Contaminants Monitored in the Distribution System

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

2019 Unregulated Contaminants Monitored at the Plant Finished Taps

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

2019 Unregulated Contaminants Monitored in the Distribution System Haloacetic Acids

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

2020 City of Detroit
Tap Water Mineral Analysis

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

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

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

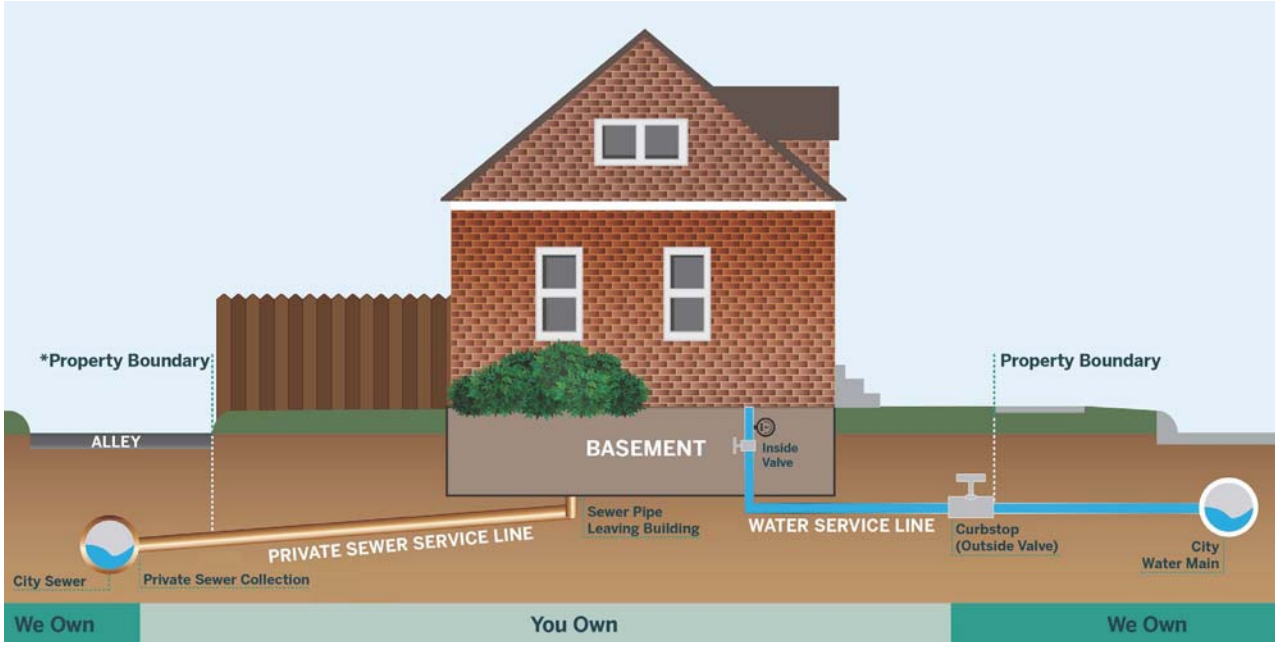
Did You Know?

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

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

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

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



Water & Sewerage Department

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

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

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PUBLIC AFFAIRS GROUP
313•964•9576
dwsd-publicaffairs@detroitmi.gov

STORMWATER MANAGEMENT PLAN PROGRESS REPORT

October 2019

Detroit Water and Sewerage Department
STORMWATER MANAGEMENT GROUP
6425 Huber Street • Detroit, MI 48211

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B. Withdrawal Notice from EGLE for 2008 General Permit (Nov. 30, 2010)
C. DWSD Enforcement Response Procedure
D. MS4 Catch Basin Spreadsheet
E. Stormwater Management Regulations – Post-Construction Stormwater Management Ordinance
F. Excerpt of City Code Regarding Authority to Prohibit Discharges to the Storm System
G. DWSD IDEP MS4 Support, SWMP MS4 Outfall Investigation Report, May 2018
H. Street Sweeping Schedule
I. Wayne County Illicit Discharge Investigation Training Program
J. The City of Detroit Water and Sewerage Department Stormwater Management Design Manual
K. Communications with EGLE
L. Previous Submittal Addressing City's Legal Authority

1.0 INTRODUCTION

1.1 Purpose

This Stormwater Management Plan (SWMP) has been prepared to fulfill the requirements of the NPDES permit issued to the City of Detroit for the stormwater discharged from the Municipal Separate Storm Sewer System (MS4). This document updates and supersedes the previous SWMPP which was prepared in December 2017, and is submitted to comply with the requirements of the NPDES permit dated February 25, 2003 which is currently in effect.

1.2 Regulatory Requirements

The City of Detroit's stormwater discharges are currently regulated by the general stormwater discharge permit issued on February 25, 2003 to individual municipalities (the "jurisdictional" general stormwater permit, MIS049000). There are no nested jurisdictions in the City of Detroit.

The permit specifies that permittees are to develop, implement, and enforce a SWMP to reduce the discharge of pollutants from the drainage system to the Maximum Extent Practicable. The MEP requirement must be met by implementing Best Management Practices (BMPs) to address the six "minimum measures" including:

1. Public Involvement/Participation Program
2. Public Education Program (PEP)
3. Illicit Discharge Elimination Program (IDEP)
4. Post-Construction Stormwater Runoff Program
5. Pollution Prevention and Good Housekeeping Program
6. Construction Stormwater Runoff Control

1.3 Affected City Departments

Discharges from municipally-owned storm sewers within the City of Detroit are not the responsibility of a single municipal department or agency. Rather, several City departments have been actively involved in the development and implementation of the SWMP, with the Detroit Water and Sewerage Department (DWSD) serving as the lead agency with the responsibility of coordinating the efforts to be undertaken to comply with the NPDES permit and the Certification of Coverage (COC) issued by EGLE. Other participating city agencies include the General Services Department; the Planning and Development Department; the Department of Public Works; the Buildings, Safety Engineering and Environmental Department; the Greater Detroit Resource Recovery Authority; and, the Law Department.

1.4 Summary of Prior Submittals

The City of Detroit filed an application dated July 17, 2008 requesting coverage under EGLE's General Stormwater Jurisdictional Permit, and the submittal included a list of 48 municipal separated storm sewer system (MS4) outfalls. The drainage area for each outfall was reviewed by field investigation which determined that 16 of the small outfalls were actually roadway underdrains or bridge foundation drains rather than storm sewers (see August 13, 2009 letter in **Appendix K**), leaving a total of 32 MS4 outfalls.

Subsequently, one new storm sewer with an outlet to the Rouge River was constructed by the Department of Public Works before 2013 at Ridge Road, south of McNichols, to handle roadway drainage. This resulted in a total of 33 MS4 outfalls.

In May 2018, the City surveyed each MS4 outfall previously investigated in 2010. Several of the outfalls found in 2010 could not be located or were determined not functional in 2018. The comprehensive 2018 investigation of the City's MS4 identified 34 MS4 outfalls including 22 MS4 outfalls to the Detroit River and its tributaries, and 12 MS4 outfalls to the Rouge River. The updated inventory of municipal storm sewers is discussed in more detail in Section 2.2 of this report.

The City submitted an alternate approach for managing post-construction storm water runoff in a letter dated May 4, 2009 (see **Appendix K**) in response to new requirements imposed by the 2008 revised General Permit. Those requirements have since been eliminated due to EGLE's withdrawal of the 2008 Permit.

Under the General Permit No. MIS040000 Certification of Coverage, the City also submitted the Permit Application for Discharge of Stormwater to Surface Waters of the State from a Municipal Separate Storm Sewer System on April 1, 2016.After review by EGLE, DWSD made edits to the original permit application, and submitted the updated application on August 29, 2019.

Shortly after the issuance of Detroit's first stormwater discharge permit, the City also submitted supplemental information to EGLE regarding the City's legal authority to perform tasks which may need to be undertaken as part of the stormwater management effort. This information was transmitted to EGLE in a letter dated April 27, 2005 (see **Appendix L**).

As part of the April 2007 SWMPP, the City included documentation that the City has the legal authority to prohibit discharges into the storm drainage system. Copies of the applicable regulations are included in **Appendix F**.

2.0 DETROIT'S EXISITING STORMWATER CONVEYANCE SYSTEM

2.1 Stormwater Conveyed through Combined Sewers

The vast majority of stormwater runoff within the City of Detroit is conveyed through the City's combined sewer system which uses a single pipe to convey sanitary waste from residences,

industries and businesses, along with stormwater drainage. The combined sewer system services nearly the entire population of the City of Detroit, with a service area estimated at 139 square miles. The combined sewers convey all dry weather flow, and a large portion of the wet weather flow to the GLWA Water Resource Recovery Facility (WRRF) at 9300 W. Jefferson in accordance with NPDES permit MI0022802.

Within the combined sewer system service area, there are several small tracts where separate storm sewers have been constructed and are utilized to convey stormwater. However, these storm sewers reconnect to the combined sewer system at a downstream point, and do not discharge directly to receiving waters. As such, they are an integral part of the City's combined sewer system, and the resulting discharges of combined sewage through the permitted CSO outfalls are authorized by NPDES Permit MI0022802.

The City's CSO permit also stipulates that DWSD shall implement a program to construct Green Stormwater Infrastructure at the Upper Rouge Tributary (URT) to reduce the stormwater runoff from the combined sewer overflow (CSO) system. The Green Stormwater Infrastructure program was introduced to remove a portion of the city's contributing untreated CSO volume within the URT area as an economical alternative to the terminated Upper Rouge Tunnel project.

2.2 Municipally-Owned Separate Storm Sewers

Detroit's MS4 has a very limited service area consisting primarily of parkland with river frontage, and a small amount of roadway drainage from city streets adjacent to the Rouge River or from bridges over river crossings. 85 residential homes are included in the MS4 area. A comprehensive investigation of the City's MS4 system has identified 34 MS4 outfalls, including 22 MS4 outfalls to the Detroit River and its tributaries, and 12 MS4 outfalls to the Rouge River. These storm sewer discharges are shown in Table 1.

The location of all MS4 storm sewer outfalls and the drainage areas to each outfall are displayed on Figures 1 - 21. As shown, these storm sewers serve an area which includes portions of Belle Isle and the roads around the island, portions of Rouge Park and the City streets which traverse that area, portions of three other small parks, plus a few roadways adjacent to the Rouge River.

Table 1: ESTIMATED DRAINAGE AREA FOR KNOWN STORMWATER OUTFALLS CITY OF DETROIT MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)

Outfall ID	Receiving Water	Location	Outfall Diameter	Land Use	Estimated Surface Drainage Area (Acres) (Tetra Tech)	Status
Detroit River and Tributaries						
D1	Detroit River	Lakewood East Park (3308) Bridge at Riverside Dr.	12"	roadway	0.4	Confirmed
D2	Lake Muskoday	Belle Isle Storm Pump Station No. 7	6"	roadway/park	1.59	Confirmed
D4	Nashua Creek	Behind athletic building, Lotier Way - Pump Station	12"	athletic field	3.02	Confirmed
D5	Nashua Creek	Lotier Way behind former zoo	8"	lawn	0.08	Confirmed
D7	Nashua Creek	DRD service yard	6"	service yard	0.26	Confirmed
D8	Lake Tacoma	Strand St/Picnic Way, east of bridge	8"	roadway	0.59	Confirmed
D16	Lake Tacoma	Lake Tacoma off Strand, west of sign	6"	roadway	0.008	Confirmed
D17	Detroit River	Strand St. behind casino	9"	roadway	0.21	Confirmed
D22	Detroit River	Mt. Elliott Park (#3)	12"	park; lawn	3.35	Confirmed
D new-1	Detroit River	Belle Isle, north side of Strand, south side of Lake Tacoma	unknown	Roadway	0.26	Confirmed
D new-2	Detroit River	Belle Isle - north side of the Strand, 150 ft east of bridge to Casino	unknown	Roadway	0.29	Confirmed
D new-3	Detroit River	Belle Isle - north side of the Strand, east of bridge to Casino	unknown	Roadway	0.26	Confirmed
D new-4	Detroit River	Belle Isle - north side of the Strand, 525 ft east of the bridge to Casino	unknown	Roadway	0.21	Confirmed
D new-5	Detroit River	Belle Isle - north side of the Strand, approx. 530 ft east of bridge	unknown	Roadway	0.27	Confirmed
D new-6	Detroit River	Belle Isle - north side of the Strand, approx. 830ft east of bridge to casino	unknown	Roadway	0.27	Confirmed
D new-7	Detroit River	Belle Isle - north side of the Strand, ~990 ft east of bridge to Casino	unknown	Roadway	0.21	Confirmed
D new-8	Detroit River	Belle Isle - north side of the Strand, ~1140 ft east of bridge to casino	unknown	Roadway	0.21	Confirmed
D new-9	Detroit River	Belle Isle - north side of the Strand, ~870 ft west of Picnic Way	unknown	Roadway	0.23	Confirmed
D new-10	Detroit River	Belle Isle - north side of the Strand, ~720 ft west of Picnic Way	unknown	Roadway	0.27	Confirmed
D new-11	Detroit River	Belle Isle - north side of the Strand, ~590 ft west of Picnic Way	unknown	Roadway	0.21	Confirmed
D new-12	Detroit River	Belle Isle - north side of the Strand, ~450 ft west of Picnic Way	unknown	Roadway	0.25	Confirmed
D new-13	Detroit River	Belle Isle - north side of the Strand, ~300 ft west of picnic way	unknown	Roadway	0.76	Confirmed
Rouge River and Tributaries						
R1	Rouge River	Glenhurst Ave. at Grayfield Ave.	15"	roadway	3.03	Confirmed
R10A-new	Rouge River	Located at the south end of Circle drive in Eliza Howell Park	15"	park; lawn; roadway	16.25	Confirmed
R14	Rouge River	Immediately north of Spinoza Dr. on west bank	18"	roadway	0.21	Confirmed
R14A	Rouge River	Immediately south of Spinoza Dr. on west bank	18"	roadway	0.27	Confirmed
R16	Rouge River	Immediately north of Joy, on east bank	18"	roadway	8.88	Confirmed
R17	Rouge River	Parkland Ave @ Constance Rd. south of Joy Rd.	15"	roadway	11.01	Confirmed
R18	Rouge River	Tireman Ave at Spinoza, south of Joy Rd.	18"	roadway	1.47	Confirmed
R18A-New	Rouge River	New construction on Tireman Bridge	unknown	park; lawn; roadway	3.2	Confirmed
R22	Rouge River	Rouge Park - Spinoza Ave near Tireman	36"	roadway	6.36	Confirmed
R23	Rouge River	Rouge Park - Spinoza Ave near Tireman	12"	park; lawn	2.38	Confirmed
R29	Rouge River	North end of Lahser Rd. - south bank of river	12"	parking lot	3.47	Confirmed
R35	Rouge River	Ridge Road south of McNichols Road (new)	12"	paved areas and residential lots	0.63	Confirmed

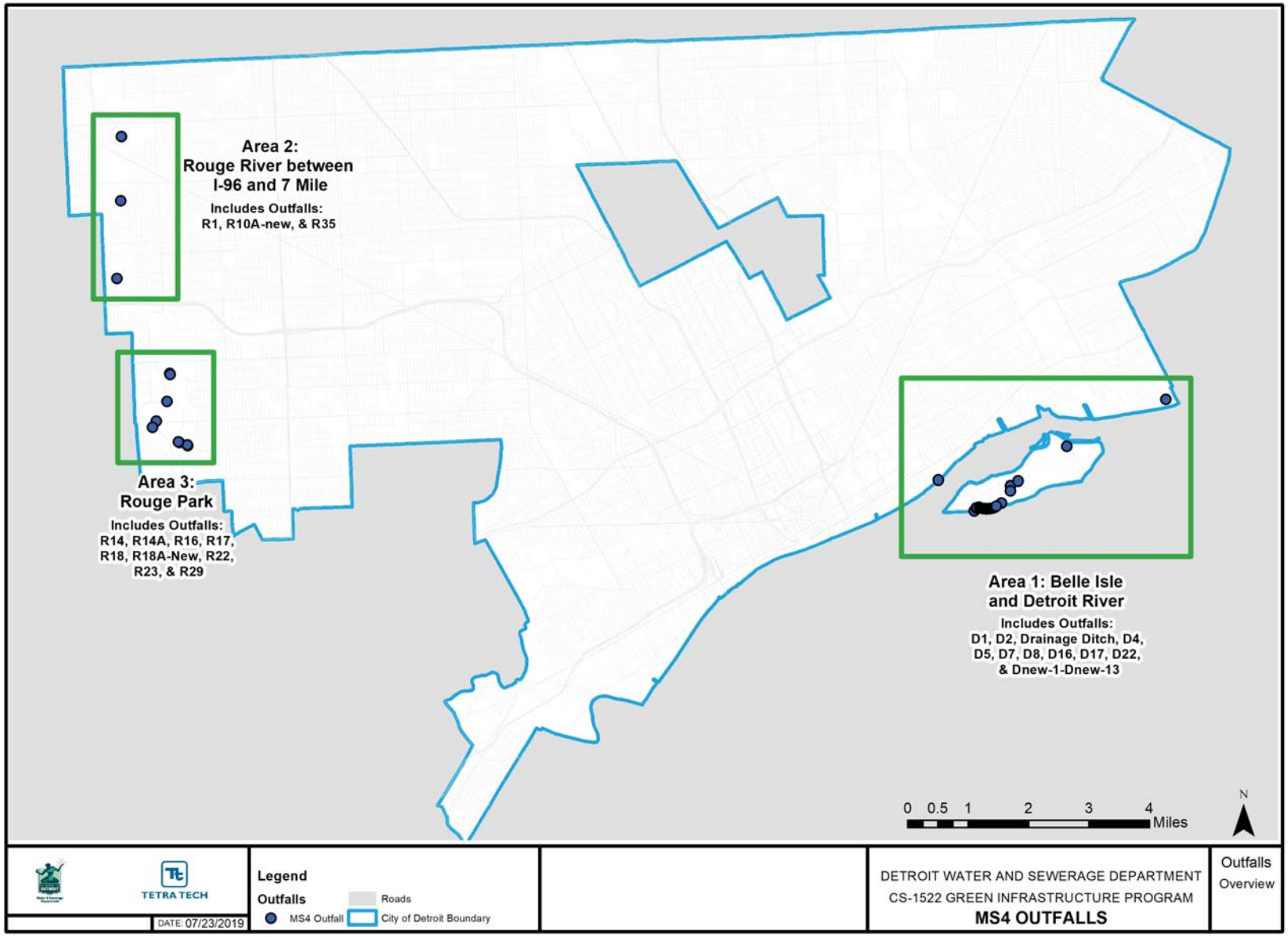


Figure 1: INDEX MAP OF KNOWN SEPARATE STORM SEWER OUTFALLS

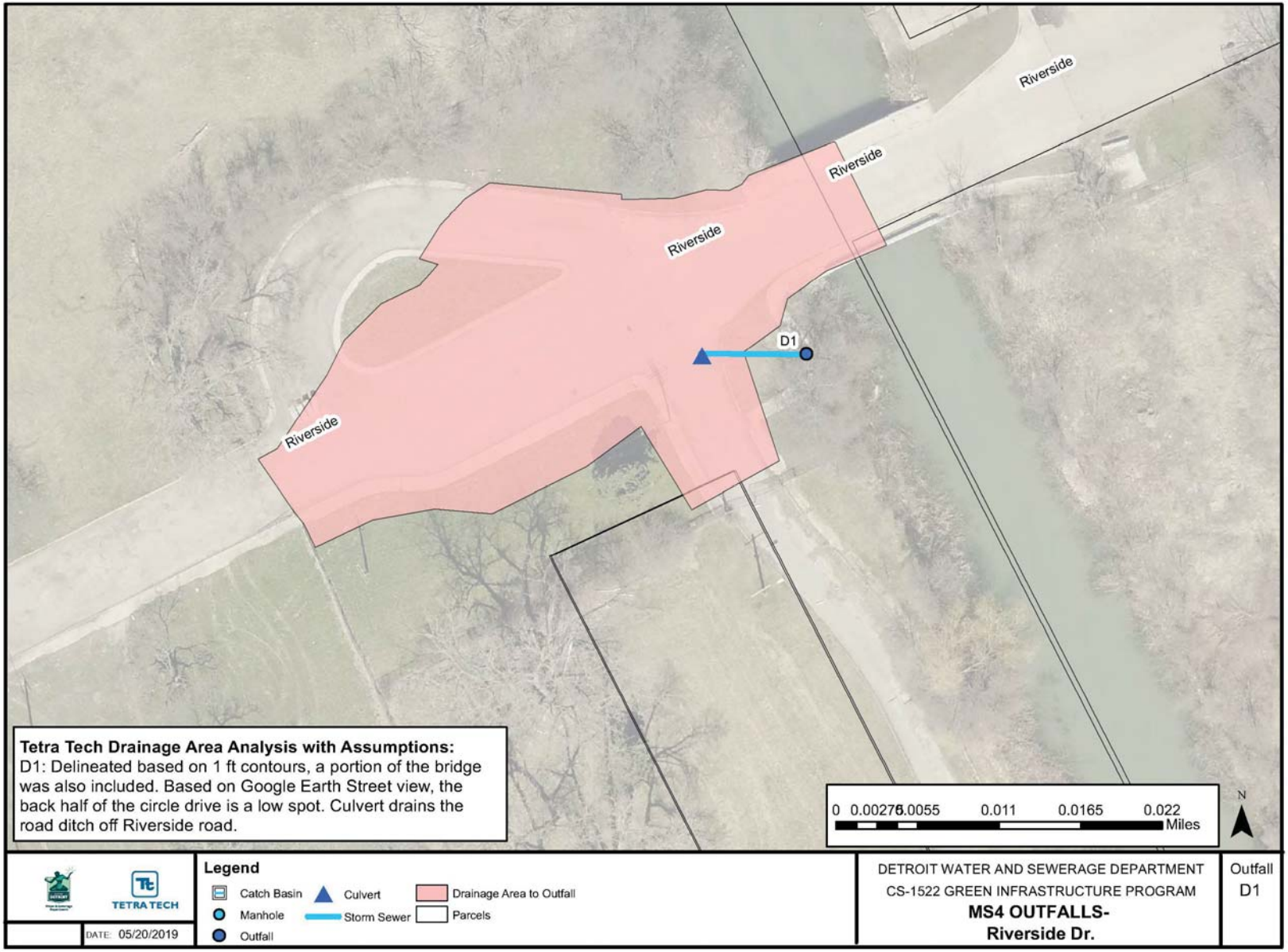


Figure 2: D1 OUTFALL

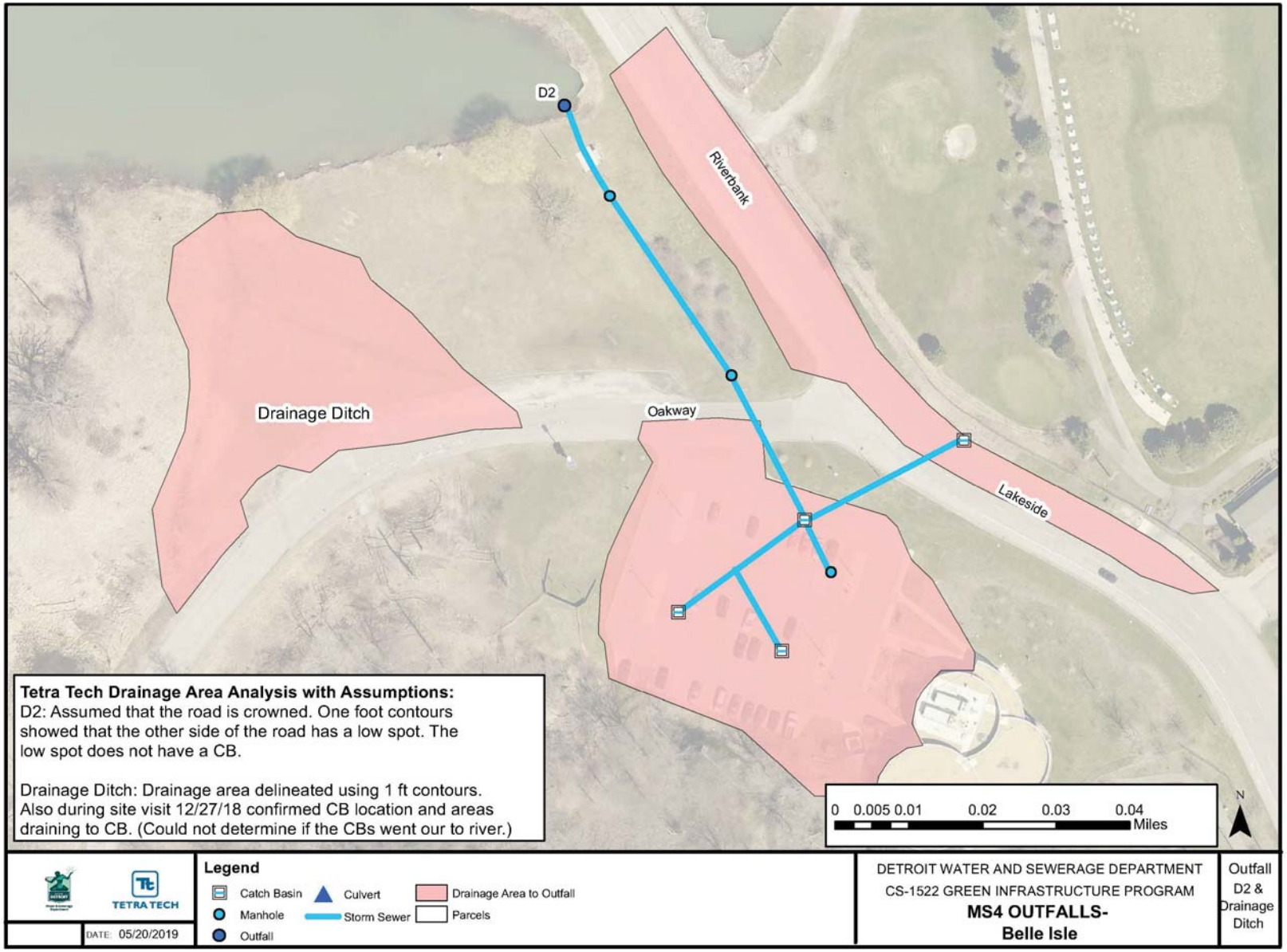


Figure 3: D2 OUTFALL

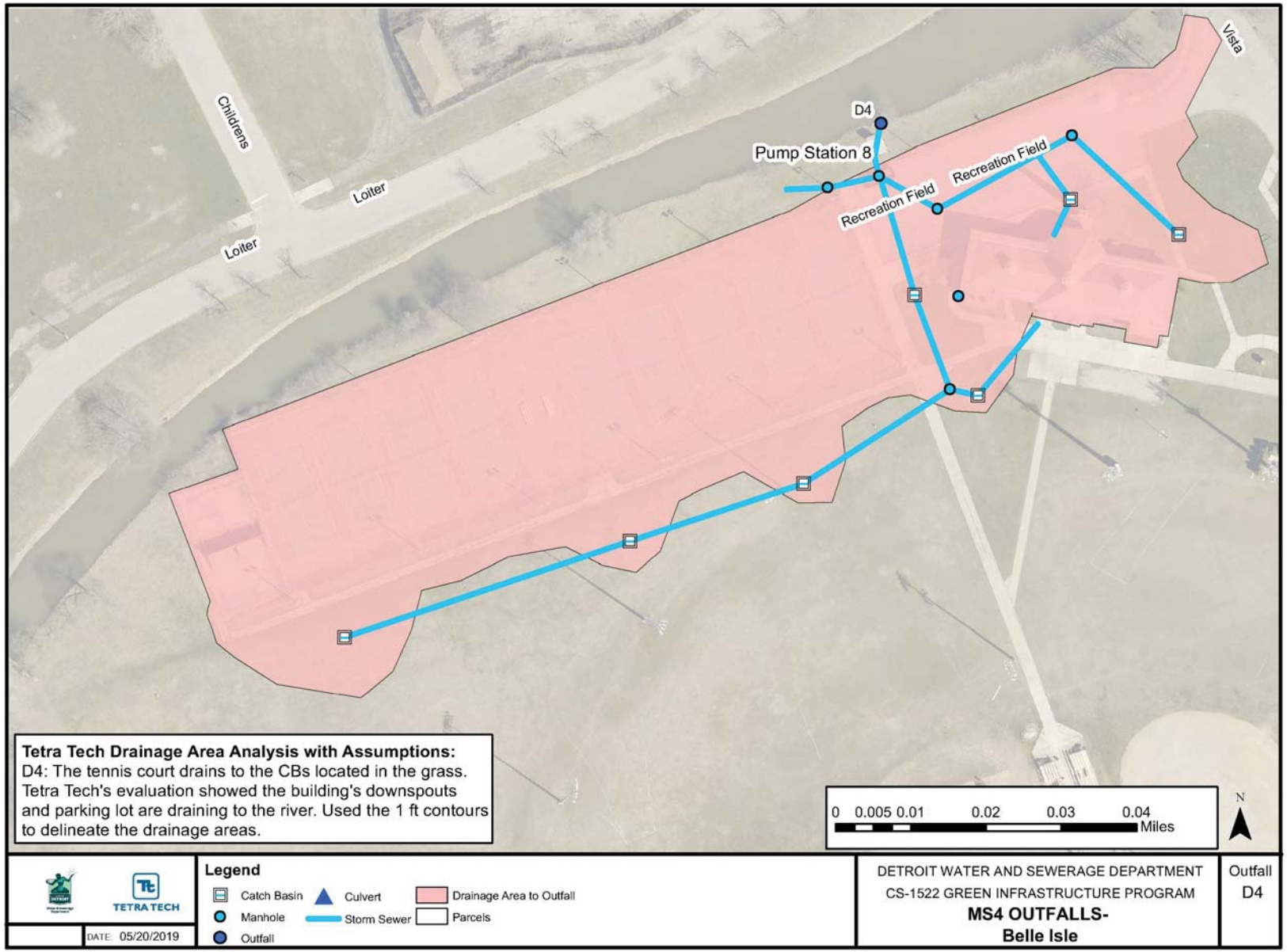


Figure 4: D4 OUTFALL

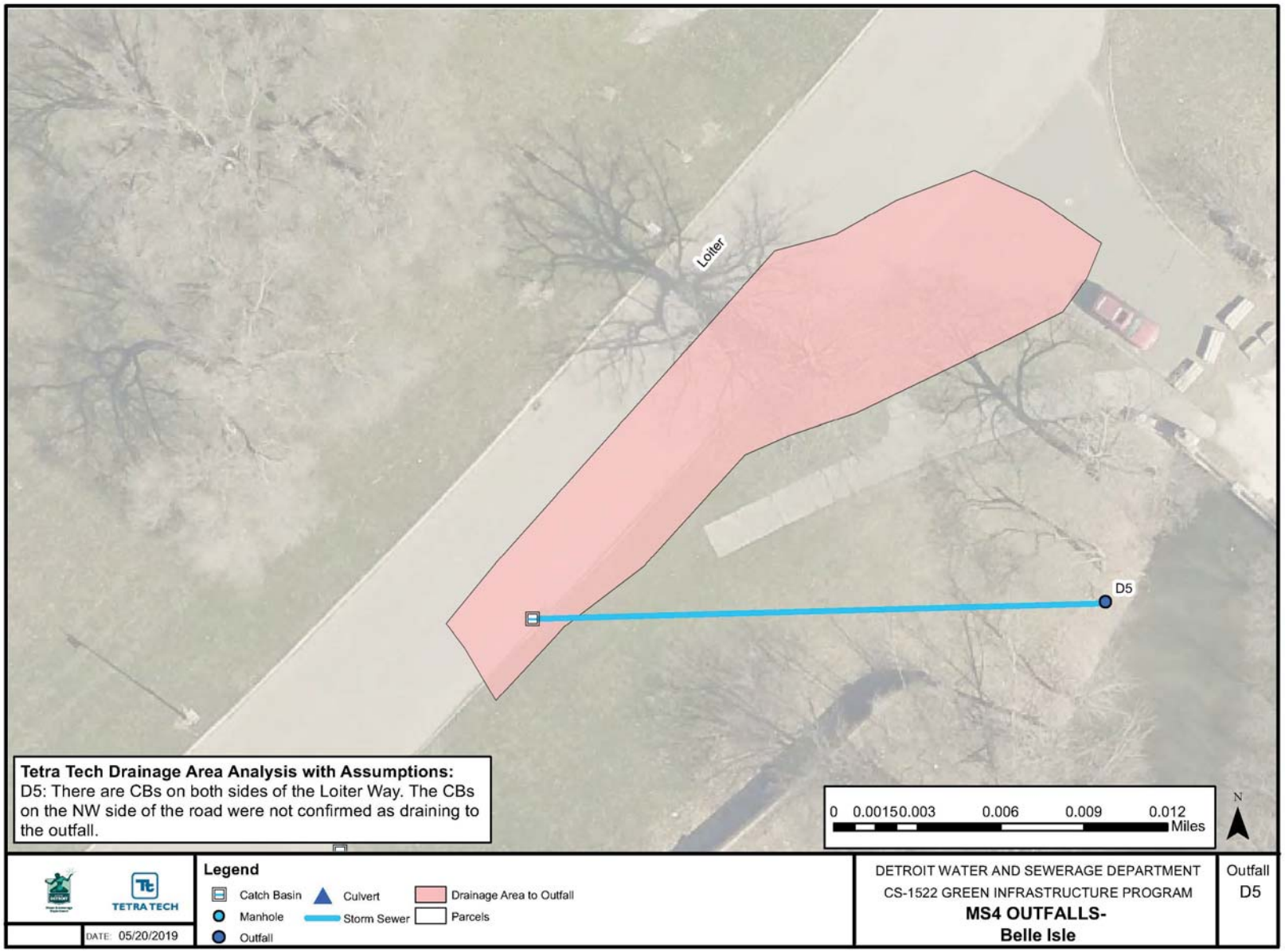


Figure 5: D5 OUTFALL

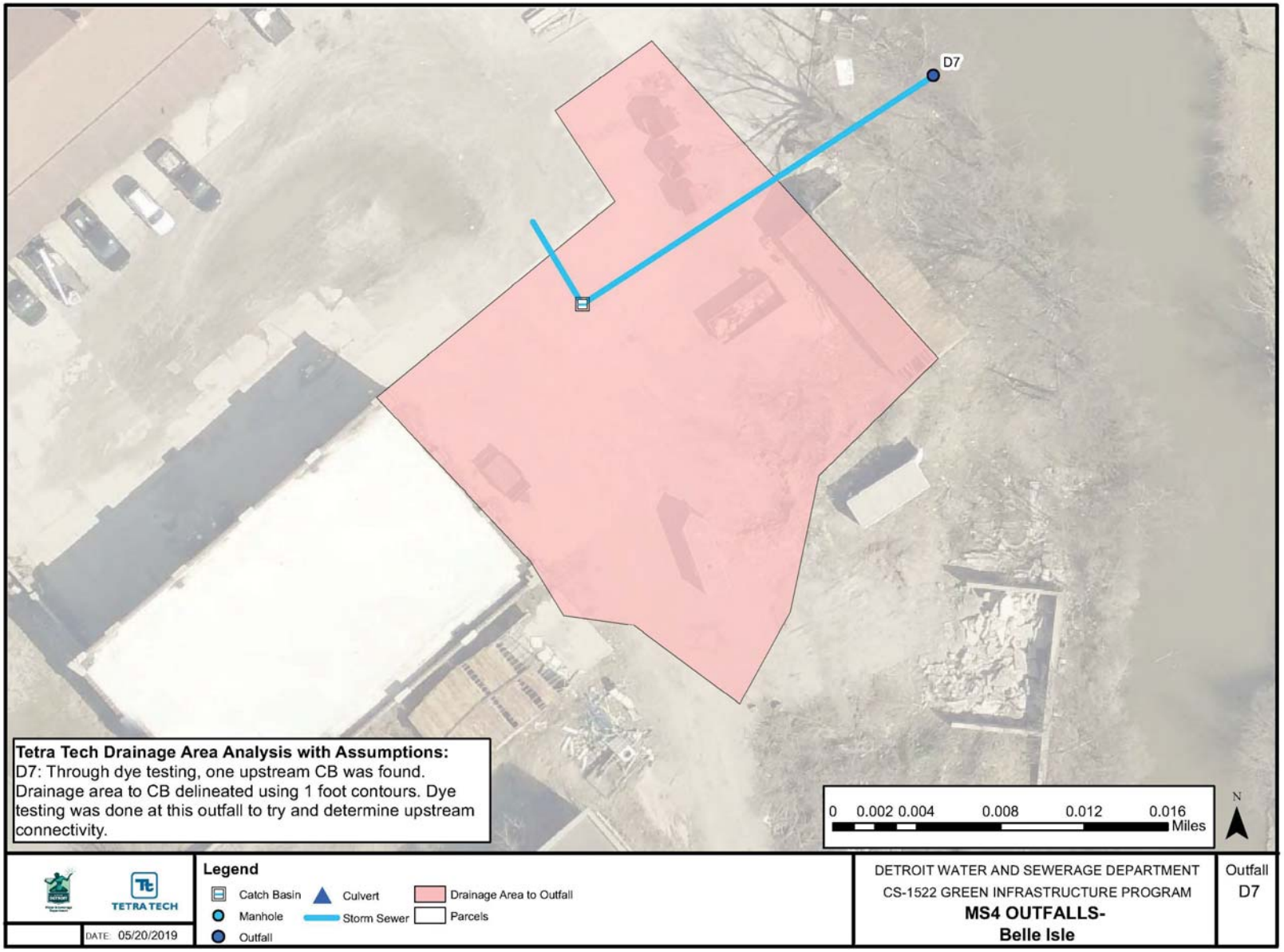


Figure 6: D7 OUTFALL

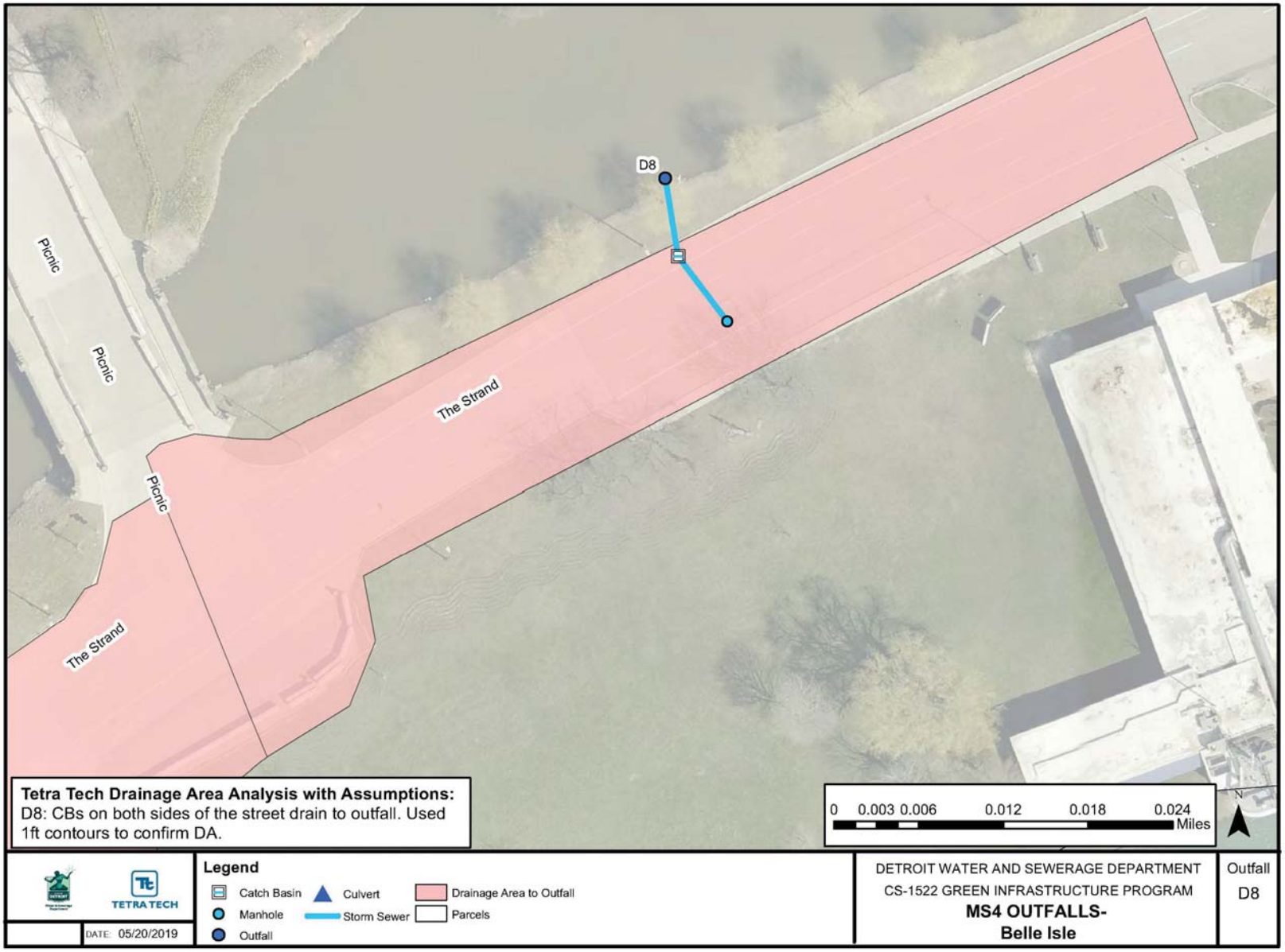


Figure 7: D8 OUTFALL

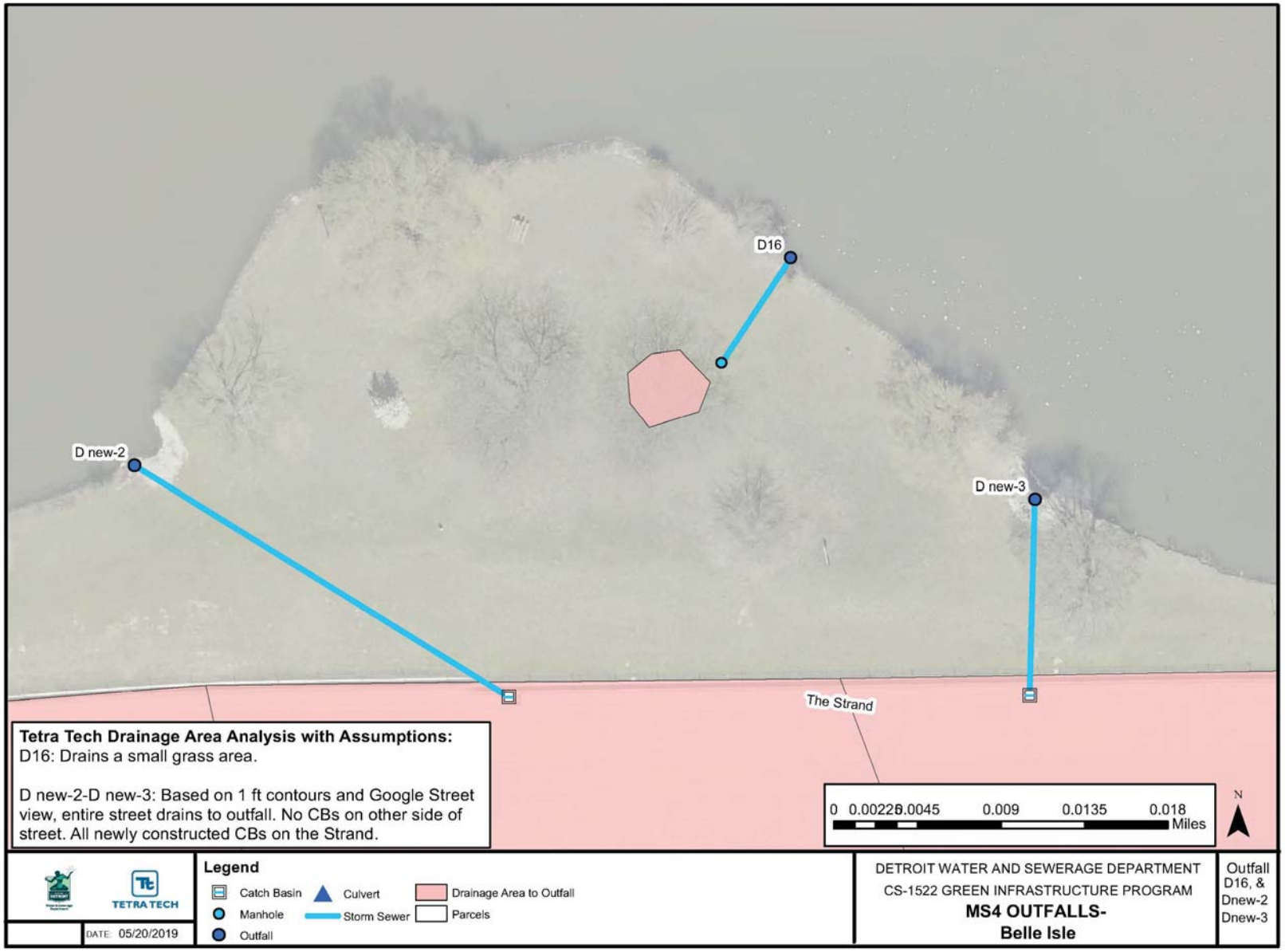


Figure 8: D new-2, D new-3, D16 OUTFALLS

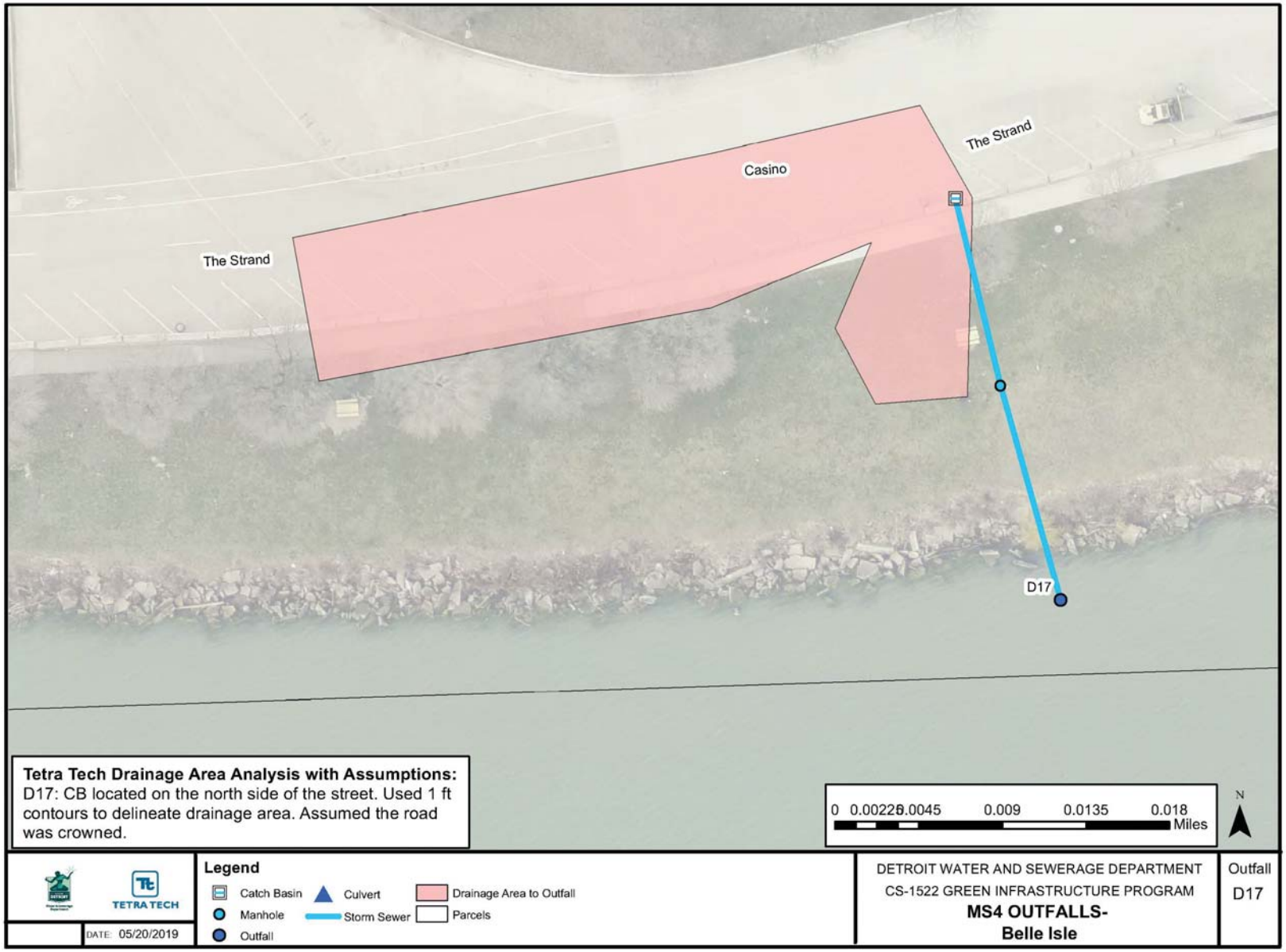


Figure 9: D17 OUTFALL

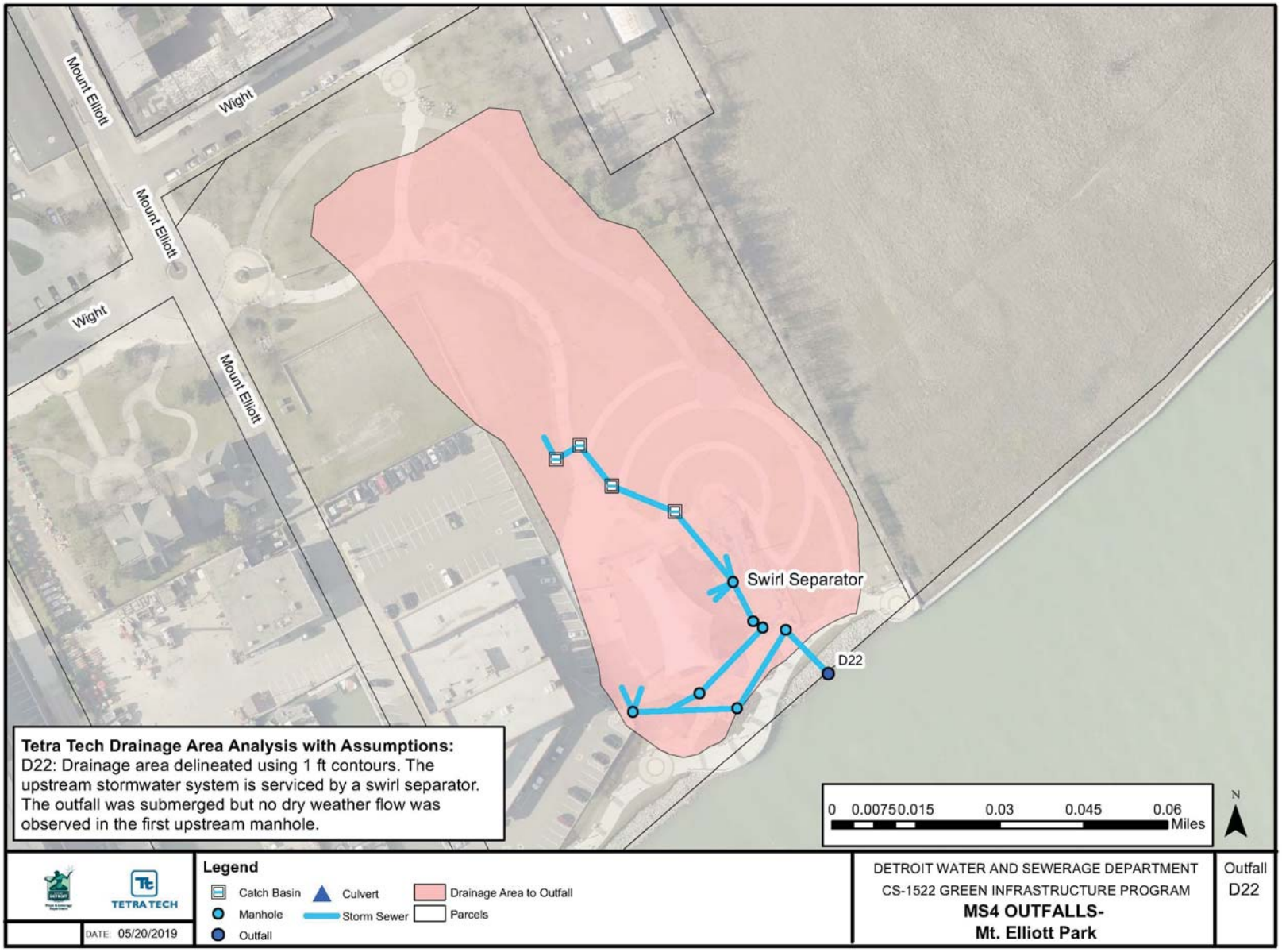


Figure 10: D22 OUTFALL

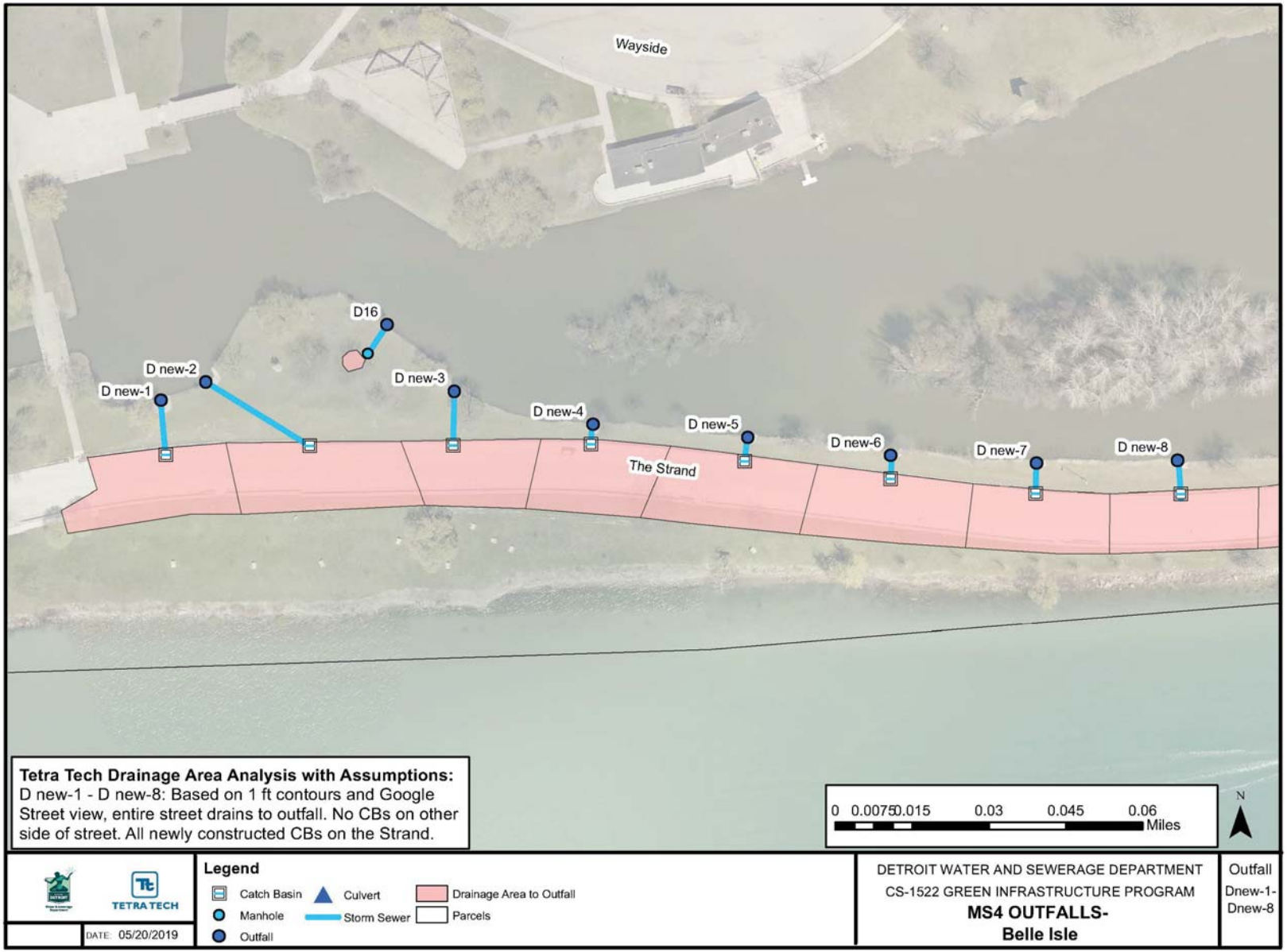


Figure 11: D new-1, D new-2, D16, D new-3, D new-4, D new-5, D new-6, D new-7, D new-8 OUTFALLS

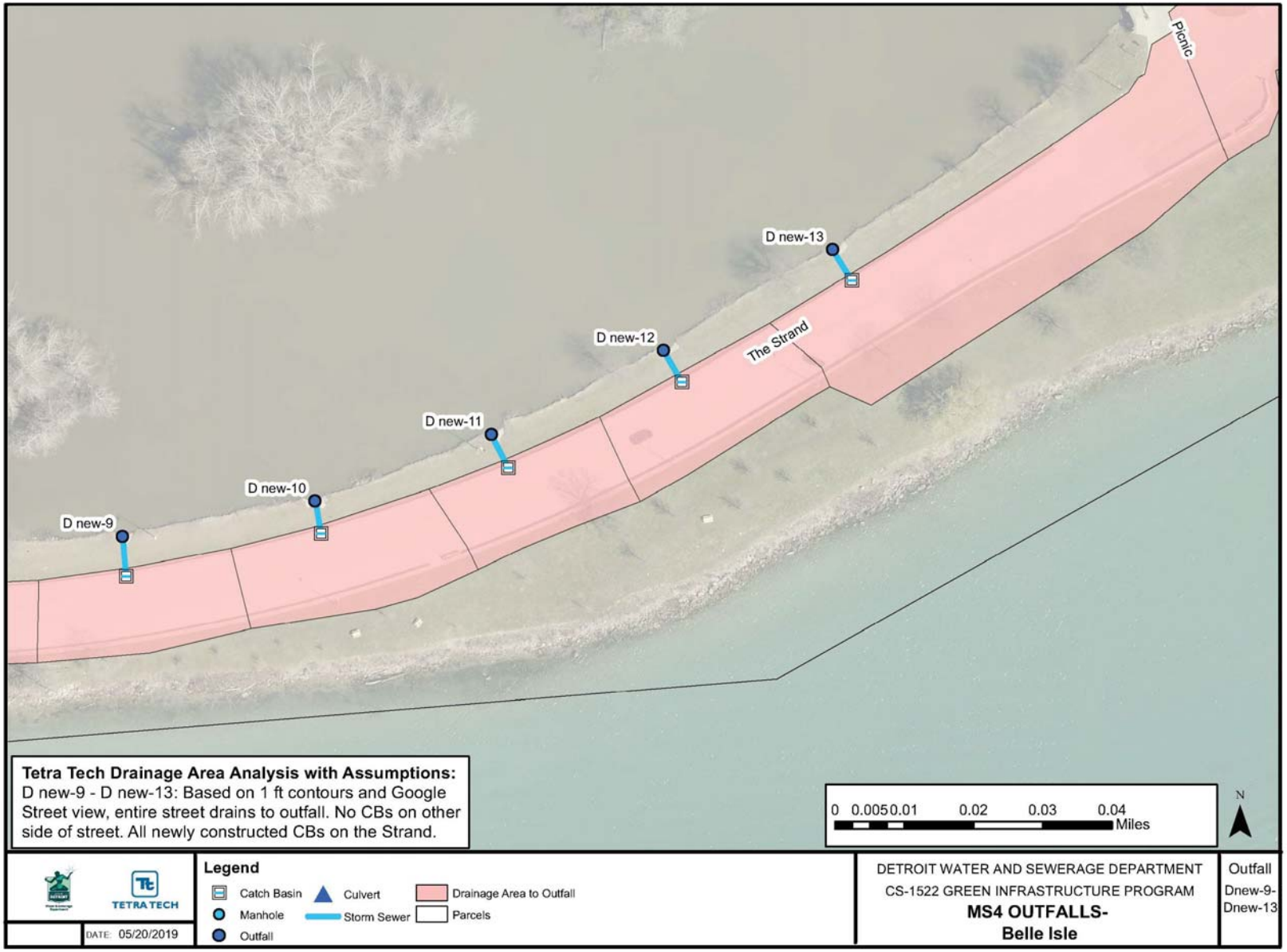


Figure 12: D new-9, D new-10, D new-11, D new-12, D new-13 OUTFALLS

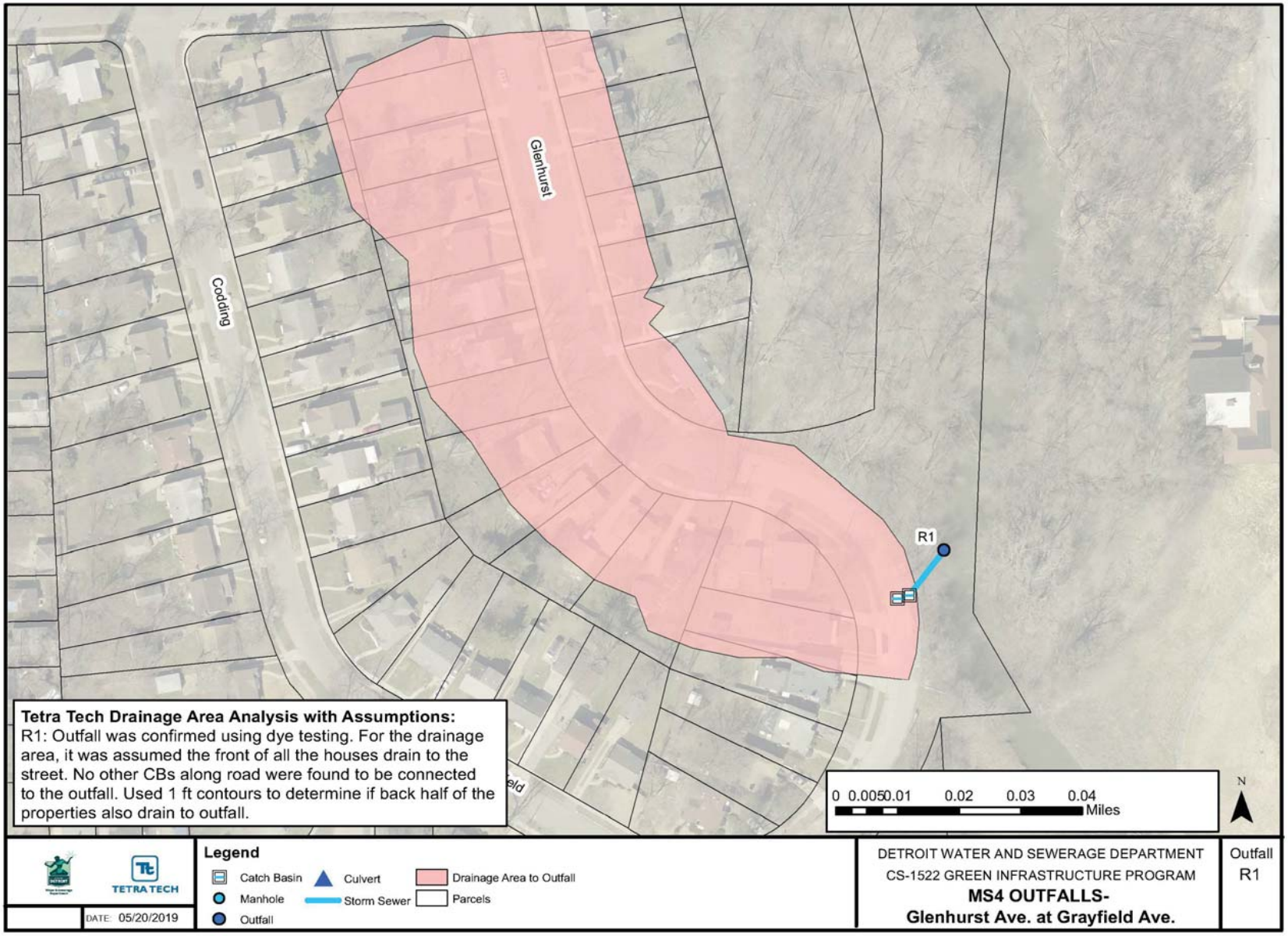


Figure 13: R1 OUTFALL

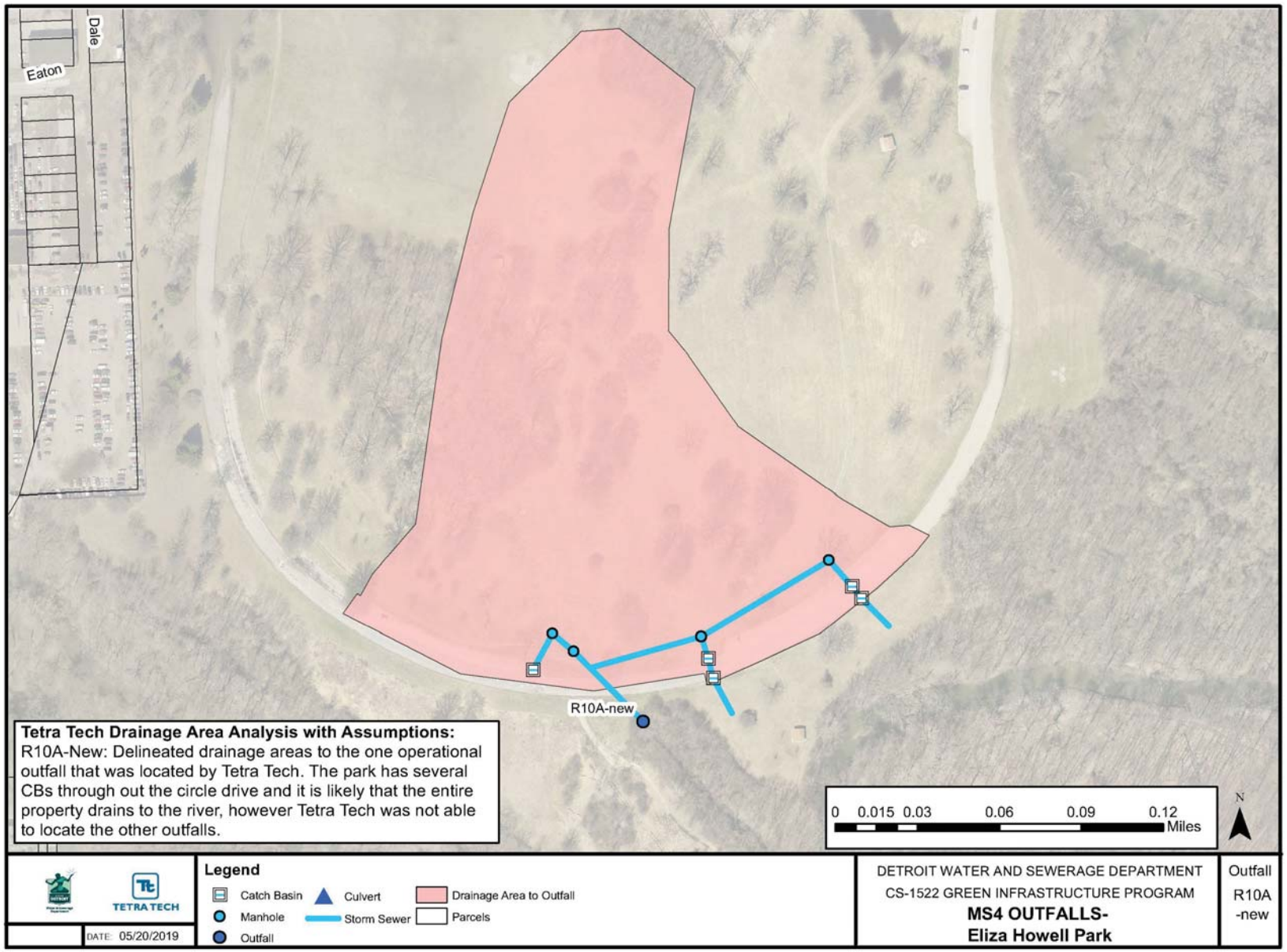


Figure 14: R10A-new OUTFALL

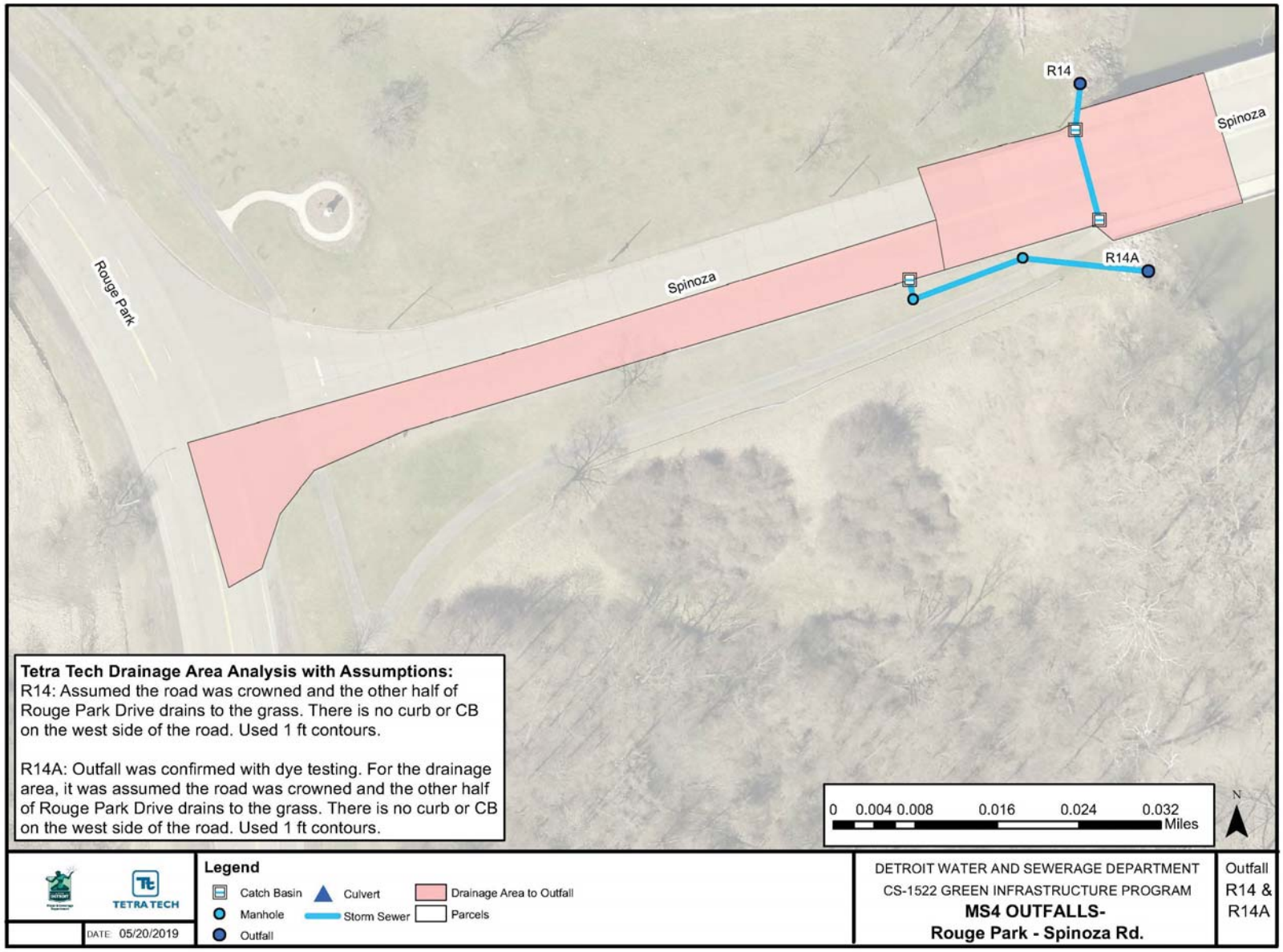


Figure 15: R14, R14A OUTFALLS

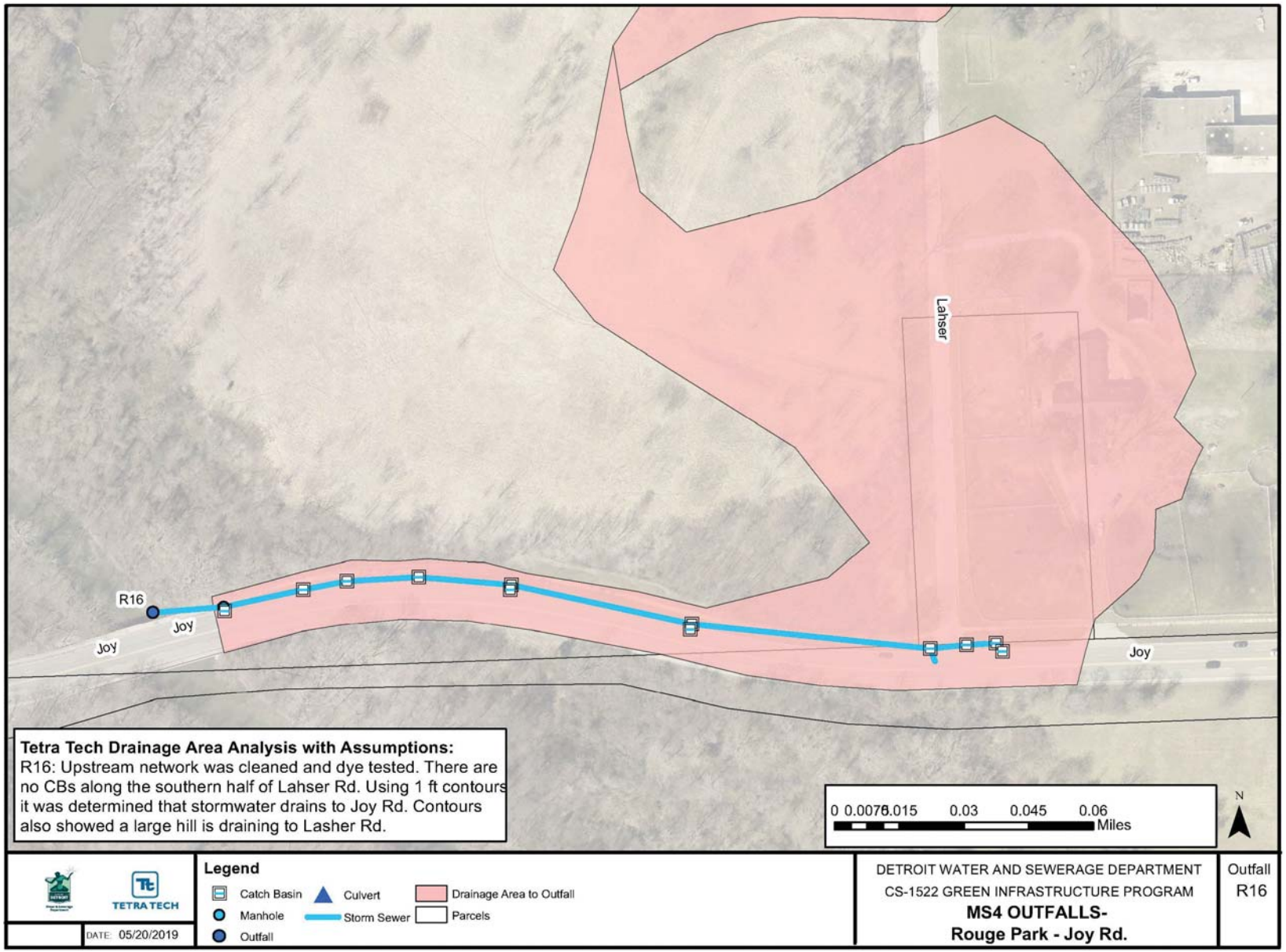


Figure 16: R16 OUTFALL

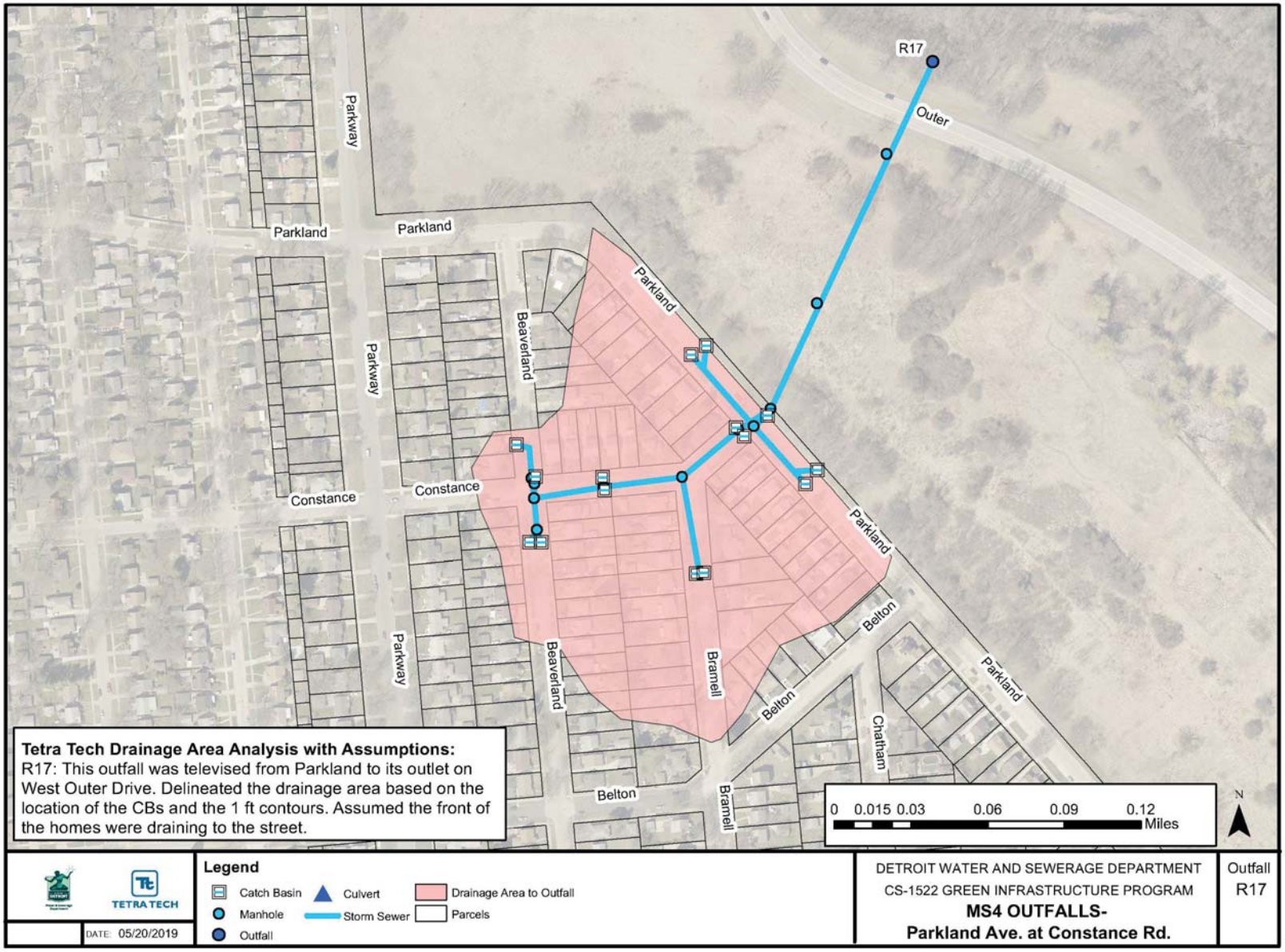


Figure 17: R17 OUTFALL

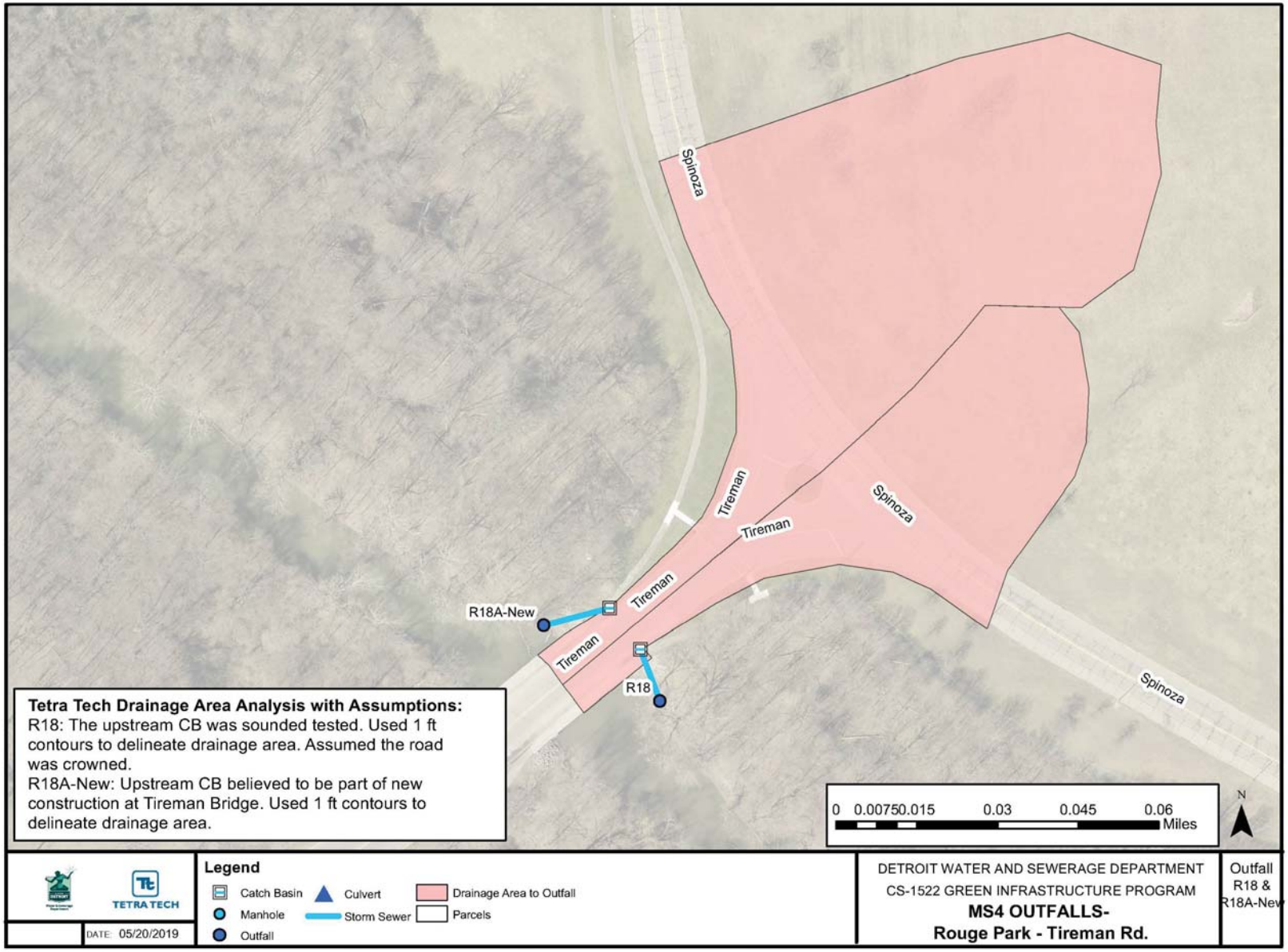


Figure 18: R18A-new, R18 OUTFALLS

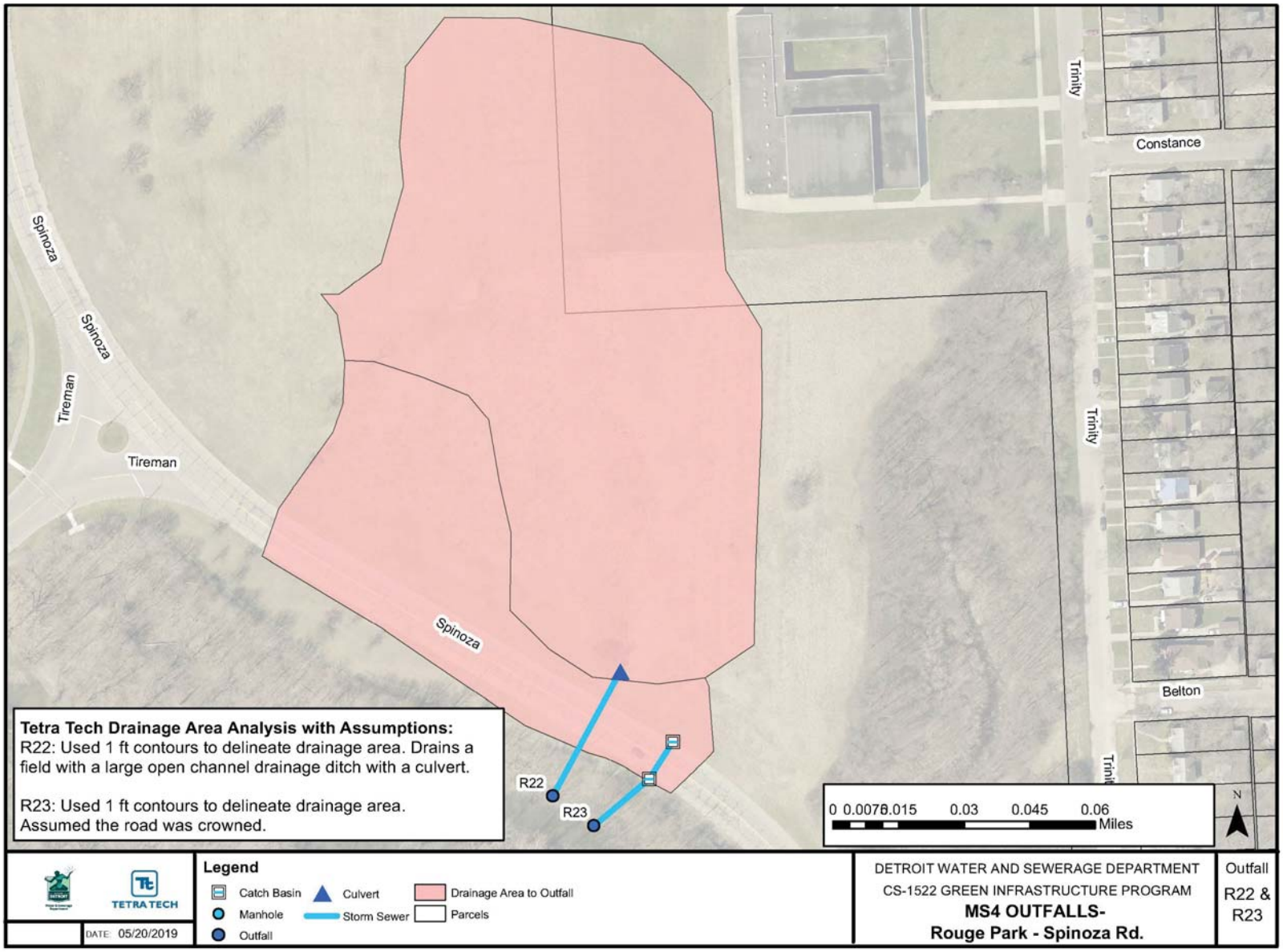


Figure 19: R22, R23 OUTFALLS

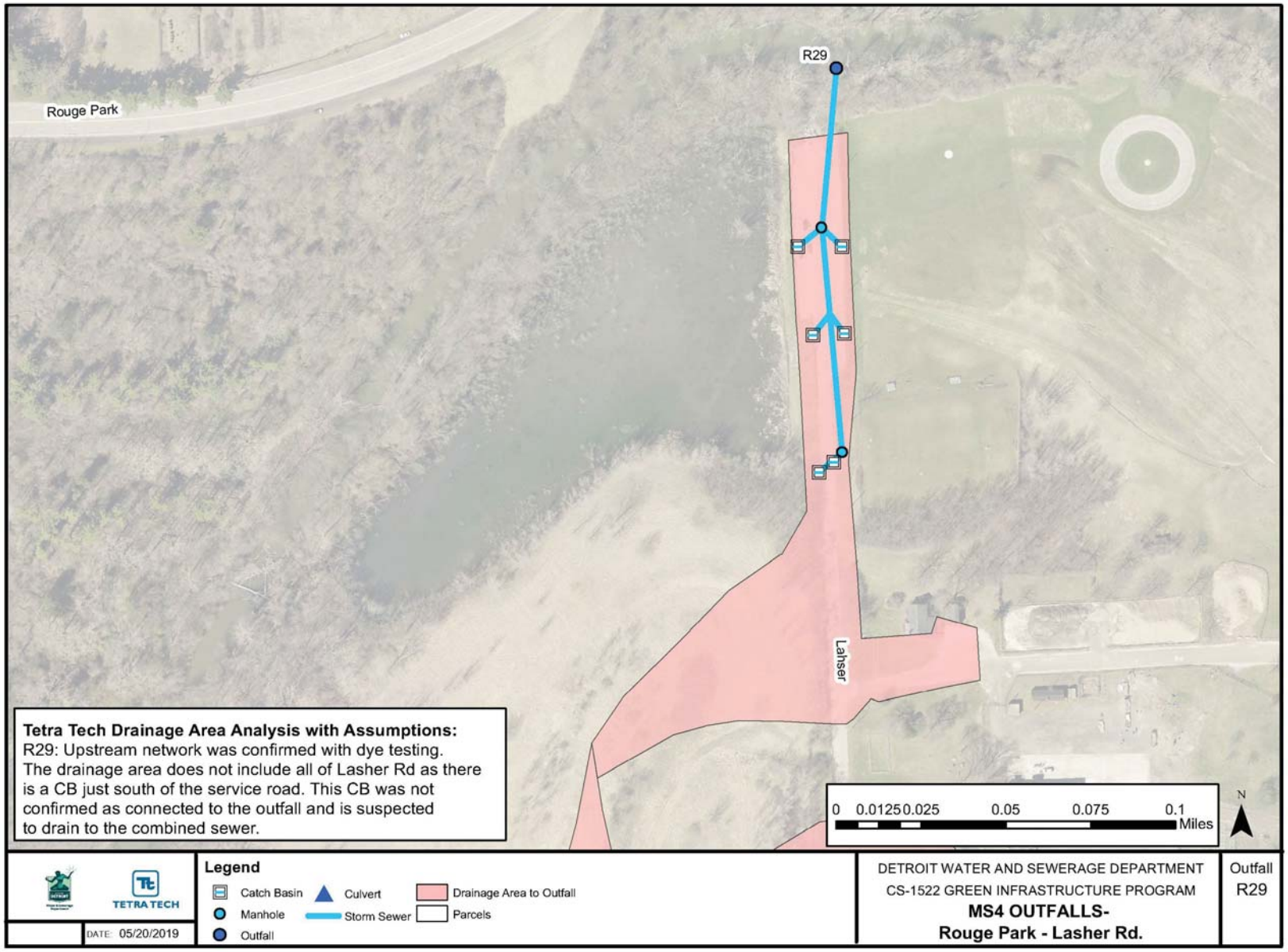


Figure 20: R29 OUTFALL

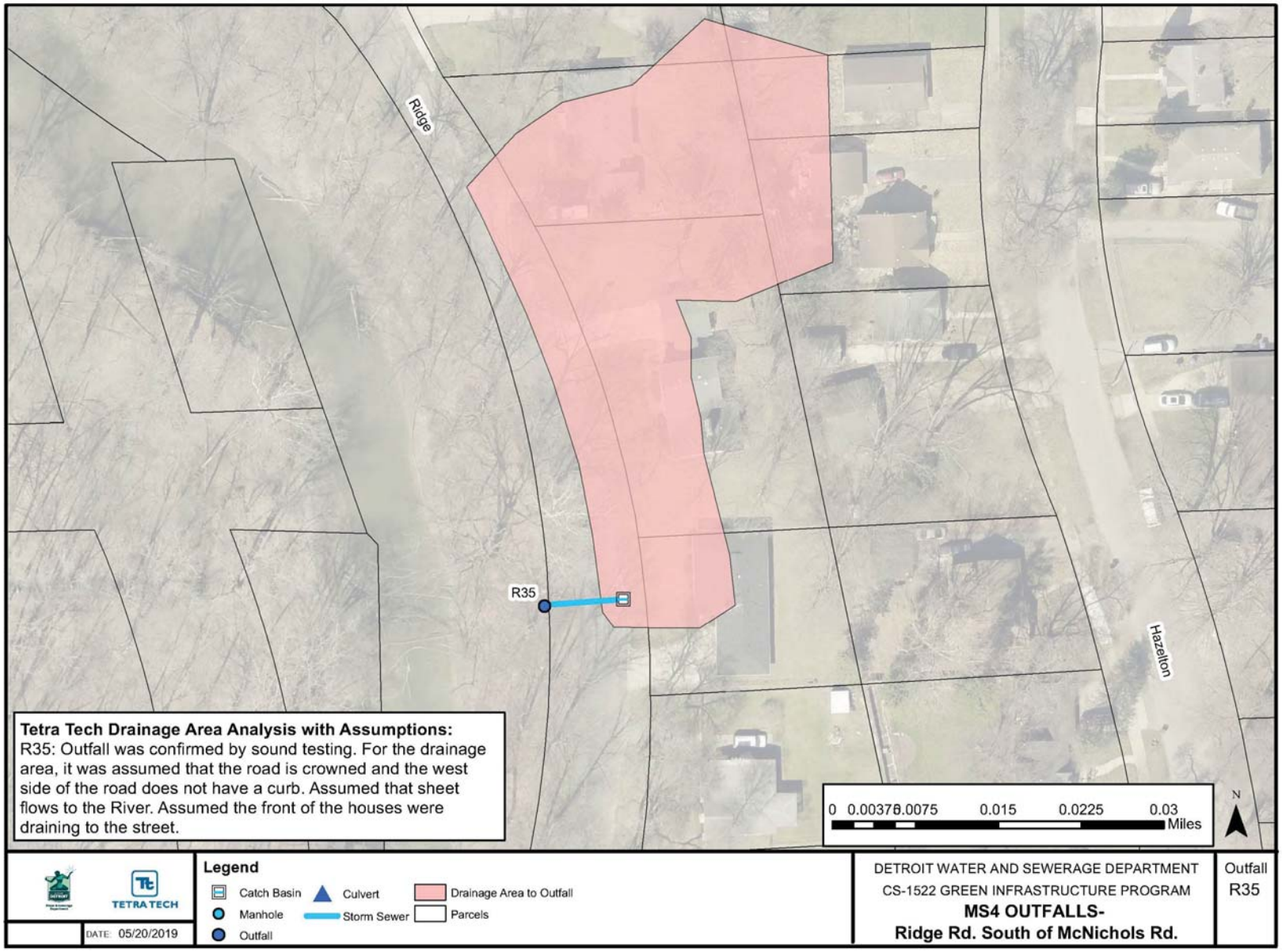


Figure 21: R35 OUTFALL

3.0 STORMWATER MANAGEMENT PLAN (SWMP)

The City of Detroit has developed and is implementing a SWMP which is designed to reduce the discharge of pollutants from the drainage area tributary to the City's MS4 to the maximum extent practicable. The program includes the development and implementation of BMPs to address the measures set forth in the general stormwater NPDES discharge permit. The program includes measurable goals for the Best Management Practice (BMP) and establishes a schedule for implementation if the BMP is not already implemented.

After January 2016, the City of Detroit, with DWSD as the lead Department, assumed responsibility for managing the MS4 permit, including preparation of the biennial update of the SWMP Progress Report. DWSD is also the lead department for managing the Green Stormwater Infrastructure (GSI) Program required under NPDES Permit MI-0022802, providing coordination between these two programs.

The BMPs established for the SWMP reflect the specific conditions within the City of Detroit tributary to the MS4 system. A total of thirty-four (34) storm sewer outfalls have been identified as part of the City's MS4 inventory, including 22 discharges to the Detroit River and its tributaries, and 12 discharges to the Rouge River. A majority of the storm sewer outfalls and tributary drainage systems are found within the City's owned parks including Belle Isle which is leased to the State of Michigan. Only 85 residential homes are included in the MS4 area and there are no industrial or commercial properties. Of the City's total acreage of over 90,000 acres, approximately 70 acres make up the MS4 area.

Based on these land uses and the fact that the drainage area tributary to separated storm sewer discharges is extremely small, a limited number of stormwater BMPs are being implemented. A variety of stormwater management programs are being developed and implemented as part of the City's Long Term CSO Control Program, pursuant to Permit No. MI0022802, including the installation of green stormwater infrastructure (GSI) and implementation of a new Post-construction Stormwater Management regulation which are intended to have a much larger impact. DWSD has also re-vamped their drainage charge program to include incentives (fee credits) for property owners to install and adequately maintain GSI on their properties.

3.1 Implementation Efforts

3.1.1 BMP No. 1: Public Participation/Involvement Program (PPP)

Due to the very small drainage area tributary to the City's storm sewer system and the fact that this property is mostly park areas, the SWMP did not include the creation of new organizations or forums for purposes of public involvement/participation. However, the City has made copies of the SWMP available to the public, including distribution of the plan to local stream and watershed protection organizations, and has continued current forums for public involvement/participation.

Detroit continues to fulfill the following activities associated with public involvement:

1. Provided a link to a memo summarizing the SWMP on DWSD's website.
2. Distributed copies of the SWMP memo for public inspection at public libraries.
3. Distributed copies of the SWMP memo to various organizations involved with stormwater management and green infrastructure. This included the Friends of the Rouge, Friends of the Detroit River, Friends of Rouge Park, Friends of Belle Isle, SEMCOG, and the Alliance of Rouge Communities.
4. Continuing to work with SEMCOG staff to assist with public involvement/participation efforts on a variety of issues affecting Detroit including stormwater management and green stormwater infrastructure.
5. Continuing to cooperate with and participate in the ongoing work and special events coordinated by Friends of the Rouge, Friends of Rouge Park, Friends of Belle Isle Park; Friends of the Detroit River and various Neighborhood Organizations. This effort includes communication on topics such as DWSD's ongoing green stormwater infrastructure.
6. The PPP contact information where the public can submit comments is the Stormwater Management Group (SMG), 6425 Huber Street, Detroit, MI 48211.

3.1.2 BMP No. 2: Public Education Program (PEP)

The PEP is currently focused on visitors in park areas where storm sewers have been identified, which includes Belle Isle and Rouge Park. Detroit has also posted signage at Belle Isle Park and Rouge Park regarding storm water management practices. Representative photos of the signage/stenciling installed at the Rouge Park are included in **Appendix M.**

Due to the small area of the MS4 and limited activities within the MS4, the newly proposed activities on the PEP will be completed via the website and links to the Friends of the Rouge, SEMCOG, Wayne County and other appropriate agencies to educate the small number of residential homes (approximately 85) in the City's MS4 area as there are no commercial or industrial properties in the MS4 area. It should also be noted that there are no septic tanks in the MS4 area.

DWSD will review the website periodically and update accordingly. Topics such as pet waste, car washing, lawn care, hazardous waste will all be topics on DWSD's website to educate and help minimize the potential for illicit discharges. Website topics are presented as follows:

Pet waste disposal
Website: https://semcog.org/protect-our-waterways#770114-what-you-can-do-about-pet-care
Flyer: https://semcog.org/Portals/0/Documents/What-You-Can-Do/To-Protect-Our-Waterways/PetCare.pdf

Residential Car washing
Website: https://semcog.org/protect-our-waterways#770113-what-you-can-do-about-car-care
Flyer: https://semcog.org/Portals/0/Documents/What-You-Can-Do/To-Protect-Our-Waterways/CarCare.pdf

Proper Disposal of Hazardous Wastes, etc.

SEMCOG website: https://semcog.org/protect-our-waterways#770118-what-you-can-do-with-household-hazardous-waste
SEMCOG flyer: https://semcog.org/Portals/0/Documents/What-You-Can-Do/To-Protect-Our-Waterways/HouseholdHazardousWaste.pdf
Detroit website: https://detroitmi.gov/departments/department-public-works/refuse-collection/household-hazardous-waste-information
Wayne County website:
https://www.waynecounty.com/departments/environmental/landresources/household-hazardous-waste.aspx

Other links:
Storm drain information: https://semcog.org/protect-our-waterways#770117-what-you-can-do-about-storm-drains
Landscaping: https://semcog.org/protect-our-waterways#770116-what-you-can-do-with-landscaping

Under the PEP component, Detroit has undertaken several BMPs including:

1. Encouraging reporting (e.g. illegal dumping or clogged drains) via the City web site and providing a new mobile application 'Improve Detroit' for reporting. People reporting issues are offered drop down menus and are asked to provide location, information that describes the concern, identify the license plate number of vehicles suspected of illegal dumping, and even upload photos to assist with follow up investigations. The same reporting can be done on Detroit's SeeClickFix website.
2. Continuing the City's household hazardous waste collection program for proper disposal of pesticides, herbicides, fertilizers, motor vehicle fluids, batteries, cleaners and other potentially hazardous materials. This program is managed by the Greater Detroit Resources Recovery Authority (GDRRA) and the Department of Public Works. The service is free to City of Detroit residents. Information on the program is detailed on the https://detroitmi.gov/document/household-hazardous-waste
3. Continuing the household compostable waste program with the regular trash and recycling curbside collection service. Collectable yard wastes include leaves, grass clippings and twigs which are picked up on a biweekly basis. https://detroitmi.gov/news/city-announces-improvements-bulk-yard-waste-collections-schedule-changes-some-residents
4. Detroit also initiated a stenciling program for storm drain catch basins in the MS4 area in order to discourage dumping of wastes into drains which go directly to the river with no treatment. This program will be completed under DWSD's supervision in 2020.
5. Educating the general public regarding responsibilities and stewardship in their watershed and providing overviews of programs and initiatives to support stormwater management. DWSD website currently has information on the benefits of green infrastructure and Low Impact Development including information of the GSI practices that have been constructed in the City. Information is also included the Post Construction Stormwater Management Regulation and Stormwater Management Design Manual. DWSD also provides the annual progress report for DWSD's Green Stormwater Infrastructure (GSI)

Program.
https://detroitmi.gov/departments/water-and-sewerage-department#Programs-and-Initiatives
https://detroitmi.gov/departments/water-and-sewerage-department/stormwater-management-and-drainage-charge/green-infrastructure-projects

There are 85 homes within the MS4 area. Due to the small size and limited activities in the City's MS4, metrics for effectiveness of the PEP will include a counter on the DWSD website, counting the number of visitors to the site. DWSD will distribute a flyer to the 85 homes informing them of MS4 program and the links to the DWSD website as well as DWSD – SMG's group contact information.

DWSD will also conduct a survey of 3% of the homes (typical response rate of social surveys) which would include calling three houses once a permit cycle to ask them a list of questions on MS4 issues. To determine effectiveness, questions will be asked that indicate behavior change or increased awareness to stormwater management.

3.1.3 BMP No. 3: Illicit Discharge Elimination Program (IDEP)

The IDEP focuses on the development and implementation of measures to identify and effectively eliminate illicit discharges to the City-owned separate storm sewer system. All known MS4 outfalls have been inspected using outside contractors to provide field investigation support to the City. Field observations were conducted during dry weather periods to determine whether any supplemental investigation, such as sampling and inspection is needed. The City already has the legal authority to prohibit discharges into the storm drainage system. Copies of the applicable regulations were previously provided to EGLE and are included in **Appendix A, B, and L**. The City's ordinance does not specifically address discharges or flows from firefighting activities and other non-stormwater discharges and/or flows. The City has plans to revise the City's ordinance to include the exclusions of acceptable non-stormwater discharges as outlined in NPDES regulation.

The previous field investigation work has confirmed that the City owned storm sewers are not located in areas where drainage from septic tanks needs be considered. The potential for a physical connection from a sanitary sewer to the storm sewer is also quite limited recognizing that most of the area tributary to the storm sewers is open land with no nearby combined or sanitary sewers. Very few of the 34 storm sewers are located within 100 feet of a combined/sanitary sewer. Given the very small probability of seepage infiltrating into the storm drainage system from a sanitary sewer or on-site sewage disposal system, Detroit has determined that establishing a new program to limit infiltration of seepage is not warranted or cost effective.

The activities associated with the IDEP BMP include the following:

1. Provide a map of all existing outfalls. The latest version of this map is included as Figures 1 - 21 of this plan. Updated maps of the confirmed MS4 outfalls will be stored at the DWSD Stormwater Management Group (SMG) office at 6425 Huber, Detroit, Michigan, 48211.

2. Update the inventory of MS4 City-owned storm sewers and the storm sewer maps as necessary to incorporate new or newly discovered storm sewers.
3. Conduct training for City staff for activities such as the identification of illicit discharges and related efforts such as sampling, source detection and elimination in the event that this activity is performed by City staff.
4. Conduct field screening through visual inspection of outfalls once every permit cycle. If field screening indicates a dry weather discharge or presence of suspicious indicators (i.e. oil, odors, sewage) samples will be collected and analyzed for indicator parameters within 24-48 hours of flow discovery. The IDEP investigation will be documented and stored at the DWSD SMG office.
5. Field observations will be conducted at all outfalls and points of discharge within the MS4. Due to the small size of the MS4, outfalls will not be prioritized.
6. Where appropriate, investigating upstream drainage area to look for possible cross-connections, sanitary sewer seepage, or other illicit connection sources.
7. DWSD will initiate a source investigation 30 days after receiving analytical results from samples that were collected during field screening. However, due to the small size of the MS4 area and the fact that there have been no illicit discharges in the MS4 area, DWSD feels that a procedure and schedule for illicit discharges not identified during field screening is warranted.
8. For procedures responding to illegal dumping or spills, once DWSD's SMG is notified, SMG will respond to the complaint within 48 hours and initiate field inspections, follow-up screening and source investigations as appropriate. The schedule will be accelerated based on the complaint and/or threat to stormwater and receiving waters.
9. Once DWSD's Stormwater Management Group (SMG) is notified, SMG group will address the illicit discharge within 48 hours and initiate response actions. The schedule will be accelerated based on the illicit discharge and/or threat to stormwater.
10. DWSD has a 24-hour emergency hotline to report releases of any polluting materials from the MS4. The emergency hotline number is (313) 267-7401 and posted on DWSD's website. The EGLE Warrant District office (586-753-3700) will also be added to the website for calls during office hours.
11. Taking corrective measures as appropriate to eliminate illicit connection sources. Due to the small area of the MS4 and that no illicit discharges have been found, the procedure will be to document and identify a root cause and corrective action. Depending on the root cause, corrective actions may include one or any of the following re-sampling, source investigation, increased inspections, and/or increased training.
12. DWSD personnel that conduct maintenance operations will receive IDEP training. A training module will be used that has been created by Wayne County (**Appendix I of SWMP**). Personalized DWSD updates of this module are scheduled for completion by June 2020. Training will be conducted for identified personnel once per permit cycle and within the first year of hire for new staff. Because much of the MS4 area includes parks, the training module will be supplied to park personnel outside of DWSD.
13. DWSD SMG personnel as well as DWSD catch basin inspectors participated in a SEMCOG IDEP and Good Housekeeping on training October 23rd, 2019 and 24th, 2019.

Results of dry weather stormwater outfall inspections and collected samples in May 2018 are presented in a report that is available for review at DWDSD-SMG and included as **Appendix G**.

All catch basins draining to an MS4 outfall were checked for dry weather flow. No dry weather flow was found in any of the confirmed outfalls. Therefore, analytical testing was not needed.

3.1.4 BMP No. 4: Construction Stormwater Runoff Control

While there have been no construction projects in the MS4 area which have warranted issuance of a SESC Permit, construction projects disturbing one acre or more within areas tributary to the City-owned storm sewers are addressed through the City's BSEED site plan review process. The site plan review process also addresses projects less than one acre that are part of a larger common project that will disturb one acre or more. In addition, Wayne County continues to enforce its stormwater management program to any new and re-development projects within its jurisdiction of Detroit's storm sewer area. Wayne County is the current enforcing agency for Part 91 permits within the City of Detroit.

The supporting documentation for the Post-Construction Stormwater Management Plan Application requests a copy of all applicable state and federal permits related to erosion, water resource and stormwater management of the regulated project and therefore, if these permits are required by the landowner or recorded easement holder, they will be identified during the site plan review process and included along with other deficiencies in the correspondence with the applicant.

In addition, it should be noted that the Stormwater Management Design Manual directs applicants to Wayne County's SESC program and well as the EGLE's Permit-by-Rule requirements.

The BMPs for construction site stormwater runoff control include:

1. Continue existing site plan review process which ensure that site plans adequately allow for soil erosion and sedimentation controls, as applicable.

2. Immediately notify the local SESC agency and EGLE when soil and sediment are discharged to the MS4 from construction activity in violation of a soil erosion and sedimentation control permit. Also, immediately notify EGLE when other wastes are discharged from construction activity in violation of a permit. Refer to ERP.

3.1.5 BMP No. 5: Post-Construction Stormwater Runoff Control

In November 2018, the City of Detroit adopted a post-construction stormwater management regulation citywide referred to as the Stormwater Management Regulations. These regulations apply to any new development or redevelopment which creates or replaces 0.5 acres (21,780 square feet) or more of impervious surface. The applicant may apply for alternative compliance if they demonstrate and quantify the presence of extraordinarily difficult site conditions. Extraordinarily difficult site conditions consist of: 1) sub-surface conditions limiting the infiltration (soil contamination or high groundwater); 2) Unique conditions that would require

substantial re-grading; 3) Potential for off-site basement flooding; 4) conditions that require pumping of stormwater; and 4) other-department judgement. Options for alternative compliance include off-site migration and in-lieu fee. DWSD's Stormwater Management Regulation and Stormwater Management Design Manual are posted on DWSD's website and included as **Appendix J**.

In support of the Stormwater Management Regulations, DWSD developed a Stormwater Management Design Manual. The design manual serves as a resource for applicants to ensure compliance with the stormwater management regulation and addresses the permit requirements (Part I.A.15.d.9) pertaining to stormwater controls for projects requiring a Part 91 construction permit issued by EGLE. In addition to general green stormwater infrastructure design guidance, the manual provides information on the following:

- Applicability of the requirements for new development, redevelopment, and municipal projects including roadway improvements.
- Provides up-to-date precipitation data, as well as acceptable methods for calculating runoff volumes and peak discharge rates.
- Design criteria for site drainage, roadway and parking lots, and flow conveyance of sewers, culverts, and open channels that will address water quantity and quality considerations. Design standards are specified for both the combined sewer areas and the separate sewer (MS4) areas.
- Overview of drainage design methodologies and acceptable practices.
- Stormwater control measure design considerations for systems such as green roofs, water harvesting, bioretention, tree plantings, porous pavements, and detention and retention basins.
- Guidance on required long-term operations and maintenance of stormwater management controls.

As part of the City's permitting process for this regulation, DWSD permitting staff reviews development/redevelopment projects and has the authority to require site conditions for the management of stormwater. With the addition of the DWSD Stormwater Management Group (SMG), these projects are also now routed to DWSD's SMG and reviewed by this group specifically to address any stormwater concerns and to make sure stormwater management practices meet design criteria as outlined in the stormwater design manual.

The BMPs for the post-construction stormwater management program for new development and re-development projects include the following:

1. As part of the site plan review and approval process, ensure that appropriate post-construction stormwater management practices are incorporated into any new or redevelopment project located in the MS4 area. This includes the requirement that a long-term maintenance plan be prepared and approved for any required stormwater controls.
2. At the completion of construction of all new and re-development projects for which post-construction stormwater runoff controls are required, DWSD reviews the project to determine whether it conforms to the terms and conditions of the approved site plan and

maintenance plan, including proper maintenance of any structural stormwater controls, if applicable.

Since the establishment of the new Stormwater Design Manual, there have been no new or re-development projects initiated in the MS4 tributary area.

3.1.6 BMP No. 6: Pollution Prevention/Good Housekeeping Program

The pollution prevention/good housekeeping efforts focus on minimizing the discharge of pollutants through the City's MS4 which are attributable to municipal operations. As required by the permit, the municipal properties which include one or more MS4 outfalls are listed below. The only structural stormwater controls at these properties are catch basins. As such, these facilities are prioritized all the same and given a low priority as low due to limited operations and activities.

- Rouge Park
- Belle Isle Park
- Mt. Elliott Park
- Lakewood East Park
- Portions of several roadways

Some permit requirements are not applicable or have limited applicability as follows:

- The maintenance of structural controls is limited to catch basins since no other structural controls exist in the storm sewer area. There are 78 catch basins in the City's MS4 area. Catch basin locations are in DWSD's GIS system are stored at the DWSD SMG office at 6425 Huber, Detroit, Michigan, 48211. Inventory and maps will be updated within 30 days of removing or adding a catch basin. An inventory of catch basins is provided as **Appendix D**.
- The plan does not address the storage, handling and use of pesticides as none are stored or applied in the park's areas.
- There are no vehicle maintenance facilities in the City's MS4 storm sewer area. There is a service yard on Belle Isle, which is operated by the State of Michigan via the lease agreement in 2013. Since the 2013 lease agreement, MDOT is responsible for all road maintenance on Belle Isle, (including street sweeping and salting).

Detroit's Pollution Prevention/Good Housekeeping Measures for Municipal Operations include the following BMPs to control sediments, the main pollutant of concern:

1. Perform routine maintenance of all structural stormwater controls in the MS4 area which consist of catch basins located in the MS4 portion of the municipal properties listed above. The only structural controls currently in place on Detroit's MS4 system are catch basins. Catch basins within the MS4 area will be inspected at least once every three years and cleaned when no more than 50% full. DWSD will be using their Cityworks maintenance program to schedule inspections. The cleaning crew inspects each catch basin to determine if more that 50% full and answers assessment questions. If more than

50% full, maintenance crews use vactor trucks for the catch basin cleaning. If additional maintenance is needed, an additional work order is added for the maintenance crew. Any sediment and sludge collected is emptied into the pits at DWSD's Central Services Facility. The pits are dewatered and dried out and stockpiled until taken to a landfill. The catch basin inspection and cleaning program is felt to be adequate to assess the parks and residential homes in the MS4 area.

   a. As noted on the catch basin spreadsheet in **Appendix D**, catch basins were inspected in 2017. The priority is rated as high as catch basins in the MS4 area are a priority of the rest of the City. For 2020, if any of the catch basin is found to be more than 50% full, the inspection frequency will be re-evaluated as well as the rating for the Park in which they are located.

2. Perform street sweeping and application in the MS4 area. DPW conducts street sweeping on an 11-week cycle which starts approximately April 1. The goal is to do three cycles each year and includes all streets within the City, including the MS4 areas. Belle Isle is not swept as this is the responsibility of the State. **Appendix H** provides the current street sweeping schedule for the City of Detroit. Proper sweeping methods include operating sweeping equipment in accordance with the manufacturer's operating instructions and to protect water quality. Disposal of the material collected through street sweeping is done through an outside contractor who charges the City based on weight of disposed material. Perform application of salt/deicing materials in the MS4 area during winter months in selected streets within the MS4 area. Residential roads are never salted and the City does no salting or plowing at Belle Isle as that is the responsibility of the State. Salt is used on some of the roads in the MS4 area.
3. Perform routine grass mowing in the parks. Buffer zones exist between the grass areas and the waterways to minimize impact on these waterways. The parks are not used for the purpose of snow stockpiling during winter. DWSD will conduct training to City park personnel that conduct maintenance operations. Training will be part of the Illicit Discharge Elimination Program training. Training will be conducted for identified personnel once per permit cycle and within first year of hire for new staff. Schedule for completion June 2021. At this time, DWSD is not aware of any contractors conducting activities in the MS4 area. DWSD will review the boiler plate language for contractors working for DWSD, to ensure that it addresses stormwater management. Belle Isle is under long term contract with the State of Michigan and the State conducts the lawn mowing at Belle Isle. Schedule for completion June 2021.
4. For Right-of-Way activities other than catch basin cleaning or street sweeping, such as road repairs, catch basins are typically blocked off to minimize the potential for sediments and millings discharging to the catch basins and SESC controls are implemented as outlined in BMP #4 – Construction Stormwater Runoff Control.

3.1.7 Total Maximum Daily Load (TMDL) Implementation Plan

This section establishes the plan to comply with the Total Maximum Daily Load (TMDL) elements of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit application questions 85 to 88. These requirements are as follows:

- Provide a procedure for identifying and prioritizing Best Management Practices (BMPs) to reduce the TMDL pollutants,
- Provide a list of BMPs that will be implemented to reduce the TMDL pollutants, and
- Provide a monitoring plan to access the effectiveness of the BMPs.

Applicable TMDLs

The U.S. Environmental Protection Agency has approved the following TMDL assessments that are applicable to the City of Detroit:

- Statewide TMDL for *E. coli* (July 2019). This TMDL applies to the Rouge River and supersedes the previously approved *E. coli* TMDL specific to the Rouge River.
- *E. coli* TMDL assessment for the Detroit River (August 2008).
- Biota (sediment) TMDL assessment for the Rouge River (August 2007).

There are also two statewide TMDL assessments for mercury (June 2018) and PCB (August 2013). These TMDLs cover the inland water bodies in the state primarily impacted by atmospheric deposition of the pollutant of concern. An implementation plan to address the atmospheric deposition of these pollutants is not required under the NPDES MS4 permit program at this time.

Table 2 summarizes the water quality targets identified in the TMDL assessment documents.

Table 2: TMDL Targets

Parameter	Target
E. coli	• 130 *E. coli* per 100 mL as a 30-day geometric mean and 300 *E. coli* per 100 mL as a daily maximum to protect the total body contact use from May 1 through October 31, and • 1,000 *E. coli* per 100 mL as a daily maximum year-round to protect the partial body contact use
Biota (sediment)	• Primary numeric target is based on the Procedure 51 biological community assessment protocol. The target is Procedure 51 results in a consistent “acceptable” or “excellent” rating. • Secondary target is a mean annual in-stream Suspended Solids (SS) concentration of 80 mg/L for wet weather events. Achievement of the biological target will override this secondary target.

Pollutant Sources

The suspected sources and causes associated with each of the TMDL parameters are provided in Table 3. Only those sources regulated under the MS4 permit and applicable to the City of Detroit are included in these tables.

Table 3: Potential Pollutant Sources and Causes

Parameter	Potential Sources	Potential Causes
E. coli	Illicit sanitary connections to the MS4	• Undetected or uncorrected illicit discharges
	Contaminated runoff during storm events carrying waste from pets, feral animals and nuisance wildlife	• Lack of knowledge or caring about the importance of pet/animal waste management. • Loss of pervious areas thru urban development.
	Contaminated runoff during storm events carrying waste from improper garbage disposal	• Lack of knowledge or caring about the importance of proper garbage disposal.
Sediment	Municipal infrastructure (e.g. roads)	• Loss of pervious areas from urban development. • Insufficient stormwater infrastructure maintenance.
	Flashy hydrology from large development projects contributing to in-stream erosion.	• Insufficient stormwater management of large development projects.

BMP Prioritization

Suitable BMPs are identified and prioritized based on the following criteria:

- *Multiple parameters*. BMPs that can impact multiple TMDL requirements are weighted higher than those impacting a single parameter.
- *Human health*. The ability of the BMP to affect human health impacts caused by direct contact with the river.
- *Pollutant concentration*. The ability of the BMP to impact the concentration of the pollutants (E. coli and sediment) in the receiving stream or reduce the runoff flashiness (peak flow).
- *Impact and cost*. The anticipated level of impact of the BMP compared to the added cost to implement.
- *Prerequisites*. BMPs that have prerequisite projects that must be completed before the BMP can be implemented are ranked lower than BMPs without prerequisite projects.

Only BMPs that the City has the legal authority to implement are considered. The prioritization procedures may be reviewed and updated if needed by the City.

BMP Selection

BMPs that were identified for consideration are listed in Table 4 along with their associated ranking. The prioritization criteria were ranked using a high, moderate and low score. High scores were assigned a numeric value of 2, moderate a value of 1 and low scores were assigned a value of zero. The resultant score for the BMP is the sum of the assigned numeric values

assigned to each of the identified criteria. The last column identifies the BMPs selected for implementation at this time.

Table 4 BMPs Considered

BMP Description	Multiple Parameters	Human Health	Pollutant Concentration	Impact and cost	Prerequisites	Score	Implement
Illicit discharge source identification and abatement	2	2	2	2	2	10	✓
Implementation of the new stormwater regulation	2	2	2	2	2	10	✓
PEP: Train municipal O&M staff	2	1	1	1	2	7	✓
Good Housekeeping: Catch basin maintenance and street sweeping	1	1	1	1	2	6	✓
PEP: Education on IDEP complaint line	2	1	1	1	1	6	✓
Good Housekeeping: Riparian corridor/buffer strip to Parks staff	1	1	1	1	1	5	✓
PEP: Education on the impact of pet waste	0	1	1	1	1	4	✓
Implement additional stormwater control measures on public infrastructure improvement projects	1	1	1	0	0	3	(1)

(1) When municipal capital improvement projects are planned for municipal infrastructure in the MS4 areas, implementation of additional stormwater control measures will be considered and evaluated.

Evaluating Effectiveness

Various metrics will be tracked for evaluating the effectiveness of the BMPs implemented. Individual program metrics for illicit discharge source identification, public education and good housekeeping practices are discussed with information specific to those programs.

In-stream monitoring of *E. coli* and sediment are not planned for either the Rouge River or the Detroit River since the City of Detroit MS4 area represents an insignificant fraction of the watershed areas for each of the rivers. That is to say that implementation of the BMPs by the City is not expected to have a measurable impact on the receiving streams by itself. It will take much more change within the river's watersheds in order to see a net change in the river. In-stream monitoring in the Rouge River is periodically conducted by the Alliance of Rouge Communities and the State of Michigan. Publicly available in-stream monitoring results will be used to help guide the implementation plan when appropriate.

E. coli

For *E. coli*, monitoring the effectiveness is planned to utilize the monitoring efforts of the illicit discharge detection program. As a part of this program, the outfalls will be physically assessed

and dry weather flow monitored for flow rate, *E. coli* concentration and other water quality parameters at least once every five years. Measured *E. coli* concentrations will be compared against the target levels identified in Table 2.
DWSD will conduct wet weather sampling for E. coli on two outfalls within the City's MS4 area per permit cycle. Results of samples will be compared to the targets set in the E. coli TMDL. Results will be assessed and used to update the TMDL implementation plan as appropriate.

Sediment (biota)
Computer modeling will be performed when newly constructed stormwater control measures are implemented as a part of a municipal infrastructure improvement project. The modeling will document the expected sediment load reductions due to the implemented BMPs. The computer model for the pollutant load estimates will be selected based on the project specifics. Models such as STEPL, the National Stormwater Calculator, L-THIA, and P8 will be considered. These models estimate sediments loads following the same methodology used in the TMDL assessment document (August 2007). The sediment load will be assigned by land use, consistent with **Appendix B** of the TMDL assessment document (August 2007).

The assumed percent removal by BMP will be assigned based on literature values from the Center for Watershed Protection (Center for Watershed Protection, 2000; Center for Watershed Protection, 2007), the International Stormwater BMP Database (Water Research Foundation, U.S. Environmental Protection Agency; Federal Highway Administration; American Public Works Association; Environmental and Water Resources Institute of ASCE, 2019), or other similar research literature.

Development projects must comply with the new stormwater ordinance which includes provision for managing the peak flow, volume and sediment from the site. As an additional metric for managing the sediment, the number and area of development projects in the MS4 area complying with the stormwater ordinance will be reported.

DWSD will also investigate the feasibility of collaborating with the ARC on the Rouge macroinvertebrate sampling. If feasible, the ARC data will be used to assess the biota TMDL for the City's MS4 area. DWSD's concern is that it may be cost prohibitive for the small MS4 area.

References
Center for Watershed Protection. (2000, March). *National Pollutant Removal Performance Database for Stormwater Treatment Practices*. Ellicott City.

Center for Watershed Protection. (2007). *National Pollutant Removal Performance Database Version 3*. Center for Watershed Protection. Ellicott City: Center for Watershed Protection.

Water Research Foundation, U.S. Environmental Protection Agency; Federal Highway Administration; American Public Works Association; Environmental and Water Resources Institute of ASCE. (2019). Retrieved from International Stormwater BMP Database: www.bmpdatbase.org

4.0 IMPLEMENTATION EFFORTS FOR THE UPCOMING PERMIT CYCLE

4.1.1 Record Keeping/Schedule/Frequency/Responsible Agency

The following tables list the individual BMPs along with the City departments or agencies responsible for each activity. These tables also show the anticipated schedule for implementation of the BMPs, the measureable goals, record keeping requirements and the responsible party. In some cases, activities are listed to be undertaken on an "as needed" basis. For example, the investigation of storm sewer outfalls for potential suspicious or illicit connections will be necessary only if the initial field observation indicates that there is dry weather flow present, or there is some other evidence of an illicit or suspicious connection.

Table 5: BMP #1: PUBLIC PARTICIPATION/INVOLVEMENT PROGRAM

Topic	Implementation BMP	Timeframe	Measurable Goal	Recordkeeping	Responsible Party
New BMP Topics Identified for Implementation					
SWMP notification to City Departments	Prepare memo for City Departments informing them of SWMP	Throughout permit cycle	Memos informing of latest SWMP at City Departments	Memo	DWSD
SWMP notification to local Organizations	Prepare memo for City Departments informing them of SWMP	Throughout permit cycle	Memo informing of the latest SWMP to FoTR, SEMCOG, FORP, FODR, FOBI	Memo	DWSD
Drainage Charge Program	Finalize drainage charge credits	Complete	Drainage Charge Credits for Stormwater Practices	Tracking of properties within MS4 with stormwater practices	DWSD
Ongoing BMP Topics Implemented					
SWMP notification to the Public	Memo on SWMP prepared for local organizations will be posted on the DWSD Website	Ongoing	Link to memo on the DWSD website	NA	DWSD
Participate in Watershed Protection Groups and Neighborhood Organizations	Support ongoing work by the groups and organizations	Ongoing	Provide City of Detroit employee assistance at selected events	Information available on website	DWSD/Public Affairs

Table 6: BMP #2: PUBLIC EDUCATION PROGRAM (PEP)

Topic	Implementation BMP	Timeframe	Measurable Goal	Recordkeeping	Responsible Party
New BMP Topics Identified for Implementation					
Signage at MS4 Catch Basins	Signage/stenciling similar to the ones at the Rouge Park	2020	All MS4 catch basin signage	Photographs of signs at all MS4catch basins	DWSD
Plan to upgrade SeeClickFix website and Improve Detroit app (both use the same software and are connected)	Include feature providing capability to report illegal discharges specifically into storm sewers and clogged catch basins	2021	Adding the feature to the software program	Maintaining a log of reports	DWSD
Ongoing BMP Topics Implemented					
Provide Stormwater Management Information to the Public	Post stormwater management information including DWSD's Stormwater Management Regulations on DWSD's website	Ongoing	Information on DWSD's website	NA	DWSD
Drainage Charge Program	Implement updated drainage charge program (including credit program) to all customers	Implemented & ongoing	Drainage Charge Credits for Stormwater Practices	Tracking of properties within MS4 with stormwater practices	DWSD
Post-Construction Stormwater Management Ordinance	Finalize and adopt the stormwater ordinance	Adopted Nov 13, 2018	Official ordinance adopted	Ordinance available on DWSD's website	DWSD
Provide Green Infrastructure (GI) Information to the Public	Issue GI annual progress reports for the Upper Rouge tributary areas and post on DWSD's website	Ongoing	Information on DWSD's website	NA	DWSD
Provide Technology Tools to Assist in Educating the Public	Make the "Improve Detroit" app available for download on DWSD's website	Ongoing	Information on City's website	NA	City of Detroit IT
Keep the Public Informed about Relevant Stormwater Management Issues	Issue press releases relevant to stormwater management	Throughout permit cycle	Information on DWSD's website	NA	DWSD
Provide Information about Watershed Protection Groups and Neighborhood Organizations	Provide DWSD website links to Friends of the Detroit River, Friends of the Rouge and similar neighborhood organizations	Ongoing	Links on DWSD's website	NA	DWSD
Collection and Disposal of Hazardous Waste	Provide collection and proper disposal of household hazardous waste	Ongoing	Information on City's website	N/A	GDRRA

Table 7: BMP #3: ILLICIT DISCHARGE ELIMINATION PROGRAM (IDEP)

Topic	Implementation BMP	Timeframe	Measurable Goal	Recordkeeping	Responsible Party
New BMP Topics Identified for Implementation					
Report Illegal Discharges to the Storm Sewers	ERP	As reported throughout permit cycle	Established mechanism for reporting	ERP Spill Notification and Report form	DWSD
Ongoing BMP Topics Implemented					
Drainage System Mapping	Mapping of the drainage system connected to the MS4 outfalls	Complete	All drainage structures inventoried	Map produced of drainage system connected to MS4	DWSD
Inspection of Outfalls	Re-inspect the outfalls and sample, if necessary	Completed May 2018 & once every permit cycle going forward	All MS4 outfalls re-inspected	Inspection report	DWSD

Table 8: BMP #4: CONSTRUCTION STORMWATER RUNOFF CONTROL PROGRAM

Topic	Implementation BMP	Timeframe	Measurable Goal	Recordkeeping	Responsible Party
New BMP Topics Identified for Implementation					
None					
Ongoing BMP Topics Implemented					
Review of Site Plans	DWSD to review site plans for stormwater management and provide input to BSEED	In process - Ongoing	Site plan reviews	List of site plans reviewed for stormwater management	DWSD/BSEED
Post-Construction Stormwater Management Ordinance	Finalize and issue the stormwater ordinance	Adopted November 2018	Ordinance enacted	Stormwater Management Regulations and Stormwater Design Manual available on DWSD's website	DWSD

Table 9: BMP #5: POST CONSTRUCTION STORMWATER RUNOFF PROGRAM

Topic	Implementation BMP	Timeframe	Measurable Goal	Recordkeeping	Responsible Party
New BMP Topics Identified for Implementation					
None					
Ongoing BMP Topics Implemented					
Review and Approval of Preliminary Site Plans	Continue current review process by BSEED with input from DWSD regarding stormwater management	Ongoing	Number of site plan reviews. Application requests applicable permits.	List of site plans reviewed for stormwater management	BSEED/DWSD
Post-Construction Stormwater Management Ordinance	Finalize and issue the stormwater ordinance	Adopted Nov 13, 2018	Ordinance enacted	Ordinance available on DWSD's website	DWSD
Review and Approval of Preliminary Site Plans	In addition to BSEED, DWSD will review the site plans to identify any applicable GI credits	In process - ongoing	Participation of DWSD in the review process	List of site plans reviewed for stormwater management	DWSD/BSEED

Table 10: BMP #6: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAM

Topic	Implementation BMP	Timeframe	Measurable Goal	Recordkeeping	Responsible Party
New BMP Topics Identified for Implementation					
Catch Basin Cleaning	Plan to add a feature in the SeeClickFix software ("Improve Detroit" App) to allow public to report catch basin clogging in MS4 areas	2021	SeeClickFix updated and public reports being submitted	Database for public reporting catch basin clogging	DPW
Catch Basin Cleaning Program	DWSD is establishing a program for catch basin cleaning. Cityworks maintenance program will be used to schedule	2020 and after that, at a minimum, once every 3 years. More frequently for catch basins that are found with more than 50% sediment	Every catch basin inspected & cleaned, if necessary, at a minimum every 3 years	DWSD GIS log of number of catch basins cleaned	DWSD
Ongoing BMP Topics Implemented					
Street Sweeping and Material Disposal	Continue current practices for street sweeping and material disposal in the MS4 areas	Continue following DPW's current street sweeping schedule; request extra sweeping as needed throughout permit cycle	Periodical street sweeping with material disposal by an outside contractor	Maintain log of street sweeping and material disposal	GSD/DPW
Lawn Mowing	Continue current practices for lawn mowing in the MS4 areas with buffer zones between the lawns and water bodies	Ongoing	Periodic lawn mowing, as needed	Records of training DWSD personnel to GSD personnel who conduct lawn mowing	GSD/DPW
Catch Basin Cleaning	Continue current practice of catch basin cleaning	Ongoing – when sump is no more than 50% full	Number of catch basins cleaned during reporting period	DWSD GIS log of number of catch basins cleaned	DWSD
Right of Way Maintenance	Catch basin cleaning and street sweeping. Catch basin blocked off during road repair.	Ongoing	Catch basin cleaning and inspection program	DWSD GIS log of number of catch basins cleaned	DWSD/DPW

5.0 SUMMARY

The City of Detroit's Stormwater Management Plan has been developed through a coordinated multi-agency effort by representatives from several City Departments. Because stormwater is not the sole responsibility of any one Department, the SWMP activities involve many entities including the Water and Sewerage Department, the General Services Department, the Planning and Development Department, the Department of Public Works, the Buildings, Safety Engineering and Environmental Department, the Greater Detroit Resource Recovery Authority, and the Law Department.

Management and control of stormwater discharges will be achieved in a manner consistent with the efforts already underway by the City of Detroit to control wet weather discharges from its combined sewer system. However, due to the small size of the MS4, it is expected that the Long Term CSO Control Plan will have the most impact on the wet weather and stormwater runoff on the Detroit River and the Rouge River.

Attachment 22

Map data ©2022 Google 1 mi

Rating Hours All filters

Engine 35
No reviews
Fire station · 111 Kenilworth St
Directions

Hamtramck Fire Department
5.0 (3)
Fire station · 2625 Caniff St
Open 24 hours · (313) 305-4503
Website Directions

Detroit Fire Engine 39 Medic 1
5.0 (3)
Fire station · 8700 14th St
Open 24 hours
Website Directions

Highland Park Fire Department
5.0 (4)
Fire station · 25 Gerald St
· (313) 852-3068
Website Directions

Detroit Fire Department Engine 17 Ladder 7 Chief 5
5.0 (4)
Fire station · 6100 2nd Ave
Directions

Detroit Fire Department
4.9 (8)
Fire station · 13939 Dexter Ave
Open 24 hours
Directions

Detroit Fire Department
No reviews
Fire station · 435 W Alexandrine St
Directions

Engine 23 Squad 3
5.0 (2)
Fire station · 1818 E Grand Blvd
· (313) 333-8926
Directions

Detroit Fire Engine 1
5.0 (1)
Fire station · 111 W Montcalm St

Website Directions

Detroit Fire Department
No reviews
Fire station

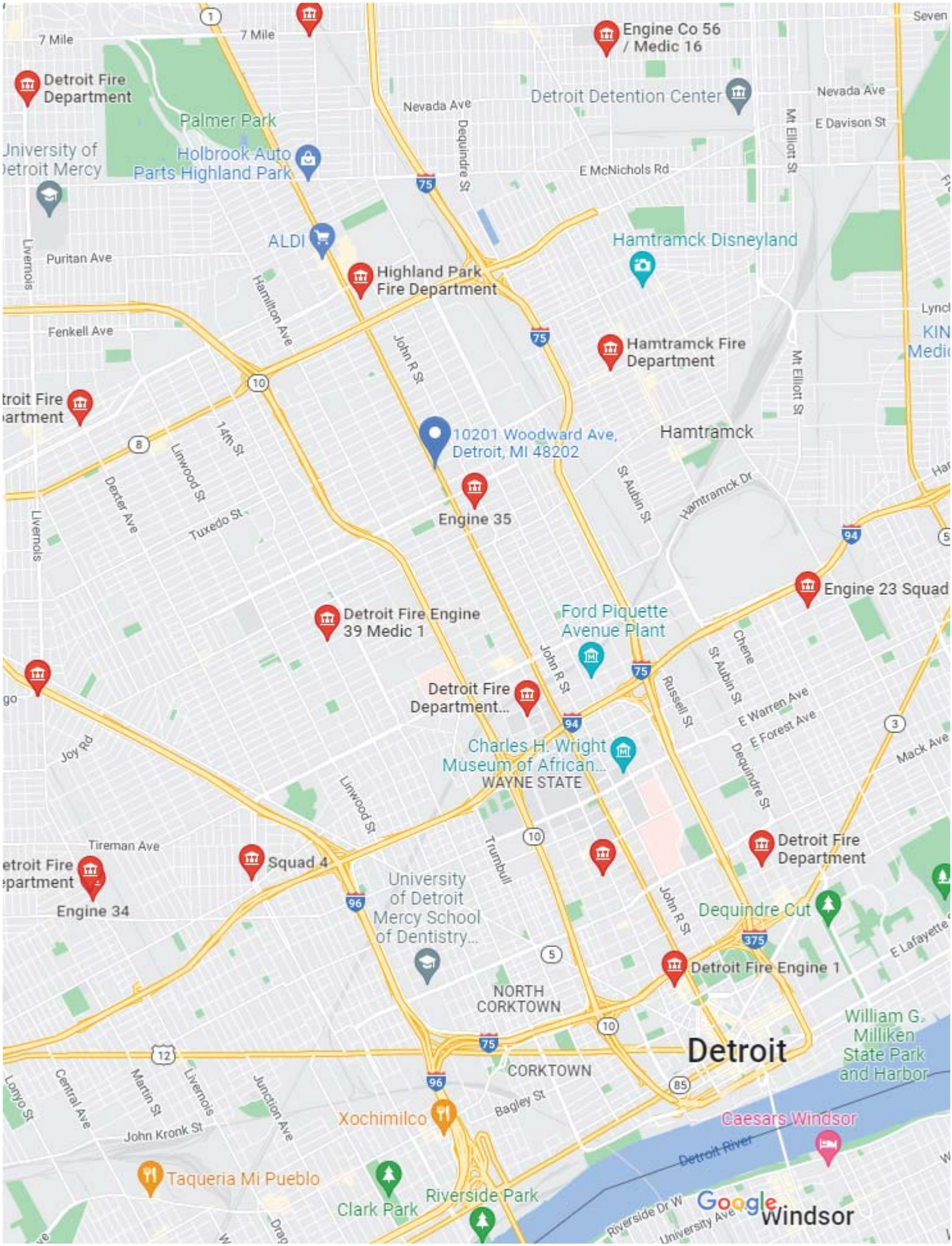
Directions

Engine 44 Ladder 18
5.0 (1)
Fire station · 35 W Seven Mile Rd

Directions

Showing results 1 - 20

Fire Stations



Map data ©2022 Google 1 mi

Rating All filters

Highland Park Police Department
2.8 (23)
Police department · 14112 Woodward Ave
· (313) 852-7338
Website Directions

Hamtramck Police Department
2.5 (45)
Police department · 3401 Evaline St
Open 24 hours · (313) 800-5281
Website Directions

3rd Precinct NPO
4.0 (23)
Police department · 2875 W Grand Blvd
· (313) 596-5300
Directions

Detroit Police Department Tenth Precinct
3.4 (20)
Police department · 12000 Livernois
Open 24 hours · (313) 596-1000
Website Directions

Wayne State University Police
4.3 (22)
Police department · 6050 Cass Ave
· (313) 577-2222
Directions

DPSCD Police Department
4.4 (17)
School administrator · 8500 Cameron St
Open 24 hours · (313) 748-6002
Website Directions

Detroit Police Department Eleventh Precinct
4.2 (17)
Police department · 5100 Nevada Ave
· (313) 596-1100
Directions

Detroit Police Department, Twelfth Precinct
3.3 (31)
Police department · 1441 W Seven Mile Rd
· (313) 596-1200

Website Directions

DPD
No reviews
Police department · 14655 Dexter Ave

Directions

Eighth Precinct Police Station
No reviews
Police station · 4150 Grand River Ave

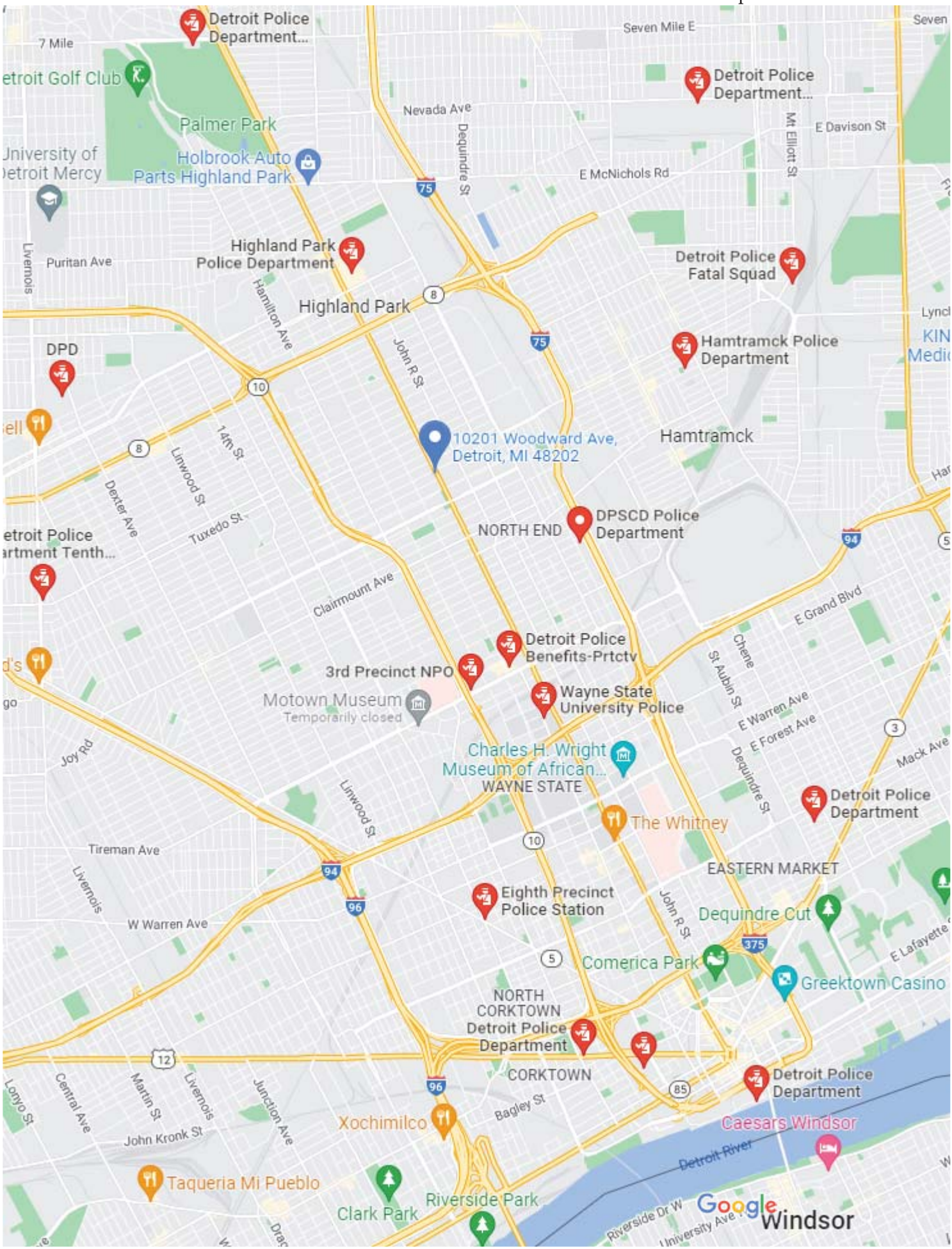
Directions

Detroit Police Department
No reviews
Police department · Scott St

Directions

Showing results 1 - 20

Police Depts.

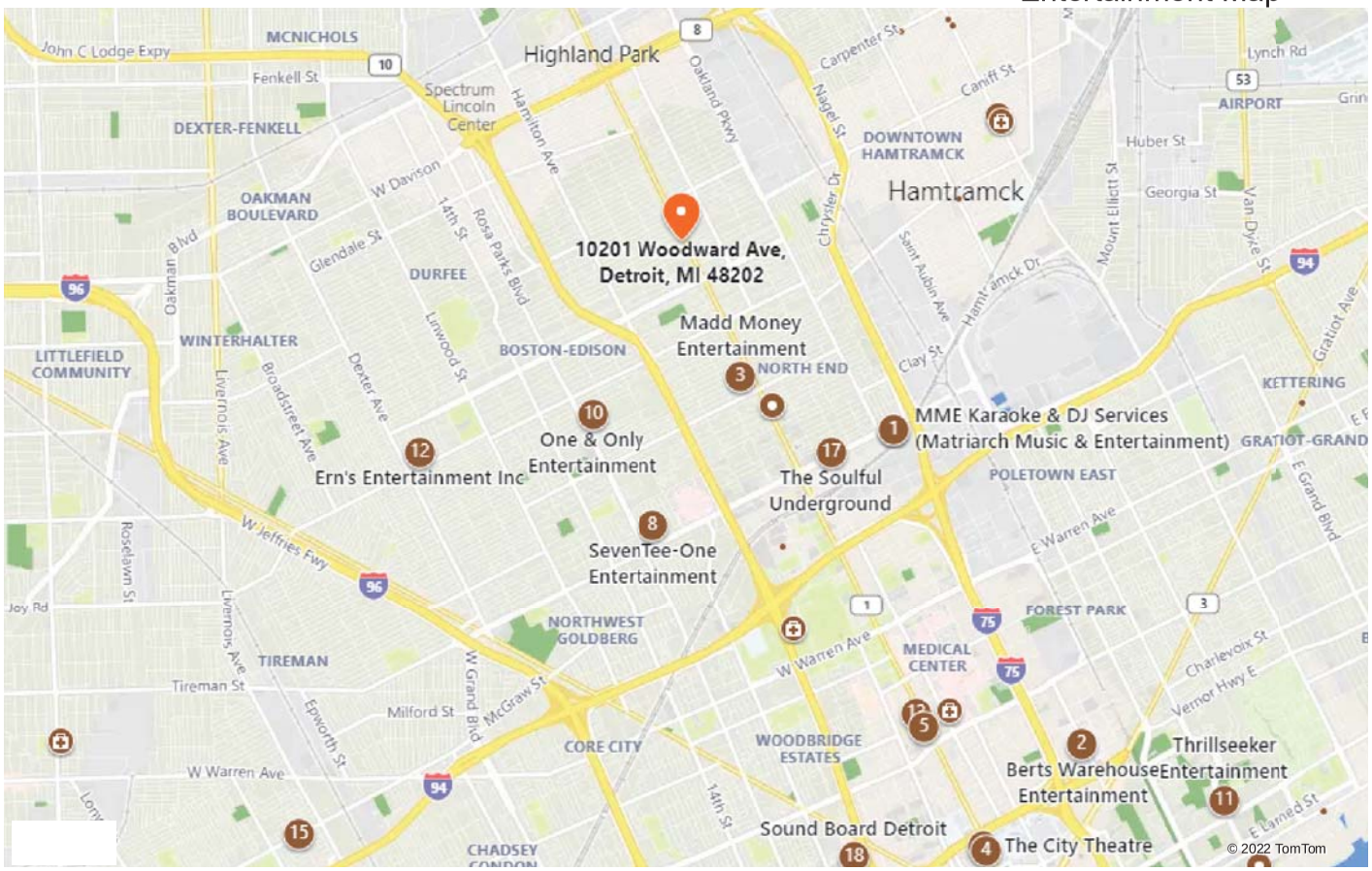


Attachment 23

entertainment

1. **MME Karaoke & DJ Services (Matriarch Music & Entertainment)**
   Address: 2785 E Grand Blvd Unit 160, Detroit, MI 48211
   Phone: (313) 282-1675
   Website: http://matriarchmusicent.com/
3. **Madd Money Entertainment**
   Address: 47 Pingree St, Detroit, MI 48202
   Phone: (313) 656-4559
   Website: http://www.maddmoneyentertainment.com/
5. **Detroit Symphony Orchestra**
   Address: 3711 Woodward Ave, Detroit, MI 48201
   Phone: (313) 576-5111
   Website: https://www.dso.org/
7. **Parables Entertainment**
   Address: 2785 E Grand Blvd Ste 385 48211
   Website: https://www.facebook.com/parablesent/
9. **M-Class Entertainment**
   Address: 65 Cadillac Sq, Detroit, MI 48226
   Website: https://www.facebook.com/M-Class-Entertainment-135980796434087/
11. **Thrillseeker Entertainment**
   Address: 1090 Chene, Detroit, MI
   Website: http://www.thrillseekerentertainment.com/
13. **Moskillz Entertainment**
   Address: Private Address in Detroit, MI
   Phone: (313) 694-8178
15. **Intertwined Entertainment LLC**
   Address: Private Address in Detroit, MI
   Phone: (517) 708-2020
   Website: http://www.intertwinedent.com/
17. **The Soulful Underground**
   Address: 3000 E Grand Blvd, Detroit, MI 48202
   Website: https://www.facebook.com/SoulfulUnderground/
2. **Berts Warehouse Entertainment**
   Address: 2727 Russell St, Detroit, MI 48207
   Phone: (313) 567-2030
   Website: http://www.bertsentertainmentcomplex.com/
4. **Fox Theatre**
   Address: 2211 Woodward Avenue, Detroit, MI 48201
   Phone: (313) 471-7000
   Website: https://www.313presents.com/venues-events/fox-theatre
6. **The City Theatre**
   Address: 2301 Woodward Ave, Detroit, MI 48201
   Phone: (313) 471-3200
8. **SevenTee-One Entertainment**
   Address: 7401 Woodrow, Wilson, MI 48206
   Phone: (313) 949-3140
10. **One & Only Entertainment**
   Address: 1687 Hazelwood St, Detroit, MI 48206
   Phone: (313) 875-1463
12. **Ern's Entertainment Inc**
   Address: 9326 Savery St, Detroit, MI 48206
14. **Freep Entertainment**
   Address: 160 W Fort St, Detroit, MI 48226
   Phone: (313) 222-6620
   Website: http://freep.com/entertainment
16. **CGS Entertainment**
   Address: PO Box 21914, Detroit, MI 48221
   Phone: (313) 862-4139
   Website: https://www.cgsentertainment.com/
18. **Sound Board Detroit**
   Address: 2901 Grand River Ave, Detroit, MI 48201
   Phone: (313) 309-4700
   Website: http://motorcitycasino.com/

Entertainment Map



Park Finder

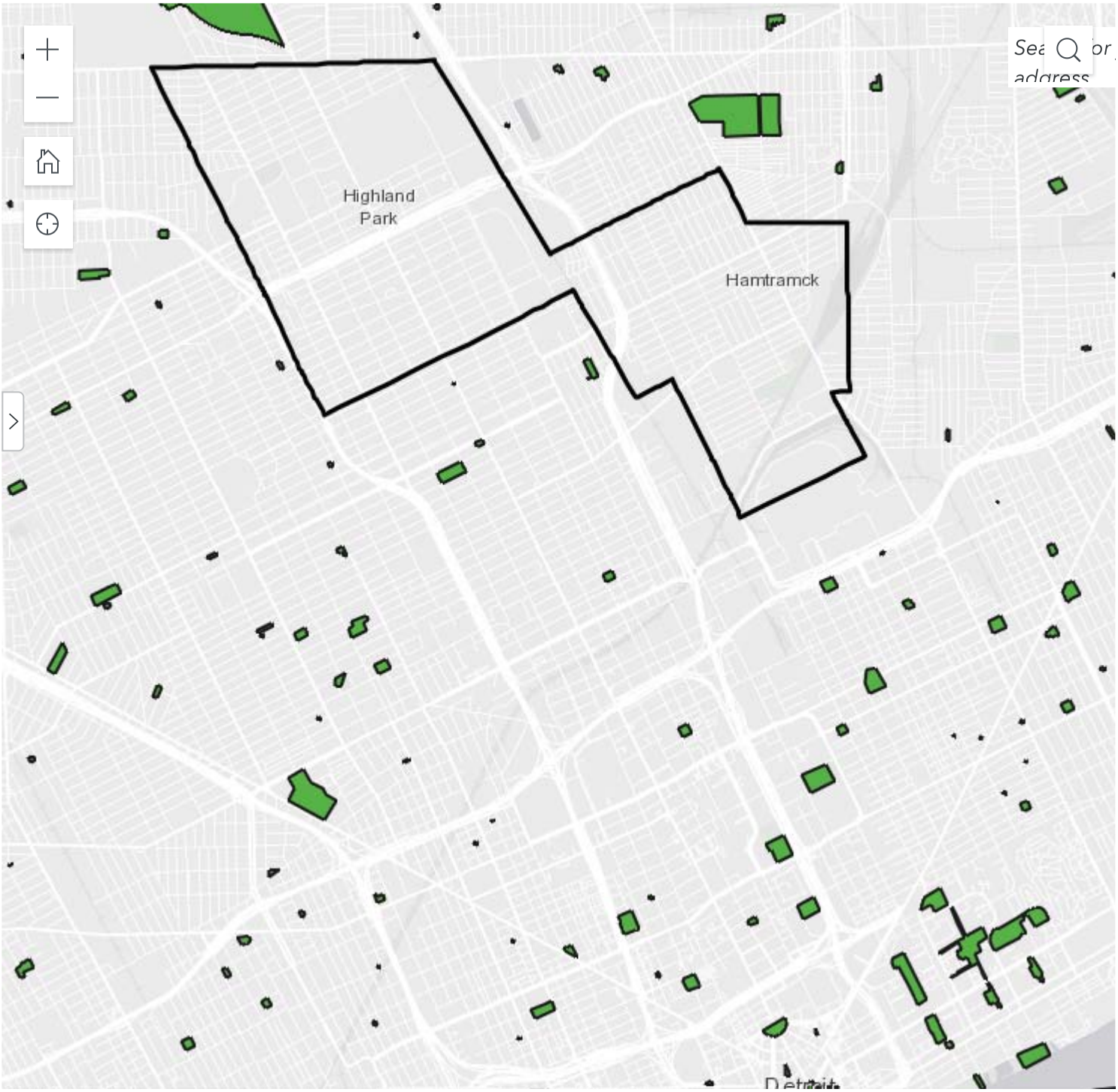
What would you like to do in a park?

Choose a park amenity to filter the list:

Baseball | Basketball | Comfort station | Dog park

Fitness equipment | Fishing | Football

Horseshoes | Nature area/trail | Parking

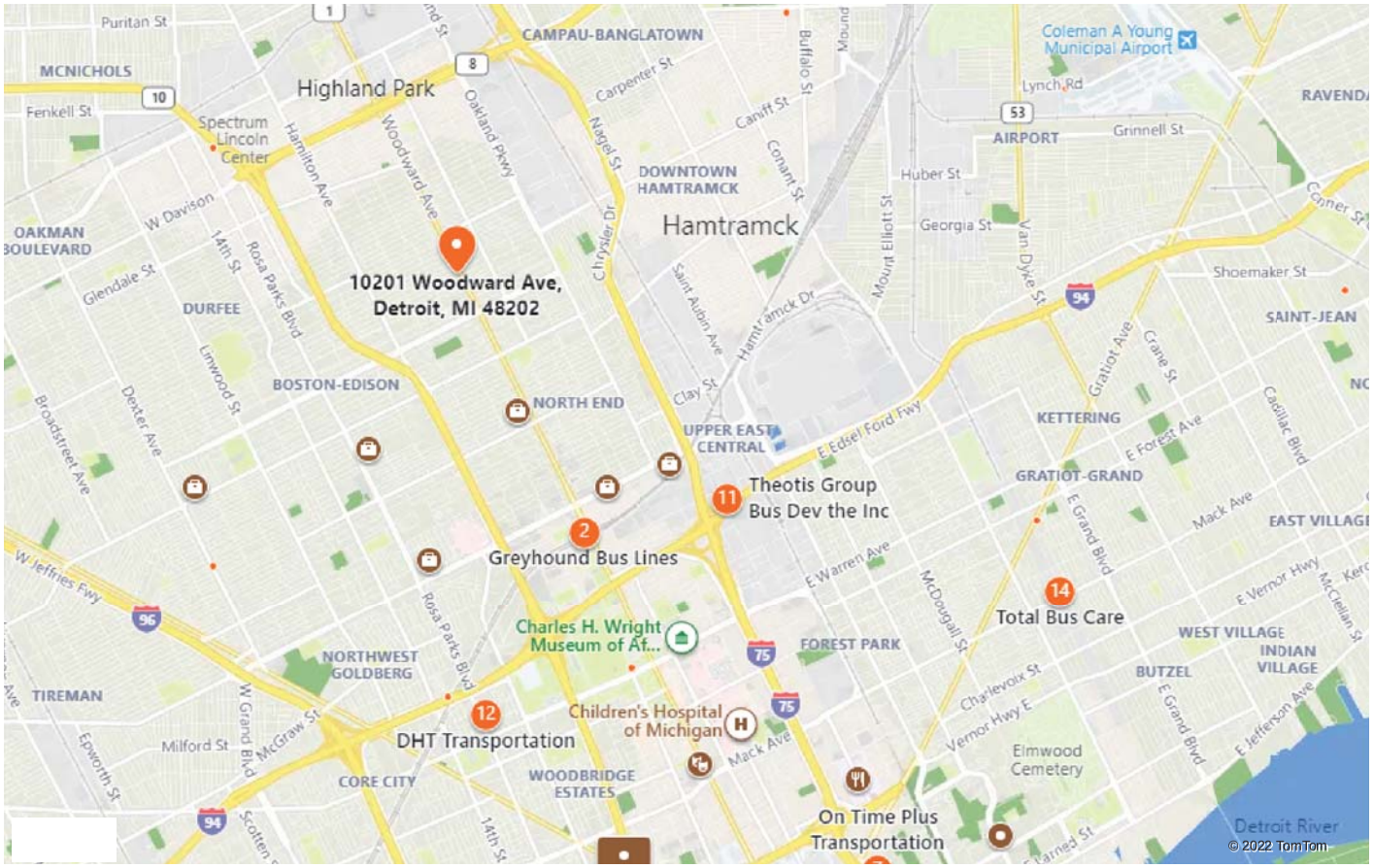


SEMCOG, Esri, HERE, Garmin, GeoTechnologies, Inc., USGS, EPA, NRCan | Michigan Geographic Framework | Esri… Powered by Esri

Attachment 24

bus

1. **Greyhound Bus Lines**
   Address: 1001 Howard St, Detroit, MI 48226
   Phone: (313) 961-8011
   Website: https://www.greyhound.com/en-us/bus-station-240317
2. **Greyhound Bus Lines**
   Address: 11 W Baltimore St, Detroit, MI 48202
   Phone: (800) 231-2222
   Website: http://www.greyhound.com/
3. **Transit Windsor**
   Address: 300 Chatham Street West, Windsor ON N9A 0A8
   Phone: 519-944-4111
   Website: https://citywindsor.ca/residents/transitwindsor/Pages/Transit-Windsor.aspx
4. **Detroit Bus Company**
   Address: 1990 Bagley St, Detroit, MI 48216
   Phone: (313) 444-2871
   Website: http://thedetroitbus.com/
5. **Rosa Parks Transit Center**
   Address: 1310 Cass Ave, Detroit, MI 48226
   Phone: (313) 933-1300
   Website: http://www.detroitmi.gov/ddot
6. **Smart**
   Address: 535 Griswold St Ste 600, Detroit, MI 48226
   Phone: (313) 223-2100
   Website: https://www.smartbus.org/
7. **On Time Plus Transportation**
   Address: 1010 Antietam Ave, Detroit, MI 48207
   Phone: (313) 567-4945
   Website: http://ontimeplus.com/
8. **Detroit–Windsor Tunnel**
   Address: 100 E Jefferson Ave, Detroit, MI 48226
   Phone: (313) 567-4422
   Website: https://www.dwtunnel.com/
9. **Party Bus Detroit**
   Address: 442 W Larned St, Detroit, MI 48226
   Phone: (313) 312-5466
   Website: http://www.limodetroit.com/
10. **Carrs Motorcoach, LLC**
    Address: 9370 Livernois Ave, Detroit, MI 48204
    Phone: (313) 931-1240
    Website: http://carrsmotorcoach.com/
11. **Theotis Group Bus Dev the Inc**
    Address: 6040 Russell St, Detroit, MI 48211
    Phone: (313) 758-0100
12. **DHT Transportation**
    Address: 5150 Rosa Parks Blvd, Detroit, MI 48208
    Phone: (313) 895-1300
13. **Detroit Party Bus Rentals**
    Address: 18411 Goulburn St, Detroit, MI 48205
    Phone: (313) 924-3399
    Website: https://detroit-party-bus.com/vehicles.html
14. **Total Bus Care**
    Address: 3601 Bellevue St, Detroit, MI 48207
    Phone: (313) 923-0204
15. **Turner Tours**
    Address: 4602 E Davison St, Detroit, MI 48212
    Phone: (313) 733-8119
    Website: http://turnertours.com/
16. **Tornado Bus Company**
    Address: 1950 Campbell St, Detroit, MI 48209
    Phone: (313) 554-8930
17. **School Bus Stop**
    Address: 2157 York St., Windsor Ontario N8X 1W8
18. **Giles Bus Stop**
    Address: 1201-1291 Ouellette Ave., Windsor Ontario N8X 1J6


10201 Woodward Ave,
Detroit, MI 48202
Highland Park
Hamtramck
Theotis Group
Bus Dev the Inc
Greyhound Bus Lines
Total Bus Care
DHT Transportation
On Time Plus
Transportation
Charles H. Wright
Museum of Af...
Children's Hospital
of Michigan
Coleman A Young
Municipal Airport
Spectrum
Lincoln
Center
MCNICHOLS
OAKMAN
BOULEVARD
DURFEE
BOSTON-EDISON
NORTH END
UPPER EAST
CENTRAL
DOWNTOWN
HAMTRAMCK
CAMPAU-BANGLATOWN
KETTERING
GRATIOT-GRAND
FOREST PARK
NORTHWEST
GOLDBERG
TIREMAN
CORE CITY
WOODBRIDGE
ESTATES
WEST VILLAGE
INDIAN
VILLAGE
BUTZEL
EAST VILLAGE
SAINT-JEAN
AIRPORT
RAVENDA
Elmwood
Cemetery
Detroit River
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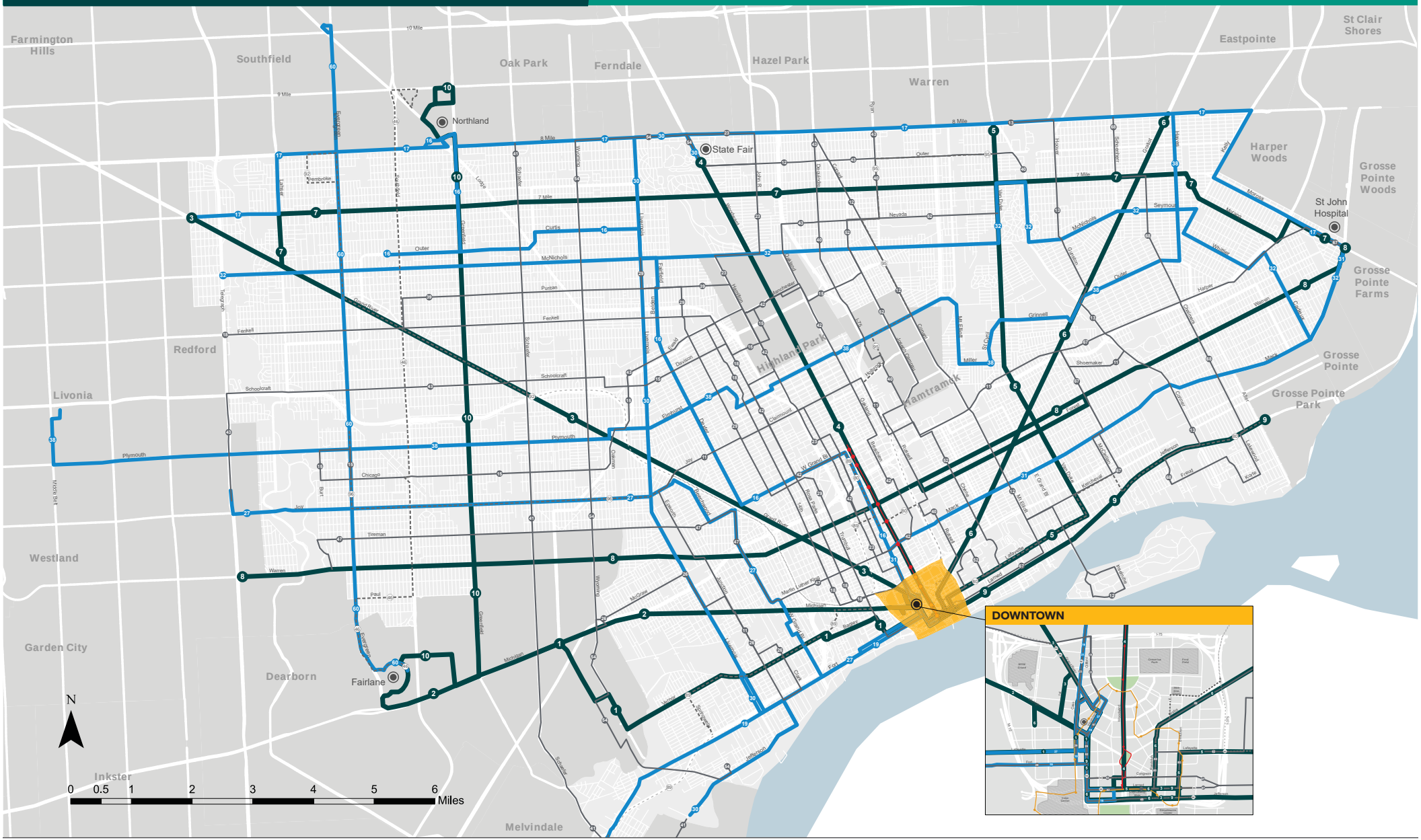
DDOT System Map

Last Revised: October 2020



ConnectTen Routes

ConnectTen Routes are the backbone of the transit system. All ConnectTen Routes are:

- 24/7
- 20 minutes or better weekday frequency
- Every 20-30 minutes at other times.

1 Vernor*
2 Michigan*
3 Grand River*
4 Woodward*
5 Van Dyke-Lafayette*
6 Gratiot*
7 Seven Mile*
8 Crosstown*
9 Jefferson*
10 Greenfield*

* Denotes 24/7 route.

Key Routes

Cross-city routes operating 18-24 hours a day, with frequency every 15-30 minutes.

16 Dexter*
17 Eight Mile*
19 Fort
27 Joy
30 Livernois
31 Mack
32 McNichols
38 Plymouth
60 Evergreen

* Denotes 24/7 route.

Neighborhood Routes

Shorter routes operating during day and early evening times, with frequency every 30-60 minutes.

11 Clairmont
12 Conant
13 Conner
15 Chicago/Davison
18 Fenkell
23 Hamilton/John R
26 Junction
29 Linwood
39 Puritan
40 Russell
41 Schaefer
42 Mid-City Loop
43 Schoolcraft
47 Tireman
52 Chene
54 Wyoming
57 Cadillac/Harper
63 Chalmers

Part-Time Routes

Limited service, generally operating during weekday peak hours.

46 Southfield
80 Villages Direct
89 Southwest Direct
92 Rosedale Express
95 Ryan Express
96 Joy Express

DDOT Routes

- ConnectTen
- Primary
- Neighborhood
- Peak Hour Route

Transit In the City

- Transit Hubs
- People Mover
- M1 Rail
- SMART Bus