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

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

Project Information

Project Name: Meyers-Senior-Center

HEROS Number: 900000010341182

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

DETROIT MI, 48226

RE Preparer: Kim Siegel

State / Local Identifier: Detroit, Michigan

Certifying Officer: Julie Schneider, Director

Grant Recipient (if different than Responsible Entity):

Point of Contact:

Consultant (if applicabl

e):

Point of Contact:

Project Location: Meyers Road, Detroit, MI 48235

Additional Location Information: 17440, 17370 & 17334 Meyers Road

Direct Comments to: Penny Dwoinen, Environmental Review Officer, City of Detroit

dwoinenp@detroitmi.gov

Coleman A. Young Municipal Center (CAMYC), 2 Woodward

Ave., Suite 908, Detroit, Michigan 48226

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

Located in Northwest Detroit, Meyers Senior Apartments is a 105-unit independent senior (55+) living community located on the former Lewis College of Business at 17400 & 17370 Meyers Road, Detroit, Michigan 48235 and vacant home at 17334 Meyers Road, Detroit, Michigan 48285. As part of this development, the two former college buildings will be renovated and repurposed with competitive 9 percent LIHTC's to house eight studio apartments and twenty-four one-bedroom apartments. The extant structure at 17334 Meyers Road will be demolished. A new, four-story building will be constructed adjacent to the renovated buildings on the corner of Meyers Road and Santa Maria Avenue using MSHDA / Detroit financing sources and 4 percent LIHTC equity. This new building will house 62 onebedroom units and 11 two bedroom units. Seniors will enjoy modern, in-unit amenities such as LVT flooring, garbage disposals, ceiling fans, and brand-new appliances. Residents will also have access to a fully equipped fitness center, community space for socialization, and a business center with computers. Funding for the proposed project comes from LIHC TDC equity, MSHDA HOME, and City of Detroit HOME funds. This project is valid for five years. This review is for \$372,671.46 in HOME 2019, \$127,328.54 in HOME 2020 and 5 Detroit Housing Commission (DHC) Project-Based Vouchers (PBV's).

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

The proposed project is intended to address Michigan's growing senior population, the housing shortage in the City of Detroit, long waiting lists for senior apartments, and the blight reduction in Detroit. The State of Michigan is the twelfth oldest state in the union, with a median age of 39.8 years. Occupancy rates for Northwest Detroit for senior apartments are 98.5 percent, based on a survey of twenty senior only rental developments. Subsidized senior-only rental developments reported occupancy rates 99.4 percent. There are limited options for subsidized rental developments for seniors in Northwest Detroit.

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

According to the market study conducted for the project by Shaw Research and Consulting, LLC, dated March 25, 2020, and updated January 30, 2021, the senior population in the State of Michigan is expected to increase over time. Senior-only apartment rentals are in high demand as evidenced with the long waiting lists for and the high occupancy rates at senior-only rental developments in Northwestern Detroit. There are limited affordable housing options for seniors in Northwestern Detroit. The subject property is an appealing location for seniors since the Detroit Medical Center's Sinai-Grace Hospital is only 0.75 miles away in Northwestern Detroit. The market study did not identify any market related concerns. The current rental housing market

conditions are overall healthy and indicative of demand for affordable housing supply such as the subject property. All the data demonstrates an ongoing need for affordable housing over the foreseeable term.

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

Determination:

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

Approval Documents:

Meyers Senior Center Combined Notice for 7-26-23.pdf

7015.15 certified by Certifying Officer

on:

7015.16 certified by Authorizing Officer

on:

Funding Information

Grant / Project Identification Number	HUD Program	Program Name
M19MC260202	Community Planning and Development (CPD)	HOME Program
M20MC260202	Community Planning and Development (CPD)	HOME Program
MI001	Public Housing	Project-Based Voucher Program

Estimated Total HUD Funded,

\$500,000.00

Assisted or Insured Amount:

This project anticipates the use of funds or assistance from another federal agency in addition to HUD in the form of:

Estimated Total Project Cost [24 CFR 58.2 (a) \$29,103,572.00 **(5)]:**

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

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6 STATUTES, EXECUTIVE ORD Airport Hazards Clear Zones and Accident Potential	Are formal compliance steps or mitigation required? DERS, AND REGULATION NO	Compliance determination (See Appendix A for source determinations) ONS LISTED AT 24 CFR §50.4 & § 58.6 The property is not located in a FAAdesignated Airport Runway Clear Zone
Zones; 24 CFR Part 51 Subpart D		or Accidental Potential Zone. The Coleman A. Young International Airport (DET) is approximately 7.7 miles from the property and Windsor International Airport is 14.2 miles away (Attachment A).
Coastal Barrier Resources Act Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	□ Yes ☑ No	The property is not located in the Coastal Barrier Resource Area in Wayne County. No coastal barriers will be impacted by the proposed project (Attachment B).
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	According to the attached FEMA FIRMette Map 26163C0100E, effective on February 2, 2012, the property is in Zone X, which represents minimal risk outside the 1-percent and 2-percentannual-chance floodplains. Flood insurance is not necessary (Attachment C).
STATUTES, EXECUTIVE ORD	DERS, AND REGULATION	ONS LISTED AT 24 CFR §50.4 & § 58.5
Air Quality Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	□ Yes ☑ No	The entire State of Michigan is designated as "attainment" for carbon monoxide, nitrogen dioxide, sulfur dioxide, PM10, and lead except for small locations in Wayne and Saint Clair Counties with sulfur dioxide nonattainment areas and portions of the state are in nonattainment for ozone. Wayne County is a non-attainment county for ozone. The project was submitted to the EGLE Air Quality Division, and a response was received

<u> </u>		
		on September 27, 2021, indicating that
		the project is in conformance with the
		state implementation plan and does not
		require a detailed conformity analysis
		(Attachment D).
Coastal Zone Management Act	☐ Yes ☑ No	This project does not involve any
Coastal Zone Management Act,		property or parcel located within the
sections 307(c) & (d)		Coastal Zone Management Area for
		Wayne County. This project does not
		require formal consultation with the
		State of Michigan Coastal Zone
		Management Program (Attachment E).
Contomination and Taxia	☑ Yes □ No	The Phase I ESA was conducted on
Contamination and Toxic	₩ Yes ⊔ No	
Substances		December 31, 2020. The report did not
24 CFR 50.3(i) & 58.5(i)(2)]		identify any Recognized Environmental
		Conditions (REC's) associated with the
		site (Attachment F). Asbestos
		inspections were conducted at 17370
		and 17400 Meyers. The scope of work
		included sampling of suspect ACM's in
		general conformance with the National
		Emission Standards for Hazardous Air
		Pollutants (NESHAP) 40 CFR Part 61
		Subpart M. Based on the inspection
		conducted by ASTI between September
		21-22, 2021, the following ACMs were
		identified in floor tile and calk. During
		completion of the inspection, several
		materials were identified as potential
		•
		ACMs, however, due to the destructive
		nature of sampling required; these
		materials were not sampled at this time
		and should be considered as presumed
		asbestos-containing materials (PACMs)
		until they can be sampled. The following
		PACMs were identified during the site
		inspection: 17344 was inaccessible due
		to safety issues, roofs, fire doors and
		frames of 17370 and 17400 Meyers.
		During completion of the inspection,
		several materials were identified as
		potential ACMs, however, due to the
		destructive nature of sampling required;
		these materials were not sampled at
		this time and should be considered as
		presumed asbestos-containing materials

Endangered Species Act	☐ Yes ☑ No	(PACMs) until they can be sampled. The asbestos will be abated and a closeout report completed prior to occupancy. The site will be tested for asbestos after closing on the project. If asbestos are present above criteria, they will be abated and a closeout report generated for the site prior to occupancy (Attachment F). Lead - Lead-Based Paint inspections were conducted at 17370 and 17400 Meyers. 37 of the 659 measurements were positive for LBP. 77 of the 115 dust wipes exceeded the State of Michigan, HUD and Environmental Protection Agency (EPA) standards. The soil tests revealed that lead concentrations in soil do not exceed the HUD & EPA standards. The lead will be abated and a closeout report completed prior to occupancy. 17344 was inaccessible due to safety concerns. (Attachment F). The property is in Wayne County, which is within Zone 3 of the EPA Radon Map for risk of indoor radon levels; Zone 3 is low potential risk for indoor radon levels (Attachment F).
Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402		may disturb natural vegetation or critical habitat. There are trees at the subject property that are planned to be cut down, that are not a critical habitat for endangered the Indiana Bat and the Northern Long Eared Bat species. Therefore, this project may affect a listed or proposed endangered or threatened species. Consultation with the U.S. Fish and Wildlife Service or the State of Michigan Department of Natural Resources is not required. A letter from the U.S. Fish and Wildlife Service dated October 12, 2021, determined that the project will have no effect on any of the endangered species known to have habitats within Wayne County (Attachment G).

Europeius and Flammakia Harris	□ Voc □ Al=	The project is leasted at an Assertable
Explosive and Flammable Hazards Above-Ground Tanks)[24 CFR Part 51 Subpart C	☐ Yes ☑ No	The project is located at an Acceptable Separation Distance (ASD) from any above-ground explosive or flammable fuels or chemicals containers according to 24 CFR 51C. A one-mile radius around the Property was searched for ASTs containing hazardous materials and one above-ground explosive or flammable fuels or chemicals containers. The sight container is at Grace Hospital 6071 West Outer Drive, Detroit, Michigan 48235 at 0.649 mile (3,426.72 feet) away from the project site. The container is not pressurized or diked. The volume of the container is 5,000 gallons. The project site is within ASD
		for both people and buildings at 540.74 and 105.81 respectively (Attachment H).
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	□ Yes ☑ No	This project does not include any prime or unique farmland. The property is located within an "urbanized area" and, therefore, are not subject to the statutory or regulatory requirements identified above, per 7 CFR 658.2(a) (Attachment I).
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	□ Yes ☑ No	According to the attached FEMA FIRMette Map 26163C0100E, effective on February 2, 2012, the property is in Zone X, which represents minimal risk outside the 1-percent and 2-percent- annual-chance floodplains. Floodplain management is not required (Attachment C).
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	☑ Yes □ No	Due to the ground disturbing nature of the new construction, the project was submitted to the City of Detroit for review, per the programmatic agreement between the City of Detroit and the State Historic Preservation Office (SHPO). The City has reviewed the Section 106 application and forwarded the application to SHPO for further comment. SHPO has reviewed the project and determined that no historic properties will be affected by the project in a letter dated February 15,

		2022. * Although, there is no evidence of archaeological sites on the Subject Property, if any artifacts or bones are discovered during ground disturbing activities, that the work will be halted, with the immediate consultation with the Preservation Specialist for further guidance on how to proceed. * If the scope of work changes in any way, the SHPO must be contacted immediately (Attachment J).
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	✓ Yes □ No	The property is near John C. Lodge Freeway (M-10), Meyers Road, and West McNichols, which are considered busy roads due to its size and traffic volume. The site is also within proximity of two airports. Coleman A. Young International Airport (DET) is approximately 7.7 miles distant and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not within a distance of concern. Windsor International Airport (YQG) is approximately 14.2 miles distant and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not considered to represent a noise concern to the property. The noise for the roadway was projected to levels in 2030 and was found to be in the normally unacceptable range at 72.3 dB (Attachment K). The HUD Sound Transmission Classification Assessment Tool (STraCAT) was used to determine the noise attenuation for the building walls to bring the noise levels within acceptable levels for interiors. The building materials included 29,040 square feet of wall construction with a Sound Transmission Class (STC) rating of 50, wall construction of 29,040 square feet of 2"x6" wood studs, 16" o.c. 5

have a disproportionately high adverse
effect on human health or environment
of minority populations and/or low-
income populations (Attachment O).

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

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

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

Environmental	Impact	Impact Evaluation	Mitigation			
Assessment Factor	Code	pust _suitation	······································			
LAND DEVELOPMENT						
Conformance with						
	2	The project is in line with the existing				
Plans / Compatible		zoning and compatible with the				
Land Use and Zoning		surrounding neighborhood which is a				
/ Scale and Urban		combination of single-family dwellings,				
Design		multi-family buildings, and commercial				
		structures. The parcel is currently zoned as				
		R3 - Low Density Residential District. The				
		project is not anticipated to have any				
		significant impact on the surrounding				
		urban environment, and it will be				
		compatible with surrounding land uses. The				
		surrounding land is zoned multi-family,				
		single-family and commercial. The project				
		will rehabilitate two vacant buildings,				
		demolish a vacant house, and construct a				
		four-story apartment building. Because the				
		project is removing blight as part of the City				
		of Detroit's goal to eliminate blight, the				
		project may be potentially beneficial.				
Soil Suitability /	2	Based on the USDA Soil Survey of Wayne				
Slope/ Erosion /		County, the general soil lithology of the				
Drainage and Storm		area is the Wasepi-Gilford-Boyer				
Water Runoff		association and generally consists of very				
		poorly to well drained soils that have a				
		moderately course to course textured				
		subsoil. Since the subject property has				
		been previously developed, no adverse				

Environmental	Impact	Impact Evaluation	Mitigation
Assessment Factor	Code		
		effect is anticipated. According to the Royal	
		Oak Quadrangle 7.5-minute Topographic	
		map has a 665 feet elevation and the	
		region generally slopes to the south. The	
		property is relatively flat with an and no	
		drainage or slope issues are anticipated.	
		There was no visual evidence of slides or	
		slumps on the property. The project is not	
		located near an erosion sensitive area. The	
		subject property has an urban land soil of	
		variable texture. The soil is considered to	
		be non-hydric. Since the subject property	
		has been previously developed, no adverse	
		effect is anticipated.	
Hazards and	1	The project is not adversely affected by on-	
Nuisances including		site or off-site hazards or nuisances. There	
Site Safety and Site-		will be adequate on-site parking for	
Generated Noise		residents, and lighting. The property will	
		also have security cameras monitoring	
		walkways and parking areas and a key fob	
		entry system.	
		SOCIOECONOMIC	
Employment and	1	The area is already served by electrical and	
Income Patterns		gas utilities provided by DTE Energy. There	
		is adequate capacity to serve the new	
		construction building.	
Demographic	2	There will be a temporary increase in jobs	
Character Changes /		related to the construction of the project.	
Displacement		Other than construction related changes,	
		the project will not result in a change to	
		employment and income patterns in the	
		area. The project will provide permanent	
		jobs for the on-site management staff. The	
		project could be beneficial to local	
		businesses because there will be an	
		increase in households requiring goods and	
		services.	
Environmental Justice	2	The project will not change the	
EA Factor		demographics of the general area. It will	
		provide much needed affordable housing	
		and supportive housing to residents of the	
		area. The project aims to assist low-income	
		senior citizens by providing affordable one-	
		bedroom units. The project involves the	

Environmental	Impact	Impact Evaluation	Mitigation
Assessment Factor	Code		
		demolition of a vacant structure and the	
		renovation of two extant two-story	
		structures that are currently vacant. No	
		displacement will occur.	
		INITY FACILITIES AND SERVICES	
Educational and	2	The area is served by the Detroit Public	
Cultural Facilities		Schools Community District. As this project	
(Access and Capacity)		is for senior citizens it will not impact the	
		capacity of any of the neighborhood	
	_	schools	
Commercial Facilities	2	The project area has commercial corridors	
(Access and		on West McNichols Road two blocks to the	
Proximity)		south and on Wyoming Avenue seven	
		blocks to the east. No commercial facilities	
Hoolth Caro / Casial	2	will be negatively impacted by this project.	
Health Care / Social Services (Access and	2	The project area is served by a full range of	
Capacity)		health care professionals. Detroit Medical Center Sinai Grace Hospital is	
Capacity)		approximately .75 mile from the project	
		site. No health care services will be	
		negatively impacted by this project.	
Health Care / Social	2	The project area is served by a full range of	
Services (Access and	_	health care professionals. Detroit Medical	
Capacity)		Center Sinai Grace Hospital is	
		approximately .75 mile from the project	
		site. No health care services will be	
		negatively impacted by this project.	
Solid Waste Disposal	1	No social services will be negatively	
and Recycling		impacted by the project activities. There is	
(Feasibility and		not likely to be an increase in the demand	
Capacity)		for social services as a result of the project	
		activities. Affordable housing options could	
		potentially reduce the number of people	
		requiring social services.	
Solid Waste Disposal	1	No social services will be negatively	
and Recycling		impacted by the project activities. There is	
(Feasibility and		not likely to be an increase in the demand	
Capacity)		for social services as a result of the project	
		activities. Affordable housing options could	
		potentially reduce the number of people	
		requiring social services.	
Waste Water and	2	The project will be connected to the	
Sanitary Sewers		municipal sanitary sewer service. Service	
		already exists for the property. The Detroit	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
	Code	Water and Sowage Department provides	
(Feasibility and		Water and Sewage Department provides	
Capacity)	2	service to the project area.	
Waste Water and	2	The project will be connected to the	
Sanitary Sewers		municipal sanitary sewer service. Service	
(Feasibility and		already exists for the property. The Detroit	
Capacity)		Water and Sewage Department provides	
	_	service to the project area.	
Water Supply	2	The project will be connected to the	
(Feasibility and		municipal water service. Service already	
Capacity)		exists for the property. The Detroit Water	
		and Sewage Department provides service	
		to the project area.	
Water Supply	2	The project will be connected to the	
(Feasibility and		municipal water service. Service already	
Capacity)		exists for the property. The Detroit Water	
		and Sewage Department provides service	
		to the project area.	
Public Safety - Police,	2	The Detroit Police Department covers the	
Fire and Emergency		city with the 12th Precinct covering the	
Medical		project location. The precinct offices are	
		located at 1441 W 7 Mile Detroit, MI	
		48203, within three miles of the property.	
		No police services will be negatively	
		impacted by the proposed project. The	
		Detroit Fire Department provides fire	
		department services to the city along with	
		basic first responder medical assistance	
		from paramedics. No fire services will be	
		·	
		negatively impacted by the proposed	
		project. The Emergency Medical Services	
		Division of the Detroit Fire Department	
		provides Emergency Medical Services to	
		residents in the project area. No	
		emergency medical services will be	
		negatively impacted by the proposed	
		project.	
Public Safety - Police,	2	The Detroit Police Department covers the	
Fire and Emergency		city with the 12th Precinct covering the	
Medical		project location. The precinct offices are	
		located at 1441 W 7 Mile Detroit, MI	
		48203, within three miles of the property.	
		No police services will be negatively	
		impacted by the proposed project. The	
		Detroit Fire Department provides fire	

Environmental	Impact	Impact Evaluation	Mitigation
Assessment Factor	Code		
		department services to the city along with	
		basic first responder medical assistance	
		from paramedics. No fire services will be	
		negatively impacted by the proposed	
		project. The Emergency Medical Services	
		Division of the Detroit Fire Department	
		provides Emergency Medical Services to	
		residents in the project area. No	
		emergency medical services will be	
		negatively impacted by the proposed	
		project.	
Parks, Open Space	2	The proposed project is located near open	
and Recreation		spaces including parks. Within	
(Access and Capacity)		approximately a half-mile of the property	
		there is Couzens- Outer Drive Park. No	
		open spaces will be negatively impacted by	
		the proposed project. The project is in	
		Detroit's West Side near Winship; there are	
		many options for recreation available. The	
		project is located within a few miles of	
		Rouge Park, Frisbee-Pembroke Park,	
		Palmer Park, Couzens-Outer Drive Park,	
		O'Hair Park, and the Detroit Golf Club. No	
		recreation facilities will be negatively	
		impacted by the proposed project.	
Parks, Open Space	2	The proposed project is located near open	
and Recreation		spaces including parks. Within	
(Access and Capacity)		approximately a half-mile of the property	
		there is Couzens- Outer Drive Park. No	
		open spaces will be negatively impacted by	
		the proposed project. The project is in	
		Detroit's West Side near Winship; there are	
		many options for recreation available. The	
		project is located within a few miles of	
		Rouge Park, Frisbee-Pembroke Park,	
		Palmer Park, Couzens-Outer Drive Park,	
		O'Hair Park, and the Detroit Golf Club. No	
		recreation facilities will be negatively	
Transportation	2	impacted by the proposed project.	
Transportation and	2	Bus service in the city is provided by the	
Accessibility (Access		Detroit Department of Transportation. The	
and Capacity)		nearest bus stop is at Meyers Road and	
		Curtis Street. The City of Detroit is divided	
		by a number of main expressways that also	

Environmental	Impact	Impact Evaluation	Mitigation
Assessment Factor	Code		
		provide access to the rest of the state. The	
		nearest major roadways near the project	
		area are Woodward Avenue (M-1), the	
		John C. Lodge Freeway (M-10), M-39	
		Southfield Freeway, and I-75 Expressway.	
Transportation and	2	Bus service in the city is provided by the	
Accessibility (Access		Detroit Department of Transportation. The	
and Capacity)		nearest bus stop is at Meyers Road and	
		Curtis Street. The City of Detroit is divided	
		by a number of main expressways that also	
		provide access to the rest of the state. The	
		nearest major roadways near the project	
		area are Woodward Avenue (M-1), the	
		John C. Lodge Freeway (M-10), M-39	
		Southfield Freeway, and I-75 Expressway.	
		NATURAL FEATURES	·
Unique Natural	2	The project location does not contain any	
Features /Water		unique natural features or agricultural	
Resources		lands. The City of Detroit is an urban city	
		with few unique natural features or	
		agricultural lands. Groundwater will not be	
		affected by the proposed construction	
		project. The city provides municipal water	
		service to the project area. There are no	
		sole source aquifers in the State of	
		Michigan. The Michigan EGLE provides	
		information regarding source waters for	
		different areas in the state, according to	
		this map Detroit's source water is likely	
		l · · · · · · · · · · · · · · · · · · ·	
		from the Great Lakes connecting channels.	
		No water resources will be impacted by the	
Unique Natural	2	proposed project.	
Unique Natural Features /Water	2	The project location does not contain any	
•		unique natural features or agricultural	
Resources		lands. The City of Detroit is an urban city	
		with few unique natural features or	
		agricultural lands. Groundwater will not be	
		affected by the proposed construction	
		project. The city provides municipal water	
		service to the project area. There are no	
		sole source aquifers in the State of	
		Michigan. The Michigan EGLE provides	
		information regarding source waters for	
		different areas in the state, according to	

Environmental	Impact	Impact Evaluation	Mitigation
Assessment Factor	Code		
		this map Detroit's source water is likely	
		from the Great Lakes connecting channels.	
		No water resources will be impacted by the	
	_	proposed project.	
Vegetation / Wildlife	2	No vegetation or wildlife is expected to be	
(Introduction,		impacted by the proposed project.	
Modification,			
Removal, Disruption,			
etc.)	2	No constation and ildife is accompated to be	
Vegetation / Wildlife	2	No vegetation or wildlife is expected to be	
(Introduction, Modification,		impacted by the proposed project.	
•			
Removal, Disruption, etc.)			
Other Factors 1			
Other Factors 1			
Other Factors 2			
Other Factors 2			
Other ractors 2		CLIMATE AND ENERGY	
Climata Chanasa		CLIMATE AND ENERGY	
Climate Change	2	The proposed project is anticipated to	
		increase urban density along Meyers Road	
		in the City of Detroit, thereby reducing the need extensive infrastructure services	
		sprawling over great distances. The	
		property is 723 feet from the 32 DDOT bus	
		line on McNichols Road, a grocery store is	
		691 feet from the property, and is 0.75	
		miles from DMC Sinai Grace Hospital, all of	
		which will help reduce the carbon footprint	
		of potential future residents of the	
		proposed project. Additionally, two extant	
		building are proposed to undergo adoptive	
		reuse which will overall reduce the carbon	
		footprint of the proposed project.	
Climate Change	2	The proposed project is anticipated to	
		increase urban density along Meyers Road	
		in the City of Detroit, thereby reducing the	
		need extensive infrastructure services	
		sprawling over great distances. The	
		property is 723 feet from the 32 DDOT bus	
		line on McNichols Road, a grocery store is	
		691 feet from the property, and is 0.75	
		miles from DMC Sinai Grace Hospital, all of	

Environmental	Impact	Impact Evaluation	Mitigation
Assessment Factor	Code		
		which will help reduce the carbon footprint of potential future residents of the proposed project. Additionally, two extant building are proposed to undergo adoptive reuse which will overall reduce the carbon footprint of the proposed project.	
Energy Efficiency	2	The proposed project is anticipated to increase urban density which is expected to increase energy usage. However, the proposed project is to rehabilitate two former school buildings into and new construction of apartments, which are anticipated to require less energy for HVAC equipment. Otherwise, the proposed project is not anticipated to have an adverse impact on energy resources within the City of Detroit.	
Energy Efficiency	2	The proposed project is anticipated to increase urban density which is expected to increase energy usage. However, the proposed project is to rehabilitate two former school buildings into and new construction of apartments, which are anticipated to require less energy for HVAC equipment. Otherwise, the proposed project is not anticipated to have an adverse impact on energy resources within the City of Detroit.	

Supporting documentation

Attachment P - EA Factors Maps.pdf

Additional Studies Performed:

Field Inspection [Optional]: Date and completed by:

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

1. Michael Hambacher, Archeologist, Michigan State Historic Preservation Office, 300 North Washington Square, Lansing MI 48913, 517-243-9513. 2. Federal Emergency Management Agency-Map Service for Flood Rate Insurance Maps https://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=1000 1&catalogId= 10001&langId=-1 3. U.S. Fish & Wildlife Service, National Wetlands Inventory, Wetlands Mapper; http://www.fws.gov/wetlands/data/mapper.html 4. U.S. Fish & Wildlife Service, Endangered Species, Michigan County Distribution of Federally-Listed Threatened, Endangered, Proposed, and Candidate Species, http://www.fws.gov/midwest/endangered/lists/michigan-cty.html 5. Michigan Department of Environmental Quality, Michigan Coastal Zone Boundary Maps, http://www.michigan.gov/deq/0,4561,7-135-3313 3677 3696-90802--,00.html 6. Michigan Department of Environmental Quality, Air Quality Division, http://www.michigan.gov/deq/0,1607,7-135-3310 30151 31129---,00.html 7. US EPA Map of Radon Zones, Kent County, Michigan, http://www.epa.gov/radon/states/michigan.html 8. Tiffany Ciavattone, Preservation Specialist, City of Detroit, 2 Woodward Ave., Detroit, Michigan 48226, 313-224-1339 9. City of Detroit, Zoning Map: Buildings, Safety Engineering, and Environmental Department, Section 59, https://detroitmi.gov/departments/buildings-safetyengineering-and-environmentaldepartment/ bseed-divisions/zoning-special-landuse/zoning-map-index.

List of Permits Obtained:

Public Outreach [24 CFR 58.43]:

All historical, local and federal contacts on the 2023 Interest Parties List were sent a copy of the Notice of Intent to Request for Release of Funds to use HUD funding for the project and were asked to comment on the project.

Cumulative Impact Analysis [24 CFR 58.32]:

The proposed low-income housing project will not adversely impact the City Detroit or neighborhoods surrounding the site. The activity is compatible with the surrounding neighborhood and land use and will have minimal impact on existing resources or services in the area.

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

No other sites were considered for this project.

No Action Alternative [24 CFR 58.40(e)]

The No Action Alternative is to not renovate the two extant, two-story structures into housing. This alternative is not preferred as it fails to provide additional housing to meet the need for affordable housing for senior citizens in the City of Detroit. Additionally, the No Action Alternative allows the structures to remain as blight, which interferes with the City of Detroit's goal to eliminate blight from the city.

Summary of Findings and Conclusions:

The proposed low-income housing construction will improve the conditions in the City Detroit or neighborhoods surrounding the site. The project will create affordable living for seniors in the City. The activity is compatible with the surrounding neighborhood and zoning and will have minimal impact on existing resources or services in the area.

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

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

Law, Authority, or Factor	Mitigation Measure or Condition	Comments on Completed	Mitigation Plan	Complete
Historic Preservation	Condition - No Historic Properties are present; however, the City of Detroit Preservation Specialist should be notified if any artifacts or bones are discovered during ground disturbing activities.	Measures N/A	The project will follow the mitigation measures outlined in the approved Mitigation	
Noise Abatement and Control	Condition - Noise attenuation measures will be incorporated into the buildings.	N/A	Plan. The project will follow the mitigation measures outlined in the approved	

			Mitigation Plan.
Toxic/Hazardous Substances/ Radioactive Materials, Contamination, Chemical or Gases - Asbestos	Condition - Asbestos-Containing Material will be abated prior to occupancy.	N/A	The project will follow the mitigation measures outlined in the approved Mitigation Plan.
Toxic/Hazardous Substances/ Radioactive Materials, Contamination, Chemical or Gases - Asbestos	Condition - Lead-Based Paint will be abated prior to occupancy.	N/A	The project will follow the mitigation measures outlined in the approved Mitigation Plan.

Project Mitigation Plan

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

Mitigation Plan.pdf

Supporting documentation on completed measures

APPENDIX A: Related Federal Laws and Authorities

Airport Hazards

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

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

√ No

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

Yes

Screen Summary

Compliance Determination

The property is not located in a FAA-designated Airport Runway Clear Zone or Accidental Potential Zone. The Coleman A. Young International Airport (DET) is approximately 7.7 miles from the property and Windsor International Airport is 14.2 miles away (Attachment A).

Supporting documentation

Attachment A - RCZ Map.pdf

Are formal compliance steps or mitigation required?

Yes

√ No

Coastal Barrier Resources

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

1.	Is the	project	located i	in a	CBRS	Unit?
----	--------	---------	-----------	------	-------------	-------

√ No

Document and upload map and documentation below.

Yes

Compliance Determination

The property is not located in the Coastal Barrier Resource Area in Wayne County. No coastal barriers will be impacted by the proposed project (Attachment B).

Supporting documentation

Attachment B - Coastal Barrier Map.pdf

Are formal compliance steps or mitigation required?

Yes

Flood Insurance

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

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

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

✓ Yes

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

Attachment C - Floodplain Map.pdf

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

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

✓ No

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

Yes

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

Yes

No

Screen Summary

Compliance Determination

According to the attached FEMA FIRMette Map 26163C0100E, effective on February 2, 2012, the property is in Zone X, which represents minimal risk outside the 1percent and 2-percent-annual-chance floodplains. Flood insurance is not necessary (Attachment C).

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

Air Quality

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

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

✓	Yes
	No

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

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

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

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

	Carbon Monoxide
	Lead
	Nitrogen dioxide
\checkmark	Sulfur dioxide

Ozone

Particulate Matter, <2.5 microns

Particulate Matter, <10 microns

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

Sulfur dioxide 100.00 ppb (parts per billion)

Provide your source used to determine levels here:

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

- 4. Determine the estimated emissions levels of your project. Will your project exceed any of the de minimis or threshold emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?
 - ✓ No, the project will not exceed de minimis or threshold emissions levels or screening levels.

Enter the estimate emission levels:

Sulfur dioxide 0.00 ppb (parts per billion)

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

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

Screen Summary

Compliance Determination

The entire State of Michigan is designated as "attainment" for carbon monoxide, nitrogen dioxide, sulfur dioxide, PM10, and lead except for small locations in Wayne and Saint Clair Counties with sulfur dioxide non-attainment areas and portions of the state are in nonattainment for ozone. Wayne County is a non-attainment county for ozone. The project was submitted to the EGLE Air Quality Division, and a response

was received on September 27, 2021, indicating that the project is in conformance with the state implementation plan and does not require a detailed conformity analysis (Attachment D).

Supporting documentation

Attachment D - Non-Attainment Map.pdf Attachment D - EGLE Letter.pdf

Are formal compliance steps or mitigation required?

Yes

Coastal Zone Management Act

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

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

Yes

✓ No

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

Screen Summary

Compliance Determination

This project does not involve any property or parcel located within the Coastal Zone Management Area for Wayne County. This project does not require formal consultation with the State of Michigan Coastal Zone Management Program (Attachment E).

Supporting documentation

Attachment E - Coastal Zone Map.pdf

Are formal compliance steps or mitigation required?

Yes

✓ No.

Contamination and Toxic Substances

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

- 1. How was site contamination evaluated? Select all that apply. Document and upload documentation and reports and evaluation explanation of site contamination below.
- ✓ American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment (ESA)
 ASTM Phase II ESA
 Remediation or clean-up plan
 ASTM Vapor Encroachment Screening
 None of the Above
- 2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

✓	N	^
•	1.7	

Explain:

The Phase I ESA was conducted on December 31, 2020. The report did not identify any Recognized Environmental Conditions (REC's) associated with the site.

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

Yes

Screen Summary
Compliance Determination

The Phase I ESA was conducted on December 31, 2020. The report did not identify any Recognized Environmental Conditions (REC's) associated with the site (Attachment F). Asbestos inspections were conducted at 17370 and 17400 Meyers. The scope of work included sampling of suspect ACM's in general conformance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 Subpart M. Based on the inspection conducted by ASTI between September 21-22, 2021, the following ACMs were identified in floor tile and calk. During completion of the inspection, several materials were identified as potential ACMs, however, due to the destructive nature of sampling required; these materials were not sampled at this time and should be considered as presumed asbestos-containing materials (PACMs) until they can be sampled. The following PACMs were identified during the site inspection: 17344 was inaccessible due to safety issues, roofs, fire doors and frames of 17370 and 17400 Meyers. During completion of the inspection, several materials were identified as potential ACMs, however, due to the destructive nature of sampling required; these materials were not sampled at this time and should be considered as presumed asbestos-containing materials (PACMs) until they can be sampled. The asbestos will be abated and a closeout report completed prior to occupancy. The site will be tested for asbestos after closing on the project. If asbestos are present above criteria, they will be abated and a closeout report generated for the site prior to occupancy (Attachment F). Lead - Lead-Based Paint inspections were conducted at 17370 and 17400 Meyers. 37 of the 659 measurements were positive for LBP. 77 of the 115 dust wipes exceeded the State of Michigan, HUD and Environmental Protection Agency (EPA) standards. The soil tests revealed that lead concentrations in soil do not exceed the HUD & EPA standards. The lead will be abated and a closeout report completed prior to occupancy. 17344 was inaccessible due to safety concerns. (Attachment F). The property is in Wayne County, which is within Zone 3 of the EPA Radon Map for risk of indoor radon levels; Zone 3 is low potential risk for indoor radon levels (Attachment F).

Supporting documentation

Attachment F - Radon Map.pdf

ATD16E~1.PDF

Attachment F - Lead-Based Paint Report.pdf

Attachment F - Asbestos Report.pdf

Are formal compliance steps or mitigation required?

✓ Yes

No

Endangered Species

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

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

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

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

- Yes, the activities involved in the project have the potential to affect species and/or habitats.
- 2. Are federally listed species or designated critical habitats present in the action area?

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

- ✓ Yes, there are federally listed species or designated critical habitats present in the action area.
- 3. What effects, if any, will your project have on federally listed species or designated critical habitat?

✓ No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat. in the action area.

Document and upload all documents used to make your determination below. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate

May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review. If negative effects cannot be mitigated, cancel the project using the button at the bottom of this screen.

Mitigation as follows will be implemented:

✓ No mitigation is necessary.

Explain why mitigation will not be made here:

The trees that will be cut down are not critical habitat for the Indiana Bat and the Northern Long Eared Bat species.

Screen Summary
Compliance Determination

This project involves activities which may disturb natural vegetation or critical habitat. There are trees at the subject property that are planned to be cut down, that are not a critical habitat for endangered the Indiana Bat and the Northern Long Eared Bat species. Therefore, this project may affect a listed or proposed endangered or threatened species. Consultation with the U.S. Fish and Wildlife Service or the State of Michigan Department of Natural Resources is not required. A letter from the U.S. Fish and Wildlife Service dated October 12, 2021, determined that the project will have no effect on any of the endangered species known to have habitats within Wayne County (Attachment G).

Supporting documentation

Attachment G - T and E Species Review.pdf

Are formal compliance steps or mitigation required?

Yes

Explosive and Flammable Hazards

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

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

✓	No
	Vac

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

No

✓ Yes

- 3. Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:
- Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR
- Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 or later version of National Fire Protection Association (NFPA) Code 58.

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

No

✓ Yes

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

✓	Yes
---	-----

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

No

Screen Summary

Compliance Determination

The project is located at an Acceptable Separation Distance (ASD) from any above-ground explosive or flammable fuels or chemicals containers according to 24 CFR 51C. A one-mile radius around the Property was searched for ASTs containing hazardous materials and one above-ground explosive or flammable fuels or chemicals containers. The sight container is at Grace Hospital 6071 West Outer Drive, Detroit, Michigan 48235 at 0.649 mile (3,426.72 feet) away from the project site. The container is not pressurized or diked. The volume of the container is 5,000 gallons. The project site is within ASD for both people and buildings at 540.74 and 105.81 respectively (Attachment H).

Supporting documentation

Attachment H - Explosives Worksheet and Map.pdf

Are formal compliance steps or mitigation required?

Yes

Farmlands Protection

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

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

✓ Yes

No

- 2. Does your project meet one of the following exemptions?
 - Construction limited to on-farm structures needed for farm operations.
 - Construction limited to new minor secondary (accessory) structures such as a garage or storage shed
 - Project on land already in or committed to urban development or used for water storage. (7 CFR 658.2(a))
- ✓ Yes

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

No

Screen Summary

Compliance Determination

This project does not include any prime or unique farmland. The property is located within an "urbanized area" and, therefore, are not subject to the statutory or regulatory requirements identified above, per 7 CFR 658.2(a) (Attachment I).

Supporting documentation

Attachment I - Soil USDA Survey.pdf

Are formal compliance steps or mitigation required?

Yes

Floodplain Management

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

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

55.12(c)(3)

55.12(c)(4)

55.12(c)(5)

55.12(c)(6)

55.12(c)(7)

55.12(c)(8)

55.12(c)(9)

55.12(c)(10)

55.12(c)(11)

✓ None of the above

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

Attachment C - Floodplain Map.pdf

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

Does your project occur in a floodplain?

✓ No

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

Yes

Screen Summary

Compliance Determination

According to the attached FEMA FIRMette Map 26163C0100E, effective on February 2, 2012, the property is in Zone X, which represents minimal risk outside the 1-percent and 2-percent-annual-chance floodplains. Floodplain management is not required (Attachment C).

Supporting documentation

Are formal compliance steps or mitigation required?

Yes

Historic Preservation

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

Detroit, MI

Threshold

Is Section 106 review required for your project?

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the PA Database to find applicable PAs.) No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

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

Step 1 – Initiate Consultation Select all consulting parties below (check all that apply):

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

✓ City of Detroit Preservation Specialist

Completed

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

Under the authority of the National Historic Preservation Act (NHPA) of 1966, as amended, and the Programmatic Agreement between the Michigan State Historic Preservation Office and the City of Detroit, Michigan as amended, dated December 21, 2022, the City of Detroit has reviewed the above-cited project and has determined it to be an undertaking as defined by 36 CFR 800.16(y).

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

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

Yes

No

Step 2 – Identify and Evaluate Historic Properties

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

APE for direct effect is the area within the project boundaries where ground disturbance will occur, as determined by the client/developer and communicated to the cultural resource's consultants. Ground disturbance will occur within the 253 ft. east-west by 639 ft. north-south parcel.

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

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

Address / Location	National Register	SHPO Concurrence	Sensitive
/ District	Status		Information

Additional Notes:

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

✓ Yes

Document and upload surveys and report(s) below. For Archeological surveys, refer to HP Fact Sheet #6, Guidance on Archeological Investigations in HUD Projects.

Additional Notes:

A Phase I Archeological investigation was performed as the project is larger than 0.50 acres (see below).

No

Step 3 -Assess Effects of the Project on Historic Properties

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

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

✓ No Historic Properties Affected

Based on the response, the review is in compliance with this section. Document and upload concurrence(s) or objection(s) below.

Document reason for finding:

✓ No historic properties present.

Historic properties present, but project will have no effect upon them.

No Adverse Effect

Adverse Effect

Screen Summary

Compliance Determination

Due to the ground disturbing nature of the new construction, the project was submitted to the City of Detroit for review, per the programmatic agreement between the City of Detroit and the State Historic Preservation Office (SHPO). The City has reviewed the Section 106 application and forwarded the application to SHPO for further comment. SHPO has reviewed the project and determined that no historic properties will be affected by the project in a letter dated February 15, 2022. * Although, there is no evidence of archaeological sites on the Subject Property, if any artifacts or bones are discovered during ground disturbing activities, that the work will be halted, with the immediate consultation with the Preservation Specialist for further guidance on how to proceed. * If the scope of work changes in any way, the SHPO must be contacted immediately (Attachment J).

Supporting documentation

Attachment J - Section 106 Letter.pdf

Are formal compliance steps or mitigation required?

✓ Yes

No

Noise Abatement and Control

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

Detroit, MI

- 1. What activities does your project involve? Check all that apply:
 - ✓ New construction for residential use.

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

Rehabilitation of an existing residential property

NOTE: For major or substantial rehabilitation in Normally Unacceptable zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. For major rehabilitation in Unacceptable zones, HUD strongly encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

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

An interstate land sales registration

Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster None of the above

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

Indicate the findings of the Preliminary Screening below:

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

- ✓ Noise generators were found within the threshold distances.
- 5. Complete the Preliminary Screening to identify potential noise generators in the

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

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

Indicate noise level here: 72.3

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

Is your project in a largely undeveloped area?

✓ No

Indicate noise level here: 72.3

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

Yes

Unacceptable: (Above 75 decibels)

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

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

Indicate noise level here: 72.3

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

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

Mitigation as follows will be implemented:

✓ No mitigation is necessary.

Explain why mitigation will not be made here:

Noise attenuation measures will be incorporated into the project; therefore, formal mitigation is not required.

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

Screen Summary

Compliance Determination

The property is near John C. Lodge Freeway (M-10), Meyers Road, and West McNichols, which are considered busy roads due to its size and traffic volume. The site is also within proximity of two airports. Coleman A. Young International Airport (DET) is approximately 7.7 miles distant and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not within a distance of concern. Windsor International Airport (YQG) is approximately 14.2 miles distant and is within 15 miles (the MSHDA/HUD civil airport distance criterion) of the development. Based on the Noise Contour Map for the airport, the site is not considered to represent a noise concern to the property. The noise for the roadway was projected to levels in 2030 and was found to be in the normally unacceptable range at 72.3 dB (Attachment K). The HUD Sound Transmission Classification Assessment Tool (STraCAT) was used to determine the noise attenuation for the building walls to bring the noise levels within acceptable levels for interiors. The building materials included 29,040 square feet of wall construction with a Sound

Transmission Class (STC) rating of 50, wall construction of 29,040 square feet of 2"x6" wood studs, 16" o.c. 5 1/2" glass fiber insulation, 5/8" fire-shielded gypsum board one side, 5/8" fire-shielded gypsum board for the other side with a STC of 38, V1 Series Single hung / gliding window with nailing flange and J Channel of double strength, insulated glass of 5/8" with a STC rating of 30, 24 square feet for each solid door with a STC of 35, 1748 square feet of 3/8x6/8 fiber-classic/smooth-star full lite flush glazed balcony doors, 47 square feet of a rolling 24 galvanized steel garage door with an STC of 28, and 73 square feet of hollow metal doors with a STC of 35. The noise attenuation necessary to bring the levels to below 45 dB with the combined attenuation for the wall components was found to be 35.01 dB. The wall components will bring noise levels to acceptable interior standards of below 45 dB. No further attenuation is needed for the site (Attachment K).

Supporting documentation

Attachment K - Noise Assessment.pdf

Are formal compliance steps or mitigation required?

✓ Yes

No

Sole Source Aquifers

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

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

Yes

✓ No

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

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

✓ No

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

Yes

Screen Summary

Compliance Determination

There are no sole source aquifers located in Detroit or Wayne County, Michigan (Attachment L).

Supporting documentation

Attachment L - Sole Source Aquifer.pdf

Are formal compliance steps or mitigation required?

Yes

Wetlands Protection

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

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

No

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

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

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

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

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

Screen Summary
Compliance Determination

No wetlands are present on the property according to the National Wetlands Inventory Map (Attachment M).

Supporting documentation

Attachment M - Wetland Map.pdf

Are formal compliance steps or mitigation required?

Yes

Wild and Scenic Rivers Act

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

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

✓ No

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

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

Screen Summary

Compliance Determination

Wayne County does not have any Wild and Scenic Rivers. There are no Michigan Natural Rivers in Wayne County (Attachment N).

Supporting documentation

Attachment N - Wild and Scenic Rivers Map.pdf

Are formal compliance steps or mitigation required?

Yes

Environmental Justice

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

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

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

Yes

✓ No

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

Screen Summary

Compliance Determination

This project entails the adoptive reuse of two, two-story structures and demolition/new construction of a multi-family building into affordable senior apartment community. This project is intended to improve the present environment of low-income senior citizens in Detroit. The project will not have a disproportionately high adverse effect on human health or environment of minority populations and/or low-income populations (Attachment O).

Supporting documentation

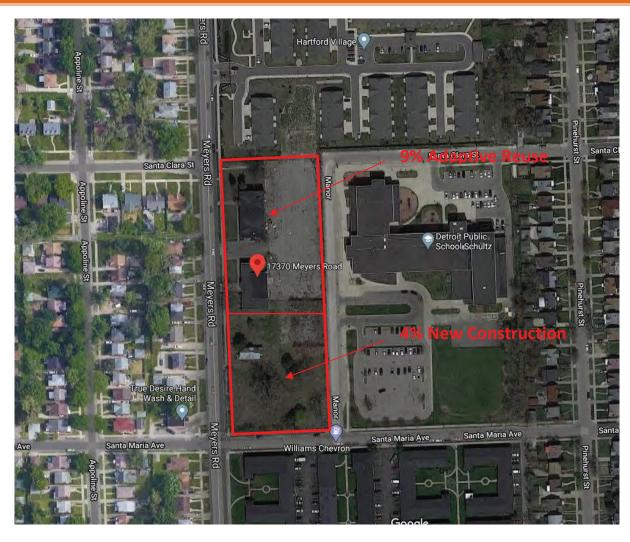
Attachment O - EJ Screen.pdf

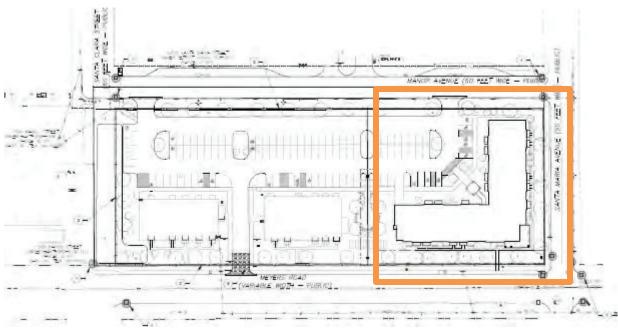
Are formal compliance steps or mitigation required?

Yes

MEYERS SENIOR APARTMENTS II

17370 MEYERS ROAD | DETROIT | WAYNE COUNTY | MICHIGAN | 48235





Located in Northwest Detroit, Meyers Senior Apartments is a 105-unit independent senior (55+) living community located on the former Lewis College of Business. As part of this development, the two former college buildings will be renovated and repurposed with competitive 9% LIHTC's to house 8 studio apartments and 24 one-bedroom apartments. A new, 4-story building will be constructed adjacent to the renovated buildings on the corner of Meyers Road and Santa Maria Avenue using MSHDA/Detroit financing sources and 4% LIHTC equity. This new building will house 62 one-bedroom units and 11 two-bedroom units.

Seniors will enjoy modern, in-unit amenities such as LVT flooring, garbage disposals, ceiling fans, and brandnew appliances. Residents will also have access to a fully equipped fitness center, community space for socialization, and a business center with computers. The building and site will be designed to offer seniors all the comforts of home.

Wallick Communities has partnered with Presbyterian Villages of Michigan ("PVM") in this endeavor as Co-Developers and Co-Owners. PVM will also serve as manager of the property, as they have local expertise and management scale to benefit the proposed development.

Project Location:

https://www.google.com/maps/place/17370+Meyers+Rd,+Detroit,+MI+48235/@42.4195726,-83.1720297,825m/data=!3m1!1e3!4m13!1m7!3m6!1s0x8824cbf96ff55e29:0xecb4d99186d8074e!2s17370+Meyers+Rd,+Detroit,+MI+48235!3b1!8m2!3d42.4195687!4d-

83.169841!3m4!1s0x8824cbf96ff55e29:0xecb4d99186d8074e!8m2!3d42.4195687!4d-83.169841?hl=en

4 % New Construction (73 Units)



Competitive Summary:

Competitive Pool: MSHDA HOME & Mortgage Restructuring Funds (MRF)

• Project Type: New Construction

Population Type: Senior 55+

Building Type: 4-Story Congregate

of Buildings: One# of Units: 73

1 Bedroom Standard Units:2 Bedroom Standard Units:11

Project Element	Total Project	
Development Cost	\$11,395,486	
Development Cost per Unit:	\$156,103/unit	
Construction Contract (6%,2%,6% w/o 5% contingency)	\$8,070,065 (\$110,549/unit)	
Total Developer Fee	\$1,461,000	
Deferred Developer Fee	\$123,891	
HOME/TCAP Request	\$250,000 / \$121,502	
HOME/TCAP Request/Unit	\$5,089/unit	

Project Ownership Structure:

General Partner(s):

Presbyterian Villages of Michigan (PVM) and Wallick Communities will be Co-Developers and Co-General partners of Meyers Senior Apartments II and will hold a combined 0.01% ownership interest in the project. Of the 0.01% ownership interest,

- PVM, through the affiliated entity Meyers Senior II GP, LLC, will be the 51% Administrative Member
- Wallick, through the affiliated entity WAM Meyers Senior II, LLC, will be the 49% Managing Member.

Limited Partner:

It is currently anticipated that City Real Estate Advisors ("CREA"), will be the 99.99% Limited Partner, who will provide the LIHTC equity investment into the project.

Financing Summary:

4% LIHTC Equity (CREA):

As previously mentioned, City Real Estate Advisors ("CREA") is the proposed LIHTC Investor. CREA has been a long-time partner to Wallick and has an extensive amount of experience with MSHDA. Additionally, CREA has been involved with the project concept and financial structuring for the past several months. The current LIHTC Equity projections provide for the following assumptions:

4% LIHTC Equity: \$5,294,239
 Annual Allocation: \$557,344
 Total Allocation: \$5,573,443
 LP % Ownership: 99.99%
 Net Equity Pricing: \$0.9500

Construction and Permanent Financing (MSHDA):

MSHDA will provide both the construction and permanent financing to the project. Below is a summary of the construction and permanent financing MSHDA has provided:

Construction Loan: \$5,925,653

Interest Rate: 3.95 (fixed)
Term: 21 Months
Amortization: Interest Only

Permanent Loan: \$4,315,462

Interest Rate: 3.95% (fixed)
Term: 40 years
Amortization: 40 years
Loan Fees: 2%
Legal Fees: \$0

Other Conditions:
 All project reserves must be held with MSHDA

In addition to the LIHTC equity and the construction/permanent financing, the financial structure for Meyers Senior Apartments II currently anticipates the following additional sources:

• HOME/ TCAP: \$371,502

Loan Type: HOME Funds & Tax Credit Assistance Program Funds
 Lender/Recipient: MSHDA/Meyers Senior Apartments II LDHA, LP

Interest Rate: 3.00% (fixed)Term: 40 yearsAmortization: N/A

Repayment Type: Repayable from Surplus Cash Flow, if available

Subordinate Loan: \$1,250,000

Loan Type: HOME Funds
Lender: City of Detroit
Interest Rate: 3.00% (fixed)
Term: 40 years
Amortization: N/A

Repayment Type: Repayable from Surplus Cash Flow, if available

Other Conditions: (i) Project must commit to a minimum affordability period of 20-years

Deferred Developer Fee: \$123,891

Required MSHDA DCR
 1.20 at stabilization, ≥1.0 for 20-year compliance period

Project Guarantees:

- Wallick will provide for the 100% of the following guarantees that may be required by the project lenders and LIHTC investors:
 - The construction loan
 - Obtaining the permanent loan and any financing shortfalls,
- Wallick will split the following guarantees with PVM on a pro-rata basis on percentage of ownership (Wallick-49%, PVM-51%):
 - Operating deficit guarantee
- o PVM will provide for 100% of the following guarantees:
 - Tax credit lease up delivery and tax credit compliance
- o Wallick and PVM will equally share the repurchase obligations to the investor members

Project Summary:

Meyers Senior Apartments II (4%) is a proposed 73-unit, new construction opportunity that will provide a quality affordable option to seniors (55+) within the City of Detroit, MI.

- To meet MSHDA standards for threshold and scoring purposes, the project will incorporate the following:
 - o 1,000 square feet of accessible community space
 - Units with "visitability" design features
 - o 3 units will be set aside to meet the Low HOME funding requirements
 - o 8 units will be set aside to meet the High HOME funding requirements
 - o Remaining 62 units will be set aside at 60% AMI
- Rents are set at LIHTC Max for the 50% LIHTC set aside, which a preliminary market assessment by VSI deems achievable.
- Rents at 60% AMI are slightly below the MAX but are deemed achievable by VSI.

# of BDRMs	# of Units	# of Baths	Square Footage	Rent Restriction	Income Restriction	Gross Rent	Utility Allowance	Net Rent
1	2*	1	630	50%	50%	\$736	\$80	\$656
1	53	1	630	60%	60%	\$835	\$80	\$755
1	7**	1	630	60%	60%	\$764	\$80	\$684
2	1*	1.5	840	50%	50%	\$883	\$101	\$782
2	9	1.5	840	60%	60%	\$1,001	\$101	\$900
2	1**	1.5	840	60%	60%	\$977	\$101	\$876

^{*}Low HOME

Unit Amenities:

- Appliances: refrigerator, range, garbage disposal
- Central HVAC
- Ceiling Fans
- Carpet and Vinyl Flooring
- Window Blinds
- Walk-In Closets
- Pull Cords

Community Amenities

- Kitchenette
- On-site laundry
- On-site management
- Fitness Center
- Community Porch
- Numerous Seating Areas
- Controlled Access/ Security Cameras

^{**}High HOME

Proposed NOI is as follows:

- 1% Revenue Inflator Year 1 thru 5 and 2% Year 6 thru remainder / Expense inflators are based upon MSHDA Standards
- 7% Vacancy Year 1 thru 5 and 6% Year 6 thru remainder
- The project has been granted a PILOT from the City of Detroit that will be calculated as follows: 4% of Gross Rent Potential Vacancy and Collection Loss Utilities
- \$4,936 PUPA Operating Expense Load including \$322 PUPA for the PILOT, \$500 PUPA for owner paid utilities and \$4,114 Managed Expense PUPA for all other expenses excluding real estate taxes, utilities and annual R4R deposit
- \$250 PUPA annual deposit to the R4R as required by MSHDA
- 1 FT Office and 1 FT Maintenance Professional budget (5-Days/week for entire site)

Project Cash Flow:

• Deferred Developer Fee estimated to be fully repaid in Year 4

Project Contact List:

Contact	Organization	Title	Email	Phone
Joe Hall	Wallick Communities	Vice President, Development	jhall@wallick.com	614.552.5676
Tyler Ponder	Wallick Communities	Development Manager	tponder@wallick.com	614.552.5649
Brennon Davis	Wallick Communities	Development Associate	bdavis@wallick.com	614.699.3251
Kevin Petru	Presbyterian Villages of	Director of Real Estate Development	kpetru@pvm.org	248.281.2055
	Michigan			



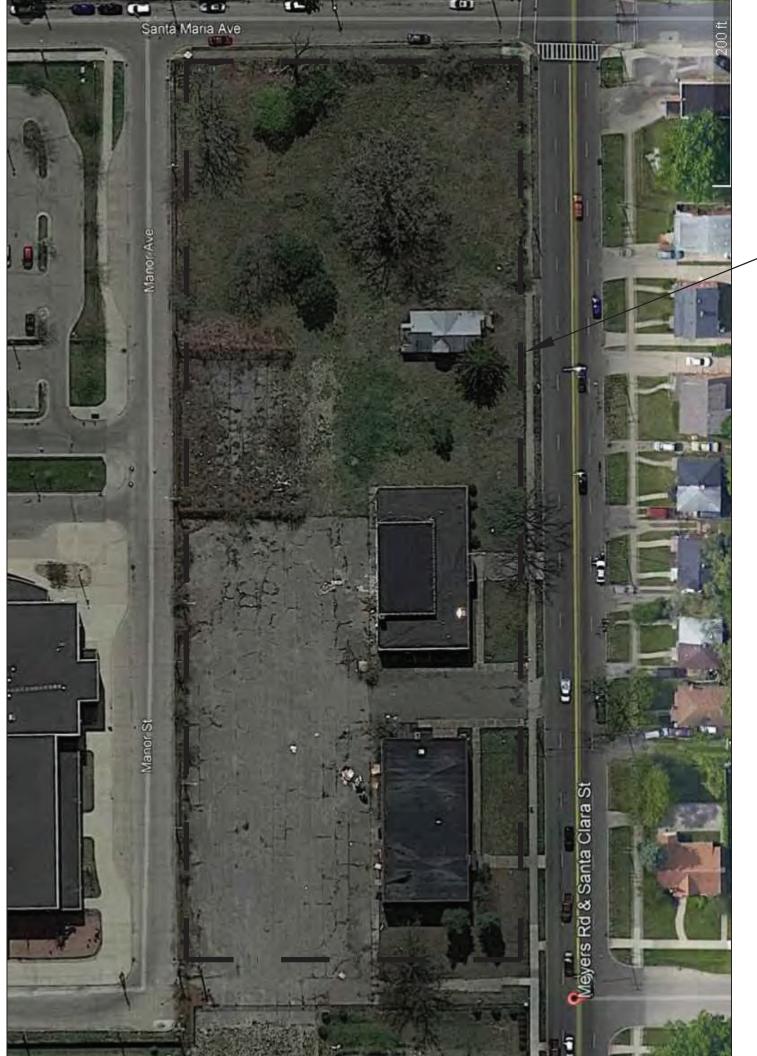
MEYERS SENIOR APARTMENTS II

17370 MEYERS ROAD | DETROIT | WAYNE COUNTY | MICHIGAN | 48235

In regards to Exhibit 3. Site Information, please find the following as attachments:

- 1. A site plan package including Existing Conditions, Soil and Sediment Control Plan, Demolition Plan, Site Plan, Grading Plan, Utility Plan, and Site Details.
- 2. A letter dated May 3, 2021 from Jayda Philson, City of Detroit Zoning Manager, noting Site Plan approval, dimensional variance approval, variance extension, and future lot split acknowledgement.





ING AND GRADING NOTES

- TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
- VING CONTRACTOR SHALL BE REQUIRED TO COORDINATE THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, SPRINKLERS, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO
 - THE PAVEMENT MATERIALS. ENSURE THAT ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED AND THAT THE TRENCHES ARE PROPERLY BACKFILLED AND COMPACTED.
 - OINTS SHALL BE PLACED AT ALL LOCATIONS WHERE AN EXISTING ASPHALT PAVEMENT SURFACE IS BEING DISTURBED BY REMOVALS AND/OR THE INSTALLATION OF NEW ASPHALT PAVEMENT
- VEMENT AREAS SHOULD BE CLEARED AND GRUBBED BY REMOVING SURFACE VEGETATION, TOPSOIL, DEBRIS AND OTHER DELETERIOUS MATERIALS.
- ACEMENT OF THE FINAL ASPHALT LIFT SHALL BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED, OR AS APPROVED BY THE OWNER. A BOND COAT OF SS-1H EMULSION
 - APPLIED (AT A RATE OF 0.10 GALLONS/S.Y.D.) BETWEEN THE LEVELING AND WEARING COURSE WHEN 48 HOURS HAVE ELAPSED BETWEEN PLACEMENTS.
- SED AGGREGATE BASE SHALL EXTEND A MINIMUM OF 1 FOOT BEYOND THE PAVEMENT EDGE/BACK OF CURB.

VAL SUB-GRADE SHALL BE THOROUGHLY PROOF-ROLLED UNDER THE OBSERVATION OF THE SOILS ENGINEER

- ENCHES WITHIN A ONE ON ONE SLOPE OF PAVEMENT SHALL BE BACKFILLED WITH SAND (MDOT CLASS II MINIMUM) AND MECHANICALLY COMPACTED IN NOT MORE THAN 9" LAYER TO 95% MAXIMUM DRY DENSITY PER PROCTER COMPACTION TEST ASTM D-1557.
- TO THE START OF ANY FILLING, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND ALL OTHER UNACCEPTABLE SOIL FROM THE FILL AREAS, AND PROPERLY BACKFILL WITH ACCEPTABLE SOIL

DZEN MATERIAL SHALL BE PERMITTED AS BACKFILL UNDER ANY ROADWAY, DRIVEWAY OR PARKING AREA.

- ER FREE SIGNAGE SHALL BE PLACED IN FRONT OF EVERY DESIGNATED BARRIER FREE STALL. THE CONTRACTOR SHALL COORDINATE STANDARD AND VAN ACCESSIBILITY SIGNAGE AS INDICATED ON THE PLANS.
- RRIER FREE RAMPS TO BE A.D.A. COMPLIANT
- H GRADE AT EXISTING BUILDING SHALL MATCH BRICK LEDGES, DOORWAYS OR BASEMENT WINDOWS RAL GRADING REQUIREMENTS ARE AS FOLLOWS:
- TAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING $(\pm 2\%)$
 - WALK CROSS SLOPE ±2% UNLESS OTHERWISE NOTED (EXCLUDING RAMPS)
- MENT SLOPES (1.0% MINIMUM, 4.0% MAXIMUM) UNIFORMLY BETWEEN FINISH GRADE ON PLANS
- ROPOSED GRADES ARE AT THE GUTTER UNLESS OTHERWISE NOTED. SEE DETAILS FOR FACE OF CURB, TOP OF CURB AND ASPHALT ADJUSTMENTS.

I AREAS ± 1% MINIMUM TO 25% (BERMS) MAXIMUM

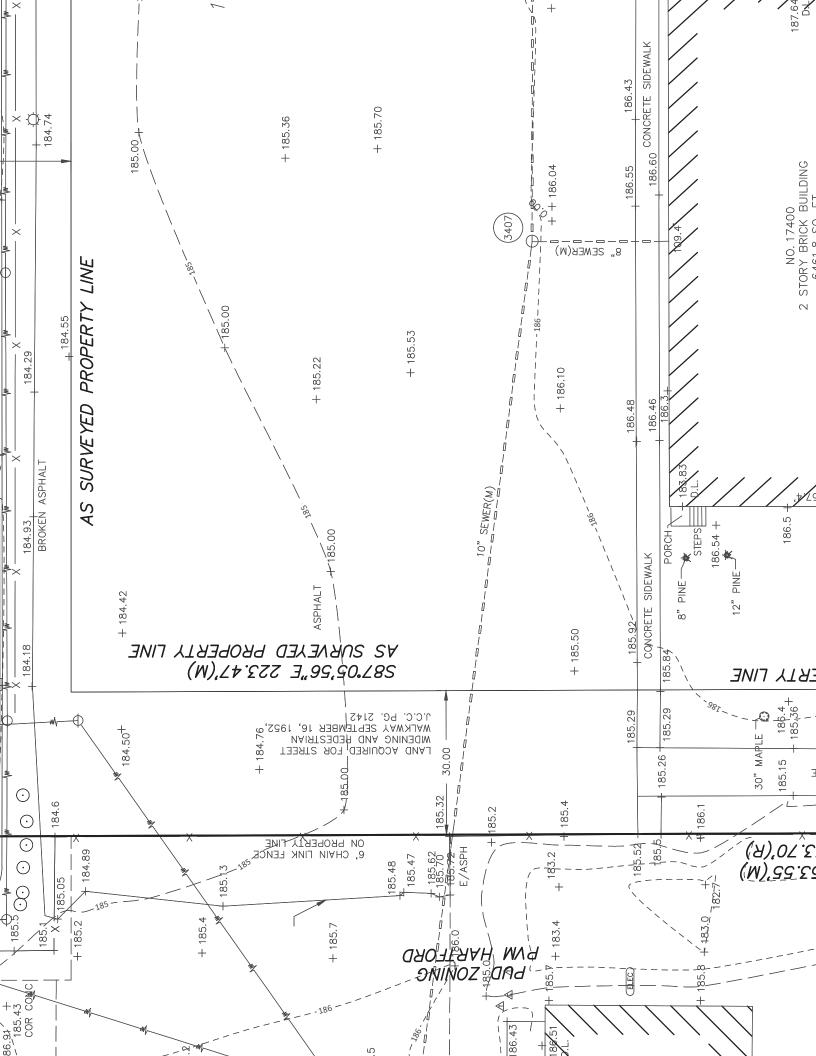
- TO ARCHITECTURAL PLANS TO COORDINATE ALL:
 - FR SUPPLY, METERING, SPRINKLER AND FDC PIPING, DESIGN AND COORDINATION
- JING SEWER, BUILDING DRAIN DESIGN AND CONNECTIONS TO CLEAN OUTS AND ROOF CONNECTORS ELECTRIC AND COMMUNICATION SERVICES AND LIGHTING DETAILS AND COORDINATION.
- UILDING ACCESS WALKS AND ENTRY DETAILS, INCLUDING SUPPORTED SLABS
 - - VORK TO CONSTRUCT THE BUILDING AND ALL ITEMS CONNECTED TO IT
- TO THE PLACEMENT OF ANY BASE ASPHALT OR LEVELING COURSE, THE CURBS SHALL BE PARTIALLY BACKFILLED AND THE SUB-GRADE SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF THE SOILS ENGINEER.
- DEWALK AND PATHWAYS IN ANY PUBLIC R.O.W. SHALL BE INSPECTED BY THE AGENCY WITH JURISDICTION

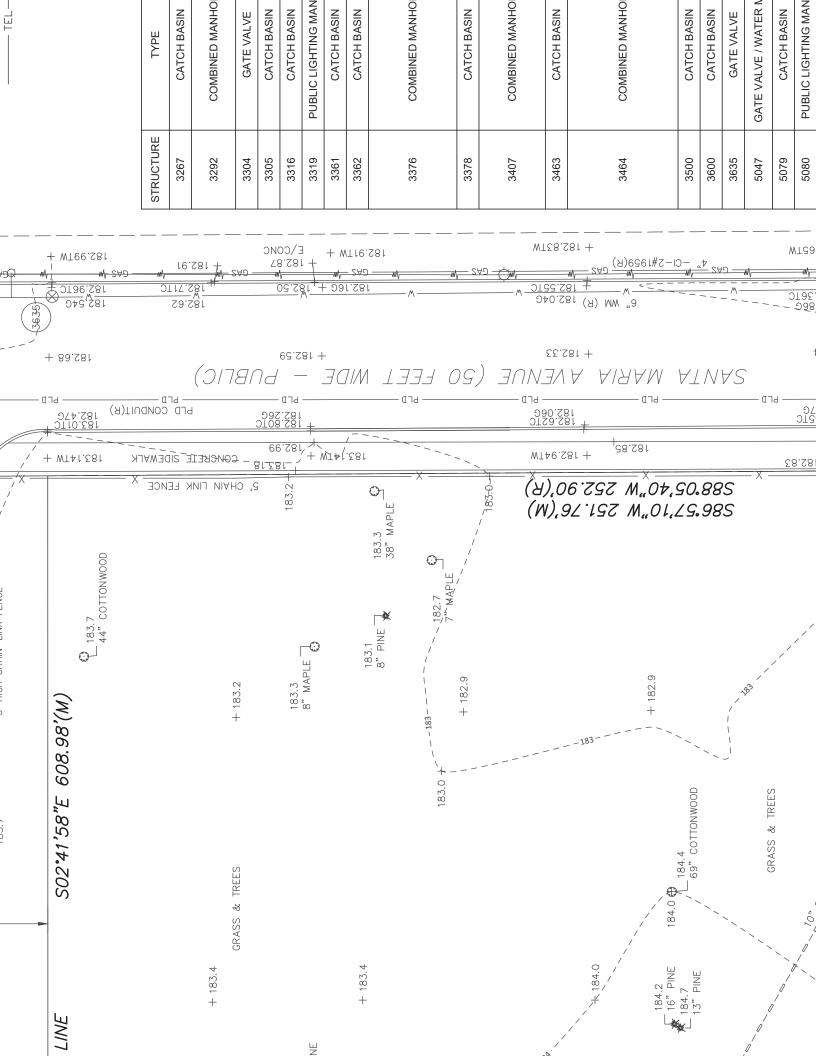
PROPOSED EXISTING PROPOSED **EXISTING**

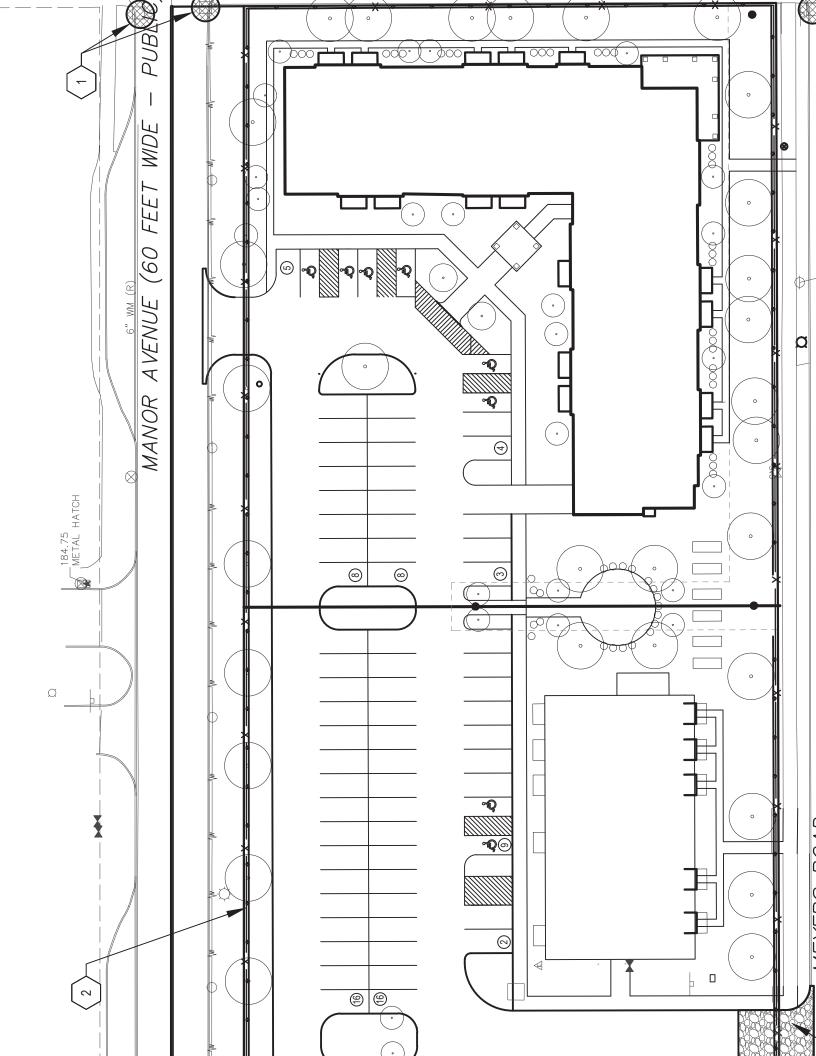
GUY WIRE ANCHOR UTILITY FLAG

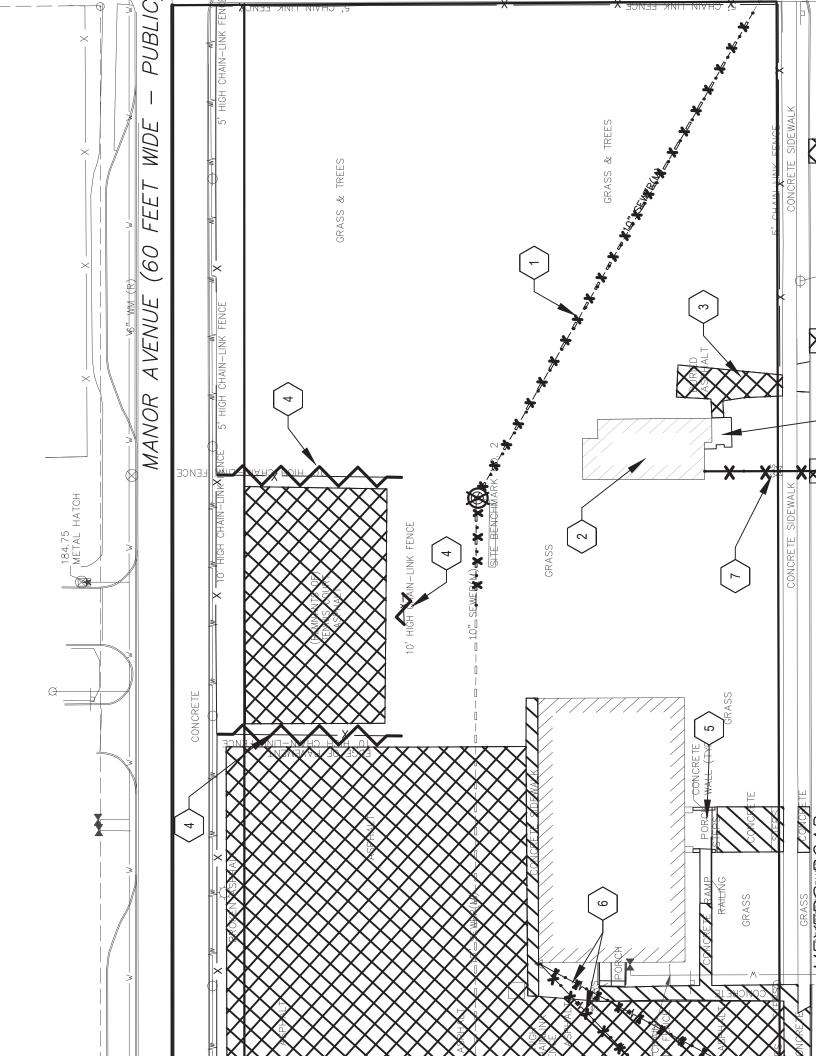
REMOVE UTILITY STRUC

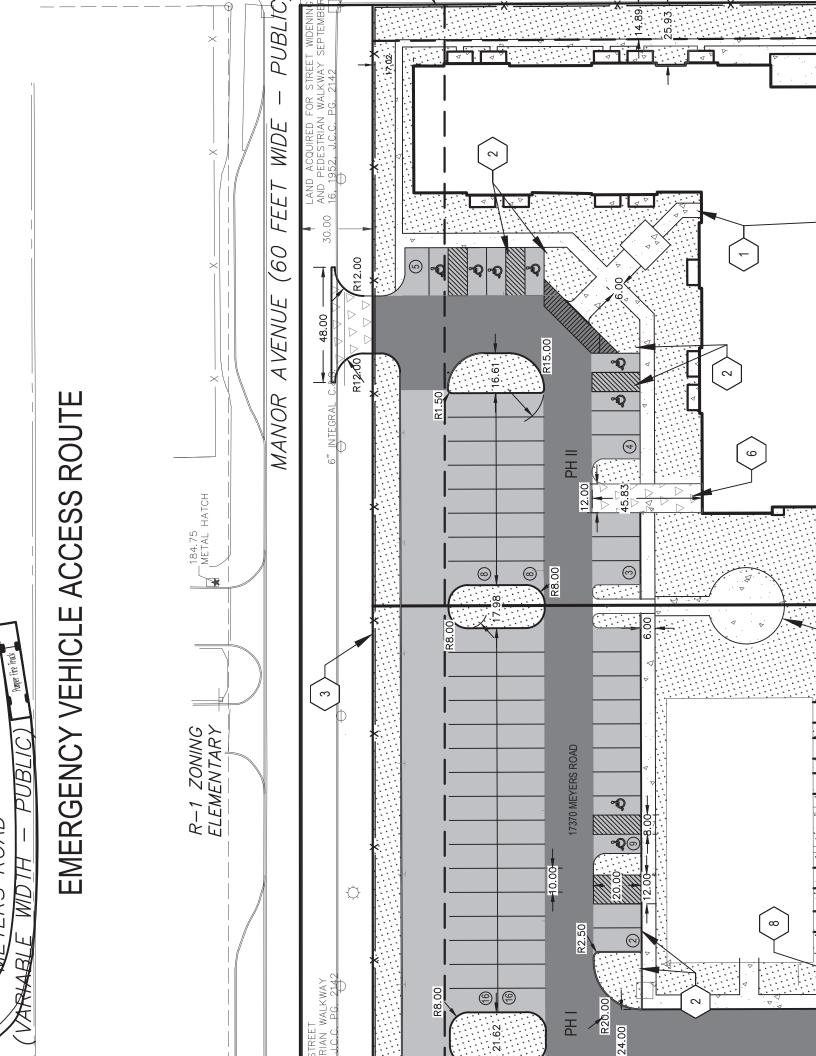
REMOVE UTILITY PIPE

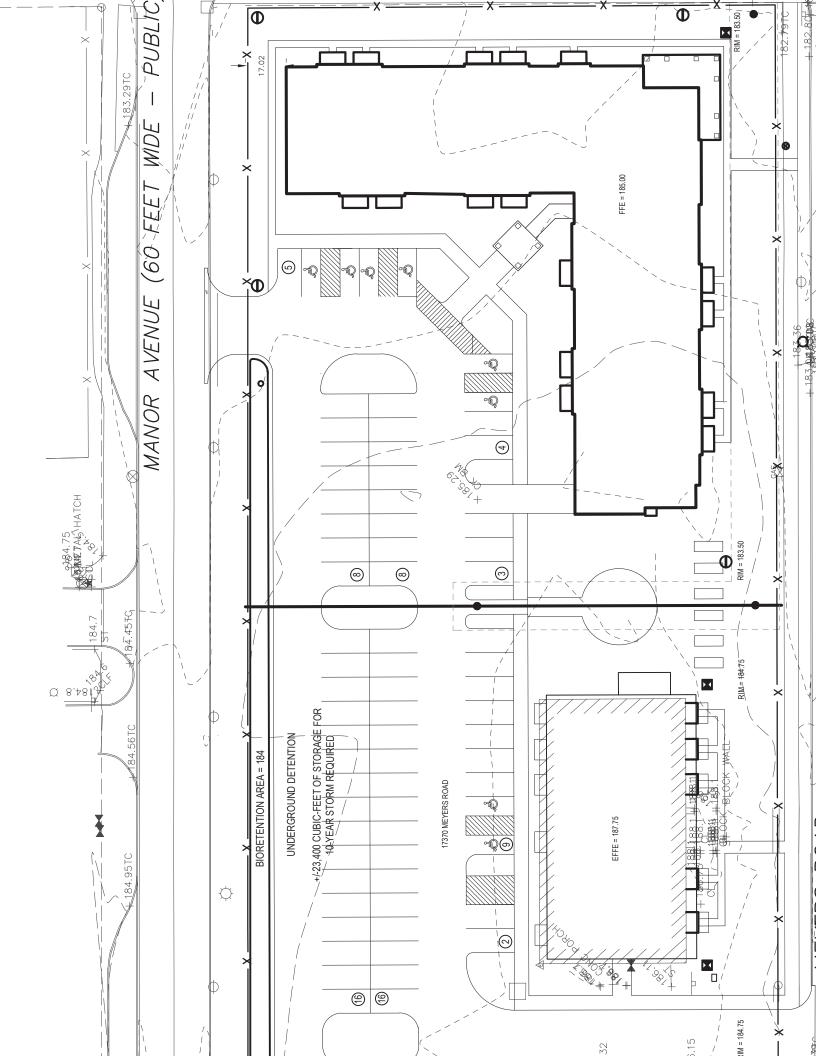


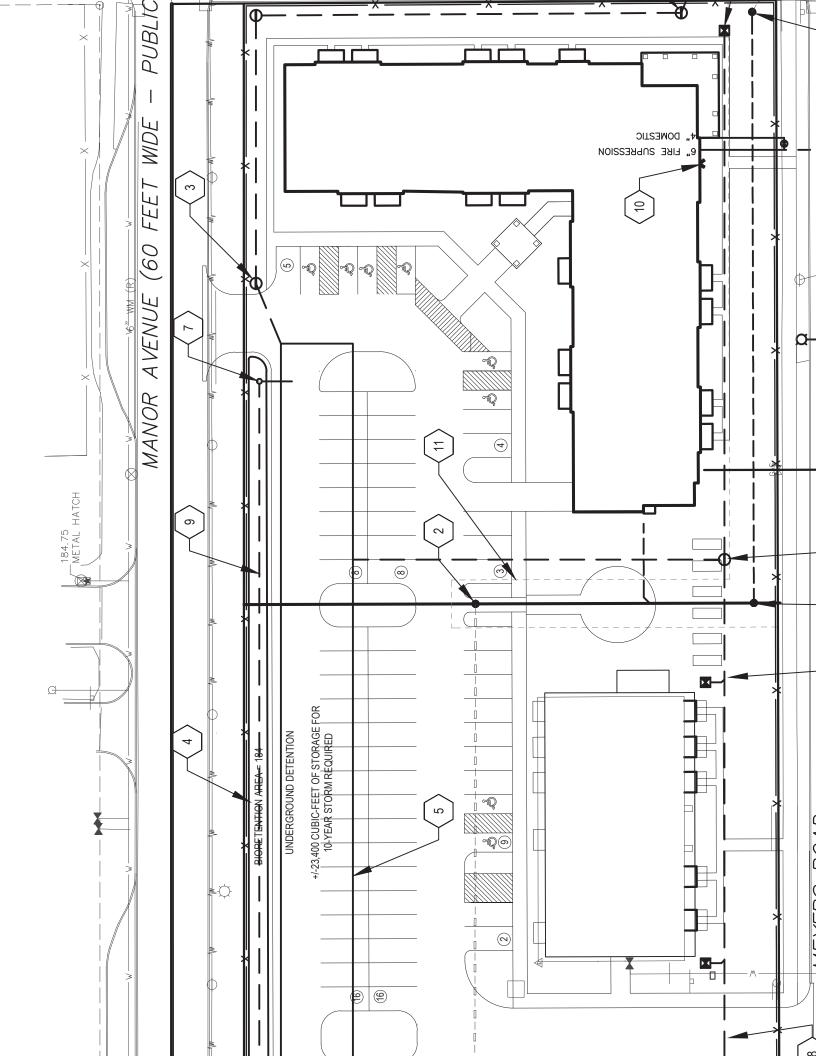


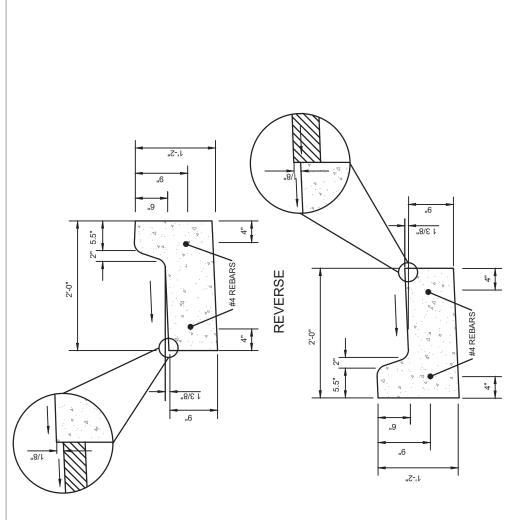










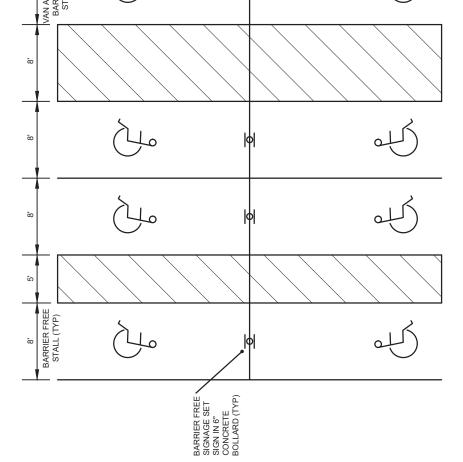


STANDARD

NOTE:

- USE MDOT 35P CONCRETE UNLESS OTHERWISE NOTED.
 REFER TO PLANS FOR LOCATIONS OF STANDARD AND REVERSE CURB.
 CONTRACTOR SHALL SMOOTHLY TRANSITION BETWEEN STANDARD AND
 REVERSE CURB. -. ∠. ε.

CONCRETE CURB & GUTTER N.T.S.



NOTE:

- PAINT SHALL BE LIFE LINE YELLOW LY-1 FOR STANDARD SPACES.
 PAINT SHALL BE B-1052 FOR BARRIER FREE SPACES.
 ALL STRIPING SHALL BE FOUR INCHES (4") IN WIDTH PAINTED HIGHWAY YELLOW OR BLUE SUPPLEMENTAL SPECS.
 ALL STRIPING SHALL BE APPLIED IN TWO (2) COATS.

BARRIER FREE PAVEMENT I

- FENCE POSTS DRIVEN

SPACING 6' MAX.



Coleman A. Young Municipal Center 2 Woodward Avenue, Fourth Floor Detroit, Michigan, 48226 Phone 313-224-2733 TTY:711 Fax 313-224-1467 www.detroitmi.gov

May 3, 2021

To whom it may concern,

On March 31, 2020, the City of Detroit Buildings, Safety Engineering & Environmental Department approved with conditions the Site Plan, inclusive of both the 4% and 9% elements, for Meyers Senior Apartments located at 17370 Meyers Road, Detroit, MI 48235.

The noted condition of a rear setback dimension variance was requested and approved by the City of Detroit Board of Zoning Appeals on August 6, 2020 (Case No. 17-20).

Further, we recognize that a variance approval extension was granted, now set to not expire before October 31, 2021.

We understand that, because the Meyers Senior Apartments development is comprised of both 4% and 9% LIHTCs, a future lot split will be required. The lot split process is administered through the City of Detroit's Office of the Assessor.

https://detroitmi.gov/departments/office-chief-financial-officer/ocfo-divisions/office-assessor

Given the previously provided and approved Site Plan, we do not anticipate any concerns regarding the proposed future lot split to distinguish the 4% and 9% portions of the entire Meyers Senior Apartments development.

Regards,

Jayda Philson

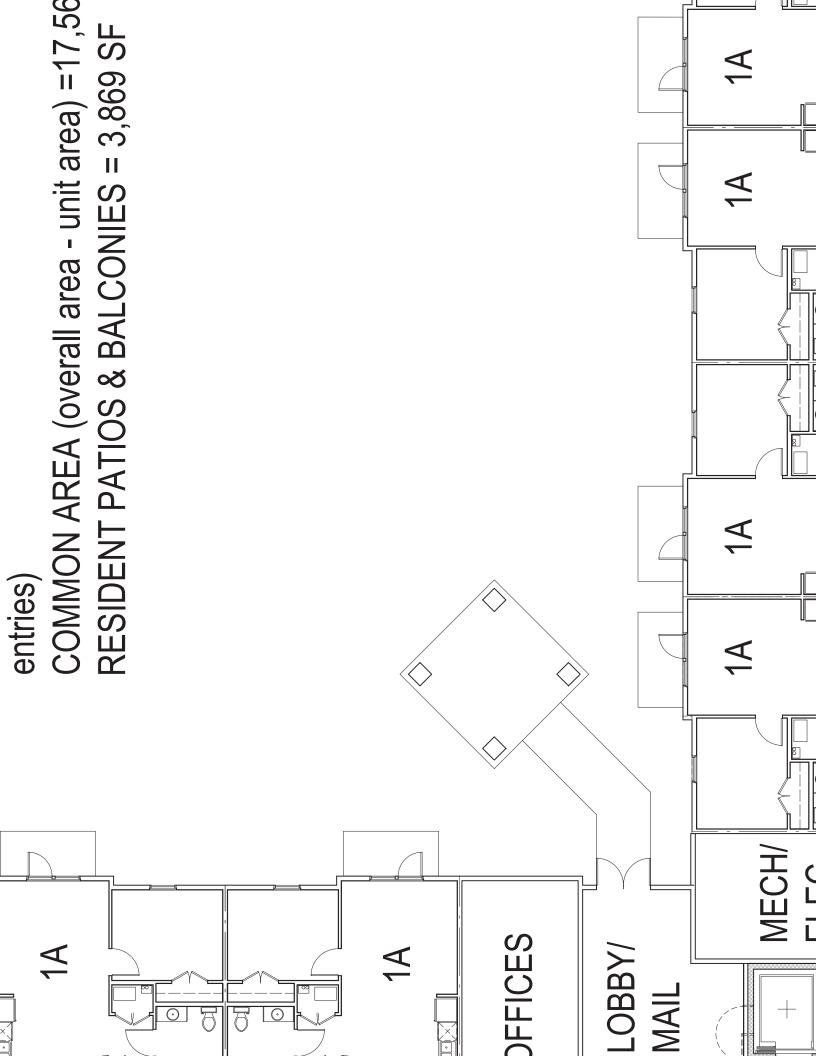
Zoning Manager

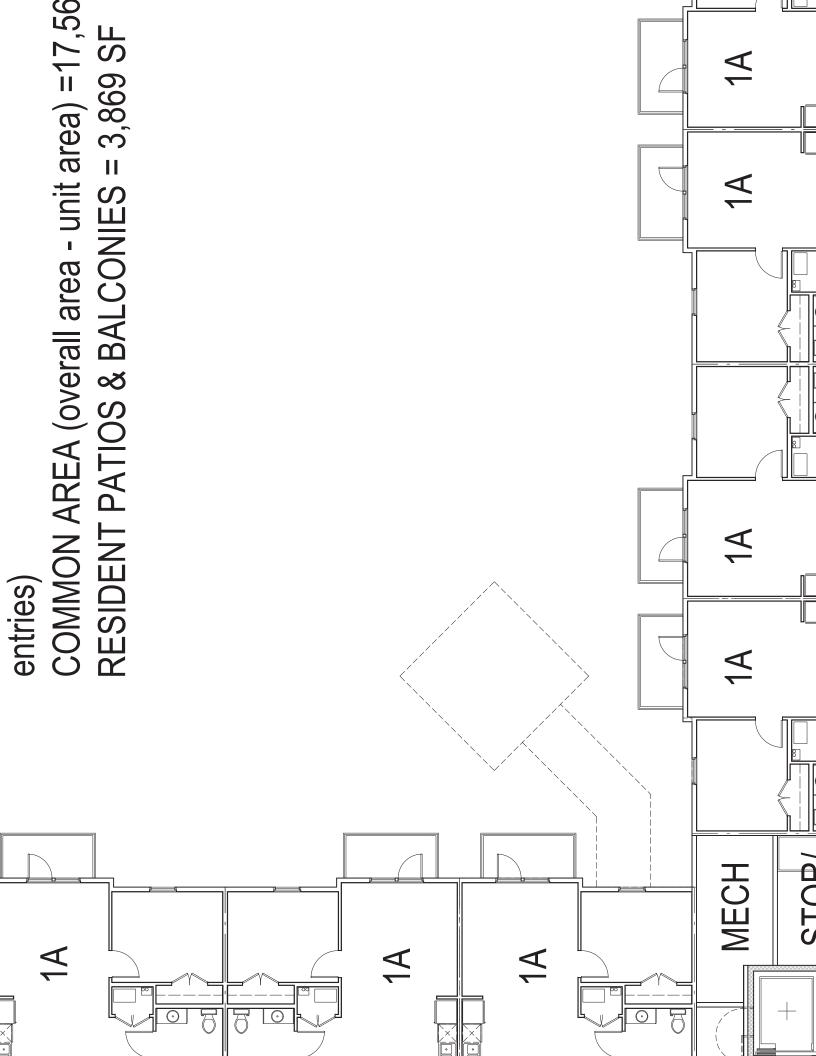
Jayda Philson

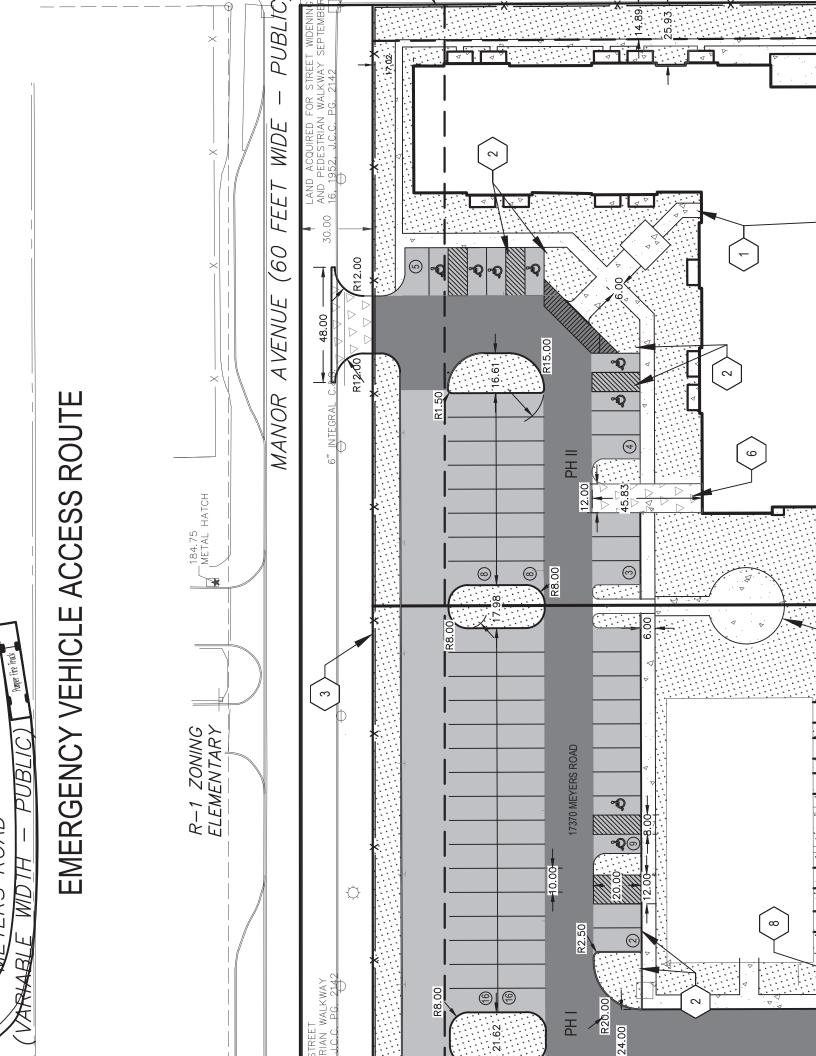
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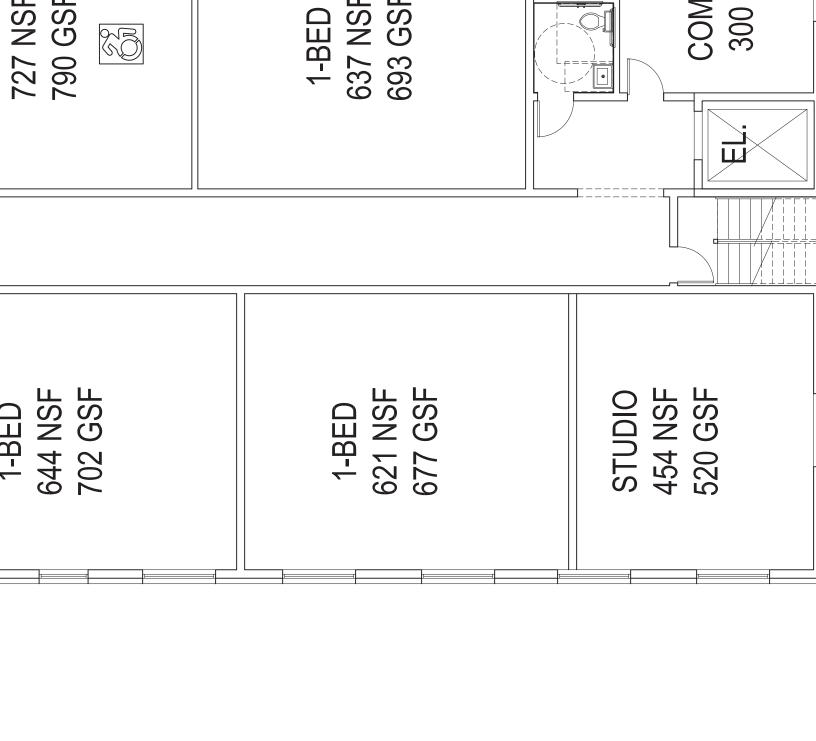


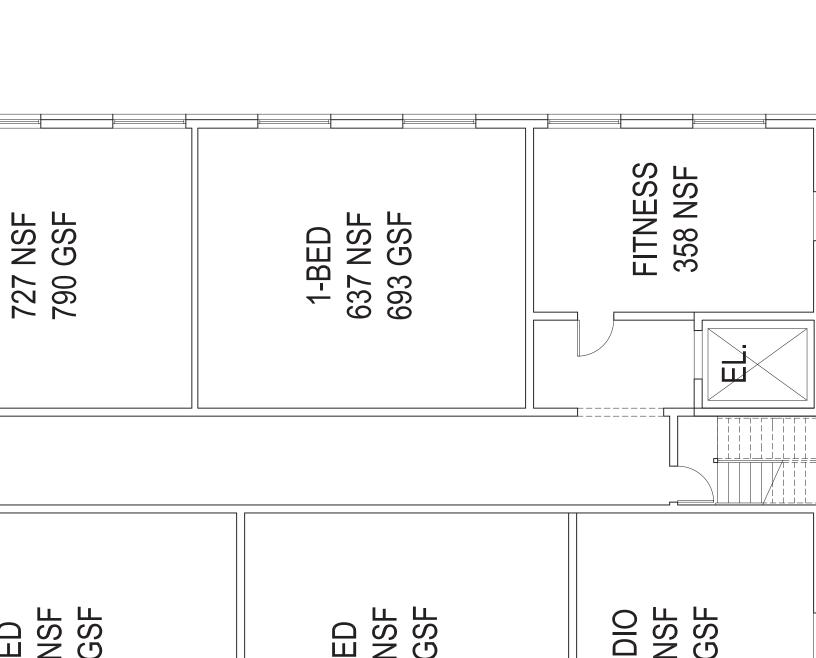


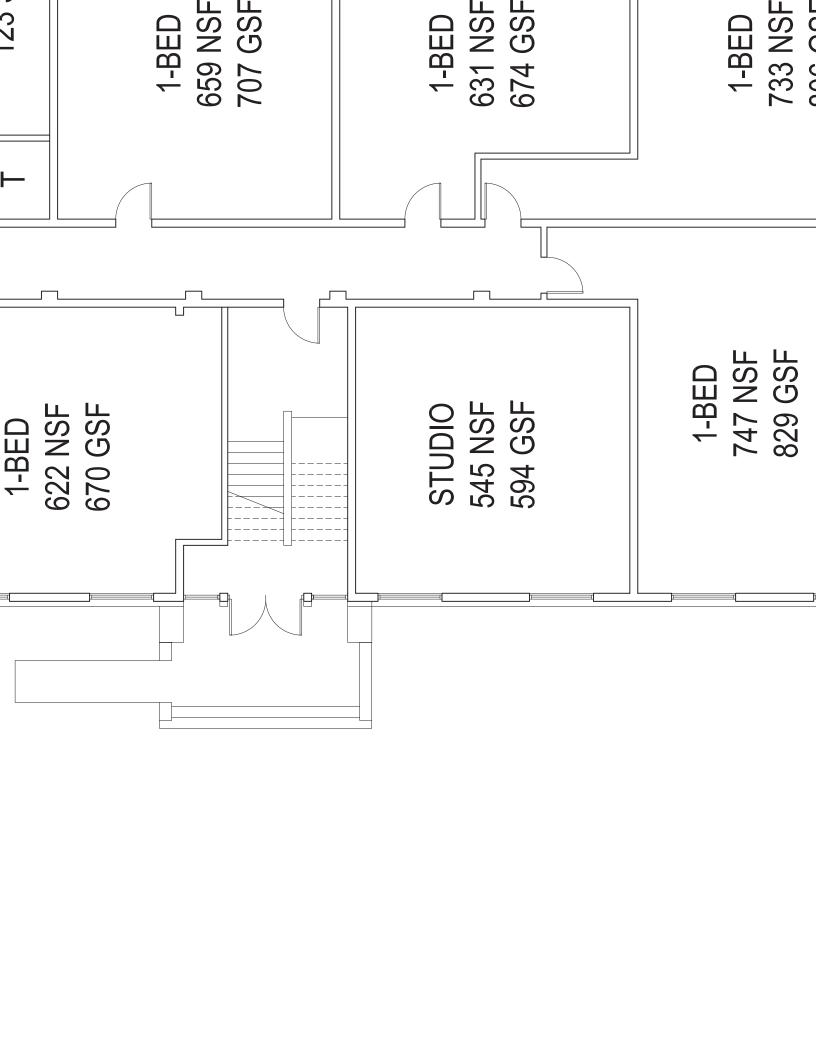


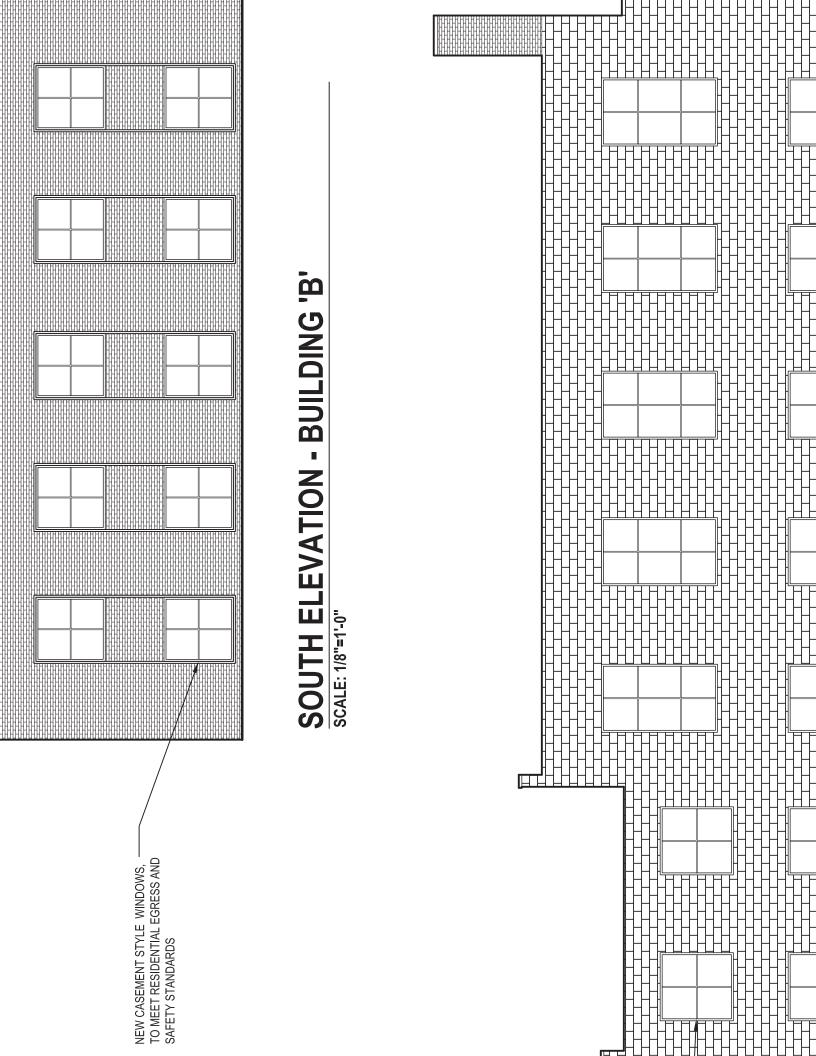




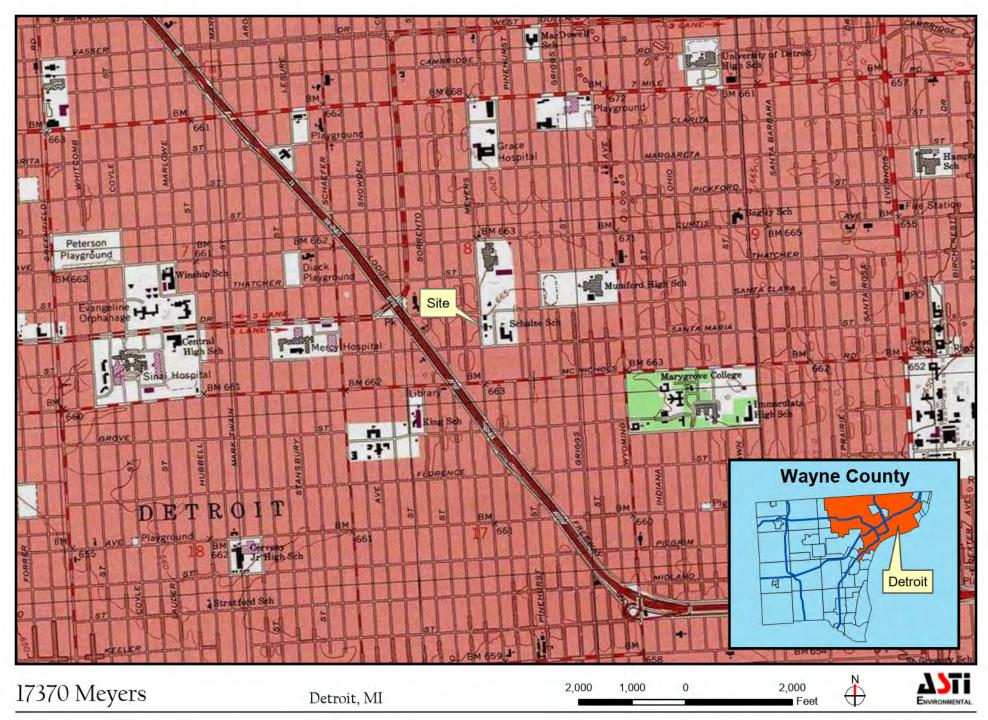


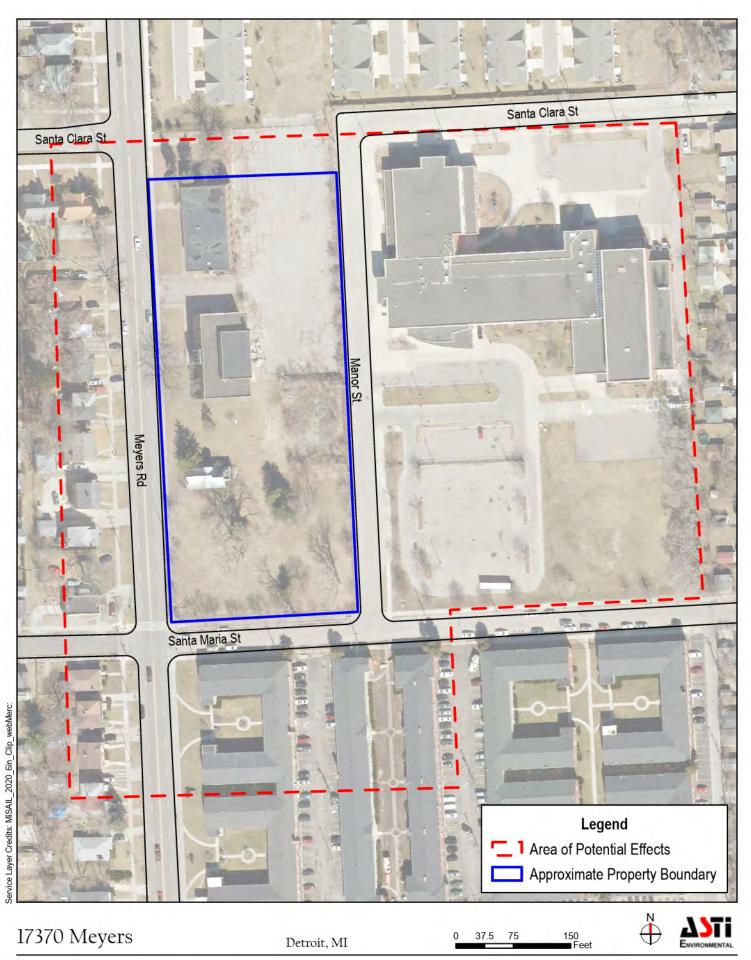














JOHN H. CHAFEE COASTAL BARRIER RESOURCES SYSTEM **MICHIGAN** LAKE SUPERIOR MI-53 MI-52 II-64 MI-63 MI-55 MI-62 MI-49 MI-42 MI-40 MI-17 LAKE • MI-14 HURON MI-13 MI-20 4 MI-21 LAKEMICHIGAN **MI-06** MI-05 Number of CBRS Units: 46 Number of System Units: 46 0 Number of Otherwise Protected Areas: Total Acres: 17,083 MI-04 3,988 *Upland Acres:* MI-03 13,095 Associated Aquatic Habitat Acres: Shoreline Miles: MI-02 Boundaries of the John H. Chafee Coastal Barrier Resources System (CBRS) shown on this map were transferred from the official CBRS maps for this area and are depicted on this map (in red) for informational purposes only. The official CBRS maps are enacted by Congress via the Coastal Barrier Resources Act, as amended, and are maintained by the U.S. Fish and Wildlife Service. The official Map Date: March 14, 2016 CBRS maps are available for download at http://www.fws.gov/CBRA.

National Flood Hazard Layer FIRMette

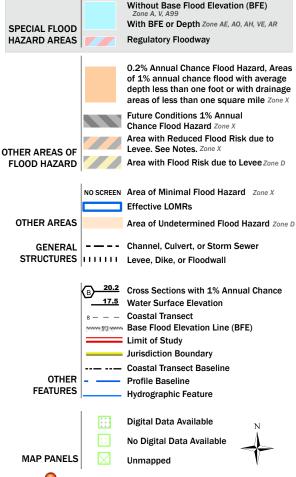


Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



Legend

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



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

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

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/3/2021 at 2:02 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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



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

LANSING



September 27, 2021

Ms. Ashleigh Czapek ASTI Environmental 10448 Citation Drive Brighton, Michigan 48116

Via Email Only

Dear Ms. Czapek:

Subject: Meyers Senior Apartments, 17370 Meyers Road, Detroit, MI

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

On August 3, 2018, Wayne County was designated nonattainment for the 2015 ozone standard; and thus, general conformity must be evaluated when completing construction projects of a given size and scope. EGLE is currently working to complete the required SIP submittal 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 Meyers Senior Apartments project, proposed to be completed with federal grant monies, including the adaptive reuse and construction of a new, four-story building providing 73 units of senior housing. The apartment building, parking lot, and any associated greenspace will be constructed at 17370 Meyers Road in Detroit, Michigan. Project construction is expected to commence in June 2022 and will be completed in approximately 14 months.

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

Ms. Ashleigh Czapek Page 2 September 27, 2021

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

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

Breune Brikanski

Breanna Bukowski Environmental Quality Analyst Air Quality Division

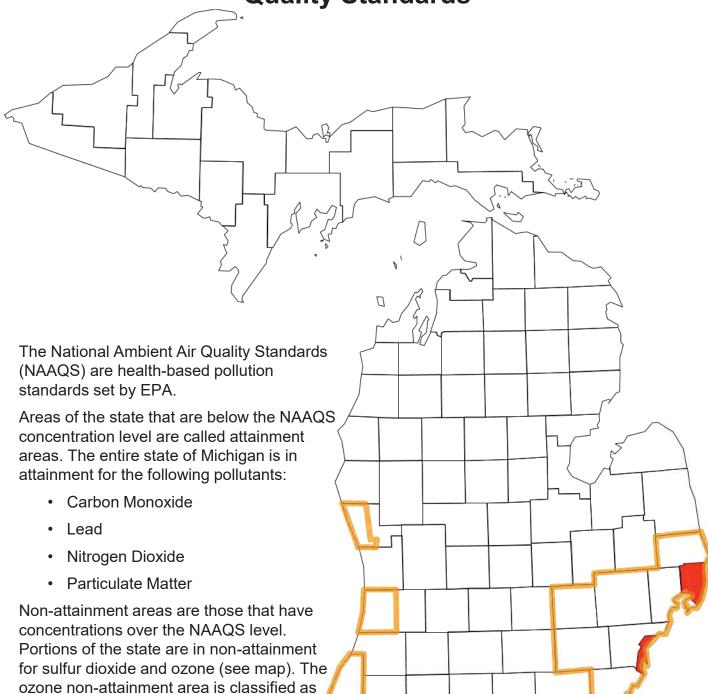
cc: Mr. Michael Leslie, USEPA Region 5

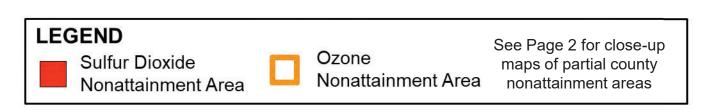
Ms. Mary Weidel, U.S. Department of Housing and Urban Development

Mr. Mike Vollick, Michigan State Housing Development Authority

Ms. Penny Dwoinen, City of Detroit

Attainment Status for the National Ambient Air Quality Standards





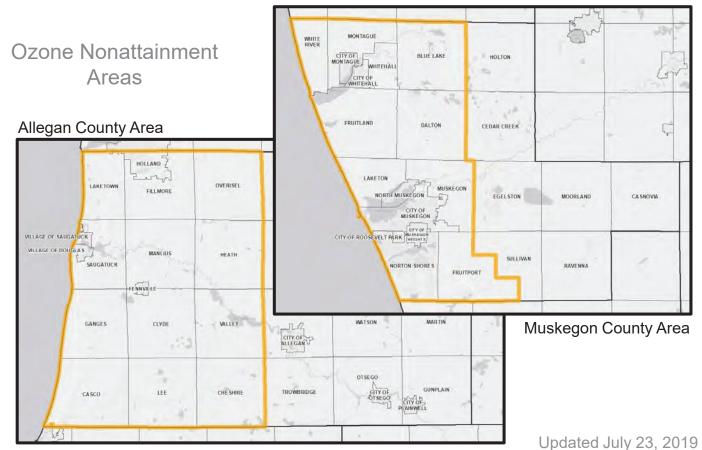
marginal.

Close-Up Maps of Partial County Nonattainment Areas

Sulfur Dioxide Nonattainment Areas

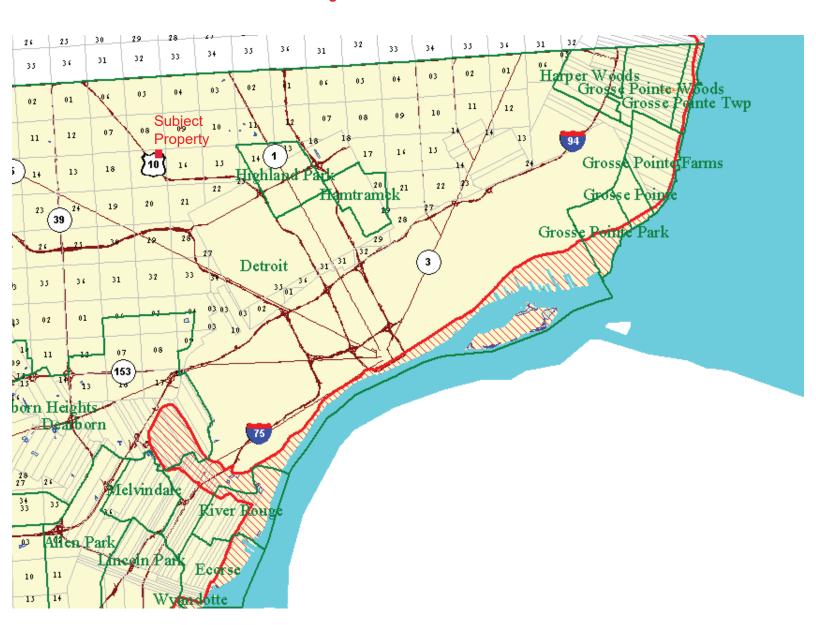
Wayne County Area Dearborn Detroit Heights Dearborn Winds Inkster Melvindale 20 ECRO Allen Park 94 Lincom Park Taylor Southgate Riverview Trenton Grosse Ile Amherstburg Flat Rock South Rockwood





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**.



Asbestos-Containing Materials Inspection Meyers Senior Apartments 17370-17400 Meyers Road Detroit, Michigan 48235

Wallick Companies

November 29, 2021

ASTI ENVIRONMENTAL





Asbestos-Containing Materials Inspection Meyers Senior Apartments 17370-17400 Meyers Road Detroit, Michigan 48235

November 29, 2021

Report Prepared For:

Wallick Companies

Report Prepared By:

ASTI Environmental 10448 Citation Drive, Suite 100 Brighton, Michigan 48116 1-800-395-ASTI

ASTI Project No. 1-11382

Report Prepared by:

Jelaine D. Tinsley, EP

Asbestos Inspector (A16395)

Report Reviewed by:

David A. Amir, EP

Director-Site Redevelopment Services



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i



Executive Summary

ASTI Environmental (ASTI) was retained by Wallick Companies to conduct an asbestos-containing material (ACM) inspection of the building located at 17370 - 17400 Meyers Road Detroit, Michigan (Subject Property). ASTI's scope of work included sampling of suspect ACMs in general conformance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 Subpart M.

The structures inspected consists of two academic buildings that are two-story and of masonry construction with flat roofs. Based on the inspection conducted by ASTI between September 21-22, 2021, the following ACMs were identified on the Subject Property:

MATERIAL	LOCATION	ESTIMATED QUANTITY				
	17370 Meyers Road					
9"x9" Floor tile – Brown beneath carpet	Rooms B7, B8, B10, B14, 3, 5, and 6	2,750 ft ²				
9"x9" Floor tile – Brown with white & orange streaks	Rooms B11, 7, 8, 10, 30, and 32	3,500 ft ²				
9"x9" Floor tile – Green	Rooms B12, B13	1,300 ft ²				
9"x9" Floor tile – Red	Rooms 10, 11, 11A	600 ft ²				
	17400 Meyers Road					
9"x9" Floor tile – Grey	Room B4	600 ft ²				
9"x9" Floor tile – Green with orange & white streaks	Rooms B5, B6, B7, B10, 4, 10, 30, and maintenance room	3,500 ft ²				
9"x9" Floor tile – Tan	Rooms B10 upper	750 ft ²				
Caulk - Grey	Exterior overhang	100 lf 25 ft²				



Presumed Asbestos-Containing Materials

During completion of the inspection, several materials were identified as potential ACMs, however, due to the destructive nature of sampling required; these materials were not sampled at this time and should be considered as presumed asbestos-containing materials (PACMs) until they can be sampled. The following PACMs were identified during the site inspection.

Presumed Asbestos-Containing Materials Summary

MATERIAL	LOCATION	ESTIMATED QUANTITY
Roofing system	17370 & 17400 Meyers Road Roofs	13,200 ft ²
Fire Doors and Frames	Throughout 17370 & 17400 Meyers Road	Eight sets



1.0 Introduction

ASTI Environmental (ASTI) was retained by Wallick Companies to conduct an asbestos-containing material (ACM) inspection at 17370 - 17400 Meyers Road, Detroit, Michigan (Subject Property). Refer to the attached Site Location Map for the approximate location of the Subject Property. The information and opinions rendered in this report are prepared for the benefit of Wallick Companies; ASTI acknowledges that said parties may rely upon the contents and conclusions presented in this report. The services provided by ASTI in completing this assessment have been provided in a manner consistent with the normal standards of the profession. No other warranties, expressed or implied are made.



2.0 LIMITATION AND EXCEPTIONS

ASTI's scope of work included sampling of suspect homogeneous ACMs in general conformance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 Subpart M and ASTM E2356-10 Standard Practice for Comprehensive Building Asbestos Surveys. Suspect materials not identified within this report may be encountered in inaccessible wall cavities, chases, floor cavities, etc. during demolition activities. These materials must be presumed to be ACM until they can be sampled and analyzed for asbestos content. ASTI inspected several holes located in the concrete block walls to examine for insulation. No insulation was encountered in these locations. If additional materials are found during renovation / demolition activities, these materials must be presumed to be ACMs until sampled and analyzed for asbestos content.



3.0 SUBJECT PROPERTY DESCRIPTION

	Building Descriptions					
#	Building Type	Primary Use	Functional Spaces	# Present	Built Date	Stories
1	Academic (17400 Meyers Rd.)	Vacant	Classrooms, offices, library, mechanical room, storage areas, restroom	1	1958	2
2	Academic (17370 Meyers Rd.)	Vacant	Classrooms, offices auditorium, mechanical room, restroom, storage areas, restroom	1	1950	2

	Building Construction					
#	Square Footage	Primary Construction	Interior Finishes			
1	11,440	Poured concrete foundation, brick exterior, metal frames, concrete block, rubber membrane roof	Carpet, paint, resilient floor tiles, ceiling tiles, cove base, concrete block walls			
2	13,640	Poured concrete foundation, brick exterior, metal frames, concrete block, rubber membrane roof	Carpet, paint, resilient floor tiles, ceiling tiles, cove base, concrete block walls			



4.0 ASBESTOS-CONTAINING MATERIALS INSPECTION

Ms. Jelaine D. Tinsley (Asbestos Inspector No. A16395) and Mr. John Schuitema (Asbestos Inspector No. A51781) of ASTI's Site Redevelopment Services Group conducted the ACM inspection of 17370-17400 Meyers Road in Detroit, Michigan. A copy of Ms. Tinsley's and Mr. Schuitema's resumes and asbestos accreditations are provided as Appendix A:

4.1 Previous Asbestos-Containing Materials Inspections

ASTI is not aware of any previous ACM inspections of the Subject Property.

4.2 Asbestos Inspection Methodology

ASTI's scope of work included sampling of suspect ACMs in accordance with the AHERA and NESHAP protocols. The inspection included a visual inspection of the building in order to identify homogeneous areas of suspect surfacing materials, thermal system insulation, and miscellaneous materials, as well as the sampling of suspect friable and non-friable materials. The following definitions from 40 CFR Part 763 are provided below.

<u>Asbestos-Containing Material (ACM):</u> any material or product which contains more than one percent asbestos.

<u>Surfacing Materials (SM)</u>: material that is troweled-on, sprayed-on or otherwise applied to surfaces for acoustical, fireproofing or other purposes.

Thermal System Insulation (TSI): material applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior components to prevent heat loss or gain, or water condensation or for other purposes.

<u>Miscellaneous Materials (MM):</u> interior building material on structural components, structural members or fixtures such as floors and ceilings and does not include surfacing material or thermal system insulation.

<u>Friable:</u> material that when dry, may be crumbled pulverized or reduced to powder by hand pressure, and includes previously non-friable material after such previously non-friable material becomes damaged to the extent that when dry it may be crumbled, pulverized or reduced to powder by hand pressure.

Non-friable: material which when dry may not be crumbled, pulverized or reduced to powder by hand pressure.



<u>Homogeneous areas (HAs)</u>: an area of surfacing material, thermal system insulation, or miscellaneous material that is uniform in color and texture.

4.3 Sample Collection

Samples were collected by physically removing a small piece of suspect material and placing it in a marked plastic bag. Samples were collected using wet methods, as appropriate. The sample collection tool was cleaned prior to each use to avoid cross-contamination of samples. ASTI sampled a variety of materials for asbestos testing. The material types sampled are listed below.

- Grout
- Pipe insulation
- 12" x 12" Floor tile and associated mastic (various types)
- Glue Pod
- 12" x 12" Glued Ceiling tile
- 4" Cove base and associated mastic (various types)
- Textured ceiling paint
- Caulk (various types)
- Drywall and joint compound
- 9"x9" Floor tile and associated mastic (various types)
- Fire Door material
- Brick mortar
- Stair tread
- Carpet mastic
- Plaster
- 6" Cove base and associated mastic
- Paper insulation
- Block mortar

ASTI collected 138 bulk samples from the suspect ACMs. A total of 229 sample layers were analyzed. The bulk samples were transmitted under chain-of-custody protocol to Apex Research Laboratory in Whitmore Lake, Michigan for asbestos analysis using polarized light microscopy with dispersion staining (PLM/DS) in accordance with the US Environmental Protection Agency's (US EPA's) "Interim Method for the Determination of Asbestos in Bulk Building Materials" (EPA 600/R-93/116, June 1993). Sample results are presented in the attached Tables 1 and 2.



4.4 <u>Laboratory Analytical Results</u>

Building materials identified to contain greater than 1% asbestos are defined as ACMs. Review of the asbestos test results revealed that the following ACMs were identified on the Subject Property:

НА	Material/Description	Location	Asbestos Result				
	17370 Meyers Road						
12	9"x9" Floor tile – Brown beneath carpet	Rooms B7, B8, B10, B14, 3, 5, and 6	10% Chrysotile				
18	9"x9" Floor tile – Brown with white & orange streaks	Rooms B11, 7, 8, 10, 30, and 32	10% Chrysotile				
19	9"x9" Floor tile – Green	Rooms B12, B13	10% Chrysotile				
30	9"x9" Floor tile – Red	Rooms 10, 11, 11A	10% Chrysotile				
	17400 Meyers Road						
11	9"x9" Floor tile – Grey	Room B4	10% Chrysotile				
12	9"x9" Floor tile – Green with orange & white streaks	Rooms B5, B6, B7, B10, 4, 10, 30, and maintenance room	10% Chrysotile				
13	9"x9" Floor tile – Tan	Room B10 upper	2% Chrysotile				
30	Caulk - Grey	Exterior overhang	5% Chrysotile				

A comprehensive list of sampled materials with analytical results is provided as Table 1 (17370 Meyers Rd) and Table 2 (17400 Meyers Rd). A copy of the laboratory data sheets, along with the chain-of-custodies are included in Appendix B.

Asbestos-Containing Material Quantities

MATERIAL	LOCATION	ESTIMATED QUANTITY		
17370 Meyers Road				
9"x9" Floor tile – Brown beneath carpet	Rooms B7, B8, B10, B14, 3, 5, and 6	2,750 ft ²		
9"x9" Floor tile – Brown with white & orange streaks	Rooms B11, 7, 8, 10, 30, and 32	3,500 ft ²		
9"x9" Floor tile – Green	Rooms B12, B13	1,300 ft ²		
9"x9" Floor tile – Red	Rooms 10, 11, 11A	600 ft ²		



MATERIAL	LOCATION	ESTIMATED QUANTITY			
	17400 Meyers Road				
9"x9" Floor tile – Grey	Room B4	600 ft ²			
9"x9" Floor tile – Green with orange & white streaks	Rooms B5, B6, B7, B10, 4, 10, 30, and maintenance room	3,500 ft ²			
9"x9" Floor tile – Tan	Room B10 upper	750 ft ²			
Caulk - Grey	Exterior overhang	100 lf 25 ft ²			

4.5 <u>Presumed Asbestos-Containing Materials</u>

During completion of the inspection, two materials were identified as potential ACMs, however, due to the destructive nature of sampling required; these materials were not sampled at this time and should be considered as presumed asbestos-containing materials (PACMs) until they can be sampled. The following PACMs were identified during the site inspection.

Presumed Asbestos-Containing Materials Summary

MATERIAL	LOCATION	ESTIMATED QUANTITY
Roofing system	17370 & 17400 Meyers Road Roofs	13,200 ft ²
Fire Doors and Frames	Throughout 17370 & 17400 Meyers Road	Eight sets



5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the inspection completed at the Subject Property, ACMs were identified in the buildings. A summary of the ACMs identified, along with ASTI's recommendations are as follows.

Based on the inspection conducted by ASTI between September 21-22, 2021 the following ACMs were identified on the Subject Property.

MATERIAL	LOCATION	ESTIMATED QUANTITY			
17370 Meyers Road					
9"x9" Floor tile – Brown beneath carpet	Rooms B7, B8, B10, B14, 3, 5, and 6	2,750 ft ²			
9"x9" Floor tile – Brown with white & orange streaks	Rooms B11, 7, 8, 10, 30, and 32	3,500 ft ²			
9"x9" Floor tile – Green	Rooms B12, B13	1,300 ft ²			
9"x9" Floor tile – Red	Rooms 10, 11, 11A	600 ft ²			
	17400 Meyers Road				
9"x9" Floor tile – Grey	Room B4	600 ft ²			
9"x9" Floor tile – Green with orange & white streaks	Rooms B5, B6, B7, B10, 4, 10, 30, and maintenance room	3,500 ft ²			
9"x9" Floor tile – Tan	Room B10 upper	750 ft ²			
Caulk - Grey	Exterior overhang	100 If 25 ft ²			

According to classification guidelines set forth in NESHAP, the flooring samples and exterior caulk are classified as Category I non-friable ACMs. These materials in their current condition represent minimal risk of fiber release. If renovation or demolition would disturb these materials, ASTI recommends the ACMs be removed by a licensed abatement contractor prior to disturbance.



Presumed Asbestos-Containing Materials

During completion of the inspection, several materials were identified as potential ACMs, however, due to the destructive nature of sampling required; these materials were not sampled at this time and should be considered as presumed asbestos-containing materials (PACMs) until they can be sampled. The following PACMs were identified during the site inspection.

Presumed Asbestos-Containing Materials Summary

MATERIAL	LOCATION	ESTIMATED QUANTITY
Roofing system	17370 & 17400 Meyers Road Roofs	13,200 ft ²
Fire Doors and Frames	Throughout 17370 & 17400 Meyers Road	Eight sets

According to classification guidelines set forth in NESHAP, the roofing is classified as a Category I non-friable ACM. The roofing appeared to be in good condition and in its current condition represents minimal risk of fiber release However, as demolition or renovation would disturb this material; ASTI recommends additional testing of the roofing materials prior to disturbance or assume the roofing is an ACM and be removed by a licensed abatement contractor.

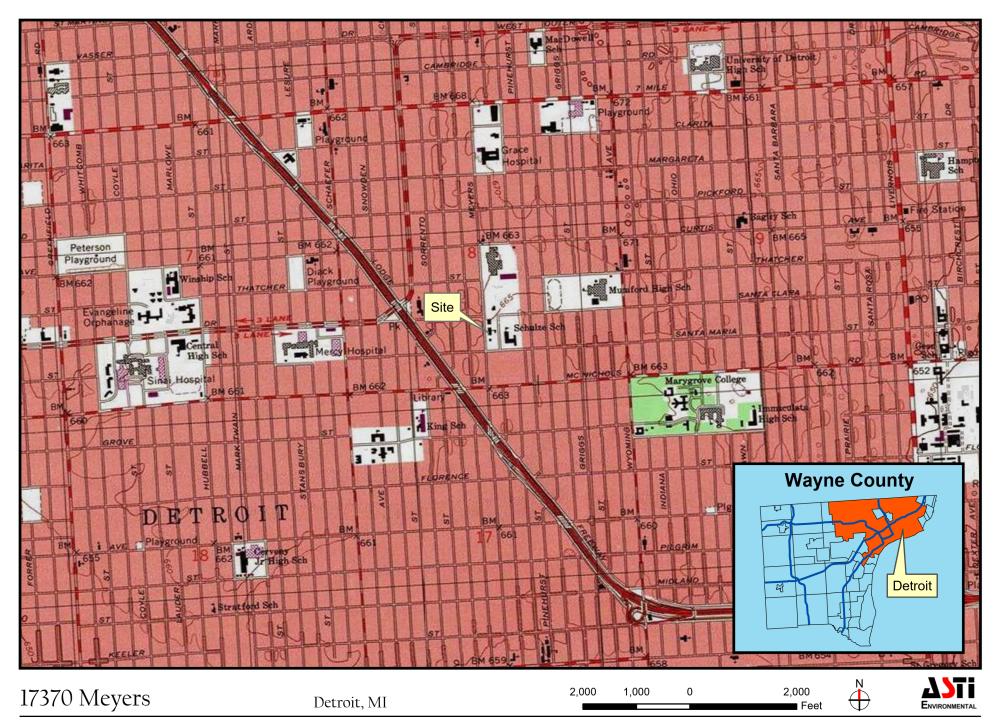
According to classification guidelines set forth in NESHAP, the fire door sets are assumed to contain asbestos and are classified as Category II non-friable ACMs. Until testing of these materials is completed, they should be treated as Category II non-friable ACMs.

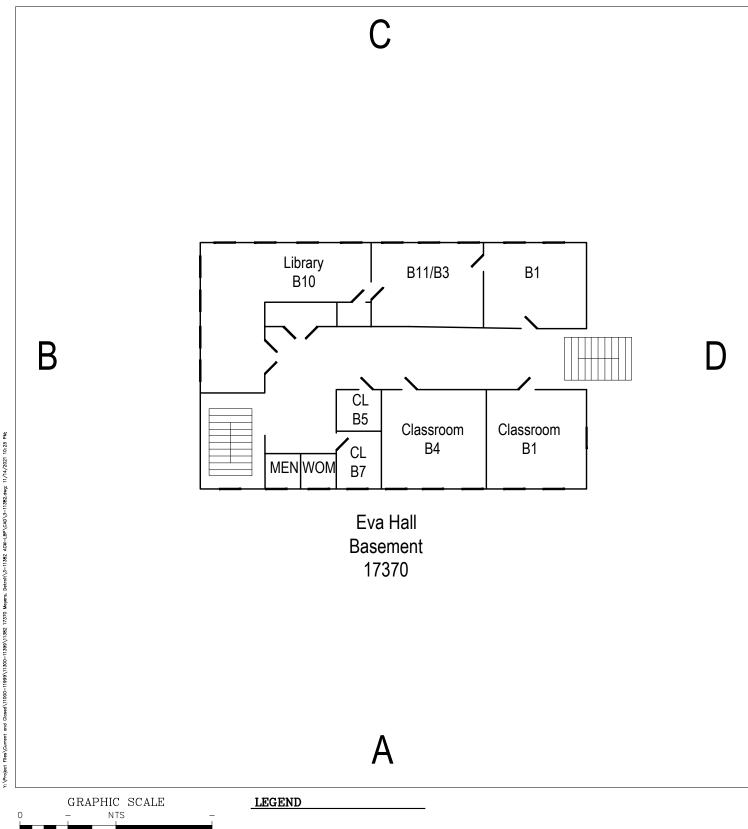


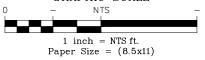
Figures

Site Location Map Floor Plan-Basement (17370 Meyers Rd) Floor Plan-1st Floor (17370 Meyers Rd) Floor Plan-2nd Floor (17370 Meyers Rd) Floor Plan-Basement (17400 Meyers Rd) Floor Plan-2nd Floor (17400 Meyers Rd)

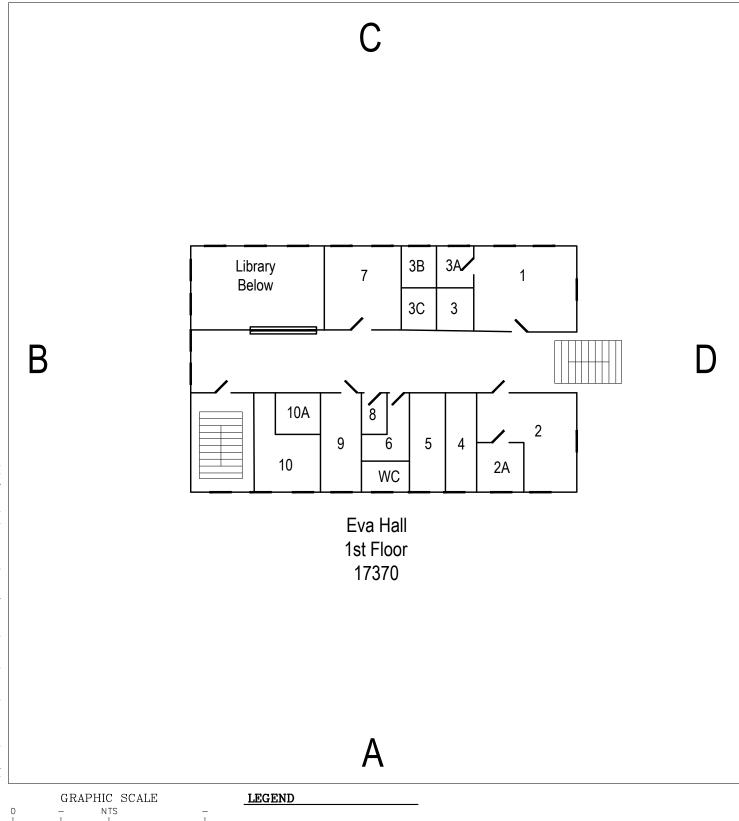


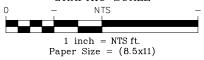






Meyers Senior Apartments

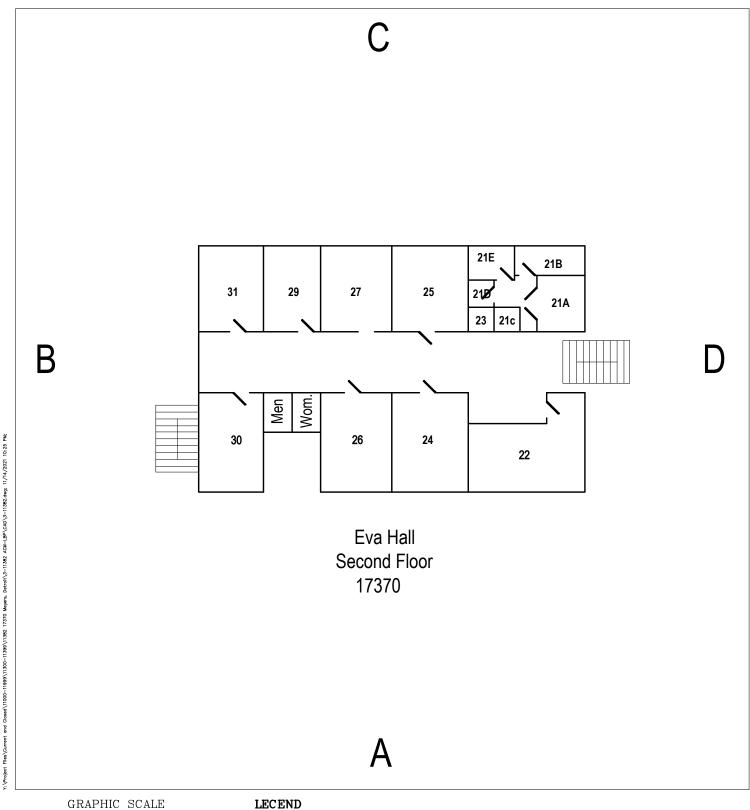


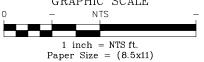




17370 Meyers, Detroit, MI

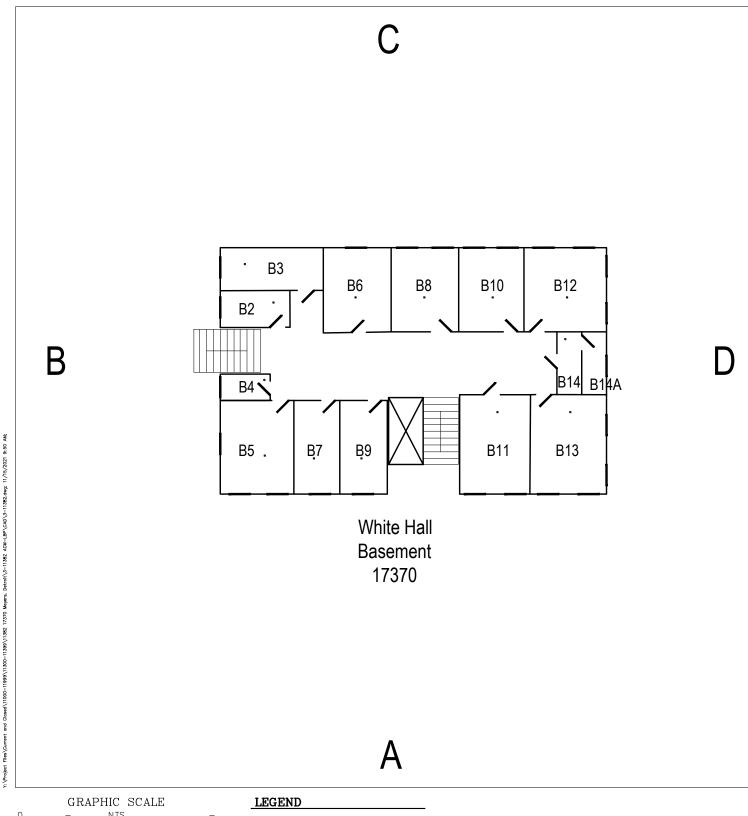


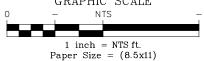




Meyers Senior Apartments







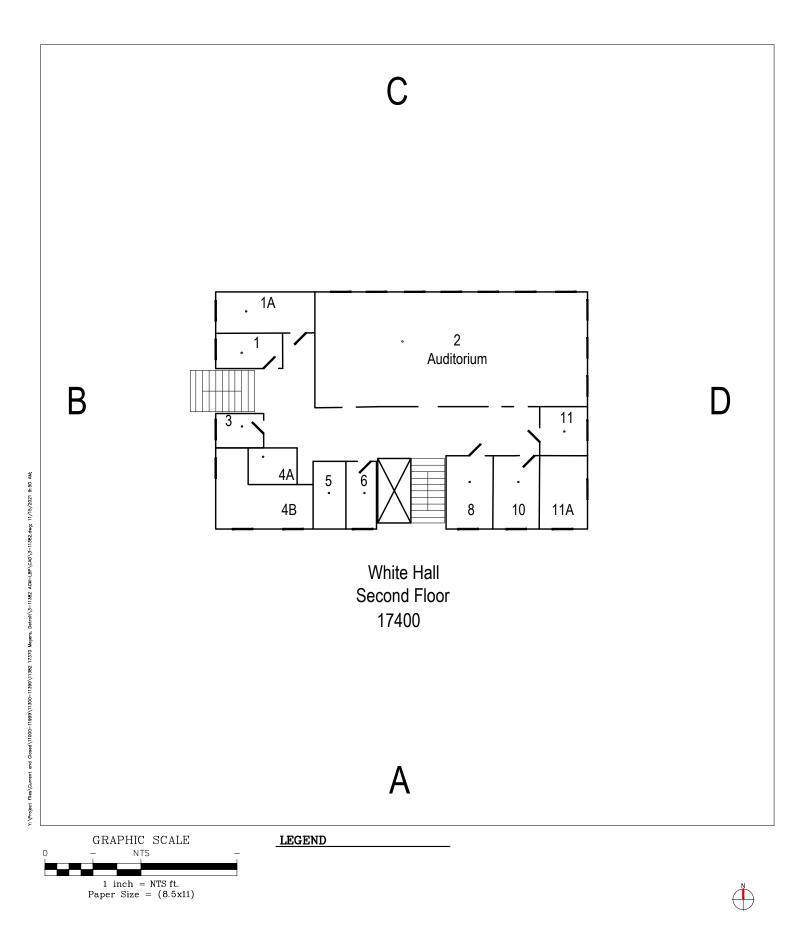
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Meyers Senior

<u>Apartments</u>

17400 Meyers, Detroit, MI





Meyers Senior Apartments

, Detroit, MI Environm

17400 Meyers, Detroit, MI

Tables

- Asbestos Sample Results (17370 Meyers Rd) Asbestos Sample Results (17400 Meyers Rd) 1
- 2



Table 1 Asbestos Sample Results 17370 Meyers Road Detroit, Michigan

ASTI Project No: 3-11382					
ASTI Sample ID	Material/Description	Sample Location	Asbestos Result		
1A	Tile Grout-Light Grey	Room B2	NAD		
1B	Tile Grout-Light Grey	Room B4	NAD		
2A	Pipe Insulation-White	Room B3	NAD		
2B	Pipe Insulation-White	Room B3	NAD		
2C	Pipe Insulation-White	Room B3	NA		
3A	12"x12" Floor Tile-White	Room B5	NAD		
-	Glue	Room B5	NAD		
3B	12"x12" Floor Tile-White	Room B5	NAD		
	Glue	Room B5	NAD		
4A	Glue Pods-Brown	Behind Chalkboard Room B5	NAD		
4B	Glue Pods-Brown	Behind Chalkboard Room B5	NAD		
5A	Caulk-Brown	Windows In Room B5	NAD		
5B	Caulk-Brown	Windows In Room B7	NAD		
6A	12"x12" Floor Tile-Grey w/White/Grey Specks	Room B6	NAD		
07	Glue	Room B6	NAD		
6B	12"x12" Floor Tile-Grey w/White/Grey Specks	Room B6	NAD		
00	Glue	Room B6	NAD		
7.0	12"x12" Ceiling Tile-White	Room B6	NAD		
7A	Brown Glue Pod	Room B6	NAD		
7 D	12"x12" Ceiling Tile-White	Hallway	NAD		
7B	Brown Glue Pod	Hallway	NAD		
0.4	4" Cove Base-Grey	Room B6	NAD		
8A	Glue	Room B6	NAD		
0.0	4" Cove Base-Grey	Room B6	NAD		
8B	Glue	Room B6	NAD		
9A	Textured Ceiling Paint-White	Room B6	NAD		
9B	Textured Ceiling Paint-White	Room B6	NAD		
9C	Textured Ceiling Paint-White	Room B11	NAD		
9D	Textured Ceiling Paint-White	2nd Floor Hall	NAD		
9E	Textured Ceiling Paint-White	2nd Floor Hall	NAD		
9F	Textured Ceiling Paint-White	2nd Floor Hall	NAD		
9G	Textured Ceiling Paint-White	2nd Floor Hall	NAD		
10A	Texture-Orange Peel-White	Room B6	NAD		
10R	Texture-Orange Peel-White	Room B6	NAD		
10C	Texture-Orange Peel-White	Room B6	NAD		
	Drywall-White	Room B6	NAD		
11A	Joint Compound	Room B6	NAD		
11B	Drywall-White	Room B6	NAD		
	Joint Compound	Room B6	NAD		
12A	Glue - Yellow 9"x9" Floor Tile-Brown-Under Carpet	Room B7 Room B7	NAD 10% Chrysotile		
128	Mastic	Room B7 Room B7	NAD		
	Glue - Yellow	Room B7	NAD		
12B	9"x9" Floor Tile-Brown-Under Carpet	Room B7	NA		
	Mastic	Room B7	NAD		
13A	4" Cove Base-Black	B Floor Hallway	NAD		
	Glue	B Floor Hallway	NAD		
13B	4" Cove Base-Black Glue	B Floor Hallway B Floor Hallway	NAD NAD		
	Glue	D FIUUI FIAIIWAY	INAU		

Table 1 **Asbestos Sample Results** 17370 Meyers Road Detroit, Michigan

ASTI Project No: 3-11382				
ASTI Sample ID	Material/Description	Sample Location	Asbestos Result	
14A –	12"x12" Floor Tile-Red	B Floor Hallway	NAD	
	Mastic	B Floor Hallway	NAD	
	12"x12" Floor Tile-Red	B Floor Hallway	NAD	
	Mastic	B Floor Hallway	NAD	
15A	12"x12" Floor Tile-Off White	B Floor Hallway	NAD	
	Mastic	B Floor Hallway	NAD	
15B	12"x12" Floor Tile-Off White	B Floor Hallway	NAD	
	Mastic	B Floor Hallway	NAD	
16A	4" Cove Base-Brown	Room B7	NAD	
	Glue	Room B7	NAD	
16B	4" Cove Base-Brown	Room B7	NAD	
	Glue	Room B7	NAD	
17A	Fire Door Insulation-White	B Floor Elevator Door	NAD	
17B	Fire Door Insulation-White	B Floor Elevator Door	NAD	
17C	Fire Door Insulation-White	Upper Floor Elevator Door	NAD	
18A	9"x9" Floor Tile-Brown w/White & Orange Streaks	Room B11	10% Chrysotile	
-	Mastic	Room B11	NAD	
18B	9"x9" Floor Tile-Brown w/White & Orange Streaks	Room B11	NA NA	
	Mastic	Room B11	NAD	
	9"x9" Floor Tile - Green	Room B12	10% Chrysotile	
19A	Mastic	Room B12	NAD	
	9"x9" Floor Tile - Green	Room B12	NA NA	
19B	Mastic	Room B12	NAD NAD	
20A	Brick Mortar-Grey	West Exterior	NAD	
20B	Brick Mortar-Grey	West Exterior West Exterior	NAD	
21A	Window Caulk-Grey	West Exterior	NAD	
21B	Window Caulk-Grey Window Caulk-Grey	West Exterior	NAD	
22A	Stair Tread-Brown	North Stairway	NAD	
22B	Stair Tread Brown	North Stairway	NAD	
	Carpet Mastic/Glue Yellow	Room 1	NAD	
23A -	Carpet Mastic Black	Room 1	NAD	
225	Carpet Mastic/Glue Yellow	Room 1	NAD	
23B	Carpet Mastic Black	Room 1	NAD	
0.44	Plaster-White/Finish Coat	Room 1	NAD	
24A	Plaster/Base Coat Grey	Room 1	NAD	
0.45	Plaster-White/Finish Coat	Room 1	NAD	
24B	Plaster/Base Coat Grey	Room 1	NAD	
240	Plaster-White/Finish Coat	Room 1	NAD	
24C	Plaster/Base Coat Grey	Room 1	NAD	
240	Plaster-White/Finish Coat	Room B1	NAD	
24D -	Plaster/Base Coat Grey	Room B1	NAD	
24E	Plaster-White/Finish Coat	Room B1	NAD	
24E	Plaster/Base Coat Grey	Room B1	NAD	
24F	Plaster-White/Finish Coat	Room B1	NAD	
۷41	Plaster/Base Coat Grey	Room B1	NAD	
24G	Plaster-White/Finish Coat	Room 1	NAD	
240	Plaster/Base Coat Grey	Room 1	NAD	
25A	6" Cove Base-Black	Room 1	NAD	
20/1	Glue	Room 1	NAD	
25B	6" Cove Base-Black	Room 1	NAD	
200	Glue	Room 1	NAD	
26A	Paper Insulation-Brown & Silver	Room 1 Above Ceiling	NAD	
26B	Paper Insulation-Brown & Silver	Room 1 Above Ceiling	NAD	
27A	4" Cove Base-Cream	Room 2	NAD	
21 A	Glue	Room 2	NAD	
27B	4" Cove Base-Cream	Room 2	NAD	
210	Glue	Room 2	NAD	

Table 1 Asbestos Sample Results 17370 Meyers Road Detroit, Michigan

	7.01.	110,000110.0 11002	
ASTI Sample ID	Material/Description	Sample Location	Asbestos Result
28A	4" Cove Base-Red	Room 2	NAD
20A	Glue	Room 2	NAD
28B	4" Cove Base-Red	Room 2	NAD
200	Glue	Room 2	NAD
29A	Tile Grout-Grey	Room 4A Restroom	NAD
29B	Tile Grout-Grey	Room 4A Restroom	NAD
	Glue - Yellow	Room 10	NAD
30A	9"x9" Floor Tile-Red	Room 10	10% Chrysotile
	Mastic	Room 10	NAD
	Glue - Yellow	Room 10	NAD
30B	9"x9" Floor Tile-Red	Room 10	NA
	Mastic	Room 10	NAD
31A	Block Mortar-Grey	South Stairwell	NAD
31B	Block Mortar-Grey	South Stairwell	NAD
26C	Paper Insulation-Brown & Silver	Room 1 Above Ceiling	NAD

Table 2 Asbestos Sample Results 17400 Meyers Road Detroit, Michigan

ASTI Project No: 3-11382					
ASTI Sample ID	Material/Description	Sample Location	Asbestos Result		
1A	Ceiling Tile-White	Hallway Near B2	NAD		
IA	Glue Pod	Hallway Near B2	NAD		
1B	Ceiling Tile-White	Hallway Near B2	NAD		
	Glue Pod	Hallway Near B2	NAD		
2A	Pipe Insulation-Yellow & White	Hallway	NAD		
2B	Pipe Insulation-Yellow & White	Hallway	NAD		
2C	Pipe Insulation-Yellow & White	Hallway	NAD		
	Plaster-White Finish Coat	Room B1	NAD		
3A	Plaster Base Coat Grey	Room B1	NAD		
	Drywall	Room B1	NAD		
	Plaster-White Finish Coat	Room B1	NAD		
3B	Plaster Base Coat Grey	Room B1	NAD		
	Drywall	Room B1	NAD		
	Plaster-White Finish Coat	Room B1	NAD		
3C	Plaster Base Coat Grey	Room B1	NAD		
	Drywall	Room B1	NAD		
	Plaster-White Finish Coat	Room 31	NAD		
3D	Plaster Base Coat Grey	Room 31	NAD		
- J	Drywall Drywall	Room 31	NAD		
	Plaster-White Finish Coat	Room 31	NAD		
3E	 				
3E	Plaster Base Coat Grey	Room 31	NAD		
	Drywall	Room 31	NAD		
4A	12"x12"1 Floor Tile-Tan	Hallway	NAD		
	Mastic	Hallway	NAD		
4B	12"x12" Floor Tile-Tan	Hallway	NAD		
45	Mastic	Hallway	NAD		
5A	4" Cove Base-Brown	Room B1 A	NAD		
3A	Glue	Room B1 A	NAD		
50	4" Cove Base-Brown	Room B1 B	NAD		
5B	Glue	Room B1 B	NAD		
	Drywall-White	Room B1 A	NAD		
6A —	Joint Compound	Room B1 A	NAD		
	Drywall-White	Room B1 B	NAD		
6B	Joint Compound	Room B1 B	NAD		
7.0	·				
7A 7B	Caulk-White	Room B1 A Room B1 A	NAD NAD		
	Caulk-White 4" Cove Base-Tan	Room B1 A Room B2	NAD NAD		
8A	Glue	Room B2	NAD		
8B	4" Cove Base-Tan	Room B2	NAD		
	Glue	Room B2	NAD		
9A	Window Caulk-Brown	Room B2	NAD		
9B 10A	Window Caulk-Brown Pipe Insulation-White Over Brown	Room B2	NAD NAD		
10A 10B	Pipe Insulation-White Over Brown Pipe Insulation-White Over Brown	B Hallway B Hallway	NAD NAD		
10D	Pipe Insulation-White Over Brown	B Hallway	NAD		

Table 2 Asbestos Sample Results 17400 Meyers Road Detroit, Michigan

	ASTI Pro	ect No: 3-11382	
ASTI Sample ID	Material/Description	Sample Location	Asbestos Result
	Glue-Yellow	Room B4	NAD
	9"x9" Floor Tile-Grey	Room B4	10% Chrysotile
11A	Mastic	Room B4	NAD
	Glue-Yellow	Room B4	NAD
	Filler	Room B4	NAD
	Glue-Yellow	Room B4	NAD
_	Glue-Yellow	Room B4	NAD
_	9"x9" Floor Tile-Grey	Room B4	NA NA
11B -	Mastic Chr. Velley:	Room B4	NAD NAD
-	Glue-Yellow Filler	Room B4 Room B4	NAD NAD
_	Glue-Yellow	Room B4	NAD
	9"x9" Floor Tile-Green w/Orange & White	TOOHI B4	NAD
12A	Streaks	Room B10	10% Chrysotile
120	Mastic	Room B10	NAD
100	9"x9" Floor Tile-Green w/Orange & White	Room B6	NA NA
12B	Streaks		NAD
	Mastic	Room B6	NAD
13A	9"x9" Floor Tile-Tan	Room B10	2% Chrysotile
	Glue	Room B10	NAD
13B	9"x9" Floor Tile-Tan	Room B10	NA
	Glue	Room B10	NAD
14A	4" Cove Base-Green	B7 Closet	NAD
, .	Glue	B7 Closet	NAD
14B	4" Cove Base-Green	B7 Closet	NAD
	Glue	B7 Closet	NAD
15A	4" Cove Base-Maroon	Room 1	NAD
	Glue	Room 1	NAD
15B	4" Cove Base-Maroon	Room 1	NAD
	Glue	Room 1	NAD
16A	12"x12" Floor Tile-Tan	Room 1	NAD NAD
	Mastic 12"x12" Floor Tile-Tan	Room 1 Room 1	NAD NAD
16B	Mastic	Room 1	NAD
_	4" Cove Base-Blue	Room 3	NAD
17A -	Glue	Room 3	NAD
470	4" Cove Base-Blue	Room 3	NAD
17B	Glue	Room 3	NAD
18A	12"x12" Floor Tile-White	Room 3	NAD
IOA	Glue	Room 3	NAD
18B	12"x12" Floor Tile-White	Room 3	NAD
	Glue	Room 3	NAD
19A	Textured Wall-White	Room 9	NAD
19B	Textured Wall-White	Room 9	NAD
20A	Tile Grout-White	Room 9	NAD NAD
20B	Tile Grout-White 9"x9" Floor Tile-Green w/Orange & White	Room 9	
21A	Streaks Glue	Room 10	2% Chrysotile
	9"x9" Floor Tile-Green w/Orange & White	Room 10	NAD
21B	Streaks	Room 10	NA
	Glue	Room 10	NAD
22A	Stair Tread-Tan	North Stairwell	NAD
-	Glue	North Stairwell	NAD
22B	Stair Tread-Tan Glue	North Stairwell	NAD NAD
23A	Block Mortar-Grey	North Stairwell Room 1	NAD NAD
23A 23B	Block Mortar-Grey	Room 29	NAD NAD
24A	Tile Grout-Dark Grey	Room 28	NAD
24B	Tile Grout-Dark Grey	Room 28	NAD

Table 2 Asbestos Sample Results 17400 Meyers Road Detroit, Michigan

AOTITIOJECTIO. 3-11302				
ASTI Sample ID	Material/Description	Sample Location	Asbestos Result	
25A	Caulk-Beige	Room 28	NAD	
25B	Caulk-Beige	Room 28	NAD	
26A	4" Cove Base-Cream	Room 21	NAD	
204	Glue	Room 21	NAD	
26B	4" Cove Base-Cream	Room 21 E	NAD	
200	Glue	Room 21 E	NAD	
27A	12"x12" Floor Tile-Cream w/Blue Diamond	Room 21D	NAD	
2/4	Glue	Room 21D	NAD	
27B	12"x12" Floor Tile-Cream w/Blue Diamond	Room 21D	NAD	
2/6	Glue	Room 21D	NAD	
28A	Stair Tread-Brown	South Stairwell	NAD	
204	Glue	South Stairwell	NAD	
28B	Stair Tread-Brown	South Stairwell	NAD	
20B	Glue	South Stairwell	NAD	
29A	Brick Mortar-Grey	South Exterior	NAD	
29B	Brick Mortar-Grey	East Exterior	NAD	
30A	Caulk-Grey	Overhang	5% Chrysotile	
30B	Caulk-Grey	Overhang	NA	
19C	Textured Wall-White	Room 9	NAD	

Appendix A

Resume and Accreditation of Ms. Jelaine Tinsley
And
Mr. John Schuitema







JELAINE D. TINSLEY Environmental Professional

PROFILE

Certifications/Licenses

NIOSH 582-Equivalent Course Sampling and Analysis of Airborne Asbestos Fibers OSHA 29 CFR 1910.120 HAZWOPER 40-Hour and 8-Hour Refresher (2020)

Asbestos Inspector-Michigan (License No. A16395)

Asbestos Inspector-Illinois (License No. 100-19756)

Asbestos Inspector-Indiana (License No. 19A007625)

Asbestos Hazard Evaluation Specialist-Ohio (License No.ES36108)

Asbestos Inspector / Management Planner-Kentucky (License No. 66369)

Asbestos Project Designer-Michigan (License No. A16395)

Certified Confined Space Entrant and Attendant

American Red Cross First Aide and Adult CPR Certified

ASTM Certification in RBCA Applied at Petroleum Release Sites

Bituminous Testing Technician

Michigan Provisional Teaching Certificate

Education

Western Michigan University, B.S., Earth Science and Education

Experience History

Environmental Professional, ASTI ENVIRONMENTAL Project Manager, Yeoman Group Project Manager, A&F Environmental Environmental Consultant, DLZ Corporation Environmental Consultant, AKT Peerless Geologist, ATC Associates Geologist, NUS Corporation Teacher, Detroit Public Schools

Professional Memberships and Service

Staff Scientist, CTI and Associates, Inc.

Michigan Association of Environmental Professionals (MAEP)

Commercial Real Estate Women Detroit (CREW)

Professional Background

Ms. Tinsley has more than 32 years experience in the environmental industry in a variety of areas including Phase I environmental site assessments (ESAs), Phase II ESAs, baseline environmental assessments (BEAs), subsurface investigations (soil and groundwater testing), soil and groundwater evaluations, asbestos and mold inspections, abatement oversight, and specification development. Ms. Tinsley has also coordinated numerous hazardous material and pre-demolition surveys which included evaluations of asbestos, mold, radon and universal wastes for municipal, commercial, and industrial facilities.

Years Experience:

7 --- ASTI ENVIRONMENTAL 25 --- other firms

ENVIRONMENTAL DUE DILIGENCE AND SITE INVESTIGATION PROJECTS

Environmental Site Assessments

Completed numerous site assessments for a variety of projects (vacant land, agricultural, residential, commercial, and industrial) to determine the environmental condition of sites for real estate transactions. Projects involved both surface and subsurface evaluations of sites for a variety of hazardous substances. Responsibilities included the preparation and/or review of ASTM Phase I and Phase ESAs, Baseline Environmental Assessments (BEAs), and Due Care Plans. Ms. Tinsley has experience working in Michigan, Illinois, Indiana, Ohio, Kentucky, Tennessee, Georgia, Alabama, Mississippi, and Florida. Ms. Tinsley also has performed listing site evaluations for a dedicated contactor to the US EPA. Ms. Tinsley is also knowledgeable with All Appropriate Inquiries (AAI) per 40 CFR Part 312 and meets the requirements of an Environmental Professional per AAI.

Customer Training

Provided training for financial institutions on the types of properties that should have environmental evaluations.

Vapor Intrusion Evaluation, Jackson, Michigan

Conducted vapor intrusion studies at commercial properties to assess potential vapor migration. Scope of work included coordination of vapor intrusion points, vapor sample collection, and coordination of chemical testing.

CONSTRUCTION TESTING

Conducted construction material analysis which included soil proctors, soil sieve analysis, asphalt extractions, and concrete stress testing.

ASBESTOS INSPECTIONS AND ABATEMENT COORDINATION/OVERSIGHT

Responsible for asbestos program management including coordination and technical lead for hazardous material surveys and asbestos and mold related testing activities.

<u>Asbestos Inspections, City of Detroit Neighborhood</u> Redevelopment Project

Inspector of asbestos hazards at over 300 residential and commercial properties. Collected samples of suspect ACM for laboratory analysis. Provided report to the City of Detroit with findings and compliance requirements.

Asbestos Inspections, City of Inkster Neighborhood Redevelopment Project

Conducted asbestos inspections at over 100 residential and commercial properties. Collected samples of suspect ACM for laboratory analysis. Provided report to the City of Inkster with findings and compliance requirements.

Large Hotel Detroit, Michigan

Inspected the hotel property as part of a team. Collected samples, reviewed laboratory analysis, and provided client a report of methods and findings. Performed oversight of ACM abatement.

Medical Complex Kalamazoo, Michigan

Responsible for coordination of field activities for the ACM abatement of the complex. Conducted schedule and strategy meetings.

Hotel, Detroit, Michigan

Inspected the hotel property. Collected samples, reviewed laboratory analysis, and provided client a report of methods and findings.

Former Coal Power Plant

Conducted a thorough asbestos inspection of an inactive multi-building coal power plant in Detroit, Michigan. Collected samples, and performed thorough photo documentation and quantification of all ACMs in the power plant and supporting buildings.

UNDERGROUND STORAGE TANKS AND PETROLEUM REMEDIATION PROJECT

Commercial Development Royal Oak, Michigan

Coordinated the remediation of a former gasoline service station, during site development for a commercial company. Work included Phase I ESA and Phase II site investigation to evaluate USTs and hoists onsite, as well as coordinating a GPR survey for additional USTs on site, a BEA, and a Due Care Plan. Assisted with the development bid specifications for site remediation activities including UST and hoist removal, soil remediation, and asbestos abatement. Coordinated the removal of five (5) USTs, one in-ground hoist, and 300,000 cubic yards of petroleum-impacted soils.







JOHN F. SCHUITEMA Environmental Field Technician

PROFILE

Certifications

Asbestos Inspector (A51781)
Michigan Lead Inspector/Risk Assessor (P-07409)
ICC Property Maintenance Inspector
ICC Zoning Inspector
40-Hour OSHA HAZWOPER Training
8-Hour OSHA HAZWOPER Refresher

Education

Lead Inspector/Risk Assessor Training Asbestos Awareness Training Lead Awareness Training Asbestos Inspector Training

Experience History

Field Technician, ASTI Environmental Government

Professional Background

Mr. Schuitema has experience in the field with soil sampling, lead dust sampling, asbestos surveys, air monitoring, hazardous materials surveys, and lead inspections. Mr. Schuitema has assisted with Phase II investigations, property condition assessments, mold sampling, indoor air quality assessments, moisture operation and maintenance plans, and performed health and safety related building inspections.

Years' Experience: 3 --- ASTI ENVIRONMENTAL

3 --- Government

ENVIRONMENTAL DUE DILIGENCE AND SITE INVESTIGATION PROJECTS

Environmental Site Assessments

Completed numerous site assessments for a variety of projects (vacant land, agricultural, residential, commercial, and industrial), to determine the environmental condition of sites for real estate transactions. Projects involved both surface and subsurface evaluations of sites for a variety of hazardous substances.

ASBESTOS AND LEAD INSPECTION AND RISK ASSESSMENTS

Responsible for asbestos inspections and lead inspections and risk assessments on commercial, multi-family, and single-family properties.

<u>Lead Based Paint Inspections and Risk Assessments.</u> <u>Flint Housing Commission</u>

Inspection of lead hazards throughout Flint's public housing complexes, dust wipe sample collection for laboratory analysis, XRF sampling, and writing the report to the Flint Housing Commission with findings and compliance requirements.

Large Apartment Complex in Flint, Michigan

Conducted asbestos inspections of over 100 residential units. Collected samples of suspect ACM for laboratory analysis. Provided report to the City of Flint with findings and compliance requirements.

INDOOR AIR QUALITY AND MOLD

Conducted mold assessments and verification sampling on municipal buildings, schools, and private facilities in the State of Michigan. Assessment scopes included mold identification and moisture infiltration, abatement scope design, and post abatement visual inspection and clearance sampling.

Conducted visual and indoor air quality clearance samples for multiple residential homes following ACM removal, prior to demolition, throughout the State of Michigan.

Highrise Apartment Building Detroit, Michigan

Monitored indoor air quality during removal of asbestos containing materials. Provided clearance air sampling upon completion.

Multiple School Buildings Detroit, Michigan

Performed visual inspection, tape lift samples, air sampling, and moisture readings to evaluate potential mold growth. Completed clearance inspection and sampling after remediation and provided the client with a report of methods and findings.

PROPERTY CONDTION ASSESSMENTS

Completed inspections of commercial, industrial, and residential properties in the State of Michigan. Identified physical deficiencies, material defects, and deferred maintenance. Reported findings, including cost estimates for repairs and replacements deemed necessary.

STORM WATER INSPECTIONS

Performed inspections of construction sites to determine compliance with state storm water regulations. Reported deficiencies and recommend remedies.

Large Apartment Complex Howell, Michigan

Conducted weekly inspections during construction to ensure compliance with construction storm water regulations. Provided weekly report with findings, deficiencies, and remedy options to the client and County.

WASTEWATER OPERATIONS

Super Fund Site, St. Joseph, Michigan

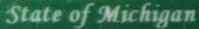
Performed monthly maintenance and sampling to insure proper operation and compliance with applicable regulations. Maintained air striper and CatOx system for removal of VOCs from contaminated groundwater.

AIR MONITORING

Former McLouth Steel Site, Trenton, Michigan

Operated outdoor air monitoring and sampling stations to ensure chemicals of concern and fugitive dust did not leave the property. Performed real time air monitoring during demolition activities.





Department of Labor and Economic Opportunity

Michigan Occupational Safety & Health Administration - Asbestos Program

Asbestos Inspector

John F. Schuitema 6790 Hinchey Road Pinckney, MI 48169

Accreditation Number

Expiration Date 02/27/2022

This individual has satisfactorily met or exceeded the requirements of Michigan Public Act 440 of 1988, as amended, to be accredited as an Asbestos Inspector.

DOB: 06/17/1981

Accreditation card is not valid if altered

151348

Appendix B

Results of Asbestos Sample Analysis and Chain of Custody



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Other - 100%

Lab ID #: 96257 - 01

Cust. #: Material: Tile Grout-Light Grey

Location: Room B2

Appearance: white, nonfibrous, homogenous

Layer: of

96257 - 02 Lab ID #:

Cust. #: 1B

Material: Tile Grout-Light Grey

Location: Room B4

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 03

Cust. #:

Material: Pipe Insulation-White

Location: Room B3

Appearance: yellow,fibrous,nonhomogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Cellulose - 10%

Fiberglass - 70% Other - 20%

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96257

Date Collected: 09/21/21

Date Received: 09/28/21

Date Analyzed: 09/29/21

Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Non-Asbestos Material

Cellulose - 10%

Fiberglass - 65%

Other - 25%

Other - 100%

Lab ID #: 96257 - 04 Cust. #: 2B

Brighton, MI 48116

Pipe Insulation-White

Location: Room B3

Material:

Appearance: yellow,fibrous,nonhomogenous

Layer: 1 of

Lab ID #: 96257 - 05

Cust. #: 2C

Material: Pipe Insulation-White

Location: Room B3

Appearance: Layer: of Asbestos Present:

NO SAMPLE RECEIVED

Asbestos Present: NO

No Asbestos Observed

Lab ID #: 96257 - 06

Cust. #: 3A

Material: 12x12 Floor Tile-White

Location: Room B5

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96257 - 06a

Brighton, MI 48116

Cust. #: 3A Material: Glue

Location: Room B5

Appearance: yellow,nonfibrous,homogenous

Layer:

96257 - 07 Lab ID #:

Cust. #: 3B

Material: 12x12 Floor Tile-White

Location: Room B5

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 07a

Cust. #: 3B Material: Glue

Location: Room B5

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Appearance: yellow,nonfibrous,homogenous

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Lab ID #: 96257 - 08

Brighton, MI 48116

Cust. #: Material: Glue Pods-Brown

Location: Behind Chalkboard Room B5 Appearance: brown,nonfibrous,homogenous

Layer:

96257 - 09 Lab ID #:

Cust. #:

Material: Glue Pods-Brown

Location: Behind Chalkboard Room B5 Appearance: brown,nonfibrous,homogenous

Layer: of

Lab ID #: 96257 - 10

Cust. #: 5A

Caulk-Brown Material:

Location: Windows In Room B5

Appearance: brown, nonfibrous, homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 11

Brighton, MI 48116

Cust. #: 5B

Material: Caulk-Brown

Location: Windows In Room B7

Appearance: brown,nonfibrous,homogenous

Layer:

Lab ID #:

96257 - 12

Cust. #:

Material: 12x12 FT-Grey w/White/Grey Specks

Location: Room B6

Appearance: grey,nonfibrous,homogenous

Layer: of

Lab ID #: 96257 - 12a

Cust. #: 6A Material: Glue

Location: Room B6

Appearance: yellow,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Other - 100%

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental**

10448 Citation Dr., Suite 100

Brighton, MI 48116

ARI Report #

21-96257

Date Collected: Date Received:

09/21/21 09/28/21

Date Analyzed:

09/29/21

Date Reported:

09/29/21

Sample Information

Non-Asbestos Material

Lab ID #:

96257 - 13

Cust. #:

Material:

12x12 FT-Grey w/White/Grey Specks

Location: Room B6

Appearance: grey,nonfibrous,homogenous

Layer:

Lab ID #:

of

96257 - 13a

Cust. #: 6B Material:

Glue Location: Room B6

Appearance: yellow,nonfibrous,homogenous

Layer: 2

of

Lab ID #: 96257 - 14

Cust. #:

Material: 12x12 Ceiling Tile-White

Location: Room B6

Appearance: brown, fibrous, homogenous

Layer:

of

For Layered Samples, each component will be analyzed and reported separately.

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Asbestos Present: NO

No Asbestos Observed

Cellulose - 80% Other - 20%

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental**

10448 Citation Dr., Suite 100

Brighton, MI 48116

ARI Report #

21-96257 Date Collected: 09/21/21

Date Received:

09/28/21

Date Analyzed: Date Reported:

09/29/21 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 14a

Cust. #: 7A

Material: Brown Glue Pod

Location: Room B6

Appearance: brown, nonfibrous, homogenous

Layer:

Lab ID #:

Cust. #: Material:

Location: Hallway

Appearance: brown, fibrous, homogenous

Layer:

Lab ID #:

96257 - 15a

Brown Glue Pod

Cust. #:

Material:

Location: Hallway

Appearance: brown,nonfibrous,homogenous

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Other - 100%

96257 - 15

7B

12x12 Ceiling Tile-White

of

Asbestos Present: NO No Asbestos Observed

Other - 100%

Cellulose - 80%

Other - 20%

Layer: of

7B

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 Brighton, MI 48116

ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Other - 100%

Lab ID #: 96257 - 16

Cust. #: Material:

4" Cove Base-Grey

Location: Room B6

Appearance: grey,nonfibrous,homogenous

Layer:

of

96257 - 16a Lab ID #:

Cust. #: 8A Material: Glue

Location: Room B6

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96257 - 17

Cust. #:

Material: 4" Cove Base-Grey

Location: Room B6

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Appearance: grey,nonfibrous,homogenous

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 17a

Brighton, MI 48116

Cust. #: 8B Material: Glue

Location: Room B6

Appearance: yellow,nonfibrous,homogenous

Layer:

Lab ID #:

96257 - 18

Cust. #:

9A

Material: **Textured Ceiling Paint-White**

Location: Room B6

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 19

Cust. #:

Material:

Textured Ceiling Paint-White Location: Room B6

Appearance: white, nonfibrous, homogenous

Layer: of Asbestos Present: NO

No Asbestos Observed

Other - 100%

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 1% Other - 99%

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

ARI Report #

Other - 100%

Other - 100%

Sample Information

Asbestos Type/Percent

Lab ID #: 96257 - 20

Cust. #:

Brighton, MI 48116

Material: Textured Ceiling Paint-White

Location: Room B11

Appearance: white, nonfibrous, homogenous

Layer: of

96257 - 21 Lab ID #:

9D

Cust. #:

Material: **Textured Ceiling Paint-White**

Location: 2nd Floor Hall

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 22

Cust. #:

Material:

Location: 2nd Floor Hall

Appearance: white, nonfibrous, homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

No Asbestos Observed

Asbestos Present: NO Other - 100%

Textured Ceiling Paint-White

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

ARI Report #

Other - 100%

Other - 100%

Sample Information

Asbestos Type/Percent

Lab ID #: 96257 - 23

Brighton, MI 48116

Cust. #:

Material:

Textured Ceiling Paint-White

Location: 2nd Floor Hall

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #:

96257 - 24 9G

Cust. #: Material:

Textured Ceiling Paint-White

Location: 2nd Floor Hall

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 25

Cust. #: 10A

Material: Texture-Orange Peel-White

Location: Room B6

Appearance: white, nonfibrous, homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 Brighton, MI 48116

ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Lab ID #: 96257 - 26

Cust. #: 10B

Material: Texture-Orange Peel-White

Location: Room B6

Appearance: white, nonfibrous, homogenous

Layer:

96257 - 27 Lab ID #:

Cust. #: 10C

Texture-Orange Peel-White Material:

Location: Room B6

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 28

Cust. #: 11A

Material: Drywall-White

Location: Room B6

Appearance: white, fibrous, nonhomogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Cellulose - 20%

Other - 80%

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 28a Cust. #:

11A

Material: Joint Compound Location: Room B6

Appearance: white,nonfibrous,homogenous

Layer:

Lab ID #: 96257 - 29

Cust. #: 11B

Material: Drywall-White Location: Room B6

Appearance: white, fibrous, nonhomogenous

Layer: of

Lab ID #: 96257 - 29a

Cust. #: 11B

Material: Joint Compound

Location: Room B6

Appearance: white, nonfibrous, homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

Cellulose - 20%

Other - 100%

Other - 100%

Other - 80%

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

ARI Report #

Other - 100%

Other - 90%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 30

Cust. #: 12A

Material: Yellow Glue Location: Room B7

Appearance: yellow,nonfibrous,homogenous

Layer: of

Lab ID #: 96257 - 30a

Cust. #: 12A

9x9 FT-Brown-Under Carpet Material:

Location: Room B7

Appearance: brown, fibrous, homogenous

Layer: of

Lab ID #: 96257 - 30b

Cust. #: 12A Material: Mastic

Location: Room B7

Appearance: black,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: YES

Chrysotile - 10%

Asbestos Present: NO Other - 100%

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 31 Cust. #:

12B Yellow Glue

Material: Location: Room B7

Appearance: yellow,nonfibrous,homogenous

Layer: of

Lab ID #: 96257 - 31a

Cust. #: 12B

Material:

9x9 FT-Brown-Under Carpet

of

Location: Room B7

Appearance:

Layer:

96257 - 31b Lab ID #:

Cust. #: 12B Material: Mastic

Location: Room B7

Appearance: black,nonfibrous,homogenous

Layer: of

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present:

NOT ANALYZED

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

ARI Report #

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96257 - 32 Cust. #:

4" Cove Base-Black

Material: Location: B Floor Hallway

Appearance: black,nonfibrous,homogenous

Layer:

96257 - 32a Lab ID #:

Cust. #: 13A Material: Glue

Location: B Floor Hallway

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96257 - 33

Cust. #: 13B

4" Cove Base-Black Material: Location: B Floor Hallway

Appearance: black,nonfibrous,homogenous

Layer: of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Other - 100%

Cellulose - 1%

Other - 99%

Lab ID #: 96257 - 33a

Cust. #: 13B Material: Glue

Location: B Floor Hallway

Appearance: yellow,nonfibrous,homogenous

Layer:

96257 - 34 Lab ID #:

Cust. #: 14A

12x12 Floor Tile-Red Material: Location: B Floor Hallway

Appearance: red,nonfibrous,homogenous

Layer: of

Lab ID #: 96257 - 34a

Cust. #: 14A Material: Mastic

Location: B Floor Hallway

Appearance: black,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

ARI Report #

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 35 Cust. #:

Material: 12x12 Floor Tile-Red Location: B Floor Hallway

Appearance: red,nonfibrous,homogenous

Layer: of

96257 - 35a Lab ID #:

Cust. #: 14B Material: Mastic

Location: B Floor Hallway

Appearance: black,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96257 - 36

Cust. #: 15A

12x12 Floor Tile-Off White Material:

Location: B Floor Hallway

Appearance: white, nonfibrous, homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Lab ID #: 96257 - 36a

Cust. #: 15A Material: Mastic

Location: B Floor Hallway

Appearance: black,nonfibrous,homogenous

Layer:

Lab ID #: 96257 - 37

Cust. #: 15B

12x12 Floor Tile-Off White Material:

Location: B Floor Hallway

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 37a

Cust. #: 15B Material: Mastic

Location: B Floor Hallway

Appearance: black,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

 Date Collected:
 09/21/21

 Date Received:
 09/28/21

 Date Analyzed:
 09/29/21

 Date Reported:
 09/29/21

ARI Report #

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96257 - 38

Cust. #: 16A

Material: 4" Cov

erial: 4" Cove Base-Brown

Location: Room B7

Appearance: brown,nonfibrous,homogenous

Layer: 1

01 2

Lab ID #: 96257 - 38a

Cust. #: 16A Material: Glue

Location: Room B7

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96257 - 39

Cust. #: 16B

Material: 4" Cove Base-Brown

Location: Room B7

Appearance: brown,nonfibrous,homogenous

Layer: 1 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 39a

Cust. #: 16B Material: Glue

Location: Room B7

Appearance: yellow,nonfibrous,homogenous

Layer:

96257 - 40 Lab ID #:

Cust. #: 17A

Material: Fire Door Insulation-White Location: B Floor Elevator Door Appearance: white, fibrous, homogenous

Layer: of

Lab ID #: 96257 - 41

Cust. #: 17B

Material: Fire Door Insulation-White Location: B Floor Elevator Door

Layer:

Asbestos Present: NO

No Asbestos Observed

Other - 100%

ARI Report #

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 2%

Other - 98%

Asbestos Present: NO

No Asbestos Observed

Fiberglass - 2% Other - 98%

Appearance: white, fibrous, homogenous

of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 42 Cust. #:

Material:

Brighton, MI 48116

17C Fire Door Insulation-White Location: Upper Floor Elevator Door Appearance: white, fibrous, homogenous

Layer: of

Lab ID #: 96257 - 43

Cust. #: 18A Material:

FT-9x9-Brown w/White & Orange Streaks Location: Room B11

Appearance: brown, fibrous, homogenous

Layer: of

Lab ID #: 96257 - 43a

Material: Mastic

Location: Room B11

Appearance: black,nonfibrous,homogenous

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: **YES**

Asbestos Present: NO

Chrysotile - 10%

Fiberglass - 1%

Other - 99%

Other - 90%

Other - 100%

No Asbestos Observed Cust. #: 18A

Layer: of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To:

Mr. David Amir

ASTI Environmental

10448 Citation Dr., Suite 100

Brighton, MI 48116

ARI Report #

21-96257

Date Collected: Date Received:

09/21/21 09/28/21

Date Analyzed:

09/29/21

Date Reported:

09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #:

96257 - 44

Cust. #:

FT-9x9-Brown w/White & Orange Streaks Material:

Location: Room B11

Appearance:

Layer:

Lab ID #:

96257 - 44a

Cust. #:

18B

Material: Mastic

Location: Room B11

Appearance: black,nonfibrous,homogenous

Layer: 2 of

Lab ID #:

96257 - 45

Cust. #:

19A

9x9 Floor Tile - Green Material:

Location: Room B12

Appearance: green, fibrous, homogenous

Layer:

of

Other - 100%

Other - 90%

Asbestos Present:

NOT ANALYZED

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: **YES**

Chrysotile - 10%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

ARI Report #

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 45a

Cust. #: 19A

Material: Mastic Location: Room B12

Appearance: black,nonfibrous,homogenous

Layer:

Lab ID #:

96257 - 46

Material:

Location: Room B12

Appearance:

Layer:

of

Lab ID #: 96257 - 46a

Cust. #: 19B Material:

Mastic Location: Room B12

Appearance: black,nonfibrous,homogenous

Layer: of

Other - 100%

Asbestos Present: NO No Asbestos Observed

Cust. #: 19B

9x9 Floor Tile - Green

NOT ANALYZED

Asbestos Present:

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96257 - 47

Brighton, MI 48116

Cust. #: 20A Material: **Brick Mortar-Grey** Location: West Exterior

Appearance: grey,nonfibrous,homogenous

Layer: of

96257 - 48 Lab ID #:

Cust. #: 20B

Material: **Brick Mortar-Grey** Location: West Exterior

Appearance: grey,nonfibrous,homogenous

Layer: of

Lab ID #: 96257 - 49

Cust. #: 21A

Material: Window Caulk-Grey

Location: West Exterior

Appearance: grey,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96257

Date Collected: 09/21/21

Date Received: 09/28/21

Date Analyzed: 09/29/21

Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96257 - 50 Cust. #: 21B

Brighton, MI 48116

Material: Window Caulk-Grey

Location: West Exterior

Appearance: white, nonfibrous, homogenous

Layer: 1 of

Lab ID #: 96257 - 51

Cust. #: 22A

Material: Stair Tread-Brown Location: North Stairway

Appearance: brown, nonfibrous, homogenous

Layer: 1 of 1

Lab ID #: 96257 - 52

Cust. #: 22B

Material: Stair Tread-Brown Location: North Stairway

Appearance: brown,nonfibrous,homogenous

Layer: 1 of 1

1,011 120 0000 1120000

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

1 6 1

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

Date Collected: 09/21/21
Date Received: 09/28/21
Date Analyzed: 09/29/21
Date Reported: 09/29/21

ARI Report #

Cellulose - 1%

Cellulose - 1%

Other - 99%

Other - 100%

Other - 99%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96257 - 53 Cust. #: 23A

Carpet Mastic/Glue Yellow

Location: Room 1

Material:

Appearance: yellow,nonfibrous,homogenous

Layer: 1 of 2

Lab ID #: 96257 - 53a

Cust. #: 23A

Material: Carpet Mastic Black

Location: Room 1

Appearance: black,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96257 - 54

Cust. #: 23B

Material: Carpet Mastic/Glue Yellow

Location: Room 1

Appearance: yellow,nonfibrous,homogenous

Layer: 1 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Other - 100%

Other - 100%

Lab ID #: 96257 - 54a

Cust. #:

Material: Carpet Mastic Black

Location: Room 1

Appearance: black,nonfibrous,homogenous

Layer:

96257 - 55 Lab ID #:

Cust. #: 24A

Material: Plaster-White/Finish Coat

Location: Room 1

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 55a

Cust. #: 24A

Material: Plaster/Base Coat Grey

Location: Room 1

Appearance: grey,fibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Cellulose - 1%

No Asbestos Observed Vermiculite - 10%

Other - 89%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Lab ID #: 96257 - 56 Cust. #:

Material: Plaster-White/Finish Coat

Location: Room 1

Appearance: white, nonfibrous, homogenous

Layer:

96257 - 56a Lab ID #:

Cust. #: 24B

Material: Plaster/Base Coat Grey

Location: Room 1

Appearance: grey,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96257 - 57

Cust. #: 24C

Plaster-White/Finish Coat Material:

Location: Room 1

Appearance: white, nonfibrous, homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 1% Vermiculite - 10%

Other - 100%

Other - 89%

Other - 100%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96257

Project : Meyers Senior South Building Project # :3-11382

Report To: Mr. David Amir ASTI Environmental 10448 Citation Dr., Suite 100

Date Collected: 09/21/21
Date Received: 09/28/21
Date Analyzed: 09/29/21
Date Reported: 09/29/21

ARI Report #

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96257 - 57a Cust. #: 24C

Material:

Brighton, MI 48116

Plaster/Base Coat Grey

Location: Room 1

Appearance: grey,nonfibrous,homogenous

Layer: 2 of 2

Other - 100%

Cellulose - 1%

Other - 89%

Vermiculite - 10%

Lab ID #: 96257 - 58

Cust. #: 24D

Material: Plaster-White/Finish Coat

Location: Room B1

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

Asbestos Present: **NO**

No Asbestos Observed

Cellulose - 1% Vermiculite - 10%

Other - 89%

Lab ID #: 96257 - 58a

Cust. #: 24D

Material: Plaster/Base Coat Grey

Location: Room B1

Appearance: grey,nonfibrous,homogenous

Layer: 2 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96257

Date Collected: 09/21/21

Date Received: 09/28/21

Date Analyzed: 09/29/21

Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 59 Cust. #: 24E Asbestos Present: **NO**No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Other - 100%

Cellulose - 1%

Other - 89%

Other - 100%

Vermiculite - 10%

Material: Plaster-

Brighton, MI 48116

Plaster-White/Finish Coat

Location: Room B1

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

Lab ID #: 96257 - 59a

Cust. #: 24E

Material: Plaster/Base Coat Grey

Location: Room B1

Appearance: grey,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96257 - 60

Cust. #: 24F

ust. π. 2-1

Material: Plaster-White/Finish Coat

Location: Room B1

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Lab ID #: 96257 - 60a Cust. #: 24F

Material: Plaster/Base Coat Grey

Location: Room B1

Appearance: grey,nonfibrous,homogenous

Layer:

96257 - 61 Lab ID #:

Cust. #: 24G

Material: Plaster-White/Finish Coat

Location: Room 1

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96257 - 61a

Cust. #: 24G

Material: Plaster/Base Coat Grey

Location: Room 1

Appearance: grey,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1% Vermiculite - 10%

Other - 89%

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1% Vermiculite - 10%

Other - 89%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 Brighton, MI 48116

ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96257 - 62 Cust. #:

6" Cove Base-Black

Material:

Location: Room 1

Appearance: black,nonfibrous,homogenous

Layer:

96257 - 62a Lab ID #:

Cust. #: 25A Material: Glue

Location: Room 1

Appearance: yellow,nonfibrous,homogenous

of Layer: 2

Lab ID #: 96257 - 63

Cust. #: 25B

6" Cove Base-Black Material:

Location: Room 1

Appearance: black,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



21-96257

Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir ASTI Environmental 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

ARI Report #

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 63a

Cust. #: 25B Material: Glue Location: Room 1

Appearance: yellow,nonfibrous,homogenous

Layer:

96257 - 64 Lab ID #:

Cust. #: 26A

Paper Insulation-Brown & Silver Material:

Location: Room 1 Above Ceiling

Appearance: brown, fibrous, nonhomogenous

Layer: of

96257 - 65 Lab ID #:

Cust. #: 26B

Material: Paper Insulation-Brown & Silver

Location: Room 1 Above Ceiling

Appearance: brown, fibrous, nonhomogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 50%

Other - 100%

Other - 50%

Asbestos Present: NO

No Asbestos Observed

Cellulose - 50% Other - 50%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



21-96257

Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

 Date Collected:
 09/21/21

 Date Received:
 09/28/21

 Date Analyzed:
 09/29/21

 Date Reported:
 09/29/21

ARI Report #

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 66 Cust. #: 27A

27A

Material: 4" Cove Base-Cream

Location: Room 2

Appearance: beige, nonfibrous, homogenous

Layer: 1 of 2

Lab ID #: 96257 - 66a

Cust. #: 27A Material: Glue

Location: Room 2

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96257 - 67

Cust. #: 27B

Material: 4" Cove Base-Cream

Location: Room 2

Appearance: beige,nonfibrous,homogenous

Layer: 1 of 2

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: **NO**

No Asbestos Observed

Asbestos Present: **NO**

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96257

Date Collected: 09/21/21

Date Received: 09/28/21

Date Analyzed: 09/29/21

Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96257 - 67a

Brighton, MI 48116

Cust. #: 27B Material: Glue

Location: Room 2

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96257 - 68

Cust. #: 28A

Material: 4" Cove Base-Red

Location: Room 2

Appearance: red,nonfibrous,homogenous

Layer: 1 of 2

Lab ID #: 96257 - 68a

Cust. #: 28A Material: Glue

Location: Room 2

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior South Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96257

Date Collected: 09/21/21

Date Received: 09/28/21

Date Analyzed: 09/29/21

Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96257 - 69

Brighton, MI 48116

Cust. #: 28B

Material: 4" Cove Base-Red

Location: Room 2

Appearance: red,nonfibrous,homogenous

Layer: 1 of 2

Lab ID #: 96257 - 69a

Cust. #: 28B Material: Glue

Location: Room 2

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96257 - 70

Cust. #: 29A

Material: Tile Grout-Grey Location: Room 4A Restroom

Appearance: brown,nonfibrous,homogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 90%

Lab ID #: 96257 - 71

Brighton, MI 48116

Cust. #: 29B

Material: Tile Grout-Grey Location: Room 4A Restroom

Appearance: brown, nonfibrous, homogenous

Layer:

Lab ID #: 96257 - 72

Cust. #: 30A

Material: Yellow Glue Location: Room 10

Appearance: yellow,nonfibrous,homogenous

of Layer:

Lab ID #: 96257 - 72a

Cust. #: 30A

9x9 Floor Tile-Red Material:

Location: Room 10

Appearance: red,fibrous,homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: **YES**

Chrysotile - 10%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96257 - 72b Cust. #: 30A

Brighton, MI 48116

Material: Mastic Location: Room 10

Appearance: black,nonfibrous,homogenous

Layer:

Lab ID #: 96257 - 73

Cust. #: 30B

Material: Yellow Glue Location: Room 10

Appearance: yellow,nonfibrous,homogenous

of Layer:

Lab ID #: 96257 - 73a

Cust. #: 30B

9x9 Floor Tile-Red Material:

Location: Room 10

Appearance:

Layer: of

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1%

Other - 99%

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Asbestos Present:

NOT ANALYZED

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 Brighton, MI 48116

ARI Report # 21-96257 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/29/21

Sample Information

Asbestos Type/Percent

Lab ID #: 96257 - 73b Cust. #:

30B Material: Mastic Location: Room 10

Appearance: black,nonfibrous,homogenous

Layer:

96257 - 74 Lab ID #:

Cust. #: 31A

Material: **Block Mortar-Grey** Location: South Stairwell

Appearance: grey,nonfibrous,homogenous

Layer: of

96257 - 75 Lab ID #:

Cust. #: 31B

Material: **Block Mortar-Grey** Location: South Stairwell

Appearance: grey,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Other - 100%

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior South Building Project #:3-11382

Report To: ARI Report # 21-96257 Date Collected: Mr. David Amir 09/21/21 **ASTI Environmental** Date Received: 09/28/21 10448 Citation Dr., Suite 100 Date Analyzed: 09/29/21 Brighton, MI 48116 Date Reported: 09/29/21

Sample Information Asbestos Type/Percent Non-Asbestos Material

Asbestos Present:

Asbestos Present:

Lab ID #: 96257 - 73 Cust. #: 26C

Asbestos Present: NO No Asbestos Observed

Cellulose - 50% Other - 50%

Material:

Paper Insulation-Brown & Silver

Location:

Appearance: brown, fibrous, nonhomogenous

Layer:

Lab ID #:

Cust. #:

Material: Location:

Appearance:

Layer:

of

Lab ID #:

Cust. #:

Material:

Location: Appearance:

Layer:

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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96257

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11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

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Tape	BioSIS	 	Air/Zefon/AlergencoD	Air/Ze	Bulk _	Mold:	no	TTP (yes)	Other:
Bulk	Paint	Air		Wipe ASTM E1792? circle YES or NO.	Wipe ASTN	Lead / Cad / Chrome:	Lead	72 hour	48 hour
1	PCM	Point Count		< Wipe	Bulk >	Asbestos:		24 hour	Rush
Email:	ntity	indicate type and quantity		Circle analyses required,	Circle and	her side.	and conditions on the of	Turn Around Time: (c <i>ircle ONe</i>)***Terms and conditions on the other side.	Turn Around
Verbal:	ti-env.com	Email: damir@asti-env.com jschuitema@asti-env.com	env.com jscl	lamir@asti-e	Email: d		Fax:	225-2800	Phone: 810-225-2800
Fax			ave Amir	Contact Person: Dave	Contact		99	City, St., Zip: Brighton, MI, 48169	City, St., Zip
Report:				# 3-11382	Project #			Address: 10448 Citation Dr.	Address: 104
Log-In:		Bullding	or South	Project: Meyers Senior	Project:			lame: ASTI	Customer Name: ASTI
Lab Use Only	-		1-9/22/202	Date of Survey: 9/21-9/22/2021	Date of (

96257 Page -

APEX Research, Inc.

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BioSIS Tape		Air/Zefon/AlergencoD	Bulk Air/Z	Mold:	TTP %es/ no	P 1
Paint Bulk	Air F		Wipe ASTM E1792? circle YES or NO.	Lead / Cad / Chrome:	72 bour	48 hour
PCM -	Point Count		Bulk X Wipe	Asbestos:	24 hour	Rush
	idicate type and quantity	ed, indicate t	Circle analyses required, in	d conditions on the other side.	Turn Around Time: (Circle ONE) Terms and conditions on the other side	Turn Around T
	iuitema@asti-	env.com jsch	Email: damir@asti-env.com Jschultema@asti-eliv.com	Fax:		Phone: 810-225-2800
		ave Amir	Contact Person: Dave Amir		City, St., Zip: Brighton, MI, 48169	City, St., Zip:
Report.			Project # 3-11382		Address: 10448 Citation Dr.	Address: 104
Log-In:	Boilding	or So.H.	Project: Meyers Senior		ame: ASTI	Customer Name: ASTI
Lab Use Only		1-9/22/2021	Date of Survey: 9/21-9/22/2021			
mc steamen	1 www.ApexMI.co	(734) 449 - 999	hone: (734) 449 - 9990, Fax	11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com	2 11054 Hi Tech D	

Date: 9/2/2/ Revision R4 Date: May/2017 Relinquished By:
Date: 9/24/21

> Received By: Time/Date:

APEX RESEARCH

Date:

Relinquished By:

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96257 Page 3

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Dr. Sal. Addition

11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

		Date of Survey: 9/				Lab Use Only
Customer Name: ASTI		Project: Meyers Sen	nior South	Building		Log-In:
Address: 10448 Citation Dr.		Project # 3-11382				Report:
City, St., Zip: Brighton, MI, 4816	69	Contact Person: D	ave Amir			Fax:
Phone: 810-225-2800	Fax:	Email: damir@asti-	env.com jsc	huitema@as	ti-env.com	Verbal:
Turn Around Time: (circle one)	s and conditions on the other side.	Circle analyses requi	ired, indicate	type and qua	ntity	Email:
Rush 24 hour	Asbestos:	Bulk \times Wipe		Point Count _	PCM	
48 hour 72 hour	Lead / Cad / Chrome:	Wipe ASTM E1792? circle	YES or NO	Air	Paint	Bulk
Other: TTP ves/	no Mold:	Bulk Air/Z	efon/Alergenc	oD	BioSIS	Tape
Samples received after 3pm (Test Till Positive logged in next morning	ve) TEM:	Bulk/NOB	NIOSH 7402_	EPA Le	vel II	Other
Lab ID Customer ID #	Material/Lo	cation	Volume	Area	Res	ults
/014	Texture - orange Peel	- White -	Room B	6		
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(4 A)	Drywall & Joint Com	pound - white -	Room B	6		
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124	9x9 Floor tile -	Brown - under	Cu-pt-	Room B7		
17.13	[4		' //			
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13 🛭	и	11	<u> </u>			
14A	12×12 Floor tile-	Red - B-flo	1 Hall W	~		
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15 A	12×12 floortile -	Off-White -	R- Floor	Hallway		
Relinquished By: Date: 9/24/21 Revision R4 Date: May/2017	Received By: Time/Date: SFP 2 8 26	E レ Relinquished By	γ:	Rece	e/Date:	

APEX RESEARCH

96257 Page 4

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	11054 Hi Tech	11054 Hi Tech Drive, Whitmore Lake, MI 48189. F	Phone: (734) 449 - 9990, Fax (734)		449 - 9991 www.ApexM1.com	om and the second
	·		Date of Survey: 9/21-9/22/2021	1-9/22/2021		Lab Use Only
Customer Name: ASTI	me: ASTI		Project: Meyers Senior	Too the	Bollding	Log-In:
Address: 10448 Citation Dr.	8 Citation Dr.		Project # 3-11382			Report:
City, St., Zip:	Brighton, MI, 48169	9	Contact Person: Dave Amir	ve Amir		Fax:
Phone: 810-225-2800		Fax:	Email: damir@asti-env.com jschuitema@asti-env.com	nv.com jschu	itema@asti-e	env.com Verbal:
Turn Around Ti	e one)-Terms	and conditions on the other side.	Circle analyses required, indicate type and quantity	ed, indicate type	pe and quanti	tity Email:
Rush	24 hour	Asbestos:	Bulk X Wipe	Po	Point Count	PCM
48 hour	72 hour	Lead / Cad / Chrome:	Wipe ASTM E1792? circle YES or NO.	S or NO Air		Paint Bulk
Other:	TTP 65/ no	no Mold:	Bulk Air/Ze	Air/Zefon/AlergencoD		BioSIS Tape
Samples received after 3pm logged in next morning	(Test Ti	TEM:	Bulk/NOB	NIOSH 7402	_ EPA Level II	31 II Other
Lab ID	Customer ID#	Material/Location	cation	Volume	Area	Results
	153	17×17 Floor Tile -	Off-white - B-1	How Halloway	2	
	164	4" Couchal - Brown	- Room	Z7		
	16B	11	11			
	17 14	Fire Door Insulation	- White - 3	flow Ek.	Kustor Do	
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	184	From Till - 9x9 -	Brown w/ white o	orange S	Streaks-	Room 8/1
	181	11		11		
	194	9×9 Floor file -	Green - Room	B 12		
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Relinguished By:	\	Received By:	Relinquished By:		Receiv	Received By:
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Revision R4 Date: May/2017	017	APEX RESEARCH	RCH			

	·		Date of Survey: 9/21-9/22/2021	21-9/22/2021			Lab Use Only
Customer N	Customer Name: ASTI		Project: Meyers Senior	ior Soft	Boildas		Log-In:
Address: 104	Address: 10448 Citation Dr.		Project # 3-11382		L		Report:
City, St., Zip	City, St., Zip: Brighton, MI, 48169	39	Contact Person: Dave Amir	ave Amir			Fax:
Phone: 810-225-2800	225-2800	Fax:	Email: damir@asti-env.com jschuitema@asti-env.com	env.com jsch	าuitema@ast		Verbal:
Turn Around	Turn Around Time: (c <i>ircle ONE</i>)***Terms and conditions on the other side	and conditions on the other side.	Circle analyses required, in	red, indicate	ndicate type and quantity		Email:
Rush	24 hour	Asbestos:	Bulk X Wipe		Point Count	PCM _	
48 hour	(7) hour	Lead / Cad / Chrome:	Wipe ASTM E1792? circle YES or NO_		Air	Paint	Bulk
Other:	TTP (yes)/ no	no Moid :	Bulk Air/Z	Air/Zefon/AlergencoD		BioSIS	Tape
Samples received after 3pm ogged in next morning	r 3pm (Test Till Positive) g	TEM:	Bulk/NOB	NIOSH 7402_	EPA Level II		Other
Lab ID	Customer ID#	Material/Location	cation	Volume	Area	Results	ılts
	2114	Window Castk - Gray	1 - West Ex	Exterior			
	213	/ /	17				
	224	Stair Tread - Brown	on - North	Stas/way	:		
	822	ll	11	_			
	73 A	Carpet Master - KI	Killow W/ Black	- Zoom	, /		:
	228		, , , , ,				
	24A	Plaster - white our	Gray -	Room	1		
	248		1 /				
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Revision R4 Date: May/2017

APEX RESEARCH

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5	10		Restran		8		Room 2		Room 1 Above		Room 1	170011	Volume Area		Air/Zefon/AlergencoD			Wipe Point Count	quired, indicate type and quantity	Email: damir@asti-env.com jschuitema@asti-env.com	: Dave Amir		Senior Solk Boilding	Date of Survey: 9/21-9/22/2021	Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com	ic.	
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Relinquished By:
Date: $9/\sqrt{y/y}$

Revision R4 Date: May/2017

Time/Date: Received By:

Relinquished By:

Received By: Time/Date:

96257 Page -

APEX Research, Inc.

11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

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Deport.			Project # 3-11382		Address 10440 Citation Dr.	Address in
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Revision R4 Date: May/2017

Time/Date: _

Date: _

Time/Date: Received By:

Relinquished By:

APEX RESEARCH

Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 01 Cust. #:

Brighton, MI 48116

Material: Ceiling Tile-White Location: Hallway Near B2

Appearance: brown,fibrous,homogenous

Layer:

96256 - 01a Lab ID #:

Cust. #: 1 A Material: Glue Pod

Location: Hallway Near B2

Appearance: brown,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96256 - 02

Cust. #:

Ceiling Tile-White Material: Location: Hallway Near B2

Appearance: brown, fibrous, homogenous

Layer: of

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 80%

Other - 20%

Other - 100%

Asbestos Present: NO No Asbestos Observed

Cellulose - 80% Other - 20%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir ASTI Environmental 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Lab ID #: 96256 - 02a

Cust. #: 1B

Brighton, MI 48116

Material: Glue Pod

Location: Hallway Near B2

Appearance: brown, nonfibrous, homogenous

Layer:

96256 - 03 Lab ID #:

Cust. #:

Material: Pipe Insulation-Yellow & White

Location: Hallway

Appearance: yellow,fibrous,nonhomogenous

of Layer:

Lab ID #: 96256 - 04

Cust. #:

Material: Pipe Insulation-Yellow & White

Location: Hallway

Appearance: yellow,fibrous,nonhomogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 10% Fiberglass - 60%

Other - 100%

Other - 30%

Asbestos Present: NO No Asbestos Observed

Cellulose - 15% Fiberglass - 60%

Other - 25%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir ASTI Environmental 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

ARI Report #

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Lab ID #: 96256 - 05 Cust. #:

Material:

Pipe Insulation-Yellow & White

Location: Hallway

Appearance: yellow,fibrous,nonhomogenous

Layer: of

96256 - 06 Lab ID #:

Cust. #:

Plaster-White Finish Coat Material:

Location: Room B1

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 06a

Cust. #:

Material: Plaster Base Coat Grey

Location: Room B1

Appearance: grey,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 15% Fiberglass - 60%

Other - 25%

Other - 100%

Cellulose - 1%

Vermiculite - 10% Other - 89%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental**

10448 Citation Dr., Suite 100 Brighton, MI 48116

ARI Report # 21-96256 Date Collected: 09/21/21

Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Non-Asbestos Material

Lab ID #: 96256 - 06b

Sample Information

Cust. #:

Material: Drywall Location: Room B1

Appearance: white, fibrous, nonhomogenous

Layer:

Lab ID #:

96256 - 07

Cust. #:

Material: Plaster-White Finish Coat

Location: Room B1

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 07a

Cust. #:

Material: Plaster Base Coat Grey

Location: Room B1

Appearance: grey,nonfibrous,homogenous

Layer: of Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Other - 100%

Other - 80%

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1%

Vermiculite - 10% Other - 89%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

ARI Report #

Sample Information

Asbestos Type/Percent

Lab ID #: 96256 - 07b Cust. #:

Brighton, MI 48116

Material: Drywall Location: Room B1

Appearance: white, fibrous, nonhomogenous

Layer:

96256 - 08 Lab ID #:

Cust. #: 3C

Material: Plaster-White Finish Coat

Location: Room B1

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 08a

Cust. #:

Material: Plaster Base Coat Grey

Location: Room B1

Appearance: grey,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Other - 100%

Other - 80%

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1%

Vermiculite - 10% Other - 89%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Lab ID #: 96256 - 08b Cust. #: 3C

Drywall

Material: Location: Room B1

Appearance: white, fibrous, nonhomogenous

Layer:

96256 - 09 Lab ID #:

Cust. #: 3D

Material: Plaster-White Finish Coat

Location: Room 31

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 09a

Cust. #:

Material: Plaster Base Coat Grey

Location: Room 31

Appearance: grey,nonfibrous,homogenous

Layer:

Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

Other - 100%

Other - 80%

Asbestos Present: NO No Asbestos Observed

of

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1% Vermiculite - 10%

Other - 89%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 09b Cust. #: 3D

Drywall

Material: Location: Room 31

Appearance: white, fibrous, nonhomogenous

Layer:

Lab ID #:

96256 - 10

Cust. #:

Material: Plaster-White Finish Coat

Location: Room 31

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 10a

Cust. #: Material: Plaster Base Coat Grey

Location: Room 31

Appearance: grey,nonfibrous,homogenous

Layer: of Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

ARI Report #

Other - 80%

Other - 100%

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1%

Vermiculite - 15% Other - 84%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 10b Cust. #:

Brighton, MI 48116

Drywall

Location: Room 31

Material:

Appearance: white, fibrous, nonhomogenous

Layer:

96256 - 11 Lab ID #:

Cust. #:

12x12 Floor Tile-Tan Material:

Location: Hallway

Appearance: brown,nonfibrous,homogenous

of Layer:

Lab ID #: 96256 - 11a

Material: Mastic Location: Hallway

Appearance: black,nonfibrous,homogenous

Layer:

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20%

ARI Report #

Other - 80%

Other - 100%

Other - 100%

No Asbestos Observed Cust. #: 4A

of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior North Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96256
Date Collected: 09/21/21
Date Received: 09/28/21
Date Analyzed: 09/29/21
Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96256 - 12

Brighton, MI 48116

Cust. #: 4B

Material: 12x12 Floor Tile-Tan

Location: Hallway

Appearance: brown, nonfibrous, homogenous

Layer: 1 of 2

Lab ID #: 96256 - 12a

Cust. #: 4B Material: Mastic Location: Hallway

Appearance: black,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96256 - 13

Cust. #: 5A

Material: 4" Cove Base-Brown

Location: Room B1 A

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior North Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96256
Date Collected: 09/21/21
Date Received: 09/28/21
Date Analyzed: 09/29/21
Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96256 - 13a

Brighton, MI 48116

Cust. #: 5A Material: Glue

Location: Room B1 A

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96256 - 14

Cust. #: 5B

Material: 4" Cove Base-Brown

Location: Room B1 B

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

Lab ID #: 96256 - 14a

Cust. #: 5B Material: Glue

Material. Ofuc

Location: Room B1 B

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 15 Cust. #:

Material: Drywall-White Location: Room B1 A

Appearance: white, fibrous, nonhomogenous

Layer:

96256 - 15a Lab ID #:

Cust. #: 6A

Material: Joint Compound Location: Room B1 A

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 16

Cust. #: 6B

Material: Drywall-White Location: Room B1 B

Appearance: white, fibrous, nonhomogenous

Layer: of

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 20%

Other - 100%

Other - 80%

Asbestos Present: NO

No Asbestos Observed

Cellulose - 20% Other - 80%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Lab ID #: 96256 - 16a

Cust. #:

Material: Joint Compound Location: Room B1 B

Appearance: white, nonfibrous, homogenous

Layer:

96256 - 17 Lab ID #:

Cust. #: 7A

Material: Caulk-White Location: Room B1 A

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 18

Cust. #: 7B

Caulk-White Material: Location: Room B1 A

Appearance: white, nonfibrous, homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Other - 100%

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project : Meyers Senior North Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

ARI Report # 21-96256
Date Collected: 09/21/21
Date Received: 09/28/21
Date Analyzed: 09/29/21
Date Reported: 09/30/21

Other - 100%

Other - 100%

Other - 100%

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96256 - 19

Cust. #: 8A

Brighton, MI 48116

Material: Cave Base 4"-Tan

Location: Room B2

Appearance: brown,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 96256 - 19a

Cust. #: 8A Material: Glue Location: Room B2

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96256 - 20

Cust. #: 8B

Material: Cave Base 4"-Tan

Location: Room B2

Appearance: brown,nonfibrous,homogenous

Layer: 1 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96256 - 20a

Cust. #: 8B Material: Glue Location: Room B2

Appearance: yellow,nonfibrous,homogenous

Layer:

Lab ID #:

96256 - 21

Cust. #: Material:

Window Caulk-Brown

Location: Room B2

Appearance: brown,nonfibrous,homogenous

Layer: of

Lab ID #: 96256 - 22

Cust. #: 9B

Window Caulk-Brown Material:

Location: Room B2

Appearance: brown,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir ASTI Environmental 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Lab ID #: 96256 - 23 Cust. #:

Material:

Brighton, MI 48116

Pipe Insulation-White Over Brown

Location: **B** Hallway

Appearance: brown, fibrous, nonhomogenous

Layer:

96256 - 24 Lab ID #:

Cust. #: 10B

Material: Pipe Insulation-White Over Brown

Location: B Hallway

Appearance: brown,fibrous,nonhomogenous

Layer: of

Lab ID #: 96256 - 25

Cust. #: 10C

Material: Pipe Insulation-White Over Brown

Location: B Hallway

Appearance: brown, fibrous, nonhomogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Cellulose - 85%

Other - 15%

Asbestos Present: NO

No Asbestos Observed

Cellulose - 85%

Cellulose - 85%

Other - 15%

Other - 15%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental**

10448 Citation Dr., Suite 100

Brighton, MI 48116

ARI Report #

21-96256

Date Collected: Date Received:

09/21/21 09/28/21

Date Analyzed:

09/29/21

Date Reported:

Other - 100%

Other - 90%

09/30/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: YES

Chrysotile - 10%

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96256 - 26

Cust. #:

11A

Material: Yellow Glue Location: Room B4

Appearance: yellow,nonfibrous,homogenous

Layer: of

Lab ID #:

96256 - 26a

Cust. #:

11A

Material:

9x9 Floor Tile-Grey

Location: Room B4

Appearance: grey,fibrous,homogenous

Layer: 2 of

Lab ID #: 96256 - 26b

Cust. #:

11A

Material: Mastic

Location: Room B4

of

Appearance: black,nonfibrous,homogenous Layer:

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1%

Other - 99%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Other - 100%

Cellulose - 1%

Other - 99%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Lab ID #: 96256 - 26c

Cust. #: 11A

Material: Yellow Glue Location: Room B4

Appearance: yellow,nonfibrous,homogenous

Layer:

Lab ID #:

96256 - 26d

Cust. #: 11A Material: Filler

Location: Room B4

Appearance: grey,nonfibrous,homogenous

Layer: 5 of

Lab ID #: 96256 - 26e

Cust. #: 11A

Yellow Glue Material: Location: Room B4

Appearance: yellow,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1% Other - 99%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

ARI Report #

Sample Information

Brighton, MI 48116

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96256 - 27 Cust. #:

11B

Material: Yellow Glue Location: Room B4

Appearance: yellow,nonfibrous,homogenous

Layer: of

Lab ID #: 96256 - 27a

Cust. #: 11B

9x9 Floor Tile-Grey Material:

Location: Room B4

Appearance:

Layer: 2 of

Lab ID #: 96256 - 27b

Cust. #: 11B Material: Mastic

Location: Room B4

Appearance: black,nonfibrous,homogenous

Layer: of Asbestos Type/Percent

Asbestos Present: NO Other - 100%

NOT ANALYZED

Asbestos Present:

Asbestos Present: NO

No Asbestos Observed

Cellulose - 1% Other - 99%

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental**

10448 Citation Dr., Suite 100

Brighton, MI 48116

ARI Report #

21-96256

Date Collected: Date Received:

09/21/21 09/28/21

Date Analyzed:

09/29/21

Date Reported:

09/30/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 27c

Cust. #: 11B

Yellow Glue Material:

Location: Room B4

Appearance: yellow,nonfibrous,homogenous Layer:

Lab ID #: 96256 - 27d

Cust. #: 11B Material: Filler

Location: Room B4

Appearance: grey,fibrous,homogenous

Layer: 5 of

Lab ID #: 96256 - 27e

Cust. #: 11B

Yellow Glue Material: Location: Room B4

Appearance: yellow,nonfibrous,homogenous

Layer:

of

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Asbestos Present: NO

No Asbestos Observed

Cellulose - 2%

Other - 100%

Other - 98%

No Asbestos Observed

Asbestos Present: NO

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To:

Mr. David Amir **ASTI Environmental**

10448 Citation Dr., Suite 100

Brighton, MI 48116

ARI Report #

21-96256

Date Collected:

09/21/21 09/28/21

Date Received: Date Analyzed:

09/29/21

Date Reported:

Other - 90%

Other - 100%

09/30/21

Sample Information

Asbestos Type/Percent

Asbestos Present: **YES**

Asbestos Present: NO

No Asbestos Observed

Chrysotile - 10%

Non-Asbestos Material

Lab ID #:

96256 - 28

Cust. #: Material:

9x9 FT-Green w/Orange & White Streaks

Location: Room B10

Appearance: grey,fibrous,homogenous of

Layer:

96256 - 28a

Lab ID #: Cust. #:

12A

Material: Mastic Location: Room B10

Appearance: black,nonfibrous,homogenous

Layer: 2

of

Lab ID #:

96256 - 29

Cust. #:

Material:

9x9 FT-Green w/Orange & White Streaks

Location: Room B6

NOT ANALYZED

Asbestos Present:

Appearance:

Layer:

of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: YES

Asbestos Present: NO

No Asbestos Observed

Chrysotile - 2%

No Asbestos Observed

Non-Asbestos Material

Cellulose - 1%

Other - 99%

Other - 98%

Other - 100%

Lab ID #: 96256 - 29a Cust. #:

Brighton, MI 48116

12B Mastic

Location: Room B6 Appearance: black,nonfibrous,homogenous

Layer:

Lab ID #:

Material:

96256 - 30

Cust. #: Material:

9x9 Floor Tile-Tan

13A

Location: Room B10

Appearance: brown,fibrous,homogenous

of

Layer:

Lab ID #: 96256 - 30a

Cust. #: 13A Material: Glue

Location: Room B10

Appearance: yellow,nonfibrous,homogenous

Layer: of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 31

Cust. #: Material:

9x9 Floor Tile-Tan

Location: Room B10

Appearance:

Layer:

96256 - 31a Lab ID #:

Cust. #: 13B Material: Glue

Location: Room B10

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96256 - 32

Cust. #: 14A

4" Cove Base-Green Material:

Location: B7 Closet

Appearance: green,nonfibrous,homogenous

Layer: of

Asbestos Present:

NOT ANALYZED

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



21-96256

09/21/21

09/28/21

09/29/21

09/30/21

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Received: Date Analyzed: Date Reported:

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

ARI Report #

Date Collected:

Other - 100%

Lab ID #: 96256 - 32a

Cust. #: 14A Material: Glue

Location: B7 Closet

Appearance: yellow,nonfibrous,homogenous

Layer:

Lab ID #:

96256 - 33 14B

Cust. #: Material:

4" Cove Base-Green

Location: B7 Closet

Appearance: green,nonfibrous,homogenous

Layer: of

Lab ID #: 96256 - 33a

Cust. #: 14B Material: Glue

Location: B7 Closet

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96256 - 34 Cust. #:

Material: 4" Cove Base-Maroon

Location: Room 1

Appearance: maroon,nonfibrous,homogenous

Layer:

96256 - 34a Lab ID #:

Cust. #: 15A Material: Glue

Location: Room 1

Appearance: yellow,nonfibrous,homogenous

of Layer: 2

Lab ID #: 96256 - 35

Cust. #: 15B

4" Cove Base-Maroon Material:

Location: Room 1

Appearance: maroon,nonfibrous,homogenous

Layer: of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Other - 100%

Lab ID #: 96256 - 35a

Brighton, MI 48116

Cust. #: 15B Material: Glue

Location: Room 1

Appearance: yellow,nonfibrous,homogenous

Layer:

96256 - 36 Lab ID #:

Cust. #: 16A

12x12 Floor Tile-Tan Material:

Location: Room 1

Appearance: brown,nonfibrous,homogenous

Layer: of

Lab ID #: 96256 - 36a

Cust. #: 16A Material: Mastic

Location: Room 1

Appearance: black,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present: NO Other - 100%

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96256 - 37 Cust. #:

16B

Material: 12x12 Floor Tile-Tan

Location: Room 1

Appearance: brown, nonfibrous, homogenous

Layer:

96256 - 37a Lab ID #:

Cust. #: 16B Material: Mastic

Location: Room 1

Appearance: black,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96256 - 38

Cust. #: 17A

4" Cove Base-Blue Material:

Location: Room 3

Appearance: blue,nonfibrous,homogenous

Layer: of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Other - 100%

Lab ID #: 96256 - 38a

Cust. #: 17A Material: Glue

Location: Room 3

Appearance: yellow,nonfibrous,homogenous

Layer:

96256 - 39 Lab ID #:

Cust. #: 17B

4" Cove Base-Blue Material:

Location: Room 3

Appearance: blue,nonfibrous,homogenous

Layer: of

Lab ID #: 96256 - 39a

Cust. #: 17B Material: Glue

Location: Room 3

Appearance: yellow,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Lab ID #: 96256 - 40 Cust. #:

18A

Material: 12x12 Floor Tile-White

Location: Room 3

Appearance: white, nonfibrous, homogenous

Layer:

96256 - 40a Lab ID #:

Cust. #: 18A Material: Glue

Location: Room 3

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96256 - 41

Cust. #: 18B

12x12 Floor Tile-White Material:

Location: Room 3

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Appearance: white,nonfibrous,homogenous

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Non-Asbestos Material

Lab ID #: 96256 - 41a Cust. #:

Brighton, MI 48116

18B Material: Glue

Location: Room 3

Appearance: yellow,nonfibrous,homogenous

Layer:

Lab ID #:

96256 - 42

19A

Cust. #: Material:

Textured Wall-White

Location: Room 9

Appearance: white, nonfibrous, homogenous

Textured Wall-White

Layer:

of

Lab ID #:

96256 - 43 Cust. #: 19B

Material:

Location: Room 9

Appearance: white,nonfibrous,homogenous

Layer:

of

Asbestos Type/Percent

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Asbestos Present: NO

No Asbestos Observed

Other - 100%

Other - 100%

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir ASTI Environmental 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: **YES**

Chrysotile - 2%

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 98%

Lab ID #: 96256 - 44

Brighton, MI 48116

20A

Cust. #:

Material: Tile Grout-White

Location: Room 9

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #:

96256 - 45

Cust. #: 20B

Material: Tile Grout-White

Location: Room 9

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 46

Cust. #: 21A

Material: 9x9 FT-Green w/Orange & White Streaks

Location: Room 10

Appearance: beige, fibrous, homogenous

Layer:

of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

ARI Report #

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 46a

Cust. #: 21A

Material: Glue Location: Room 10

Appearance: yellow,nonfibrous,homogenous

Layer:

Lab ID #: 96256 - 47

Cust. #: 21B

Material:

9x9 FT-Green w/Orange & White Streaks

Location: Room 10

Appearance:

Layer: of

Lab ID #: 96256 - 47a

Cust. #: 21B Material: Glue

Location: Room 10

Appearance: yellow,nonfibrous,homogenous

Layer: of

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present:

NOT ANALYZED

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

ARI Report #

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96256 - 48 Cust. #:

22A

Material: Stair Tread-Tan Location: North Stairwell

Appearance: brown, nonfibrous, homogenous

Layer:

96256 - 48a Lab ID #:

Cust. #: 22A Material: Glue

Location: North Stairwell

Appearance: black,nonfibrous,homogenous

Layer: 2 of

Lab ID #: 96256 - 49

Cust. #: 22B

Stair Tread-Tan Material: Location: North Stairwell

Appearance: brown, nonfibrous, homogenous

Layer: of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

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Test Method, Polarized Light Microscopy (PLM)



21-96256

Project : Meyers Senior North Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

Date Collected: 09/21/21
Date Received: 09/28/21
Date Analyzed: 09/29/21
Date Reported: 09/30/21

ARI Report #

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Asbestos Present: NO

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

No Asbestos Observed

Non-Asbestos Material

Lab ID #: 96256 - 49a Cust. #: 22B

Cust. #: 22B Material: Glue

Location: North Stairwell

Appearance: black,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96256 - 50

Cust. #: 23A

Material: Block Mortar-Grey

Location: Room 1

Appearance: grey,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 96256 - 51

Cust. #: 23B

Material: Block Mortar-Grey

Location: Room 29

Appearance: grey,nonfibrous,homogenous

Layer: 1 of 1

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96256 - 52 Cust. #:

24A Tile Grout-Dark Grey

Material:

Location: Room 28

Appearance: brown, nonfibrous, homogenous

Layer:

Lab ID #: 96256 - 53

Cust. #: 24B

Material: Tile Grout-Dark Grey

Location: Room 28

Appearance: brown,nonfibrous,homogenous

Layer: of

Lab ID #: 96256 - 54

Cust. #: 25A

Material: Caulk-Beige Location: Room 28

Appearance: beige,nonfibrous,homogenous

Layer: of Non-Asbestos Material

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



21-96256

Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100

Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

ARI Report #

Other - 100%

Other - 100%

Other - 100%

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 55 Cust. #:

25B Caulk-Beige

Location: Room 28 Appearance: beige, nonfibrous, homogenous

Layer: of

Material:

96256 - 56 Lab ID #:

Cust. #: 26A

Material: 4" Cove Base-Cream

Location: Room 21

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #:

Cust. #: 26A Material: Glue

Location: Room 21

Appearance: yellow,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

96256 - 56a Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Test Method, Polarized Light Microscopy (PLM)



21-96256

Project : Meyers Senior North Building Project # :3-11382

Report To:
Mr. David Amir
ASTI Environmental
10448 Citation Dr., Suite 100

Date Collected: 09/21/21
Date Received: 09/28/21
Date Analyzed: 09/29/21
Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 57

Asbestos Present: **NO**No Asbestos Observed

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Other - 100%

Other - 100%

Other - 100%

ARI Report #

Cust. #: 26B Material: 4" C

4" Cove Base-Cream

Location: Room 21 E

Appearance: white,nonfibrous,homogenous

Layer: 1 of

Lab ID #: 96256 - 57a

Cust. #: 26B Material: Glue

Location: Room 21 E

Appearance: yellow,nonfibrous,homogenous

Layer: 2 of 2

Lab ID #: 96256 - 58

Cust. #: 27A

Material: FT-12x12-Cream w/Blue Diamond

Location: Room 21D

Appearance: white, nonfibrous, homogenous

Layer: 1 of 2

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Lab ID #: 96256 - 58a

Brighton, MI 48116

Cust. #: 27A Material: Glue

Location: Room 21D

Appearance: clear,nonfibrous,homogenous

Layer:

96256 - 59 Lab ID #:

Cust. #: 27B

Material: FT-12x12-Cream w/Blue Diamond

Location: Room 21D

Appearance: white, nonfibrous, homogenous

Layer: of

Lab ID #: 96256 - 59a

Cust. #: 27B Material: Glue

Location: Room 21D

Appearance: clear,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%



Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Lab ID #: 96256 - 60 Cust. #:

28A

Material: Stair Tread-Brown Location: South Stairwell

Appearance: brown, nonfibrous, homogenous

Layer:

96256 - 60a Lab ID #:

Cust. #: 28A Material: Glue

Location: South Stairwell

Appearance: yellow,nonfibrous,homogenous

of Layer: 2

Lab ID #: 96256 - 61

Cust. #: 28B

Stair Tread-Brown Material: Location: South Stairwell

Appearance: brown, nonfibrous, homogenous

Layer: of

Asbestos Present: NO

No Asbestos Observed

Asbestos Present: NO Other - 100%

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Other - 100%

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Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 Date Reported: 09/30/21

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Other - 100%

Other - 100%

Other - 100%

Lab ID #: 96256 - 61a

Cust. #: 28B

Material: Glue

Location: South Stairwell

Appearance: yellow,nonfibrous,homogenous

Layer:

96256 - 62 Lab ID #:

Cust. #: 29A

Material: **Brick Mortar-Grey** Location: South Exterior

Appearance: grey,nonfibrous,homogenous

Layer: of

96256 - 63 Lab ID #:

Cust. #: 29B

Material: **Brick Mortar-Grey** Location: East Exterior

Appearance: grey,nonfibrous,homogenous

Layer: of

Asbestos Present: NO

Asbestos Present: NO

No Asbestos Observed

No Asbestos Observed

Asbestos Present: NO

No Asbestos Observed

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



Certificate of Laboratory Analysis

Test Method, Polarized Light Microscopy (PLM)



Project: Meyers Senior North Building Project #:3-11382

Report To: Mr. David Amir **ASTI Environmental** 10448 Citation Dr., Suite 100 ARI Report # 21-96256 Date Collected: 09/21/21 Date Received: 09/28/21 Date Analyzed: 09/29/21 09/30/21 Date Reported:

Sample Information

Brighton, MI 48116

Asbestos Type/Percent

Non-Asbestos Material

Lab ID #: 96256 - 64 Cust. #:

Asbestos Present: YES Chrysotile - 5%

Other - 95%

30A Material: Caulk-Grey

Location: Overhang

Appearance: grey,fibrous,homogenous

Layer: of

96256 - 65 Lab ID #:

Cust. #: 30B

Caulk-Grey Material:

Location: Overhang

Appearance: Layer:

NOT ANALYZED

Asbestos Present: NO

No Asbestos Observed

Asbestos Present:

of

Lab ID #: 96256 - 66

19C Cust. #:

Material:

Textured Wall-White

Location:

Appearance: white, nonfibrous, homogenous

Layer: of

For Layered Samples, each component will be analyzed and reported separately.

Robert T. Letarte Jr., Laboratory Director

Cellulose - 1%

Other - 99%

Test Method EPA 40 CFR - Part 763 and/or EPA 600/R-93/116 was used to analyze the above samples. Matrix interference and/or resolution limits may yield false/negative results in certain circumstances. Suspect floor tiles containing <1% should be tested with SEM or TEM. This certificate of analysis relates only to the samples as submitted and to insure the integrity of the results, may only be reproduced in full. This certificate must not be used by the customer to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government. APEX Research Inc. is not responsible for the accuracy of the results for layered samples or samples comprising multiple materials. Liability limited to cost of analysis.



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11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

			Date of Survey: 9/2				Lab Use Only
Customer N	Name: ASTI		Project: Meyers Sen	ior Nost	Building		Log-In:
Address: 104	148 Citation Dr.		Project # 3-11382				Report:
City, St., Zip	: Brighton, MI, 4816	<u> </u>	Contact Person: D	ave Amir			Fax:
Phone: 810-	-225-2800	Fax:	Email: damir@asti-	env.com jsc	huitema@as	ti-env.com	Verbal:
Turn Around	Time: (c <i>ircle one</i>)***Terms	s and conditions on the other side.	Circle analyses requi	red, indicate	type and qua	ntity	Email:
Rush	24 hour	Asbestos:	Bulk X Wipe		Point Count _	PCM	
48 hour	72 hour	Lead / Cad / Chrome:	Wipe ASTM E1792? circle Y	ES or NO	Air	Paint	Bulk
Other:	TTP @ /	no Mold:	Bulk Air/Z	efon/Alergence	oD	BioSIS	Tape
Samples received after logged in next morning	=	TEM:	Bulk/NOB	NIOSH 7402_	EPA Le	vel II	Other
Lab ID	Customer ID#	Material/Lo	cation	Volume	Area	Res	ults
	/A	Ceiling tile - white -	Hallway New	- 32			
	1 B	11	4				
	7 A	Pipe insulation -	Yellow + white.	- Hall wa	¥		
	ZB		1		/		
	26	✓	\				
	34	Plester - White over	Gray - Room	B1			
	33		1				
	3 c		1	•			
	3 D		Koo	m 31			
	3E	V	1	4			
	4 A	12×12 Floor Tile-	Jan - Hallwan				
	48	· •	4				
Relinquished By Date:	21	Received By: Attack Time/Date: OBOO SEP 28	Relinquished By Date:			ived By:	

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96256

Revision R4 Date: May/2017

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11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

			Date of Survey: 9/				Lab Use Only
Customer I	Name: ASTI		Project: Meyers Ser	nior Nort	h Boilding	<u> </u>	Log-In:
	448 Citation Dr.		Project # 3-11382	2			Report:
City, St., Zip	Brighton, MI, 481	69	Contact Person: D	ave Amir			Fax:
Phone: 810	-225-2800	Fax:	Email: damir@asti-	env.com jsc	huitema@as	sti-env.com	Verbal:
Turn Around	Time: (circle one)***Term	s and conditions on the other side.	Circle analyses requi	ired, indicate	type and qua	antity	Email:
Rush	24 hour	Asbestos:	Bulk Wipe		Point Count	PCM	
48 hour	72 hour	Lead / Cad / Chrome:	Wipe ASTM E1792? circle				Bulk
Other:	TTP yes/		Bulk Air/Z	lefon/Alergenc	oD	BioSIS	Tape
Samples received after logged in next morning	-	ve) TEM:	Bulk/NOB	NIOSH 7402_	EPA L	evel II	Other
Lab ID	Customer ID #	Material/Lo	cation	Volume	Area	Res	ults
	.5 A	4" con 6ah - Brown	- Room	B1 A			
	5 B	ι (11 Room	B1 B			
	6A	Dryway & Joint Compo	and - White -	Room B	A		
	6 B	′ //	V	Room	B1B	·	
	74	Crolk - white - Ro	oon B1 A				
	7B	/("				
	84	Cove bah 4" - T	an - Room	32			
	83	11	1/				
	94	Window Carla - Brown	4 - Room	B2			
	98	И	L/				
	10 A	Pipe inblation -	Whitefore Brown	- B	Hallway		
	10 B	6ECEIVE!		11			
Relinquished By		Received By: SEP 2 8 2021	Relinquished By	/:	Rec	eived By:	
Date: $9/\tau$	4/4	Time/Date:	Date:			e/Date:	

APEX RESEARCH

* 96256 Page 3

Revision R4 Date: May/2017

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11054 Hi Tech Drive,	Whitmore Lake, MI 48189.	Phone:	(734) 449 - 9990	, Fax (734) 449 - 9991	www.ApexMI.com

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APEX

			Date of Survey: 9/	21-9/22/202			Lab Use Only
Customer I	Name: ASTI		Project: Meyers Ser	nior Nort	4 Building		Log-In:
Address: 104	448 Citation Dr.		Project # 3-11382	<u> </u>			Report:
City, St., Zip	Brighton, MI, 4816	69	Contact Person: D	ave Amir			Fax:
Phone: 810	-225-2800	Fax:	Email: damir@asti-	env.com jsc	huitema@as	ti-env.com	Verbal:
Turn Around	Time: (c <i>ircle one</i>)***Term	s and conditions on the other side.	Circle analyses requi	ired, indicate	type and qua	ntity	Email:
Rush	24 hour	Asbestos:	Bulk Wipe		Point Count _	PCM	
48 hour	72 hour	Lead / Cad / Chrome:	Wipe ASTM E1792? circle	ES or NO	Air	Paint	Bulk
Other:	TTP 🙉 /	no Mold:	Bulk Air/Z	efon/Alergenc	oD	BioSIS	Tape
Samples received after logged in next morning	-	ve) TEM:	Bulk/NOB	NIOSH 7402_	EPA Le	vel II	Other
Lab ID	Customer ID#	Material/Lo	cation	Volume	Area	Res	ults
	100	Pipe insulator - 1	White our Brown	- BA	41way		
	11/4	9K9 Floor Tile -	Gray - Room	R 4	/		
	ll B	11	Gray - Room				
	124	9x9 Floor tile -	Green w/ oran	tuhite.	Strenks -	Room [7/0
	12B	U	,	t r			6
	134	9x9 Floor tile -	T44 - Roon	B 10			
	13B	lı	t,				
	144	4" Covebale - Gre	en - 37 Ca	St			
	14 B	Lt	V				
	154	4" Cove bal - Mar	1004 - Room I				
	15 B	11	/				
		RECEIVED					
Relinquished By	:	Received By: SEP 2 8 2021 Time/Date:	_ Relinquished By Date:	/:		ived By:	

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11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com

			Date of Survey: 9	/21-9/22/202	.1		Lab Use Only
Customer l	Name: ASTI		Project: Meyers Se	nior No.44	Bulling		Log-In:
Address: 10	448 Citation Dr.		Project # 3-1138	2			Report:
City, St., Zip	Brighton, MI, 481	69	Contact Person: _	Dave Amir			Fax:
Phone: 810	-225-2800	Fax:	Email: damir@asti	-env.com jsc	huitema@as	sti-env.com	Verbal:
Turn Around	Time: (circle one)***Term	s and conditions on the other side.	Circle analyses requ	ired, indicate	type and qua	antity	Email:
Rush	24 hour	Asbestos:	Bulk Kipe	2	Point Count _	PCM	
48 hour	72 hour	Lead / Cad / Chrome:	Wipe ASTM E1792? circle				Bulk
Other:	TTP_yes	no Mold:	Bulk Air/Z	Zefon/Alergeno	:oD	BioSIS	Tape
Samples received after logged in next morning	•	ve) TEM:	Bulk/NOB	NIOSH 7402	EPA Le	evel II	
Lab ID	Customer ID #	Material/Lo	cation	Volume	Area	Re	sults
	16 A	12×12 Flow the -	Tan -	Room 1			
	16B	11	′/				
	17 A	4" cove but - Blue	- Room 3				
	17 B	11	"(
	18 A	12 x 12 Floor the -1	White - Room	3			
	18 B	il	4				
	19 A	Textual wall - White	- Room 9				
	19 B	t (t/				
	20 A	Tile Groot - White-	Room 9				
	20 B	l c	(1				
	21 A	9×9 Floor tile-	Cream w/ orange	& white st	reakes -	Room 10	
	213	RECEIVED)	l I			
Relinquished By: Date: 4/2 Revision R4 Date: May		Received By: SEP 2 8 2021 Time/Date:				eived By:e/Date:	

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		Date of Sur	9/22/2021		_ab Use Only
Customer Name: ASTI	ne: ASTI	Project: Meyers Senior	Noth	Boilding Loi	Log-In:
Address: 10448 Citation Dr.	Citation Dr.	Project #	3-11382		Report:
City, St., Zip: [Brighton, MI, 48169		Contact Person: Dave Amir	Tī w	Fax:
Phone: 810-225-2800		Fax: Email: dam	Email: damir@asti-env.com jschuitema@asti-env.com		Verbal:
Turn Around Tim	e: (circle one) ***Terms	Turn Around Time: (circle one) **Terms and conditions on the other side. Circle analyses required	es required, indicate type and quantity		Email:
Rush	24 hour	Asbestos: Bulk	Wipe Point Count	ount PCM	
48 hour	72 hour	Lead / Cad / Chrome: Wipe ASTM E17	Wipe ASTM E1792? circle YES or NO Air	Paint Bu	Bulk
Other:	TTP (yes) no	no Mold: Bulk	Air/Zefon/AlergencoD	BioSIS Ta	Tape
Samples received after 3pm logged in next morning	1 (Test Till Positive)	TEM: Bulk/NOB	NIOSH 7402 F	EPA Level IIOti	Other
Lab ID (Customer ID#	Material/Location	Volume Ar	Area Results	
	724	Star Treat - Ten - North	Stail well		
	72 <i>B</i>	"	//		
	734	Block Mater - Gray Rosen	1 /		
	23 B	u /	n 29		
	244	Tile Gost - Dark Gray - Po	120 m 28		
7	248	11 / 11			
7	254	Caulk - Brigg - Room .	28		
5	258				
	26A	4" Couber - Cours - Roson	m 2/		
	263	4" Coubab - Cream - Room	n 218		
	274	Floor File - 12×12 - Cream w	Blog digwood -	200m 21 D	
	27B	RECEIVED	" "		
Relinquished By:	4	Received By: SEP 2 8 2021 Reling	Relinquished By:	Received By:	
Date: $9/24/2$ Revision R4 Date: May/2017		Time/Date: Date:		Time/Date:	

Time/Date:
APEX RESEARCH

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Relinquished By: $\frac{q/e \frac{y}{l}}{l}$ Date: $\frac{q/e \frac{y}{l}}{l}$ Revision R4 Date: May/2017	·									Lab ID	Samples received after 3pm logged in next morning	Other:	48 hour	Rush	Turn Around T	Phone: 810-225-2800	City, St., Zip	Address: 104	Customer Name: ASTI		70230	コバントブ
017				30 B	30 K	298	294	283	2814	Customer ID#	3pm (Test Till Positive)	TTP Ges / no	72 hour	24 hour	Turn Around Time: (c <i>ircle one</i>)***Terms and conditions on the other side	225-2800	City, St., Zip: Brighton, MI, 48169	Address: 10448 Citation Dr.	lame: ASTI		6 11054 Hi Tec) (
Received By: SEP 2 8 2021 Time/Date: APEX RESEARCH	RECEIVED			11	Caulk - Gray -	,,	Brick Martar - Gra	11	Stair Trul - Brown	Material/Location	'e) TEM:	no Mold:	Lead / Cad / Chrome:	Asbestos:	s and conditions on the other side.	Fax:	39				11054 Hi Tech Drive, Whitmore Lake, MI 48189. Phone: (734) 449 - 9990, Fax (734) 449 - 9991 www.ApexMI.com	APEX
Relinquished By:				"	over hans	ir East &	7 - South		- Sooth Str.	ocation	Bulk/NOB	Bulk Air/Zet	Wipe ASTM E1792? circle YES or NO.	Bulk Wipe	Circle analyses required,	Email: damir@asti-env.com jschuitema@asti-env.com	Contact Person: Dave	Project # 3-11382	Project: Meyers Senior	Date of Survey: 9/21-9/22/2021	Phone: (734) 449 - 9990, Fax	APEX Research, Inc.
						Exterior	Externe		irwell	Volume A1	NIOSH 7402 I	Air/Zefon/AlergencoD	SorNOAir	Point Count	ed, indicate type and quantity	nv.com jschuitem	ve Amir		or North	1-9/22/2021	(734) 449 - 9991 wwv	
Received By:										Area	EPA Level II	BioSIS	Paint		nd quantity	ıa@asti-env.com			Buildave		v.ApexMI.com	
										Results	Other	Tape	Bulk	PCM	Email:	Verbal:	Fax:	Report:	Log-In:	Lab Use Only	APEX	

Appendix C

Photos



17370-17400 Meyers Road, Detroit, Michigan



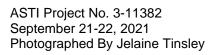
Photo 1. A view of the front of 17400 Meyers Road



Photo 2. A view of the asbestoscontaining floor tile beneath carpet



Photo 3. A view of the asbestoscontaining 9"x9" floor tile





17370-17400 Meyers Road, Detroit, Michigan



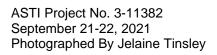
Photo 4. A view of the asbestoscontaining caulk on overhang



Photo 5. A view of the asbestoscontaining caulk on overhang



Photo 6. A view of presumed asbestos-containing fire doors





17370-17400 Meyers Road, Detroit, Michigan



Photo 7. A view of the front of 17370 Meyers Road



Photo 8. A view of the asbestoscontaining 9"x9" floor tile beneath carpet



Photo 9. A view of the asbestoscontaining 9"x9" floor tile



17370-17400 Meyers Road, Detroit, Michigan



Photo 10. A view of the asbestoscontaining 9"x9" green floor tile beneath carpet



Photo 11. A view of the asbestoscontaining 9"x9" red floor tile beneath carpet+

ASTI ENVIRONMENTAL

ENVIRONMENTAL INVESTIGATION, REMEDIATION, COMPLIANCE AND RESTORATION PROJECTS THROUGHOUT THE GREAT LAKES SINCE 1985.

OUR SERVICES INCLUDE:

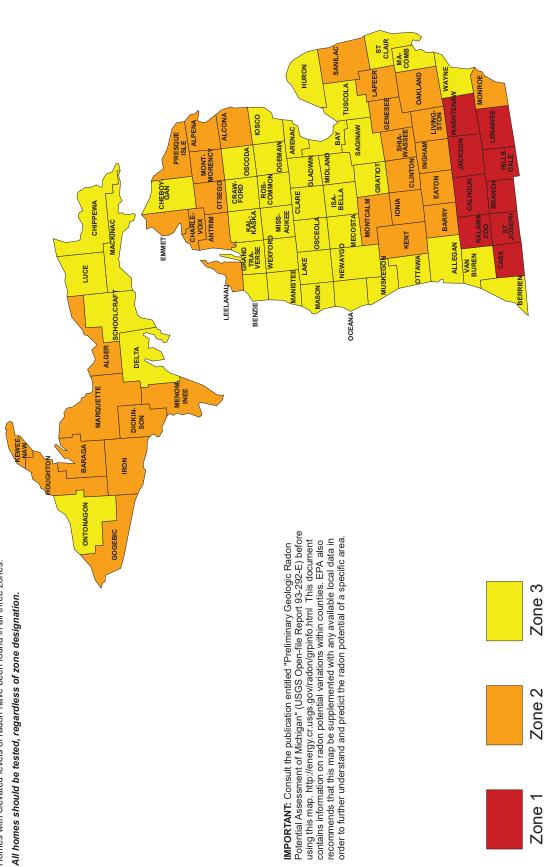
- ASBESTOS, LEAD, MOLD, AND RADON ASSESSMENTS
- BROWNFIELD/GREYFIELD REDEVELOPMENT ASSISTANCE
- DEVELOPMENT INCENTIVES AND GRANT MANAGEMENT
- ECOLOGICAL ASSESSMENTS AND RESTORATION
- ENVIRONMENTAL ASSESSMENTS AND IMPACT STATEMENTS
- ENVIRONMENTAL OPPORTUNITIES ASSESSMENT
- GIS MAPPING
- HAZARD MITIGATION PLANNING
- MINING AND RECLAMATION ASSISTANCE
- REMEDIATION IMPLEMENTATION, OPERATION AND MAINTENANCE
- PHASE I ESA AND ENVIRONMENTAL DUE DILIGENCE ASSESSMENTS
- REGULATORY COMPLIANCE AND PERMITTING
- Soil and Groundwater Assessments
- Soil and Groundwater Remediation
- STORAGE TANK COMPLIANCE AND CLOSURE
- THREATENED AND ENDANGERED SPECIES SURVEYS
- WATERSHED AND STORMWATER MANAGEMENT PROGRAMS
- WETLAND DELINEATION, PERMITTING, MITIGATION AND BANKING



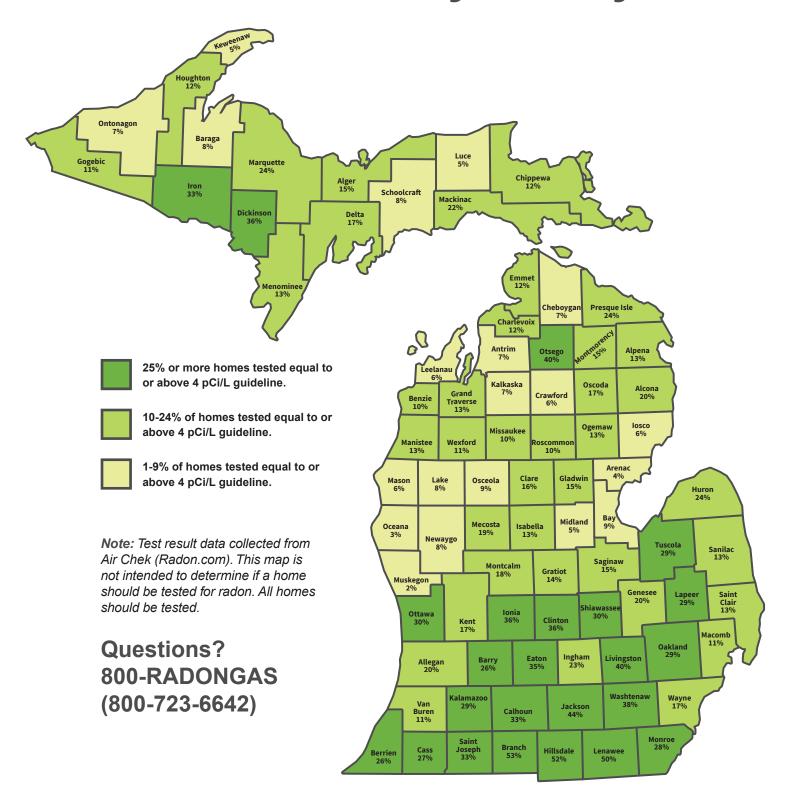
MICHIGAN - EPA Map of Radon Zones

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.



Percentage of Elevated Radon Test Results by County



Michigan Federally-listed Endangered and Threatened Species

Updated October 2018

SPECIES	STATUS	COUNTIES	НАВІТАТ
MAMMALS			
Canada lynx (Lynx canadensis)	Threatened	Current distribution: A Canada lynx was recently documented in the Upper Peninsula. The counties listed here have the highest potential for Lynx presence: Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, Schoolcraft.	Northern forests
Gray wolf Canis lupus	Endangered	Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, Schoolcraft	Northern forested areas
Indiana bat (Myotis sodalis)	Endangered	Allegan, Barry, Bay, Benzie, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Ingham, Ionia, Jackson, Kalamazoo, Kent, Lapeer, Leelanau, Lenawee, Livingston, Macomb, Manistee, Mason, Monroe, Montcalm, Muskegon, Oakland, Oceana, Ottawa, Saginaw, St. Joseph, Sanilac, Shiawassee, St. Clair, Tuscola, Van Buren, Washtenaw, and Wayne	Summer habitat includes small to medium river and stream corridors with well developed riparian woods; woodlots within 1 to 3 miles of small to medium rivers and streams; and upland forests. Caves and mines as hibernacula.
Northern long-eared bat <i>Myotis septentrionalis</i>	Threatened	Statewide	Hibernates in caves and mines - swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests during spring and summer.
BIRDS			
Kirtland's warbler Setophaga kirtlandii	Endangered	Alcona, Alger, Antrim, Baraga, Chippewa, Clare, Crawford, Delta, Grand Traverse, Iosco, Kalkaska, Luce, Marquette, Montmorency, Ogemaw, Oscoda, Otsego, Presque Isle, Roscommon, Schoolcraft	Breeding in young jack pine
Piping plover (Chradrius melodus)	Endangered	Alger, Alpena, Benzie, Berrien, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Leelanau, Luce, Mackinac, Manistee, Mason, Muskegon, Presque Isle, Schoolcraft	Beaches along shorelines of the Great Lakes
Piping plover (Chradrius melodus)	Critical Habitat	Alger, Benzie, Charlevoix, Cheboygan, Chippewa, Emmet, Iosco, Leelanau, Luce, Mackinac, Mason, Muskegon, Presque Isle, Schoolcraft	Beaches along shorelines of the Great Lakes

SPECIES	STATUS	COUNTIES	НАВІТАТ
Rufa Red knot (Calidris canutus rufa)	Threatened	Only actions that occur along coastal areas during the Red Knot migratory window of MAY 1 - SEPTEMBER 30 for the following counties: Alcona, Alger, Allegan, Alpena, Antrim, Arenac, Baraga, Bay, Benzie, Berrien, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Gogebic, Grand Traverse, Houghton, Huron, Iosco, Keweenaw, Leelanau, Luce, Mackinac, Macomb, Manistee, Marquette, Mason, Menominee, Monroe, Muskegon, Oceana, Ontonagon, Ottawa, Presque Isle, Sanilac, Schoolcraft, St. Clair, Tuscola, Van Buren, Wayne Only actions that occur in large wetland complexes during the Red knot migratory window of MAY 1 - SEPTEMBER 30 for the following counties:	Coastal areas and large wetland complexes
Whooping crane ** (Grus americanus)	Non-essential experimental population	Midland, Saginaw, Shiawassee Allegan, Barry, Berrien, Jackson, Kent, Lenawee, Macomb, Oceana, Ottawa	Open wetlands and lakeshores
REPTILES	The sheet seed		
Copperbelly water snake (Nerodia erythrogaster neglecta)	Threatened	Branch, Calhoun, Cass, Eaton, Hillsdale, St. Joseph	Wooded and permanently wet areas such as oxbows, sloughs, brushy ditches and floodplain woods
Eastern massasauga (Sistrurus catenatus)	Threatened	Alcona, Allegan, Alpena, Antrim, Arenac, Barry, Berrien, Branch, Calhoun, Cass, Cheboygan, Clare, Clinton, Crawford, Eaton, Emmett, Genesee, Grand Traverse, Hillsdale, Huron, Ingham, Ionia, Iosco, Jackson, Kalamazoo, Kalkaska, Kent, Lake, Lapeer, Lenawee, Livingston, Mackinac, Macomb, Manistee, Mason, Missaukee, Montcalm, Montmorency, Muskegon, Newaygo, Oakland, Oscoda, Presque Isle, Saginaw, St. Joseph, Shiawassee, Van Buren, Washtenaw, Wayne	Graminoid dominated plant communities (fens, sedge meadows, peatlands, wet prairies) open woodlands and shrublands
INSECTS			
Hine's emerald dragonfly (Somatochlora hineana)	Endangered	Alcona, Alpena, Mackinac, Menominee, Presque Isle	Spring fed wetlands, wet meadows and marshes; calcareous streams & associated wetlands overlying dolomite bedrock
Hungerford's crawling water beetle (Brychius hungerfordi)	Endangered	Charlevoix, Cheboygan, Crawford, Emmet, Montmorency, Oscoda, Otsego, Presque Isle	Cool riffles of clean, slightly alkaline streams; known to occur in five streams in northern Michigan.
Karner blue butterfly (Lycaeides melissa samuelis)	Endangered	Allegan, Ionia, Kent, Lake, Mason, Mecosta, Monroe, Montcalm, Muskegon, Newaygo, Oceana	Pine barrens and oak savannas on sandy soils and containing wild lupines (Lupinus perennis), the only known food plant of larvae.
Mitchell's satyr (Neonympha mitchellii mitchellii)	Endangered	Barry, Berrien, Branch, Cass, Jackson, Kalamazoo, St. Joseph, Van Buren, Washtenaw	Fens; wetlands characterized by calcareous soils which are fed by carbonate-rich water from seeps and springs

SPECIES	STATUS	COUNTIES	НАВІТАТ
Poweshiek skipperling (Oarisma poweshiek)	Endangered Critical Habitat	Hillsdale, Jackson, Lenawee, Livingston, Oakland, and Washtenaw Maps of proposed critical habitat in Michigan at www.fws.gov/midwest/endangered/insects/posk/fC Hmaps/poskchMI.pdf	Wet prairie and fens
	'		
MUSSELS			
Clubshell (Pleurobema clava)	Endangered	Hillsdale	Found in coarse sand and gravel areas of runs and riffles within streams and small rivers
Northern riffleshell (Epioblasma torulosa rangiana)	Endangered	Monroe, Sanilac, Wayne	Large streams and small rivers in firm sand of riffle areas; also occurs in Lake Erie
Rayed Bean (Villosa fabalis)	Endangered	Oakland, St. Clair	Belle, Black, Clinton and Pine Rivers
Snuffbox (Epioblasma triquetra)	Endangered	Gratiot, Ionia, Kent, Livingston, Oakland, St. Clair, Washtenaw	Small to medium-sized creeks in areas with a swift current and some larger rivers
PLANTS			
American hart's tongue fern (Asplenium scolopendrium var. americanun = Phyllitis japonica ssp. a.)	Threatened	Chippewa, Mackinac	Cool limestone sinkholes in mature hardwood forest
Dwarf lake iris (Iris lacustris)	Threatened	Alpena, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Mackinac, Menominee, Presque Isle, Schoolcraft	Partially shaded sandy- gravelly soils on lakeshores
Eastern prairie fringed orchid (Plantathera leucophaea)	Threatened	Bay, Cheboygan, Clinton, Eaton, Genesee, Gratiot, Huron, Livingston, Monroe, Saginaw, St. Clair, St. Joseph, Tuscola, Washtenaw, Wayne	Mesic to wet prairies and meadows
Houghton's goldenrod (Solidago houghtonii)	Threatened	Charlevoix, Cheboygan, Chippewa, Crawford, Emmet, Kalkaska, Mackinac, Presque Isle, Schoolcraft	Sandy flats along Great Lakes shores
Lakeside daisy (Hymenoxy acaulis var. glabra)	Threatened	Mackinac	Dry, rocky prairie grassland underlain by limestone
Michigan monkey-flower (Mimulus michiganesis)	Endangered	Benzie, Charlevoix, Cheboygan, Emmet, Leelanau, Mackinac	Soils saturated with cold flowing spring water; found along seepages, streams and lakeshores
Pitcher's thistle (Cirsium pitcheri)	Threatened	Alcona, Alger, Allegan, Alpena, Antrim, Arenac, Benzie, Berrien, Charlevoix, Cheboygan, Chippewa, Delta, Emmet, Grand Traverse, Huron, Iosco, Leelanau, Mackinac, Manistee, Mason, Muskegon, Oceana, Ottawa, Presque Isle, Schoolcraft, Van Buren	Stabilized dunes and blowout areas

SPECIES	STATUS	COUNTIES	HABITAT
Small whorled pogonia (Isotria medeoloides)	Threatened	Berrien	Dry woodland; upland sites in mixed forests (second or third growth stage)





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/

IPaC Record Locator: 394-106484999 October 12, 2021

Subject: Consistency letter for 'Meyers Senior Apartments - 17370 Meyers, Detroit, MI' for threatened and endangered species that may occur in your proposed project location consistent with the Michigan Endangered Species Determination Key (Michigan

DKey)

Dear Dianne Martin:

The U.S. Fish and Wildlife Service (Service) received on **October 12, 2021** your effect determination(s) for the 'Meyers Senior Apartments - 17370 Meyers, Detroit, MI' (the Action) using the Michigan DKey within the Information for Planning and Consultation (IPaC) system. The Service developed this system in accordance with the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

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

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

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

For non-Federal representatives: Please note that when a project requires consultation under section 7 of the Act, the Service must consult directly with the Federal action agency unless that agency formally designates a non-Federal representative (50 CFR 402.08). Non-Federal

representatives may prepare analyses or conduct informal consultations; however, the ultimate responsibility for section 7 compliance under the Act remains with the Federal agency. If the Federal agency concurs with your determination, the project as proposed has completed section 7 consultation. All documents and supporting correspondence should be provided to the Federal agency for their records.

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

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

Bald and Golden Eagles:

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

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

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

Wetland impacts:

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

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

Action Description

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

1. Name

Meyers Senior Apartments - 17370 Meyers, Detroit, MI

2. Description

The following description was provided for the project 'Meyers Senior Apartments - 17370 Meyers, Detroit, MI':

Senior apartments will be refurbished and some new units will be constructed within this approximately 3.5 acre site.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.41944499999996,-83.1696417409683,14z



Qualification Interview

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

Yes

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

No

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

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

No

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

Nο

6. Does the action involve a new communication tower?

No

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

No

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

 No
- 9. Will your action temporarily affect local hydrology by impacting 1/2 acre or more of wetland; or by increasing or decreasing groundwater or surfacewater elevations? *No*
- 10. Will your project have any direct impacts to a stream or river (e.g., Horizontal Directional Drilling (HDD), hydrostatic testing, stream/road crossings, new storm-water outfall discharge, dams, other in-stream work, etc.)?

No

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

No

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

Yes

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

Yes

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

No

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

Automatically answered

Yes

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

No

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

Automatically answered

Yes

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

Automatically answered

Yes

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

Voc

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

Automatically answered

Yes

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

Automatically answered

Yes

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

Automatically answered

Yes

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

Automatically answered

Yes

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

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft² - hr - people and 10,000 BTU/ft² - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

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

Acceptable Separation Distance Assessment Tool

Is the container above ground?	Yes: ☑ No: □
Is the container under pressure?	Yes: □ No: ☑
Does the container hold a cryogenic liquified gas?	Yes: No:
Is the container diked?	Yes: □ No: ☑
What is the volume (gal) of the container?	5000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	
ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	540.74
ASD for Thermal Radiation for Buildings (ASDBPU)	105.81
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

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

Providing Feedback & Corrections

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

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

Related Information

ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)

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



Acceptable Separation Distance Map

■ Feet 1,000

200

250

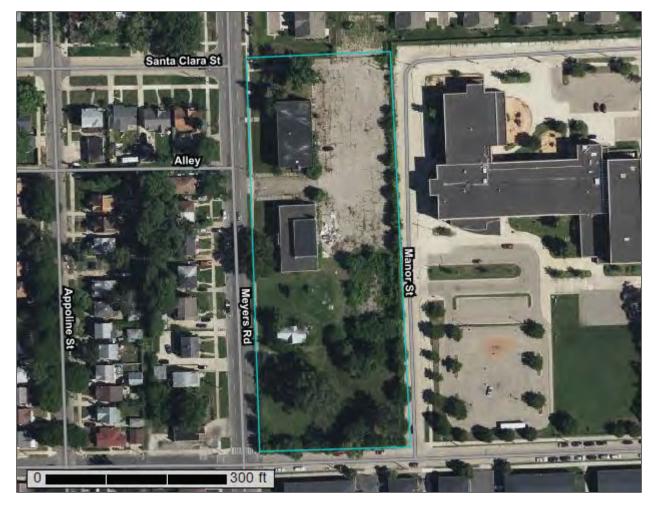
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VRCS

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

Custom Soil Resource Report for Wayne County, Michigan



Preface

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

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

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2 053951).

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

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

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

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alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

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

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

Soil Map

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



MAP LEGEND

Special Line Features Streams and Canals Interstate Highways Aerial Photography Very Stony Spot Major Roads Local Roads Stony Spot US Routes Spoil Area Wet Spot Other Rails Nater Features **Fransportation 3ackground** W 8 ◁ ŧ Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Miscellaneous Water Soil Map Unit Lines Closed Depression Marsh or swamp Perennial Water Mine or Quarry Rock Outcrop Special Point Features **Gravelly Spot** Saline Spot Sandy Spot Lava Flow **Borrow Pit** Clay Spot **Gravel Pit** Area of Interest (AOI) Blowout Landfill 9 Soils

MAP INFORMATION

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

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

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

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

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

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

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

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

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

Severely Eroded Spot

Slide or Slip

Sinkhole

Sodic Spot

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

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BrmuaB	Brems-Urban land complex, 0 to 4 percent slopes	3.6	99.6%
FrtaaB	Fortress family, 0 to 6 percent slopes	0.0	0.4%
Totals for Area of Interest		3.7	100.0%

Map Unit Descriptions

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

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

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

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

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

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

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

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

Wayne County, Michigan

BrmuaB—Brems-Urban land complex, 0 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2tx6s Elevation: 570 to 710 feet

Mean annual precipitation: 28 to 38 inches Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 135 to 210 days

Farmland classification: Not prime farmland

Map Unit Composition

Brems, human transported surface, and similar soils: 55 percent

Urban land: 35 percent Minor components: 10 percent

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

Description of Brems, Human Transported Surface

Setting

Landform: Deltas, nearshore zones (relict), raised beaches, water-lain moraines

Down-slope shape: Linear

Across-slope shape: Convex, linear

Parent material: Sandy human-transported material over sandy glaciolacustrine

deposits

Typical profile

^Au - 0 to 9 inches: loamy sand ^Cu - 9 to 12 inches: sand Ab - 12 to 19 inches: loamy sand Bwb - 19 to 42 inches: sand C - 42 to 80 inches: sand

Properties and qualities

Slope: 0 to 4 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(1.42 to 14.17 in/hr)

Depth to water table: About 36 to 42 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: A

Ecological site: F099XY003MI - Warm Moist Sandy Depression

Hydric soil rating: No

Description of Urban Land

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 0 inches to manufactured layer

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: D Hydric soil rating: No

Minor Components

Plainfield, human transported surface

Percent of map unit: 7 percent

Landform: Deltas, raised beaches, water-lain moraines, nearshore zones (relict)

Microfeatures of landform position: Rises Down-slope shape: Linear, convex Across-slope shape: Convex, linear

Hydric soil rating: No

Tedrow, human transported surface

Percent of map unit: 3 percent

Landform: Raised beaches, water-lain moraines, deltas, nearshore zones (relict)

Microfeatures of landform position: Open depressions

Down-slope shape: Linear, concave Across-slope shape: Convex, linear

Hydric soil rating: No

FrtaaB—Fortress family, 0 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2tx7w

Elevation: 570 to 710 feet

Mean annual precipitation: 28 to 38 inches
Mean annual air temperature: 45 to 52 degrees F

Frost-free period: 135 to 210 days

Farmland classification: Not prime farmland

Map Unit Composition

Fortress family and similar soils: 90 percent

Minor components: 10 percent

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

Description of Fortress Family

Setting

Landform: Nearshore zones (relict), water-lain moraines

Down-slope shape: Linear

Across-slope shape: Convex, linear

Parent material: Sandy human-transported material

Typical profile

^Au - 0 to 9 inches: loamy sand

^Cu - 9 to 80 inches: gravelly-artifactual sand

Properties and qualities

Slope: 0 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(1.42 to 14.17 in/hr)

Depth to water table: About 36 to 42 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline (0.1 to 1.5 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 3.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: A

Ecological site: F099XY003MI - Warm Moist Sandy Depression

Hydric soil rating: No

Minor Components

Urban land

Percent of map unit: 5 percent

Hydric soil rating: No

Riverfront

Percent of map unit: 4 percent

Landform: Nearshore zones (relict), water-lain moraines

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

Riverfront, steep

Percent of map unit: 1 percent

Landform: Nearshore zones (relict), water-lain moraines

Down-slope shape: Linear

Across-slope shape: Convex, linear

Hydric soil rating: No

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References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

Custom Soil Resource Report

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

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

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



GRETCHEN WHITMER

STATE OF MICHIGAN MICHIGAN STRATEGIC FUND STATE HISTORIC PRESERVATION OFFICE

QUENTIN L. MESSER, JR.
PRESIDENT

February 15, 2022

TIFFANY CIAVATTONE
HISTORIC PRESERVATION SPECIALIST
CITY OF DETROIT
HOUSING AND REVITALIZATION DEPARTMENT
2300 CADILLAC TOWER
DETROIT MI 48226

RE: ER22-295 Meyers Senior Apartments Conversion and New Construction, 17370 Meyers Road,

Sec. 8, T1S, R11E, Detroit, Wayne County (HUD)

Dear Ms. Ciavattone:

Under the authority of the National Historic Preservation Act (NHPA) of 1966, as amended, and the "Programmatic Agreement between the Michigan State Historic Preservation Office and the City of Detroit, Michigan" (November 9, 2016), as amended (May 4, 2020), 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 <u>no historic properties are affected</u> within the area of potential effects of this undertaking.

This letter evidences HUD's compliance with 36 CFR § 800.4 "Identification of historic properties," and the fulfillment of HUD's responsibility to notify the SHPO, as a consulting party in the Section 106 process, under 36 CFR § 800.4(d)(1) "No historic properties affected." 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).

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.

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. Thank you for this opportunity to review and comment, and for your cooperation.

Sincerely.

Brian G. Grennell

Cultural Resource Management Coordinator

MJH:BGG

Copy: Penny Dwoinen, Detroit Housing & Revitalization Department

Karen Averell, Wallick Companies Christopher Yelonek, ASTI Environmental

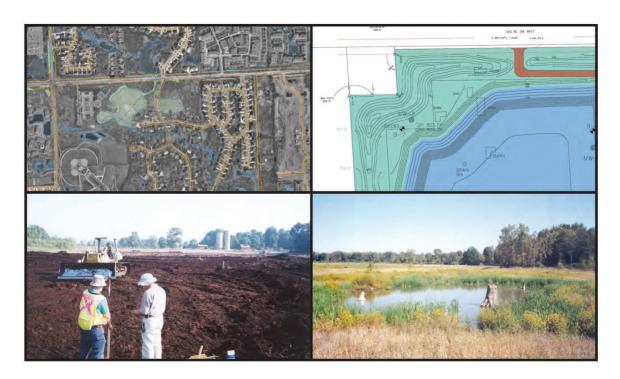


Noise Assessment Meyers Senior Apartments 17370 Meyers Road Detroit, Michigan

Wallick Companies

January 20, 2020

ASTI ENVIRONMENTAL





Noise Assessment Meyers Senior Apartments 17370 Meyers Road Detroit, Michigan

January 20, 2020

Report Prepared For:

Wallick Companies 160 W. Main Street New Albany, Ohio 43054

Report Prepared By:

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

ASTI Project No. 11382

Report Prepared by:

Ashleigh Czapek

Associate I

Report Reviewed by:

Pamela Chapman, PE, EP Phase I Group Leader



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ATTACHMENTS

- A NAL Location MapB Airport Noise Contour MapC AADT Information
- **D** Day-Night Level Electronic Assessment

1.0 INTRODUCTION

Wallick Companies proposes the new construction utilizing funding provided from the Michigan State Housing Development Authority (MSHDA) of the Meyers Senior Apartments at 17370 Meyers Road, Detroit, Michigan, referred to herein as "Subject Property".

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

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

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

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

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

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

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

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

NAL #1

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A Young International Airport	7.7 miles
	Windsor International Airport	14.2 miles
Busy Road(s)	Meyers Road	75 feet
	W. McNichols	765 feet
	John C. Lodge Freeway	930 feet
Railroad(s)	None	NA
Non-Transportation	None	NA

2.0 EVALUATION OF NOISE SOURCES

2.1 Airports

Coleman A. Young International Airport is approximately 7.7 miles distant. Based on the Noise Contour Map for the airport (Attachment B), the site is not within a distance of concern.

Windsor International Airport is approximately 14.2 miles distant. Based on the Noise Contour Map for the airport (Attachment B), the site is not within a distance of concern.

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

2.2 Busy Roadways

The major roadways are:

- Meyers Road
- W. McNichols
- John C. Lodge Freeway

Meyers Road is a 4-lane road and the speed limit is 30 mph near the Subject Property. The roadway is an approximate effective distance of 75 feet from the southwest corner of the southernmost proposed building (NAL #1).

W. McNichols Road is a 4-lane road and the speed limit is 35 mph near the Subject Property. The roadway is an approximate effective distance of 765 feet from the southwest corner of the southernmost proposed building (NAL #1).

John C. Lodge Freeway is a 6-lane northwest (NW) and southeast (SE) freeway and the speed limit is 55 mph near the Subject Property. The roadway is an approximate effective distance of 930 feet from the southwest corner of the southernmost proposed building (NAL #1).

Traffic counts for the roadways were obtained through MDOT. Projections were done through 2030. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable. Traffic projections are included in Attachment C.

2.3 RailroadsNot applicable.

2.4 **Non-Transportation Sources**

Not applicable.

3.0 CALCULATIONS

A Noise DNL calculator worksheet for the NAL is provided in Attachment D.

Using the HUD DNL calculator, the noise level at NAL #1, as predicted in 2030, is calculated to be 72.3 dB and within the Normally Unacceptable range.

4.0 CONCLUSIONS

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

NAL#	Combined Source DNL (dB)	Category
1	72.3	Normally Unacceptable

5.0 REFERENCES

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

HUD ATTENUATION GUIDANCE

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

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

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

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

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

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

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

ATTACHMENT A

NAL Location Map



17370 Meyers

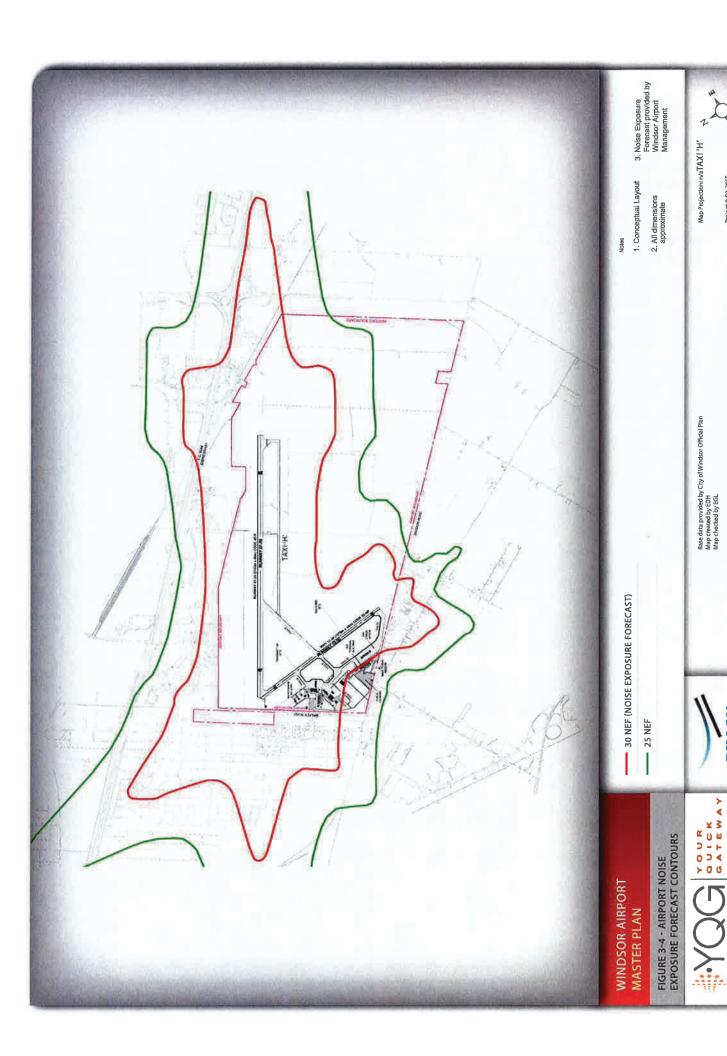
Detroit, MI

37.5 75 150 Feet





ATTACHMENT B Airport Noise Contour Maps



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

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

DILLON

WINDSOR INTERNATIONAL AIRPORT

ATTACHMENT C

AADT Information

Auto and Heavy Truck 10-year ADT Projections *Meyers Rd*

5 0 0				
	Cars	% Change	Trucks	% Change
2016	6393		555.92	
2017	11808	84.7	1026.8	84.7
2018	11808	0.0	1026.8	0.0
	Avg % change:	42.4	Avg % change:	42.35
	% Change/Year Assumption	1	%/Year Change Assumption	Τ-

2030 Projections

2000 10002	200	
	Cars	Trucks
2018	11808	1027
2019	11926	1037
2020	12046	1047
2021	12166	1058
2022	12288	1068
2023	12411	1079
2024	12535	1090
2025	12660	1101
2026	12787	1112
2027	12914	1123
2028	13044	1134
2029	13174	1146
2030	13306	1157

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
13306	1157

Auto and Heavy Truck 10-year ADT Projections W. MicNichols

	Cars	% Change	Trucks	% Change
2016	10893		947.2	
2017	11496	5.5	89.666	5.5
2018	11496	0.0	89.666	0.0
2019	11217	-2.4	975.36	-2.4
	Avg % change:	1.0	Avg % change:	1.04
	% Change/Year Assumption	1	%/Year Change Assumption	1

2030 Projections

2000		
	Cars	Trucks
2019	11217	975
2020	11329	985
2021	11442	995
2022	11557	1005
2023	11672	1015
2024	11789	1025
2025	11907	1035
2026	12026	1046
2027	12146	1056
2028	12267	1067
2029	12390	1077
2030	12514	1088

12514 1088	redicted 2030 Auto ADT Predict	Predicted 2030 Truck ADT
	12514	1088

Auto and Heavy Truck 10-year ADT Projections
John C Lodge Fwy

	Cars	% Change	Trucks	% Change
2014	84756		10475.52	
2015	75205	-11.3	9295	-11.3
2016		3.2	9592	3.2
2017	83779	8.0	10354.74	8.0
2018		-4.2	9924.64	-4.2
	Avg % change:	-1.1	Avg % change:	-1.07
	Avg % change (Last 5-yr Trend):	-1.1	Avg % change (Last 5-yr Trend):	-1.07
	% Change/Year Assumption	1	%/Year Change Assumption	1

2030 Projections

	Trucks	9925	10024	10124	10225	10328	10431	10535	10641	10747	10854	10963	11073	11183
200	Cars	80299	81102	81913	82733	83560	84395	85239	86092	86953	87822	88700	89587	90483
0.000		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
90483	11183

ATTACHMENT D

Day-Night Level Electronic Assessments

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

DNL Calculator

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

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

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	11382
Record Date	01/20/2020
User's Name	ASTI Environmental NAL1
Road # 1 Name:	Meyers Rd.

Vehicle Type	Cars 🗹	Medium Trucks ☑	Heavy Trucks 🗹
Effective Distance	75	75	75
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	13306	579	578
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	61.5677	57.954	69.7183
Calculate Road #1 DNL	70.6114	Reset	

Road #2

Vehicle Type	Cars 🗹	Medium Trucks ✓	Heavy Trucks 🗹
Effective Distance	765	765	765
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	12514	544	544
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	47.5111	43.8931	54.326
Calculate Road #2 DNL	55.4859	Reset	

1/20/2020

KUAU # 5 NAME.

JUIIII C. LOUGE FWY

Road #3

Vehicle Type	Cars 🗹	Medium Trucks 🗹	Heavy Trucks 🗹
Effective Distance	930	930	930
Distance to Stop Sign			
Average Speed	55	55	55
Average Daily Trips (ADT)	93533	2033	9149
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	58.9003	52.2721	66.1186
Calculate Road #3 DNL	67.0498	Reset	
Add Road Source Add Ra	ail Source		
Add Road Source Add Ra Airport Noise Level Loud Impulse Sounds?	ail Source	○Yes ●No	
Airport Noise Level	ail Source	○Yes ●No	
Airport Noise Level	ail Source	●Yes ●No 72.3435	
Airport Noise Level Loud Impulse Sounds? Combined DNL for all			

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/)



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

<u>Location, Noise Level and Wall Configuration to Be Analyzed</u>

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

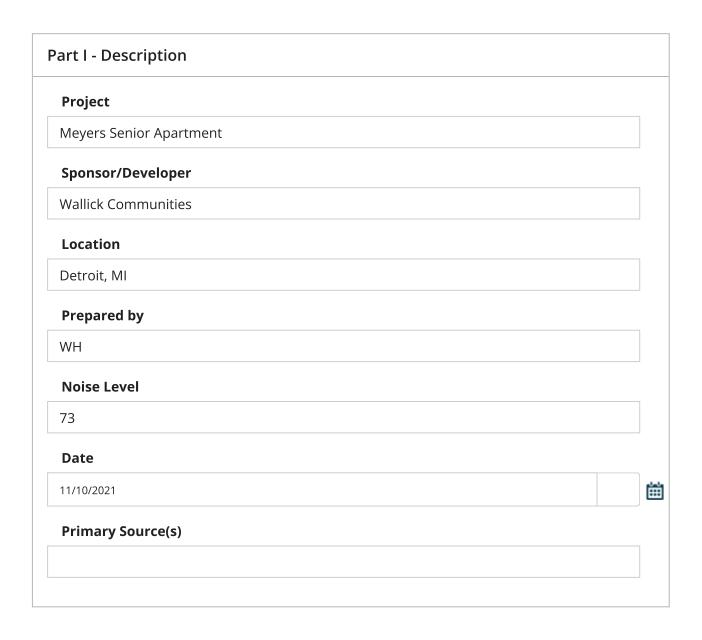
Users first enter basic project information and the NAL noise level that will be used as the basis for required attenuation. This noise level must be entered in whole numbers. STraCAT users then enter information on wall, window and door component type and area. Again, as noted above, the wall, window 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

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.



Wall Construction	on Detail		Area	STC
	_	fiber insulation; 5/8" fire e-shield gypsum board (/ / // // //	38
Add new wall				
			29,040 Sq. Feet	38
Window Construction De	tail Quantity	Sq Ft/Unit	STC	
Windows	1	2872	30	
Add new window				
	Quantity	Sq Ft/Unit	STC	
Door Construction	Quantity	Sq Ft/Unit	STC 35	
Door Construction Detail Hollow Metal				

Wall Statistics

Stat	Value
Area:	29040 ft ²
Wall STC:	38

Aperture Statistics

Aperture	Count	Area	% of wall
Windows:	1	ft²	9.89%
Doors:	3	ft²	6.9%

Evaluation Criteria

Criteria	Value
Noise source sound level (dB):	73
Combined STC for wall assembly:	35.01
Required STC rating:	31
Does wall assembly meet requirements?	Yes

Print

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.





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OUR VISION TECHNICAL RESOURCES

OUR DOORS & THE ENVIRONMENT

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STC (Sound Transmission Class)

STC Definition and Options

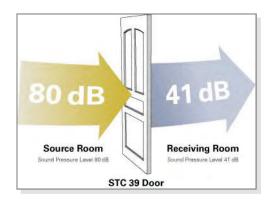
STC ratings are single number indicating the sound insulation value of a door or window (including partitions and floor-ceiling assemblies.) A door's ability to reduce noise is called its sound transmission loss (TL) effectiveness.

TL is a value given in decibels (dB) which is determined by measuring sound pressure levels at a certain frequency in the source and receiving rooms.

See image using STC 39 as a sample -->

These values are fitted to a curve in a method defined by the ASTM E413 Classification Standard for Rating Sound Insulation. The higher the STC value, the better the rating and the better the performance.

STC Rating	Performance	Description
50-60	Excellent	Loud sounds heard faintly or not at all
40-50	Very Good	Loud speech heard faintly
35-40	Good	Loud speech heard but hardly intelligible
30-35	Fair	Loud speech understood fairly well
25-30	Poor	Normal speech understood easily and distinctly
35-40 30-35 25-30 20-25	Very Poor	Low speech audible



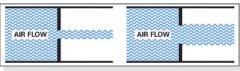


Figure 1

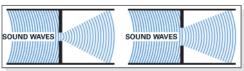


Figure 2

Haley offers architectural doors with the following STC ratings, sub components, and gasketing:

STC 32- Standard Particle Board Assembly- (1LD1 Core) APC Bond to Core.

STC 32- Lumber Core Assembly- ALC Bond to Core.

STC 33- 36 lbs to 40 lbs Core- (1LD2 Core) APC Bond to Core, No Lead, Standard Stiles and Rails.

STC 35- 44 lbs to 45 lbs Commercial Density Core- Bond to Core, No Lead, Standard Stiles and Rails.

Any unsealed gaps and clearances in door assemblies effectively cancel out the noise reduction benefits of STC rated doors. For example, 1/8" clearances around the edges reduce the effective rating of an STC-52 door to STC-21!

Gasketing's importance derives from a fundamental property of sound: Sound waves travel through any opening with very little loss. While the amount of air flowing through a gap increases in proportion with the size of the gap (see Figure 1) the size of the gap in a sound barrier does not matter (see Figure 2.) A tiny hole transmits almost as much sound as a much larger gap.

STC 40- SLM Stiles and Rails

1 lb Lead

1/2" Particle Board Sound Board

Soundboard

1/2" Particle Board Sound Board

1 lb Lead

Pemko 2005V Threshold, 234V Sweep with Two sets of S88 Gasket.

STC 41- SLM Stiles and Rails

1 lb Lead 1/2" Particle Board Sound Board Soundboard 1/2" Particle Board Sound Board

1 lb Lead

Pemko 2005V Threshold, 234V Sweep with Two sets of S88 Gasket and One Additional set of 319R Seal.











Corporate/Sales Offices:

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1592 E San Bernardino Ave San Bernardino, CA 92408

Ph: 909-796-6969

Receiving/Will Call Hours: M-F 7:00AM-12:00PM

(48 hour notice required to schedule Will Calls. Will Call orders not picked up on confirmed date will be subject to rescheduling.)

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E6297.02-113-11-R0 ACOUSTICAL PERFORMANCE TEST REPORT ASTM E90

Rendered to:

THERMA-TRU CORPORATION

Series/Model: 3/0 x 6/8 Fiber-Classic/Smooth-Star, Full Lite Flush Glazed

Type: Side-Hinged Single Door System

Summary of Test Results				
Data File No.	Test Description	STC	OITC	EWNR
E6297.01B1	5/8" IG (1/8" tempered, 3/8" air space, 1/8" tempered), sealed with duct tape on both sides, (inoperable)	29	27	31
E6297.01B	5/8" IG (1/8" tempered, 3/8" air space, 1/8" tempered), (operable)	29	26	31

Reference should be made to Intertek-ATI Report No. E6297.02-113-11 for complete test specimen description. This page alone is not a complete report. Flanking limit tests and reference specimen tests are available upon request.





Acoustical Performance Test Report

THERMA-TRU CORPORATION 118 Industrial Drive Edgerton, Ohio 43517

Report No E6297.02-113-11 Test Date 04/21/15 Report Date 05/22/15

Project Scope

Architectural Testing, Inc., an Intertek company ("Intertek-ATI"), was contracted to conduct a sound transmission loss test. The complete test data is included as Appendix B of this report. The client provided the test specimen.

Test Methods

Testing for this project was conducted in accordance with the following standards. The equipment listed in the attachments meets the requirements of the following standards.

ASTM E90-09, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements

ASTM E413-10, Classification for Rating Sound Insulation

ASTM E1332-10a, Standard Classification for Rating Outdoor-Indoor Sound Attenuation ASTM E2235-04 (2012), Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods

Test Procedure

All measurements were conducted in the HT test chambers at Intertek-ATI located in York, Pennsylvania. The sensitivity of the microphones was checked before measurements were conducted.

The transmission loss values were obtained for a single direction of measurement. Two background noise sound pressure level and twenty-five sound absorption measurements were conducted at each of five microphone positions.

Two sound pressure levels were made simultaneously in the receive and source rooms at each of five microphone positions.

The air temperature and relative humidity conditions were monitored and recorded during all measurements.





Specimen Installation

A sound transmission loss test was initially performed on a filler wall.

The specimen plug was removed from the filler wall assembly. The specimen was placed on a foam isolation pad in the test opening. Duct seal was used to seal the perimeter of the specimen to the test opening on both sides. The interior side of the specimen frame, when installed, was approximately 1/4" from being flush with the receive room side of the filler wall. A stethoscope was used to check for any abnormal air leaks around the test specimen prior to testing. Operable portions of the test specimen, if any, were cycled at least five times prior to testing.

Test Calculations

Transmission loss (TL) at each 1/3 octave frequency is the average source room sound pressure level minus the average receive room sound pressure level, plus, 10 times the log of the specimen area divided by the sound absorption of the receive room with the sample in place.

STC Rating

To obtain the Sound Transmission Class (STC), read the TL of the contour curve at 500 Hz. The sum of the deficiencies below the contour curve may not exceed 32. The maximum deficiency at any one frequency may not exceed 8.

OITC Rating

The Outdoor-Indoor Transmission Class (OITC) is calculated by subtracting the logarithmic summation of the TL values from the logarithmic summation of the A-weighted transportation noise spectrum stated in ASTM E1332.

Specimen Descriptions

		Frame
Size		82" by 37-5/8"
Thi	ckness	4-1/2"
	Corners	Butted
	Fasteners	Screws
	Seal Method	Sealant
Ma	terial	Wood
	Reinforcement	N/A
	Thermal Break Material	N/A
	N/A N-4 A1:1-1-	•

N/A-Not Applicable





Specimen Descriptions (Continued)

Leaf Materials

Layers (outside to inside)	Layer Description (material and thickness)
1	0.080" Fiberglass skin
2	1.5" Foam core
3	0.080" Fiberglass skin

Comments

The daylight opening size was 21" by 63". The stiles were constructed with 1-1/2" by 1-1/4" wood. The rails were constructed with 1-1/2" by 1" composite material.

Measured Overall Insulation Glass Unit Thickness	0.715"
Spacer Type	Reinforced butyl

	Exterior Sheet	Gap	Interior Sheet
Measured Thickness	0.120"	0.475"	0.120"
Muntin Pattern	N/A	N/A	N/A
Material	Tempered	Air*	Tempered
Laminate Material	N/A	N/A	PVB

Glazing Method	Channel
Glazing Material	Silicone
Glazing Bead Material	N/A

^{* -} Stated per Client/Manufacturer, N/A-Not Applicable



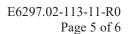


Specimen Descriptions (Continued)

	Туре	Quantity	Location
Wea	atherstrip		
	1-1/4" Foam-filled leaf gasket	1 Row	Head jambs
	Dual bulb triple fin door sweep	1	Bottom rail
Har	dware		
	Hinge	3	Hinge stile
	Lockset	1	Lock stile
Dra	inage		
	No drainage		

Comments

The client did not supply a report drawing of the test specimen. Intertek-ATI will store samples of test specimens for four years.







Intertek-ATI will service this report for the entire test record retention period. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained by Intertek-ATI for the entire test record retention period. The test record retention period ends four years after the test date.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen tested. This report is intended to help in the client's quality assurance program, but it does not represent a continuous or exhaustive evaluation of the specimen tested or of other products or materials that were not evaluated. The statements and data provided herein do not constitute approval, disapproval, certification, or acceptance of performance or materials.

This report may not be reproduced, except in full, without the written approval of Intertek-ATI.

For INTERTEK-ATI:

Donul P. Plutto

Daniel P. Platts Senior Technician - Acoustical Testing To Ad D. Kisth Digitally Signed by: Todd D. Kister

Todd D. Kister Laboratory Supervisor – Acoustical Testing

DPP:jmcs

Attachments (pages): This report is complete only when all attachments listed are included.

Appendix-A: Equipment description (1) Appendix-B: Complete test results (4)

Appendix-C: Photographs (1)





Revision Log

<u>Rev. #</u>	Date	Page(s)	Revision(s)
R0	05/22/15	N/A	Original Report Issue





E6297.02 -113-11

Appendix A

Instrumentation:

Instrument	Manufacturer	Model	Description	ATI Number	Date of Calibration
Data Acquisition Unit	National Instruments	PXI-1033	Data Acquisition card	65127	04/14 *
Source Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64902	12/14
Source Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64903	12/14
Source Room Microphone	PCB Electronics	378B20	Microphone and Preamplifier	65103	05/14
Source Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64905	12/14
Source Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64906	12/14
Receive Room Microphone	PBC Piezotronics	378B20	Microphone and Preamplifier	64907	11/14
Receive Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64908	11/14
Receive Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64909	11/14
Receive Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64910	11/14
Receive Room Microphone	PCB Piezotronics	378B20	Microphone and Preamplifier	64911	11/14
Receive Room Environmental Indicator	Vaisala	HMW92	Temperature Humidity Sensor	64286	06/14
Source Room Environmental Indicator	Vaisala	HMW60Y	Temperature and Humidity Sensor	Y002653	06/14
Microphone Calibrator	Larson Davis	CAL200	Calibrator	65327	09/14

 $[\]hbox{\it *-Note: The calibration frequency for this equipment is every two years per the manufacturer's recommendation.}$

Test Chamber:

	Volume	Description
Receive Room	234 m ³ (8291.3 ft ³)	Rotating vane and stationary diffusers Temperature and humidity controlled Isolation pads under the floor
Source Room	206.6 m ³ (7296.3 ft ³)	Stationary diffusers only Temperature and humidity controlled

	Maximum Size	Description
	4.27 m (14 ft) wide by	Vibration break between source and receive rooms
TL Test Opening	3.05 m (10 ft) high	Vibration break between source and receive rooms

N/A-Non Applicable





Appendix B

Complete Test Results







ASTM E 90

Test Date	04/21/15	04/21/15							
Data File No.	E6297.01B1								
Client	Therma-Tru Con	rporation							
Description		3/0 x 6/8 Fiber-Cla h 5/8" IG (1/8" ten noperable)			•	_	_		
Specimen Area	1.99 m ²	Receive Temp.	22.6 °C		Source Temp.	22.1 °C			
Technician	Daniel P. Platts	Receive Humidity	49%		Source Humidity	48%			

Enag	Background	Absorption	Source	Receive	Specimen	95%	Number
Freq	SPL	Absorption	SPL	SPL	TL	Confidence	of
(Hz)	(dB)	(m^2)	(dB)	(dB)	(dB)	Limit	Deficiencies
80	41.6	4.2	105	78	25.0	2.02	-
100	36.3	4.7	106	78	25.7	2.00	-
125	39.4	4.6	106	77	25.7	1.11	0
160	41.9	4.6	107	79	24.4	1.27	0
200	40.4	4.5	106	78	24.0	0.73	0
250	35.8	4.9	106	79	23.4	0.33	0
315	28.4	5.5	102	79	19.1	0.54	6
400	24.3	5.8	101	72	24.5	0.36	4
500	20.4	5.8	101	68	28.5	0.50	0
630	17.9	5.5	102	66	30.9	0.36	0
800	16.4	5.8	101	65	32.2	0.26	0
1000	12.9	6.0	100	66	29.6	0.32	2
1250	10.8	6.7	98	61	32.2	0.24	1
1600	8.3	7.0	101	65	30.9	0.37	2
2000	6.7	7.5	100	69	25.5	0.29	8
2500	6.4	8.5	98	58	34.2	0.14	0
3150	6.5	10.2	98	53	38.5	0.27	0
4000	7.2	12.7	97	56	33.7	0.37	0
5000	7.7	16.3	95	48	38.4	0.30	-

STC Rating 29 (Sound Transmission Class)
Deficiencies 23 (Sum of Deficiencies)

Deficiencies 23 (Sum of Deficiencies)

OITC Rating 27 (Outdoor-Indoor Transmission Class)

EWNR Rating 31 (Exterior Wall Noise Reduction)

1) Receive Room levels less than 5 dB above the Background levels are highlighted in yellow.

2) Specimen TL levels listed in red indicate the lower limit of the transmission loss.

3) Specimen TL levels listed in green indicate that there has been a filler wall correction applied

Notes:

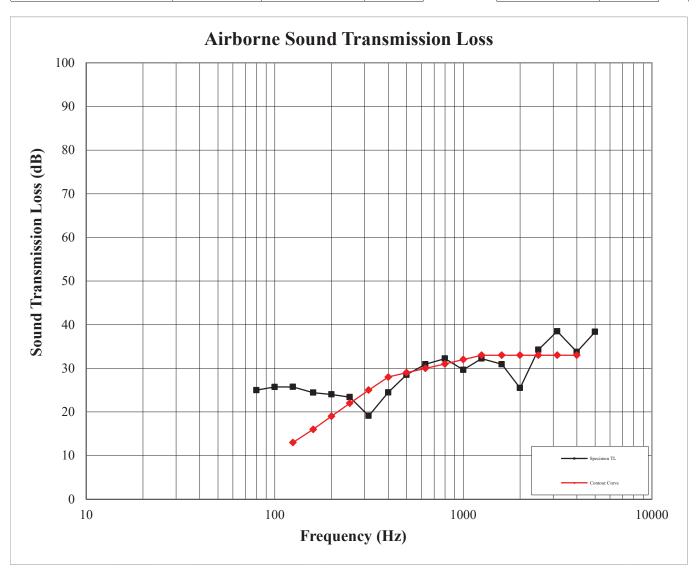






ASTM E 90

Test Date	04/21/15						
Data File No.	E6297.01B1						
Client	Therma-Tru Co	rporation					
Description	Series/Model: 3/0 x 6/8 Fiber-Classic/Smooth-Star full lite flush glazed, side-hinged single door system with 5/8" IG (1/8" tempered, 3/8" air space, 1/8" tempered), sealed with duct tape on both sides (inoperable)						
Specimen Area	1.99 m ²	Receive Temp.	22.6 °C		Source Temp.	22.1 °C	
Technician	Daniel P. Platts	Receive Humidity	49%		Source Humidity	48%	



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ASTM E 90

Test Date	04/21/15					
Data File No.	E6297.01B					
Client	Therma-Tru Co	rporation				
Description		8/0 x 6/8 Fiber-Cla h 5/8" IG (1/8" tem			_	single
Specimen Area	1.99 m ²	Receive Temp.	22.6 °C	Source Temp.	22.1 °C	
Technician	Daniel P. Platts	Receive Humidity	49%	Source Humidity	48%	

Freq	Background SPL	Absorption	Source	Receive	Specimen	95%	Number
Freq		Absorption	SPL	SPL	TL	Confidence	of
(Hz)	(dB)	(m^2)	(dB)	(dB)	(dB)	Limit	Deficiencies
80	41.2	5.0	105	79	23.7	1.88	-
100	36.7	4.9	106	78	25.0	1.71	-
125	38.7	4.4	106	78	24.9	1.37	0
160	41.9	4.4	107	79	24.3	1.42	0
200	40.1	4.3	106	79	24.0	0.66	0
250	35.6	4.9	107	79	23.5	0.39	0
315	28.0	5.4	102	79	19.0	0.53	6
400	24.6	5.7	101	73	24.3	0.32	4
500	20.4	5.8	101	68	28.2	0.47	1
630	17.4	5.6	102	67	30.4	0.37	0
800	15.7	5.7	101	66	30.8	0.24	0
1000	11.9	6.1	100	68	27.5	0.32	4
1250	12.8	6.8	98	63	29.8	0.26	3
1600	7.8	7.2	101	67	29.1	0.36	4
2000	6.5	7.6	100	69	25.0	0.30	8
2500	6.4	8.5	98	60	32.3	0.14	1
3150	6.5	10.2	98	56	35.3	0.24	0
4000	7.2	12.4	98	57	32.9	0.37	0
5000	7.8	15.8	95	51	35.7	0.32	-

STC Rating 29 (Sound Transmission Class)

Deficiencies 31 (Sum of Deficiencies)

OITC Rating 26 (Outdoor-Indoor Transmission Class)
EWNR Rating 31 (Exterior Wall Noise Reduction)

Notes: 1) Receive Room levels less than 5 dB above the Background levels are highlighted in yellow.

2) Specimen TL levels listed in red indicate the lower limit of the transmission loss.

3) Specimen TL levels listed in green indicate that there has been a filler wall correction applied

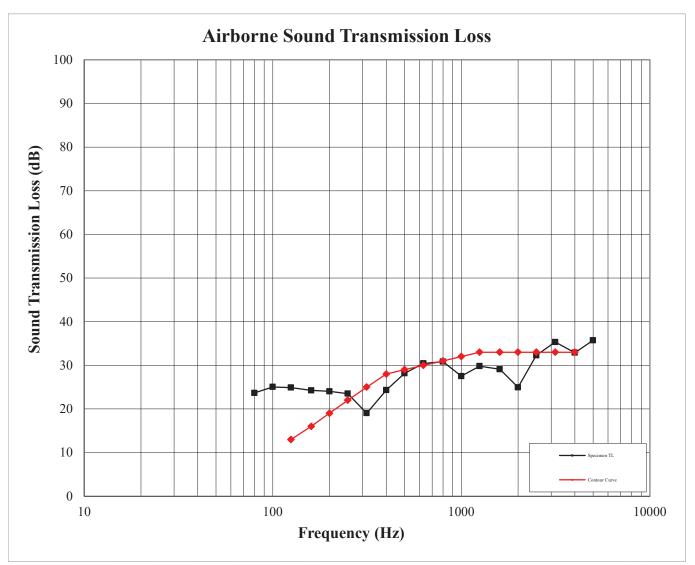






ASTM E 90

Test Date	04/21/15					
Data File No.	E6297.01B					
Client	Therma-Tru Con	rporation				
Description				ite flush glazed, sid 8" tempered) (opera	_	ingle
Specimen Area	1.99 m ²	Receive Temp.	22.6 °C	Source Temp.	22.1 °C	
Technician	Daniel P. Platts	Receive Humidity	49%	Source Humidity	48%]



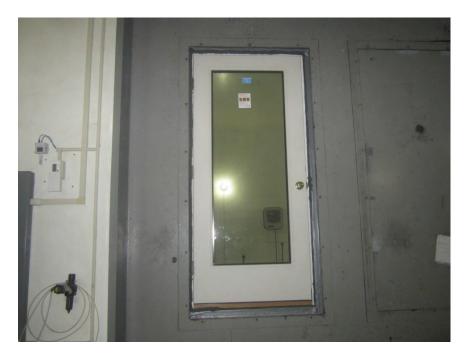
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Appendix C

Photographs



Receive Room View of Installed Specimen



Source Room View of Installed Specimen





Silver Line® Product Performance Sound Transmission Ratings

Silver Line® Product Series	Silver Line Product Type	IG	Glass Type	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
V3 SERIES					
V3 Series Casement, Awning,	Casement Window	3/4"	SS DS 3mm/4mm	27 28 33	23 22 26
Picture & Specialty Windows			Laminated DS-DS/060/DS	35	30
with Nailing Flange, with Nailing Flange & J-Channel,			SS DS	27 28	23 22
and with Insert Frame (FORMERLY 70 SERIES NEW CONSTRUCTION OR	Awning Window	3/4"	3mm/4mm Laminated DS-DS/060/DS	33 35	26 30
REPLACEMENT CASEMENT)			SS	- 27	- 23
	Picture & Specialty Windows	3/4"	3mm/4mm Laminated	31	26
V3 Series Double-Hung Window			DS-DS/060/DS SS	34 27	29 22
with Nailing Flange and Nailing	Double-Hung Window	3/4"	DS 3mm/4mm	27 27 30	22 22 26
Flange & J-Channel (FORMERLY 3000/39000 SERIES NEW CONSTRUCTION DOUBLE-HUNG)	Double-Hung Window	3/4	Laminated DS/060/DS-DS	33	28
	Double-Hung Window	3/4"	SS	27	22
V3 Series Double-Hung/Gliding Window with Insert Frame (FORMERLY 8600 SERIES REPLACEMENT DOUBLE-HUNG AND 8700			DS	27	22
			3mm/4mm Laminated DS/060/DS-DS	30	26 28
	Gliding Window	3/4"	SS	27	22
SERIES REPLACEMENT SLIDER)			DS	27	22
,			3mm/4mm Laminated DS-DS/060/DS	30	26 28
			SS	-	-
V3 Series Gliding Patio Door (FORMERLY 5800 SERIES PATIO DOORS)	Patio Door	3/4"	DS Laminated	27 33	22 28
V1 SERIES			DS-DS/060/DS	33	20
VISERIES					
V1 Series Single-Hung/Gliding			SS	28	-
Window with Nailing Flange	Single-Hung & Gliding	E/O"	DS 2mm/4mm	30	-
(FORMERLY 2200 SERIES NEW CONSTRUCTION SINGLE-HUNG)	Windows	5/8"	3mm/4mm Laminated DS-SS/060/SS	32 34	26 29
V1 Series Single-Hung/Gliding		5/8"	SS	28	-
Window with Nailing Flange & J-Channel	Single-Hung & Gliding Windows		DS 3mm/4mm	30 32	- 26
(FORMERLY 2900/4900 SERIES) NEW CONSTRUCTION SINGLE-HUNG)	Willidows		Laminated DS-SS/060/SS	34	29



Silver Line® Product Performance Sound Transmission Ratings

Silver Line® Product Series	Silver Line Product Type	IG	Glass Type	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)
V1 Series Single-Hung Window			SS	28	-
with Insert Frame	Single-Hung & Gliding Windows	5/8"	DS	30	-
			3mm/4mm	32	26
(FORMERLY 2000 SERIES REPLACEMENT SINGLE-HUNG)			Laminated	34	29
			DS-SS/060/SS		29
V4 Series Develo Hung Window	Double-Hung Window	5/8"	SS	27	-
V1 Series Double-Hung Window			DS	28	-
with Insert Frame			3mm/4mm	32	26
(FORMERLY 1200 SERIES REPLACEMENT DOUBLE-HUNG)			Laminated	34	20
			DS-SS/060/SS		29
V4 Control Olidian Bette Boom	Patio Door	3/4"	SS	-	-
V1 Series Gliding Patio Door			DS	29	24
(FORMERLY 5500/5700 SERIES PATIO DOOR)			Laminated	32	20
FATIO DOOR)			DS-DS/060/DS		28

KEY

SS = Single Strength
DS = Double Strength

"Sound Transmission Class (STC)" and "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.

This data is accurate as of October 2018. Due to ongoing product changes, updated test results or new industry standards or requirements, this data may change over time.

Silver Line reserves the right to change specifications, product details and other information at any time without prior notification.

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Rolling Steel Doors - Stormtite™ AP Model 627

Our rolling steel doors (also known as roll-up steel doors, roll-up overhead doors, coiling doors, and folding garage doors) are designed for durability, serviceability, and good looks. Each of our rolling service doors is computer-designed to your specifications, then solidly constructed to promote easy installation, trouble-free operation, and long life.



Advanced Performance Insulated Rolling Doors

The **Stormtite™ AP Model 627** is engineered to supply advanced performance in industrial and general commercial applications where thermal performance, climate control, and security are primary concerns.

This door system presents the most advanced thermal performance values published by any major US manufacturer of insulated rolling steel doors, with an R-value of 10.9, U-value of 0.09, and a tested installed U-factor of 0.84. The superior construction of this rolling service door and the advanced design of the perimeter seals offer superior door protection against air leakage. The sound performance of the

Stormtite[™] AP Model 627 furnishes a through curtain Sound Transmission Class (STC) rating of 28 and an installed system rating of 21.

The Stormtite[™] AP door system's advanced performance answers the demand for more reliability, durability, security, flexibility and thermal efficiency.



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To learn more about other options, check out our commercial doors and choose the right commercial door and dock for your facility. Spend some time looking at the sectional doors, rolling steel doors, other industrial doors and the accessories like commercial door operators that you can find at the Overhead Door Company of The Meadowlands & NYC (Division of Loading Dock, Inc.). You will appreciate not only our amazing selection but also the level of customer service and care you receive from our team of overhead door experts. You can also read other entries in our blog.

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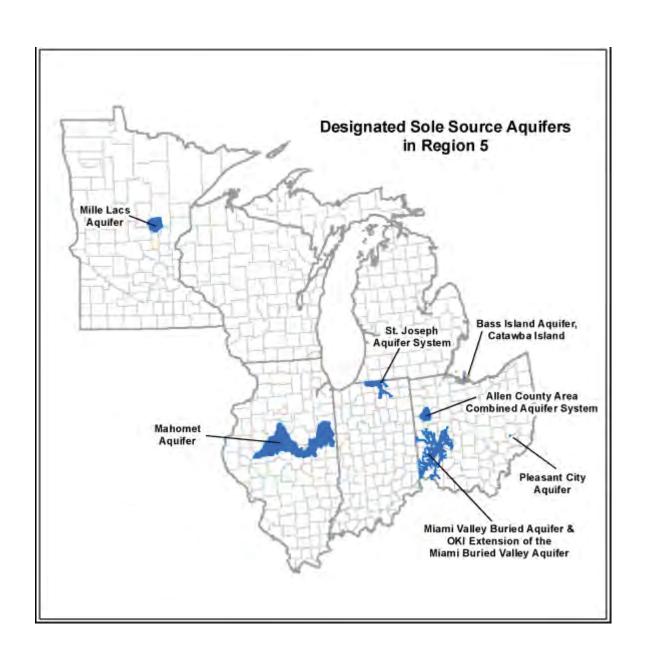
Company

Job Title	
Phone	
Email*	
Message	
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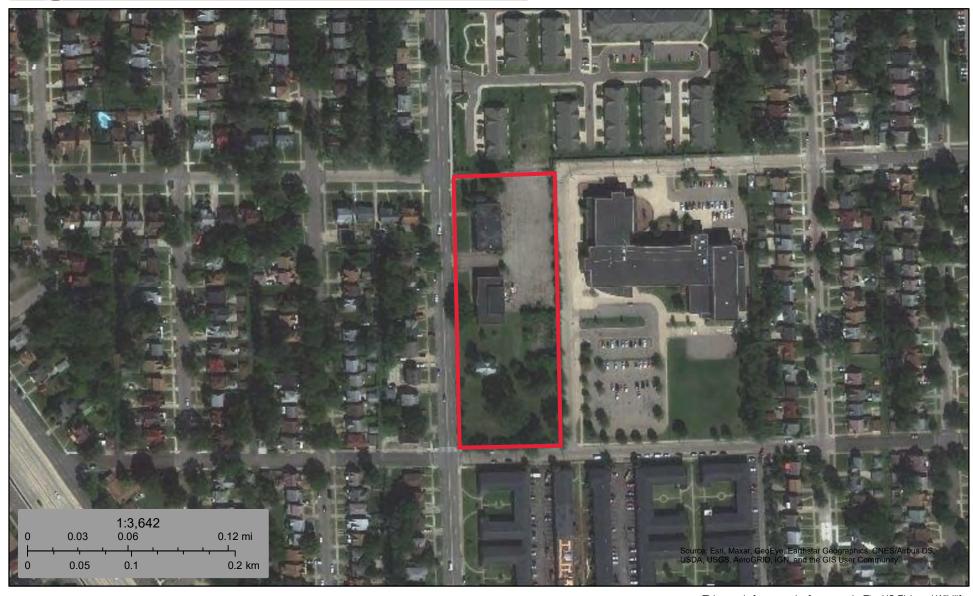


FESTIA WILLIAMS

U.S. Fish and Wildlife Service

National Wetlands Inventory

Meyers Senior



September 3, 2021

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.

9/25/2019 Michigan



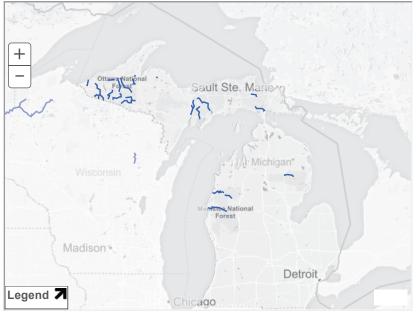




NATIONAL SYSTEM MANAGEMENT RESOURCES PUBLICATIONS CONTACT US 50 YEARS SITE INDEX

MICHIGAN

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



Choose A State ▼ Go Choose A River ▼

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

+ View larger map

AuSable River

Bear Creek

Black River

Carp River

Indian River

Manistee River

Ontonagon River

Paint River

Pere Marquette River

Pine River

Presque Isle River

Sturgeon River (Hiawatha National Forest)

Sturgeon River (Ottawa National Forest)

Tahquamenon River (East Branch)

Whitefish River

Yellow Dog River

9/25/2019 Michigan

NATIONWIDE RIVERS INVENTORY | CONTACT US | PRIVACY NOTICE | Q & A SEARCH ENGINE | SITE MAP



Designated Rivers	National System	River Management	Resources
About WSR Act	WSR Table	Council	Q & A Search
State Listings	Study Rivers	Agencies	Bibliography
Profile Pages	Stewardship	Management Plans	Publications
	WSR Legislation	River Mgt. Society	GIS Mapping
		GIS Mapping	Logo & Sign Standards



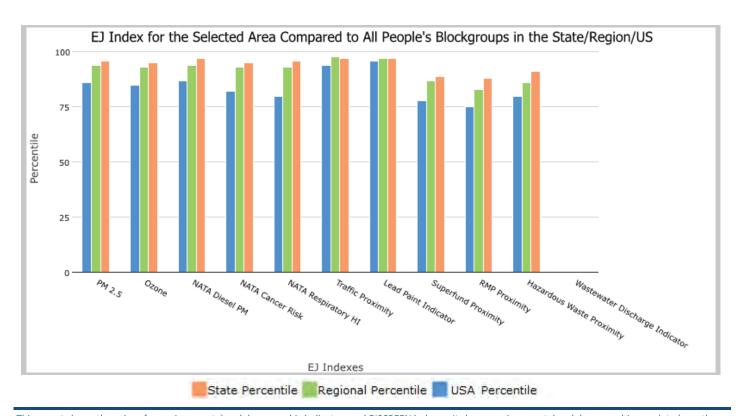
EJSCREEN Report (Version 2020)



1 mile Ring around the Corridor, MICHIGAN, EPA Region 5

Approximate Population: 29,920 Input Area (sq. miles): 3.49 Meyers Senior

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	96	94	86
EJ Index for Ozone	95	93	85
EJ Index for NATA* Diesel PM	97	94	87
EJ Index for NATA* Air Toxics Cancer Risk	95	93	82
EJ Index for NATA* Respiratory Hazard Index	96	93	80
EJ Index for Traffic Proximity and Volume	97	98	94
EJ Index for Lead Paint Indicator	97	97	96
EJ Index for Superfund Proximity	89	87	78
EJ Index for RMP Proximity	88	83	75
EJ Index for Hazardous Waste Proximity	91	86	80
EJ Index for Wastewater Discharge Indicator	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.

September 03, 2021 1/3



EJSCREEN Report (Version 2020)



1 mile Ring around the Corridor, MICHIGAN, EPA Region 5

Approximate Population: 29,920 Input Area (sq. miles): 3.49 Meyers Senior



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

September 03, 2021 2/3



EJSCREEN Report (Version 2020)



1 mile Ring around the Corridor, MICHIGAN, EPA Region 5

Approximate Population: 29,920 Input Area (sq. miles): 3.49 Meyers Senior

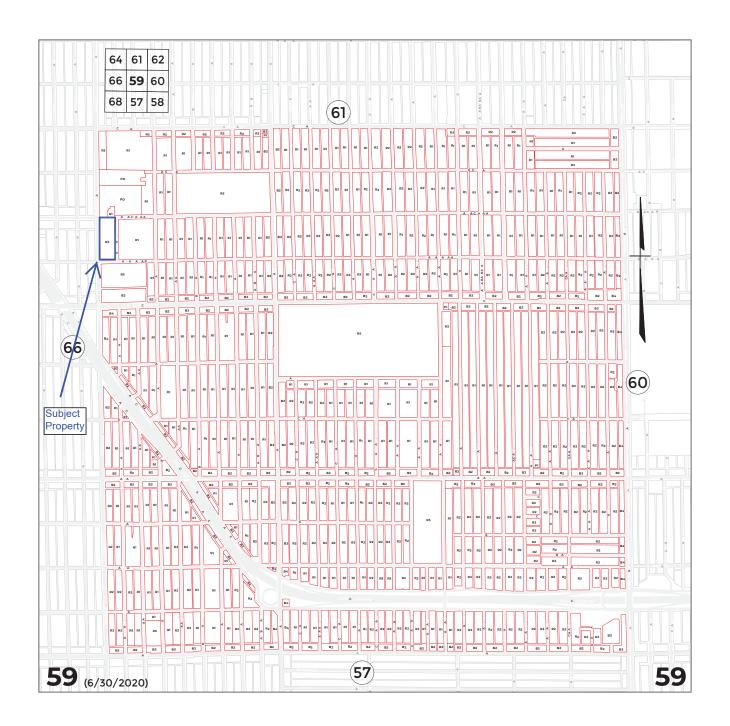
Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	9.58	8.11	96	8.4	93	8.55	83
Ozone (ppb)	42.9	43.1	31	43.8	24	42.9	51
NATA [*] Diesel PM (μg/m³)	0.676	0.338	94	0.446	80-90th	0.478	80-90th
NATA* Cancer Risk (lifetime risk per million)	29	24	86	26	70-80th	32	<50th
NATA* Respiratory Hazard Index	0.37	0.29	93	0.34	70-80th	0.44	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	2200	650	93	530	95	750	91
Lead Paint Indicator (% Pre-1960 Housing)	0.9	0.38	95	0.38	95	0.28	97
Superfund Proximity (site count/km distance)	0.043	0.15	28	0.13	35	0.13	37
RMP Proximity (facility count/km distance)	0.22	0.53	52	0.83	37	0.74	41
Hazardous Waste Proximity (facility count/km distance)	1.4	1.2	70	2.4	54	5	58
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)	N/A	1.7	N/A	2.4	N/A	9.4	N/A
Demographic Indicators							
Demographic Index	77%	29%	94	28%	95	36%	94
People of Color Population	99%	25%	97	25%	98	39%	97
Low Income Population	54%	33%	83	30%	85	33%	84
Linguistically Isolated Population	0%	2%	63	2%	59	4%	45
Population With Less Than High School Education	12%	9%	70	10%	69	13%	60
Population Under 5 years of age	7%	6%	65	6%	61	6%	59
Population over 64 years of age	16%	16%	54	16%	59	15%	62

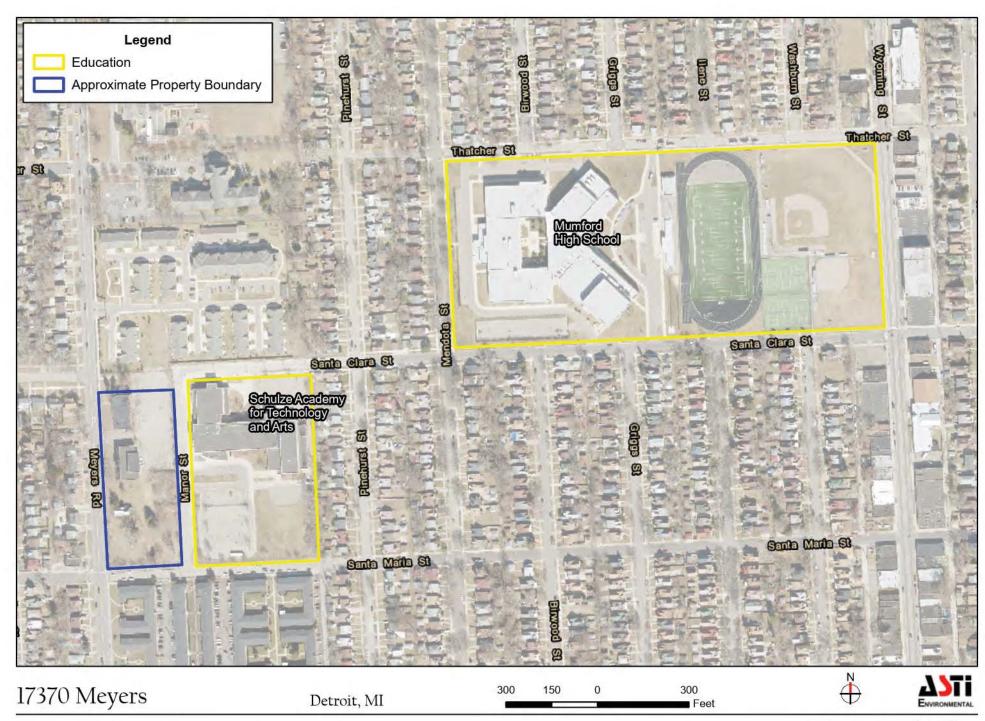
^{*} The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates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

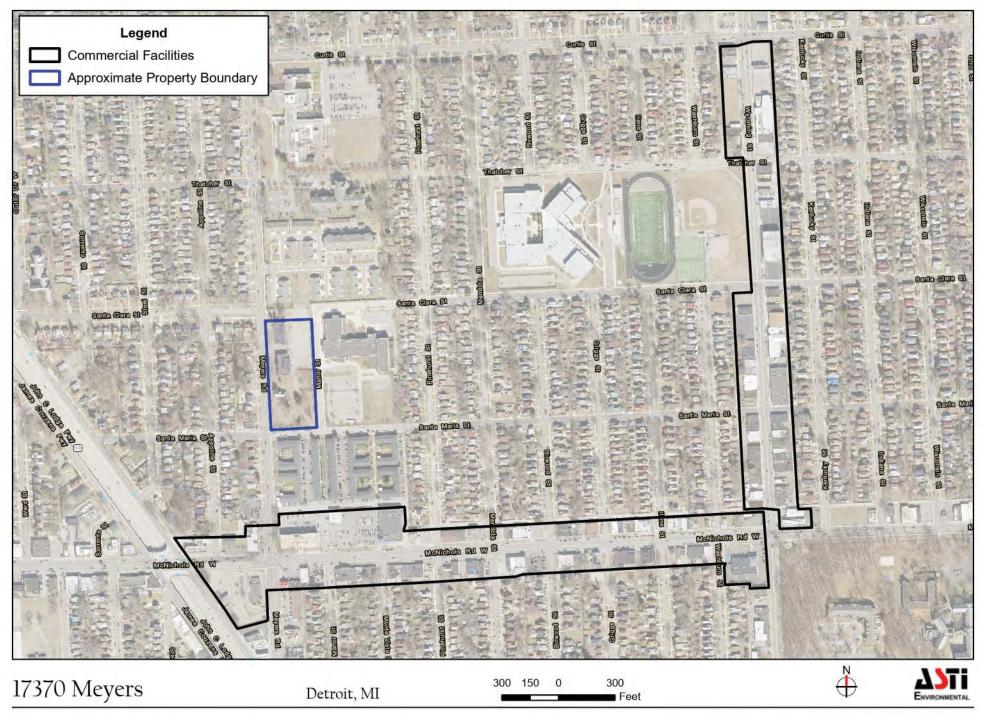
For additional information, see: www.epa.gov/environmentaljustice

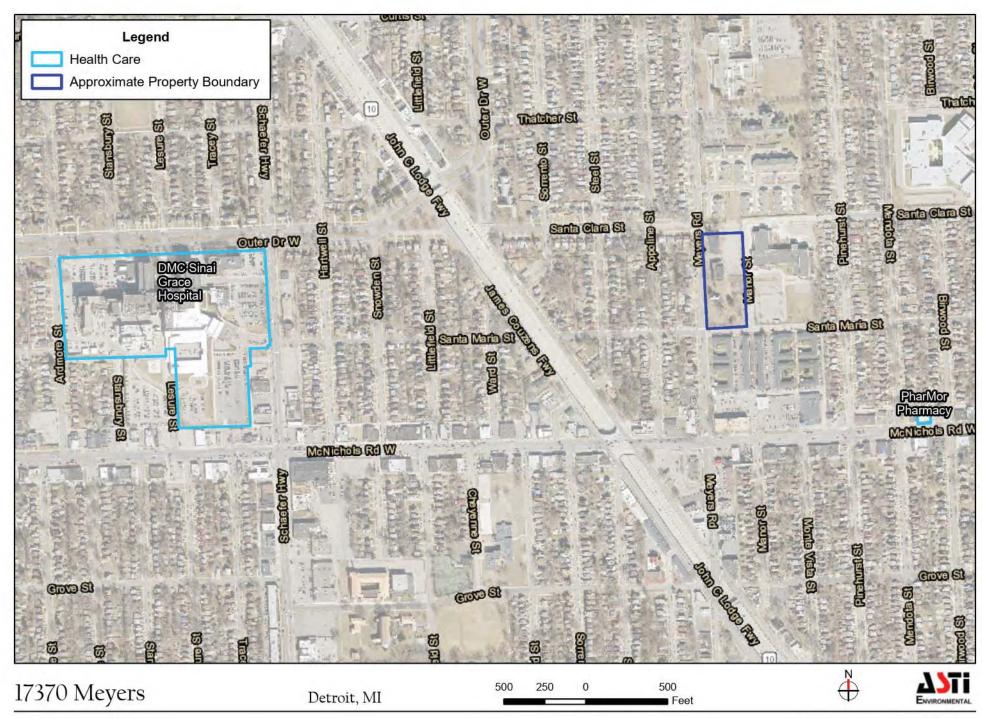
EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools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

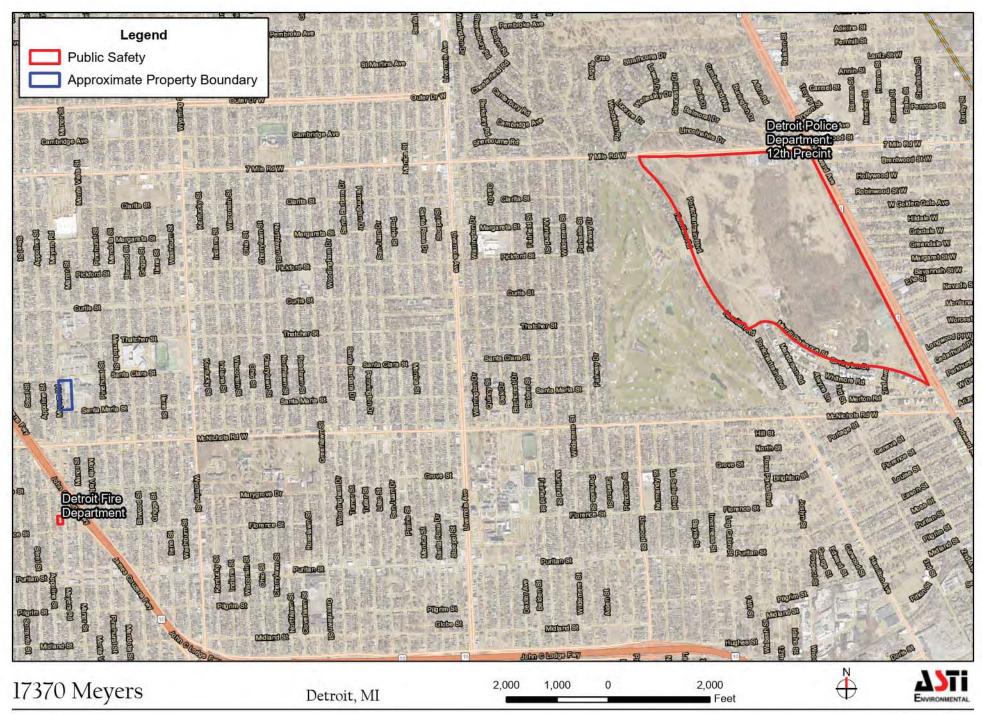
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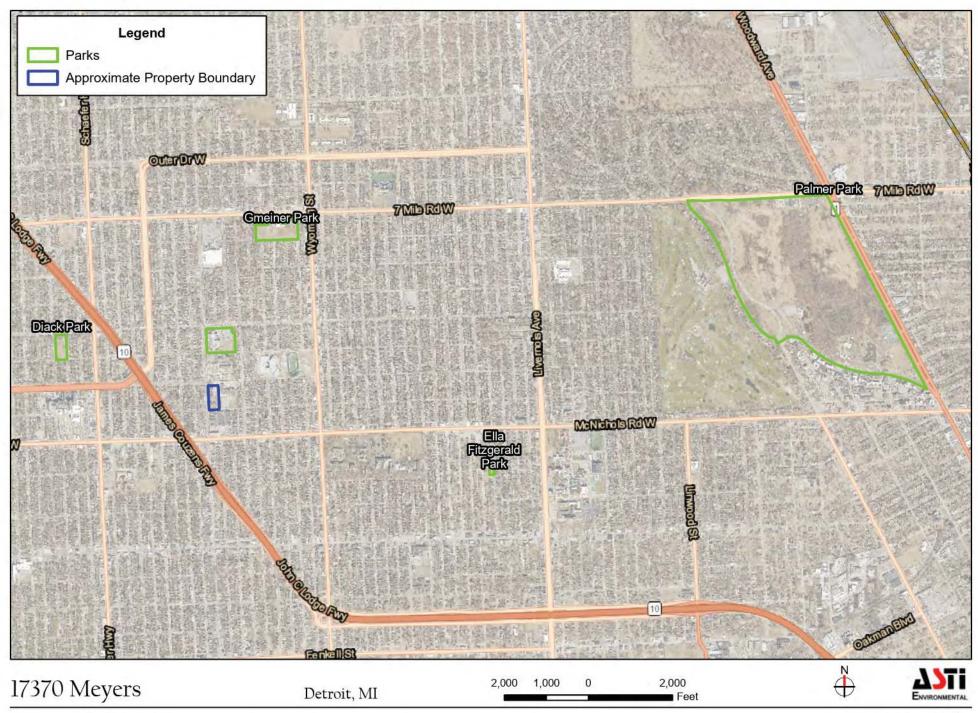


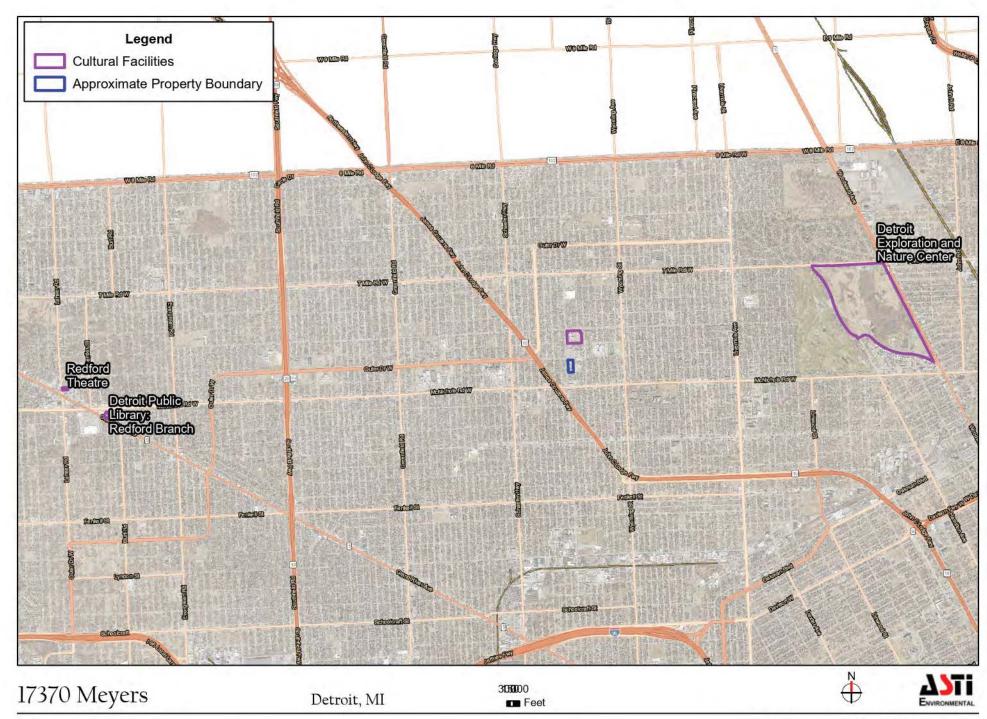




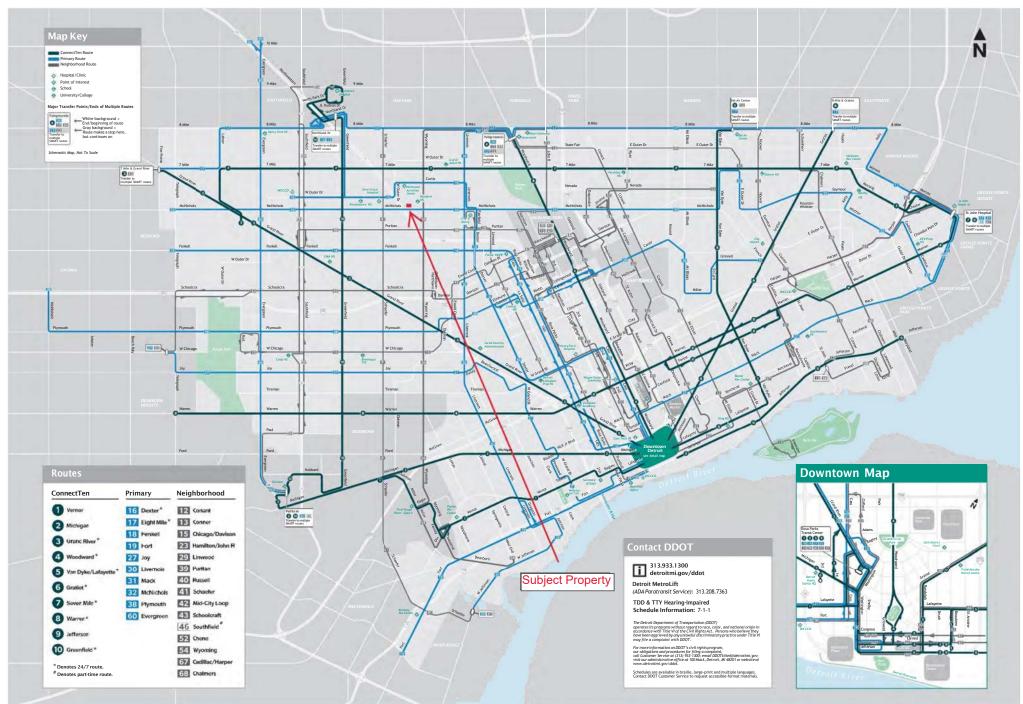


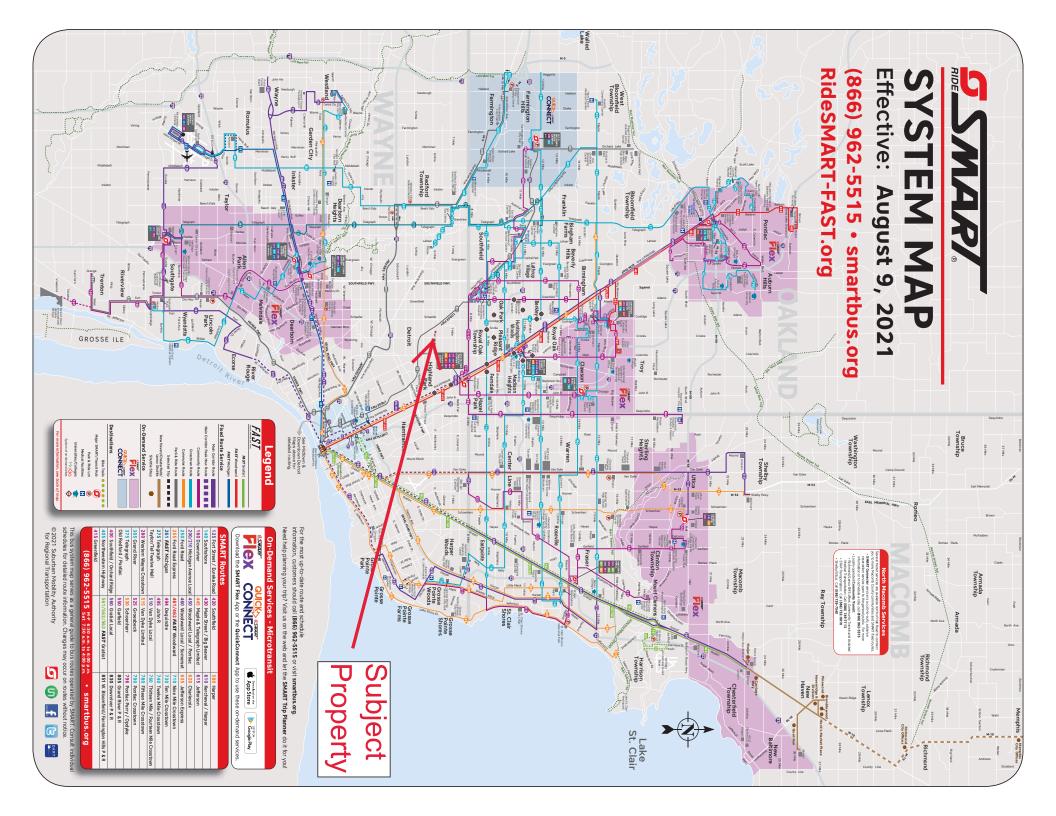












Meyers Senior ASTI Environmental April 19, 2023

Response Activity or Continuing Obligation	Required Activities	Party Responsible for Completing Activity	Timing of Activity	Required Follow- up or Reporting
Asbestos Containing Materials Removal	 A. Several style of floor titles and caulk were identified as Asbestos Containing Materials (ACMs) in the two former school buildings. B. The roofs, fire doors, and fire door frames are presumed to be ACMs in the two former school buildings. C. Prior to any work that would disturb the ACMs and presumed ACMs, the materials are to be removed by a licensed Asbestos abatement specialist. 	General Contractor, Licensed Abatement Specialist, and Consultant.	Prior to Construction.	Clearance inspection following an abatement and ACM closeout Report.
Lead-Based Paint Removal	 A. Seventy-two lead-based paint (LBP) hazards were identified at the two former school buildings. B. Fifty-six deteriorated LBP hazards were identified at the two former school buildings. C. Seventy-seven lead dust hazards were identified at the two former school buildings. D. For the deteriorated LBP hazards: 1) Remove and replace components, 2) LBP encapsulation using a HUD/EPA approved paint stabilizer of the LBP hazard. 3) Strip the painted surface bare to substrate, stabilize the surface, and repaint it. E. Clean all floors, windowsills, and window toughs found to have elevated levels of lead dust using a HEPA cleaning method. Following cleaning, collect clearance samples in accordance with HUD requirements. 	General Contractor, Consultant.	During Construction.	Collect dust samples to demonstrate compliance with EPA and HUD standards.
Section 106 – Conditional No Adverse Effect Requirements	A. If there is a change in the scope of work, those changes will be required to undergo additional	General Contractor.	Prior to Construction.	

Meyers Senior ASTI Environmental April 19, 2023

	Section 106 Review prior to the execution of any work. B. In the unlikely event, if bones or artifacts are discovered during ground disturbing activities, all work will be halted, and immediate consultation with the Preservation Specialist will be conducted.	General Contractor.	At any time.	
Noise Analysis – Unacceptable Noise	Appropriate construction materials will be incorporated in the building to mitigate noise levels within the acceptable range.	Architect, Construction, Crew, Foremen, and Developer.	During Construction.	Building specs .