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February 20, 2018
Project No. 171618

State of Michigan
Michigan Department of Technology, Management and Budget
P.O. Box 30026
Lansing, Michigan 48909

Attention: Mr. Judson N. Sorensen, P.E.

Reference: ASTM Phase I Environmental Site Assessment
Billie S. Farnum Building at 123 W. Allegan Street
Adjacent Parking Lot at 215 S. Capitol Avenue
Lansing, Michigan

Dear Mr. Sorensen:

The enclosed report presents the results of a Phase I Environmental Site Assessment (Phase I) conducted at the above-referenced properties (herein referred to as the "Site"). This Phase I was conducted in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as referenced in 40 Code of Federal Regulations (CFR) Part 312 (the All Appropriate Inquiries [AAI] Rule).

The objective of a Phase I is to assess whether recognized environmental conditions (RECs), controlled RECs (CRECs), or historical RECs (HRECs) are associated with the Site, as defined in the ASTM E 1527-13 Standard.

Thank you for the opportunity to perform these services for you. Please do not hesitate to contact our office if you have any questions or comments.

Sincerely,

MATERIALS TESTING CONSULTANTS, INC.

Joseph Bolin
Assistant Project Geologist

Rick Dunkin, C.P.G.
Senior Environmental Project Manager

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PHASE I ENVIRONMENTAL SITE ASSESSMENT
BILLIE S. FARNUM BUILDING AT 123 W. ALLEGAN STREET
ADJACENT PARKING LOT AT 215 S. CAPITOL AVENUE
LANSING, MICHIGAN

Prepared For:

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Lansing, Michigan

Prepared By:

MATERIALS TESTING CONSULTANTS, INC.
Grand Rapids, Michigan

February 2018
MTC Project No. 171618

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1.0 EXECUTIVE SUMMARY

Materials Testing Consultants, Inc. (MTC) has performed a Phase I Environmental Site Assessment (Phase I) for the existing Billie S. Farnum Building at 123 W. Allegan Street and the adjacent paved parking lot at 215 S. Capitol Avenue, in the downtown commercial business district of Lansing, Michigan (herein referred to as the "Site"). This Phase I was performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) E1527-13 Standard and the federal All Appropriate Inquiry (AAI) Rule. Deviations from this Standard are described in Section 11.0 of this report.

SITE:

The Site consists of 2 land parcels which total approximately 0.38-acres situated at the southeast corner of W. Allegan Street and S. Capitol Avenue. The northern parcel (33-01-01-16-328-001), currently identified as the Billie S. Farnum Building, was constructed in 1959 as a 10-level commercial office building which includes basement and penthouse (11th level) mechanical and boiler room facilities. The majority of the building has been designed with various committee and conference rooms, office space and general administrative spaces that have been complete with typical finishes (tile floor, carpet, standard hung drywall and drop ceilings). The building also includes three passenger elevators for vertical movement to upper levels of the building. A hydraulic elevator system has also been installed within the building for freight transportation. The building has undergone numerous renovation activities throughout the 1990s and 2000s. Historical development of the Site, prior to the existing structure, consisted of commercial retail storefronts dating from the 1950s to the early 1900s in which a residential house existed at the location dating to at least the late 1800s.

The southern parcel (33-01-01-16-328-011) serves as a paved parking lot for the building inclusive of 23 automotive parking spaces which are accessible from S. Capitol Avenue to the west. Historically, the southern parcel was developed with a structure that served for commercial purposes and was later transitioned to a banking facility prior to demolition in the 1970s.

The Site was not identified by the regulatory database as a location for which UST systems were registered with the MDEQ. There were no indications of the presence of UST (i.e. fill ports, vent pipes, dispensers, etc.) observed during the site reconnaissance for this Phase I ESA. Similarly, there were no aboveground storage tank (AST) systems registered for the property or observed during the site reconnaissance effort.

The Site was not identified by the regulatory database search as a RCRA regulated facility for the generation, use, storage, transportation or disposal of hazardous wastes.

During the Site reconnaissance, MTC observed the presence of one 80-gallon steel container of Steamate NA701, which is a corrosion inhibitor believed to be added to the water for the steam heated boilers. The container was situated within a plastic cart that served as a secondary containment in the event of leakage or incidental spillage, noting a floor drain was located within close proximity of the container.

MTC also noted a hydraulic lift elevator adjacent to the three passenger elevators. Visually, MTC noted the elevator machine room within the basement near the boiler room facility. The elevator unit was

constructed within a steel secondary containment structure to capture hydraulic oils that are used as a part of normal operations. Two 5-gallon pails of hydraulic fluid were noted adjacent to the elevator unit for replenishment, as needed. There did not appear to be any environmental concerns associated with the use of the hydraulic elevator system (i.e. no staining or floor drains). MTC also observed various areas that served as storage of common building maintenance and household cleaning supplies. There were no visual indications of any current or historical spills or releases associated with any of the areas of storage.

There were no areas of staining identified during the site reconnaissance that would pose significant potential for environmental impact. Staining on the concrete floor near the boiler room compressor units from cyclical blowdown was observed and noted as limited in nature and not in close proximity to any floor drains. Minor staining within the boiler rooms and staining within the parking lot from incidental vehicular fluid leaks was not considered as posing a significant potential for environmental impact at the Site.

Floor drains were identified within the restrooms and utility closets present at each floor of the building as well as within the basement and penthouse boiler rooms. Drains within the boiler rooms appear to serve as the location for condensate generated through normal operation of the steam-powered boiler systems. MTC noted a green substance on the concrete floor of the basement boiler room which appears to be migrating and entering the floor drain located at the western portion of the area. It is believed that the green substance is corrosion from the copper coils present within the Hankison air drying unit (dehumidifier). MTC recommends periodic cleaning of the floor to remove the substance from the area. There were no indications of the illegal discharge of any process related chemicals to the drains.

Electrical power is available to the area of the Site. Electrical service is present as underground transmission lines along the public roadways with lateral connection to a metered location along the exterior wall of the building. Visually, MTC identified the presence of transformer units within the boiler rooms as well one concrete pad-mounted transformer outside of the building, within the paved parking lot. MTC did not readily identify labeling on the units as non-PCB containing; however, the units appeared to be in good condition, and there were no indications that historical releases had occurred.

Natural gas is provided to the general area of the Site with supply lines present along the public roadways. While noting the availability of the public utilities, the two boiler rooms which heat the building are powered by steam with ventilation present at each level of the building. As a commercial office building, the entire structure is also air conditioned with dedicated condensing units.

Sanitary sewer is provided to the area by the City of Lansing with municipal water serviced by the Lansing Board of Light and Water.

Solid waste is not currently being generated at the Site as a result of vacancy of any on-going operations. Visually, MTC observed general office equipment and supplies (chairs, tables, televisions, etc.) throughout the building. Small waste bins were located throughout the building which consisted of general refuse.

Scattered solid waste debris blown from adjacent properties was noted by MTC at the time of the site reconnaissance. Such blown waste and debris is not considered as posing a significant potential for

environmental concern to the Site. Visually, MTC did not observe any indications of recent or historical burying of solid wastes on the property.

SURROUNDING PROPERTIES:

Visually, MTC did not observe any outward appearance of a potential for environmental impact to the Site from immediately adjacent, or adjoining properties. There was no outward appearance of outside drum storage, ASTs or USTs noted during the area reconnaissance.

The lack of information regarding the gasoline station that was previously operational in the area of the existing Ellis Parking Ramp (205 W. Allegan) as well as the former Crown Gasoline Service Station that was present at 232 S. Capitol Avenue from the 1950s through at least 1972 is considered as a REC. While MTC was able to obtain copies of environmental investigations conducted at the properties that documented impacts to soil and groundwater, no further information was made available through a review of the public record. We were not able to determine if the tanks had been removed, if the contaminants had been properly delineated or if the DEQ had issued site closures for either property indicating the impacted areas had been adequately mitigated. Both of the properties are topographically upgradient of the Site and with a presumed groundwater flow direction to the east, towards the Grand River. The potential exists that contaminated groundwater, if present, may migrate towards or under the Site and allow for vapor intrusion at the Site.

The Accident Fund of Michigan site at 231 S. Capitol Avenue is currently identified as an Open LUST site, meaning that the release of gasoline products had not been appropriately addressed to DEQ satisfaction. However, it appears that the impacted media was limited to the soil profile with only minor quantities of VOCs being detected in groundwater. While noting such conditions, the property is topographically cross gradient of the Site. Accordingly, the release conditions associated with the Accident Trust Fund of Michigan would not appear to pose any significant potential for environmental impact at the Site and would not be considered as a REC.

The regulatory database did not identify any other regulated facilities for which uncontrolled and/or un-remediated conditions were deemed as having a significant potential impact to the subject property based on the factors that included: 1) location relative to the Site; 2) topography; 3) groundwater flow direction to the east; 4) the absence of any identified release condition, and 5) the degree to which any identified release had previously been reported, assessed to define the extent of migration, initiated remedial actions, and/or for which a determination of No Further Action had been made.

Based upon the aforementioned and information gathered from reasonably ascertainable sources, other than the former gasoline station located in the area of the current Ellis Parking Ramp and the Former Crown Gasoline Service Station, there would not appear to be any conditions that would warrant further investigations with respect to off-site sources.

Releases on the Site or on adjoining properties are likely to migrate vertically until contact with groundwater and then laterally in the downgradient direction. Shallow groundwater generally flows in directions parallel to the natural ground surface slopes toward points of discharge such as rivers, creeks, swamps, drainage swales, or pumped groundwater wells. Localized shallow groundwater flow direction

can differ from regional groundwater flow direction depending on the presence of significant subsurface features, extent of groundwater pumping conducted in close proximity of the site and seasonal precipitation levels. Based upon topography and previous environmental reports completed in the area have determined shallow groundwater flow direction to be to the east toward the Grand River, located approximately 0.20 miles east of the Site.

CONCLUSIONS, OPINIONS AND RECOMMENDATIONS

Any exceptions to or deletions from the specific protocols established by ASTM have been discussed in Section 11.0 of this Report. **In summary, the following Recognized Environmental Conditions (RECs) were identified in connection with the Site:**

- **Former gasoline service station at 205 W. Allegan Street (currently The Ellis Parking Ramp) –** The Ellis Parking Ramp was constructed circa 1973 as a 6-level public parking structure located at 205 W. Allegan Street. Prior to development of the parking ramp, the area served as the location for a gasoline service station from the 1950s and 1960s and included two gasoline UST systems. A review of historical information revealed a Baseline Environmental Assessment (BEA) was completed in 2002 by AKT Peerless that documented impacted soils in the area of the USTs. These soils contained the following petroleum hydrocarbons: xylenes, ethylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and sec-butylbenzene at concentrations above the Part 201 Generic Cleanup Criteria for residential land use. While noting soil samples collected as a part of the investigation, groundwater samples were not obtained. MTC was not able to obtain any other information regarding if the USTs were abandoned, if any further site activities were performed or if a site closure had been issued by the DEQ.

- **Former Crown Gasoline Service Station –** Prior to the current development at 232 S. Capitol Avenue with the existing multi-story Blue Cross Blue Shield Care Network of Michigan building, the area served as the location for the Crown Gasoline Service Station 1950s through at least 1972. A subsurface investigation was conducted which identified petroleum hydrocarbon constituents (benzene, toluene, ethylbenzene and xylenes, collectively known as BTEX) in soils to a depth of approximately 25 feet. Water samples collected with the perched zone indicated benzene at a concentration of 170 parts per billion. Given relatively high concentrations within soils present to the north and northeast of the building, it was not determined whether the contamination was from a historical release from UST systems at the property or from the former filling station to the north (Ellis Parking Structure, 205 W. Allegan). MTC was not able to obtain any additional information documenting if the USTs had been removed, if further investigation was conducted for proper horizontal and vertical delineation of the plume or if a Site Closure has been issued by the DEQ.

2.0 INTRODUCTION

2.1 Purpose

The Site consists of two land parcels (33-01-01-16-328-001 and 33-01-01-16-328-011), which total approximately 0.38-acres, situated at the southeast corner of W. Allegan Street and S. Capitol Avenue. The northern portion of the Site is most commonly known as the Billie S. Farnum Building which served as the location for the Michigan State Senate from 1979 to 2016. The southern part of the Site includes a paved parking lot which is accessible from S. Capitol Avenue. The Site has been vacant of any operations since senate activities ceased in 2016.

MTC understands that the Site is being considered for sale by the owner, the State of Michigan. Accordingly, the Michigan Department of Technology, Management and Budget (DTMB) has retained MTC to conduct a Phase I ESA for the purpose of identifying any Recognizable Environmental Conditions (RECs) which may result in the need for environmental assessment or potential clean-up action.

The following Report presents the information obtained during the investigation and provides findings, opinions and conclusions based upon the information.

2.2 Scope of Services

This Phase I Environmental Site Assessment was performed using the ASTM document ASTM E 1527-13 and the All Appropriate Inquiry (AAI) standard codified at 40 CFR 312.

The following services were provided for the Assessment:

- A review of published topographic and geologic maps, soils and hydrologic reports, and other nearby site reports or observations to characterize area drainage;

- A review of available documents, historical Sanborn Fire Insurance Maps, historical aerial photography, city directory listings, municipal records, maps, aerial photographs for the Site and surrounding properties, and interviews with knowledgeable persons regarding current and historical uses of the Site and adjacent properties;

- A review of environmental databases for sites that fall within the search radii that are published in the Standard. Such databases are periodically published by local, state and federal agencies, and have been summarized by Environmental Data Resources (EDR), included as Appendix D. For sites identified by the databases as having the likelihood for environmental impact to the Site, additional information may have been obtained from a review of site-specific files maintained by Department of Environmental Quality through submittal of a Freedom of Information Act (FOIA) form;

- A site and adjacent property reconnaissance for obvious indications of present or past activities that have or could have contaminated the subject property. Photographs of pertinent observations were obtained and have been presented in Appendix A, and

- Preparation of this Report presenting our findings and conclusions.

2.3 Significant Assumptions

The following assumptions are made by MTC in this report. MTC relied on information derived from secondary sources including governmental agencies, the client, designated representatives of the client, property contact, property owner, property owner representatives, computer databases, and personal interviews. MTC has reviewed and evaluated the thoroughness and reliability of the information derived from secondary sources. It appears that all information obtained from outside sources and reviewed for this assessment is thorough and reliable. However, MTC cannot guarantee the thoroughness or reliability of this information.

Groundwater flow, unless otherwise specified by on-site well data or well data from the Site or nearby sites, is inferred from ground level contour information depicted on the USGS topographic maps. MTC assumes the property has been correctly and accurately identified by the client, designated representative of the client, property contact, property owner, and property owner's representatives.

2.4 Limitations

Property conditions, as well as local, state, tribal and federal regulations, can change significantly over time. Therefore, the recommendations and conclusions presented as a result of this assessment apply strictly to the environmental regulations and property conditions existing at the time the assessment was performed. Available information has been analyzed using currently accepted assessment techniques and it is believed that the inferences made are reasonably representative of the property. MTC makes no warranty, expressed or implied, except that the services have been performed in accordance with generally accepted environmental property assessment practices applicable at the time and location of the assessment.

Considerations identified by ASTM as beyond the scope of a Phase I ESA that may affect business environmental risk at a given property include the following: asbestos containing materials (ACMs), radon, lead-based paint (LBP), lead in drinking water, wetlands, regulatory compliance, cultural and historical resources, industrial hygiene, health and safety, ecological resources, endangered species, indoor air quality, mold, and high voltage lines. These environmental issues or conditions may warrant assessment based on the type of the property transaction; however, they are considered non-scope issues under ASTM Standard Practice E1527-13.

If requested by the client, these non-scope issues are discussed herein. Otherwise, the purpose of this assessment is solely to satisfy one of the requirements for qualification of the innocent landowner defense, contiguous property owner or bona fide prospective purchaser under CERCLA. ASTM Standard Practice E1527-13 and the United States EPA Standards and Practices for All

Appropriate Inquiries (40 CFR Part 312) constitute the "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in:

1) 42 U.S.C. § 9601(35)(B), referenced in the ASTM Standard Practice E1527-13.
2) Sections 101(35)(B) (ii) and (iii) of CERCLA and referenced in the EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312).
3) 42 U.S.C. § 9601(40) and 42 U.S.C. § 9607(q).

The Phase I ESA is not, and should not be construed as, a warranty or guarantee about the presence or absence of environmental contaminants that may affect the property. Neither is the assessment intended to assure clear title to the property in question. The sole purpose of assessment into property title records is to ascertain a historical basis of prior land use. All findings, conclusions, and recommendations stated in this report are based upon facts, circumstances, and industry-accepted procedures for such services as they existed at the time this report was prepared (i.e., federal, state, and local laws, rules, regulations, market conditions, economic conditions, political climate, and other applicable matters). All findings, conclusions, and recommendations stated in this report are based on the data and information provided, and observations and conditions that existed on the date and time of the Site reconnaissance.

Responses received from local, state, or federal agencies or other secondary sources of information after the issuance of this report may change certain facts, findings, conclusions, or circumstances to the report. A change in any fact, circumstance, or industry-accepted procedure upon which this report was based may adversely affect the findings, conclusions, and recommendations expressed in this report.

2.5 Special Terms and Conditions

No special terms or conditions apply to this Phase I Environmental Site Assessment.

2.6 User Reliance

All reports, both verbal and written, are for the use and benefit of the Michigan DTMB. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of MTC. Either verbally or in writing, third parties may come into possession of this report or all or part of the information generated as a result of this work. In the absence of a written agreement with MTC granting such rights, no third parties shall have rights of recourse or recovery whatsoever under any course of action against MTC, its officers, employees, vendors, successors or assigns. Reliance is provided in accordance with MTC's Proposal and General Conditions. The limitation of liability defined in the General Conditions is the aggregate limit of MTC's liability to the client and all relying parties.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The Site, identified by addresses 123 W. Allegan Street (Farnum Building) and 215 S. Capitol Avenue (parking lot) consists of two land parcels (33-01-01-16-328-001 and 33-01-01-16-328-011) which total approximately 0.38-acres. The Farnum Building is identified as being owned by the State of Michigan Real Estate Management with the adjacent rear parking lot noted as being under ownership of the Michigan State Senate, according to information presented on property record cards, as obtained in the Office of the Ingham County Recorder. The legal description for the Site is as follows:

123 W. Allegan Street – The East 30 feet of the West 78 feet of the North 100 feet of Lots 11 and 12 and the North 100 feet of the West 48 feet of Lots 11 and 12, Block 115, Original Plat, City of Lansing, Ingham County, Michigan, according to the recorded plat thereof.

215 S. Capitol Avenue – The North 32 5/6 feet of Lot 10 and the South 21 feet of Lot 11, Block 115, Original Plat, City of Lansing, Ingham County, Michigan, according to the recorded plat thereof.

3.2 Site and Vicinity General Characteristics

The existing structure at the Site was constructed in 1959 as a 10-level office building which has been primarily used by the Michigan State Senate (1979-2016). MTC notes the structure was originally developed for use by the Michigan National Bank (now the Boji Tower) located to the north, across W. Allegan Street, in which an underground tunnel extending underneath the roadway connects the two structures. Current surrounding property use is exclusively commercial facilities (parking structures, law school, restaurants, shopping centers) while noting the Michigan State Capitol just northwest of the intersection of Allegan Street and Capitol Avenue. MTC notes the area has been developed with commercial and historically, residential houses, dating back to at least 1885.

Electrical services for the area are present as subsurface transmission lines along the public roadways (typically vaulted). Natural gas transmission lines are underground within easements along existing roadways. However, it should be noted that the structure contains two boiler rooms which utilize steam as a source of heat. Sanitary sewer is provided to the area by the City of Lansing with municipal water serviced by the Lansing Board of Light and Water.

3.3 Current Use of the Property

The Michigan State Senate ceased operations in 2016 and the structure has remained vacant since that time with no on-going operations or activities being conducted at the location.

3.4 Descriptions of Structures, Roads, Other Improvements

The Site consists of two land parcels which total approximately 0.38-acres situated at the southeast corner of W. Allegan Street and S. Capitol Avenue in the downtown business district of Lansing, Michigan. The northern parcel (33-01-01-16-328-001), currently identified as the Billie S. Farnum Building, was constructed in 1959 as a 10-level commercial office building which includes basement and penthouse (11th level) mechanical and boiler room facilities. The majority of the building has been designed with various committee and conference rooms, office space and general administrative spaces that have been complete with typical finishes (tile floor, carpet, standard hung drywall and drop ceilings). The building also includes three passenger elevators for vertical movement to upper levels of the building. A hydraulic elevator system has also been installed within the building for freight transportation. The building has undergone numerous renovation activities throughout the 1990s and 2000s. Historical development of the Site, prior to the existing structure consisted of commercial retail storefronts dating from the 1950s to the early 1900s in which a residential house existed at the location dating to at least the late 1800s.

The southern parcel (33-01-01-16-328-011) serves as a paved parking lot for the building inclusive of 23 automotive parking spaces which are accessible via S. Capitol Avenue, to the west. Historically, the southern parcel was developed with a structure that served for commercial purposes and was later transitioned to a banking facility prior to demolition in the 1970s.

Roadway maintenance for the area of the site is performed through a combination of the City of Lansing and Ingham County. Stormwater runoff along roadways is addressed through concrete curbing with directed flow towards stormwater grates for collection within the City of Lansing stormwater collection system.

3.5 Current Uses of Surrounding Properties

Direction from Site	Tenant/Use (Address)	Regulatory Database Listing(s)
North	Boji Tower – 124 W. Allegan Street	N/A
East	Commercial Retail Storefronts	N/A
South	Cooley Law School – 217 S. Capitol Ave	N/A
West	Ellis Parking Ramp – 205 W. Allegan Street	BEA

4.0 User Provided Information

4.1 Chain of Ownership

No chain of ownership was provided for this report.

4.2 Environmental Liens

Mr. Judson Sorensen, as representative of the Michigan DTMB, was not aware of any environmental liens associated with the Site.

MTC did not identify any environmental liens associated with the Site during review of public records. There were no identified activity use limitations specific to the Site.

4.3 Specialized Knowledge

Mr. Sorenson had indicated that the Site, while currently vacant, most recently served as the location of the Michigan State Senate. Mr. Sorensen only maintained limited knowledge of the Site and noted that prior to sale of the building, a Phase I ESA was being requested. Accordingly, there would be no specialized knowledge on the part of Mr. Judson Sorensen.

4.4 Commonly Known or Reasonable Ascertainable Information

Only commonly known or reasonably ascertainable information was used in preparation of this Report. Such information included publicly available information contained within the regulatory files (federal and state) that have been summarized and presented as part of the regulatory database, as well as additional information available through a review of state environmental files on the obtained through a Freedom of Information Act (FOIA) submittal, and/or localized information available from the Ingham County Health Department. Other observations are the direct result of interviews with the parties involved with the transaction and/or observed as part of a site and area reconnaissance effort.

4.5 Valuation Reduction for Environmental Issues

Mr. Judson Sorensen, as representative of the Michigan DTMB, was not aware of any environmental concerns that have resulted in a reduction in the purchase price of the Site.

4.6 Owner, Property Manager, and Occupant Information

According to records available from the Ingham County Tax Assessor, the Site is identified as being owned by the State of Michigan Real Estate Management (Farnum Building) with the adjacent rear parking lot noted as being under ownership of the Michigan State Senate. As previously mentioned, the Site has been vacant since 2016 in which the Michigan State Senate operated at the location dating to 1979. Given such vacancy, limited maintenance of the building and parking lot would be the responsibility of the owner.

4.7 Reason for Performing Phase I ESA

As previously mentioned, the Site is being considered for sale by the owner, the State of Michigan. As a part of the sale, the Michigan DTMB is providing potential purchasers with a copy of a Phase I ESA as a part of the due diligence process. Accordingly, Michigan DTMB has retained MTC to assess the site relative to RECs that could materially impact the future use of the subject property or result in significant cost implications for future environmental clean-up.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

MTC contracted Environmental Data Resources (EDR) to conduct a search of publicly available information from federal, state, tribal, and local databases containing known and suspected sites of environmental contamination and sites of potential environmental significance. Data gathered during the current regulatory database search is compiled by EDR into one regulatory database report. Location information for listed sites is designated using geocoded information provided by federal, state or local agencies and commonly used mapping databases with the exception of "Orphan" sites. Due to poor or inadequate address information, Orphan sites are identified but not geocoded/mapped by EDR, rather, information is provided based upon vicinity zip codes, city name, and state. A copy of the regulatory database report is included as Appendix D of this report.

MTC reviewed information within the EDR Radius Map report and MDEQ records for the Site and select properties that may have impacted or pose a potential for environmental impact to the Site. Summaries of the reports and documents reviewed are provided in Section 5.2.

5.2 Summary of Environmental Records

As described in Section 5.1, the regulatory database and MDEQ environmental files were reviewed with respect to documents, correspondence and other pertinent information of potential environmental concerns, releases and on-site inspections for the Site and surrounding properties. Documents deemed to be relevant for the purpose of this assessment are briefly summarized herein and provided for review in Appendix E.

Ellis Parking Ramp – 205 W. Allegan Street

The Ellis Parking Ramp was constructed circa 1973 as a 6-level public parking structure located at the southwest corner of W. Allegan Street and S. Capitol Avenue with the address: 205 W. Allegan Street. Historically, the address was associated with nearly the entire commercial block and included several lots to west and southwest of the Ellis Parking Ramp. More recently the parcel has been subdivided with the address being solely associated with the parking ramp. In 2002 a Baseline Environmental Assessment (BEA) was completed by AKT Peerless Environmental Services (AKT Peerless) due to on-site contamination documenting the property was a *facility*, meaning that contamination was identified above DEQ cleanup criteria. AKT Peerless had initially completed a Phase I Environmental Site Assessment (ESA) which concluded with the following Recognized Environmental Conditions (RECs):

(1) The adjoining property to the east and south at 232 South Capitol Avenue was identified as a SHWS. Subsurface investigations at the property indicate the presence of contamination at the site. Historical investigation indicates the property was occupied by a gasoline (filling) station and commercial building with gasoline tanks from approximately 1945 to at least 1972.
(2) The southern portion of the property was occupied by a dry cleaner for at least 10 years in the 1950's.

(3) The past use of the eastern and southern portions of the property included a repair and service stations in the 1920's and 1930's.
(4) The past use of an adjoining property to the south beyond Washtenaw and west beyond Townsend Street included a service station.
(5) During completion of the site visit a UST vent and fill pipe were observed on the adjoining property to the south and east.
(6) The northwestern and northeastern portions of the property were occupied by churches. The churches were demolished in the late 1960's and 1970's and fill material was likely brought to the property following demolitions to restore grade. It is unknown where the fill material was obtained.

Given the identified RECs, AKT Peerless performed a Phase II ESA to determine if the property had been impacted by such historical activities conducted at the location. Soil samples were collected from a total of 14 locations across the property with three borings being converted to temporary wells for collect groundwater samples. While noting the six RECs identified above, MTC will focus Phase II ESA information related to the Ellis Parking Ramp for purpose of this Phase I ESA, as necessary. As previously mentioned, a gasoline service station was located there that included two gasoline underground storage tanks (USTs), were located along the eastern portion of the property where the parking ramp now exists. During the investigation of the former gasoline station, soil samples collected in the area of the USTs exhibited the following petroleum hydrocarbons: xylenes, ethylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and sec-butylbenzene, at concentrations above the Part 201 Generic Cleanup Criteria for residential land use. In total, five soil borings were installed in the area of the former gasoline station. AKT Peerless had transitioned one of the borings to a temporary well; however, a significant source of groundwater was not obtained so a sample was not collected. MTC was not able to obtain any other information regarding further site activities or site closure issued by the DEQ.

Former Crown Gasoline Service Station – 232 S. Capitol Avenue

Prior to the current development of the property as a multi-story Blue Cross Blue Shield Care Network of Michigan building, the area served as the location for a gasoline service station from the 1950s through the 1960s. MTC was able to review a copy of a Phase I ESA completed in 1994 by Soils and Materials Engineers, Inc. (SME) that indicated several UST systems had existed at the location. The Phase I ESA also noted the location had previously been used for various dry cleaning activities. Based upon information obtained during the Phase I ESA, additional investigation was completed, which consisted of 11 soil borings completed across the property ranging from a depth of 20 to 30 feet. The borings were primarily advanced to the north and northeast of the building, and had identified petroleum hydrocarbon constituents (BTEX) within soils to a depth of approximately 25 feet. SME indicated perched groundwater was located at approximately 28.5 feet, and water samples were collected with the perched zone indicated benzene at a concentration of 170 parts per billion. Given relatively high concentrations within soils present to the north and northeast of the building, SME was not able to identify whether the contamination was from a historical release from UST systems at the property or from the former filling station to the north.

MTC was not able to obtain any further information regarding further investigation, delineation or site closure at the Crown Gasoline Station.

Accident Fund of Michigan – 231 S. Capitol Avenue

Through a review of the regulatory database, the Accident Fund of Michigan site at 231 S. Capitol Avenue was identified with Open LUST conditions with a release being reported (leak number C-1327-01) on October 18, 2001. MTC subsequently obtained a copy of the BEA completed in 2001 by SME which indicated historical use of the property for many operations including dry cleaning activities, commercial banking as well as previous use as a gasoline service station from approximately 1926 through 1951. According to SME's reports, the site was complete with two dispenser islands and gasoline UST systems. The reports did not identify how many USTs were utilized by the gasoline station. Given the historical presence of the station, SME advanced five soil boings for collection of soil and groundwater samples. The investigation identified volatile organic compounds (VOCs) in soils above the MDEQ residential cleanup criteria. Groundwater samples collected exhibited minor detections of VOCs, which were not identified above the most restrictive residential cleanup criteria. MTC was not able to obtain any further information regarding site closure noting that the property is currently classified with Open LUST conditions.

5.3 Physical Setting

Geology: According to information obtained from the USDA Soil Conservation Service's database SSURGO, the near-surface soils in the area are classified as Urban land-Marlette complex, 2 to 12 percent slopes.	
USGS Topographic Map:	Lansing South, MI – 2014
Nearest surface water to Site:	Grand River – 0.2 Miles East of Site
Gradient Direction / Source	East – Topographic map interpretation
Estimated Depth to Groundwater / Source:	Approximately 28.5 feet; Previous environmental reports completed for the area

5.4 Historical Use Information on the Property

5.4.1 Sanborn Fire Insurance Maps

Historical Sanborn Fire Insurance Maps were available for the area of the Site through EDR. Years available included 1888, 1892, 1898, 1906, 1913, 1951, 1953, 1966 and 1972. Copies of Sanborn Maps are provided as Appendix C.

Year	GENERAL DESCRIPTION
1885 – 1906	A residential structure appears to be present at the site, identified as 119 W. Allegan Street. The southern parcel for the Site appears to have been developed with the Masonic Temple building in 1906.
1913	The residential dwelling remains at the location. A 3-level commercial office building (123 W. Allegan Street) has been built as well as automotive parking garage along the southern portion of the Site.

1951 – 1953	The residential structure appears to have been demolished with several stores being constructed in the same location. The 3-level commercial office building is also being used for residential purposes. Addresses for the retail storefronts were identified as 125, 127 and 129 W. Allegan Street as well as 205 and 207 S. Capitol Avenue. The structure at the southern parcel was identified as the Veteran's War Memorial.
1966 – 1972	All structures previously present at the Site have been demolished. According to the maps, a 10-level commercial building has replaced the former structure (consistent with current date) which was identified as the Stoddard Building. The building was constructed in 1959 as a concrete and steel frame building with metal panel exterior which included three elevators to access upper level office space. The structure at the southern parcel appears to have been transitioned to a drive-thru commercial bank.

5.4.2 Aerial Photos

A number of aerial photos of the general area of the Site were available through EDR. The descriptions for each photo reviewed are written below. Years available included dated 1938, 1950, 1956, 1963, 1970, 1976, 1981, 1993, 2005, 2006, 2009, 2010 and 2012. Copies of the Aerials are provided as Appendix B.

Aerial Year	GENERAL DESCRIPTION
1938 – 1956	The Site appears to be developed with various commercial retail storefronts with the southern parcel developed with the Masonic Temple facility.
1963 – 1970	The commercial structures appear to have been demolished with subsequent redevelopment with the existing 10-level structure. The Masonic Temple facility has been demolished and redeveloped as a commercial bank with drive-thru facilities.
1976	While noting poor clarity and resolution, it appears that the bank has been demolished with the area being redeveloped with a paved parking lot.
1981 – 2012	While noting a long duration of time from the 1981 through 2012, the general area of the Site appears to be consistent with that of current date.

5.4.3 City and County Directories

A search of Historical City Directories for the Site (123 W. Allegan Street) was conducted by EDR from 1906 through 2014. It should be noted that the paved parking lot to the south of the building (215 S. Capitol Ave) was not listed within the city directories. The results of our review are provided below.

123 W. Allegan Street

YEAR	OCCUPANT
2000 – 2014	Not Listed in Directory
1995	Michigan Senate
1963 – 1992	Not Listed in Directory
1953 – 1958	James Building

1948	Surplus Market
1934 – 1945	Vacant
1916 – 1928	Freeman & Seth James
1906 – 1910	Not Listed in Directory

Through a review of Sanborn Fire Insurance Maps, MTC was able to identify additional addresses that were historically associated with the Site. MTC had also contracted EDR to perform a search of the addresses which are summarized below, as follows:

125 W. Allegan Street

YEAR	OCCUPANT
1992 – 2014	Michigan Senate
1982 – 1987	Billie S. Farnum Building
1963 – 1977	Stoddard Building
1958	Harrison Barber Shop
1945 – 1953	Christian Science Reading Room
1940	Residential
1934	Stratton Insurance Agency
1925 – 1928	Allen Beauty Shop
1906 – 1919	Not Listed in Directory

127 W. Allegan Street

YEAR	OCCUPANT
1945	Michigan National Bank
1934 – 1940	Industrial Bank
1925 – 1928	Electric Utilities Corporation
1906 – 1919	Residential

129 W. Allegan Street

YEAR	OCCUPANT
1945	Michigan National Bank
1934 – 1940	Industrial Bank
1928	Electric Utilities Corporation
1925	Not Listed in Directory
1906 – 1919	Residential

5.4.4 Ownership History

No chain of ownership was provided for this Report.

5.4.5 Other Records of Historical Use

No other historical records were identified for the Site.

5.5 Historical Use Information on Adjoining Properties

5.5.1 Sanborn Fire Insurance Maps

Historical Sanborn Fire Insurance Maps were available for the general area surrounding the Site through EDR. Years available included 1888, 1892, 1898, 1906, 1913, 1951, 1953, 1966 and 1972. Copies of Sanborn Maps are provided as Appendix C.

Year	GENERAL DESCRIPTION
1885	North: Residential dwellings (114 and 118 W. Allegan) East: Vacant land with commercial office space and retail storefronts further east South: Vacant West: No coverage by EDR
1892	North: Similar to the 1885 Sanborn Map East: Similar to the 1885 Sanborn Map South: Residential dwellings have been developed along S. Capitol West: The Presbyterian Church has been constructed while noting 2 residential dwellings (200 and 204 S. Capitol)
1898	North: Similar to the 1885 Sanborn Map East: Similar to the 1885 Sanborn Map South: Similar to the 1892 Sanborn Map West: Similar to the 1892 Sanborn Map
1906	North: The dwelling at 114 W. Allegan has been demolished and redeveloped as a bowling alley East: Commercial facilities (111-117 W. Allegan) have been constructed South: Between the Site and the residential dwellings along S. Capitol, the Masonic Temple has been built West: Similar to the 1892 Sanborn Map
1913	A surrounding property appears to be generally consistent with that of that of the 1906 Sanborn Map
1951	North: The residential home at 118 W. Allegan has been demolished with the Olds Tower Building having been constructed South: The Veteran's War Memorial structure (211 S. Capitol) has been constructed to the immediate south of the Site East: Increased commercial development West: The church and residential structures have been demolished. The area has been redeveloped with automotive parking structures (210 and 2016 S. Capitol). At the front of the structures is a small area identified as a filling station which included 2 underground storage tanks. There was also a ground level parking lot identified by address 201 W. Allegan St.
1953	Similar to that described in the 1951 Sanborn Map
1966	North: Similar to the 1953 Sanborn Map South: Similar to the 1953 Sanborn Map

	East: Similar to the 1953 Sanborn Map West: It appears that the parking structures and filling station have been demolished with the area being used for ground level parking to the Plymouth Conglomerate Church to the west. The gasoline storage tanks associated with the filling station were not noted on the 1996 Sanborn Map.
1972	Similar to that described in the 1966 Sanborn Map

5.5.2 Aerial Photos

A number of aerial photos of the general area surrounding the Site were available through EDR. The descriptions for each photo reviewed are written below. Years available included dated 1938, 1950, 1956, 1963, 1970, 1976, 1981, 1993, 2005, 2006, 2009, 2010 and 2012. Copies of the Aerials are provided as Appendix B.

Aerial Year	GENERAL DESCRIPTION
1938	The general area surrounding the Site appears to be developed with high-rise commercial structures noting the presence of the Michigan State Capitol building to the northwest.
1950 – 1956	Through a review of the aerial photograph and historical Sanborn Maps, it appears that both the gasoline station at future location of the Ellis Parking Ramp and the Crown Gasoline station (232 S. Capitol Avenue) have been constructed. Also, the gasoline station present at 231 S. Capitol Street is visible on the 1950 aerial photograph.
1963	While noting consistent surrounding property use, it appears that the structure adjacent to the Ellis Parking Ramp that was used as a gasoline station has been demolished. The gasoline station at 231 S. Capitol Avenue has been demolished and exists as a parking lot.
1970 – 1981	Overall, there appears to be some light development in the area and transitioning to existing buildings.
1993	The area of the Crown Gasoline Station at 232 S. Capitol appears to have been developed with the existing Blue Cross Blue Shield high-rise building. The Ellis Parking Ramp (205 S. Capitol Ave) has been constructed.
2005 – 2012	While noting minor changes to existing structures and parking lots in the general area surrounding the Site, overall property use and construction appears to be consistent with that of current date.

5.5.3 City and County Directories

A search of several historical city directory sources from 1906 through 2014 for areas in general proximity of the Site was performed by EDR (Figure 2 – Area Site Use for location relative to the subject property). MTC has summarized select surrounding properties in the following table, as follows:

ADDRESS	DIRECTION FROM SITE	YEAR	OCCUPANT
115 W. Allegan St	East	1992 – 2014	Professional Offices

		1987	Capitol Hall
		1919 – 1982	Bausch Building
		1906 – 1916	Dr. Bausch
205 W. Allegan St	West	2014	Not Listed in Directory
		2010	Boil Tower ISED LLC
		2005	Not Listed in Directory
		1992 – 2000	Ellis Parking
		1906 – 1987	Not Listed in Directory
217 S. Capitol Ave	South	2005 – 2014	Lansing Teen Court
		2000	Ingham County Bar Association
		1995	Thomas Cooley Law School
		1906 – 1990	Not Listed in Directory
224 S. Capitol Ave	West	1972 – 2014	Not Listed in Directory
		1967	Vacant
		1963	Not Listed in Directory
		1940 – 1958	Crown Service Gasoline Station
		1906 – 1934	Residential
231 S. Capitol Ave	South	1987 – 2014	Ellis Parking
		1958 – 1982	Michigan National Parking
		1934 – 1953	Not Listed in Directory
		1928	Clark's Art Store
		1925	Not Listed in Directory
		1916 – 1919	Elmer Rice & Co.
		1906 – 1910	Not Listed in Directory
232 S. Capitol Ave	Southwest	2014	Blue Cross Blue Shield
		1992 – 2010	Professional Offices
		1953 – 1987	Michigan Accident Fund
		1928 – 1948	Wolverine Building
		1906 – 1925	Residential

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

The site reconnaissance effort was performed on January 23, 2018 by Joe Bolin of MTC. Mr. Bolin was not accompanied during the site reconnaissance.

Site photographs document the conditions observed during the site visit, as well as the surrounding property use (Appendix A). Adjoining properties were observed from the Site boundaries, or via tour of public rights-of-way or other public areas.

6.2 General Site Setting

The existing structure at the Site was constructed in 1959 as a 10-level office building which has been primarily used by the Michigan State Senate (1979-2016). MTC notes the structure was originally developed for use by the Michigan National Bank (now the Boji Tower) located to the north, across W. Allegan Street, in which an underground tunnel extending underneath the roadway connects the two structures. Current surrounding property use is exclusively commercial facilities (parking structures, law school, restaurants, shopping centers) while noting the Michigan State Capitol just northwest of the intersection of Allegan Street and Capitol Avenue. MTC notes the area has been developed with commercial and historically, residential houses, dating to at least 1885.

Electrical services for the area are present as subsurface transmission lines along the public roadways (typically vaulted). Natural gas transmission lines are underground within easements along existing roadways. However, it should be noted that the structure contains two boiler rooms which utilize steam as a source of heat. Sanitary sewer is provided to the area by the City of Lansing with municipal water serviced by the Lansing Board of Light and Water.

6.3 Site Observations

The Site consists of two land parcels which total approximately 0.38-acres situated at the southeast corner of W. Allegan Street and S. Capitol Avenue in the downtown business district of Lansing, Michigan. The northern parcel (33-01-01-16-328-001), currently identified as the Billie S. Farnum Building, was constructed in 1959 as a 10-level commercial office building which includes basement and penthouse (11th level) mechanical and boiler room facilities. The majority of the building has been designed with various committee and conference rooms, office space and general administrative spaces that have been complete with typical finishes (tile floor, carpet, standard hung drywall and drop ceilings). The building also includes three passenger elevators for vertical movement to upper levels of the building. A hydraulic elevator system has also been installed within the building for freight transportation. The building has undergone numerous renovation activities throughout the 1990s and 2000s. Historical development of the Site, prior to the existing structure consisted of commercial retail storefronts dating from the 1950s to the early 1900s in which a residential house existed at the location dating to at least the late 1800s.

The adjacent southern parcel (33-01-01-16-328-011) serves as a paved parking lot for the building inclusive of 23 automotive parking spaces which are accessible via S. Capitol Avenue, to the west. Historically, the southern parcel was developed with a structure that served for commercial purposes and was later transitioned to a banking facility prior to demolition in the 1970s.

Roadway maintenance for the area of the site is performed through a combination of the City of Lansing and Ingham County. Stormwater runoff along roadways is addressed through concrete curbing with directed flow towards stormwater grates for collection within the City of Lansing stormwater collection system.

The following conditions were specifically assessed for their potential for environmental concern:

6.3.1 Underground Storage Tanks

The Site was not identified by the regulatory database as a location for which UST systems were registered with the MDEQ. There were no indications of the presence of USTs (i.e. fill ports, vent pipes, dispensers, etc.) observed during the Site reconnaissance.

6.3.2 Aboveground Storage Tanks

AST systems were not identified during the site reconnaissance.

6.3.3 Hazardous and Petroleum Product Containers/Drums

The Site was not identified by the regulatory database search as a RCRA regulated facility for the generation, use, storage, transportation or disposal of hazardous wastes.

During the Site reconnaissance, MTC observed the presence of one 80-gallon steel container of Steamate NA701 which is a corrosion inhibitor believed to be added to the water for the steam heated boilers. The container was situated within a plastic cart that served as a secondary containment in the event of leakage or incidental spillage occurred noting a floor drain was located within close proximity of the container.

MTC also noted a hydraulic lift elevator adjacent to the three passenger elevators. Visually, MTC noted the elevator machine room within the basement near the boiler room facility. The elevator unit was constructed within a steel secondary containment structure to capture hydraulic oils that are used as a part of normal operations. Two 5-gallon pails of hydraulic fluid were noted adjacent to the elevator unit for replenishment, as needed. There did not appear to be any environmental concerns associated with the use of the hydraulic elevator system (i.e. no staining or floor drains).

MTC identified several areas that were being used for the staging of commercially available, common building maintenance and household cleaning supplies. There were no visual indications of any current or historical spills or releases associated with any of the areas of storage. The use of building maintenance and household cleansers, when used in accordance with the manufacturer's recommendations, do not present a significant potential for environmental impact and are therefore not considered a REC. There were no observed indications of any current or historical spills or releases associated with the storage areas.

6.3.4 Heating Fuels and Cooling Systems/Chemicals

Natural gas to the area of the Site is provided to the general area of the Site with supply lines present along the public roadways. While noting the availability of the public utilities, the two boiler rooms which heat the building are powered by steam with ventilation present at

each level of the building. As a commercial office building, the entire structure is also air conditioned with dedicated condensing units.

6.3.5 Solid Waste

Solid waste is not currently being generated at the Site as a result of vacancy of any on-going operations. Visually, MTC observed general office equipment and supplies (chairs, tables, televisions, etc.) throughout the building. Small waste bins were located throughout the building which consisted of general refuse.

Scattered solid waste debris blown from adjacent properties was noted by MTC at the time of the site reconnaissance. Such blown waste and debris is not considered as posing a significant potential for environmental concern to the Site.

Visually, MTC did not observe any indications of recent or historical burying of solid wastes on the property.

6.3.6 Sewage Disposal/Septic Tanks

Sanitary sewer to the area of the Site is provided by the City of Lansing. The building is currently connected to the municipal sanitary sewer service. MTC is aware that prior to commercial development in the early 1900s, the Site was previously used for residential purposes. A review of the Sanborn Maps identified a residential dwelling at the Site in 1885. A review of the Sanborn Maps did not indicate the municipal water lines were installed until 1892. It would appear that the sanitary sewer lines were installed at the same time. Given the historical residency at the Site, the potential exists that a on-site septic system had been installed at the location. MTC did not obtain any septic permits within the public record and note that if any systems were installed at the Site, it is likely that they were removed as a part of demolition and redevelopment activities.

6.3.7 Hydraulic Systems

As previously mentioned, a hydraulic lift elevator was identified within the building. At the base of the elevator, within the elevator machine room, MTC noted the secondary containment structure which stores hydraulic fluids. Visual observations did not suggest any historical spills or releases outside the containment had occurred. In-ground hydraulic systems were not observed during the site reconnaissance.

6.3.8 Contracted Maintenance Services

Contracted maintenance services are performed on an “as needed” basis for the Site.

6.3.9 Electrical Service/Transformers

Electrical transformers can be a source for PCB contamination in the event of fire, explosion or other releases. While many of the existing transformer units that historically contained PCBs as a contaminant of the di-electric fluid have been tested, replaced and/or drained; some units remain in service. The only means of verification of PCB content of di-electric fluids is through sample collection and analysis. In the absence of laboratory results or other specific knowledge of PCB concentration, di-electric fluids within electrical transformers should be considered as containing PCB (precautionary).

Electrical power is available to the area of the Site. Electrical service is present as underground transmission lines along the public roadways with lateral connection to a metered location along the exterior wall of the building. Visually, MTC identified the presence of transformer units within the boiler rooms as well one concrete pad-mounted transformer outside of the building, within the paved parking lot. MTC did not readily identify labeling on the units as non-PCB containing; however, the units appeared to be in good condition and there were no indications that historical releases had occurred.

6.3.10 Water Supply/Wells

Municipal water to the area of the Site is provided by the Lansing Board of Water and Light. The facility is currently and likely historically been connected to the municipal water supply since initial development in 1959. Historical development with commercial facilities in the early 1900s would have also likely been connected to the public utilities when constructed, however; the residential dwelling may predate the installation of the water lines in the late 1800s and, therefore, the possibility exists that the building may have used a water well as a source of potable water. During the Site reconnaissance, MTC did not identify any water wells and note any such systems would have likely been abandoned through subsequent redevelopment.

6.3.11 Drains and Sumps

Visually, MTC observed floor drains within the restrooms and utility closets present at each floor of the building. Floor drains were also noted within the boiler rooms. Drains within the boiler rooms appear to serve as the location for condensate generated through normal operation of the steam-powered boiler systems. MTC noted a green substance on the concrete floor of the basement boiler room which appears to be migrating and entering the floor drain located at the western portion of the area. It is believed that the green substance is corrosion from the copper coils present within the Hankison air drying unit (dehumidifier). MTC recommends periodic cleaning of the floor to remove the substance from the area. There were no indications of the illegal discharge of any process related chemicals to the drains.

6.3.12 Pits, Ponds, Lagoons, and Surface Waters

There were no pits, ponds, lagoons or surface water identified on the Site.

6.3.13 Areas of Staining

There were no areas of staining identified during the site reconnaissance that would pose significant potential for environmental impact. Staining on the concrete floor near the boiler room compressor units from cyclical blowdown was observed and noted as limited in nature and not in close proximity to any floor drains. Minor and incidental staining was generally limited to the boiler rooms and did not appear to pose any significant concerns. Staining outside of the building within the parking lot from incidental vehicular fluid leaks was not considered as posing a significant potential for environmental impact at the Site.

6.3.14 Stressed Vegetation

MTC did not observe the presence of any areas of stressed vegetation; however, it should be noted the Site is entirely covered by the building footprint.

6.3.15 Odors

No unusual odors were detected during the site reconnaissance.

6.3.16 Vapor Intrusion

The ASTM 1527-13 standard states that "for the purposes of this practice, "migrate" and "migration" refers to the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface". Thus, this section specifies whether or not we perceive a risk of vapor migration to the Site. To assess a vapor migration risk, we conducted a detailed review and analysis of the site-specific environmental database report and/or other reasonably ascertainable records to assess whether:

1. Off-site properties have documented chlorinated VOC soil contamination located within 100 ft of the Site, or
2. Off-site properties have documented petroleum VOC soil contamination within 30 ft of the Site.

There have been no documented releases with respect to the Site. Surrounding properties have consisted of various commercial operations dating to at least the early 1900s. MTC is aware of the historical releases from former gasoline stations that existed at the Ellis Parking Structure (205 W. Allegan) as well as the Crown Gasoline Service Station which formerly occupied the area of the existing Blue Cross Blue Shield Building at 232 S. Capitol Avenue. While environmental investigations have been conducted by SME for both locations, it doesn’t appear that proper horizontal and vertical delineation of contaminants has occurred,

nor has a No Further Action been issued by the DEQ. Accordingly, the potential for vapor intrusion may exist at the Site.

6.3.17 Wetlands

The National Wetland Inventory Maps, for the area of the subject site did not indicate the presence of jurisdictional wetlands (please refer to Figure 3). During the site reconnaissance, MTC did not observe the presence of vegetation that would be consistent with the presence of wetland areas.

6.3.18 Floodplains

According to the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Maps for Ingham County (All Jurisdictions), the Site was not located within a flood prone area (please refer to Figure 4).

6.4 Observations on Adjacent Properties

Visually, Materials Testing Consultants did not observe any outward appearance of a potential for environmental impact to the Site from immediately adjacent, or adjoining properties. There was no outward appearance of outside drum storage, ASTs or USTs noted during the area reconnaissance.

7.0 INTERVIEWS

7.1 Interview with Site Owner

MTC did not interview with the Site owner. We were able to speak with Mr. Judson Sorensen with the Michigan DTMB. Mr. Sorensen had indicated that the structure was identified as the Billie S. Farnum Building and had most recently served as the location for the Michigan State Senate. Mr. Sorensen was aware of asbestos material located throughout the building and had informed MTC that some historical abatement had occurred to address the issue. However, other than concerning asbestos containing materials within the building, Mr. Sorensen maintained no awareness of any other environmental concerns associated with the building or surrounding properties.

7.2 Interview with Key Site Manager

Refer to Section 7.1.

7.3 Interview with Site Occupant

Refer to Section 7.1.

7.4 Interview with Local Government Official

The Ingham County Health Department (ICHD) was contacted regarding environmental files associated with the Site. MTC was not able to obtain any documents from the ICHD.

7.5 Interview with Others

No additional interviews were conducted during completion of this Phase I Environmental Site Assessment.

8.0 FINDINGS

Phase I Environmental Site Assessment findings identify known or suspected environmental conditions associated with the Site including potential Recognized Environmental Conditions, Historical Recognized Environmental Conditions and Controlled Recognized Environmental Conditions, and *de minimis* conditions. Recognized Environmental Conditions are defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. A Historical REC is defined as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)." A Controlled REC (CREC) applies to sites that have received regulatory closure but are still subject to controls. *De minimis* conditions are those that are judged to not present a material risk of harm to health or the environment. Historical conditions include records of past releases that have been remediated to the satisfaction of the governing regulatory agency.

The following environmental conditions were identified during this investigation:

On Site:

The Site was not identified by the regulatory database as a location for which UST systems were registered with the MDEQ. There were no indications of the presence of USTs (i.e. fill ports, vent pipes, dispensers, etc.) observed during the Site reconnaissance.

The Site was not identified by the regulatory database search as a RCRA regulated facility for the generation, use, storage, transportation or disposal of hazardous wastes.

During the Site reconnaissance, MTC noted various boiler room chemicals and treatment substances, storage of hydraulic fluids used for service elevator as well as commercially available, common building maintenance and household cleaning supplies. MTC did not identify any areas posing significant concern with the storage or use of such materials as a part of normal operations.

Solid wastes are currently not generated at Site given that the building is vacant of any on-going operations. MTC identified the presence of typical office and administrative items located throughout the building that would not pose for environmental concern.

Staining identified inside and outside of the building was considered as a *de minimis* condition. Staining on the concrete floor near the boiler room compressor units from cyclical blowdown was observed and noted as limited in nature and not in close proximity to any floor drains. Minor and incidental staining was generally limited to the boiler rooms and did not appear to pose any significant concerns. Staining outside of the building within the parking lot from incidental vehicular fluid leaks was not considered as posing a significant potential for environmental impact at the Site.

There have been no documented releases with respect to the Site. Surrounding properties have consisted of various commercial operations dating to at least the early 1900s. MTC is aware of the historical releases from former gasoline stations that existed at the Ellis Parking Structure (205 W. Allegan) as well as the Crown Gasoline Service Station which formerly occupied the area of the existing Blue Cross Blue Shield Building at 232 S. Capitol Avenue. While environmental investigations have been conducted by SME for both locations, it doesn't appear that proper horizontal and vertical delineation of contaminants has occurred, nor has a No Further Action been issued by the DEQ. Accordingly, the potential for vapor intrusion may exist at the Site.

Off Site:

The Ellis Parking Ramp was constructed circa 1973 as a 6-level public parking structure located at 205 W. Allegan Street. Prior to development of the parking ramp, the area served as the location for a gasoline service station from the 1950s and 1960s which included two gasoline UST systems. A review of historical information revealed a Baseline Environmental Assessment (BEA) was completed in 2002 by AKT Peerless which described various RECs identified in the Phase I ESA and subsequent Phase II ESA activities involving collection of soil samples in the area of the USTs which exhibited the following petroleum hydrocarbons: xylenes, ethylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and sec-butylbenzene at concentrations above the Part 201 Generic Cleanup Criteria for residential land use. In total, five soil borings were installed in the area of the former gasoline station. AKT Peerless had transitioned one of the borings to a temporary well; however, a significant source of groundwater was not obtained so a groundwater sample was not collected. MTC was not able to obtain any other information regarding if the USTs were abandoned, if any further site activities were performed or site closure issued by the DEQ.

Prior to the current development at 232 S. Capitol Avenue with the existing multi-story Blue Cross Blue Shield Care Network of Michigan building, the area served as the location for the Crown Gasoline Service Station 1950s through at least 1972. MTC was able to review a copy of a Phase I ESA completed in 1994 by Soils and Materials Engineers, Inc. (SME) which indicated that several UST systems had existed at the location. Based upon information obtained during the Phase I ESA, additional investigation was completed which consisted of 11 soil borings that were completed across the property ranging from a depth of 20 to 30 feet. The borings were primarily advanced to the north and northeast of the building which had identified petroleum hydrocarbon constituents

(BTEX) within soils to a depth of approximately 25 feet. SME indicated perched groundwater was located at approximately 28.5 feet and water samples collected with the perched zone indicated benzene at a concentration of 170 parts per billion. Given relatively high concentrations within soils present to the north and northeast of the building, SME was not able to identify whether the contamination was from a historical release from UST systems at the property or from the former filling station to the north (Ellis Parking Structure, 205 W. Allegan). MTC was not able to obtain any additional information documenting if the USTs had been removed, if further investigation was conducted for proper horizontal and vertical delineation of the plume or if a Site Closure has been issued by the DEQ.

The Accident Fund of Michigan site at 231 S. Capitol Avenue was identified within the regulatory database with Open LUST conditions with a release being reported (leak number C-1327-01) on October 18, 2001. MTC subsequently obtained a copy of the BEA completed in 2001 by SME which indicated historical use of the property for many operations including dry cleaning activities, commercial banking as well as previous use as a gasoline service station from approximately 1926 through 1951. According to SME's reports, the site was complete with two dispenser islands and gasoline UST systems. The reports did not identify how many USTs were utilized by the gasoline station. Given the historical presence of the station, SME advanced 5 soil boings for collection of soil and groundwater samples. The investigation identified VOCs in soils above the MDEQ residential cleanup criteria. Groundwater samples collected exhibited minor detection of VOCs, which were not identified above the most restrictive residential cleanup criteria. MTC was not able to obtain any further information regarding site closure noting that the property is currently classified with Open LUST conditions.

9.0 OPINION

9.1 Contaminant Migration

Releases on the Site or on adjoining properties are likely to migrate vertically until contact with groundwater and then laterally in the downgradient direction. Shallow groundwater generally flows in directions parallel to the natural ground surface slopes toward points of discharge such as rivers, creeks, swamps, drainage swales, or pumped groundwater wells. Localized shallow groundwater flow direction can differ from regional groundwater flow direction depending on the presence of significant subsurface features, extent of groundwater pumping conducted in close proximity of the site and seasonal precipitation levels. Based upon topography and previous environmental reports completed in the area have determined shallow groundwater flow direction to be to the east toward the Grand River, located approximately 0.20 miles east of the Site.

9.2 Evaluation of Identified Environmental Conditions

1) On Site:

MTC did not identify any Recognizable Environmental Conditions (RECs) during the interior Site reconnaissance, noting the remaining portion of the Site is used for parking lot purposes.

2) Off Site:

The lack of information regarding the gasoline station that was previously operational in the area of the existing Ellis Parking Ramp (205 W. Allegan) as well as the former Crown Gasoline Service Station that was present at 232 S. Capitol Avenue from the 1950s through at least 1972 is considered as a REC. While MTC was able to obtain copies of environmental investigations conducted at the properties which documented impacts to soil and groundwater, no further information was made available through a review of the public record. We were not able to determine if the tanks had been removed, if the contaminants had been properly delineated or if the DEQ had issued site closures for either property indicating the impacted areas had been adequately cleaned up. Both of the properties are topographically upgradient of the Site and with a presumed groundwater flow direction to the east, towards the Grand River. The potential exists that contaminated groundwater, if present, may migrate towards or under the Site and allow for vapor intrusion at the Site.

The Accident Fund of Michigan site at 231 S. Capitol Avenue is currently identified as an Open LUST site, meaning that the release of gasoline products had not been appropriately addressed to DEQ satisfaction. However, it appears that the impacted media was limited to the soil profile with only minor quantities of VOCs being detected in groundwater. While noting such conditions, the property is topographically cross gradient of the Site. Accordingly, the release conditions associated with the Accident Trust Fund of Michigan would not appear to pose any significant potential for environmental impact at the Site and would not be considered as a REC.

The regulatory database did not identify any other regulated facilities for which uncontrolled and/or un-remediated conditions were deemed as having a significant potential impact to the subject property based on the factors that included: 1) location relative to the Site; 2) topography; 3) groundwater flow direction to the east; 4) the absence of any identified release condition, and 5) the degree to which any identified release had previously been reported, assessed to define the extent of migration, initiation of remedial actions, and/or for which a determination of No Further Action had been made.

Based upon the aforementioned and information gathered from reasonably ascertainable sources, other than the former gasoline station located in the area of the current Ellis Parking Ramp and the Former Crown Gasoline Service Station, there would not appear to be any conditions that would warrant further investigations with respect to off-site sources.

10.0 CONCLUSIONS

Materials Testing Consultants, Inc. (MTC) has performed a Phase I Environmental Site Assessment (Phase I) for the existing Billie S. Farnum Building at 123 W. Allegan Street and paved parking lot at 215 S. Capitol Avenue, in the downtown commercial business district of Lansing, Michigan.

Any exceptions to or deletions from the specific protocols established by ASTM have been discussed in Section 11.0 of this Report. **In summary, the following Recognized Environmental Conditions (RECs) were identified in connection with the Site:**

- **Former gasoline service station at 205 W. Allegan Street (currently The Ellis Parking Ramp) –** The Ellis Parking Ramp was constructed circa 1973 as a 6-level public parking structure located at 205 W. Allegan Street. Prior to development of the parking ramp, the area served as the location for a gasoline service station from the 1950's and 1960's which included 2 gasoline UST systems. A review of historical information revealed a Baseline Environmental Assessment (BEA) was completed in 2002 by AKT Peerless which documented impacted soils in the area of the USTs which exhibited the following petroleum hydrocarbons: xylenes, ethylbenzene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and sec-butylbenzene at concentrations above the Part 201 Generic Cleanup Criteria for residential land use. While noting soil samples collected as a part of the investigation, groundwater samples were not obtained. MTC was not able to obtain any other information regarding if the USTs were abandoned, if any further site activities were performed or site closure issued by the DEQ.

- **Former Crown Gasoline Service Station –** Prior to the current development at 232 S. Capitol Avenue with the existing multi-story Blue Cross Blue Shield Care Network of Michigan building, the area served as the location for the Crown Gasoline Service Station 1950s through at least 1972. A subsurface investigation was conducted which identified petroleum hydrocarbon constituents (BTEX) in soils to a depth of approximately 25 feet. Water samples collected with the perched zone indicated benzene at a concentration of 170 parts per billion. Given relatively high concentrations within soils present to the north and northeast of the building, it was not determined whether the contamination was from a historical release from UST systems at the property or from the former filling station to the north (Ellis Parking Structure, 205 W. Allegan). MTC was not able to obtain any additional information documenting if the USTs had been removed, if further investigation was conducted for proper horizontal and vertical delineation of the plume or if a Site Closure has been issued by the DEQ.

11.0 DEVIATION AND DATA GAPS

There were no significant deviations from the ASTM E 1527-13 identified during the completion of this Phase I Environmental Site Assessment.

The absence of a chain of title and interviewing with the site owner is considered a "data gap", however, information regarding historical ownership and environmental concerns associated with

the Site were obtained through other historical resources. While the absence of any information regarding further investigation of the former gasoline station at 205 W. Allegan and the former Crown Gasoline Station at 232 S. Capitol Avenue is a significant data gap, it is quite likely that additional information does not exist within the public record.

12.0 OTHER ENVIRONMENTAL CONSIDERATIONS

No other additional services (i.e. water sampling, lead-based paint survey, asbestos containing material survey, mold survey) were requested in association with this Phase I Site Assessment. These non-scope considerations are considered by ASTM E1527-13 as Business Environmental Risks, defined as "a risk which can have a material environmental or environmental-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice."

13.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONALS

The undersigned declare the following:

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined in 40 CFR Part 312, §312.10.

We have the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the Site and "develop opinions and conclusions regarding conditions indicative of releases or threatened releases." We have developed and performed the "all appropriate inquiries" (AAI) in conformance with the standards and practices set forth in 40 CFR Part 312.

Sincerely,

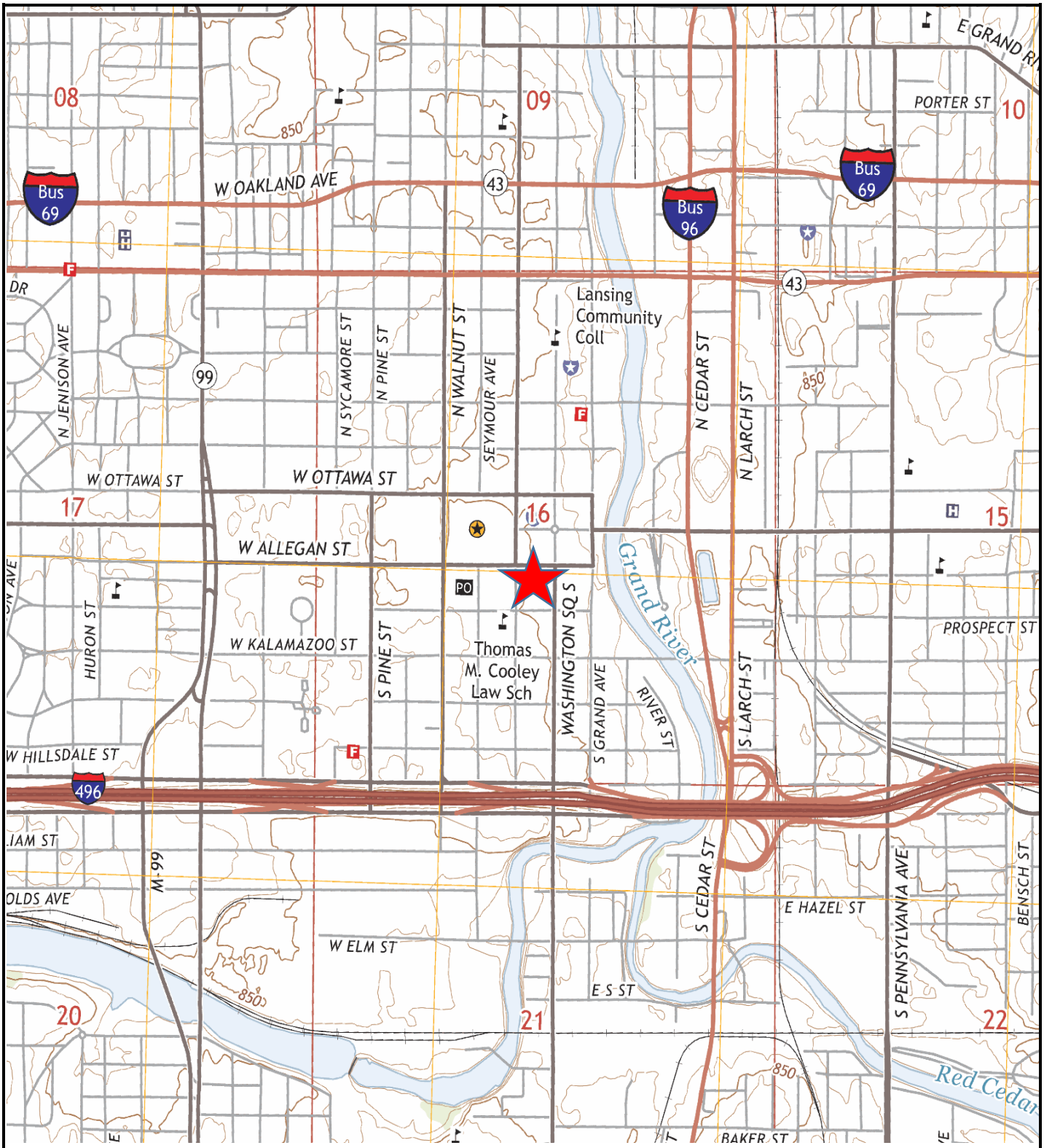
MATERIALS TESTING CONSULTANTS, INC.

Joseph Bolin

Joseph Bolin
Assistant Project Geologist

Rick Dunkin

Rick Dunkin, C.P.G.
Senior Environmental Project Manager



TITLE: SITE LOCATION MAP		PROJECT: 123 W. Allegan Street, Lansing	
SCALE: NTS	DATE: 2/16/2018	PROJECT NO.: 171618	**Materials Testing Consultants**, INC.
FIG. NO.: 1	DR. BY: JB	REV. BY: RD	

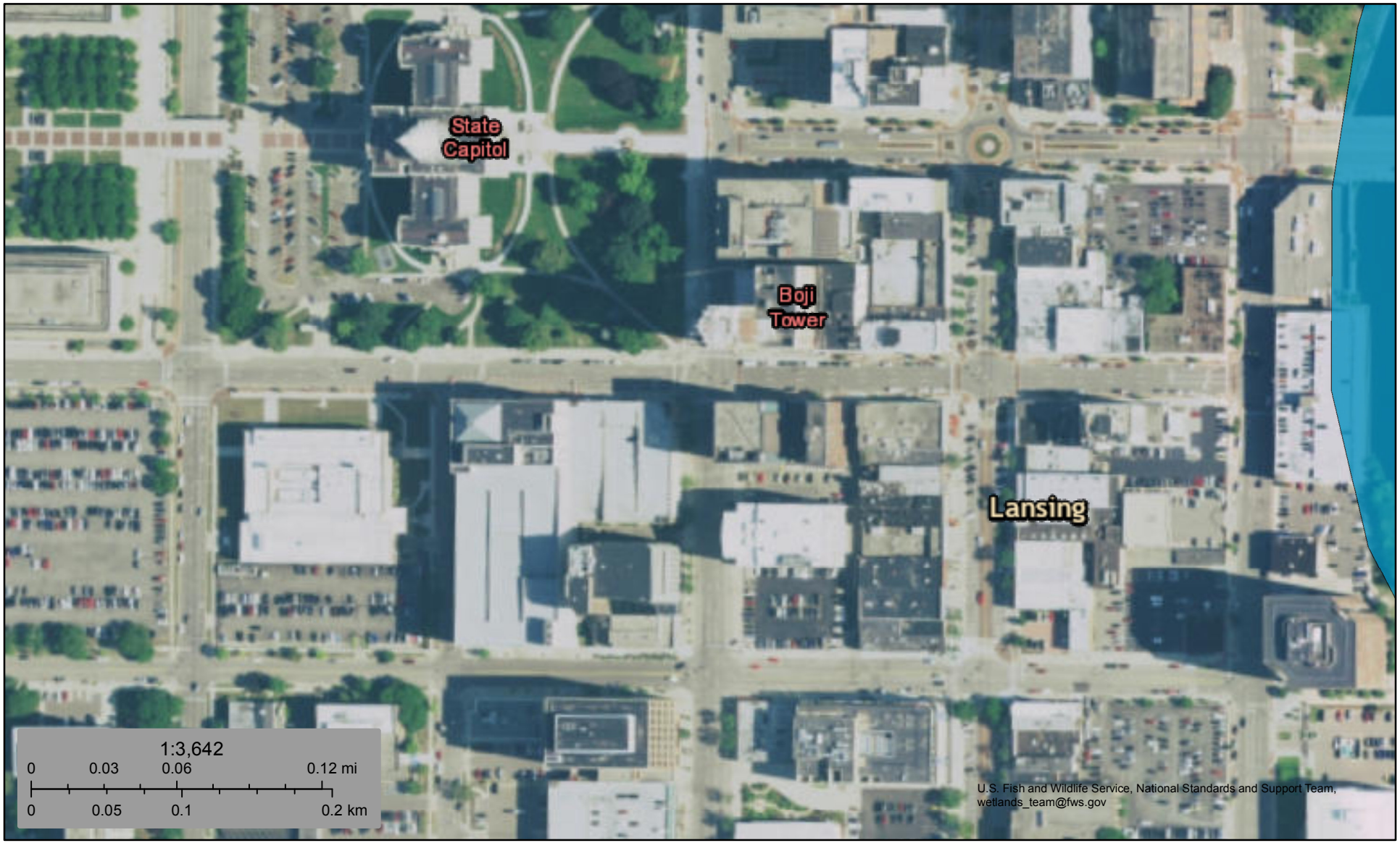
Legend:

1) Boji Tower – 124 W. Allegan St.
2) Michigan State Capitol – 100 N. Capitol Ave.
3) BG Parking (Ellis Parking) – 205 W. Allegan St.
4) Blue Cross Blue Shield – 231 S. Capitol Ave.
5) Cooley Law School – 217 S. Capitol Ave.
6) Commerical Storefronts – W. Allegan St.

TITLE: Area Site Use		PROJECT: 123 W. Allegan Street, Lansing	
SCALE: NTS	DATE: 2/16/2018	PROJECT NO.: 171618	**Materials Testing Consultants**, INC.
FIG. NO.: 2	DR. BY: JB	REV. BY: RD	

U.S. Fish and Wildlife Service
National Wetlands Inventory

Figure 3 - Wetlands



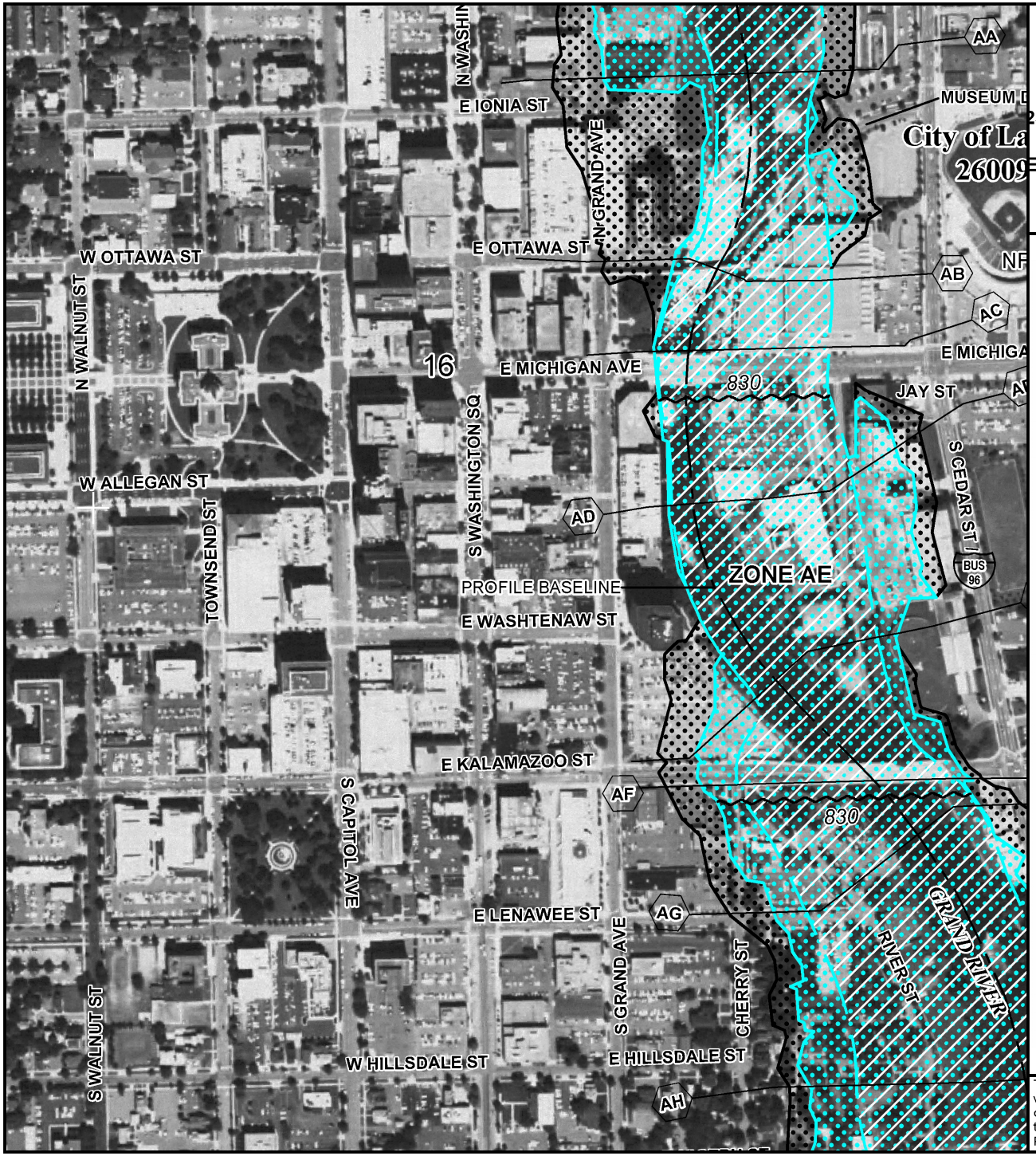
January 29, 2018

Wetlands

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

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

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



MAP SCALE 1" = 500'

250 0 500 1000

FEET

METERS

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0131D

FIRM

FLOOD INSURANCE RATE MAP

INGHAM COUNTY, MICHIGAN

(ALL JURISDICTIONS)

PANEL 131 OF 425

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LANSING, CITY OF	260090	0131	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
26065C0131D

EFFECTIVE DATE
AUGUST 16, 2011

Federal Emergency Management Agency