BROWNFIELD CONDITIONS AND ACTIVITIES SUMMARY

309 NORTH ASHLEY STREET

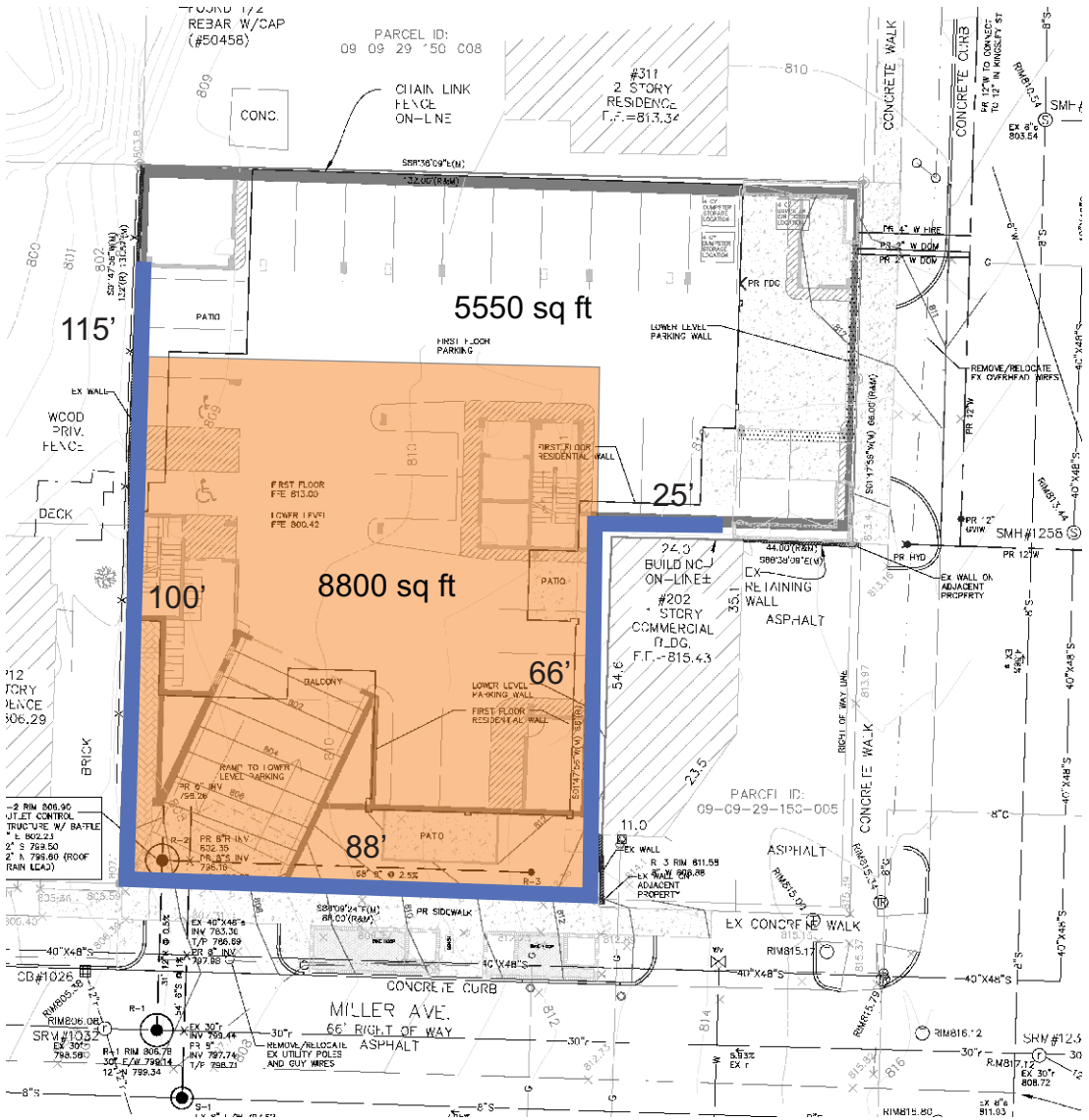
Multiple environmental assessments have demonstrated that soil on the property at 309 North Ashley Street (the Property) is contaminated with volatile aromatic hydrocarbons, consistent with being constituents of gasoline. The area of contamination, which extends from at least 4 feet below the ground surface to 16-18 feet bgs, is present across the southern 60% of the Property (Figure 1). The levels of contamination pose threats to human health through the direct contact and vapor intrusion pathways. The observed concentrations of contaminants are consistent with migration from one or more releases of gasoline on the east-adjoining property at 202 Miller Ave. A gasoline service station operated on that property from before 1931 to after 1972. Sanborn® fire insurance maps indicate that three underground storage tanks were present near the southeast corner of the property during its operation as a service station. Historical fill from unknown sources, suspected to contain hazardous constituents, covers the Property to depths of 4 feet or greater.

The brownfield activities described in the Brownfield Plan are designed to mitigate the human health threats and remove as much of the contaminated soil as possible in an attempt to achieve residual contaminant levels that are below Michigan's generic residential cleanup criteria. Contaminated soil will be excavated to the property lines and to depths of up to 18 feet bgs to remove contaminated soil. Excavation will remove most of the source soils on the Property and reduce the potential for vapor intrusion and future contaminant migration off the Property, into the Miller Ave. right-of-way. Tangential auger cast piles, as shown in Figure 1 (blue line), will be installed along the property line to stabilize adjoining properties. This is necessary to allow maximum extent of excavation on the Property. The remediated soil will be transported and disposed at a licensed landfill. Other excess soil generated by construction, if that soil is contaminated to the extent it cannot be used at another site, will be properly managed and disposed.

Since some contamination may remain on the Property and the source of contamination on the adjoining property will not be remediated, vapor intrusion will remain a potential threat to future residents of the redevelopment. The auger cast piles will become a part of the vapor intrusion mitigation system when they are coated with a spray-applied, asphaltic-urethane membrane to prevent lateral migration of vapors in to the underground garage space. The potential for vapor intrusion through the floor of the garage will be mitigated by installation of an active subslab depressurization system.

Other brownfield activities will include dust and track-out control, fencing to protect the public from contaminated soil, public utility upgrades (upgraded water main and burying electric lines), brick pavers, streetscapes, a green roof for stormwater management, and other project-critical items described in the Brownfield Plan.

FIGURE 1


5550 sq ft
8800 sq ft
115'
100'
25'
66'
88'
PARCEL ID: 09 09 29 150 008
#311 2 STORY RESIDENCE
CHAIN LINK FENCE ON-LINE
CONC.
CONCRETE WALK
CONCRETE CURB
PATIO
LOWER LEVEL PARKING WALL
FIRST FLOOR RESIDENTIAL WALL
EX WALL
WOOD PRIV. FENCE
DECK
FIRST FLOOR FFE 813.00
LOWER LEVEL FFE 800.42
BALCONY
RAMP TO LOWER LEVEL PARKING
BRICK
EX RETAINING WALL
ASPHALT
#202 STORY COMMERCIAL BLDG. F.F.=815.43
EX WALL ON ADJACENT PROPERTY
PARCEL ID: 09-09-29-150-005
PR SIDEWALK
EX CONCRETE WALK
MILLER AVE. 66' RIGHT OF WAY ASPHALT
REMOVE/RELOCATE EX UTILITY POLES AND GUY WIRES
REMOVE/RELOCATE EX OVERHEAD WIRES
SMH#1258
SRW#1032
CB#1026
Area of Petroleum Contamination Excavation
Auger Cast Pile Shoring for Contaminated Soil