Phase I Environmental Site Assessment

HAM-75-0.22, PID No. 89068 Harrison Terminal, 1220 Harrison Avenue

Cincinnati, Ohio









Prepared for:

Ohio Department of Transportation District 8, 505 South SR 741 Lebanon, Ohio 45036

January 2014

BURGESS & NIPLE

PHASE I ENVIRONMENTAL SITE ASSESSMENT

HAM-75-00.22 PID NO. 89068

HARRISON TERMINAL 1220 HARRISON AVENUE CINCINNATI, OHIO

PREPARED FOR

OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 8 505 SOUTH SR 741 LEBANON, OH 45036

JANUARY 2014

PREPARED BY:

BURGESS & NIPLE, INC.
ENGINEERS • ENVIRONMENTAL SCIENTISTS • GEOLOGISTS
5085 REED ROAD
COLUMBUS, OHIO 43220

TABLE OF CONTENTS

		Page
	TENTS	
	SUMMARY	
	GE	
	ITION	
	ICAL/GEOLOGIC SETTING OF THE PROJECT STUDY AREA	
	IC INFORMATION	
•	l History	
	Photographs	
	n Maps	
•	irectories	
	con County Auditor's Information	
	con County Recorder's Office	
	c Topographic Maps	
	Database Review	
0 ,	Records Review	
	/Parcel Reconnaissance	
	ews	
	Reconnaissance	
-	ROW and Construction Activities ONS AND RECOMMENDATIONS	
	A Recommendations	
		20
APPENDIX A	FIGURES	
APPENDIX B	AERIAL PHOTOGRAPHS	
APPENDIX C	SANBORN MAPS	
APPENDIX D	CITY DIRECTORIES	
APPENDIX E	HAMILTON COUNTY AUDITOR'S/RECORDER'S INFORMA	ATION
APPENDIX F	HISTORIC TOPOGRAPHIC MAPS	
APPENDIX G	EDR DATABASE REPORT	
APPENDIX H	REGULATORY RECORDS INFORMATION	
APPENDIX I	PARCEL DIAGRAM AND PHOTOGRAPHS	
APPENDIX J	PROJECT PLAN SHEETS	
APPENDIX K	SOIL BORING AND MONITORING WELL LOCATION MAP	
APPENDICES AV	/All ABLE UPON REQUEST (Large Files)	

1.0 EXECUTIVE SUMMARY

A Phase I Environmental Site Assessment (ESA) was completed for the former Harrison Terminal located at 1220 Harrison Avenue in Cincinnati, Hamilton County, Ohio (the Property). The Phase I ESA was completed in accordance with the Ohio Department of Transportation (ODOT) ESA guidelines dated April 2009. The Property was recommended for a Phase I ESA by ODOT Office of Environmental Services (OES) in June 2010 based on the Environmental Site Screening conducted by Third Rock Consultants in May 2010. The ESA Screening was conducted as part of the Brent Spence Bridge Replacement/ Rehabilitation Project, Western Hills Viaduct Interchange. The Property will be impacted along the northern portion by bridge and embankment construction, including pile driving and foundation construction. To complete the proposed work, new right-of-way (ROW) will be required from the Harrison Terminal.

Construction activities will occur in conjunction with the building of the Western Hills Exit Ramp to Spring Grove Avenue. The construction will involve major construction activities in the northern portion of the Property and will affect the one-story parking garage located within the construction limits. Completion of these activities will require new ROW from the Property.

The subject property was inspected on Friday, December 27, 2013. The site is occupied by a five-story apartment building and a one-story parking garage. Concrete parking areas are located to the east and west of the apartment building. The remainder of the Property is gravel. Four monitoring wells were identified on the Property from the previous Voluntary Action Program (VAP) Phase II Property Assessment (PA) performed in October 2009. There are three former underground storage tank (UST) cavities located on the Property. There were no fill ports or evidence of the former UST locations. Access to the Property is gained by Harrison Avenue to the south and Buck Street to the east. The Property is surrounded by the Western Hills viaduct to the north, Harrison Avenue and United Mail to the south, Buck Street with BIS, a file storage warehouse, and a Duke Energy electrical substation to the east and the CSX terminal to the west.

The former Harrison Terminal located at 1220 Harrison Avenue was identified as a Resource Conservation and Recovery Act (RCRA) large quantity generator (LQG), a Division of Environmental Response and Revitalization (DERR) site, a BROWNFIELDS

property, with two spills reported and has a release for previous USTs. According to the UST closure reports from 1991, the petroleum release was considered cleaned up after the removal of the USTs. According to the Ohio Environmental Protection Agency (EPA) files received about the Brownfields status, the VAP Phase II PA performed on the Property, as well as the spill reports, the Property has been impacted by contaminants either from the former operations on the Property or from an off-site source. According to the VAP Phase II PA, the Property has been impacted along the northern portion from the northern adjacent Property, CSX. A monitoring well located on the Property was identified as a CSX well, MW-10 during the site visit.

An interview with Mr. Elwood Jee, the property owner, verified that all USTs had been removed from the Property. Mr. Jee also stated that there was no contamination on the Property according to the VAP Phase II PA report. This information is false, since the VAP Phase II PA report was reviewed and indicated that there is suspected off-site impact. Results from the soil sampling show shallow soils (0 to 2 feet) exceed the commercial/industrial VAP standards along the northern portion of the Property. However, future potential exposure is possible if the Property is disturbed during construction activities. Also, groundwater sampling results show dissolved pentachlorophenol (PCP), lead, and arsenic exceeding the VAP generic unrestricted potable use standards (UPUS) in upgradient wells. A deed restriction to prohibit the installation of potable wells to eliminate the exposure pathway was recommended.

The combination of historical records reviewed (city directories, aerial photographs, historic topographic maps, Sanborn maps, and Hamilton County Recorder records) indicates that the subject property was a foundry and furniture factory from the late 1890s to approximately the 1950s. It became the Harrison Terminal in 1953 and the Property operated as many businesses from sheet metal works, scrap metal recycling, junkyard, truck repair, trailer sales, and transport facility until 2007 when E&T Real Estate Holdings, LLC purchased the Property.

With the extensive historical use of the Property and from review of previous reports, it is believed that there are environmental impacts to the Property. The historical use of the Property and possible off-site impacts require additional assessments based on the current proposed work within the construction limits. A Phase II ESA is recommended.

SIGNATURE PAGE

This Phase I ESA has been prepared by Burgess & Niple, Inc. (B&N). The primary author and reviewer information is listed below.

Preparer's Signature

Ms. Krista N. Carter Environmental Scientist

Burgess & Niple, Inc. 5085 Reed Road Columbus, Ohio 43220 (614) 459-7272, x1286 krista.carter@burgessniple.com Reviewer's Signature

Mr. Richard G. Fitch Chief Transportation Environmental Specialist

Burgess & Niple, Inc. 5085 Reed Road Columbus, Ohio 43220 (614) 459-7272, x1315 rick.fitch@burgessniple.com

2.0 INTRODUCTION

An ESA Screening for the Western Hills Viaduct was conducted by Third Rock Consultants in May 2010. Based on the review of this report by ODOT OES, a Phase I ESA was recommended for the former Harrison Terminal, located at 1220 Harrison Avenue, Cincinnati, Hamilton County, Ohio (the Property). Based on the conclusions of the Brent Spence Replacement/Rehabilitation Project, ESA Screening – Western Hills Viaduct, ODOT PID No. 75119, HAM-71/75-0.00/0.22, KYTC Project Item No. 6/17, Conducted by Third Rock Consultants in May 2010, the Property was listed in multiple environmental databases and historic maps reviewed revealed land use concerns (auto recycling/junk yard/foundry). The Property was also recognized in the March 2010 Phase I ESA for the Brent Spence Replacement/Rehabilitation Project, ESA Screening – Western Hills Viaduct, ODOT PID No. 75119, HAM-71/75-0.00/0.22, KYTC Project Item No. 6/17, Conducted by Third Rock Consultants as an adjacent property to Site 2 (Duke Energy Station). A full Phase I ESA was not completed for the Property. A Phase II ESA was recommended in the March 2010 report based on the historic land use.

The proposed project is located just northwest of downtown Cincinnati, Hamilton County, Ohio. As currently proposed, new ROW will be required from the Property along the northern portion of the Property. The one-story parking garage, located within the construction limits, will be affected. Extensions of the Western Hills Viaduct Tight Urban Diamond Interchange will occur within the existing ROW. Improvements made to the Western Hills Viaduct will greatly improve traffic flow as well as pedestrian and bicycle access. A site location map (U.S. Geological Survey [USGS] quadrangle for Chillicothe East) depicting the site location is included in **Appendix A**.

This Phase I ESA Report was completed in accordance with the ODOT ESA Guidelines dated April 2009.

3.0 GEOGRAPHICAL/GEOLOGIC SETTING OF THE PROJECT STUDY AREA

According to the Physiographic Regions of Ohio Map from the Ohio Department of Natural Resource (ODNR), the Property is located within the Bluegrass Section/Outer Bluegrass Region. The Bluegrass Section/Outer Bluegrass Region is characterized by being moderately high relief with dissected plateaus of carbonate rocks. In the east, caves and other karst features are relatively common. In the west, thin, early drift caps narrow ridges.

Underlying geology consists of Ordovican- and Silurian-age dolomites, limestone, and shales. There are thin pre-Wisconsian drift on the ridges in the west.

Underlying soils are mapped as Urbanland and Udorthents. Udorthents makes up 70 percent of the map unit. Slopes are 0 to 50 percent. Depth to a root restrictive layer is greater than 60 inches. Available water to a depth of 60 inches is very low. Shrink-swell potential is low. This soil is not flooded and it is not ponded. There is no zone of water saturation within a depth of 72 inches. This soil does not meet hydric criteria.

A copy of the soils map for the project area is included in **Appendix A**.

4.0 SITE-SPECIFIC INFORMATION

4.1 Site/Parcel History

The site/parcel history for the former Harrison Terminal was investigated through the review of aerial photographs, Sanborn maps, historic USGS mapping, city directories, and Hamilton County Recorder documents. Aerial photographs from 1938, 1949, 1956, 1962, 1968, 1975, 1977, 1985, 1994, 2000, 2005, 2009, 2010, and 2011 were obtained from Environmental Data Resources (EDR). Sanborn Fire Insurance Maps for the years 1891, 1904, 1922, 1950, and 1981 were reviewed from EDR. Additional information on historical site uses was also obtained by reviewing available city directories from EDR. In addition, parcel information was obtained from the Hamilton County Auditor and copies of deed information were obtained from the Hamilton County Recorder's Office. A summary of historical site uses as generated from available historical resources is included in the following sections.

4.1.1 Aerial Photographs

Historical aerial photographs from 1938, 1949, 1956, 1962, 1968, 1975, 1977, 1985, 1994, 2000, 2005, 2009, 2010, and 2011 were obtained from EDR and reviewed for information about historical development of the Properties. Results of the review are summarized below:

<u>1938</u> - The Property appears to have three large buildings present. All roadways accessing the Property are present. The viaduct is visible to the north. Commercial and industrial properties appear to the south and east with a rail yard to the west.

<u>1949, 1956, 1962</u> - The Property appears to have one large building on the southern portion with four smaller buildings to the north. There are multiple tractor trailers or large storage bins present on the Property. Construction for Interstate 75 is visible to the east.

<u>1968</u>, <u>1975</u> - The Property appears to have two separate buildings present with a large amount of tractor trailers or large storage bins present. The northernmost portion of the Property has been taken for use of an exit ramp to Interstate 75.

<u>1977</u> – The resolution of the 1977 aerial photograph is poor and Property conditions are not visible.

<u>1985, 1994</u> - The Property appears to have two main buildings. Multiple storage containers or tractor trailers are visible.

2000, 2005 - The Property appears to be utilized as a possible scrap or junk yard. Several vehicles and piles of scrap are visible on the entire property. There are two main buildings visible.

2009, **2010**, **2011** - The Property and surrounding are appears similar as they are today. The junk or scrap yard present on the Property is no longer visible.

Copies of aerial photographs reviewed are provided in **Appendix B**.

4.1.2 Sanborn Maps

Sanborn Fire Insurance Maps for the years 1891, 1904, 1922, 1950, and 1981 were reviewed from EDR. Results of the review are summarized below:

<u>1891</u> – The Property is shown as the C.F. Thauwald & Co. and The F. Yoelckel Co. The address for the Property is 118-134 Harrison Avenue. The buildings and operations present include a foundry, flask yard, storage, coke oven, varnishing, packing, an office and two elevators. There is one dwelling located on the southeast corner of the Property with two garages.

<u>1904</u> - The Property has three separate businesses that all appear interconnected. The Cincinnati Planer Company (2225-2237 Buck Street) shows an engine room, office, machine shop, pattern warehouse, sand house, storage, and a coke oven. The J.A. Oberhelman Foundry Co. and the C.F. Thauwald & Co. (1218-1232 Harrison Avenue) has a foundry, office, molding cleaning and storage, steam dry house, sawing, carving, sanding, varnish and finishing, veneering, a 1,500-gallon water tank and lumber storage.

<u>1922</u> – The map appears to be a lot map. There are no specific details about the Property depicted.

Engineers . Environmental Scientists . Geologists

<u>1950</u> – The Property is occupied by the Young & Bertke Co. (2231-2241 Buck Street) and has an elevator, office and pattern shop shown. The Household Goods Storage is located at 1220-1232 Harrison Avenue. There are two elevators, a garage, truck repair, motor freight station. A gasoline tank is shown on the Property located within the motor freight building.

<u>1981</u> – There are no specific business names depicted on the map. The addresses for the Property are 1220-1232 Harrison Avenue and 2201 Buck Street. There are two elevators, two freight stations, a garage and truck repair, and loft building shown. A gasoline tank is shown on the Property located within the motor freight building.

Copies of the Sanborn maps are provided in **Appendix C**.

4.1.3 City Directories

A City Directory Search was requested from EDR and reviewed for information regarding current and historical property uses. Based on results of the search, the following historical and current addresses and tenants were identified for the Property.

City Directory Search Results

Address	Year	Listing
1220 Harrison Avenue	1925	The C F Thauwald Co. (furniture)
	1930	The C F Thauwald Co. (furniture)
	1940	Vacant
	1947	Ferguson Moving and Storage Co.
	1952	Ferguson Moving and Storage Co.
	1958	Not Listed
	1969	R J Bonekamp Baker Supplies
		Harrison Terminal Sales (trailer rentals)
		Miami Transportation Co.
	1974	R J Bonekamp Baker Supplies
		Harrison Terminal Sales (trailer rentals)
		Gordon Transports Inc.
	1979	Harrison Terminal Inc. (trailer rentals)
		Gordon Transports Inc.
		Sam Janson Transfer Inc.
	1983	Harrison Terminal Inc. (trailer rentals)
		Vacant
		Display Works

Address	Year	Listing		
1220 Harrison Avenue (Cont.)	1989	Harrison Terminal Inc. (trailer rentals)		
		Display Works		
		AAA Vending & Distributing Co.		
	1995	Dimensional Fabricating		
		Display Works		
		Harrison Terminal		
		Maestro Audio Creative Music & Post production Services		
		Mobil Truck Service		
		Woodcreek		
	2002	Collins Rock Truck Repair		
		Display Works		
		Harrison Terminal		
		Sound Proff		
		WWR Recycling		
	2008	4 Collins Rock Truck Repair		
1232 Harrison Avenue	1969	Polson Rubber Co.		
	1974	Harrison Terminal Inc (warehouse)		
	1979	Harrison Terminal Inc (warehouse)		
	1983	Harrison Terminal Inc (warehouse)		
	1989	Harrison Terminal Inc (warehouse)		
2225 Buck Street	1995	Reynolds Aluminum Recycling Co.		
2229 Buck Street	1969	Miami Transfer (loading docks)		
2229-2235 Buck Street	1974	Miami transfer (loading docks)		
	1979	Gordon Transports (loading docks)		
	1983	Vacant		
2231 Buck Street	1925	General Pattern Works		
	1930	General Pattern Works		
	1940	General Pattern Works		
	1947	General Pattern Works		
	1952	General Pattern Works		
	1958	Cincinnati General Pattern Inc.		
2235 Buck Street	1925	Mid-West Glass Co.		
		Boyle & Emmes Machine Tool Co.		
	1930	Mid-West Glass Co.		
	1940	Mid-West Glass Co.		
	1947	Vacant		
	1952	Young & Bertke Co.		
	1969	Miami transfer (loading docks)		
2235-2245 Buck Street	1958	Young & Bertke Co (sheet metal workers)		

Copies of the city directories are provided in **Appendix D.**

4.1.4 Hamilton County Auditor's Information

Information for the site was obtained from the Hamilton County Auditor's Office and is summarized in the following table.

Table 1
Hamilton County Auditor's Office Information

ROS-SR159-1.12, PID 85190 BP GAS STATION				
Parcel Number 187-0009-0004-00				
Owner	E & T Real Estate Holdings LLC			
Property Address	1220 Harrison Avenue			
Land Use/Class	431 Office/Apartment Over			
Acreage 2.382 Acres				

Copies of information obtained from the Hamilton County Auditor are included in **Appendix E**.

4.1.5 Hamilton County Recorder's Office

Information related to property ownership and transfers was reviewed on the Hamilton County Recorders website http://recordersoffice.hamilton-co.org/. The Recorder Series Books were reviewed from 1918 to 1990. The information found was reviewed and found to be extensive. The current lots for the Property are Lots 1 to 6 and partial Lots 7 to 10. Based on this information, the following tenants or leases have been listed for the Lots and may or may not have been entirely on the Property:

Table 2
Deed Information

Year	Grantor(s)	Grantee(s)	Lots	Book/Page
1921	Elizabeth Thauwald	City of Cincinnati	4	1201/190
1921	C.H.M Atkins	Cinti Planer Co.	10	1220/16
1921	John Krier	Katherine Krier	9	1225/619
1922	Cinti Planner	Midwest Glass Co.	6-7, 8-9, 10	171/470
1922	Elizabeth Thauwald	Affidavit as to	1, 2, 3, 4	1276/381
1922	William Thauwald	J.E. Thauwald, et al	1-4, 6-9	1301/52

Year	Grantor(s)	Grantee(s)	Lots	Book/Page
1923	J.E. Thauwald, et al	C.F. Thauwald Co.	1-4, 6-9	1307/132
1926	Katherine Krier	Jacob Koch	9	1382/456
1926	Cinti Planer Co.	Atkins Realty Co.	6-7, 8-9, 10	1349/520
1927	Atkins Realty Co.	Midwest Glass Co.	6-7, 8-9, 10	196/137
1934	John Oberhelman	Affidavit as to	1-5, and 6	1654/659
1939	C.F. Thanwald Co.	Central Trust Co.	1-4, 6-9	1846/58
1941	Atkins Realty Co.	Cincinnati Planner Co.	6-10	1895/267
1943	Central Trust Co.	William Ferguson	1-4, and 6-9	1987/332
1944	Cincinnati Planner Co.	Howard Engr. & Mfg. Co.	6-9	241/456
1947	William Ferguson	Ferguson Realty Co.	1-4; and 7-9	2227/287
1948	Ferguson Moving & Storage	Miami Transportation Co.	3-4	251/289
1948	Sam Leffel	Howard Engr. & Mfg. Co.	6-9, and 12	251/366
1948	Cincinnati Planner Co.	Sam Leffel	6-10	2307/344
1949	Sam Leffel	Young & Bertke Co.	6-10	253/597
1949	A.J. Oberhelman, et al	Oberhelman Realty Co.	1-5	2351/180
1950	Sam Leffel	Young & Bertke Co.	6-10	2412/598
1950	Phil Stillpass Co.	St. Louis Terminal Warehouse Co.	1-4	258/423
1951	Cincinnati Air Conditioning Co.	Douglas Guardian Warehouse Corp.	1-4	262/349
1953	Ferguson Realty Co.	Harrison Terminal, Inc.	1-4	2591/559
1954	Cincinnati Union Terminal	Harrison Terminal, Inc.	1220 Harrison	2775/180
			Ave.	
1959	G.T. Oberlander	Cincinnati Gas & Electric Co.	5-6	3816/548
1959	Young & Bertke Co.	Cincinnati Gas & Electric Co.	6-9	2020/144
1961	H. & Peter Ruehlmen	Harrison Terminal, Inc.	3-6, and 8	3158/396
1962	Young & Bertke Co.	State of Ohio	7-10	3211/569
1962	Young & Bertke Co.	City of Cincinnati	7-11	3211/551
1963	Scot Oberlander	Harrison Terminal, Inc.	1-6, and 8	32299/457
1966	Young & Bertke Co.	Harrison Terminal, Inc.	6-9	3456/872
1966	Harrison Terminal, Inc.	Miami Transport Co., Inc.	1-9	303/454

Copies of the above referenced information from the Hamilton County Recorder are included in **Appendix** E.

4.1.6 Historic Topographic Maps

Historic topographic maps for the years 1898 (West Cincinnati), 1914 (Cincinnati), 1955 (Covington), 1961 (Covington), 1969 (Covington), and 1979 (West Cincinnati) were obtained from EDR. The Property appears within a highly developed area on the historical maps. The Property appears to have structures present on the 1914 (Cincinnati), 1955 (Covington), 1961 (Covington), 1969 (Covington), and 1979 (West Cincinnati) maps.

Copies of the historic topographic maps for the Property are provided in **Appendix F**.

4.2 Regulatory Database Review

A regulatory database review for the site was conducted by EDR. A copy of the complete EDR report for the subject property is included in **Appendix G**. A list of the databases reviewed by EDR is included in the following table.

Table 3
List of Databases Reviewed by EDR

Database	Search Radius (Miles)
Federal National Priority List (NPL) Site List (NPL, Proposed NPL, NPL Liens, Delisted NPL)	0.25
Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) List (CERCLIS, CERCLIS No Further Remedial Action Planned [NFRAP])	0.25
Federal Resource Conservation and Recovery Act (RCRA) CORRACTS	0.25
Federal RCRA non-CORRACTS Treatment, Storage, and Disposal (TSD)	0.25
Federal RCRA Generators (Large Quantity Generator [LQG], Small Quantity Generator [SQG], CESQG, Non-GEN)	0.25
Federal Emergency Response Notification System (ERNS) List	0.25
State/Tribal CERCLIS (SHWS, DERR)	0.25
State/Tribal Landfills and Solid Waste Disposal Sites	0.25
State/Tribal Leaking Storage Tanks (Leaking Underground Storage Tanks [LUST], UNREG LTANKS, INDIAN LUST)	0.25
State/Tribal Registered Storage Tanks (USTs, INDIAN USTs)	0.25
State/Tribal Voluntary Cleanup Sites (VCP)	0.25
Indian VCP	0.25
State/Tribal Brownfield Sites	0.25
Local Brownfields	0.25
U.S. Brownfields	0.25
Local Lists of Landfill/Solid Waste Disposal Sites	0.25
Local Lists of Registered Storage Tanks	0.25
Records of Emergency Release Reports (SPILLS)	0.25

Table 4 Environmental Database Search Results

Site Name	Address	Location	Database	Description
Harrison	1220 Harrison	Target	RCRA-LQG	This facility is listed as a RCRA
Terminal	Avenue	Property	DERR	LQG. This facility was registered
			BROWNFIELDS	in 1994 for ignitable hazardous
			SPILLS	wastes, corrosive hazardous
				wastes, chromium, benzene,
				halogenated solvents, and non-
				halogenated solvents. There were
				no violations found. This site is
				listed in the Ohio EPA Clean
				Ohio Fund Program and listed as
				a Brownfields property in 2008.
				Spill was reported in 1999.
				Reports received from Ohio EPA
				are further discussed in Section
				4.3.
Harrison	1220 Harrison	Target	LUST	This facility had a release
Terminal	Avenue	Property		reported for an UST. This release
				is no longer active and has NFA
				status. This past release is
				further discussed in Section 4.3 .
Collins	1220 Harrison	Target	SPILLS	An unknown material was
	Avenue	Property		reported released in 2005. The
				SPILL report was obtained from
				Ohio EPA and further discussed
				in Section 4.3.
	1220 Harrison	Target	Historical Auto	This site is listed as a historical
	Avenue	Property	Station	auto station. It is believed that
				the site was not an actual filling
				station and is listed as Collins
				Rock Truck Repair in 2008.
Regal Auto	2163 Barnard	1 foot south	Historical Auto	This facility is listed as a
Painting Co.		adjacent	Station	historical auto station for the
		south		year 1925.
		beyond		
		Harrison		
		Avenue		
J&P Garage	2254 Buck	1 foot south	Historical Auto	This facility is listed as a
		adjacent	station	historical auto station for the
		south		years 1930 and 1935.
		beyond		
		Harrison		
		Avenue		

Site Name	Address	Location	Database	Description
MSD Of Greater Cincinnati – CSO 004 & 006	2233 Buck Street	12 feet south adjacent north	RCRA-LQG	This facility is listed as a RCRA LQG. These facilities generate 1,000 kg or more of hazardous waste per calendar month. This facility was registered in 2012 for arsenic, barium, chromium, and lead. There were no violations found.
R&A Motor Company	1227 Harrison Avenue	26 feet south adjacent beyond Harrison Avenue	Historical Auto Station	This facility is listed as a historical auto station for the year 1925.
Texs Alignment Garage	2183 Buck	98 feet south- southeast	Historical Auto Station	This property is listed as a historical auto station for the years 1964-1983.
Davis Auto Repair	2173 Buck	134 feet south- southeast	Historical Auto Station	This facility is listed as a historical auto station for the year 1925.
Werner Towing Service	2174 Buck	141 feet south- southeast	Historical Auto Station	This facility is listed as a historical auto station for the years 1979 and 1983.
CSXT Cincinnati Buck Street	2261 Buck Street	234 feet north- northeast	DERR VCP USD	This facility is listed under the Ohio EPA VAP. An Urban Site Designation is in place for this site. This means no ground water can be used for residential purposes.
CSX Transportation Inc.	2261 Buck Street	234 feet north- northeast	RCRA-SQG	This facility is listed as a RCRA SQG. These facilities generate more than 100 kg and less than 1,000 kg of hazardous waste per calendar month. There were no violations found.
The Standard Oil Company of Ohio	2221 Spring Grove Avenue	237 feet east - adjacent east beyond Buck Street	Historical Auto Station	This site was listed as a historical auto station for the year 1925. It is unknown if an actual filling station was located at this address or if it was for an operations office. The 1925 City Directory lists the site as a filling station; however, this is not indicated on the historical Sanborn maps. A filling station is not indicated on the 1938 or 1949 aerial photographs.

<u>,</u>
9
9
cal
58.
9
cal
9
cal
52.
9
RA
erate
S
here
1
cal
47.
e'e
e V
1
9
-
9

Site Name	Address	Location	Database	Description
BP Oil No 09138	2139 Spring	767 feet	UST	This facility had two USTs
	Grove Avenue	south-	LUST	removed in 1995, four in 2004
		southeast		and three in 2005. There is one
				active release at this property.
Standard Oil Co	2139 Spring	767 feet	Historical Auto	This facility is listed as a
	Grove Avenue	south-	Station	historical auto station for the
		southeast		years 1969-2003.
BP Oil No 09138	2139 Spring	767 feet	RCRA-CESQG	This facility is listed as a RCRA
	Grove Avenue	south-		CESQG. There were no
		southeast		violations found.
CSX Intermodal	2149 Western	800 feet	UST	This facility had four USTs
	Avenue	south	LUST	removed in 1995. There is one
			SPILLS	inactive release with NFA status.
				Three spills were reported for
				this facility for alcohol
COM	21.10.117	000 (DCD A	benzosulfate and fertilizer.
CSXI	2149 Western	800 feet	RCRA	This facility is listed as a RCRA
	Avenue	south	NonGen/NLR	Non Generator (NonGen) and is
				NLR. NonGen Facilities no
				longer generate hazardous waste. There were no violations
				found.
Max	2212 Western	863 feet	Historical Auto	This facility is listed as a
Winterhalter	Avenue	south	Station	historical auto station for the
vviitterriaiter	Avenue	South	Station	years 1925-1935.
Tresler Oil Co.	2417 Spring	900 feet	Historical Auto	This facility is listed as a
Tresier On Co.	Grove Avenue	north-	Station	historical auto station for the
	Glove Avenue	northeast	Station	years 1930-1964.
Steph	2426 Spring	930 feet	Historical Auto	This facility is listed as a
Wuestefeld	Grove Avenue	north-	Station	historical auto station for the
, raesterera	Grove Trvende	northeast		year 1947.
Jason	2101 Western	932 feet	Historical Auto	This facility is listed as a
McDermott	Avenue	south	Station	historical auto station for the
1,162 61111611	11101140	304611		years 1930-1940.
Austin Laundry	2101 Western	932 feet	Historical	This site is listed as a historical
	Avenue	south	Cleaners	cleaner for the year 1925.
CL Boner	2119 Spring	980 feet	Historical Auto	This facility is listed as a
	Grove Avenue	south-	Station	historical auto station for the
		southeast		year 1930.
Spring Grove	2448 Spring	981 feet	Historical Auto	This facility is listed as a
Radiator Service	Grove Avenue	north-	Station	historical auto station for the
		northeast		year 1964.
Donald Tipton	2416 Central	1028 feet	Historical Auto	This facility is listed as a
	Pkwy	east-	Station	historical auto station for the
		northeast		year 1952.

Site Name	Address	Location	Database	Description
Arthur Colburn	2115 Spring	1036 south-	Historical Auto	This facility is listed as a
	Grove Avenue	southeast	Station	historical auto station for the
				year 1935.
William Powell	2503 Spring	1132 feet	RCRA_TSDF	This facility is an engaged in
Company	Grove Avenue	north-	RCRA-LQG	treatment, storage or disposal of
		northeast	US AIRS	hazardous waste. There are
				multiple violations reported.
				There is an air permit for
				uncontrolled emissions.
William Powell	2503 Spring	1132 feet	DERR	The site is part of an Ohio EPA
Company	Grove Avenue	north-		program. The program is not
		northeast		specified.
Bocks Gas	2312 Central	1183 feet	Historical Auto	This facility is listed as a
Station	Pkwy	east	Station	historical auto station for the
				years 1974-1979.
George	2310 Central	1185 feet	Historical Auto	This facility is listed as a
Schreiner	Pkwy	east	Station	historical auto station for the
				years 1935-1952.
Young & Bertke	2118 Winchell	1228 feet	UST	This facility has four USTs
8	Avenue	south-	LUST	removed in 1996. There is one
		southeast		active release at this property.
Southwest Ohio	1401 Bank Street	1232 feet	RCRA-SQG	This facility is listed as a RCRA
Regional Transit		south	US AIRS	SQG. There were no violations
Authority				found. There is an air permit for
				uncontrolled emissions.
Queen City	1401 Bank Street	1232 feet	Unreg Tanks	There is one suspected release or
Metro		south		source identified at this facility.
METRO SORTA	1401 Bank Street	1232 feet	UST	Five USTs are currently in use at
		south	LUST	this site. One UST was removed
				in 1993 and eight were removed
				in 1994. There are four inactive
				releases at this facility.
Johns Swift Co.	2524 Spring	1235 feet	RCRA-SQG	This facility is listed as a RCRA
	Grove Avenue	north-	~	SQG. There were no violations
		northeast		found.
Spring Grove	2530 Spring	1262 feet	UST	One UST was removed from this
Avenue Trust	Grove Avenue	north-		facility in 1993.
		northeast		
The Andrew	2535 Spring	1276 feet	UST	Two USTs were filled in place at
Jergens Co.	Grove Avenue	north	LUST	this facility in 1998. One active
0 221				release is reported.
KAO Brands Co.	2535 Spring	1276 feet	RCRA-SQG	This facility is listed as a RCRA
	Grove Avenue	north	TRIS	SQG. There are no violations
			SPILLS	reported. A hydrochloric acid
			US AIRS	spill was reported in 2003. There
				is an air permit for uncontrolled
				emissions.
L	1	1	1	1 - 3

Site Name	Address	Location	Database	Description	
Freeman Garage	1108 Harrison	1283 feet	Historical Auto	This facility is listed as a	
	Avenue	east-	Station	historical auto station for the	
		southeast		year 1930.	
Young & Bertke	2145 Patterson	1290 feet	RCRA-CESQG	This facility is listed as a RCRA	
Co.	Street	southeast		CESQG. There were no	
				violations found.	
Amies Laundry	664 W.	1315 feet	Historical	This site is listed as a historical	
•	McMicken	east	Cleaners	cleaner for the years 1969-1979.	
	Avenue			-	

RCRA = Resource Conservation and Recovery Act; LQG = large quantity generator; SQG = small quantity generator; LUST – leaking underground storage tank; UST = underground storage tank; NFA = No Further Action; kg = kilogram; VAP = Voluntary Action Program; EPA = Environmental Protection Agency; CESQG = Conditionally Exempt Small Quantity Generator; NLR = No Longer Regulated; TSDF = treatment, storage, and disposal facility; Voluntary Cleanup Program (VCP)

A review of database information revealed that the former Harrison Terminal was listed as a RCRA-LQG, a DERR site, a BROWNFIELDS property, with two spills reported and has a release for previous USTs. According to the UST closure reports in 1991, the petroleum release was considered cleaned up after the removal of the USTs. According to the Ohio EPA files received about the Brownfields status, the VAP Phase II PA performed on the Property, as well as the spill reports, the Property has been impacted by contaminants either from the former operations on the Property or from an off-site source. The report further states the Property has been impacted on the northern portion from the northern adjacent Property, CSX. A monitoring well was identified as CSX well MW-10 during the site visit.

All correspondence from the regulatory agencies regarding the listings for the Property is further discussed in **Section 4.3**.

One Property listed above, CSX Cincinnati Buck Street, located at 2261 Buck Street, is listed as a DERR site and is under the Voluntary Cleanup Program (VCP) with an Urban Site Designation (USD) in place for this site. This means no groundwater can be used for residential purposes. Upon further minimal investigation, it is possible that the contamination from this adjacent northern property is what has impacted the northern portion of the Property. Evidence of this is that the address is directly north of the Property on Buck Street, just north of the Western Hills Viaduct and there is a groundwater monitoring well on the Property with a CSX label.

None of the other sites identified in the EDR report are considered environmental concerns due to their location, distance from the site, or nature of the listing.

4.3 Regulatory Records Review

File review requests were made to the following local agencies with potential information regarding spills, releases, or other incidents at the Property that may have involved hazardous substances or petroleum products. Review results are summarized below in **Table 5.**

Table 5
Local Agency Record Review Results

		Request	Response
Agency	Contact	Date	Date
Fire Department	Fax FOIA Letter 513-352-1548	12/10/2013	No Records -
			12/17/2013 &
			1/6/2014
Health Department	Fax FOIA Letter 513-357-7262	12/10/2013	No Records -
			12/16/2013
Building Department	Fax FOIA Letter 513-352-2579	12/10/2013	No Response
BUSTR	Online FOIA Request	12/10/2013	Records Found
			12/17/2013
Ohio EPA	Email FOIA Letter to SWDO Penny	12/10/2013	Records Found -
	Hataway penny.hataway@epa.ohio.gov		12/19/2013 for DERR
	and cindy.stanwick@epa.ohio.gov		12/23/2013 for
			SPILLS.
			No Records found for
			several other business
			names and addresses -
			12/23/2013
Ohio EPA	Email FOIA letter to Central Office	12/19/2013	1/3/2014 - No
	Richard Bouder		Records
	Richard.bouder@epa.ohio.gov		
U.S. EPA	Online FOIA Request	12/10/2013	Records Found -
	https://foiaonline.regulations.gov/foia/		12/13/2013 Land and
	action/public/home		Chemicals Division.
			No records found -
			12/17/2013 Superfund
			Division.

BUSTR = Bureau of Underground Storage Tank Regulations; FOIA = Freedom of Information Act

The City of Cincinnati Fire Department was contacted via fax on December 10, 2013. A response was received on December 17, 2013 and January 6, 2014 stating they had no records for the Property, except for a minor building fire in 2008.

The City of Cincinnati Health Department was contacted via fax on December 10, 2013. A response was received on December 16, 2013 stating they had no records for the Property.

The City of Cincinnati Building Department was contacted on December 10, 2013. As of the date of this report, no response has been received.

On December 10, 2013, an online request for records was sent to BUSTR pertaining to the Harrison Terminal and all associated records for both Old Incident No. 311091900 and New Facility and Release No. 31010136-N00001. Closure reports for two separate UST removals were received on December 17, 2013. The following reports were reviewed:

Underground Storage Tank Closure Assessment Report, Harrison Terminal, 1220 Harrison Avenue, Cincinnati, Ohio, PSARA Technologies, Inc., April 1991.

Two USTs and associated dispensers (one 10,000-gallon diesel and one 1,000-gallon leaded fuel) were removed on February 28, 1991. The report states the diesel tank was steel and was installed in the 1980s. The leaded fuel tank was installed in the 1940s. According to the report, both tanks did not have any holes or noticeable corrosion. All analytical analyses were below detection limits except for a few with higher levels of total petroleum hydrocarbons (TPH). Additional soils were removed from this area.

Underground Storage Tank Closure Assessment Report, Harrison Terminal, 1220 Harrison Avenue, Cincinnati, Ohio, PSARA Technologies, Inc., August 1991.

Three USTs and associated dispensers were removed on February 28, 1991 (one 10,000-diesel and two 4,000-gallon unleaded gasoline). All tanks were reported to be installed around the 1970s. According to the report, all three USTs appeared to be in good condition. All analytical analyses were below detection limits except for a few with higher levels of TPH. Additional soils were removed from this area.

In October 1991, a letter was received from BUSTR stating no further corrective actions were warranted for the Property.

The Ohio EPA was sent requests for files to both the Central Office and Southwest District Office (SWDO) for records pertaining to the Property and all associated addresses and former business names. The SWDO responded on December 19, 2013 with a copy of the Ohio VAP Phase II PA Report. The report was reviewed and is summarized as follows:

VAP Phase II Assessment, The Lofts at Harrison Terminal, 1220 Harrison Avenue, Cincinnati, Ohio 45214, KERAMIDA Project No. 2-13358. October 5, 2009.

The VAP Phase II PA consisted of performing 28 soil borings, installing 8 monitoring wells, and an asbestos survey. There were three Identified Areas (IAs) noted in the report. IA-1 was the former UST cavity, IA-2 was the entire Property and IA-3 was the interior of existing buildings.

Results from the soil sampling show shallow soils (0 to 2 feet) exceed the commercial/industrial VAP standards along the northern portion of the Property. However, future potential exposure is possible if the Property is disturbed during construction activities.

Groundwater sampling results show dissolved PCP, lead and arsenic exceeding the VAP generic UPUS in upgradient wells. A deed restriction to prohibit the installation of potable wells to eliminate the exposure pathway was recommended.

The VAP Phase II PA also states that the impact to the Property, along the northern portion, is potentially from an off-site source.

Asbestos-containing materials (ACM) were discovered within the main building and debris piles throughout the Property.

Ohio EPA SWDO also responded on December 23, 2013 with letters stating the Property was not found within their records based on the various former business names and addresses that were listed for the Property.

Two SPILL reports were received on December 23, 2013 from Ohio EPA Central Office. One SPILL report, from 1999, states a citizen reported dumping/disposal of an unknown amount to diesel fuel and oil on the Property. Remarks for the spill states, "Facility scraps

out semi-truck. They dump oil and diesel all over the place. Facility has been there for approximately 10 years. Owners name is Rock Collins. Advice called to call HD also." No other information to this report is known.

The second SPILL report, for 2005, states unknown waste is being improperly handled. The report remarks states, "Approximately 75 drums illegally stored at above location. Drums are stored in semi trailers and along side of building. Caller noted the words hazardous waste on several drums." No other information to this report is known.

The U.S. EPA responded to the FOIA request on December 13, 2013 stating the Land and Chemicals Division had records on the RCRA-LQG and forwarded the 1994 LQG Handler Detail Report. The detail report did not have any violations or information pertaining to possible incidents on the Property.

The Superfund Division responded on December 17, 2013 stating they had no records for the Property. A second request was sent to the Superfund Division requesting the search be conducted again based on the database stating the Property is a Brownfields site. As of the date of this report, no response has been received.

Copies of all correspondence and regulatory records reviewed are included in **Appendix H**.

4.4 Interviews/Parcel Reconnaissance

4.4.1 Interviews

Mr. Elwood Jee, Property Owner, was interviewed during the site visit on Friday, December 27, 2013. Mr. Jee has owned the Property since July 2007. Mr. Jee indicated that the Property was formerly an auto recycling company and had multiple tenants throughout history such as a foundry, linen company and other various "mom and pop" shops. He stated all USTs on the Property had been removed. Mr. Jee had a Phase I and Phase II ESA performed when he acquired the Property. Since the purchase of the Property, Mr. Jee has renovated the five-story building with loft apartments. Construction to the first floor of the building is ongoing. The one-story building to the north is used as a parking garage. Mr. Jee stated that there are two transformers located on the Property.

One is located to the east of the apartment building and was present when he purchased the Property. The other, located on the west side of the apartment building, was installed in 2008.

Mr. Jee stated that the Phase II ESA performed in October 2009 did not find any contamination on the Property. He also stated that some of the wells installed as part of the Phase II ESA had been covered by the parking lots installed.

4.4.2 Parcel Reconnaissance

A site inspection of the Property was conducted on Friday, December 27, 2013. The site is occupied by a five-story loft apartment building and a one story parking garage. Concrete parking areas are located to the east and west of the apartment building. The remainder of the Property is gravel. Three of the monitoring wells were identified on the Property from the previous VAP Phase II PA performed in October 2009. There are three former UST cavities located on the Property. There were no fill ports or evidence of the former UST locations. Access to the Property is gained by Harrison Avenue to the south and Buck Street to the east. The Property is surrounded by the Western Hills viaduct to the north, Harrison Avenue and United Mail to the south, Buck Street with BIS, a file storage warehouse, and a Duke Energy electrical substation to the east and the CSX terminal to the west.

During the inspection of the interior portion of the five story building, it was noted that the first floor was under construction and floors two through five had been renovated into loft apartment, five on each floor. The apartments were not inspected during the site visit. The basement was split into two areas. The portion of the basement beneath the eastern side of the building was mostly unused and had a pit and an elevator, both no longer in use. The second basement, beneath the western portion of the building, was full of furniture and construction supplies. The basement was not fully inspected during the site visit due to inaccessibility.

The interior portion of the parking garage was observed. The former terminal offices were inaccessible due to construction debris. It was noted that possible asbestos containing material was present in the office spaces in the form of floor and ceiling tiles. The parking garage area was occupied by tenant cars and trucks. There were no large quantities of oils observed.

The exterior portion of the Property consists of two paved parking areas to the east and west of the apartment building. The remainder of the Property is gravel. Piles of debris, including brick, drywall, wood, and fill material was observed along the northern portion of the Property as well as surrounding the parking garage. There were three monitoring wells observed on the Property, installed in 2009 during the VAP Phase II PA. One of the monitoring wells was labeled with a CSX label. All of the former UST locations were observed and there was no evidence of the USTs or associated fill pipes or dispensers.

Two pad-mounted transformers were identified on the Property. One is located to the east of the apartment building and was present when he purchased the Property. The other, located on the west side of the apartment building, was installed in 2008. Both transformers appeared to be in good condition. There was no staining or corrosion observed beneath either transformer. One pole-mounted transformer is located on the southeast corner of the Property. This transformer is labeled with the blue "non-PCB" containing label and appears in good condition.

A parcel diagram with site features and findings and photographs for the subject property are included in **Appendix I**.

4.5 Proposed ROW and Construction Activities

Construction activities will occur in conjunction with the building of the Western Hills Exit Ramp to Spring Grove Avenue. The construction will involve major construction activities in the northern portion of the Property and will affect a portion of the parking garage. Completion of these activities will require new ROW from the Property.

Available project information depicting the proposed construction limits is included in **Appendix J**.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Completion of the Phase I ESA for the former Harrison Terminal located at 1220 Harrison Avenue in Cincinnati, Hamilton County, Ohio included the review of federal, state, and local environmental databases, as well as previous environmental studies, to identify facility records for the subject site or any immediately adjacent properties involved in the use, storage, or disposal of hazardous substances or petroleum products. In addition, interviews were conducted with the property owner to assist in identifying potential environmental concerns for the site. Available historical records for the property were reviewed in order to determine past land uses and a site inspection of the property was conducted on Friday, December 27, 2013.

The former Harrison Terminal located at 1220 Harrison Avenue was identified as a RCRA-LQG, a DERR site, a BROWNFIELDS property, with two spills reported and has a release for previous USTs. According to the UST closure reports from 1991, the petroleum release was considered cleaned up after the removal of the USTs. According to the Ohio EPA files received about the Brownfields status, the VAP Phase II PA performed on the Property, as well as the spill reports, the Property has been impacted by contaminants either from the former operations on the Property or from an off-site source. According to the Phase II ESA, the Property has been impacted along the northern portion from the northern adjacent Property, CSX. A monitoring well, was identified as a CSX well MW-10 during the site visit.

An interview with Mr. Elwood Jee, the property owner, verified that all USTs had been removed from the Property. Mr. Jee also stated that there was no contamination on the Property according to the VAP Phase II PA report. This information is false, since the VAP Phase II PA report was reviewed and indicated that there is suspected off-site impact. Results from the soil sampling show shallow soils (0 to 2 feet) exceed the commercial/industrial VAP standards along the northern portion of the Property. However, future potential exposure is possible if the Property is disturbed during construction activities. Also, groundwater sampling results show dissolved PCP, lead and arsenic exceeding the VAP generic UPUS in upgradient wells. A deed restriction to prohibit the installation of potable wells to eliminate the exposure pathway was recommended.

The combination of historical records reviewed (city directories, aerial photographs, historic topographic maps, Sanborn maps, and Hamilton County Recorder records) indicates that the subject property was a foundry and furniture factory from the late 1890s to approximately the 1950s. It became the Harrison Terminal in 1953 and the Property operated as many businesses from sheet metal works, scrap metal recycling, junk yard, truck repair, trailer sales, and transport facility until 2007 when E&T Real Estate Holdings, LLC purchased the Property.

With the extensive historical use of the Property and from review of previous reports, it is believed that there are environmental impacts to the Property. The historical use of the Property and possible off-site impacts require additional assessments based on the current proposed work within the construction limits. A Phase II ESA is recommended.

5.1 Phase II ESA Recommendations

Additional soil and groundwater analysis should be conducted on the Property prior any to construction activities. According to the previous VAP Phase II PA, the Property has shallow soils (0 to 2 feet) that exceed the commercial/industrial VAP standards along the northern portion of the Property. Future potential exposure is possible if the Property is disturbed during construction activities. Also, groundwater sampling results indicated dissolved PCP, lead and arsenic exceeded the VAP generic UPUS in upgradient wells. A deed restriction to prohibit the installation of potable wells to eliminate the exposure pathway was recommended.

According to the Hamilton County Recorder website, there are no recorded deed restrictions in place for the Property.

Contaminants recommended for analysis within the construction limits are RCRA Metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs). An additional three soil borings should be performed within the proposed construction limits as well as the installation of an additional monitoring well. All existing monitoring wells within the northern portion of the Property should be located and inspected for quality. If the quality is sufficient, these wells should be developed and re-sampled. If the wells are found insufficient and/or tampered with, new wells should be installed in the proposed construction limits and the insufficient wells should be properly abandoned.

According to previous soil boring and monitoring well logs, the soil within the proposed construction limits are sand and silt to approximately 20 feet below ground surface (bgs) and water has been discovered around 17 feet bgs.

Care should be taken to prepare construction activities and health and safety within the proposed construction limits.

A map with existing soil boring and monitoring well locations, as well as proposed locations, is provided in **Appendix K**.

APPENDIX A **FIGURES**

APPENDIX AVAILABLE <u>UPON REQUEST</u> (Large File)

APPENDIX B **AERIAL PHOTOGRAPHS**

APPENDIX AVAILABLE <u>UPON REQUEST</u> (Large File)

APPENDIX C SANBORN MAPS

APPENDIX AVAILABLE <u>UPON REQUEST</u>

APPENDIX D CITY DIRECTORIES

APPENDIX AVAILABLE <u>UPON REQUEST</u>

APPENDIX E HAMILTON COUNTY AUDITOR'S/RECORDER'S INFORMATION

APPENDIX AVAILABLE <u>UPON REQUEST</u>

APPENDIX F HISTORIC TOPOGRAPHIC MAPS

APPENDIX AVAILABLE <u>UPON REQUEST</u>

APPENDIX G EDR DATABASE REPORT

APPENDIX AVAILABLE <u>UPON REQUEST</u> (Large File)

APPENDIX H REGULATORY RECORDS INFORMATION

APPENDIX AVAILABLE <u>UPON REQUEST</u>

APPENDIX I PARCEL DIAGRAM AND PHOTOGRAPHS

APPENDIX AVAILABLE <u>UPON REQUEST</u>

APPENDIX J PROJECT PLAN SHEETS

APPENDIX AVAILABLE <u>UPON REQUEST</u>

APPENDIX K SOIL BORING AND MONITORING WELL LOCATION MAP

APPENDIX AVAILABLE <u>UPON REQUEST</u>