

Perth Amboy Brownfield Inventory Final Report



October 30, 2016

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Background

The Middlesex County Improvement Authority (MCIA) and the City of Perth Amboy, New Jersey are working to develop cost effective and creative strategies to address Perth Amboy's brownfield properties. The City estimates that there are more than 200 brownfields properties in Perth Amboy. The goal of this project was to create an accurate digital data file for Perth Amboy and MCIA to use in updating existing data sources and to identify commercial properties that might be brownfields, which are not currently included in state or federal databases.

Rutgers University Center for Urban Environmental Sustainability (CUES) completed a field survey that verified the addresses and business names of properties listed in the New Jersey Department of Environmental Protection's Known Contaminated Site List (KCSL), NJ Office of Planning Advocacy's Brownfields SiteMart, and US EPA's Resource Conservation Recovery Act (RCRA) databases. The field survey also identified potential industrial and commercial brownfield properties based on the type of business being conducted onsite or observable physical characteristics of a site.

Perth Amboy planning staff divided the city into five (5) priority neighborhoods, covering 1.8 sq. miles (Figure 1). Surveyor teams walked the five neighborhoods over a two month period during summer, 2016. The CUES team surveyed 25 Site Mart sites, 76 KCSL sites, 178 RCRA Sites and 10,087 parcels within the survey area. Properties listed in the three (3) databases were noted (Figure 2) and commercial properties (Figure 3) were visually evaluated to determine the potential for contamination based upon the business type and existing site conditions.

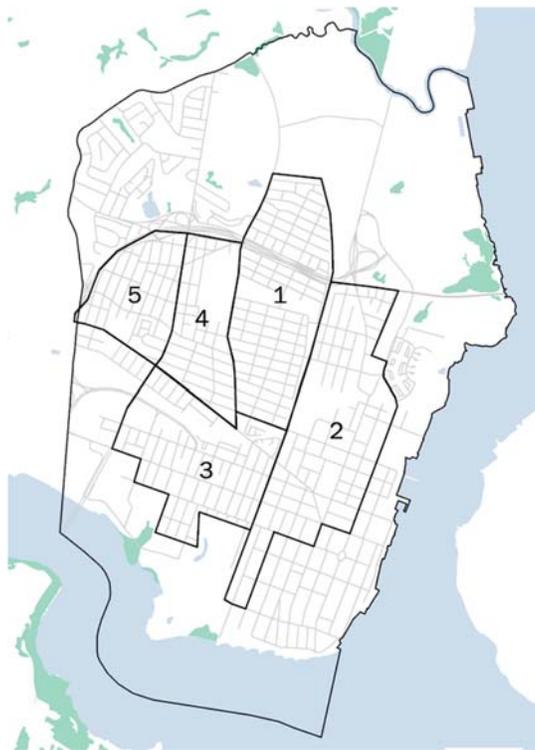


Figure 1. Designated Perth Amboy Brownfield Survey Area.

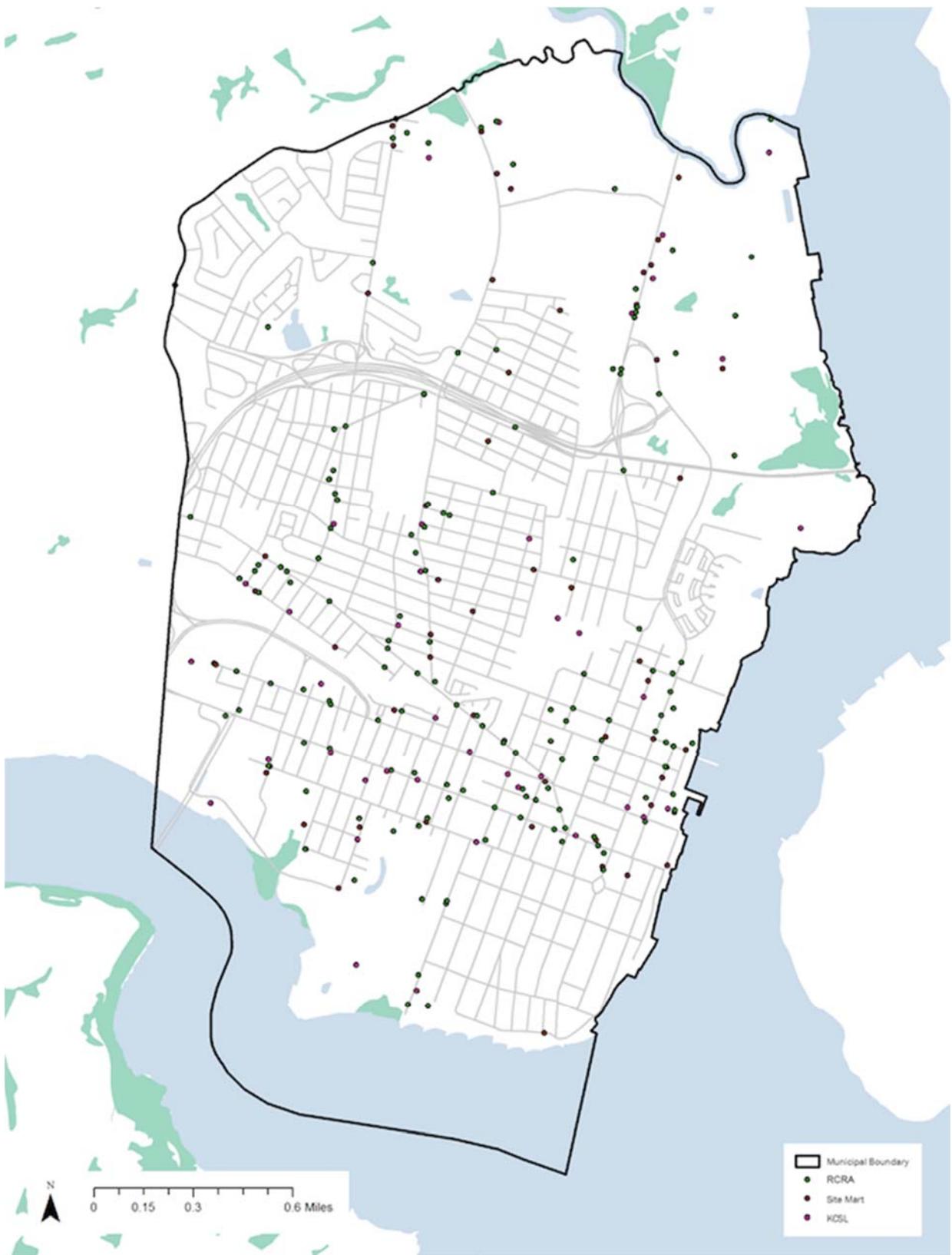


Figure 2. Sites listed in NJDEP Known Contaminated Site List (KCSL), NJ Office of Planning Advocacy Bronwfields SiteMart, and US EPA RCRA databases.

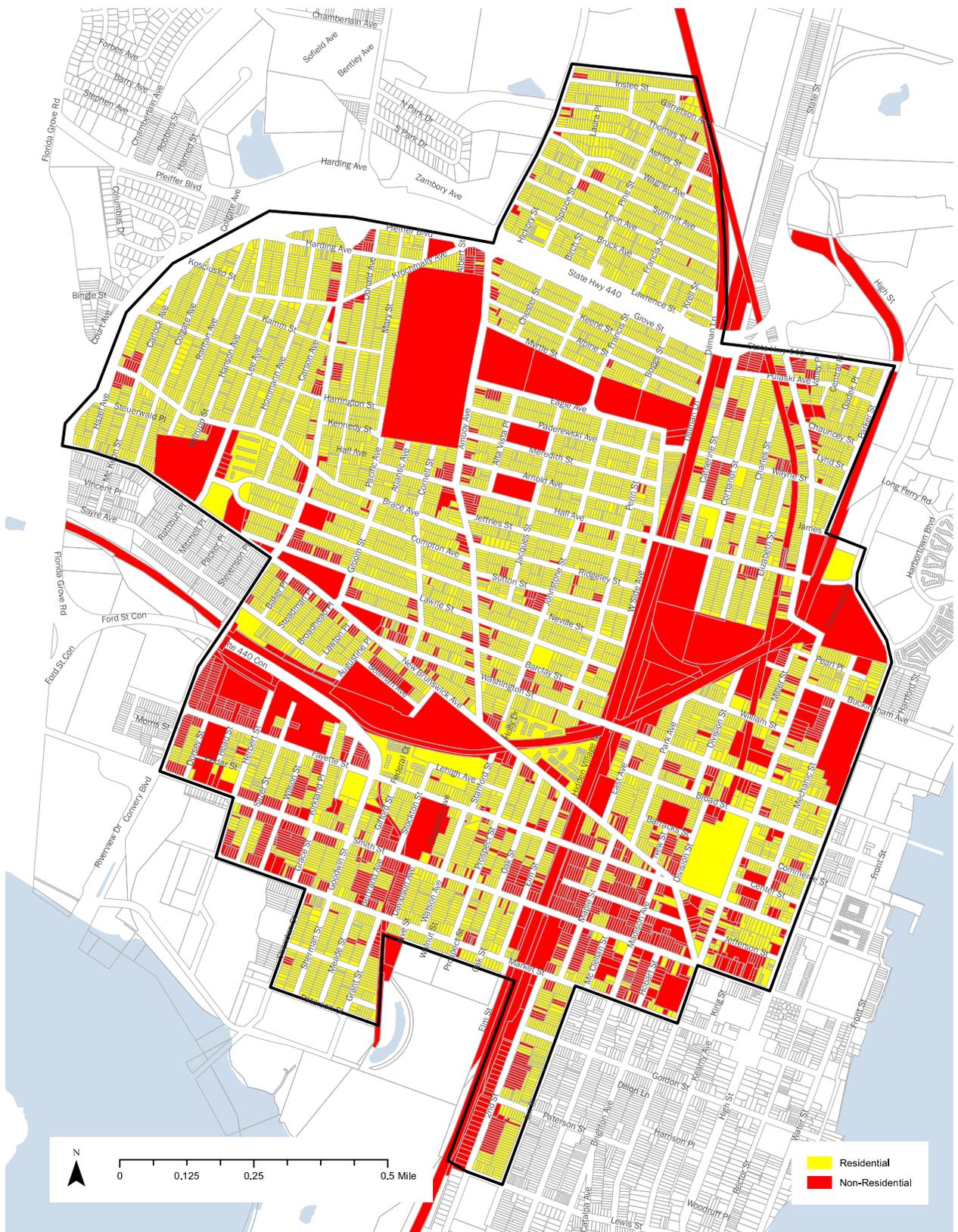


Figure 3. Perth Amboy residential and commercial parcels surveyed (June-August, 2016).

INVENTORY METHODS

Downloading and Processing Data from State and Federal Sources

In order to complete this project, data was downloaded from various State and Federal databases (Data Dictionary, see Appendix I). We first downloaded the municipality boundary and parcel data from NJGIN, and MOD IV tax assessor data. Then we joined the Parcel Data and the Tax data in order to view addresses and parcel ownership. RCRA site data was downloaded from the EPA's Geospatial Data Download Service¹; KCSL sites from the Department of Environmental Protection²; and NJ Brownfield Site Mart sites from the New Jersey Office of Planning Advocacy³. When all the data was collected and brought into ArcGIS it was clipped to the boundary of Perth Amboy and placed into a single geodatabase.

Survey Questionnaire

After the data downloads were complete, a field survey questionnaire, which contained a series of questions the surveyors answered for each parcel (Figure 4; Full Survey Questionnaire, see Appendix II), was developed in collaboration with MCIA and the City of Perth Amboy. After the survey questions were completed, they were added as fields (columns) to the parcel data. The data and survey questions were uploaded to ArcGIS Online, and then using ArcMap "Hosted Services" and ArcGIS Online, the data was downloaded to a handheld tablet used by the survey team to record data in the field, where the questions appeared as a menu in the ArcGIS Collector application.

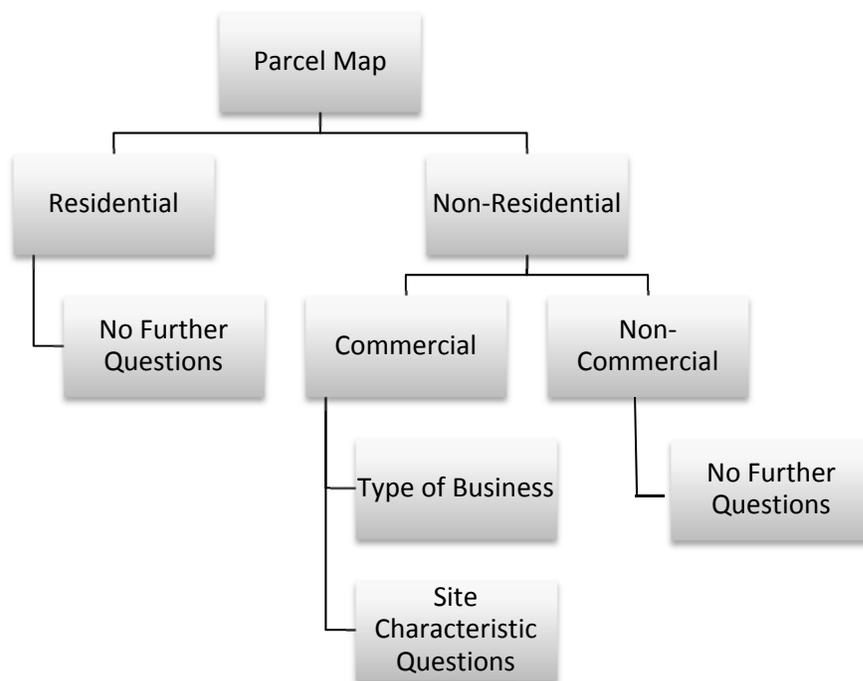


Figure 4. Survey Questionnaire schematic.

¹ <https://www.epa.gov/enviro/geospatial-data-download-service>

² http://njogis.newjersey.opendata.arcgis.com/datasets/6f11f6204ffa40a09527c8205aec4425_7

³ <http://www.nj.gov/state/planning/spc-research-resources-gis.html>

ArcGIS Online and Handhelds

The handheld device allowed the survey team to view 1) a map of each neighborhood that outlined each parcel; 2) dots identifying the location of each site listed in the three (3) databases; and the survey question menu (Figures 5, 6).

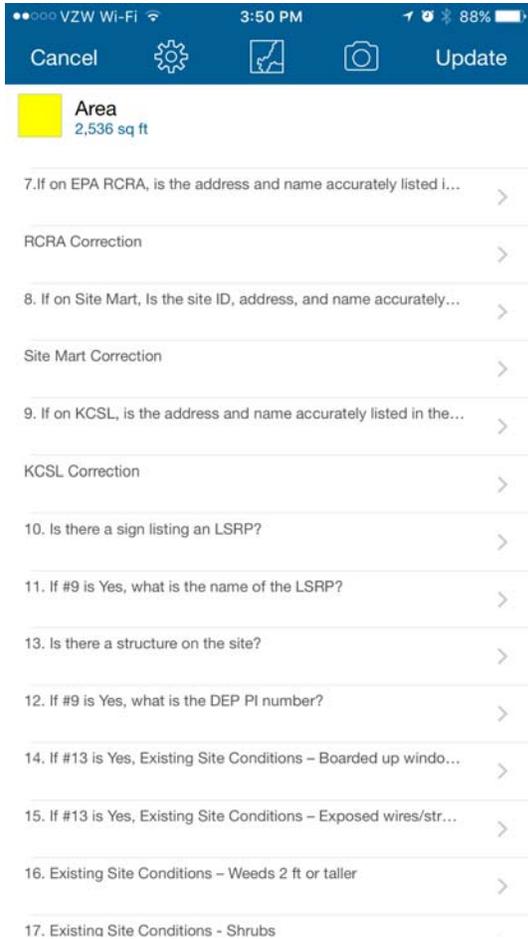


Figure 5. Survey Questions Screen



Figure 6. Data Collector Map Screen

DATA VERIFICATION

The status of all the sites listed in the official databases (address and business name), as well as each parcel within the defined study area were field verified. Survey teams employed the handheld GIS data collectors to compare database information for each identified site with respect to site address and name of any onsite business. When the surveyors found a site that was listed in a database they compared the current information to observable information. If the field observation differed (address, name of business) they entered a correction into the handheld device. If a commercial parcel was not in one of the three (3) databases, the surveyors noted the type of business and existing site conditions. Based on answers to the menu questions, sites that might have contamination issues were identified. Digital documentation was also collected where possible. This digital data is accessible on the interactive site map stored on the CUES website. This Geodatabase has also been given to the project partners MCIA and the City of Perth Amboy for their further use.

In order to assure the accuracy of the data collected during the field survey, post-processing tasks included:

- **Verification of Databases Information** - Each site in the known databases was matched and cross verified with an identified corresponding parcel. If there was an obvious parcel match, but data was missing (example: no business name), further information was obtained using google street view and/or web search capabilities. Eight sites were listed in the known databases that we were unable to find a corresponding parcel, and so they have not been included in our analysis.

INSERT TABLE WITH THE EIGHT PROPERTIES

- **Parcel Survey for Possible Contamination** - Sites within the survey area not found in the three (3) databases, which matched the criteria we associated with the possibility of contamination, were identified and extracted from the field survey data.
- **Parcels identified as possible Brownfield candidates** - Data from each site was reviewed; if the data was incomplete, further investigation (onsite and/or digital) was completed to fill in any missing data fields.

SURVEY RESULTS

DATABASE DISCREPANCIES - Addresses

There were nine (9) sites whose RCRA address did not match the property address verified in the field survey, and five (5) sites whose KCSL address did not match the property address verified in the field survey (Figure 7, Tables 1 and 2).

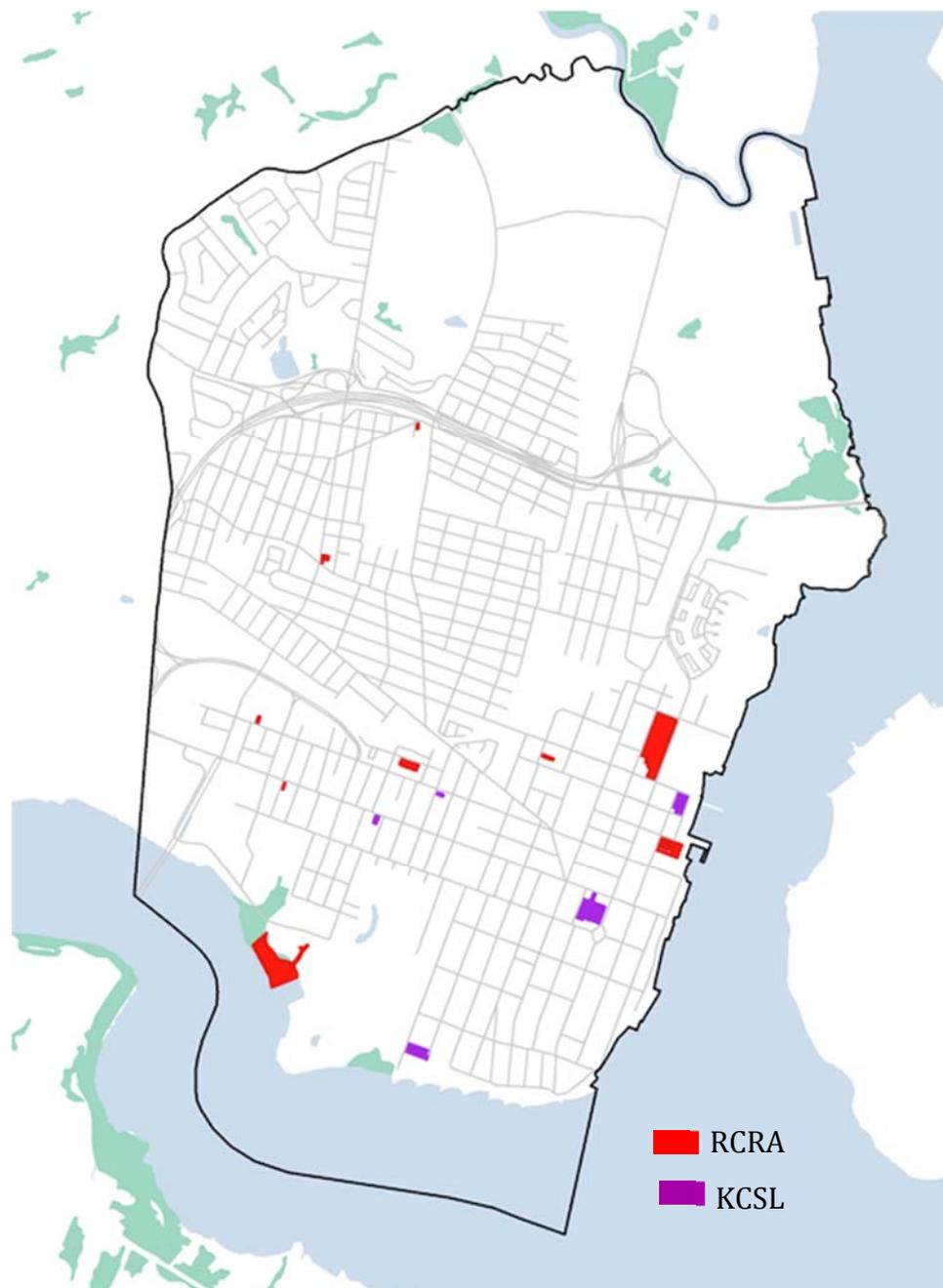


Figure 7. Map of KCSL and RCRA address discrepancies found between the database record and the field survey observation.

TABLE 1. RCRA Address Discrepancies.

RCRA ID	BLOCK	LOT	RCRA ADDRESS	Field Verified Address
110024256874	160	24.01	333 LEHIGH AVE	327 LEHIGH AVE
110022526925	136.01	1	385-387 RECTOR STREET	368 RECTOR ST.
110001534395	15	2	164 SHERIDAN STREET	401 RIVERVIEW DR.
110004157901	224	34	420 PARK AVE	428 PARK AVE.
110004193266	244	2.01	1 CONVERY BLVD	457 High Street
110007928314	87.02	29	SMITH & WILSON ST	475 SMITH ST.
110007952224	378.01	17	ALBERT & KROCKMOLLY ST	479 KROCHMALLY AVE
110004118286	101.02	3	544 FAYETTE ST	536 FAYETTE ST., NAME
110004248528	283	1.01	522 BRACE AVE	606 CONVERY BLVD

TABLE 2. KCSL Address Discrepancies.

SITE ID	BLOCK	LOT	KCSL ADDRESS	Field Verified Address
66979	9	2	SADOWSKI PWY	51 FIRST ST
83280	236	1.01	34 BROAD ST	401-409 RECTOR ST
30536	117	29	FAYETTE & ELM STS	346 PROSPECT ST
5460	73.01	27	351 SMITH ST	358 MARKET ST
5490	56	7.01	273 HIGH ST	270 KING ST

There were no address discrepancies in the **Site Mart** data.

DATABASE DISCREPANCIES - Business Names

In a number of cases, the corporate name in the database did not match the name shown on an onsite building. There were forty-two (42) sites in the RCRA database, twenty-six (26) sites in the KCSL database, and twelve (12) sites in the Site Mart database whose names did not match the name onsite. These discrepancies may be due to a corporation doing business (DBA) under a name that differs from its corporate name, or due to a business changing ownership. However, verifying actual site ownership versus the DBA name was beyond the scope of this study, and so we have just noted these differences in Tables 3, 4, and 5.

TABLE 3. RCRA Business Name Differences

REGISTRY ID	BLOCK	LOT	RCRA NAME	FIELD VERIFIED NAME
110004117839	170	1	BILLS AUTO ELECTRIC	ALL STATE MOTORS
110004119392	322	26	ALPINE SERVICE CENTER	G&G AUTO TRANSMISSION'S PLUS
110004203086	273	20	GULF SERVICE STATION	JERSEY GAS
110014474005	144	27	JOES CLEANERS & TAILORING	BOTANICA ESPIRITU DE AMERICA

110004194489	421	6	R&M AUTO BODY	NATIONWIDE UNIVERSAL AUTO
110004127132	101.04	1	B P SERVICE STATION - FORMER	76
110004170691	227	17	REPUBLIC PETROLEUM CO	ALL STARS ACADEMY
110014833877	126	19	R & S STRAUSS	AMBOY LAUNDROMAT
110001544981	73.01	27	PERTH AMBOY TIRE INC	AMERICAN INDUSTRIAL SUPPLY CORPORATION INC.
110004218089	80	31	REGAL BEDDING CO	CARLITOS CLASSIC AUTO BODY
110004200588	61	1	AUTOMATIC ECONO WASH	CHARLIE'S ECON-O-WASH
110004150631	274	17.0 1	APPLIED REFINERY SERVICES INC	CHECK CASHING
110004146861	393	5.01	JOSEPH CHEVROLET	CHILD PROTECTION AND PERMANENCY OF MIDDLESEX COUNTY
110004233115	58	11	BUSINESS CARDS TOMORROW	DON MANUELS
110004250783	70	8	JV AUTO REPAIRS	E&C AUTO MECHANIC
110004243373	119	2	BANKERS SAVINGS BANK	EDWIN JEWELRY AND BOTANICA ARTE ESPIRITUAL
110014882573	155	22	POLKOWITZ CADILLAC BUICK	EL CLASSICO RESTAURANT AND BILLARDS
110004243809	311	14	MIKES TRANSMISSION SERVICE	EMPIRE AUTI
110004214225	110	1.01	GLASGOW & SONS INC PRODUCTION DIV	FEDERAL HILL TOWNHOMES
110004213958	224	12	ARLEY MERCHANDISE CORP	FLOORING CENTRAL
110007699801	379.04	8	SUNOCO SERVICE STATION #0007 6073	GETTY
110004208991	125	40	MCGUIRE REALTY	GRACELAND ADULT MEDICAL DAY CARE
110004200659	316	34	AMBOY AUTO BROKERS	HILLS TIRE SERVICE
110015677427	35	48	KEATING JAMES J	KING HIGH GARAGE, ADDRESS 158 SECOND ST.
110004182009	186	32	V&H AUTO BODY INC	LIKE NEW AUTO BODY
110004151596	62	22	ONE HOUR MARTINIZING	METROPCS AND MINERVA DRY CLEANER
110004181590	175	13	REX AUTOBODY	NBA COLLISION, LLC AUTOBODY
110004132493	163	1.02	SUNOCO SERVICE STATION	NUNO'S AUTOMOTIVE
110004259542	123	8	YMCA OF RARITAN BAY AREA	PERTH AMBOY PUBLIC LIBRARY, ADDRESS
110004187914	118	1	GISELA DRY CLEANER	PRIMAVERA BAKERY
110004132484	275	6	SUNOCO SERVICE STATION	PROFESSIONAL AUTOMOTIVE SERVICES
110004118632	472.04	3	J & D CITGO	RACEWAY
110004172582	103.01	5	SEVILLE AUTO BODY INC	RAMOS AUTO BODY
110004143150	161	10	RELIABLE REFINISHING CO INC	RELIABLE AUTO BODY
110014355928	75	37	HESS CORPORATION	SPEEDWAY
110015255962	311	8	HESS SERVICE STATION #30513	SPEEDWAY
110004195656	153	4	ENRIQUE AUTO BODY & PAINT	ST. VINCENT DEPAUL

110004162290	103.02	1.01	AMBOY DIESEL SERVICE INC	TROPICAL CHEESE INDUSTRIES, ADDRESS 450 FAYETTE ST.
110004211852	121	12	NATIONAL STATE BANK	WELLS FARGO
110004197100	163	1.03	VALUE SERVICE STATION	WOROCO
110004185694	399.02	41	BEIRA ALTA AUTO BODY SHOP	XCLUSIVE AUTO BODY
110000322259	478.02	1	CHEVRON PRODUCTS CO - PERTH AMBOY REFINERY	BUCKEYE PARTNERS, LP

TABLE 4. KCSL Business Name Differences

SITE ID	BLOCK	LOT	KCSL NAME	FIELD VERIFIED ADDRESS
56871	123	40	MOUNT CARMEL CHURCH	VIDA CHURCH
55633	206	9	SOBEL BROS INC	THE LOT IS CURRENTLY VACANT
5460	73.01	26	PERTH AMBOY TIRE	ROYAL DINETTE
42914	263	15	CLEMENT FUEL OIL	ROSA'S DELI
45951	182	42	PERTH AMBOY BOE (FORMERLY D BROWN CO)	NOW RESIDENTIAL
5434	103.02	1.01	MENPE CORP	TROPICAL CHEESE INDUSTRIES
85552	136.01	1	ANSEMI PROPERTY @ WESTMINSTER REALTY	THE LANDINGS
5503	311	8	HESS STATION 30513	SPEEDWAY
5461	75	37	HESS STATION 30262	SPEEDWAY
175009	161	13	PUBLIC SAFTEY COMPLEX	RELIABLE AUTOMOTIVE REPAIR
5470	192	1	MIDDLESEX CNTY VOC & TECH HIGH SC	PARK VIEW APARTMENTS
43582	152	21	R&M AUTO REPAIR	M&B AUTO CARE
66747	155	24	ALBELAIN COSMETICS	LANDI APARTMENTS
5513	273	20	AMBOY CITGO	JERSEY GAS
49677	70	8	JV AUTO REPAIRS	E&C AUTO MECHANIC
24736	183	24	NEXTROM INC	MAGNUM TRANSFORMER CORPORATION
5426	378.01	16	J & N FUEL STOP NJ 0207	SHELL
5494	110	1.01	382 FAYETTE STREET	KAPLAN AT FEDERAL HILL
43753	322	26	ALPINE SERVICE CENTER	G&G AUTO TRANSMISSION'S PLUS
5514	324	15	SHIVA GASOLINE INC	DELTA
5436	181	1	WOROCO III	DELTA GAS
5498	481	1	CHEVRON USA INC	BUCKEYE PARTNERS, LP
145120	68.01	1	SUSSMAN MANUFACTURING	CARLITO'S CLASSIC AUTO BODY
145120	40	1.06	SUSSMAN MANUFACTURING	CARLITO'S CLASSIC AUTO BODY
145120	81	1.01	SUSSMAN MANUFACTURING	AMBOY LIGHTING
5435	207	27	DRY CLEANERS	ALEGRIA RESTAURANT II, GLOW II SALON

TABLE 5. Site Mart Business Name Differences

SITE ID	BLOCK	LOT	SITE MART NAME	FIELD VERIFIED NAME
8087	192	1	MIDDLESEX CNTY VOC & TECH HIGH SC	PARK VIEW APARTMENTS
8105	163	1.02	J P AUTO FIX	NUNO'S AUTOMOTIVE
49677	70	8	Not Available	E&C AUTO MECHANIC
8126	80	31	SUSSMAN MANUFACTURING	CARLITO'S CLASSIC AUTOBODY
8118	58	17	143 TO 145 SMITH INCORPORATED	OASIS HOME, DIABEST, INC, ALEX VIDEO AND PHOTO STUDIO
8109	182	38	PERTH AMBOY BOE (FORMERLY D BROWN CO)	NO NAME POSTED ON SITE
8096	124	19	AMOCO STATION 13397	BP
8122	207	27	445 AMBOY AVENUE	ALEGRIA RESTAURANT II, GLOW II SALON
8107	322	26	ALPINE SERVICE CENTER	G&G AUTO TRANSMISSION'S PLUS
8088, 8092	110	1.01	Not Available	FEDERAL HILK
8106	263	15	CLEMENT FUEL OIL	ROSA'S DELI
8102	211	10	STATE INSULATION CORP	DISTRIBUTION INTERNATIONAL

POTENTIAL BROWNFIELD PARCEL SURVEY

Residential versus Non-Residential Properties

A total of 10,087 parcels were surveyed within the designated Perth Amboy study area. To ensure every parcel within the study boundary was recorded, an answer to the first menu question (Residential or Non-Residential) was required for each property. If a parcel was residential the surveyor entered “Residential” and then continued on to the next parcel without answering any further survey questions. If the property was non-residential, then additional survey questions related to the type of commercial activity and conditions observed on site were answered. Eight thousand two hundred seventy nine (8,279) parcels were found to be residential; one thousand eight hundred eight (1,808) were non-residential; and one thousand forty parcels exhibited evidence of commercial activity (Figure 8). Potential Brownfield properties accounted for 7% of properties identified as Non-Residential and 11% of properties identified as commercial uses.

Business Type

After determining a site was Non-Residential, the next question asked the type of business. There were seven business categories specified in the menu that might indicate the presence of contamination on site, as well as a category of “Other”. If a site was “Other” then the surveyor manually entered the type of business into the digital data collector.

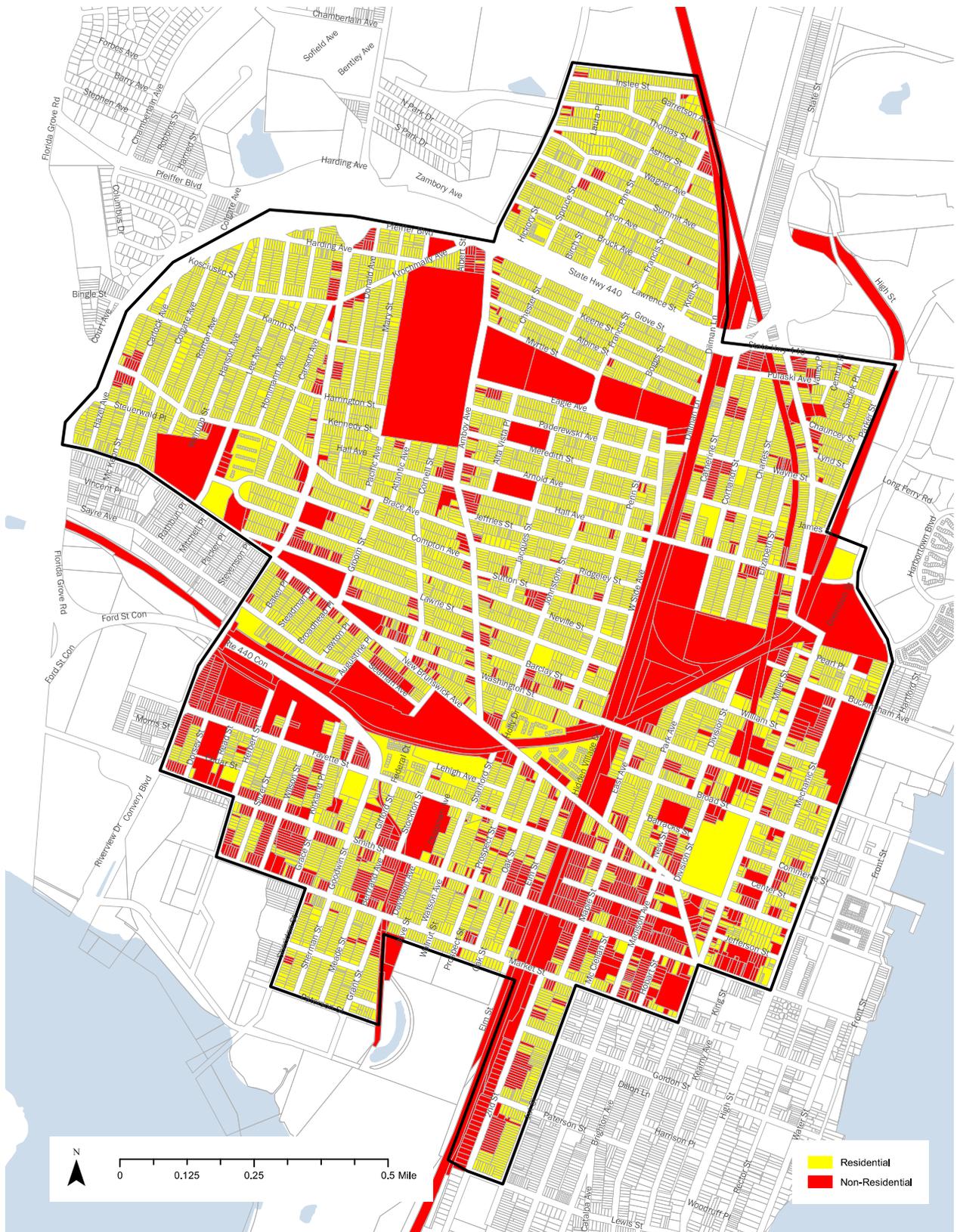


Figure 8. Map of 10,087 residential and non-residential properties surveyed within the Perth Amboy study area boundary.

One hundred twenty-four (124) parcels, 1% of the total parcels surveyed, were found to match the menu option businesses that might be associated with contamination, or were identified by surveyors as “Other” commercial uses (Figures 9, 10, Table 6). Analysis of parcels that were designated as “Other” (Figure 10) found additional current uses that might cause contamination (example: oil and gas), as well as new uses for sites that historically might have been contaminated (example: bodega opened on a previously industrial parcel). The current status of these potentially contaminated sites (address, lot/block data, activity (site is active or non-active), and presence or absence of onsite structures is presented in Tables 6, Figures 11, 12, 13.

Auto related activities and railroad related uses were responsible for 43% and 27%, respectively, of the potentially contaminated parcels (70% of the 124 locations).

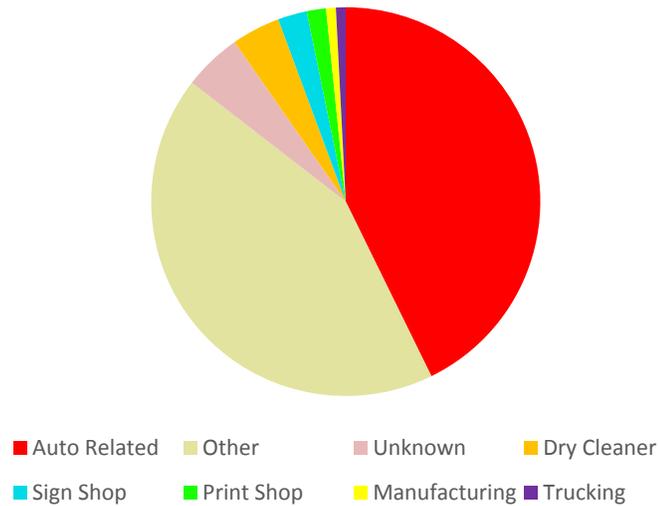


Figure 9. Proportion of businesses matching specific menu options potentially associated with activities that could lead to site contamination.

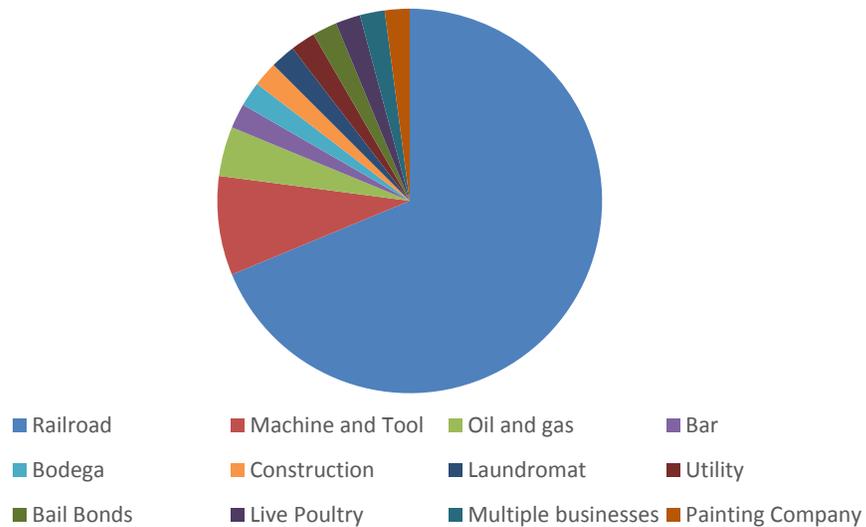


Figure 10. Proportion of businesses identified as “other” uses that may potentially be associated with current or historic activities that could cause site contamination.

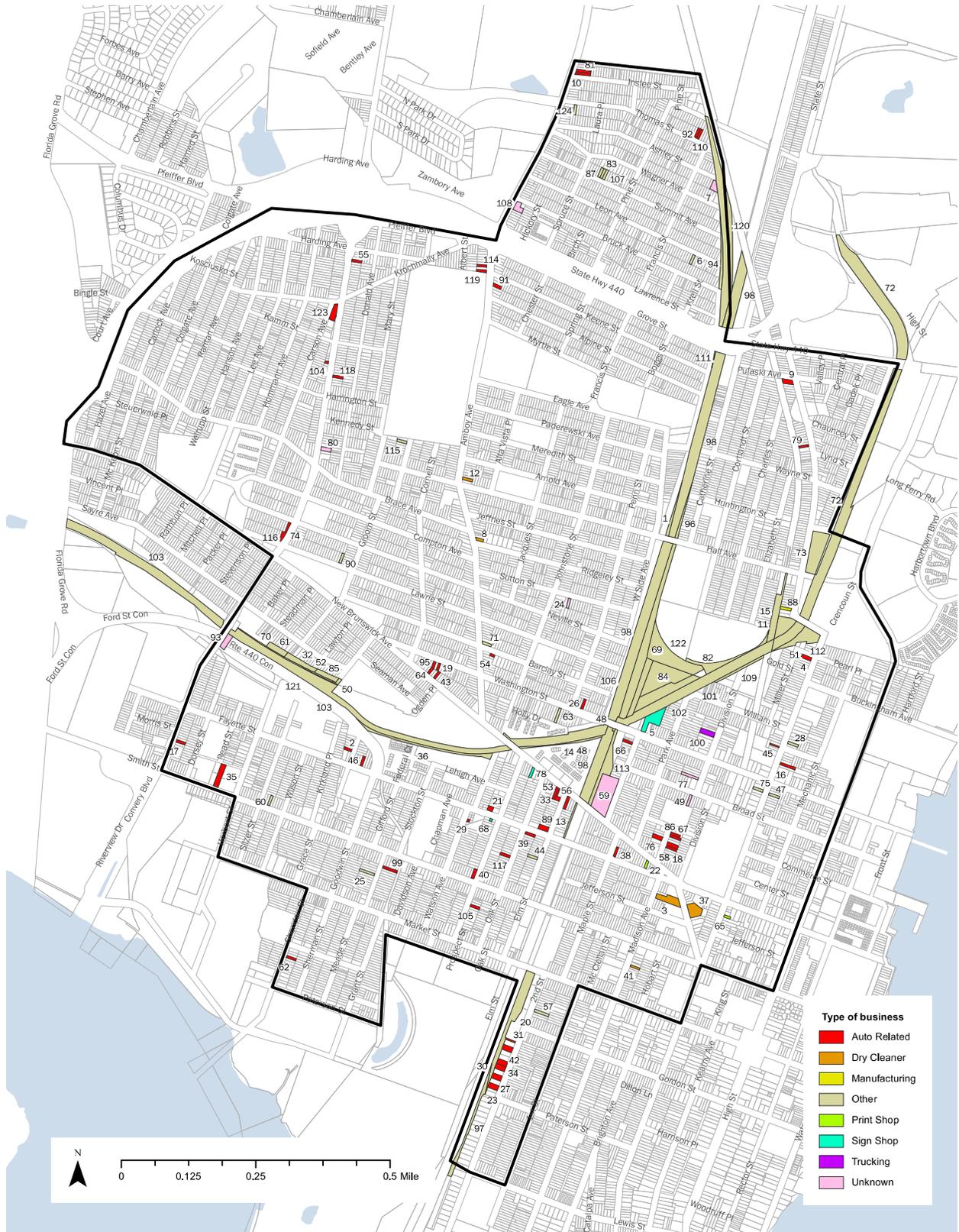


Figure 11. Map of all parcels that house businesses that might be associated with current or historic contamination.

TABLE 6. Business Associated With Potential Contamination

MAP #	BLOCK	LOT	ADDRESS	BUSINESS TYPE	ACTIVITY	STRUCTURE
1	11	2.04	N/A	Other - Railroad	Non-Active	No
2	106.01	14	361 MC GUIRE PL.	Auto Related	Active	Yes
3	124	12.01	167 NEW BRUNS. AVE	Dry Cleaner	Active	Yes
4	249	23.01	531 STATE ST.	Auto Related	Active	Yes
5	221	3	224 WASHINGTON ST.	Sign Shop	Active	Yes
6	435	38	3235 LEON AVE.	Other – Painting Company	Active	Yes
7	455	12	317 ASHLEY ST.	N/A	Active	Yes
8	271	8	582-584 AMBOY AVE.	Dry Cleaner	Active	Yes
9	360	36	785 STATE ST.	Auto Related	Active	Yes
10	449	4	984 Amboy Ave	Auto Related	Active	Yes
11	108	4.01	N/A	Other - Railroad	Non-Active	No
12	324	21	634 Amboy Ave.	Dry Cleaner	Active	Yes
13	11	1.13	N/A	Other - Railroad	Active	No
14	108	2	N/A	Other - Railroad	Non-Active	No
15	228.04	3.02	GOLD STREET	Utility power line	Active	No
16	231	19	448 STATE ST.	Auto Related	Active	Yes
17	101.04	41	320 CONVERY BLVD.	Auto Related	Non-Active	Yes
18	148	26	374 NEW ST.	Auto Related	Active	Yes
19	173	20	389 WASHINGTON ST.	Auto Related	Active	Yes
20	11	1.07	MARKET STREET	Other - Railroad	Active	No
21	159	1.01	310 FAYETTE ST.	Auto Related	Active	Yes
22	152	18	187 NEW BRUNS. AVE.	Print Shop	Active	Yes
23	36	2	141 Second St.	Auto Related	Active	No
24	212	37	311 SUTTON ST.	N/A	Non-Active	No
25	74	21	277 Betrand Ave	Middlesex County road department	Active	Yes
26	167	3	274 WASHINGTON ST.	Auto Related	Active	Yes
27	36	4	145 Second St.	Auto Related	Active	Yes
28	245	11	460 STATE ST.	Other - Bar	Non-Active	No
29	116	33.04	340 Watson St.	Auto Related	Active	Yes
30	36	6	143 Second St.	Auto Related	Active	Yes
31	36	12.01	173 Second St.	Auto Related	Active	Yes
32	182	47	N/A	Other - Railroad	Non-Active	No
33	157	14	375 ELM ST.	Auto Related	Active	Yes

34	36	7	145 Second St.	Auto Related	Active	Yes
35	100	3.01	518 SMITH ST.	Auto Related	Active	Yes
36	108	1.01	600 ROUTE 440 CONNECTION	Other - Railroad	Non-Active	No
37	126	21.01	164 NEW BRUNS. AVE.	Dry Cleaner	Active	Yes
38	152	5	206 FAYETTE ST.	Auto Related	Active	Yes
39	118	28	348 OAK ST.	Auto Related	Active	Yes
40	116	10	307 Prospect St.	Auto Related	Active	Yes
41	59	25	276 MADISON AVE.	Dry Cleaner	Active	Yes
42	36	10	173 Second St.	Auto Related	Active	No
43	173	35	394 NEW BRUNS. AVE.	Auto Related	Active	Yes
44	118	19	331 ELM ST.	Other – Natural gas regulator station	Active	No
45	230	7.02	459 STATE ST.	Auto Related	Active	Yes
46	107	4	416 FAYETTE ST.	Auto Related	Active	Yes
47	233	29	426 STATE ST.	Other – Bail Bonds	Active	Yes
48	108	2.01	NEW BRUNS. AVE	Other - Railroad	Non-Active	No
49	149	22	171 BROAD ST.	N/A	Active	Yes
50	182	47.02	N/A	Other - Railroad	Non-Active	No
51	108	4	N/A	Other - Railroad	Active	No
52	108	1.07	N/A	Other - Railroad	Non-Active	No
53	157	15	267 NEW BRUNS. AVE.	Auto Related	Active	Yes
54	169	1.02	353 BARCLAY ST.	Auto Related	Active	Yes
55	379.05	13	774 Convery Blvd.	Auto Related	Active	Yes
56	156	4	257 New Brunswick Ave.	Auto Related	Active	Yes
57	42	46	218 SECOND ST.	Other – Oil and gas	Active	Yes
58	148	25	376 NEW ST.	Auto Related	Active	Yes
59	154	1.01	244 NEW BRUNS. & EAST AVE	Unknown	Non-Active	No
60	104.02	3	470 SMITH ST.	Other - Construction	Non-Active	Yes
61	182	48	523 SAYRE AVE. REAR	Other – Railroad	Non-Active	No
62	85	4	194 SHERIDAN ST.	Auto Related	Active	Yes
63	166	11	285 WASHINGTON ST.	Other - Bodega	Active	Yes
64	173	32	402 NEW BRUNS. AVE.	Auto Related	Active	Yes
65	127	35	338 STATE ST.	Print Shop	Active	Yes
66	222	8	427-433 EAST AVE.	Auto Related	Active	Yes
67	148	22	380 NEW ST.	Auto Related	Active	Yes

68	116	30.03	311 Fayette St.	Sign Shop	Active	Yes
69	11	2.03	N/A	Other - Railroad	Non-Active	No
70	108	1.06	N/A	Other - Railroad	Non-Active	No
71	208	8	460 AMBOY AVE.	Other - Laundromat	Active	Yes
72	108	5	N/A	Other – Railroad	Active	No
73	356.01	1	626-662 STATE STREET	Other – Multiple businesses	Active	Yes
74	195	17	515 CONVERY BLVD.	Auto Related	Non-Active	Yes
75	229	9	425 STATE ST.	Dry Cleaner	Active	Yes
76	150	11	377 NEW ST.	Auto Related	Active	Yes
77	224	13	425 Division St	N/A	Active	Yes
78	158	20	291 NEW BRUNS AVE.	Sign Shop	Active	Yes
79	360	13	735 STATE ST.	Auto Related	Active	Yes
80	283	33	612 CONVERY BLVD.	Unknown	Non-Active	Yes
81	449	3	984 AMBOY AVE.	Auto Related	Active	Yes
82	108	3.02	N/A	Other - Railroad	Non-Active	No
83	441	7	410 Summit Ave.	Other – Machine and Tool	Active	No
84	219	1	CHARLES ST. REAR	Other – Rail Related	Non-Active	No
85	182	46	N/A	Other - Railroad	Non-Active	No
86	148	21	384 NEW ST.	Auto Related	Active	Yes
87	441	6	410 Summit Ave.	Other – Machine and Tool	Active	Yes
88	255	3	599 STATE ST.	Manufacturing	Active	Yes
89	157	1	266 FAYETTE ST.	Auto Related	Active	Yes
90	198	22	486 LAWRIE ST.	Other - Utility	Active	No
91	377	31	800 AMBOY AVE.	Auto Related	Active	Yes
92	453	14	344 THOMAS ST.	Auto Related	Active	Yes
93	108.03	1.08	N/A	Unknown - Construction	Active	No
94	432	1.01	WEST SIDE AVE.	Other - Railroad	Active	No
95	173	22	391 WASHINGTON ST.	Auto Related	Active	Yes
96	11	2.05	N/A	Other - Railroad	Non-Active	No
97	11	1.05	N/A	Other - Railroad	Active	No
98	11	2	N/A	Other - Railroad	Non-Active	No
99	73	34	284 BERTRAND AVE.	Auto Related	Active	Yes
100	225	14	463 DIVISION ST.	Trucking	Active	Yes
101	108	3	N/A	Other - Railroad	Active	No
102	219	1.01	REAR OF PARK & WILLIAM	Other - Railroad	Non-Active	No
103	108	1	MAIN STM.	Other - Railroad	Non-Active	No

104	311	18	695 CONVERY BLVD.	Auto Related	Active	Yes
105	70	33	282 PROSPECT ST.	Auto Related	Active	Yes
106	219	5.02	WASHINGTON ST. REAR	Other - Railroad	Non-Active	No
107	441	8	410 Summit Ave.	Other – Machine and Tool	Active	No
108	400	13.01	858 AMBOY AVE.	Unknown	Non-Active	Yes
109	108	3.01	N/A	Other - Railroad	Non-Active	No
110	453	15	340 THOMAS ST.	Auto Related	Active	Yes
111	365	1.02	CATHERINE ST.	Other - Railroad	Active	No
112	108	4.02	STATE ST.	Other - Railroad	Non-Active	No
113	11	2.01	SMITH ST.	Other - Railroad	Active	No
114	378.01	3.01	807 AMBOY AVE.	Auto Related	Active	Yes
115	277	14	645 Atlantic Ave.	Other – Machine Shop	Active	Yes
116	195	16	511 CONVERY BLVD.	Auto Related	Active	Yes
117	117	16	319 OAK ST.	Auto Related	Active	Yes
118	316	37	686 Convery Blvd.	Auto Related	Active	Yes
119	378.01	1	805 AMBOY AVE.	Auto Related	Active	Yes
120	432	1	MAIN ST GROVE CITY	Other - Railroad	Active	No
121	182	47.01	SAYRE AVE.	Other - Railroad	Non-Active	No
122	253	3	N/A	Other - Railroad	Non-Active	No
123	310	4	714 CONVERY BLVD.	Auto Related	Active	Yes
124	447	29	954 Amboy AVE.	Other – Live Poultry	Non-Active	Yes

Site Activity

Where there was evidence of business activity on a site (12a), the parcel was designated as “Active”. If the site was an overgrown empty lot (Figure 12b), or if it appeared that the business was vacant/closed (12c), the parcel was designated as “Non-Active”



Figure 12. Examples of a surveyed A) Active business, b) Non-Active lot, and C) Non-Active business.

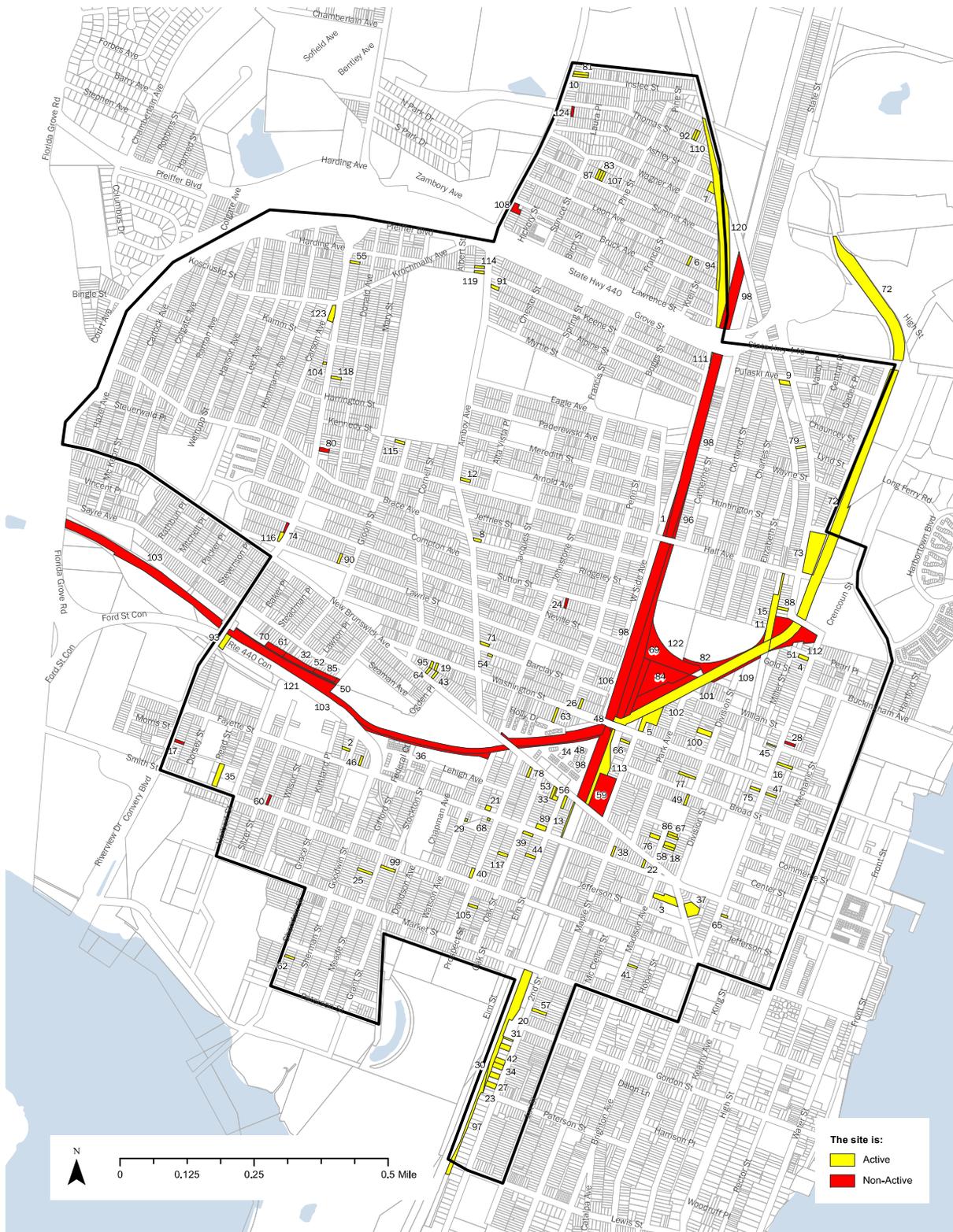


Figure 13. Map of potentially contaminated parcel activity status.

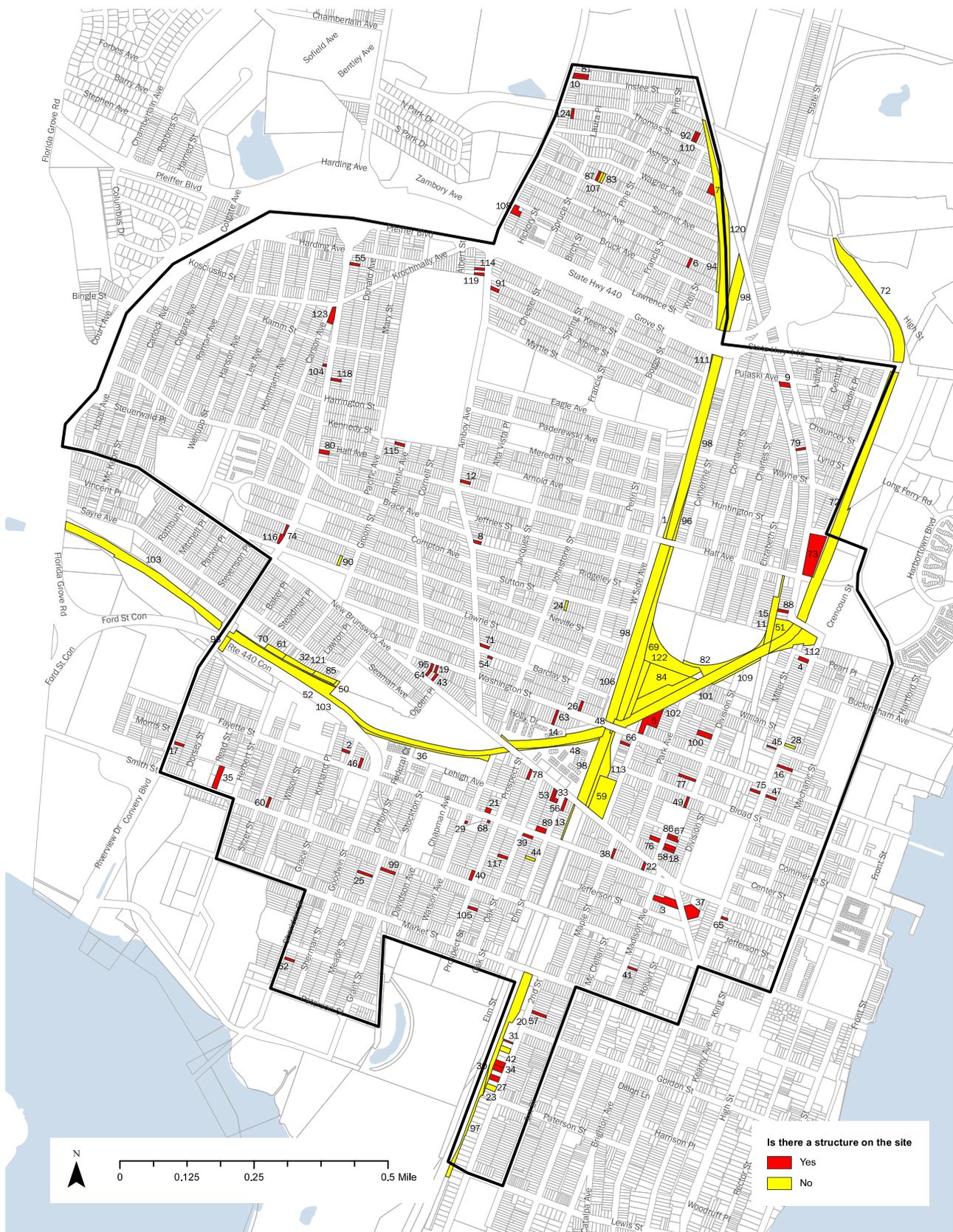


Figure 14. Map of potentially contaminated parcels with structures versus no structure.

Evidence of Chemical Spills

The majority of spills, observed on 35 properties (65% of all spill properties), are associated with auto-related businesses (Table 7, Figure 15).

TABLE 7. Parcels Where Spills Were Observed.

ID	BLOCK	LOT	ADDRESS	4. Name of Business
2	106.01	14	361 MC GUIRE PL.	Portech Auto Works
4	249	23.01	531 STATE ST.	Sergio and Sons
7	455	12	317 ASHLEY ST.	N/A
9	360	36	785 STATE ST.	H E K Machine Ink
16	231	19	448 STATE ST.	AR General MECHANIC LLC; Cruz Auto Repair
17	101.04	41	320 CONVERY BLVD.	Amboy Auto Radiator
18	148	26	374 NEW ST.	Chici Auto body, Gio's auto sales, F&J auto body
19	173	20	389 WASHINGTON ST.	M. Belem Motors
21	159	1.01	310 FAYETTE ST.	G.T Auto Tire
23	36	2	141 Second St.	Beato Auto Repair
27	36	4	145 Second St.	Unknown
29	116	33.04	340 Watson St.	Carballo Transmissions
30	36	6	143 Second St.	Ortiz Towing Service
31	36	12.01	173 Second St.	Santiago Tires Services
33	157	14	375 ELM ST.	DC AUTO BODY
34	36	7	145 Second St.	Luis Jr. Towing
35	100	3.01	518 SMITH ST.	Boss Audio and performance parts
38	152	5	206 FAYETTE ST.	Valdez Auto Sevice
42	36	10	173 Second St.	Road Runner II Towing and Services
43	173	35	394 NEW BRUNS. AVE.	unknown, probably Deepa Auto Body
46	107	4	416 FAYETTE ST.	JJ AUTOBODY
53	157	15	267 NEW BRUNS. AVE.	Moreno Auto Body, Victor custom Upholstery
56	156	4	257 New Brunswick Ave.	Brunswick Auto and Tries Service
58	148	25	376 NEW ST.	F&J Auto BODY
60	104.02	3	470 SMITH ST.	Hellenic Builders, LLC
62	85	4	194 SHERIDAN ST.	unknown
64	173	32	402 NEW BRUNS. AVE.	Deepa Auto Body
66	222	8	427-433 EAST AVE.	Bobby'o's affordable auto body
67	148	22	380 NEW ST.	N/A
74	195	17	515 CONVERY BLVD.	Alexa Motors
76	150	11	377 NEW ST.	FAYETTE MOTORS LLC
79	360	13	735 STATE ST.	White Cab Taxi
80	283	33	612 CONVERY BLVD.	N/A

83	441	7	410 Summit Ave.	Evans Machine and Tool
86	148	21	384 NEW ST.	Cheche's Auto Services
89	157	1	266 FAYETTE ST.	AJ Autobody
90	198	22	486 LAWRIE ST.	Raritan Bay Medical Center
92	453	14	344 THOMAS ST.	unknown
93	108.03	1.08	N/A	Joseph M. Sanzari, inc
95	173	22	391 WASHINGTON ST.	Deepa Auto Body
99	73	34	284 BERTRAND AVE.	Unitech autobody
100	225	14	463 DIVISION ST.	Hendry Bus Company
104	311	18	695 CONVERY BLVD.	Bobby O's Affordable Auto Sales
105	70	33	282 PROSPECT ST.	Auto Radiator sales and repair
107	441	8	410 Summit Ave.	Evans Machibe and Tool
108	400	13.01	858 AMBOY AVE.	Unknown
110	453	15	340 THOMAS ST.	unknown
113	11	2.01	SMITH ST.	NJ TRANSIT
114	378.01	3.01	807 AMBOY AVE.	Associated Sales and Leasing
115	277	14	645 Atlantic Ave.	N/A
116	195	16	511 CONVERY BLVD.	Amboy Auto Repair
117	117	16	319 OAK ST.	unknown
119	378.01	1	805 AMBOY AVE.	Barry-Livres Foreign Auto Service Center
123	310	4	714 CONVERY BLVD.	Auto Gallery

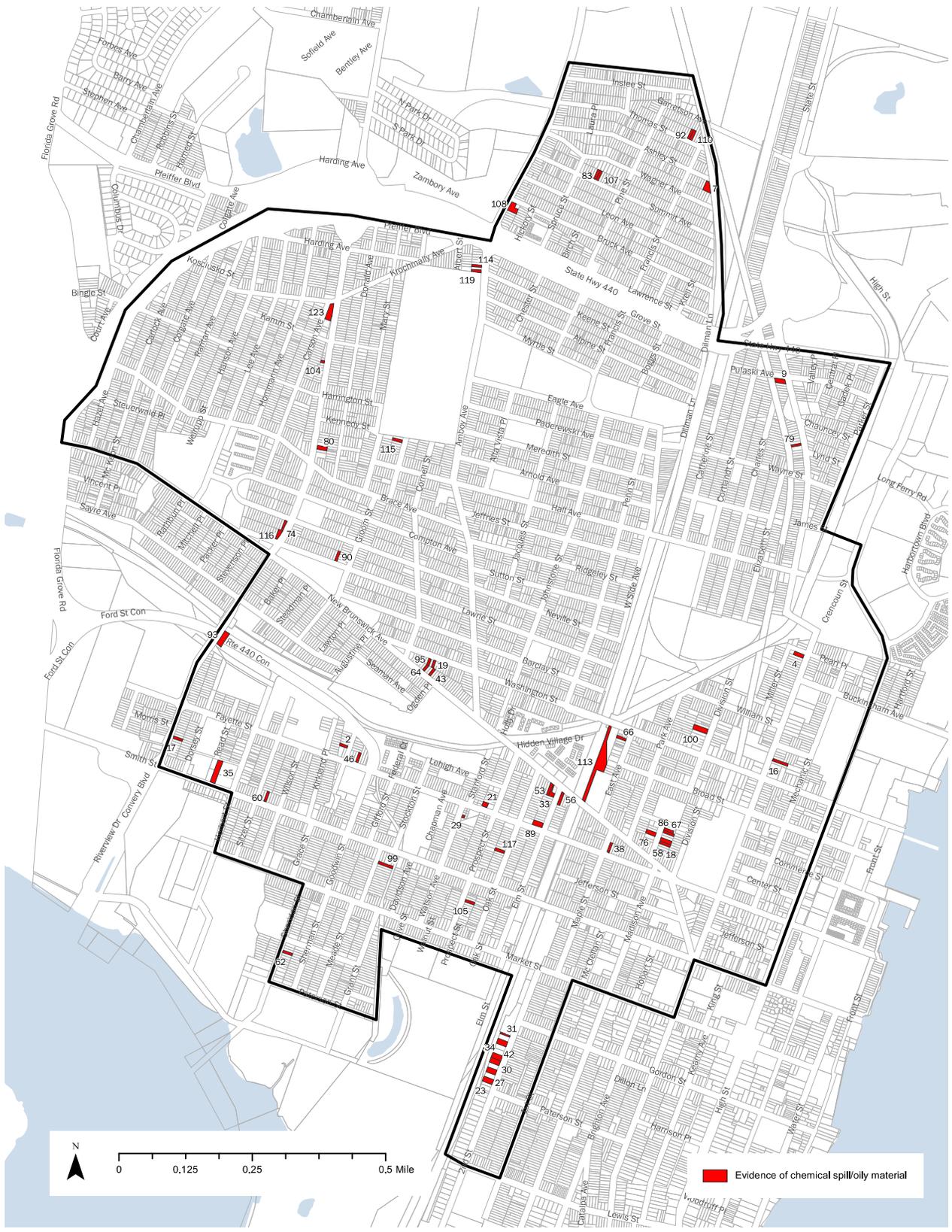


Figure 15. Parcels with evidence of chemical spills.

Chemical Drums

Evidence of chemical drums was observed on eleven (11) properties. At certain locations (Example: #23) there was also evidence that these drums might be leaking (Table 8, Figures 16, 17).

TABLE 8. Parcels Where Chemical Drums Were Observe

MAP #	BLOCK	LOT	ADDRESS	Name of Business
23	36	2	141 Second St.	Beato Auto Repair
24	212	37	311 SUTTON ST.	N/A
27	36	4	145 Second St.	Unknown
28	245	11	460 STATE ST.	Latin Love Lounge
57	42	46	218 SECOND ST.	Tomko Oil to gas conversions, oil tank removal
66	222	8	427-433 EAST AVE.	Bobby'o's affordable auto body
80	283	33	612 CONVERY BLVD.	N/A
89	157	1	266 FAYETTE ST.	AJ Autobody
90	198	22	486 LAWRIE ST.	Raritan Bay Medical Center
107	441	8	410 Summit Ave.	Evans Machibe and Tool
115	277	14	645 Atlantic Ave.	N/A

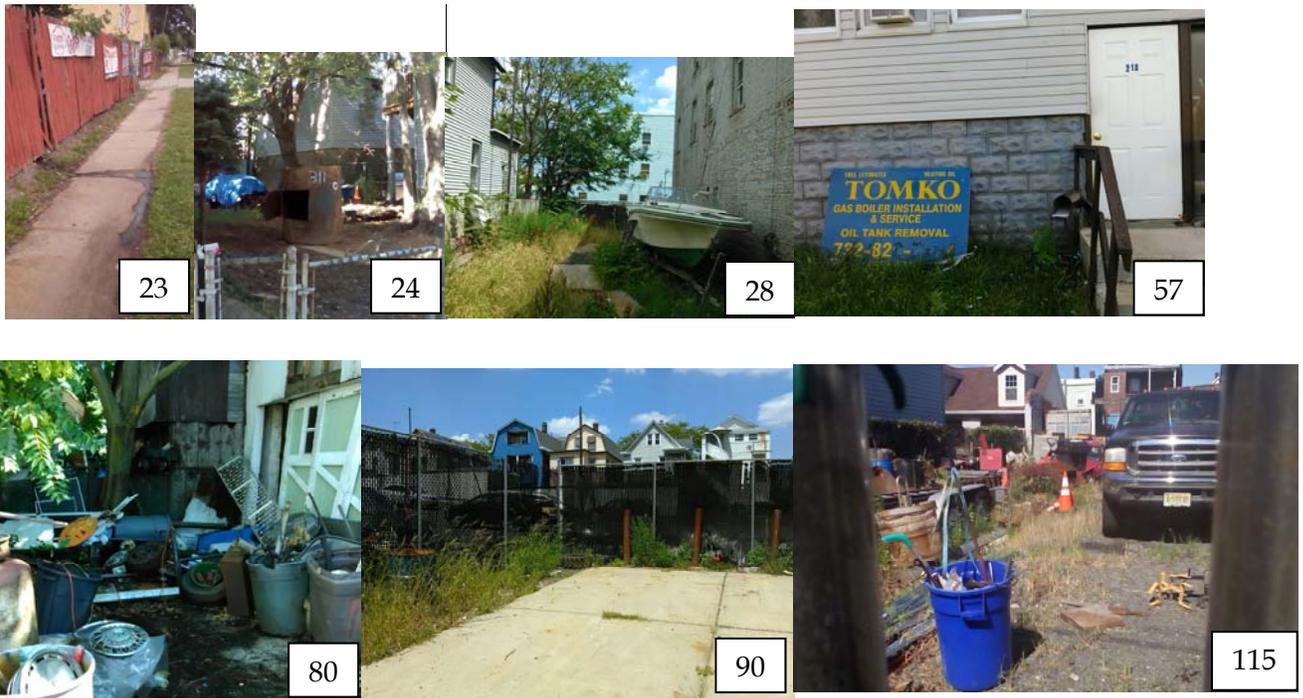


Figure 16. Examples of sites where chemical drums were observed. Photo numbers match Figure 17 map and Table 8 location ID numbers.

Squatter Activity

Three (3) sites had evidence of squatter activity onsite (Table 9, Figure 18). Two of these are the same locations where chemical drums were observed (sites 24 and 80).

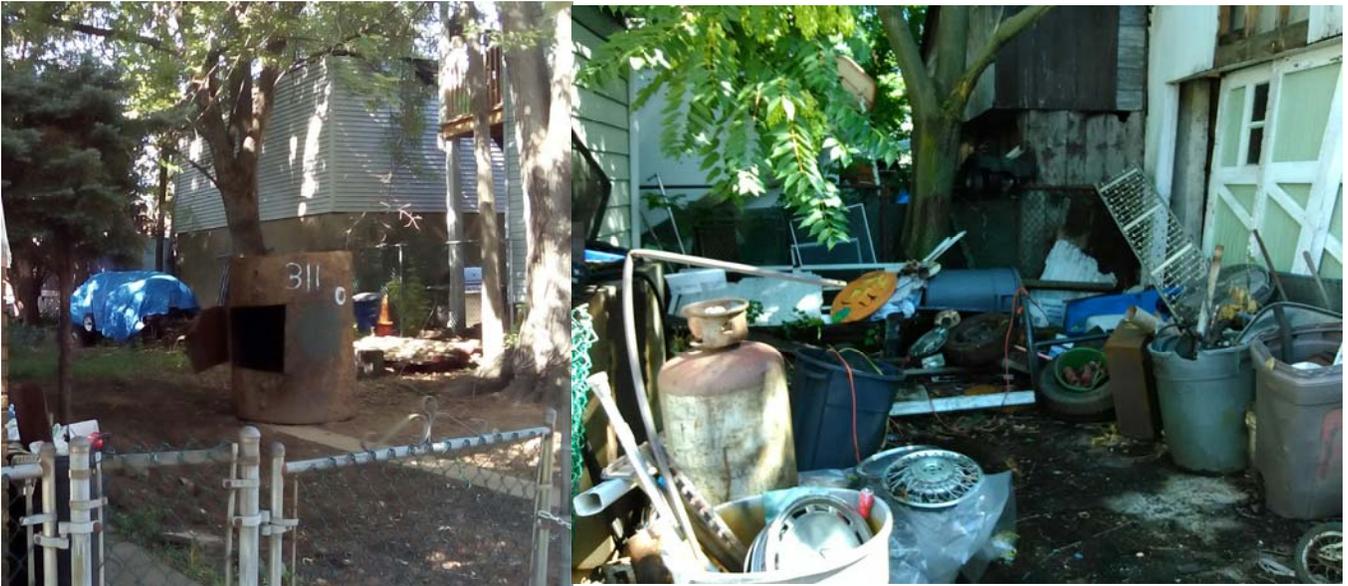


Figure 18. Examples of sites (24 and 80) where chemical drums and squatters were observed.

RECOMMENDED NEXT STEPS

APPENDIX I. Data Dictionary

Perth Amboy Brownfield Survey Data Dictionary*

Data	Source
NJ Parcel Data	https://njgin.state.nj.us/NJ_NJGINExplorer/IW.jsp?DLayer=Parcels%20by%20County/Muni
MOD IV Data	http://oprs.co.monmouth.nj.us/oprs/External.aspx?iId=12
EPA RCRA	https://www.epa.gov/enviro/geospatial-data-download-service
NJDEP KCSL	http://njogis.newjersey.opendata.arcgis.com/datasets/6f11f6204ffa40a09527c8205aec4425_7
NJ Brownfield Site Mart	http://www.nj.gov/state/planning/spc-research-resources-gis.html

*All data was accessed July, 2016

APPENDIX II. SURVEY QUESTIONNAIRE

Perth Amboy Potential Brownfield Survey Menu

1. Is the property residential?
 - a. Yes
 - b. No

2. If #1 is No, is site currently or in the past commercially (or industrially) used?
 - a. Yes
 - b. No

3. Type of business
 - a. Gas Station
 - b. Dry Cleaner
 - c. Auto-related
 - d. Trucking
 - e. Printing
 - f. Sign Shop
 - g. Manufacturing
 - h. Unknown
 - i. Other (ENTER)

4. Name of Business
 - a. ENTER

5. The site is:
 - a. Active
 - b. Vacant
 - c. Abandoned

6. Do current or traces of previous site uses suggest the possible presence of contamination?
 - a. Yes
 - b. No

7. Is the site listed in the USEPA RCRA database?
 - a. Yes
 - b. No

8. Is the site ID, address, and name accurately listed in the SiteMart database?
 - a. Yes
 - b. No
 - c. Correction (ENTER)

9. Is the site ID, address and name accurately listed in the Known Contaminated Site List database?
 - a. Yes
 - b. No
 - c. Correction (ENTER)

10. Is there a sign listing an LSRP?
 - a. Yes
 - b. No

11. If #9 is Yes, what is the name of the LSRP?
 - a. ENTER

12. 11b. If #9 is Yes, what is the DEP PI number?
 - a. ENTER

13. Does the site have buildings/structures?
 - a. Yes
 - b. No

14. If #11 is Yes, Existing Site Conditions - Boarded up windows/doors?
 - a. Yes
 - b. No

15. If #11 is Yes, Existing Site Conditions - Exposed wires/structural deficiencies?
 - a. Yes
 - b. No

16. Existing Site Conditions - Weeds 2 ft or taller
 - a. Yes
 - b. No

17. Existing Site Conditions - Shrubs
 - a. Yes
 - b. No

18. Existing Site Conditions - Trees
 - a. Yes
 - b. No

19. Existing Site Conditions - Evidence of Dumping?
 - a. Yes
 - b. No

20. Existing Site Conditions – Presence of chemical drums?

- a. Yes
- b. No

21. Existing Site Conditions – Evidence of chemical spill/oily material?

- a. Yes
- b. No

22. Existing Site Conditions – Unusual odors?

- a. Yes
- b. No

23. Existing Site Conditions – Evidence of squatters?

- a. Yes
- b. No