Site: 655 Colfax Avenue
Site Recon Dates: August 31st and September 1st, 2010
Consultant: O'Brien & Gere & LaBella Associates, P.C.

Summary of Available Historic Records:

- Constructed in 1979.
- North Building (approximately 41,900 square feet (sq. ft.) basement and approximately 41,900 sq. ft. first floor).
- South Building (approximately 126,900 sq. ft. basement and approximately 126,900 sq. ft. first floor). An auto shop is located within the west side of the building.
- Former Service Station (approximately 2,500 sq. ft. first floor – no basement).
- The North and South Buildings have been utilized as school buildings (i.e., Edison Technical & Occupational Educational Center) since construction.
- A glass/steel beam greenhouse is located adjacent to the eastern side of the North Building. The construction date of the greenhouse is unknown.
- The Former Service Station ended operation as a service station in approximately 2007 and at the time of this report was reported to be only used for storage (i.e., not routinely occupied).
- The fuel storage tanks (i.e., gasoline, diesel, oil) associated with the Former Service Station were removed three years ago.
- The following NYSDEC Spill listings were identified associated with this property:
    - Closed NYSDEC Spill #8703453 associated with the release of approximately 15 gallons of waste oil due to the overflowed of a waste oil storage tank (location not stated on Spill Report Form) in 1987.
    - Closed NYSDEC Spill #9008457 associated with the discharge of waste oil to floor drains in the first floor of the South Building in 1990. These floor drains directly discharged to the dirt floor in the South Building Basement. Automobile floor hoists (i.e., lifts) in the auto repair shop also reportedly leaked hydraulic oil onto the dirt floor. A concrete floor was reportedly poured over the impacted area.
    - Closed NYSDEC Spill #9306017 associated with the release of approximately ½ gallon of gasoline due to a tank overflow (location not stated on Spill Report Form) in 1993.
    - Closed/inactive NYSDEC Spill #9314097 associated with the failure of a 6,000-gallon diesel tank at Former Service Station in 1993. Water was found and removed from tank. No product was reportedly spilled. Tank piping was repaired in 2003.
    - Closed/inactive NYSDEC Spill #0370199 associated with the release of approximately 1,000 gallons of wastewater used to put out an automobile fire (location not stated on Spill Report Form) in 2003.
    - Closed/inactive NYSDEC Spill #0651011 associated with a tank overfill (South Building Basement) in 2006. A floor drain and trench drain in the vicinity of the tank were reportedly impacted.
    - Closed/inactive NYSDEC Spill #0652118 associated with gasoline odors detected in the South Building Basement in 2007. Source of odor was determined to be from the dumping of approximately 2 gallons of gasoline next to the exterior of the South Building near the auto repair shop.
    - Closed/inactive NYSDEC Spill #0806165 associated with the release of approximately 2 gallons of hydrochloric acid to a floor drain (location not stated on Spill Report Form) in 2008.
- Building permits were issued by the City of Rochester for the following:
    - Installation of two 6,000 gallon gasoline tanks in 1977 (location not stated).
    - Installation of one 8,000-gallon diesel tank in 1977 (location not stated).
    - Installation of two 15,000-gallon underground oil tanks in 1978 (location not stated).
    - Installation of three 1,000-gallon oil waste tanks in 1977 (location not stated).
    - Removal of two 500-gallon underground storage tanks in 2007. [Note: An Underground Storage Tank Closure Report dated July 24, 2007 states that the two tanks are 600 gallon waste oil tanks (further details provided below).]
    - Removal of two 6,000-gallon storage tanks in 2005 (contents not stated).
    - Removal of one 8,000-gallon storage tank in 2005 (contents not stated).
    - Installation of one 8,000-gallon diesel tank in 1992 (location not stated).
    - Installation of two 6,000-gallon gasoline tanks in 1992 (location not stated).
    - Installation of two 500-gallon tanks in 1992 (location not stated). [Note: An Underground Storage Tank Closure Report dated July 24, 2007 states that the two tanks are 600 gallon waste oil tanks (further details provided below).

- City of Rochester Fire Department records indicate that two 6,000-gallon gasoline tanks, one 8,000-gallon diesel fuel tank, and three 1,000-gallon waste oil tanks maintained at the Site; however, dates of installation/removal and location(s) were not provided.
- Underground Storage Tank Closure Report:
    - A Report prepared by L&O Mechanical Contractors, dated July 24, 2007 states that two 600-gallon fiberglass underground storage tanks (USTs) were installed at the Site in 1992 for waste oil associated with automotive garages (Tank 004 installed near the Former Service Station, and Tank 005 installed near the auto repair shop in the South Building) . The two tanks were removed in 2007 and the excavations were backfilled with clean materials. VOCs and SVOCs were not detected in the excavations above laboratory detection limits. A Petroleum Bulk Storage Certificate also indicates that a 500-gallon aboveground storage tank (Tank 006) was installed at the Site in 1999; however, the location of the tank was not provided.
    - The report indicates that an oil separator was located in the Former Service Station and was proposed to be removed in 2007.
- H&A performed seep sampling along the southern basement wall in December 1992. Lab results indicated concentrations of biochemical oxygen demand (BOD5), total organic carbon (TOC), and chemical oxygen demand (COD) below concentrations generally detected in leachate from municipal solid waste landfills. In addition, VOCs were below the reported laboratory detection limits.
- A neutralization tank was reportedly formerly utilized to collect waste water from the science labs. This tank is not currently utilized. Lines to the tank have reportedly been cut off and re-routed underground along the eastern side of the South Building to the sewer.

Current Site Use:

- Currently owned and operated by the Rochester City School District.
- Approximately 1,430 students occupy the school from approximately 7 am to 5 pm Monday through Friday.
- Approximately 130 school faculty (i.e., teachers, administrators, nurses, cafeteria workers, custodians, etc.) occupy the school from approximately 7 am to 5 pm Monday through Friday.

Site Recon Observations:

- North Building
    - The 1st floor consisted of primarily a gym, weight room, pool, and locker rooms.
    - A slab-on-grade greenhouse was observed on the eastern side of the North building. This area was not accessible at the time of the site reconnaissance.
    - The basement consisted of primarily earthen floor at bedrock with poured concrete walkways.
    - Two (2) air handling units (exhaust fan and supply fan) were present in the basement. According to RCSD staff, the first floor is under positive pressure with respect to the basement.
- South Building
    - The 1st floor consisted of primarily classrooms. Classrooms included auto repair, metal machining, welding, wood working, carpentry, plumbing and masonry shops as well as computer rooms and traditional classrooms.
    - The east, west, and southern portions and a small portion at the northern end of the basement were unfinished spaces with earthen floors at bedrock. The central portion of the basement has a poured concrete floor and is utilized for storage of school equipment/supplies.
    - Two (2) air handling units (exhaust fan and supply fan) were present in the basement. According to RCSD staff, the first floor is under positive pressure with respect to the basement.
- Former Service Station
    - The foundation system for this building is a slab-on-grade construction.
    - A classroom was present on the east end of this building; however, it is reportedly not currently utilized.
    - Floor slab condition was generally good (only minor cracking and no heaving observed).
    - Pressure and air exchange rates within building were not known by owner.
- The air handling units in the North and South Building Basements were not running and had reportedly been turned off for approximately 12 hours prior to the LaBella and OBG's initial round of VOC and landfill gas readings. A second set of readings including background readings and duplication of some penetrations were collected approximately one hour after the air handling units were turned on. The purpose of this was to evaluate the effectiveness of the air handling units in decreasing concentrations and therefore mitigating potential vapor

intrusion. A decrease in VOC concentrations was noted throughout the North and South Building Basements when the air handling units were turned on.

- VOCs were not detected in the majority of the background and penetration readings in the North Building basement. However, elevated readings were detected near the center of the south wall (Basement Locations 1, 2, AIR2, AIR3, AA4, and AA5 as shown on Figure 6). However, high readings were detected on the 1st floor of the North Building (i.e., restrooms) directly above the location of the elevated readings in the basement (1st Floor Locations 10, 11, 12, AA9, AA10 as shown on Figure 3). As such, the 1st Floor readings may be an indoor air source of VOCs for the elevated basement readings.

List of Observed Floor Penetrations (Potential SVI Locations):

- North Building 1st Floor
  - Exposed concrete floor in doorway between gym and storage area (i.e., Locations 1, 2)
  - There was some floor cracking (<1/8" to 1/2") observed (i.e., Locations 3, 8, 9, 10, 24, 25)
  - An apparent 1/2" to 1" cut in the concrete was observed (i.e., Location 4)
  - Floor drains (4-6") (i.e., Locations 5, 6, 7, 8, 10, 11, 12, 16, 17, 19)
  - Heater penetrations (1/2") (i.e., Locations 13, 18)
  - Electrical penetration (1/2") (i.e., Location 9)
  - Drinking water pipe penetration (1" to 2") (i.e., Locations 14, 15) [*Note: The basement could be seen through the penetration at Location 15.*]
- North Building Basement
  - Water seeps and cracks in wall (i.e., Locations 1, 21, 23, 30)
  - There was some floor cracking (<1/8" to 1/2") observed (i.e., Locations 8, 9, 10, 24, 25)
  - Floor drains (3" to 5") (i.e., Locations 6, 7, 12, 13, 15, 26, 27)
  - Sumps (30" diameter) (i.e., Locations 11, 20, 29, 32)
  - Broken bedrock (i.e., Locations 16, 17, 18)
  - Base of wall at floor (i.e., Locations 2, 5, 22, 28)
- South Building 1st Floor
  - Gap in floor at elevator shaft (1/2") (i.e., Location 1)
  - There was some floor cracking (<1/8" to 1/2") observed (i.e., Locations 10, 12, 13, 17, 25, 37, 43, 50, 54, 63, 76, 77, 80)
  - Floor drains (3" to 8") (i.e., Locations 2, 3, 15, 16, 21, 22, 27, 32, 33, 34, 35, 36, 39, 40, 42, 45, 47, 49, 52, 55, 56, 59, 64, 67, 68, 70, 75, 78, 79)
  - Sink drains (2" to 3") (i.e., Locations 7, 11, 58, 81)
  - Electrical penetrations (i.e., Locations 4, 5, 9, 18, 24, 44, 60, 61)
  - Apparent electrical trench (i.e., Location 8)
  - Apparent gas line penetration (i.e., Location 19)
  - Oil drains (~2") (i.e., Locations 23, 29)
  - Apparent vent penetration (~2" to ~4") (i.e., Locations 26, 28, 30, 41, 46, 48, 51, 53, 62, 65, 69)
  - Hole in floor (~5" diameter) (i.e., Location 57)
  - Apparent drain pipe (~2") (i.e., Locations 66, 71)
  - Heater penetrations (1/2") (i.e., Locations 72, 73, 74)
- South Building Basement
  - There was some floor cracking (<1/8" to 1/2") observed (i.e., Locations 1, 2, 13, 17, 19, 30, 40, 50, 51, 52, 53, 54, 67, 73, 89)
  - Floor drains (3" to 5") (i.e., Locations 42, 79, 80, 82, 83, 84, 85, 86, 91)
  - Sumps (24" to 30" diameter) (i.e., Locations 3, 18, 21, 25, 43, 66, 77, 82)
  - Ceiling penetrations (2" to 6") (i.e., Locations 7, 8, 10, 14, 15, 20, 26, 31, 32, 33, 35, 39, 41, 47, 48, 68, 75)
  - Apparent sewer vents (i.e., Locations 6, 9, 37, 57, 64, 65, 71)
  - Apparent sewer cleanouts (i.e., Locations 23, 63)
  - Base of wall at floor (i.e., Locations 4, 16, 45, 56, 58, 59, 60, 61, 72, 76, 90)
  - Water seeps and cracks in wall (i.e., Locations 5, 11, 28, 44, 69)
  - Sanitary sewer lines (i.e., Location 70)
- Former Service Station
  - Floor drains (6" to 8") (i.e., Locations 1, 2, 3)
  - Electrical penetration (i.e., Location 4)

- There was generally minor floor cracking (1/4” to 1/2") observed (i.e., Locations 5, 11)
- Holes (filled) in concrete floor (1”) (i.e., Locations 6, 7, 10)
- Piping along north wall (2” to 3”) (i.e., Location 8)
- Apparent oil/water separator (i.e., Location 9)

Site Recon Meter Readings (Total Readings Collected – 372):

Building Level	Total Background Readings Collected	Range of VOC Readings (ppb)	Methane Readings (%)
North Building			
1st Floor	10	0 to 222	0
Basement	13 (6 – air handling units off, 7 – air handling units on)	0 to 22	0
South Building			
1st Floor	46	20 to 4,000	0
Basement	30 (13 – air handling units off, 17 – air handling units on)	0 to 48	0
Former Service Station			
1st Floor	2	0 to 345	0

- Total Floor Penetration Readings Collected in North Building Basement = 32.
  - No VOCs readings above background (refer to Site Recon Observations Section for additional information)
  - No methane readings above background

- Total Floor Penetration Readings Collected in South Building Basement = 70.
  - VOCs readings above background

Location	Description	Background (ppb)	Reading (ppb)
49	Corner of wall in stairwell [*Note: A large box of cosmetology materials (i.e., mannequin heads, wigs, etc.) was observed in the vicinity of this location. As such, this reading is likely attributable to site operations.*]	30	82
87	Pipe penetrating the wall in boiler room*	27	327
89	Crack in concrete floor in boiler room*	28	201
90	Crack at base of wall in boiler room*	28	217

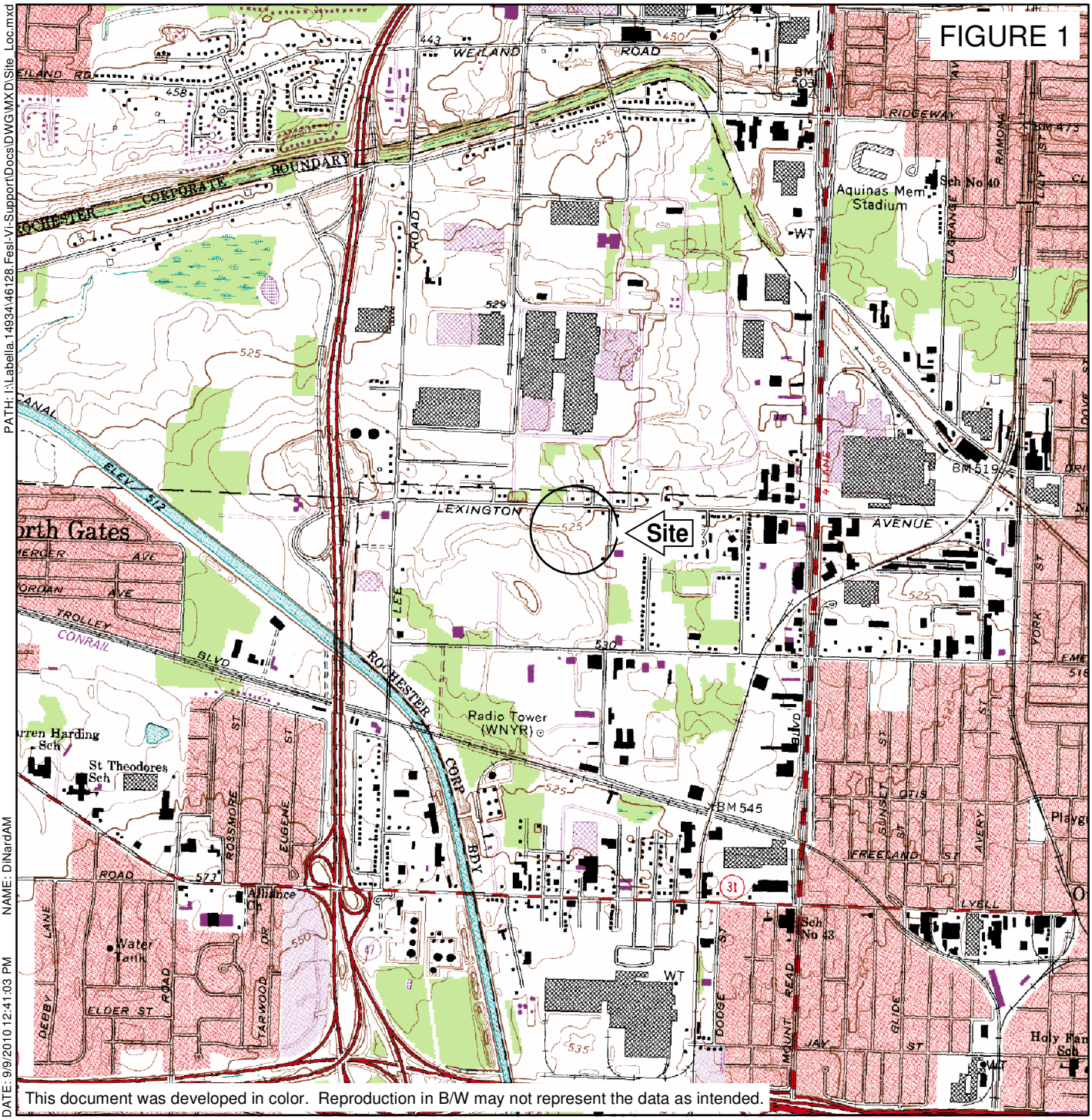
* Readings may be associated with boiler room activities (oils and other VOCs utilized).

  - No methane readings above background

- Total Floor Penetration Readings Collected in Former Service Station = 11.
  - No VOC readings above background
  - No methane readings above background

Figures

FIGURE 1



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ROCHESTER, NEW YORK

SITE LOCATION

MAP LOCATION

N

0 1,000 2,000 4,000 6,000 8,000

Feet

SEPTEMBER 2010
14934/46128

1:24,000

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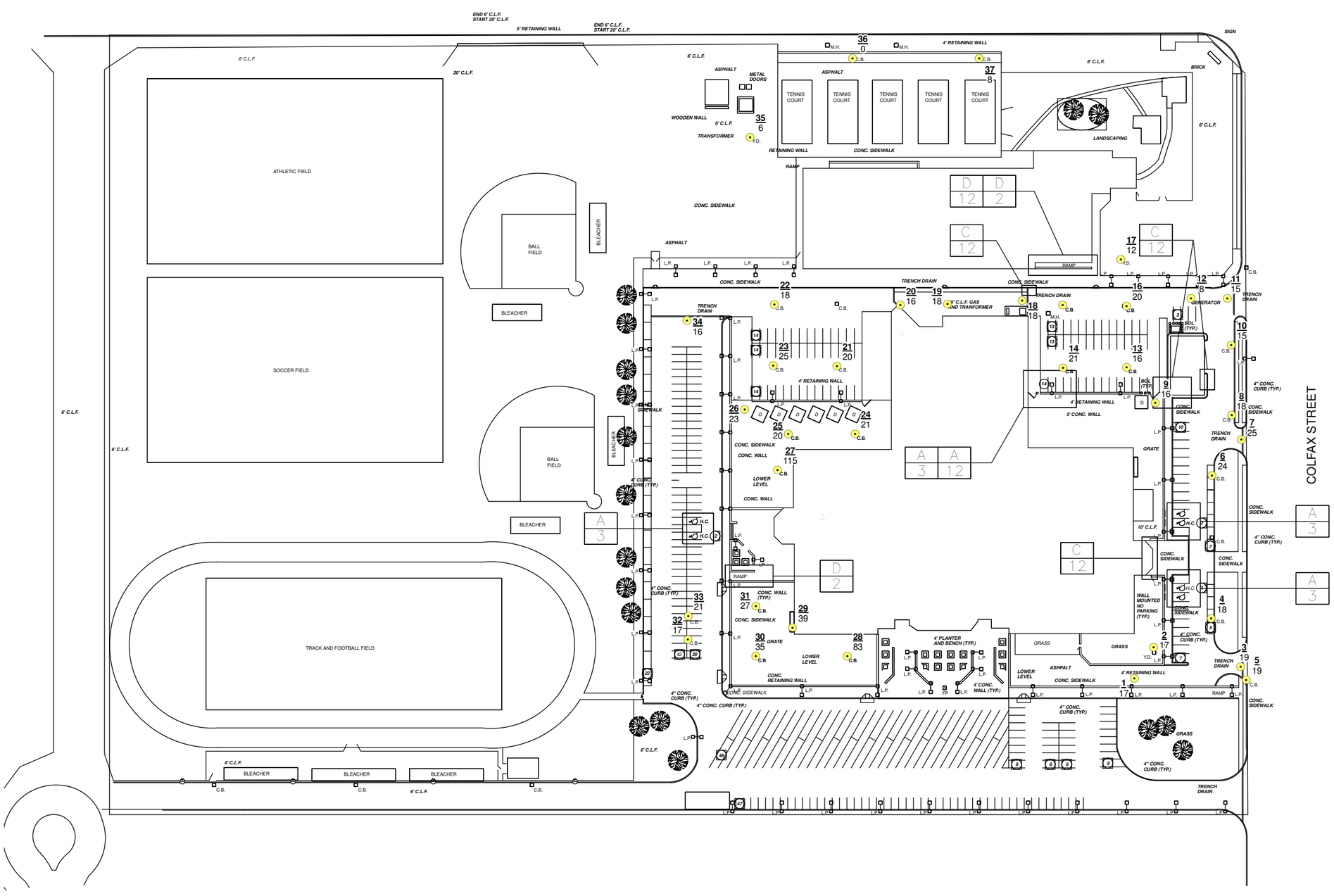

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FIGURE 2

N

LEGEND

LOCATION TYPE

- AMBIENT AIR (AIR HANDLING UNITS TURNED OFF)
- AMBIENT AIR (AIR HANDLING UNITS TURNED ON)
- VAPOR INTRUSION SAMPLING POINT

(SAMPLE LOCATION) 1
(ppbRAE READING) 30 (ppb)

NOTES:
1. BASEMAP PROVIDED BY LABELLA ASSOCIATES, PC.
2. DATA COLLECTED ON AUG. 31 AND SEPT. 1, 2010
3. LOCATIONS ARE APPROXIMATE

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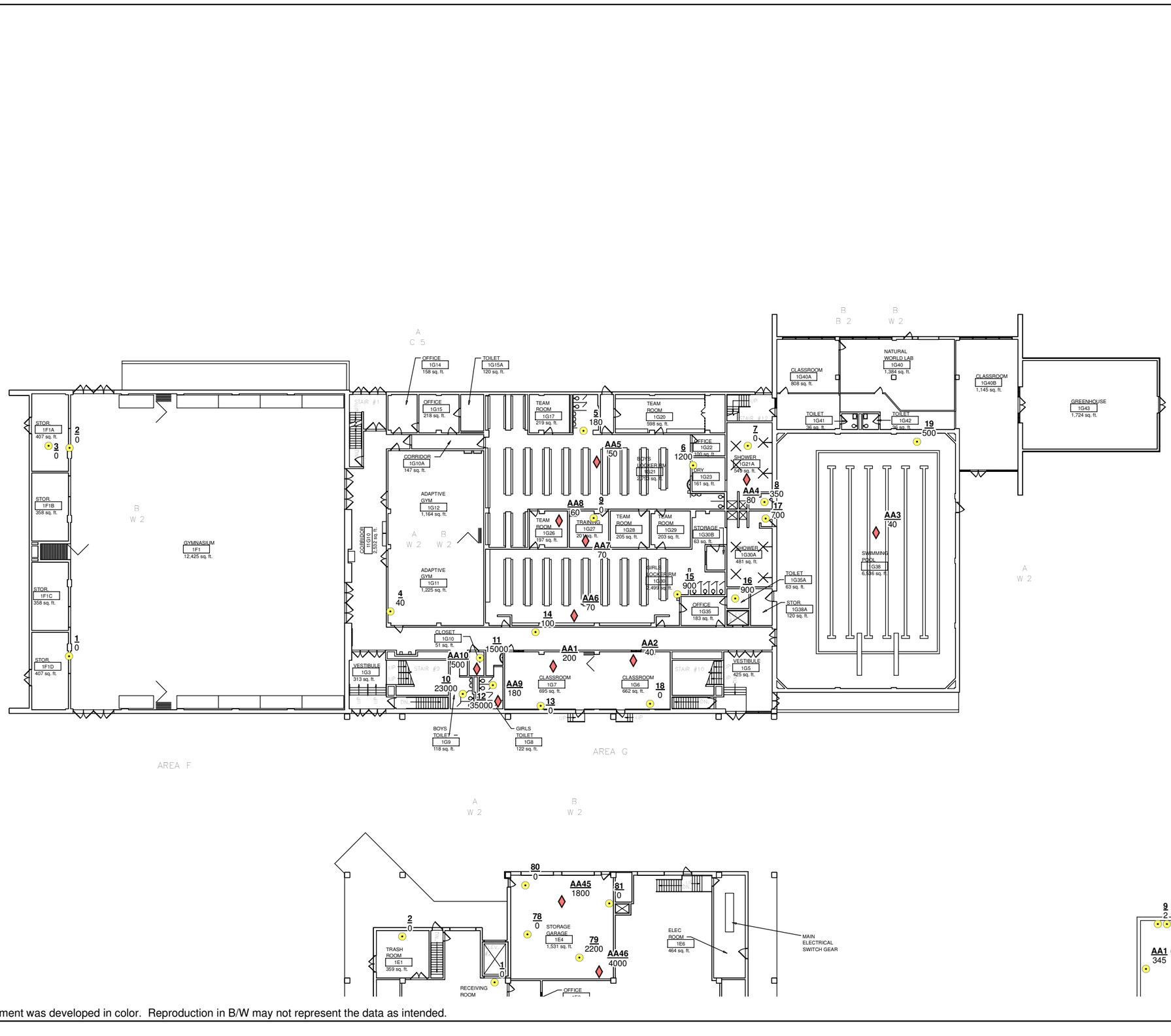

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FIGURE 3

N

LEGEND

- AMBIENT AIR (AIR HANDLING UNITS TURNED OFF)
- AMBIENT AIR (AIR HANDLING UNITS TURNED ON)
- VAPOR INTRUSION SAMPLING POINT

(SAMPLE LOCATION) **1**
(ppbRAE READING) 30 (ppb)

NOTES:
1. BASEMAP PROVIDED BY LABELLA ASSOCIATES, PC.
2. DATA COLLECTED ON AUG. 31 AND SEPT. 1, 2010
3. LOCATIONS ARE APPROXIMATE

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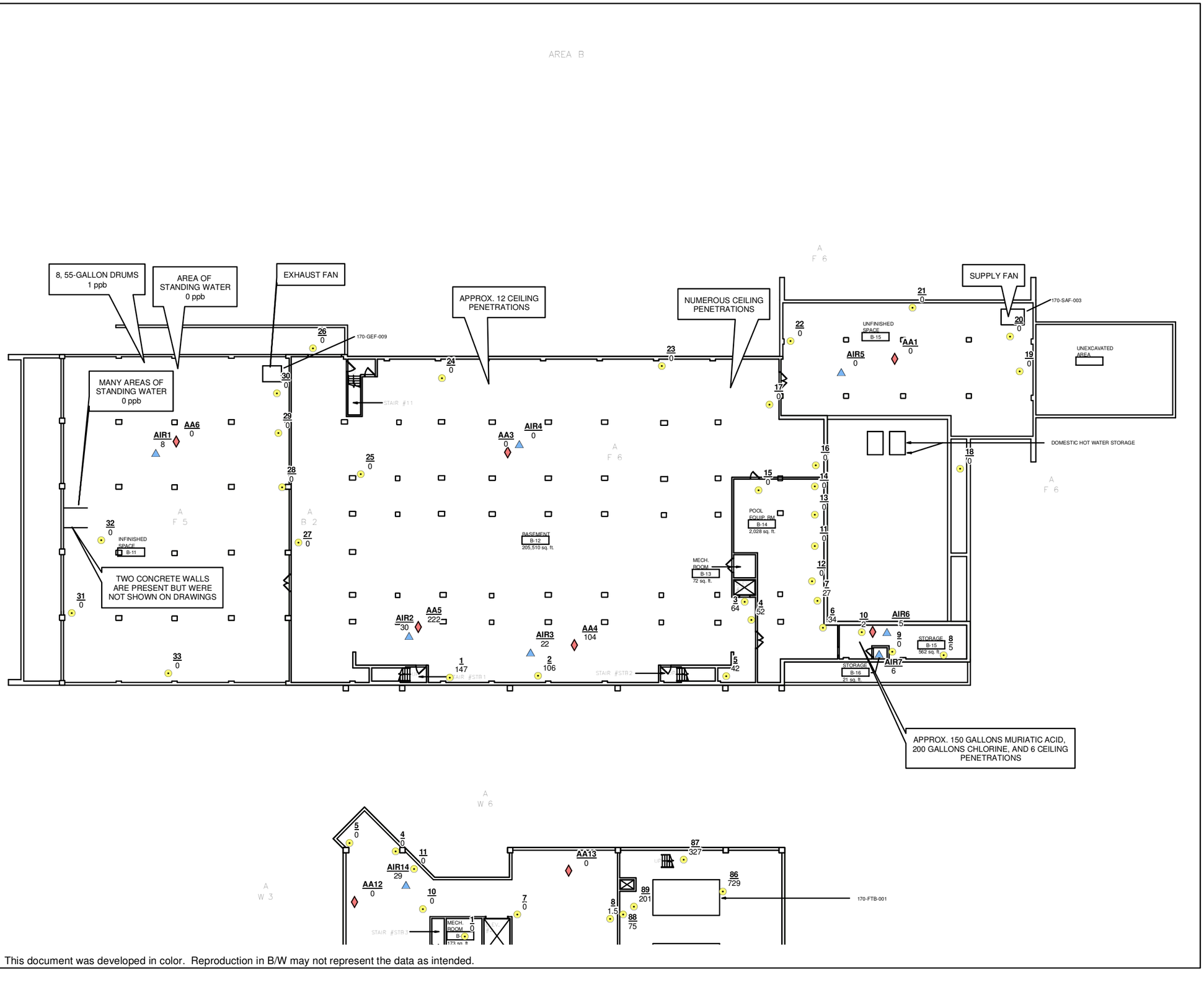
FIGURE 6



LEGEND

LOCATION TYPE

- AMBIENT AIR (AIR HANDLING UNITS TURNED OFF)
- AMBIENT AIR (AIR HANDLING UNITS TURNED ON)
- VAPOR INTRUSION SAMPLING POINT

(SAMPLE LOCATION) 1
(ppbRAE READING) 30 (ppb)

NOTES:
1. BASEMAP PROVIDED BY LABELLA ASSOCIATES, PC.
2. DATA COLLECTED ON AUG. 31 AND SEPT. 1, 2010
3. LOCATIONS ARE APPROXIMATE
4. VAPOR INTRUSION SAMPLING WAS MEASURED WITH AIR HANDLING UNITS TURNED OFF

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AIR QUALITY SURVEY - NORTH BUILDING BASEMENT

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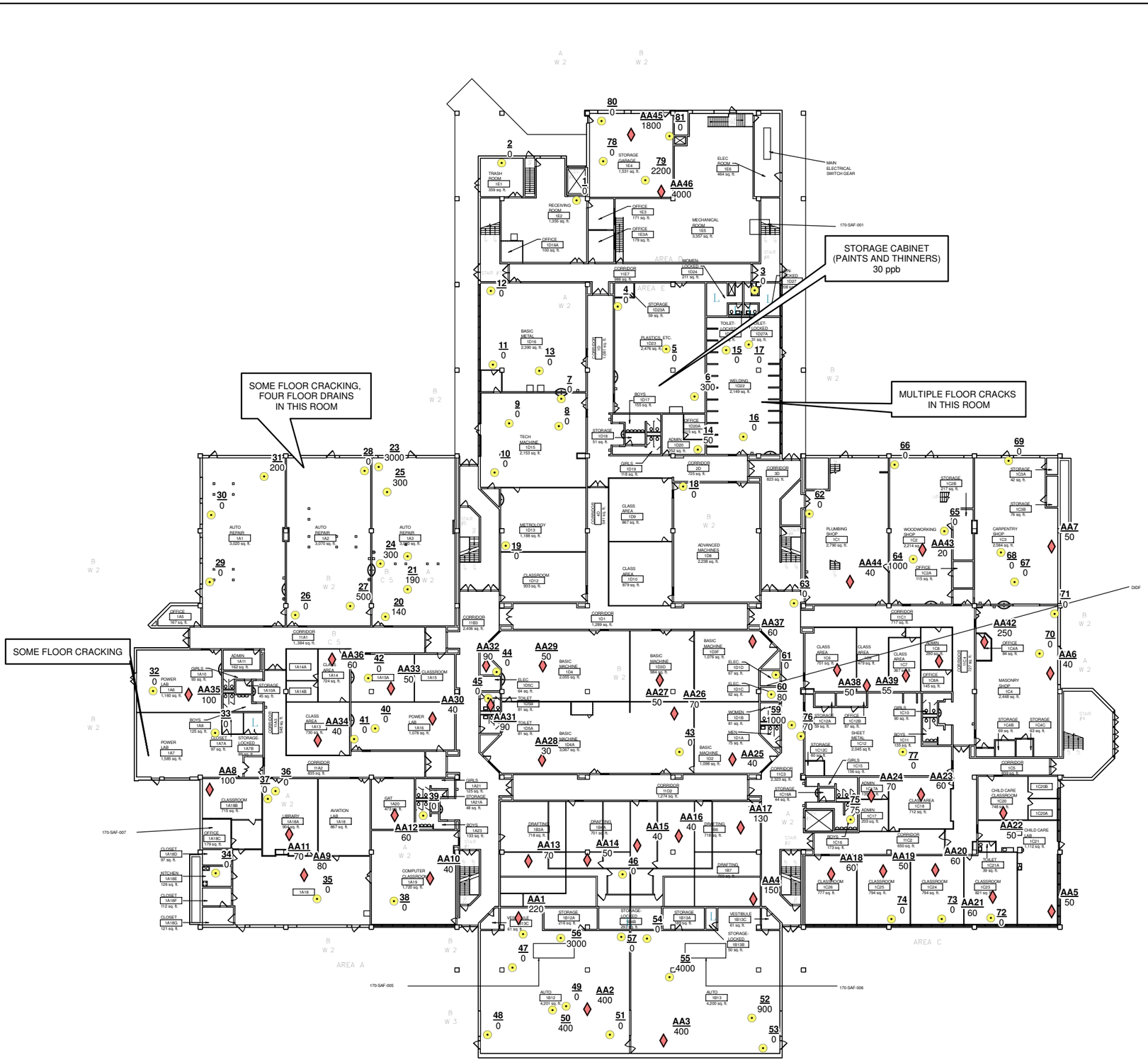

FIGURE 4

N

LEGEND

- ♦ AMBIENT AIR (AIR HANDLING UNITS TURNED OFF)
- ▲ AMBIENT AIR (AIR HANDLING UNITS TURNED ON)
- ⊙ VAPOR INTRUSION SAMPLING POINT

(SAMPLE LOCATION) 1
(ppbRAE READING) 30 (ppb)

NOTES:
1. BASEMAP PROVIDED BY LABELLA ASSOCIATES, PC.
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3. LOCATIONS ARE APPROXIMATE

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AIR QUALITY SURVEY - SOUTH BUILDING FIRST FLOOR

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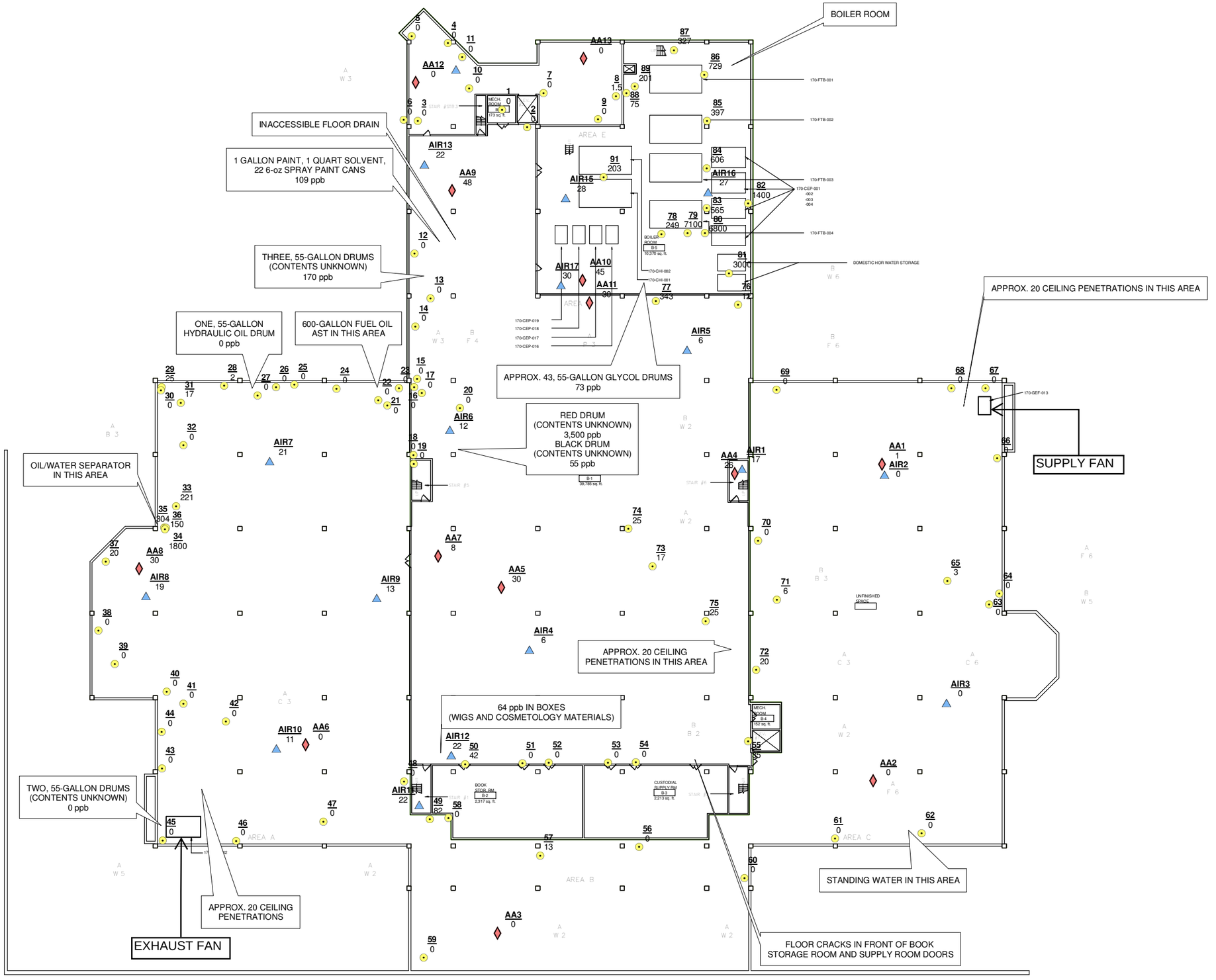

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FIGURE 7

N

LEGEND

LOCATION TYPE

- AMBIENT AIR (AIR HANDLING UNITS TURNED OFF)
- AMBIENT AIR (AIR HANDLING UNITS TURNED ON)
- VAPOR INTRUSION SAMPLING POINT

(SAMPLE LOCATION) 1
(ppbRAE READING) 30 (ppb)

NOTES:
1. BASEMAP PROVIDED BY LABELLA ASSOCIATES, PC.
2. DATA COLLECTED ON AUG. 31 AND SEPT. 1, 2010
3. LOCATIONS ARE APPROXIMATE
4. VAPOR INTRUSION SAMPLING POINTS MEASURED WITH AIR HANDLING UNITS TURNED OFF

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AIR QUALITY SURVEY - SOUTH BUILDING BASEMENT

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SEPTEMBER 2010
14934/46128

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Photographs

General interior view – 1st Floor

General interior view – 1st Floor

General interior view – 1st Floor

General interior view – Basement

General interior view – Basement

General interior view – Basement

Location #49 – Corner of wall in stairwell

Location #87 – Pipe wall penetration

Location #89 – Floor crack in boiler room

No photo available

Location #90 – Crack at base of wall

General interior view of classroom ("Basic Metal") – 1st Floor

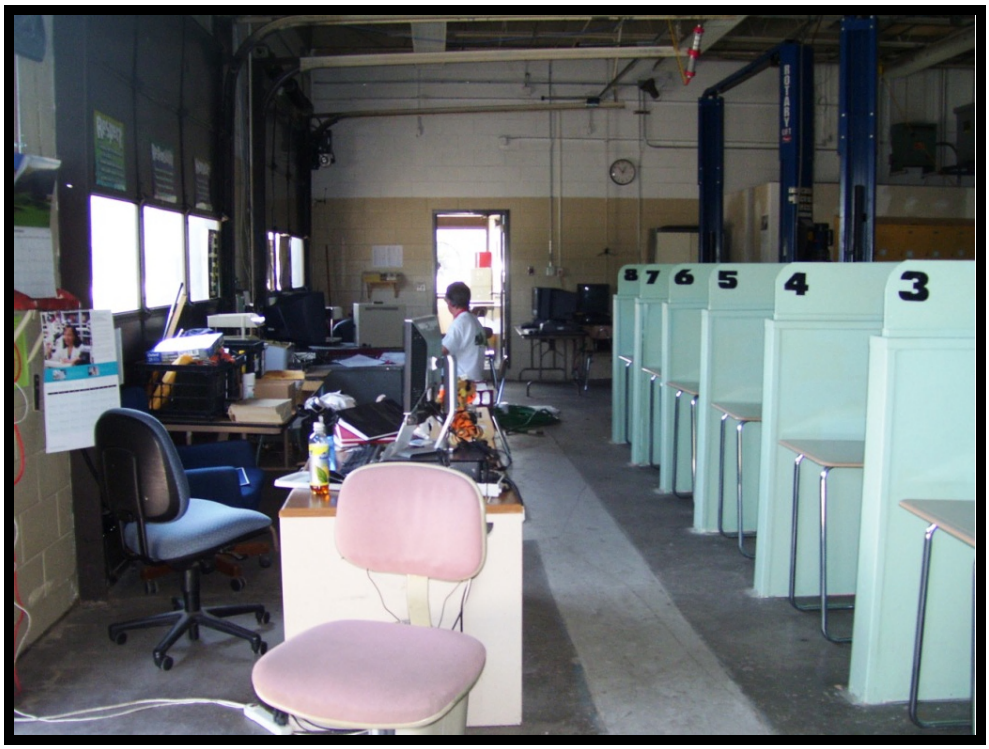
General interior view of classroom ("Auto Repair") – 1st Floor

General interior view of classroom ("Auto") – 1st Floor

General interior view of basement

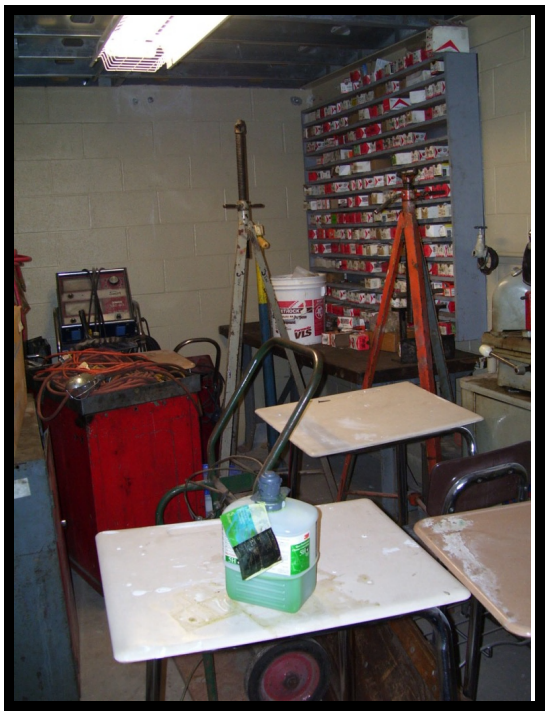
General interior view of basement

General interior view of basement



General interior view

General interior view



General interior view

General interior view

Instrument Calibration Sheets

Certificate Number: 90754
Calibration Date: 26 August 2010

Ashtead TECHNOLOGY

Calibration Certificate

Customer:	**501648--LABELLA ASSOCIATES PC**
Serial No:	**R110083**
Group:	**166 - Landfill Gas Analyzers**
Sub Group:	**003 - LANDTEC GEM2000**
Manufacturer:	**Landtec**
Calibration Date:	**26 August 2010**
Next Calibration:	**Refer to Manufacturers Instructions**
Accuracy of Unit Under Test:	**Manufacturers Specifications**
Adjustments made:	**None**
Calibration Technician:	**Dave Stiles**

Details of any limitations to the use of the equipment
None

The following measurement equipment used during the calibration procedure is traceable to National Standards.

Measurement Equipment/Standards	**Reference**
50%CH4 35%CO2 N2 BAL. - 921743	921743
25ppm H2S, 50ppm CO, 2.5% CH4, 12% O2 - CC332308	122-124225190-1

Calibrated By: _____

Dave Stiles

Test Results

Question	Result
APPLY CALIBRATION GAS TO UNIT, VERIFY UNITS READS ACCORDINGLY. VERIFY ACCESSSORIES ARE INCLUDED AS PER ACCESSORY LIST.	Yes

Certificate Number: 90752
Calibration Date: 26 August 2010

Ashtead TECHNOLOGY

Calibration Certificate

Customer:	**501648--LABELLA ASSOCIATES PC**
Serial No:	**R9416**
Group:	**158 - Indoor Air Quality**
Sub Group:	**005 - RAE PARTS-PER-BILLION SURVEYOR**
Manufacturer:	**RAE**
Calibration Date:	**26 August 2010**
Next Calibration:	**Refer to Manufacturers Instructions**
Accuracy of Unit Under Test:	**Manufacturers Specifications**
Adjustments made:	**None**
Calibration Technician:	**Victor Boccardo**

Details of any limitations to the use of the equipment
None

The following measurement equipment used during the calibration procedure is traceable to National Standards.

Measurement Equipment/Standards	**Reference**
10 PPM ISOBUTYLENE - RP161027	921619

Calibrated By:

Victor Boccardo

Soil Vapor Intrusion Preliminary Building Assessment and Site Reconnaissance Forms

FORMER EMERSON STREET LANDFILL
SOIL VAPOR INTRUSION
PRELIMINARY BUILDING ASSESSMENT AND SITE RECONAISSANCE

Parcel Information:

Address: 655 Colfax Avenue

Owner: City of Rochester

Number of Buildings: 3 total

Building this Sheet Represents *(fill out one for each building)*: North Building

Interviewer Information:

Name: Suzanne Wheatcraft Date/Time Prepared: 8/31/10 @ 2:30PM

Consultant Firm: LaBella, O'Brien & Gere Phone No.: (585) 454-6110, (585) 263-2820

Owner/Interviewee Information:

Last Name: Wheatcraft First Name: Suzanne

Address: 835 Hudson Avenue, Rochester, NY 14621

Company: Rochester City School District

Office Phone: (585) 336-4005

Tenant Information (if any):

Tenant Contact Person: Edison Tech – Tony Yaniro

Address:

Company:

Office Phone:

SECTION I - Building Construction Information

A. Site plans available? *(e.g., foundation construction, utility locations/chases, etc.)*: (Yes)/No

If yes, can copies be obtained? Yes

B. Does owner have knowledge that ash or solid waste was removed at time of building construction: (Yes)/No

If yes, are any documents available? Yes, see old H&A reports, footprints scraped clear

C. Building Construction

	Construction Type	Finish Type	Sealed	Square Feet
Basement	Poured concrete and bedrock		No	172,049
Crawl Space	NA	NA	NA	NA
First Floor	Poured concrete	Painted concrete, terrazzo, tile	Paint in some areas	169,694
Foundation Walls	Poured concrete panels	None	None	NA
2nd Floor	Block walls, poured floors	Same as 1st floor	Same as 1st floor	NA

D. Any additions to building: Yes/(No)

If yes, list dates and locations:

If yes, note variations in construction:

E. Utility/Floor Penetrations (SEE FIGURES)

	Location(s)	Size/Description
Electric		
Gas		
Water		
Sewer/Wastewater		
Sumps		
Floor/Trench Drains		
Dry Well		
Oil/Water Separators		
Cracks in Floor		
Expansion Joints		
Floating Slab		
Monitoring Points		
Scales		
Utility Vaults		
Elevators		
Other		

F. Does facility have an on-Site septic system? Yes/(No)

If yes, where and size: Neutralization tank, science labs. Lines cut off, tank goes to sewer, underground along Colfax Avenue-side of building

G. Does facility provide pretreatment of wastewater prior to discharge to sanitary sewer? Yes/(No)

If yes, What type of pretreatment is conducted: Not currently. See above

H. Is there a vapor barrier associated with the foundation system? Yes/(No)

If yes, indicate type/material, location, thickness, etc.: _____

I. Is there a radon/sub-slab soil vapor mitigation system on any portion of the building? Yes/(No)

If yes, describe system and date installed: _____

If yes, Is the system active or passive? _____

If yes, Is system currently operational? _____

J. Standing water or wet areas in lower levels? (Yes)/No

If yes, list location and describe: Seasonal and in the basement.

If yes, how frequent: less than 1/yr; 1-2 times/yr; or, more than 3 times/yr

K. Is the building insulated? (Yes)/No

If yes, location(s) and type? Insulation foam beneath metal panels. Nothing between brick

L. Are there any settlement issues with the building? Yes/(No)

If yes, describe: _____

M. Are there any cracks in floor slabs (1st floor or basement)?

If yes, location(s), width, etc.? Yes

N. Are there any elevators in the building? (Yes)/No 2 (1 freight and 1 passenger)

If yes, describe construction and condition of pit (poured concrete, cinder block, etc.) 2 Total Not accessible for observation.

Comments:

SECTION II – Heating, Ventilation and Air Conditioning Information

A. Type of heating system(s) used in this building: *(circle all that apply - note primary)*

(Forced hot air) Heat pump (Hot water baseboard)

Space Heaters Stream radiation Radiant floor

Electric baseboard Other: Hot water / forced air

For each heat system/unit, provide the following:

Unit Type	Unit Location	Areas Heated	Unit Size	Pressurization (neg. vs. positive)	Air Communication with other areas (duct work, doors, etc.)
4 Water Boilers – Run off South Building Boiler System	Boiler Room – South Building	Entire building	15 lbs. pressure	Positive	Yes, see plans

Small boiler only used in summer. 1 main boiler and two backup boilers.

B. Type of fuel used: *(circle all that apply)*

(Natural Gas) Fuel Oil Kerosene

Electric Propane Solar

Wood Coal Other: _____

If more than one list locations: _____

C. Domestic hot water tank fueled by: Water boiler systems

D. Air conditioning: (Central Air) Window units None

Comments:

SECTION III – Indoor Air Quality Influence Factors

A. Is there a garage, service area, or manufacturing area in building? Yes/(No)

If yes, list all that apply: _____

1. Does the garage, service or manufacturing areas have separate heating unit/system? Yes/(No)/NA
2. Are petroleum-powered machines or vehicles used or stored within the garage, service area or manufacturing area of building? *(e.g., forklifts, vehicle fleet, lawnmower, etc.)* Yes/No/NA

If yes, specify: _____

B. Are there any current or former USTs, ASTs or Fueling Facilities on the property? (Yes)/No

If yes, specify location: Former gas station at "service station"
USTs removed - ~5 gas and diesel and waste oil
Waste oil AST is present in basement

C. Are there any current or former hydraulic lifts at the property? Yes/(No)

If yes, locations and note if underground or above ground: _____

D. Are there any current or former petroleum or chemical spills at the Site? (Yes)/No

If yes, specify location, quantity, material and date: NYSDEC spills

E. Are there any current or former groundwater monitoring wells at the Site? (Yes)/No

If yes, specify location and accessibility: FESL related wells only

F. Has the building ever had a fire? Yes/(No)

If yes, When: _____

G. Is there a maintenance area? (Yes)/No

If yes, Where: Pool Maintenance

H. Are there any parts cleaners used at the site? Yes/(No)

If yes, list location(s) and solvent types: _____

_____

_____

I. Are there any drum and/or chemical storage areas? (Yes)/No

If yes, list location(s) and materials: Basement – Pool Chemicals. MSDS required of each Teacher – don't have available.

_____

J. Are cleaning products used routinely? (Yes)/No

If yes, When & Where: Cleaning the building

K. Has painting/staining been done in the last 6 months? (Yes)/No

If yes, When & Where: Continual painting / upkeep (every break required painting)

L. Is there new carpet, drapes or other textiles within installed within the last year? Yes/(No)

If yes, Where & When: _____

M. Are there air fresheners in office spaces or bathrooms? (Yes)/No

If yes, Where & Type: Bathroom sanitary fresheners

N. Are there exhaust fans (e.g., break rooms, (bathrooms,) other locations)? (Yes)/No

If yes, where vented and how often do they run: Gym and pool areas

O. Has there been a pesticide application on the grounds? Yes/(No)

If yes, When & Type: _____

P. Is smoking allowed on the property? Yes/(No)

If yes, is it allowed within buildings and where? _____

Q. Are there odors in the building? (Yes)/No

If yes, please describe: Propane and natural gas odors

R. Are solvents used within the building? Yes/(No –)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, etc.)

If yes, what types of solvents are used: .

_____

S. Is groundwater extracted for any purpose (e.g., cooling water, geothermal, etc.)? Yes/(No)

If yes, how many extraction wells, what depths and what is the rate of extraction: _____

T. Are there any air handling units in the building? (Yes)/No

If yes, locations, sizes, intakes & exhaust: 2 Shacks (on the building roof), 2 Basement

U. Are there any doors (overhead/bay or others) that are routinely open? Yes/(No)

If yes, note locations, sizes, and approximate times open: _____

V. Do any of the building occupants regularly use a dry-cleaning service? Yes/No (UNKNOWN)

Yes, use dry-cleaning regularly (weekly): _____

No, use dry-cleaning infrequently (monthly or less): _____

Based on Information obtained list all potential soil gas entry points and there sizes (e.g., cracks in floor, void space, piping, utility ports, sumps, elevator pits, lifts, drains, etc.).

Cracks in floor, dirt floors, piping, utility ports, void spaces, sumps, elevators, floor drains

[*Note: See page 12 & 13 for additional information to be collected on each potential soil gas entry point (i.e., photographs, PID and landfill gas measurements, etc.*]

Comments:

Section IV – Occupancy/General Use

Location Use	Occupied (list hours/shifts)	Number of Employees (Full/Part-time)	Approx. Sq. Ft.	Level (basement, 1st Floor, 2nd Floor, etc.)	Brief Summary of Business/ Operations in Area (include additional sheets as necessary)
Office					
Manufacturing/ Production					
Warehouse/ Storage					
Garage					
Maintenance					
Conference/ Break Rooms					

Comments: Administrators (7-5PM)

Teachers 7-5PM (~100 total) +/- 50%

Custodian 7-3PM (1 day and 1 night)

Cleaners 3-11PM (6-8)

Secretaries 7-5PM (quantity not provided by Suzanne Wheatcraft)

Office Workers 7-5PM (quantity not provided by Suzanne Wheatcraft)

Athletic Coaches 7-5PM (quantity not provided by Suzanne Wheatcraft)

Nurses (2) 7-5PM

Cafeteria Workers 7-5PM (~6 total)

Section V – Site Layout

A. Building(s)

Draw a plan view sketch of each floor of the building. Indicate all pertinent information (including but not limited to: manufacturing areas, office areas, garage/maintenance areas, HVAC equipment, chemical storage areas, crawl spaces, locations of cracks with length, width and depth, location of settlement areas, floor penetrations, etc. Also include numbered locations of landfill gas readings and PID readings and place readings in table)

Comments: See Figures

Instrument Readings:

Mark each location on site sketch where reading was collected and provide a photograph. At a minimum, readings must be collected from all potential soil gas entry points within buildings (e.g., utility vaults, sumps, floor drains, oil/water separators, floor cracks, etc.) and any subsurface features on the exterior (e.g., catch basins, manholes, utility vaults, etc.). In addition, at least one breathing zone location will be measured for each discrete area within buildings.

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppm	%	%	ppm	ppm	%	
1st FLOOR							
1	0	0	0	0	0	20.7	Hole between gym and stg area
2	0	0	0	0	0	20.7	Hole between gym and stg area
3	0	0	0	0	0	20.7	Crack in 2nd stg area
4	0.04	0	0	0	0	20.8	Hole between flooring and wall
5	0.15-0.18	0	0	0	0	20.8	FD in mens locker room bathroom
6	1.2	0	0	0	0	20.8	FD before shower area
7	0	0	0	0	0	20.8	Shower area FD
8	0.35	0	0	0	0	20.8	Shower area FD
9	0	0	0	0	0	20.9	Floor Penetration in laundry room
10	20-23	0	0	0	0	20.9	Mens Bathroom floor drain
11	15	0	0	0	0	20.8	Custodial FD (slop sink)
12	30-35	0	0	0	0	20.9	Girls room FD
13	0	0	0	0	0	20.9	Heater lines at vents
14	0.1	0	0	0	0	20.9	Hole near drinking fountain WLR
15	0.5-0.9	0	0	0	0	20.8	Hole near drinking fountain WLR (can see through to basement)
16	0.5-0.9	0	0	0	0	20.8	FD in office shower room
17	0.6-0.7	0	0	0	0	20.8	FD before pool room
18	0	0	0	0	0	20.8	Heat lines to heater vent
19	0.5	0	0	0	0	20.8	FD near pool

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppb	%	%	ppm	ppm	%	
Basement							
1	147	0	0	0	0		Seep near utility
2	106	0	0	0	0		Wall / floor
3	64	0	0	0	0		Elevator
4	52	0	0	0	0		Chlorine storage
5	42	0	0	0	0		Along wall (area behind stairs)
6	34	0	0	0	0		Floor drain #1
7	27	0	0	0	0		Floor drain #2
8	5	0	0	0	0		Crack
9	0	0	0	0	0		Crack
10	2	0	0	0	0		½" Crack near M. Acid Stg
11	0	0	0	0	0		Sump 30" Diameter / 1' H_2O 36" Depth
12	0	0	0	0	0		Floor drain
13	0	0	0	0	0		Floor drain
14	0	0	0	0	0		Small pipes near wall (4 total)
15	0	0	0	0	0		Floor drain between tanks
16	0	0	0	0	0		Broken bedrock along foundation
17	0	0	0	0	0		Broken bedrock along foundation
18	0	0	0	0	0		Broken bedrock along hallway
19	0	0	0	0	0		2 drums (55-gal) empty
20	0	0	0	0	0		Sump 30" wide / 3' Depth / 9" H_2O
21	0	0	0	0	0		Seep, no sheen / wall crack
22	0	0	0	0	0		Along base of wall
23	0	0	0	0	0		Seep
24	0	0	0	0	0		Cracks near conc. slab
25	0	0	0	0	0		¼" crack in floor from pillar to wall

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppb	%	%	ppm	ppm	%	
26	0	0	0	0	0		Floor drain (outside)
27	0	0	0	0	0		Floor drain (outside) near sprinkler system
28	0	0	0	0	0		Broken conc. Near bump out
29	0	0	0	0	0		Sump 30" diameter / 36" depth / 10" H_2O
30	0	0	0	0	0		No sheen
31	0	0	0	0	0		Seep
32	0	0	0	0	0		Standing H_2O
33	0	0	0	0	0		Sump 6" H_2O / 30" diameter / 36" Depth

Y:\ROCHESTER, CITY\210173 FESL\FORMS\FESL PRELIMINARY ASSESSMENT FORM.DOCX

FORMER EMERSON STREET LANDFILL
SOIL VAPOR INTRUSION
PRELIMINARY BUILDING ASSESSMENT AND SITE RECONAISSANCE

Parcel Information:

Address: 655 Colfax Avenue

Owner: City of Rochester

Number of Buildings: 3 total

Building this Sheet Represents *(fill out one for each building)*: South Building

Interviewer Information:

Name: Suzanne Wheatcraft Date/Time Prepared: 8/31/10 @ 2:30PM

Consultant Firm: LaBella, O'Brien & Gere Phone No.: (585) 454-6110, (585) 263-2820

Owner/Interviewee Information:

Last Name: Wheatcraft First Name: Suzanne

Address: 835 Hudson Avenue, Rochester, NY 14621

Company: Rochester City School District

Office Phone: (585) 336-4005

Tenant Information (if any):

Tenant Contact Person: Edison Tech – Tony Yaniro

Address:

Company:

Office Phone:

SECTION I - Building Construction Information

A. Site plans available? *(e.g., foundation construction, utility locations/chases, etc.)*: (Yes)/No

If yes, can copies be obtained? Yes

B. Does owner have knowledge that ash or solid waste was removed at time of building construction: (Yes)/No

If yes, are any documents available? Yes, see old H&A reports, footprints scraped clear

C. Building Construction

	Construction Type	Finish Type	Sealed	Square Feet
Basement	Poured concrete and bedrock		No	172,049
Crawl Space	NA	NA	NA	NA
First Floor	Poured concrete	Painted concrete, terrazzo, tile	Paint in some areas	169,694
Foundation Walls	Poured concrete panels	None	None	NA
2nd Floor	Block walls, poured floors	Same as 1st floor	Same as 1st floor	NA

D. Any additions to building: Yes/(No)

If yes, list dates and locations:

If yes, note variations in construction:

E. Utility/Floor Penetrations (SEE FIGURES)

	Location(s)	Size/Description
Electric		
Gas		
Water		
Sewer/Wastewater		
Sumps		
Floor/Trench Drains		
Dry Well		
Oil/Water Separators		
Cracks in Floor		
Expansion Joints		
Floating Slab		
Monitoring Points		
Scales		
Utility Vaults		
Elevators		
Other		

F. Does facility have an on-Site septic system? Yes/(No)

If yes, where and size: Neutralization tank, science labs. Lines cut off, tank goes to sewer, underground along Colfax Avenue-side of building

G. Does facility provide pretreatment of wastewater prior to discharge to sanitary sewer? Yes/(No)

If yes, What type of pretreatment is conducted: Not currently. See above

H. Is there a vapor barrier associated with the foundation system? Yes/(No)

If yes, indicate type/material, location, thickness, etc.: _____

I. Is there a radon/sub-slab soil vapor mitigation system on any portion of the building? Yes/(No)

If yes, describe system and date installed: _____

If yes, Is the system active or passive? _____

If yes, Is system currently operational? _____

J. Standing water or wet areas in lower levels? (Yes)/No

If yes, list location and describe: Basement. Minor areas of standing water in dirt areas along walls

If yes, how frequent: less than 1/yr; 1-2 times/yr; or, more than 3 times/yr

K. Is the building insulated? (Yes)/No

If yes, location(s) and type? Insulation foam beneath metal panels. Nothing between brick

L. Are there any settlement issues with the building? (Yes)/No

If yes, describe: Floor cracks, study done and problem found. Approximately 30 floor jacks were installed in the basement

M. Are there any cracks in floor slabs (1st floor or basement)?

If yes, location(s), width, etc.? Yes, throughout building

N. Are there any elevators in the building? (Yes)/No 2 (1 freight and 1 passenger)

If yes, describe construction and condition of pit (poured concrete, cinder block, etc.) Not accessible for observation

Comments:

SECTION II – Heating, Ventilation and Air Conditioning Information

A. Type of heating system(s) used in this building: *(circle all that apply - note primary)*

(Forced hot air) Heat pump (Hot water baseboard)

Space Heaters Stream radiation Radiant floor

Electric baseboard Other: Hot water / forced air

For each heat system/unit, provide the following:

Unit Type	Unit Location	Areas Heated	Unit Size	Pressurization (neg. vs. positive)	Air Communication with other areas (duct work, doors, etc.)
4 Water Boilers	Boiler Room	Entire building	15 lbs. pressure	Positive	Yes, see plans

Small boiler only used in summer. 1 main boiler and two backup boilers.

B. Type of fuel used: *(circle all that apply)*

(Natural Gas) Fuel Oil Kerosene

Electric Propane Solar

Wood Coal Other: _____

If more than one list locations: _____

C. Domestic hot water tank fueled by: Water boiler systems

D. Air conditioning: (Central Air) Window units None

Comments:

SECTION III – Indoor Air Quality Influence Factors

A. Is there a garage, service area, or manufacturing area in building? Yes/No

If yes, list all that apply: Sheet metal, Machine Shop, electrical, masonry, wood working

1. Does the garage, service or manufacturing areas have separate heating unit/system? Yes/No/NA

2. Are petroleum-powered machines or vehicles used or stored within the garage, service area or manufacturing area of building? *(e.g., forklifts, vehicle fleet, lawnmower, etc.)* Yes/No/NA

   If yes, specify: Lawnmowers, autobody areas/cars

B. Are there any current or former USTs, ASTs or Fueling Facilities on the property? Yes/No

If yes, specify location: Former gas station at "service station"
USTS removed - ~5 gas and diesel and waste oil
Waste oil AST is present in basement

C. Are there any current or former hydraulic lifts at the property? Yes/No

If yes, locations and note if underground or above ground: Former lifts in basement all removed - Evidence observed in basement components

D. Are there any current or former petroleum or chemical spills at the Site? Yes/No

If yes, specify location, quantity, material and date: NYSDEC Spills

E. Are there any current or former groundwater monitoring wells at the Site? Yes/No

If yes, specify location and accessibility: FESL related wells only

F. Has the building ever had a fire? Yes/No

If yes, When: Unknown

G. Is there a maintenance area? Yes/No

If yes, Where: Custodial Maintenance Area – 1st floor near storage area, basement boiler room
Maintenance area

H. Are there any parts cleaners used at the site? (Yes)/No

If yes, list location(s) and solvent types: ~2-3 associated with auto repair
Paint gun cleaner Crystal Clean Services

I. Are there any drum and/or chemical storage areas? (Yes)/No

If yes, list location(s) and materials: Throughout building
General cleaning/maintenance chemicals, oil/solvents, boiler chemicals, glycol for cooling. MSDS required of each teacher – don't have available.

J. Are cleaning products used routinely? (Yes)/No

If yes, When & Where: Cleaning the building

K. Has painting/staining been done in the last 6 months? (Yes)/No

If yes, When & Where: Continual painting / upkeep (every break required painting)

L. Is there new carpet, drapes or other textiles within installed within the last year? (Yes)/No

If yes, Where & When: Office Spaces

M. Are there air fresheners in office spaces or bathrooms? (Yes)/No

If yes, Where & Type: Some classrooms, not in bathrooms

N. Are there exhaust fans (e.g., break rooms, (bathrooms,) other locations)? (Yes)/No

If yes, where vented and how often do they run: Dedicated exhaust in shops

O. Has there been a pesticide application on the grounds? Yes/(No)

If yes, When & Type:

P. Is smoking allowed on the property? Yes/(No)

If yes, is it allowed within buildings and where?

Q. Are there odors in the building? (Yes)/No

If yes, please describe: propane / natural gas odors

R. Are solvents used within the building? (Yes)/No – The school
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, etc.)

If yes, what types of solvents are used: Parts washers / gun cleaner. H_2O based paint thinners. Some solvent based thinners.

S. Is groundwater extracted for any purpose (e.g., cooling water, geothermal, etc.)? Yes/(No)

If yes, how many extraction wells, what depths and what is the rate of extraction: _____

T. Are there any air handling units in the building? (Yes)/No

If yes, locations, sizes, intakes & exhaust: Roof (3 air handling rooms), 2 basement

U. Are there any doors (overhead/bay or others) that are routinely open? (Yes)/No

If yes, note locations, sizes, and approximate times open: Shops, custodial entrance / loading dock, freight elevator.

V. Do any of the building occupants regularly use a dry-cleaning service? Yes/No (UNKNOWN)

Yes, use dry-cleaning regularly (weekly): _____

No, use dry-cleaning infrequently (monthly or less): _____

Based on Information obtained list all potential soil gas entry points and there sizes (e.g., cracks in floor, void space, piping, utility ports, sumps, elevator pits, lifts, drains, etc.).

Cracks in floor, dirt floors, piping, utility ports, void spaces, sumps, elevators, floor drains

[*Note: See page 12 & 13 for additional information to be collected on each potential soil gas entry point (i.e., photographs, PID and landfill gas measurements, etc.*]

Comments:

Section IV – Occupancy/General Use

Location Use	Occupied (list hours/shifts)	Number of Employees (Full/Part-time)	Approx. Sq. Ft.	Level (basement, 1st Floor, 2nd Floor, etc.)	Brief Summary of Business/ Operations in Area (include additional sheets as necessary)
Office				**Book clerks relocated from basement**	
Manufacturing/ Production					
Warehouse/ Storage					
Garage					
Maintenance					
Conference/ Break Rooms					

Comments: Administrators (7-5PM)

Teachers 7-5PM (~100 total) +/- 50%

Custodian 7-3PM (1 day and 1 night)

Cleaners 3-11PM (6-8)

Secretaries 7-5PM (quantity not provided by Suzanne Wheatcraft)

Office Workers 7-5PM (quantity not provided by Suzanne Wheatcraft)

Athletic Coaches 7-5PM (quantity not provided by Suzanne Wheatcraft)

Nurses (2) 7-5PM

Cafeteria Workers 7-5PM (~6 total)

Section V – Site Layout

A. Building(s)

Draw a plan view sketch of each floor of the building. Indicate all pertinent information (including but not limited to: manufacturing areas, office areas, garage/maintenance areas, HVAC equipment, chemical storage areas, crawl spaces, locations of cracks with length, width and depth, location of settlement areas, floor penetrations, etc. Also include numbered locations of landfill gas readings and PID readings and place readings in table)

Comments: See Figures

Instrument Readings:

Mark each location on site sketch where reading was collected and provide a photograph. At a minimum, readings must be collected from all potential soil gas entry points within buildings (e.g., utility vaults, sumps, floor drains, oil/water separators, floor cracks, etc.) and any subsurface features on the exterior (e.g., catch basins, manholes, utility vaults, etc.). In addition, at least one breathing zone location will be measured for each discrete area within buildings.

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppm	%	%	ppm	ppm	%	
1st FLOOR							
1	0	0	0	0	0	21	Elevator Shaft
2	0	0	0	0	0	20.8	Floor Drain
3	0	0	0	0	0	20.8	Bathroom Floor Drain (Shower)
4	0	0	0	0	0	20.8	Electric Floor Penetration
5	0	0	0	0	0	20.8	Table Saw Electric Penetration
6	0.3	0	0	0	0	20.8	Ambient in Woodshop
7	0	0	0	0	0	20.8	Sink Drain
8	0	0	0	0	0	20.8	Electric Trench
9	0	0	0	0	0	20.9	Electrical Conduit for Saw
10	0	0	0	0	0	20.9	Floor Crack
11	0	0	0	0	0	20.8	Sink Drain
12	0	0	0	0	0	20.9	Crack
13	0	0	0	0	0	20.9	Crack
14	0.03 – 0.05	0	0	0	0	20.9	Office Area
15	0	0	0	0	0	20.8	Floor Drain in Welding Shop
16	0	0	0	0	0	20.8	Floor Drain in Welding Shop
17	0	0	0	0	0	20.8	Crack in Welding Shop
18	0	0	0	0	0	20.8	Electrical Conduit
19	0	0	0	0	0	20.8	Gas line? In Computer Room
20	0.12 – 0.14	0	0	0	0	20.9	Ambient

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppm	%	%	ppm	ppm	%	
21	0.18 – 0.19	0	0	0	0	20.9	1st Floor Drain
22	2 – 2.5	0	0	0	0	20.9	2nd Floor Drain
23	2 – 3	0	0	0	0	20.9	Oil Drain
24	0.3	0	0	0	0	20.9	Electrical Conduit
25	0.3	0	0	0	0	20.9	Divet Near Lift
26	0	0	0	0	0	20.9	Vent Near Door
27	0.4 – 0.5	0	0	0	0	20.9	Floor Drain
28	0	0	0	0	0	20.9	Vent
29	0	0	0	0	0	20.9	Oil Drain
30	0	0	0	0	0	20.9	Vent System
31	0.2	0	0	0	0	20.9	0.14 – 0.17 Bkgd (Rack/Slab Fix)
32	0	0	0	0	0	20.9	FD in General Shop
33	0	0	0	0	0	20.9	FD
34	0	0	0	0	0	20.9	FD in ROTC Kitchen
35	0	0	0	0	0	20.9	FD in ROTC Hall
36	0	0	0	0	0	20.9	FD in Classroom #1
37	0	0	0	0	0	20.9	Crack in Classroom #1
38	0	0	0	0	0	20.9	Electrical Outlets
39	0	0	0	0	0	20.9	FD in Men's Room
40	0	0	0	0	0	20.9	FD (2 of 2) in Art Room
41	0	0	0	0	0	20.9	Sewer Vent
42	0	0	0	0	0	20.9	FD's in Comp Room
43	0	0	0	0	0	21.0	Crack/Direct in Floor
44	0	0	0	0	0	21.0	Penetrations (Electrical)
45	0	0	0	0	0	21.0	Floor Drain in Bathroom
46	0	0	0	0	0	21.0	Vent Duct AC/or Heat Insulated

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppm	%	%	ppm	ppm	%	
47	0	0	0	0	0	21.0	FD
48	0	0	0	0	0	21.0	Vent
49	0	0	0	0	0	21.0	FD
50	0.3 – 0.4	0	0	0	0	20.9	Cracking Large Divet (Acetone Odor)
51	0	0	0	0	0	20.9	Pipe
52	0.6 - 0.9	0	0	0	0	20.9	FD
53	0	0	0	0	0	20.9	White Vent
54	0	0	0	0	0	20.8	Crack in Wall/Floor Meet
55	3.8 – 4.0	0	0	0	0	20.8	FD
56	3.0	0	0	0	0	20.8	FD Near Overhead Door
57	0	0	0	0	0	20.8	Hole Near Corner
58	0	0	0	0	0	20.7	Wash sink drain into floor in auto shop 91813) at the northeastern portion where the room bumps out to the north
59	0.8 – 1	0	0	0	0	20.8	Ladies Bathroom FD
60	0.08 bkgd	0	0	0	0	20.8	Electrical Penetrations
61	0	0	0	0	0	20.8	Electrical Penetrations
62	0	0	0	0	0	20.8	Vent Penetrations (sewer?)
63	0	0	0	0	0	20.8	Floor Crack
64	0.8 – 1.0	0	0	0	0	21.0	Floor Drain in Middle of Room
65	0	0	0	0	0	21.0	Vent Duct
66	0	0	0	0	0	20.9	Line from Wall to Floor (off white)
67	0	0	0	0	0	20.9	FD (1 of 3)
68	0	0	0	0	0	20.9	FD (3 of 3)
69	0	0	0	0	0	20.9	Vent
70	0	0	0	0	0	20.9	FD 1
71	0	0	0	0	0	20.9	Apparent drain pipe in masonry shop (1C4)

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppm	%	%	ppm	ppm	%	
72	0	0	0	0	0	20.9	Heater Penetration 1C23
73	0	0	0	0	0	20.9	Heater Penetration 1C24
74	0	0	0	0	0	20.9	Heater Penetration 1C25
75	0.07 – 0.075 ambient =0.012	0	0	0	0	20.9	Boys Room FD
76	0.07	0	0	0	0	20.9	Crack Near Door
77	0	0	0	0	0	20.7	Crack in Floor
78	0	0	0	0	0	20.7	FD (W)
79	2 - 2.2	0	0	0	0	20.7	FD (E)
80	0	0	0	0	0	20.7	Crack
81	0	0	0	0	0	20.7	Sink Drain Penetration

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppb	%	%	ppm	ppm	%	
BASEMENT							
1	0	0	0	0	0	21.0	Crack in Mech. Rm. Floor
2	0	0	0	0	0	21.0	Crack between Floor and Elevator
3	0	0	0	0	0	21.0	Sump
4	0	0	0	0	0	21.0	Low Spot Near Wall
5	0	0	0	0	0	21.0	Water Seep on Wall
6	0	0	0	0	0	21.0	Sewer Vent Near Sump
7	0	0	0	0	0	21.0	Sewer Type Pipe in Ceiling
8	1 – 1.5	0	0	0	0	20.8	Other End of Sewer Pipe (PVC) in Ceiling
9	0	0	0	0	0	20.8	Sewer Vent Ending at Wall Near Floor
10	0	0	0	0	0	20.8	Vent in Ceiling (Storm Sewer)
11	0	0	0	0	0	20.8	Crack in Wall
12	0	0	0.1%	0	0	20.8	Fuel Oil Lines
13	0	0	0	0	0	20.8	Large Crack in Floor (~ ½ ”)
14	0	0	0	0	0	20.8	Heat Unit Penetrations in Ceiling
15	0	0	0	0	0	20.8	Seam in Ceiling and wall
16	0	0	0	0	0	20.8	½” Gap between 3rd Column and Floor
17	0	0	0	0	0	20.8	¼” Crack in Floor
18	0	0	0	0	0	20.8	Sump (Surface and 4’ up) 30” Diameter / 25” Petrol Sheen Depth
19	0	0	0	0	0	20.8	Crack in Floor Near Corner of Wall
20	0	0	0	0	0	20.8	Vent / Pipes to Ceiling
21	0	0	0	0	0	20.8	Sump (No Sheen)
22	0	0	0	0	0	20.8	600-Gal AST Fuel Oil
23	0	0	0	0	0	20.8	Cleanout Pipe
24	0	0	0	0	0	20.8	Vent Pipe in Wall Near Small Sump
25	0	0	0	0	0	20.8	24” Diameter Sump / 20” H_2O Sheen

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppb	%	%	ppm	ppm	%	
26	0	0	0	0	0	20.8	Oil / H_2O Sep Meets Ceiling
27	0	0	0	0	0	20.8	Apparent Pipe (Broken)
28	2	0	0	0	0	20.8	Area of Gas Leak Down Wall
29	25	0	0	0	0	20.8	Electric Panel
30	0	0	0	0	0	20.8	Crack in Corner
31	17	0	0	0	0	20.8	Apparent Sewer Penetration in Ceiling
32	0-76	0	0	0	0	20.8	Former Lift Pit Penetration in Ceiling (10 Total)
33	221	0	0	0	0	20.8	Former Lift Pit Penetration in Ceiling (10 Total)
34	1.8 ppm	0	0	0	0	20.8	Bucket of Oil Near Oil / H_2O Sep.
35	304	0	0	0	0	20.8	Ceiling Penetration
36	150	0	0	0	0	20.8	Oil / H_2O Sep.
37	20	0	0	0	0	20.8	Vent / Sewer Pipe in Wall
38	0	0	0	0	0	20.8	Hole in Floor Near Bucket
39	0	0	0	0	0	20.8	Vent (Pipe) to Ceiling
40	0	0	0	0	0	20.8	Crack Near Corner of Wall and Footer Block
41	0	0	0	0	0	20.8	Gas/Sewer Line Penetration to Ceiling
42	0	0	0	0	0	20.8	Floor Drain Penetration
43	0	0	0	0	0	20.8	Sump 30” Diameter / 7” H_2O / ~25” Depth
44	0	0	0	0	0	20.8	Crack in Wall with H_2O Leaking
45	0	0	0	0	0	20.8	Floor / Wall Meeting
46	0	0	0	0	0	20.8	Hole Near Bump out
47	0	0	0	0	0	20.8	Vent Duct in Ceiling
48	0	0	0	0	0	20.8	Storm Sewer Lines in Ceiling
49	82	0	0	0	0	20.8	Corner of Wall in Stairwell
50	42	0	0	0	0	20.8	Crack in Floor
51	0	0	0	0	0	20.8	Crack in Floor

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppb	%	%	ppm	ppm	%	
52	0	0	0	0	0	20.8	Crack in Floor
53	0	0	0	0	0	20.8	Crack in Floor
54	0	0	0	0	0	20.8	Crack in Floor
55	35	0	0	0	0	20.8	Elevator Entrance
56	0	0	0	0	0	20.8	Floor/Wall Meeting (Low Spot)
57	13	0	0	0	0	20.8	Sewer Type Vent/Pipe
58	0	0	0	0	0	20.8	Corning of Walls and Floor
59	0	0	0	0	0	20.8	Floor Near Corner
60	0	0	0	0	0	20.8	Floor/Wall
61	0	0	0	0	0	20.8	Floor/Wall
62	0	0	0	0	0	20.8	Standing H2O near Bump out
63	0	0	0	0	0	20.8	Sewer Cleanout
64	0	0	0	0	0	20.8	Storm Sewer Pipe/Wall Penetration
65	3	0	0	0	0	20.8	Apparent Sewer Piping/Floor Penetration
66	0	0	0	0	0	20.8	Sump 3’ Deep (dry) 30” Diameter
67	0	0	0	0	0	20.8	Crack Going to Wall
68	0	0	0	0	0	20.8	Crack Where Ceiling Meets Wall
69	0	0	0	0	0	20.8	Seep / Crack in Wall
70	0	0	0	0	0	20.8	Sanitary Sewer Lines
71	6	0	0	0	0	20.8	Sewer Vent Floor Penetration
72	20	0	0	0	0	20.8	Broken Bedrock Area Near Wall
73	17	0	0	0	0	20.8	Floor Crack
74	25	0	0	0	0	20.8	KemKool 30-gallon Drum-Empty
75	25	0	0	0	0	20.8	Ceiling Sewer/Water Penetrations
76	12	0	0	0	0	20.8	Corner
77	295 @ 3’	0	0	0	0	20.8	30” Diameter / 7” H_2O

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppb	%	%	ppm	ppm	%	
	Above in Sum 343 in Sump						30” Depth Sump
78	249					20.8	Background reading
79	7,100					20.8	Floor drain (water present, no sheen)
80	6,800					20.8	2nd Floor Drain (bucket of oil adjacent at 1,100 ppb)
81	3,000					20.8	Floor drain between tanks
82	747 at sump surface; 1,400 at water surface					20.8	Sump (30" diameter, 3' depth, 8" water present)
83	565					20.8	Floor drain
84	606					20.8	Floor drain
85	397					20.8	Floor drain
86	729					20.8	Floor drain
87	327					20.8	Pipe into wall
88	75					20.8	Opening of covered area near wall
89	201					20.8	Crack
90	217					20.8	Base of wall
91	203					20.8	Floor drain

FORMER EMERSON STREET LANDFILL
SOIL VAPOR INTRUSION
PRELIMINARY BUILDING ASSESSMENT AND SITE RECONAISSANCE

Parcel Information:

Address: 655 Colfax Avenue

Owner: City of Rochester

Number of Buildings: 3 total

Building this Sheet Represents *(fill out one for each building)*: Former Service Station

Interviewer Information:

Name: Suzanne Wheatcraft Date/Time Prepared: 8/31/10 @ 2:30PM

Consultant Firm: LaBella, O'Brien & Gere Phone No.: (585) 454-6110, (585) 263-2820

Owner/Interviewee Information:

Last Name: Wheatcraft First Name: Suzanne

Address: 835 Hudson Avenue, Rochester, NY 14621

Company: Rochester City School District

Office Phone: (585) 336-4005

Tenant Information (if any):

Tenant Contact Person: Edison Tech – Tony Yaniro

Address:

Company:

Office Phone:

SECTION I - Building Construction Information

A. Site plans available? *(e.g., foundation construction, utility locations/chases, etc.)*: (Yes)/No

If yes, can copies be obtained? Yes

B. Does owner have knowledge that ash or solid waste was removed at time of building construction: (Yes)/No

If yes, are any documents available? Yes, see old H&A reports, footprints scraped clear

C. Building Construction

	Construction Type	Finish Type	Sealed	Square Feet
Basement	NA	NA	NA	NA
Crawl Space	NA	NA	NA	NA
First Floor	Poured concrete	NA	none	2,457
Foundation Walls	Concrete block	Painted	None	NA
2nd Floor	NA	NA	NA	NA

D. Any additions to building: Yes/(No)

If yes, list dates and locations:

If yes, note variations in construction:

E. Utility/Floor Penetrations (SEE FIGURES)

	Location(s)	Size/Description
Electric		
Gas		
Water		
Sewer/Wastewater		
Sumps		
Floor/Trench Drains		
Dry Well		
Oil/Water Separators		
Cracks in Floor		
Expansion Joints		
Floating Slab		
Monitoring Points		
Scales		
Utility Vaults		
Elevators		
Other		

F. Does facility have an on-Site septic system? Yes/(No)

If yes, where and size: Neutralization tank, science labs. Lines cut off, tank goes to sewer, underground along Colfax Avenue-side of building

G. Does facility provide pretreatment of wastewater prior to discharge to sanitary sewer? Yes/(No)

If yes, What type of pretreatment is conducted: Not currently. See above

H. Is there a vapor barrier associated with the foundation system? Yes/(No)

If yes, indicate type/material, location, thickness, etc.: _____

I. Is there a radon/sub-slab soil vapor mitigation system on any portion of the building? Yes/(No)

If yes, describe system and date installed: _____

If yes, Is the system active or passive? _____

If yes, Is system currently operational? _____

J. Standing water or wet areas in lower levels? Yes/(No)

If yes, list location and describe: _____

If yes, how frequent: less than 1/yr; 1-2 times/yr; or, more than 3 times/yr

K. Is the building insulated? Yes/(No)

If yes, location(s) and type? NA

L. Are there any settlement issues with the building? Yes/(No)

If yes, describe: _____

M. Are there any cracks in floor slabs (1st floor or basement)?

If yes, location(s), width, etc.? Yes, some, see figures

N. Are there any elevators in the building? Yes/(No)

If yes, describe construction and condition of pit (poured concrete, cinder block, etc.) _____

Comments:

SECTION II – Heating, Ventilation and Air Conditioning Information

A. Type of heating system(s) used in this building: *(circle all that apply - note primary)*

(Forced hot air) Heat pump (Hot water baseboard)

Space Heaters Stream radiation Radiant floor

Electric baseboard Other: Hot water / forced air

For each heat system/unit, provide the following:

Unit Type	Unit Location	Areas Heated	Unit Size	Pressurization (neg. vs. positive)	Air Communication with other areas (duct work, doors, etc.)
4 Water Boilers	Boiler Room	Entire building	15 lbs. pressure	Positive	Yes, see plans

Small boiler only used in summer. 1 main boiler and two backup boilers.

B. Type of fuel used: *(circle all that apply)*

(Natural Gas) Fuel Oil Kerosene

Electric Propane Solar

Wood Coal Other: _____

If more than one list locations: _____

C. Domestic hot water tank fueled by: Water boiler systems

D. Air conditioning: Central Air Window units None

Comments:

Rooftop AC, variable air volume box

SECTION III – Indoor Air Quality Influence Factors

A. Is there a garage, service area, or manufacturing area in building? (Yes)/No

If yes, list all that apply: Former gasoline service station

1. Does the garage, service or manufacturing areas have separate heating unit/system? (Yes)/No/NA

2. Are petroleum-powered machines or vehicles used or stored within the garage, service area or manufacturing area of building? *(e.g., forklifts, vehicle fleet, lawnmower, etc.)* Yes/(No)/NA

If yes, specify: Formerly used as a gasoline service station

B. Are there any current or former USTs, ASTs or Fueling Facilities on the property? (Yes)/No

If yes, specify location: Gas, diesel, oil storage tank, removed 3 years ago. Unknown sizes and Years of installation.

C. Are there any current or former hydraulic lifts at the property? (Yes)/No

If yes, locations and note if underground or above ground: Air, hydraulic underground, sealed

D. Are there any current or former petroleum or chemical spills at the Site? (Yes)/No

If yes, specify location, quantity, material and date: NYSDEC spills

E. Are there any current or former groundwater monitoring wells at the Site? (Yes)/No

If yes, specify location and accessibility: FESL related wells only

F. Has the building ever had a fire? Yes/(No)

If yes, When:

G. Is there a maintenance area? Yes/(No)

If yes, Where:

H. Are there any parts cleaners used at the site? (Yes)/No

If yes, list location(s) and solvent types: Formerly used as a gasoline service station.

I. Are there any drum and/or chemical storage areas? Yes/(No)

If yes, list location(s) and materials: _____

J. Are cleaning products used routinely? Yes/(No)

If yes, When & Where: _____

K. Has painting/staining been done in the last 6 months? Yes/(No)

If yes, When & Where: _____

L. Is there new carpet, drapes or other textiles within installed within the last year? Yes/(No)

If yes, Where & When: _____

M. Are there air fresheners in office spaces or bathrooms? Yes/(No)

If yes, Where & Type: _____

N. Are there exhaust fans (e.g., break rooms, bathrooms, other locations)? Yes/(No)

If yes, where vented and how often do they run: _____

O. Has there been a pesticide application on the grounds? Yes/(No)

If yes, When & Type: _____

P. Is smoking allowed on the property? Yes/(No)

If yes, is it allowed within buildings and where? _____

Q. Are there odors in the building? (Yes)/No

If yes, please describe: Petroleum in storage area.

R. Are solvents used within the building? Yes/(No –)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, etc.)

If yes, what types of solvents are used: Formerly used as a gasoline service station

S. Is groundwater extracted for any purpose (e.g., cooling water, geothermal, etc.)? Yes/(No)

If yes, how many extraction wells, what depths and what is the rate of extraction: _____

T. Are there any air handling units in the building? (Yes)/No

If yes, locations, sizes, intakes & exhaust: Refer to B

U. Are there any doors (overhead/bay or others) that are routinely open? Yes/(No)

If yes, note locations, sizes, and approximate times open: _____

V. Do any of the building occupants regularly use a dry-cleaning service? Yes/(No)

Yes, use dry-cleaning regularly (weekly): _____

No, use dry-cleaning infrequently (monthly or less): _____

Based on Information obtained list all potential soil gas entry points and there sizes (e.g., cracks in floor, void space, piping, utility ports, sumps, elevator pits, lifts, drains, etc.).

Cracks in floor, dirt floors, piping, utility ports, void spaces, sumps, elevators, floor drains

[*Note: See page 12 & 13 for additional information to be collected on each potential soil gas entry point (i.e., photographs, PID and landfill gas measurements, etc.*]

Comments:

Section IV – Occupancy/General Use

Location Use	Occupied (list hours/shifts)	Number of Employees (Full/Part-time)	Approx. Sq. Ft.	Level (basement, 1st Floor, 2nd Floor, etc.)	Brief Summary of Business/ Operations in Area (include additional sheets as necessary)
Office	Building not routinely occupied.				
Manufacturing/ Production					
Warehouse/ Storage					
Garage					
Maintenance					
Conference/ Break Rooms					

Comments:

Section V – Site Layout

A. Building(s)

Draw a plan view sketch of each floor of the building. Indicate all pertinent information (including but not limited to: manufacturing areas, office areas, garage/maintenance areas, HVAC equipment, chemical storage areas, crawl spaces, locations of cracks with length, width and depth, location of settlement areas, floor penetrations, etc. Also include numbered locations of landfill gas readings and PID readings and place readings in table)

Comments: See Figures

Instrument Readings:

Mark each location on site sketch where reading was collected and provide a photograph. At a minimum, readings must be collected from all potential soil gas entry points within buildings (e.g., utility vaults, sumps, floor drains, oil/water separators, floor cracks, etc.) and any subsurface features on the exterior (e.g., catch basins, manholes, utility vaults, etc.). In addition, at least one breathing zone location will be measured for each discrete area within buildings.

Location	VOCs	CH4	CO2	H2S	CO	O2	Description & Comments
Units	ppb	%	%	ppm	ppm	%	
1st FLOOR							
1	0	0	0	0	0	20.8	Floor drain near overhead door
2	0	0	0	0	0	20.8	Floor drain #2
3	0	0	0	0	0	20.8	Floor drain #3
4	0	0	0	0	0	20.8	Electrical penetration
5	0	0	0	0	0	20.8	Crack near corner door
6	49	0	0	0	0	20.8	Hole (small) in floor
7	8	0	0	0	0	20.8	Hole (small) in floor
8	0	0	0	0	0	20.8	Vent on north Side
9	2	0	0	0	0	20.8	Black metal plate on north side
10	49	0	0	0	0	20.8	Small hole in floor near bathroom
11	11	0	0	0	0	20.8	Crack