ANNUAL SITE MANAGEMENT REPORT
FROM AUGUST 2014 TO JULY 2015
MOTT HAVEN CAMPUS-X790
730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK
BCP AGREEMENT # C-203030

PREPARED FOR:

New York City Department of Education
Office of Environmental Health and Safety
44-36 Vernon Blvd.
Long Island City, New York 11101

PREPARED BY:

104 East 25th Street, 10th Floor
New York, New York 10010-2917

Date of Issue: September 14, 2015
REVISED: December 11, 2015

Cardno ATC Project No. Z214YI0181

TABLE OF CONTENTS

Attachments:

PROJECT DIRECTORY

CLIENT:	New York City Department of Education Office of Environmental Health and Safety 44-36 Vernon Blvd. Long Island City, New York 11101 (718) 361-3808
PROJECT LOCATION:	Mott Haven Campus - X790 730 Concourse Village West Bronx, New York, 10451 (718) 292-2036
PROJECT TECHNICAL SUPPORT:	New York State Department of Environmental Conservation Division of Environmental Remediation, Region 2 47-40 21st Street Long Island City, New York 11101-5407 (718) 482-4891 New York City School Construction Authority 30-30 Thomson Avenue Long Island City, New York 11101 (718) 472-8000 TRC Engineers, Inc. 1430 Broadway New York, NY 10018 (212) 221-7822 STV Incorporated 225 Park Avenue South New York, NY 10003 (212) 777-4400
DESCRIPTION OF WORK:	Review Site Management Plan, O&M plan and prior reports; review custodian's inspection forms, walk-through visual inspection
ATC REPRESENTATIVES:	Gilbert Gedeon, PE, Division Manager Husam Zeidan, Inspector Nancy Guevara, Inspector

EXECUTIVE SUMMARY

This Site Management Report (SMR) covers the period from August 1, 2014 to July 31, 2015 for Public School 790X located at 730 Concourse Village West, Bronx, NY. This report is being submitted in response to the August 4, 2015 New York State Department of Environmental Conservation (NYSDEC) Reminder Notice included under Attachment 1. This SMR includes information based on the most recent annual site refresher training associated with the operation and maintenance of the sub-slab depressurization system (SSDS), vapor barrier and composite cover system, as well as the annual site inspection conducted on August 26, 2015 pursuant to the NYSDEC-approved Site Management Plan (SMP).

The annual site inspection included an evaluation of engineering controls identified in the SMP which includes the vapor barrier, SSDS, and cover system established at the site. During this inspection, Cardno ATC (ATC) observed that all SSDS fans were operational; however SSDS fan EF-6, located on the roof of Building B, had been experiencing some problems with the power fuse and vacuum gauge. These issues were brought to the attention of the custodial staff who immediately addressed the issue with the power fuse. The vacuum gauge, which was observed to be non-functional, is scheduled for replacement.

Furthermore, during the same inspection, the BMS was observed to be connected to all SSDS fan units except for EF-6. ATC advised the custodial staff that this needs to be repaired immediately. In addition, ATC observed the spare fan unit to be located in Room B80.

On September 11, 2015, ATC received notice from the school's building manager that the BMS was connected and showing correct status of all SSDS fans. ATC conducted follow-up inspections on September 14, 2015 and December 3, 2015 to ensure that the BMS was functioning properly.

Finally, ATC reviewed the custodial monthly inspection logs and groundwater monitoring reports prepared by others. All issues identified during last year's report were addressed by the custodial staff.

Based on the visual inspection, the aforementioned issues are minor in nature and do not impact the effectiveness of the Engineering Controls (ECs) and Institutional Controls (ICs). Therefore, ATC concludes that the ECs and ICs have not changed, are effective, protect public health and the environment, and the remedial goals are being met. See Attachment 1 for the Institutional and Engineering Controls Certification Form.

1.0 INTRODUCTION

On behalf of the NYCDOE Office of Environmental Health and Safety (DOE/EHS), ATC is pleased to provide this SMR to NYSDEC for Public School 790X located at 730 Concourse Village West in Bronx, NY. The campus opened in September 2010 and is currently attended by approximately 1,490 students.

A one-acre area of the Mott Haven Property was accepted into the Brownfield Cleanup Program (BCP) and underwent remedial action from July 2006 to October 2007. The SMP was generated to ensure operation, maintenance, and effectiveness of the ECs and Environmental Easement (institutional controls). The BCP Area and the remainder of the property are addressed by the SMP.

This report was completed in accordance with the revised SMP approved by the NYSDEC on March 27, 2014.

The scope of work for this report included:

1. Review of the school custodian's monthly inspection logs documenting his routine walk-through to identify any observed changes to the ECs and ICs;
2. Roof-mounted SSDS equipment Inspection;
3. Basement Inspection and Exterior Inspection for concrete cracks;
4. Review of SMP, Operations and Maintenance Plan (O&M Plan), Groundwater Monitoring Reports and SSDS Biweekly Inspection Logs; and
5. Photographic documentation of observations.

This report was developed to document: (a) the changes to the ECs and ICs if any, and (b) whether the program for maintenance and monitoring is being implemented in accordance with the SMP. Mr. Gilbert Gedeon, P.E., Mr. Husam Zeidan and Ms. Nancy Guevara of ATC, conducted an annual site inspection on August 26, 2014. Ms. Nancy Guevara of ATC, conducted follow-up inspections on September 14, 2015 and December 3, 2015 to verify that the BMS was functional and correctly monitoring all SSDS fans. During all inspections, ATC was accompanied by Mr. Robert Rivera Jr., the school's Custodian.

2.0 ENGINEERING CONTROLS

According to the SMP prepared by Chicago Bridge & Iron Company (CB&I) (formerly Shaw Environmental & Infrastructure), dated November 2008, the Mott Haven Campus (X790) contains ECs that include a Gas Vapor Barrier and a SSDS constructed beneath the school to prevent residual soil vapors from entering the Mott Haven Campus buildings. In addition, a Composite Surface Cover System consisting of asphalt, concrete, pavers and soil cover was constructed to act as a barrier to prevent direct contact with subsurface soils. Site plans of the Engineering Controls is included in Attachment 2.

2.1 Vapor Barrier

The vapor barrier was installed beneath the school buildings as a precautionary measure to prevent soil vapors from entering the buildings in the future. The vapor barrier is applied underneath the buildings' ground floor slabs.

2.2 Sub-Slab Depressurization System

A sub-slab depressurization system was installed at the school as an added safeguard to prevent soil vapors from entering the school buildings in the future. The primary components of the SSDS are gas permeable aggregate (GPA) and slotted schedule 80 PVC piping located beneath the school, schedule 40 steel riser piping through building chase spaces from the ground floor slab to the roof, and stainless steel ductwork connecting the steel SSDS piping to the roof top fans. The SSDS fans are monitored by the Building Management System (BMS) using differential pressure switches mounted near each SSDS fan.

2.3 Composite Cover System

A composite cover system was installed on the school campus and also below the platform of P.S. 156 and I.S. 151 to the north of the property, to prevent school occupants from exposure to the underlying soils. This composite cover system is comprised of school buildings (concrete foundation), asphalt pavement, concrete sidewalks, and the concrete cap below the platforms that support P.S. 156 and I.S. 151, artificial turf on athletic fields, or two feet of clean fill on all exposed ground surfaces.

3.0 INSTITUTIONAL CONTROLS

The ICs at the Site state that the owner of the Property shall:

- Comply with the Environmental Easement and Declarations of Covenants and Restrictions (DCR) and comply with all elements of the SMP;
- Operate and maintain all ECs as per the SMP;
- Inspect, maintain, and certify the integrity of the cover system consisting of concrete building slabs, asphalt pavement, concrete covered sidewalks, and artificial turf athletic field, or two feet of clean fill on all exposed ground surfaces including landscaped areas in the BCP Area and Non-BCP Area A as required by the SMP;
- Inspect the cover system consisting of a concrete cap on all exposed ground surfaces beneath P.S. 156 and I.S. 151 to prevent human exposure to underlying soils remaining under Non-BCP Area B;
- Operate, inspect, maintain, and certify the soil vapor mitigation system consisting of a SSDS and vapor barrier under all building structures (BCP Area and Non-BCP Area A) as required;
- Inspect and certify all ECs at a frequency and in a matter defined in the SMP;
- Perform groundwater monitoring as stated in the SMP;

- Report data and information relevant to Site Management for the Property at the frequency and in a manner defined in the SMP;
- Protect and replace on-site monitoring devices as necessary to ensure the devices function in the manner specified in the SMP;
- Refrain from discontinuing the ECs without an amendment or the extinguishment of the Environmental Easement or DCR and approval by NYSDEC and NYSDOH;
- Prohibit farming and vegetable gardens on the Property;
- Prohibit the use of groundwater underlying the Property unless treatment is used rendering it safe for its intended purpose;
- Prohibit all future activities on the Property that will disturb historic urban fill material (Non-BCP Area A and Non BCP Area B) unless conducted as defined in the soil management provisions of the SMP;
- Use the Property as a school campus provided all long-term ECs and ICs included in the SMP are employed;
- Prohibit the Property from being used for purposes other than a school without an amendment or the extinguishment of the Environmental Easement and DCR approved in writing by the NYSDEC; and
- Agree to submit to NYSDEC a written statement that certifies that: (1) controls employed at the Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow. This annual statement must be certified by an expert that the NYSDEC finds acceptable.

4.0 SITE INSPECTIONS AND SSDS REPAIRS

4.1 Document Review

4.1.1 Review of Custodian's Inspection Logs

On September 30, 2014, the NYSDEC requested revisions be made to the Monthly Inspection Form (found in appendix M of the SMP), to include space for the vacuum gauge readings. ATC made revisions to the form and submitted it for approval on November 4, 2015. The NYSDEC approve the new Monthly Inspection Form on November 17, 2015. As such the revised SMP was updated and the new form was provided to the school's custodial staff.

ATC reviewed the Monthly or Severe Condition Inspection Forms with the custodial staff for which they were prepared for the months of August 2014 through July 2015.

ATC noted the following:

1. Minor cracks around the manhole cover on the East Access Drive were repaired on November 11, 2014 by a Temco Service Industries, Inc. (Temco) representative.

2. All pillow block bearings on SSDS fans were greased during the February 26, 2015 monthly inspection.
3. On March 14, 2015, SSDS fan unit EF-6 in Building B went down due to a defected fuse. Repairs were made by a Temco electrician on March 16, 2015 and the fan was returned to service.
4. Services to replace the fuse SSDS fan unit EF-6 in Building B were made in April, June and July 2015 by Temco representatives.

The indicator lights on the BMS were functioning properly on all monthly inspection forms, except for September 2014 and July 2015. The custodian indicated that during his inspections, the BMS incorrectly indicated that all SSDS fans were down. Mr. Rivera inspected the fans and confirmed that they were operational and that the BMS was providing false alarms. Mr. Rivera contacted Control Technologies, Inc. (CTI) to troubleshoot the BMS and repair the connection issues in September 2014 and July 2015. The custodian notified ATC that CTI conducted remote maintenance of the BMS.

As part of the annual inspection, ATC provided annual refresher training and advised the custodian to continue conducting inspections and documenting the observations in a monthly inspection form. The Monthly Inspection Forms and Training Acknowledgement are included in Attachment 3 and Attachment 7, respectively.

4.1.2 Review of Biweekly Inspection Logs

Biweekly inspections by SCA's representative, TRC Engineers (TRC), have been concluded after September 2013.

4.1.3 Review of Semiannual Groundwater Monitoring Reports

The Site is currently undergoing a semiannual groundwater monitoring program until the upgradient contamination source is addressed. ATC reviewed the groundwater monitoring reports (Attachment 4) prepared by STV for December 2014 and June 2015 events. The reports were submitted to the NYSDEC by SCA on January 29, 2015 and August 3, 2015.

Summaries of the December 2014 and June 2015 groundwater sampling events are provided below:

December 2014 Sampling Event

On December 21, 2014, STV collected ground water samples from the seven (7) existing groundwater monitoring wells. These samples were submitted to York Analytical Laboratories, Inc. of Stratford, Connecticut.

Acetone was detected in a sample collected and the trip blank from MW-26R at concentrations below the NYSDEC Class GA Value. Acetone was not detected in any of the other laboratory analysis batch blanks. In addition, methylene chloride was also detected in the trip blank for MW-26R. Acetone and methylene chloride are common laboratory contaminant and these compounds are not considered to be associated with groundwater contamination at the site.

Cis-1,2-Dichloroethylene (Cis-DCE), tetrachloroethylene (PCE), trichloroethylene (TCE), and vinyl chloride were detected in the downgradient monitoring well MW-3R at concentrations below the Class GA Values. No other VOCs were detected in the other two (2) downgradient monitoring wells (MW-5R and MW-11R) above Class GA values.

Cis-DCE, PCE, and vinyl chloride were detected in upgradient monitoring wells MW-23 at a concentration below their corresponding NYSDEC Class GA Values.

PCE was the only VOC detected at a concentration above the groundwater quality standard in monitoring well MW-24. Monitoring well MW-24 is located on the upgradient side of the site and VOCs detected are likely related to an upgradient source. No other VOCs were detected in the other upgradient monitoring wells MW-23, MW-25 and MW-26R.

The remedial objective for groundwater in the NYSDEC-approved Remedial Action Work Plan (RAWP) is to maintain groundwater quality at the downgradient property line. No VOCs were detected in downgradient monitoring wells MW-3R, MW-5R and MW-11R above Class GA Values. The groundwater monitoring results demonstrated that the remedial objective for groundwater continues to be met per the RAWP.

June 2015 Sampling Event

On June 13, 2015 STV collected ground water samples from the seven (7) existing groundwater monitoring wells. These samples were submitted to York Analytical Laboratories, Inc. of Stratford, Connecticut.

Acetone was detected in the sample collected from MW-25 at a concentration below the NYSDEC Class GA Value. Acetone was not detected in any of the other samples.

No VOCs were detected in the three (3) downgradient monitoring wells (MW-3R, MW-5R and MW-11R) above Class GA values. Methylene chloride was detected in the samples collected and the trip blanks collected from monitoring wells MW-3R, MW-5R, MW-11R and MW-26R; however, the detection of methylene chloride in the trip blank indicated that it was attributed to laboratory contamination. Methylene chloride was detected in the primary and field duplicate samples for MW-3R at concentrations of 3.5µg/L and 3.1µg/L, respectively; however, this is still less than the groundwater quality standard of 5µg/L.

PCE was detected in upgradient monitoring wells MW-23, and MW-24 at a concentration above the groundwater quality standard. Chloroform was also detected in monitoring well MW-24 at a concentration above the groundwater quality standard. Monitoring wells MW-23, and MW-24 are located on the upgradient side of the site and VOCs detected are likely related to an upgradient source. No other VOCs were detected in the other upgradient monitoring wells (MW-23, MW-24, MW-25 and MW-26R).

The remedial objective for groundwater in the NYSDEC-approved Remedial Action Work Plan (RAWP) is to maintain groundwater quality at the downgradient property line. With the exception of methylene chloride, which was attributed to laboratory contamination, no VOCs

were detected in downgradient monitoring wells MW-3R, MW-5R and MW-11R above Class GA Values. The groundwater monitoring results demonstrated that the remedial objective for groundwater continues to be met per the RAWP.

4.2 ATC's Visual Observations

On August 26, 2015, ATC conducted visual observations and photographic documentation while accompanied by the custodial staff. Site photographs are included Attachment 5 and the Annual Inspection Form is included in Attachment 6. During the inspection, ATC noted the following:

- All SSDS fans are operational;
- A spare fan unit labeled EF-7 is available at the school and is located in Room B80; and
- Repairs of the surficial cracks around the manhole on East Access Drive by the 35 yard line were completed by a representative from Temco on November 11, 2014.

During the annual inspection, the BMS was connected to all SSDS fans except for EF-6. The BMS was falsely indicating an alarm for EF-6 after ATC confirmed that the fan was operational and running. ATC advised the custodian that the BMS should be repaired immediately. In addition to the monthly inspections, ATC further advised the custodial staff to perform visual daily checks of all SSDS fan units until the BMS was repaired.

ATC received notice from the school's building manager on September 11, 2015 that the BMS had been repaired remotely by CTI and was connected and showing correct status of all SSDS fans. As such ATC conducted a follow-up inspection on September 14, 2015.

Additional maintenance on the BMS was conducted on October 6, 2015 by CTI. ATC conducted another follow-up inspection on December 3, 2015 and confirmed that the BMS was connected and showing correct status for all SSDS fan units and that all fan units were operational as designed. See Attachment 8 for Follow-up Inspection Documents.

4.2.1 Roof Vent SSDS Inspection

1. The SSDS blowers and stacks are located on the top of the roof of Buildings A, B, C, and D as follows:
    - ***Buildings A & B*** roofs have two fans each: one on the top of the main roof and the other on the top of the mechanical room roof
    - ***Buildings C & D*** roofs have one fan each: on the top of the mechanical room roof.
2. All SSDS fan units were operational;
3. All fan belts were aligned and in good condition. The custodial staff has been replacing worn belts on an as-needed basis.
4. The vacuum gauge on EF-6 on Building B is not functional;
5. Guy wires of all SSDS fan units were observed to be tight and in good condition;
6. Fan mounting and vibration isolators were intact; and

4.2.2 Basement Inspection (Cellar)

ATC inspected the accessible areas of the basement floors. ATC did not observe any visible concrete cracks penetrating into the basement floor during the site inspections. Furthermore, ATC did not observe any floor joints in the basement floor. As such, smoke testing consistent with Section 3.2.2 of the SMP was not conducted. ATC's observation of the basement concrete floors was limited due to architectural finishes such as ceramic floor tiles, vinyl floor tiles, wood flooring and miscellaneous equipment and furniture. ATC also inspected the DOT maintenance corridor and did not observe any visible cracks.

4.2.3 Exterior Inspection

ATC inspected the composite cover system around the perimeter of the Mott Haven Campus including the paved and unpaved areas. There was no evidence of pavement removal. No structures have been constructed on the unpaved areas. ATC also observed minor surficial cracks around the manhole on East Access Drive by the 35 yard line. The soil erosion and minor depression observed during last year's report were repaired on October 20, 2014 by a representative from Temco. Repair of the surficial cracks around the manhole on East Access Drive by the 35 yard line was completed by a representative from Temco on November 11, 2014.

ATC did not observe any other visible cracks in the exterior paved areas or sidewalks during the annual inspection. ATC also inspected the artificial turf and observed no apparent holes, cracks or deterioration. ATC concludes that the composite cover system is intact and provides a barrier to direct contact with underlying soils.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on visual observations, ATC concludes the following:

1. The SSDS is operational and is being monitored by the BMS;
2. No visible concrete cracks penetrating into the basement floors or walls were observed during the annual inspection; therefore, no smoke testing was performed;
3. The Soil erosion and minor depression observed were repaired on October 20, 2014 by a representative from Temco;
4. Minor cracks around the manhole cover on the East Access Drive were repaired on November 11, 2014 by a Temco representative.
5. A work order has been submitted and replacement is underway for the vacuum gauge on EF-6;
6. The ICs and ECs are in place, remain effective and the remedial goals have been met;
7. The O&M Plan is being implemented;
8. No changes have occurred that would reduce the ability of the controls to protect public health and the environment;
9. Access is available to the Site by NYSDEC and NYSDOH to evaluate continued maintenance of such controls; and
10. Site usage is compliant with the environmental easement.

Based on document review and visual observations, ATC recommends the following:

1. Repair/replace the vacuum gauge on SSDS fan unit EF-6 on Building B.
2. Continue documenting all operation and maintenance activities on ECs;
3. Continue to conduct monthly and routine/preventative maintenance inspections and record observations in the Monthly and Routine and Preventative Maintenance logs; and
4. Continue to replace any worn fan belts and conduct preventative maintenance on the SSDS fan units as needed.

6.0 STANDARDS OF CARE

ATC's work was performed in a professional manner with the best interest of our client in mind. Our objective was to perform our work with care, exercising the customary skills and competence of consulting professionals in the relevant disciplines. The conclusions presented in this report are professional opinions based upon visual observations, site documents review and real-time environmental measurements. The conclusions expressed in this report reflect only the limited inspections of specific locations. The opinions and recommendations presented herein apply to site conditions existing at the time of our observations. ATC cannot act as insurers, and no expressed or implied representation or warrant is included or intended in our report except that our work was performed, within the limits prescribed by our clients, with the customary thoroughness and competence of our profession at the time and place the services were rendered.

It is our pleasure to provide our consultative services to the NYCDOE. If you have any questions about this report, please call (212) 353-8280.

Sincerely,
CARDNO ATC

Gilbert Gedeon, P.E.
Division Manager

cc: B. Orlan
Y. Efstathiou
N. Guevara

Attachment 1
Institutional and Engineering Controls Certification Form

New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway, Albany, New York 12233
Phone: (518) 402-9553 **Fax:** (518) 402-9577
Website: www.dec.ny.gov

Joe Martens
Commissioner

8/4/2015

Bernie Orlan
Director, EHS
New York City Dept. of Education
44-36 Vernon Blvd
3rd Floor
Long Island City, NY 11101

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Former Metro North Property
Site No.: C203030
Site Address: 730 Concourse Village West
New York, NY 10451

Dear Bernie Orlan:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **September 15, 2015**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:
http://www.dec.ny.gov/regulations/2586.html

The signed certification forms should be sent to Sondra Martinkat, Project Manager, at the following address:

New York State Department of Environmental Conservation
One Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101

Phone number: 718-482-4891. E-mail: sondra.martinkat@dec.ny.gov

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

cc: w/ enclosures
New York City Dept. of Education

ec: w/ enclosures
Sondra Martinkat, Project Manager
Jane O'Connell, Hazardous Waste Remediation Engineer, Region 2

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7)**:**

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. **C203030**

Site Name Former Metro North Property

Site Address: 730 Concourse Village West Zip Code: 10451
City/Town: New York
County: Bronx
Site Acreage: 0.9

Reporting Period: July 31, 2014 to July 31, 2015

Reporting Period: August 1, 2014 to July 31, 2015

	YES	NO
1. Is the information above correct?	☐	☑
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative Date

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C203030 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
9-2443-78 P/O	New York City Dept. of Education	Ground Water Use Restriction Soil Management Plan Landuse Restriction Building Use Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

ICs:
Compliance with the Environmental Easement and DCR.
All ECs must be operated and maintained as specified in SMP
Cover systems inspection, certification, and maintenance.
Soil Vapor Mitigation system consisting of vapor Barrier and SSDS must be inspected, certified, and maintained as required in SMP. All ECs must be inspected and certified at frequency specified in SMP. Groundwater monitoring must be performed as specified in SMP. Groundwater monitoring wells must be protected and replaced as necessary to ensure compliance with SMP. ECs may not be discontinued or amended without concurrence from NYSDEC and NYSDOH. Vegetable gardens and farming at the property is prohibited. The use of groundwater property is prohibited. All activities disturbing urban fill materials are prohibited. Controlled property can only be used as a school provided long term ICs and ECs are employed as specified in SMP.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
9-2443-78 P/O	Vapor Mitigation Groundwater Containment Subsurface Barriers Fencing/Access Control

ECs:
Cover Systems
Vapor Barrier
Jet Grout Hydraulic Barrier
Waterloo Hydraulic Barrier
SSDS

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☑	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. C203030

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Bernard P ORLAN (print name) at 44-36 Vernon Blvd LIC, NY 11101 (print business address),

am certifying as OWNER (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Bernard P Orlan
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

8/19/15
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Gilbert Gedeon (print name) at 104 E. 25th St, NY, NY 10010 (print business address),

am certifying as a Professional Engineer for the NYC Department of Education (Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

Date: 9/14/15

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

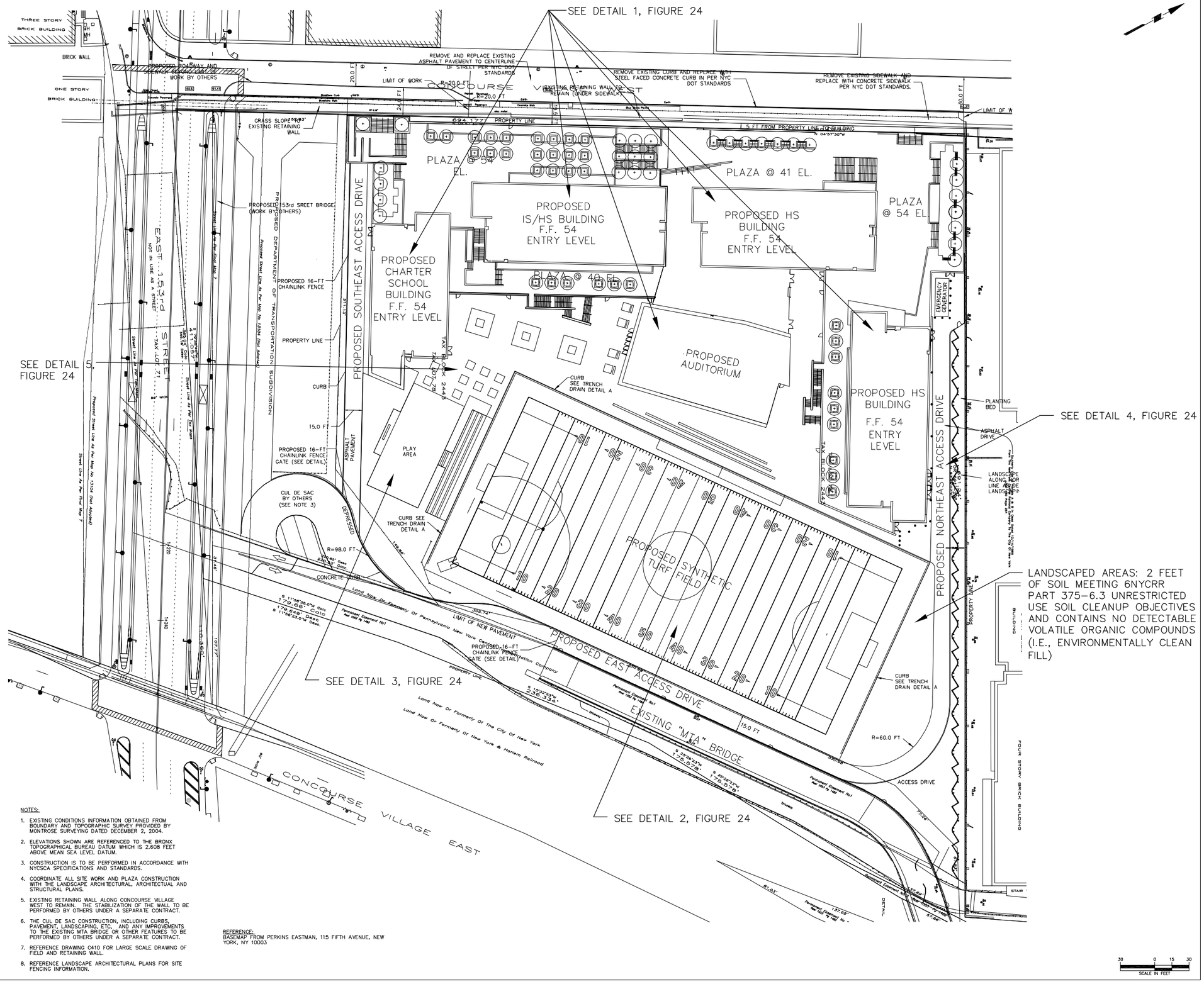
B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

Attachment 2
Engineering Controls Site Plans



NOTES:

1. EXISTING CONDITIONS INFORMATION OBTAINED FROM BOUNDARY AND TOPOGRAPHIC SURVEY PROVIDED BY MONTROSE SURVEYING DATED DECEMBER 2, 2004.
2. ELEVATIONS SHOWN ARE REFERENCED TO THE BRONX TOPOGRAPHICAL BUREAU DATUM WHICH IS 2.608 FEET ABOVE MEAN SEA LEVEL DATUM.
3. CONSTRUCTION IS TO BE PERFORMED IN ACCORDANCE WITH NYCSCA SPECIFICATIONS AND STANDARDS.
4. COORDINATE ALL SITE WORK AND PLAZA CONSTRUCTION WITH THE LANDSCAPE ARCHITECTURAL, ARCHITECTUAL AND STRUCTURAL PLANS.
5. EXISTING RETAINING WALL ALONG CONCOURSE VILLAGE WEST TO REMAIN. THE STABILIZATION OF THE WALL TO BE PERFORMED BY OTHERS UNDER A SEPARATE CONTRACT.
6. THE CUL DE SAC CONSTRUCTION, INCLUDING CURBS, PAVEMENT, LANDSCAPING, ETC., AND ANY IMPROVEMENTS TO THE EXISTING MTA BRIDGE OR OTHER FEATURES TO BE PERFORMED BY OTHERS UNDER A SEPARATE CONTRACT.
7. REFERENCE DRAWING C410 FOR LARGE SCALE DRAWING OF FIELD AND RETAINING WALL.
8. REFERENCE LANDSCAPE ARCHITECTURAL PLANS FOR SITE FENCING INFORMATION.

REFERENCE:
BASEMAP FROM PERKINS EASTMAN, 115 FIFTH AVENUE, NEW YORK, NY 10003

NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY

Sharon L. Greenberger, MCP, President & CEO

Board of Trustees

Chancellor Joel I. Klein, Chairman
Stanley E. Grayson, Trustee
Lilliam Barrios-Paoli, Trustee

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E. Bruce Barrett, R.A., Vice President

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Timothy F. Ng, R.A., PP., Director of Design Studio 2
George D. Roussey, P.E., Director of Design Studio 3
Gary Deane, Director of Operations, Special Projects

OWNER: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY 11101-3045

ARCHITECT: PERKINS EASTMAN
115 FIFTH AVENUE
NEW YORK, NY 10003

CONSULTING ARCHITECT: ALEXANDER GORLIN ARCHITECT LLC
137 VARICK STREET
NEW YORK, NY 10013

STRUCTURAL ENGINEER: LESLIE E. ROBERTSON ASSOCIATES, RLLP
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NEW YORK, NY 10004

MECHANICAL ENGINEER: FLACK + KURTZ ENGINEERS
475 FIFTH AVENUE
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CIVIL ENGINEER: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
21 PENN PLAZA
360 WEST 31ST SIREET, 8TH FLOOR
NEW YORK, NY 10001

FOOD SERVICE CONSULTANT: ROMANO GAETANO
99 WEST HOFFMAN AVENUE
LINDENHURST, NY 11757

ACOUSTIC AND THEATER CONSULTANT: HARVEY MARSHALL BERLING ASSOCIATES, LLC.
173 WEST 81ST STREET
SUITE 2, LOWER LEVEL
NEW YORK, NY 10024

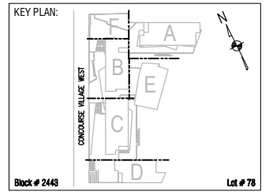
LANDSCAPE ARCHITECT: RGR LANDSCAPE
116 FIFTH AVENUE
NEW YORK, NY 10003

BID SET

NOTE: Drawing may be printed at reduced scale

NO.	REVISION	DATE
1	ISSUED FOR ADDENDUM No. 1	JULY 31, 2006

KEY PLAN:



Block # 2443 Lot # 78

SCA Design Manager:	Bohdan Huhlewych
Project Architect/Engineer:	Christine Schlendorf
Designer:	Ernesto Vela
Drawn by:	Christine Schlendorf
Checked by:	Perry Nuñez

LLW No.:	Facility Code:	Date:
033485	1215-05	1/16/08

Project:
MOTT HAVEN CAMPUS
-
Address: 730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK 10451

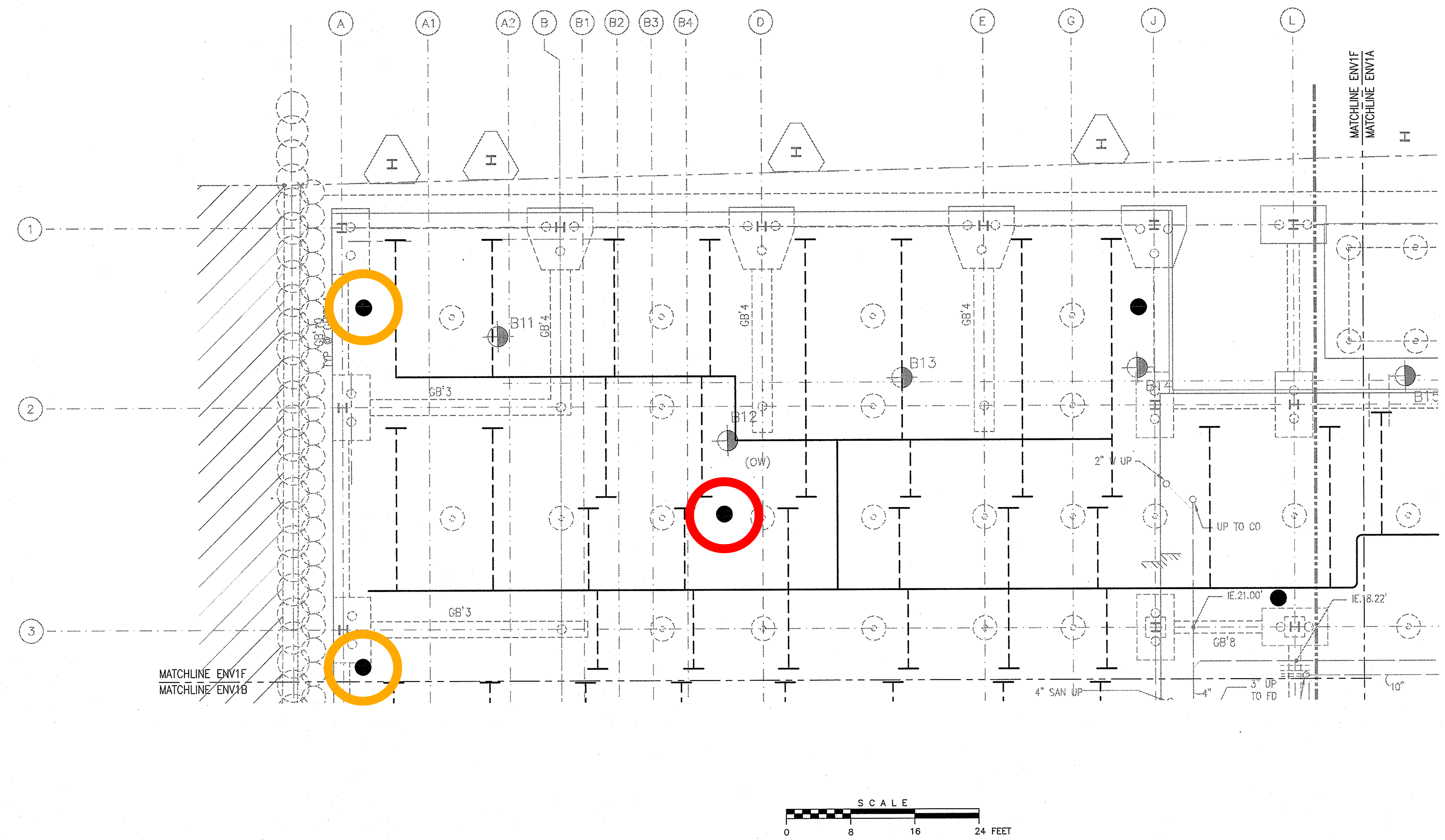
Drawing Title:
FIGURE 25
PRINCIPAL SITE COVERS

Drawing No.:
Figure 25 SMP

Sheets in Contract:
of 1072

PFA No. 21200.00

O:\Shaw Offices - CAD Files\Harrison NY\114926\SMP - DEC 2007\Figure 25-SMP.dwg 01/16/08 - 1:33pm



NOTES :

1. THE SURFACES TO BE LINED SHALL BE FREE OF ALL ROCKS, STONES, STICKS, ROOTS, SHARP OBJECTS, OR CONSTRUCTION DEBRIS OF ANY KIND. NO STANDING WATER, EXCESSIVE MOISTURE OR FROZEN GROUND SHALL BE ALLOWED.
2. AGGREGATE BACKFILL MUST BE ROLLED FLAT.
3. DRAWINGS ENV1A THROUGH ENV1F AND ENV2 SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFIC LIQUID BOOT TERMINATION DETAILS.
5. UNDERSLAB GAS VAPOR COLLECTION PIPING SHALL BE CONSTRUCTED OF SCHEDULE 80 PVC WITH 6 ROWS OF 0.03 INCH WIDE SLOTS ALONG THE CIRCUMFERENCE OF THE PIPE KEEPING SLOT SPACING OF 0.25 INCH THROUGHOUT THE LENGTH OF EACH PIPE. THE INSIDE AND OUTSIDE SLOT LENGTHS SHALL BE 1.5 AND 2.75 INCHES RESPECTIVELY. THE SOLID PIPING SHALL BE CONSTRUCTED OF SCHEDULE 80 PVC WITH 1 ROW OF 0.5 INCH DIAMETER PERFORATION AT THE BOTTOM OF THE PIPE KEEPING PERFORATION SPACING OF 2 FEET THROUGHOUT THE LENGTH OF EACH SOLID PIPE TO DRAIN THE CONDENSATE WATER. SLOTTED AND SOLID PIPE ENDS TO BE CAPPED.
6. SLOTTED AND SOLID GAS VAPOR COLLECTION PIPING SHALL BE 6" IN DIAMETER UNLESS OTHERWISE SPECIFIED ON DRAWING.
7. GAS VAPOR COLLECTION PIPING BELOW THE STRUCTURAL SLAB SHALL BE SCHEDULE 80 PVC PIPE AT DIAMETERS SHOWN. VERTICAL RISERS THROUGH THE BUILDING SHALL BE GALVANIZED SCHEDULE 40 CARBON STEEL. THE TRANSITION FROM SCHEDULE 80 PVC PIPE TO SCHEDULE 40 CARBON STEEL SHALL BE MADE BELOW GRADE JUST BEFORE THE RISER SLAB PENETRATION AS SHOWN IN DETAIL B, DRAWING NO. ENV2.
8. WHERE SUBSLAB HEADER PIPING IS SHOWN TO PASS THROUGH GRADE BEAMS, 6" PIPING SHALL BE REDUCED DOWN TO 4" AT THESE LOCATIONS WITH SCH 80 PVC REDUCER BUSHINGS. 4" SUBSLAB PIPING SHALL RUN THROUGH SLEEVES INSTALLED THROUGH THE 5 1/2" THICK SECTION OF CONCRETE BETWEEN THE BOTTOM OF THE FLOOR SLAB AND TOP OF GRADE BEAM. REFER TO STRUCTURAL DRAWINGS FOR DETAILS. USE 45° SCH 80 PVC ELBOWS TO BRING SUBSLAB HEADER PIPING TO REQUIRED ELEVATION BETWEEN BOTTOM OF FLOOR SLAB AND TOP OF GRADE BEAM.
9. WHERE SUBSLAB HEADER AND SOLID PIPING IS SHOWN TO PASS ABOVE UTILITIES, 6" HEADER PIPING SHALL RUN THROUGH SLEEVES INSTALLED THROUGH THE CONCRETE ENCASED UTILITIES. THE SECTION OF SLOTTED PIPING PASSING THROUGH THE SLEEVES SHALL BE CONVERTED TO SOLID PIPING TO PREVENT CONCRETE PLUGGING. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
10. TOP OF VENT STACKS SHALL BE A MINIMUM OF 3 FEET ABOVE THE ROOF LINE AND CAPPED WITH 6" RAIN HATS. CONTRACTOR TO VERIFY THAT VENT STACK EXHAUST LOCATIONS ARE AT LEAST 10 FEET AWAY FROM ANY ADJOINING OR ADJACENT BUILDINGS, HVAC INTAKES, SUPPLY REGISTERS, AND/OR OPENINGS LESS THAN TWO FEET BELOW THE EXHAUST POINTS. FINAL LOCATION AND HEIGHT OF VENT STACKS SHALL BE IN ACCORDANCE WITH NEW YORK CITY BUILDING CODE AND NEW YORK STATE DEPARTMENT OF HEALTH GUIDANCE.
11. A MINIMUM OF ONE (1) OFFSET PIPE CLAMP IS REQUIRED PER FLOOR WITH SPACING BETWEEN PIPE CLAMPS NOT TO EXCEED 15'.
12. REFER TO DRAWING ENV2 DETAIL D AND ARCHITECTURAL DRAWINGS FOR PIPING DETAILS AT ROOF. CONTRACTOR SHALL FIRESTOP ALL NEW PENETRATIONS THROUGH FLOORS AND ROOF AS REQUIRED BY NEW YORK CITY BUILDING CODE AND MAINTAIN MINIMUM REQUIRED FIRE RATING.
13. USE GRAY HEAVY BODIED CEMENT FOR ALL GLUED PVC JOINTS.
14. USE PIPE JOINT COMPOUND OR JOINT TAPE (TEFLON) ON MALE THREADS AT EACH GALVANIZED STEEL PIPE JOINT AND TIGHTEN JOINT TO LEAVE NO MORE THAN THREE (3) THREADS EXPOSED.
15. PIPING CAN BE ADJUSTED UP TO 12" IN ANY DIRECTION TO ACCOMMODATE BUILDING UTILITY/MECHANICAL REQUIREMENTS. OFFSET PIPING SHALL BE PROVIDED WHERE NECESSARY TO ACCOMODATE GRAVITY DRAINAGE, UTILITIES, AND OTHER SUBSURFACE OBSTRUCTIONS. INSTALLATION OF OFFSETS SHALL BE MADE WITH 45° FITTINGS TO MINIMIZE THE SYSTEM PRESSURE DROP ACROSS THE OFFSET.
16. REFER TO STRUCTURAL FOUNDATION SECTIONAL VIEW FOR ANY VARIATION TO SLAB DEPTHS AND ELEVATIONS.
17. TESTING PROCEDURES: CONTRACTOR SHALL PRESSURE TEST ABOVEGROUND VAPOR PIPING WITHIN THE BUILDING. TEMPORARILY PLUG PIPING AT BUILDING SLAB (CLEANOUT TEST TEE) AND ROOF AND PRESSURIZE PIPING TO 10 PSIG WITH AIR. SOAP ALL JOINTS AND MONITOR PRESSURE GAUGE FOR 30 MINUTES MINIMUM WITHOUT LOSS IN PRESSURE. REPAIR LEAKS AND RETEST AS NECESSARY. PRESSURE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02221, ARTICLE 3.01 B.
18. ALL PROPOSED PIPING/TRENCH LOCATIONS TO BE CONFIRMED AND APPROVED BY THE AUTHORITY OR AUTHORITY'S FIELD REPRESENTATIVE DURING THE TIME OF CONSTRUCTION.
19. ROOFTOP VENT STACKS SHALL BE SECURELY ANCHORED FROM A MINIMUM OF THREE (3) POINTS WITH ADEQUATE STRUCTURAL SUPPORTS SUCH AS GUY WIRES.
20. MANUFACTURER OF FLUID APPLIED WATERPROOFING/VAPOR BARRIER SHALL BE LIQUID BOOT® OR AUTHORITY APPROVED EQUAL.
21. LIQUID BOOT® IS TO BE APPLIED TO THE ENTIRE FOOTPRINT OF BUILDING AND ALONG EXTERIOR SUBSURFACE WALLS.

LEGEND:

- 6" DIA. SOLID PVC PIPE
- 6" DIA. SLOTTED PVC PIPE
- PIPE CAP
- LOCATION WHERE HEADER TURNS UP AND PENETRATES FLOOR SLAB
- PFE MONITORING POINT

DRAWING PREPARED BY SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P. C.
BASE DRAWING: SCHOOL F FIRST FLOOR FRAMING PLAN, DRAWING NO. S101F

File: N:\PROJ\NYC-SCA\Mott Haven\Contract 3 Submittals\SSDS As-Builts\As-Built ONLY Drawings\ENV1F.dwg

NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY

OWNER: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY 11101-3045

ARCHITECT: PERKINS EASTMAN
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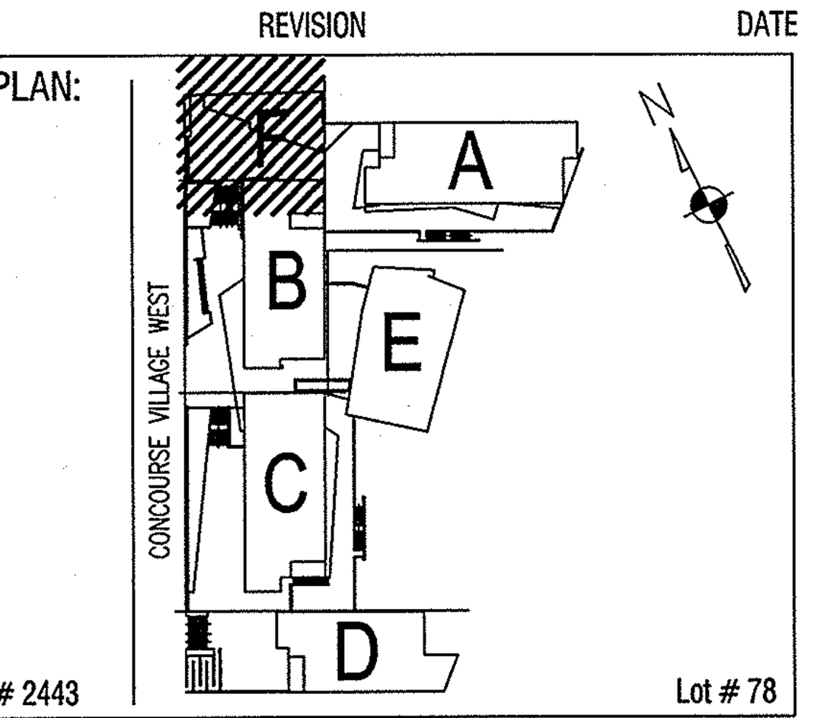
ENVIRONMENTAL CONSULTANT: SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P.C.
92 NORTH AVENUE
NEW ROCHELLE, NY 10801

AS-BUILT SET

NOTE: Drawing may be printed at reduced scale

NO.	REVISION	DATE
1	AS-BUILT SUBMISSION	4/23/10

KEY PLAN:



Block # 2443 Lot # 78

SCA Design Manager:	Bohdan Huhlewych
Project Architect/Engineer:	August Arrigo
Designer:	Peter Helseth
Drawn by:	Peter Helseth
Checked by:	Michael Sherwood

LLW No.:	Facility Code:	Date:
033485	1215-05	4/23/10

Project:
MOTT HAVEN CAMPUS

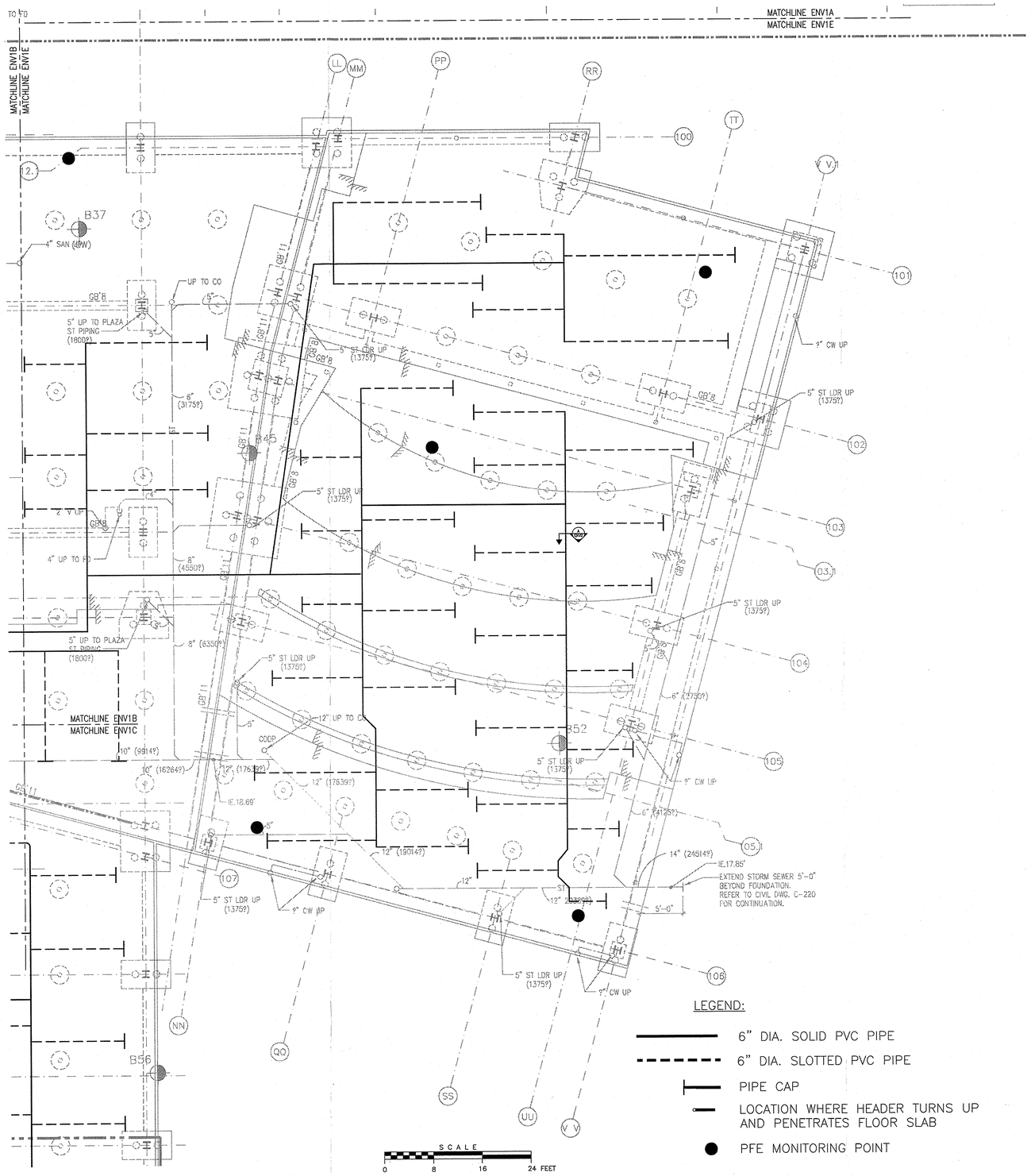
Address: 730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK 10451

Drawing Title:
PRACTICE GYMNASIUM-GAS VAPOR COLLECTION SYSTEM PIPING PLAN

Drawing No.: ENV1F

Sheets in Contract: 50 of 1072

PEA No. 21200.00



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DRAWING PREPARED BY SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P. C.
BASE DRAWING: SCHOOL E AUDITORIUM FRAMING PLAN, DRAWING NO.S101E

File: N:\PROJ\NYC-SCA\Mott Haven\Contract 3 Submittals\SDS As-Builts\As-Built ONLY Drawings\ENV1E.dwg

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30-30 THOMSON AVENUE
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NEW YORK, NY 10003

CONSULTING ARCHITECT: ALEXANDER GORLIN ARCHITECT LLC
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MECHANICAL ENGINEER: FLACK + KURTZ ENGINEERS
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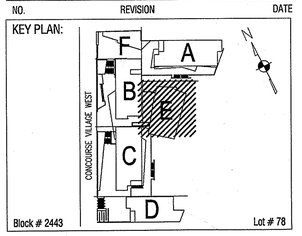
ENVIRONMENTAL CONSULTANT: SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P.C.
92 NORTH AVENUE
NEW ROCHELLE, NY 10801

AS-BUILT SET

NOTE: Drawing may be printed at reduced scale

NO.	REVISION	DATE
1	AS-BUILT SUBMISSION	6/14/10

KEY PLAN:



SCA Design Manager:	Bohdan Huhlewych
Project Architect/Engineer:	August Arrigo
Designer:	Peter Helseth
Drawn by:	Peter Helseth
Checked by:	Michael Sherwood

LLW No.:	Facility Code:	Date:
033485	1215-05	6/14/10

Project:
MOTT HAVEN CAMPUS
-
Address: 730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK 10451

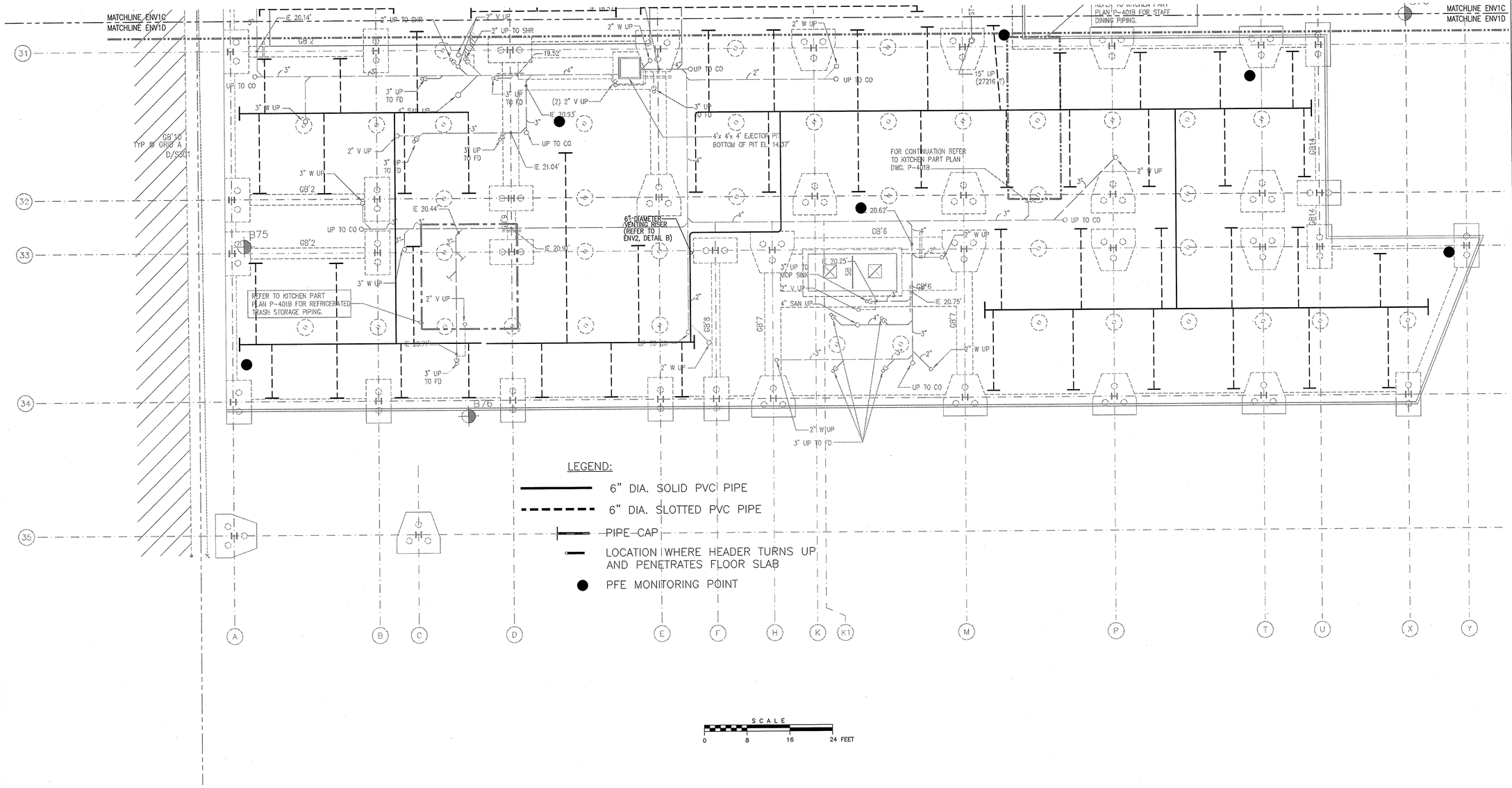
Drawing Title:
AUDITORIUM-
GAS VAPOR COLLECTION
SYSTEM PIPING PLAN

STATE OF NEW YORK
ROBERT ANTHONY AMICO
No. 072215
LICENSED PROFESSIONAL ENGINEER
6/15/10

Drawing No.:
ENV1E

Sheets in Contract:
49 of 1072

PEA No. 21200.00



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8. WHERE SUBSLAB HEADER PIPING IS SHOWN TO PASS THROUGH GRADE BEAMS, 6" PIPING SHALL BE REDUCED DOWN TO 4" AT THESE LOCATIONS WITH SCH 80 PVC REDUCER BUSHINGS. 4" SUBSLAB PIPING SHALL RUN THROUGH SLEEVES INSTALLED THROUGH THE 5 1/2" THICK SECTION OF CONCRETE BETWEEN THE BOTTOM OF THE FLOOR SLAB AND TOP OF GRADE BEAM. REFER TO STRUCTURAL DRAWINGS FOR DETAILS. USE 45° SCH 80 PVC ELBOWS TO BRING SUBSLAB HEADER PIPING TO REQUIRED ELEVATION BETWEEN BOTTOM OF FLOOR SLAB AND TOP OF GRADE BEAM.
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14. USE PIPE JOINT COMPOUND OR JOINT TAPE (TEFLON) ON MALE THREADS AT EACH GALVANIZED STEEL PIPE JOINT AND TIGHTEN JOINT TO LEAVE NO MORE THAN THREE (3) THREADS EXPOSED.
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DRAWING PREPARED BY SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P. C.
BASE DRAWING: SCHOOL D FIRST FLOOR FRAMING PLAN, DRAWING NO.S101D

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CONSULTING ARCHITECT: ALEXANDER GORLIN ARCHITECT LLC
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STRUCTURAL ENGINEER: LESLIE E. ROBERTSON ASSOCIATES, RLLP
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CIVIL ENGINEER: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
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FOOD SERVICE CONSULTANT: ROMANO GATLAND
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NEW YORK, NY 10003

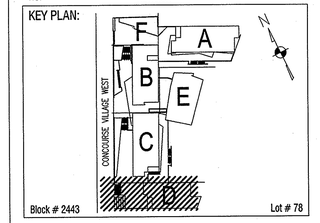
ENVIRONMENTAL CONSULTANT: SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P.C.
92 NORTH AVENUE
NEW ROCHELLE, NY 10801

AS-BUILT SET

NOTE: Drawing may be printed at reduced scale

NO.	REVISION	DATE
1	AS-BUILT SUBMISSION	4/23/10

KEY PLAN:



SCA Design Manager:	Bohdan Huhlewych
Project Architect/Engineer:	August Arrigo
Designer:	Peter Helseth
Drawn by:	Peter Helseth
Checked by:	Michael Sherwood

LLW No.:	Facility Code:	Date:
033485	1215-05	4/23/10

Project:
MOTT HAVEN CAMPUS
-
Address: 730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK 10451

Drawing Title:
BUILDING D-
GAS VAPOR COLLECTION
SYSTEM PIPING PLAN

STATE OF NEW YORK
THOMAS ANTHONY [illegible]
No. 076540
LICENSED PROFESSIONAL ENGINEER

Drawing No.:
ENV1D

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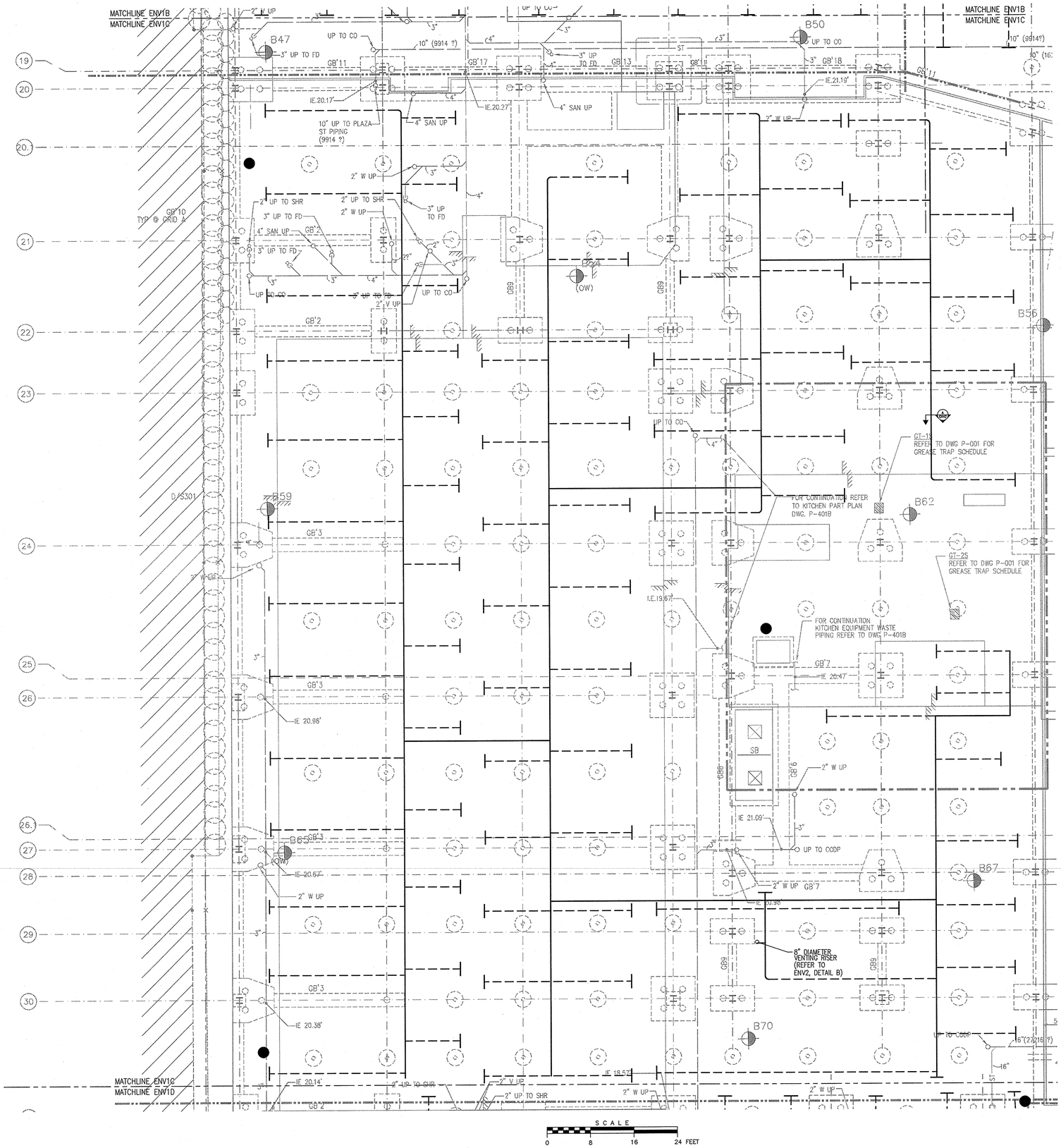
48 of 1072

PEA No. 21200.00



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BASE DRAWING: SCHOOL C FIRST FLOOR FRAMING PLAN, DRAWING NO. S101C

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LEGEND:

- 8" DIA. SOLID PVC PIPE
- 8" DIA. SLOTTED PVC PIPE
- PIPE CAP
- LOCATION WHERE HEADER TURNS UP AND PENETRATES FLOOR SLAB
- PFE MONITORING POINT

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AS-BUILT SET

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NO.	REVISION	DATE
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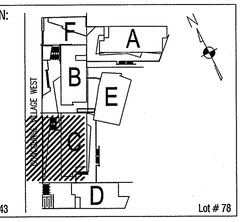
KEY PLAN:



Block # 2443 Lot # 78

SCA Design Manager:	Bohdan Huhlewych
Project Architect/Engineer:	August Arrigo
Designer:	Peter Helseth
Drawn by:	Peter Helseth
Checked by:	Michael Sherwood

LLW No.:	Facility Code:	Date:
033485	1215-05	4/23/10

Project:
MOTT HAVEN CAMPUS
-

Address: 730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK 10451

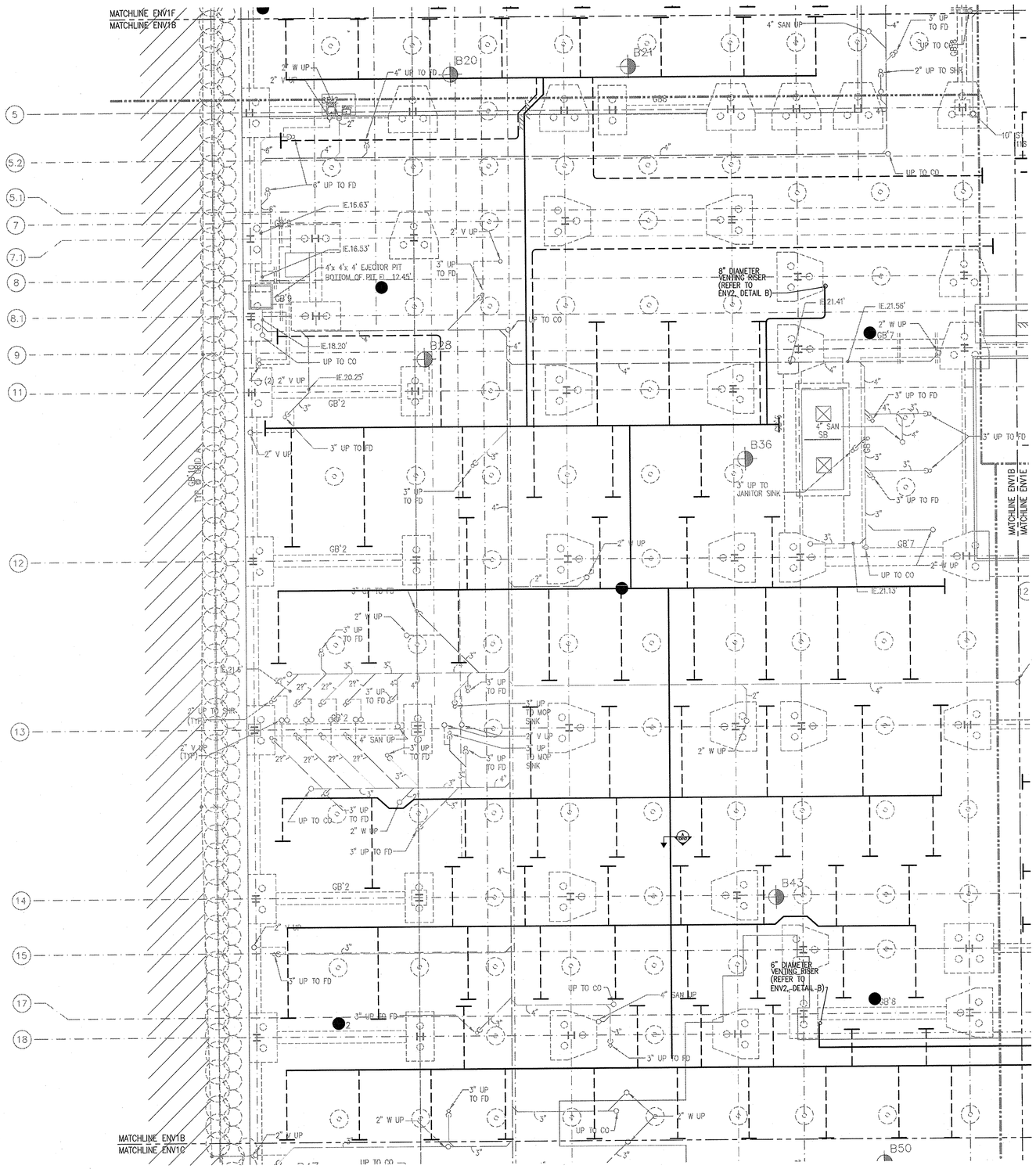
Drawing Title:
BUILDING C-
GAS VAPOR COLLECTION
SYSTEM PIPING PLAN

STATE OF NEW YORK — LICENSED PROFESSIONAL ENGINEER — No. 072045

Drawing No.:
ENV1C

Sheets in Contract:
47 of 1072

PEA No. 21200.00



SCALE
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DRAWING PREPARED BY SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P. C.
BASE DRAWING: SCHOOL B FIRST FLOOR FRAMING PLAN, DRAWING NO.S101B

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5. UNDERSLAB GAS VAPOR COLLECTION PIPING SHALL BE CONSTRUCTED OF SCHEDULE 80 PVC WITH 6 ROWS OF 0.03 INCH WIDE SLOTS ALONG THE CIRCUMFERENCE OF THE PIPE KEEPING SLOT SPACING OF 0.25 INCH THROUGHOUT THE LENGTH OF EACH PIPE. THE INSIDE AND OUTSIDE SLOT LENGTHS SHALL BE 1.5 AND 2.75 INCHES RESPECTIVELY. THE SOLID PIPING SHALL BE CONSTRUCTED OF SCHEDULE 80 PVC WITH 1 ROW OF 0.5 INCH DIAMETER PERFORATION AT THE BOTTOM OF THE PIPE KEEPING PERFORATION SPACING OF 2 FEET THROUGHOUT THE LENGTH OF EACH SOLID PIPE TO DRAIN THE CONDENSATE WATER. SLOTTED AND SOLID PIPE ENDS TO BE CAPPED.
6. SLOTTED AND SOLID GAS VAPOR COLLECTION PIPING SHALL BE 8" IN DIAMETER. UNLESS OTHERWISE NOTED ON DRAWING.
7. GAS VAPOR COLLECTION PIPING BELOW THE STRUCTURAL SLAB SHALL BE SCHEDULE 80 PVC PIPE AT DIAMETERS SHOWN. VERTICAL RISERS THROUGH THE BUILDING SHALL BE GALVANIZED SCHEDULE 40 CARBON STEEL. THE TRANSITION FROM SCHEDULE 80 PVC PIPE TO SCHEDULE 40 CARBON STEEL SHALL BE MADE BELOW GRADE JUST BEFORE THE RISER SLAB PENETRATION AS SHOWN IN DETAIL B, DRAWING NO. ENV2.
8. WHERE SUBSLAB HEADER PIPING IS SHOWN TO PASS THROUGH GRADE BEAMS, 8" PIPING SHALL BE REDUCED DOWN TO 4" AT THESE LOCATIONS WITH SCH 80 PVC REDUCER BUSHINGS. 4" SUBSLAB PIPING SHALL RUN THROUGH SLEEVES INSTALLED THROUGH THE 5 1/2" THICK SECTION OF CONCRETE BETWEEN THE BOTTOM OF THE FLOOR SLAB AND TOP OF GRADE BEAM. REFER TO STRUCTURAL DRAWINGS FOR DETAILS. USE 45° SCH 80 PVC ELBOWS TO BRING SUBSLAB HEADER PIPING TO REQUIRED ELEVATION BETWEEN BOTTOM OF FLOOR SLAB AND TOP OF GRADE BEAM.
9. WHERE SUBSLAB HEADER AND SOLID PIPING IS SHOWN TO PASS ABOVE UTILITIES, 8" HEADER PIPING SHALL RUN THROUGH SLEEVES INSTALLED THROUGH THE CONCRETE ENCASED UTILITIES. THE SECTION OF SLOTTED PIPING PASSING THROUGH THE SLEEVES SHALL BE CONVERTED TO SOLID PIPING TO PREVENT CONCRETE PLUGGING. REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
10. TOP OF VENT STACKS SHALL BE A MINIMUM OF 3 FEET ABOVE THE ROOF LINE AND CAPPED WITH 6" RAIN HATS. CONTRACTOR TO VERIFY THAT VENT STACK EXHAUST LOCATIONS ARE AT LEAST 10 FEET AWAY FROM ANY ADJOINING OR ADJACENT BUILDINGS, HVAC INTAKES, SUPPLY REGISTERS, AND/OR OPENINGS LESS THAN TWO FEET BELOW THE EXHAUST POINTS. FINAL LOCATION AND HEIGHT OF VENT STACKS SHALL BE IN ACCORDANCE WITH NEW YORK CITY BUILDING CODE AND NEW YORK STATE DEPARTMENT OF HEALTH GUIDANCE.
11. A MINIMUM OF ONE (1) OFFSET PIPE CLAMP IS REQUIRED PER FLOOR WITH SPACING BETWEEN PIPE CLAMPS NOT TO EXCEED 15'.
12. REFER TO DRAWING ENV2 DETAILS D & E AND ARCHITECTURAL DRAWINGS FOR PIPING DETAILS AT ROOF. CONTRACTOR SHALL FIRESTOP ALL NEW PENETRATIONS THROUGH FLOORS AND ROOF AS REQUIRED BY NEW YORK CITY BUILDING CODE AND MAINTAIN MINIMUM REQUIRED FIRE RATING.
13. USE GRAY HEAVY BODIED CEMENT FOR ALL GLUED PVC JOINTS.
14. USE PIPE JOINT COMPOUND OR JOINT TAPE (TEFLON) ON MALE THREADS AT EACH GALVANIZED STEEL PIPE JOINT AND TIGHTEN JOINT TO LEAVE NO MORE THAN THREE (3) THREADS EXPOSED.
15. PIPING CAN BE ADJUSTED UP TO 12" IN ANY DIRECTION TO ACCOMMODATE BUILDING UTILITY/MECHANICAL REQUIREMENTS. OFFSET PIPING SHALL BE PROVIDED WHERE NECESSARY TO ACCOMODATE GRAVITY DRAINAGE, UTILITIES, AND OTHER SUBSURFACE OBSTRUCTIONS. INSTALLATION OF OFFSETS SHALL BE MADE WITH 45° FITTINGS TO MINIMIZE THE SYSTEM PRESSURE DROP ACROSS THE OFFSET.
16. REFER TO STRUCTURAL FOUNDATION SECTIONAL VIEW FOR ANY VARIATION TO SLAB DEPTHS AND ELEVATIONS.
17. TESTING PROCEDURES: CONTRACTOR SHALL PRESSURE TEST ABOVEGROUND VAPOR PIPING WITHIN THE BUILDING. TEMPORARILY PLUG PIPING AT BUILDING SLAB (CLEANOUT TEST TEE) AND ROOF AND PRESSURIZE PIPING TO 10 PSIG WITH AIR. SOAP ALL JOINTS AND MONITOR PRESSURE GAUGE FOR 30 MINUTES MINIMUM WITHOUT LOSS IN PRESSURE. REPAIR LEAKS AND RETEST AS NECESSARY. PRESSURE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02221, ARTICLE 3.01 B.
18. ALL PROPOSED PIPING/TRENCH LOCATIONS TO BE CONFIRMED AND APPROVED BY THE AUTHORITY OR AUTHORITY'S FIELD REPRESENTATIVE DURING THE TIME OF CONSTRUCTION.
19. ROOFTOP VENT STACKS SHALL BE SECURELY ANCHORED FROM A MINIMUM OF THREE (3) POINTS WITH ADEQUATE STRUCTURAL SUPPORTS SUCH AS GUY WIRES.
20. MANUFACTURER OF FLUID APPLIED WATERPROOFING/VAPOR BARRIER SHALL BE LIQUID BOOT® OR AUTHORITY APPROVED EQUAL.
21. LIQUID BOOT® IS TO BE APPLIED TO THE ENTIRE FOOTPRINT OF BUILDING AND ALONG EXTERIOR SUBSURFACE WALLS.

LEGEND:

- 8" DIA. SOLID PVC PIPE
- 8" DIA. SLOTTED PVC PIPE
- PIPE CAP
- LOCATION WHERE HEADER TURNS UP AND PENETRATES FLOOR SLAB
- PFE MONITORING POINT

NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY

Sharon L. Greenberger, MCP, President & CEO

Board of Trustees

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Timothy F. Ng, R.A., PP., Director of Design Studio 2
George D. Roussey, P.E., Director of Design Studio 3
Gary Deane, Director of Operations, Special Projects

OWNER: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY 11101-3045

ARCHITECT: PERKINS EASTMAN
115 FIFTH AVENUE
NEW YORK, NY 10003

CONSULTING ARCHITECT: ALEXANDER GORLIN ARCHITECT LLC
137 VARICK STREET
NEW YORK, NY 10013

STRUCTURAL ENGINEER: LESLIE E. ROBERTSON ASSOCIATES, RLLP
30 BROAD STREET
NEW YORK, NY 10004

MECHANICAL ENGINEER: FLACK + KURTZ ENGINEERS
475 FIFTH AVENUE
NEW YORK, NY 10017

CIVIL ENGINEER: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
21 PENN PLAZA
360 WEST 31ST STREET, 8TH FLOOR
NEW YORK, NY 10001

FOOD SERVICE CONSULTANT: ROMANO GATLAND
99 WEST HOFFMAN AVENUE
LINDENHURST, NY 11757

ACOUSTIC AND THEATER CONSULTANT: HARVEY MARSHALL BERLING ASSOCIATES, LLC.
173 WEST 81ST STREET
SUITE 2, LOWER LEVEL
NEW YORK, NY 10024

LANDSCAPE ARCHITECT: RGR LANDSCAPE
115 FIFTH AVENUE
NEW YORK, NY 10003

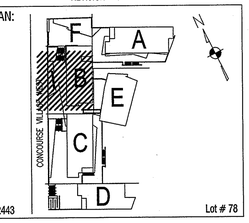
ENVIRONMENTAL CONSULTANT: SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P.C.
92 NORTH AVENUE
NEW ROCHELLE, NY 10801

AS-BUILT SET

NOTE: Drawing may be printed at reduced scale

NO.	REVISION	DATE
1	AS-BUILT SUBMISSION	4/23/10

KEY PLAN:



Block # 2443 Lot # 78

SCA Design Manager:	Bohdan Huhlewych
Project Architect/Engineer:	August Arrigo
Designer:	Peter Helseth
Drawn by:	Peter Helseth
Checked by:	Michael Sherwood

LLW No.:	Facility Code:	Date:
033485	1215-05	4/23/10

Project:
MOTT HAVEN CAMPUS
-
Address: 730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK 10451

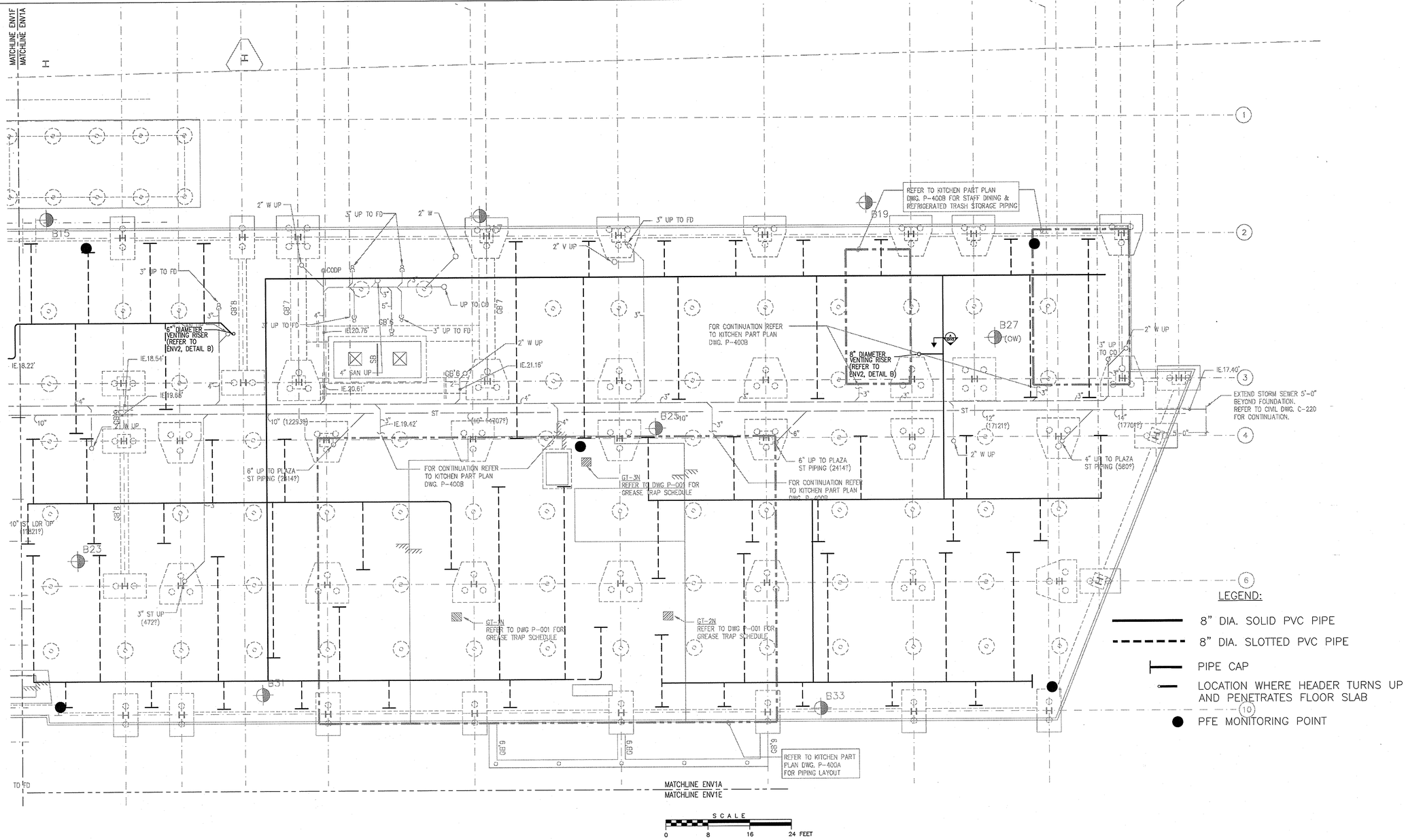
Drawing Title:
BUILDING B-
GAS VAPOR COLLECTION
SYSTEM PIPING PLAN

STATE OF NEW YORK — MICHAEL SHERWOOD — LICENSED PROFESSIONAL ENGINEER — No. 070903

Drawing No.:
ENV1B

Sheets in Contract:
46 of 1072

PEA No. 21200.00



NOTES :

1. THE SURFACES TO BE LINED SHALL BE FREE OF ALL ROCKS, STONES, STICKS, ROOTS, SHARP OBJECTS, OR CONSTRUCTION DEBRIS OF ANY KIND. NO STANDING WATER, EXCESSIVE MOISTURE OR FROZEN GROUND SHALL BE ALLOWED.
2. AGGREGATE BACKFILL MUST BE ROLLED FLAT.
3. DRAWINGS ENV1A THROUGH ENV1F AND ENV2 SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR SPECIFIC LIQUID BOOT TERMINATION DETAILS.
5. UNDERSLAB GAS VAPOR COLLECTION PIPING SHALL BE CONSTRUCTED OF SCHEDULE 80 PVC WITH 6 ROWS OF 0.03 INCH WIDE SLOTS ALONG THE CIRCUMFERENCE OF THE PIPE KEEPING SLOT SPACING OF 0.25 INCH THROUGHOUT THE LENGTH OF EACH PIPE. THE INSIDE AND OUTSIDE SLOT LENGTHS SHALL BE 1.5 AND 2.75 INCHES RESPECTIVELY. THE SOLID PIPING SHALL BE CONSTRUCTED OF SCHEDULE 80 PVC WITH 1 ROW OF 0.5 INCH DIAMETER PERFORATION AT THE BOTTOM OF THE PIPE KEEPING PERFORATION SPACING OF 2 FEET THROUGHOUT THE LENGTH OF EACH SOLID PIPE TO DRAIN THE CONDENSATE WATER. SLOTTED AND SOLID PIPE ENDS TO BE CAPPED.
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DRAWING PREPARED BY SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P. C.
BASE DRAWING: SCHOOL A FIRST FLOOR FRAMING PLAN, DRAWING NO.S101A

File: N:\PROJ\NYC-SCA\Mott Haven\Contract 3 Submittals\DSDS As-Builts\As-Built ONLY Drawings\ENV1A.dwg

OWNER: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY 11101-3045

ARCHITECT: PERKINS EASTMAN
115 FIFTH AVENUE
NEW YORK, NY 10003

CONSULTING ARCHITECT: ALEXANDER GORLIN ARCHITECT LLC
137 VARICK STREET
NEW YORK, NY 10013

STRUCTURAL ENGINEER: LESLIE E. ROBERTSON ASSOCIATES, RLLP
30 BROAD STREET
NEW YORK, NY 10004

MECHANICAL ENGINEER: FLACK + KURTZ ENGINEERS
475 FIFTH AVENUE
NEW YORK, NY 10017

CIVIL ENGINEER: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
21 PENN PLAZA
360 WEST 31ST STREET, 8TH FLOOR
NEW YORK, NY 10001

FOOD SERVICE CONSULTANT: ROMANO GATLAND
99 WEST HOFFMAN AVENUE
LINDENHURST, NY 11757

ACOUSTIC AND THEATER CONSULTANT: HARVEY MARSHALL BERLING ASSOCIATES, LLC.
173 WEST 81ST STREET
SUITE 2, LOWER LEVEL
NEW YORK, NY 10024

LANDSCAPE ARCHITECT: RGR LANDSCAPE
115 FIFTH AVENUE
NEW YORK, NY 10003

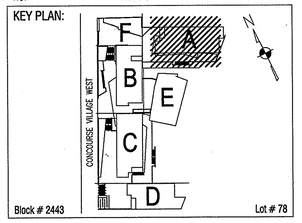
ENVIRONMENTAL CONSULTANT: SHAW ENVIRONMENTAL & INFRASTRUCTURE ENGINEERING OF NEW YORK, P.C.
92 NORTH AVENUE
NEW ROCHELLE, NY 10801

AS-BUILT SET

NOTE: Drawing may be printed at reduced scale

NO.	REVISION	DATE
1	AS-BUILT SUBMISSION	4/23/10

KEY PLAN:



SCA Design Manager:	Bohdan Huhlewych
Project Architect/Engineer:	August Arrigo
Designer:	Peter Helseth
Drawn by:	Peter Helseth
Checked by:	Michael Sherwood

LLW No.:	Facility Code:	Date:
033485	1215-05	4/23/10

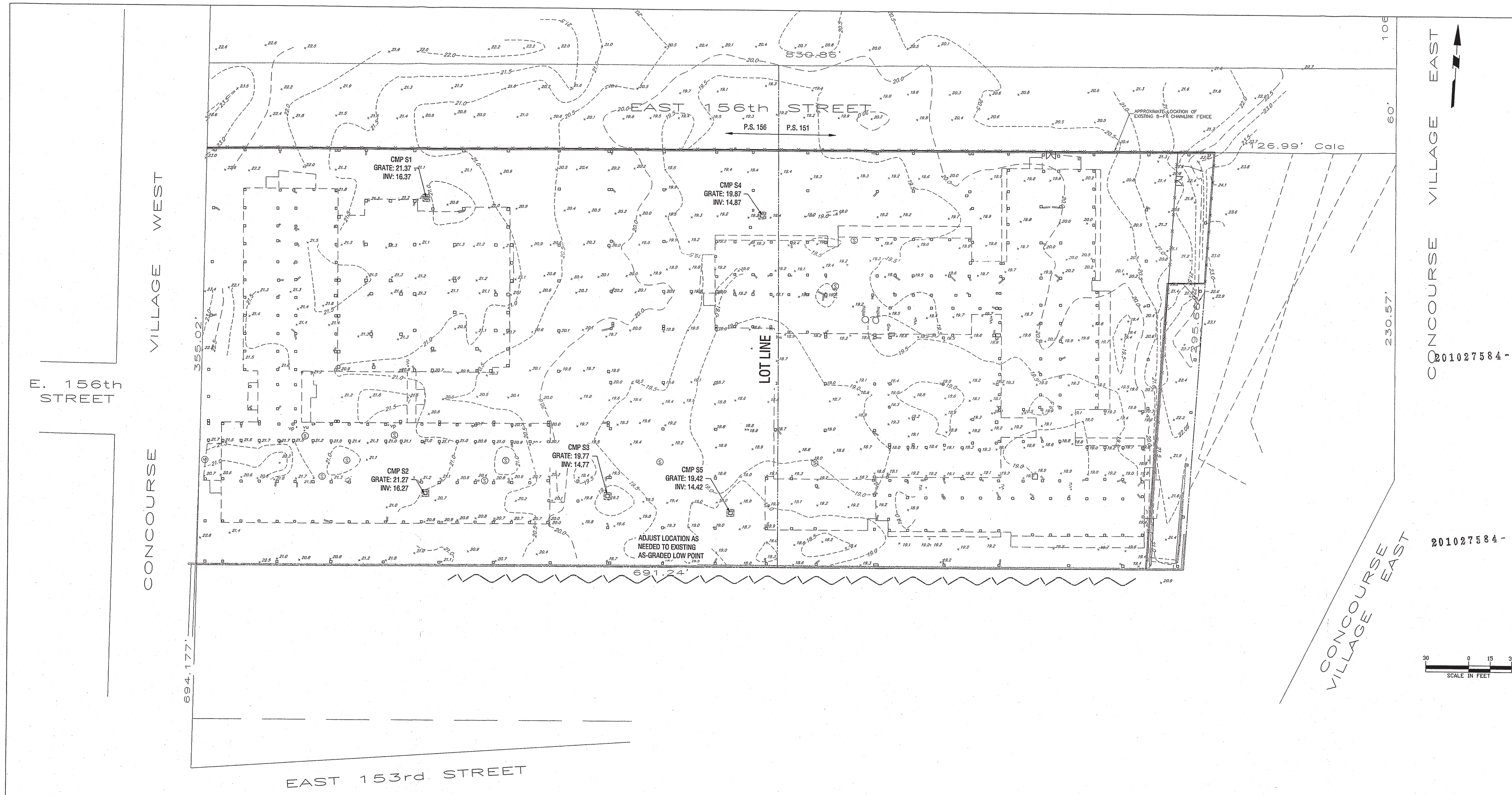
Project:
MOTT HAVEN CAMPUS
-
Address: 730 CONCOURSE VILLAGE WEST
BRONX, NEW YORK 10451

Drawing Title:
BUILDING A-
GAS VAPOR COLLECTION SYSTEM PIPING PLAN

Drawing No.:
ENV1A

Sheets in Contract:
45 of 1072

PEA No. 21200.00



201027584-

201027584-

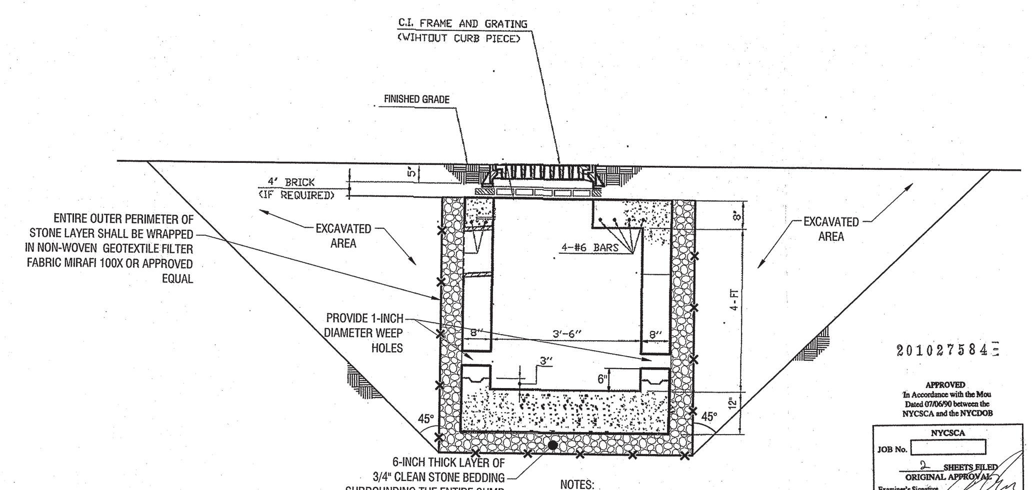
201027584-

LEGEND

□	EXISTING COLUMN
	EXISTING COLUMN WITH UTILITY
Ⓢ	EXISTING SANITARY MANHOLE
○mhu	EXISTING MANHOLE
•vp	EXISTING UTILITY
•vu	EXISTING UTILITY
	PRECAST CONCRETE MONITORING POINT (CMP)

NOTE:

1. THE PROPOSED WORK FOR THIS PROJECT IS COMPLETELY COVERED. NO DIRECT STORMWATER RUNOFF REACHES THE PROPOSED PRECAST CONCRETE MONITORING POINTS.
2. TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, ALL WORK UNDER THIS APPLICATION IS EXEMPT FROM THE NYCECC BASED ON THE FACT THAT THE SCOPE OF WORK DOES NOT AFFECT THE ENERGY USE OF THE EXISTING BUILDING.
3. NO PLUMBING WORK HAS BEEN PERFORMED AS PART OF THIS FILING BASED ON THE NYC BUILDING CODE 27-124, 125 & 126. THERE ARE NO MINOR ALTERATIONS, BUILDING, ORDINARY REPAIRS, PLUMBING, WALLS, FLOORS, ROOF CONSTRUCTION, REMOVAL, CUTTING, OR MODIFICATION OF ANY BEAMS OR STRUCTURAL SUPPORTS; THERE ARE NO REMOVAL, CHANGE, OR CLOSING OF ANY REQUIRED MEANS OF EGRESS; THERE ARE NO REARRANGEMENT OR RELOCATION OF ANY PARTS OF THE BUILDING AFFECTING LOADING OR EXIT REQUIREMENTS, OR LIGHT, HEAT, VENTILATION, OR ELEVATOR REQUIREMENTS; THERE ARE NO MINOR ALTERATIONS OR ORDINARY REPAIRS INCLUDING ADDITIONS TO, ALTERATIONS OF, OR REARRANGEMENT, RELOCATION, REPLACEMENT, REPAIR OR REMOVAL OF ANY PORTION OF A STANDPIPE OR SPRINKLER SYSTEM, WATER DISTRIBUTION SYSTEM, HOUSE SEWER, PRIVATE SEWER, OR DRAINAGE SYSTEM, INCLUDING LEADERS, OR ANY SOIL, WASTE OR VENT PIPE, OR ANY GAS DISTRIBUTION SYSTEM, OR ANY OTHER WORK AFFECTING HEALTH OR THE FIRE OR STRUCTURAL SAFETY OF THE BUILDING. THERE IS NO REPAIR OR REPLACEMENT OF ANY FIXTURE, PIPING OR FAUCETS FROM THE INLET SIDE OF A TRAP TO ANY EXPOSED STOP VALVE.



NOTES:

1. NO SHEETING OR SHORING ALLOWED FOR THIS PROJECT. WHEN EXCAVATION EXCEEDS 5-FT THE SOIL IS TO BE SLOPED NO STEEPER THAN 45 DEGREES TO A LEVEL GROUND AREA AS PER 27-1032.

PRECAST CONCRETE MONITORING POINT (CMP)

N.T.S

201027584-

APPROVED
In Accordance with the Mou
Dated 07/06/90 between the
NYCSCA and the NYCDOB

NYCSCA
JOB No.
2 SHEETS FILED
ORIGINAL APPROVAL
Examiner's Signature
ROBERT RAS, R.A.
Printed Name NYCSCA-BCC/Plan Examiner
Date FEB 15 2012

President & CEO
Sharon L. Greenberger, MCP

SCA
NYC School Construction Authority

Architecture & Engineering
E. Bruce Barrett, R.A., Vice President
Elan R. Abneri, P.E., Director of Design Studio 1
Stanley Dahir, R.A., Director of Design Studio 2
María A. Gómez, P.E., Director of Design Studio 3
George D. Roussey, P.E., Director of Technical Standards & Suppport Studio
Stacey Spann–Thom, Director of Operations Support

Consultants:

OWNER: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
30–30 THOMSON AVENUE
LONG ISLAND CITY, NY 11101–3045

ARCHITECT: PERKINS EASTMAN
115 FIFTH AVENUE
NEW YORK, NY 10003

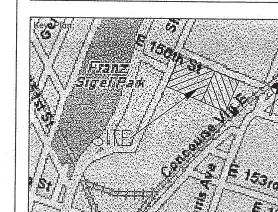
CIVIL ENGINEER: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
21 PENN PLAZA
360 WEST 31ST STREET, 8TH FLOOR
NEW YORK, NY 10001

201027584-

NOTE: Drawing may be printed at reduced scale

201027584-

No.	Date	Revision



Block # 2443 Lot # 79

SCA Program Design Manager:	D. BOSS
Project Architect/Engineer:	D. LEAD
Discipline Lead:	DJ HODSON
Designer:	SR
Drawn by:	KM
Checked by:	SR

LLW No.:	Facility Code:	Date:
054376	0790X	02/10/2012

Project:
P.S. 156X, BRONX

Address:
250 EAST 156TH STREET
BRONX, NEW YORK 10451

Drawing Title:
SITE PLAN

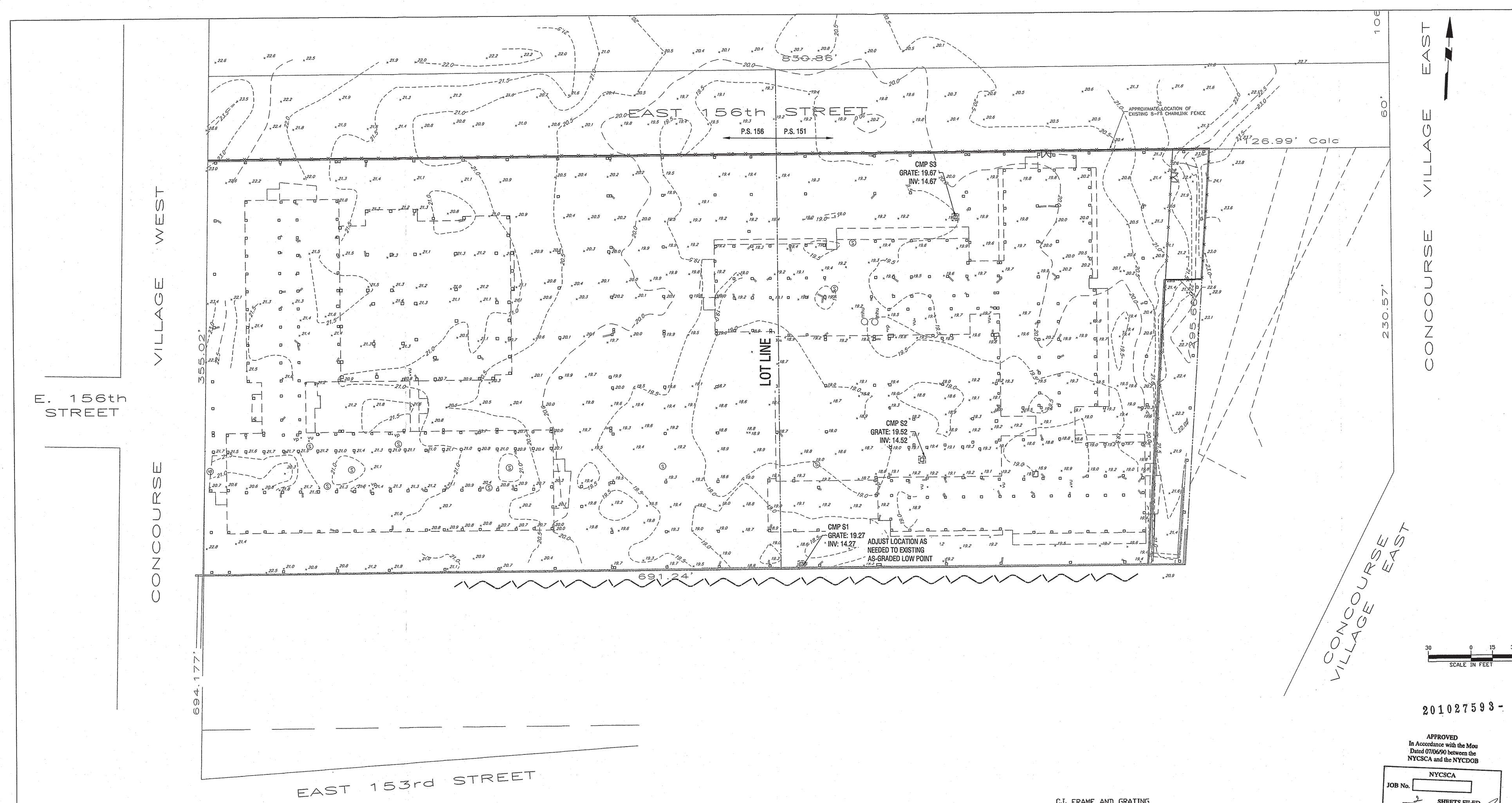
STATE OF NEW YORK · ALAN POEPPEL · 080220 · LICENSED PROFESSIONAL ENGINEER

Drawing No.: 2

Sheets in Contract: 2 of 2

PEA No. 21200.00

\\langan.com\data\NY\data5\5633501\Cadd Data – 5633501\Dwg\IS–152 PS 156\Sheets – PS 156X\5633503_Plan PS 156X.dwg 02/15/12 – 9:53am



201027593-

201027593-

201027593-

APPROVED
In Accordance with the Mou
Dated 07/06/90 between the
NYCSCA and the NYCDOB

NYCSCA
JOB No.
2 SHEETS FILED
ORIGINAL APPROVAL
Examiner's Signature
Printed Name ROBERT RAS, R.A. NYCSCA-BCC/Plan Examiner
Date FEB 15 2012

201027593

NOTE:

1. THE PROPOSED WORK FOR THIS PROJECT IS COMPLETELY COVERED. NO DIRECT STORMWATER RUNOFF REACHES THE PROPOSED PRECAST CONCRETE MONITORING POINTS.
2. TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, ALL WORK UNDER THIS APPLICATION IS EXEMPT FROM THE NYCECC BASED ON THE FACT THAT THE SCOPE OF WORK DOES NOT AFFECT THE ENERGY USE OF THE EXISTING BUILDING.
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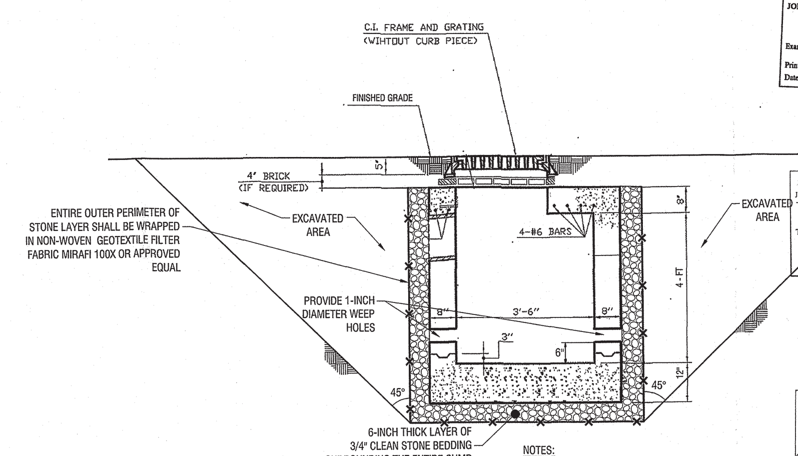
LEGEND

Symbol	Description
□	EXISTING COLUMN
	EXISTING COLUMN WITH UTILITY
(S)	EXISTING SANITARY MANHOLE
○mhu	EXISTING MANHOLE
∘vp	EXISTING UTILITY
∘vu	EXISTING UTILITY
	PRECAST CONCRETE MONITORING POINT (CMP)



NOTES:

1. NO SHEETING OR SHORING ALLOWED FOR THIS PROJECT. WHEN EXCAVATION EXCEEDS 5-FT THE SOIL IS TO BE SLOPED NO STEEPER THAN 45 DEGREES TO A LEVEL GROUND AREA AS PER 27-1032.

PRECAST CONCRETE MONITORING POINT (CMP)

N.T.S

APPROVED
In Accordance with the Mou
Dated 07/06/90 between the
NYCSCA and the NYCDOB
NYCSCA
JOB No.
SHEETS FILED
INSPECTORS OFFICIAL COPY
THIS IS A TRUE COPY OF THE PLANS APPROVED BY THE NYCSCA-BCC. THESE PLANS MUST REMAIN PERMANENTLY ON THE PREMISES UNTIL THE WORK IS COMPLETED.
ROBERT RAS, R.A.
NYCSCA-BCC / Plan Examiner

APPROVED
In Accordance with the Mou
Dated 07/06/90 between the
NYCSCA and the NYCDOB
NYCSCA
JOB No.
SHEETS FILED
ORIGINAL APPROVAL
Examiner's Signature
Printed Name ROBERT RAS, R.A. NYCSCA-BCC/Plan Examiner
Date

President & CEO
Sharon L. Greenberger, MCP

NYC School Construction Authority

Architecture & Engineering

E. Bruce Barrett, R.A., Vice President
Elan R. Abneri, P.E., Director of Design Studio 1
Stanley Dahir, R.A., Director of Design Studio 2
María A. Gómez, P.E., Director of Design Studio 3
George D. Roussey, P.E., Director of Technical Standards & Suppport Studio
Stacey Spann-Thom, Director of Operations Support

Consultants:

OWNER: NEW YORK CITY SCHOOL CONSTRUCTION AUTHORITY
30-30 THOMSON AVENUE
LONG ISLAND CITY, NY 11101-3045

ARCHITECT: PERKINS EASTMAN
115 FIFTH AVENUE
NEW YORK, NY 10003

CIVIL ENGINEER: LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES
21 PENN PLAZA
360 WEST 31ST STREET, 8TH FLOOR
NEW YORK, NY 10001

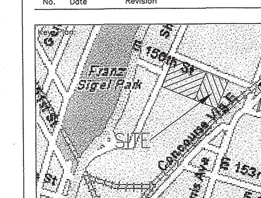
201027593-

201027593

NOTE: Drawing may be printed at reduced scale

201027593

No.	Date	Revision



Block # 2443 Lot # 79

SCA Program Design Manager:	D. BOSS
Project Architect/Engineer:	D. LEAD
Discipline Lead:	DJ HODSON
Designer:	SR
Drawn by:	KM
Checked by:	SR

LLW No.:	Facility Code:	Date:
054376	0790X	02/10/2012

Project:
P.S. 151X, BRONX

Address:
250 EAST 156TH STREET
BRONX, NEW YORK 10451

Drawing Title:
SITE PLAN

STATE OF NEW YORK ALAN POEPPEL 080220 LICENSED PROFESSIONAL ENGINEER

Drawing No.: 2

Sheets in Contract: 2 of 2

PEA No. 21200.00

\\langan.com\data\NY\data5\5633501\Cadd Data - 5633501\Dwg\IS-152 PS 156\Sheets - PS 151X\5633503_Plan PS 151X.dwg 02/15/12

Attachment 3
Custodian Monthly or Severe Condition Inspection Forms

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera Sr
Inspection Date: 8/24/14
Inspection Time: 9:00 am
Weather Conditions: Cloudy
Air Temperature (°F): 87°-
Comments:

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK
* Inspect alignment of fan belt. OK
* Record vacuum gauge reading. EF-1: -5 inches of water/ EF-2: -5 inches of water/
EF-3: -6 inches of water/ EF-4: -5 inches of water
EF-5: -5 inches of water/ EF-6: -10 inches of water
* Inspect bolts and set screws for tightness and rusty condition. OK
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?):

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) No
* Any other visible openings (unintended) in the ground floors? (Y/N) No
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: NO

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) NO
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) NO
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) NO
* Comments: NO

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls

Need to replace vaccum guage on SSDS 6 Building B

Inspector's Signature:

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera Jr
Inspection Date: 9/7/14
Inspection Time: 11:60 am
Comments:

Weather Conditions: Sunny
Air Temperature (°F): 73

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK
* Inspect alignment of fan belt. OK
* Record vacuum gauge reading. EF-1: -5 inches of water EF-2: -5 inches water
  EF-3: -4 inches of water EF-4: -5 inches Water
  EF-5: -5 inches of water EF-6: -10 inches of water
* Inspect bolts and set screws for tightness and rusty condition. OK
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) NO
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?): NO

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) NO
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/a
* Note the width of the crack/opening. NO
* Comments: NO

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) Yes
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N)
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N)
* Comments: No

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls
Need to replace Vaccum Guage on SSDS 6 on Building B

Inspector's Signature: [signature]

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera Sr
Inspection Date: 10/16/14
Inspection Time: 10:00 am
Comments:

Weather Conditions: Mostly Cloudy
Air Temperature (°F): 54°

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK
* Inspect alignment of fan belt. OK
* Record vacuum gauge reading. EF-1: -5 inches water ✓ EF-2: -5 inches water ✓
  EF-3: -5 inches water ✓ EF-4: -5 inches water ✓
  EF-5: -5 inches water ✓ EF-6: -10 inches water ✓
* Inspect bolts and set screws for tightness and rusty condition. OK
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?):

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) No
* Any other visible openings (unintended) in the ground floors? (Y/N) No
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: No

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) NO
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) Yes
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) NO
* Comments: Rain fall common soil erosion

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls

N/A Need to replace vacuum on SSDS6 Building 6

Inspector's Signature: Matt Durning

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera JR
Inspection Date: 11/25/2014
Inspection Time: 11:00 am
Comments:

Weather Conditions: Mostly cloudy ~~55°~~
Air Temperature (°F): 55°

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires.
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK
* Inspect alignment of fan belt. OK
* Record vacuum gauge reading. EF-1: -5 inches water EF-2: -5 inches water ✓
  EF-3: -5 inches water ✓ EF-4: -5 inches water ✓
  EF-5: -5 inches water EF-6: -10 inches water ✓
* Inspect bolts and set screws for tightness and rusty condition. OK
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?):

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) NO
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: Manhole cover on block top has been patch by football field emergency entrance & exit.

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) NO
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) Yes
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) NO
* Comments: Erosion free soil by landscaping area on south side of football field. Due to rainy weather.

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls
Manhole cover on blank top area was completed today 11/25/2014 by Jose Temco A Handyperson. Jose fixed patch blacktop area where manhole is located.

Inspector's Signature: [signature]

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera JR
Inspection Date: 12-29-2014
Inspection Time: 2:15 pm
Comments:

Weather Conditions: Sunny
Air Temperature (°F): 50°F

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK
* Inspect alignment of fan belt. OK
* Record vacuum gauge reading. EF-1: -5 inches of water EF-2: -6 inches of water
  EF-3: -6.5 inches of water EF-4: -5 inches of water
  EF-5: -4.5 inches of water EF-6: -9 inches of water
* Inspect bolts and set screws for tightness and rusty condition.
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?):

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) NO
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: N/A

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) NO
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out [illegible] pavement)? (Y/N) No
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) No
* Comments:

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls

Inspector's Signature: Matt Kivenzy

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera Jr
Inspection Date: 1-12-2015
Inspection Time:
Comments:

Weather Conditions: Cloudy X
Air Temperature (°F): 37°

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. Fan Belts are in good condition
* Inspect alignment of fan belt. Fan Alignment is good.
* Record vacuum gauge reading. EF-1: -5 inches of water EF-2: -4 inches of water
  EF-3: -4 inches of Water EF-4: -5 inches of water
  EF-5: -5 inches of Water EF-6: -10 inches of water
* Inspect bolts and set screws for tightness and rusty condition. Screws are tighten/Rust visible
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. Clean
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?): Nothing Unusual

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) ~~N/O~~ NO
* Any other visible openings (unintended) in the ground floors? (Y/N) ~~N/O~~ NO
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: N/A

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) NO
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) No
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) No
* Comments: Everything OK

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls

No Repairs

Inspector's Signature: [signature]

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera Jr
Inspection Date: 02-26-2015
Inspection Time: 3:32 pm
Comments:

Weather Conditions: Cloudy
Air Temperature (°F): 28°F

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK
* Inspect alignment of fan belt. OK
* Record vacuum gauge reading. EF-1: 100m - 5 inches EF-2: 100m - 5 inches
  EF-3: 100m - 5 inches EF-4: 100m - 5 inches
  EF-5: 100m - 5 inches EF-6: 250m - 10 inches
* Inspect bolts and set screws for tightness and rusty condition. OK
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?): Vibration sounds

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) NO
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: N/A

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) NO
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) Yes
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) No
* Comments: No major soil erosion.

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls
Grease all pillow block bearings on SSDF

Inspector's Signature: [signature]

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera
Inspection Date: 3-27-2015
Inspection Time: 10:00 am
Comments:

Weather Conditions: Cloudy
Air Temperature (°F): 45°

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. Fan belts are in good condition.
* Inspect alignment of fan belt. Alignment of fan Belts are in correct position
* Record vacuum gauge reading. EF-1: -5 inches of water EF-2: -4 inches of water
  EF-3: -4 inches of water EF-4: -5 inches of water
  EF-5: -5 inches of water EF-6: -10 inches of water
* Inspect bolts and set screws for tightness and rusty condition. Screws are tighten / Rust visible
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?): Nothing un usual

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) NO
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: N/A

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) NO
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) NO
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) NO
* Comments: Everything OK

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls
On 3/14/15 SSDF6 on Building B went down due to a blown fuse. On 3/16/15 The fuse was replace by a Temco Electrican and SSDF6 was return back into service

Inspector's Signature: Kent Hwang

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera JR
Inspection Date: 4-30-2015
Inspection Time: 10:00 am
Comments:

Weather Conditions: Partly Cloudy
Air Temperature (°F): High 63° Low 45°

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. Yes no loose wires
* Inspect fan mounting and vibration isolators. Yes everything OK
* Inspect condition of fan belt. Yes
* Inspect alignment of fan belt. Yes
* Record vacuum gauge reading. EF-1: -5 inches of water EF-2: -5 inches water
  EF-3: -5 inches water EF-4: -5 inches water
  EF-5: -5 inches water EF-6: -10 inches water
* Inspect bolts and set screws for tightness and rusty condition. Yes everything OK
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. Yes
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?): Everything OK bearings are properly grease.

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) Yes exit behind football field.
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map.
* Note the length of the crack/opening. Around the sewer cap.
* Note the width of the crack/opening.
* Comments: Crack & depression on black top behind football field exit ramp due to winter weather snow & ice.

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) Yes
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) Yes
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) NO
* Comments: Crack & depression on black top behind football field exit ramp due to snow plow removal

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls
On 04-17-2015 replace 1 fuse for SSDS Fan 6 located on Building B rooftop. Three phase power supply 1 phase was out SSDS Fan 6 was temporarily down

Inspector's Signature: Robert Turney

[redacted]nly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera JR
Inspection Date: 5-19-2015
Inspection Time: 11:39 AM
Comments:

Weather Conditions: Cloudy
Air Temperature (°F): 59°

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK
* Inspect alignment of fan belt. OK
* Record vacuum gauge reading. EF-1: -5 inches of water EF-2: -4 inches of water
  EF-3: -3 inches of water EF-4: -5 inches of water
  EF-5: -4 inches of water EF-6: -
* Inspect bolts and set screws for tightness and rusty condition. OK
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?): Everything OK bearings are properly grease

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) Yes ramp gate behind football field.
* Any other visible openings (unintended) in the ground floors? (Y/N) No
* Draw approximate location of floor cracks/openings on the site map.
* Note the length of the crack/opening. Around the sewer cap
* Note the width of the crack/opening.
* Comments: Crack & depression on black top behind football field exit ramp due to winter weather snow & ice.

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) Yes
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) Yes
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) No
* Comments: Rain water causing soil erosion along with school activity.

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls
None.

Inspector's Signature: Hari Kiveraja

Monthly/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera Jr
Inspection Date: 06-19-2015
Inspection Time: 11:23 am
Comments:

Weather Conditions: Cloudy 72°
Air Temperature (°F): 72° High 84° Low 66°

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. Yes
* Inspect fan mounting and vibration isolators. Yes
* Inspect condition of fan belt. Yes
* Inspect alignment of fan belt. Yes
* Record vacuum gauge reading. EF-1: -5 inches of water EF-2: -4 inches of water
  EF-3: -3 inches of water EF-4: -5 inches of water
  EF-5: -4 inches of water EF-6: -14 inches of water
* Inspect bolts and set screws for tightness and rusty condition. Yes
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. Yes
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) Yes
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?): All bearing's, belt's, shaft has been properly inspected.

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) NO
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map. NO
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments: N/A

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) Yes
* Has any of the pavement material been removed? (Y/N) Yes
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) Yes
* Have any structures been constructed on the unpaved areas? (Y/N) Yes

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the [redacted])? (Y/N) Yes
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) Yes
* Comments: Heavy Rain & School activity.

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls
Replace fuse LP-J 10SP 600 VAC 300 VDC / Black top behind ~~sewer~~ football field Emergency exit ramp black top need repairs.

Inspector's Signature: [signature]

~~Monthly~~/Severe Condition Inspection Form
Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Robert Rivera Jr
Inspection Date: 7/16/2015
Inspection Time: 9:58 am
Comments:

Weather Conditions: Partly Cloudy
Air Temperature (°F): 72°F

A. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of the school buildings.

* Inspect fan stack guy wires. OK no loose wires
* Inspect fan mounting and vibration isolators. OK
* Inspect condition of fan belt. OK Good
* Inspect alignment of fan belt. OK Align Properly
* Record vacuum gauge reading. EF-1: -5 inches of water. EF-2: -4 inches of water
  EF-3: -4 inches of water EF-4: -5 inches of water
  EF-5: -5 inches of water EF-6: -14 inches of water
* Inspect bolts and set screws for tightness and rusty condition.
* Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing. OK
* Is the Building Management System monitoring the SSDS fans and functioning properly? (Y/N) NO
* Confirm that a spare fan is stored in a designated secure location and in working condition. Yes
* Confirm that the spare fan's bearings are completely filled with grease/lubricant. Yes
* Rotate the fan wheel of the spare fan several times to ensure that bearings remain lubricated. Yes
* Comments (See or hear anything unusual?):

B. COVER SYSTEM – BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors.

* Any visible cracks or depressions in the ground floors? (Y/N) NO
* Any other visible openings (unintended) in the ground floors? (Y/N) NO
* Draw approximate location of floor cracks/openings on the site map. N/A
* Note the length of the crack/opening. N/A
* Note the width of the crack/opening. N/A
* Comments:

C. COVER SYSTEM – EXTERIOR INSPECTION

1. **Walk and inspect the entire perimeter of the Site.**
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site and under platform.**
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field.**

* Are there any signs of significant cracks, settlement, or deterioration of the paved areas? (Y/N) Yes
* Has any of the pavement material been removed? (Y/N) NO
* Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? (Y/N) NO
* Have any structures been constructed on the unpaved areas? (Y/N) NO

* Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? (Y/N) Yes
* Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? (Y/N) No
* Comments: Rain Fall Cause Soil erosion.

D. REPAIRS

* Summarize needed/ completed repairs to the Engineering Controls

On 7/16/2015 BMS indicating all SSDF Fans are down all are in operation. Replace 2 Low Peak time Delay Fuse on LPJ-30SP on SSDS 6 on Building B roof top.

Inspector's Signature: [signature]

Attachment 4
Semiannual Groundwater Monitoring Reports

January 29, 2015

Ms. Sondra Martinkat
Environmental Engineer 2
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation, Region 2 Office
47-40 21st Street
Long Island City, New York 11101

Re: Semi-Annual Groundwater Monitoring
December 2014 (16th Event, 12th Semi-Annual Event)
Mott Haven Campus
730 Concourse Village West
Bronx, New York 11375
SCA LLW# 033485/Service ID #41747
BCP No. C203030

Dear Ms. Martinkat:

On behalf of the New York City School Construction Authority (NYCSCA), STV Incorporated (STV) has prepared this semi-annual report regarding the post-remediation groundwater sampling at the Mott Haven Campus (i.e., the "Site). Groundwater monitoring results are being reported in accordance with the November 2008 Mott Haven Site Management Plan (SMP), approved by the New York State Department of Environmental Conservation (NYSDEC, the Department) on November 25, 2008. The groundwater monitoring data will be submitted via email to the NYSDEC in Electronic Data Deliverable (EDD) format for input into the Department's database.

On December 21, 2014, water levels were measured in the seven existing on-site monitoring wells and five upgradient and off-site monitoring wells on Concourse Village West. The depth to water measurements and corresponding groundwater elevations are summarized in Table 1. Groundwater contours based on measured groundwater elevation data on the Site are shown in Figure 2. The contours depicted on Figure 2 indicate that the direction of horizontal groundwater flow is generally toward the southeast, consistent with data obtained during the remedial investigation and previous groundwater monitoring events.

On December 21, 2014, groundwater samples were collected from the seven existing on-site monitoring wells MW-3R, MW-5R, MW-11R, MW-23, MW-24, MW-25, and MW-26R as shown on Figure 1. Sampling was performed in accordance with the Sampling Event Protocol presented in Section 3.3.4 of the SMP. Field sampling logs for the groundwater sampling are presented in *Appendix A*.

Groundwater samples were submitted to York Analytical Laboratories, Inc. (York) of Stratford, Connecticut, a New York State Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis for Target Compound List (TCL) volatile organic compounds (VOCs) plus methyl tert-butyl ether (MTBE) per the United States Environmental Protection Agency (USEPA) Method 8260. Table 2 summarizes the groundwater analytical data. The laboratory report for the groundwater sample analysis is provided in *Appendix B,* and *Appendix C* contains York's ELAP certification forms.

Acetone was detected in the sample collected from MW-26R and the trip blank sample both at concentrations of 6.2 micrograms per liter (µg/L) relative to a NYSDEC Class GA Value of 50 µg/L.

Methylene chloride was also detected in the trip blank at a concentration of 8.6 µg/L. (Acetone was not detected in any of the laboratory analysis batch blanks and therefore was not flagged with a "B" qualifier). Acetone and methylene chloride are common laboratory contaminants, and the detection of these compounds is not considered to be associated with groundwater contamination at the Site, or cross contamination in the field.

The field duplicate sample was collected from monitoring well MW-23. Cis-1,2-Dichloroethylene (cis-DCE), tetrachloroethylene (PCE), and vinyl chloride were detected in the primary sample at concentrations of 0.95 µg/L, 0.88 µg/L, and 0.49 µg/L (estimated concentration), respectively. Cis-DCE, PCE, and vinyl chloride were detected in the duplicate sample at concentrations of 0.96 µg/L, 0.83 µg/L, and 0.62 µg/L, respectively, indicating good laboratory precision. The VOCs detected in MW-23 were all below their corresponding NYSDEC Class GA Values. All other laboratory QC criteria were acceptable and are not anticipated to affect the usability of the data.

The laboratory analytical results reported only one VOC detected in one groundwater sample at a concentration greater than the NYSDEC Class GA Values. Tetrachloroethene (PCE) was detected in monitoring well MW-24 at a concentration of 11 µg/L, which exceeded the NYSDEC Class GA groundwater standard of 5.0 µg/L. In previous sampling events, PCE concentrations in groundwater samples collected from MW-24 have ranged between non-detect and 51 µg/L. Trichloroethylene (TCE) and chloroform were the only other VOCs detected in MW-24 at concentrations of 0.90 µg/L and 6.0 µg/L respectively, which are less than their corresponding NYSDEC Class GA groundwater standards of 5.0 µg/L and 7.0 µg/L, respectively. Monitoring well MW-24 is located on the upgradient side of the Site and the VOCs detected in the groundwater sample collected from MW-24 are likely from an upgradient source. Aside from the detections of cis-DCE, PCE, and vinyl chloride in MW-23 at concentrations below corresponding Class GA Values and the detection of acetone in MW-26R which was attributed to laboratory contamination, no VOCs were detected in the groundwater sample collected from the other upgradient monitoring wells (MW-23, MW-25, and MW-26R).

Cis-DCE, PCE, TCE, and vinyl chloride were detected in downgradient monitoring well MW-3R at concentrations of 0.85 µg/L, 0.84 µg/L, 0.21J (estimated concentration), and 0.41J (estimated concentration) which are all below the corresponding Class GA Values. Samples analyzed from the other downgradient monitoring wells, MW-5R and MW-11R, did not detect any VOCs. No other VOCs were detected in groundwater at concentrations exceeding the laboratory method detection limits or the reporting limits.

The remedial objective for groundwater in the NYSDEC approved Remedial Action Work Plan (RAWP) is to maintain existing groundwater quality at the downgradient property line. No VOCs were detected in downgradient monitoring wells MW-3R, MW-5R and MW-11R above Class GA Values during this sampling event. Accordingly, the remedial objectives for groundwater continue to be met per the RAWP.

Please do not hesitate to contact me at (914) 400-5205 if you have any questions or require additional information regarding this project.

Sincerely,

STV Incorporated

Michael R. Sherwood, CPG
Senior Consultant

cc: D. Hettrick, New York State Department of Health (NYSDOH)
L. Guterman, NYCSCA

Attachments:

Table 1 – Groundwater Monitoring Well Elevation Data
Table 2 – Summary of Target Compound List VOCs Detected in Groundwater

Figure 1 – Monitoring Well Sample Location Plan
Figure 2 – Groundwater Surface Elevation Contour Plan

Appendix A – Field Sampling Logs
Appendix B – Laboratory Analytical Data Summary Package
Appendix C – Laboratory Certification Forms

August 3, 2015

Ms. Sondra Martinkat
Project Manager
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation, Region 2 Office
One Hunter's Point Plaza, 1st Floor
47-40 21st Street
Long Island City, New York 11101

Re: Semi-Annual Groundwater Monitoring
June 2015 (17th Event, 13th Semi-Annual Event)
Mott Haven Campus
730 Concourse Village West
Bronx, New York 11375
SCA LLW# 033485/Service ID #41747
BCP No. C203030

Dear Ms. Martinkat:

On behalf of the New York City School Construction Authority (NYCSCA), STV Incorporated (STV) has prepared this semi-annual report regarding the post-remediation groundwater sampling at the Mott Haven Campus (i.e., the "Site"). Groundwater monitoring results are being reported in accordance with the November 2008 Mott Haven Site Management Plan (SMP), approved by the New York State Department of Environmental Conservation (NYSDEC, the Department) on November 25, 2008. The groundwater monitoring data will be submitted via email to the NYSDEC in Electronic Data Deliverable (EDD) format for input into the Department's database.

On June 13, 2015, water levels were measured in the seven existing on-site monitoring wells and five upgradient and off-site monitoring wells on Concourse Village West. The depth to water measurements and corresponding groundwater elevations are summarized in Table 1. Groundwater contours based on measured groundwater elevation data on the Site are shown in Figure 2. The contours depicted on Figure 2 indicate that the direction of horizontal groundwater flow is generally toward the southeast, consistent with data obtained during the remedial investigation and previous groundwater monitoring events.

On June 13, 2015, groundwater samples were collected from the seven existing on-site monitoring wells MW-3R, MW-5R, MW-11R, MW-23, MW-24, MW-25, and MW-26R as shown on Figure 1. Sampling was performed in accordance with the Sampling Event Protocol presented in Section 3.3.4 of the SMP. Field sampling logs for the groundwater sampling are presented in *Appendix A*.

Groundwater samples were submitted to York Analytical Laboratories, Inc. (York) of Stratford, Connecticut, a New York State Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis for Target Compound List (TCL) volatile organic compounds (VOCs) plus methyl tert-butyl ether (MTBE) per the United States Environmental Protection Agency (USEPA) Method 8260. Table 2 summarizes the groundwater analytical data. The laboratory report for the groundwater sample analysis is provided in *Appendix B,* and *Appendix C* contains York's ELAP certification forms.

Acetone was detected in the sample collected from MW-25 at a concentration of 17 micrograms per liter (µg/L) well below the NYSDEC Class GA Value of 50 µg/L. Acetone was not detected in any of the

other samples, but was qualified by the laboratory for the samples collected from MW-3R, MW-5R, MW-11R, MW-23, MW-26R, and the trip blank as estimated.

Methylene chloride was detected in the samples collected from MW-3R, MW-5R, MW-11R, MW-26R, and the trip blank at estimated concentrations ranging from 2.5 µg/L to 6.6 µg/L versus a groundwater quality standard of 5 µg/L. However, the detection of methylene chloride in the trip blank indicates that its presence is not considered to be associated with groundwater contamination at the Site.

The field duplicate sample was collected from monitoring well MW-3R. Methylene chloride was detected in the primary sample at an estimated concentration of 3.5 µg/L and in the duplicate sample at a concentration of 3.1 µg/L. However, no other VOCs were detected in the primary or the duplicate sample. Laboratory QC criteria were acceptable and data are considered useable for evaluation.

The laboratory analytical results reported only two VOCs detected in the groundwater samples at concentrations greater than the NYSDEC Class GA Values. Tetrachloroethene (PCE) was detected in monitoring wells MW-23 and MW-24 at concentrations of 6.2 µg/L and 5.8 µg/L, respectively, which exceeded the NYSDEC Class GA groundwater standard of 5.0 µg/L. In previous sampling events, PCE concentrations in groundwater samples collected from MW-23 ranged between non-detect and 6.2 µg/L and in MW-24 have ranged between non-detect and 51 µg/L. Chloroform was also detected in MW-24 at a concentrations of 12 µg/L, which is greater than the corresponding NYSDEC Class GA groundwater standard of 7.0 µg/L. In previous sampling events, chloroform concentrations in groundwater samples collected from MW-24 ranged between non-detect and 6.0 µg/L. Monitoring wells MW-23 and MW-24 are located on the upgradient side of the Site and the VOCs detected in the groundwater samples collected from these wells are likely from an upgradient source. Aside from the detections of chloroform in MW-24, and PCE in MW-23 and MW-24, no VOCs were detected at concentrations above the corresponding Class GA Values in the groundwater sample collected from the upgradient monitoring wells (MW-23, MW-24, MW-25, and MW-26R).

With the exception of methylene chloride, which was attributed to laboratory contamination, no VOCs were detected in the samples collected from the downgradient monitoring wells (MW-3R, MW-5R, and MW-11R) at concentrations exceeding the laboratory method detection limits or the reporting limits.

The remedial objective for groundwater in the NYSDEC approved Remedial Action Work Plan (RAWP) is to maintain existing groundwater quality at the downgradient property line. No VOCs were detected in downgradient monitoring wells MW-3R, MW-5R and MW-11R above Class GA Values during this sampling event. Accordingly, the remedial objectives for groundwater continue to be met per the RAWP.

Please do not hesitate to contact me at (914) 400-5205 if you have any questions or require additional information regarding this project.

Sincerely,

STV Incorporated

Michael R. Sherwood, CPG
Senior Consultant

cc: D. Hettrick, New York State Department of Health (NYSDOH)
L. Guterman, NYCSCA
S. Kanaparthi, NYCSCA

Attachments:

Table 1 – Groundwater Monitoring Well Elevation Data
Table 2 – Summary of Target Compound List VOCs Detected in Groundwater

Figure 1 – Monitoring Well Sample Location Plan
Figure 2 – Groundwater Surface Elevation Contour Plan

Appendix A – Field Sampling Logs
Appendix B – Laboratory Analytical Data Summary Package
Appendix C – Laboratory Certification Forms

NEW YORK CITY SCHOOL
CONSTRUCTION AUTHORITY

August 3, 2015

Ms. Sondra Martinkat
Project Manager
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation, Region 2 Office
One Hunter's Point Plaza, 1st Floor
47-40 21St
Long Island City, New York 11101

Re: Request to Terminate Post-Remedial Groundwater Monitoring at
Mott Haven Campus, 730 Concourse Village West, Bronx, New York 11375

Dear Ms. Martinkat:

As you know, SCA has diligently complied with the commitment to continue groundwater monitoring at the Mott Haven Campus until such time as the upgradient sources of groundwater contamination have been addressed. This year marks our eighth year of post-remedial groundwater monitoring and includes 17 rounds of groundwater sampling. Further, we are aware that an off-site investigation has been completed by the upgradient responsible party under the platform located north of the Mott Haven Campus. We trust that this investigation has better defined the nature and extent of contamination relative to the hydraulic barriers serving to protect our Site.

At the time of the groundwater monitoring commitment outlined in the Site Management Plan, the primary concern was related to both the former MGP facility and documented gasoline spill located to the northwest of the Mott Haven Campus. The last occurrence where a petroleum-related compound was found marginally above the groundwater standards was in March 2010, along the northern property boundary. At the time, we noted that this detection could be originating from the on-Site remediation area.

We believe that that our commitment for long-term monitoring has been met and that any future monitoring is no longer warranted. We respectfully request that DEC review the data in light of the information gained from the off-site investigation, and allow us to terminate the groundwater monitoring program at this time.

Sincerely,
New York City School Construction Authority

Lee Guterman
Director of HazMat Unit, Industrial and Environmental Hygiene Division

cc: A. Lempert, S. Kanaparthi, M. Sherwood
Att: Semi-Annual Groundwater Monitoring, June 2015 (17th Event, 13th Semi-Annual Event)

30-30 Thomson Avenue
Long Island City, NY 11101-3045
718 472-8502
FAX 718 472-8500

Attachment 5
Photographic Documentation

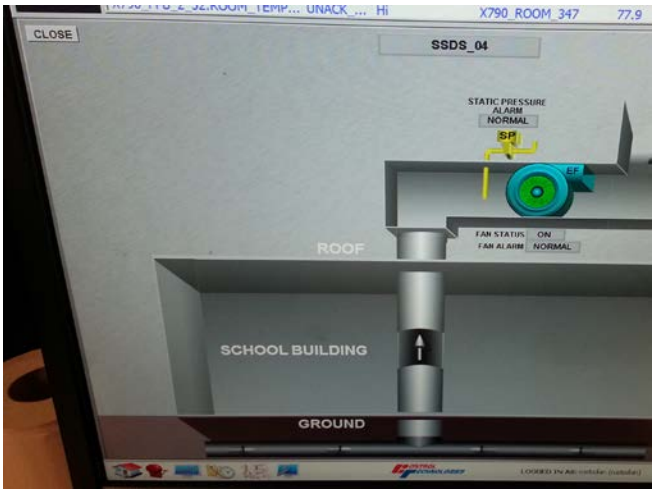


Photo 1: View of functional BMS on typical SSDS fan unit (EF-4).

Photo 2: View of spare SSDS fan unit (EF-7) in Room B80.

Photo 3: View of BMS incorrectly indicating an alarm on fan unit SSDS-6.

Photo 4: View of typical SSDS roof fan unit (EF-6).

Photo 5: View of typical SSDS roof fan unit (EF-1).

Photo 6: View of typical vacuum gauge associated with SSDS fan units (EF-1).

Photo 7: View of typical SSDS fan belt and assembly (EF-6).

Photo 8: View of typical bare floor in Room C59.

Photo 9: View of typical bare concrete floor in Stairwell H.

Photo 10: View of repairs made to the manhole by the East Access Drive.

Photo 11: View of artificial turf on football field.

Photo 12: View of repairs made to the minor depression (4'x 2'x 4") at the east end of the artificial turf.

Attachment 6
Annual Inspection Forms

Annual Inspection Form

Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

Inspector's Name: Gilbert Gedeon
Inspection Date: 8/26/15
Inspection Time:
Comments:

Weather Conditions: Sunny
Air Temperature (°F): 90°F

A. PRE INSPECTION CHECKLIST

- ✓* Schedule Annual Inspection when school is not occupied by students.
- ✓* Review 12 Previous Monthly Inspection Checklists.
- ✓* Meet with Custodian and Principal to solicit comments/concerns regarding the operation of the Engineering Controls over the last 12 months.
- ✓* Conduct Annual Refresher SMP Training with DOE, DSF. met with Robert Rivero
- ✓* Comments:

B. SSDS SYSTEM INSPECTION

1. Walk the entire roof surface of school buildings.

- ✓* Inspect fan stack guy wires. good
- ✓* Inspect fan mounting and vibration isolators. good
- ✓* Inspect condition of fan belt. good
- ✓* Inspect alignment of fan belt. good
- ✓* Record vacuum gauge reading. EF-1: -5, EF-2: -4, EF-3: -4, EF-4: -5, EF-5: -5
- ✓ Inspect bolts and set screws for tightness and rusty condition. EF-6: N/A
- ✓ Verify spare fan is available, properly lubricated, and properly stored. Rm. B80
- ✓ Verify spare fan parts (i.e. drive belts) are available and in good condition. good
- ✓ Inspect for cleanliness. Clean exterior surfaces only. Remove dust and grease on motor housing, good
- ✓ Are the indicator lights on the Building Management System functioning properly? NO
- * Comments (see or hear anything unusual?):
  BMS not reading EF-6 status.

C. COVER SYSTEM - BOTTOM FLOOR INSPECTION

1. Walk all of the bottom floors

- ✓ Any visible cracks or settlement in the ground floors? NO
- ✓ Any other visible openings (unintended) in the ground floors? NO
- ✓ Any other visible cracks in elevator pit or other accessible pits? NO
- ✓ Draw approximate location of floor cracks/openings on site map. N/A
- ✓ Note the length of the crack/opening. N/A
- ✓ Note the width of the crack/opening. N/A
- Comments:

Annual Inspection Form

Mott Haven Campus
730 Concourse Village West, Bronx, New York 10451

D. COVER SYSTEM - EXTERIOR INSPECTION (Including area under platform)

1. **Walk and inspect the entire perimeter of the Site and the concrete cap under platform.** yes
2. **Walk and inspect all of the paved areas (concrete and asphalt) of the Site, including areas under PS 156 and IS 151.** yes
3. **Walk and inspect all of the unpaved areas of the Site including artificial turf field** yes

- ✓ Are there any signs of significant cracks, settlement or deterioration of the paved areas? no
- ✓ Has any of the pavement material been removed? no
- ✓ Are there signs of vehicular use on the unpaved areas (tire tracks, rutting, etc.)? no
- ✓ Have any structures been constructed on the unpaved areas? no
- ✓ Inspect synthetic turf. Any problems identified? no
- ✓ Are the flush-mounted caps/protective casings for the 7 monitoring wells secured? yes
- ✓ Are there any signs of soil washing or erosion (gullies, soil washed out onto the pavement)? no
- ✓ Are there any signs of intrusive activities (drilling, digging, trenching, grading, excavating, etc.)? no
- * Comments: All issues identified in last years report have been addressed/ fixed.

E. VAPOR BARRIER INSPECTION

1. **Walk all of the bottom floors** yes

- ✓ Review all cracks or other openings indentified in ground floors during previous inspections.
- ✓ Conduct smoke test at each identified crack/opening/depression using environmentally safe smoke.
- ✓ Draw approximate location of floor cracks/openings that appear to have potential leak through vapor barrier.
- * Identify sources of potential impact to smoke test (i.e., HVAC vent nearby). N/A
- * Redo smoke test at location of potential vapor barrier leak after sealing off sources of potential impact. N/A

Comments:

F. Repair

Summarize needed/completed repairs to Engineering Controls:

1. Repair BMS to correctly indicate status of SSDS EF-6.
2. Repair/ Replace vacuum gauge for EF-6.

Inspector's Signature: [signature]

Attachment 7
Training Acknowledgement

Cardno ATC
Shaping the Future

104 East 25th St, 10th Floor
New York, NY 10010-2917
www.cardnoatc.com
212-353-8280
Fax 212-353-8306

Annual Training Acknowledgement
Engineering Controls Operation and Maintenance

Location: X790

Custodian/Fireman: Robert Rivera Jr

I, Robert Rivera Jr. received annual refresher training on Engineering Controls Operation and Maintenance by Cardno ATC on 8/26/2015. As part of the annual refresher training I conducted a walkthrough with Cardno ATC during which all elements covered by the Operation and Maintenance Plan were explained to me including the completion of the daily logs and monthly inspection form.

Signed by: Robert Rivera Jr **Date:** 8/26/2015
Custodian/Fireman

Recommendations:

1. Repair BMS for EF-6.
2. Replace vacuum gauge for EF-6.

Attachment 8
Follow-up Inspection Documents

ATC GROUP SERVICES LLC

104 East 25 Street
10th Floor
New York, New York 10010
Telephone 212-353-8280
Fax 212-353-8306

FIELD ACTIVITY LOG

Date: 9/14/15

ATC Representative: Nancy Guevara

Project Site:
Mott Haven (PS X790)
730 Concourse Village West
Bronx, NY 10451

Field Activity Subject: BMS Follow-up Inspection

Description:

- ATC conducted a follow-up inspection at X790 to confirm repairs on the BMS.
- ATC met with custodian Mr. Robert Rivero Jr.
- ATC noted that the BMS had been repaired for SSDS-6 and that all fan units were demonstrating "Normal, ON" settings on the BMS.
- ATC conducted a visual inspection of all the SSDS fan units and noticed that they were operating as designed.

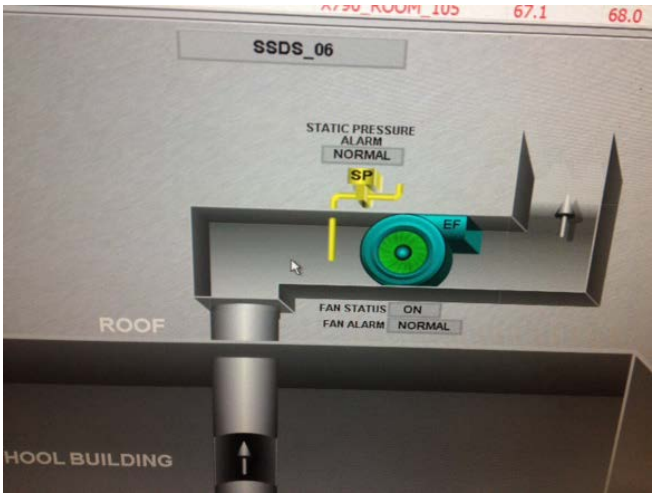


Photo 1: View of functional BMS on typical SSDS fan unit (EF-6).

Photo 2: View of typical SSDS roof fan unit (EF-6).

GROUP SERVICES LLC

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10th Floor
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Telephone 212-353-8280
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FIELD ACTIVITY LOG

Date: 12/3/15

ATC Representative: Nancy Guevara

Project Site:
Mott Haven (PS X790)
730 Concourse Village West
Bronx, NY 10451

Field Activity Subject: BMS Follow-up Inspection

Description:

- ATC met with custodian Mr. Robert Rivero Jr.
- Mr. Rivero informed ATC that Control Technologies, Inc. had been performing remote maintenance on the BMS on 10/6/15.
- ATC conducted a follow-up inspection to confirm maintenance repairs on the BMS.
- ATC noted that the BMS was functioning properly for all fan units.
- ATC conducted a visual inspection of all the SSDS fan units and noticed that they were operating as designed.

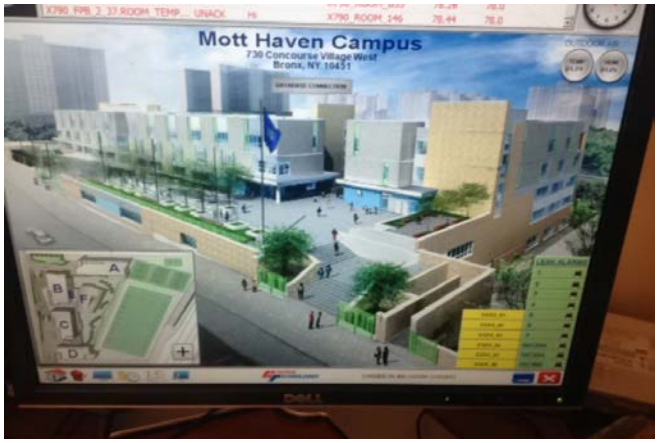

Photo 1: View of functional BMS at P.S. X790.

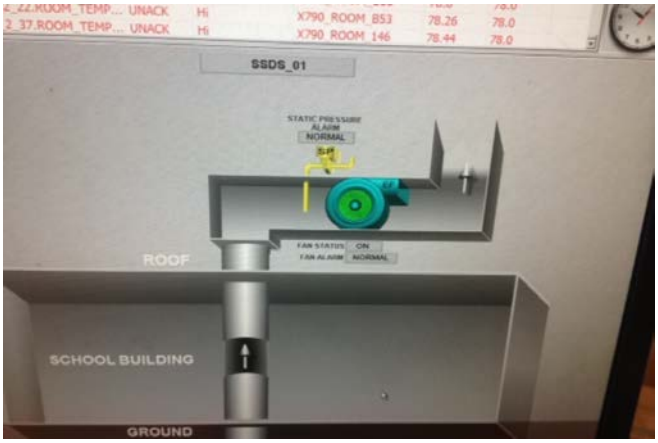

Photo 2: View of typical BMS showing normal status on SSDS fan unit SSDS-1.