Syracuse University Center of Excellence
Site Management Plan
Construction Compliance Report and Certification

PROJECT
Intermodal Transportation Center
Center of Excellence
Syracuse NY, 13244

Owner
Syracuse University

General Contractor
CBD Construction, LLC

Prepared By
CBD Construction, LLC
AXA Tower 1
100 Madison Street Suite 1200
Syracuse, NY 13202

February 2016

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I. Introduction:

This construction compliance report was prepared by CBD Construction, LLC who served as the construction manager for the Syracuse University Center of Excellence (COE) Intermodal Transportation Center (ITC) project, in conjunction with OP-TECH NRC Environmental Services (OP-TECH/NRC) who served as the environmental remediation contractor for the ITC project. The ITC project was completed on the undeveloped, southeast portion of the COE Headquarter Building Site (COE site) located at 727 East Washington St. (previously identified as 700 and 728 East Water St.) in Syracuse, NY.

This construction compliance report is prepared in compliance with Section 10 of the NYS Department of Environmental Conservation (NYSDEC) and NYS Department of Health (NYSDOH) approved "Site Management Plan for the Construction of the TIEQ Laboratory and COE Headquarters Facility" (SMP) dated July 2005. This report details the area of the ITC construction project and provides a narrative of the construction activities performed, the environmental and safety monitoring conducted, any problems and/or anomalies encountered and their resolutions, and other pertinent information to document and certify that ITC construction activities were performed in accordance with the SMP from the beginning of the ITC project in May 2015 until the site "cap" was fully installed in October 2015.

II. Site History:

The COE site at 727 E. Washington St. occupies an entire city block, with the exception of the northeast corner of the block which is owned by the U-Haul company, and is bordered by E. Washington St. to the south, E. Water Street to the north, Forman Ave. to the east and Almond St. to the west. A site map of the COE facility depicting relevant site features is included as Figure 1.

The COE site is comprised of two historic parcels identified as 700 E. Water St. and 728 E. Water St. The following provides a brief summary of the Site's history based on information provided by Syracuse University:

- 700 East Water St. (western parcel): This is a 2.4 acre parcel previously owned by the City of Syracuse that served as the site of the former Midtown Plaza building (City parcel). Prior to purchase by Syracuse University, a Record of Decision (ROD) was issued for the site (March 1998) and the activities to implement the ROD, including demolition for the Midtown Plaza building, and remediation of the site under NYSDEC's Environmental Restoration Program (Site Number B-0003) was completed by the City of Syracuse. Syracuse University purchased the parcel in 2004 and commenced redevelopment activities under the NYSDEC and NYSDOH approved SMP. Additional limited subsurface investigations were conducted by Syracuse University prior to, and during construction of, the COE Headquarters building and contaminants, including asbestos debris, semi-volatile polycyclic hydrocarbons, heavy metals, and hexavalent chromium were identified to be present in the site's soils and groundwater at varying degrees.

- 728 East Water St. (eastern parcel): This is a 0.6 acre parcel previously owned by the City of Syracuse Industrial Development Agency (SIDA parcel). This parcel was purchased by Syracuse University in or around 2004. There were no historic environmental conditions known for the site therefore redevelopment activities were not performed under NYSDEC's Environmental Restoration Program and no construction SMP was required. However, during redevelopment and construction of the COE Headquarters building, a small amount of asbestos debris was encountered in soils on the SIDA parcel.

Construction of the COE Headquarters building was completed in September 2010 and a construction compliance report and certification was submitted to NYSDEC by the construction manager, LeChase Construction Services, LLC, for the COE Headquarters building project. The report, dated February 14, 2011, indicated that all areas of the site redeveloped during construction of the COE Headquarters building were covered with a demarcation layer (orange mirafi fabric) and capped with a minimum of twelve (12) inches of NYSDEC approved cover material (Site Cap). The undeveloped portion of the site, which was the area southeast of the COE Headquarters building (see Figure 1), was fenced-in without the required "Cap" installed pending future redevelopment for the ITC.

III. ITC Project Description:

The ITC project involved the redevelopment of approximately 1.2 acres of the COE site southeast of the COE Headquarters building into a surface parking lot with a pavilion and a storm water management system. The area redeveloped for the ITC project included portions of both the former City parcel and the SIDA parcel. To provide simplicity during construction of the ITC, the two parcels were not differentiated and redevelopment activities for both parcels were conducted in compliance with the July 2005 Construction SMP issued for the City parcel. All soils impacted during construction of the ITC were conservatively assumed to contain asbestos and a single site specific asbestos variance from NYS Department of Labor Code Rule 56, covering both the City and the SIDA parcels, was issued for the ITC project (Appendix 6).

Excavation depths for the ITC project varied depending on the approved dig plan (i.e. construction requirements for each specific area). All areas of the ITC site were minimally excavated to a depth of three (3) feet below ground surface (ft bgs), with some excavations completed to depths up to ten (10) ft bgs. Prior to the commencement of excavation activities for the ITC project, a pre-characterization soil sampling program was completed to obtain representative waste characterization data for the material planned for excavation and offsite disposal. The ITC site was divided into 82 grid sections (Figure 2). Sampling activities consisted of excavating three (3) test pits per grid and collecting three (3) grab samples from three (3) different depths in each test pit. Each test pit had an excavation depth equivalent to the maximum excavation depth required for planned construction activities in that particular grid. The nine (9) grab samples that were collected from within each grid were combined to yield one (1) composite sample per grid.

The composite sample for each grid was analyzed for TCLP Metals, TCLP SVOCs, and TCLP VOCs. No contaminants in excess of the RCRA hazardous waste levels were identified in any of the grid sections located on the City parcel. Lead contamination in excess of RCRA hazardous waste levels was encountered in two grid sections on the SIDA parcel, Grids B1 and A2. No other contaminants in excess of the RCRA hazardous waste levels were identified on the SIDA Parcel. Details on the lead contamination and remediation actions are provided in Section V of this report.

Excavation for the ITC project commenced in June 2015 and was completed in September 2015. All materials excavated from the ITC project site were transported to Seneca Meadows Landfill for disposal (Appendix 3).

A site map depicting the ITC project excavation area and the elevations of the demarcation layer plus six (6) inches of approved cover is included as Figure 3. No excavation in the historic "T2 area" described in Section 1.4 of the July 2005 SMP occurred below a depth of six (6) ft bgs during construction activities for the ITC project.

Once the required depth of excavation was achieved in each area, the area was covered with a demarcation layer (orange mirafi fabric) and capped with a minimum of twelve (12) inches of cover material (Site Cap) per the SMP.

"Asbestos Danger" signs were also placed on the mirafi fabric prior to placement of the cover material. ITC Project constriction photographs are provided in Appendix 4.

IV. Environmental Monitoring:

The following environmental monitoring was conducted throughout the ITC project during all soil/ground intrusive activities occurring at the site (prior to placement of the Site Cap):

- A third party NYS certified asbestos project monitor was on-site per the site specific asbestos variance to perform the required daily asbestos air sampling and to monitor asbestos abatement and deregulation activities. Following completion of the required excavation in each grid section, the grid section was deregulated for asbestos. In accordance with the site specific asbestos variance, deregulation/clearance of a grid section included the use of daily air samples in lieu of asbestos clearance air samples and an asbestos project monitor visual inspection of the excavated grid section. Once asbestos clearance was achieved for a particular grid section, the area was covered with orange mirafi fabric, "Asbestos Danger" signs, and a minimum of six (6) inches of sand/stone/soil, pending installation of the final Site Cap (i.e. minimum of twelve (12) inches of cover).

- A third party environmental field screener (AECC Environmental Consulting) was employed to screen each bucket of excavated material for visual staining or odors and with a photoionization detector (PID) to detect volatile organic compounds (VOCs). Daily field observations and the maximum PID readings observed in the materials excavated from each grid section were recorded by the field screener. The SMP required that any soil with PID readings higher than 10 parts per million (PPM) or visual staining or odors, be staged and analyzed separately. PID readings above 10 PPM were observed in one grid section on the City parcel, grid B15. PID readings above 10 PPM were observed in two grid sections excavated on the SIDA parcel, grids B1 and B3.

- A community air monitoring program (CAMP), consistent with NYSDOH CAMP requirements, was administered throughout the project by the third party environmental company (AECC Environmental Consulting). The CAMP monitoring consisted of real-time ambient air monitoring at the site perimeter for particulates and VOCs. A total dust aerosol (particulate) monitor and a PID (VOC) monitor were placed at an upwind and a downwind location on the Site's perimeter. The CAMP monitors were equipped with visual alarms triggered by an exceedance in either the aerosol monitor (>100 ug/m^3) or the PID monitor (>5 PPM). In accordance with CAMP requirements, if a CAMP alarm was activated, all work was to stop until the cause was identified and corrective measures implemented. Data from all instruments was downloaded daily and compiled into weekly summary reports. Sprinklers were utilized for dust suppression during all excavation and loadout activities. No CAMP alarms were triggered during any phase of the ITC project.

- In accordance with OSHA requirements, personal asbestos air samples were obtained for asbestos abatement workers working at the ITC site during every shift of abatement activities. The personal asbestos air samples were analyzed and posted for on-site personnel.

V. Problems, Anomalies and SMP Deviations Encountered:

The following provides a summary of problems and anomalies identified during the ITC construction project on the City Parcel which is covered by the SMP, and the SIDA parcel which is not covered by the SMP. As indicated in Section III above, to provide simplicity during construction of the ITC, the two parcels were not differentiated therefore redevelopment activities for both parcels were conducted in accordance with the July 2005 Construction SMP issued for the City parcel.

City Parcel

This parcel is covered by the NYSDEC and NYSDOH approved July 2005 SMP for Construction at the COE site.

No deviations from the requirements of the July 2005 SMP occurred on the City parcel during construction of the ITC.

- **Friable Asbestos:** Minor amounts of friable asbestos materials (tar paper, insulation) were encountered on this portion of the site during excavation activities. The encountered friable asbestos was handled in accordance with the NYS Department of Labor issued site specific variance and properly disposed of by the University.

- **Elevated PID Readings and Discolored Soil in Grid B15 (NYSDEC Spill # 1504915):** On 8/6/15, during excavation in grid section B15, discolored soil was encountered at approximately eight (8) ft bgs at the western edge of grid B15. The soil was screened with a PID and PID readings greater than 10 PPM were observed. Excavation activities in this area were suspended and the site construction manager (CBD) and Syracuse University's Environmental Health and Safety Services Office (SU EHSS) were informed. Syracuse University EHSS gave permission to continue excavation to see if a source of the elevated PID readings could be identified. When excavation resumed on 8/7/15, a wooden box encased in concrete (measuring approximately 4 ft x 4.25 ft) was uncovered at approximately 9 ft bgs. The box contained dark, sludgy soil and PIDs readings from inside the box were approximately 300 PPM. The box was removed and no inlet or outlet piping was observed. The remaining soil in the excavated area was screened with a PID and all areas of remaining soil, including behind and below where the box was previously located, were observed to be less than 10 PPM.

  Syracuse University EHSS notified the NYSDEC Spill Hotline and spill # 1504915 was issued. Chris Mannes from NYSDEC Region 7 Division of Environmental Remediation was onsite and advised on closure sampling. One closure sample was requested and obtained from the remaining soil in the bottom of the B15 grid where the box was removed from. The closure sample was analyzed for Total Metals, Total VOCs, Total SVOCs and Total PCBs. The analytical results of the closure sample revealed that all detectable contaminants were below NYSDEC's Part 375 Commercial Soil Clean-Up Objectives (SCO) with the exception of cadmium. The level of cadmium detected, 26.9 PPM, was above the NYSDEC Commercial SCO of 9.3 PPM but below the NYSDEC Industrial SCO of 60 PPM. Syracuse University submitted a "spill" report to NYSDEC detailing the incident and the closure sampling results. NYSDEC provided closure of this "spill" event with no further action in a letter dated September 9, 2015.

  The discolored and elevated PID soil excavated from this area was staged separately and a composite sample of the soil was also obtained for waste characterization purposes. The results of the TCLP analysis that was performed on the waste soil sample indicated that the soil was below RCRA hazardous waste levels. The soil was subsequently shipped for disposal at Seneca Meadows Landfill.

  Concrete Box in Grid B8: On 8/29/15, a concrete box was found in grid section B8. The box contained sludge but the PID readings of the sludge were below 10 PPM. OpTech-NRC informed CBD and excavation continued. The box and sludge were shipped for disposal with other site wastes at Seneca Meadows Landfill.

SIDA Parcel

This parcel is not covered by the NYSDEC and NYSDOH approved July 2005 SMP for Construction at the COE site. However, during ITC construction the University required all construction activities occurring on the ITC site, including the SIDA parcel, to fully comply with the requirements of the July 2005 SMP.

- **RCRA Lead Contamination in Grids B1 and A2 (NYSDEC Spill # 1504953):** As indicated in Section III above, lead concentrations from the TCLP analysis performed on the pre-characterization composite samples from grids B1 and A2 were 10.6 mg/L and 5.4 mg/L (respectively), both of which exceeded the RCRA regulatory level of 5 mg/L for characteristic hazardous waste. The elevated lead levels were discussed with NYSDEC's Region 7 Division of Environmental Remediation (Mr. Chris Mannes) and were notified to NYSDEC's spill hotline. Spill # 1504953 was issued. Options to address the RCRA lead impacted soils were investigated and the University, after discussion with NYSDEC and Seneca Meadows Landfill, opted to treat the soil onsite prior to off-site disposal using a lead stabilization method recommended by OpTech-NRC. A Lead Stabilization Plan was developed by OP-TECH/NRC and the University provided the Lead Stabilization Plan to NYSDEC Region 7's Divisions of Environmental Remediation (Chris Mannes) and Solid Materials Management (Tom Annal and Brian Rogers).

  In August 2015 and September 2015, OpTech-NRC excavated the lead contaminated soils in grids B1 and A2 down to 9 ft bgs (maximum depth of sampling) and stabilized the lead contaminated soils ex-situ with a stabilization product (3% by weight) known as EnviroBlend® Metal Waste Treatment by Premier Magnesia, LLC. Post treatment confirmatory soil sampling indicated that no contaminants, including lead, were observed in excess of the RCRA hazardous waste levels.

  After the soils were excavated out of grids B1 and A2, confirmation closure samples were collected from the bottom and remaining side walls in grids B1 and A2 as per the requirements of NYSDEC. The samples were analyzed for TCLP lead and Total Metals, Total VOCs, Total SVOCs and Total PCBs. The confirmation closure samples indicated that no RCRA levels of TCLP lead were present in the remaining soils and that all detectable contaminants were below NYSDEC's Part 375 Commercial Soil Clean-Up Objectives. A closure report for this spill event, including closure sampling results, was submitted to NYSDEC by Syracuse University on 10/22/15. NYSDEC subsequently granted closure for the spill via letter dated 10/23/15.

- **Geothermal Well - Dynalene Spills (NYSDEC Spill # 1503839):** In July 2015 there were two (2) instances of dynalene releases from the geothermal well system that was unearthed to facilitate the ITC project. In both instances, CBD notified SU EHSS and spill cleanup activities were initiated. SU EHSS notified NYSDEC Region 7 Division of Environmental Remediation (Chris Mannes) and the NYS spill hotline after the first spill. Spill # 1503839 was issued. At the direction of Mr. Mannes (NYSDEC), a separate spill number was not issued for the second dynalene release. The soil/materials impacted by the released dynalene were excavated and staged onsite. Seneca Meadows Landfill approved the dynalene impacted soil/materials for disposal under the ITC project's existing waste profile and the impacted soil/material was subsequently shipped for disposal at the Seneca Meadows Landfill.

- **Elevated PID Readings in Grids B1 and B3:** In May 2015, during pre-characterization sampling, PID readings higher than 10 PPM were observed in test pits in grid B1 and B3 by OpTech-NRC and the third party environmental screener. The encountered soil with PID readings >10 PPM was not staged separately as required by the University's site management requirements, but instead were returned to the test pit after the pre-characterization samples were obtained. The pre-characterization sampling results for grids B1 and B3 both indicated no detectable VOCs by TCLP analysis. Lead contamination was detected (TCLP analysis) in grid B1 above the RCRA hazardous waste limit. No contaminants above RCRA hazardous was limits was detected in grid B3.

    - **Grid B1 Soil Excavation:** On August 20, 2015, the soil from grid B1 was excavated for disposal. The excavated soil from grid B1 was screened with a PID by the third party environmental field screener. PID readings were observed to be >10 PPM in soil excavated from a depth of six (6) to eight (8) ft bgs. The excavated soil with PID readings >10 PPM was staged separately from the other soils excavated from grid B1. A composite sample was collected from the staged excavated soil with PID readings >10 PPM (following lead stabilization as discussed in a previous bullet). The analytical results indicated no contaminants were present above RCRA hazardous waste levels and the soil was subsequently shipped for disposal at Seneca Meadows Landfill.

    - **Grid B3 Soil Excavation:** On September 1, 2105, soil from grid B3 was excavated for disposal. Each bucket of excavated soil from grid B3 was screened by the third party environmental field screener with a PID. No visual or olfactory signs of contamination or PID readings >10 PPM were observed during the excavation. All soil excavated from grid B3 was shipped to Seneca Meadows Landfill for disposal.

VI. Project Records: Environmental, health and safety records associated with the ITC project were provided to and will be maintained by Syracuse University's Office of Campus Planning, Design and Construction. This includes laboratory analytical reports, daily field screening logs, training and site sign-in sheets, CAMP monitoring records, waste manifests, incident reports, etc.

VII. Current Site Status: As of October 11, 2015, **t**he entire ITC site is now covered with a demarcation layer (orange mirafi) and "capped" with a minimum of twelve (12) inches of NYSDEC approved cover material (soil, sand, stone, concrete) as required by the SMP. Final paving of the parking lot area with asphalt will be completed when weather conditions permit in the spring (2016).

Figure 1

COE Headquarters Site Map

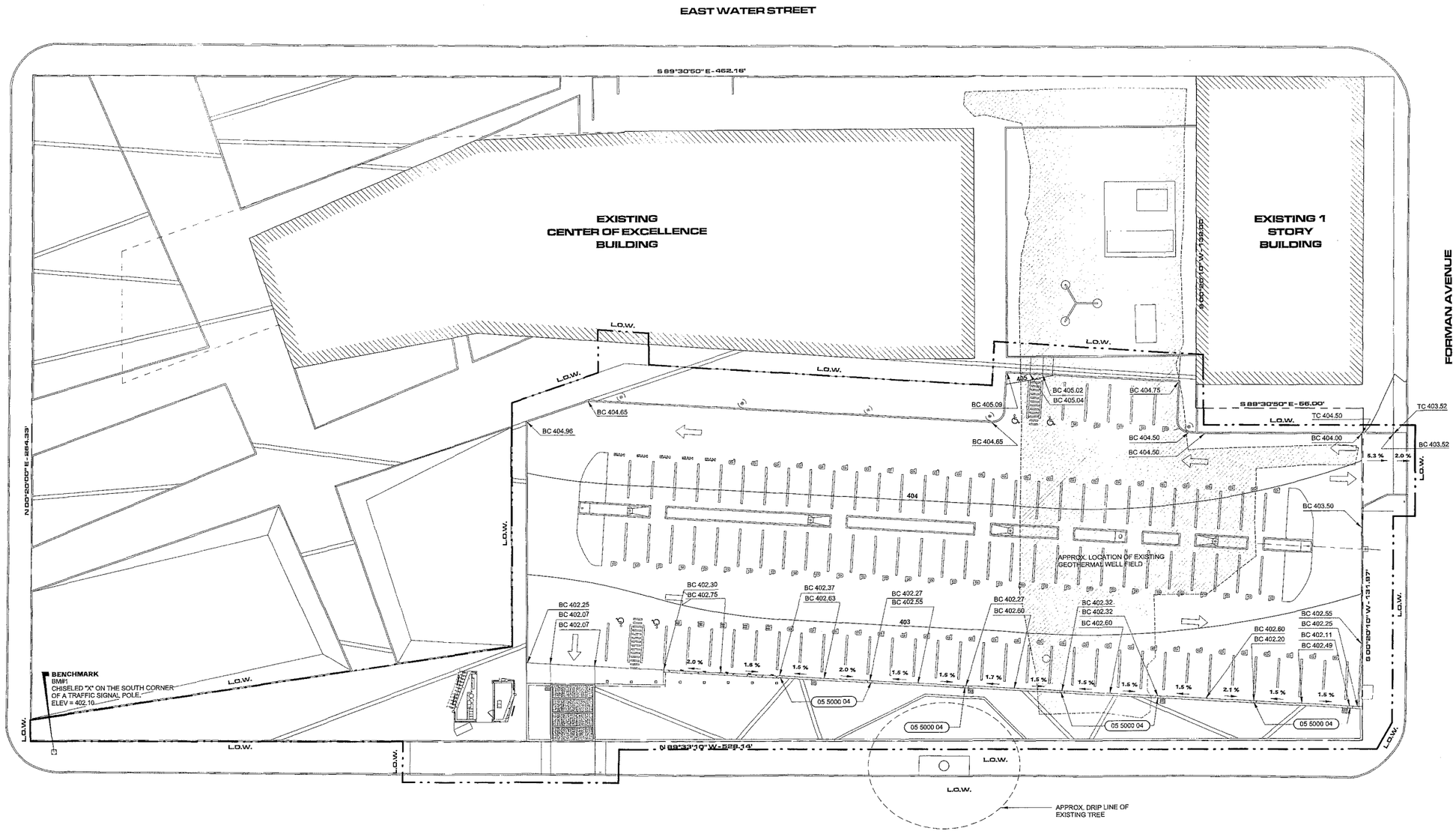
GENERAL NOTES:

01 REFERENCE LANDSCAPE DRAWINGS FOR FINISH GRADING AT PEDSTRIAN PAVING.

02 REFERENCE CIVIL DRAWINGS FOR ROUGH GRADING / EXCAVATION DEPTHS THROUGHOUT SITE.

03 CONTRACTOR TO PROTECT ALL EXISTING SITE FEATURES TO REMAIN. VERIFY EXISTING CONDITIONS WITH OWNER SUPPLIED INFORMATION.

04 BENCHMARK, CONTOURS AND NORTH ORIENTATION ARE BASED ON CONTROL INFORMATION SUPPLIED BY OWNER.



1 Vehicular Pavement Grading Plan
1" = 20'-0"

Drawing Issue	Date
Issued for Bidding	2014/04/11

Intermodal Transportation Center
Center of Excellence, Syracuse, New York 13244

P.I.N.
3754.47

SU Project No:
100755

Owner:
Syracuse University
Syracuse, New York 13244

Structural, MEP & Civil Engineer
O'Brien & Gere Engineers
333 West Washington Street
Syracuse, NY 13202

Landscape Architect:
Hargreaves Associates
180 Varick Street Suite 1304
New York, NY 10014

REGISTERED ARCHITECT DAVID S. McHENRY 033055 STATE OF NEW YORK

DAVID McHENRY, AIA NY LIC. # 033055
REGISTERED ARCHITECT - NEW YORK STATE

N

Architect: SCOTT A. ERDY, AIA
DAVID S. MCHENRY, AIA

emArchitecture
Erdy McHenry Architecture, LLC
915 North Orianna Street
Philadelphia, Pennsylvania 19123
ph: 215.925.7000 fax: 215.925.1990
web: http://www.em-arc.com

Vehicular Paving Grading Plan

SCALE:	DATE:
1" = 20'-0"	04/11/2014
DRAWN BY:	PROJECT NO:
BA / CE	1121

DRAWING NUMBER:

A1.00

Figure 2

Pre-Characterization Sampling Grid Site Map

EAST WATER STREET

ALMOND STREET

FORMAN AVENUE

EAST WASHINGTON STREET

APPROXIMATE PROPERTY LINE

CONC.

CONC.

RAMP

CENTER OF EXCELLENCE
HEADQUARTERS

CONC. COOLING TOWER

GENERATOR

1 STORY
MASONRY

TRAILER

150' MET
TOWER

GEOTHERMAL
VAULT

DRIVEWAY PAVED

APPROXIMATE PROPERTY LINE

WARREN RAMIE SURVEYING
SAMPLING GRID LAYOUT
MAY 2015

N

GRANITE
CURBING

HOT BOX

APPROXIMATE PROPERTY LINE

APPROXIMATE PROPERTY LINE

APPROXIMATE PROPERTY LINE

F8 F7 F6 F5 F4 F3 F2 F1

E11 E10 E9 E8 E7 E6 E5 E4 E3 E2 E1

D12 D11 D10 D9 D8 D7 D6 D5 D4 D3 D2 D1

C12 C11 C10 C9 C8 C7 C6 C5 C4 C3 C2 C1

B18 B17 B16 B15 B14 B13 B12 B11 B10 B9 B8 B7 B6 B5 B4 B3 B2 B1

A21 A20 A19 A18 A17 A16 A15 A14 A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1

Figure 3

Site Map depicting Depth of Excavation/Depth to Mirafi

EAST WATER STREET

ALMOND STREET

FORMAN AVENUE

EAST WASHINGTON STREET

APPROXIMATE PROPERTY LINE

APPROXIMATE PROPERTY LINE

CONC.

CONC.

RAMP

VENT

VENT

VENT

VENT

VENT

CENTER OF EXCELLENCE
HEADQUARTERS

LANDS N/F
SYRACUSE UNIVERSITY
TMP #30-15-1.1
L.4895, P.383

OVERHANG

OVERHANG

Volumes by Triangulation (Prisms) Fri Oct 09, 2015
Existing Surface: INTERMODEL TRANSPORTATION CENTER\Existing Conditions Survey 10-08-15.tin
Demarcation Surface: INTERMODEL TRANSPORTATION CENTER\Demarcation Layer 10-09-15.tin

Cut volume: 244,782.3 C.F., 9,066.01 C.Y.
Fill volume: 0.0 C.F., 0.00 C.Y.

Area in Cut : 53,155.5 S.F., 1.22 Acres
Area in Fill: 0.0 S.F., 0.00 Acres
Total inclusion area: 53,155.5 S.F., 1.22 Acres

Average Cut Depth: 4.61 feet
Export Volume: 9,066.0 C.Y.

CONC.

COOLING TOWER

GENERATOR

150' MET TOWER

TRAILER

GEOTHERMAL VAULT

1 STORY
MASONRY

LANDS N/F
AMERCO REAL ESTATE CO
TMP #30-15-3
L.4746, P.870

DRIVEWAY PAVED

DEMARCATION SURVEY LIMIT

DEMARCATION SURVEY LIMIT

DEMARCATION LAYER SURVEY LIMIT

WARREN RAMIE SURVEYING
DEMARCATION LAYER AS-BUILT SURVEY

FIELD SURVEY STARTED IN AUGUST AND COMPLETED IN OCTOBER OF 2015
ASSUMED 6 INCHES OF CLEAN SOIL OVER DEMARCATION LAYER

OCTOBER 09, 2015
SCALE 1"=20'

N

SOUTHWEST
DETENTION TANK
(UNDERGROUND)

SG BOX

TSP

HOT BOX

HYD

WV

Appendix 1

COE Intermodal Transportation Center Project Construction Manager's Certification of Compliance

CBD Construction Services performing as construction manager (CM) supervising and coordinating construction activities between Syracuse University and governing jurisdictions during development of the Intermodal Transportation Center (ITC), located on the Center of Excellence (CoE) Headquarters Facility site at 727 East Washington St. in Syracuse, NY, in accordance with the July 2005 Site Management Plan for Construction of the CoE Headquarters' Facility (SMP), certifies the following:

Soil/Debris Management 2.0; including Sections 2.1 to 2.4 of the SMP, was followed strictly in its entirety for the ITC project worked performed on the City parcel. All excavations of soil and debris on the City parcel for the ITC project conformed to the requirements of Section 2 of the SMP. All materials within the excavation limits were characterized in accordance with the SMP and then shipped off-site to a permitted disposal facility approved by Syracuse University. No soils were excavated to a depth of 6 feet or more below grade within the 50 ft radius of the T-2 sampling location identified in the SMP. An approved fabric layer (orange mirafi) was placed in all instances on top of the completed excavations and covered in accordance with the SMP. Following the completion of excavation activities and placement of the orange mirafi demarcation layer, an as-built survey was completed across the ITC construction site to document the elevations of the orange mirafi demarcation layer.

Construction/Storm Water Management 3.0; including sections 3.1 and 3.2, of the SMP was followed strictly in its entirety. The site was relatively a level site posing no significant run off. The site perimeter was maintained with silt fence and straw bales with best practices and as required through the site's Storm Water Pollution Prevention Plan (SWPPP).

Airborne Particle Management 4.0; of the SMP was followed strictly in its entirety including SMP Exhibit B, NYSDEC TAGM 4031 guidelines. A dust suppression system was established and used strictly as required. Air monitoring and data recording was continuous during all excavations and soil intrusive activities through an established Community Air Monitoring Program (CAMP) which conformed to SMP Exhibit C, NYSDOH Generic Community Air Monitoring Plan. All CAMP data was downloaded daily and compiled into weekly summary reports. A brief summary of daily CAMP operation and data was also documented in daily - field notes and summary reports submitted to the construction manager by a third party field screener. A hardcopy of the daily field notes were kept in an onsite logbook that was maintained by the construction manager. No CAMP alarms were triggered during excavation activities for the ITC.

Management of Asbestos-Containing Material 5.0; including sections 5.1 and 5.2, of the SMP was followed strictly in its entirety and in compliance with NYS Department of Labor (DOL) Asbestos regulations, 12 NYCRR Part 56, and a site specific variance approved by NYS DOL (File No. 14-0835).

Placement of City Parcel Cover 6.0 of the SMP was followed strictly for the ITC construction site. The entire ITC construction area (southeast quadrant of the CoE Headquarters site) was covered with approved fabric (orange mirafi) as a demarcation layer and then a minimum of 12 inches of approved cover in accordance with the City Parcel Cover requirements of the SMP Section 1.5.5. The approved cover consisted of NYSDOT approved brown gravel (type 4) and NYSDOT approved brown select fill.

Soil Vapor Intrusion Review 7.0; including sections 7.1 and 7.2, of the SMP were not applicable to the construction of the ITC. A soil vapor intrusion protection system was not installed in the area of the ITC.

Notification Requirements 8.0 was followed strictly in its entirety. All excavations where contaminants or suspect contaminants were encountered or observed on the City Parcel portion on the ITC site were immediately notified to the University and applicable governing agencies or jurisdictions as necessary.

Health and Safety 9.0; including sections 9.1 and 9.2, of the SMP was followed strictly in its entirety. Construction activities on site followed all local, state, and federal regulations in relation to health and safety. CBD Construction and its subcontractors furnished a company site specific HASP (Health and Safety Plan) as a standard requirement for working on the site. During the excavation and remediation phase of the project, all field personnel held current 40 hour Hazardous Waste Operations (HAZWOPER) training certifications. Following completion of the excavation activities and after the installation of the demarcation layer and 12 inches of approved cover, 10 hour OSHA training was documented for all onsite workers through the completion of site development activities. CBD developed an orientation program that was provided to all subcontractors and workforce. This included pertinent portions of the SMP, the nature of the project, notification process, and general safety was discussed. No unidentified material was excavated without notification of the University and governing jurisdictions and all approved procedures were followed.

Certification Acknowledgement

CBD Construction, to the best of its-knowledge and belief, certifies that remediation of the Intermodal Transportation Center was performed in compliance with the July 2005 CoE Construction Site Management Plan (SMP) as described above, and that the information provided in this certification and corresponding construction compliance report is accurate and complete:

Construction Manager's Signature: _____ Date: 3/13/16

Construction Managers Name: James Wade

Construction Managers Title: Project Manager

Appendix 2
COE Intermodal Transportation Center
Construction Time Line

Below is a timeline of construction activities which occurred during construction of the ITC project.

May 2015:

- Mobilization
- Site preparation
- Test pitting for site characterization
  - Test pits in B1 and B3 registered PID readings higher than 10 PPM, however soil was not staged separately (as required by the University) and was returned to the test pits. Soil from these grids was later re-excavated and screened prior to load-out, PID readings >10 PPM were again noted in B1 and that soil was staged separately, sampled, and analyzed.

June 2015

- Test pitting and site characterization completed
- Began excavation and off-site disposal of assumed asbestos contaminated soil
- 6/11/15 discovered a canister that is part of a piping system that contained water with a possible sheen. Water was pumped out of the canister and into a drum which was given to Syracuse University (SU) for analysis. Pipe was later cut and staged on polyethylene sheeting until analysis was returned and piping was disposed of offsite with other site soils.
- 6/17/15 found a pipe with suspected friable asbestos insulation. Pipe was double wrapped and placed in asbestos bags, as was the surrounding soil which was excavated by hand.
- 6/22/15 a Riccelli truck transporting soil from the site spilled its contents on Erie Boulevard. NYSDEC and NYSDOL's Syracuse Asbestos Control Bureau were notified.
  - The OP-TECH/NRC abatement crew that was working at COE ITC shut down operations at the ITC site and began spill cleanup on Erie Boulevard.
  - Spill was cleaned up to the satisfaction of the third party air monitor and NYSDEC.
  - Materials were transported back to the COE ITC site for load out with other site soils.

July 2015

- 7/1/15 suspected friable asbestos black tar paper was found in excavation. Area was dug out by hand (under the supervision of the project monitor) and double-bagged per the requirements of the site specific variance.
- There were two (2) incidences (July 9, 2015 and July 17, 2015) of spills from the geothermal well system. In both instances, CBD was notified, and spill cleanup activities were initiated. Spilled and cleanup materials were placed in 55-gallon drums. Once the disposal facility (Seneca Meadows) approved disposal under the current waste profile, soil was removed from the drums and transported off-site along with other site soils.
- 7/24/15 an underground electrical line to the weather tower was broken during excavation activities.

August 2015

- 8/6/15 discolored soil with high PID readings was discovered at approximately eight (8) ft bgs at the edge of grid B15. CBD was informed who informed SU. SU provided permission to continue digging and stockpile the soil. NYSDEC was informed and mobilized to the site. NYSDEC required a bottom closure sample of the area which was collected and analyzed. A wooden box encased in concrete was found to be the source and was excavated on 8/7/15 and combined with the soil from that area. The soil pile was analyzed and, with the exception of cadmium, did not show any exceedances of NYSDEC's Part 375 Commercial SCOs. Soil was ultimately disposed of off-site along with other site soils.
- 8/20/15 began treatment of the hazardous lead soil by mixing with 3% by weight Enviroblend Coarse onsite. Grid B1 and A2 were excavated, mixed and analyzed separately. Grid B1 had PID readings higher than 10 PPM. CBD was informed who, in turn, informed SU. Soil with high PID readings was staged separately and analyzed separately. Analytical results showed non-detectable TCLP lead levels and no exceedances of any other hazardous waste levels. Confirmation samples were collected from the bottoms and remaining sidewalls of the excavations per the direction of the NYSDEC. Seneca Meadows provided approval that the soil could be disposed of under the same profile as long as analytical results confirmed non-hazardous levels.
- 8/26/15 draining of geothermal lines created leaks where the lines were previously repaired. Spilled material and surrounding soil was cleaned up and placed in 55-gallon drums. Soil was ultimately removed from drums and disposed off-site with other site soils, after the disposal facility approved it for disposal under the same profile as other site soils.
- 8/29/15 a concrete box containing sludge was discovered in grid B8. PID readings were below the 10 PPM threshold. CBD was informed who contacted SU and excavation was allowed to continue. The soil was stockpiled and disposed of with other site soils.

September 2015

- Surveying showed remediation activities in the southeastern corner of the site had not reached their horizontal limits; affected areas were re-excavated to required limits. This included grid A2 which was hazardous for lead. NYSDEC was informed that the A2 grid would need to be re-opened so additional excavation could be performed. The additional soil excavated from grid A2 was treated with lead stabilization product on 9/21/15 and 9/22/15 and re-sampled. No concentrations above RCRA hazardous waste levels were observed in the analysis results. The stabilized soil was shipped to Seneca Meadows for disposal. An additional bottom closure sample was collected from grid A2.

Closing Information:

- 09/29/15 – End date for remediation activities, last day materials were transported to landfill, all areas covered by demarcation layer
- 10/01/15 – All impacted soil was removed and OP-TECH/NRC finished backfilling areas
- 10/01/15 – All areas covered with six (6) inches of approved cover
- 10/02/15 – OP-TECH/NRC fully demobilized from site.
- 10/11/15 – All areas covered with a minimum of twelve (12) inches of approved cover and site opened to non-asbestos workers and trade workers without 40 hour HAZWOPER training

Appendix 3

COE Intermodal Transportation Center Project
Regulated Waste Disposal Totals

- **15,025.41 tons** of asbestos impacted soil/material/building debris was shipped for disposal at Seneca Meadows Landfill from June 2015 to October 2015.

- **586.85 tons** of asbestos impacted soil/material/building debris treated with Enviroblend for lead stabilization was shipped for disposal at Seneca Meadows landfill from August 2015 to October 2015.

Appendix 4

COE Intermodal Transportation Center Project Construction Photographs

May 7, 2015

July 8, 2015

July 22, 2015

July 22, 2015

July 31, 2017

August 4, 2015

August 10, 2015

August 11, 2015

August 12, 2015

August 13, 2015

August 18, 2015

August 18, 2015

August 31, 2015

September 9, 2015

September 9, 2015

September 14, 2015

September 14, 2015

September 14, 2015

September 21, 2015

September 29, 2015

December 31, 2015

Appendix 5

COE Intermodal Transportation Center Project
Contractors Facilitating Site Environmental Activities

Construction Manager
CBD Construction, LLC
AXA Tower 1
100 Madison Street Suite 1200
Syracuse, NY 13202

Project Manager: James Wade
Site Supervisor: Todd Gerbsch, Nick Harmer

Environmental Contractor
OP-TECH/NRC
1260 Scottsville Road
Suite 202B
Rochester, NY 14624

Environmental Monitoring Contractor
AECC Environmental Consultants
6308 Fly Road
East Syracuse, NY 13057

Asbestos Project Monitor
Envirologic of NY, Inc.
6950 East Genesee Street
Fayetteville, New York 13066

Appendix 6

NYS DOL Issues Site Specific Asbestos Variance for COE Intermodal Transportation Center Construction Project

New York State Department of Labor
Andrew M. Cuomo, *Governor*
Peter M. Rivera, *Commissioner*

August 27, 2014

JB Evans & Sons LLC
POB 404
Cazenovia, NY 13035

RE: File No. 14-0835

Dear Sir/Madam:

STATE OF NEW YORK
DEPARTMENT OF LABOR
DIVISION OF SAFETY AND HEALTH

The attached is a copy of Decision, dated, 8/25/2014, which I have compared with the original filed in this office and which I DO HEREBY CERTIFY to be a correct transcript of the text of the said original.

If you are aggrieved by this decision you may appeal within 60 days from its issuance to the Industrial Board of Appeals as provided by Section 101 of the Labor Law. Your appeal should be addressed to the Industrial Board of Appeals, State Office Building Campus, Building 12, Room 116, Albany, New York, 12240 as prescribed by its Rules and Procedure, a copy of which may be obtained upon request.

WITNESS my hand and the seal of the NYS Department of Labor, at the City of Albany, on this day of 8/25/2014.

Edward A. Smith, P.E.
Senior Safety and Health Engineer
Engineering Services Unit

MW

Phone: (518) 457-1536 Fax: (518) 457-1301
W. Averell Harriman State Office Campus, Bldg. 12, Room 154, Albany, NY 12240
www.labor.state.ny.us

STATE OF NEW YORK
DEPARTMENT OF LABOR
STATE OFFICE BUILDING CAMPUS
ALBANY, NEW YORK 12240-0100

Variance Petition

of

JB Evans & Sons
Petitioner's Agent

On Behalf of

Syracuse University (c/o James McCumber)
Petitioner

in re

Premises: Vacant Land
720-730 East Washington Street
Syracuse, New York 13202

Removal of Exterior Friable and Non-friable ACM Debris in Soil

File No. 14-0835

DECISION

Case(s) 3

ICR 56

The Petitioner, pursuant to Section 30 of the Labor Law, having filed Petition No. 14-0835 on June 30, 2014 with the Commissioner of Labor for a variance from the provisions of Industrial Code Rule 56 as hereinafter cited on the grounds that there are practical difficulties or unnecessary hardship in carrying out the provisions of said Rule; and the Commissioner of Labor having reviewed the submission of the petitioner dated May 18, 2014; and

Upon considering the merits of the alleged practical difficulties or unnecessary hardship and upon the record herein, the Commissioner of Labor does hereby take the following actions:

Case No. 1	ICR 56-7
Case No. 2	ICR 56-8
Case No. 2	ICR 56-11.6

VARIANCE GRANTED. The Petitioner's proposal is for removal of 9500 cu. yds. of exterior non-friable debris in soil and 20 cu. yds. of exterior friable debris in soil at the subject premises in accordance with the attached 10-page stamped copy of the Petitioner's submittal, is accepted; subject to the Conditions noted below:

THE CONDITIONS

1. A full time independent project monitor shall be on site and responsible for oversight of the abatement contractor during all abatement activities to ensure compliance with ICR 56 and variance conditions and to ensure that no visible emissions are generated. If visible emissions are observe, work practices shall be altered according to the project monitor's recommendations.

Secure the Work Site

2. The entire controlled demolition area and all surrounding portions of the site to be utilized for demolition cleanup, staging areas and regulated abatement work areas, shall be enclosed within a barrier or fence (orange construction fence or snow fence) at a distance of twenty-five (25'). The intent of this barrier is to define the restricted area at the work site, alert the public to the asbestos work and associated hazards, and to prevent unauthorized entry onto the work site.

3. Entry/Exit of all persons and equipment shall be through one designated and secure "doorway" in the barrier or fence, which shall provide an adequate and appropriate means of egress from the work site.

4. Signage in accordance with the requirements of ICR 56-7.4(c) shall be posted on the exterior of the work site boundary fence/barrier, to warn the public of the asbestos hazard.

Establishment of Regulated Areas

5. The restricted work areas, decontamination units, airlocks, and dumpster areas shall be cordoned off at a distance of twenty-five feet (25') where possible, and shall remain vacated except for certified workers until satisfactory clearance air monitoring results have been achieved or the abatement project is complete. These areas shall have Signage posted in accordance with Subpart 56-7.4(c) of this Code Rule. For areas where twenty-five feet isn't possible, the areas shall be cordoned off as practical, and a daily abatement air sample shall be included in the vicinity of the barrier.

6. Non-certified Sheet piling equipment operators and waste hauler truck drivers shall receive asbestos awareness training in accordance with OSHA regulations prior to performing work in the work area. These truck drivers and sheet piling operators shall be restricted to the enclosed cab, shall remain in their vehicles/equipment/machinery, with the windows up and the ventilation system off while temporarily in the regulated work area for waste transfer and sheet piling driving activities only. All equipment operators utilized for demolition or removal activities within the regulated work area must be certified in compliance with ICR 56-3.2. A certified asbestos abatement contractor/supervisor or project monitor shall be onsite at all times to supervise and observe sheet piling operations and to ensure no visible emissions are observed.

7. Critical Barriers to any vicinity structures within 25 foot of the immediate removal area shall be installed in conformance to Subpart 56-7.11(a). All openings (critical barriers) shall be covered with two (2) layers of (6) six-mil fire retardant polyethylene.

Remote Personal Decontamination Units

8. A remote personal decontamination enclosure system that otherwise complies with ICR 56-7.5(d) shall be utilized. A remote waste decontamination enclosure system that otherwise complies with ICR 56-7.5(f) shall be utilized. These enclosures shall be located as close as possible to the regulated work area and shall be removed only after satisfactory clearance air monitoring results have been achieved for the regulated abatement work area. The walkway from the regulated abatement work area to the decontamination system or next work area shall have a cleared pathway. This walk way will be delineated and separated from non-certified personnel access.

9. Each restricted area shall have an attached air lock within which workers shall remove their outer suit, wipe off their inner suit and don a clean outer suit prior to proceeding to another work area or to the remote decontamination unit over a walk way as defined above.

10. If remote decontamination units are to be used, an airlock as defined in Subpart 56-7.5(b) (11) of this Code Rule shall be constructed at the entrance to each restricted area, and shall be large enough to serve as a changing area. Within the airlock, workers shall remove their outer suit, wipe off their inner suit and don a clean outer suit prior to proceeding to another work area or to the remote personal decontamination unit over a walk way as defined above. The airlock/changing area shall not be used as a waste storage area.

11. The walkway from the regulated abatement work area to the decontamination system shall have a cleared pathway. This walk way will be delineated and separated from non-certified personnel access and signage installed as per section 56-7.4(c), to delineate it from the public.

Exterior Project Removal of Non Friable Asbestos Containing Material

12. The provisions of 56-11.5 shall be followed for all non-friable controlled demolition removals, except as modified by this variance.

13. No dry disturbance or removal of asbestos material shall be permitted.

14. Wastewater shall be confined within the controlled demolition regulated abatement work area. All wastewater shall be collected by means of trenching or ditches, properly filtered and directed into a holding tank. Disposal of such wastewater shall be in accordance with applicable laws and regulations. After wastewater has dissipated, the earth surface below the trenches and holding tank shall be scraped and any residual asbestos contamination removed and disposed of as asbestos contaminated waste.

15. All decontamination areas shall be within the regulated abatement work area. An equipment decontamination area shall be cordoned off within the worksite for cleaning of heavy equipment, i.e., backhoes, excavators, loaders, etc. The ground surface in this decontamination area shall be banked on the sides to confine the contaminated wastewater.

16. All demolition debris, structural members, barrier components, used filters and similar items shall be considered to be asbestos containing materials/asbestos contaminated waste and treated accordingly.

17. In addition to the requirement of Subpart 56-4.9(c), air monitoring within the work areas shall be conducted daily. If more than one shift daily is required to accomplish the work, air monitoring within the work area during abatement shall be performed on each shift, preferably at mid-shift timing.

18. All waste must be labeled and shall be transported as an asbestos-containing material by appropriate legal methods.

19. After each section has been excavated and removed, a thorough cleaning of all visible debris must be completed in the immediate area.

20. After abatement of the asbestos, all plastic sheeting and tape will be treated as contaminated material and properly disposed of asbestos waste at the end of the project.

21. Daily abatement air monitoring is required only on days when abatement or support activities such as ACM disturbance or cleaning activities are performed. Include also with the daily abatement air monitoring as per ICR 56-4.9 additional sampling up and down wind of the abatement work area.

22. The contractor shall observe, at a minimum, two-hour waiting (settling/drying) periods.

23. In lieu of post-abatement clearance air monitoring in compliance with ICR-56-9.2(d), the most recent daily abatement air samples collected during removal and cleaning operations in the regulated work area, shall be used for comparison with ICR 56-4.11 clearance criteria. All other applicable provisions of ICR 56-4 shall be followed for the duration of the abatement project.

24. After removal and cleanings are complete and a minimum drying period has elapsed, an authorized and qualified Project Monitor shall determine if the area is dry and free of visible asbestos debris/residue. If the area is determined to be acceptable and the most recent daily abatement air sample results meet 56-4.11 clearance criteria, the final dismantling of the site may begin.

Exterior Project Removal of Friable Asbestos Containing Material

25. No dry disturbance or removal of asbestos material shall be permitted.

26. Under areas where ACM is removed, a drop cloth, made of six (6) mil fire retardant polyethylene sheeting shall be placed on the ground below the work area to prevent spread of any ACM remnants.

27. Asbestos containing material will not be allowed to accumulate on the drop cloth.

28. Prior to removing any material, the regulated abatement work areas, decontamination units, airlocks, and dumpster areas shall be cordoned off at a distance of twenty-five feet (25') and shall remain vacated except for certified workers until satisfactory clearance air monitoring results have been achieved or the abatement project is complete. These areas shall have Signage posted in accordance with Subpart 56-7.4(c) of this Code Rule.

29. The entire cleanup area(s) and all surrounding portions of the site to be utilized for cleanup, staging areas and regulated abatement work areas, shall be enclosed within a barrier or fence to define the restricted area, alert the public to the asbestos work and to prevent unauthorized entry onto the work site.

30. Daily abatement air monitoring within the work areas shall be conducted during the abatement and cleaning activities. The work area air samples shall be collected for each entire work shift with the samples locations being distributed both upwind and downwind of the daily abatement activity.

31. The most recent daily abatement air samples collected during removal and cleaning operations in the regulated work area shall be used for comparison with ICR 56-4.11 clearance criteria.

32. After removal and cleanings are complete the Project Monitor shall determine if the area is dry and free of visible asbestos debris/residue. If the area is determined to be acceptable and the most recent daily abatement air sample results meet 56-4.11 clearance criteria, the final dismantling of the site may begin.

33. All material and soil shall be treated as asbestos contaminated material, except for structural members, pilings, steel components and similar non-porous and non-suspect items that can be fully decontaminated.

34. Removals and cleanup shall include all visible asbestos or suspect asbestos debris, as well as a minimum of two (2) inches of soil around and immediately underneath any asbestos material.

35. In addition to the requirement of Subpart 56-4.9(b-c), air monitoring within the work areas shall be conducted daily during abatement and cleaning activities. Two (2) additional daily air samples shall be collected within the work areas in the immediate vicinity of potential disturbance activities. The work area air samples shall be collected for each entire workshift with the samples locations being distributed both upwind and downwind of the daily abatement activity

36. All ACM debris removed from site shall be disposed of by appropriate legal method.

37. Usage of this variance is limited to those asbestos removals identified in this variance or as outlined in the Petitioner's proposal.

In addition to the conditions required by the above specific variances, the Petitioner shall also comply with the following general conditions:

GENERAL CONDITIONS

1. A copy of this DECISION and the Petitioner's proposals shall be conspicuously displayed at the entrance to the personal decontamination enclosure.

2. This DECISION shall apply only to the removal of asbestos-containing materials from the aforementioned areas of the subject premises.

3. The Petitioner shall comply with all other applicable provisions of Industrial Code Rule 56-1 through 56-12.

4. The NYS Department of Labor Engineering Service Unit retains full authority to interpret this variance for compliance herewith and for compliance with Labor Law Article 30. Any deviation to the conditions leading to this variance shall render this variance Null and Void pursuant to 12NYCRR 56-12.2. Any questions regarding the conditions supporting the need for this

variance and/or regarding compliance hereto must be directed to the Engineering Services Unit for clarification.

5. This DECISION shall terminate on August 31, 2015.

Date: August 25, 2014

PETER M. RIVERA
COMMISSIONER OF LABOR

By

Edward A. Smith, P.E.
Senior Safety and Health Engineer

PREPARED BY: Mark G. Wykes, P.E.
Senior Safety and Health Engineer

REVIEWED BY: Edward A. Smith, P.E.
Senior Safety and Health Engineer

14- 0875

June 23, 2014

Mr. Edward A. Smith, PE
Senior Safety and Health Engineer
Engineering Services Unit
Asbestos Control Bureau
Division of Safety and Health
New York State Department of Labor
W. Averell Harriman State Office Campus
Building 12, Room 154
Albany, NY 12240

Re: Petition for Variance from 12 NYCRR Part 56
Syracuse University Intermodal Transportation Center

Dear Mr. Smith,

Variances from Industrial Code Rule 56 were previously obtained for this site during construction of the Center of Excellence project in Syracuse, NY. At this time, Syracuse University is preparing to develop an additional section of the same parcel. As the site history and types of ACM in the soil are identical, this petition for variance follows closely the procedures of one of the most recent variances granted to Syracuse University for the Center of Excellence Project; that is, variance 09-0370.

BACKGROUND

Syracuse University will be constructing its Intermodal Transportation Center (ITC) on the southern portion of a parcel occupied by the University Center of Excellence Headquarters Campus (727 E. Washington St., Syracuse, NY). The CoE Campus, with one exception, occupies the entire city block. The exception is a truck storage building on the northeast corner of the block owned by the U-Haul Company. The CoE Headquarters building occupies the remainder of the northern portion of the Campus. There are no other residential or occupied commercial operations within 25-feet of the proposed project area except for the truck storage building and CoE Headquarters building. The surrounding vicinity is sparsely occupied by commercial and industrial properties.

The CoE Campus is comprised of two parcels. The western parcel (Midtown Plaza Parcel) was where the former Midtown Plaza building was demolished under project specific variances from 12 NYCRR 56 (variances 98 1351 and 99 0053). The adjacent, eastern parcel was formerly owned by the Syracuse Industrial Development Agency (SIDA parcel). The Center of Excellence Headquarters building occupies the majority of the northern portion of the CoE Campus Site. During construction of the CoE Headquarters, small, scattered chips of asbestos-containing roofing debris were found in the soil fill

JB Evans & Sons, LLC
PO Box 404, Cazenovia, NY 13035
jbevansandsons@gmail.com
Mobile 315-720-2947 Office 315-815-4263

across much of the former Midtown Plaza parcel and a minor amount of friable asbestos debris (insulation) was encountered on the former SIDA parcel Multiple variances, most recently 06-0326, 08-0929 and 09-0370, were granted for the site during the CoE Headquarters construction. It is assumed that the area where the ITC will be constructed (ITC Site) will share the same site characteristics of ACM roofing debris and potentially minor amounts of friable asbestos in the soil, as what was encountered during the CoE Headquarters construction. An aerial photograph of the site is attached for your information.

The ITC Site is currently surrounded by an eight-foot chain link fence with a locking gate. The remainder of the CoE campus site, where construction of the COE Headquarter building and site restoration activities are complete, has a "Cover" (consisting of impervious products in place at a depth of not less than 12-inches) installed on it in accordance with the site's Construction Soil Management Plan.

VARIANCE REQUEST

It is requested that a variance to Industrial Code Rule 56 be granted for the construction of the ITC. The requested variance will facilitate the work of this project in a manner consistent with the remainder of the site, provide efficiencies of operations and will protect the health and safety of construction personnel as well as the general public.

Question 9 ICR Relief sought:

12 NYCRR Parts 56-7, 56-8, 56-11.6

Question 10 Hardship Description:

Construction of the ITC will require excavation of soil for foundations and grading as well as for the burial of utilities, drainage structures and energy infrastructure. The ITC project is expected to continue the local momentum of green construction and is expected to include use of alternative energy sources. Soils requiring excavation are on a site where soils were found to be contaminated by non-friable roofing debris. One portion of the site was also found to have minor amounts of buried, friable ACM debris from unknown sources. The purpose of this variance request is to utilize procedures previously approved for site soils to dictate procedures for new excavations on the site.

Question 11 Proposed Abatement Method:

It is proposed to perform excavation and soil disposal using the following procedures.

Notification

Notification of asbestos removal will be provided in accordance with 12 NYCRR Part 56-3.4(b). Prior to excavation the expected area will be vacated and demarcated with barrier tape and with signs posted in accordance with 56-7.4(a), (b) and (c). Only certified asbestos workers will be permitted to enter the demarcated area or to perform excavation.

Site Demarcation and Access

Prior to excavation, the excavation area will be demarcated with barrier tape and signs posted in accordance with Part 56 requirements. Uncertified workers will not be allowed to enter the regulated area, except for wastes hauler truck drivers that will remain in their enclosed cabs with ventilation systems off. All other personnel in the in the regulated work area shall be certified as per ICR 56.

Isolation of Adjacent Building Openings

Prior to soil excavation within 25 feet horizontally or 10 feet vertically (1 story) of any operable building windows and/or doors of the CoE building, the abatement contractor will seal the operable windows and/or doors air tight with six mil, fire retardant polyethylene sheeting. Prior to soil excavation within 25 feet of operable windows and/or doors of the U-Haul truck storage building, the abatement contractor will request permission from the building owner to cover the applicable windows and/or doors. If permission is granted windows and doors within 25 feet of the excavation area will be sealed air tight with six mil, fire retardant polyethylene sheeting. If permission is denied, this will be documented in the project monitor's logbook and excavation will proceed.

Personnel Decontamination

A small project Personal Decontamination System Enclosure will be constructed remote from, but within 50 ~~75~~-feet of, the work area. Workers will don Tyvek® suits and P-100 filtered respirators in the decontamination unit and proceed along a designated pathway to the demarcated area.

5/15/14 MDW

Waste and Equipment Decontamination

A Waste Decontamination System Enclosure will not be constructed in accordance with 56-7.5(e) or (f). Rather, a decontamination area compliant with 56-11.5(c)(4) and (5) will be constructed as this more accurately addresses the nature of the work.

Soil Testing

Potentially contaminated soils to be excavated will be presumed to be asbestos containing. Testing for metals and other contaminants will be completed prior to excavation for the great majority of samples. The testing will be performed by certified asbestos workers wearing appropriate PPE. This variance request presumes that testing will not identify soils as hazardous waste. It is requested that the spoils disturbed during testing be allowed to be returned to excavation hole pending receipt of sampling results and future site excavation. If sections of abandoned, concrete building slabs must be removed to facilitate testing, pieces of concrete will be returned to the test pit and covered pending excavation, or will be washed by a certified asbestos contractor and stockpiled on site for disposal as C&D waste.

Sheet Piling

For excavation safety and OSHA compliance, it will be necessary to install sheet piling along the south side of the excavation for a length of approximately 390'. The majority of this sheet piling will be installed in unaffected soil outside the footprint of contaminated soil. Ninety feet of piling, however, will be installed to a depth of 20' within the area of contaminated soil. In this area contaminated soil is

covered by 6" – 12" of clean fill. Operation of equipment and uncertified personnel is permitted on the site under the conditions of the previous variances as long as soil below the clean fill is not disturbed.

As installation of sheet piling is a specialty operation which is not commonly performed by asbestos certified contractors, it is requested that the following procedures be permitted.

SEE VARIANCE CONDITIONS 9/15/14 MGW

A contractor/subcontractor who is not certified in asbestos will mobilize labor and equipment on top of clean fill in accordance with conditions of the previous variances for the site as well as the post-construction site management plan. This contractor will not excavate clean fill, but will pound sheet piling down through clean fill and into potentially contaminated soil. It is not expected that non-friable roofing debris in the contaminated soil will be brought up through clean fill to the surface. Air monitoring will be performed during sheeting installation to verify that no airborne asbestos results from the operation; one sample upwind, one downwind and one at the property line closest to the operation will be collected daily during sheeting installation.

Upon completion of the excavation work, some sheet piling in uncontaminated soils will be removed. Sheet piling which was installed through contaminated soil, though, will be left in place to avoid the potential for bringing contamination to the surface. This sheet piling to remain will be cut off 12" below grade by a licensed asbestos contractor and will be left in place.

Soil Handling and Disposal

Soils will be excavated, moved, handled, stored and loaded by certified asbestos workers and supervisors wearing appropriate PPE. Excavated soil will be wetted throughout disturbance, loaded into lined waste containers or lined trucks, covered and disposed of in accordance with federal, state and landfill requirements. It is requested that the Asbestos Contractor have the option of using polyethylene sheeting to line trucks or commercially available, disposable polyethylene truck liners. These liners are not fire rated, but are not to be used for temporary enclosures nor are they to be exposed to any heat source.

Loaded or partially loaded trucks that are not immediately sent off site will also be sealed air and water tight at the end of each work day and then removed from site the following work day. A decontamination pad will be constructed such that all equipment leaving the regulated work area shall have their tires washed of any residual soils. Soils below the decontamination pad will be scraped and disposed of as asbestos waste upon completion of excavation activities.

It is not anticipated that soil will be stockpiled on site. If stockpiling becomes necessary, however, to accommodate daily transportation capacity or to permit additional time for testing for other contaminants, soil will be wet and covered with weighted polyethylene sheeting or tarpaulins by the Abatement Contractor.

Friable Asbestos Debris

Should excavations by the abatement contractor and/or visual observation by the Asbestos Project Monitor reveal friable asbestos debris in the soil, the debris will be handled using the following procedure.

In the event that a minor or small quantity of friable asbestos debris is revealed during excavation, the abatement contractor will cease operations and notify the project monitor. The site of the excavation will already be isolated and demarcated as described above, and personnel will already be asbestos certified and wearing PPE. A decontamination unit will be already present. Accordingly, the abatement contractor will saturate the debris and, using hand methods, remove the debris and adjacent soil. A negative pressure tent or other enclosure will not be employed. Debris and soil will be double bagged and properly disposed of as friable asbestos waste. An air sample will be collected in the immediate vicinity of the debris during removal and two additional air samples will be collected downwind during removal. If these air samples are found to be below 0.01 fibers per cubic centimeter, the area will be considered suitable for resumption of activities.

If friable asbestos debris is discovered that is greater than a minor or small project, operations of the abatement contractor will cease in the vicinity and the debris will be saturated and covered with six mil, fire retardant polyethylene sheeting. Separate barrier tape will be erected around the friable debris at a distance of 10 feet. A separate variance or amendment of this variance will be requested to address this quantity of friable asbestos debris. If warranted, the Project Notification will be amended to include additional quantities of ACM. Work of the abatement contractor may resume as long as they do not come within ten feet of the discovered debris while this separate variance request is being processed.

Air Monitoring and Final Clearance

Five air samples, three downwind and two upwind, will be collected daily during excavation at the perimeter of work area. It is requested that the last set of air samples collected during excavation be considered final air samples, as they will be collected when the potential for airborne fibers is highest. It is requested that aggressive air sampling be waived as the exposed soil on site is likely to cause overloading of samples if aggressed. Rather, normal site activities and air movement will be used.

Following excavation and collection daily air samples, inspection by a certified Asbestos Project Monitor will be conducted. The project monitor's inspection will be a visible examination of the excavation for materials that could be ACM. If the final daily air samples are found to be below 0.01 f/cc or background, whichever is greater, and the project monitor visual inspection is acceptable, it is proposed that the geotextile demarcation layer and isolation barrier be allowed to be installed as described below.

Post excavation isolation barrier and demarcation

Following the demarcation and isolation methods used at the site during construction of the CoE Headquarters building, upon completion of the excavation, a geotextile demarcation layer will be installed at the bottom of excavations to serve as a marker of the beginning of contaminated soil. Subsequently, asbestos signs will be posted on the demarcation layer and shallow sloped or level portions of the excavation will be backfilled with approximately 6" of sand or clean fill on top of the geotextile fabric. As it would be impractical to place sand or fill on steeper excavation slopes (e.g. above 30^0), geotextile will remain exposed on steep slopes until backfilling of the total excavation is performed.

It is requested that Mirafi™ landscaping fabric be permitted for the geotextile demarcation layer. A cut sheet for this material and a sample were attached to petition for variance 09-0370. Additional copies of the cut sheet and samples can be provided if requested. We have researched the longevity of this product but have found no definitive data for it when used for this application. It is predicted to last at least 70 years when used on top of soil where it is exposed to ultraviolet radiation. When used below grade and protected from ultraviolet radiation, it is expected that it will resist degradation for greater than 70 years.

Excavation clearance

It is requested that the asbestos operation be considered complete when excavation operations are completed, soil has been transported for disposal, air sampling and the project monitor visual inspection as described above are complete, and demarcation layer and isolation barrier as described above has been installed. Subsequent to completion of asbestos operations, personnel not certified in asbestos operations will be permitted to work on top of the isolation barrier (i.e. Mirafi™ with six inches of sand or backfill above it). No uncertified personnel will be permitted to walk on sloped portions of the excavation where Mirifi™ is present without a fill cover. When construction and installations below grade and above Mirifi™ have been completed, excavations will be backfilled with clean fill in accordance with the Soil Management Plan developed for the Site.

Site Management Plan

Site soils are included in a deed restriction as well as Construction and Post-Construction Site Management Plans (SMP) that will remain in perpetuity. Due to the discovery of asbestos, the Owner has committed to an SMP which includes restrictions to soil disturbance, maintenance of soil cover and long term management of soils. Copies of the Site Management Plans were attached to petition for variance 09-0370. Additional copies of the SMPs can be provided if requested.

JBE&S and the ITC design team appreciate your assistance in this matter. If we can provide additional information to assist you in considering this request, please contact me at your convenience at 315/720-2947 or by e-mail at jbevansandsons@gmail.com

Respectfully,

James Evans, partner

Cc: Leonard Campolieta, PE – O'Brien & Gere Engineers
James McCumber – Syracuse University

Attachments: Petition for Variance Form SH 752
Aerial Photograph of the Site

Aerial Photo of the Center of Excellence block
Area of excavation for the Intermodal Transportation Center outlined