HAZARDOUS MATERIALS REMEDIAL ACTION REPORT

for

NYU LANGONE MEDICAL CENTER
NEW SCIENCE BUILDING
435 East 30th Street
New York, New York
Block 962, p/o Lot 7501

NYC VCP Project No. 14CVCP211M
OER Project No. 14RHAZ138M
CEQR No. 11BSA029M
Restrictive Declaration No. R-197

Prepared for:

NYU Langone Medical Center – Project Planning and Design
323 East 29th Street
New York, New York 10016

Prepared by:
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LANGAN

January 30, 2018
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LIST OF ACRONYMS

Acronym	Definition
AGV	Air Guideline Value
BUD	Beneficial Use Determination
BGS	Below grade surface
BPMD	Borough President of Manhattan Data
CAMP	Community Air Monitoring Plan
CHASP	Construction Health and Safety Plan
C&D	Construction and Demolition Debris
AWQS	Ambient Water Quality Standards
DER-10	Division of Environmental Remediation Technical Guidance Manual
EC	Engineering Control
ELAP	Environmental Laboratory Approval Program
IC	Institutional Control
NOC	Notice of Completion
NTP	Notice to Proceed
NYC VCP	New York City Voluntary Cleanup Program
NYCDEP	New York City Department of Environmental Protection
NYCDOH	New York City Department of Health
NYCOER	New York City Office of Environmental Remediation
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
PPM	Parts per million
QA/QC	Quality Assurance/Quality Control
QEP	Qualified Environmental Professional
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan
RIR	Remedial Investigation Report
SCG	Standards, Criteria and Guidance
SCO	Soil Cleanup Objective
SMMP	Soil/Materials Management Plan
SMP	Site Management Plan
SVOCs	Semivolatile Organic Compounds
UST	Underground Storage Tank
VOCs	Volatile Organic Compounds

CERTIFICATION

I, Jason Hayes, certify to the following:

- I am currently a registered professional engineer licensed by the State of New York.
- I performed professional engineering services and had primary direct responsibility for implementation of the remedial program for the NYU Langone Medical Center – New Science Building (435 East 30th Street) site, New York City Office of Environmental Remediation (OER) Voluntary Cleanup Program (VCP) No. 14CVCP211M.
- I have reviewed this document, to which my signature and seal are affixed.
- Engineering Controls implemented during this remedial action were designed by Michelle Lapin, PE (NYS PE License No. 073934) of AKRF, Inc. (AKRF) and achieve the goals established in the January 2014 Remedial Action Work Plan (RAWP) by AKRF for this site.
- The Engineering Controls constructed during this remedial action were professionally observed by me or by a person under my direct supervision and (1) are consistent with the Engineering Control design established in the RAWP and (2) are accurately reflected in the text and drawings for as-built design reported in this Remedial Action Report.
- To the best of my knowledge, the January 2014 RAWP and January 29, 2014 Stipulation List were implemented and the requirements in those documents have been substantively complied with.
- To the best of my knowledge; contaminated soil, fill, liquids, or other material from the site were taken to facilities licensed to accept this material in full compliance with applicable laws and regulations.

Jason Hayes
Name

089491
PE License Number

Signature

1-30-2018
Date

EXECUTIVE SUMMARY

New York University Langone Medical Center (NYULMC) has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a development site within a property located at 435 East 30th Street in the Kips Bay neighborhood of Manhattan, New York (the site). Per City Environmental Quality Review (CEQR) No. 11BSA029M, the site has a Restrictive Declaration (R-197) for 'Hazmat' and was assigned NYC VCP Project No. 14CVCP211M. Requirements to satisfy the Restrictive Declaration parallel those of the VCP.

A Remedial Investigation (RI) was performed by AKRF, Inc. (AKRF) in November 2013 to compile and evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). This Remedial Action Report (RAR) describes the remedial action performed pursuant to the New York City Office of Environmental Remediation (OER)-approved January 2014 RAWP and January 29, 2014 RAWP Stipulation List; both certified by AKRF. The remedial action described in this RAR has rendered the site protective of public health and the environment consistent with the use of the property, protects public health and the environment, and complies with applicable environmental standards, criteria, guidance, applicable laws, and regulations.

Site Location and Background

The 36,000-square-foot site is identified as Block 962, part of Lot 7501 on the New York City Tax Map and is part of the NYULMC 'superblock' (total of 362,642 square feet). The site is bound by NYULMC facilities followed by East 34th Street to the north, the FDR Drive service road to the east, NYULMC facilities followed by East 30th Street to the south, and the NYC Office of the Chief Medical Examiner (OCME) followed by First Avenue to the west. The site was created by filling portions of the East River in the mid-1800s and early 1900s. Based on data provided in the November 2, 2012 Geotechnical Engineering Study – Science Building, prepared by Langan, geotechnical borings encountered a 17.5 to 40-foot-thick layer of historic fill material, which included sand, gravel, silt, brick, and concrete with some timber and rubble (likely associated with the historical East River bulkhead). Prior to redevelopment, the Site consisted of three NYULMC buildings: a dormitory, a lecture hall, and an office building. The former structures contained partial cellars.

Summary of Redevelopment

Redevelopment consisted of the construction of a new 15-story research building with a partial cellar in the northwestern portion of the site and landscaped areas along the northern, eastern, and southern site boundaries. The new building has a 34,300-square-foot ground floor, which includes a lobby, conference rooms, offices, a kitchen, cafeteria, loading docks, and storage/mechanical areas. The 9,200-square-foot cellar will include storage and mechanical

areas including a stormwater detention tank, a fuel oil tank and pump room, sump rooms, and elevator pits. The building will offer research and support space, seminar and conference rooms, and administrative offices.

Excavation for the 2.5-foot-thick mat foundation slab for the partial cellar extended to elevation[1] (el.) -12 (about 18 to 19 feet below grade surface [feet bgs]). Excavation for the 14-inch thick ground-floor foundation slab extended to variable elevations between el. 4 and -2.5 (about 2 to 8.5 feet bgs) to accommodate slab elevation changes, pile caps, and foundation elements. Deeper excavations were required for footings, pits and sumps and extended to el. -19 (about 25 to 26 feet bgs). Dewatering was necessary to accommodate excavation below the water table, which is between 6 and 15 feet bgs. A total of 12,640.03 tons of historic fill material was excavated and transported off-site for disposal during foundation construction. About 180 cubic yards of ¾-inch recycled concrete aggregate (RCA) was imported for site grading and 11 cubic yards of 1.5-inch virgin quarry stone was imported to construct a construction truck ramp and was ultimately disposed of off-site when the ramp was removed. The landscaped and concrete sidewalk areas around the perimeter of the site were completed in October 2017. The current zoning designation for the property is R8. The new building use is consistent with existing zoning designations.

Summary of Surrounding Property

The site is bounded by NYULMC facilities followed by East 34th Street to the north, the FDR Drive service road to the east, NYULMC facilities followed by East 30th Street to the south, and the NYC OCME followed by First Avenue to the west. The off-site portion of the NYULMC superblock is occupied by medical buildings including a hospital. Amtrak train tunnels exist north of the site and beneath the northern portion of the NYULMC superblock. The surrounding area is occupied by medical, office and residential buildings (many with ground floor retail/commercial uses) zoned for commercial and residential uses. Additional medical facilities are located within a 500-foot radius of the site.

Summary of Past Uses of Site

The site was created in the mid-1800s and early 1900s by filling the East River with historic fill material consisting of sand, gravel, silt, brick, concrete, timber, and rubble likely associated with the historical East River bulkhead. The site was originally improved with a warehouse, a lumber yard, an airplane factory and hangar, and a laboratory building. Prior to demolition for redevelopment, the site was used by NYULMC as a dormitory, a lecture hall, and offices with

[1] Borough President of Manhattan Datum

partial cellars. The buildings were constructed between about 1952 and 1973 and demolished in 2014.

The Areas of Concern identified during previous investigations are described below:

1. Urban fill materials beneath the Site;
2. Past Site uses including a lumber yard, an airplane factory and a hangar, and a laboratory; and
3. Past and present uses in the surrounding area, including manufacturing, a Standard Gas Light Co. manufactured gas holder facility, garages and filling stations, and hospital/laboratory buildings.

Summary of the Remedial Investigation Scope of Work

An RI was performed by AKRF in 2013 and the results are documented in the December 2013 Remedial Investigation Report (RIR). On behalf of NYULMC, AKRF performed the following tasks at the Site:

1. Conducted a Site inspection to identify AOCs and physical obstructions (e.g. structures);
2. Installed 8 soil borings across the Site and collected 16 soil samples for chemical analysis from the borings to evaluate soil quality;
3. Collected 3 soil samples from 3 hand-dug test pits along the northern Site boundary for chemical analysis to evaluate soil quality;
4. Installed 3 temporary monitoring wells and collected 3 samples for chemical analysis to evaluate groundwater quality;
5. Sampled 1 existing permanent geotechnical monitoring well and collected a sample for chemical analysis to evaluate groundwater quality; and
6. Installed 5 soil vapor probes throughout the Site to collect 5 samples for chemical analysis.

Summary of Findings of Remedial Investigation

The results of the RI are summarized as follows:

1. Elevation of pre-development foundation slabs ranged from el. 8 to -5 (about 2 feet above sidewalk grade to about 12 feet bgs).
2. Groundwater elevation ranges from el. 0 to -3 (about 6 to 15 feet bgs).
3. Groundwater flow was not determined during the RI but, based on topography, is believed to be from west to east (toward the East River). Groundwater elevation and

flow direction may be tidally influenced as the East River is about 200 feet east of the site.

4. On-site stratigraphy, from the surface down, consisted of a 17.5- to 40-foot-thick layer of historic fill material consisting of sand, gravel, silt, brick and concrete with some timber and rubble (likely associated with a historical East River bulkhead), underlain by a layer of silty clay, silty sand, and/or silt. A layer of decomposed bedrock was encountered in several borings drilled by Langan between 95 to 120 feet bgs; historical boring data indicates that this layer may extend to more than 190 feet bgs. The former East River bulkhead ran north-south through the central portion of the site, based on review of historical maps and investigation plans. Soil borings show that the historical East River bulkhead appeared to run north-south through the central portion of the site.

5. Visual, olfactory, or instrumentation (photoionization detector [PID]) evidence of a spill or release were not apparent during field activities. Soil analytical results were compared to the Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs) and Restricted Use Commercial SCOs. Two volatile organic compounds (VOCs), benzene (maximum of 0.34 milligrams per kilogram [mg/kg]) and total xylenes (maximum of 1.75 mg/kg), were detected at concentrations exceeding the Unrestricted Use SCOs but below the Commercial SCOs. Seven semivolatile organic compounds (SVOCs) including benzo(a)anthracene (maximum of 4 mg/kg), benzo(a)pyrene (maximum of 4.4 mg/kg), benzo(b)fluoranthene (maximum of 5.3 mg/kg), benzo(k)fluoranthene (maximum of 2.2 mg/kg), chrysene (maximum of 4 mg/kg), dibenzo(a,h)anthracene (maximum of 1 mg/kg), and indeno(1,2,3-cd)pyrene (maximum of 3.7 mg/kg) were detected at concentrations exceeding the Unrestricted Use SCOs, with benzo(a)pyrene and dibenzo(a,h)anthracene detected at concentrations exceeding the Commercial SCOs. Six metals including arsenic (maximum of 38 mg/kg), copper (maximum of 110 mg/kg), chromium (maximum of 39 mg/kg), lead (maximum of 280 mg/kg), mercury (maximum of 0.71 mg/kg), and zinc (maximum of 290 mg/kg) were detected at concentrations exceeding the Unrestricted Use SCOs in shallow soil samples. Arsenic concentrations exceeded the Commercial SCO. Three pesticides including 4,4'-DDD (0.00582 mg/kg), 4,4'-DDE (maximum of 0.00539 mg/kg), and 4,4'-DDT (maximum of 0.0218 mg/kg) were detected at concentrations exceeding the Unrestricted Use SCOs in three shallow soil samples but not exceeding the Commercial SCOs. Polychlorinated biphenyls (PCBs) were not detected at concentrations exceeding the Unrestricted Use SCOs.

6. Groundwater analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) Technical & Operational Series (TOGS) Ambient

Water Quality Standards and Guidance Values (SGVs) and Groundwater Effluent Limitations for Class GA groundwater. VOCs, pesticides, and PCBs were not detected at concentrations above the SGVs. Several SVOCs including benzo(a)anthracene (maximum 0.24 micrograms per liter [µg/L]), benzo(a)pyrene (maximum of 0.21 µg/L), benzo(b)fluoranthene (maximum of 0.23 µg/L), benzo(k)fluoranthene (maximum of 0.17 µg/L), chrysene (maximum of 0.26 µg/L), and indeno(1,2,3-cd)pyrene (maximum of 0.15 µg/L) were detected above the SGVs. Several metals including antimony (5.53 µg/L), iron (maximum of 65,600 µg/L), magnesium (maximum of 735,000 µg/L), manganese (48,940 µg/L), selenium (maximum of 50.4 µg/L), and sodium (maximum of 6,410,000 µg/L) were detected at concentrations exceeding the SGVs. Concentrations of SVOCs and metals were attributed to sediment entrained in the samples.

7. Soil vapor analytical results were compared to the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York 'Decision Matrices'. Carbon tetrachloride was not detected. Tetrachloroethene (maximum of 1.76 micrograms per cubic meter [µg/m^3]) and 1,1,1-trichloroethane (maximum of 2.62 µg/m^3) were detected at concentrations where no further action is recommended. Trichloroethene was detected at a maximum concentration of 1.76 µg/m^3, which indicates that reasonable and practical actions to identify sources and reduce exposure is recommended. Acetone (maximum of 1,310 µg/m^3) and p/m-xylene (maximum of 764 µg/m^3) were the VOCs detected at the highest concentrations. Benzene was detected at a maximum concentration of 48.9 µg/m^3.

Summary of the Remedial Action

The remedial action was performed in accordance with the RAWP and RAWP Stipulation List and achieved the remedial action objectives established for the project. The remedial action was evaluated in an alternatives analysis and was determined to be protective of human health and the environment; compliant with standards, criteria, and guidelines; effective in the short-term; effective in the long-term, capable of attaining appropriate levels of reduction of toxicity, mobility, or volume of contaminated material; implementable; cost effective; acceptable to the community; consistent with land uses; and sustainable.

A summary of the milestones achieved in the remedial action is as follows: A Pre-Application Meeting was held on December 19, 2012. A Remedial Investigation (RI) was performed in August and October 2013. A RI Report was prepared to evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A Site Contact List was established. A draft RAWP was prepared and released with a Fact Sheet on January 17, 2014 for a 30-day public comment period. The RAWP and Stipulation List dated January 27, 2014 was approved by the New York City Office of Environmental Remediation (OER) on March 4,

2014. An on-site Pre-Construction Meeting was held on April 25, 2014 and was attended by OER, Turner, and Langan. The remedial action was begun November 25, 2014 and excavation activities completed July 2, 2015. Foundation concrete formwork and placement and subgrade waterproofing/vapor barrier system installation were substantially complete by September 2015.

The remedial action consisted of the following:

1. Prepared a Community Protection Statement and performed required NYC VCP citizen participation activities according to an approved Citizen Participation Plan (CPP)
2. Established and achieved site-specific (Track 4) SCOs. Track 4 SCOs were 6 NYCRR Part 375 Commercial SCOs with the following modifications:
    a. Total SVOCs: 500 parts per million (ppm)
    b. Total PCBs: 1 ppm
    c. Arsenic: 23 ppm
    d. Barium: 500 ppm
    e. Lead: 1,200 ppm
3. Mobilized equipment and personnel in November 2014, established site security, completed utility mark outs, and marked and staked excavation areas
4. Collected waste characterization samples prior to excavation activities. Nine waste characterization sample sets (one grab sample and one composite sample per set) were collected by Long Island Analytical Laboratories, Inc. on September 20, 2014. Waste characterization samples were collected at a frequency dictated by disposal facilities.
5. Performed activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations
6. Implemented a Community Air Monitoring Plan (CAMP) for particulates and VOCs during excavation activities
7. Implemented stormwater pollution prevention measures in compliance with applicable laws and regulations
8. Dewatered groundwater was pretreated via settling tank and discharged into the New York City Department of Environmental Protection (NYCDEP) sewer system in accordance with an NYCDEP discharge permit number 707714. Moretrench designed, permitted, and provided the dewatering system, which was operated by the foundation contractor, John Civetta & Sons. The dewatering system consisted of a vacuum well

point system connected to a PVC header pipe connected to a settling tank. From the settling tank, dewatered fluids were gravity fed to a 4 feet by 2 feet by 4 feet storm sewer located along the east side of the site. The storm sewer discharged to the NYCDEP combined sewer system. The NYCDEP approved the discharge of 69,120,000 gallons of water

9. Screened excavated historic fill material during intrusive work for indications of impacts by visual and olfactory observation, and instrumental inspection using a calibrated PID equipped with a 10.6 electron volt (eV) lamp
10. Conducted materials management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials
11. Transported and disposed of all soil/fill material at permitted facilities in accordance with all applicable laws and regulations for handling, transporting, and disposing, and the RAWP
12. Excavated and removed historic fill material with concentrations exceeding the Track 4 SCOs. The following excavations were performed:
    a. Excavation within the cellar footprint extended to depths ranging from about 13 to 19 feet bgs to reach the cellar slab grade, with deeper excavation to about 20 to 26 feet bgs for pile caps and sump pits. Excavations within the building footprint but outside of the cellar area extended to about 2 to 10 feet bgs. Excavation for landscaped areas at the building footprint extended to about 2 feet bgs.
13. A total of 12,640.03 tons of historic fill material was excavated and disposed of at Clean Earth of Carteret (CEC), located at 24 Middlesex Avenue, Carteret, New Jersey
14. Collected and analyzed post-excavation confirmation samples, which determined that Track 4 SCOs were achieved (with the exception of concentrations of benzo[a]pyrene in two documentation samples, which complied with the total SVOC site-specific SCO)
15. Imported 180 cubic yards of ¾-inch RCA and 11 cubic yards of 1.5-inch virgin quarry stone
16. Constructed an engineered composite cover system consisting of: 14- to 30-inch-thick concrete foundation slabs; a minimum of two feet of clean fill in landscaped areas; or a 4-inch-thick concrete sidewalk to prevent human exposure to residual soil/fill remaining under the Site. The contractor for the cover construction was John Civetta & Sons, Inc.
17. Constructed a waterproofing/vapor barrier system (Grace Preprufe 300R [47 mils] and

Bituthene 4000 [59 mils]) beneath the foundation slabs and on sub-grade foundation walls. Seams were sealed using the Grace Preprufe adhesive applied to the membrane by the manufacturer and/or Preprufe tape. Grace Preprufe tape was wrapped around typical utility penetrations. Grace Bituthene Liquid Membrane was then applied around the penetrations to provide a watertight seal between the Preprufe membrane and Preprufe tape. The contractor for the Vapor Barrier System construction was John Civetta & Sons, Inc.

18. Residual soil is present beneath the cover layer and will be subject to Site Management under this Remedial Action. In landscaped areas, residual soil was demarcated using geosynthetic material placed beneath the landscaped cover layer.
19. Submitted this RAR, which defines the site boundaries, describes the remedial action, certifies that the remedial requirements defined in the RAWP have been achieved, lists deviations from the RAWP, describes Engineering and Institutional Controls (ECs/ICs) implemented at the site, and includes a Sustainability Statement
20. Submitted a Site Management Plan (SMP) for long term management of residual soil, including plans for the operation, maintenance, inspection, and certification of the performance of ECs and ICs. Inspections will be performed annually. Inspection and certification reports will be submitted by July 30, 2021 (for the reporting period calendar years 2018-2020), July 30, 2024 (for the reporting period calendar years 2021-2023) and every three years thereafter (for the reporting period consisting of the prior calendar years). Inspection and certification reports will cover calendar years since the prior reporting period.
21. The site will continue to be registered with a Restrictive Declaration.

1.0 SITE BACKGROUND

New York University Langone Medical Center (NYULMC) enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a development within a property located at 435 East 30th Street in the Kips Bay neighborhood of Manhattan, New York (the site). The site was assigned NYC VCP Project No. 14CVCP211M. Per City Environmental Quality Review (CEQR) No. 11BSA029M, the site has a Restrictive Declaration (R-197) for 'Hazmat'. Requirements to satisfy the Restrictive Declaration parallel those of the VCP.

A Remedial Investigation (RI) was performed by AKRF, Inc. (AKRF) in November 2013 to compile and evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). This Remedial Action Report (RAR) describes the remedial action performed pursuant to the New York City Office of Environmental Remediation (OER)-approved January 2014 RAWP and January 29, 2014 RAWP Stipulation List; both prepared by AKRF. The remedial action described in this RAR has rendered the site protective of public health and the environment consistent with the use of the property, protects public health and the environment, and complies with applicable environmental standards, criteria, guidance, applicable laws, and regulations.

1.1 Site Location and Background

The 36,000-square-foot site is identified as Block 962, part of Lot 7501 on the New York City Tax Map and is part of the NYULMC 'superblock' (total of 362,642 square feet). The site is bound by NYULMC facilities followed by East 34th Street to the north, the FDR Drive service road to the east, NYULMC facilities followed by East 30th Street to the south, and the NYC Office of the Chief Medical Examiner (OCME) followed by First Avenue to the west. The site was created by filling portions of the East River in the mid-1800s and early 1900s. Per the 2 November 2012 Geotechnical Engineering Study prepared by Langan, geotechnical borings encountered a 17.5 to 40-foot-thick layer of historic fill material which included sand, gravel, silt, brick, and concrete with some timber and rubble (likely associated with the historical East River bulkhead). Prior to demolition for redevelopment, the site was used by NYULMC as a dormitory, a lecture hall, and offices with partial cellars. The buildings were constructed between about 1952 and 1973 and demolished in 2014.

A site location map is provided as Figure 1, and a site plan is provided as Figure 2.

1.2 Redevelopment Plan

Redevelopment consists of a new 15-story research building with a partial cellar in the northwestern portion of the site and landscaped areas along the northern, eastern, and southern site boundaries. The new building has a 34,300-square-foot ground floor, which includes a lobby, conference rooms, offices, a kitchen, cafeteria, loading docks, and

storage/mechanical areas. The 9,200-square-foot cellar includes storage and mechanical areas including a stormwater detention tank, a fuel oil tank and pump room, sump rooms, and elevator pits. The building will provide research and support space, seminar and conference rooms, and administrative offices. A site development plan is provided as Figure 3.

Excavation extended to varying depths because of the former partial basement, variable slab elevations, and localized deeper excavations for pits. Excavation for the 2.5-foot thick mat foundation slab for the partial cellar extended to elevation[2] (el.) -12 (18 to 19 feet below grade surface [bgs]). Excavation for the 14-inch thick ground-floor foundation slab extended to variable elevations between el. 4 and -5 (about 2 to 11 feet bgs) to accommodate slab elevation changes, pile caps, and foundation elements. Deeper excavations were required for footings, pits and sumps and extended to el. -19 (about 25 to 26 feet bgs). Dewatering was necessary to accommodate excavation below the water table, which is between 6 and 15 feet bgs. A total of 12,640.03 tons of historic fill material was excavated and transported off-site for disposal during foundation construction. About 180 cubic yards of ¾-inch recycled concrete aggregate (RCA) was imported for general site regrading around pile caps and 11 cubic yards of 1.5-inch virgin quarry stone was imported to construct a temporary construction truck ramp and was ultimately disposed of off-site when the ramp was removed. The landscaped and concrete sidewalk areas around the perimeter of the site were completed in October 2017. The current zoning designation for the property is R8. The new building use is consistent with existing zoning designations. The excavation depths and backfill locations are depicted on Figure 4.

1.3 Description of Surrounding Property

The site is bounded by NYULMC facilities followed by East 34th Street to the north, the FDR Drive service road to the east, NYULMC facilities followed by East 30th Street to the south, and the NYC OCME followed by First Avenue to the west. The off-site portion of the NYULMC superblock is occupied by medical buildings including a hospital. Amtrak train tunnels exist north of the site and beneath the northern portion of the NYULMC superblock. The surrounding area is occupied by medical, office and residential buildings (many with ground floor retail/commercial uses) zoned for commercial and residential uses. Additional medical facilities are located within a 500-foot radius of the site.

1.4 Summary of Past Site Uses and Areas of Concern

The site's landmass was created in the mid-1800s and early 1900s by filling the East River with historic fill material consisting of sand, gravel, silt, brick, concrete, timber, and rubble likely

[2] Borough President of Manhattan Datum

associated with the historical East River bulkhead. The site was originally improved with a warehouse, a lumber yard, an airplane factory and hangar, and a laboratory building. Prior to redevelopment, the site was used by NYULMC as a dormitory, a lecture hall, and offices with partial cellars, which were constructed between about 1952 and 1973 and demolished in 2014.

Per a Phase I ESA and a RI, AKRF identified the following Areas of Concern (AOCs).

4. Urban fill materials beneath the Site;
5. Past Site uses including a lumber yard, an airplane factory and a hangar, and a laboratory; and
6. Past and present uses in the surrounding area, including manufacturing, a Standard Gas Light Co. facility manufactured gas holder facility, garages and filling stations, and hospital/laboratory buildings.

1.5 Summary of Remedial Investigation Scope of Work

An RI was performed by AKRF in 2013 and the results are documented in the December 2013 Remedial Investigation Report (RIR). On behalf of NYULMC, AKRF performed the following tasks at the Site:

1. Conducted a Site inspection to identify AOCs and physical obstructions (e.g. structures);
2. Installed 8 soil borings across the Site and collected 16 soil samples for chemical analysis from the borings to evaluate soil quality;
3. Collected 3 soil samples from 3 hand-dug test pits along the northern Site boundary for chemical analysis to evaluate soil quality;
4. Installed 3 temporary monitoring wells and collected 3 samples for chemical analysis to evaluate groundwater quality;
5. Sampled 1 existing permanent geotechnical monitoring well and collected a sample for chemical analysis to evaluate groundwater quality; and
6. Installed 5 soil vapor probes throughout the Site to collect 5 samples for chemical analysis.

Summary of Findings of Remedial Investigation

The results of the RI are summarized as follows:

1. Elevation of pre-development foundation slabs ranged from el. 8 to -5 (2 feet above sidewalk grade to 12 feet bgs).
2. Groundwater elevation ranges from el. 0 to -3 (about 6 to 15 feet bgs).

3. Groundwater flow was not determined during the RI but, based on topography, is believed to be from west to east (toward the East River). Groundwater elevation and flow direction may be tidally influenced as the East River is about 200 feet east of the site.

4. On-site stratigraphy, from the surface down, consisted of a 17.5- to 40-foot-thick layer of historic fill material consisting of sand, gravel, silt, brick and concrete with some timber and rubble (likely associated with a historical East River bulkhead), underlain by a layer of silty clay, silty sand, and/or silt. A layer of decomposed bedrock was encountered in several borings drilled by Langan between 95 to 120 feet bgs; historical boring data indicates that this layer may extend to more than 190 feet bgs. The former East River bulkhead ran north-south through the central portion of the site, based on review of historical maps and investigation plans. The historical East River bulkhead appeared to run north-south through the central portion of the site, based on soil boring results.

5. No visual, olfactory, or instrumentation (photoionization detector [PID]) evidence of a spill or release were apparent during field activities. Soil analytical results were compared to the Title 6 of the New York Codes, Rules and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs) and Restricted Use Commercial SCOs. Two volatile organic compounds (VOCs), benzene (maximum of 0.34 milligrams per kilogram [mg/kg]) and total xylenes (maximum of 1.75 mg/kg), were detected at concentrations exceeding the Unrestricted Use SCOs but below the Commercial SCOs. Seven semi-volatile organic compounds (SVOCs) including benzo(a)anthracene (maximum of 4 mg/kg), benzo(a)pyrene (maximum of 4.4 mg/kg), benzo(b)fluoranthene (maximum of 5.3 mg/kg), benzo(k)fluoranthene (maximum of 2.2 mg/kg), chrysene (maximum of 4 mg/kg), dibenzo(a,h)anthracene (maximum of 1 mg/kg), and indeno(1,2,3-cd)pyrene (maximum of 3.7 mg/kg) were detected at concentrations exceeding the Unrestricted Use SCOs, with benzo(a)pyrene and dibenzo(a,h)anthracene detected at concentrations exceeding the Commercial SCOs. Six metals including arsenic (maximum of 38 mg/kg), copper (maximum of 110 mg/kg), chromium (maximum of 39 mg/kg), lead (maximum of 280 mg/kg), mercury (maximum of 0.71 mg/kg), and zinc (maximum of 290 mg/kg) were detected at concentrations Exceeding the Unrestricted Use SCOs in shallow soil samples. Arsenic concentrations exceeded the Commercial SCO. Three pesticides including 4,4'-DDD (0.00582 mg/kg), 4,4'-DDE (maximum of 0.00539 mg/kg), and 4,4'-DDT (maximum of 0.0218 mg/kg) were detected at concentrations exceeding the Unrestricted Use SCOs in three shallow soil samples but not exceeding the Commercial SCOs. Polychlorinated biphenyls (PCBs) were not detected at concentrations exceeding the Unrestricted Use SCOs.

6. Groundwater analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) Technical & Operational Series (TOGS) Ambient Water Quality Standards and Guidance Values (SGVs) and Groundwater Effluent Limitations for Class GA groundwater. VOCs, pesticides, and PCBs were not detected at concentrations exceeding the SGVs. Several SVOCs including benzo(a)anthracene (maximum 0.24 micrograms per liter [µg/L]), benzo(a)pyrene (maximum of 0.21 µg/L), benzo(b)fluoranthene (maximum of 0.23 µg/L), benzo(k)fluoranthene (maximum of 0.17 µg/L), chrysene (maximum of 0.26 µg/L), and indeno(1,2,3-cd)pyrene (maximum of 0.15 µg/L) were detected at concentrations exceeding the SGVs. Several metals including antimony (5.53 µg/L), iron (maximum of 65,600 µg/L), magnesium (maximum of 735,000 µg/L), manganese (48,940 µg/L), selenium (maximum of 50.4 µg/L), and sodium (maximum of 6,410,000 µg/L) were detected at concentrations exceeding the SGVs. Concentrations of SVOCs and metals were attributed to sediment entrained in the samples.

7. Soil vapor analytical results were compared to the NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York 'Decision Matrices'. Carbon tetrachloride was not detected. Tetrachloroethene (maximum of 1.76 micrograms per cubic meter [µg/m^3]) and 1,1,1-trichloroethane (maximum of 2.62 µg/m^3) were detected at concentrations where no further action is recommended. Trichloroethene was detected at a maximum concentration of 1.76 µg/m^3, which indicates that reasonable and practical actions to identify sources and reduce exposure is recommended. Acetone (maximum of 1,310 µg/m^3) and p/m-xylene (maximum of 764 µg/m^3) were the VOCs detected at the highest concentrations. Benzene was detected at a maximum concentration of 48.9 µg/m^3.

Previous environmental reports are included in Appendix A.

1.6 Waste Characterization Study

A waste characterization study was conducted on September 20, 2014 by Long Island Analytical Laboratory (LIAL). Sixteen test-pits were excavated to depths of up to 14 feet bgs. Excavated material consisted of historic fill material and construction and demolition debris. Groundwater was observed in test pits at 3 to 10 feet bgs. Apparent environmental impacts were not observed based on visual and olfactory observations and the absence of elevated photoionization detector (PID) readings measured on excavated material. LIAL collected 9 grab samples and 9 composite samples for analysis. The waste characterization study sampling map and laboratory analytical reports are included in Appendix B.

2.0 DESCRIPTION OF REMEDIAL ACTIONS

The remedial action was performed in accordance with the RAWP and RAWP Stipulation List and achieved the remedial action objectives established for the project. The remedial action was evaluated in an alternatives analysis and was determined to be protective of human health and the environment; compliant with standards, criteria, and guidelines; effective in the short-term; effective in the long-term, capable of attaining appropriate levels of reduction of toxicity, mobility, or volume of contaminated material; implementable; cost effective; acceptable to the community; consistent with land uses; and sustainable.

A summary of the milestones achieved in the remedial action is as follows: A Pre-Application Meeting was held on December 19, 2012. A Remedial Investigation (RI) was performed in August and October 2013. A RI Report was prepared to evaluate data and information necessary to develop a Remedial Action Work Plan (RAWP). A Site Contact List was established. A draft RAWP was prepared and released with a Fact Sheet on January 17, 2014 for a 30-day public comment period. The RAWP and Stipulation List dated January 27, 2014 was approved by the New York City Office of Environmental Remediation (OER) on March 4, 2014. An on-site Pre-Construction Meeting was held on April 25, 2014 and was attended by OER, Turner, and Langan. The remedial action was begun November 25, 2014 and excavation activities completed July 2, 2015. Foundation concrete formwork and placement and subgrade waterproofing/vapor barrier system installation were substantially complete by September 2015.

The remedial action consisted of the following:

1. Prepared a Community Protection Statement and performed required NYC VCP citizen participation activities according to an approved Citizen Participation Plan (CPP)
2. Established and achieved site-specific (Track 4) SCOs. Track 4 SCOs were 6 NYCRR Part 375 Commercial SCOs with the following modifications:
    a. Total SVOCs: 500 parts per million (ppm)
    b. Total PCBs: 1 ppm
    c. Arsenic: 23 ppm
    d. Barium: 500 ppm
    e. Lead: 1,200 ppm
3. Mobilized equipment and personnel in November 2014, established site security, completed utility mark outs, and marked and staked excavation areas
4. Collected waste characterization samples prior to excavation activities. Nine waste characterization sample sets (one grab sample and one composite sample per set) were

collected by Long Island Analytical Laboratories, Inc. on September 20, 2014. Waste characterization samples were collected at a frequency dictated by disposal facilities.

5. Performed activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations
6. Implemented a Community Air Monitoring Plan (CAMP) for particulates and VOCs during excavation activities
7. Implemented stormwater pollution prevention measures in compliance with applicable laws and regulations
8. Dewatered groundwater was pretreated via settling tank and discharged into the New York City Department of Environmental Protection (NYCDEP) sewer system in accordance with an NYCDEP discharge permit number 707714. Moretrench designed, permitted, and provided the dewatering system, which was operated by the foundation contractor, John Civetta & Sons. The dewatering system consisted of a vacuum well point system connected to a PVC header pipe connected to a settling tank. From the settling tank, dewatered fluids were gravity fed to a 4 feet by 2 feet by 4 feet storm sewer located along the east side of the site. The storm sewer discharged to the NYCDEP combined sewer system. The NYCDEP approved the discharge of 69,120,000 gallons of water
9. Screened excavated historic fill material during intrusive work for indications of impacts by visual and olfactory observation, and instrumental inspection using a calibrated PID equipped with a 10.6 electron volt (eV) lamp
10. Conducted materials management of excavated materials including temporarily stockpiling and segregating in accordance with defined material types and to prevent co-mingling of contaminated material and non-contaminated materials
11. Transported and disposed of all soil/fill material at permitted facilities in accordance with all applicable laws and regulations for handling, transporting, and disposing, and the RAWP
12. Excavated and removed historic fill material with concentrations exceeding the Track 4 SCOs. The following excavations were performed:
    a. Excavation within the cellar footprint extended to depths ranging from about 13 to 19 feet bgs to reach the cellar slab grade with deeper excavation to about 20 to 26 feet bgs for pile caps and sump pits. Excavations within the building footprint but outside of the cellar area extended to about 2 to 10 feet bgs. Excavation for landscaped areas at the building footprint extended to about 2 feet bgs.

13. A total of 12,640.03 tons of historic fill material was excavated and disposed of at Clean Earth of Carteret (CEC), located at 24 Middlesex Avenue, Carteret, New Jersey
14. Collected and analyzed post-excavation confirmation samples, which determined that Track 4 SCOs were achieved (with the exception of concentrations of benzo[a]pyrene in two documentation samples, which complied with the total SVOC site-specific SCO)
15. Imported 180 cubic yards of ¾-inch RCA and 11 cubic yards of 1.5-inch virgin quarry stone
16. Constructed an engineered composite cover system consisting of: 14- to 30-inch-thick concrete foundation slabs; a minimum of two feet of clean fill in landscaped areas; or a 4-inch-thick concrete sidewalk to prevent human exposure to residual soil/fill remaining under the Site. The contractor for the cover construction was John Civetta & Sons, Inc.
17. Constructed a waterproofing/vapor barrier system (Grace Preprufe 300R [47 mils] and Bituthene 4000 [59 mils]) beneath the foundation slabs and on sub-grade foundation walls. Seams were sealed using the Grace Preprufe adhesive applied to the membrane by the manufacturer and/or Preprufe tape. Grace Preprufe tape was wrapped around typical utility penetrations. Grace Bituthene Liquid Membrane was then applied around the penetrations to provide a watertight seal between the Preprufe membrane and Preprufe tape. The contractor for the Vapor Barrier System construction was John Civetta & Sons, Inc.
18. Residual soil is present beneath the cover layer and will be subject to Site Management under this Remedial Action. In landscaped areas, residual soil was demarcated using geosynthetic material placed beneath the landscaped cover layer.
19. Submitted this RAR, which defines the site boundaries, describes the remedial action, certifies that the remedial requirements defined in the RAWP have been achieved, lists deviations from the RAWP, describes Engineering and Institutional Controls (ECs/ICs) implemented at the site, and includes a Sustainability Statement
20. Submitted a Site Management Plan (SMP) for long term management of residual soil, including plans for the operation, maintenance, inspection, and certification of the performance of ECs and ICs. Inspections will be performed annually. Inspection and certification reports will be submitted by July 30, 2021 (for the reporting period calendar years 2018-2020), July 30, 2024 (for the reporting period calendar years 2021-2023) and every three years thereafter (for the reporting period consisting of the prior calendar years). Inspection and certification reports will cover calendar years since the prior reporting period.
21. The site will continue to be registered with a Restrictive Declaration.

3.0 COMPLIANCE WITH REMEDIAL WORK PLAN

3.1 Construction Health and Safety Plan

The remedial construction activities performed under this program were in compliance with the Construction Health and Safety Plan (CHASP) and applicable laws and regulations. The Site Safety Coordinator was Harry Harriendorf of Turner Construction.

3.2 Community Air Monitoring Plan

The CAMP was implemented during invasive soil activities to evaluate and manage the potential off-site migration of VOCs and particulates and to ensure proper protections were employed to protect workers and the neighboring community. Due to the low VOC concentrations in soil and groundwater, and based on air monitoring results during excavation in November and December 2014, OER approved the discontinuation of VOC monitoring via email on Thursday, January 8, 2015. CAMP data results and the OER correspondence are included in Appendix C.

3.3 Soil/Material Management Plan

The Soil/Materials Management Plan (SMMP) provided detailed plans for managing disturbed historic fill material; including excavation, handling, storage, transportation and disposal. It also included a series of controls to assure effective, nuisance-free remedial activity in compliance with applicable laws and regulations. Remedial construction activities performed under this program were in compliance with the SMMP in the RAWP (Appendix A).

3.4 Stormwater Prevention Plan

Stormwater pollution prevention included physical methods and processes to control and/or divert surface water flows and to limit the potential for erosion and migration of on-site soil, via wind or water. Remedial construction activities performed under this program were in compliance with methods and processes defined in the RAWP for stormwater prevention and applicable laws and regulations.

3.5 Deviations from the Remedial Action Work Plan

Deviations from the RAWP include the following:

Deviation 1

Original Requirements: "Real-time air monitoring for VOCs and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media."

Deviation: Due to the low VOC concentrations in site soil and groundwater, VOC monitoring was removed from the CAMP, which was approved by OER on Thursday, January 8, 2015. The OER correspondence is included in Appendix E.

4.0 REMEDIAL PROGRAM

4.1 Project Organization

The remedial action was performed concurrently with site redevelopment. The owner/developer representative was NYULMC. Turner Construction provided construction management for the project, including permitting and subcontracting for excavation and foundation work. John Civetta & Sons, Inc. was contracted by Turner to perform the site excavation. Langan provided environmental engineering services including documenting intrusive earthwork activities and installation of ECs, CAMP implementation, OER coordination, and fulfillment of RAWP objectives. Jason Hayes, PE of Langan was the New York State Professional Engineer (PE) responsible for management of environmental oversight of the project. Gerald Nicholls, PE of Langan provided project management and Sarah Donatich of Langan was the primary field geologist during earthwork.

4.2 Site Controls

4.2.1 Site Preparation

Following approval of the January 2014 RAWP, the OER issued an NTP on March 4, 2014 (Appendix D). Prior to the initiation of the remedial activities, the site was secured with plywood fencing along the perimeter of the lot. Appropriate New York City Department of Buildings permits and an OER VCP Information Sheet were placed on the fence. A subsurface utility survey was conducted prior to excavation.

An on-site pre-construction meeting was held between OER, Turner, and Langan on April 25, 2014. As part of site preparation, existing buildings were demolished, construction and demolition debris (C&D) was exported off-site, and the site was graded. About 15% of the site area was previously occupied by building basements and is outside of the new building cellar area; this portion of the site was graded with site material (historic fill material) prior to the start of excavation activities. Mass excavation commenced on November 25, 2014. Daily tailgate safety meetings were conducted by Turner and included a discussion of potential work zone hazards, proper handling of dangerous tools and equipment, and avoidance of unsafe work conditions. The CAMP was implemented, including real-time air monitoring for VOCs and particulate levels at the perimeter of the exclusion zone or work area, during excavation activities.

4.2.2 Soil Screening

Soil screening was conducted by Langan during soil excavation. Excavated historic fill material was screened for visual and olfactory evidence of impacts (i.e., staining and odor). In addition, a calibrated PID was used to screen for the presence of VOCs within the work zone. Segregation of excavated material was not performed because all historical fill excavated was

destined for Clean Earth of Carteret, NJ and because no new or anomalous contaminant sources were encountered during excavation.

4.2.3 Stockpile Management

Stockpiling was minimized and historic fill material was generally direct-loaded onto trucks. The Contractor generated stockpiles containing less than 200 cubic yards of historic fill material and at the end of each workday, any remaining stockpiles were covered with a minimum of 6-mil poly sheeting.

4.2.4 Truck Inspection

An outbound-truck inspection station was set up on-site near the site exit on the FDR Drive service road. Before exiting the site, trucks were examined by the Contractor for evidence of historic fill material on the undercarriage, body, and wheels. Historic fill material was removed with brooms, shovels and potable water, as necessary. A truck wash pad consisting of 1.5-inch virgin quarry stone was constructed at the site entrance and maintained during foundation construction.

4.2.5 Site Security

Continuous fencing and site access points monitored by on-site security prevented public access during construction work hours. Site security during off-work hours and on weekends was provided by the construction manager, Turner Construction Company, and gates were closed during this time.

4.2.6 Nuisance Controls

Site perimeters and the surrounding vicinity were monitored during earthwork via CAMP performance by a Langan field engineer. On Thursday, January 8, 2015, the OER approved removal of VOC monitoring from the CAMP because of the low concentrations of recorded VOCs in site soil and groundwater, maintenance of construction engineering controls and absence of air monitoring concerns during construction.

During soil excavation activities, the following dust-control measures were employed:

- Limited the area of open excavations
- Applied water to road, egress, and excavation areas
- Provided extra care during dry and high-wind periods

These techniques were effective in preventing both on-site and off-site odor and dust nuisances. There were no instances of halting work due to nuisances and no community odor nuisance complaints were received during redevelopment activities.

4.2.7 Reporting

A Langan field engineer/geologist was on-site during excavation and material loading activities to document implementation of the RAWP, implement CAMP, and collect documentation samples. Observations were recorded in field books and in daily site observation reports. Those reports included

- Project number and statement of the activities and an update of progress made and locations of work performed;
- Quantities of material imported and exported from the site;
- Status of on-site soil/fill stockpiles;
- A summary of any citizen complaints, if any, with relevant details (basis of complaint; actions taken; etc.);
- A summary of CAMP data; and
- Photographs of notable site conditions and activities.

During work, Langan collected soil disposal documentation and CAMP data. Daily site observation reports are included in Appendix E and photographic documentation is included in Appendix F.

4.3 Materials Excavation and Disposal

The remedial action included the removal of nonhazardous historic fill and soil encountered during the development excavation. Prior to excavation, waste characterization sampling and analysis was conducted in general accordance with disposal facility requirements, as summarized in Section 1.6. Waste characterization data is included in Appendix B.

The Track 4 SCOs established in the RAWP were 6 NYCRR Part 375 Commercial SCOs with the following modifications:

a. Total SVOCs: 500 ppm
b. Total PCBs: 1 ppm
c. Arsenic: 23 ppm
d. Barium: 500 ppm
e. Lead: 1,200 ppm

The remedial action included the removal of nonhazardous soil/fill exceeding Track 4 SCOs from surface grade to between about 2 and 26 feet bgs throughout the site. The following development excavations were completed:

- Cellar excavation to about 13 to 19 feet bgs
- Cellar pile cap excavations to about 20 to 26 feet bgs
- Cellar sump pit excavation to about 24 to 25 feet bgs
- Site excavation to about 2 to 9 feet bgs for pile caps located within at-grade portions of the building
- Excavation along the southern, eastern, and northern site perimeters to about 2 feet bgs for landscaped and paved areas

About 12,640.03 tons of soil/fill were excavated and removed from the site. Soil and materials management, including excavation, handling, and disposal, was conducted in accordance with the SMMP in the RAWP. A map depicting the extent of the excavation area is provided as Figure 4.

4.3.1 Total Quantities Removed

Excavated material primarily consisted of historic fill and construction and demolition (C&D) debris. Additionally, organic material exhibiting a sulfur-like odor was encountered beneath timbers excavated from the north-central portion of the site at a maximum depth of 5 feet bgs. No evidence of environmental impacts was observed based on visual and olfactory observations. Excavated material was either temporarily stockpiled or loaded directly into trucks for off-site disposal. Excavated material was not used as permanent backfill.

As shown on Table 1, about 12,640.03 tons of historic fill material was excavated and disposed of at Clean Earth of Carteret, located at 24 Middlesex Avenue, Carteret, New Jersey, as part of the Track 4 remedy. Excavation and disposal was conducted from November 25, 2014 to July 2, 2015. The Contractor arranged for transportation and off-site disposal of the excavated material in accordance with applicable federal, state, and local regulations.

Acceptance letters were issued by the facilities following review of waste characterization data. The acceptance letters and facility approval packages were submitted to OER for approval. Facility acceptance letters and OER approval documentation are attached in Appendix G. Countersigned facility non-hazardous waste manifests are included in Appendix H. A detailed table summarizing each transported load is included as Table 1.

4.4 Documentation Sampling

Langan collected seven post-excavation documentation samples (EP01 through EP07) for Part 375 VOCs, SVOCs, pesticides, PCBs, herbicides, and metals from 6 inches below the final excavation extent. Samples were collected at depths ranging from 7 to 25.5 feet bgs. Sample EP-05 was collected from the within the area of the previous building basement that was

graded prior to development. One field blank and one duplicate sample were collected and analyzed for quality assurance and control purposes. Documentation samples were collected into laboratory-supplied containers and transported to Alpha Analytical located in Westborough, Massachusetts, a NYSDOH ELAP-certified laboratory.

Six samples were collected by AKRF during the November 2013 RI at depths below the final extent of excavation, and serve as additional documentation samples for the site. RI soil sample analytical results indicated that all compound concentrations were below the site-specific Track 4 SCOs.

Documentation soil sample analytical results indicated that all analyte concentrations were below the site-specific Track 4 SCOs. Benzo(a)pyrene was detected in EP-06_050115 (1.1 mg/kg) and EP-07 (1.2 mg/kg) at concentrations that exceed the Commercial Use SCO of 1 mg/kg, but did not exceed the site-specific Track 4 SCO of 500 ppm for total SVOCs, so the remedy is intact. Maximum documentation sample detections of contaminants of concern are compared to the site-specific Track 4 SCOs in the below table:

Contaminant of Concern	Site-Specific Track 4 SCO (mg/kg)	Maximum Detection Concentration (mg/kg)	Sample ID
Total SVOCs	500	30.5	EP_06_050115
PCBs	1	0.0256	SB-11
Arsenic	23	15	DUP01_060415
Barium	500	350	EP_07
Lead	1,200	310	EP_07

Potential future exposures from residual historic fill material will be prevented by ECs/ICs and addressed by the SMP in Section 7.0 of this report. A documentation sample location map, which indicates approximate sample collection depths and elevations, is provided as Figure 5. A documentation sample analytical summary is included as Table 2 and laboratory analytical reports are included in Appendix I. Additional documentation samples collected during the RI are included in Figure 5 and Table 2.

4.5 Imported Backfill

Backfill was imported on a temporary basis for a stabilized construction entrance, and on a permanent basis for landscaped areas and for site grading below the building slabs and sidewalks.

Temporary Backfill: About 11 cubic yards of 1.5-inch virgin quarry stone were imported to the site from Tilcon New York Inc. on December 15, 2014 to construct a truck entrance ramp and was ultimately disposed of off-site when the ramp was removed.

Permanent Backfill:

- About 180 cubic yards of ¾-inch recycled stone were imported from Tilcon New York Inc. on May 27, 2015 to backfill and re-grade around pile caps.
    - On March 2, 2015, about 20 cubic yards of unapproved RCA containing recycled concrete, brick, and debris was imported to the site. The material was loaded back into the truck and transported off-site and returned to the origin facility.
- About 126 cubic yards of 1.5-inch virgin quarry stone were imported to the site from Tilcon New York Inc. on August 16, 2017 for use as subbase for sidewalks and landscaped areas at the perimeter of the site.
- About 98 cubic yards of topsoil were imported to Sponzilli Landscape Group in Fairfield, New Jersey from RER Supply in Wantage, New Jersey on July 13, 14, and 15, 2017. The topsoil was stockpiled at the Sponzilli Landscape Group facility, and soil samples were collected on August 22, 2017. Between September 1 and 7, 2017, the topsoil was transported from the Sponzilli Landscape Group facility to the site for use as topsoil in landscaped areas.

The laboratory analytical report for soil samples collected from the topsoil is included in Appendix J. There were no compounds or analytes detected at concentrations above their respective NYSDEC Part 375 Restricted Commercial Use and Protection of Groundwater SCOs. Backfill quantities and sources are shown on Table 3 and import tickets are included in Appendix J.

4.6 Demarcation

Residual historic fill material below the building footprint and paved areas on the site perimeter is demarcated by the concrete slabs. Residual historic fill material below landscaped areas on the site perimeter is demarcated by a geotextile fabric placed below the minimum 2-foot clean soil cap. Residual historic fill material below the final cover will be addressed during the site management phase in perpetuity.

5.0 ENGINEERING CONTROLS

ECs were employed in the remedial action to address residual historic fill material remaining at the site. The site has two primary ECs, including:

1. Composite Cover System consisting of concrete sidewalks, clean soil over landscaped areas, and concrete building slabs
2. Waterproofing/vapor barrier system

5.1 Composite Cover System

Exposure to residual soil/fill is prevented by an engineered Composite Cover System that has been built on the Site. This composite Cover System is comprised of a 14- to 30-inch-thick concrete building foundation slab underlain by a waterproofing/vapor barrier membrane and a concrete mud-slab. The concrete sidewalk areas were capped with a 4- to 7-inch-thick concrete underlain by a subbase of 1.5-inch stone. The landscaped areas were covered with at least two feet of clean top soil. Photographs of construction of the composite cover system are included in Appendix F. The construction drawings for the composite cover system are included in Appendix K. No deviations from these construction drawings were noted during construction. A composite cover system map is included as Figure 6. The contractor for construction of the Composite Cover System was John Civetta & Sons, Inc. The professional engineer for the Composite Cover System was Brian Falconer, P.E. of Severud Associates.

5.2 Vapor Barrier System

Exposure to soil vapor is prevented by a Vapor Barrier System that has been built throughout the Site. A waterproofing/vapor barrier system was installed beneath the foundation slabs and on sub-grade foundation walls. The system consists of Grace Preprufe 300R (47-mil) and Bituthene 4000 (59 mils) beneath the foundation slabs and on sub-grade foundation walls. Horizontally-applied waterproofing/vapor barrier membrane was placed directly on top of a mud-slab. Seams were sealed using the Grace Preprufe adhesive applied to the membrane by the manufacturer and/or Preprufe tape. Preprufe tape was wrapped around typical utility penetrations. Bituthene Liquid Membrane was then applied around the penetrations to provide a watertight seal between the Preprufe membrane and Preprufe tape. Photographs of construction of the waterproofing/vapor barrier system are included in Appendix F. Waterproofing/vapor barrier specifications, installer certification warranty certificate, and contractor installation letter are included in Appendix L. The location of the waterproofing/vapor barrier system is shown on Figure 7. The contractor for construction of the Vapor Barrier System was John Civetta & Sons, Inc. The professional engineer for the Vapor Barrier System was Jason Hayes, P.E. and Saul Shapiro, P.E. of Langan.

6.0 INSTITUTIONAL CONTROLS

A series of ICs are employed as part of this remedial action to assure permanent protection of public health by elimination of exposure to residual materials. These ICs define the program to operate, maintain, inspect, and certify the performance of ECs. Adherence to these ICs will be implemented in accordance with the SMP included in this RAR. The following ICs are employed:

1. The property will continue to be registered with a Restrictive Declaration. Property owner and property owner's successors and assigns are required to comply with the approved SMP.
2. Compliance with the SMP, including procedures for appropriate operation, maintenance, inspection, and certification of performance of ECs and ICs, must be followed. The property owner and property owner's successors and assigns will inspect ECs and ICs and submit to OER a written certification prepared by a NYS-licensed professional engineer that evaluates their performance in a manner and at a frequency to be determined by OER.
3. ECs will not be discontinued without prior OER approval.
4. OER has the right to enter the site, upon notice, for the purpose of evaluating the performance of ECs and ICs.
5. Vegetable gardens and farming in residual soil/fill on the Site are prohibited;
6. Use of groundwater underlying the Site without treatment rendering it safe for its intended use is prohibited;
7. Future activities on the site that will disturb residual soil/fill must be conducted pursuant to the Soil/Materials Management Plan (SMMP) provisions of the SMP, or otherwise approved by OER.
8. The site will be used for restricted commercial use and will not be used for a higher level of use without prior approval by OER.

7.0 SITE MANAGEMENT PLAN

Site management is the last phase of the remedial process and begins after the approval of the RAR and issuance of the Notice of Completion (NOC) and/or Notice of Satisfaction (NOS) by OER. It is the responsibility of the property owner to ensure that site management responsibilities are performed. The penalty for failure to implement the SMP includes revocation of the NOC/NOS and associated certifications and liability protections.

ECs and ICs have been incorporated into this remedial action to ensure that the site remains protective of public health and the environment. Generally, ECs provide physical protective measures and ICs provide restrictions on site usage and establish remedial operation, maintenance, inspection and certification measures. This SMP has been established to govern long-term performance of ECs and ICs for the site.

The SMP provides a detailed description of procedures required to manage residual material at the site following the completion of remedial construction in accordance with the NYC VCP. This includes: (1) operation and maintenance of ECs; (2) inspection of ECs and ICs; and (3) certification of the performance of ECs and ICs.

7.1 Engineering Controls

ECs were employed in the remedial action to address residual materials remaining at the site. The site has two ECs:

1. Composite cover system consisting of concrete sidewalks, clean soil over landscaped areas, and concrete building slabs
2. Waterproofing/vapor barrier system

7.1.1 Operation and Maintenance of Composite Cover System

Section 5 describes the composite cover system utilized in this remedial action and provides design details and the location of each cover type. The composite cover system is a permanent EC for the site and is comprised of a 14- to – 30-inch-thick concrete building foundation slab underlain by a waterproofing/vapor barrier system. The sidewalk was capped with concrete pavement and the landscaped areas were covered with at least two feet of clean top soil. The system will be inspected and its performance certified at specified intervals defined in this SMP. A SMMP is included in Section 7.5 and outlines the procedures to be followed in the event that the composite cover system and underlying residual soil/material must be disturbed after the remedial action is complete.

The composite cover system does not require any special operation or maintenance activities. If the system is breached during future construction activities, the system will be rebuilt by reconstructing the system according to the original design and tying newly constructed cover

layers into existing cover layers to form a continuous layer(s).

7.1.2 Operation and Maintenance of Waterproofing/Vapor Barrier System

Section 5 describes the waterproofing/vapor barrier system utilized in this remedial action and provides design details and the system location. The waterproofing/vapor barrier system is a permanent EC for the site. The waterproofing/vapor barrier system will be inspected and its performance certified at specified intervals defined in this SMP.

The waterproofing/vapor barrier system does not require any special operation or maintenance activities. If the waterproofing/vapor barrier system is breached during future construction activities, the system will be rebuilt by reconstructing the vapor barrier layers and sealing the newly constructed materials with existing barrier materials in accordance with manufacturer specifications.

7.2 Institutional Controls

A series of ICs are required under this remedial action to ensure permanent protection of public health by mitigation of exposure to residual materials. These ICs define the program to operate, maintain, inspect, and certify the performance of ECs and ICs on this site. These ICs will be implemented in accordance with this SMP.

ICs are designed to prevent future exposure to residual soil/materials by managing disturbances in the subsurface, restricting higher uses of the property than commercial use (without prior OER approval), and establishing restrictions on activities and site usage. ICs for the site are:

1. The property will continue to be registered with a Restrictive Declaration. The property owner and property owner's successors and assigns are required to comply with the approved SMP.
2. Compliance with the SMP including procedures for appropriate operation, maintenance, inspection, and certification of performance of ECs and ICs. The property owner and property owner's successors and assigns will inspect ECs and ICs and submit to OER a written certification that evaluates their performance in a manner and at a frequency to be determined by OER.
3. ECs will not be discontinued without prior OER approval.
4. OER has the right to enter the site, upon notice, for the purpose of evaluating the performance of ECs and ICs.
5. Vegetable gardens and farming in residual soil/fill on the Site are prohibited;

6. Use of groundwater underlying the Site without treatment rendering it safe for its intended use is prohibited;
7. Future activities on the site that will disturb residual soil/fill must be conducted pursuant to the SMMP provisions of the SMP, or otherwise approved by OER.
8. The site will be used for restricted commercial use and will not be used for a higher level of use without prior approval by OER.

7.3 Inspections

ECs and ICs will be inspected on an annual basis for the first 2 years and every 5 years thereafter. The inspections will evaluate the following:

1. If ECs/ICs employed at the site continue to perform as designed and continue to be protective of human health and the environment;
2. If anything has occurred that impairs the ability of the ECs/ICs to protect public health and the environment;
3. If changes are needed to the ECs;
4. If compliance with this SMP has been maintained;
5. If site records are complete and up to date; and
6. General site conditions at the time of inspection.

In an addition, if an emergency occurs such as a natural disaster, or if an unforeseen failure of any of the ECs occurs, an inspection of the site will be performed within 14 days to evaluate the ECs and a letter report of findings will be submitted to OER.

7.3.1 Inspection of Composite Cover System

Inspection of the composite cover system will be performed in accordance with the inspection schedule. The inspection will also be performed after severe weather conditions that may affect ECs. Observations made during inspections will be documented in a dedicated notebook and photographs will be taken. The composite cover system inspection will be overseen by the Qualified Environmental Professional (QEP)/PE to assure that it is functioning properly. Cracks, holes, perforations or slab disturbances will be recorded and repaired, as appropriate. An inspection checklist is included in Appendix M.

7.3.2 Inspection of Vapor Barrier System

Inspection of the vapor barrier system will be performed on a regular schedule at a minimum of once per year. The inspection will also be performed after severe weather conditions that may affect ECs. Observations made during inspections will be documented in a dedicated notebook

and photographs will be taken. The vapor barrier system inspection will be overseen by the QEP/PE to assure that it is functioning properly. The vapor barrier system is not visible and cannot be directly inspected. However, it can be inspected simultaneously with inspection of the building slab. If the inspector observes a failure in the slab that exposes the vapor barrier, then the underlying vapor barrier will be inspected for any damage, including tears or perforations, which would prevent the vapor barrier from completing its intended purpose. Cracks, holes, perforations or slab disturbances will be recorded and repaired, as appropriate. An inspection checklist is included in Appendix M.

7.3.3 Site Use Prohibitions

Inspections will be performed to evaluate the status of site use prohibitions and will include an evaluation of whether there is vegetable gardening or farming in residual soil/fill; whether groundwater underlying the site has been used without treatment rendering it safe for its intended use; whether activities that have disturbed site soil/fill have been conducted pursuant to the SMP, (or otherwise approved by OER), and whether the site has been used for a higher level of use other than the commercial use.

7.4 Inspection and Certification Letter Report

Results of inspections performed during a reporting period and certification of performance of ECs and ICs will be included in an Inspection and Certification Letter Report. Inspections will be performed every year. Inspection and Certification Letter Reports will be submitted by July 31, 2021 (for the reporting period calendar years 2018-2020), July 31, 2024 (for the reporting period calendar years 2021-2023) and every 3 years thereafter (for the reporting period consisting of the prior three calendar year). Inspection and Certification Reports will cover calendar years since the prior reporting period. Inspection and Certification Letter Reports will be submitted to OER in digital format and will include, at a minimum:

- Date of inspections;
- Personnel conducting inspections;
- Description of the inspection activities performed;
- Any observations, conclusions, or recommendations;
- Copy of any inspection forms;
- A determination as to whether groundwater plume conditions, if any, have changed since the last reporting event; and
- Certification of the performance of ECs and ICs, as discussed below.

The certification of the performance of ECs and ICs will establish:

- If ECs or ICs employed at the site continue to be in place and perform as designed and continue to be protective of human health and the environment;
- If anything has occurred that impairs the ability of ECs or ICs to protect public health and the environment;
- If changes are recommended;
- If compliance with this SMP has been maintained;
- If vegetable gardening and farming in residual soils has been prevented;
- If groundwater underlying the Site is being utilized without treatment rendering it safe for the intended purpose has been prevented;
- If activities on the Site that have disturbed residual soil/fill material have been in accordance with the Soil/Materials Management Plan in this SMP;
- If the site has been used for a higher level of use other than the restricted commercial use addressed by the remedial action;
- If site records are complete and up to date; and
- If the site continues to be registered with a Restrictive Declaration.

OER may enter the site, upon notice, for the purpose of evaluating the performance of ECs and ICs.

7.4.1 Notifications

Notifications will be submitted by the property owner to OER as described below:

- 60-day advance notice of any proposed changes in site use, such as an upgrade from existing commercial use, and
- Notice within 30 days of any emergency, such as a fire, flood, or earthquake that has the potential to reduce the effectiveness of ECs.

7.5 Soil/Materials Management Plan

Any future intrusive work that will disturb residual soil/fill beneath the property, including modifications or repairs to the existing composite cover system, will be performed in compliance with this SMMP. Intrusive work will also be conducted in accordance with the procedures defined in the CAMP and a CHASP. The CHASP is the responsibility of the site owner and should be in compliance with NYSDEC Division of Environmental Remediation Technical Guidance Manual 10 (DER-10) and 29 Code of Federal Regulations (CFR) 1910 and

1926, and other applicable federal, state, and city regulations. Intrusive construction work should be described in the next Inspection and Certification Letter Report.

7.5.1 Soil Screening Methods

Visual, olfactory, and PID soil screening and assessment will be performed under the supervision of the QEP/PE during future intrusive work.

7.5.2 Stockpile Methods

Stockpiles will be used to isolate excavated soil and will be removed as soon as reasonably practicable. While stockpiles are in place, they will be inspected daily and before/after storm events. Results of inspections will be recorded in a logbook, maintained at the site, and made available for inspection by OER. Excavated soils will be stockpiled on double layers of 6-mil minimum sheeting (at a minimum), will be kept covered with appropriately anchored plastic tarps, and will be routinely inspected. Broken or ripped tarps will be promptly replaced.

Stockpile activities will be compliant with applicable laws and regulations. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable laws and regulations. Stockpiles of excavated soils and other materials will be located at least 50 feet from the property boundaries, where possible. Hay bales, or equivalent, will surround soil stockpiles except for areas where access by equipment is required. Silt fencing and hay bales will be used as needed near catch basins, surface waters, and other discharge points.

7.5.3 Characterization of Excavated Materials

Soil/fill or other excavated media that is transported off-site for disposal will be sampled in a manner required by the receiving facility, and in compliance with applicable laws and regulations. Excavated soil will only be reused on-site with prior approval by OER.

7.5.4 Materials Excavation, Load-Out and Departure

The QEP/PE overseeing the SMMP activities will:

- Supervise intrusive work and the excavation and load-out of excavated material;
- Ensure that there is a party responsible for the safe execution of invasive and other work performed under this management plan;
- Ensure that site maintenance activities and maintenance-related grading cuts will not interfere with, or otherwise impair or compromise the remedial measures established during the remediation construction phase;
- Ensure that the presence of utilities and easements on the site has been investigated and that any identified risks from work proposed under this plan are properly addressed by appropriate parties;

- Ensure that loaded outbound trucks are inspected and cleaned if necessary before leaving the site; and
- Ensure that egress points for truck and equipment transport from the site will be kept clean of site-derived materials during site intrusive work.

Cleaning of the adjacent streets will be performed, as needed, to maintain a clean condition with respect to site-derived materials.

7.5.5 Off-site Materials Transport

Loaded vehicles leaving the site will comply with applicable materials transportation requirements (including appropriate covering, manifests, and placards) in accordance with applicable laws and regulations, including use of licensed haulers in accordance with 6 NYCRR Part 364. Truck liners will be used if trucks contain wet material capable of leakage. Queuing of trucks will be performed on-site, when possible, to minimize off-site disturbance.

Outbound truck transport routes shall follow the current "New York City Truck Route Map" published by the NYC Department of Transportation. Truck routing must take into account the following factors: (a) limiting transport through residential areas and past sensitive sites; (b) use of mapped truck routes; (c) minimizing off-site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport. To the extent possible, trucks loaded with site materials will travel from the site using these truck routes. Trucks will not stop or idle in the neighborhood after leaving the project site.

7.5.6 Materials Disposal Off-site

The following documentation will be established and reported by the QEP/PE for each disposal destination used in this project to document that the disposal of material exported from the site conforms with applicable laws and regulations: (1) a letter from the QEP/PE or site owner to each disposal facility describing the material to be disposed and requesting written acceptance of the material. This letter will state that material to be disposed of is material generated at an environmental remediation site in New York, New York under a governmental remediation program. The letter will provide the project identity and the name and phone number of the QEP/PE or site owner. The letter will include a summary of chemical data for the material being transported.

Documentation associated with disposal of material will include records and facility disposal approvals for the material. Soil/fill or other waste excavated and removed from the site will be disposed of in accordance with applicable laws and regulations. Historic fill material and contaminated soils transported off-site will be handled as solid waste and will not be disposed at a Part 360-16 Registration Facility (also known as a soil recycling facility).

Waste characterization sampling will be performed as required by the receiving facility and in conformance with its applicable permits. Waste characterization sampling and analytical methods, sampling frequency, analytical results and quality assurance/quality control (QA/QC) will be retained and included in the following Inspection and Certification Report. A manifest system for off-site transportation of exported materials will be employed. Hazardous wastes derived =on-site will be stored, transported, and disposed of in compliance with applicable laws and regulations.

7.5.7 Materials Reuse On-site

Soil excavated during any future repair or construction purposes will be backfilled in the same excavation area it was derived from or will be disposed of off-site, unless otherwise approved by OER beforehand.

7.5.8 Repair of Remedial Systems

Any future intrusive work that will disturb vapor mitigation systems at the site will be performed in compliance with the SMP. After completion of any invasive work, any damage of the ECs and the composite cover system will be restored to the original condition established during initial construction unless otherwise approved by the PE and OER.

7.5.9 Import of Backfill Soil from Off-site Sources

In the event that soil import is needed for backfilling purposes, the proposed material will meet OER-approved backfill and cover soil quality objectives for this site. The backfill soil quality objectives are the Track 4 site-specific SCOs. The cover soil objectives are the lower of the 6 NYCRR Part 375 Restricted Commercial Use SCOs and the Protection of Groundwater SCOs. A process will be established to evaluate sources of backfill and cover soil to be imported to the site, and will include an examination of source location, current and historical use(s), and applicable documentation. Material from industrial sites, spill sites, environmental remediation sites, or other potentially contaminated sites will not be imported to the site. The following potential sources may be used pending attainment of backfill and cover soil quality objectives:

- Clean soil from construction projects at non-industrial sites in compliance with applicable laws and regulations
- Clean soil from roadway or other transportation-related projects in compliance with applicable laws and regulations
- Clean RCA from facilities permitted or registered by the regulations of NYSDEC
    - RCA imported to the site must be derived from recognizable and uncontaminated concrete

  - RCA will not be used as cover material
- Virgin quarried material or other materials with an approved Beneficial Use Determination (BUD) from NYSDEC for reuse as clean fill

The Inspection and Certification Report will report the source of the fill, evidence that an inspection was performed on the source, chemical sampling results, frequency of testing, and a site map indicating the locations where backfill or soil cover was placed.

7.5.10 Source Screening and Testing

Inspection of imported fill material will include visual, olfactory, and PID screening for evidence of contamination. Materials imported to the site will be subject to inspection, as follows:

- Trucks with imported fill material will be in compliance with applicable laws and regulations and will enter the site at designated locations.
- The QEP/PE is responsible to ensure that every truck load of imported material is inspected for evidence of contamination.
- Fill material will be free of solid waste including pavement materials, debris, stumps, roots, other organic matter, ashes, oil, perishables, and foreign matter.

Composite samples of imported material from the identified clean soil sources will be collected at a minimum frequency of one sample for every 500 cubic yards of material. One composite sample will be collected from each source of virgin quarried material or other material with an NYSDEC approved BUD, unless otherwise approved by OER.

7.5.11 Fluids Management

Liquids to be removed from the site, including dewatering fluids, will be handled, transported, and disposed of in accordance with applicable laws and regulations. Liquids discharged into the New York City sewer system must receive prior approval by NYCDEP. If discharge to the NYCDEP sewer system is not appropriate, the dewatering fluids will be managed by transportation and disposal at an off-site treatment facility. Discharge of water generated during remedial construction to surface waters (i.e. a stream or river) is prohibited without a State Pollutant Discharge Elimination System (SPDES) permit issued by the NYSDEC.

7.5.12 Storm Water Pollution Prevention

Applicable laws and regulations pertaining to stormwater pollution prevention will be addressed during the remedial program. Existing stormwater systems will be inspected to ensure proper operation.

7.5.13 Odor Control

Necessary means will be employed to prevent on- and off-site odor nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) use of foams to cover exposed odorous soils. If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-site disposal; and (e) use of chemical odorants in spray or misting systems.

This odor control plan is capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until nuisance odors have been abated. OER will be notified of odor complaint events.

7.5.14 Dust Control

Dust management during invasive on-site work will include, at a minimum:

- Use of a dedicated water spray methodology for roads, excavation areas and stockpiles
- Use of properly anchored tarps to cover stockpiles
- Extra care during dry and high-wind periods
- Use of gravel or recycled concrete aggregate on egress and other roadways to provide a clean and dust-free road surface

If nuisance dust emissions are identified, work will be halted and the source of dusts will be identified and corrected. Work will not resume until nuisance dust emissions have been abated. OER will be notified of dust complaint events.

7.5.15 Noise

Noise control will be exercised during the remedial program. Remedial work will conform, at a minimum, to NYC noise control standards.

7.6 Community Air Monitoring Plan

Real-time air monitoring for VOCs and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous monitoring will be performed for ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing

monitoring wells. Periodic monitoring during sample collection, for instance, will consist of taking a reading at a sample location upon arrival and prior to leaving the site. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities.

7.6.1 VOC Monitoring, Response Levels, and Actions

VOCs will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis during invasive work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of VOCs at the downwind perimeter of the work area or exclusion zone are measured at 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the VOC concentration readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If VOC concentrations at the downwind perimeter of the work area or exclusion zone persist in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of VOCs identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the VOC concentration at about 200 feet downwind of the exclusion zone, or half the distance to the nearest potential receptor or residential/commercial structure (whichever is less but in no case less than 20 feet) is below 5 ppm over background for the 15-minute average.
- If the VOC concentration is above 25 ppm at the perimeter of the work area, activities will be shut down.

15-minute readings must be recorded and be available for OER personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

7.6.2 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a

period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will include an audible alarm to indicate concentrations above the action level. In addition, fugitive dust migration will be visually assessed during work activities.

- If the downwind PM-10 particulate concentration is 150 µg/m^3 greater than background for the 15-minute period, or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate concentrations are not 150 µg/m^3 above background and no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate concentrations are greater than 150 µg/m^3 above background, work will be stopped and activities will be re-evaluated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to less than 150 µg/m^3 above background and no visible dust is migrating from the work area.

CAMP readings will be recorded and be available for OER personnel to review.

7.7 Contingency Plan

This contingency plan is developed for the remedial construction or repair work to address the discovery of unknown structures or contaminated media during excavation. Identification of unknown contamination source areas during invasive site work will be promptly communicated to OER's Project Manager. Petroleum spills will be reported to the NYSDEC Spill Hotline. If previously unidentified contaminant sources are found during on-site remedial excavation or development-related excavation, sampling will be performed on contaminated source material and surrounding soils, and reported to OER.

7.7.1 Emergency Telephone Numbers

In the event of any emergency condition pertaining to these remedial systems, the site owner's representative(s) should contact the appropriate parties from the contact list below. Prompt contact should also be made to Gerald Nicholls of Langan. These emergency contact lists must be maintained in an easily accessible location at the site.

7.7.2 Emergency Contact Numbers

Medical, Fire, and Police:	911
One Call Center: 3 day notice required for utility mark out	(800) 272-4480
Poison Control Center:	(800) 222-1222
Pollution Toxic Chemical Oil Spills:	(800) 424-8802
NYSDEC Spills Hotline	(800) 457-7362
Jason Hayes, PE	(212) 479-5410

Gerald Nicholls, PE	(212) 479-5559
Office of Environmental Remediation	(212) 788-8841

8.0 SUSTAINABILITY REPORT

This remedial action provided for sustainable remediation and redevelopment through a variety of means that are defined in this Sustainability Report.

8.1 Reuse of Clean, Recyclable Materials

Reuse of clean, recyclable materials reduces consumption of non-renewable virgin resources and can provide energy savings and greenhouse gas reduction since these materials can be locally-derived. An estimate of the tonnage of recycled material reused on this project is about 180 cubic yards of RCA.

8.2 Conservation of Non-Renewable Resources

Reduced consumption of non-renewable resources such as soil and top-soil lowers the overall environmental impact of the project on the region by conserving these resources. Conservation of non-renewable resources was achieved by using RCA as structural fill under the foundation slab.

8.3 Conversion to Clean Fuels

Use of clean fuel improves NYC's air quality by reducing harmful emissions. Natural gas is used for the fuel source for the new building.

8.4 Recontamination Control

Recontamination after cleanup and redevelopment is completed undermines the value of work performed, may result in a property that is less protective of public health or the environment, and may necessitate additional cleanup work later that could impede future redevelopment. Recontamination can arise from future releases that occur within the property or by influx of existing contamination from off-site. The cover system, consisting of a minimum 14-inch concrete pressure slab and a vapor barrier, asphalt, concrete pavers, or two feet of clean soil will prevent migration of vapors into the structure in the future. Therefore, the entire site footprint contains recontamination controls.

8.5 Paperless Brownfield Cleanup Program

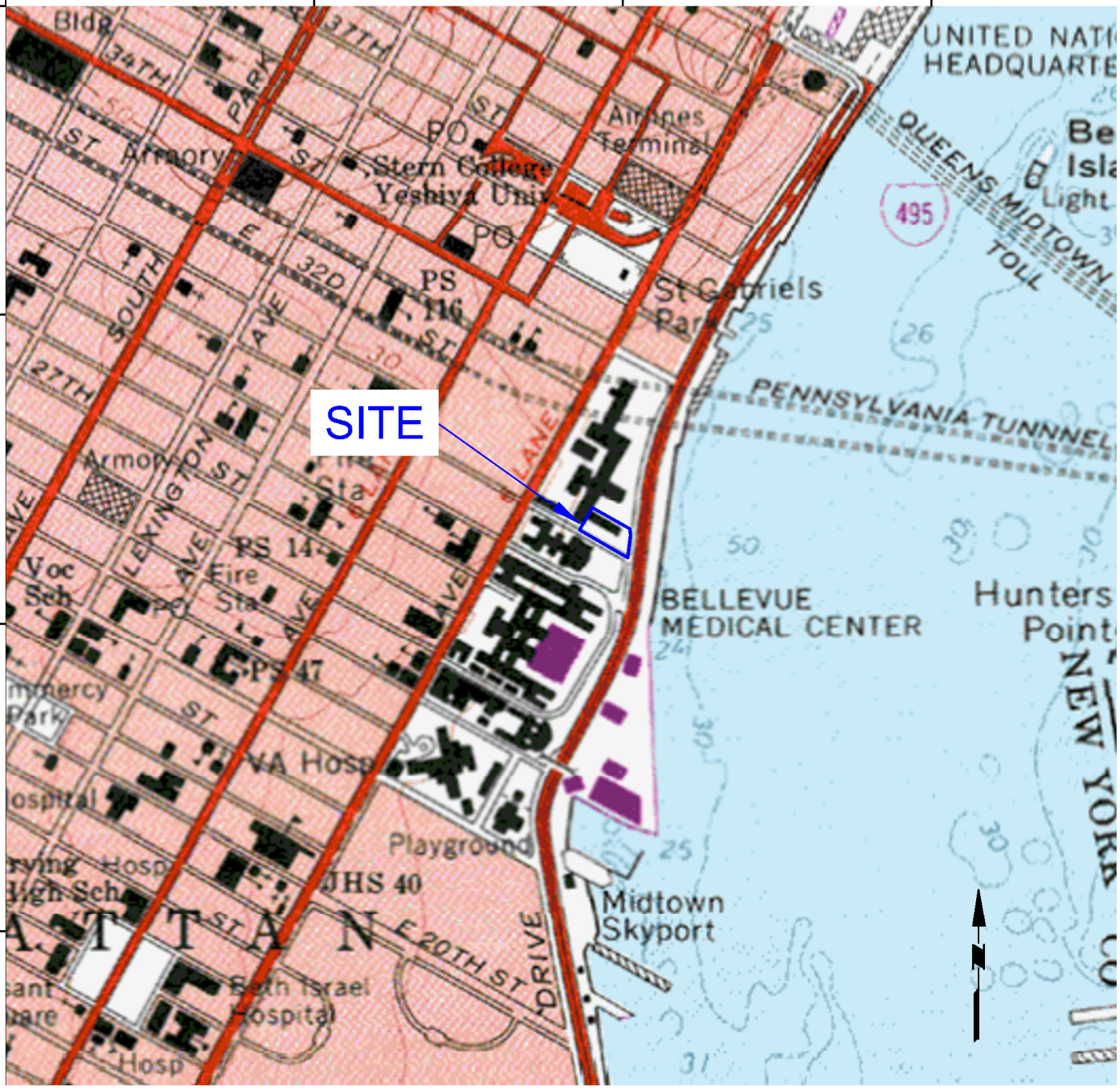
NYULMC participated in OER's Paperless Brownfield Cleanup Program. Under this program, submission of electronic documents replaced submission of hard copies for the review of project documents, communications and milestone reports. A best estimate of the mass (pounds) of paper saved under this plan is about 50 pounds.

8.6 Low-Energy Project Management Program

NYULMC participated in OER's low-energy project management program. Under this program, whenever possible, meetings were held using remote communication technologies, such as

videoconferencing and teleconferencing to reduce energy consumption and traffic congestion associated with personal transportation. A gross estimate of the number of miles of personal transportation that was conserved in this process is about 200 miles.

FIGURES



LEGEND

APPROXIMATE SITE BOUNDARY

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

SOURCE: USGS TOPOGRAPHIC QUADRANGLE BROOKLYN, NY

LANGAN

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Langan Engineering and Environmental Services, Inc.
Langan International LLC

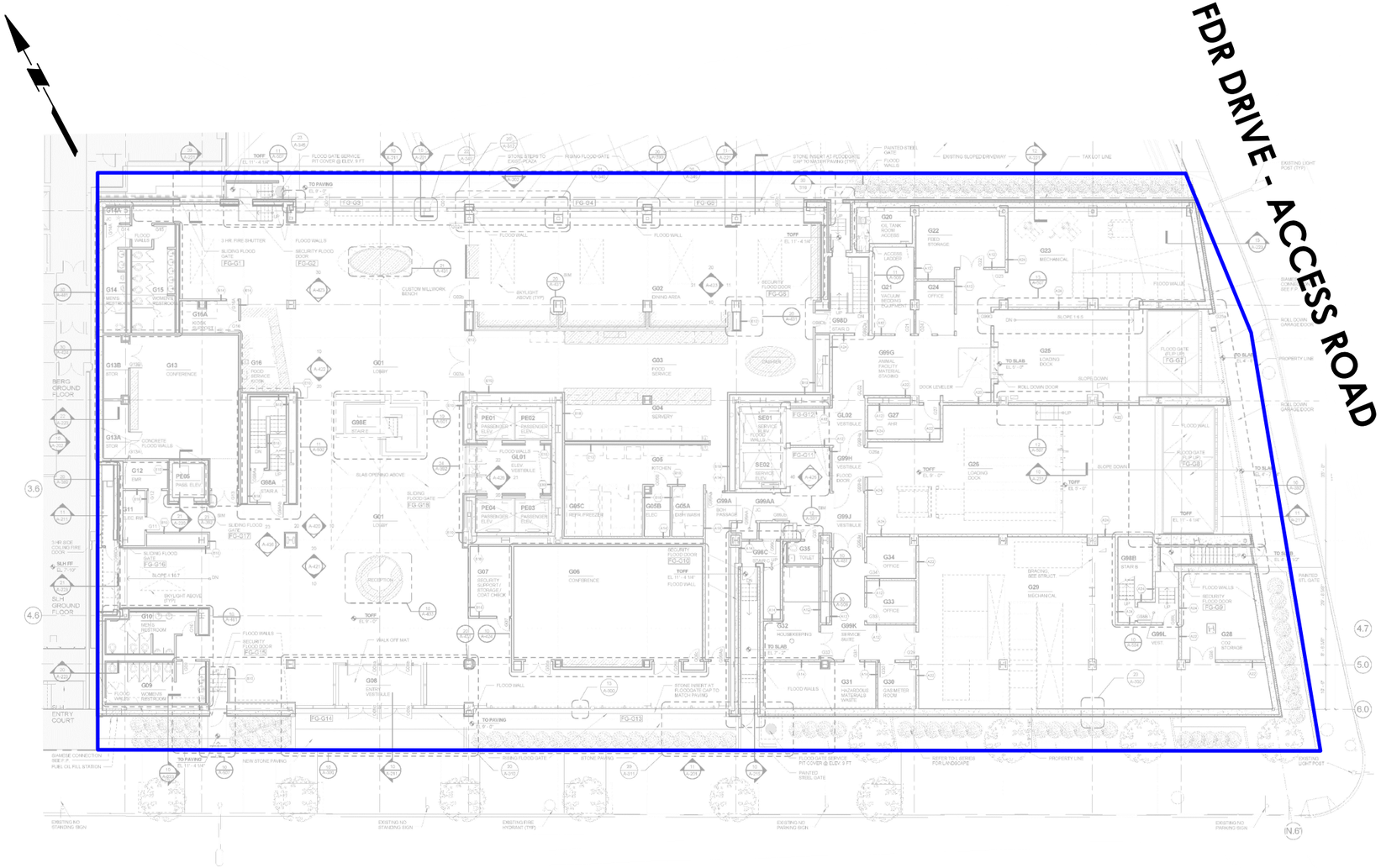
Collectively known as Langan

Project
NYU LANGONE MEDICAL CENTER NEW SCIENCE BUILDING
BLOCK No. 962, LOT No. 7501
NEW YORK NEW YORK

Figure Title
SITE LOCATION MAP

Project No. 170037830	Figure No. 1
Date 5/20/2016	
Scale NTS	
Drawn By PTF	
Submission Date	Sheet 1 of 7

Filename: \\langan.com\data\NYC\data8\170037830\Cadd Data - 170037830\SheetFiles\Environmental\Remedial Action Report\Figure 1 - Site Location Map.dwg Date: 10/24/2017 Time: 15:02 User: eadkins Style Table: Langan.stb Layout: ANSIA-BP



LEGEND

SITE BOUNDARY

GENERAL NOTES

1. BASE MAP SOURCES: DRAWING A–102.00 PLAN – GROUND FLOOR BY ENNEAD ARCHITECTS, LLP (JANUARY 31, 2014) AND NYU LANGONE MEDICAL CENTER SCIENCE BUILDING ASI#33 CD REVISIONS, L102, BY ENNEAD ARCHITECTS, LLP (DECEMBER 23, 2015)
2. DATUM IS BOROUGH PRESIDENT OF MANHATTAN DATUM (BPMD), WHICH IS APPROXIMATELY 2.75 FEET ABOVE MEAN SEA LEVEL DATUM AT SANDY HOOK, NEW JERSEY AS DEFINED BY THE UNITED STATES GEOLOGICAL SURVEY (USGS NGVD 1929)

30 0 15 30

SCALE IN FEET

LANGAN

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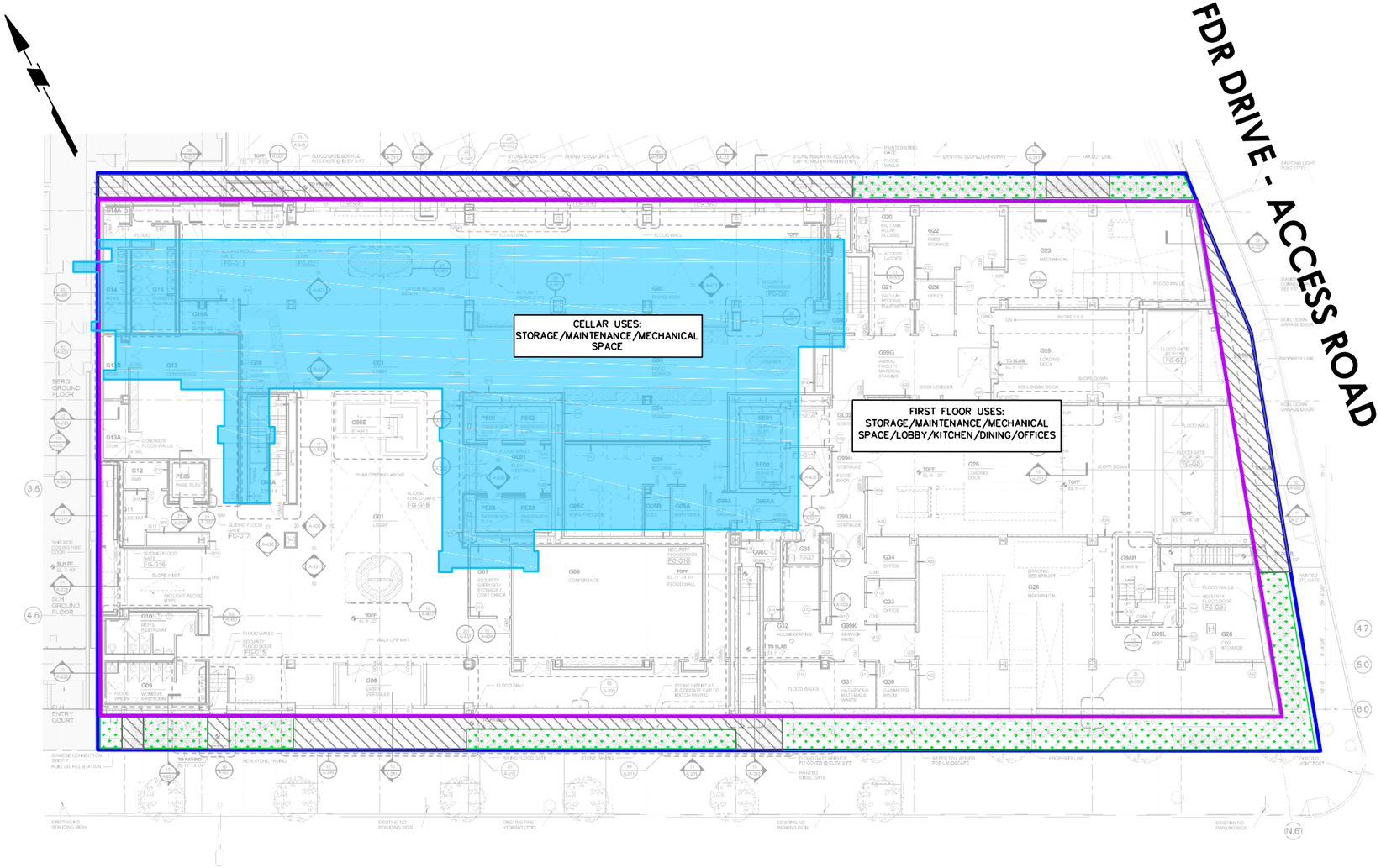
Project
NYU LANGONE MEDICAL CENTER NEW SCIENCE BUILDING
BLOCK No. 962, LOT No. 7501
NEW YORK NEW YORK

Figure Title
SITE PLAN

Project No. 170037830	Figure No. 2
Date 10/06/2017	
Scale 1" = 30'	
Drawn By ERA	
Submission Date	Sheet 2 of 7

Filename: \\langan.com\data\NYC\data8\170037830\Cadd Data - 170037830\SheetFiles\Environmental\Remedial Action Report\Figure 2 - Site Plan_BNedits.dwg Date: 10/24/2017 Time: 15:24 User: eadkins Style Table: Langan.stb Layout: ANSIB-BL



LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT BOUNDARY
- CELLAR BOUNDARY
- LANDSCAPE AREA WITH MINIMUM 2–FOOT LAYER OF CERTIFIED CLEAN FILL
- CONCRETE SIDEWALK

GENERAL NOTES

1. BASE MAP SOURCES: DRAWING A–102.00 PLAN – GROUND FLOOR BY ENNEAD ARCHITECTS, LLP (JANUARY 31, 2014) AND NYU LANGONE MEDICAL CENTER SCIENCE BUILDING ASI#33 CD REVISIONS, L102, BY ENNEAD ARCHITECTS, LLP (DECEMBER 23, 2015)
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3. LOCATIONS ARE APPROXIMATE.

30 0 15 30

SCALE IN FEET

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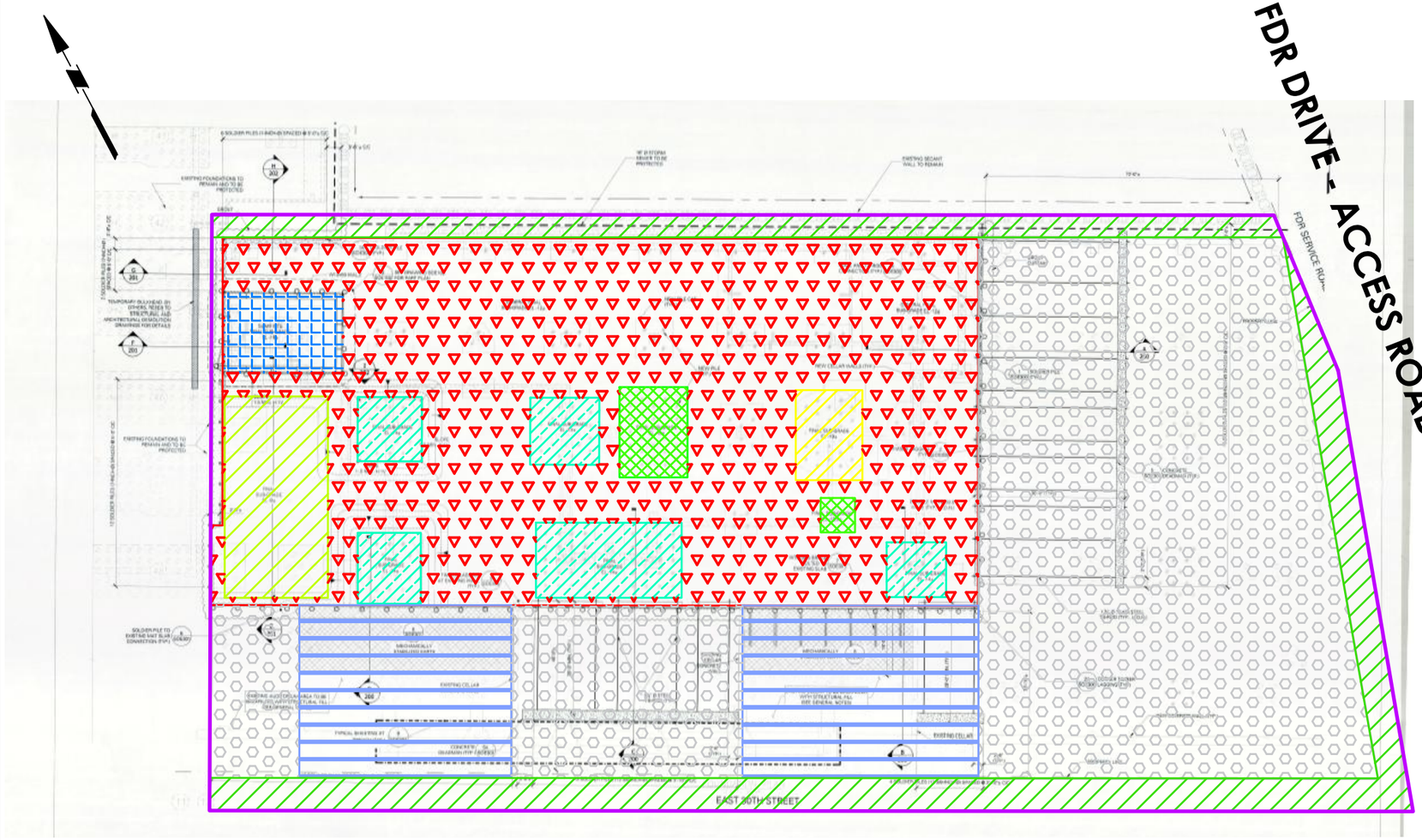
NYU LANGONE MEDICAL CENTER NEW SCIENCE BUILDING
BLOCK No. 962, LOT No. 7501
NEW YORK NEW YORK

Figure Title
SITE DEVELOPMENT MAP

Project No. 170037830	Figure No. 3
Date 10/06/2017	
Scale 1" = 30'	
Drawn By ERA	
Submission Date	Sheet 3 of 7

Filename: \\langan.com\data\NYC\data8\170037830\Cadd Data - 170037830\SheetFiles\Environmental\Remedial Action Report\Figure 3 - Site Development Map.dwg Date: 10/23/2017 Time: 17:00 User: eadkins Style Table: Langan.stb Layout: ANSIB-BL



EAST 30TH STREET

LEGEND

- SITE BOUNDARY
- EXCAVATION TO EXISTING CELLAR SLAB AT EL –5 (ABOUT 9–10 FEET BGS) FOLLOWED BY BACKFILL TO SURFACE GRADE
- EXCAVATION TO ABOUT EL –9 FOR CELLAR (ABOUT 13–14 FT BGS)
- EXCAVATION TO ABOUT EL –12 FOR CELLAR (ABOUT 18–19 FT BGS)
- EXCAVATION TO ABOUT EL –14 FOR PILECAPS (ABOUT 20–21 FT BGS)
- EXCAVATION TO ABOUT EL –15 FOR FOR PILECAPS (ABOUT 21–22 FT BGS)
- EXCAVATION TO EL –18 FOR SUMP PITS (ABOUT 24–25 FT BGS)
- EXCAVATION TO ABOUT ELEVATION –19 FOR PILE CAPS (ABOUT 25–26 FT BGS)
- EXCAVATION TO EL –2.5 TO 4 FOR PILE CAPS (ABOUT 2 TO 9 FT BGS) FOLLOWED BY BACKFILL AROUND PILE CAPS TO EL 3 TO 8 (GRADE)
- EXCAVATION TO ABOUT ELEVATION +4 FOR LANDSCAPED AREAS (ABOUT 2 FT BGS)

GENERAL NOTES

1. BASE MAP SOURCES: DRAWING A–102.00 PLAN – GROUND FLOOR BY ENNEAD ARCHITECTS, LLP (JANUARY 31, 2014) AND NYU LANGONE MEDICAL CENTER SCIENCE BUILDING ASI#33 CD REVISIONS, L102, BY ENNEAD ARCHITECTS, LLP (DECEMBER 23, 2015)
2. EXCAVATION AND BACKFILL LOCATIONS BASED ELEVATIONS (EL) IDENTIFIED IN DRAWINGS SOE–100.0–SUPPORT OF EXCAVATION WITH EXISTING FOUNDATIONS AND SOE–101.00–SUPPORT OF EXCAVATION PLAN WITH NEW FOUNDATIONS, PREPARED BY LANGAN (NOVEMBER, 6 2013).
3. ALL ELEVATIONS ARE PRESENTED IN BOROUGH PRESIDENT OF MANHATTAN DATUM (BPMD), WHICH IS APPROXIMATELY 2.75 FEET ABOVE MEAN SEA LEVEL DATUM AT SANDY HOOK, NEW JERSEY AS DEFINED BY THE UNITED STATES GEOLOGICAL SURVEY (USGS NGVD 1929).
4. LOCATIONS ARE APPROXIMATE.
5. FT BGS = FEET BELOW GRADE SURFACE

30 0 15 30
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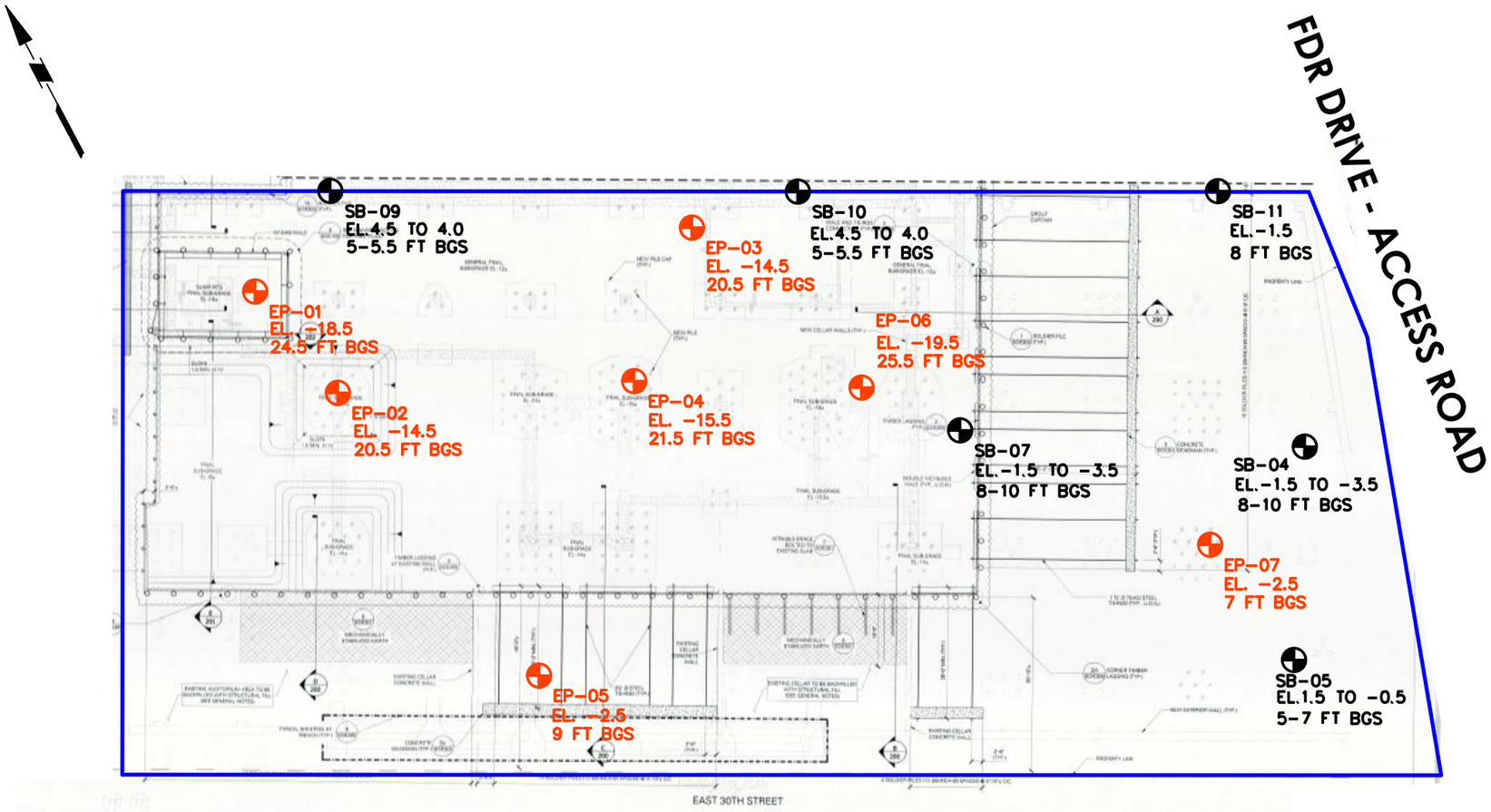
Figure Title
EXCAVATION AND BACKFILL LOCATION MAP

Project No. 170037830	Figure No. 4
Date 10/6/2017	
Scale 1" = 30'	
Drawn By ERA	
Submission Date	Sheet 4 of 7

Filename: \\langan.com\data\NYC\data8\170037830\Cadd Data - 170037830\SheetFiles\Environmental\Remedial Action Report\Figure 4 - Depth of Excavation and Backfill Map.dwg Date: 10/24/2017 Time: 08:40 User: eadkins Style Table: Langan.stb Layout: ANSIB-BL



EAST 30TH STREET

LEGEND

- APPROXIMATE SITE BOUNDARY
- EP-01 — ENDPOINT SAMPLE LOCATION SAMPLE COLLECTION ELEVATION AND APPROXIMATE DEPTH NOTED
- SB-04 — BORING EXTENDING BELOW EXCAVATION EXTENTS, ADVANCED BY AKRF AS A PART OF THE DECEMBER 2013 RI APPROXIMATE SAMPLE COLLECTION ELEVATION AND SAMPLE DEPTH NOTED

GENERAL NOTES

1. BASE MAP SOURCE: DRAWING SOE-101.00 – SUPPORT OF EXCAVATION PLAN WITH NEW FOUNDATIONS – PREPARED BY LANGAN (NOVEMBER 6, 2013).
2. SAMPLE COLLECTION ELEVATIONS ARE SHOWN IN FEET, RESPECTIVE TO THE BOROUGH PRESIDENT OF MANHATTAN DATUM (BPMD), WHICH IS APPROXIMATELY 2.75 FEET ABOVE MEAN SEA LEVEL DATUM AT SANDY HOOK, NEW JERSEY AS DEFINED BY THE UNITED STATES GEOLOGICAL SURVEY (USGS NGVD 1929).
3. LOCATIONS ARE APPROXIMATE.
4. SAMPLE ELEVATIONS SHOWN ARE APPROXIMATE.
5. RI = REMEDIAL INVESTIGATION
6. FT BGS = FEET BELOW GRADE SURFACE

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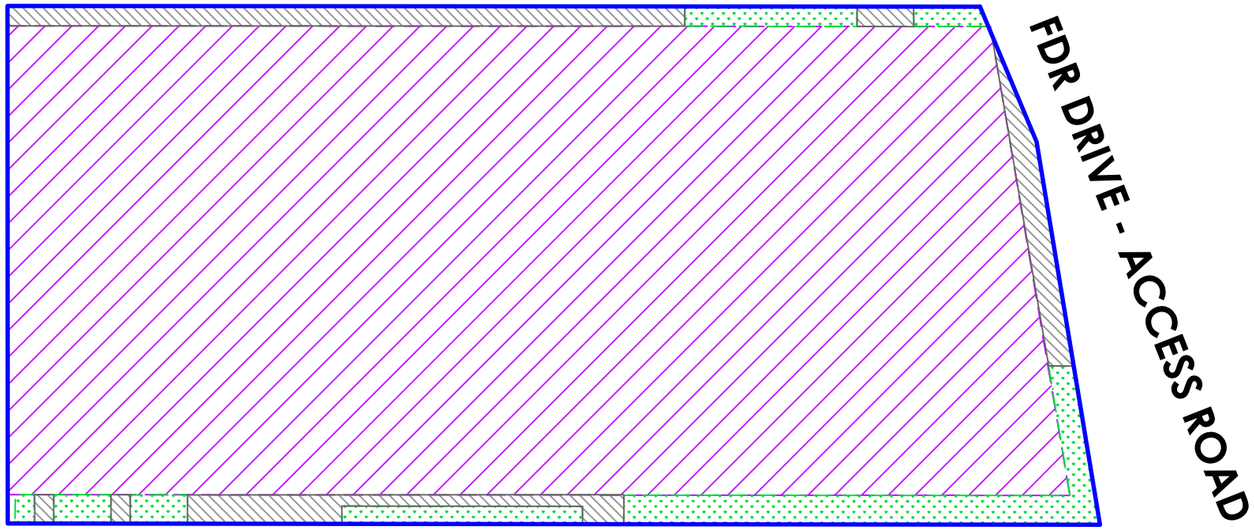
Figure Title
DOCUMENTATION SAMPLE LOCATION MAP

Project No. 170037830	Figure No. 5
Date 5/20/2016	
Scale 1" = 30'	
Drawn By SRD	
Submission Date	Sheet 5 of 7

Filename: \\langan.com\data\NYC\data8\170037830\Cadd Data - 170037830\SheetFiles\Environmental\Remedial Action Report\Figure 5 - Endpoint Sampling Location Map.dwg Date: 10/23/2017 Time: 17:05 User: eadkins Style Table: Langan.stb Layout: ANSIB-BL



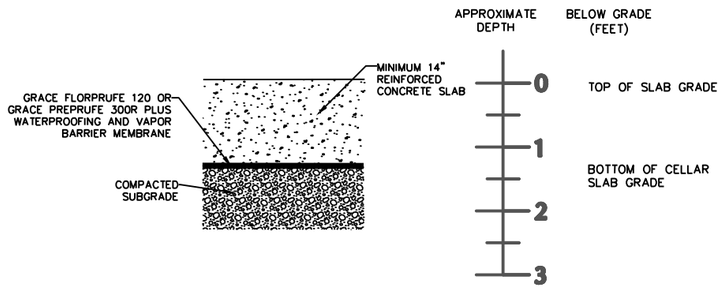
LEGEND

- APPROXIMATE SITE BOUNDARY
- EXTENT OF CONCRETE FOUNDATION SLAB
- LANDSCAPE AREA WITH MINIMUM 2–FOOT LAYER OF CERTIFIED CLEAN FILL
- CONCRETE SIDEWALK

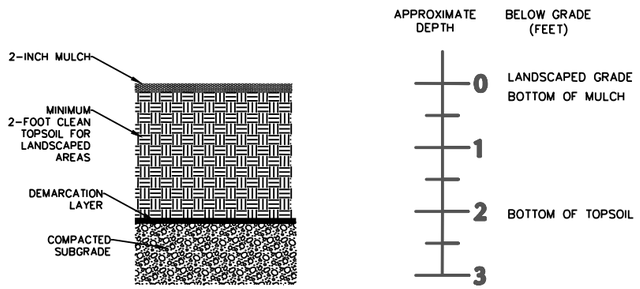
GENERAL NOTES

1. BASE MAP SOURCES: DRAWING A–102.00 PLAN – GROUND FLOOR BY ENNEAD ARCHITECTS, LLP (JANUARY 31, 2014) AND NYU LANGONE MEDICAL CENTER SCIENCE BUILDING ASI#33 CD REVISIONS, L102, BY ENNEAD ARCHITECTS, LLP (DECEMBER 23, 2015).
2. LANDSCAPED AREAS ARE CAPPED WITH A MINIMUM OF TWO FEET OF CERTIFIED CLEAN TOP SOIL.
3. THE VAPOR BARRIER UNDERLIES THE FOUNDATION SLAB AND IS COMPRISED OF GRACE PREPRUFE 300R, FLORPRUFE 120, AND BITUTHENE 4000 BENEATH THE FOUNDATION SLABS AND ON SUB–GRADE FOUNDATION WALLS. SEAMS WERE SEALED USING GRACE PREPRUFE ADHESIVE APPLIED TO THE MEMBRANE BY THE MANUFACTURER AND/OR PREPRUFE TAPE. GRACE PREPRUFE TAPE WAS WRAPPED AROUND TYPICAL UTILITY PENETRATIONS. GRACE BITUTHENE LIQUID MEMBRANE WAS THEN APPLIED AROUND THE PENETRATIONS TO PROVIDE A WATERTIGHT SEAL BETWEEN THE PREPRUFE MEMBRANE AND PREPRUFE TAPE.

GENERALIZED BACKFILL CROSS–SECTION BELOW BUILDING



GENERALIZED BACKFILL CROSS–SECTION BELOW LANDSCAPED AREA



GENERALIZED BACKFILL CROSS–SECTION BELOW SIDEWALK

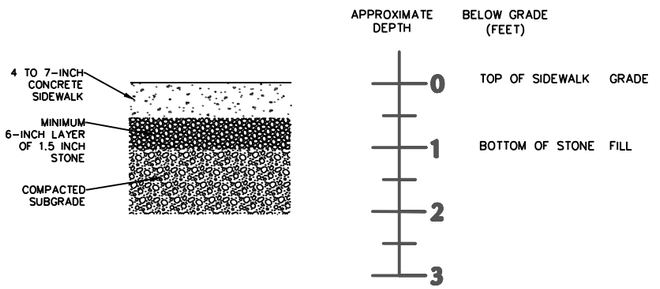


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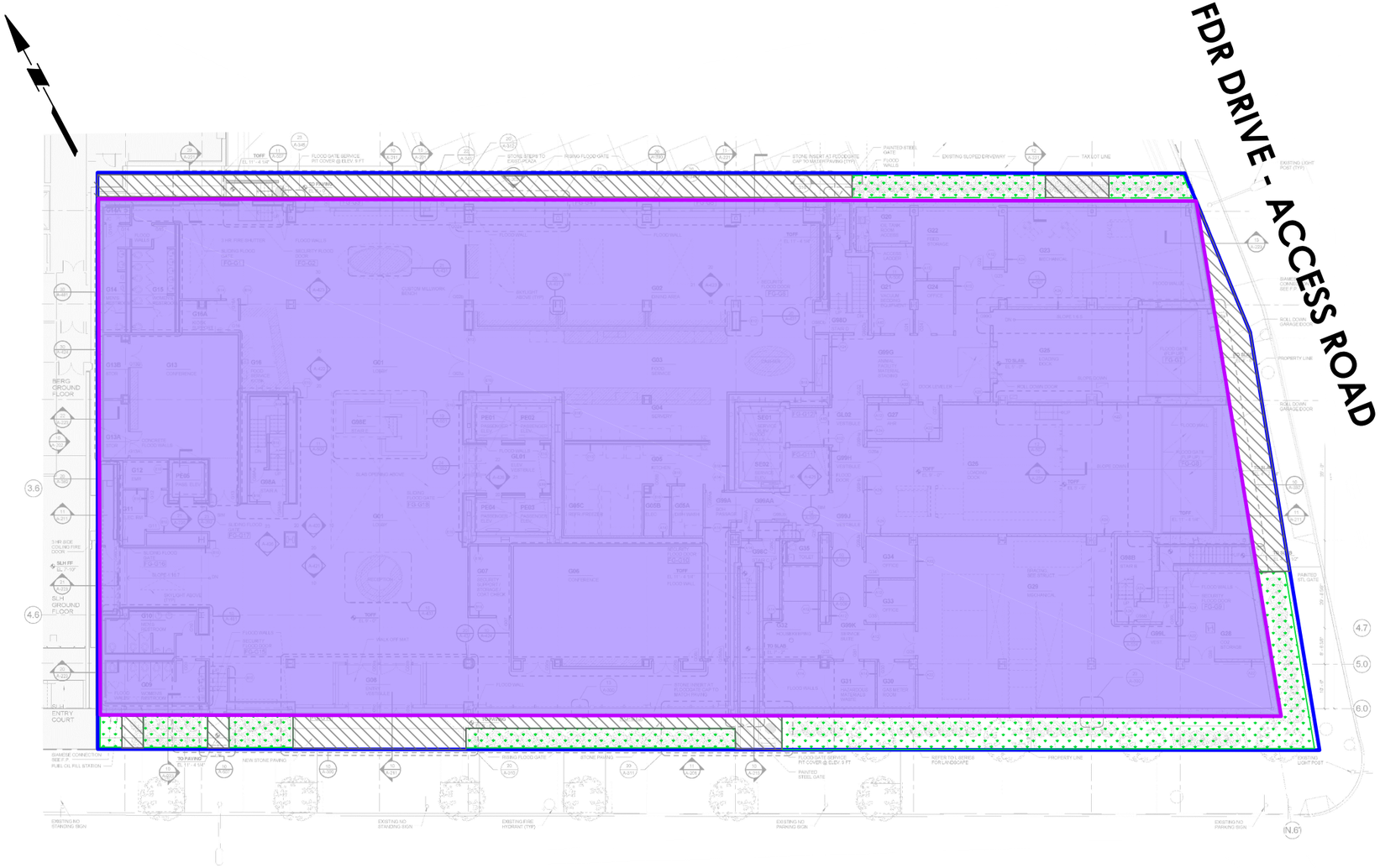
Figure Title
COMPOSITE COVER SYSTEM AND CROSS SECTIONS

Project No. 170037830	Figure No. 6
Date 10/6/2017	
Scale 1" = 40'	
Drawn By ERA	
Submission Date	Sheet 6 of 7

Filename: \\langan.com\data\NYC\data8\170037830\Cadd Data - 170037830\SheetFiles\Environmental\Remedial Action Report\Figure 6 - Composite Cover System Location Map_BNedits.dwg Date: 10/23/2017 Time: 17:07 User: eadkins Style Table: Langan.stb
Layout: ANSIB-BL



LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT BOUNDARY
- EXTENT OF WATERPROOFING AND VAPOR BARRIER MEMBRANE
- LANDSCAPE AREA WITH MINIMUM 2–FOOT LAYER OF CERTIFIED CLEAN FILL
- CONCRETE SIDEWALK

GENERAL NOTES

1. BASE MAP SOURCES: DRAWING A–102.00 PLAN – GROUND FLOOR BY ENNEAD ARCHITECTS, LLP (JANUARY 31, 2014) AND NYU LANGONE MEDICAL CENTER SCIENCE BUILDING ASI#33 CD REVISIONS, L102, BY ENNEAD ARCHITECTS, LLP (DECEMBER 23, 2015)
2. DATUM IS BOROUGH PRESIDENT OF MANHATTAN DATUM (BPMD), WHICH IS APPROXIMATELY 2.75 FEET ABOVE MEAN SEA LEVEL DATUM AT SANDY HOOK, NEW JERSEY AS DEFINED BY THE UNITED STATES GEOLOGICAL SURVEY (USGS NGVD 1929)
3. LOCATIONS ARE APPROXIMATE.
4. VAPOR BARRIER/WATERPROOFING CONSISTS OF 46–MIL GRACE PREPRUFE 300R AND 59–MIL BITUTHENE 4000.

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Figure Title
VAPOR BARRIER AND WATERPROOFING LOCATION MAP

Project No. 170037830	Figure No. 7
Date 10/24/2017	
Scale 1" = 30'	
Drawn By ERA	
Submission Date	Sheet 7 of 7

Filename: \\langan.com\data\NYC\data8\170037830\Cadd Data - 170037830\SheetFiles\Environmental\Remedial Action Report\Figure 7 - Vapor Barrier and Waterproofing Location Map_ERA.dwg Date: 12/4/2017 Time: 13:58 User: eadkins Style Table: Langan.stb
Layout: ANSIB-BL

TABLES

Table 1 - Disposal Quantities and Disposal Facilities
NYU Langone Medical Center – New Science Building
435 East 30th Street, New York, New York
NYC VCP Site. No. 14VCP211M
Langan Project No. 170037830

Total Loads of Soil	**431 loads**	**Total Tons of Soil**	**12,640.03**
Total Loads to Clean Earth Carteret	431 loads	Total Tons to Clean Earth Carteret	12,640.03

LOAD COUNTER	DATE	TRUCKING COMPANY	TRUCK NUMBER	TRUCK LICENSE PLATE NUMBER	MANIFEST NUMBER	PANEL/GRID NUMBER	SOIL CLASSIFICATION	DISPOSAL FACILITY	COUNTERSIGNED MANIFEST/WEIGHT TICKET No.	AMOUNT DISPOSED OFF-SITE (TON)	COMMENTS
1	11/25/2014	Munoz	06	AN464M	1033421	I	NJ Non-Residential	Clean Earth Carteret	1033421	25.78	
2	11/25/2014	Munoz	3000	AN386L	1022422	I	NJ Non-Residential	Clean Earth Carteret	1022422	26.71	
3	11/25/2014	Munoz	59	AP519D	1033423	I	NJ Non-Residential	Clean Earth Carteret	1033423	25.93	
4	11/25/2014	Munoz	06	AN464M	1033416	I and C	NJ Non-Residential	Clean Earth Carteret	1033416	27.99	
5	11/25/2014	Munoz	3000	AN386L	1033417	I and C	NJ Non-Residential	Clean Earth Carteret	1033417	30.36	
6	11/25/2014	Munoz	59	AP519D	1033418	I and C	NJ Non-Residential	Clean Earth Carteret	1033418	27.00	
7	11/25/2014	Munoz	06	AN464M	1033415	I	NJ Non-Residential	Clean Earth Carteret	1033415	28.11	
8	11/25/2014	Munoz	3000	AN386L	1033419	I	NJ Non-Residential	Clean Earth Carteret	1033419	31.43	
9	11/25/2014	Munoz	59	AP519D	1033420	I	NJ Non-Residential	Clean Earth Carteret	1033420	30.00	
10	12/1/2014	Munoz	14	AN383L	1033436	I	NJ Non-Residential	Clean Earth Carteret	1033436	28.69	
11	12/1/2014	Munoz	48	AS122E	1033437	I	NJ Non-Residential	Clean Earth Carteret	1033437	32.03	
12	12/1/2014	Munoz	08	AN466M	1033438	I	NJ Non-Residential	Clean Earth Carteret	1033438	31.49	
13	12/1/2014	Munoz	40	AN387L	1033439	I	NJ Non-Residential	Clean Earth Carteret	1033439	27.82	
14	12/1/2014	Munoz	14	AN383L	1033440	I and C	NJ Non-Residential	Clean Earth Carteret	1033440	27.66	
15	12/1/2014	Munoz	48	AS122E	1033441	I	NJ Non-Residential	Clean Earth Carteret	1033441	28.42	
16	12/1/2014	Munoz	40	AN387L	1033442	I	NJ Non-Residential	Clean Earth Carteret	1033442	30.08	
17	12/1/2014	Munoz	08	AN466M	1033443	I	NJ Non-Residential	Clean Earth Carteret	1033443	29.65	
18	12/1/2014	Munoz	14	AN383L	1033448	I	NJ Non-Residential	Clean Earth Carteret	1033448	27.60	
19	12/1/2014	Munoz	48	AS122E	1033449	I	NJ Non-Residential	Clean Earth Carteret	1033449	28.43	
20	12/1/2014	Munoz	40	AN387L	1033450	I	NJ Non-Residential	Clean Earth Carteret	1033450	26.76	
21	12/2/2014	Munoz	48	AS122E	1033464	I	NJ Non-Residential	Clean Earth Carteret	1033464	28.55	
22	12/2/2014	Munoz	08	AN466M	1033465	A	NJ Non-Residential	Clean Earth Carteret	1033465	28.56	
23	12/2/2014	Munoz	40	AN387L	1033466	I	NJ Non-Residential	Clean Earth Carteret	1033466	27.03	
24	12/2/2014	Munoz	48	AS122E	1033467	A	NJ Non-Residential	Clean Earth Carteret	1033467	28.29	
25	12/2/2014	Munoz	08	AN466M	1033469	A	NJ Non-Residential	Clean Earth Carteret	1033469	29.96	
26	12/2/2014	Munoz	40	AN387L	1033470	A	NJ Non-Residential	Clean Earth Carteret	1033470	26.91	
27	12/2/2014	Munoz	48	AS122E	1033472	A and B	NJ Non-Residential	Clean Earth Carteret	1033472	26.71	
28	12/2/2014	Munoz	08	AN466M	1033471	A and B	NJ Non-Residential	Clean Earth Carteret	1033471	29.54	
29	12/2/2014	Munoz	40	AN387L	1033473	A and B	NJ Non-Residential	Clean Earth Carteret	1033473	27.42	
30	12/4/2014	Manolos	01	AN421H	1033451	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1033451	28.64	
31	12/4/2014	F & Y Transport	16	AP320X	1033474	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1033474	26.43	
32	12/4/2014	CF Brothers Transport	71	AP733S	1033475	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1033475	28.42	
33	12/4/2014	CF Brothers Transport	10	AL312C	1080402	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080402	31.10	
34	12/4/2014	Munoz	48	AS122E	1080403	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080403	27.51	
35	12/4/2014	Munoz	08	AN466M	1080404	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080404	28.96	
36	12/4/2014	Manolos	01	AN421H	1080412	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080412	28.43	
37	12/4/2014	CF Brothers Transport	71	AP733S	1080413	A, B, and E	NJ Non-Residential	Clean Earth Carteret	1080413	30.04	
38	12/4/2014	F & Y Transport	16	AP320X	1080414	A, B, and E	NJ Non-Residential	Clean Earth Carteret	1080414	29.01	
39	12/4/2014	CF Brothers Transport	10	AL312C	1080415	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080415	30.72	
40	12/4/2014	Munoz	48	AS122E	1080416	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080416	28.98	
41	12/4/2014	Munoz	08	AN466M	1080417	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080417	30.23	
42	12/4/2014	Manolos	01	AN421H	1080418	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080418	34.47	
43	12/4/2014	CF Brothers Transport	71	AP733S	1080419	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080419	32.60	
44	12/4/2014	F & Y Transport	16	AP320X	1080420	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080420	31.02	
45	12/4/2014	CF Brothers Transport	10	AL312C	1080411	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080411	31.69	
46	12/4/2014	Munoz	48	AS122E	1080405	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080405	29.88	
47	12/4/2014	Munoz	08	AN466M	1080406	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080406	32.04	
48	12/5/2014	Manolos	01	AN421H	1080438	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080438	31.19	
49	12/5/2014	CF Brothers Transport	10	AL312C	1080439	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080439	32.17	
50	12/5/2014	Munoz	51	AS124E	1080440	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080440	27.23	
51	12/5/2014	Munoz	08	AN466M	1080441	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080441	27.83	
52	12/5/2014	Munoz	69	AP886R	1080442	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080442	28.70	
53	12/5/2014	Manolos	01	AN421H	1080431	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080431	29.81	

Table 1 - Disposal Quantities and Disposal Facilities
NYU Langone Medical Center – New Science Building
435 East 30th Street, New York, New York
NYC VCP Site. No. 14VCP211M
Langan Project No. 170037830

LOAD COUNTER	DATE	TRUCKING COMPANY	TRUCK NUMBER	TRUCK LICENSE PLATE NUMBER	MANIFEST NUMBER	PANEL/GRID NUMBER	SOIL CLASSIFICATION	DISPOSAL FACILITY	COUNTERSIGNED MANIFEST/WEIGHT TICKET No.	AMOUNT DISPOSED OFF-SITE (TON)	COMMENTS
54	12/5/2014	CF Brothers Transport	10	AL312C	1080432	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080432	31.50	
55	12/5/2014	Munoz	51	AS124E	1080433	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080433	27.72	
56	12/5/2014	Munoz	08	AN466M	1080434	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080434	29.05	
57	12/5/2014	Manolos	01	AN421H	1080435	A, B, E and I	NJ Non-Residential	Clean Earth Carteret	1080435	27.41	
58	12/5/2014	CF Brothers Transport	10	AL312C	1080436	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080436	27.97	
59	12/5/2014	Munoz	51	AS124E	1080437	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080437	27.08	
60	12/8/2014	Munoz	43	AR558H	1080443	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080443	25.40	
61	12/8/2014	Munoz	51	AS124E	1080444	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080444	28.09	
62	12/8/2014	Munoz	26	AN385L	1080445	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080445	26.88	
63	12/8/2014	Munoz	69	AP886R	1080446	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080446	28.72	
64	12/8/2014	Munoz	06	AN464M	1080407	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080407	27.65	
65	12/8/2014	Munoz	31	AP518D	1080408	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080408	31.18	
66	12/8/2014	Munoz	43	#REF!	1080409	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080409	29.81	
67	12/8/2014	Munoz	51	AS124E	1080410	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080410	30.01	
68	12/8/2014	Munoz	26	AN385L	1080448	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080448	28.31	
69	12/8/2014	Munoz	69	AP886R	1080449	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080449	30.75	
70	12/8/2014	Munoz	06	AN464M	1080450	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080450	27.50	
71	12/8/2014	Munoz	31	AP518D	1080451	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080451	32.06	
72	12/8/2014	Munoz	43	AR558H	1080452	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080452	30.39	
73	12/8/2014	Munoz	51	AS124E	1080453	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080453	29.33	
74	12/8/2014	Munoz	69	AP886R	1080454	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080454	30.25	
75	12/8/2014	Munoz	06	AN464M	1080455	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080455	28.68	
76	12/8/2014	Munoz	26	AN385L	1080456	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080456	28.59	
77	12/8/2014	Munoz	31	AP518D	1080457	B, E and I	NJ Non-Residential	Clean Earth Carteret	1080457	33.43	
78	12/11/2014	Manolos	04	AS122E	1080458	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080458	27.51	
79	12/11/2014	CF Brothers Transport	71	AM21Z	1080459	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080459	30.01	
80	12/11/2014	Munoz	43	AN382L	1080460	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080460	28.62	
81	12/11/2014	Munoz	100	AN488T	1080492	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080492	30.91	
82	12/11/2014	Munoz	3000	AN383L	1080461	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080461	28.69	
83	12/11/2014	Munoz	20	AN131Z	1080462	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080462	27.04	
84	12/11/2014	Munoz	32	AN466M	1080463	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080463	28.02	
85	12/11/2014	Munoz	3	AN387L	1080493	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080493	27.10	
86	12/11/2014	Munoz	88	AM248W	1080494	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080494	26.58	
87	12/11/2014	Munoz	31	AP951N	1080495	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	1080495	30.34	
88	12/11/2014	CF Brothers Transport	71	AS122E	1080496	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080496	33.03	
89	12/11/2014	Munoz	43	AM21Z	1080497	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080497	30.63	
90	12/11/2014	Munoz	100	AN382L	1080498	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080498	29.28	
91	12/11/2014	Munoz	3000	AN383L	1080500	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080500	29.78	
92	12/11/2014	Munoz	20	AN131Z	1080501	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080501	29.24	
93	12/11/2014	Munoz	32	AN387L	1080502	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080502	31.17	
94	12/11/2014	Munoz	3	AN466M	1080503	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080503	29.19	
95	12/11/2014	Munoz	88	AP951N	1080504	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080504	29.85	
96	12/11/2014	Munoz	31	AM248W	1080505	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080505	34.50	
97	12/11/2014	Manolos	04	AN488T	1080506	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080506	29.28	
98	12/11/2014	CF Brothers Transport	71	AS122E	1080507	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080507	31.94	
99	12/11/2014	Munoz	43	AM21Z	1080525	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080525	28.51	
100	12/11/2014	Munoz	100	AN382L	1080524	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080524	29.05	
101	12/11/2014	Munoz	3000	AN383L	1080508	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080508	28.84	
102	12/11/2014	Munoz	20	AN387L	1080509	B, C and I	NJ Non-Residential	Clean Earth Carteret	1080509	28.03	
103	12/11/2014	Munoz	32	AN466M	1080510	B and C	NJ Non-Residential	Clean Earth Carteret	1080510	29.49	
104	12/11/2014	Munoz	3	AP951N	1080511	I	NJ Non-Residential	Clean Earth Carteret	1080511	31.81	
105	12/11/2014	Munoz	88	AR470F	1080512	I	NJ Non-Residential	Clean Earth Carteret	1080512	29.77	
106	12/11/2014	Munoz	31	AL312C	1080513	I	NJ Non-Residential	Clean Earth Carteret	1080513	28.82	
107	12/12/2014	Munoz	48	AS122E	1080526	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164729	26.92	
108	12/12/2014	Munoz	70	AM21Z	1080527	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164749	23.76	
109	12/12/2014	Munoz	11	AN382L	1080528	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164755	28.32	
110	12/12/2014	Munoz	100	AN488T	1080499	B, C and I	NJ Non-Residential	Clean Earth Carteret	70000164932	24.18	

Table 1 - Disposal Quantities and Disposal Facilities
NYU Langone Medical Center – New Science Building
435 East 30th Street, New York, New York
NYC VCP Site. No. 14VCP211M
Langan Project No. 170037830

LOAD COUNTER	DATE	TRUCKING COMPANY	TRUCK NUMBER	TRUCK LICENSE PLATE NUMBER	MANIFEST NUMBER	PANEL/GRID NUMBER	SOIL CLASSIFICATION	DISPOSAL FACILITY	COUNTERSIGNED MANIFEST/WEIGHT TICKET No.	AMOUNT DISPOSED OFF-SITE (TON)	COMMENTS
111	12/12/2014	Munoz	14	AN383L	1080530	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164773	26.40	
112	12/12/2014	Munoz	25	AN131Z	1080531	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164859	25.37	
113	12/12/2014	Munoz	08	AN466M	938579	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164894	28.02	
114	12/12/2014	Munoz	40	AN387L	938580	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164899	24.95	
115	12/12/2014	Munoz	52	AM248W	938581	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164921	22.82	
116	12/12/2014	Munoz	34	AP951N	938582	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000164923	25.54	
117	12/12/2014	Munoz	48	AS122E	1080529	B, C	NJ Non-Residential	Clean Earth Carteret	700000165018	26.21	
118	12/12/2014	Munoz	70	AM21Z	938583	B, C	NJ Non-Residential	Clean Earth Carteret	700000165082	26.46	
119	12/12/2014	Munoz	11	AN382L	938585	B, C	NJ Non-Residential	Clean Earth Carteret	700000165106	28.93	
120	12/12/2014	Munoz	14	AN383L	938586	B, C	NJ Non-Residential	Clean Earth Carteret	700000165113	23.85	
121	12/12/2014	Munoz	25	AN131Z	938587	B, C	NJ Non-Residential	Clean Earth Carteret	700000165201	22.99	
122	12/12/2014	Munoz	40	AN387L	938588	B, C	NJ Non-Residential	Clean Earth Carteret	700000165197	23.97	
123	12/12/2014	Munoz	08	AN466M	938589	B, C	NJ Non-Residential	Clean Earth Carteret	700000165227	26.95	
124	12/12/2014	Munoz	34	AP951N	938590	B, C	NJ Non-Residential	Clean Earth Carteret	700000165237	25.17	
125	12/12/2014	Munoz	52	AM248W	938591	B, C	NJ Non-Residential	Clean Earth Carteret	700000165265	25.45	
126	12/12/2014	Munoz	100	AN488T	938592	B, C	NJ Non-Residential	Clean Earth Carteret	700000165267	23.54	
127	12/12/2014	Munoz	48	AS122E	938593	B, C	NJ Non-Residential	Clean Earth Carteret	700000165281	25.66	
128	12/12/2014	Munoz	70	AM21Z	938594	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000165347	25.10	
129	12/12/2014	Munoz	11	AN382L	938595	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000165391	29.14	
130	12/12/2014	Munoz	14	AN383L	938596	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000165393	25.26	
131	12/12/2014	Munoz	40	AN387L	938597	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000165427	25.80	
132	12/12/2014	Munoz	08	AN466M	938598	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000165431	28.17	
133	12/12/2014	Munoz	34	AP951N	938599	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000165440	29.18	
134	12/15/2014	David Anderson	07	AR470F	938600	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166176	29.64	
135	12/15/2014	CF Brothers Transport	10	AL312C	938601	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166184	30.58	
136	12/15/2014	Manolos	05	AP414M	938602	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166194	28.28	
137	12/15/2014	Munoz	48	AS122E	938603	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166154	28.04	
138	12/15/2014	Munoz	33	AP776R	938604	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166167	28.07	
139	12/15/2014	Munoz	007	AN465M	938610	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166232	27.48	
140	12/15/2014	Munoz	43	AR558H	938611	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166276	28.07	
141	12/15/2014	Munoz	51	AS124E	938612	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166313	26.89	
142	12/15/2014	Munoz	26	AN385L	938613	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166359	25.72	
143	12/15/2014	Munoz	47	AR562H	938614	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166378	29.29	
144	12/15/2014	Munoz	21	AN129Z	938615	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	70000016*	23.53	*Weight ticket number illegible
145	12/15/2014	Munoz	69	AP886R	938616	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166417	25.07	
146	12/15/2014	Munoz	39	AR166G	938617	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166*	25.72	*Weight ticket number illegible
147	12/15/2014	Munoz	72	AN389L	938618	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166450	25.35	
148	12/15/2014	Munoz	33	AP776R	938619	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166534	27.06	
149	12/15/2014	Munoz	48	AS122E	938620	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166547	25.06	
150	12/15/2014	CF Brothers Transport	10	AL312C	938621	B, C, D, E and F	NJ Non-Residential	Clean Earth Carteret	700000166553	29.95	
151	12/15/2014	David Anderson	07	AR470F	938622	B, C, D, E and F	NJ Non-Residential	Clean Earth Carteret	700000166557	29.75	
152	12/15/2014	Manolos	05	AP414M	938623	B, C, D, E and F	NJ Non-Residential	Clean Earth Carteret	700000166570	27.58	
153	12/15/2014	Munoz	007	AN465M	938624	B, C, D, E and F	NJ Non-Residential	Clean Earth Carteret	700000166586	28.00	
154	12/15/2014	Munoz	43	AR558H	938625	B, C, D, E and F	NJ Non-Residential	Clean Earth Carteret	700000166607	28.06	
155	12/15/2014	Munoz	51	AS124E	938626	B, C, D and E	NJ Non-Residential	Clean Earth Carteret	700000166638	25.43	
156	12/15/2014	Munoz	26	AN385L	938627	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166695	27.54	
157	12/15/2014	Munoz	47	AR562H	938628	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166700	29.78	
158	12/15/2014	Munoz	21	AN129Z	938629	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166707	30.95	
159	12/15/2014	Munoz	69	AP886R	938630	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166713	28.96	
160	12/15/2014	Munoz	39	AR166G	938631	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166724	27.82	
161	12/15/2014	Munoz	72	AN389L	938632	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166734	28.09	
162	12/15/2014	Munoz	33	AP776R	938633	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166756	28.51	
163	12/15/2014	Munoz	48	AS122E	938634	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166787	26.61	
164	12/15/2014	David Anderson	07	AR470F	938635	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166818	29.63	
165	12/15/2014	CF Brothers Transport	10	AL312C	938636	B, C, D, F and G	NJ Non-Residential	Clean Earth Carteret	700000166822	29.73	
166	12/15/2014	Manolos	05	AP414M	938637	B, C and D	NJ Non-Residential	Clean Earth Carteret	700000166827	30.25	
167	12/15/2014	Munoz	007	AN465M	938638	C	NJ Non-Residential	Clean Earth Carteret	700000166834	28.56	

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LOAD COUNTER	DATE	TRUCKING COMPANY	TRUCK NUMBER	TRUCK LICENSE PLATE NUMBER	MANIFEST NUMBER	PANEL/GRID NUMBER	SOIL CLASSIFICATION	DISPOSAL FACILITY	COUNTERSIGNED MANIFEST/WEIGHT TICKET No.	AMOUNT DISPOSED OFF-SITE (TON)	COMMENTS
168	12/15/2014	Munoz	43	AR558H	938639	C and D	NJ Non-Residential	Clean Earth Carteret	700000166839	29.21	
169	12/15/2014	Munoz	51	AS124E	938640	C and D	NJ Non-Residential	Clean Earth Carteret	700000166852	27.87	
170	12/15/2014	Munoz	26	AN385L	938641	C and D	NJ Non-Residential	Clean Earth Carteret	700000166874	26.86	
171	12/15/2014	Munoz	47	AR562H	938642	C and D	NJ Non-Residential	Clean Earth Carteret	700000166890	30.02	
172	12/15/2014	Munoz	21	AN129Z	938643	C and D	NJ Non-Residential	Clean Earth Carteret	700000166891	30.61	
173	12/15/2014	Munoz	69	AP886R	938644	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000166897	27.15	
174	12/15/2014	Munoz	39	AR166G	938605	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000166898	23.68	
175	12/15/2014	Munoz	72	AN389L	938606	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000166901	24.00	
176	12/16/2014	David Anderson	07	AR470F	938646	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167075	29.57	
177	12/16/2014	Uriel Trucking LLC	12	AR989F	938647	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167112	27.64	
178	12/16/2014	Manolos	02	AK597T	938648	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167114	26.44	
179	12/16/2014	CF Brothers Transport	71	AP733S	938649	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167160	29.33	
180	12/16/2014	F & Y Transport	16	AP320X	938650	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167171	29.13	
181	12/16/2014	CF Brothers Transport	10	AL312C	938651	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167215	29.66	
182	12/16/2014	Munoz	72	AN389L	938652	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167221	25.96	
183	12/16/2014	Manolos	05	AP414M	938653	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167253	26.23	
184	12/16/2014	Munoz	69	AP886R	938654	B, C, E and I	NJ Non-Residential	Clean Earth Carteret	700000167255	27.70	
185	12/16/2014	David Anderson	07	AR470F	938655	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000167474	31.80	
186	12/16/2014	Manolos	02	AK597T	938656	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000167452	33.52	
187	12/16/2014	Uriel Trucking LLC	12	AR989F	938571	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000167464	28.81	
188	12/16/2014	CF Brothers Transport	71	AP733S	938572	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000167496	31.42	
189	12/16/2014	F & Y Transport	16	AP320X	938573	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000167502	32.99	
190	12/16/2014	CF Brothers Transport	10	AL312C	938574	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000167513	31.80	
191	12/16/2014	Munoz	72	AN389L	938575	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000167525	27.12	
192	12/16/2014	Manolos	05	AP414M	938676	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167557	30.75	
193	12/16/2014	Munoz	69	AP886R	938577	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167561	27.79	
194	12/16/2014	Manolos	02	AK597T	938607	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167665	32.35	
195	12/16/2014	Uriel Trucking LLC	12	AR989F	938608	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167639	28.76	
196	12/16/2014	David Anderson	07	AR470F	938668	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167652	32.97	
197	12/16/2014	CF Brothers Transport	71	AP733S	938667	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167654	33.04	
198	12/16/2014	F & Y Transport	16	AP320X	938666	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167656	32.63	
199	12/16/2014	CF Brothers Transport	10	AL312C	938665	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167683	32.43	
200	12/16/2014	Munoz	72	AN389L	938664	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167678	28.64	
201	12/16/2014	Manolos	05	AP414M	938663	C and D	NJ Non-Residential	Clean Earth Carteret	700000167682	30.75	
202	12/16/2014	Munoz	69	AP886R	938662	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167686	29.30	
203	12/16/2014	Munoz	200	AJ731S	938661	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167688	32.76	
204	12/17/2014	CF Brothers Transport	10	AL312C	938660	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167845	30.69	
205	12/17/2014	MCB Trucking	2	AN639J	938659	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167848	28.18	
206	12/17/2014	Manolos	05	AP414M	938658	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167869	31.63	
207	12/17/2014	Munoz	72	AN389L	938657	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167872	27.74	
208	12/17/2014	Munoz	15	AN384L	938541	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167906	28.63	
209	12/17/2014	Munoz	43	AR558H	938542	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167934	27.72	
210	12/17/2014	Munoz	41	AR167J	938543	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167997	28.84	
211	12/17/2014	Munoz	44	AR559H	938544	C, D and E	NJ Non-Residential	Clean Earth Carteret	700000167989	28.39	
212	12/17/2014	Munoz	51	AS124E	938545	F	NJ Residential	Clean Earth Carteret	700000167971	27.18	
213	12/17/2014	CF Brothers Transport	10	AL312C	938546	F	NJ Residential	Clean Earth Carteret	700000168196	30.71	
214	12/17/2014	Manolos	05	AP414M	938547	F	NJ Residential	Clean Earth Carteret	700000168230	31.66	
215	12/17/2014	MCB Trucking	2	AN639J	938548	F	NJ Residential	Clean Earth Carteret	700000168224	32.18	
216	12/17/2014	Munoz	15	AN384L	938549	F	NJ Residential	Clean Earth Carteret	700000168227	29.57	
217	12/17/2014	Munoz	72	AN389L	938550	F	NJ Residential	Clean Earth Carteret	700000168255	29.66	
218	12/17/2014	Munoz	43	AR558H	938551	F	NJ Residential	Clean Earth Carteret	700000168276	31.15	
219	12/17/2014	Munoz	41	AR167J	938552	F	NJ Residential	Clean Earth Carteret	700000168318	30.16	
220	12/17/2014	Munoz	44	AR559H	938553	F	NJ Residential	Clean Earth Carteret	700000168335	32.17	
221	12/17/2014	Munoz	51	AS124E	938554	F	NJ Residential	Clean Earth Carteret	700000168343	30.17	
222	12/17/2014	CF Brothers Transport	10	AL312C	938555	F	NJ Residential	Clean Earth Carteret	700000168508	33.94	
223	12/17/2014	Manolos	05	AP414M	938556	F	NJ Residential	Clean Earth Carteret	700000168514	31.77	
224	12/17/2014	MCB Trucking	2	AN639J	938557	F	NJ Residential	Clean Earth Carteret	700000168524	31.53	

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225	12/17/2014	Munoz	15	AN384L	938558	C, D, E and F	NJ Non-Residential	Clean Earth Carteret	700000168530	30.83	
226	12/17/2014	Jencar	67	AR621C	938559	F	NJ Residential	Clean Earth Carteret	700000168531	34.10	
227	12/17/2014	Munoz	72	AN389L	938560	C and D	NJ Non-Residential	Clean Earth Carteret	700000168542	29.61	
228	12/17/2014	Jencar	68	AP812A	938561	C and D	NJ Non-Residential	Clean Earth Carteret	700000168546	33.17	
229	12/17/2014	Munoz	43	AR558H	938562	C and D	NJ Non-Residential	Clean Earth Carteret	700000168552	30.53	
230	12/17/2014	Munoz	44	AR559H	938563	C and D	NJ Non-Residential	Clean Earth Carteret	700000168553	31.56	
231	12/17/2014	Munoz	41	AR167J	938564	C and D	NJ Non-Residential	Clean Earth Carteret	700000168560	30.74	
232	12/17/2014	Munoz	51	AS124E	938565	C and D	NJ Non-Residential	Clean Earth Carteret	700000168562	28.08	
233	12/18/2014	Munoz	33	AP776R	938566	F	NJ Residential	Clean Earth Carteret	700000168675	29.88	
234	12/18/2014	Munoz	46	AR561H	938567	F	NJ Residential	Clean Earth Carteret	700000168692	31.05	
235	12/18/2014	Munoz	42	AN388L	938568	F	NJ Residential	Clean Earth Carteret	700000168695	29.98	
236	12/18/2014	Munoz	007	AN465M	938569	F	NJ Residential	Clean Earth Carteret	700000168714	30.34	
237	12/18/2014	Munoz	17	AP516D	938570	F	NJ Residential	Clean Earth Carteret	700000168760	29.79	
238	12/18/2014	Munoz	9	AP237E	938686	F	NJ Residential	Clean Earth Carteret	700000168785	29.83	
239	12/18/2014	Munoz	33	AP776R	938685	F	NJ Residential	Clean Earth Carteret	700000168914	30.43	
240	12/18/2014	Munoz	46	AR561H	938684	F and I	NJ Non-Residential	Clean Earth Carteret	700000168956	31.35	
241	12/18/2014	Munoz	42	AN388L	938683	F	NJ Residential	Clean Earth Carteret	700000168969	29.00	
242	12/18/2014	Munoz	007	AN465M	938682	F and I	NJ Non-Residential	Clean Earth Carteret	700000168990	28.82	
243	12/18/2014	Munoz	9	AP237E	938681	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000169040	28.77	
244	12/18/2014	Munoz	17	AP516D	938680	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000169048	31.07	
245	12/18/2014	Munoz	33	AP776R	938679	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000169255	30.64	
246	12/18/2014	Munoz	46	AR561H	938678	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000169272	31.71	
247	12/18/2014	Munoz	42	AN388L	938677	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000169281	28.98	
248	12/18/2014	Munoz	007	AN465M	938676	C, D and G	NJ Non-Residential	Clean Earth Carteret	700000169289	30.00	
249	12/18/2014	Munoz	9	AP237E	938675	C and D	NJ Non-Residential	Clean Earth Carteret	700000169330	29.85	
250	12/18/2014	Munoz	17	AP516D	938674	C and D	NJ Non-Residential	Clean Earth Carteret	700000169332	29.56	
251	12/19/2014	Munoz	33	AP776R	938673	D, E, G and H	NJ Non-Residential	Clean Earth Carteret	700000169650	29.97	
252	12/19/2014	Munoz	42	AN388L	938672	D, E, G and H	NJ Non-Residential	Clean Earth Carteret	700000169663	29.34	
253	12/19/2014	Munoz	007	AN465M	938671	D, E, G and H	NJ Non-Residential	Clean Earth Carteret	700000169669	29.30	
254	12/19/2014	Munoz	33	AP776R	938670	D, E, G and H	NJ Non-Residential	Clean Earth Carteret	700000169898	32.27	
255	12/19/2014	Munoz	42	AN388L	938669	D, E, G and H	NJ Non-Residential	Clean Earth Carteret	700000169915	28.99	
256	12/19/2014	Munoz	007	AN465M	938511	D, E, G and H	NJ Non-Residential	Clean Earth Carteret	700000169946	28.52	
257	12/19/2014	Munoz	33	AP776R	938512	D, G and H	NJ Non-Residential	Clean Earth Carteret	700000170153	29.37	
258	12/19/2014	Munoz	42	AN388L	938513	D, G and H	NJ Non-Residential	Clean Earth Carteret	700000170170	29.71	
259	12/19/2014	Munoz	007	AN465M	938514	D, G and H	NJ Non-Residential	Clean Earth Carteret	700000170191	29.42	
260	1/5/2015	Munoz	72	AN389L	938515	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174412	30.05	
261	1/5/2015	Munoz	43	AR558H	938516	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174413	29.01	
262	1/5/2015	Munoz	3000	AN386L	938517	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174415	30.99	
263	1/5/2015	Munoz	100	AN488T	938518	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174427	32.28	
264	1/5/2015	Munoz	31	AP518D	938519	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174452	33.53	
265	1/5/2015	Munoz	44	AR559H	938520	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174455	31.56	
266	1/5/2015	Munoz	77	AP347D	938521	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174457	29.54	
267	1/5/2015	Munoz	06	AN464M	938522	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174462	33.10	
268	1/5/2015	Munoz	72	AN389L	938523	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174619	27.25	
269	1/5/2015	Munoz	43	AR558H	938524	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174636	27.84	
270	1/5/2015	Munoz	3000	AN386L	938525	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174627	27.06	
271	1/5/2015	Munoz	100	AN488T	938526	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174641	29.19	
272	1/5/2015	Munoz	31	AP518D	938527	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174647	30.89	
273	1/5/2015	Munoz	44	AR559H	938528	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174651	28.39	
274	1/5/2015	Munoz	77	AP347D	938529	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174677	26.28	
275	1/5/2015	Munoz	06	AN464M	938530	A, B, C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000174678	26.41	
276	1/5/2015	Munoz	72	AN389L	938531	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174790	26.12	
277	1/5/2015	Munoz	3000	AN386L	938532	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174802	28.04	
278	1/5/2015	Munoz	43	AR558H	938533	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174830	29.78	
279	1/5/2015	Munoz	100	AN488T	938534	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174844	28.36	
280	1/5/2015	Munoz	31	AP518D	938535	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174842	30.47	
281	1/5/2015	Munoz	44	AR559H	938536	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174849	27.39	

Table 1 - Disposal Quantities and Disposal Facilities
NYU Langone Medical Center – New Science Building
435 East 30th Street, New York, New York
NYC VCP Site. No. 14VCP211M
Langan Project No. 170037830

LOAD COUNTER	DATE	TRUCKING COMPANY	TRUCK NUMBER	TRUCK LICENSE PLATE NUMBER	MANIFEST NUMBER	PANEL/GRID NUMBER	SOIL CLASSIFICATION	DISPOSAL FACILITY	COUNTERSIGNED MANIFEST/WEIGHT TICKET No.	AMOUNT DISPOSED OFF-SITE (TON)	COMMENTS
282	1/5/2015	Munoz	77	AP347D	938537	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174860	28.52	
283	1/5/2015	Munoz	06	AN464M	938538	C, D, G and H	NJ Non-Residential	Clean Earth Carteret	700000174866	29.09	
284	2/13/2015	Munoz	46	AR561H	938539	C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190414	30.11	
285	2/13/2015	Munoz	45	AR560H	938540	C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190430	29.68	
286	2/13/2015	Munoz	17	AP516D	938491	C, D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190457	29.68	
287	2/13/2015	Munoz	46	AR561H	938492	D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190710	29.92	
288	2/13/2015	Munoz	45	AR560H	938493	D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190717	29.25	
289	2/13/2015	Munoz	17	AP516D	938494	D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190722	28.02	
290	2/13/2015	Munoz	46	AR561H	938495	D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190727	29.88	
291	2/13/2015	Munoz	45	AR560H	938496	D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190937	30.20	
292	2/13/2015	Munoz	17	AP516D	938497	D, E, F, G and H	NJ Non-Residential	Clean Earth Carteret	700000190943	28.92	
293	3/2/2015	Munoz	18	AN877X	938467	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196754	29.53	
294	3/2/2015	Munoz	68	AP886R	938468	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196591	28.81	
295	3/2/2015	Munoz	72	AN389L	938470	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196594	28.65	
296	3/2/2015	Munoz	21	AN129Z	938469	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196613	27.08	
297	3/2/2015	Munoz	72	AN389L	938697	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196797	30.40	
298	3/2/2015	Munoz	68	AP886R	938698	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196799	20.62	
299	3/2/2015	Munoz	33	AP776R	938699	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196800	30.65	
300	3/2/2015	Munoz	21	AN129Z	938700	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196805	30.78	
301	3/2/2015	Munoz	18	AN877X	938701	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196870	29.32	
302	3/2/2015	Munoz	72	AN389L	938702	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196900	27.75	
303	3/2/2015	Munoz	68	AP886R	938703	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196902	27.57	
304	3/2/2015	Munoz	33	AP776R	938704	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000196904	28.00	
305	3/6/2015	Munoz	52	AM248W	938500	I	NJ Non-Residential	Clean Earth Carteret	700000198032	28.03	
306	3/6/2015	Munoz	47	AR562H	938705	I	NJ Non-Residential	Clean Earth Carteret	700000198034	29.00	
307	3/6/2015	Munoz	9	AP237E	938450	I	NJ Non-Residential	Clean Earth Carteret	700000198039	29.05	
308	3/6/2015	Munoz	35	AP129C	938449	I	NJ Non-Residential	Clean Earth Carteret	700000198045	31.03	
309	3/6/2015	Munoz	47	AR562H	938448	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198098	30.35	
310	3/6/2015	Munoz	10	AP234E	938447	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198096	30.55	
311	3/6/2015	Munoz	9	AP237E	938446	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198101	31.17	
312	3/6/2015	Munoz	35	AP129C	938448	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198098	30.35	
313	3/6/2015	Munoz	10	AP234E	938444	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198150	26.42	
314	3/6/2015	Munoz	47	AR562H	938443	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198156	26.21	
315	3/6/2015	Munoz	800	AP127L	948442	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198163	28.45	
316	3/6/2015	Munoz	9	AP237E	938441	C, D, E, F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198173	27.77	
317	3/10/2015	Munoz	44	AR559H	938439	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198767	26.74	
318	3/10/2015	Munoz	77	AP347D	938440	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198787	32.82	
319	3/10/2015	Munoz	39	AR166G	938510	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198802	33.30	
320	3/10/2015	JC Transport	10	AP124L	938490	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198816	34.65	
321	3/10/2015	JC Transport	15	AR611G	938507	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198818	34.98	
322	3/10/2015	Munoz	44	AR559H	938508	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198977	34.03	
323	3/10/2015	Munoz	77	AP347D	938423	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199038	34.98	
324	3/10/2015	Munoz	39	AR166G	938424	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199015	30.36	
325	3/10/2015	JC Transport	10	AP124L	938425	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199019	32.56	
326	3/10/2015	JC Transport	15	AR611G	938426	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199021	28.09	
327	3/10/2015	Munoz	44	AR559H	938427	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199069	30.92	
328	3/10/2015	Munoz	48	AS122E	938428	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199077	29.75	
329	3/10/2015	Munoz	39	AR166G	938429	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199088	29.61	
330	3/10/2015	JC Transport	15	AR611G	938431	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198087	29.89	
331	3/10/2015	JC Transport	10	AP124L	938430	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000198089	31.73	
332	3/12/2015	Munoz	13	AP342D	938706	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199772	35.03	
333	3/12/2015	Munoz	32	AP345D	938501	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199769	31.73	
334	3/12/2015	Munoz	3	AP344D	938502	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199750	28.12	
335	3/12/2015	Munoz	80	AL205D	938503	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199776	29.89	
336	3/12/2015	Munoz	3000	AN386L	938504	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000199805	32.76	
337	3/12/2015	Munoz	3	AP344D	938505	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000200005	28.83	
338	3/12/2015	Munoz	32	AP345D	938506	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000200058	32.00	

Table 1 - Disposal Quantities and Disposal Facilities
NYU Langone Medical Center – New Science Building
435 East 30th Street, New York, New York
NYC VCP Site. No. 14VCP211M
Langan Project No. 170037830

LOAD COUNTER	DATE	TRUCKING COMPANY	TRUCK NUMBER	TRUCK LICENSE PLATE NUMBER	MANIFEST NUMBER	PANEL/GRID NUMBER	SOIL CLASSIFICATION	DISPOSAL FACILITY	COUNTERSIGNED MANIFEST/WEIGHT TICKET No.	AMOUNT DISPOSED OFF-SITE (TON)	COMMENTS
339	3/12/2015	Munoz	3000	AN386L	938509	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000200009	31.01	
340	3/12/2015	Munoz	80	AL205D	938487	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000200088	28.71	
341	3/12/2015	Munoz	13	AP342D	938486	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000200061	28.53	
342	3/12/2015	Munoz	3000	AN386L	938485	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000200151	34.05	
343	3/12/2015	Munoz	3	AP344D	938484	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000200154	32.54	
344	3/18/2015	Munoz	59	AP519D	938483	B, C, F, G and I	NJ Non-Residential	Clean Earth Carteret	700000203368	27.72	
345	3/18/2015	Munoz	41	AR167J	938482	B, C, F, G and I	NJ Non-Residential	Clean Earth Carteret	700000203441	26.58	
346	3/18/2015	Munoz	26	AN385L	938481	I	NJ Non-Residential	Clean Earth Carteret	700000203489	28.89	
347	3/18/2015	Munoz	59	AP519D	938489	B, C, F, G and I	NJ Non-Residential	Clean Earth Carteret	700000203882	25.56	
348	3/18/2015	Munoz	41	AR167J	938488	B, C, F, G and I	NJ Non-Residential	Clean Earth Carteret	700000203937	28.17	
349	3/18/2015	Munoz	26	AN385L	938397	B, C, F, G and I	NJ Non-Residential	Clean Earth Carteret	700000203982	27.80	
350	3/18/2015	Munoz	59	AP519D	938398	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204183	32.32	
351	3/18/2015	Munoz	41	AR167J	938399	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204198	27.45	
352	3/18/2015	Munoz	26	AN385L	938400	F, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204197	27.96	
353	3/19/2015	Manolos	02	AK597T	938401	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204405	32.65	
354	3/19/2015	MCB Trucking	3	AP322V	938402	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204500	32.34	
355	3/19/2015	CF Brothers Transport	71	AP733S	938403	B, C and I	NJ Non-Residential	Clean Earth Carteret	700000204542	32.75	
356	3/19/2015	Andrades	6	AS295E	938404	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204535	35.02	
357	3/19/2015	Munoz	88	AN467M	938405	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204614	27.58	
358	3/19/2015	Manolos	02	AK597T	938406	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204741	33.40	
359	3/19/2015	MCB Trucking	3	AP322V	938432	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000204794	30.71	
360	3/19/2015	Andrades	6	AS295E	938433	I	NJ Non-Residential	Clean Earth Carteret	700000204844	33.17	
361	3/19/2015	CF Brothers Transport	71	AP733S	938434	I	NJ Non-Residential	Clean Earth Carteret	700000204867	31.76	
362	3/19/2015	JMJ Pro	2	AP948W	938435	I	NJ Non-Residential	Clean Earth Carteret	700000204989	30.93	
363	3/19/2015	Manolos	02	AK597T	938465	I	NJ Non-Residential	Clean Earth Carteret	700000205006	35.06	
364	3/19/2015	Munoz	88	AN467M	938436	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000205021	29.81	
365	3/19/2015	MCB Trucking	3	AP322V	938466	I	NJ Non-Residential	Clean Earth Carteret	700000205053	28.56	
366	3/19/2015	Andrades	6	AS295E	938437	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000205046	30.02	
367	3/19/2015	CF Brothers Transport	71	AP733S	938438	C, D, G, H and I	NJ Non-Residential	Clean Earth Carteret	700000205056	31.98	
368	3/23/2015	J Granda	17	AP694F	938464	D, H and I	NJ Non-Residential	Clean Earth Carteret	700000205757	33.08	
369	3/23/2015	Andrades	6	AS295E	938463	D, H and I	NJ Non-Residential	Clean Earth Carteret	700000205780	35.02	
370	3/23/2015	MCB Trucking	7	AS171C	938462	D, H and I	NJ Non-Residential	Clean Earth Carteret	700000205842	30.28	
371	3/23/2015	Andrades	1	AP158Y	938461	D, H and I	NJ Non-Residential	Clean Earth Carteret	700000205845	25.37	
372	3/23/2015	MCB Trucking	5	AP880S	938460	D, H and I	NJ Non-Residential	Clean Earth Carteret	700000205864	28.12	
373	3/23/2015	Munoz	77	AP347D	938459	C and G	NJ Non-Residential	Clean Earth Carteret	700000205877	28.18	
374	3/23/2015	J Granda	17	AP694F	938458	C and G	NJ Non-Residential	Clean Earth Carteret	700000206027	30.45	
375	3/23/2015	Andrades	6	AS295E	938457	C and G	NJ Non-Residential	Clean Earth Carteret	700000206029	30.35	
376	3/23/2015	Andrades	1	AP158Y	938456	D, H and I	NJ Non-Residential	Clean Earth Carteret	700000206137	28.23	
377	3/23/2015	MCB Trucking	5	AP880S	938455	C and G	NJ Non-Residential	Clean Earth Carteret	700000206181	32.47	
378	3/23/2015	MCB Trucking	7	AS171C	938454	C and G	NJ Non-Residential	Clean Earth Carteret	700000206166	31.44	
379	3/23/2015	Munoz	77	AP347D	938453	C and G	NJ Non-Residential	Clean Earth Carteret	700000206255	33.11	
380	3/23/2015	Andrades	6	AS295E	938452	C and G	NJ Non-Residential	Clean Earth Carteret	700000206280	34.97	
381	3/23/2015	J Granda	17	AP694F	938451	C and G	NJ Non-Residential	Clean Earth Carteret	700000202690	31.41	
382	3/23/2015	Andrades	1	AP158Y	938480	C and G	NJ Non-Residential	Clean Earth Carteret	700000206352	31.83	
383	3/23/2015	MCB Trucking	7	AS171C	938479	C and G	NJ Non-Residential	Clean Earth Carteret	700000206368	32.11	
384	3/23/2015	MCB Trucking	5	AP880S	938459	C and G	NJ Non-Residential	Clean Earth Carteret	700000206404	30.97	
385	3/23/2015	Munoz	77	AP347D	938360	C and G	NJ Non-Residential	Clean Earth Carteret	700000206486	28.92	
386	3/25/2015	Manolos	2	AK597T	938478	C and G	NJ Non-Residential	Clean Earth Carteret	700000207516	33.50	
387	3/25/2015	Munoz	20	AM820Z	938477	C and G	NJ Non-Residential	Clean Earth Carteret	700000207612	32.39	
388	3/25/2015	Andrades	6	AS295E	938476	C and G	NJ Non-Residential	Clean Earth Carteret	700000207540	32.92	
389	3/25/2015	Idrovo	1	AR438F	938475	C and G	NJ Non-Residential	Clean Earth Carteret	700000207591	31.50	
390	3/25/2015	Idrovo	3	AP440M	938474	C and G	NJ Non-Residential	Clean Earth Carteret	700000207665	31.81	
391	3/25/2015	Manolos	2	AK597T	938472	D and H	NJ Non-Residential	Clean Earth Carteret	700000207851	35.31	
392	3/25/2015	Andrades	6	AS295E	938473	D and H	NJ Non-Residential	Clean Earth Carteret	700000207853	36.02	
393	3/25/2015	Idrovo	1	AR438F	938374	D and H	NJ Non-Residential	Clean Earth Carteret	700000207665	31.81	
394	3/25/2015	Munoz	20	AM820Z	938375	D and H	NJ Non-Residential	Clean Earth Carteret	700000207898	29.29	
395	3/25/2015	Idrovo	3	AP440M	938376	D and H	NJ Non-Residential	Clean Earth Carteret	700000207944	31.56	

Table 1 - Disposal Quantities and Disposal Facilities
NYU Langone Medical Center – New Science Building
435 East 30th Street, New York, New York
NYC VCP Site. No. 14VCP211M
Langan Project No. 170037830

LOAD COUNTER	DATE	TRUCKING COMPANY	TRUCK NUMBER	TRUCK LICENSE PLATE NUMBER	MANIFEST NUMBER	PANEL/GRID NUMBER	SOIL CLASSIFICATION	DISPOSAL FACILITY	COUNTERSIGNED MANIFEST/WEIGHT TICKET No.	AMOUNT DISPOSED OFF-SITE (TON)	COMMENTS
396	3/25/2015	Manolos	2	AK597T	938369	C and G	NJ Non-Residential	Clean Earth Carteret	700000208116	34.35	
397	3/25/2015	Andrades	6	AS295E	938370	C and G	NJ Non-Residential	Clean Earth Carteret	700000208136	32.92	
398	3/25/2015	Idrovo	1	AR438F	938371	C and G	NJ Non-Residential	Clean Earth Carteret	700000208197	30.13	
399	3/25/2015	Munoz	20	AM820Z	938372	C and G	NJ Non-Residential	Clean Earth Carteret	700000208223	31.80	
400	3/25/2015	Idrovo	3	AP440M	938373	C and G	NJ Non-Residential	Clean Earth Carteret	700000208246	33.54	
401	4/23/2015	Munoz	43	AR558H	938361	H	NJ Non-Residential	Clean Earth Carteret	700000223426	26.46	
402	4/23/2015	Munoz	28	AP517D	938362	H	NJ Non-Residential	Clean Earth Carteret	700000223471	28.51	
403	4/23/2015	Munoz	43	AR558H	938363	H	NJ Non-Residential	Clean Earth Carteret	700000223709	31.38	
404	4/23/2015	Munoz	28	AP517D	938364	H	NJ Non-Residential	Clean Earth Carteret	700000223749	30.82	
405	4/23/2015	Munoz	43	AR558H	938365	H	NJ Non-Residential	Clean Earth Carteret	700000223927	30.97	
406	4/23/2015	Munoz	28	AP517D	938366	H	NJ Non-Residential	Clean Earth Carteret	700000223952	23.66	
407	5/1/2015	Munoz	69	AP886R	938317	H	NJ Non-Residential	Clean Earth Carteret	700000228180	31.22	
408	5/1/2015	Munoz	11	AN382L	938316	H	NJ Non-Residential	Clean Earth Carteret	700000228193	31.15	
409	5/1/2015	Munoz	007	AN465M	938315	H	NJ Non-Residential	Clean Earth Carteret	700000228206	29.05	
410	5/1/2015	Munoz	69	AP886R	938314	H	NJ Non-Residential	Clean Earth Carteret	700000228496	29.90	
411	5/1/2015	Munoz	11	AN382L	938313	H	NJ Non-Residential	Clean Earth Carteret	700000228497	31.96	
412	5/1/2015	Munoz	007	AN465M	938312	H	NJ Non-Residential	Clean Earth Carteret	700000228543	29.66	
413	5/1/2015	Munoz	69	AP886R	938311	H	NJ Non-Residential	Clean Earth Carteret	700000228730	24.96	
414	5/1/2015	Munoz	11	AN382L	938310	H	NJ Non-Residential	Clean Earth Carteret	700000228769	29.28	
415	5/1/2015	Munoz	007	AN465M	938309	H & I	NJ Non-Residential	Clean Earth Carteret	700000228786	23.69	
416	6/30/2015	Munoz	25	AN131Z	248505	I	NJ Non-Residential	Clean Earth Carteret	700000261450	27.25	
417	6/30/2015	Munoz	25	AN131Z	248506	I	NJ Non-Residential	Clean Earth Carteret	700000261663	26.52	
418	6/30/2015	Munoz	25	AN131Z	248507	I	NJ Non-Residential	Clean Earth Carteret	700000261804	28.11	
419	7/1/2015	Munoz	25	AN131Z	941678	I	NJ Non-Residential	Clean Earth Carteret	700000262022	28.23	
420	7/1/2015	Munoz	33	AP776R	941679	I	NJ Non-Residential	Clean Earth Carteret	700000262025	24.81	
421	7/1/2015	Munoz	25	AN131Z	941677	I	NJ Non-Residential	Clean Earth Carteret	700000262246	28.96	
422	7/1/2015	Munoz	33	AP776R	941676	I	NJ Non-Residential	Clean Earth Carteret	700000262253	27.18	
423	7/1/2015	Munoz	25	AN131Z	941675	I	NJ Non-Residential	Clean Earth Carteret	700000262434	28.24	
424	7/1/2015	Munoz	33	AP776R	941674	I	NJ Non-Residential	Clean Earth Carteret	700000262435	27.41	
425	7/2/2015	Munoz	25	AN131Z	941683	I	NJ Non-Residential	Clean Earth Carteret	700000262615	24.64	
426	7/2/2015	Munoz	25	AN131Z	941682	I	NJ Non-Residential	Clean Earth Carteret	700000262786	30.88	
427	7/2/2015	Munoz	47	AR562H	941681	I	NJ Non-Residential	Clean Earth Carteret	700000262815	28.76	
428	7/2/2015	Munoz	54	AS433H	941686	I	NJ Non-Residential	Clean Earth Carteret	700000262817	28.86	
429	7/2/2015	Munoz	46	AR561H	941685	I	NJ Non-Residential	Clean Earth Carteret	700000262824	26.29	
430	7/2/2015	Munoz	007	AN465M	941684	I	NJ Non-Residential	Clean Earth Carteret	700000262833	25.44	
431	7/2/2015	Munoz	06	AN464M	1080670	I	NJ Non-Residential	Clean Earth Carteret	700000262850	25.60	

Table 2 - Documentation Sample Analytical Summary
NYU Langone Medical Center - New Science Building
435 East 30th Street, New York, New York
NYC VCP Site No. 14VCP211M
Langan Project No. 170037830

												Duplicate Samples											
Sample ID	**Track 4 Site-Specific SCOs**	**EP_01**		**EP02-150109**		**EP-03-150213**		**EP_07**		**EP_04**		**EP06_050115**		**EP_05_060415**		**DUP_01_060415**		**SB-04**	**SB-05**	**SB-07**	**SB-09**	**SB-10**	**SB-11**
Sampling Date		**12/31/2014**		**1/9/2015**		**2/13/2015**		**3/23/2015**		**3/25/2015**		**5/1/2015**		**6/4/2015**		**6/4/2015**		**8/6/2013**	**8/6/2013**	**8/6/2013**	**10/18/2013**	**10/18/2013**	**10/22/2013**
Lab Sample ID		**L1431405-01**		**L1500451-01**		**L1502852-01**		**L1505617-01**		**L1505835-01**		**L1509358-01**		**L1512462-01**		**L1512462-02**		**L1315035-04**	**L1315035-07**	**L1315035-10**	**L1321227-02**	**L1321227-02**	**L1321227-03**
Approximate Depth (ft. bgs)		**24.5 - 25.5**		**20.5 -21.5**		**20.5 - 21.5**		**6.5**		**21.5 - 22.5**		**25.5 - 26.5**		**11.5**		**11.5**		**8-10**	**5-7**	**8-10**	**5-5.5**	**5-5.5**	**8.0**
Approximate Elevation (NAVD88)		**-18.5**		**-14.5**		**-14.5**		**-2.5**		**-15.5**		**-19.5**		**-2.5**		**-2.5**		**-1.5 to -3.5**	**1.5 to -0.5**	**-1.5 to -3.5**	**4.5 to 4.0**	**4.5 to 4.0**	**-1.5**
Volatile Organic Compounds (mg/kg)																							
1,2,4,5-Tetramethylbenzene	~	0.0048	U	0.004	U	0.0039	U	0.013	J	0.004	U	0.0046	U	0.0048	U	0.0046	U	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	190	0.006	U	0.005	U	0.0049	U	0.042	J	0.005	U	0.0058	U	0.006	U	0.0057	U	ND	ND	ND	ND	ND	ND
2-Butanone	500	0.028		0.0048	J	0.00076	J	0.62	U	0.01	U	0.0072	J	0.004	J	0.0031	J	ND	ND	ND	ND	ND	ND
Acetone	500	0.18		0.019		0.011		0.62	U	0.011		0.02		0.067		0.051		ND	ND	ND	ND	ND	ND
Carbon disulfide	~	0.0038	J	0.01	U	0.0097	U	0.62	U	0.0029	J	0.012	U	0.0018	J	0.011	U	ND	ND	ND	ND	ND	ND
Naphthalene	500	0.00091	J	0.00061	J	0.00075	J	0.67		0.0007	J	0.00056	J	0.0023	J	0.0027	J	ND	ND	ND	ND	ND	ND
p-Diethylbenzene	~	0.0048	U	0.004	U	0.0039	U	0.047	J	0.00021	J	0.0046	U	0.00028	J	0.0046	U	ND	ND	ND	ND	ND	ND
p-Ethyltoluene	~	0.0048	U	0.004	U	0.0039	U	0.056	J	0.004	U	0.0046	U	0.0048	U	0.0046	U	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	~	0.0012	U	0.0016		0.00097	U	0.062	U	0.00087	J	0.00042	J	0.0023		0.0015		ND	ND	ND	ND	ND	ND
Semivolatile Organic Compounds (mg/kg)																							
2-Methylnaphthalene	~	0.077	J	0.23	U	0.23	U	0.15	J	0.22	U	0.072	J	0.23	U	0.23	U	ND	ND	ND	ND	NE	NE
3-Methylphenol/4-Methylphenol	500	0.2	J	0.28	U	0.27	U	0.27	U	0.26	U	0.28	U	0.28	U	0.28	U	ND	ND	ND	ND	ND	ND
Acenaphthene	500	0.05	J	0.15	U	0.057	J	0.15		0.15	U	0.4		0.077	J	0.061	J	ND	ND	ND	ND	NE	ND
Acenaphthylene	500	0.16	U	0.15	U	0.041	J	0.13	J	0.15	U	0.12	J	0.084	J	0.044	J	ND	ND	ND	ND	NE	NE
Anthracene	500	0.11	J	0.086	J	0.1	J	0.35		0.071	J	0.86		0.21		0.16		ND	NE	ND	NE	NE	NE
Benzo(a)anthracene	5.6	0.2		0.14		0.32		1		0.2		1.4		0.47		0.32		ND	NE	ND	NE	NE	NE
Benzo(a)pyrene	1	0.16		0.12	J	0.32		**1.2**		0.17		**1.1**		0.43		0.29		ND	NE	ND	NE	NE	NE
Benzo(b)fluoranthene	5.6	0.17		0.15		0.4		1.2		0.2		1.4		0.49		0.33		ND	NE	ND	NE	NE	NE
Benzo(ghi)perylene	500	0.077	J	0.057	J	0.18		0.76		0.11	J	0.63		0.26		0.18		ND	NE	ND	NE	NE	NE
Benzo(k)fluoranthene	56	0.08	J	0.062	J	0.14		0.55		0.089	J	0.52		0.24		0.14		ND	NE	ND	NE	NE	NE
Bis(2-Ethylhexyl)phthalate	~	0.2	U	0.078	J	0.19	U	0.088	J	0.18	U	0.2	U	0.078	J	0.1	J	ND	ND	NE	ND	NE	NE
Carbazole	~	0.042	J	0.19	U	0.043	J	0.12	J	0.18	U	0.23		0.082	J	0.066	J	ND	ND	ND	ND	NE	ND
Chrysene	56	0.19		0.14		0.32		0.92		0.17		1.2		0.47		0.31		ND	NE	ND	NE	NE	NE
Dibenzo(a,h)anthracene	0.56	0.12	U	0.11	U	0.042	J	0.19		0.11	U	0.17		0.051	J	0.051	J	ND	NE	ND	ND	NE	NE
Dibenzofuran	350	0.2	U	0.19	U	0.19	U	0.078	J	0.18	U	0.23		0.19	U	0.19	U	ND	ND	ND	ND	ND	ND
Fluoranthene	500	0.38		0.33		0.62		1.9		0.42		3.3		1		0.75		ND	NE	ND	NE	NE	NE
Fluorene	500	0.2	U	0.19	U	0.19	U	0.16	J	0.18	U	0.5		0.09	J	0.065	J	ND	ND	ND	ND	NE	ND
Indeno(1,2,3-cd)Pyrene	5.6	0.077	J	0.077	J	0.19		0.83		0.12	J	0.71		0.23		0.15	J	ND	NE	ND	NE	NE	NE
Naphthalene	500	0.13	J	0.19	U	0.091	J	0.21		0.18	U	0.15	J	0.11	J	0.076	J	ND	ND	ND	ND	NE	NE
Phenanthrene	500	0.34		0.26		0.43		1.4		0.21		2.8		0.7		0.51		ND	NE	ND	NE	NE	NE
Pyrene	500	0.35		0.25		0.59		1.9		0.36		2.6		0.89		0.64		ND	NE	ND	NE	NE	NE
Total SVOCs	500	15.2		14.6		16.1		24.7		14.6		30.5		17.9		16.2		ND	NE	NE	NE	NE	NE
Herbicides (mg/kg)		ND		ND		ND		ND		ND		ND		ND		ND		ND	ND	ND	ND	ND	ND
Pesticides (mg/kg)																							
4,4'-DDD	92	0.0191	U	0.00184	U	0.00186	U	0.00176	U	0.00171	U	0.00124	J	0.000982	J	0.00119	J	ND	ND	ND	ND	ND	ND
4,4'-DDE	62	0.0191	U	0.00184	U	0.00186	U	0.00176	U	0.00171	U	0.00178	U	0.00288	P	0.00217	P	ND	ND	ND	ND	ND	ND
4,4'-DDT	47	0.0425		0.00346	U	0.00349	U	0.00502		0.00321	U	0.00334	U	0.00384		0.00239	J	ND	ND	ND	ND	ND	NE
Lindane	9.2	0.00796	U	0.000768	U	0.000776	U	0.00389		0.000714	U	0.000742	U	0.000775	U	0.000761	U	ND	ND	ND	ND	ND	ND
Polychlorinated Biphenyls (mg/kg)																							
Aroclor 1254	1	0.0392	U	0.0375	U	0.0375	U	0.0368	U	0.0361	U	0.0106	J	0.0389	U	0.039	U	ND	ND	ND	ND	ND	ND
PCBs, Total	1	0.0392	U	0.0375	U	0.0375	U	0.0368	U	0.0361	U	0.0106	J	0.0389	U	0.039	U	ND	ND	ND	ND	NE	NE
Metals (mg/kg)																							
Aluminum, Total	~	12000		7000		10000		7700		4700		7600		7100		8700		NE	NE	NE	NE	NE	NE
Antimony, Total	~	4.6	U	4.6	U	4.5	U	4.4	U	4.3	U	2	J	4.5	U	9.5		ND	ND	ND	NE	NE	NE
Arsenic, Total	23	14		6.8		14		8.3		3.8		8.7		9.1		15		NE	NE	NE	NE	NE	NE
Barium, Total	500	44		56		130		350		39		65		66		83		NE	NE	NE	NE	NE	NE
Beryllium, Total	590	0.59		0.42	J	0.56		0.37	J	0.22	J	0.31	J	0.34	J	0.45	J	NE	NE	NE	NE	NE	NE
Cadmium, Total	9.3	0.91	U	0.1	J	0.12	J	0.22	J	0.41	J	0.92	U	0.1	J	0.19	J	NE	NE	NE	NE	NE	NE
Calcium, Total	~	4000		9000		3700		24000		7800		8200		77000		40000		NE	NE	NE	NE	NE	NE
Chromium, Total	1500	22		15		22		21		13		15		18		24		NE	NE	NE	NE	NE	NE
Cobalt, Total	~	8.1		5.6		8.9		5.8		5.3		7.3		5.8		10		NE	NE	NE	NE	NE	NE
Copper, Total	270	26		28		47		40		21		36		30		62		NE	NE	NE	NE	NE	NE
Iron, Total	~	24000		12000		20000		15000		10000		18000		14000		17000		NE	NE	NE	NE	NE	NE
Lead, Total	1200	66		81		150		310		51		140		78		180		NE	NE	NE	NE	NE	NE
Magnesium, Total	~	4300		3000		3600		4800		2500		3200		4400		5100		NE	NE	NE	NE	NE	NE
Manganese, Total	10000	1000		260		230		280		190		350		340		450		NE	ND	NE	NE	NE	NE
Mercury, Total	2.8	0.11		0.24		0.77		0.68		0.1		0.33		0.24		0.25		NE	NE	ND	NE	NE	NE
Nickel, Total	310	18		12		18		16		10		13		14		19		NE	NE	NE	NE	NE	NE
Potassium, Total	~	2400		1600		2900		3000		1100		1700		1600		1700		NE	NE	NE	NE	NE	NE
Selenium, Total	1500	0.36	J	1.8	U	1.8	U	1.7	U	1.7	U	1.8	U	1.8	U	1.9	U	ND	ND	ND	ND	NE	NE
Silver, Total	1500	0.91	U	0.91	U	0.46	J	0.87	U	0.86	U	0.92	U	0.9	U	0.93	U	ND	ND	ND	ND	ND	ND
Sodium, Total	~	2800		1300		1300		450		650		1100		790		860		NE	NE	NE	NE	NE	NE
Vanadium, Total	~	29		20		29		26		15		20		20		26		NE	NE	NE	NE	NE	NE
Zinc, Total	10000	61		45		540		250		44		100		65		660		NE	NE	NE	NE	NE	NE
Chromium, Hexavalent	400	ND		ND		ND		ND		ND		ND		ND		ND		NA	NA	NA	NA	NA	NA
Chromium, Trivalent	1500	22		15		22		21		13		15		18		24		NA	NA	NA	NA	NA	NA
General Chemistry																							
Cyanide, Total																							
Cyanide, total (mg/kg)	27	1.2	U	1.1	U	1.1	U	0.44	J	1	U	1.1	U	1.1	U	1.1	U	NA	NA	NA	NA	NA	NA
% Solids	~	82.7		86.2		85.7		87.3		89.7		84.6		83.8		83.7		87.6	93.0	98.1	63.0	83.3	77.2

Notes and Qualifiers:

1. Soil sample analytical results are compared to Track 4 Site-Specific Soil Cleanup Objectives (SCOs), which are the 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 Commercial Use SCOs with the following modifications: a) Total Semivolatile Organic Compounds = 500 parts per million (ppm), b) Total PCBs = 1 ppm, c) Arsenic = 23 ppm, d) Barium = 500 ppm, e) Lead = 1,200 ppm
2. Concentrations above the Track 4 Site-Specific SCOs are shaded and bolded. The Restricted Residential SCO for benzo(a)pyrene was exceed for two samples but total SVOC concentrations are below the site-specific SCO.
3. Only detected compounds are shown in the table.
4. mg/kg = milligrams per kilogram
5. ND = not detected
6. NE = no exceedance
7. NA = not analyzed
8. U = analyte not detected at the reported detection limit for the sample.
9. J = estimated value.
10. P = the relative percent difference (RPD) between the results for the two columns exceeds the method-specified criteria for the matrix spike and matrix spike duplicate (MS/MSD).

Table 3 - Backfill Quantities and Sources
NYU Langone Medical Center – New Science Building
435 East 30th Street, New York, New York
NYC VCP Site. No. 14VCP211M
Langan Project No. 170037830

Total Import Loads		
Total 1 1/2-inch Stone (Tilcon)	0	137 CY
Total 3/4-inch Recycled Stone (Tilcon)	0	180 CY
Total Topsoil (RER Supply)	0	98 CY

DATE	PRELIMINARY MANIFEST NUMBER	PRELIMINARY IMPORTER FACILITY	MANIFEST NUMBER	TYPE OF MATERIAL	IMPORTER FACILITY	APPROX. VOLUME (CY)
12/15/14	N/A	N/A	41626382	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	11
05/27/15	N/A	N/A	41701503	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701523	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701497	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701538	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701542	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701546	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701544	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701524	3/4-inch Recycled Stone	Tilcon New York Inc.	20
05/27/15	N/A	N/A	41701525	3/4-inch Recycled Stone	Tilcon New York Inc.	20
07/13/17	048152	RER Supply	01059	Topsoil	Sponzilli Landscaping	32
07/14/17	048153	RER Supply	01075	Topsoil	Sponzilli Landscaping	22
07/14/17	048155	RER Supply	01060	Topsoil	Sponzilli Landscaping	22
07/15/17	048156	RER Supply	01076	Topsoil	Sponzilli Landscaping	22
08/16/17	N/A	N/A	41632234	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	18
08/16/17	N/A	N/A	41632235	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	18
08/16/17	N/A	N/A	41632231	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	18
08/16/17	N/A	N/A	41632233	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	18
08/16/17	N/A	N/A	41632230	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	18
08/16/17	N/A	N/A	41632232	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	18
08/16/17	N/A	N/A	41632229	1.5-inch Virgin Quarry Stone	Tilcon New York Inc.	18

Notes:

1. RCA = Recycled Concrete Aggregate
2. CY = cubic yards
3. Topsoil loads represent material transported from RER Supply in Wantage, NJ to Sponzilli Landscape Group in Fairfield, NJ. The topsoil was imported to the site between September 1 and 7, 2017.