



**2021 PERIODIC REVIEW REPORT
for**

**February 28, 2021 – February 28, 2022
Reporting Period**

**FORMER SUN CHEMICAL SITE
STATEN ISLAND, RICHMOND COUNTY, NEW YORK**

NYSDEC Site # C243024

prepared for:

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PERIODIC REVIEW REPORT

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LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
AWQS	Ambient Water Quality Standards
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Plan
COC	Certificate of Completion
CVOC	Chlorinated Volatile Organic Compounds
DER	Division of Environmental Remediation
DER-10	NYSDEC Technical Guidance for Site Investigation & Remediation
ECs	Engineering Controls
EWP	Excavation Workplan
GWQS	Groundwater Quality Standards
ICs	Institutional Controls
LFPS	Low-Flow Purging and Sampling
MNA	Monitored Natural Attenuation
MW	Monitoring Well
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PCB	Polychlorinated Biphenyls
PDB	Passive Diffusion Bag
PRR	Periodic Review Report
SCO	Soil Cleanup Objectives
SESI	SESI Consulting Engineers, PC
SMP	Site Management Plan
SSDS	Sub-Slab Depressurization System
SVOCs	Semi-Volatile Organic Compounds
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

1.1 SUMMARY

Sun Chemical Corporation (Sun) investigated and remediated the Former Sun Chemical Site (Entire Site) in accordance with Brownfield Cleanup Agreement (BCA) Index # A2-0614-0109, Site # C243024, dated March 9, 2009. Following the investigation and remediation, the New York State Department of Environmental Conservation (NYSDEC) issued a Certificate of Completion (COC) for the Entire Site on October 31, 2018. Residual contamination remains on a portion of the Entire Site previously identified as Block 2846, Lot 12, which since has been subdivided into Block 2846, Lot 12 (Lot 12), Lot 14 (Lot 14), Lot 16 (Lot 16), Lot 18, (Lot 18), and Lot 25 (Lot 25), (collectively, Subject Site). The United States Geological Survey (USGS) general site location map and a scaled site plan are provided in **Figures 1** and **2**, respectively. Engineering Controls (ECs) and Institutional Controls (ICs) have been incorporated into the remedy for the Subject Site to control exposure to the remaining contamination during the use of the Subject Site to protect public health and the environment.¹ In fact, an Environmental Easement dated October 2018 was recorded for the Subject Site with the Richmond County Clerk. The Environmental Easement incorporates the provisions of the Site Management Plan (SMP) for the Subject Site, prepared by ENVIRON Engineers of North Carolina, dated October 2018.

In accordance with the October 2018 SMP, the Environmental Easement, and the New York State Brownfield Cleanup Program (BCP), SESI Consulting Engineers (SESI) submits this periodic review report (PRR) for the Subject Site on behalf of 2846 Partners, LLC (Partners) as a current owner of a portion of the Subject Site. While Sun remediated and previously owned the Entire Site, Partners is the current owner of Lot 12 and Lot 18, LUS Licensing, LLC (LUS) is the current owner of Lot 14 and Lot 16, and Tompkins Capital Staten Island, LLC (Tompkins Capital) is the current owner of Lot 25. Sun is responsible for certain requirements detailed in the October 2018, SMP, including groundwater monitoring in accordance with Section 4.3.1 and investigation and remediation of the off-Site area in accordance with Section 4.3.2. Sun has retained Ramboll to satisfy its obligations pursuant to the SMP.

Notwithstanding the foregoing and given that the NYSDEC requires a single PRR for the Subject Site, Sun has contributed to this PRR, but, as noted above, SESI submits this PRR on behalf of

¹ The ECs and ICs for the Subject Site apply only to the Subject Site and not to the remainder of the Entire Site, which was previously identified as Block 2846, Lot 54. As a result, this report applies only to the Subject Site and not to the remainder of the Entire Site.

Partners as an owner of a portion of the Subject Site. This PRR covers the period from February 28, 2021 to February 28, 2022. SESI inspected the ECs for the Subject Site throughout the ongoing redevelopment of the Subject Site. While the ECs have been removed to facilitate the redevelopment activities, temporary ECs, such as a Community Air Monitoring Program (CAMP), Site fencing, and Site security measures, have been implemented to minimize potential exposure to contaminants remaining on Site. SESI has monitored and inspected these temporary ECs during the course of the redevelopment activities and has reported on these activities in Weekly Reports 1 through 44, which have been previously provided to the NYSDEC. At the time of the cap inspection performed by SESI on March 24, 2022, construction was not complete on two (2) of the five (5) occupied spaces (CubeSmart parcel and LIDL Parcel). Aside from those locations, no areas of exposed soil or perforations in the cap were observed. Per correspondence with the NYSDEC, a sub-slab and indoor air sampling event will be performed in the completed building locations in April 2022. As the sampling event will be outside the heating season, a follow-up investigation may be required in the heating season of 2022-2023 across all occupied buildings on the subject Site. Based on this inspection and sampling activities, and as described in more detail below, SESI confirms that ECs and ICs for soil, groundwater, and vapor contamination at the Subject Site remain in place and are effective.

1.2 EFFECTIVENESS OF REMEDIAL PROGRAM

Soil Cap

Subject Site redevelopment activities commenced in August of 2020. As a result, the Subject Site-wide cap was removed and stockpiled on Site. The materials that previously constituted the cap were reused on Site as subbase for the new capping materials. Redevelopment activities, including excavation and off-Site disposal of non-hazardous contaminated material, operated in accordance with the SMP and associated Excavation Workplan (EWP). Temporary ECs, such as a CAMP, Site fencing, and Site security measures, have been implemented to minimize potential exposure to contaminants remaining onsite. SESI has monitored and inspected these temporary ECs during the course of the redevelopment activities and has reported on these activities in Weekly Reports 1 through 44, which have been previously provided to the NYSDEC.

Groundwater

The below description of the groundwater monitoring activities was provided by Ramboll, the consultant for the Sun Chemical, on March 30, 2022.

“Sun Chemical has discussed on several occasions the need for reinstallations of wells MW 3 and 3D, with 2846 Partners. Per a February 19, 2020, letter from SESI Engineers to NYSDEC (discussed in the March 31, 2020 Initial PRR), the Site requires significant regrading to enable the planned building construction, with such grading resulting in an approximate reduction in ground surface elevation of 8 to 10 feet at these well locations. Sun Chemical also determined that the wells would be reinstalled within the loading/unloading area of a planned self-storage facility.”

Per Ramboll’s “Third Periodic Review Report” dated March 30, 2022, monitoring wells MW-3 and MW-3D were scheduled to be reinstalled in April 2021. However, due to additional construction related factors, the wells could not be reinstalled due to slab completion delay and a change in building layout. MW-3 and MW-3D were moved approximately 15 feet west of the prior well positions due to an elevator component and underground utilities, making the installation in the precise locations of the former wells impossible. As a result, MW-3 and MW-3D were installed and developed on June 16-17, 2021. MW-2 and MW-15 were attempted to be located but the wells were buried/destroyed during construction activities. As a result, the wells were reinstalled and developed on July 1, 2021 at their original locations.

Ramboll later corresponded with Javier Perez of the NYSDEC requesting the use of passive diffusion bags (PDBs) for sampling the wells included in the SMP. The NYSDEC responded on August 20, 2021 and indicated “the use of PDBs would first require a Site-specific evaluation comparing [volatile organic compound] VOC concentration obtained from PDB samplers to VOC concentrations obtained from wells using [low-flow purging and sampling] LFPS.” As a result, PDBs were deployed in MWs 2, 3, 3D, and 15 on March 30, 2022. Allowing for equilibration of those bags, groundwater samples for VOC analysis will be collected on or about April 20, 2022. Immediately after sample collection, the wells will be sampled using low flow sampling procedure and the results will be compared and validated for data accuracy and precision. Ramboll will supply the groundwater results and sampling method evaluation in a letter report and upon NYSDEC approval, will use the selected method for groundwater monitoring. Ramboll’s contribution to this PRR is included as **Appendix A**. The groundwater monitoring is proposed to continue on a semi-annual basis for five (5) years, per SMP Section 4.3.1.

Groundwater in close proximity to the Site is not utilized for potable use, and groundwater was previously determined to not migrate off Site, and that will be confirmed upon initiation of the

groundwater monitoring.

Soil Vapor

During the remediation of the Subject Site, a vapor evaluation was performed. The results of that investigation warranted the installation of passive sub-slab depressurization systems (SSDSs) in the buildings on the Subject Site. The SSDSs were designed by a licensed professional engineer and were installed beneath each building on Site in accordance with the engineering plans.

1.3 COMPLIANCE

Soil Cap

SESI oversaw soil excavation, disposal activities, and ground intrusive work that concluded on the Site. On-Site monitoring included the inspection and documentation of excavation and disposal activities, implementation of the CAMP, and documentation of the Subject Site activities in accordance with the SMP. SESI has verified that the work performed at the Subject Site in the areas where the ECs and the ICs were in place as well as redevelopment activities in other areas is in compliance with the SMP during this current reporting period. The location and previous cap cover system details are provided in **Figures 3 and 4**, respectively. The location and proposed cap cover details are provided in **Figures 5, and 6**, respectively. Post building completion, SESI performed a cap inspection on March 24, 2022. Most of the Site cap was observed as shown on **Figures 5 and 6**. However, several areas of exposed soil were observed. One (1) was directly outside the unfinished CubeSmart building that is still under construction and within the LIDL parcel as construction has not begun on that parcel. These areas are identified on **Figure 7**. Following construction completion, the areas will consist of the proposed cap on **Figures 5 and 6** and SESI will perform a follow-up cap inspection.

Groundwater

Per Ramboll's "Third Periodic Review Report" dated March 30, 2022, monitoring wells MW-3 and MW-3D were scheduled to be reinstalled in April 2021. However, due to additional construction related factors, the wells could not be reinstalled due to slab completion delay and a change in building layout. MW-3 and MW-3D were moved approximately 15 feet west of the prior well positions due to an elevator component and underground utilities, making the installation in the precise locations of the former wells impossible. As a result, MW-3 and MW-3D were installed and developed on June 16-17, 2021. MW-2 and MW-15 were attempted to be located but the

wells were buried/destroyed during construction activities. As a result, the wells were reinstalled and developed on July 1, 2021 at their original locations.

Ramboll later corresponded with Javier Perez of the NYSDEC requesting the use of PDBs for sampling the wells included in the SMP. The NYSDEC responded on August 20, 2021 and indicated “the use of PDBs would first require a Site-specific evaluation comparing VOC concentration obtained from PDB samplers to VOC concentrations obtained from wells using LFPS.” As a result, PDBs were deployed in MWs 2, 3, 3D, and 15 on March 30, 2022. Allowing for equilibration of those bags, groundwater samples for VOC analysis will be collected on or about April 20, 2022. Immediately after sample collection, the wells will be sampled with low flow sampling procedure and the results will be compared and validated for data accuracy and precision. Ramboll will supply the groundwater results and sampling method evaluation in a letter report and upon NYSDEC approval, will use the selected method for groundwater monitoring. Ramboll’s contribution to this PRR is included as **Appendix A**. The groundwater monitoring is proposed to continue on a semi-annual basis for five (5) years, per SMP Section 4.3.1.

Soil Vapor

Following the construction of the Site buildings, a soil vapor evaluation will be performed per the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006 (VI Guidance) and the Soil Vapor/Indoor Air Decision Matrices. SESI observed the placement of the SSDS piping in accordance with the approved SSDS plan and as depicted on **Figures 8 and 9**. The proposed activities were described in the “Proposed Sub-Slab Depressurization System Sampling” dated January 24, 2022 prepared by SESI, which includes the required procedure and protocols, and was provided to the NYSDEC and NYSDOH for review and approval prior to implementation of the soil vapor investigation. The proposed plan was approved by the NYSDEC on February 9, 2022 and is included in this report as **Appendix B**. If required by NYSDEC and NYSDOH, the SMP will be modified to include monitoring and maintenance of the SSDS and to require the SSDS to be turned into an active system. Due to the unfinished building construction, a vapor intrusion investigation was not performed during the heating season for 2021-2022. Per correspondence with NYSDEC dated March 24, 2022, a preliminary vapor investigation will be performed in the completed building space in April 2022. A follow-up vapor investigation will be performed during the heating season of 2022-2023, including a resampling of the currently occupied building, if required. The results of the preliminary sampling to be conducted in April 2022 and the 2022-

2023 heating season vapor investigation will be included in the 2022 PRR. Correspondence with the NYSDEC is included as **Appendix C**.

1.4 RECOMMENDATIONS

The Subject Site has been subject to significant changes during the current reporting period (February 28, 2021, through February 28, 2022). As previously mentioned, the Subject Site has substantially completed construction related to the Subject Site's redevelopment. Redevelopment activities, including excavation and off-Site disposal of non-hazardous contaminated material, operated in accordance with ENVIRON's previously approved October 2018 SMP and associated EWP. Post-building completion, SESI performed a cap inspection on March 24, 2022. Most of the Site cap was observed as shown on **Figures 5 and 6**. However, several areas of exposed soil were observed, as noted above. SESI will complete an additional inspection of the Site to confirm the cap is installed in the unfinished areas following building completion. A preliminary vapor investigation will be performed in the completed building space in April 2022. A follow-up vapor investigation will be performed during the heating season of 2022-2023 including a resampling of the currently occupied building, if required. The results of the cap inspection and vapor investigation will be included in the 2022 PRR.

2.0 SITE OVERVIEW

2.1 SITE LOCATION AND DESCRIPTION

The Subject Site is located in the County of Richmond, New York and was previously identified as Block 2846, Lot 12 on the Tax Map of the County of Richmond. The Subject Site is bounded to the north by Chestnut Avenue, to the east by the remainder of the Entire Site and Tilson Place, to the south by residential housing and St. Joseph's Parochial School, and to the west by Tompkins Avenue. The United States Geological Survey (USGS) general site location and a scaled site plan are provided in **Figures 1 and 2**, respectively. As noted above, this PRR applies only to the Subject Site, which was previously identified as Block 2846, Lot 12, and has since been subdivided into Block 2846, Lots 12, 14, 16, 18, and 25.

2.2 SITE HISTORY

The Subject Site continuously operated for the production of pigments for the printing and cosmetics industries since development of the Subject Site for industrial purposes in 1907 until 2006. Sun operated the Site since 1957, primarily producing red pigments, but also lesser quantities of blue, yellow and green pigments, in portions of the facility designated as the Red and Blue Wings. Other buildings included a powerhouse, an ice plant, a warehouse/office/laboratory (the "WOL" building) and supporting buildings for maintenance operations. All on-Site structures other than the guard house were demolished in 2008-2009.

Sun completed several phases of remedial investigation at various areas of concern (AOCs) at the Subject Site, which identified the presence of certain contaminants of concern, including several metals, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs) and semi-volatile organic compounds (SVOCs) above applicable NYSDEC Soil Cleanup Objectives (SCOs). Additionally, several chlorinated volatile organic compounds (CVOCs) were detected above Ambient Water Quality Standards (AWQS). Although a specific source of CVOCs was not detected in soils on the Subject Site, because these CVOCs were detected near former maintenance buildings, it is possible that the contamination resulted from incidental historical releases of maintenance-related chemicals used to clean equipment during repairs.

On March 1, 2019, following issuance of the COC, Sun transferred the Entire Site, including the Subject Site, to Partners. On the same day, Partners transferred the portion of the Subject Site identified as Lot 25 to Tompkins Capital. In connection with these transfers, Sun transferred the COC for the Entire Site to Partners on May 28, 2019, and Partners transferred the COC for Lot

25 to Tompkins Capital on July 30, 2019. Partners also transferred the portion of the Subject Site identified as Lots 14 and 16 to LUS on August 21, 2020. Partners Transferred the COC for Lots 14 and 16 to LUS on June 15, 2021. Documentation of the transfer occurring during the period of this PRR is attached as **Appendix D**.

2.2.1 SUMMARY OF CONTAMINATION REMAINING ON SITE

Soils

SVOCs, total PCBs, and metals remain in excess of residential SCOs. Sun remediated constituents of concern, with the exception of nickel, to be in compliance with the restricted residential SCOs. The presence of those nickel concentrations is addressed via the institutional and engineering controls that were placed as part of the approved remedy.

Currently, ground-intrusive redevelopment activities at the Subject Site have concluded including the excavation and off-Site disposal of non-hazardous contaminated soils. Over this reporting period, and as documented in the weekly reports 1 through 44 previously provided to NYSDEC, approximately 48,108.34 tons of material was offloaded for off-Site disposal to the Liberty Stone and Aggregate Clinton Quarry in Clinton, New Jersey and to the SoilSafe Metro12 Facility in Carteret, New Jersey.

Groundwater

Based on sampling completed as part of the remedial action, CVOCs remain the predominant contaminants of concern identified in the groundwater above the Groundwater Quality Standards (GWQS). These constituents are present at a saturated interval that extends to a maximum depth of 65 feet. As indicated in the preceding section, there were no VOC soil concentrations identified above the SCOs. Accordingly, there are no areas of the Subject Site that contain remaining VOC source areas or higher levels of contamination.

Additionally, based on pre-remediation groundwater monitoring, Sun confirmed the presence of nickel above the AWQS. Evaluations of nickel soil conditions confirmed that these nickel concentrations in groundwater did not require remedial action.

Soil Vapor

As mentioned previously, during the remediation of the Subject Site, a vapor evaluation was performed. The results of that investigation warrant the installation of passive SSDSs in future buildings on the Subject Site. As a result, an SSDS was installed beneath the slab of two (2) of

the newly constructed buildings on Site (multi-tenant building and CubeSmart building). The SSDSs were designed by a licensed professional engineer. SESI oversaw the installation of the SSDS to ensure the system was installed in accordance with the engineering plans. A plan depicting the system details is included as **Figures 8 and 9**. In addition, following the construction of the Site buildings, a soil vapor evaluation will be performed per the NYSDOH VI Guidance and the Soil Vapor/Indoor Air Decision Matrices. The proposed activities were described in the "Proposed Sub-Slab Depressurization System Sampling" dated January 24, 2022 prepared by SESI, which includes the required procedure and protocols, and was provided to the NYSDEC and NYSDOH for review and approval prior to implementation of the soil vapor investigation. The proposed plan was approved by the NYSDEC on February 9, 2022 and is attached as **Appendix B**. Due to the unfinished building construction, a vapor intrusion investigation will not be performed during the heating season for 2021-2022. Per correspondence with NYSDEC dated March 24, 2022, a preliminary vapor investigation will be performed in the completed building space in April 2022. A follow-up vapor investigation will be performed during the heating season of 2022-2023 including a resampling of the currently occupied building, if required. The results of the preliminary sampling to be conducted in April 2022 and the 2022-2023 heating season vapor investigation will be included in the 2022 PRR. If required by NYSDEC and NYSDOH, the SMP will be modified to include monitoring and maintenance of the SSDS and to require the SSDS to be turned into an active system. Correspondence with the NYSDEC is included in this report as **Appendix C**.

2.2.2 DESCRIPTION OF REMEDIAL ACTIONS

The Entire Site was remediated in accordance with the NYSDEC-approved Remedial Action Work Plan dated June 2015. The following is a summary of the Remedial Actions performed at the Entire Site:

Table 2.1: Description of Remedial Actions

AOC	Contaminant of Concern Above Remedial Action Objectives	Remedial Action
AOC 1 – Former Shooting Gallery	Metal (chromium)	Excavation, Engineering Controls and Institutional Controls
AOC 2 – Former Railroad Tracks at Eastern Parking Lot	SVOC (benzo[a]pyrene), Metals (arsenic, barium, chromium, lead, mercury), PCBs	Excavation, Engineering Controls and Institutional Controls

AOC	Contaminant of Concern Above Remedial Action Objectives	Remedial Action
AOCs 3, 4, 5 and 15 – Former Aboveground Acid Storage Tanks	Metals (arsenic, barium, lead, nickel)	Excavation, Engineering Controls and Institutional Controls
AOC 7 – Former Chrysophenine Plant	Metals (barium, lead)	Excavation, Engineering Controls and Institutional Controls
AOC 9 – Former Drum and Bag Storage Area at B907	PCBs	Excavation, Engineering Controls and Institutional Controls
AOC 14 – Former Caustic Release Area	SVOCs (indeno[1,2,3-cd]pyrene)	Excavation, Engineering Controls and Institutional Controls
Grind & Mix	Metals (barium, nickel, lead), SVOCs	Excavation, Engineering Controls and Institutional Controls
Powerhouse	Metals (barium, chromium, lead)	Excavation, Engineering Controls and Institutional Controls
Storage Building	Metals (chromium, lead)	Excavation, Engineering Controls and Institutional Controls
Warehouse/Office/Laboratory	Metal (barium)	Excavation, Engineering Controls and Institutional Controls

2.2.3 DESCRIPTION OF ENGINEERING CONTROLS

Soil Cap

The Environmental Easement lists the ECs and ICs required by the NYSDEC to manage the residual contamination present at the Subject Site to protect public health and the environment and keep the Subject Site suitable for reuse. The cover system was composed of a combination of a minimum 24-inches of certified clean quarry-process backfill and crushed stone armoring, as well as remaining asphalt pavement, concrete covered sidewalks and concrete building slabs. The location and contamination details of the cap cover system were provided in the SMP.

For purposes of the Subject Site ECs, given the obvious visual physical differences between the cover system and underlying Subject Site soils with remaining contamination, the demarcation layer is the base of the cover system. In particular, unpaved areas with subsurface soils with remaining contamination were covered with quarry process backfill, which was composed of gray

rock fines, and thus, visually distinct from the underlying reddish-brown Subject Site soils. The remedial action documented attainment of restricted-residential SCOs for constituents with the exception of nickel. As a result, it was assumed that soils underlying the topsoil/backfill cover system area are impacted with nickel concentrations above the restricted residential SCO. As such, the visual difference between the backfill and the native soils is sufficient demarcation. The Subject Site has substantially completed redevelopment activities and the new ECs were inspected on March 24, 2022, by SESI. The new ECs consist of concrete building slabs, concrete flatwork, landscaped areas, and asphalt parking areas and roadways. In addition, SSDSs have been installed beneath the new building slabs as mentioned previously. The location and previous cap cover system details are provided in **Figures 3 and 4**, respectively. The location and proposed cap cover details are provided in **Figures 5, and 6**, respectively.

Groundwater

Per Section 4.3.1 of the SMP, Sun Chemical proposed to conduct semi-annual groundwater monitoring of four (4) wells for a minimum of five (5) years for monitored natural attenuation (MNA). As described above, monitoring wells MW-3 and MW-3D were scheduled to be reinstalled in April 2021. However, due to additional construction-related factors, the wells could not be reinstalled due to slab completion delay and a change in building layout. MW-3 and MW-3D were moved approximately 15 feet west of the prior well positions due to an elevator component and underground utilities, making the installation in the precise locations of the former wells impossible. As a result, MW-3 and MW-3D were installed and developed on June 16-17, 2021. MW-2 and MW-15 were attempted to be located, but the wells were buried/destroyed during construction activities. As a result, the wells were reinstalled and developed on July 1, 2021 at their original locations.

Ramboll later corresponded with Javier Perez of the NYSDEC requesting the use of PDBs for sampling the wells included in the SMP. The NYSDEC responded on August 20, 2021 and indicated “the use of PDBs would first require a Site-specific evaluation comparing VOC concentration obtained from PDB samplers to VOC concentrations obtained from wells using LFPS.” As a result, PDBs were deployed in MWs 2, 3, 3D, and 15 on March 30, 2022. Allowing for equilibration of those bags, groundwater samples for VOC analysis will be collected on or about April 20, 2022. Immediately after sample collection, the wells will be sampled with low flow sampling procedure and the results will be compared and validated for data accuracy and precision. Ramboll will supply the groundwater results and sampling method evaluation in a letter

report and upon NYSDEC approval, will use the selected method for groundwater monitoring. Ramboll's contribution to this PRR is included as **Appendix A**. The groundwater monitoring is proposed to continue on a semi-annual basis for five (5) years, per SMP Section 4.3.1.

As groundwater in proximity to the Subject Site is not utilized for potable use, and groundwater was previously determined to not migrate off Site, the groundwater engineering controls remain effective and will be confirmed upon initiation of the groundwater monitoring.

Soil Vapor

As mentioned previously, during the remediation of the Subject Site, a vapor evaluation was performed. The results of that investigation warrant the installation of passive SSDSs in future buildings on the Subject Site. As a result, an SSDS was installed beneath the slab of two (2) of the newly constructed buildings on Site (multi-tenant building and CubeSmart building). The SSDSs were designed by a licensed professional engineer. SESI oversaw the installation of the SSDS to ensure the system was installed in accordance with the engineering plans. A plan depicting the system details is included as **Figures 8 and 9**. In addition, following the construction of the Site buildings, a soil vapor evaluation will be performed per the NYSDOH VI Guidance and the Soil Vapor/Indoor Air Decision Matrices. The proposed activities were described in the "Proposed Sub-Slab Depressurization System Sampling" dated January 24, 2022 prepared by SESI, which includes the required procedure and protocols, and was provided to the NYSDEC and NYSDOH for review and approval prior to implementation of the soil vapor investigation. The proposed plan was approved by the NYSDEC on February 9, 2022 and is attached as **Appendix B**. Due to the unfinished building construction, a vapor intrusion investigation will not be performed during the heating season for 2021-2022. Per correspondence with NYSDEC dated March 24, 2022, a preliminary vapor investigation will be performed in the completed building space in April 2022. A follow-up vapor investigation will be performed during the heating season of 2022-2023, including a resampling of the currently occupied building, if required. The results of the preliminary sampling to be conducted in April 2022 and the 2022-2023 heating season vapor investigation will be included in the 2022 PRR. If required by NYSDEC and NYSDOH, the SMP will be modified to include monitoring and maintenance of the SSDS and to require the SSDS to be turned into an active system. Correspondence with the NYSDEC is included in this report as **Appendix C**.

3.0 REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

The goal of the remedial operations at the Subject Site was to verify the effectiveness of the ECs that include monitoring of the cap system integrity.

On-Site reconnaissance was conducted throughout the redevelopment activities during this reporting period. Based on the results of the periodic monitoring, the redevelopment activities, including excavation and off-Site disposal of non-hazardous contaminated material, are operating in accordance with ENVIRON's previously approved October 2018 SMP and associated EWP. SESI will continue to oversee Subject Site redevelopment activities if ground intrusive work is needed. SESI will provide recommendations for repairs and/or alterations to monitoring schedules for the soil cap, groundwater, or soil vapor as conditions warrant.

4.0 EC/IC PLAN COMPLIANCE

4.1 EC/IC REQUIREMENTS AND COMPLIANCE

4.1.1 ENGINEERING CONTROL SYSTEMS

Soil Cap

Exposure to the remaining contamination in soil/fill at the Subject Site was previously mitigated by a soil cover system placed over the Subject Site. This cover system was composed of a combination of a minimum 24 inches of certified clean quarry-process backfill and crushed stone armoring, as well as remaining asphalt pavement, concrete covered sidewalks and concrete building slabs. The SMP outlined the procedures required to be implemented in the event the cover system is breached, penetrated, or temporarily removed and when any underlying remaining contamination is disturbed. Procedures for the inspection and maintenance of this cover are provided in the October 2018 SMP. The new ECs consist of concrete building slabs, concrete flatwork, landscaped areas, and asphalt parking areas and roadways. In addition, SSDSs have been installed beneath the new building slabs as mentioned previously. The location and previous cap cover system details are provided in **Figures 3 and 4**, respectively. The proposed cap cover details are provided in **Figures 5, and 6**, respectively. The Subject Site has substantially completed redevelopment activities and the new ECs were inspected on March 24, 2022, by SESI. Most of the Site cap was observed as shown on **Figures 5 and 6**. However, several areas of exposed soil were observed. One (1) is directly outside the unfinished CubeSmart building that is still under construction and within the LIDL parcel as construction has not begun on that parcel. These areas are identified on **Figure 7**. Following construction completion, the areas will consist of the proposed cap on **Figures 5 and 6**. A follow up inspection will occur and be included in the 2023.

Groundwater

As reported above, per Section 4.3.1 of the SMP, Sun Chemical proposed to conduct semi-annual groundwater monitoring of four (4) wells for a minimum of five (5) years for MNA. As indicated in Tables 6 and 7 in that section, the wells included two (2) source area wells, MWs 3 and 3D, and two (2) downgradient sentinel wells, MWs 2 and 15. As further described in that section, MWs 3 and 3D had been abandoned as part of the soil remediation, as needed to enable excavation in AOC 15A, which was deeper than initially planned based on results of initial post-excavation soil sampling. As previously mentioned, monitoring wells MW-3, 3D, 2, and 15 were reinstalled in June and July of 2021. The wells will be sampled by Ramboll on approximately April 20, 2022 via

PDBs. As described in Ramboll's contribution to the 2022 PRR, the NYSDEC accepted this method of sampling. Ramboll's contribution to the 2022 PRR is included as **Appendix A**.

Soil Vapor

During the remediation of the Subject Site, a vapor evaluation was performed. The results of that investigation warrant the installation of passive SSDSs in future buildings on the Subject Site. The SSDSs were designed by a licensed professional engineer and were installed in accordance with the engineering plans. In addition, following the construction of the Site buildings, a soil vapor evaluation will be performed per the NYSDOH VI Guidance and the Soil Vapor/Indoor Air Decision Matrices. The proposed activities were described in the "Proposed Sub-Slab Depressurization System Sampling" dated January 24, 2022, prepared by SESI, which includes the required procedure and protocols, and was provided to the NYSDEC and NYSDOH for review and approval prior to implementation of the soil vapor investigation. The proposed plan was approved by the NYSDEC on February 9, 2022 and is included as **Appendix B**. Due to the unfinished building construction, a vapor intrusion investigation will not be performed during the heating season for 2021-2022. Per correspondence with NYSDEC dated March 24, 2022, a preliminary vapor investigation will be performed in the completed building space in April 2022. A follow-up vapor investigation will be performed during the heating season of 2022-2023 including a resampling of the currently occupied building, if required. The results of the preliminary sampling to be conducted in April 2022 and the 2022-2023 heating season vapor investigation will be included in the 2022 PRR. If required by NYSDEC and NYSDOH, the SMP will be modified to include monitoring and maintenance of the SSDS and to require the SSDS to be turned into an active system. Correspondence with the NYSDEC is included in this report as **Appendix C**.

4.1.2 CRITERIA FOR COMPLETION OF REMEDIATION/TERMINATION OF REMEDIAL SERVICES

Generally, remedial processes are considered complete when effectiveness monitoring indicates that the remedy has achieved the remedial action objectives identified by the decision document. The framework for determining when remedial processes are complete is provided in Section 6.6 of NYSDEC DER-10.

Soil Cap

The composite cover system is a permanent control and the quality and integrity of this system will be inspected at defined, regular intervals in perpetuity.

Groundwater

Groundwater monitoring activities to assess natural attenuation will commence once the Subject Site regrading has been completed and the necessary wells can be reinstalled. The MNA will continue, as determined by the NYSDEC, until residual groundwater concentrations are found to be consistently below NYSDEC standards or have become asymptotic at an acceptable level over an extended period. Groundwater monitoring will continue until permission to discontinue is granted in writing by the NYSDEC. Additional source removal, treatment, and/or control measures are not required at this time.

Soil Vapor

During the remediation of the Subject Site, a vapor evaluation was performed. The results of that investigation warrant the installation of passive SSDSs in future buildings on the Subject Site. The SSDSs were designed by a licensed professional engineer and were installed in accordance with the engineering plans. In addition, following the construction of the Site buildings, a soil vapor evaluation will be performed per the NYSDOH VI Guidance and the Soil Vapor/Indoor Air Decision Matrices. The proposed activities were described in the "Proposed Sub-Slab Depressurization System Sampling" dated January 24, 2022 prepared by SESI, which includes the required procedure and protocols, and was provided to the NYSDEC and NYSDOH for review and approval prior to implementation of the soil vapor investigation. The proposed plan was approved by the NYSDEC on February 9, 2022 and is included in **Appendix B**. Due to the unfinished building construction, a vapor intrusion investigation will not be performed during the heating season for 2021-2022. Per correspondence with NYSDEC dated March 24, 2022, a preliminary vapor investigation will be performed in the completed building space in April 2022. A follow up vapor investigation will be performed during the heating season of 2022-2023 including a resampling of the currently occupied building, if required. The results of the preliminary sampling to be conducted in April 2022 and the 2022-2023 heating season vapor investigation will be included in the 2022 PRR. If required by NYSDEC and NYSDOH, the SMP will be modified to include monitoring and maintenance of the SSDS and to require the SSDS to be turned into an active system. Correspondence with the NYSDEC is included in this report as **Appendix C**.

4.1.3 INSTITUTIONAL CONTROLS

A series of ICs is required by the Decision Document for the Subject Site, for which a Track 4 remedy has been conducted, to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination; and, (3) limit the use and development of the Subject Site to restricted residential, commercial and industrial uses only. Adherence to these ICs on the Subject Site is required by the Environmental Easement and will be implemented under the October 2018 SMP. ICs identified in the Environmental Easement may not be discontinued without an amendment to or extinguishment of the Environmental Easement. The IC boundaries were established in the Environmental Easement approved by NYSDEC on October 4, 2016 and recorded by Sun with the Richmond County Clerk on April 11, 2017. These ICs are:

- The Subject Site may be used for restricted residential, commercial and/or industrial use;
- All ECs must be operated and maintained as specified in this SMP;
- All ECs must be inspected at a frequency and in a manner defined in the SMP.
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Richmond County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
- Groundwater and other environmental or public health monitoring must be performed as defined in this SMP;
- Data and information pertinent to site management must be reported at the frequency and in a manner as defined in this SMP;
- All future activities that will disturb remaining contaminated material must be conducted in accordance with this SMP;
- Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in this SMP;
- Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in this SMP;

- Access to the Subject Site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;
- The potential for vapor intrusion must be evaluated prior to the occupancy of any buildings developed in the area within the IC boundaries noted on Plate 9 of the SMP, and any potential impacts that are identified must be monitored or mitigated; and
- Vegetable gardens, farming and the raising of livestock on the Subject Site are prohibited.

4.2 IC/EC CERTIFICATION

The NYSDEC Institutional and Engineering Controls Certification Form has been completed and is included in **Appendix D**.

5.0 MONITORING PLAN COMPLIANCE

The table below summarizes the periodic monitoring as required in the SMP.

Table 5.1: SMP Monitoring Frequency Requirements

Monitoring Program	Frequency	Matrix	Analysis
Soil Cover System	Annual	Soil	Visual
Groundwater	Semi-annual until contaminants of concern are below AWQS or reach asymptotic levels that are accepted by the NYSDEC	Water	VOCs
Soil Vapor	Prior to building construction then Annually thereafter	Soil Vapor	TO+15 at startup, Visual thereafter

5.1 MONITORING COMPLETED DURING THIS MONITORING PERIOD

Soil Cover

A soil cover system visual inspection was conducted by SESI continuously throughout the redevelopment activities ongoing at the Subject Site. As specified above, the redevelopment activities are substantially complete. The soil cover system has been removed and the Subject Site redevelopment operated in accordance with the SMP, specifically the EWP. The new ECs were inspected on March 24, 2022, by SESI. The new ECs consist of concrete building slabs, concrete flatwork, landscaped areas, and asphalt parking areas and roadways. In addition, SSDSs have been installed beneath the new building slabs of two (2) Site buildings as mentioned previously. The location and previous cap cover system details are provided in **Figures 3 and 4**, respectively. The proposed cap cover details are provided in **Figures 5, and 6**, respectively. As mentioned previously, several areas of exposed soil were observed. One (1) is directly outside the unfinished CubeSmart building that is still under construction and within the LIDL parcel as construction has not begun on that parcel. These areas are identified on **Figure 7**. Following construction completion, the areas will consist of the proposed cap on **Figures 5 and 6**. A follow-up inspection will occur and be included in the 2022 PRR.

Groundwater Monitoring

As stated above, per Section 4.3.1 of the SMP, Sun Chemical proposed to conduct semi-annual groundwater monitoring of four (4) wells for a minimum of five (5) years. As indicated in Tables 6

and 7 in that section, the wells included two (2) source area wells, MWs 3 and 3D, and two (2) downgradient sentinel wells, MWs 2 and 15. As further described in that section, MWs 3 and 3D had been abandoned as part of the soil remediation, as needed to enable excavation in AOC 15A, which was deeper than initially planned based on results of initial post-excavation soil sampling. As previously mentioned, monitoring wells MW-3, 3D, 2, and 15 were reinstalled in June and July of 2021. The wells will be sampled by Ramboll on approximately April 20, 2022 via PDBs. As described in Ramboll's contribution to the 2022 PRR, the NYSDEC accepted this method of sampling. Ramboll's contribution to the 2022 PRR is included as **Appendix A**.

Monitoring Deficiencies / Deviations

The monitoring plan was conducted in accordance with NYDEC applicable regulations.

Conclusions and Recommendations

The remedial program appears to be meeting the Subject Site remedy design goal. Therefore, SESI does not recommend any repairs, or preventative action at this time. In addition, no changes to the monitoring schedules for the soil cap, groundwater, or soil vapor are recommended at this time.

6.0 OPERATION AND MAINTENANCE PLAN COMPLIANCE

There are no current operation or maintenance plan requirements since the Subject Site is undergoing redevelopment and has not been developed with any structures.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Compliance with the SMP

All aspects of each component comply with the SMP. Therefore, SESI does not recommend any repairs, or preventative action at this time.

There are no new exposure pathways resulting in an unacceptable risk.

Performance and Effectiveness of the Remedy

Soil Cap

The new capping system has been installed across the majority of the Site where redevelopment activities have been completed. One (1) building on Site has not been completed to date and the areas surrounding them have not installed the full extent of the new capping system. In addition, the LIDL parcel has not begun construction. Following building completion, an inspection will occur to ensure the approved capping system was installed correctly.

Groundwater

As reported above, groundwater monitoring has not been performed during this monitoring period. Sun Chemical has reinstalled the wells needing to be sampled per the approved SMP. The wells are scheduled to be sampled on April 20, 2022 and the results will be included in the 2022 PRR.

Soil Vapor

As reported above, during the remediation of the Subject Site, a vapor intrusion investigation was performed. The results of that investigation warrant the installation of engineering controls to address vapor intrusion. As a result, the SSDSs were designed by a licensed professional engineer and will be installed in future buildings at the Subject Site in accordance with the engineering plans. In addition, following the construction of the Site buildings, a soil vapor evaluation will be performed per the NYSDOH VI Guidance and the Soil Vapor/Indoor Air Decision Matrices. Due to the unfinished building construction, a vapor intrusion investigation will not be performed during the heating season for 2021-2022. Per correspondence with NYSDEC dated March 24, 2022, a preliminary vapor investigation will be performed in the completed building space in April 2022. A follow up vapor investigation will be performed during the heating season of 2022-2023 including a resampling of the currently occupied building, if required. The results of the preliminary sampling to be conducted in April 2022 and the 2022-2023 heating season vapor investigation will be included in the 2022 PRR. If required by NYSDEC and NYSDOH, the SMP

will be modified to include monitoring and maintenance of the SSDS and to require the SSDS to be turned into an active system.

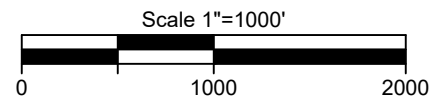
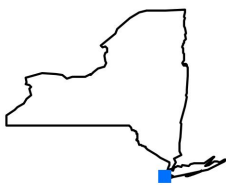
Future PRR Submittals

Based on the above information, no changes to the monitoring schedules for the soil cap, groundwater, or soil vapor are recommended at this time. We do not recommend any changes to the frequency of the PRR submittal at this time. As mentioned previously, a soil vapor investigation will be performed in the completed buildings in April 2022, outside of the heating season. A vapor investigation will be completed during the 2022-2023 heating season on all occupied buildings on Site including a resampling of the currently occupied building, if required. In addition, a cap inspection will be performed following the remaining building completion. The results of both investigations will be included in the next PRR submittal.

Figures



REFERENCE:
SITE AERIAL TAKEN FROM GOOGLE MAPS, DATED 2/26/2020.



441 TOMPKINS AVE.
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SITE LOCATION MAP

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FIG-1

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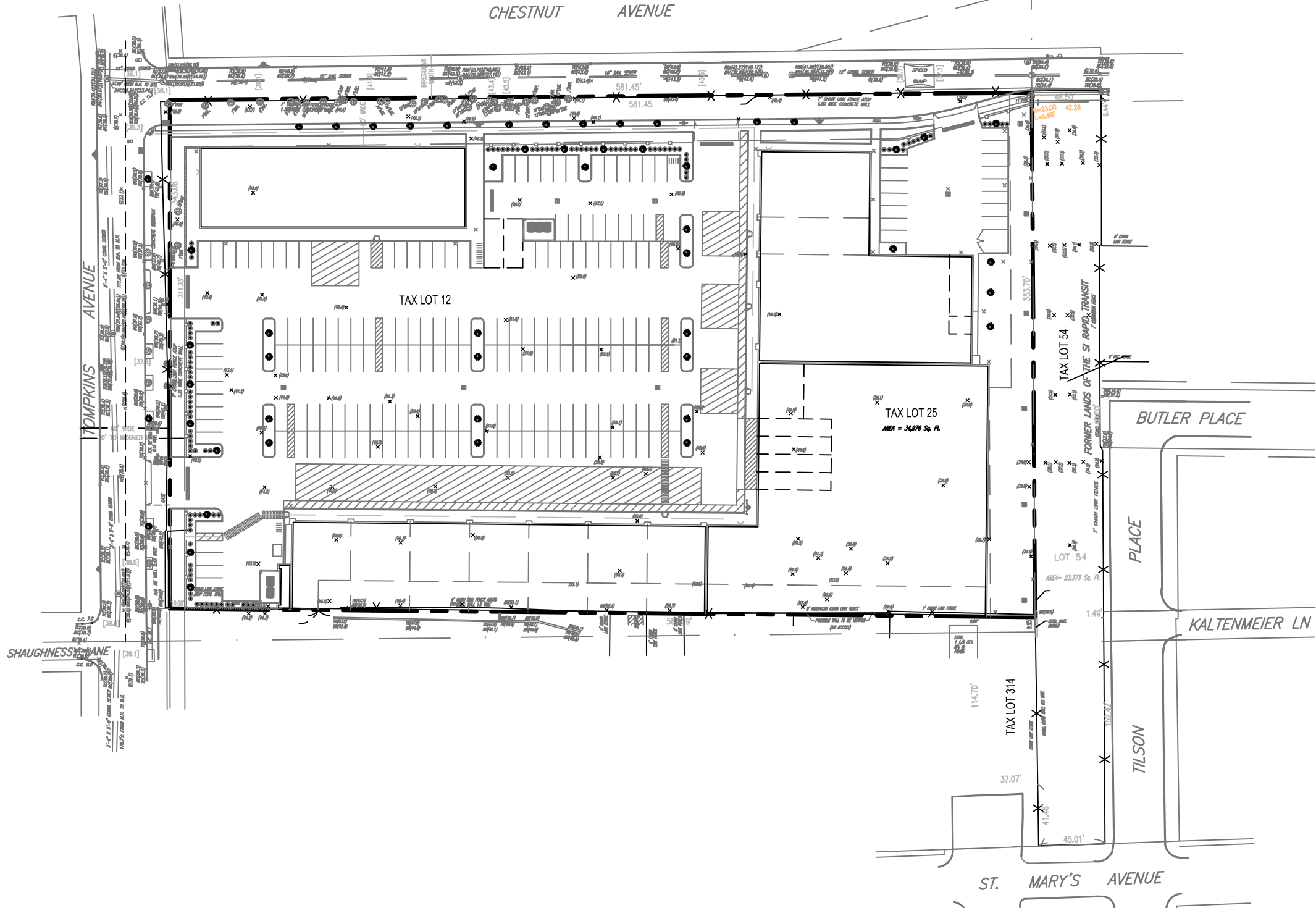
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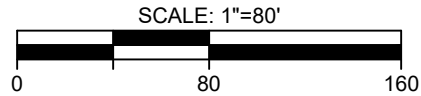
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LEGEND:

--- SMP SITE BOUNDARY



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project:

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title:

SITE PLAN

job no: 10598
drawing no:

FIG-2

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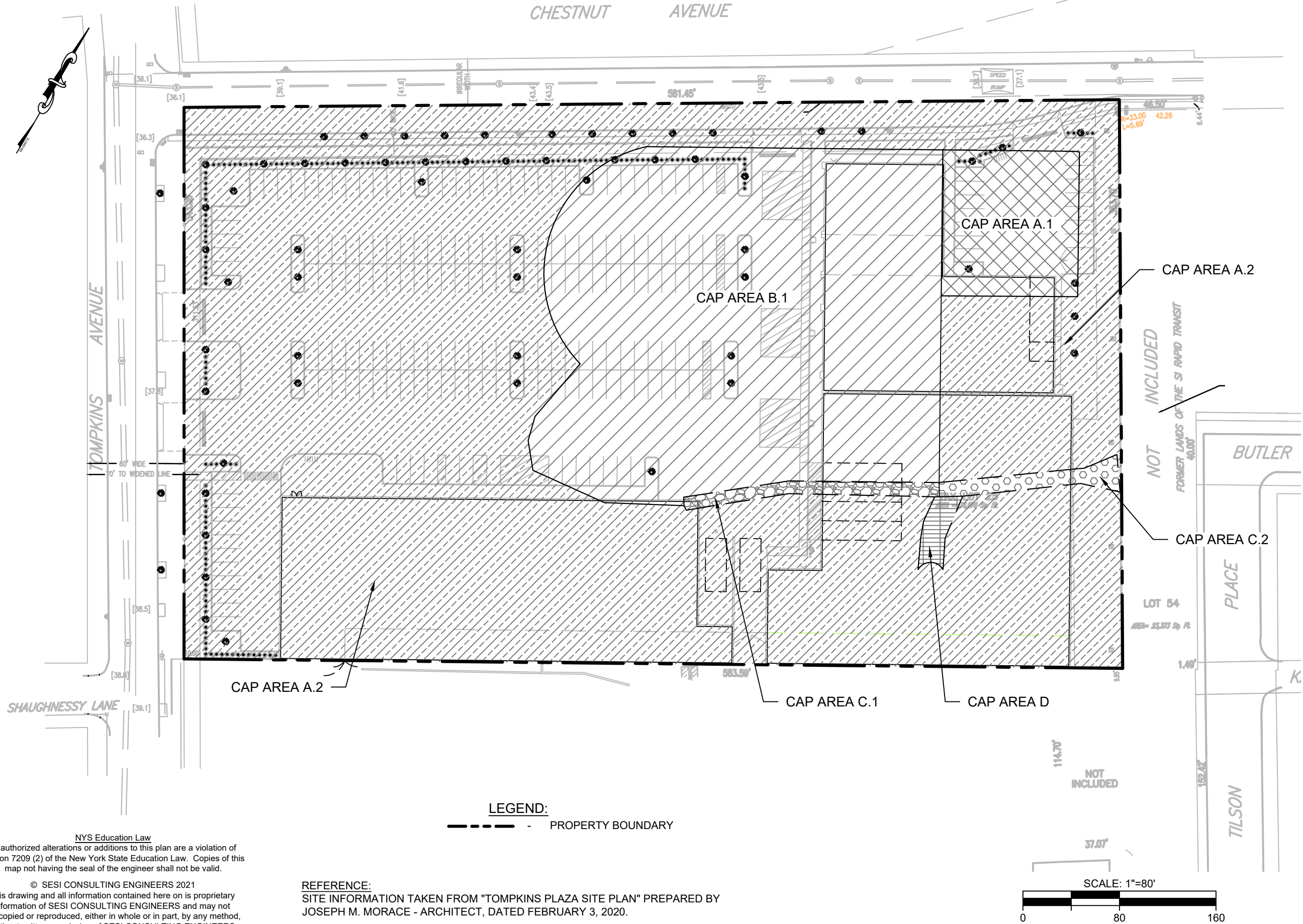
N:\ACAD\10598\CAD\10598 FIG-3 - PREVIOUS ENGINEERING CONTROL PLAN.DWG 03/22/21 11:13:48AM, Jenny, LAYOUT:FIG-3

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LEGEND:
- - - - - PROPERTY BOUNDARY



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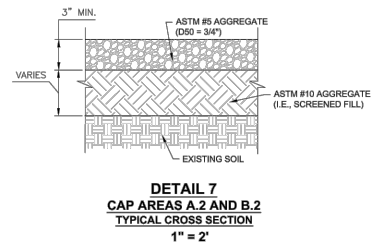
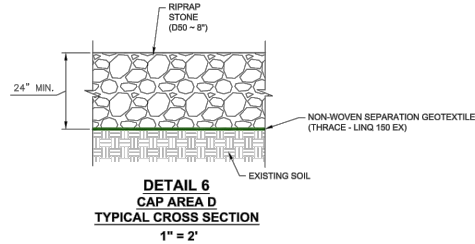
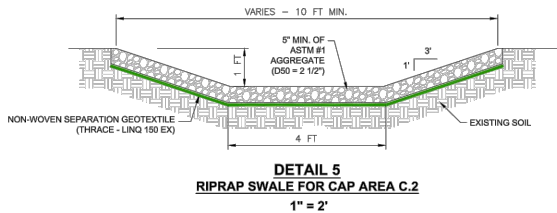
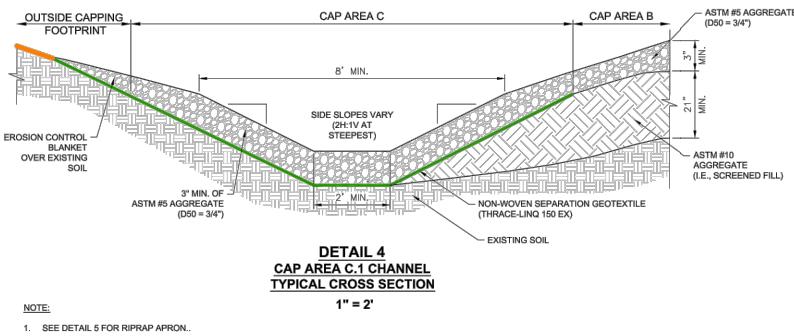
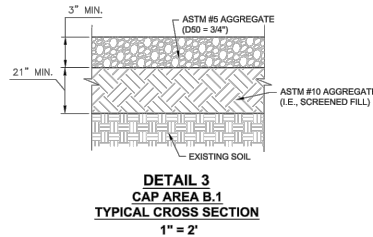
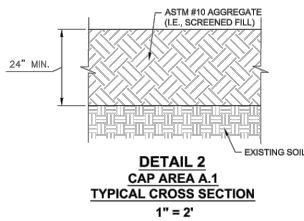
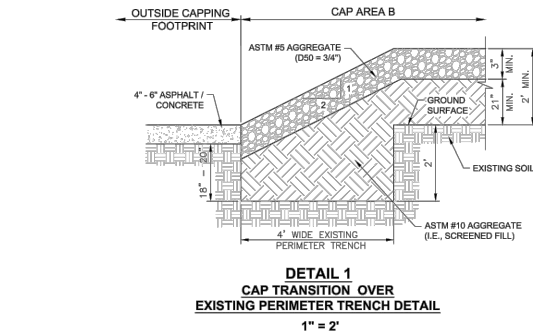
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title:
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job no: 10598
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FIG-3

N:\ACAD\10598\CAD\10598 FIG-4 PREVIOUS ENGINEERING CONTROL DETAILS.DWG 03/16/21 10:35:50AM, aas, LAYOUT: FIG-4



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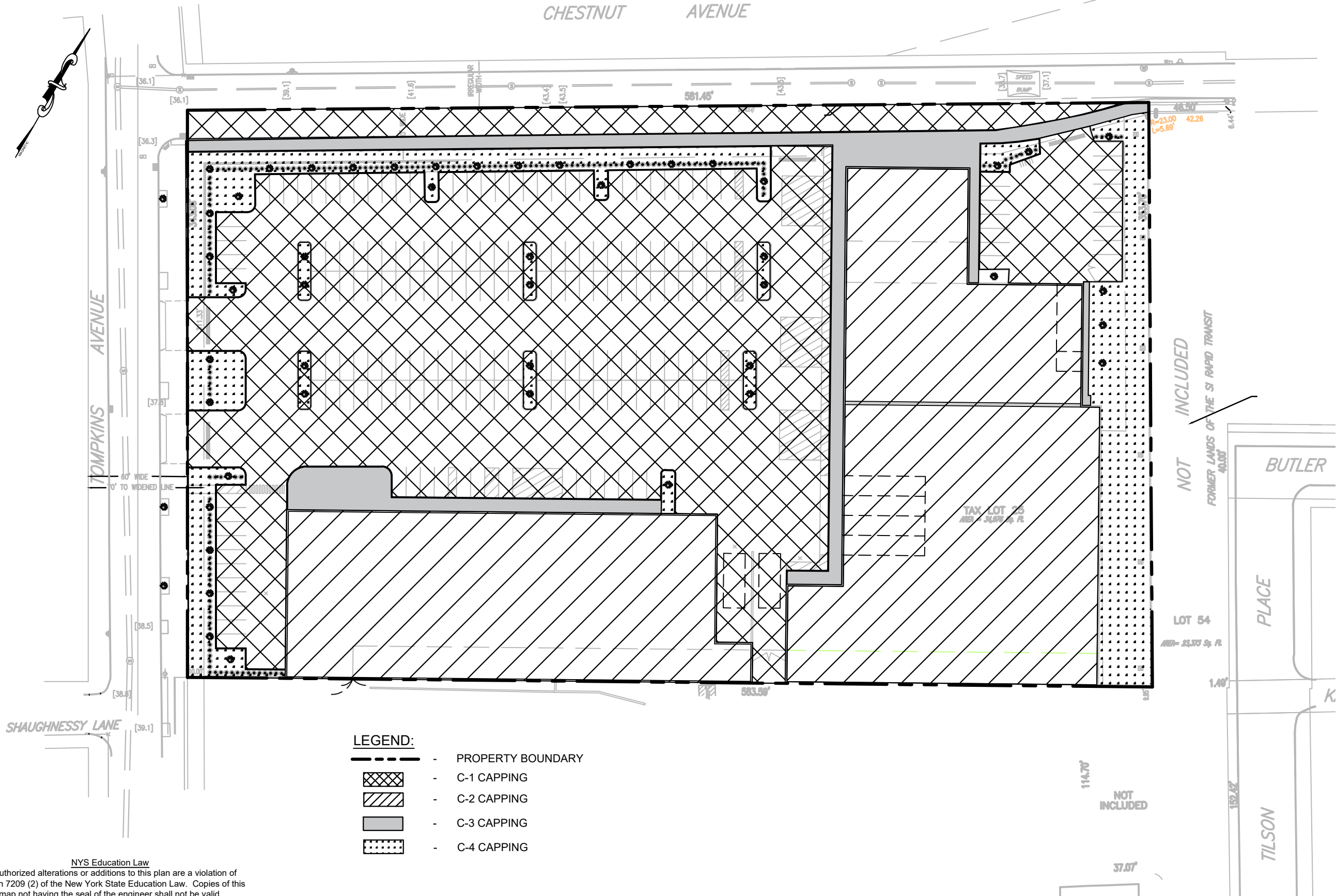
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FIG-4

N:\ACAD\10598\CAD\10598 FIG-5 - PROPOSED ENGINEERING CONTROL PLAN.DWG 03/22/21 11:18:18AM, jenny, LAYOUT: FIG-5



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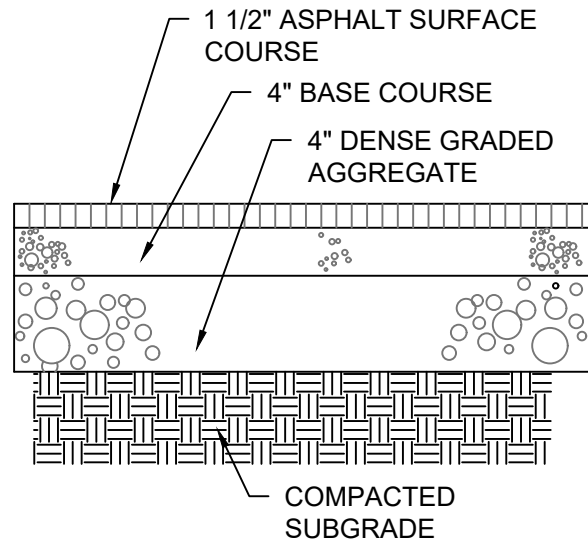
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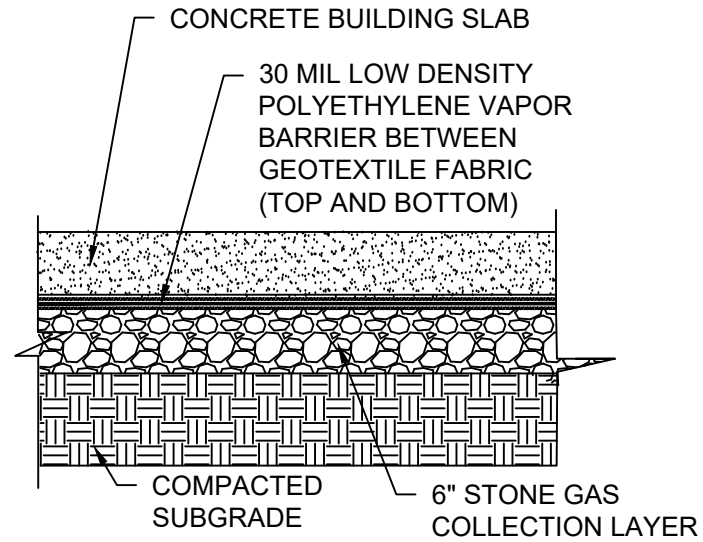
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FIG-5

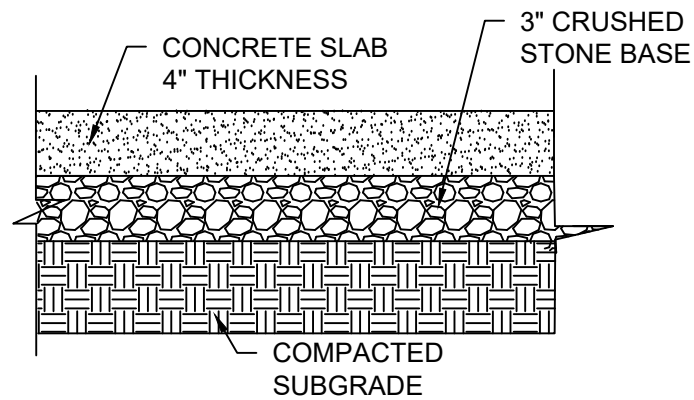
N:\ACAD\10598\CAD\10598 FIG-6 PROPOSED ENGINEERING CONTROL DETAILS.DWG 03/17/21 09:22:58AM, aas, LAYOUT:FIG-6



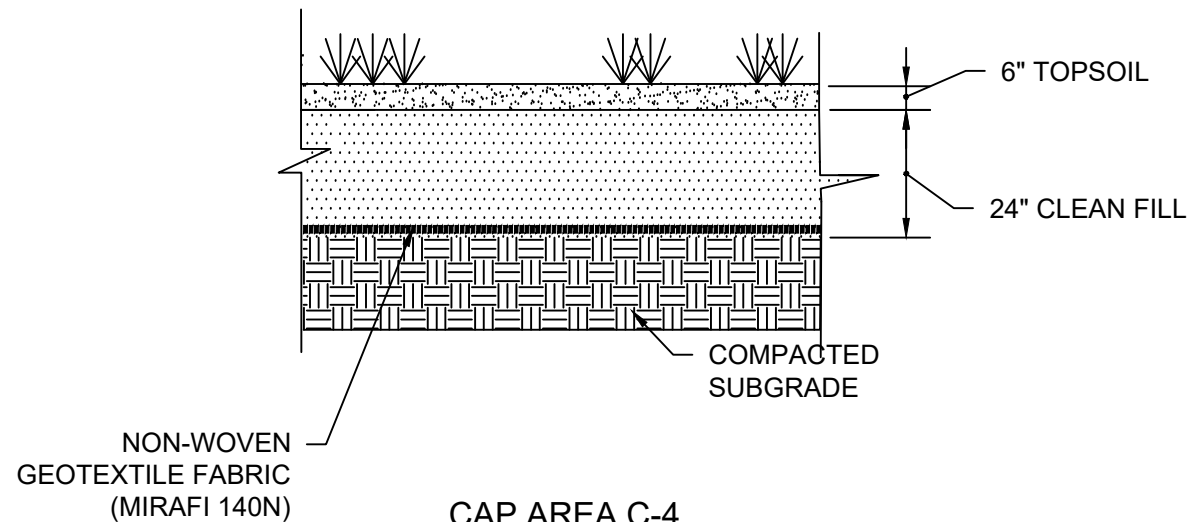
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CAP AREA C-2
N.T.S.



CAP AREA C-3
N.T.S.



CAP AREA C-4
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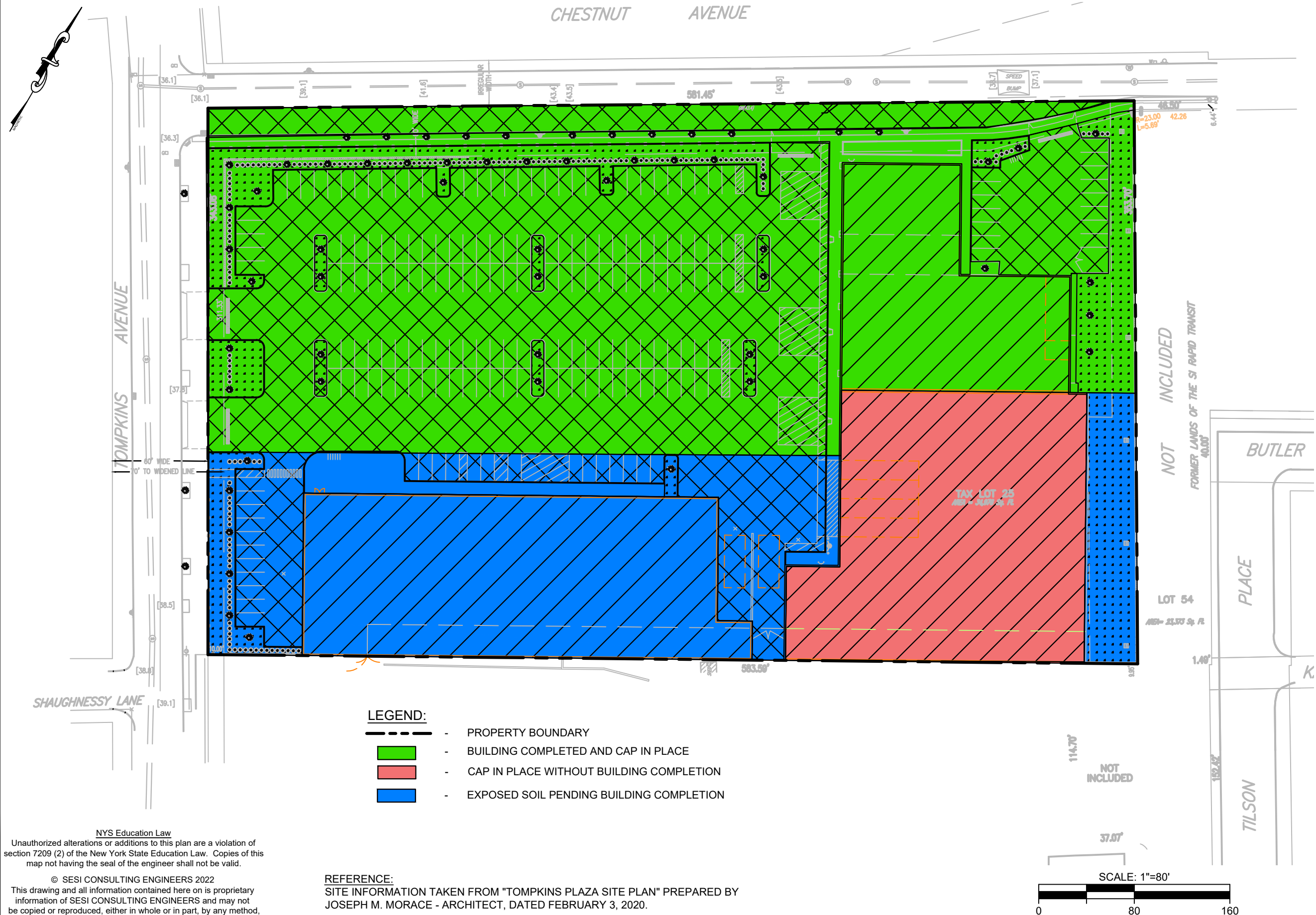
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**PROPOSED ENGINEERING
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drawing no:

FIG-6

N:\ACAD\10598\CAD\10598 FIG-7 - CURRENT CAP CONDITIONS PLAN.DWG 04/04/22 11:38:25AM, yelena.zolotova, LAYOUT:FIG-7



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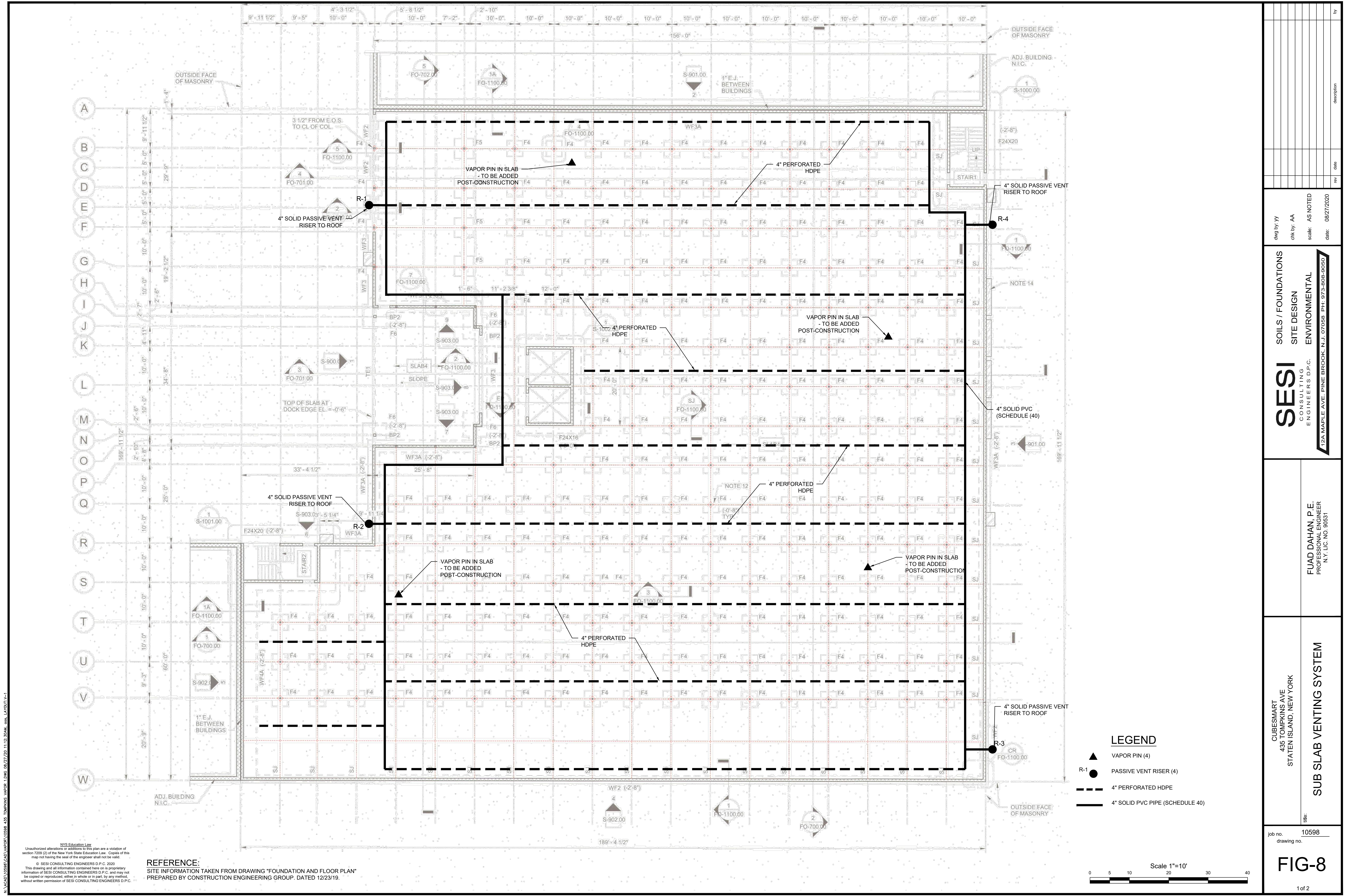
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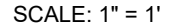
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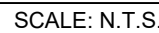


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job no. 10598		drawing no.		FIG-8	
1 of 2					

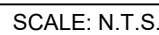
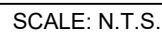
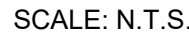


NOTES:

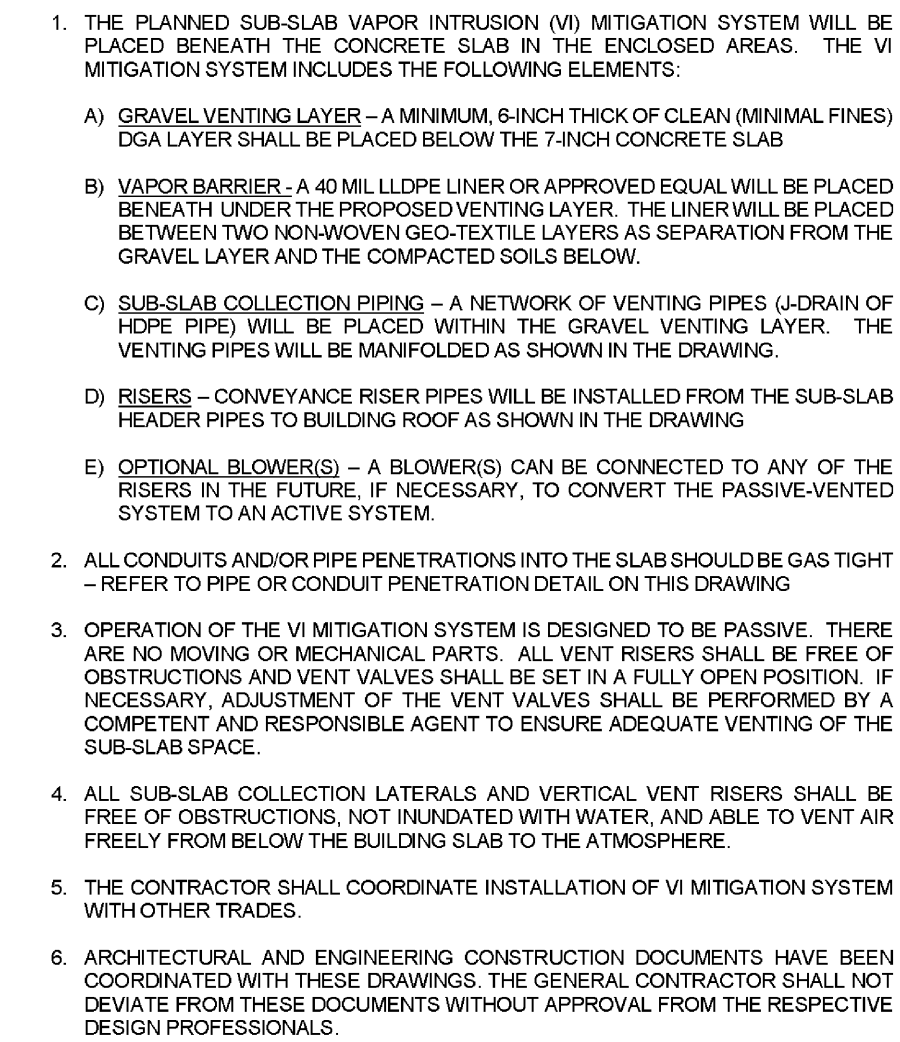
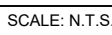
1. DGA SHALL CONTAIN LESS THAN 10% "FINES" (MATERIAL PASSING NO. 200 SEIVE)
2. SESI SHALL INSPECT THE LINER PRIOR TO PLACEMENT OF THE TOP LAYER OF GEOTEXTILE . SMOKE TESTING SHALL BE PERFORMED ON A REGULAR BASIS DURING INSTALLATION



NOTE: REFER TO MECHANICAL DRAWINGS FOR LOCATIONS OF PIPE PENETRATIONS



NOTE: REFER TO MECHANICAL DRAWINGS FOR LOCATIONS OF PIPE PENETRATIONS



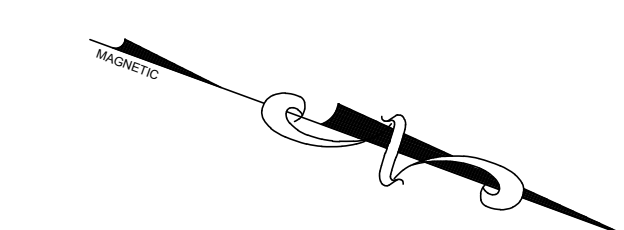
THE PURPOSE OF THE AIR TEST IS TO VERIFY THAT VENT RISERS ARE CLEAR OF OBSTRUCTIONS AND FREELY TRANSMIT AIR FROM THE SUB-SLAB GRAVEL VENTING LAYER TO EACH VENT'S TERMINATION ABOVE THE ROOF. IT IS RECOMMENDED THAT THE TEST BE PERFORMED PRIOR TO AND AFTER PLACEMENT OF THE CONCRETE FLOOR SLAB, FOR EACH VENTING SECTION

1. CLOSE GATE VALVES OF ALL VENTS.
2. BLOW AMBIENT AIR IN ONE VENT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AN ADEQUATELY SIZED BLOWER; PRELIMINARILY, A 200 - 400 CFM BLOWER IS RECOMMENDED.
3. WITH THE AIR SUPPLY DISCHARGING INTO THE VAPOR MITIGATION PIPING SYSTEM, OPEN FULLY EACH REMAINING VENT SEPARATELY, AND MEASURE AIR FLOW RATE, VELOCITY AND DIRECTION AT EACH VENT SAMPLE PORT. RECORD THE RESULTS AND CLOSE THE GATE VALVE.
4. REPEAT THIS PROCEDURE FOR ALL VENTS.
5. ALL AIR TESTING SHALL BE PERFORMED UNDER THE OBSERVATION OF SESI AND/OR THE LSRP.

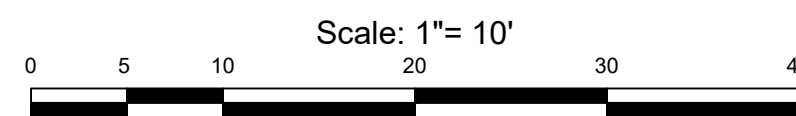
1. UNROLL VAPOR BARRIER WITH THE LONGEST DIMENSION PARALLEL WITH THE DIRECTION OF THE POUR. VISUALLY INSPECT THE MATERIAL DURING INSTALLATION FOR IMPERFECTIONS AND MARK FAULTY OR SUSPECT AREAS.
 - A. UNROLL VAPOR BARRIER USING METHODS THAT WILL NOT DAMAGE MATERIAL AND WILL PROTECT UNDERLYING SURFACE FROM DAMAGE
 - B. PERSONNEL WALKING ON VAPOR BARRIER SHALL NOT ENGAGE IN ACTIVITIES OR WEAR SHOES THAT COULD DAMAGE IT. SMOKING CIGARETTES SHALL NOT BE PERMITTED ON THE BARRIER.
 - C. DO NOT ALLOW VEHICULAR TRAFFIC DIRECTLY ON THE VAPOR BARRIER.
2. OVERLAP JOINTS IN MATERIAL SHALL BE THE MINIMUM OVERLAP REQUIRED BY THE MANUFACTURER IN ORDER TO FUSION WELD THE MATERIALS. INSTALLATION AND FUSION WELDING OF THE LINER SHALL BE COMPLETED BY A CERTIFIED CONTRACTOR.
3. THE CONTRACTOR SHALL REPAIR DAMAGED AREAS BY CUTTING PATCHES OF VAPOR BARRIER, OVERLAPPING THEM ON THE DAMAGED AREA, AND FUSION WELDING THE PATCHES TO THE LINER.
4. THE CONTRACTOR SHALL INSPECT ALL SEAMS, JOINTS, AND PENETRATIONS IN THE VAPOR BARRIER PRIOR TO ANY JOINT INSPECTION REPORT. THE CONTRACTOR SHALL REPAIR OR REPLACE ALL DEFECTIVE SEAMS, JOINTS, AND PENETRATIONS PRIOR TO COVERING VAPOR BARRIER.
5. QA/QC TESTING SHALL BE COMPLETED DURING FUSION WELDING BY THE CERTIFIED CONTRACTOR TO DOCUMENT THAT ALL WELDS ARE BEING COMPLETED CORRECTLY. THE QA/QC PACKAGE SHALL BE PROVIDED TO SESI FOLLOWING COMPLETION OF THE SYSTEM.

1. THE VAPOR BARRIER SHALL BE SMOKE TESTED FOR QUALITY ASSURANCE. SMOKE TESTING SHALL BE CONDUCTED BY SESI OR AN APPROVED VAPOR BARRIER APPLICATOR.
- A. THE VAPOR BARRIER SHALL BE VISUALLY INSPECTED. ANY APPARENT DEFICIENCIES AND/OR INSTALLATION PROBLEMS SHALL BE CORRECTED PRIOR TO SMOKE TESTING.
- B. THE DATE, TIME, TESTING REFERENCE AREA, TEMPERATURE, WIND SPEED/DIRECTION AND CLOUD COVER SHALL BE RECORDED ON THE SMOKE TESTING RECORD. THE AMBIENT AIR TEMPERATURE AT THE LOCATION OF TESTING SHOULD BE IN EXCESS OF 45° F AND THE WIND SPEED AT GROUND LEVEL SHOULD BE 15 MPH OR LESS. (NOTE: VISUAL IDENTIFICATION OF LEAKS BECOMES MORE DIFFICULT WITH INCREASING WIND SPEED.)
- C. DELINEATE A SMOKE TESTING AREA. ASSEMBLE AND SITUATE SMOKE TESTING SYSTEM TO INJECT SMOKE BENEATH VAPOR BARRIER ONLY. INJECTION OF SMOKE IS TO BE UTILIZED FOR VAPOR BARRIER SMOKE TEST.
- D. DESIGNATE TESTING CONTROL AREAS BY CUTTING OPENINGS IN AN "X" PATTERN (MINIMUM 4' X 4') IN THE VAPOR BARRIER AT SELECTED LOCATIONS. MARK TESTING CONTROL AREAS FOR IDENTIFICATION PRIOR TO CONDUCTING THE SMOKE TEST.
- E. ACTIVATE SMOKE GENERATOR/BLOWER SYSTEM (NOMINAL 150-950 CFM). APPLY SUFFICIENT PRESSURE AS TO ENSURE THAT SMOKE WILL PERMEATE THE DESIGNATED TESTING AREA. FOR VERIFICATION, ENSURE THAT SMOKE IS LEAKING THROUGH TESTING CONTROL AREAS.
- F. PUMP SMOKE BENEATH THE VAPOR BARRIER FOR A MINIMUM PERIOD OF 1-2 MINUTES. OBSERVE FOR LEAKS IN THE VAPOR BARRIER. REDUCE PRESSURE/FLOW RATE IF EXCESSIVE LIFTING OF THE VAPOR BARRIER OCCURS.
- G. THOROUGHLY INSPECT ENTIRE VAPOR BARRIER SURFACE WITHIN AREA DELINEATED FOR TESTING. USE MARKING DEVICE TO MARK/LABEL ANY LEAK LOCATIONS. MARK/LABEL LEAK LOCATIONS ON COLOR PLAN AND CORRESPONDING TESTING REFERENCE AREA.
- H. REPAIR LEAK LOCATIONS MARKED IN STEP G BY CUTTING PATCHES OF VAPOR BARRIER, OVERLAPPING DAMAGED AREA BY 6 INCHES MINIMUM, AND TAPING ALL FOUR SIDES.

REPEAT STEPS F AND G, AS NECESSARY TO CONFIRM INTEGRITY OF THE VAPOR BARRIER. ONCE THE VAPOR BARRIER HAS PASSED THE SMOKE TEST INSPECTION, THE SUCCESSFUL COMPLETION



1 of 1



Appendix A:
Ramboll's Contribution to 2022 PRR

March 30, 2022

Via Electronic Mail

Javier Pérez-Maldonado
NYSDEC
Division of Environmental Remediation
625 Broadway
Albany, NY 12233

**THIRD PERIODIC REVIEW REPORT
SUN CHEMICAL, SITE #C243024
441 TOMPKINS AVENUE, STATEN ISLAND, NEW YORK**

Dear Javier:

Ramboll US Consulting, Inc. (Ramboll) has prepared this letter report on behalf of Sun Chemical Corporation (Sun Chemical) to provide certain information in support of an overall Periodic Review Report (PRR) as required under Section 7.2 of the October 2018 Site Management Plan (SMP) for the above-captioned site. Specifically, this letter provides information related to the groundwater monitoring program detailed under Section 4.3.1 of the SMP. Other relevant information for this second PRR is being provided in separate correspondence by the current site owner, 2846 Partners, LLC.

Ramboll
101 Carnegie Center
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USA

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Groundwater Monitoring

Per the 2018 SMP, periodic groundwater sampling was proposed at four monitoring wells, including MWs 3 and 3D (the "source area" wells) and MWs 2R and 15, downgradient sentinel wells. As indicated in Table 7 (in Section 4.3.1) of the SMP, MWs 3 and 3D were abandoned to enable removal of contaminated soils associated with AOC 15A. Sun Chemical therefore indicated that the wells would require reinstallation with the same overall construction, screened intervals, and locations as close as feasible to the prior wells.

As noted in Ramboll's March 29, 2021 Second PRR, installation of those wells had been delayed due to (1) the site significant regrading required to enable the planned building construction and (2) the slab had been poured for the interior loading / unloading area of the self-storage facility. Based on information provided as of March 2021, we noted in the Second PRR that the slab installation was anticipated to be completed in April 2021 such that Sun Chemical had scheduled installation of MWs 3 and 3D on April 26 and 27, 2021. However, due to additional construction-related factors, the well reinstallations could not be completed on those dates. Those factors included:

- The slab completion was delayed into June 2021.
- Ramboll completed a resurveying of the former locations of MWs 3 and 3D within the Cube Smart loading dock on June 14, 2021. Rather than

being positioned within the loading dock, the survey showed the well locations to be inside the building in a finished floor in front of the nearby elevator shaft. As that was inconsistent with the construction plans Ramboll had been provided, Ramboll conferred with 2846 Partners who confirmed that the loading dock footprint had been shortened by approximately 20 feet in order to allow better functioning of drive aisles inside the building.

- Ramboll provided electronic correspondence to Javier Perez on June 14, 2021 discussing this development and proposing alternative locations given the change in building layout. Based on a review of the feasibility of installing the wells inside the building, close to the former well locations, Ramboll was advised that because the steel framing had been constructed, there was not enough vertical clearance to get a drill rig to those positions. Additionally, Ramboll determined that the elevator-component layout and new underground utilities would preclude installing the wells precisely at their former positions. As such, Ramboll proposed locations inside the revised loading dock area within 15 feet west of the prior well positions, as close as feasible to their former positions.
- MWs 3 and 3D were installed and developed on June 16-17, 2021. The wells were completed with a temporary protective stickup casing to enable completion of the steel building frame and loading dock slab pour without damage to the wells. The temporary stickup casings would then be removed and permanent flushmount protective casings installed during the final loading dock slab pour. Although the expectation had been that the slab pour and flushmount installations would have been completed in the summer, owing to various construction-related delays, the flushmount casings installation and final slab pour were conducted on November 24, 2021.
- Ramboll checked the conditions of MWs 2 and 15, the other two wells included in the periodic groundwater monitoring program and did not locate those wells. Ramboll later confirmed with the site construction manager that based on changes to final site grade / construction plan, those wells had been destroyed and/or buried by approximately 7 feet of soil.
- Ramboll reinstalled those wells on July 1, 2021 at their original locations and also developed the wells on that date.
- Ramboll provided electronic correspondence to Javier Perez on July 27, 2021 noting that Sun Chemical preferred to eliminate purge-water generation / management issues by using passive diffusion bags (PDBs) instead. As the use of PDBs is not detailed in DER-10, Ramboll requested NYSDEC agreement that using PDBs would be acceptable for this site. Ramboll again requested NYSDEC approval of the PDB approach in a follow-up correspondence dated August 18, 2021.
- NYSDEC responded in an August 20, 2021 electronic correspondence indicating that use of PDBs would first require a site-specific evaluation comparing VOC concentrations obtained from PDB samplers to VOCs concentrations obtained from wells using LFPS.

PDBs were deployed in MWs 2, 3, 3D and 15 on March 30, 2022. Allowing for equilibration of those deployed bags, groundwater samples for VOC analysis will be collected from those PDBs on or about April 20, 2022, immediately after which groundwater samples will also be collected using low-flow sampling procedures. Laboratory data packages will be compared for relative percent difference

(RPD) and validated for data accuracy and precision. Ramboll will supply the groundwater results and sampling method evaluation in a letter report and upon NYSDEC approval, will use the selected method for the groundwater monitoring, which will continue on a semi-annual basis for two years, per SMP Section 4.

If NYSDEC requires any additional information regarding this PRR, please contact me directly or a representative of the current site owner, 2846 Partners LLC, who are submitting the overall PRR.

Sincerely,



William D. Kraft, III
Principal Consultant

WDK:sn
1690004716\PRIN_WP\44930.docx\v2

cc: G. Andrzejewski, Sun Chemical
W. Faure, Esq., Sun Chemical
J. Kenney, NYSDOH
T. Wolff, Esq., Manatt Phelps & Philipps
S. Arakhan, NYSDEC
J. O'Connell, NYSDEC
K. Lewandowski, NYSDEC

Appendix B:
Approved SSDS Sampling Plan



Geotechnical
Foundations
Land Planning
Geo-Structural
Environmental
Water Resources

Principals:

Anthony Castillo, PE
Fuad Dahan, PhD, PE, LSRP
John M. Nederfield, PE
Justin M. Protasiewicz, PE
Michael St. Pierre, PE

January 24, 2022

Mr. Javier Perez-Maldonado
Project Manager
NYSDEC
625 Broadway
Albany, New York 12233

**RE: Proposed Sub-Slab Depressurization System Sampling
Former Sun Chemical Site
Staten Island, New York
SESI Project No. 10598**

Dear Mr. Perez-Maldonado:

This letter summarizes the process of sampling the sub-slab depressurization system (SSDS) that was installed in the multi-tenant building on Site. Samples will be collected from sampling ports installed beneath the concrete slab with concurrent indoor air samples being collected inside the building. In addition, an ambient air sample will be collected from outside of the building. Prior to sample collection, a helium tracer gas test will be administered to each sampling port to confirm the seal around the sampling port is intact. The sampling will be performed by a trained environmental technician from our firm and will be in accordance with the New York State Department of Environmental Conservation (NYSDEC) "Guidance for Soil Vapor Intrusion" dated October 2006.

Indoor Air and Ambient Air Sampling

In order to assess the indoor air quality at the Site, indoor air samples will be collected using 6-liter Summa canisters and will be placed in the vicinity of corresponding sub slab samples. Prior to sample collection, a Building Questionnaire/Product Inventory form will be completed which will document any recent renovations, floor sketch, weather conditions, floor cracks, etc, and will include information on the space where the samples are being collected. In addition, the heating system will be operating for at least 24 hours prior to sampling. The flow regulators are anticipated to be set at a rate of approximately 12.5ml/min. The sample collection time will be approximately eight (8) hours. In addition, one (1) ambient air sample will be collected and placed outside of the Site building. The ambient air sample will be collected using a 6-liter Summa canister that is certified clean by an ELAP certified laboratory and the flow regulator is anticipated to be set at a rate of approximately 12.5ml/min. The sample collection time will be approximately eight (8) hours. A total of four (4) indoor air samples and one (1) ambient air sample are proposed to be collected. The proposed sample locations are provided in **Figure V-1**. All indoor air and ambient air samples will be analyzed for EPA Air Method Toxic Organics (TO-15) with select ion monitoring

(SIM) and will be compared to the New York State Department of Health (NYSDOH) "Soil Vapor/Indoor Air Matrices", dated May 2017. All samples will be sent to an ELAP certified laboratory and placed on a standard turnaround time. Indoor air and ambient air sampling activities will be performed and completed immediately prior to the helium gas tracer testing and soil vapor sampling.

Helium Tracer Gas Test

Before collecting a sub slab sample SESI will administer a helium tracer gas test to confirm ambient air is not infiltrating the sub slab sample. The process will involve placing a shroud over the sampling port. The shroud will have two ports, one connected to the sampling port and one connected to the helium gas. Helium will be introduced into the shroud to enrich the area surrounding the sampling port. The helium detector will be used in the other port on the shroud attached to the sampling port and flow at or below 200 ml/min will be induced. If helium is detected below 10 percent of the atmosphere in the shroud, the test passes. If helium is detected above 10 percent of the total helium atmosphere, then the seal around the sampling port will be repaired and the port retested. The sampling will be conducted only after a less than 10% helium is detected in the sample port.

Soil Vapor Sample Collection

Once the helium tracer gas test is passed, the sampling of the sub slab sample ports can begin. Samples from the sub slab will be collected with 1-liter (or 2.7 liter) Summa canisters that are certified clean by an ELAP certified laboratory. Flow regulators will be set to collect the air samples at or below 200ml/min. It is anticipated that the sub slab sample flow regulators will be set at a rate of 200ml/min. As a result, the sample duration for the sub slab samples is anticipated to be approximately five (5) minutes if 1-liter canisters are utilized and 13.5 minutes if a 2.7-liter canister is utilized. Prior to sample collection, a low flow pump will be used to purge the stagnant air from the vapor point at or below a rate of 200 ml/min. The purge rate of the pump will be calibrated to match the purge rate of the flow regulator.

A total of four (4) sub slab vapor samples will be collected. Proposed sample locations are provided in **Figure V-1**. All sub slab samples will be analyzed for EPA TO-15 SIM and will be compared to the NYSDOH "Soil Vapor/Indoor Air Matrices", dated May 2017. All samples will be sent to an ELAP certified laboratory and placed on a standard turnaround time.

Please feel free to contact me if you have any questions regarding the above.

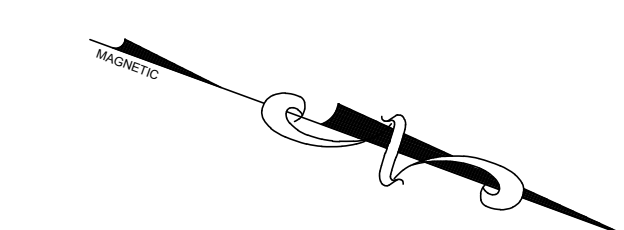
Sincerely,

SESI CONSULTING ENGINEERS

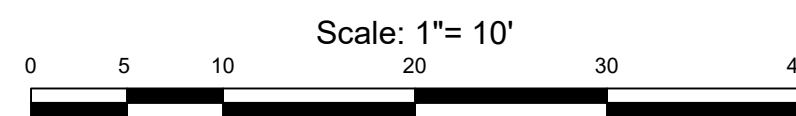


Fuad Dahan, PhD, P.E., LSRP
Principal

FIGURES



1 of 1



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau B

625 Broadway, 12th Floor, Albany, NY 12233-7016

P: (518) 402-9767 | F: (518) 402-9773

www.dec.ny.gov

Sent via e-mail

February 9, 2022

SESI Consulting Engineers
12A Maple Avenue
Pine Brook, NJ 07058
fd@sesi.org

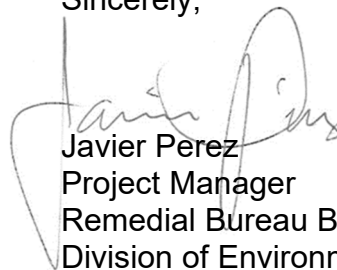
Re: Proposed Sub-Slab Depressurization
Sampling Plan
Sun Chemical Site
Site ID No. C243024
Staten Island, Richmond County

Dear Fuad Dahan:

The New York State Department on Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health (NYSDOH), has reviewed Sub-Slab Depressurization System Sampling Plan dated January 24, 2022 for the referenced site. The proposed plan is acceptable.

If you have any questions, please feel free to contact me at (518) 402-8172 or javier.perez-maldonado@dec.ny.gov.

Sincerely,


Javier Perez
Project Manager
Remedial Bureau B
Division of Environmental Remediation

cc: W. Bennett
S. McLaughlin
J. Kenney
A. Allen



Department of
Environmental
Conservation

Appendix C: SSDS Correspondence with NYSDEC

Jonathan C Stuart

From: Perez-Maldonado, Javier (DEC) <javier.perez-maldonado@dec.ny.gov>
Sent: Friday, March 25, 2022 7:29 AM
To: Andrew A. Allen, LSRP
Cc: Fuad Dahan, PE, LSRP; Jonathan C Stuart; Karmel, Matthew; 'Charles Farina'
Subject: RE: Sun Chemical Site (C243024) - SSDS Sampling Plan

Andrew – This is acceptable to the Department. As discussed, additional sampling may be necessary for these occupied buildings in the 2022-23 heating season.

Regards,

Javier Perez-Maldonado

Project Manager, Division of Environmental Remediation

New York State Department of Environmental Conservation

625 Broadway, Albany, NY 12233

P: (518) 402-8172 | F: (518) 402-9773 | javier.perez-maldonado@dec.ny.gov

www.dec.ny.gov |  |  | 



From: Andrew A. Allen, LSRP <aa@sesi.org>
Sent: Thursday, March 24, 2022 1:14 PM
To: Perez-Maldonado, Javier (DEC) <javier.perez-maldonado@dec.ny.gov>
Cc: fd@sesi.org; jcs@sesi.org; Karmel, Matthew <mkarmel@RIKER.com>; 'Charles Farina' <bluestarsi@aol.com>
Subject: RE: Sun Chemical Site (C243024) - SSDS Sampling Plan

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.

Javier,

Thanks for the conversation a few minutes ago. Per our conversation we will coordinate the vapor sampling at the currently occupied multi-tenant building and we will postpone the sampling at the CubeSmart and Lidl buildings as they are not completed at this time. Please confirm at your earliest convenience.

Regards,



Andrew A. Allen, LSRP
Sr Project Manager
✉ aa@sesi.org
☎ 973-808-9050 Ext 268
☎ 862-702-5715
📍 12A Maple Avenue
Pine Brook, NJ 07058



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From: Perez-Maldonado, Javier (DEC) <javier.perez-maldonado@dec.ny.gov>
Sent: Wednesday, February 9, 2022 3:16 PM
To: Fuad Dahan, PE, LSRP <fd@sesi.org>
Cc: william.bennett@dec.ny.gov; McLaughlin, Scarlett E (HEALTH) <scarlett.mclaughlin@health.ny.gov>; Kenney, Julia M (HEALTH) <julia.kenney@health.ny.gov>; Andrew A. Allen, LSRP <aa@sesi.org>
Subject: Sun Chemical Site (C243024) - SSDS Sampling Plan

This email copies you on correspondence from the New York State Department of Environmental Conservation, Division of Environmental Remediation. An electronic attachment is enclosed. A hard copy version will not follow in the mail. Please contact me, if you experience problems with this transmission or hard copy of the attachment is required.

Regards,

Javier Perez-Maldonado

Project Manager, Division of Environmental Remediation

New York State Department of Environmental Conservation

625 Broadway, Albany, NY 12233

P: (518) 402-8172 | F: (518) 402-9773 | javier.perez-maldonado@dec.ny.gov

www.dec.ny.gov |  |  | 



Appendix D:
NYSDEC IC & EC Certification Form

Enclosure 1

Certification Instructions

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

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

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

1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.
2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.
3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

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

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

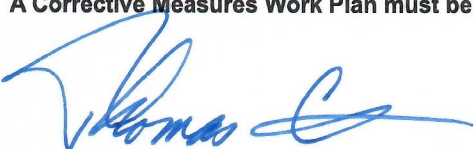
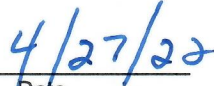
If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.
- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site Details		Box 1
Site No.	C243024	
Site Name	Sun Chemical Corporation	
Site Address:	441-443 Tompkins Avenue and 88 Chestnut Ave	Zip Code: 10305
City/Town:	Staten Island	
County:	Richmond	
Site Acreage:	5.196	
Reporting Period: February 28, 2021 to February 28, 2022		
		YES NO
1.	Is the information above correct?	<input checked="" type="checkbox"/> <input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input checked="" type="checkbox"/> <input type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/> <input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input checked="" type="checkbox"/> <input type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5.	Is the site currently undergoing development?	<input checked="" type="checkbox"/> <input type="checkbox"/>
		Box 2
		YES NO
6.	Is the current site use consistent with the use(s) listed below?	<input checked="" type="checkbox"/> <input type="checkbox"/>
7.	Are all ICs in place and functioning as designed?	<input checked="" type="checkbox"/> <input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
		
Signature of Owner, Remedial Party or Designated Representative		Date

		Box 2A	
		YES	NO
8.	Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.</p>			
9.	Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.</p>			

SITE NO. C243024		Box 3
Description of Institutional Controls		
<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
2846-12	2846 Partners, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
<p>2846 Partners is signing this form as the designated representatives of Tompkins Capital and LUS Licensing, LLC.</p>		
<ul style="list-style-type: none"> - Periodic certification of institutional and engineering controls; - Allow the use and development of the controlled property for restricted-residential, commercial or industrial use; - Restrict the use of groundwater; and - Require compliance with Site Management Plan. 		
2846-14	LUS Licensing, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
<ul style="list-style-type: none"> - Periodic certification of institutional and engineering controls; - Allow the use and development of the controlled property for restricted-residential, commercial or industrial use; - Restrict the use of groundwater; and - Require compliance with Site Management Plan. 		
2846-16	LUS Licensing, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
<ul style="list-style-type: none"> - Periodic certification of institutional and engineering controls; - Allow the use and development of the controlled property for restricted-residential, commercial or industrial use; - Restrict the use of groundwater; and - Require compliance with Site Management Plan. 		
2846-18	2846 Partners, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan

- Periodic certification of institutional and engineering controls;
- Allow the use and development of the controlled property for restricted-residential, commercial or industrial use;
- Restrict the use of groundwater; and
- Require compliance with Site Management Plan.

2846-25

Tompkins Capital Staten Island, LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
IC/EC Plan

- Periodic certification of institutional and engineering controls;
- Allow the use and development of the controlled property for restricted-residential, commercial or industrial use;
- Restrict the use of groundwater; and
- Require compliance with Site Management Plan.

Description of Engineering Controls

Box 4

Parcel

Engineering Control

2846-12

Cover System

- A site cover

2846-14

Cover System

- A site cover.

2846-16

Cover System

- A site cover.

2846-18

Cover System

- A site cover.

2846-25

Cover System

- A site cover.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that: See Note in Box 7

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true: See Note in Box 7

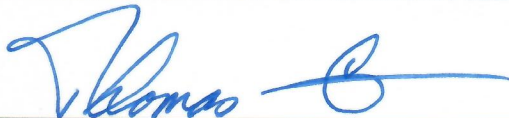
- (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

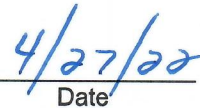
☐ ☒

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

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



Signature of Owner, Remedial Party or Designated Representative



Date

IC CERTIFICATIONS
SITE NO. C243024

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

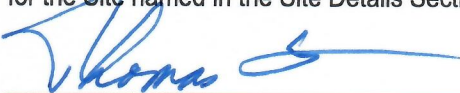
I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I THOMAS COSTA at 1357 HUGUENOT AVE ST NY 10312
print name print business address

am certifying as Owner of 2846-12/Designated Representative for 2846-25, 2846-14 and 2846-16 (Owner or Remedial Party)

See Note in Box 7

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



Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

4/27/22
Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

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

I Fuad Dahan at SESI Consulting Engineers,
print name print business address

am certifying as a Professional Engineer for the 2846 Partners, LLC
(Owner or Remedial Party)



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



Stamp
(Required for PE)

5/10/2022
Date

Note: Sun Chemical Corporation (Sun), the remedial party and prior owner of the site, retains responsibility for certain of the requirements detailed in the Site Management Plan (SMP), including groundwater monitoring in accordance with Section 4.3.1 and investigation and remediation of the off-site area in accordance with Section 4.3.2. Sun has provided information regarding satisfaction of these requirements, as applicable, which has been incorporated into the Periodic Review Report (PRR). Neither 2846 Partners, LC, Tompkins Capital Staten Island, LLC, LUS Licensing, LLC, or Andrew A. Allen as QEP for such entities, certifies as to the accuracy or completeness of the information provided by Sun or Ramboll, its environmental consultant.

Enclosure 3
Periodic Review Report (PRR) General Guidance

- I. Executive Summary: (1/2-page or less)
 - A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
 - B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
 1. progress made during the reporting period toward meeting the remedial objectives for the site
 2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
 - C. Compliance
 1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
 2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
 - D. Recommendations
 1. recommend whether any changes to the SMP are needed
 2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
 3. recommend whether the requirements for discontinuing site management have been met.
- II. Site Overview (one page or less)
 - A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
 - B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.
- III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations should be presented simply and concisely.
- IV. IC/EC Plan Compliance Report (if applicable)
 - A. IC/EC Requirements and Compliance
 1. Describe each control, its objective, and how performance of the control is evaluated.
 2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
 3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
 4. Conclusions and recommendations for changes.
 - B. IC/EC Certification
 1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).
- V. Monitoring Plan Compliance Report (if applicable)
 - A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
 - B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
 - C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
 - D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
 - E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.
- VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
 - A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
 - B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed
 - C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluate the ability of each component of the remedy subject to O&M requirements to perform as designed/expected, during this PRR reporting period.
 - D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.
 - E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

- A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
 - 1. whether all requirements of each plan were met during the reporting period
 - 2. any requirements not met
 - 3. proposed plans and a schedule for coming into full compliance.
- B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.
- C. Future PRR Submittals
 - 1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
 - 2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

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