



February 12, 2019

Ms. Rachel Gardner
New York State Department of Environmental Conservation (NYSDEC)
Division of Environmental Remediation
317 Washington Street
Watertown, NY 13601

Gregory Rys
New York State Department of Health (NYSDOH)
Bureau of Environmental Exposure Investigation
Empire State Plaza
Corning Tower Room 1787
Albany, NY 12237

RE: Site Name: Former Globe Woolen Mills
Site No.: C633084
Location of Site: 811-827 Court St., Oneida County, Utica, NY 13502

Dear Ms. Gardner and Mr. Rys:

On behalf of Lofts at Globe Mill, L.P., EFI Global, Inc. (EFI) is pleased to provide the revised Remedial Action Work Plan (RAWP) as required by the executed Brownfield Cleanup Agreement for the Former Globe Woolen Mills Site located at 811-827 Court Street, Oneida County, Utica, NY (Tax parcel number 318.40-4-6) and as per the NYSDEC response letter dated February 4, 2019. This revised RAWP contains the remedial course of action to be performed consistent with the known future affordable housing site use. EFI acknowledges that comments #2 and #7 of the February 4, 2019 NYSDEC response letter have been removed from consideration, as per the NYSDEC letter dated February 11, 2019. EFI also acknowledges that all monitoring wells except for MW-1, MW-2, and MW-3 will be decommissioned prior to the installation of the new pavement and in accordance with CP-43.

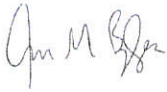
EFI appreciates this opportunity to work with you on this project. If you require additional information or have questions regarding the RAWP, please feel free to contact me at 732-629-7930.

Sincerely,

A handwritten signature in blue ink that reads "Margaret A. Silva". The signature is written in a cursive, flowing style.

Margaret A. Silva, P.G.
Client Manager

I Jason M. Brydges certify that I am currently a NYS Registered Professional Engineer and that this Remedial Action Work Plan was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).



Jason M. Brydges, PE, MS/MBA
Senior Engineer



Margaret A. Silva
Project Manager



Brownfield Cleanup Program

Remedial Action Work Plan

Former Globe Woolen Mills

Prepared for:

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EFI Project Number:

94705-11320

Date:

February 12, 2019

Submitted to:

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Division of Environmental Remediation
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1.0 INTRODUCTION

Loft at Globe Mill, LP, owner of the Former Globe Woolen Mills Site (New York State Department of Environmental Conservation (NYSDEC) Site #C633084 hereinafter “Site”) located at 811-827 Court St and 925 Stark Street, Oneida County, Utica, NY 13502 (collectively the “parcels” refer to **Figure 1**) has entered into a Brownfield Cleanup Agreement (BCA) with the NYSDEC as a Volunteer in the “Brownfield Cleanup Program (BCP) Act”. Loft at Globe Mill, LP has contracted EFI Global, Inc. (EFI) to complete Remedial Investigation (RI), which was summarized in a Remedial Investigation Report including an analysis of remedial alternatives (“RIR/RAAR”) and prepare a Remedial Action Work Plan (RAWP) as required by the BCA and complete the selected remedial measure recommended in the RIR/RAAR. This document presents a summary of the RI results and the proposed scope of work for completion of selected remedial action for the Site.

This RAWP is being completed in accordance with BCP requirements as defined in Subparts 1, 3 and 6 of the 6 NYCRR Part 375 Environmental Remediation Program Regulations. It is anticipated that the remedial measure selected will lead to a site remedy as defined in Part 375-1.8(g)(2)(ii), and achieve a Track 4 Restricted-residential use Soil Cleanup Objectives (SCO) as defined in Part 375-6.8, including the remediation of any grossly contaminated environmental impacted media issues at the Site and a site-wide cover system. The contemplated future use of the Site includes the renovation of the main structures on site to affordable loft-style apartments.

1.1 Site Background

The 4.87 acre Site is located on the southeast corner of the intersection of Stark and Court Street in Utica, New York. Addresses on the site include 811-827 Court Street and 925 Stark Street. The Site contains six buildings, which are currently vacant or contain commercial uses. The 811-827 Court St addresses are occupied by Bank of New York Mellon (Offices), New York State Department of Transportation (Project Engineer's Office), Quanterian (Reliability Analysis), Wright Lighting (Storage), Murray Kirshtein (Law Office), and Mohawk Hospital Supply (Storage). The 925 Stark Street address is currently vacant and used for storage. The rest of the Site is covered in a large asphalt parking lot with minimal green space. A summary of the buildings is shown below.

- Building 1: A four-story building containing a basement at 827 Court Street – primarily unused with commercial offices and a bank.
- Building 2: A four-story building with a partial basement – primarily unused.
- Office Building: A two-story building with no basement at 815 Court Street – contains commercial offices and a bank.
- Boiler Room: A one-story building with a partial basement - used for property maintenance/equipment storage.
- Building 4: A four-story building containing a basement at 925 Stark St. – vacant and used for storage.
- Building 6: A two-story building with no basement located at 811 Court Street – currently vacant.

The locations of the buildings on the Site are provided in **Figure 2**. It should be noted that 933 Stark Street, the dye house building, is currently not included in this BCP Site and is excluded from this RAWP.

Beginning in the mid 1800's, the Site contained industrial operations associated with woolen textile production. The operations produced the products of woolen goods and worsted woolens. Mill operations continued on the property until the 1950s when the property buildings were converted to

college class rooms and warehouses. Historically Nail Creek ran through the southeastern section of the now asphalt parking lot on the property connecting the Mohawk River to the north and the Chenango Canal to the south. The creek once emptied into a former pond in this area and was used as a water source for mill operations and transportation of supplies. In the 1930s, the creek was redirected underground by a large culvert and the pond was covered with the present-day parking lot. Record of a 10,000-gallon diesel underground storage tank (UST) and its removal in 1994 has been found in the historical review. The spill report was closed by the NYSDEC, but recent investigations show contamination remains on the Site in the vicinity of the former tank location.

From the 1950's onward, the Site has been primarily occupied by commercial uses, which would not typically cause environmental impact. Some buildings on the Site were converted to college classrooms in the 1960's and then others were occupied by a mixed-use office/commercial space in the 1980's.

Contaminants from the historic mill operations include metals, formaldehyde, and volatile organic compounds (VOCs), including petroleum and minimal chlorinated solvents as well as acids and bases. In addition, it appears that non-native contaminated historic fill has been placed across the Site at varied depths overlying native soils. Various media including the soil, groundwater, and air (e.g., soil vapor intrusion) were investigated under the RI program for potential environmental impacts from historic operations and those impacts posed by imported contaminated historic fill.

1.2 Previous Investigations

Historical information indicates the following environmental investigation activities have been completed on the Site:

1.2.1 Lu Engineers, Phase I Environmental Site Assessment (ESA) for 811-827 Court Street & 925 and 933 Stark Street, City of Utica, Oneida County, New York, dated March 2016.

Lu Engineers completed a Phase I on the Site in March 2016. No recognized environmental conditions (RECs) were noted in the submission of the report. The Phase I did call out the removal of the 10,000 gallon UST, which noted the removal of contaminated soil associated with the 10,000 gallon UST in 1994. The site reconnaissance also identified peeling paint in various on-site buildings as well as hazardous materials found from previous uses. Lu Engineers recommended that soil vapor intrusion sampling be conducted before occupancy of onsite buildings as well as a survey for asbestos-containing material (ACM), mold, and lead-based paint (LBP).

1.2.2 EFI Global, Inc., (EFI) Phase I ESA Report, Lofts at Globe Mill, 925 Stark Street, Utica, NY 13502, Prepared for Lofts at Globe Mill, LP, dated March 2, 2017.

EFI completed a Phase I on the Site in March 2017 to support a bona fide landowner defense to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability prior to potential acquisition and to delineate potential business environmental risk.

The following REC and Historic REC were identified by EFI:

- The historic uses associated with woolen textile mills that utilized paints, oils, and solvents in combination with records indicated the Site as a Resource Conservation and Recovery Act (RCRA) generators for metals and solvents in the 1980's and 1990's is considered a REC.
- The removal of the 10,000 gallon fuel tank and corresponding contamination was noted as well. Remedial actions took place in September 1994, and the spill report was closed in December

1994. This is considered an HREC by definition of ASTM E1527-13.

1.2.3 EFI, Phase II Limited Subsurface Investigation Report, Lofts at Globe Mill, 811-827 Court Street, 925 Stark Street, and 933 Stark Street, Utica, New York, Prepared for: KCG Development, dated March 30, 2017.

EFI completed a Phase II investigation on the Site in March 2017 focusing on the REC and HREC identified in their previous Phase I ESA. Soil borings (B-1 through B-6) were completed to assess the previously identified areas of interest. Borings B-1 through B-5 were then converted to temporary monitoring wells (TW-1 through TW-5) for groundwater analysis.

Soil sample results showed benzene in sample B-5, mercury in B-2, and arsenic in B-2 exceeded NYSDEC Unrestricted Use (UU) SCOs. Groundwater analysis showed exceedances of NYSDEC Technical & Operations Guidance Series (TOGS) Ambient Water Quality Standard and Guidance Values for VOCs and PAHs. Benzene and benzo(b)fluoranthene exceeded TOGs in TW-5. Two areas of concern (AOC) were defined by EFI in the Phase II ESA. A former maintenance shop (AOC-1) with corresponding boring – B-5 and the former pond (AOC-2) with corresponding boring – B-2 were identified as areas requiring additional investigation.

1.2.4 EFI, Phase II Limited Subsurface Investigation Report, Lofts at Globe Mill, 811-827 Court Street, 925 Stark Street, and 933 Stark Street, Utica, New York, Prepared for: Lofts at Globe Mill, LP, dated, May 16, 2017.

EFI completed a seconded Phase II ESA on the Site in May 2017 to further assess the AOCs defined in the March 2017 Phase II. Soil samples taken from the borings were analyzed VOCs, Semi-VOCs (SVOCs), and metals dependent upon field screening and observations. Nine temporary monitoring wells were installed within borings 2B-1 through 2B-9 (2TW-1 through 2TW-9). Light non-aqueous phase liquid (LNAPL) was noted in borings 2B-10 through 2B-12, which prevented the installation of temporary monitoring wells at these locations.

The six borings installed to assess AOC-2 revealed varied exceedances of metals such as arsenic, chromium, lead, and mercury at subsurface depths of five to eight fbgs. Notable exceedances include: Residential SCO exceedances at 2B-2 and 2B-3 for arsenic and at 2B-5 for mercury. Detections of benzene and various PAHs were also found in borings 2B-11 and 2B-12 just above the water table where LNAPL was noted. Groundwater exceedances of TOGs were found to primarily be associated with total metals. Multiple total metals were detected above TOGs including arsenic, barium, cadmium, chromium, and selenium in the temporary wells located near AOC-2. Detections for various PAHs were also found in 2TW-8 and 2TW-9 with chrysene exceeding TOGs in 2TW-9.

1.2.5 EFI, RIR/AAR, Lofts at Globe Mill, 811-827 Court Street, 925 Stark Street, and 933 Stark Street, Utica, New York, Prepared for: Lofts at Globe Mill, LP, dated, August 7, 2018.

1.2.5.1 Backfill/Soil Investigation

The RI revealed that non-native or urban backfill materials were found across the entire Site overlying native sediment/soils at depths up to 12 fbgs. A total of 14 surface samples were taken below the asphalt layer across the Site. Historic fill material in the form of brick, gravel, wood, fill material, and concrete was identified at all locations.

Five subsurface samples from historic fill materials were also collected from various borings. All soil samples were collected for analysis for NYSDEC Part 375 brownfield constituents. The soil sampling

detected compounds of arsenic, chromium, copper, mercury, and lead exceeding Restricted-residential SCOs at depths down to approximately eight fbgs.

SVOCs were found exceeding Restricted-residential SCOs primarily at depths down to approximately eight fbgs. PID readings up to approximately 200 ppm and free product were observed near AOC 1. The free product was noted starting at 5.5 fbgs and had a strong petroleum odor. Although the soil sample in this area possessed only one Residential SCO exceedance of chrysene, VOC TICs were also approximately 200 ppm. The RI determined historical operations, including the use of USTs and ASTs at the Site, and historic fill across the Site, are the primary sources of impacts to soil, soil vapor, and groundwater on the Site.

1.2.5.2 Groundwater Investigation

Groundwater samples were collected from nine monitoring wells and analyzed for TCL VOCs, SVOCs, pesticides, and PCBs, as well as pH, formaldehyde, TAL metals, dissolved metals and NYSDEC Emerging Contaminants.

Metals were detected in all nine RI monitoring wells on the Site. Sodium, iron, magnesium, manganese, and selenium were found to exceed TOGS. The detected groundwater contaminants are naturally occurring compounds but may be elevated due to on-Site historic fill. SVOC TICs in MW-3 were detected at 278.9 ppb. VOC TICs reported for MW-3 were detected at 230 J ppb suggesting degraded petroleum is still present.

1.2.5.3 Soil Vapor Investigation

A vapor study was completed that consisted of sampling vapors from beneath the floor slab and within the buildings (i.e., indoor air). Five sub slab air samples were collected from the following buildings: office building, Building 1, Boiler Room, Building 6, Building 4, and the former Dye Building, the latter of which is not included in the BCP. Seven indoor air samples were taken, one in each building on the lowest floor. One upwind outdoor air sample was also taken. The sub slab air analytical results reveal that trichloroethylene (TCE) was detected in all five sub slab samples at elevated concentrations that when applied to the Indoor Air Decision Matrices requires mitigation within Building 1 and the Office Building and monitoring within Building 6 in AOC-1. Additional sampling will be performed in Building 2 and 4 as part of the RAWP in order to confirm this conclusion because the one sample taken was located at the end of the building farthest away from the UST tank "hot spot" area. The remaining compounds detected in the remaining buildings all require "No Further Action" when compared to the matrices.

Detections of petroleum VOCs (BTEX) were also found in the sub slab vapor and indoor air samples across the Site with the highest levels found in the samples taken in the northwestern buildings. Although not covered by the NYSDOH matrices, they could be indicative of other onsite contaminants and are addressed in the June 2015 EPA Soil Vapor Technical Guidance document, which is an applicable guidance standard for consideration and mitigation should be considered given the planned residential use in these historic buildings.

2.0 Nature and Extent of Contamination

Based on the prior investigations, the primary constituents of concern (COCs) at the Site are SVOCs and metals in the non-native historic fill, petroleum VOCs in the area of the former maintenance shop and previously removed UST (AOC-1), and TCE in soil vapor under on-site buildings.

3.0 Identification of Standards, Criteria, and Guidance (SCGs)

SCGs are promulgated requirements (i.e., standards and criteria) and non-promulgated guidance that govern environmental remediation activities and are used by regulatory agencies. The following are the primary SCGs for this project:

- NYSDEC 6 NYCRR Part 375 – Environmental Remediation Programs December 2006;
- NYSDEC DER-10 – Technical Guidance for Site Investigations and Remediation May 2010;
- NYSDEC - Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations June 1998 (TOGS);
- NYSDEC Policy – CP-51- Soil Cleanup Guidance; Date Issued: October 21, 2010; and,
- NYSDOH October 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York and its May 2017 amendment.

4.0 REMEDIAL ACTION PLAN

A Track 4 Restricted-residential use remedy was selected for the Site, which consists of grossly contaminated/hot spot removal, site-wide cover system, and soil vapor mitigation in buildings. In addition, although not part of the RIR/AAR, a building survey identified asbestos-containing materials (ACM) and lead-based paint (LBP) in all of the buildings. The abatement of ACM and LBP is included in the remedial action and in accordance with local, state, and federal guidelines. The final remedial measures for the Former Globe Woolen Mills must satisfy Remedial Action Objectives (RAOs), which are site-specific statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment. The primary RAOs identified for the Site are the following:

Groundwater **RAOs for Public Health Protection -**

Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

Soil **RAOs for Public Health Protection -**

Prevent ingestion/direct contact with contaminated soil.

Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

Soil Vapor **RAOs for Public Health Protection -**

Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

The project intends to create a historic adaptive reuse property containing affordable loft-style apartments with ancillary commercial uses based out of the three main structures at the corner of Court and Stark Street (Buildings 1, 2, and 4). The surrounding area contains commercial uses to the north and west with residential uses to the south and east. The project area is zoned Planned Development – Extraordinary, which supports the project and welcomes the introduction of modern affordable housing to the downtown Utica area. The Site sits adjacent to the city's Brewery District to the north, which contains primarily commercial uses, and the FX Matt Brewery. New residential uses in the area are intended to support local businesses in the area and improve the surrounding residential areas located to the south and east. The remediation project plan is to restore the existing historic mill buildings with

new sub-slab depressurization systems (SSDS), remove some of the contaminated historic fill soils under the existing cracked and dilapidated parking lot, regrade the Site, and then recap the Site with a new asphalt parking lot, which will serve as part of the Site-wide cover system along with two feet of cover in greenspace.

If any building is demolished in the future, soil beneath the building should be evaluated and any grossly contaminated soil, source material, and Nuisance Conditions, as defined in CP-51, will be removed and a cover system consistent with the Restricted-residential use will be restored.

4.1 CITIZEN PARTICIPATION PLAN (CPP)

Volunteer will provide the fact sheet to individuals on the site contact list where no email is available, and a CPP has been prepared for the Site and upon approval of the RAWP, the RAWP commencement fact sheet containing information about the remedial action will be developed by the NYSDEC and the Volunteer will provide the fact sheet to the site contact list and the local library along with a copy of the RAWP. A copy is located in Appendix A.

4.2 HEALTH AND SAFETY PLAN

The Site Specific Health and Safety Plan prepared in accordance with the Occupational Safety and Health Administration and as stipulated in the requirements contained within 29 CFR 1910.120 for the Phase II investigation in May 2017 will be utilized during the implementation of the remedial plan. A copy is located in Appendix B.

4.3 COMMUNITY AIR MONITORING PLAN

During construction and remedial work, fugitive dust may be generated. The community air monitoring plan (CAMP), as approved in the Remedial Investigation Work Plan, will be implemented during all on-Site construction and remediation activities that will impact subsurface soils and fill to minimize fugitive dust concerns during this time. A copy of the CAMP is provided in Appendix C. Dust control measures (e.g. wetting of dry surfaces in the work areas) will be implemented to prevent off-site migration of contaminated airborne particulates and dust generated from rehabilitation and remediation activities, including a truck tire wash station at the entrance and exit of the Site during remediation. Other dust suppression techniques that may be used depending on Site conditions to supplement the water spray include applying water on adjoining roads, hauling materials in properly tarped containers or vehicles, or restricting vehicle speeds on-site. Periodic monitoring for VOCs will be conducted during remedial activities.

4.4 REMEDIATION OF AOC-1 (FORMER UST)

The NYSDEC and NYSDOH will be notified seven-days prior to the commencement of any field activities. The asphalt covering the area of the former UST will be removed and impacted soil will be excavated down to approximately the groundwater table, which may include excavating below the water table (the smear zone). If dewatering is required, then the dewatering plans will be pre-approved by the NYSDEC. It is assumed based on a ground penetrating radar survey and the property management that the UST was removed in the 1990s. If the UST is discovered on-site, then the UST will be removed in accordance with NYSDEC guidelines. To the extent the UST is not discovered, Efi will proceed with excavation of impacted soil and any process piping associated with the UST. The dimensions of the excavation will be field determined; however, the estimated excavation is eight feet

wide, 10 feet long, and 10 feet deep. During the excavation, the soils will be monitored utilizing a PID with a 10.6eV lamp. The PID readings will help determine the extent of the excavation. Any LNAPL or free product observed in the excavation will be pumped out and disposed of in accordance with NYSDEC requirements. As necessary, excavated soil will be placed on (1) an impervious surface or poly and stockpiled or (2) direct loaded for off-site disposal until the excavation is completed. The stockpiled soil will be sampled for disposal purposes. Grossly contaminated soil will be placed in one stockpile and will be removed and disposed of by a licensed waste hauler to the appropriate disposal facility. Non-grossly contaminated soil will be placed in a separate stockpile and will be sampled for either on-Site reuse to the extent it meets the requirements in 6 NYCRR Section 375-6.7(d)(1)(ii)(b) and if not, sent for appropriate off-site disposal.

Confirmation end-point soil samples will be collected per DER-10 Section 5.4(b)(5) from all four walls every 90 feet of the excavation and bottom, if groundwater is not met, prior to backfilling and analyzed for VOCs and SVOCs at a NYSDEC-certified laboratory. If MW-3 is not destroyed during the excavation, then the groundwater will be sampled from this well after completion of the excavation. The groundwater in the monitoring well will be sampled for VOCs and SVOCs in accordance with NYSDEC requirements. The samples will be analyzed at a NYSDEC-certified laboratory. If MW-3 is destroyed, then a new monitoring well will be installed in the excavation and sampled as stated above in this paragraph. The installation of additional monitoring wells will be at the discretion of the NYSDEC.

4.5 Site-Wide Cover System Installation

In order to commence the Site-wide cover system remediation, the current asphalt parking lot, which is cracked and cannot serve as a long term cover system, will be removed. Contaminated historic fill soils will be removed down to the design grade of the hardscape, which may range from two inches to two feet below the ground surface dependent upon the design, and (1) directly loaded for off-site disposal, or (2) stock piled for off-site disposal. As needed, historic fill soils will be regraded and placed beneath the new asphalt cover system. It is anticipated that removed asphalt material will be crushed and placed back under the new asphalt pavement. This remedial work is anticipated to commence in summer 2019. The NYSDEC and NYSDOH will be notified seven-days prior to commencement of these activities.

In the few areas of the Site that includes new landscaped areas, the existing asphalt and underlying soils/fill will be removed as needed for grading. Clean fill will be placed in the excavation and covered with the approved grass or trees. The required two feet of clean fill will be installed in all landscaped areas.

Any subsurface soil or fill materials removed during the removal of old utility lines or the installation of new utility lines will be stockpiled on an impervious surface and returned to the utility excavation unless they consist of grossly contaminated soils. Any such materials not returned to the excavation will be tested for disposal purposes and disposed of by a licensed-waste hauler. The final Site Plan, including the location of landscaped areas and location of the utilities has not been finalized. Upon finalizing these locations, a Site Plan will be provided to the NYSDEC and the NYSDOH as a supplemental RAWP submission.

4.6 Installation of Sub-Slab Depressurization Mitigation Systems

To address the soil vapor exceedances at the Site for VOCs, a sub-slab depressurization system will be installed in Building 1, the office connected to Building 1, and Building 6 in accordance with NYSDEC and NYSDOH guidelines. The systems will be installed during the rehabilitation of the

buildings. The design of the sub-slab depressurization systems have not been determined as the redevelopment plans for the buildings have not been finalized; however, the final designs will be provided to NYSDEC and NYSDOH for approval prior to installation. A work plan to perform communication testing as well as the results of that testing will be submitted to the NYSDEC prior to the submittal of the final design. Upon completion of the installation of the systems, the indoor air will be tested for VOCs to verify that the systems are operational.

Buildings 2 and 4 will be reevaluated and additional soil vapor assessment will be conducted to determine if a sub-slab depressurization system is required in either of these buildings. The findings of the assessment will be provided to the NYSDEC and NYSDOH along with the appropriate recommendation.

4.7 Installation of Soil-Gas Borings for Testing

To determine if chlorinated vapors are migrating off-site, EFI will install a soil-gas vapor boring west of Building 1 and west of Building 2 in the grassy area adjacent to the buildings along Stark Street and two soil-gas vapor borings to the north of Building 1 in the grassy area adjacent to the building along Court Street. The soil gas samples will be collected and analyzed for VOCs via EPA Method 15. In addition, two soil-gas borings will be installed inside Building 2 and Building 4. The soil-gas samples will be analyzed for VOCs via EPA Method 15. Refer to Figure 4 for the proposed locations. As per utility clearance and permitting, the locations of the soil-gas borings may need to be adjusted. NYSDEC will be notified seven days prior to field activities. Refer to Figure 4 for proposed soil-gas boring locations.

5.0 Quality Assurance and Quality Control Protocols

All post remedial soil and soil vapor sampling will be conducted in accordance with Section 5.0 of the approved Remedial Investigation Work Plan. The laboratory data packages will also be submitted to a data validation specialist for evaluation of the data and an applicable Data Usability Summary Report (DUSR) will be prepared. The DUSRs will be conducted in accordance with Section 5.7 of the approved Remedial Investigation Work Plan.

6.0 Documentation and Reporting

EFI will be on-Site during all remedial actions, which include all activities associated with the excavation and confirmatory sampling around the former UST (AOC-1), the removal and replacement of utilities, the removal of the existing asphalt, removal of source area fill soils, and installation of clean fill and landscaping cover, the installation of the new site-wide cover system, soil vapor sampling in Buildings 1, office building, and Building 6, and installation of SSDSs in all buildings requiring such systems. Field notes will be utilized to record the remedial work. Monthly progress reports will be submitted to the NYSDEC and NYSDOH. Photographic documentation will be completed during field activities.

Subsequent to the remedial action implementation, a Final Engineering Report ("FER") summarizing the work performed will be prepared. The FER will summarize the excavation of the area of the former UST as well as the analytical results of the soil and groundwater samples in this area.

The additional soil vapor sampling event in Building 2 and Building 4 will be provided to the Department upon receipt in order to determine if these building do or do not need vapor mitigation.

7.0 Site Management Plan

A Site Management Plan (SMP) will be prepared in accordance with DER-10 after the completion of the field work. The SMP will include the activities listed below that are necessary for the proper and effective management of the institutional and engineering controls and to monitor the effectiveness of the implemented remedy.

- Implementation of an Institutional Control (IC) in the form of an environmental easement that identifies all use restrictions and Engineering Controls (ECs) for the Site and details the steps and media specific requirements necessary to ensure the IC and/or ECs remain in place and effective. The ECs include a Site-wide cover system including the on-Site buildings, new asphalt parking lot and landscaped area with an underlying clean soil cover system, maintenance of any soil vapor mitigation systems.
- Implementation of an Excavation Plan, which details provisions for management of future excavations in areas of remaining contamination;
- Descriptions for the provisions of the environmental easement including any land use or groundwater use restrictions;
- Provisions for the management and inspection of the identified ECs;
- Maintaining Site access controls and NYSDEC notifications; and
- The steps necessary for periodic reviews and certifications of the IC/ECs.

8.0 PROJECT SCHEDULE

The following schedule is anticipated for the remedial action:

- | | |
|---|---------------------|
| • Remediate AOC-1 (former UST) | April – June 2019 |
| • Conduct soil-gas sample testing | April – June 2019 |
| • Install sub-slab depressurization systems | October 2019 |
| • Remove and replace asphalt paving | June – October 2019 |
| • Remove asphalt and install landscape | June – October 2019 |
| • Final grading of asphalt and landscape | June 2020 |
| • Remove and install utilities | June– October 2019 |
| • Environmental Easement | October 2020 |
| • Final Engineering Report & Site Management Plan | October 2020 |
| • Site Redevelopment Completion | November 2020 |


9.0 REFERENCES

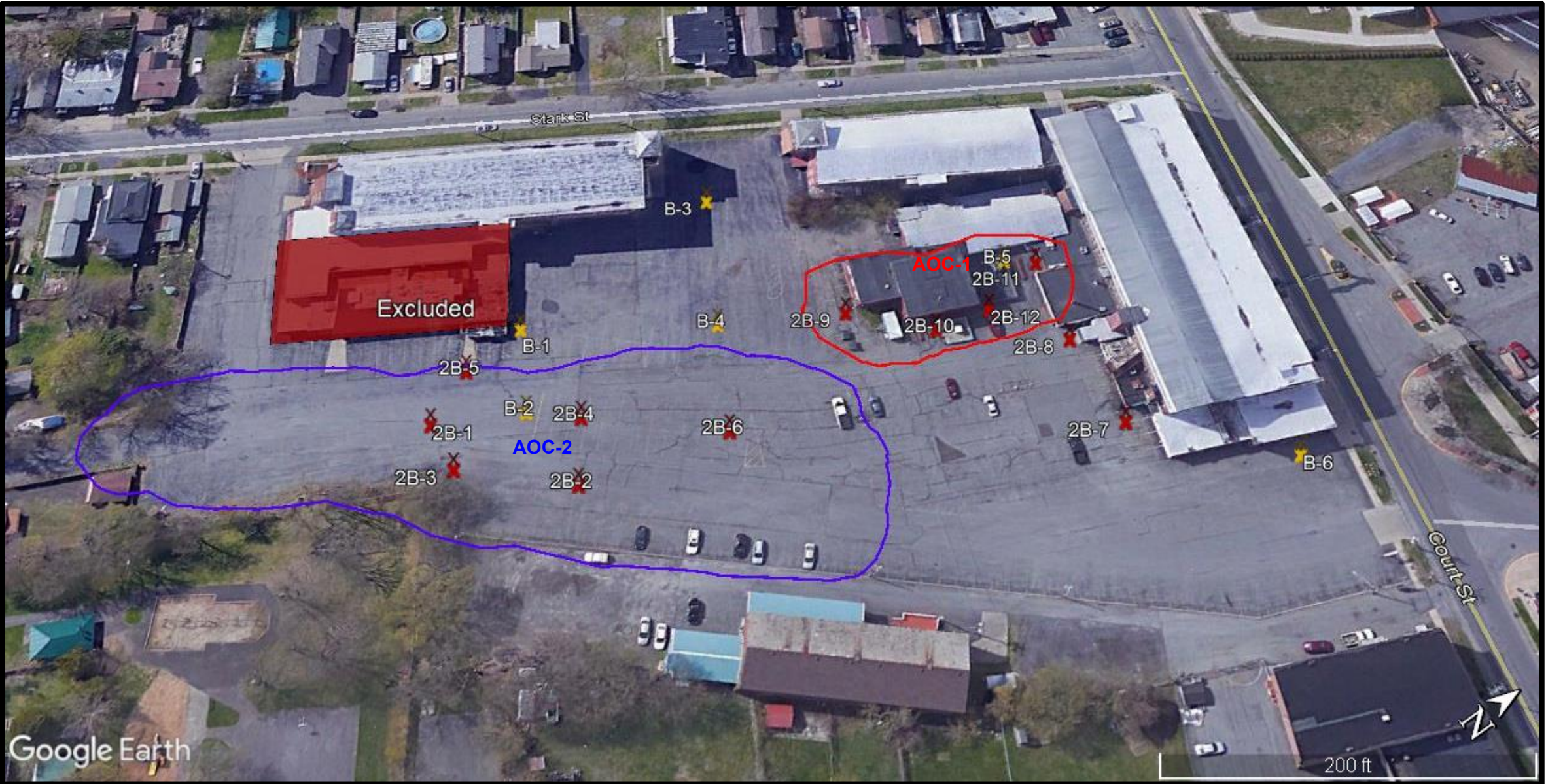
1. EFI Global Inc., *Brownfield Cleanup Program Remedial Investigation Work Plan, 811-827 Court Street Utica, NY 13502, Site #: C633084*, March 2018.
2. Lu Engineers, *Phase I Environmental Site Assessment for 811-827 Court Street & 925 and 933 Stark Street, City of Utica, Oneida County, New York*, March 2016.
3. EFI Global, Inc., *Phase I Environmental Site Assessment Report, Lofts at Globe Mill, 925 Stark Street, Utica, NY 13502, Prepared for Lofts at Globe Mill, LP*, March 2017.

4. EFI Global, Inc., *Phase II Limited Subsurface Investigation Report, Lofts at Globe Mill, 811-827 Court Street, 925 Stark Street, and 933 Stark Street, Utica, New York, Prepared for: Lofts at Globe Mill, LP*, May 2017.
5. EFI Global, Inc., *Phase II Limited Subsurface Investigation Report, Lofts at Globe Mill, 811-827 Court Street, 925 Stark Street, and 933 Stark Street, Utica, New York, Prepared for: Lofts at Globe Mill, LP*, May 2017.
6. EFI Global, Inc., *Remedial Investigation/Alternative Analysis Report, Lofts at Globe Mill, 811-827 Court Street, 925 Stark Street, and 933 Stark Street, Utica, New York, Prepared for: Lofts at Globe Mill, LP*, November 16, 2018.
7. USGS, *Hydrogeology of the stratified-drift aquifers in the Utica area, Oneida and Herkimer Counties, New York. Part 2. East*, 1989.
8. *The Bouwer and Rice Slug Test - An Update*, Bouwer, H., Groundwater Journal, Vol. 27, No. 3, May-June 1989.

FIGURES

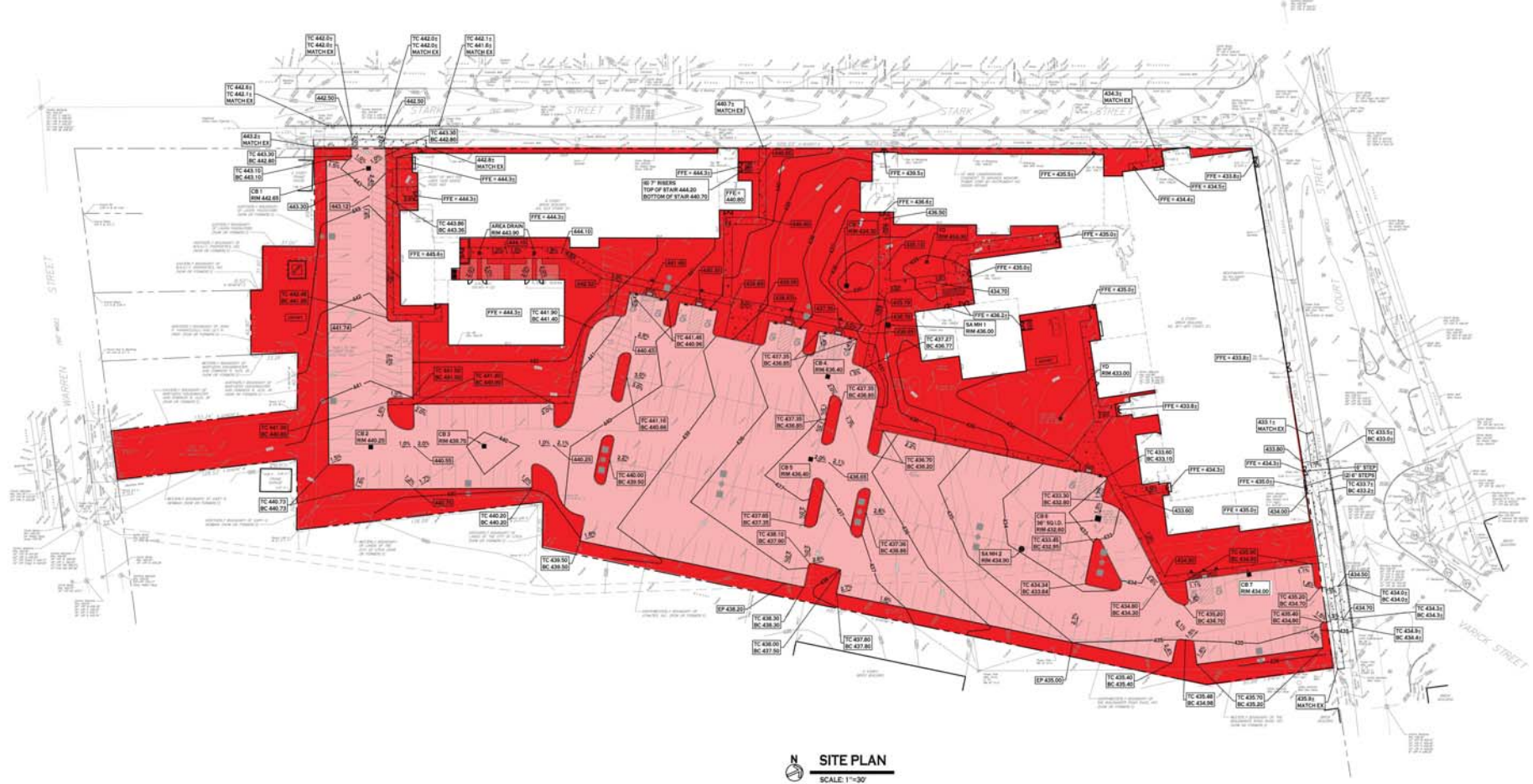


	FIGURE 1: RI SITE LOCATION MAP	
	Former Lofts at Globe Mills 811-827 Court St Utica, NY 13502	
7-08-2017	SCALE: N/A	SHEET 1 OF 1



	Historical Site Features and Phase II Boring Locations Lofts at Globe Mill Utica, New York	Legend:		Scale:	As Shown	
			Existing Location-Mar	Created By:	C. Dare	
			Existing Location-Apr	Revision:	0	
			Estimated Groundwater Impact-Former Maintenance Shop Area	Date:	07/26/2018	
			Estimated Former Pond Limits	ImageSource:	Google Earth	
Figure 2						

Source: EFI Global, Inc., 811 - 827 Court Street, Utica, NY 13502, Remedial Investigation Work Plan, March 2018



SITE PLAN
SCALE: 1"=30'

PROPOSED GRADING LEGEND

PROPOSED CONTOUR	10' = 10'
PROPOSED SPOT ELEVATION	100.00
PROPOSED TOP/BOTTOM OF CURB/SLAB	100.00
PROPOSED LOT/BUILDING	100.00
PAVEMENT/GRASS/SLIP	100.00
PROPOSED HATCH/DRAIN	100.00
PROPOSED MANHOLE	100.00

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS. CARMINA WOOD MORRIS, D.P.C. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.



PRELIMINARY
NOT FOR CONSTRUCTION
08/01/2018

REVISIONS

NO.	DATE	DESCRIPTION
1	08/01/2018	ADDITION 3

PROJECT NAME:
Mill No. 1, Mill No. 2, Mill No. 4
GLOBE MILL LOFTS
811 Court Street, Utica, NY 13502

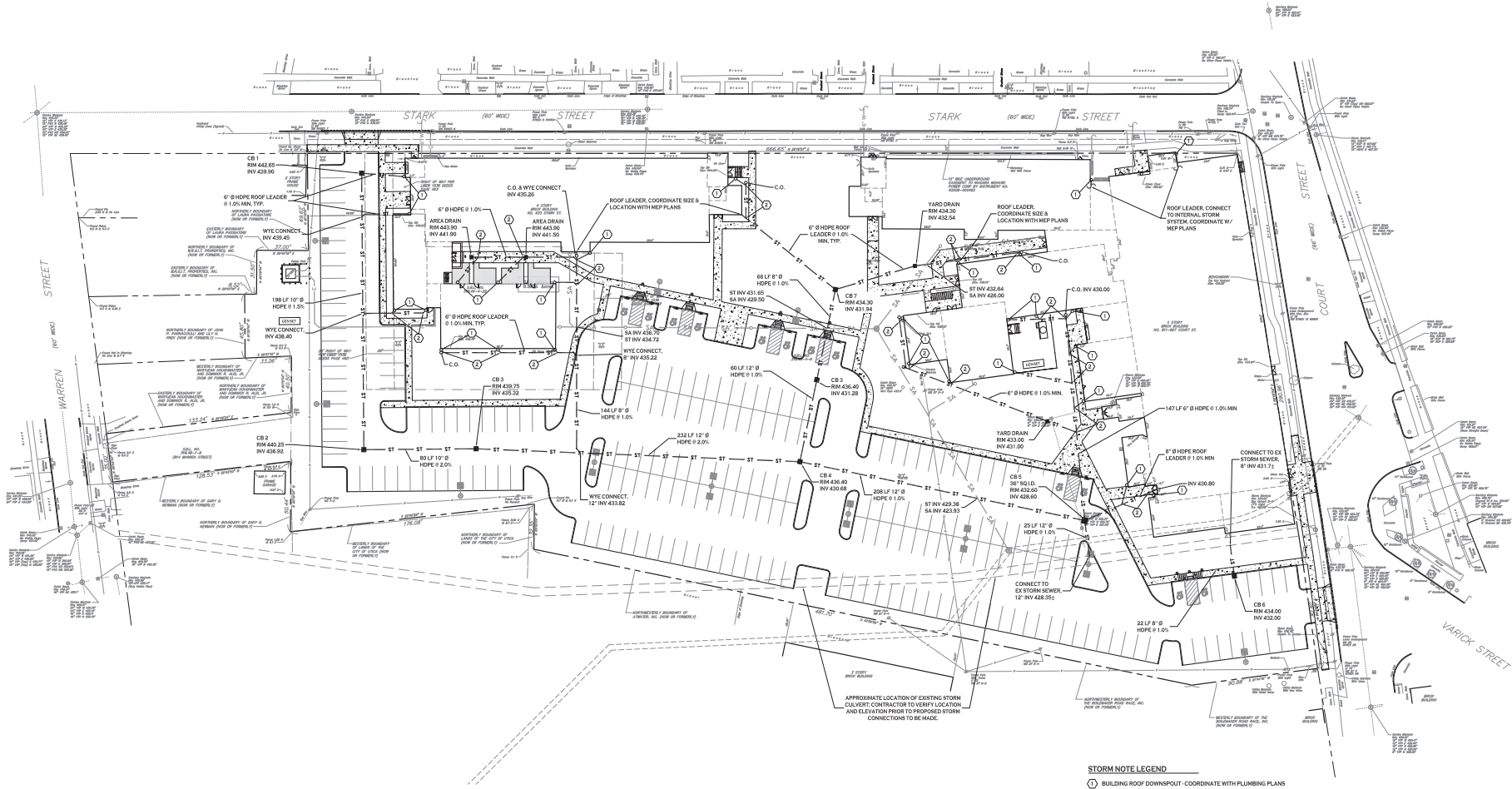
Preliminary Bid Set: 06.29.2018
Municipality Submission: 07/01/18
Drawn by: JLP
Scale: 1"=30'

DRAWING NAME:
Grading Plan

DRAWING NO.
C-200

Project no.: 15.019

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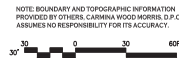


STORM DRAINAGE PLAN
SCALE: 1"=30'

- STORM NOTE LEGEND**
- ① BUILDING ROOF DOWNSPOUT - COORDINATE WITH PLUMBING PLANS
 - ② WYE CONNECT-TYPICAL

- PROPOSED UTILITY LEGEND**
- PROPOSED STORM SEWER — ST —
 - PROPOSED SANITARY SEWER — 6"SA —
 - PROPOSED WATERLINE — 1"W —
 - PROPOSED CATCH BASIN ■ CB
 - PROPOSED YARD DRAIN ● YD
 - PROPOSED MANHOLE ● MH
 - PROPOSED HYDRANT ASSEMBLY
 - PROPOSED GATE VALVE ● GV

NOTE: FOR PROPOSED VALVE BOXES, CLEANOUTS, ETC., INSTALL A 3600 PSI CONCRETE COLLAR AROUND THE ITEM AT GRADE. THE COLLAR SHALL BE A MINIMUM OF 6" WIDER ON ALL SIDES THAN THE BOX/CLEANOUT, ETC. THE COLLAR SHALL BE A MINIMUM OF 6" THICK.



PRELIMINARY
NOT FOR CONSTRUCTION
08/01/2018

REVISIONS:

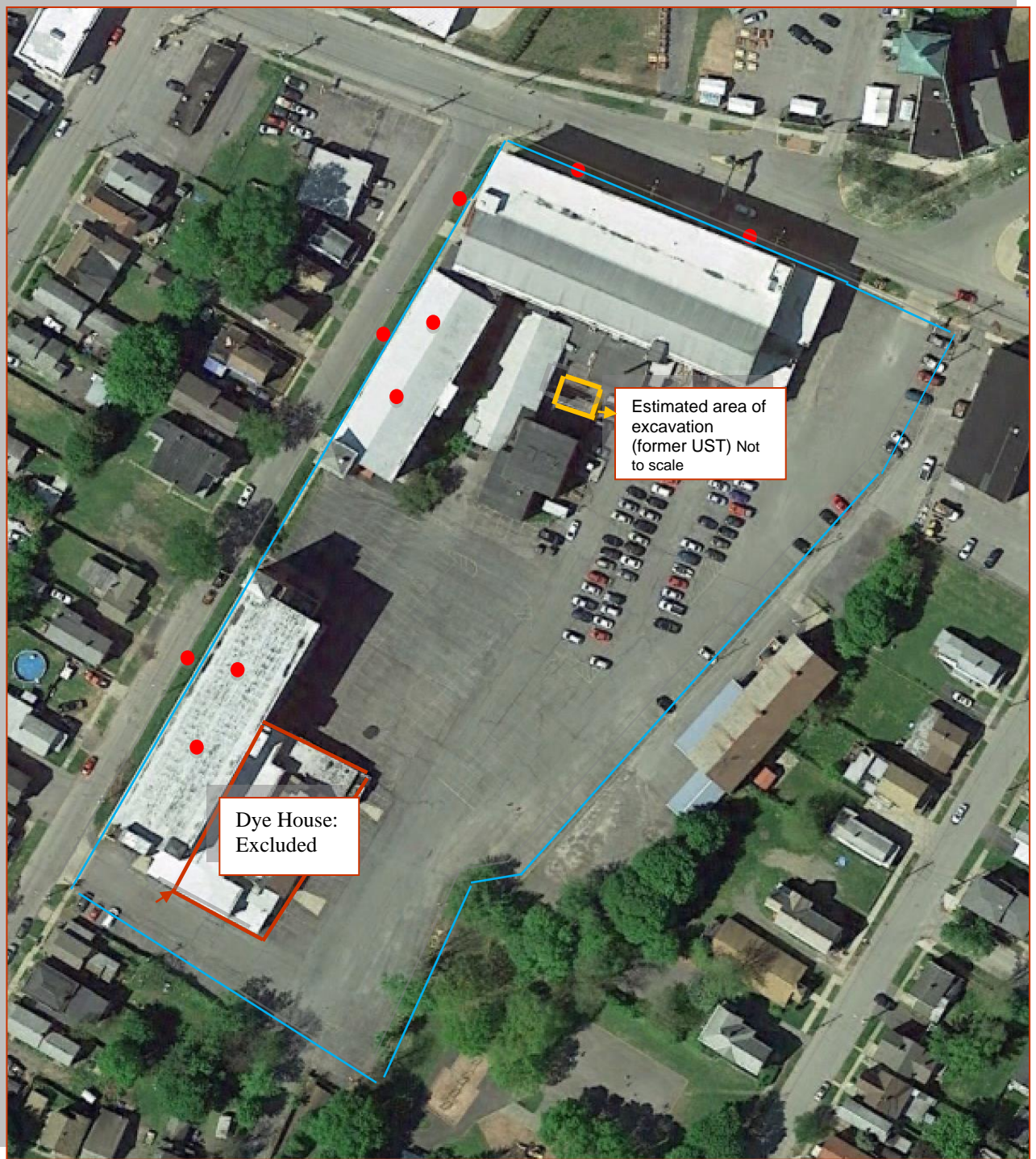
NO.	DESCRIPTION	DATE
1	As Noted	08/01/2018


PROJECT NAME:
MILL No. 1, MILL No. 2, MILL No. 4
GLOBE MILL LOFTS
811 Court Street, Utica, NY 13502

Preliminary Set Date: 08/23/2018
Municipality Submission: 5/20/18
Drawn by: JLP
Scale: 1/30

DRAWING NAME:
Storm Drainage Plan

DRAWING NO.
C-300
Project no.: 15.019



<p>FIGURE 4</p> <p>● Proposed Soil-Gas Locations</p>	<p>Lofts at Globe Mill Utica, NY</p>	<p>↑ N</p>
<p></p>	<p>SCALE 1" = ~115'</p> <p>*The pavement of the Property will be removed (2" to 2' bls dependent upon grade) as part of the remediation.</p>	

APPENDIX A

CITIZEN PARTICIPATION PLAN

APPENDIX B

HEALTH AND SAFETY PLAN

APPENDIX C

COMMUNITY AIR MONITORING PLAN