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December 10, 2013
File: 190500751

Todd Caffoe, P.E
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon, NY 14414

Reference: **Brownfield Cleanup Program**
Monthly Progress Report #9
Site #C828184
Former Carriage Factory
33 Litchfield Street
Rochester, Monroe County, New York

Dear Todd,

On behalf of Carriage Factory Special Needs Apartments, LP (CFSNA), Stantec Consulting Services Inc. (Stantec) has prepared this Monthly Progress Report #9 for the Brownfield Cleanup Program (BCP) at the Former Carriage Factory located at 33 Litchfield Street in the City of Rochester, Monroe County, New York (Site). This report covers activities that took place during the month of November 2013.

1. Actions During The Previous Month

- *Remedial Investigation-related Activities*:
  - Preparation of the Remedial Investigation report continued.
- *Construction and Remediation-related Activities*:
  - Conducted a site meeting with Mr. Todd Caffoe, NYSDEC project manager, on November 13 to review progress and findings to date.
  - Presented findings from test pits excavated October 29 to NYSDEC on November 6. Analytical results and field observations showed that petroleum-related contaminants were found in two test pits located in a central area south of the building where the proposed driveway and landscaped areas will be. It was agreed upon by Mr. Caffoe during his November 13 site visit that the impacted material can remain in place under proposed paved areas, but it should be excavated and removed to 2 ft. below finish grade and covered with a demarcation layer in areas that will be landscaped. These distinctions and associated excavations will be made next spring when exterior site work continues.

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- Excavations in the basement for the installation of plumbing piping were ongoing throughout the month of November. Figure 1 shows the areas of the basement that were disturbed. Most of the excavated soil was backfilled into the trench from which it was removed. Some excavated materials were not suitable for backfill or did not fit back into the excavations. Excess materials were stockpiled in an area in the southeastern proposed parking lot and were separated into impacted (staged on and under plastic sheeting) and non-impacted piles. These staging piles are shown on Figure 2 and will be sampled for disposal once the remainder of basement excavation activities is completed. Most of the excavated soil had PID readings ranging from 0 – 5 parts per million (ppm). In several spots the soil exhibited PID readings ranging from 10 – 220 ppm. Bedrock depths ranged from ~4 ft. below finish floor elevation (bff) to ~2 ft. bff (determined by the known difference in elevation between proposed finish floor and existing stairwell foundation surfaces). Where required, bedrock was removed to achieve design grades and facilitate sufficient pitch for the piping. Areas of rock removal are shown on Figure 1. Most bedrock exhibited no PID response when fractured, however, in two locations, freshly fractured bedrock exhibited PID readings of up to 190 ppm. One of these locations is immediately below installed remedial injection piping. The second is located in close proximity to the former crock that is suspected to be a source of chlorinated solvent contamination. This is within 5 feet of monitoring well RW-2 and within 20 feet of two remedial injection piping lines. The impacted rock was removed and placed in the impacted staging pile. In several places the plumbing piping crossed or ran parallel to previously installed groundwater remediation injection piping. These instances were photo-documented and if disturbed, previously placed crushed stone was replaced beneath and above the injection piping. No bentonite seals were disturbed.
- During the period 11/05 to 11/07 benched excavations were made along the northwest exterior wall, the central southern exterior wall, and around the interior perimeter of the northern addition area down to the building footer elevation to expose the areas for Liquid Boot application as part of the Vapor Intrusion Mitigation System (VIMS). Approximate excavation areas are shown on Figure 3. Soil removed from the northwestern and southern excavations was screened with a PID and yielded no readings above 1 ppm. Approximately 1 cubic yard (cy) of soil removed from the northwest corner of the northern addition area was stained and saturated with water, and a sheen was observed. PID readings of up to 45 ppm were observed in this soil. This material was temporarily staged on and under plastic sheeting in Wiley Street and will ultimately be staged onsite with the other impacted soil removed from the basement. The rest of the material excavated from the northern addition area yielded PID readings below 5 ppm with the exception of one small area about 6 feet wide,

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around a former roof drain pipe that crossed under the wall separating the northern addition from the basement to the south. This pipe and associated contaminated soil were previously removed on the south side of this wall. A small amount (1-2 cy) of impacted soil (PID reading of 370 ppm) was removed from the north side of this wall to reach the footer. This soil was added to the staging pile with the rest of soil removed from the northern addition area, and is expected to be backfilled once all piping penetrations through the recently applied Liquid Boot membrane have been repaired. Approximately 100 feet of steel, former roof drain piping was removed from this area. No evidence of impacts was observed in the piping and it was recycled by the site work contractor.

- On 11/16 a total of 1,940 sq. ft. of Liquid Boot membrane was applied by Terrafix, the VIMS contractor, to the exterior areas described above as well as to the west and southwest interior basement walls as specified as a component of the VIMS (Figure 3). On 11/17 the applied material passed all thickness tests taken insuring it was applied to a thickness greater than the required 60 mils.
- On 11/18 the west and south excavations made for the Liquid Boot application were backfilled with native material. A 1/8" thick protection board was placed between the Liquid Boot material and the backfill to prevent sharp edges from penetrating the VIMS. One tear in the Liquid Boot material was noted on the west wall within 2 feet of the ground surface. This location was documented and will be addressed during the next mobilization of the Liquid Boot application contractor.
- On 11/25 plumbing pipe penetrations were made through the Liquid Boot into the northern addition area. The following day this area was partially backfilled with native material, however the pipe penetrations were left exposed to allow a patch to be made over the affected Liquid Boot material.
- During the period 11/8 – 11/11, the middle leg of the proposed groundwater remediation system piping that was partially installed in September was completed. A hole was cored through the southern building wall and the lines were temporarily stubbed and capped outside the wall. Since the hole was cored through foundation material, the void space around the pipes was sealed with concrete for structural reasons, as discussed with and approved by the NYSDEC project manager, instead of the proposed bentonite. See Figure 4 for an as-built plan of the remediation piping.
- During the period 11/12 – 11/13, the easternmost leg of the proposed groundwater remediation system piping was installed as shown in Figure 4. Due to the limited space available between bedrock and finish floor elevation, the remediation piping was installed above storm and sanitary drain piping, as discussed with and approved by the

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NYSDEC project manager, in order for the drain piping to maintain sufficient pitch. In all excavations where plumbing piping crossed beneath the location of the remediation piping, the plumbing trench was excavated to bedrock and was backfilled with crushed stone to provide the required pathway for the future injected remediation solution to reach bedrock. The trench excavated for the remediation piping was also excavated to bedrock and backfilled with crushed stone. In accordance with the design, bentonite seals were placed where one injection pipe ends and another becomes perforated. As with the middle leg, the hole cored through the south wall to bring the injection piping outside was filled with concrete since it was cored through the wall footer.

- On 11/11 three relatively small excavations were made along Litchfield Street to construct piers for light posts. The material that was removed did not exhibit evidence of fill material or positive PID screening results and is expected to be backfilled or stockpiled for use as clean fill on site as needed.
- During the period 11/12 to 11/15 a trench was excavated to carry electrical conduit that exits the building through the eastern south wall foundation and runs to the southeast to a transformer vault (Figure 1). Ten 4-inch diameter conduits were enclosed in a concrete trunk and the excavation was backfilled with native material. None of the material excavated exhibited detectable PID readings.
- During the period 11/19 to 11/20, 1,830.27 tons of urban fill was removed from the site and disposed at Waste Management's Mill Seat Landfill in Bergen, NY under waste profile 110956NY. The material was previously staged as shown in Figure 2 and was generated during grading activities in the central and eastern areas immediately south of the building.
- On 11/20 Clark Alley and a section of Wiley Street were excavated to install water service piping. The material that was removed could not be used as backfill due to City of Rochester requirements for engineered backfill. The material that was removed did not yield any PID readings above 0.1 ppm and was staged in a separate pile in the southwest area of the proposed parking lot (Figure 2). The following day a hole was cored through the west wall of the basement to bring the water line into the building. The Liquid Boot material on the interior wall that was compromised by this coring is expected to be repaired during the next mobilization of the VIMS contractor. On 11/22 the excavation was backfilled and Clark Alley was re-paved.
- On 11/27 the Liquid Boot material applied to the west interior wall was observed to be leaking water and generating bubbles in two areas adjacent to both the newly installed water service and the roof drainage outlet to Clark Alley. The roof drainage has since

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been tied into the sewer and this issue is being addressed. The damaged Liquid Boot material will be repaired during the next mobilization of the VIMS contractor.

2. Data Received or Generated in the Previous Month

- Laboratory results were received as follows (QA/QC samples are not included in this tally).
  - Results from the test pit samples taken October 29 were received on November 5. These results were previously submitted to NYSDEC on November 6.

3. Deliverables Completed and Submitted during the Previous Month

- Submitted analytical results and a geologic description of the test pits excavated on October 29 to Mr. Caffoe on November 6.
- Submitted on November 6 to the NYSDEC in Albany analytical results and a request for disposal of urban fill soils generated during site grading activities in accordance with the previously approved Contained-In Demonstration Work Plan. Approval of this request was received from NYSDEC on November 12.
- Submitted Monthly Progress Report No. 8 to NYSDEC on November 8.

4. Actions Scheduled for the Next Reporting Period

The following activities are anticipated to occur in December:

- Continued preparation of the Draft Remedial Investigation Report.
- Ongoing monitoring of construction-related activities, which will potentially include the following (scheduling for some of these activities is uncertain):
  - Addition of Liquid Boot and Geovent VIMS and sub-slab depressurization system in portions of the building;
  - Collection of samples from the stockpiled basement soils (pursuant to the project Contained-In Demonstration) once soil excavation activities are complete;
  - Decommission and replace damaged groundwater monitoring well RW-2; and
  - Removal and re-construction of the existing elevator shaft concrete slab.

5. Completion, Delays and Future Schedule

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Submittal of the draft RI report to NYSDEC is anticipated to occur in January. Minor construction delays occurred due to the need to remove bedrock for installation of basement utilities and preparing the building for continued work during winter conditions.

Closing

If you have any questions or require further information, please call me at 585-413-5266.

Regards,

STANTEC CONSULTING SERVICES INC.

Michael P. Storonsky
Managing Principal
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mike.storonsky@stantec.com

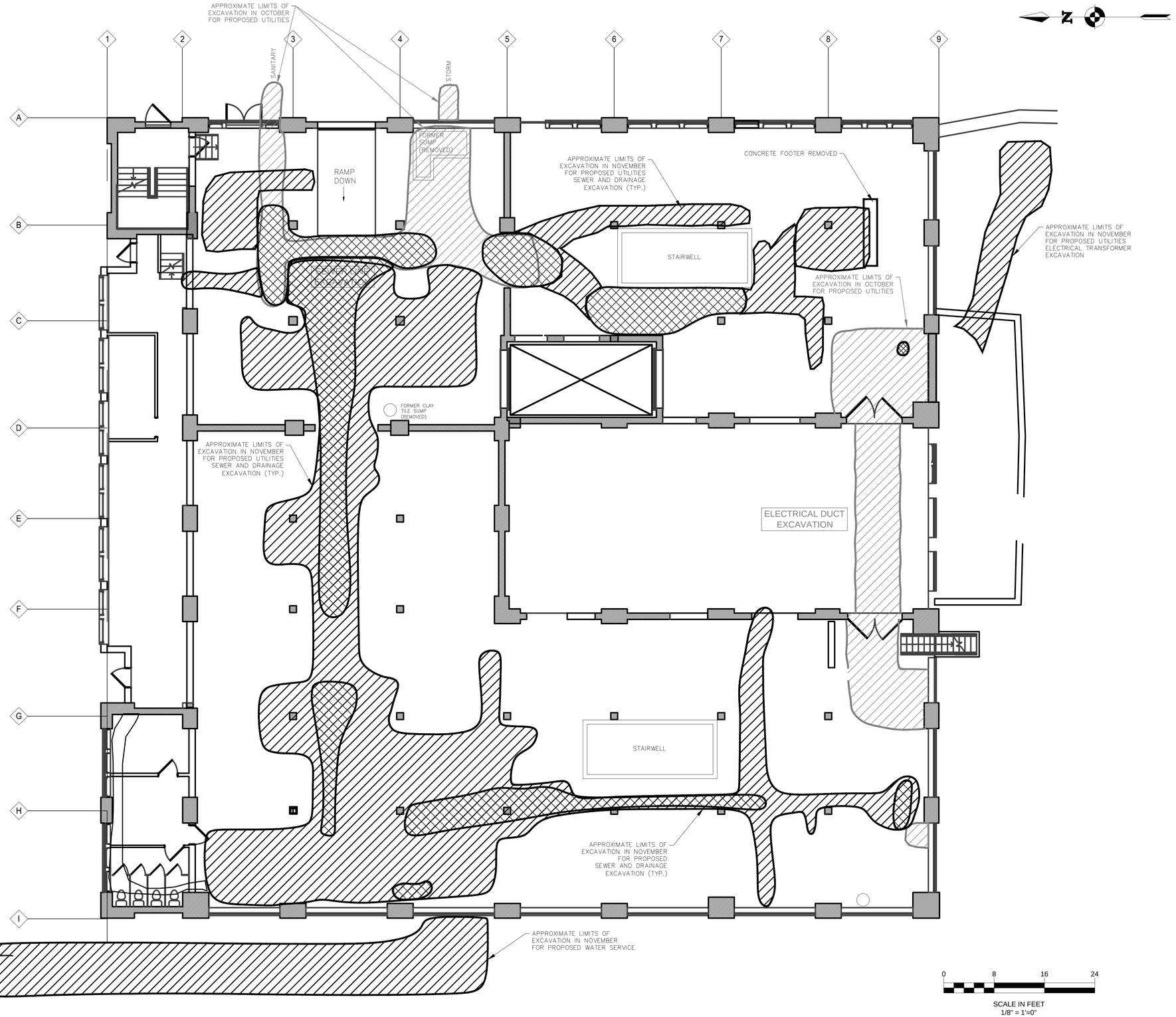
Attachments:

Figure 1 – Utility Excavations
Figure 2 – Exterior Stockpile Locations
Figure 3 – Vapor Intrusion Mitigation System (VIMS) Excavations
Figure 4 – As-built ERD Groundwater Remediation Piping Plan

ec:

Bart Putzig (NYSDEC)	Al Floro (Nixon Peabody)
James Mahoney (NYSDEC)	Jonathan Penna (Nixon Peabody)
Justin Deming (NYSDOH)	Mark Gregor (City of Rochester)
James Whalen (CFSNA)	James Patchett (Goldman Sachs)
Mark Fuller (CFSNA)	Eleonora Bershadskaya (Goldman Sachs)
Gillian Conde (CFSNA)	Linda Kaiser (Goldman Sachs)
Joy Cromwell (CFSNA)	Patrick Miller (CPC)
Chris Betts (Betts Housing)	David Lent (IVI)

FIGURES



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Legend

- UTILITY EXCAVATION IN NOVEMBER 2013
- PREVIOUS EXCAVATION (OCTOBER)
- BEDROCK EXCAVATION

Notes

1. EXCAVATION LIMITS APPROXIMATE ONLY.
2. AREAS EXCAVATED PRIMARILY FOR STORM AND SANITARY PIPES AND CONNECTIONS TO SEWER.

Revision	By	Appd.	YY.MM.DD
Progress Report December 2013	RM	MPS	13.12

Issued

File Nome:	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

Client/Project
CARRIAGE FACTORY

BROWNFIELD CLEANUP PROGRAM
FORMER CARRIAGE FACTORY
33 LITCHFIELD STREET, ROCHESTER , NY

Title
UTILITY EXCAVATIONS

Project No.	Scale	
190500751	AS SHOWN	
Drawing No.	Sheet	Revision
FIGURE 1	of	0

U:\190500751\drawing\CAD\Basement Excavation\Progress Report - Decemeber 2013\Figure 1 - Utility Excavation Interior As Of 12-2013.dwg
2013/12/10 9:56 AM By: Leis, Andy

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Geographic Information Systems

Cartographic Design By: Andy Less

Document Path: U:\190500751\drawing\CAD\Basement Excavation\Progress Report - Decemeber 2013\Figure 2 Exterior Stockpile Locations.mxd

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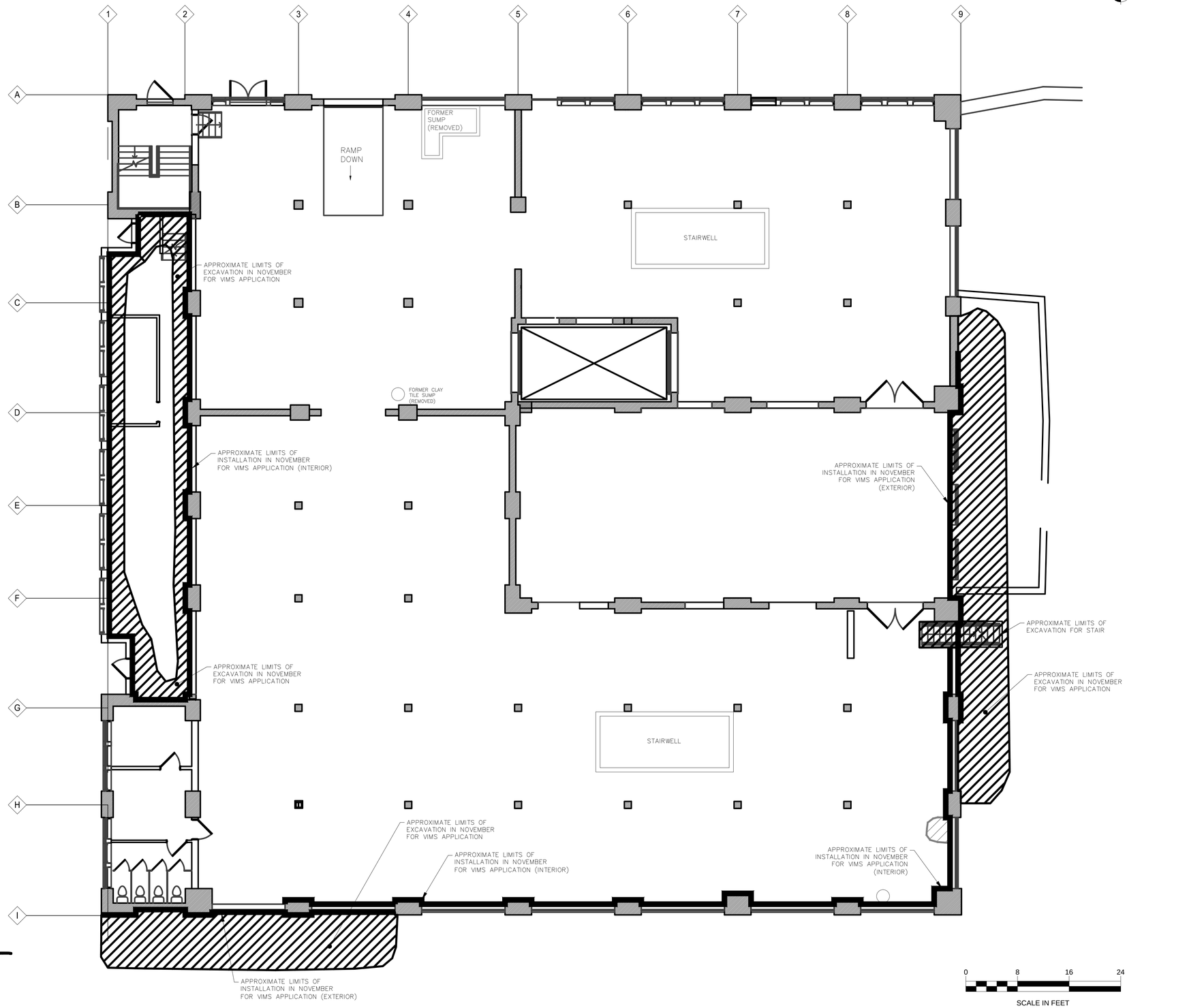
Figure 2
Carriage Factory
Exterior Stockpile Locations
Progress Report - December 2013



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Legend

VIMS EXCAVATION

VIMS (LIQUID BOOT MEMBRANE) APPLICATION

Notes

1. EXCAVATION LIMITS APPROXIMATE ONLY.

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FORMER CARRIAGE FACTORY

33 LITCHFIELD STREET, ROCHESTER , NY

Title

VAPOR INTRUSION MITIGATION SYSTEM (VIMS) EXCAVATIONS

Project No.	Scale	
190500751	AS SHOWN	
Drawing No.	Sheet	Revision
FIGURE 3	of	0

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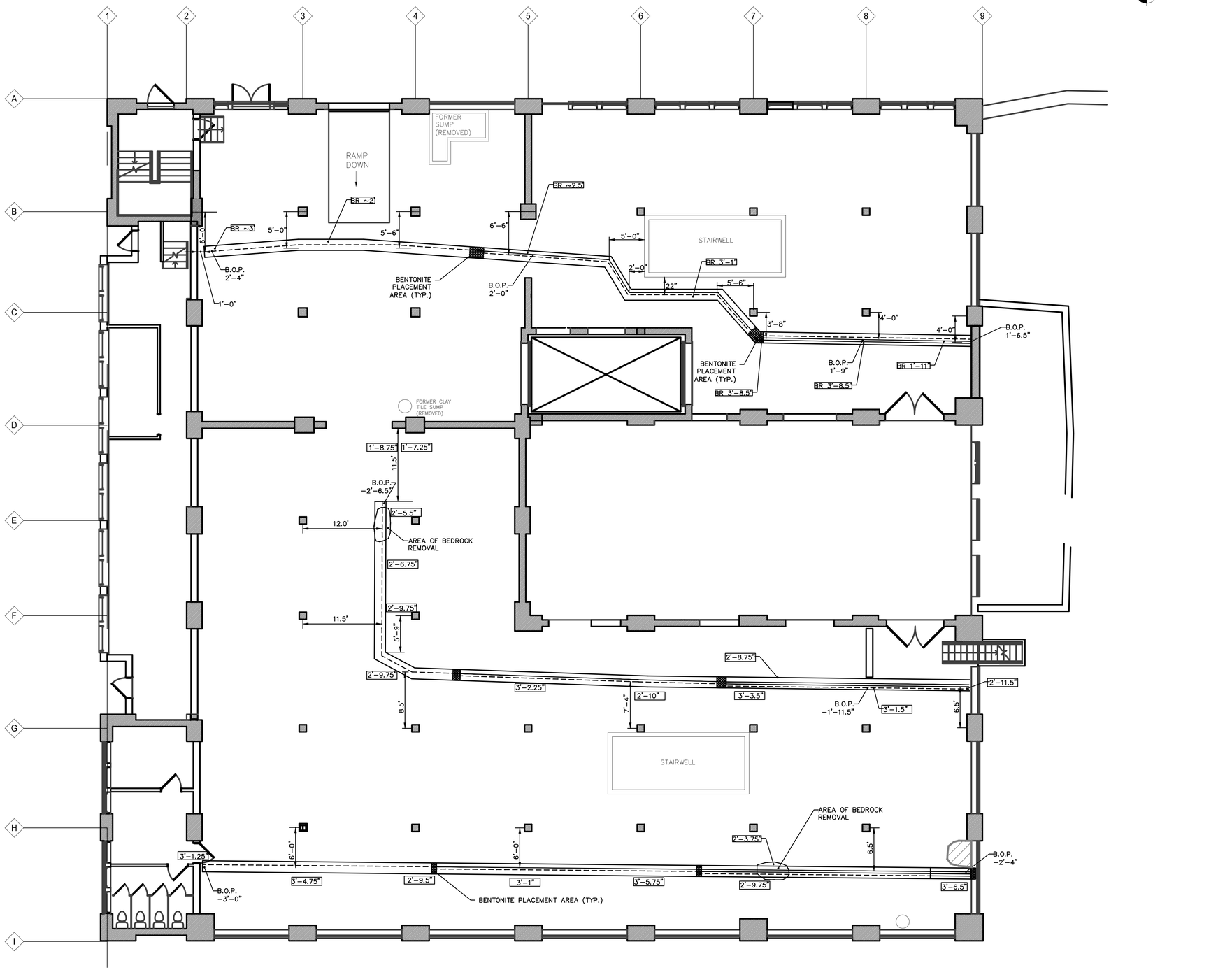

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Legend

3'-1.25" = BEDROCK INVERT ELEVATION BEFORE NECESSARY REMOVAL

SOLID 2" PVC PIPE

SLOTTED (.010") 2" PVC PIPE

B.O.P. BOTTOM OF PIPE

Notes

1. EXCAVATION LIMITS APPROXIMATE ONLY.

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CARRIAGE FACTORY

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FORMER CARRIAGE FACTORY
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Title

AS-BUILT GROUNDWATER REMEDIATION PIPING PLAN

Project No.	Scale
190500751	AS SHOWN

Drawing No.	Sheet	Revision
FIGURE 4	of	0