# Final Engineering Report

## 3100 Clinton Street Site
## BCP Site No. C915339
## West Seneca, New York

December 2020 B0450-019-001

Prepared For:

Rosina Food Products, Inc.
&
3100 Clinton Street, LLC

Prepared By:

Benchmark Environmental Engineering & Science, PLLC

In Association With:

TurnKey Environmental Restoration, LLC

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# BROWNFIELD CLEANUP PROGRAM

# FINAL ENGINEERING REPORT

## 3100 CLINTON STREET SITE
## NYSDEC SITE NUMBER: C915339
## WEST SENECA, NEW YORK

December 2020 0450-019-001

Prepared for:

**ROSINA FOOD PRODUCTS, INC.**

**AND**

**3100 CLINTON STREET, LLC**

Prepared By:


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# CERTIFICATIONS

I, Thomas H. Forbes, certify that I am currently a registered professional engineer licensed by the State of New York, I had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Investigation/Interim Remedial Measures Work Plan (RI/IRM Work Plan) was implemented and that all construction activities were completed in substantial conformance with the Department-approved RI/IRM Work Plan.

I certify that the data submitted to the Department with this November 2020 Final Engineering Report for the 3100 Clinton Street Site (BCP Site No. C915339) demonstrates that the remediation requirements set forth in the RI/IRM Work Plan and in all applicable statutes and regulations have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all documents generated in support of this report have been submitted in accordance with the DER's electronic submission protocols and have been accepted by the Department.

I certify that all data generated in support of the report have been submitted in accordance with the Department's electronic data deliverable and have been accepted by the Department.

I certify that all information and statements in this certification form 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 H. Forbes, of 2558 Hamburg Turnpike, Lackawanna, New York, am certifying as Owner's Designated Site Representative for Rosina Food Products, Inc. and 3100 Clinton Street, LLC, for the site.

Date: 12-1-20

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## LIST OF ACRONYMS

| | |
|---|---|
| ACM | Asbestos Containing Material |
| AST | Aboveground Storage Tank |
| BCA | Brownfield Cleanup Agreement |
| BCP | Brownfield Cleanup Program |
| BMHA | Buffalo Municipal Housing Authority |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CAMP | Community Air Monitoring Plan |
| C/D | Construction and Demolition |
| CFR | Code of Federal Regulation |
| COC | Certificate of Completion |
| CP | Commissioner Policy |
| DER | Division of Environmental Remediation |
| DUSR | Data Usability Summary Report |
| EC | Engineering Control |
| ELAP | Environmental Laboratory Approval Program |
| FBGS | Feet Below Ground Surface |
| FER | Final Engineering Report |
| FOP | Field Operating Procedure |
| GWQS/GV | Groundwater Quality Standards/Guidance Values |
| HASP | Health and Safety Plan |
| IC | Institutional Control |
| IRM | Interim Remedial Measure |
| LQG | Large Quantity Generator |
| LUST | Leaking Underground Storage Tank |
| MECP | Master Erosion Control Plan |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| NYSDOL | New York State Department of Labor |
| NYCRR | New York Codes, Rules, and Regulations |
| O&M | Operations and Maintenance |
| OM&M | Operation, Maintenance, and Monitoring |
| OSHA | Occupational Safety and Health Administration |
| PAHs | Polycyclic Aromatic Hydrocarbons |
| PCB | Polychlorinated Biphenyl |
| PFAS | Per- and Polyfluoroalkyl Substances |

| | |
|---|---|
| PID | Photoionization Detector |
| PPM | Parts Per Million |
| PRR | Periodic Review Report |
| QA/QC | Quality Assurance/Quality Control |
| QAPP | Quality Assurance Project Plan |
| RAO | Remedial Action Objective |
| RAWP | Remedial Action Work Plan |
| RCRA | Resource Conservation and Recovery Act |
| REC | Recognized Environmental Condition |
| RI | Remedial Investigation |
| ROD | Record of Decision |
| RP | Remedial Party |
| SCG | Standards, Criteria, and Guidelines |
| SCO | Soil Cleanup Objective |
| SMP | Soil Management Plan |
| SSAL | Site-Specific Action Limit |
| SVOC | Semi-Volatile Organic Compound |
| TAL | Target Analyte List |
| TCL | Target Compound List |
| TCLP | Toxicity Characteristic Leachate Procedure |
| TIC | Tentatively Identified Compound |
| USEPA | United States Environmental Protection Agency |
| UST | Underground Storage Tank |
| VOC | Volatile Organic Compound |

# 1.0 BACKGROUND AND SITE DESCRIPTION

Rosina Food Products, Inc. and 3100 Clinton Street, LLC entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) on January 23, 2019 (Index No. C915339-12-18), to investigate and remediate a 9.95-acre portion (hereinafter referred to as the "Site") of the larger 3100 Clinton Street parcel, located in West Seneca, Erie County, New York. The property was remediated to unrestricted use and will be used as a protein plant/food manufacturing facility.

## 1.1 Site Description

The site is located in the County of Erie, Town of West Seneca, New York and is identified as a portion of SBL No. 124.15-2-10.2. The 9.95-acre Site is bound by vacant wooded land to the north, northwest, and southeast, with Clinton Street to the southwest; and commercial and industrial park on Empire Drive to the east (see Figure 1 and Figure 2). The boundaries of the site are fully described in Appendix A.

Rosina Food Products, Inc. intends to operate a protein-based food products manufacturing plant at the Site which will be owned by 3100 Clinton Street, LLC. The original tax parcel, identified as SBL No. 124.15-2-10 has been re-parceled as shown on the Town of West Seneca Tax Map dated June 11, 2020 (see Appendix A) and 3100 Clinton Street LLC completed its acquisition of SBL No. 124.15-2-10.2. Once Erie County revises its database and issues the new SBL No. and revised tax map for the Site, a copy will be provided to the Department [Note: re-parceling of the greater legal parcel has not altered the boundaries of the BCP Site]. The current Erie County parcel detail report for the greater legal parcel is provided in Appendix A for reference.

An electronic copy of this FER with all supporting documentation is included as Appendix B.

## 1.2 Environmental History

A summary of previous environmental investigations completed at the Site is provided below.

### *1.2.1 June 2008 – Phase I Environmental Site Assessment*

GZA GeoEnvironmental of New York (GZA) completed a Phase I Environmental Site Assessment (ESA) on the Site in 2008. GZA's ESA revealed the following recognized environmental conditions (RECs) in connection with the Site:

- The Site was historically developed with railroad lines and yards with multiple railroad tracks that traversed the parcels from the early 1900s to the 1960s.
- Railroad ballasts and rail bed materials were observed in existing and former railroad line locations.
- General construction debris (concrete block, brick, etc.) and general refuse (wood, tires, car parts, pallets, paper, concrete, plastic, linoleum flooring, asphalt shingles, etc.) were observed during the site visit.

GZA concluded that the potential exists for soil and/or groundwater contamination due to historic Site use.

### *1.2.2 May 2018 – Phase I Environmental Site Assessment*

Benchmark completed a Phase I ESA, dated May 2018, of the greater property, which included the 9.95-acre subject Site. The addresses subject to the Phase I ESA included 3100 Clinton Street, 160 Empire Drive, and 0 Old Union Road. Based on Benchmark's review of historical sources, the parcels were previously developed with railroad tracks/yards (1800s/early 1900s to the 1960s) and those areas were previously built-up with fill material from unknown sources. Benchmark's Phase I identified the following RECs as they relate to the 9.95-acre portion of 3100 Clinton Street:

- Historic railroad areas with fill materials, ballasts, and numerous railroad ties with known and suspected environmental impacts. Previous off-site investigation work in the rail yard had also identified fill materials impacted by polycyclic aromatic hydrocarbons (PAHs) and metals. Similar impacts are anticipated by Benchmark in fill materials across remaining portions of the Site.
- Railroad ties/tracks as such will need to be segregated and properly disposed of off-site.
- There is an industrial area adjacent to the Site.

Benchmark recommended a Phase II Environmental Investigation at 3100 Clinton Street to assess subsurface conditions and determine whether fill materials will require special handling and/or disposal as part of the redevelopment project.

### *1.2.3 April-August 2018 – Phase II Environmental Investigation*

Benchmark completed a Phase II on the Site in April and May 2018 including test pit excavation, soil boring advancement, temporary monitoring well construction, and a radiological assessment. Benchmark remobilized to the Site in August of 2018 to excavate additional test pits. All sampling locations were completed across the 36.2-acre lot, which at the time included the 9.95-acre subject Site. Figure 3 shows historic on-Site investigation locations, including locations where exceedances of NYSDEC unrestricted soil cleanup objectives (USCOs) occurred. Findings of the Phase II are described below:

- The Site was developed with multiple active railroad tracks and yards from the late 1800s/early 1900s to the 1960s. The wooded Site has been vacant and underutilized since the railroad tracks were abandoned.
- Black fill with cinders, coal, coke, and rail bed material exists across the Site in former railroad/yard areas at depths generally ranging between 1 and 3 feet below ground surface (fbgs).
- Laboratory analytical results indicate that fill materials across the Site are impacted by PAHs and metals (arsenic, chromium, lead, and mercury) with concentrations exceeding Part 375 commercial soil cleanup objectives (CSCOs) and industrial soil cleanup objectives (ISCOs).
- Volatile organic compound (VOC) concentrations in groundwater samples collected across the Site were either non-detect or at concentrations below the NYSDEC Class GA groundwater quality standards/guidance values (GWQS/ GVs).
- Radiological screening completed by Benchmark did not reveal gamma radiation concentrations exceeding 1.5 times typical background concentrations found near the Site.

### *1.2.4 BCP Remedial Investigation*

The Department admitted the Site into the BCP based upon the exceedances of CSCOs and ISCOs detected during the 2018 Phase II investigation. Benchmark completed

the Remedial Investigation (RI), in accordance with the NYSDEC-approved RI/IRM Work Plan to further characterize the Site. The RI included the advancement of soil borings, test pits, and the installation of monitoring wells to facilitate the collection of soil and groundwater samples. Figure 3 shows previous investigation locations along with RI investigation locations as well as showing where exceedances of the USCOs were detected. A Remedial Investigation/Interim Remedial Measures/Alternatives Analysis (RI/IRM/AA) Report was prepared to provide a summary of the investigations and complete an assessment of remedial alternatives beyond the IRMs capable of achieving Remedial Action Objectives (RAOs) for the Site as identified in the approved Decisions Document (DD). Results of the RI are provided below.

- Based on the RI subsurface soil/fill findings, PAHs- and metals-impacted materials were identified in a cindery fill layer across the Site to depths of at least 6 fbgs. Elevated detections were not identified in the underlying native soils. VOCs, PCBs, pesticides were identified in localized investigation locations slightly exceeding their respective USCOs.

- Based on the RI groundwater findings, no elevated VOCs, SVOCs, PCBs, pesticides, herbicides, or PFAS compounds were detected. Metals detection were limited to naturally occurring minerals.

- Completed IRMs have achieved 6NYCRR Part 375 Unrestricted Use requirements (i.e. have achieved USCOs at all on-site confirmation end-point sample points). The IRMs included: excavation and offsite disposal of impacted soil/fill; collection of excavation water for approved discharge to the municipal sanitary sewer; collection of post-excavation confirmatory samples; and, backfilling with approved stone.

- Based on the Alternatives Analysis evaluation, the completed IRM achieved USCOs, satisfies the RAOs, and is fully protective of human health and the environment. Accordingly, the completed IRM Unrestricted Use alternative was the recommended final remedy for the Site.

# 2.0 SUMMARY OF SITE REMEDY

## 2.1 Remedial Action Objectives

Based on the results of the Remedial Investigation, which determined that groundwater was unimpacted and PAHs and metals were the contaminants of concern for the Site, the following Remedial Action Objectives (RAOs) were identified for this site.

### *2.1.1 Soil/Fill RAOs*

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil/fill.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

## 2.2 Description of selected remedy

The site was remediated in accordance with the excavation interim remedial measure approved by the NYSDEC in the RI/IRM Work Plan (September 2018 and revised January 2019).

The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

1. Excavation of fill material exceeding USCOs, and additional excavation and removal of native soil identified during the RI which exceeded USCOs.
2. Backfill: Clean backfill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete backfilling of the excavation and establish the designed subgrades at the Site.

# 3.0 IRMS, OPERABLE UNITS, & REMEDIAL CONTRACTS

Interim Remedial Measures (IRMs) were completed on-Site in accordance with the NYSDEC-approved RI/IRM Work Plan. Based on the findings of the RI, areas with impacted soil/fill materials were excavated to native soils with the approximate extents and post-excavation end-point/off-site sidewall sample locations shown on Figure 4. Post-excavation end-point sample analytical results and off-site sidewall analytical results are summarized on Tables 1 and 2, respectively. Final depth of excavation contours and additional excavation areas are shown on Figure 5A and 5B. The additional areas were excavated to remove non-hazardous soil/fill outside the BCP Site boundary structurally unsuitable native soils within the BCP Site boundary for redevelopment purposes. The IRM excavation area removed PAH and metals impacted soil/fill and achieved USCOs to the BCP boundary where required. A summary of all materials removed from the Site is provided in Table 3. Details of the completed IRMs are presented below.

IRM activities were completed between December 2019 and April 2020. The NYSDEC-approved IRM activities included:

- Installation of a 6-foot chain link fence with construction gates at accessible areas of the Site at Empire Road and Clinton Street for safety and security. Temporary orange construction fencing was installed around the remaining perimeter of the Site to identify and limit access to work zones.
- Installation of silt sock erosion control around the perimeter of the Site and stone pads at accessible construction entrances at Empire Drive and Clinton Street to prevent off-site runoff during remedial activities.
- Clearing and grubbing of vegetation, shrubs, and trees within the BCP Site boundary to allow remedial excavation activities. Approval to complete work activities within designated wetland areas was received from the USACE/NYSDEC prior to starting work in those areas.
- Excavation and off-site disposal of approximately 45,850 tons (approximately 30,600 cubic yards) of PAH- and metals-impacted soil/fill at Waste Management's (WM) Chaffee Landfill located in Chaffee, New York (see Table 3 and Figure 4).
- Excavation and off-site disposal of approximately 249 tons (approximately 170 cubic yards) of non-hazardous soil/fill from an off-site area adjacent to

the southwest corner of the BCP Site boundary for redevelopment purposes. Though not included within the BCP Site, the Volunteer elected to handle the similar soil/fill material and properly dispose at Waste Management's (WM) Chaffee Landfill located in Chaffee, New York (see Table 3 and Figures 5A and 5B).

- Excavation and off-site transport to a Department-approved location of a total of 761 loads of select areas of surplus native soils which were determined to be structurally unsuitable for redevelopment purposes after IRM excavation activities and achievement of USCOs (see Table 3 and Figure 5).
- Collection of seventy-three (73) post-excavation end-point samples during the RI and IRM activities representing bottom of excavation conditions. All end-point sample results are below USCOs (see Table 1 and Figure 4).
- Collection of twenty-six (26) post-excavation sidewall samples. All sidewall samples represent off-site conditions and analytical results remain in exceedance of USCOs and/or Commercial Use SCOs (CSCOs). Note that soil/fill surrounding two (2) utility poles within the NYSEG easement right-of-way within the northeastern portion of the Site was not fully excavated for structural purposes. The soil/fill left in-place represents off-site conditions and sidewall samples were collected from the north, south, east, and west sides of the poles (see Table 2 and Figure 4).
- Excavation and off-site disposal of 5.9 tons of treated/weathered wood (former railroad ties) at WM's Chaffee Landfill (see Table 3).
- Collection, storage, volume measurement, and discharge of 1,005,000 gallons of groundwater and/or rainwater encountered during remedial activities.
- On-Site storage and removal of general construction debris noted in previous investigations for disposal or recycling at Waste Management's (WM) Chaffee Landfill located in Chaffee, New York
- Backfilling of the excavation area with approximately 172,724 tons of NYSDEC pre-approved stone from virgin-source quarries, in accordance with DER-10 requirements to subgrade design elevations (see Table 4 and Figure 5).

# 4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved RI/IRM Work plan for the 3100 Clinton Street Site. All deviations from the RI/IRM Work Plan are noted below.

## 4.1 Governing Documents

### *4.1.1 Master Erosion Control Plan (MECP)*

Erosion and sediment controls for all remedial activities were performed in conformance with the Site-specific Master Erosion Control Plan (MECP) included as Appendix F of the NYSDEC-approved RI/IRM Work Plan. The MECP provides erosion control guidance to prevent potential migration of contaminants off-Site during all remedial and invasive activities.

### *4.1.2 Site Specific Health & Safety Plan (HASP)*

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by the Federal Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120.

The Health and Safety Plan (HASP), included as Appendix D of the NYSDEC-approved RI/IRM Work Plan was complied with for all remedial and invasive work performed at the Site.

### *4.1.3 Quality Assurance Project Plan (QAPP)*

The QAPP was included as Section 5.0 of the RI/IRM Work Plan approved by the NYSDEC. The QAPP describes the specific policies, objectives, organization, functional activities, and quality assurance/ quality control activities designed to achieve the project data quality objectives.

### *4.1.4 Community Air Monitoring Plan (CAMP)*

Real-time community air monitoring was performed during intrusive remedial activities at the Site (excluding time of rainfall/precipitation). A Community Air Monitoring Plan (CAMP) was included with Benchmark-TurnKey's HASP in the NYSDEC-approved RI/IRM Work Plan. Particulate monitoring, organic vapor perimeter monitoring, and explosive vapors monitoring was performed at downwind locations during remedial activities in accordance with the RI/IRM Work Plan. The CAMP is consistent with the requirements for community air monitoring at remediation sites as established by the NYSDOH and NYSDEC. Accordingly, it follows procedures and practices outlined under NYSDEC's DER-10 Appendix A1 (NYSDOH's Generic Community Air Monitoring Plan) and Appendix A2 (Fugitive Dust and Particulate Monitoring).

CAMP results are discussed in section 4.2.5 below. CAMP data is included in Appendix C.

### *4.1.5 Community Participation Plan*

NYSDEC has coordinated and led community relations throughout the course of the project. Benchmark-TurnKey has supported NYSDEC's community relation activities as necessary. An approved Citizen Participation (CP) Plan was prepared by Benchmark-TurnKey and is available for public review at the NYSDEC Region 9 office and the Buffalo and Erie County Public Library, the designated document repository.

As required for BCP sites, copies of the BCP Application, CP Plan, RI/IRM Work Plan including the MECP, QAPP, HASP, CAMP and RI/IRM/AA Report were provided to the designated document repository for public review.

Public Notices were prepared by the Department, and mailed, and/or distributed via the NYSDEC email listserv, in accordance with the Department's approved Citizen Participation distribution list.

Following NYSDEC approval of the Final Engineering Report and issuance of the Certificate of Completion (COC), fact sheets will be prepared and distributed to announce that (1) remedial construction has been completed; and (2) that the COC has been issued, and a Notice of COC will be recorded.

## 4.2 Remedial Program elements

### *4.2.1 Contractors and Consultants*

- Benchmark Environmental Engineering & Science, PLLC served as the BCP Engineer of Record.
- TurnKey Environmental Restoration, LLC (Benchmark-TurnKey) performed test pit excavation related to remedial investigation, remedial excavation, Site grading, inspected the work performed by additional contractors, collected samples for analysis, and corresponded with the NYSDEC.
- Nature's Way Contracting provided soil boring drilling and monitoring well installation services related to remedial investigation.
- Stellar Group, Inc. served as the general contractor and provided design services for final redevelopment of the Site.
- CME Associates, Inc. (CME) performed on-Site soil and backfill compaction testing.
- Ensol, Inc. performed on-Site soil compaction testing.
- D&H Materials, Inc., Tracey Trucking Inc., Iroquois Bar Corp., TurnKey Environmental Restoration, LLC, Buffalo & Orchard Park Topsoil, Inc., NCH Transport Services, Braunscheidel, Mallare Trucking, Design Excavation and Construction, Inc., Brownell Contracting, Draper Trucking LLC, K&R Day Trucking, Inc., Anastasi Trucking & Paving Co., B.T.S. Services Inc., and LCA Development, Inc. provided off-site transportation of non-hazardous soil/fill, and of weathered wood, and/or import of backfill materials.
- Waste Management Chaffee Landfill (WM Chaffee), located in Chaffee, New York, provided off-Site disposal services for non-hazardous soil/fill and treated/weathered wood.
- County Line Stone Co. Inc. located in Akron, New York provided Department-approved surge stone during remedial and redevelopment activities.
- LaFarge A&C located in Lockport, New York provided Department-approved surge stone during remedial and redevelopment activities.

- New Enterprise Stone and Lime Co. provided Department-approved surge stone and crusher run during remedial and redevelopment activities.
- D&H Materials, Inc. provided Department-approved gravel aggregate and screened gravel from their Hard Rock Gravel Pit located in Machias, New York during remedial and redevelopment activities.
- Nussbaumer & Clarke, Inc. provided general surveying and wetland delineation surveying for the final redevelopment of the Site.
- Eurofins TestAmerica, Buffalo (TestAmerica) and Alpha Analytical Labs (Alpha) provided laboratory analytical services; and,
- Data Validation Services, Inc. (DVS) reviewed laboratory analytical data and provided data usability summary reports for the analytical data packages.

### *4.2.2 Site Preparation*

A pre-construction meeting was held with NYSDEC, Rosina Food Products, Inc., 3100 Clinton Street, LLC, and Benchmark-TurnKey. This meeting was followed up with regular weekly meetings.

Prior to excavation activities, underground utilities were marked out; waste disposal facilities' disposal applications were submitted and approved; transportation by NYSDEC licensed haulers was arranged; and excavation equipment was mobilized to the Site. Pre-characterization and waste profile approvals were completed to allow for direct loading and off-site transportation of impacted soil/fill.

Routine meetings and correspondence were conducted with the NYSDEC, Rosina Food Products, Inc., 3100 Clinton Street, LLC, Stellar Group, Inc., and Benchmark-TurnKey throughout the remedial activities.

All United States Army Corps of Engineers (USACE) requirements and all substantive compliance requirements for attainment of approved disturbance and/or protection of wetland natural resources or other permits were achieved during this Remedial Action.

Documentation of agency approvals required by the RI/IRM Work Plan is included in Appendix D. Other non-agency permits relating to the remediation project are also provided in Appendix D. A Master Erosion Control Plan (MECP) which provides technical

guidance for prevention of migration of contaminants is included in the Department approved RI/IRM Work Plan as Appendix F.

### *4.2.3 General Site Controls*

Site controls were maintained throughout construction. Access to the Site was limited to business hours and restricted by fencing and gates along Clinton Street and the terminus of Empire Drive, the points of vehicular access to the property. Only authorized employees/representatives of Rosina Food Products, Inc., 3100 Clinton Street, LLC, personnel essential to the completion of the remedial activities, and the NYSDEC were permitted in the work area, and only if wearing the prescribed level of protection. Daily work areas were defined with well-maintained drive lanes, traffic cones, caution tape, and/or high-visibility equipment to alert Site users to the work areas.

Temporary orange construction fencing was installed along the property boundary to identify and limit access to work zones.

Erosion and dust control measures were implemented during construction and remedial activities. Silt socks were installed around the perimeter of the Site as sediment and erosion control measures. Stone pads were installed at construction entrances along Clinton Street and Empire Drive to prevent off-site migration of soil/fill materials by construction vehicles.

Field Activity Daily Logs were completed to document work performed on-Site and are provided in Appendix E.

### *4.2.4 Nuisance Controls*

During excavation and off-site transportation activities, inspection, and frequent cleaning of the exit/entrances to the Site was completed.

No additional nuisance controls were required during remedial activities.

### *4.2.5 CAMP results*

CAMP monitoring activities were completed during remedial excavation and intrusive activities, in accordance with the approved air monitoring plan. All monitoring results conformed to the CAMP perimeter particulate (PM10) and the organic vapor (below 5 ppm)

requirements with no exceedances of particulate or VOC perimeter 15-min average thresholds during the remedial work.

CAMP activities are detailed in the CAMP Summary Report and copies of all field data sheets relating to the CAMP are provided in electronic format in Appendix C.

#### *4.2.6 Reporting*

NYSDEC, Rosina Food Products, Inc., 3100 Clinton Street, LLC, Stellar Group, Inc., and Benchmark-TurnKey maintained frequent and regular communications throughout the remedial project, including weekly on-Site meetings and electronic and telephone correspondence. All daily reports are included in electronic format in Appendix E. A photographic log of remedial activities is included in Appendix F.

### 4.3 Contaminated Materials Removal

The 3100 Clinton Street Site was remediated to a 6NYCRR Part 375 Track 1 USCOs cleanup. Materials removed from the Site include non-hazardous soil/fill; vegetation, shrubs, and trees; weathered wood (former railroad ties); and general construction debris and general refuse.

Table 3 shows the total quantities of each category of material removed from the Site and the disposal locations. Figure 4 presents the extents of the IRM excavation activities including post-excavation end-point sample locations. Figure 5 presents the bottom elevation of excavation activities. Disposal applications, approvals, load summaries, and disposal manifests are provided in Appendix G.

#### *4.3.1 Non-hazardous Soil/Fill*

Between December 30, 2019 and April 17, 2020, a total of 45,850 tons of non-hazardous PAHs- and metals-impacted soil/fill was excavated by TurnKey Environmental Restoration, LLC, transported by multiple NYSDEC registered hauling companies, and disposed of at WM's Chaffee Landfill located in Chaffee, New York.

Figure 4 shows the approximate remedial excavation extents and locations of post-excavation end-point samples. Sidewall samples at excavation extents representing off-site conditions are included on Figure 4. Figures 5A and 5B show final depth of the excavation

activities. Tables 1 and 2 summarize post-excavation end-point and off-site sidewall analytical results, respectively. Table 3 summarizes total quantities of each category of materials removed from the Site and the disposal locations. Approvals from disposal facilities are included in Appendix G1; load summaries are included in Appendix G2; and, manifests and/or bills of lading are included in electronic format in Appendix G3.

The remedial excavation was field inspected and surveyed by Benchmark-TurnKey personnel during the IRM activities.

#### *4.3.2 Additional Off-site Excavated Soil/Fill*

On April 8, 2020, approximately 249 tons of additional soil/fill adjacent to the southwest corner of the BCP Site boundary for redevelopment purposes. Though not included within the BCP Site, the Volunteer elected to handle the similar soil/fill material consistent with the on-Site remedial activities. Table 3 summarizes total quantities of each category of materials removed from the Site and the disposal locations. Figures 5A and 5B show approximate excavation areas and final depth of the excavation activities. Manifests and load summaries are provided in Appendix G as described above.

The remedial excavation was field inspected and surveyed by Benchmark-TurnKey personnel during the IRM activities.

### 4.4 Additional Materials Removal

#### *4.4.1 Offsite Reuse of Clean Surplus Soils*

After completion of IRM excavation activities and achievement of USCOs for remaining native soils, select areas of native soils were determined to be structurally unsuitable for redevelopment purposes. A total of 761 loads of clean, native soils were excavated, temporarily stockpiled on-Site, and transported off-site to a Department-approved location at the former Bethlehem Steel (currently Tecumseh Redevelopment) site for use throughout the Tecumseh Redevelopment area. Table 3 summarizes total quantities of each category of materials removed from the Site and the disposal locations. Figures 5A and 5B show approximate excavation areas and final depth of the excavation activities.

Department approval documentation is provided in Appendix D and bills of lading are provided in Appendix G3.

The remedial excavation was field inspected and surveyed by Benchmark-TurnKey personnel during the IRM activities.

### *4.4.2 Treated Wood Removal*

During IRM excavation activities existing railroad ties associated with former on-Site operations were encountered. The wood ties were manifested and disposed under a pre-existing profile for treated wood waste and disposed of at WM's Chaffee Landfill. Approximately 5.9 tons of wood railroad ties were removed and transported by TurnKey Environmental Restoration, LLC (9A-874) on February 28, 2020. Table 3 summarizes total quantities of materials removed from the Site and the disposal locations. Approvals from disposal facilities are included in Appendix G1, and manifests are included in Appendix G3.

### *4.4.3 General Debris Removal*

General construction debris (concrete, block, brick, etc.) and general refuse (wood, tires, car parts, pallets, paper, concrete, plastic, linoleum flooring, asphalt shingles, etc.) noted in previous investigations and encountered during IRM excavation activities were sorted and removed. All debris material was stored on-Site in dumpsters and transported to WM's Chaffee landfill for disposal or recycling.

## 4.5 Water Management

Waters that entered the shallow IRM excavation were pumped into temporary on-Site holding tanks.

A temporary discharge permit was obtained from Erie County Sewer Authority prior to discharge to the sewer system. A copy of the approved Erie County Sewer Authority temporary discharge permit was provided to the Department and is included in Appendix D.

Approximately 1,005,000 gallons of water was temporarily stored and batch discharged during IRM activities. Batch volume and discharge documentation is provided in Appendix E.

## 4.6 Remedial Performance/Documentation Sampling

During the RI and after completion of remedial excavation, a total of seventy-three (73) confirmatory samples (excluding QA/QC samples) were collected from the bottom of the remedial excavation within the native soil horizon to confirm proper removal of impacted soil/fill (see Table 1 and Figure 4). Twenty-six (26) sidewall samples (excluding QA/QC samples) were collected and represent off-site conditions (see Table 2 and Figure 4). Samples were collected in accordance with DER-10 and the approved RI/IRM Work Plan.

All end-point confirmatory and off-site samples were collected and analyzed in accordance with USEPA SW-846 methodology, with equivalent Category B deliverables to allow for independent third-party data usability assessment for the on-Site samples. Appendix H includes a copy of the laboratory analytical data packages.

The Data Usability Summary Reports (DUSRs), completed by Data Validation Services (DVS), indicates that sample analyses were conducted in compliance with the required analytical protocols. Most sample results are usable either as reported or with minor qualification/edit. The DUSR is included in Appendix I. All end-point and off-site soil sampling data were uploaded to the Department's EQuIS database. Data acceptance and upload confirmatory email responses are provided in Appendix D.

The confirmatory end-point samples off-site sidewall samples were collected as follows:

### *4.6.1 Pre-Determined RI Sample Locations*

One goal of the RI was to collect sufficient soil data at the depth of the fill/native soil horizon to be able to use a number of the RI soil results as post-excavation confirmatory data. RI test pit location sample results that did not exceed USCOs within the native soil horizon are classified as bottom end-point sample locations and are representative of remaining soils after completion of the IRM. The IRM excavation resulted in the removal of all fill material within the BCP boundary. Table 1 summarizes end-point sample results and Figure 4 shows post-excavation end-point sample locations.

### *4.6.2 IRM Post-Excavation Sample Locations*

During the IRM, fourteen (14) additional post-excavation samples were collected at RI locations which required additional analyses to verify compliance with USCOs. IRM post-excavation samples were identified by the original RI test pit, but with a "B" designation (bottom) added (e.g. TP-21 became TP-21B).

Based on the initial IRM post-excavation results, additional soil/fill removal was required at five (5) post-excavation sample locations (TP-21, TP-53, TP-71, TP-73, and TP-75) as fill material was identified during mass excavation that was not previously identified in the RI (TP-71, TP-73, and TP-75), or fill material was observed deeper than surrounding native soils (TP-21 and TP-53). These areas were excavated in approximately 30'X30' squares to delineate the area. The resampled sidewalls of the excavation locations were given the same initial sample identifier with each wall designated with its general coordinate direction (e.g. the northern sidewall of TP-21 became TP-21N). Table 1 summarizes end-point sample results and Figure 4 shows post-excavation end-point sample locations.

### *4.6.3 IRM Post-Excavation Sidewall (Off-site) Sample Locations*

Twenty-six (26) sidewall samples were collected from just beyond the BCP boundary and represent off-site conditions. Exceedance of USCOs and/or CSCOs were reported by the laboratory for the offsite sidewall samples. Table 2 summarizes end-point sample results and Figure 4 shows post-excavation end-point sample locations.

### *4.6.4 On-Site and Off-Site Power Poles*

Soil/fill materials around five (5) on-Site and nearby off-site power poles were removed to native soil, and properly disposed of off-site as described in Section 4.3.1. Impacted soil/fill was excavated entirely up to these power poles; as such, post-excavation samples were not taken at these locations.

For structural purposes soil/fill was left in place surrounding two (2) off-site power poles in the northeastern portion of the Site. The remaining soil/fill surrounding these utility poles is off-site and post-excavation sidewall samples were collected from each side of the poles (SW-6 through SW-13). All off-site sidewall post-excavation samples remain in exceedance of USCOS and/or CSCOs for multiple parameters.

Table 2 summarizes the post-excavation off-site sidewall analytical data and Figure 4 shows post-excavation sample locations and excavation extents.

## 4.7 Imported Backfill

After remedial excavation was deemed complete and achieved USCOs, the excavation was backfilled with Department-approved stone to redevelopment subgrade. A total of 172,724 tons of stone was used as backfill on Site, including screened gravel, and surge stone.

All virgin-source stone backfill was pre-approved by the NYSDEC in accordance with DER-10 requirements. NYSDEC approval documentation is provided in Appendix D. Backfill load summaries and gradation analyses are provided in Appendix J. Table 4 provides a summary of backfill material. Figure 5 shows final as-built subgrade elevations.

## 4.8 Contamination Remaining at the Site

Based on findings of the RI and results of the IRM completed, a Track 1 Unrestricted Use cleanup was achieved. As such, no contamination remains on-Site.

## 4.9 Other Engineering Controls

The remedy for the site did not require the construction of or use of any engineering control systems.

## 4.10 Institutional Controls

The remedy for the Site does not require any institutional controls.

## 4.11 Deviations from the Remedial Action Work Plan

The remedial activities were completed in general accordance with the approved RI/IRM Work Plan.

# 5.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation.* May 2010.

2. GZA GeoEnvironmental of New York. *Phase I Environmental Site Assessment, Rosina Foods, 75 & 160 Empire Drive and Unaddressed Parcels Along Old Union Road (SBL No. 124.02-1-10) and Clinton Street (SBL No. 124.15-2-10), West Seneca and Cheektowaga, New York*. June 2015.

3. Benchmark Environmental Engineering & Science, PLLC. *Phase I Environmental Site Assessment (ESA), 3100 Clinton Street, 160 Empire Drive and an Unaddressed Parcel off Old Union Road, Cheektowaga and West Seneca, New York*. May 2018.

4. Benchmark Environmental Engineering & Science, PLLC. *Phase II Environmental Investigation Report, 3100 Clinton Street, West Seneca, New York*. August 2018.

5. Benchmark Environmental Engineering and Science, PLLC. *Remedial Investigation/Interim Remedial Measures Work Plan, 3100 Clinton Street Site, West Seneca, New York*. Revised January 2019.

6. Benchmark Environmental Engineering and Science, PLLC. *Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Report, 3100 Clinton Street Site, BCP Site No. C915339, West Seneca, New York*. June 2020.

# TABLES

**TABLE 1**
**SUMMARY OF IRM END-POINT SAMPLE ANALYTICAL DATA**

**FINAL ENGINEERING REPORT**
**3100 Clinton Street Site (C915339)**
**West Seneca, New York**

| Parameter[1] | Unrestricted Use SCO[2] | TP-21B Native | TP-21N Native | TP-21S Native | TP-21E Native | TP-21W Native | TP-25 (2.5'-3.0') Re-worked Native | TP-26 (2.5'-3.0') Re-worked Native | TP-27 (2.5'-3.0') Native | TP-28 (2.5'-3.0') Native | TP-29 (2.5'-3.0') Native | TP-30 (2.5'-3.0') Native | TP-31 (2.5'-3.0') Native | TP-32B Native | TP-33 (3.0'-3.5') Re-worked Native | TP-34 (2.5'-3.0') Re-worked Native | TP-35 (3.0'-3.5') Native | TP-36 (5.0'-5.5') Native | TP-37 (3.5'-4.0') Re-worked Native | TP-38 (3.5'-4.0') Native | TP-39B Native | TP-40B Native | TP-41 (3.0'-3.5') Native | TP-42 (3.5'-4.0') Native | TP-43B Native | TP-44 (3.0'-3.5') Native |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Date** | | 1/22/2020 | | | | | February 2019 | | | | | | | 3/20/2020 | February 2019 | | | | | | 4/7/2020 | | February 2019 | | 2/20/2020 | Feb 2019 |
| ***Volatile Organic Compunds (VOCs) - mg/kg*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chloroform | **0.37** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ***TCL SVOCs + TICs (mg/kg)*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | **--** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | ND | ND | NA | ND |
| 4-Chlorophenyl phenyl ether | **--** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | ND | ND | NA | ND |
| Benzo(a)anthracene | **1** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.052 J | ND | NA | 0.038 J |
| Benzo(a)pyrene | **1** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.047 J | ND | NA | 0.038 J |
| Benzo(b)fluoranthene | **1** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.071 J | ND | NA | 0.057 J |
| Benzo(ghi)perylene | **100** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.030 J | ND | NA | 0.028 J |
| Benzo(k)fluoranthene | **0.8** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | ND | ND | NA | ND |
| Chrysene | **1** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.059 J | ND | NA | 0.054 J |
| Dibenzofuran | **7** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | ND | ND | NA | ND |
| Fluoranthene | **100** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.130 J | ND | NA | 0.084 J |
| Indeno(1,2,3-cd)pyrene | **0.5** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.028 J | ND | NA | 0.027 J |
| Naphthalene | **12** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | ND | ND | NA | ND |
| Phenanthrene | **100** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | ND | ND | NA | ND |
| Pyrene | **100** | NA | NA | NA | NA | NA | ND | ND | ND | ND | ND | ND | ND | NA | ND | ND | ND | ND | ND | ND | NA | NA | 0.110 J | ND | NA | 0.075 J |
| ***Metals - mg/kg*** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | **--** | NA | NA | NA | NA | NA | 13900 B | 8540 B | 8340 B | 5760 B | 7620 B | 8020 B | 5560 B | NA | 12600 B | 11600 B | 9170 B | 7030 B | 7970 B | 10300 | NA | NA | 7170 | 5870 | NA | 7130 |
| Antimony | **--** | NA | NA | NA | NA | NA | ND | ND | .50 J | ND | ND | 0.89 J | ND | NA | ND | 0.94 J | ND | ND | 0.64 J | ND | NA | NA | ND | ND | NA | ND |
| Arsenic | **13** | 8.2 | 5 | 6.9 | 10.3 | 6.8 | 4.3 | 3.0 | 7.6 | 3.5 | 5.0 | 8.0 | 4.5 | NA | 5.3 | 8 | 4.8 | 5.3 | 6.2 | 6.9 | NA | NA | 5.4 | 4.6 | NA | 4.1 |
| Barium | **350** | NA | NA | NA | NA | NA | 41.4 | 35.3 | 47.4 | 23.9 | 23.1 | 26.7 | 16.4 | NA | 49.6 | 56.8 | 29.1 | 24.3 | 33.8 | 47.6 | NA | NA | 27.5 | 21.0 | NA | 23.2 |
| Beryllium | **7.2** | NA | NA | NA | NA | NA | 0.43 | 0.40 | 0.40 | 0.27 | 0.34 | 0.38 | 0.30 | NA | 0.62 | 0.56 | 0.34 | 0.32 | 0.40 | 0.52 | NA | NA | 0.44 | 0.32 | NA | 0.33 |
| Cadmium | **2.5** | NA | NA | NA | NA | NA | 0.23 J | 0.25 | 0.18 J | 0.19 J | 0.17 J | 0.18 J | 0.15 J | NA | 0.40 | 0.25 | 0.20 J | 0.24 | 0.27 | 0.16 J | NA | NA | 0.18 J | 0.43 | NA | 0.21 J |
| Calcium | **--** | NA | NA | NA | NA | NA | 6160 B | 54800 B | 1800 B | 1570 B | 2270 B | 10400 B | 1340 B | NA | 13900 B | 30600 B | 5030 B | 28700 B | 15400 B | 30900 B | NA | NA | 1640 B | 43600 B | NA | 15100 B |
| Chromium | **30** | NA | NA | NA | NA | NA | 15.8 | 11.5 | 11.0 | 7.2 | 9.4 | 9.6 | 7.9 | NA | 16.1 | 16.1 | 9.9 | 8.6 | 10.0 | 13.3 | NA | NA | 8.9 | 7.7 | NA | 8.0 |
| Cobalt | **--** | NA | NA | NA | NA | NA | 6.5 | 9.4 | 9.3 | 4.4 | 6.6 | 7.1 | 4.7 | NA | 10.6 | 11.0 | 5.1 | 6.1 | 7.1 | 8.6 | NA | NA | 6.2 | 5.8 | NA | 5.8 |
| Copper | **50** | NA | NA | NA | NA | NA | 17.9 | 14.0 | 18.9 | 14.9 | 16.4 | 20.1 | 15.1 | NA | 25.8 | 26.8 | 15.4 | 17.6 | 26.3 | 22.8 | NA | NA | 20.6 | 18.3 | NA | 14.9 |
| Iron | **--** | NA | NA | NA | NA | NA | 15500 B | 11900 B | 17400 B | 10900 B | 14200 B | 16500 B | 13300 B | NA | 19500 B | 23700 B | 13600 B | 12000 B | 15300 B | 17600 | NA | NA | 12100 | 11000 | NA | 10100 |
| Lead | **63** | NA | NA | NA | NA | NA | 16.2 | 7.7 | 10.1 | 7.1 | 9.1 | 9.6 | 7.6 | NA | 13.5 | 14.8 | 11.4 | 8.6 | 11.8 | 11.2 | NA | NA | 9.3 | 7.4 | NA | 8.5 |
| Magnesium | **--** | NA | NA | NA | NA | NA | 3220 B | 9540 B | 2460 B | 1540 B | 2370 B | 4330 B | 1660 B | NA | 5500 B | 10500 B | 3540 B | 4020 B | 4740 B | 12800 | NA | NA | 2010 | 7590 | NA | 3820 |
| Maganese | **1600** | NA | NA | NA | NA | NA | 108 B | 425 B | 408 B | 156 B | 122 B | 216 B | 108 B | NA | 371 B | 336 B | 108 B | 359 B | 405 B | 263 B | NA | NA | 244 B | 254 B | NA | 165 B |
| Mercury | **0.18** | NA | NA | NA | NA | NA | 0.081 | 0.05 | 0.016 J | 0.012 J | 0.016 J | 0.029 | ND | NA | 0.045 | 0.025 | 0.036 | 0.022 | 0.028 | 0.011 J | NA | NA | 0.027 | 0.022 J | NA | 0.025 |
| Nickel | **30** | NA | NA | NA | NA | NA | 21.8 | 22.3 | 19.8 | 13.5 | 15.9 | 18.6 | 15.5 | 17.4 | 29.0 | 29.1 B | 13.8 | 18.6 | 23.0 | 23.0 | 14.6 | NA | 23.00 | 21.9 | NA | 15.1 |
| Potassium | **--** | NA | NA | NA | NA | NA | 1190 | 1830 | 1420 | 984 | 1270 | 1390 | 1260 | NA | 2470 | 2410 | 1090 | 1200 | 1400 | 2390 | NA | NA | 1230 | 1360 | NA | 987 |
| Selenium | **3.9** | NA | NA | NA | NA | NA | 0.74 J | ND | ND | ND | ND | ND | ND | NA | 0.52 J | ND | ND | ND | ND | 1.1 J | NA | NA | ND | 0.46 J | NA | ND |
| Sodium | **--** | NA | NA | NA | NA | NA | 72.3 J B | 126 J B | 67.9 J B | 59.2 J B | 70.0 J B | 77.4 J B | 71.9 J B | NA | 121.0 J B | 126 J B | 82.8 J B | 75.4 J B | 75.7 J B | 158 J | NA | NA | 50.2 J | 107 J | NA | 75.3 J |
| Vandium | **--** | NA | NA | NA | NA | NA | 32.2 | 18.9 | 18.5 | 12.8 | 16.5 | 17.9 | 13.4 | NA | 27.3 | 25.1 | 20.1 | 14.7 | 17.9 | 20.7 | NA | NA | 14.3 | 13.2 | NA | 15.1 |
| Zinc | **109** | NA | NA | NA | NA | NA | 69.8 | 59.2 | 51.1 | 44.3 | 45 | 51.6 | 48.1 | NA | 99.1 | 74.6 | 47.7 | 46.5 | 57.5 | 51.3 | NA | 40.8 | 49.3 | 94.5 | 50 | 36.6 |
| ***Pesticides and Herbicides - mg/kg*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDT | **0.0033** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-4'-DDE | **0.0033** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Alpha-BHC | **0.02** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Notes:**
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in micograms per kilogram (ug/kg) and converted to milligram per kilogram (mg/kg) for comparison to SCOs.

**Definitions:**
mg/kg = milligrams per kilogram.
B = Compound was found in blank and sample.
F1= MS and/or MSD Recovery is outside acceptance limits.
F2 = MS/MSD exceedes control limits.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
N = Presumptive evidence of material.
ND = Parameter not detected above laboratory detection limit.

**BOLD** = Concentration exceeds Unrestricted Use SCO

**TABLE 1**
**SUMMARY OF IRM END-POINT SAMPLE ANALYTICAL DATA**

**FINAL ENGINEERING REPORT**
**3100 Clinton Street Site (C915339)**
**West Seneca, New York**

| Parameter[1] | Unrestricted Use SCO[2] | TP-45 (3.0'-3.5') Native | TP-46 (3.0'-3.5') Native | TP-47 (2.5'-3.0') Native | TP-48 (2.5'-3.0') Native | TP-49 (2.5'-3.0') Native | TP-50 (1.5'-2.0') Re-worked Native | TP-51 (1.5'- 2.0') Re-worked Native | TP-52 (1.5'-2.0') Native | TP-53B Native | TP-53N Native | TP-53S Native | TP-53E Native | TP-53W Native | TP-54 (1.5'- 2.0') Native | TP-55 (1.5'-2.0') Native | TP-56 (1.5'-2.0') Native | TP-57 (1.5'-3.0') Native | TP-59B Native | TP-61 (2.0'-2.5') Native | TP-62B Native | TP-63 (0.0'-1.0') Native | TP-64B Native | TP-65 (0.0'-1.0') Native | TP-65 (3.5'-4.0') Native |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Date** | | February 2019 | | | | | | | | 1/16/2020 | | | 1/22/2020 | 1/16/2020 | February 2019 | | | | 3/20/2020 | Feb 2019 | 2/20/2020 | Feb 2019 | 2/20/2020 | February 2019 | |
| ***Volatile Organic Compounds (VOCs) - mg/kg*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chloroform | **0.37** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | ND | NA |
| ***TCL SVOCs + TICs (mg/kg)*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | **--** | 0.057 J | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.170 J | ND | ND | NA | ND | NA | ND | NA | ND | ND |
| 4-Chlorophenyl phenyl ether | **--** | ND | ND | ND | 0.025 J | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | ND | ND | ND | NA | ND | NA | ND | NA | ND | ND |
| Benzo(a)anthracene | **1** | ND | ND | ND | 0.028 J | 0.021 J | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.11 J | ND | ND | NA | ND | NA | 0.064 J | NA | 0.051 J | ND |
| Benzo(a)pyrene | **1** | ND | ND | ND | 0.029 J | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.12 J | ND | ND | NA | ND | NA | 0.057 J | NA | 0.054 J | ND |
| Benzo(b)fluoranthene | **1** | ND | ND | ND | 0.039 J | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.19 J | ND | ND | NA | ND | NA | 0.090 J | NA | 0.078 J | ND |
| Benzo(ghi)perylene | **100** | ND | ND | ND | 0.026 J | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.097 J | ND | ND | NA | ND | NA | 0.048 J | NA | 0.041 J | ND |
| Benzo(k)fluoranthene | **0.8** | ND | ND | ND | 0.027 J | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.069 J | ND | ND | NA | ND | NA | 0.033 J | NA | 0.033 J | ND |
| Chrysene | **1** | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.17 J | ND | ND | NA | ND | NA | 0.07 J | NA | 0.061 J | ND |
| Dibenzofuran | **7** | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.044 J | ND | ND | NA | ND | NA | ND | NA | ND | ND |
| Fluoranthene | **100** | ND | ND | ND | 0.030 J | 0.034 J | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.24 | ND | 0.024 J | NA | ND | NA | 0.12 J | NA | 0.094 J | ND |
| Indeno(1,2,3-cd)pyrene | **0.5** | ND | ND | ND | 0.024 J | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.085 J | ND | ND | NA | ND | NA | 0.045 J | NA | 0.042 J | ND |
| Naphthalene | **12** | 0.041 J | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.095 J | ND | ND | NA | ND | NA | ND | NA | ND | ND |
| Phenanthrene | **100** | 0.042 J | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.160 J | ND | ND | NA | ND | NA | 0.062 J | NA | ND | ND |
| Pyrene | **100** | ND | ND | ND | 0.032 J | 0.037 J | ND | ND | ND | NA | NA | NA | NA | NA | ND | 0.190 J | ND | ND | NA | ND | NA | 0.098 J | NA | 0.073 J | ND |
| ***Metals - mg/kg*** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | **--** | 5940 J | 6830 | 9300 | 8440 | 7700 | 6060 | 11700 | 11600 | NA | NA | NA | NA | NA | 7980 | 3920 | 6940 | 9550 J | NA | 8690 | NA | 9580 | NA | 11400 | 11900 |
| Antimony | **--** | ND | ND | ND | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | 0.98 J | 0.75 J | 0.50 J | 0.6 J | NA | 0.72 J | NA | 0.97 J | NA | 0.91 J | ND |
| Arsenic | **13** | 7.6 J | 6.9 | 7.8 | 5.5 | 4.2 | 4.7 | 4.2 | 4.3 | NA | NA | NA | NA | NA | 5.0 | 8.7 | 4.6 | 4.4 | NA | 6.8 | NA | 7.9 | NA | 6.1 | 4.0 |
| Barium | **350** | 25.5 F2 F1 | 35.1 | 65.3 | 30.2 | 41.3 | 19.6 | 39.9 | 26.3 | NA | NA | NA | NA | NA | 20.9 | 22.3 | 26.8 | 23.5 | NA | 32.3 | NA | 41.0 | NA | 34.4 | 29.4 |
| Beryllium | **7.2** | 0.28 | 0.29 | 0.47 | 0.36 | 0.36 | 0.13 J | 0.54 | 0.30 | NA | NA | NA | NA | NA | 0.31 | 0.17 J | 0.36 | 0.37 | NA | 0.40 | NA | 0.45 | NA | 0.40 | 0.34 |
| Cadmium | **2.5** | 0.055 J | 0.10 J | 0.19 J | 0.12 J | 0.19 J | ND | 0.14 J | 0.20 J | NA | NA | NA | NA | NA | 0.16 J | 0.50 | 0.15 J | 0.25 | NA | 0.20 J | NA | 0.39 | NA | 0.44 | 0.16 J |
| Calcium | **--** | 1800 B | 1620 B | 26400 B | 274 B | 30200 B | 259 B | 298 B | 277 B | NA | NA | NA | NA | NA | 244 B | 4890 B | 5690 B | 5770 J | NA | 11800 B | NA | 17600 B | NA | 1870 B | 759 B |
| Chromium | **30** | 8.1 | 10.1 | 12.6 | 10.5 | 10.4 | 8.5 | 10.9 | 9.2 | NA | NA | NA | NA | NA | 9.4 | 8.2 | 9.0 | 10.0 | NA | 11.0 | NA | 13.9 | NA | 13.1 | 11.1 |
| Cobalt | **--** | 5.1 | 7.2 | 11.0 | 4.4 | 6.1 | 2.3 | 5.1 | 2.5 | NA | NA | NA | NA | NA | 9.4 | 1.9 | 5.1 | 5.6 | NA | 6.6 | NA | 8.2 | NA | 5.1 | 5.0 |
| Copper | **50** | 13.4 | 19.3 | 22.2 | 24.6 | 23.0 | 7.7 | 7.7 | 7.5 B | NA | NA | NA | NA | NA | 9.2 | 15.7 | 20.1 | 15.8 | NA | 17.6 | NA | 25.3 | NA | 15.0 | 10.6 |
| Iron | **--** | 11400 F2 | 15800 | 18000 | 12900 | 13500 | 17900 | 11800 | 13000 | NA | NA | NA | NA | NA | 13200 | 12100 | 11600 | 13100 F2 | NA | 16100 | NA | 18800 | NA | 14800 | 12700 |
| Lead | **63** | 6.8 | 8.9 | 12.6 | 8.7 | 7.3 | 4.9 | 9.2 | 12.0 | NA | NA | NA | NA | NA | 7.4 | 39.8 | 9.2 | 11.1 | NA | 12.6 | NA | 31.1 | NA | 32.7 | 8.3 |
| Magnesium | **--** | 2260 F2 F1 | 2440 | 10700 | 2060 | 11900 | 1270 | 1400 | 1050 | NA | NA | NA | NA | NA | 1720 | 826 | 4480 | 2230 | NA | 6270 | NA | 6640 | NA | 1650 | 1540 |
| Maganese | **1600** | 254 F2 B | 272 B | 510 B | 190 B | 647 B | 67.7 B | 301 B | 86.5 B | NA | NA | NA | NA | NA | 347 | 56.3 | 237 | 265 B | NA | 286 B | NA | 381 | NA | 160 | 115 |
| Mercury | **0.18** | 0.011 J | 0.0096 J | 0.024 | 0.023 J | 0.015 J | 0.031 | 0.049 | 0.058 | NA | NA | NA | NA | NA | 0.021 J | 0.08 | 0.024 | 0.031 | NA | 0.022 J | NA | 0.041 | NA | 0.068 | 0.038 |
| Nickel | **30** | 12.5 F2 F1 | 17.1 | 24 | 18.1 | 17.4 | 7.9 | 11.8 | 8.0 | 15.2 | 11.5 | 12.4 | 12.6 | 12.4 | 16.3 | 8.2 | 15.8 | 16.0 | 18.1 | 18.5 | NA | 24.5 | NA | 15.6 | 13.8 |
| Potassium | **--** | 1320 J | 1500 | 2140 | 1220 | 1720 | 704 | 669 | 565 | NA | NA | NA | NA | NA | 1090 | 709 | 1360 | 1080 J | NA | 1560 | NA | 1890 | NA | 1190 | 770 |
| Selenium | **3.9** | ND | 0.65 J | ND | 0.65 J | 0.53 J | 0.67 J | 0.72 J | 1.3 J | NA | NA | NA | NA | NA | ND | 0.65 J | ND | ND | NA | ND | NA | ND | NA | ND | ND |
| Sodium | **--** | 98.10 J | 93.60 J | 134 J | 43.40 J | 118.00 J | 51.60 J | 42.30 J | 37.1 J | NA | NA | NA | NA | NA | 52.2 J | 48.2 J | 74.20 J | 60.4 J | NA | 104 J | NA | 110 J | NA | 55.2 J | 56.7 J |
| Vandium | **--** | 11.6 F1 | 15.2 | 19.1 | 15.5 | 16.2 | 16.3 | 22.7 | 23.4 | NA | NA | NA | NA | NA | 15.0 | 11.0 | 14.6 | 19.1 | NA | 18.6 | NA | 21.3 | NA | 22.4 | 22.2 |
| Zinc | **109** | 31.2 F2 F1 | 41 | 49.3 | 43.4 | 38.4 | 25.3 | 47.1 | 48.0 | 61.7 J | 54.0 | 51.3 | 84.4 | 54.4 | 39.0 | 106 | 40.6 | 50.5 | NA | 50.9 | 106 | 85.7 | 69.7 | 94.1 | 41.9 |
| ***Pesticides and Herbicides - mg/kg*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDT | **0.0033** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | ND | NA |
| 4-4'-DDE | **0.0033** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | ND | NA |
| Alpha-BHC | **0.02** | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00044 J | NA | NA | NA | NA | NA | NA | ND | NA |

**Notes:**
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in micograms per kilogram (ug/kg) and converted to milligram per kilogram (mg/kg) for comparison to SCOs.

**Definitions:**
mg/kg = milligrams per kilogram.
B = Compound was found in blank and sample.
F1= MS and/or MSD Recovery is outside acceptance limits.
F2 = MS/MSD exceedes control limits.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
N = Presumptive evidence of material.
ND = Parameter not detected above laboratory detection limit.

**BOLD** = Concentration exceeds Unrestricted Use SCO

**TABLE 1**
**SUMMARY OF IRM END-POINT SAMPLE ANALYTICAL DATA**

**FINAL ENGINEERING REPORT**
**3100 Clinton Street Site (C915339)**
**West Seneca, New York**

| Parameter[1] | Unrestricted Use SCO[2] | TP-66 (1.5'-2.0') Native | TP-67 (0.0'-1.0') Native | TP-68 (0.0'-1.0') Native | TP-69 (0.0'-1.0') Native | TP-70 (0.0'-1.0') Native | TP-71B Native | TP-71N Native | TP-71S Native | TP-71E Native | TP-71W Native | TP-72 (1.5'-2.0') Native | TP-73B Native | TP-73N Native | TP-73S Native | TP-73E Native | TP-73W Native | TP-74 (0.0'-1.0') Native | TP-75B Native | TP-75N Native | TP-75S Native | TP-75E Native | TP-75W Native | TP-76B Native | TP-78B Native |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample Date** | | February 2019 | | | | | 1/16/2020 | | 1/22/2020 | | 1/16/2020 | Feb 2019 | 1/17/2020 | | | | | Feb 2019 | 1/17/2020 | | | | | 2/5/2020 | 2/20/2020 |
| ***Volatile Organic Compounds (VOCs) - mg/kg*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chloroform | **0.37** | NA | ND | NA | 0.00046 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ***TCL SVOCs + TICs (mg/kg)*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | **--** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA |
| 4-Chlorophenyl phenyl ether | **--** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)anthracene | **1** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.068 J | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)pyrene | **1** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.07 J | NA | NA | NA | NA | NA | NA | NA |
| Benzo(b)fluoranthene | **1** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.099 J | NA | NA | NA | NA | NA | NA | NA |
| Benzo(ghi)perylene | **100** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.049 J | NA | NA | NA | NA | NA | NA | NA |
| Benzo(k)fluoranthene | **0.8** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.039 J | NA | NA | NA | NA | NA | NA | NA |
| Chrysene | **1** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.079 J | NA | NA | NA | NA | NA | NA | NA |
| Dibenzofuran | **7** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA |
| Fluoranthene | **100** | ND | ND | ND | ND | 0.024 J | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.18 J | NA | NA | NA | NA | NA | NA | NA |
| Indeno(1,2,3-cd)pyrene | **0.5** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.047 J | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | **12** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA |
| Phenanthrene | **100** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.11 J | NA | NA | NA | NA | NA | NA | NA |
| Pyrene | **100** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.13 J | NA | NA | NA | NA | NA | NA | NA |
| ***Metals - mg/kg*** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | **--** | 6800 | 13700 | 11400 | 11900 | 7300 | NA | NA | NA | NA | NA | 9790 | NA | NA | NA | NA | NA | 12100 | NA | NA | NA | NA | NA | NA | NA |
| Antimony | **--** | ND | ND | ND | ND | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | 0.73 J | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | **13** | 3.3 | 5.0 | 5.0 | 5.4 | 5.1 | NA | NA | NA | NA | NA | 4.2 | NA | NA | NA | NA | NA | 6.5 | NA | NA | NA | NA | NA | NA | NA |
| Barium | **350** | 30.3 | 27.00 | 50.2 | 76.1 | 26.8 | NA | NA | NA | NA | NA | 33.0 | NA | NA | NA | NA | NA | 28.6 | NA | NA | NA | NA | NA | NA | NA |
| Beryllium | **7.2** | 0.35 | 0.47 | 0.48 | 0.39 | 0.36 | NA | NA | NA | NA | NA | 0.39 | NA | NA | NA | NA | NA | 0.30 | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | **2.5** | 0.10 J | 0.18 J | 0.45 | 0.073 J | 0.098 J | NA | NA | NA | NA | NA | 0.14 J | NA | NA | NA | NA | NA | 0.47 | NA | NA | NA | NA | NA | NA | NA |
| Calcium | **--** | 696 B | 497 B | 1030 B | 979 B | 824 B | NA | NA | NA | NA | NA | 375 B | NA | NA | NA | NA | NA | 2030 B | NA | NA | NA | NA | NA | NA | NA |
| Chromium | **30** | 7.9 | 11.3 | 13.1 | 13.5 | 9.1 | NA | NA | NA | NA | NA | 10.6 | NA | NA | NA | NA | NA | 12.3 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | **--** | 3.5 | 3.7 | 4.9 | 4.7 | 6.1 | NA | NA | NA | NA | NA | 4.0 | NA | NA | NA | NA | NA | 3.2 | NA | NA | NA | NA | NA | NA | NA |
| Copper | **50** | 7.8 B | 7.4 B | 9.1 | 6.6 | 14.0 | NA | NA | NA | NA | NA | 8.6 B | NA | NA | NA | NA | NA | 11.7 | NA | NA | NA | NA | NA | NA | NA |
| Iron | **--** | 9440 | 15900 | 13500 | 16200 | 13400 | NA | NA | NA | NA | NA | 11200 | NA | NA | NA | NA | NA | 15600 | NA | NA | NA | NA | NA | NA | NA |
| Lead | **63** | 6.0 | 13.2 | 18.6 | 6.7 | 11.3 | 9 | 10.7 | 38.5 | 42.2 | 28.4 | 13.3 | 17.3 | 9 | 3.7 | 19.3 | 8.3 | 39.9 | NA | NA | NA | NA | NA | NA | NA |
| Magnesium | **--** | 1250 | 1370 | 1780 | 1910 | 1910 | NA | NA | NA | NA | NA | 1590 | NA | NA | NA | NA | NA | 1160 | NA | NA | NA | NA | NA | NA | NA |
| Maganese | **1600** | 114 B | 89.8 B | 318 B | 123.0 B | 260 B | NA | NA | NA | NA | NA | 161 B | NA | NA | NA | NA | NA | 128 | NA | NA | NA | NA | NA | NA | NA |
| Mercury | **0.18** | 0.024 | 0.059 | 0.065 | 0.028 | 0.027 | NA | NA | NA | NA | NA | 0.042 | NA | NA | NA | NA | NA | 0.083 | NA | NA | NA | NA | NA | NA | NA |
| Nickel | **30** | 9.8 | 9.6 | 14.5 | 11.0 | 15.3 | NA | NA | NA | NA | NA | 11.2 | NA | NA | NA | NA | NA | 11.6 | NA | NA | NA | NA | NA | NA | 27.9 |
| Potassium | **--** | 658 | 594 | 891 | 1060 | 982 | NA | NA | NA | NA | NA | 925 | NA | NA | NA | NA | NA | 666 | NA | NA | NA | NA | NA | NA | NA |
| Selenium | **3.9** | ND | 0.81 J | 0.80 J | 0.59 J | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | ND | NA | NA | NA | NA | NA | NA | NA |
| Sodium | **--** | 50.3 J | 42.9 J | 59.6 J | 55.800 J | 60.0 J | NA | NA | NA | NA | NA | 46.9 J | NA | NA | NA | NA | NA | 44.7 J | NA | NA | NA | NA | NA | NA | NA |
| Vandium | **--** | 15.3 | 28.4 | 24.0 | 29.6 | 17.5 | NA | NA | NA | NA | NA | 20.0 | NA | NA | NA | NA | NA | 24.8 | NA | NA | NA | NA | NA | NA | NA |
| Zinc | **109** | 28.3 | 58.2 | 76.3 | 45.4 | 40.1 | 62.4 | 54.5 | 37.6 | 37.3 | 104 | 46.7 | NA | NA | NA | NA | NA | 108 | 67.4 | 47.6 | 50.4 | 71.8 | 86.9 | NA | 61 |
| ***Pesticides and Herbicides - mg/kg*** [3] | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDT | **0.0033** | NA | 0.0022 J | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.0015 J | NA |
| 4-4'-DDE | **0.0033** | NA | 0.0023 | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.00056 J | NA |
| Alpha-BHC | **0.02** | NA | ND | NA | ND | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Notes:**
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in micograms per kilogram (ug/kg) and converted to milligram per kilogram (mg/kg) for comparison to SCOs.

**Definitions:**
mg/kg = milligrams per kilogram.
B = Compound was found in blank and sample.
F1= MS and/or MSD Recovery is outside acceptance limits.
F2 = MS/MSD exceedes control limits.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
N = Presumptive evidence of material.
ND = Parameter not detected above laboratory detection limit.

**BOLD** = Concentration exceeds Unrestricted Use SCO

**TABLE 2**
**SUMMARY OF POST-EXCAVATION SIDEWALL (OFF-SITE) ANALYTICAL DATA**

**FINAL ENGINEERING REPORT**
**3100 Clinton Street Site (C915339)**
**West Seneca, New York**

| Parameter [1] | Unrestricted Use SCO [2] | Commercial Use SCO [2] | Sample Location | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | SW-1 | SW-2 | SW-3 | SW-4 | SW-5 | SW-6 | SW-7 | SW-8 | SW-9 | SW-10 | SW-11 | SW-12 | SW-13 | SW-14 | SW-15 | SW-16 | SW-17 | SW-18 | SW-19 | SW-20 | SW-21 | SW-22 | SW-23 | SW-24 | SW-25 | SW-26 |
| **Sample Date** | | | 1/6/2020 | | | | | 1/15/2020 | | | | | | | | 1/30/2020 | 3/2/2020 | | | 3/20/2020 | | 4/7/2020 | | | 4/17/2020 | | | |
| **Semi-Volatile Organic Compounds (SVOCs) - mg/kg** [3] | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2-Methylnaphthalene | -- | -- | 0.22 J | 0.53 | ND | 0.21 J | 0.76 | 0.068 J | 0.24 J | 0.28 J | 0.11 J | ND | 0.22 J | ND | 0.27 J | 0.98 J | 0.25 J | 0.24 J | 0.44 | ND | 0.57 J | ND | 0.36 | 0.1 J | 0.73 J | 0.6 J | 0.76 J | 0.2 J |
| 4-Methylphenol/3-Methylphenol | **0.33** | **500** | ND | ND | ND | 0.036 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthene | **20** | **500** | ND | ND | ND | 0.043 J | 0.15 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1.9 J | 0.43 J | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | **100** | **500** | 0.27 | 0.25 J | 0.086 J | 1.4 | 0.32 | 0.062 J | 0.94 J | 1.3 | 0.13 J | 0.75 J | 0.46 J | 1.9 J | 0.92 J | 2 F1 | ND | ND | 0.12 J | 7.1 | 0.45 J | 2.3 J | 0.32 | 0.03 J | 0.38 J | 1.9 J | 0.6 J | 0.13 J |
| Acetophenone | -- | -- | ND | 0.077 J | ND | 0.035 J | 0.14 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.059 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | **100** | **500** | 0.13 J | 0.14 J | 0.044 J | 0.66 | 0.33 | ND | 0.66 J | 0.8 J | 0.073 J | 0.44 J | 0.29 J | 1.2 J | 0.7 J | 1.2 J | ND | 0.26 J | 0.056 J | 12 | 1.3 J | 2.3 J | 0.23 | ND | 0.37 J | 1.2 J | 0.34 J | 0.068 J |
| Benzo(a)anthracene | **1** | **5.6** | 0.33 | 0.3 J | 0.17 | **2.9** | 0.78 | 0.31 | **3.8** | **4.9** | 0.46 | **2.6** | **1.5** | **7.9** | **3.5** | **5.3 J** | 0.83 J | 0.87 J | 0.25 | **28** | **4** | **9.8** | **1.2** | 0.16 J | **1.4** | **4** | 0.99 | 0.25 |
| Benzo(a)pyrene | **1** | **1** | 0.43 | 0.37 J | 0.2 | **4.3** | 0.97 | 0.3 | **3.6** | **4.5** | 0.48 | **2.4** | **1.5** | **7** | **3.1** | **6.2 J** | 0.84 J | 0.84 J | 0.22 | **22** | **4** | **9.4** | **1.1** | 0.14 J | **1.5** | **3.5** | 1 | 0.26 |
| Benzo(b)fluoranthene | **1** | **5.6** | 0.60 | 0.49 J | 0.24 | **5.8** | **1.1** | 0.49 | **7.3 K** | **7.6** | **1.1 K** | **4.4** | **2.6** | **11** | **5.7** | **10** | **1.2** | **1.2** | 0.4 | **32** | **5.5** | **14** | **1.4** | 0.2 | **2.1** | **4.9** | **1.9** | 0.49 |
| Benzo(ghi)perylene | **100** | **500** | 0.25 | 0.21 J | 0.1 J | 1.8 | 0.52 | 0.21 | 2.4 | 3.2 | 0.42 | 2 | 1.2 | 5 | 2.3 | 5.3 J | 0.53 J | 0.52 J | 0.21 | 16 | 3 | 6.9 | 0.69 | 0.11 J | 1 J | 2.2 J | 0.7 J | 0.25 |
| Benzo(k)fluoranthene | **0.8** | **56** | 0.25 | 0.22 J | 0.15 | **2.2** | **0.55** | 0.25 | ND | **2.5** | ND | **2.2** | **1.4** | **6** | **1.8** | **5.1 J** | 0.5 J | 0.49 J | 0.18 J | **15** | **2.1** | **4.7** | **0.82** | 0.059 J | **1.1 J** | **2.7** | 0.77 J | 0.18 J |
| Biphenyl | -- | -- | ND | 0.062 J | ND | ND | 0.073 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.05 J | ND | ND | ND | 0.051 J | ND | ND | ND | ND | ND |
| Bis(2-ethylhexyl) phthalate | -- | -- | ND | ND | ND | ND | 0.08 J | ND | ND | ND | 0.1 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbazole | -- | -- | 0.049 J | 0.088 J | 0.027 J | 0.12 J | 0.18 J | 0.025 J | 0.22 J | 0.26 J | 0.061 J | 0.26 J | 0.45 J | 0.79 J | 0.19 J | 0.31 J | ND | ND | 0.041 J | 1.2 J | 0.49 J | 0.69 J | 0.18 J | ND | 0.21 J | 0.43 J | 0.13 J | 0.043 J |
| Chrysene | **1** | **56** | 0.37 | 0.41 J | 0.18 | **2.8** | 0.86 | 0.38 | **4.3** | **5.5** | 0.62 | **3.1** | **2.5** | **9.9** | **4** | **6.1 J** | 0.95 J | 0.98 J | 0.38 | **25** | **4.1** | **9.6** | **1.5** | 0.19 J | **1.6** | **5** | **1.4** | 0.34 |
| Dibenz(a,h)anthracene | **0.33** | **0.56** | 0.058 J | 0.05 J | ND | **0.39** | 0.09 J | 0.073 J | **0.94 J** | **1.1** | 0.14 J | **0.72 J** | **0.41 J** | **1.7 J** | **0.85 J** | **1.6 J** | ND | ND | 0.068 J | **4.9** | **0.94 J** | **2.2 J** | 0.21 | 0.037 J | 0.33 J | **0.9 J** | 0.31 J | 0.1 J |
| Dibenzofuran | **7** | **350** | 0.08 J | 0.16 J | ND | 0.11 J | 0.23 | ND | ND | 0.16 J | 0.04 J | ND | ND | ND | 0.13 J | 0.49 J | ND | ND | 0.15 J | 1.6 J | 0.34 J | ND | 0.13 J | 0.032 J | 0.27 J | 0.29 J | 0.24 J | 0.083 J |
| Di-n-butyl phthalate | -- | -- | ND | ND | ND | ND | ND | ND | ND | ND | 0.056 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Fluoranthene | **100** | **500** | 0.56 | 0.54 J | 0.27 | 2.6 | 1.6 | 0.43 | 7.2 | 8.8 | 0.87 | 2.9 | 5.1 | 19 | 5.6 | 6.4 J | 1.7 | 1.9 | 0.4 J | 57 | 8.9 | 21 | 2.3 | 0.23 | 2.5 | 9.7 | 1.8 | 0.37 |
| Fluorene | **30** | **500** | 0.03 J | 0.038 J | ND | 0.086 J | 0.12 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3.1 J | 0.34 J | ND | 0.036 J | ND | ND | 0.37 J | ND | ND |
| Indeno(1,2,3-cd)pyrene | **0.5** | **5.6** | 0.29 | 0.24 J | 0.13 J | **2.5** | **0.61** | 0.19 J | **2.3** | **3** | 0.37 | **1.8** | **1.1** | **4.9** | **2.2** | **5.1** | 0.49 J | **0.52 J** | 0.19 J | **16** | **2.6** | **6.9** | **0.71** | 0.11 J | **0.99 J** | **2.1 J** | **0.68 J** | 0.22 J |
| Naphthalene | **12** | **500** | 0.2 J | 0.45 J | 0.052 J | 0.31 | 0.83 J | 0.05 J | 0.22 J | 0.35 J | 0.093 J | 0.2 J | 0.21 J | 0.28 J | 0.21 | 0.66 J | 0.17 J | 0.16 J | 0.24 | ND | 0.39 J | ND | 0.27 | 0.071 J | ND | 0.48 J | 0.43 J | 0.12 J |
| Phenanthrene | **100** | **500** | 0.24 | 0.42 J | 0.074 J | 0.43 | 1.2 | 0.12 J | 1.5 | 1.2 | 0.25 | 0.53 J | 1.6 | 3.2 | 0.95 | 2.2 | 1 J | 1.1 | 0.44 | 19 | 4.8 | 6.9 | 0.93 | 0.15 J | 1.5 | 4.7 | 0.99 | 0.27 |
| Phenol | **0.33** | **500** | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Pyrene | **100** | **500** | 0.51 | 0.45 J | 0.26 | 2.8 | 1.4 | 0.42 | 6.9 | 8.2 | 0.81 | 2.7 | 3.8 | 16 | 5.2 | 6.2 F1 | 1.5 | 1.6 | 0.36 J | 46 | 6.9 | 19 | 2.1 | 0.24 | 2.1 | 7.4 | 1.5 | 0.34 |
| Total SVOCs | -- | -- | 4.867 | 5.495 | 1.983 | 31.53 | 12.893 | 3.378 | 42.52 | 53.65 | 6.183 | 27 | 24.34 | 95.77 | 37.62 | 65.04 | 9.96 | 10.68 | 4.254 | 307.8 | 51.15 | 115.69 | 14.537 | 1.859 | 18.08 | 52.37 | 14.54 | 3.714 |
| **Metals - mg/kg** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | -- | -- | 2,880 | 3,550 | 5,370 | 2,930 | 2,120 | 8,990 J | 7,480 | 6,900 | 7,650 | 3,980 | 16,000 | 3,790 | 6,600 | 4,470 J | 7,000 | 6,640 J | 3,540 J | 5,840 | 2,550 | 7,170 J | 4,780 | 2,890 | 5,820 | 4,710 | 2,160 | 8,290 J |
| Antimony | -- | -- | 6.52 | 4.96 J | 1.29 J | 3.18 J | 8.25 | 2.1 J | 5.6 J | 3.8 | 2.7 J | 3.9 J | 2.3 J | 3.9 J | 3.7 J | 1.8 J | 0.86 J | ND | ND | ND | 2.2 J | ND | ND | ND | 0.74 J | 2 J | 0.68 J | ND |
| Arsenic | **13** | **16** | **19.9 J** | **35.8** | **17.8** | 8.35 | **25.9** | 12.7 | **14.9** | **13.8** | 11.4 | 11.4 | 8.7 | 12.2 | **18.8** | **21.1** | **14.1** | **16.2** | **17.3** | **24.1** | **23.3** | 12.3 F2 | **15.7** | 9.1 | **44.2** | **24.1** | **70.3** | 12.5 J |
| Barium | **350** | **400** | 58.1 | 58.4 | 41.5 | 63.7 | 90.6 | 55.8 | 56.7 | 58.9 | 42.3 | 43.2 | 69.6 | 74 | 70.2 | 57.7 | 55.2 | 43.3 | 70.4 J | 41.5 | 64.5 | 55.8 F1 | 75.6 | 150 | 78.5 | 75.4 | 43.1 | 65.9 J- |
| Beryllium | **7.2** | **590** | 0.358 J | 0.364 J | 0.327 J | 0.278 J | 0.348 J | 0.71 | 0.55 | 0.57 | 0.49 | 0.46 | 0.77 | 0.58 | 0.53 | 0.49 | 0.52 | 0.51 | 0.46 | 0.4 | 0.44 | 0.61 | 0.68 | 0.39 | 0.68 | 0.55 | 0.33 | 2.4 J |
| Cadmium | **2.5** | **9.3** | 0.943 J | 0.608 J | 0.947 J | 0.659 J | 2.15 | 0.87 | 0.27 J | 0.24 J | 0.075 J | ND | 0.069 J | 0.21 J | 0.46 | 0.42 | 1.1 | 0.98 | 0.16 J | 0.66 | 2.3 | 0.51 | 0.76 | 0.36 | 1.2 | 0.27 | 0.24 | 0.86 |
| Calcium | -- | -- | 2,720 J | 1,960 | 4,290 | 1,380 | 6,980 | 2,090 B F1 F2 | 6,890 B | 5,690 B | 22,500 B | 1,250 B | 22,000 B | 1,660 B | 14,300 B | 3,290 B | 6,200 B | 10,100 B F2 | 3,010 J | 11,500 B | 4,290 B | 32,200 B F2 | 1,590 B | 2,700 B | 7,690 | 9,210 | 631 | 3,490 J- |
| Chromium | **30** | **1,500** | 11.2 | 8.47 | 10.8 | 6.31 | 21.6 | 13.2 | 14.6 | 13.7 | 12 | 10.3 | 20.7 | 10.1 | 13.8 | 13 | 23.1 | 20.5 | 8.9 J | 12.9 | **38.9** | 23.5 | 13.1 | 11 | 16.6 | 12.5 | 15.1 | 13.2 J |
| Cobalt | -- | -- | 5.32 | 5.75 | 7.37 | 5.29 | 5.28 | 8.2 | 7.9 | 7.1 | 8.1 | 5.9 | 10.6 | 5.4 | 7.3 | 4.9 | 7.7 | 7.3 | 3.7 J | 4.8 | 5.5 | 6.4 | 6.5 | 4.4 | 6.7 | 4.3 | 2.9 | 15.3 J |
| Copper | **50** | **270** | 47.6 | **57.9** | 33.1 | 33 | **1.31** | 26.1 F1 | 43.1 | 43.5 | 27.4 | 39.1 | 23.5 | 45.9 | 43.5 | 43.5 | **54.7** | 43.8 J | 21.2 J | 25.9 | **108** | 34 | **79.2** | 20.3 | **77.6** | 40.1 | 38 | **80.2 J** |
| Iron | -- | -- | 28,100 | 30,900 | 21,000 | 39,500 | 33,400 | 22,200 | 32,900 | 32,700 | 25,900 | 36,200 | 29,100 | 28,400 | 33,100 | 27,400 | 29,600 | 52,900 | 26,700 | 18,300 | 40,400 | 50,300 J | 55,400 | 26,100 | 29,600 | 34,100 | 34,300 | 46,900 J |
| Lead | **63** | **1,000** | **81.6** | **87.6** | 49.7 | 57 | **293** | 32.2 F1 | **82.1** | **71.2** | 24.5 | 54.5 | 26.7 | **78.1** | **73** | **81.7** | **124** | **238** | 22.4 J | 54.1 | **171** | **75.2** | **134** | 17.7 | **150** | **89.7** | **71.8** | **78.6 J** |
| Magnesium | -- | -- | 306 | 445 | 1910 | 225 | 308 | 1,810 F1 F2 | 2,640 | 2,280 | 7,570 | 342 | 9090 | 411 | 5,260 | 1,140 J | 2,480 | 3,100 F1 | 975 J | 5,170 | 1,050 | 3,940 J | 354 | 416 | 1,760 | 1,660 | 228 | 1,120 J- |
| Manganese | **1,600** | **10,000** | 286 J | 121 | 291 | 100 | 311 | 267 B | 295 B | 245 B | 248 B | 127 B | 459 B | 118 B | 322 B | 170 J | 364 B | 411 B | 104 J | 264 | 528 | 300 | 277 | 46.7 | 311 B | 152 B | 98.8 B | 305 J- |
| Mercury | **0.18** | **2.8** | **2.06** | **0.808** | 0.098 | 0.07 J | **0.301** | 0.027 | 0.082 | 0.12 | 0.035 | 0.068 | 0.074 | **0.29** | 0.11 | 0.097 | 0.054 | 0.069 | 0.12 | 0.088 | 0.18 | 0.047 | 0.077 | 0.014 J | 0.092 | 0.082 | **0.22** | **0.56 J** |
| Nickel | **30** | **310** | 15.3 | 7.68 | 18.5 | 8.65 | 20 | **35.8** | 20.5 | 18.1 | 20.6 | 12.5 | 29.6 | 12.2 | 18.4 | 14.4 | **33.4** | 28.6 | 10.2 J | 15 | **31.5** | 20.8 | 16.5 | 13.4 | 22.7 | 13.4 | 10 | **45.4** |
| Potassium | -- | -- | 379 | 385 | 720 | 184 J | 378 | 1,250 J | 1,380 | 1,200 | 1,540 | 489 | 3,560 | 411 | 1,320 | 615 | 1,590 | 1,500 J | 579 J | 1,470 | 542 | 1,300 J | 463 | 437 | 1,020 | 775 | 308 | 840 J- |
| Selenium | **3.9** | **1,500** | 1.9 J | 2.26 | 1.89 | 2.73 | 3.03 | 0.63 J | 0.89 J | ND | ND | 1.1 J | ND | 0.92 J | 0.77 J | 1 J | 0.51 J | ND | ND | 0.49 J | 1.5 J | ND | 0.79 J | 0.73 J | 0.97 J | 1.6 J | 1.3 J | ND |
| Silver | **2** | **1,500** | ND | ND | ND | ND | 0.317 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.24 J | ND |
| Sodium | -- | -- | 82.8 J | 73.1 J | 46.3 | 40.1 | 83.7 J | 96.7 J B | 102 J B | 92.7 J B | 113 J B | 72.8 J B | 148 J B | 54.5 J B | 108 J B | 105 J | 84.2 J | 97.1 J | 105 J | 150 J | 77.3 J | 126 J | 89.4 J | 73.9 J | 420 | 156 J | 82.9 J | 113 J |
| Thallium | -- | -- | 0.423 J | ND | 0.362 J | ND | 0.727 J | 1.9 J | ND | 0.48 J | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Vanadium | -- | -- | 11.6 | 12.1 | 13.6 | 11.6 | 10.9 | 22.4 | 19.9 | 19.6 | 18.6 | 15.8 | 32.1 | 14.4 | 21.3 | 12.9 | 19.8 | 17.4 | 13.6 | 15 | 17.4 | 20.6 | 15.2 | 16.9 | 16.6 | 15.7 | 13.5 | 24.1 J |
| Zinc | **109** | **10,000** | **136 J** | 48.9 | **122** | 58.2 | **305** | **341 J** | **114** | 104 | 54.2 | 65.6 | 73.5 | 61.4 | **142** | 99.8 J | **213** | **173 J** | 32.3 J | **121** | **573** | **135 J** | **145** | 70.6 | **255** | 69.5 | 78.1 | **318 J** |

**Notes:**
1. Only those parameters detected at a minimum of one sample location are presented in this table; all others were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in micrograms per kilogram (ug/kg) and converted to milligram per kilogram (mg/kg) for comparison to SCOs.

**Definitions:**
mg/kg = milligrams per kilogram.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
J- = Estimated value; numerical value may be biased low.
B = Compound was found in the blank and sample.
F1 = MS and/or MSD recovery is outside acceptance limits.
F2 = MS/MSD RPD exceeds control limits.
K = Benzo(b&k)fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.
ND = Parameter not detected above laboratory detection limit.

| | |
|---|---|
| **Bold** | = Concentration exceeds Unrestricted Use SCOs |
| **Bold** | = Concentration exceeds Commercial Use SCOs |

**TABLE 3**

**SUMMARY OF MATERIALS REMOVED/REUSED AND DISPOSAL LOCATIONS**

**FINAL ENGINEERING REPORT**

**3100 CLINTON STREET SITE (C915339)**
**WEST SENECA, NEW YORK**

| Activity and Material/Item | Quantity | Units | Generator | Responsible Company | Transporter I.D No. | Disposal Location/Recycling Facility | Waste Profile or Permit No. |
|---|---|---|---|---|---|---|---|
| **Clearing, Grubbing and Miscellaneous Debris** | | | | | | | |
| Weathered Wood (Railroad Ties) | 5.9 | Tons | 3100 Clinton Street, LLC | TurnKey Environmental Restoration, LLC | 9A-874 | Waste Management - Chaffee Landfill, Chaffee NY | 121847NY |
| **Remedial Excavation and Disposal** | | | | | | | |
| Non-hazardous Soil/Fill | 45,850.40 | Tons | 3100 Clinton Street, LLC | D&H Materials, Inc.<br>Tracey Trucking Inc.<br>Iroquois Bar Corp.<br>TurnKey Environmental Restoration, LLC<br>Buffalo & Orchard Park Topsoil, Inc.<br>NCH Transport Services / Braunscheidel<br>Brownell Contracting / Design Excavation and Construction, Inc.<br>Draper Trucking LLC<br>Mallare Trucking<br>K&R Day Trucking, Inc.<br>Anastasi Trucking & Paving Co.<br>B.T.S. Services Inc.<br>LCA Development | 9A-834/835<br>9A-875/879<br>9A-759<br>9A-873/874<br>9A-869<br>9A-973<br>9A-826<br>9A-937<br>9A-738<br>9A-544<br>9A-836<br>9A-763<br>9A-480 | Waste Management - Chaffee Landfill, Chaffee NY | 121629NY |
| Additional Off-site Soil/Fill | 248.56 | Tons | 3100 Clinton Street, LLC | D&H Materials, Inc. | 9A-834/835 | Waste Management - Chaffee Landfill, Chaffee NY | 121629NY |
| **Redevelopment Excavation and Transport** | | | | | | | |
| Native Soil (structurally unsuitable) | 761.00 | Loads | 3100 Clinton Street, LLC | D&H Materials, Inc.<br>Tracey Trucking Inc.<br>Iroquois Bar Corp.<br>Buffalo & Orchard Park Topsoil, Inc.<br>Brownell Contracting / Design Excavation and Construction, Inc.<br>K&R Day Trucking, Inc. | 9A-834/835<br>9A-875/879<br>9A-759<br>9A-869<br>9A-826<br>9A-544 | Tecuseh Redevelopment (former Bethlehem Steel - Lackawanna, NY | -- |

**TABLE 4**
**SUMMARY OF IMPORT MATERIALS QUANTITIES & SOURCES**

**FINAL ENGINEERING REPORT**
**3100 CLINTON STREET SITE (C915339)**
**WEST SENECA, NEW YORK**

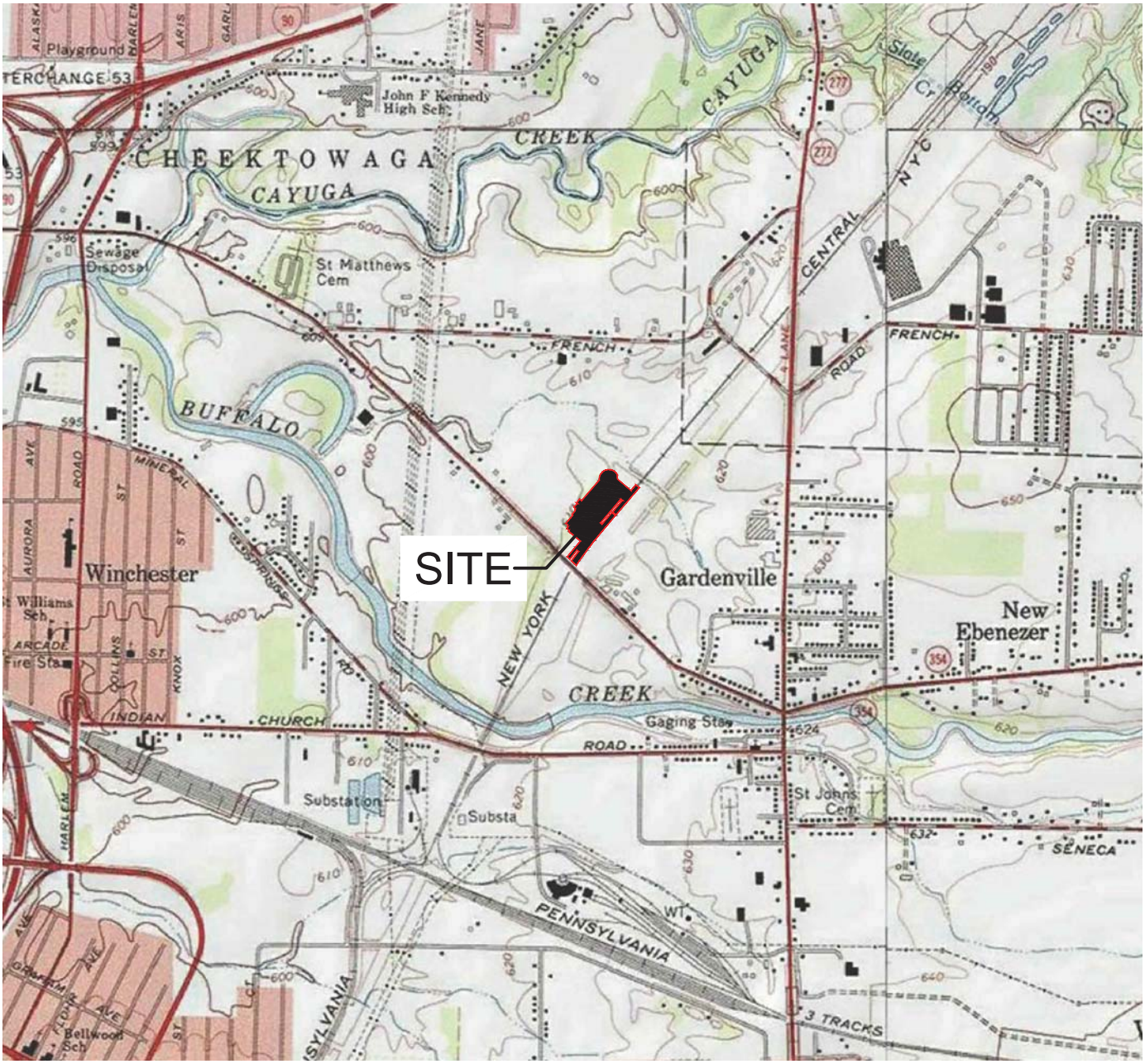
| Backfill Type | Quantity | Units | Source of Imported Backfill | Description |
|---|---|---|---|---|
| **Stone** | | | | |
| Remedial excavation and redevelopment activities | 121,835.98 | Tons | D&H Materials, Inc.<br>Hard Rock Gravel Pit<br>Arcade, New York | 2" Screened Gravel |
| Remedial excavation and redevelopment activities | 48,145.22 | Tons | Lafarge A&C<br>Lockport, New York<br><br>County Line Stone Co., Inc.<br>Akron, New York<br><br>New Enterprise Stone & Lime Co. Inc.<br>Wehrle Plant<br>Lancaster, New York | Surge Stone |
| Remedial excavation and redevelopment activities | 2,137.86 | Tons | D&H Materials, Inc.<br>Hard Rock Gravel Pit<br>Arcade, New York | #3, 4, 5 Stone |
| Remedial excavation and redevelopment activities | 605.05 | Tons | D&H Materials, Inc.<br>Hard Rock Gravel Pit<br>Arcade, New York | 5" Crusher Run |

All backfill material pre-approved by NYSDEC.

# FIGURES

F:\CAD\Benchmark\Rosina\08-Final Engineering Report\Figure 1 - Site Location and Vicinity Map.dwg

# FIGURE 1




N

2000' 0' 2000' 4000'

SCALE: 1 INCH = 2000 FEET
SCALE IN FEET
(approximate)



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
IN ASSOCIATION WITH
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599


PROJECT NO.: 0450-019-001

DATE: JUNE 2020

DRAFTED BY: CMS

## SITE LOCATION AND VICINITY MAP

FINAL ENGINEERING REPORT

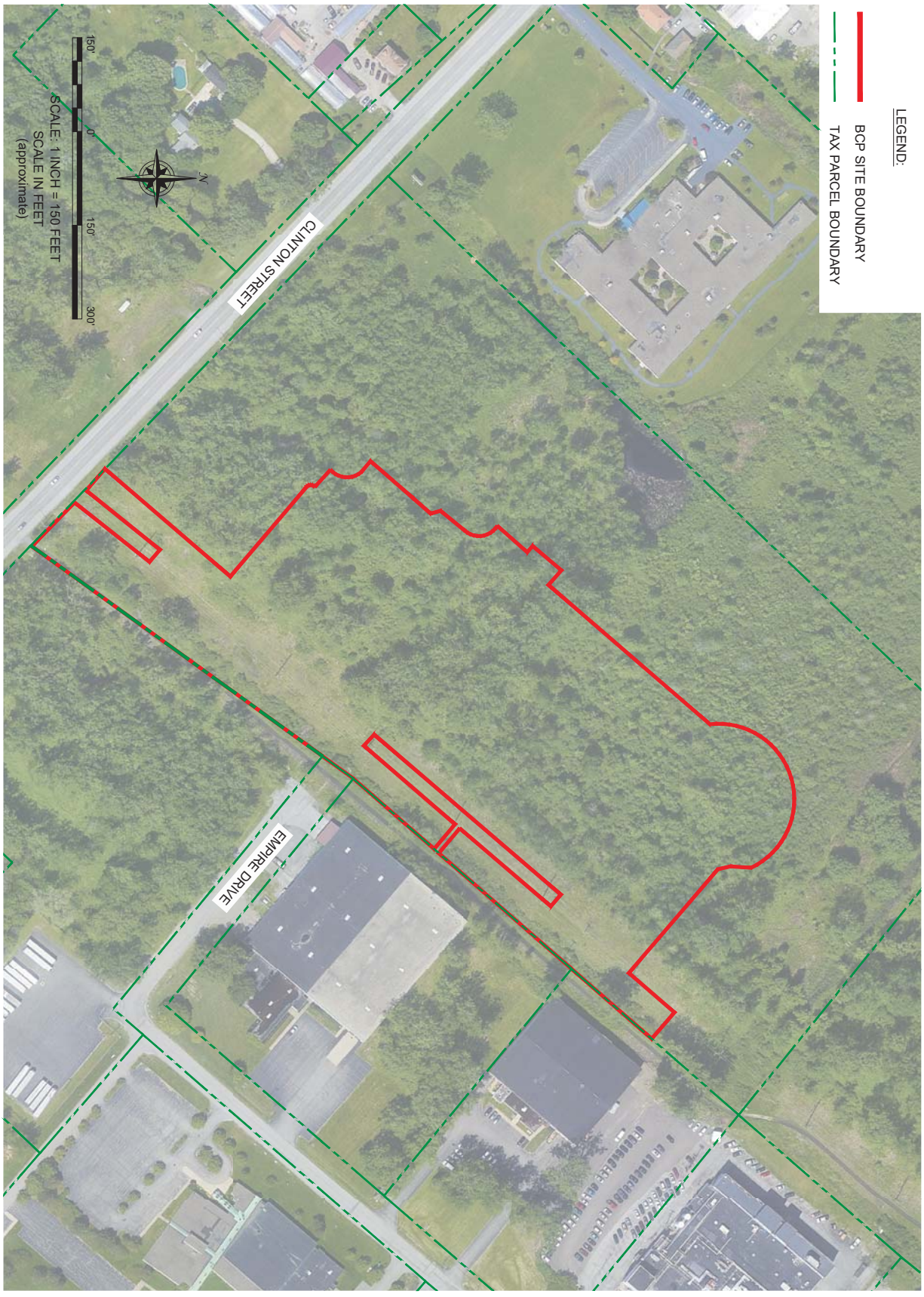
3100 CLINTON STREET SITE
BCP SITE NO. C915339
WEST SENECA, NEW YORK

PREPARED FOR

ROSINA FOOD PRODUCTS, INC. & 3100 CLINTON STREET, LLC

DATE: JUNE 2020
DRAFTED BY: CMS

F:\CAD\Benchmark\Rosina\08-Final Engineering Report\Figure 2 - Site Plan (Aerial).dwg




# SITE PLAN (AERIAL)

FIGURE 2

FINAL ENGINEERING REPORT

3100 CLINTON STREET SITE
BCP SITE NO. C915339
WEST SENECA, NEW YORK

PREPARED FOR

ROSINA FOOD PRODUCTS, INC. & 3100 CLINTON STREET, LLC


BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

*2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599*


JOB NO.: 0450-019-001

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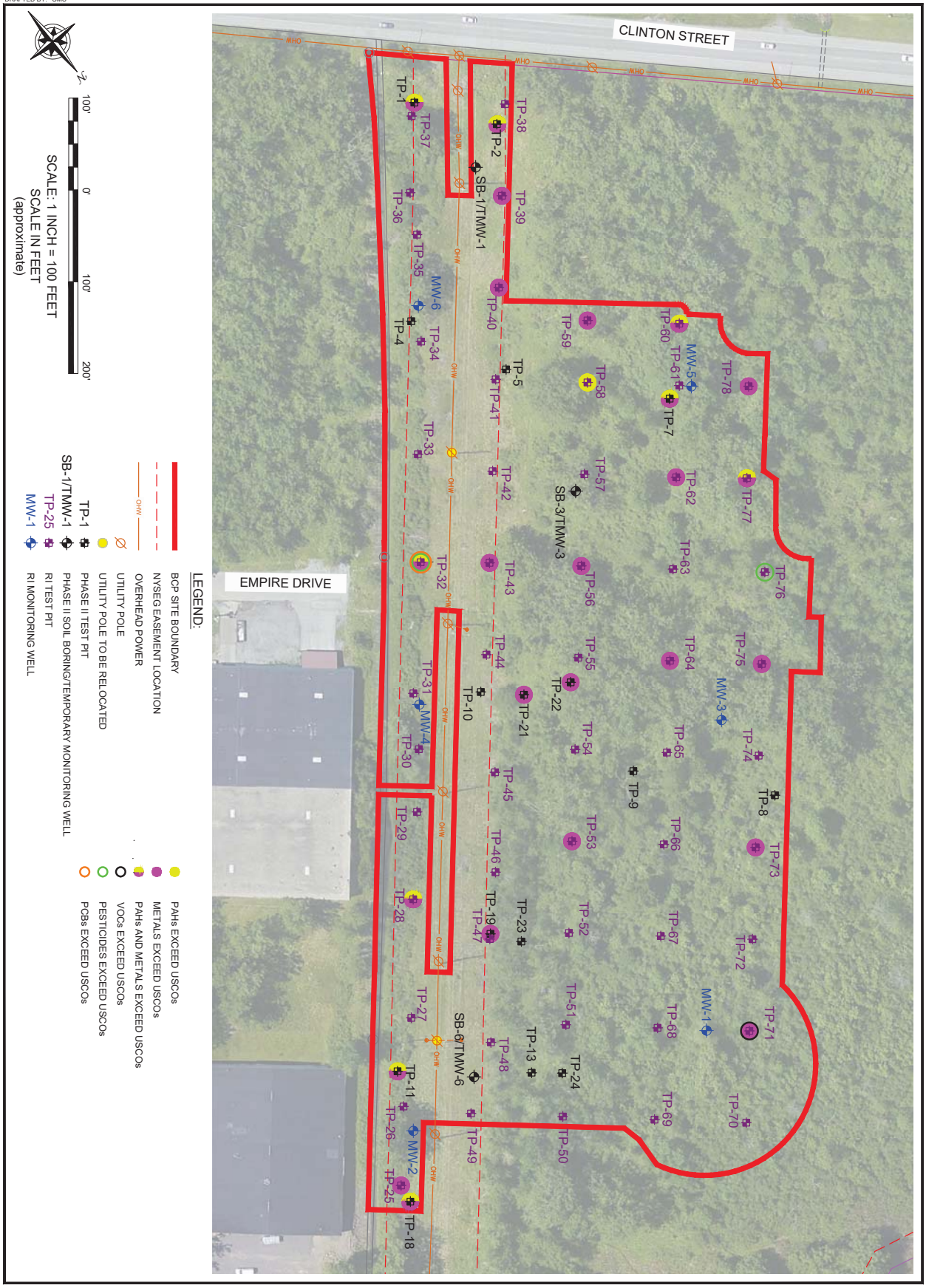


# FIGURE 3

## PHASE II AND REMEDIAL INVESTIGATION LOCATIONS

FINAL ENGINEERING REPORT

3100 CLINTON STREET SITE
BCP SITE NO. C915339
WEST SENECA, NEW YORK

PREPARED FOR
ROSINA FOOD PRODUCTS, INC. & 3100 CLINTON STREET, LLC

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
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TURNKEY ENVIRONMENTAL RESTORATION, LLC
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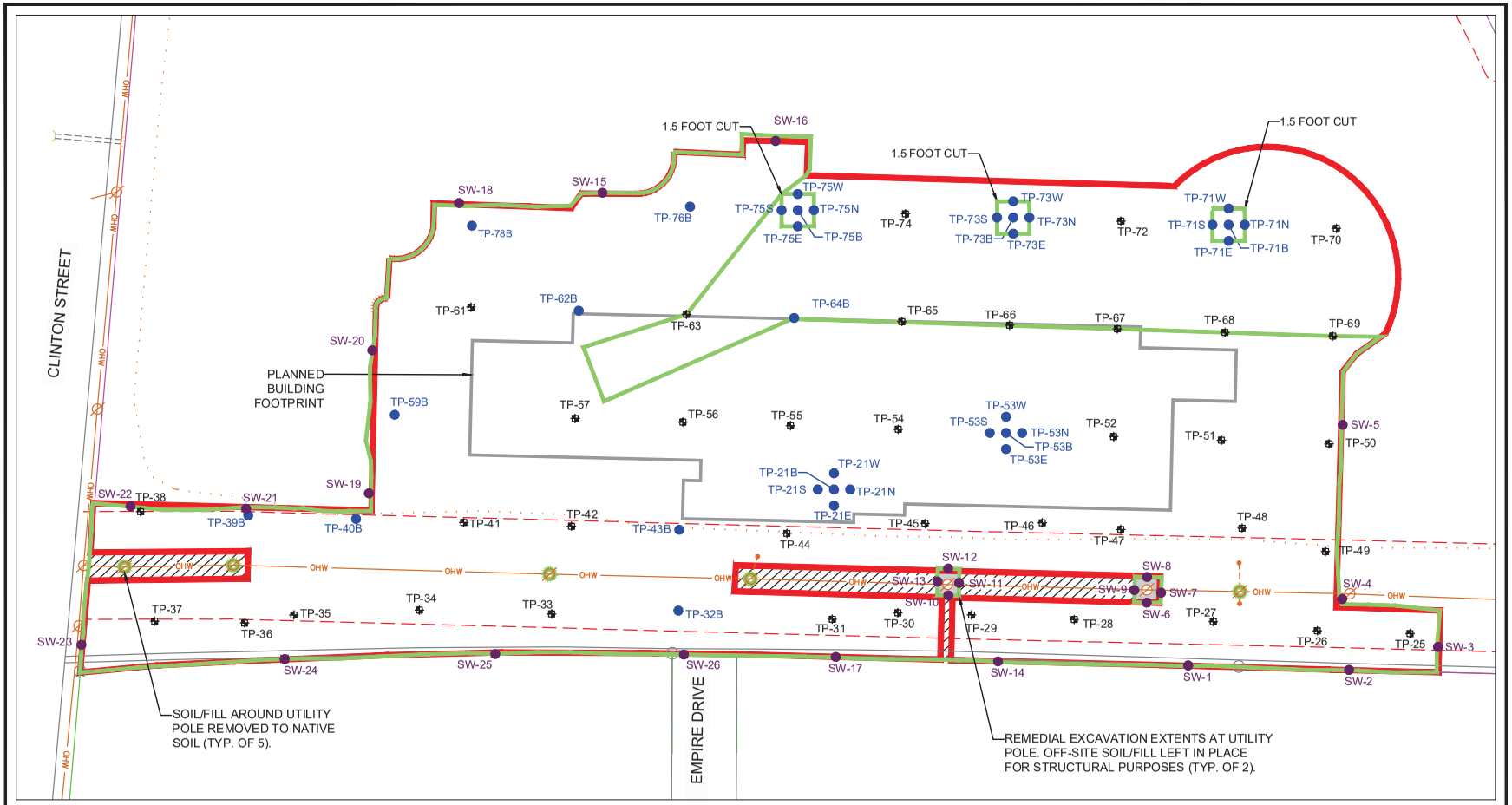
JOB NO.: 0450-018-001




LEGEND:

- BCP SITE BOUNDARY
- NYSEG EASEMENT LOCATION
- OVERHEAD POWER
- UTILITY POLE
- REMEDIAL EXCAVATION AREA
- REMEDIAL EXCAVATION AREA (OFF-SITE)
- OFF-SITE SOIL/FILL LEFT IN PLACE
- TP-25 END-POINT SAMPLE LOCATION (RI)
- TP-32B END-POINT SAMPLE LOCATION (IRM)
- SW-1 SIDEWALL SAMPLE LOCATION (OFFSITE)

NOTE: REMEDIAL EXCAVATION AREA SURVEYED BY BENCHMARK-TURNKEY PERSONNEL DURING REMEDIAL ACTIVITIES. ADDITONAL END-POINT SAMPLING AT TP-71, TP-73, AND TP-75 WAS REQUIRED TO VERIFY REMOVAL OF SPECIFIC PARAMETERS OF IMPACTS TO NATIVE SOILS.

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

F:\CAD\Benchmark\Rosina\08-Final Engineering Report\Figure 4 - IRM Excavation Area and End-Point Sample Locations.dwg

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JOB NO.: 0450-018-001

SEAL

# IRM EXCAVATION AREA AND END-POINT SAMPLE LOCATIONS

FINAL ENGINEERING REPORT

3100 CLINTON STREET SITE
BCP SITE NO. C915339
WEST SENECA, NEW YORK

PREPARED FOR

ROSINA FOOD PRODUCTS, INC. & 3100 CLINTON STREET, LLC

**FIGURE 4**

DATE: APRIL 2020
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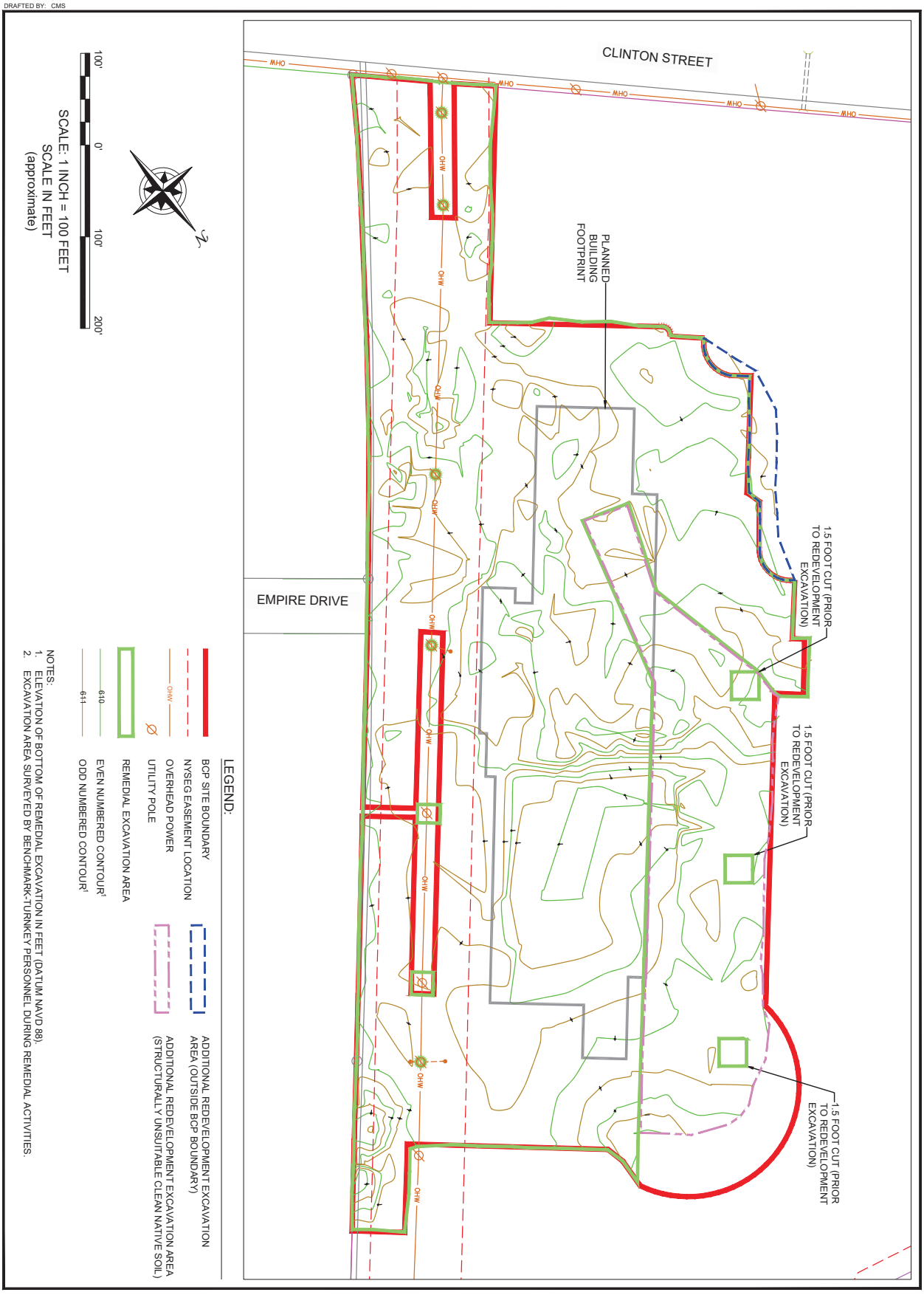


FIGURE 5A

# REMEDIAL EXCAVATION CONTOUR MAP

FINAL ENGINEERING REPORT

3100 CLINTON STREET SITE
BCP SITE NO. C915339
WEST SENECA, NEW YORK

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DATE: APRIL 2020
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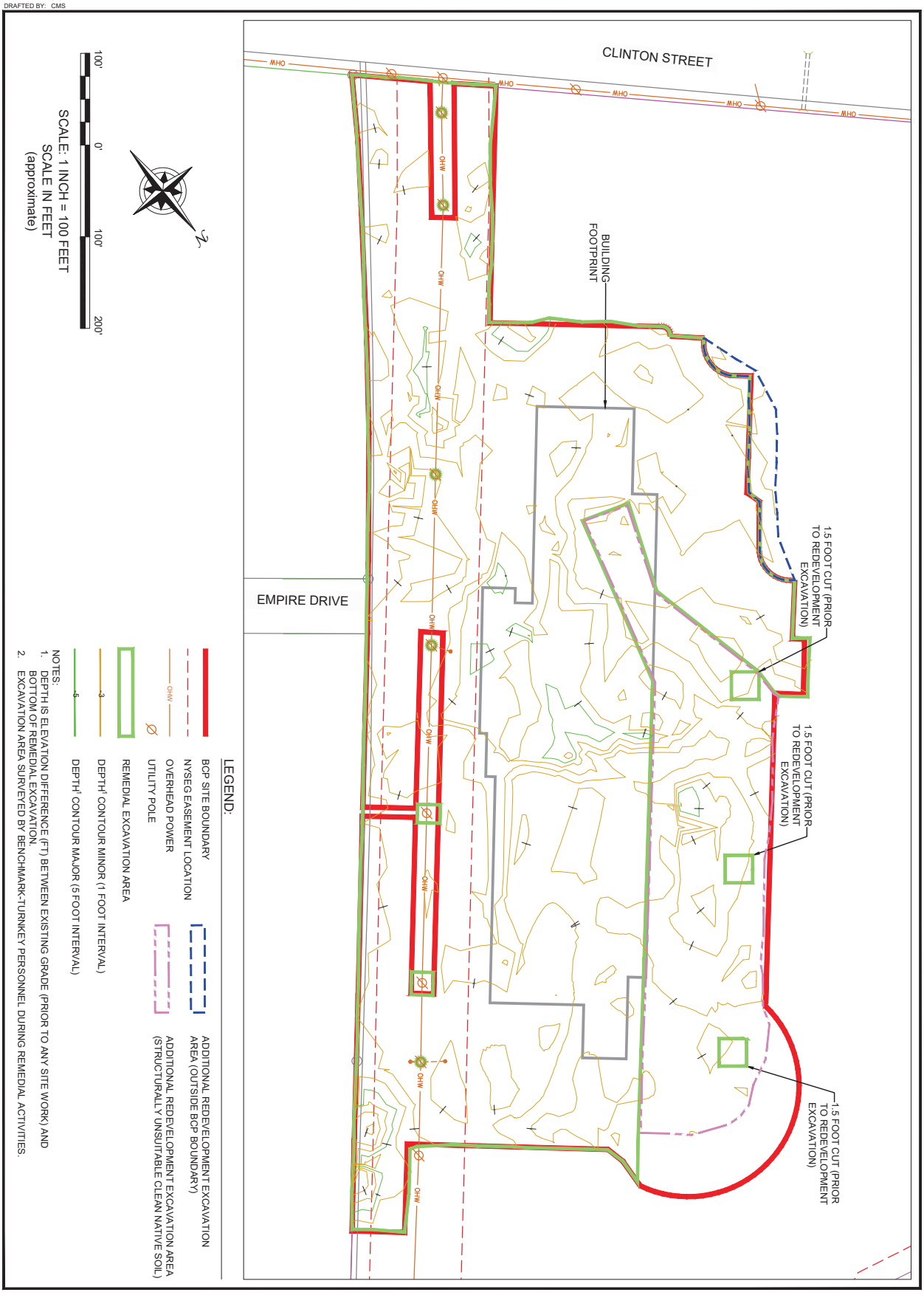


# FIGURE 5B

## FINAL DEPTH OF EXCAVATION CONTOUR MAP

FINAL ENGINEERING REPORT

3100 CLINTON STREET SITE
BCP SITE NO. C915339
WEST SENECA, NEW YORK

PREPARED FOR

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DATE: APRIL 2020
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F:\CAD\Benchmark\Rosina\08-Final Engineering Report\Figure 6 - Final Subgrade Contour Map.dwg

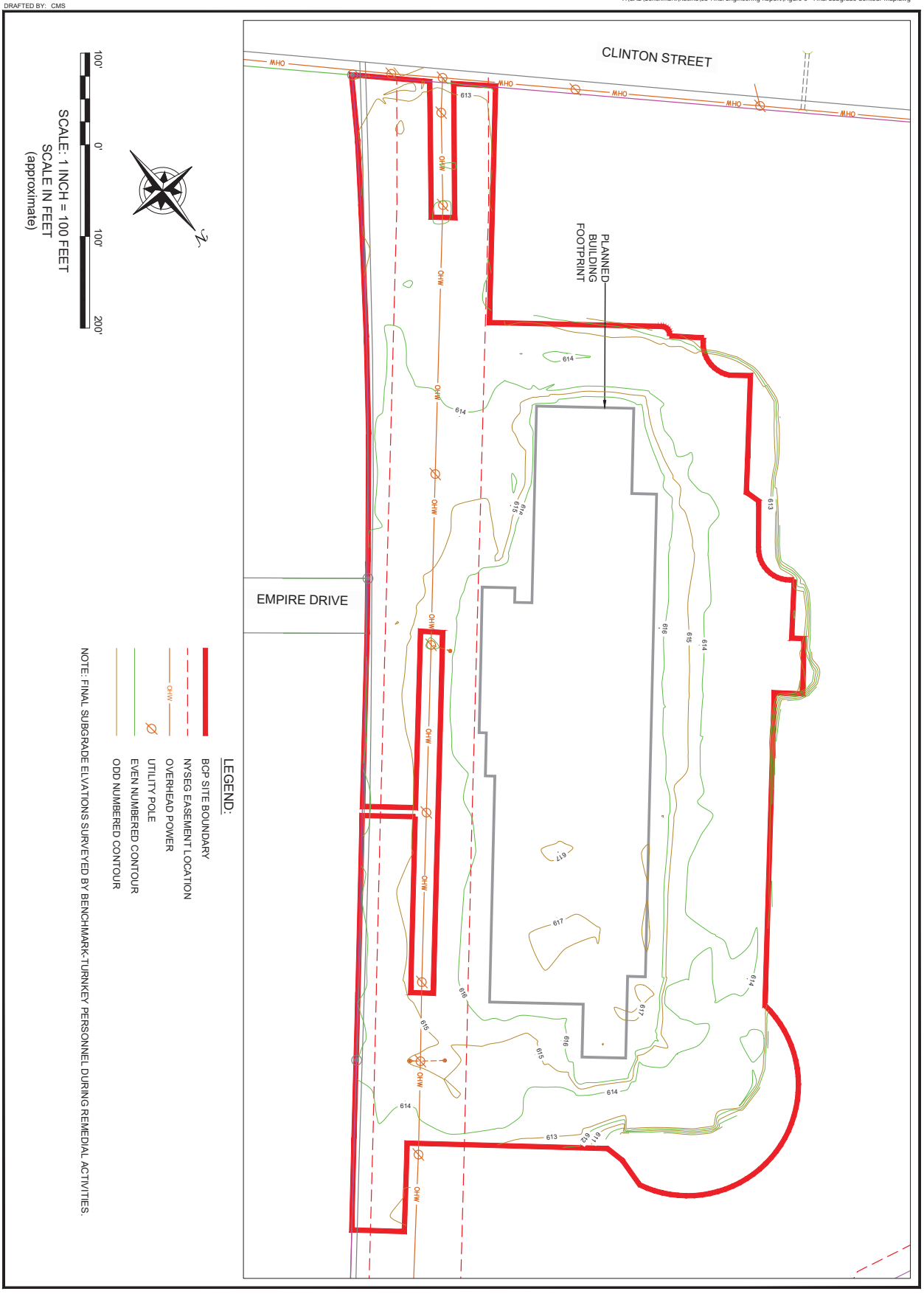


**FIGURE 6**

# FINAL SUBGRADE CONTOUR MAP

FINAL ENGINEERING REPORT

3100 CLINTON STREET SITE
BCP SITE NO. C915339
WEST SENECA, NEW YORK

PREPARED FOR

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BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

IN ASSOCIATION WITH

TURNKEY ENVIRONMENTAL RESTORATION, LLC

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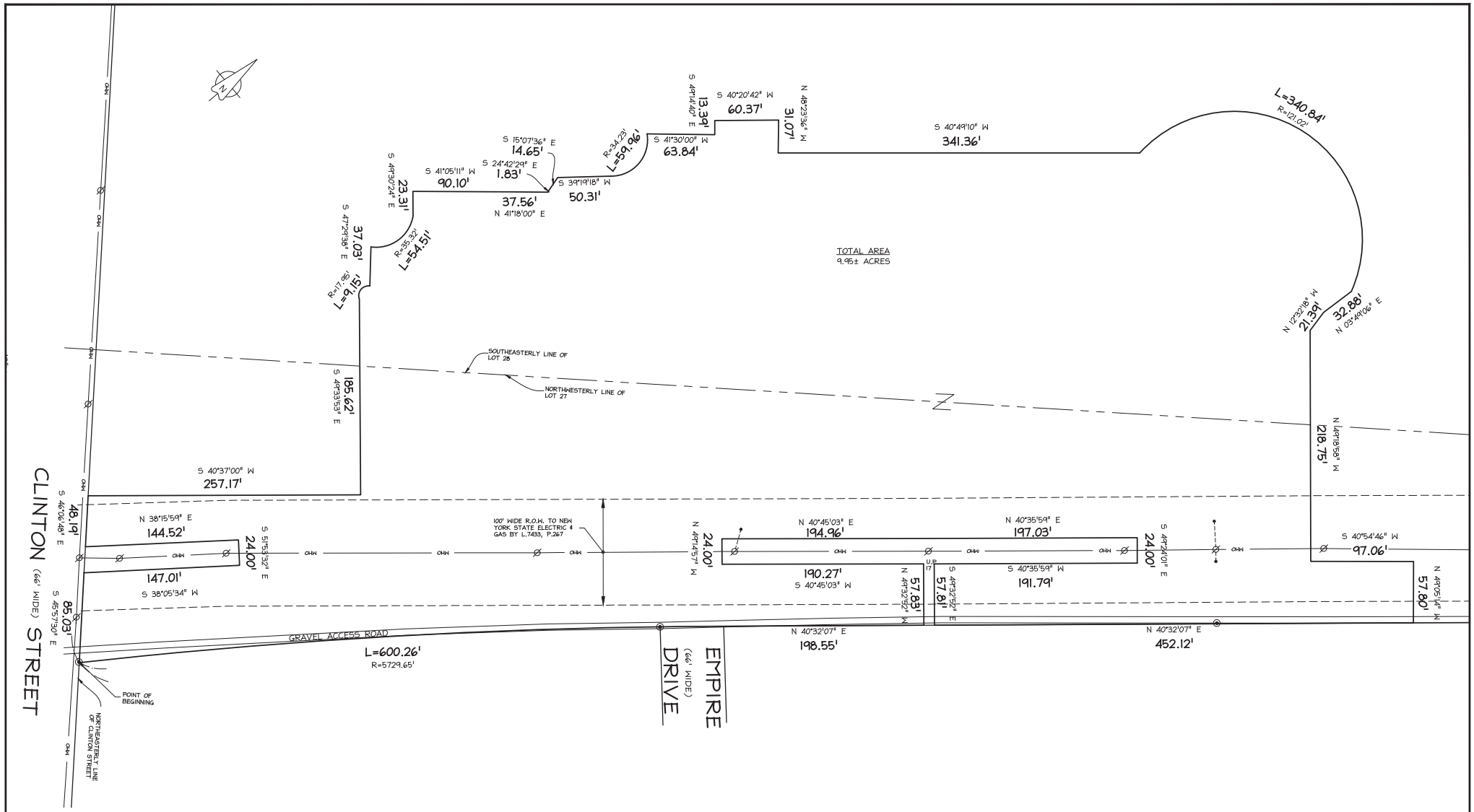
JOB NO.: 0450-018-001

# APPENDIX A

## SURVEY AND TAX MAPS
## METES & BOUNDS
## ERIE COUNTY PARCEL DETAIL REPORT




NO IRONS SET OR FOUND AT PROPERTY CORNERS UNLESS NOTED HEREON.

3556 Lake Shore Road, Suite 500, Buffalo, NY 14219
p (716) 827-8000 f (716) 270-6091 www.nussclarke.com



NUSSBAUMER & CLARKE, INC. EST. 1933 ENGINEERS AND SURVEYORS

# BCP SITE MAP

## 3100 Clinton Street

Part of Lots 26, 27
Ebenezer Lands
Town of West Seneca
County of Erie, State of New York

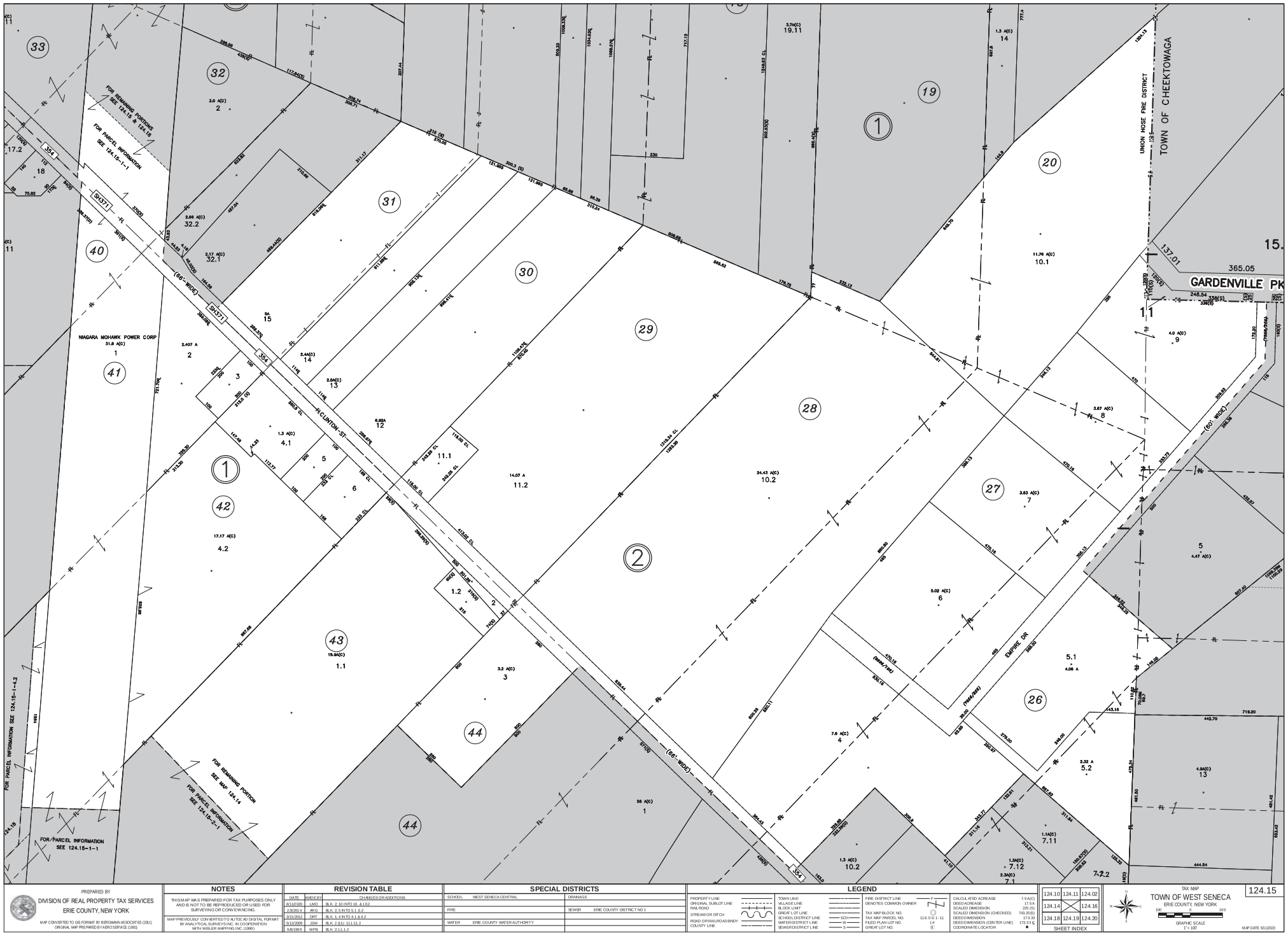
Date of Survey: 08/21/2018 Scale: 1" = 60' Project No.: 18J2-0854d

**Metes and Bounds Description**

**ALL THAT TRACT OR PARCEL OF LAND situate in the Town of West Seneca, County of New York, as part of lots no. 26 & 27 of the Ebenezer Lands, being bound and described as follows;**

**BEGINNING at a point on the northerly line of Clinton Street at its intersection with the centerline of the Gardenville Branch of the Penn Central Company Railroad;**

**THENCE northerly along said centerline of the Gardenville Branch of the Penn Central Company Railroad along a curve to the right, with a radius of 5729.65 feet, with an arc length of 600.26 feet;**
**THENCE N 40°32'07" E, a distance of 198.55 feet;**
**THENCE N 49°32'52" W, a distance of 57.83 feet;**
**THENCE S 40°45'03" W, a distance of 190.27 feet;**
**THENCE N 49°14'57" W, a distance of 24.00 feet;**
**THENCE N 40°45'03" E, a distance of 194.96 feet;**
**THENCE N 40°35'59" E, a distance of 197.03 feet;**
**THENCE S 49°24'01" E, a distance of 24.00 feet;**
**THENCE S 40°35'59" W, a distance of 191.79 feet;**
**THENCE S 49°32'52" E, a distance of 57.81 feet to the centerline of the Gardenville Branch of the Penn Central Company Railroad;**
**THENCE N 40°32'07" E, along the centerline of the Gardenville Branch of the Penn Central Company Railroad a distance of 452.12 feet;**
**THENCE N 49°05'14" W, a distance of 57.80 feet;**
**THENCE S 40°54'46" W, a distance of 97.06 feet;**
**THENCE N 49°18'58" W, a distance of 218.08 feet;**
**THENCE N 12°32'18" W, a distance of 21.39 feet;**
**THENCE N 03°49'06" E, a distance of 32.88 feet;**
**THENCE with a curve turning to the left with a radius of 121.02 feet and an arc length of 340.84 feet;**
**THENCE S 40°49'10" W, a distance of 341.36 feet;**
**THENCE N 48°23'36" W, a distance of 31.07 feet;**
**THENCE S 40°20'42" W, a distance of 60.37 feet;**
**THENCE S 49°14'40" E, a distance of 13.39 feet;**
**THENCE S 41°30'00" W, a distance of 63.84 feet;**
**THENCE with a curve turning to the right with a radius of 34.23 feet and an arc length of 59.96 feet;**
**THENCE S 39°19'18" W, a distance of 50.31 feet;**
**THENCE S 15°07'36" E, a distance of 14.65 feet;**
**THENCE S 24°42'29" E, a distance of 1.83 feet;**
**THENCE S 41°18'00" W, a distance of 37.56 feet;**
**THENCE S 41°05'11" W, a distance of 90.10 feet;**
**THENCE S 49°30'24" E, a distance of 23.31 feet;**
**THENCE with a curve turning to the right with a radius of 35.32 feet and an arc length of 54.51 feet;**
**THENCE S 47°29'38" E, a distance of 37.03 feet;**
**THENCE with a curve turning to the left with a radius of 9.15 feet and an arc length of 17.95 feet;**
**THENCE S 49°33'53" E, a distance of 185.62 feet;**
**THENCE S 40°37'00" W, a distance of 257.17 feet to the northerly line of Clinton Street;**
**THENCE S 46°06'48" E, along the northerly line of Clinton Street, a distance of 48.19 feet;**
**THENCE N 38°15'59" E, a distance of 144.52 feet;**
**THENCE S 51°53'32" E, a distance of 24.00 feet;**
**THENCE S 38°05'34" W, a distance of 147.01 feet to the northerly line of Clinton Street;**
**THENCE S 46°06'48" E, along the northerly line of Clinton Street, a distance of 85.03 feet, to the point of beginning containing 9.95 acres more or less**




PREPARED BY
DIVISION OF REAL PROPERTY TAX SERVICES
ERIE COUNTY, NEW YORK

MAP CONVERTED TO GIS FORMAT BY BERGMANN ASSOCIATES (2011)
ORIGINAL MAP PREPARED BY AERO SERVICE (1965)

## NOTES

THIS MAP WAS PREPARED FOR TAX PURPOSES ONLY AND IS NOT TO BE REPRODUCED OR USED FOR SURVEYING OR CONVEYANCING.

MAP PREVIOUSLY CONVERTED TO AUTOCAD DIGITAL FORMAT BY ANALYTICAL SURVEYS INC. IN COOPERATION WITH WEBLER MAPPING INC. (1999)

## REVISION TABLE

| DATE | MADE BY | CHANGES OR ADDITIONS |
|---|---|---|
| 6/11/2020 | LMO | BLK. 2, 10 INTO 10, & 1.0.2 |
| 2/9/2014 | REG | BLK. 2, 5 INTO 5.1, 5.2 |
| 3/21/2013 | DRT | BLK. 1, 4 INTO 4.1 & 4.2 |
| 5/12/2009 | JSM | BLK. 2.0.1- 11.1, 11.2 |
| 9/8/1999 | WPB | BLK. 2.1, 1, 1.2 |

## SPECIAL DISTRICTS

| | | | |
|---|---|---|---|
| SCHOOL | WEST SENECA CENTRAL | DRAINAGE | |
| FIRE | | SEWER | ERIE COUNTY DISTRICT NO 1 |
| WATER | ERIE COUNTY WATER AUTHORITY | | |

## LEGEND

PROPERTY LINE
ORIGINAL SUBLOT LINE
RAILROAD
STREAM OR DITCH
ROAD OR RAILROAD BNDY
COUNTY LINE
TOWN LINE
VILLAGE LINE
BLOCK LIMIT
GREAT LOT LINE
SCHOOL DISTRICT LINE
WATER DISTRICT LINE
SEWER DISTRICT LINE
FIRE DISTRICT LINE
DENOTES COMMON OWNER
TAX MAP BLOCK NO.
TAX MAP PARCEL NO.
FILED PLAN LOT NO.
GREAT LOT NO.
CALCULATED ACREAGE
DEED ACREAGE
SCALED DIMENSION
SCALED DIMENSION (CHECKED)
DEED DIMENSION
DEED DIMENSION (CENTER LINE)
COORDINATE LOCATOR

| | | |
|---|---|---|
| 124.10 | 124.11 | 124.02 |
| 124.14 | | 124.16 |
| 124.18 | 124.19 | 124.20 |

SHEET INDEX

TAX MAP
TOWN OF WEST SENECA
ERIE COUNTY, NEW YORK

GRAPHIC SCALE
1" = 100'

124.15

MAP DATE: 6/11/2020

# Erie County On-Line Mapping System
# Parcel Detail Report

Report generated:
10/14/2020 3:11:20 PM

Parcel Overview Map

Parcel Detail Map

**PIN:** 146800124150000201020O

**SBL:** 124.15-2-10.2

**Address:** 0

**Owner 1:**

**Owner 2:**

**Mailing Address:**

**City/Zip:**

**Municipality:** West Seneca

**Property Class:** 0

**Class Description:** -

**Front:** 0

**Depth:** 0

**Deed Roll:** 0

**Deed Book:**

**Deed Page:**

**Deed Date:**

**Acreage:** 24.42991771

**Total Assessment:** $0

**Land Assessment:** $0

**County Taxes:** $0

**Town Taxes:** $0

**School Taxes:** $0

**Village Taxes:** $0

**School District:**

**Year Built:** 0

**Sqft Living Area:** 0

**Condition:** 0

**Heating:** 0

**Basement:** 0

**Fireplace:** 0

**Beds:** 0

**Baths:** 0