



INVENTUM ENGINEERING, PC

**RIVERVIEW INNOVATION & TECHNOLOGY CAMPUS, INC.
ERIE COUNTY
TONAWANDA, NEW YORK**

COAL AND COKE EXCAVATION WORK PLAN

NYSDEC Site Number: C915353

Prepared for:

Riverview Innovation & Technology Campus, Inc.
333 Ganson Street
Buffalo, New York

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July 2020

Revisions to Final Approved Excavation Work Plan:

Revision No.	Date Submitted	Summary of Revision	NYSDEC Approval Date

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List of Acronyms

BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
CAMP	Community Air Monitoring Plan
C/D	Construction and Demolition
CFR	Code of Federal Regulation
CLP	Contract Laboratory Program
COC	Certificate of Completion
DER	Division of Environmental Remediation
ECL	Environmental Conservation Law
ELAP	Environmental Laboratory Approval Program
ERP	Environmental Restoration Program
EWP	Excavation Work Plan
HASP	Health and Safety Plan
IC	Institutional Control
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYCRR	New York Codes, Rules and Regulations
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PID	Photoionization Detector
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
RP	Remedial Party
SCG	Standards, Criteria and Guidelines
SCO	Soil Cleanup Objective
SOP	Standard Operating Procedures
SOW	Statement of Work
SPDES	State Pollutant Discharge Elimination System
TAL	Target Analyte List
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank



1.0 INTRODUCTION

1.1 General

This Coal and Coke Excavation Work Plan (EWP) is a required element for the excavation and removal of coal and coke from the Riverview Innovation & Technology Campus Site located in Tonawanda, New York (hereinafter referred to as the “Site”). See Figure 1. The Site is currently in the New York State (NYS) Brownfield Cleanup Program (BCP) Site No. C915353 which is administered by New York State Department of Environmental Conservation (NYSDEC).

Riverview Innovation & Technology Campus, Inc. (Riverview) entered into a Brownfield Cleanup Agreement (BCA) on February 14, 2020 with the NYSDEC to investigate and remediate the site. A figure showing the Site location and boundaries of this Site is provided in Figure 1. For reference, the Area of Investigation (AOIs) on the property are defined on Figure 2. Prior to Riverview’s acquisition of the Site, Powers Coal & Coke of Ohio (Powers) was awarded the right to remove all coal and coke on the property by the U.S. Bankruptcy Court.

This EWP was prepared to provide the framework to manage the remaining removal actions of Powers. This EWP is not intended, to address the excavation of potentially contaminated materials. It is intended to remove raw materials and products, coal, and coke (Figure 3). Powers will notify the Site owner or their representative if potentially contaminated materials are encountered. The Site owner or their representative will provide the NYSDEC with at least 15 days prior notice in the unlikely event that Powers desires to move the identified potentially contaminated materials.

This EWP was prepared by Inventum Engineering, P.C., on behalf of Riverview Innovation & Technology Campus, Inc. and Powers Coal & Coke, in accordance with the requirements of the NYSDEC’s DER-10 (“Technical Guidance for Site Investigation and Remediation”), dated May 2010, and the guidelines provided by the NYSDEC. This EWP addresses the means for the removal of coal and coke from the property. It does not address the means of implementing the remedial actions for the site.



1.2 Revisions

Revisions to this plan will be proposed in writing to the NYSDEC's project manager. Revisions will be necessary upon, but not limited to, the following occurring: any removal of contaminated sediment or soil, or other significant change to the Site conditions.

1.3 Notifications

Notifications will be submitted by the Site owner to the NYSDEC, as needed, in accordance with NYSDEC's DER – 10 for the following reasons:

- 15-day advance notice of any proposed ground-intrusive activity pursuant to the Excavation Work Plan.
- 15-day advance notice of any proposed movement of potentially contaminated materials.
- Notice within 48-hours of any damage or defect to the foundation, structures that has the potential to affect the environment, and likewise, any action to be taken to mitigate the damage or defect.
- Verbal notice by noon of the following day of any emergency, such as a fire; flood; or earthquake that has the potential to reduce the effectiveness of surface water controls in place at the site, with written confirmation within 7 days that includes a summary of actions taken, or to be taken, and the potential impact to the environment and the public.

Follow-up status reports on actions taken to respond to any emergency event requiring ongoing responsive action submitted to the NYSDEC within 45 days describing and documenting actions taken.

- Notifications of all spills and releases of petroleum products in accordance with the SWPPP. Review SWPP for completed details, but the following is provided for reference:
 - All petroleum spills that occur within New York State (NYS) must be reported to the NYS Spill Hotline (1-800-457-7362) within 2 hours of discovery, except spills which meet all of the following criteria:
 - The quantity is known to be less than 5 gallons; and
 - The spill is contained and under the control of the spiller; and
 - The spill has not and will not reach the State's water or any land; and
 - The spill is cleaned up within 2 hours of discovery.
- A spill is considered to have not impacted land if it occurs on a paved surface such as asphalt or concrete. A spill in the coal yard, coke yard, any soil surfaces or any gravel parking lot is



considered to have impacted land and is reportable. Any spills or releases that do not require reporting to the NYS Spill Hotline will be reported, in writing, to the DEC BCP Project Manager within 48-hours of discovery.

- In the event of a potential or actual release from the property beyond Outfall 004, the following shall be called in the order given after calling the NYS Spill Hotline (1-800-457-7362):
 - National Response Center - 800.424.8802
 - U.S. Coast Guard - 716.846.4168
 - U.S. EPA - 732.548.8730
 - NYSDEC (Region 9) - 716.851.7220
 - NYSDEC (Albany) - 800.457.7362
- In the event of a spill that generates material from on-Site cleanup efforts (e.g., sorbent material, impacted soil, etc.), the Project Manager will confer with Inventum and the DEC regarding the nature of the waste in order to determine the proper reuse, recycling and/or disposal method.



Table 1 includes contact information for the above notification. The information on this table will be updated as necessary to provide accurate contact information.

Table 1: Notifications*

Name	Contact Information
Ben McPherson, NYSDEC Project Manager	(716) 851-7220 benjamin.mcpherson@dec.ny.gov
Chad Staniszewski, NYSDEC Regional Engineer	(716) 851-7220 chad.staniszewski@dec.ny.gov
Peter Reuben, NYSDEC Petroleum and Chemical Bulk Storage	(716) 851-7220 peter.reuben@dec.ny.gov
Paul Morrow, Pre-treatment Coordinator, Town of Tonawanda **	(716) 693-4900 ext. 4550 pmorrow@tonawanda.ny.us

* Note: Notifications are subject to change and will be updated, as necessary.

** **Paul Morrow to be notified of any release with the potential to reach a Town of Tonawanda sanitary or storm sewer.**

Each notification of a variation from this EWP will include:

- A detailed description of the work to be performed, including the location and areal extent of excavation, plans/drawings for site re-grading, intrusive elements or utilities to be installed below ground surface, estimated volumes of potentially contaminated materials (defined in Section 2) to be excavated, and any work that may impact an engineering control;
- A summary of environmental conditions anticipated to be encountered in the work areas, including the nature and concentration levels of contaminants of concern, potential presence of grossly contaminated media (defined in Section 2) and plans for any pre-construction sampling.
- A schedule for the work, detailing the start and completion of all intrusive work.
- A summary of the applicable components of this EWP.
- A statement that the work will be performed in compliance with this EWP and 29 CFR 1910.120 (if applicable).
- A copy of the contractor's health and safety plan (HASP), in electronic format (if applicable).
- Identification of disposal facilities for potential waste streams (if applicable); and
- Identification of sources of any anticipated backfill, along with all required chemical testing results



2. SOIL SCREENING METHODS

The removal of coal and coke is limited to those products. Visual and olfactory screening of the materials being managed will be performed by the equipment operator and the RITC representatives. Any material producing a noticeable liquid like behavior, or an odor detectable more than 4 feet away shall be reported to the onsite RITC Staff:

- a. Matt Reardon - 716.570.0717
- b. Pat Cahill - 716.860.5994
- c. Keith Adderley - 716.335.2045
- d. John Black - 571.217.6761 (If Matt, Pat, or Keith are not available)

Coal, coke and reject materials will be segregated. Coal and coke shall be stockpiled, and stockpiles shall be labeled with signs to guide the loading of materials for offsite sale. Reject materials screened from the coal and coke shall be returned to the excavations, as shown on the excavation sequence, unless they are potentially grossly contaminated. For purposes of this EWP potential gross contamination shall mean:

1. Free flowing non-aqueous liquids (oil or tar).
2. Materials identified by the owner's onsite representative or the NYSDEC.

Potentially grossly contaminated materials have been identified previously in the area surrounded by the concrete barriers, known as "Tar Seep No. 2". Potentially grossly contaminated materials shall be placed in the stockpile area shown on Figure 4 after recoverable coal and coke has been removed from the former Thaw Shed (Building No. 65). The potentially grossly contaminated soils shall be placed on two layers of 6 mil (minimum) polyethylene sheeting and shall not touch the sides of the Thaw Shed.

For purposes of this EWP potentially contaminated materials shall mean:

1. Any bulk materials encountered other than coal or coke that do not exhibit the characteristics of grossly contaminated material; or
2. Materials identified by the owner's onsite representative of the NYSDEC.

Off-site disposal of site materials will not be conducted under this EWP. Trash and potential spill cleanup materials will be disposed offsite in accordance with all applicable requirements in facilities permitted for those materials. On-site placement/reuse of reject material is described in Section 3.5 of this EWP.



3. STAGING METHODS

Coal and coke shall be staged for shipping within the limits of the coal and coke yards. Each pile shall be labeled with a sign to differentiate raw and product materials from reject materials.

Reject materials stockpiles that cannot be placed in the designated fill areas within 7 days shall be continuously encircled with silt fence or silt socks. Hay bales, filter socks, or silt fence shall be used and maintained around all catch basins. No stockpiles shall be placed on the south ditch access road, the north ditch access road, or the coke yard access road. No stockpiles shall be placed such that runoff can directly discharge into the Sedimentation Pools, the Stormwater Retention Basin, or the North or south ditches.

Potentially grossly contaminated materials shall be stockpiled in the designated area (Building 65, see Section 2.0, Figure 5).

Stockpiles will be inspected by the owner's onsite representative at a minimum frequency of once each week and after every storm event. Results of inspections will be recorded in a dedicated logbook and maintained at the site and available for inspection by the NYSDEC. Logbook notes will be provided to NYSDEC after the completion of the coal and coke recovery work.

3.1 MATERIALS EXCAVATION AND LOAD-OUT

Only coal and coke for reuse and sale shall be loaded and transported from the property. The excavation of coal and coke will be limited to the following areas (Figures 2 and 3):

- AOI – 2 Eastern End of Production Area;
- AOI - 4 Coke Yard; and
- AOI - 5 – Coal Yard.

The excavations are limited to coal and coke materials. Natural soils (unless intermixed with coal and coke) shall not be excavated. The base of the excavation shall not penetrate the clay underlying the site. All excavations shall proceed in a direction to allow surface water to flow to the engineering controls at the site (Figures 4, 5 and 6). No excavation shall proceed that would allow surface water to flow from the site uncontrolled.



Specific limitations include:

- AOI - 2 - Coke recovery in this area (Former large coke storage area) shall involve the following sequence:
 - Excavation of the coke yard should progress from the north east to the southwest. Surface water flow should be directed to the northern lateral at grid AG19. The excavation sequence may be adjusted to prevent creation of a ponding area in the AOI.
- AOI – 4 – Coke recovery in this area shall involve the following sequence;
 - Remove the coal and coke from the eastern (approximately one-half) of the Thaw Shed (Building 65, Figure 4). This storage area will be the staging area for any unknown or unexpected contaminated media encountered). Prior to placement of any material in the storage area within the Thaw Shed, PCC or their contractor(s) will notify the Riverview onsite representative, see Section 3.8 who will provide and direct the placement of containment materials or containers.
 - Excavation of the coke yard should progress from the Sedimentation Pool #003 (Figure 3, west end of Figure 4) to the east. Flow should be directed to the East Coke Yard Ditch. All reject materials will be placed progressively from the Southwest corner to the northeast without obstructing flow to the East Coke Yard Ditch and without leaving a low point for stormwater accumulation.
 - Excavation of the coke in the former rail loading yard (Grids Q12 to AK13, Figures 3 and 4) should progress from the east to the west with surface water directed to the east coke yard and the East Coke Yard Ditch). All reject materials will be placed progressively from the Northwest corner to the southeast without obstructing flow to the East Coke Yard Ditch and without leaving a low point for stormwater accumulation.
- AOI – 5 - Coal recovery in this area shall involve the following sequence.
 - Test the stockpile along the North Ditch in the Coal Yard (Grids R21 to U22, Figure 4) to determine if it is salable (Btu Content). If salable content, screen, and place reject materials in the western end of the North Coal Yard.



- Excavate the coal from the North Coal Yard creating a divide along the center near the drainage ditch (T22 to P26) allowing flow to the South Coal Yard (P-25 and P26, Figure 4). As the excavations progress to the west and east, reject materials will be placed along the northern end of the excavations without obstructing flow to the surface water management system. No isolated storm water accumulation areas are to be created.
- Test the stockpile along the South Ditch in the Coal Yard (Grids N27 to AH28, Figure 4). If salable content, screen, and place reject materials in the excavation at the western end of the South Coal Yard.
- Excavate the coal from the South Coal Yard from the Northwest to the Southeast. As the excavations progress to the east, reject materials will be placed along the western end of the excavations without obstructing flow to the Catch Basins along the South Ditch Access Road without leaving a low point for stormwater accumulation.
- Gondola Cars – Gondola Cars filled with coal or coke may be emptied if they are free and clear of any overhead structures or piping. Gondola Cars under structures or piping will be opened by Riverview’s contractors to allow removal of the coal or coke in accordance with the approved Site Management Interim Site Management Work Plan (Inventum, 2020).

Loaded vehicles leaving the site will be appropriately cleaned and placarded in accordance with appropriate Federal, State, local, and NYSDOT requirements (and all other applicable transportation requirements).

A truck wash will be operated on-site at the location shown on Figure 5, as appropriate. Powers or the transportation staff will be responsible for ensuring that all outbound trucks will be washed at the truck wash before leaving the site until the activities performed under this section are complete. Truck wash waters will be collected and disposed in the town outfall in accordance with the Town of Tonawanda Permit No. 331.

Locations where vehicles enter or exit the site shall be inspected daily for evidence of off-site material tracking (soil, coal, or coke).



Powers or its contractor will be responsible for ensuring that all egress points for truck and equipment transport from the site are clean of dirt and other materials derived from the site during intrusive excavation activities. Cleaning of the access road or River Road will be performed as needed to maintain a clean condition with respect to site-derived materials.

3.2 MATERIALS TRANSPORT OFF-SITE

Egress points for truck and equipment transport from the site will be kept clean of dirt and other materials during coal and coke removal operations.

Queuing of trucks will be performed on-site to minimize off-site disturbance. Off-site queuing will be prohibited. A clear path for other vehicular traffic shall always be maintained on the access road .

3.4 MATERIALS DISPOSAL OFF-SITE

No excavated materials shall be hauled offsite for disposal under this activity. Only coal and coke suitable for its intended uses shall leave the property. The only materials that shall be disposed offsite under this activity shall be:

- Wash water in accordance with Permit No. 331 with the Town of Tonawanda.
- General trash; and
- Spill cleanup materials (if needed).

Note: All spills shall be reported to the DEC in accordance with the SWPPP and all disposal of spill cleanup materials shall be properly documented.

3.5 MATERIALS REUSE ON-SITE

The coal and coke removal program is being conducted in advance of the remedial investigation, alternatives analysis development, and remedial action. All materials that are not suitable for sale or other approved reuse will be placed in the excavations within the areas from which they were excavated. The testing and determination of the long-term management of these materials will be done during the remedial investigation and alternatives analysis. The owner's onsite representative shall document the location and



volume of all materials placed back in the excavations in the dedicated logbook.

3.6 FLUIDS MANAGEMENT

All liquids to be removed from the site, including but not limited to, excavation dewatering and equipment decontamination waters will be handled, transported, and disposed in accordance with applicable local, State, and Federal regulations. Dewatering fluids will not be recharged back to the land surface or subsurface of the site and will be managed in accordance with the Surface Water Pollution Prevention Plan (SWPPP).

3.7 STORMWATER POLLUTION PREVENTION

The management of stormwater throughout the coal and coke excavation program shall, at a minimum, comply with the SWPPP (Inventum, 2020).

Stone check dams, silt fence, and hay bale checks will be installed and inspected once a week and after every storm event. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by the NYSDEC. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the stone check dams, silt fence, and hay bale check barriers functional.

All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials.

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

Erosion and sediment control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.



3.8 EXCAVATION CONTINGENCY PLAN

If underground tanks, tar, underground pipes or utilities, or other previously unidentified contaminant sources are found during coal and coke recovery excavation activities will be suspended until appropriate equipment is mobilized to address the condition.

Identification of unknown or unexpected contaminated media identified by screening during coal and coke recovery site work will be promptly communicated by phone to Riverview's Project Superintendent, Project Manager and Engineering Manager:

Name	Contact Information
Matt Reardon, Project Superintendent	(716) 570-0717 mreardon@oscinc.com
Al Trpevski, Project Manager	(716) 818-3390 atrpevski@oscinc.com
John Black, Engineering Manager	(571) 217-6761 john.black@inventumeng.com

Riverview will inspect the suspect material and if it is unexpected contaminated media will make a determination of the contingency plan. Riverview will notify the NYSDEC before taking non-emergency actions to address the suspect material.

In the event of a release from equipment or containers, reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline.

3.9 COMMUNITY AIR MONITORING PLAN

The excavation of the coal and coke is to exclude any deliberate excavation of potentially contaminated materials. The community air monitoring plan for these activities will be fulfilled by the owner's perimeter monitoring program under the BCP.

A figure showing the location of air sampling stations based on generally prevailing wind conditions is shown in Figure 3 of the Interim Site Management Work Plan.



3.10 ODOR CONTROL PLAN

The odor control plan is to control emissions of nuisance odors to the site, no nuisance odors shall migrate off-site. Specific odor control methods to be used on a routine basis will include covering odor producing materials with coal, coke, or polyethylene sheeting. If nuisance odors are identified at the site boundary, or if odor complaints are received, work will be halted, and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. NYSDEC and NYSDOH will be notified of all off-site odor events and of any other complaints about the project. Implementation of all odor controls, including halting work, is the responsibility of the owners on-site representative.

All necessary means will be employed to prevent off-site nuisances. If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include: (a) direct load-out of coal and coke to trucks for off-site transportation; (b) use of chemical odorants in spray or misting systems; and, (c) use of staff to monitor odors in surrounding neighborhoods.

If nuisance odors develop during intrusive work that cannot be corrected, or where the control of nuisance odors cannot otherwise be achieved due to on-site conditions, the excavation and handling of coal and coke in the area will be suspended.

3.11 DUST CONTROL PLAN

A dust suppression plan that addresses dust management during intrusive on-site work will include, at a minimum, the items listed below:

- Dust suppression will be achieved through the use of a dedicated on-site water truck for road wetting. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including excavations and stockpiles.
- Gravel and pavement will be used on roadways west of the coal and coke yards to provide a clean and dust-free road surface.
- Roads within the coal and coke yards will be limited in total area to minimize the area required for water truck sprinkling.



REFERENCES

1. Inventum, 2020a, Storm Water Pollution Prevention Plan (SWPPP), Prepared for Riverview Innovation & Technology Campus, Inc., Approved June 1.
2. Inventum, 2020b, Interim Site Management Work Plan, Prepared for Riverview Innovation & Technology Campus, Inc., April. Stage 2 Approved June 5, 2020.



FIGURES



FIGURES





D



- Notes:
 1. Erie County, New York, Google Maps, www.google.com/maps
 2. Boundaries as shown are approximate.

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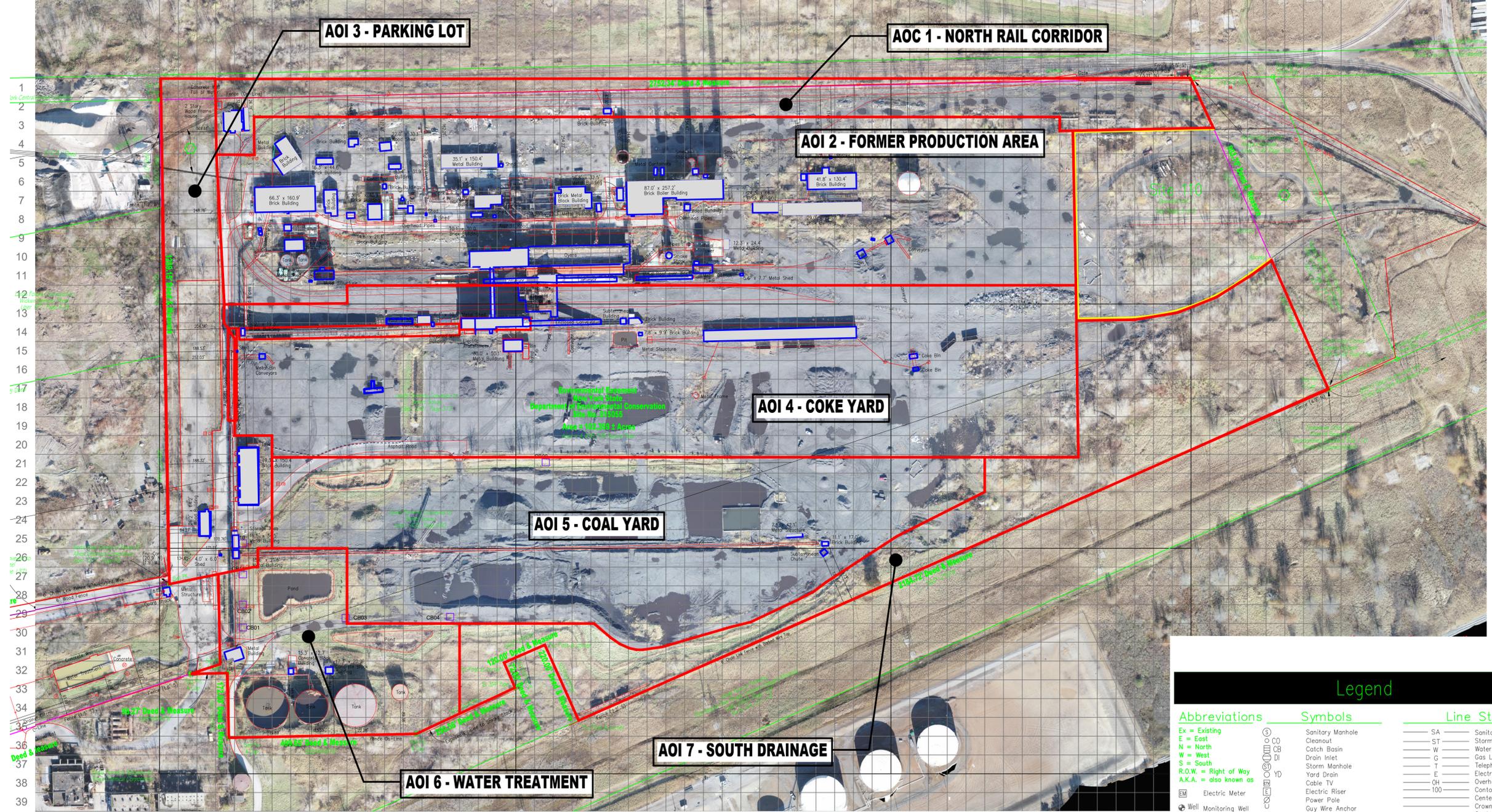
SITE LOCATION MAP
RIVERVIEW INNOVATION & TECHNOLOGY
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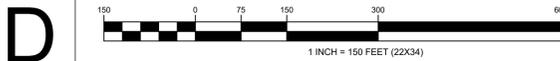


FIGURE 1
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Legend		
Abbreviations	Symbols	Line Styles
<p>Ex = Existing E = East N = North W = West S = South R.O.W. = Right of Way A.K.A. = also known as</p>	<p> Sanitary Manhole Cleanout Catch Basin Drain Inlet Storm Manhole Yard Drain Cable TV Electric Riser Power Pole Guy Wire Anchor Telephone Riser Fire Hydrant Water Valve Water Service Valve Gas Line Marker Gas Valve Gas Service Valve Sign Mailbox Metal Post Concrete R.O.W. Monument Light Standard Telephone Manhole Bollard </p>	<p> Sanitary Sewer Storm Sewer Water Line Gas Line Telephone Wires or Cables Electric Wires or Cables Overhead Wires Contour Line Centerline of Ditch Crown of Pavement Centerline of Road Right of Way Line Building Setback Line Easement Line Property Line Underground Electric Paint Stripe Former Boundary Parcel Line UCTV UFO Railroad Tracks State Superfund Site </p>



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AREAS OF INVESTIGATION (AOI) BOUNDARIES
BROWNFIELD CLEANUP PROGRAM SITE
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FIGURE 2
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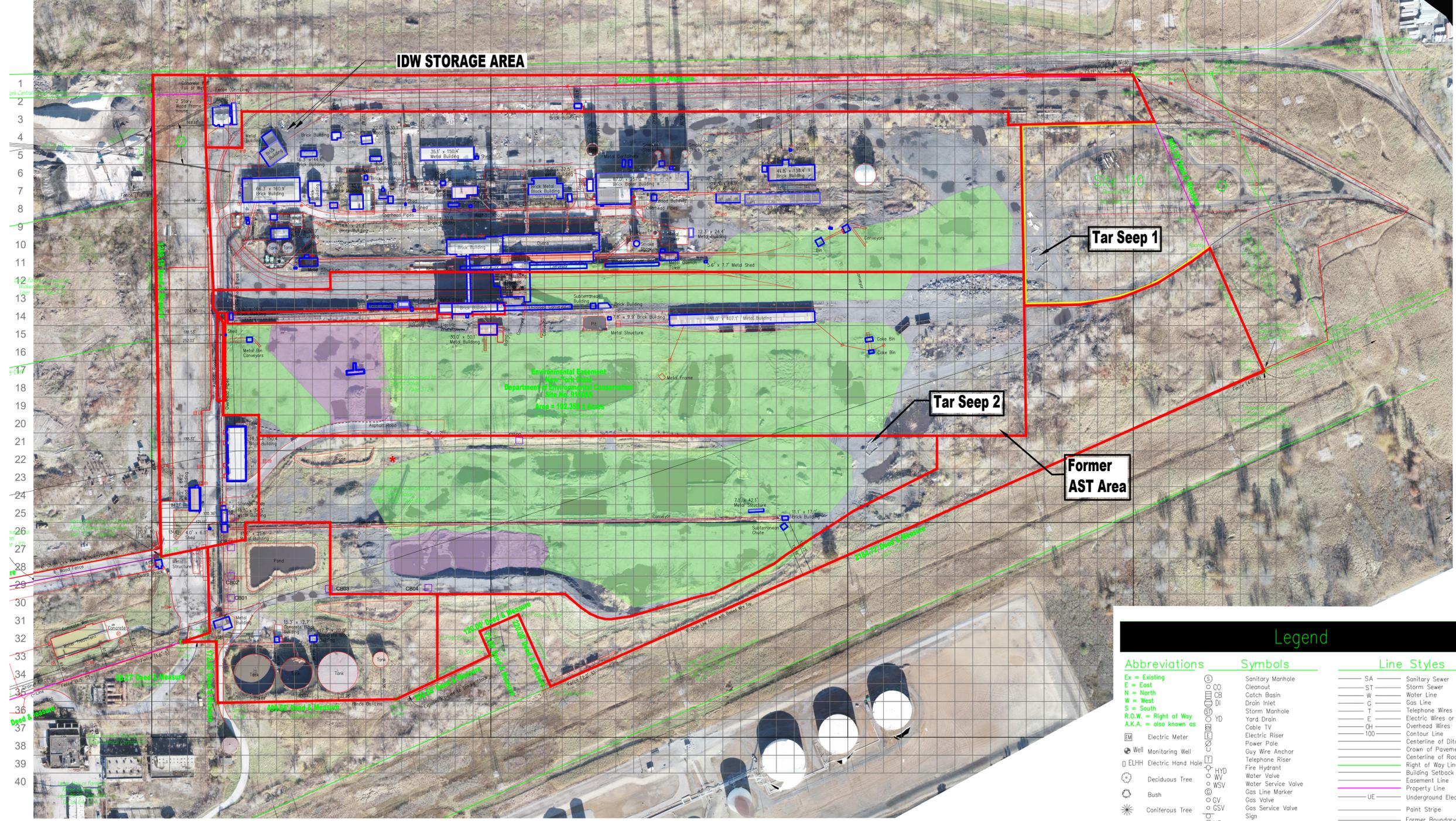
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IDW STORAGE AREA

Tar Seep 1

Tar Seep 2

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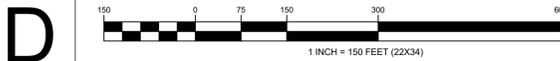
Environmental Easement
 New York State
 Department of Environmental Conservation
 Site No. 915055
 Area = 102.359 ± Acres

Legend

Abbreviations	Symbols	Line Styles
Ex = Existing	Sanitary Manhole	SA Sanitary Sewer
E = East	Cleanout	ST Storm Sewer
N = North	Catch Basin	W Water Line
W = West	Drain Inlet	G Gas Line
S = South	Storm Manhole	T Telephone Wires or Cables
R.O.W. = Right of Way	Yard Drain	E Electric Wires or Cables
A.K.A. = also known as	Cable TV	OH Overhead Wires
	Electric Meter	100 Contour Line
	Well Monitoring Well	Centerline of Ditch
	ELHH Electric Hand Hole	Centerline of Road
	Deciduous Tree	Right of Way Line
	Bush	Building Setback Line
	Coniferous Tree	Easement Line
	Electric Manhole	Property Line
		UE Underground Electric
		Point Stripe
		Former Boundary Parcel Lin
		UCTV Underground Cable TV
		UFO Underground Fiber Optic
		Railroad Tracks
		State Superfund Site

AREA PREVIOUSLY EXCAVATED TO CLAY

AREA TO BE EXCAVATED TO CLAY



D

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 RIVERVIEW INNOVATION & TECHNOLOGY
 CAMPUS, INC.
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 TONAWANDA, NEW YORK 14150
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FIGURE 3
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A B C D E F G H I J K L M N O P Q R S T U V W



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FIGURE 4

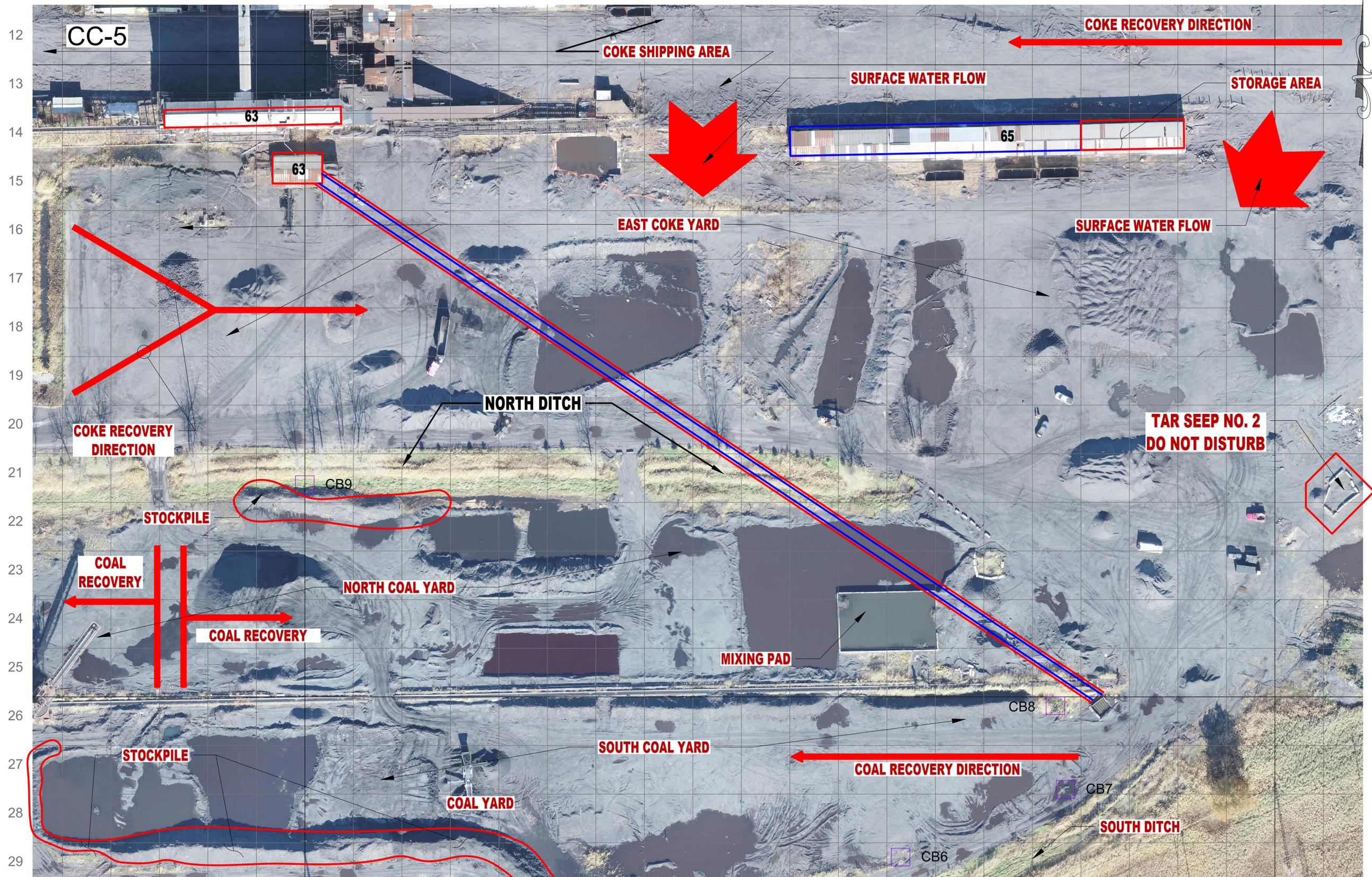
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NOTE: SEWER LOCATIONS ARE APPROXIMATE.

N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO N



NOTE: SEWER LOCATIONS ARE APPROXIMATE.

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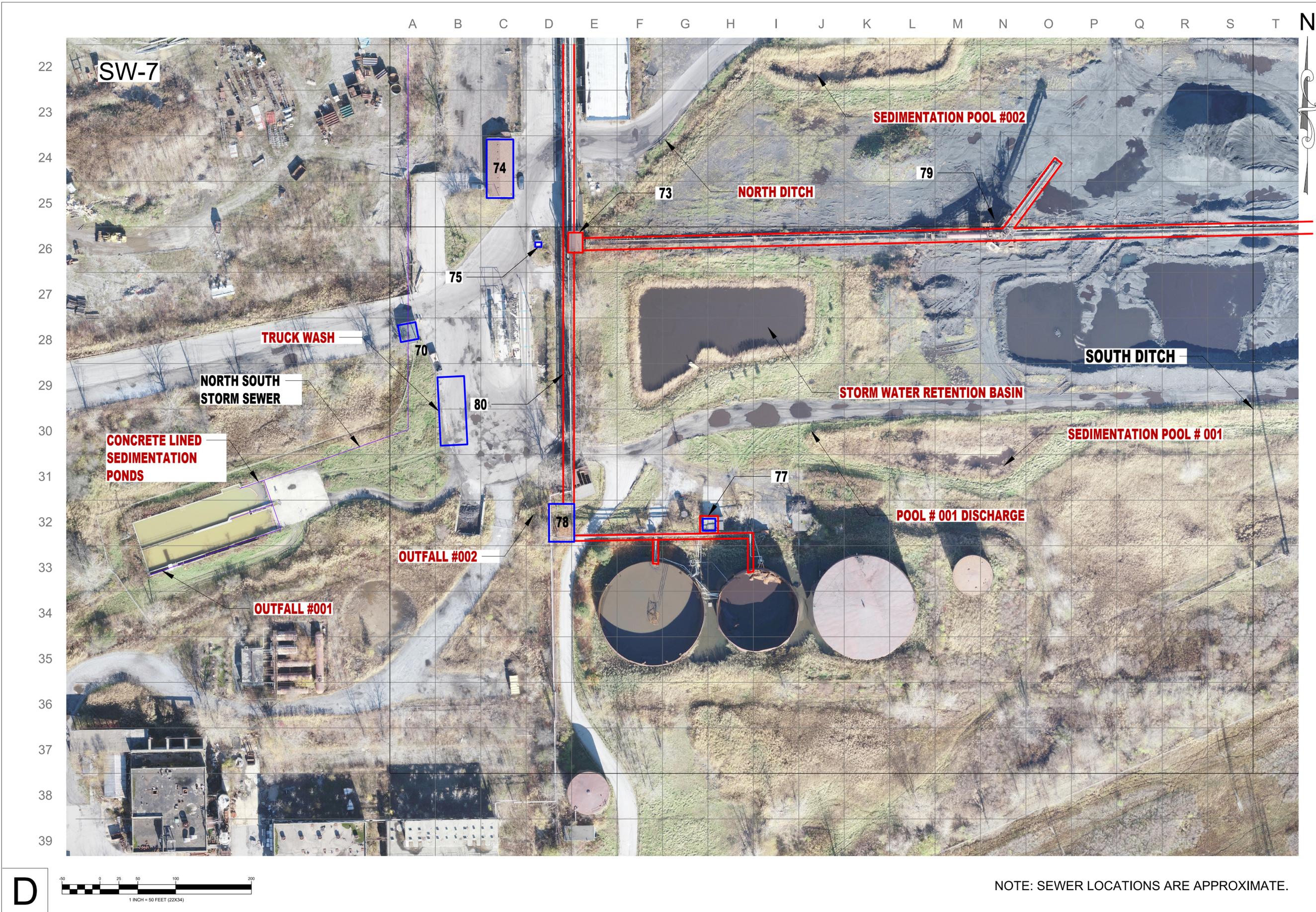
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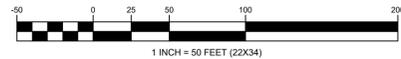
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FIGURE 5
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FIGURE 6 DRAWING NUMBER 107E		