



December 23, 2020

To: Benjamin McPherson (NYSDEC)

From: Todd Waldrop (Inventum)

CC: Jon Williams (Riverview); John Yensan (OSC); Craig Slater (CS Law); John Black, P.E., and James Edwards (Inventum)

RE: Surface Water System Maintenance Phase 3 Work Plan
Riverview Innovation & Technology Campus, Inc.
Brownfield Cleanup Program Site No. C915353
Town of Tonawanda, New York

Inventum Engineering, P.C. (Engineering), on behalf of Riverview Innovation & Technology Campus, Inc. (Riverview), is submitting this proposed IRM Work Plan in support of the Surface Water Pollution Prevention Plan (SWPPP) to the New York State Department of Environmental Conservation (NYSDEC) for the Riverview Brownfield Cleanup Program (BCP) Site (#C915353) located at 3875 River Road, Tonawanda, New York.

Background and Purpose

The samples for Outfall #001 (Figure 1 and 2) have contained concentrations of cyanide that have exceeded the SWPPP Action Level of 0.03 mg/L over the past three sample events despite numerous corrective actions to improve surface water quality. The partial data report for the December sample is provided in Appendix A. The detected concentrations are consistent with the data collected in December 2019 (0.05 mg/L) and January 2020 (0.056mg/L; dup. 0.052 mg/L), by the US Environmental Protection Agency (US EPA) but were not flagged as because the Tonawanda Coke Corporation (TCC) discharge permit limit was 0.1 mg/L. As a point of reference, the data collected by Riverview are all below the former TCC Permit limit.

The box culvert cleaning is ongoing and the impact of that effort on water quality will not be measurable until February 2021.

While the box culvert and north storm sewer IRMs are being implemented, Riverview is proposing to implement additional interim remedial measures and sampling.

Stormwater Improvement Activities

Although the USEPA had the authority for stormwater management through May 2020, Riverview was actively improving conditions upgradient of the Outfalls prior to that point (Figures 2 through 7). Riverview conducted a stormwater inspection soon after the purchase was approved. After the sale

was completed, Riverview initiated activities to improve the management of stormwater on the property:

- The Mansion Sump was nearly full of sediment. The sediment was removed from the sump to improve retention and limit the potential for sediment transport to the Concrete-lined Settling Ponds;
- A boom was installed across the discharge from the Mansion Sump to limit the movement of lighter than water biological growth;
- Stone check dams were constructed across several low areas along the South Ditch to redirect flow to the stormwater collection system;
- The eastern end of the South Ditch was dredged to remove coal fines;
- Drums and containers were moved away from stormwater inlets;
- Booms were placed around catch basins and inlets and the stormwater inlet at the warehouse was cleared of soil;
- A pump and aeration nozzle were installed to recirculate flow from the south settling pond to the north settling pond, increasing dissolved oxygen and average retention time;
- The iron oxide pile was covered to eliminate contact with precipitation and associated runoff,
- The stockpiles of soil left on the property by TCC and the US EPA were covered to eliminate contact and associated runoff, and
- The coal yard was dewatered and the south yard regraded to eliminate the impoundment.

Typical photographs of some of the stormwater improvement IRMs are presented below.



Mansion Sump at Time of Transfer to Riverview, Prior to Cleaning
January 2020





East End of South Drainage, with Check Dams
August 2020



Aeration System – Settling Ponds
August 2020





Iron Oxide Piles Protected from Weather
October 2020



Soil Piles Left by Others – Protected from Weather
October 2020





Box Culvert Cleaning – East End
December 2020



Regraded South Coal Yard and South Ditch Road Improvements
December 2020



In addition, the Phase 2 surface water IRM is underway, removing years of accumulated sediment in the box culvert and sealing laterals that discharge to the system. Nearly 55 feet of the 2000-foot-long system have been cleaned and 11 laterals have been sealed. The work should be completed, weather permitting, by late February.

Scope of Work

The exceedance of an action level prompts a response from Riverview. Riverview immediately collected a duplicate sample to confirm the result, an appropriate first response. The duplicate confirmed the cyanide excursion, but the ammonia and mercury data have not been confirmed to date.

The Phase 2 IRM is ongoing and may resolve the issue, but that work will take an additional 4 to 8 weeks to complete. In addition to that ongoing work, the following will be implemented:

- Filtration of the sedimentation pond discharge prior to Outfall #001;
- Additional sampling to identify the current distribution of ammonia, cyanide, and mercury at the Mansion Sump, at Outfall #001 and at Outfall #004; and
- Additional parameters for the monthly samples at Outfall #001 and Outfall #004.

Filtration

Filtration of the discharge will remove fine particulates and associated compounds. The removal of these particulates is to be achieved by filtering flow from the South Sedimentation Pond, through a series of bag filters.

The pump will be set along the south wall of the south settling basin (See Photograph below and Figure1). This location will allow collection of water before it reaches the final overflow weir (see Figure), but away from the aeration pump intake, which will continue to operate.





Pump Location
December 2020

(Note: The Northeast corner of the sample shed is visible in the upper left of the photograph)

The pumping rate has been selected based on the average flow measured since November 1, 2020 (Table F-1). The average flow rate in November was 28.4 GPM and the average in December (to date) is 38.45 GPM. Pumping in excess of the average rate will create the storage volume required to mitigate peak flows through the system. It is important to monitor the pond levels as the pump will create storage volume, but also can dewater the pond relatively quickly. Within 20 minutes of pump operation at 77 GPM, all flow was through the bag filters, the pond level was below the lowest point of the weir system.

The pump will run continuously unless the south sedimentation pond level drops to more than 48-inches below the weir. Floats that turn the pumps on and off will be useful to protect the ponds and pump, but for sustained operations, the following flow rates are proposed:

Pond Level (Depth Below Final Overflow Weir)¹ (Inches)	Pumping Rate (GPM)
0 to 12	75
12 to 24	45
>24	30
>48	0

The water surface elevation will be measured from the bottom of the v-notched weir twice per day, morning and at end of shift.

Dewatering of the pond would reduce retention time and could potentially negatively affect the primary treatment function of the pond. The pumping system at 75 GPM would be capable of dewatering the South pond in 5 days if the average December flow is maintained; 4 days of the cold temperatures return the flow rates to November flow volumes. At 50 percent capacity, i.e., water level more than 48-inches below the final overflow weir, nearly two days of desired retention time would be eliminated. The aeration pump provides that retention, but lower than 40-inches below the top of weir is undesirable.

The primary bag filter will be a 25-micron filter, followed by the secondary filter of 10 microns. This system will allow removal of the majority of the suspended solids from the discharge. The filters will be monitored and replaced as required to prevent excess pressure against the pump and potential failure of the filters. The spent filters will be drummed, and a representative sample will be collected to determine the appropriate means of disposal.

¹ Measured from the bottom of the V-notch.



Primary – 25 Micron Bag Filter
December 2020



Secondary – 10 Micron Bag Filter
December 2020



Filter Discharge – Upstream of Flume and Flow Meter
December 2020

Monitoring

The monitoring program will be adjusted to allow an evaluation of the progress of the multiple ongoing IRMs and the influence of the weather. The sampling program will be adapted as follows:

1. Tuesday December 22, 2020 - Water

- Outfall #001, Mansion Sump and Outfall #004
- Mercury using EPA Method 7470A (Low Level)
- Cyanide; Total, Filtered, Free
- Ammonia

2. Tuesday December 29, 2020 - Water

- Before and After Filters, Outfall #001
- Mercury using EPA Method 7470A (Low Level)
- Cyanide; Total, Filtered, Free
- Ammonia

3. Monthly Sampling – January to March - Water – In addition to current scheduled analyses (as needed)

- Outfall #001 and Outfall #004
 - Mercury using EPA Method 7470A (Low Level)
 - Cyanide
 - Ammonia

4. Monitoring – Daily – January to March

- pH
- Temperature
- Flow at Outfall #001 (will be pump discharge)
- Water elevation (morning and end of workday)
- Notations of related Surface Water IRM Activities
- Notation of Observations

Reporting

The daily notations will be compiled and submitted to the NYSDEC along with the analytical data in the monthly Self-Monitoring Report (SMR). A weekly e-mail update will be provided to DEC on the trailing Monday. As the data for the bag filters become available, that data along with the proposed disposition will be provide to the NYSDEC for review and approval.

Tables

Outfall 001										Lab Project IDs: 205857		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample # SW-001-12102020		
		Monthly Average	Daily Maximum							10-Dec-20		
										Measurement	Laboratory Qualifier/Comment	Units
Flow	NA	monitor	monitor	-	-	MGD	Continuous	Recorder	-			MGD
Temperature	NA	-	102	-	-	°F	Monthly	Grab	-			°F
Solids, Total Suspended	NA	-	50	-	-	mg/L	Monthly	24-hr. comp.	1			mg/L
Oil & Grease	NA	-	15	-	-	mg/L	Monthly	Grab	-			mg/L
Mercury, Total	NA	-	50	-	-	ng/L	Quarterly	Grab	-			ng/L
Ammonia, Total (as N)	7664-41-7	-	-	-	1.5	mg/L	Quarterly	24-hr. comp.	-		Re-sample collected 12/10/2020 of November 2020 exceedance.	mg/L
Cyanide, Total	57-12-5	-	-	-	0.03	mg/L	Quarterly	Grab	-	0.0651	Re-sample collected 12/10/2020 of November 2020 exceedance.	mg/L
Phenols, Total	NA	-	-	-	0.08	mg/L	Semi-annual	Grab	1			mg/L
Benzene	71-43-2	-	-	-	0.0015	mg/L	Quarterly	Grab	-			mg/L
Napthalene	91-20-3	-	-	-	0.003	mg/L	Quarterly	Grab	-			mg/L
Toluene	108-88-3	-	-	-	0.003	mg/L	Quarterly	Grab	-			mg/L
Fluoride	16984-48-8	-	-	-	1.5	mg/L	Semi-annual	24-hr. comp.	-			mg/L
Surfactants	NA	-	-	-	0.5	mg/L	Semi-annual	24-hr. comp.	-			mg/L
Iron	NA	-	-	-	4	mg/L	Semi-annual	24-hr. comp.	-			mg/L
pH (range)	NA		SU	-	-	-	2/monthly	Grab	-			

Outfall 001										Lab Project IDs: 205857		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample # SW-001-12102020		
		Monthly Average	Daily Maximum							10-Dec-20		
										Measurement	Laboratory Qualifier/Comment	Units
Acenaphthylene	208-96-8	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Chrysene	218-01-9	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Fluoranthene	206-44-0	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Indeno(1,2,3-cd)pyrene	193-39-5	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Phenanthrene	85-01-8	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Xylenes-mixed isomers	1330-20-7	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Benz(a)anthracene	56-55-3	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Benzo(a)pyrene	50-32-8	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Benzo(b)fluoranthene	205-99-2	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L

Outfall 001										Lab Project IDs: 205857		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample # SW-001-12102020		
		Monthly Average	Daily Maximum							10-Dec-20		
										Measurement	Laboratory Qualifier/Comment	Units
Benzo(k)fluoranthene	207-08-9	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Dibenz(a,h)anthracene	55-70-3	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Arsenic	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Lead	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
2-Methylphenol	95-48-7	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
3-Methylphenol	108-39-4	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
4-Methylphenol	106-44-5	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
VOC TICs	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L

Outfall 001										Lab Project IDs: 205857		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample # SW-001-12102020		
		Monthly Average	Daily Maximum							10-Dec-20		
										Measurement	Laboratory Qualifier/Comment	Units
SVOC TICs	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Asbestos	NA	monitor	monitor	-	monitor	#N/A	Quarterly (Q3 2020 to Q2 2021)	Grab	-			MFL

Outfall 002										Lab Project ID:		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample #		
		Monthly Average	Daily Maximum							Measurement	Laboratory Qualifier/Comment	Units
Flow	NA	monitor	monitor	-	-	MGD	Weekly	Calculated, V-Notch Weir and Cumulative Flow	-		Estimated	MGD
Solids, Total Suspended	NA	-	50	-	-	mg/L	Monthly	24-hr. comp.	1			mg/L
Oil & Grease	NA	-	15	-	-	mg/L	Monthly	Grab	-			mg/L
Mercury, Total	NA	-	50	-	-	ng/L	Quarterly	Grab	-			ng/L
Cyanide, Total	57-12-5	-	-	-	0.03	mg/L	Quarterly	Grab	-			mg/L
Aluminum	NA	-	-	-	1	mg/L	Semi-annual	Grab	-			mg/L
Copper	NA	-	-	-	0.2	mg/L	Semi-annual	Grab	-			mg/L
Manganese	NA	-	-	-	1	mg/L	Semi-annual	Grab	-			mg/L
Nickel	NA	-	-	-	0.5	mg/L	Semi-annual	Grab	-			mg/L
Zinc	NA	-	-	-	0.5	mg/L	Semi-annual	Grab	-			mg/L
pH (range, monthly)	NA	6.0 - 9.0	SU	-	-	-	monthly	Grab	-			
Acenaphthylene	208-96-8	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Chrysene	218-01-9	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Fluoranthene	206-44-0	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Indeno(1,2,3-cd)pyrene	193-39-5	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L

Outfall 002										Lab Project ID:		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample #		
		Monthly Average	Daily Maximum							Measurement	Laboratory Qualifier/Comment	Units
Phenanthrene	85-01-8	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Xylenes-mixed isomers	1330-20-7	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Benz(a)anthracene	56-55-3	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Benzo(a)pyrene	50-32-8	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Benzo(b)fluoranthene	205-99-2	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Benzo(k)fluoranthene	207-08-9	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Dibenz(a,h)anthracene	55-70-3	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Arsenic	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L

Outfall 002										Lab Project ID:		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample #		
		Monthly Average	Daily Maximum							Measurement	Laboratory Qualifier/Comment	Units
Lead	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
2-Methylphenol	95-48-7	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
3-Methylphenol	108-39-4	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
4-Methylphenol	106-44-5	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
VOC TICs	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
SVOC TICs	NA	monitor	monitor	-	monitor	mg/L	Quarterly (Q3 2020 to Q2 2021)	Grab	-			mg/L
Asbestos	NA	monitor	monitor	-	monitor	#N/A	Quarterly (Q3 2020 to Q2 2021)	Grab	-			MFL

Outfall 004										Lab Project ID:		
Parameter	CAS No.	Effluent Limit or Calculated Level Daily Max		Compliance Level/ML	Action Level	Units	Sample Frequency	Sample Type	Footnote	Sample #		
		Monthly Average	Daily Maximum							Measurement	Laboratory Qualifier	Units
Flow (May-Oct)	NA	monitor	monitor	-	-	MGD	Monthly	Calculated	-			MGD
Temperature (continuous)	NA	monitor	90	-	-	°F	Weekly	Recorder	-			°F
Settleable Solids	NA	-	0.1	-	-	mL/L	Monthly	Grab	-			mL/L
Mercury, Total	NA	-	50	-	-	ng/L	Quarterly	Grab	-			ng/L
Only Years ending in 3 and 8												
WET - Acute Invertebrate	NA	-	-	-	15	Tua	Quarterly	see footnote	2			
WET - Acute Vertebrate	NA	-	-	-	15	TUa	Quarterly	see footnote	2			
WET - Chronic Invertebrate	NA	-	-	-	100	TUc	Quarterly	see footnote	2			
WET - Chronic Vertebrate	NA	-	-	-	100	TUc	Quarterly	see footnote	2			

Laboratory Qualifier Definitions: "L" = Lab control sample recovery outside accepted QC limits.

Footnote 1 Action Levels:

Action Levels are monitoring requirements which trigger additional monitoring and review when exceeded. Within 5 business days of a reported exceedence, the DEC and owner, or owners representative shall meet and determine if additional sampling or an interim remedial measure are appropriate.

Footnote 2 Whole Effluent Toxicity (WET) refer to page 7 of the former TCC permit for full text of WET sampling requirements.

Refer to page 7 of the former TCC permit for full text of WET sampling requirements. Years ending on 3 and 8, So 2023 is next sampling.

Notes:

1. The September 2020 Sample was collected on October 1, 2020 due to the lack of flow in Septemebr. There was precipitation on September 30, 2020, allowing collection of samples October 1, 2020.

Table F-1
 Flow Data - Outfall #001
 November 1, 2020 through December 22, 2020
 Riverview Innovation Technology Campus
 Town of Tonawanda, New York

Data Summary Report Custom

Outfall 001

Riverview Outfall 001

10/31/2020 2:10 PM - 11/30/2020 12:20 AM

Flow Summary

Maximum (gpm) : 1281.97
 Minimum (gpm) : 0
 Average (gpm) : 28.40
 Total (gal) : -

Date	Maximum (gpm)	Maximum Time (EST)	Minimum (gpm)	Minimum Time (EST)	Average (gpm)	Total (gal x1)
10/30/2020	25.41	02:10:00 PM	17.53	07:05:00 PM	20.97	30196.5
10/31/2020	22.47	08:20:00 PM	13.09	03:15:00 AM	17.82	25661.3
11/01/2020	353.54	12:10:00 PM	18.27	08:20:00 AM	53.98	77727.8
11/02/2020	33.65	12:40:00 AM	24.33	08:25:00 PM	28.56	41130
11/03/2020	27.78	10:10:00 PM	18.92	08:45:00 PM	23.49	33831.5
11/04/2020	29.5	07:20:00 AM	15.37	11:45:00 PM	22.59	32532.1
11/05/2020	23.2	10:15:00 PM	13.81	05:50:00 PM	19.69	28350.5
11/06/2020	29.93	10:05:00 AM	0	11:05:00 AM	21.69	31239.5
11/07/2020	27.77	04:15:00 AM	14.35	10:25:00 PM	19.61	28235
11/08/2020	19.3	08:20:00 AM	6.2	04:30:00 PM	13.85	19939.9
11/09/2020	19.58	12:55:00 PM	3.97	04:45:00 PM	13.11	18878.5
11/10/2020	19.26	11:25:00 AM	7.25	04:55:00 PM	15.39	22157.5
11/11/2020	1281.97	04:45:00 AM	15.09	01:20:00 AM	91.94	132397.8
11/12/2020	33.4	12:45:00 AM	19.48	10:40:00 PM	24.8	35715.1
11/13/2020	26.24	06:10:00 AM	20.41	11:30:00 PM	23.35	33625.9
11/14/2020	27.87	08:15:00 AM	12.97	05:05:00 PM	20.28	29201.8
11/15/2020	137.03	08:35:00 PM	18.48	02:35:00 AM	44.24	63701.1
11/16/2020	45.14	12:05:00 AM	24.8	11:55:00 PM	30.74	44270.3
11/17/2020	32.58	10:55:00 AM	22.02	11:25:00 PM	24.91	35863.4
11/18/2020	26.33	10:05:00 PM	15.66	01:45:00 PM	20.99	30227.9
11/19/2020	24.72	09:20:00 AM	18.72	11:40:00 PM	21.74	31311.8
11/20/2020	22.88	09:50:00 AM	16.2	11:05:00 PM	19.31	27804
11/21/2020	17.32	12:45:00 AM	12.77	03:20:00 AM	15.5	22321.9
11/22/2020	287.21	08:25:00 PM	13.62	02:45:00 AM	53.18	76577.4
11/23/2020	93.86	12:00:00 AM	30.63	11:55:00 PM	40.56	58406.4
11/24/2020	32.42	10:40:00 AM	25.78	01:20:00 PM	28.27	40707.6
11/25/2020	82.1	09:05:00 PM	23.57	03:45:00 PM	34.12	49129.6
11/26/2020	70.02	04:55:00 AM	31.12	11:25:00 PM	39.86	57399.5
11/27/2020	36.49	01:00:00 AM	26.99	04:45:00 AM	30.03	43243.8
11/28/2020	31.98	04:20:00 PM	24.62	01:35:00 PM	27.7	39889.8
11/29/2020	27.1	04:30:00 AM	19.22	07:25:00 PM	24.42	35165.9
11/30/2020	32.58	09:00:00 AM	18.9	12:20:00 AM	22.15	11959.9
					Month Total	1,288,801.00

Table F-1
 Flow Data - Outfall #001
 November 1, 2020 through December 22, 2020
 Riverview Innovation Technology Campus
 Town of Tonawanda, New York

Data Summary Report Custom

Outfall 001

Riverview Outfall 001

12/01/2020 12:00 AM - 12/22/2020 10:25 AM

Flow Summary

Flow Summary

Maximum (gpm) : 209.27

Minimum (gpm) : 15.6

Average (gpm) : 38.45

Date	Maximum (gpm)	Maximum Time (EST)	Minimum (gpm)	Minimum Time (EST)	Average (gpm)	Total (gal x1)
12/01/2020	80.2	10:45:00 AM	58.05	11:55:00 PM	68.62	98811.8
12/02/2020	78.77	01:00:00 PM	47.68	11:30:00 PM	56.27	81027.8
12/03/2020	50.7	02:10:00 PM	38.36	11:35:00 PM	43.97	63315.2
12/04/2020	44.07	02:35:00 PM	33.88	11:50:00 PM	38.27	55104.1
12/05/2020	42.57	11:35:00 AM	30.86	03:55:00 AM	36.46	52501.8
12/06/2020	35.06	12:00:00 AM	27.94	10:55:00 PM	31.18	44905.7
12/07/2020	31.33	05:25:00 AM	26.3	11:25:00 PM	28.48	41005.2
12/08/2020	33.36	11:10:00 PM	24.83	04:50:00 AM	28.89	41608
12/09/2020	86.95	09:00:00 AM	27.27	02:25:00 AM	48.43	69740.3
12/10/2020	70.79	10:25:00 AM	31.45	05:10:00 AM	36.93	53183.3
12/11/2020	54.85	12:50:00 PM	28.13	09:20:00 PM	34.38	49503.4
12/12/2020	189.96	09:05:00 PM	24.84	12:15:00 PM	49.95	71926.5
12/13/2020	59.55	12:00:00 AM	30.53	11:35:00 PM	38.57	55548
12/14/2020	44.92	11:10:00 AM	28.51	10:45:00 PM	33.03	47563.5
12/15/2020	37.34	11:20:00 AM	25.58	04:20:00 PM	28.02	40350.5
12/16/2020	35.37	12:25:00 PM	24.47	09:00:00 AM	27.5	39592.9
12/17/2020	29.32	12:10:00 AM	18.62	03:35:00 PM	23.01	33130.4
12/18/2020	29.65	01:40:00 PM	15.6	07:55:00 PM	21.45	30887.7
12/19/2020	25.02	06:00:00 PM	19.09	12:00:00 AM	22.54	32453.3
12/20/2020	59.76	03:30:00 PM	22.72	12:00:00 AM	37.54	54060.4
12/21/2020	209.27	09:20:00 PM	27.26	11:05:00 AM	50.49	72698.4
12/22/2020	79.65	12:00:00 AM	51.28	08:30:00 AM	61.88	38675.6

Month Total (through 11/22/2020) 1,167,593.80

Excess Pumping Rate (GPM/Gallons Per Month) 36.55 1,605,356

South Settling Pond Volume (Gallons) 269,280

Days to Empty 5.12

Figures

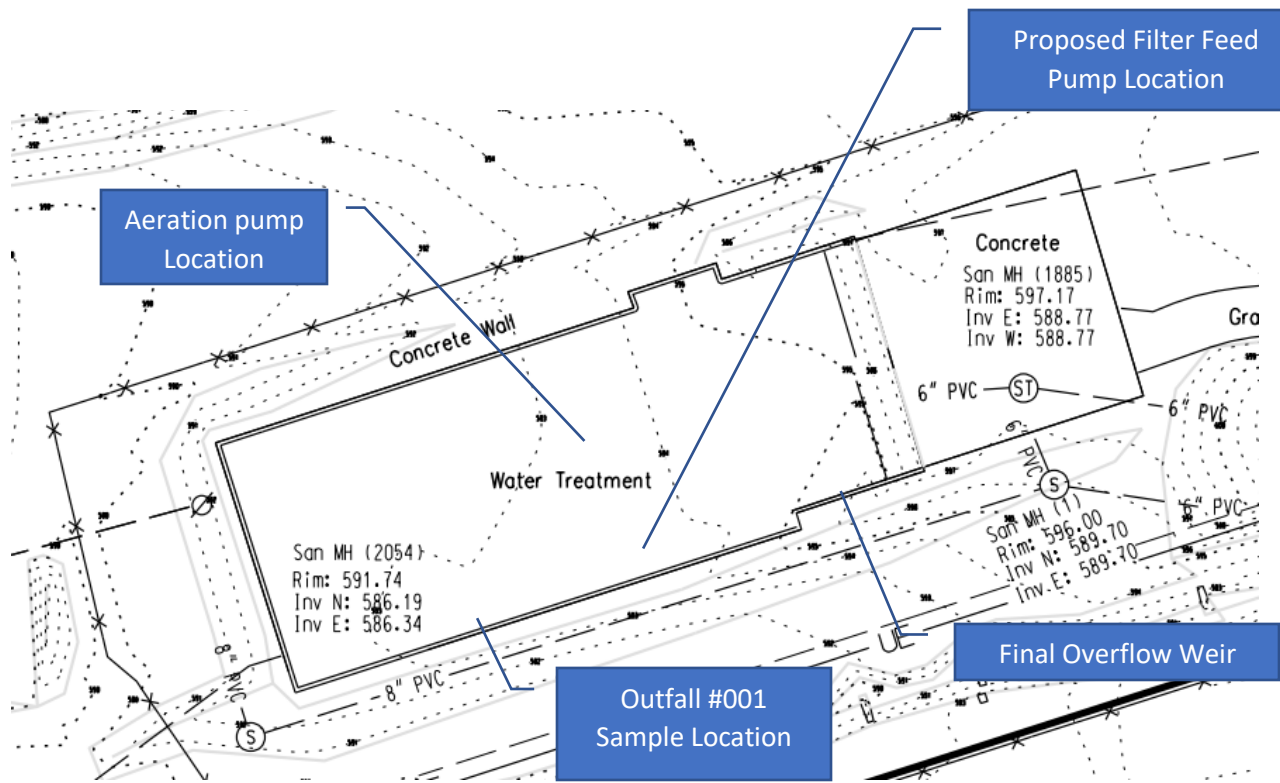
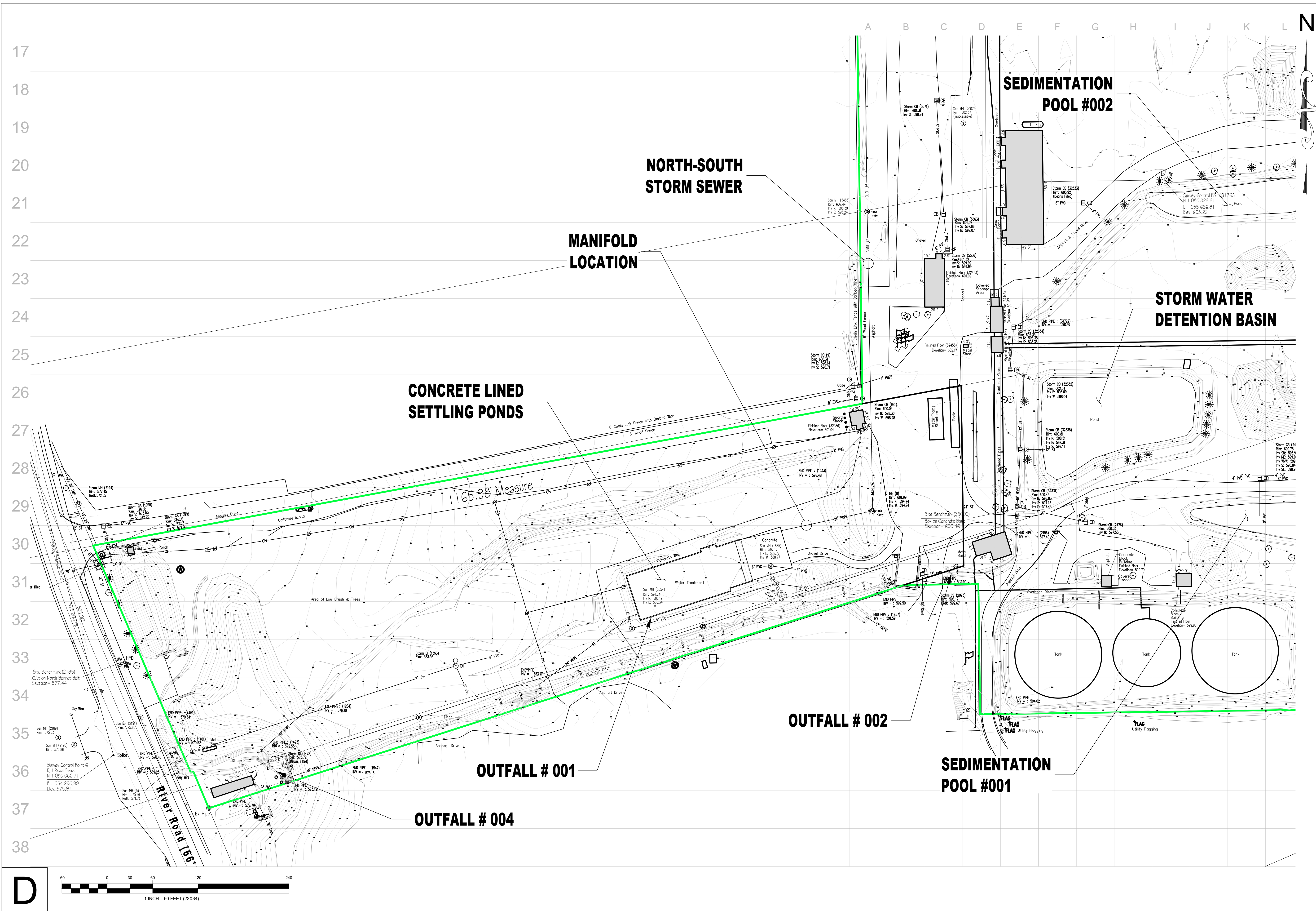


Figure 1

Settling Ponds



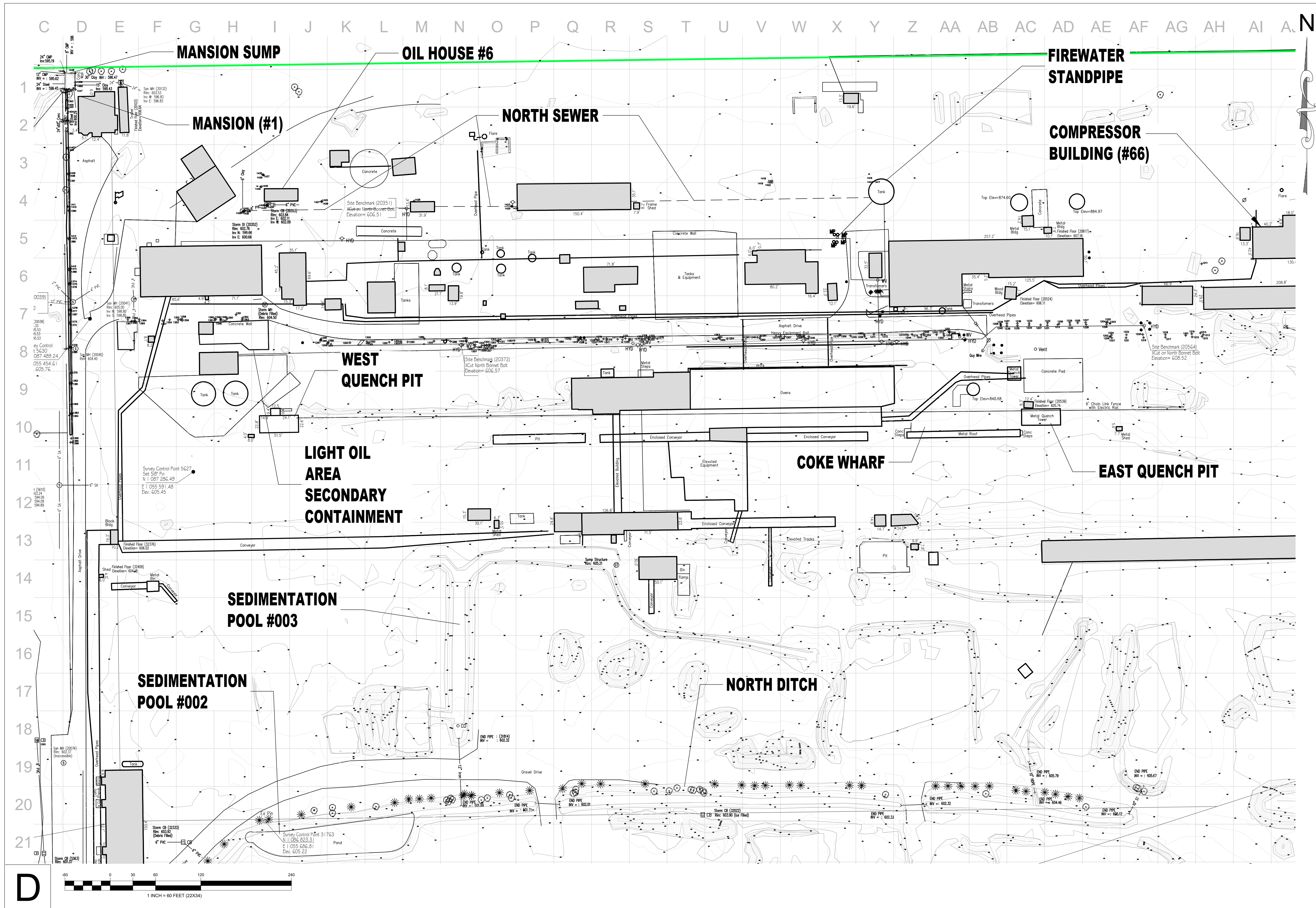
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STORMWATER OUTFALL LOCATIONS
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FIGURE 2
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NORTH SURFACE WATER COLLECTION SYSTEMS
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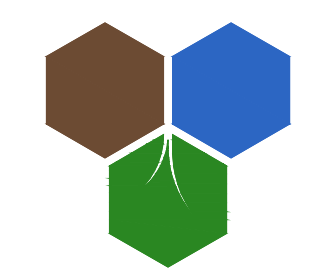
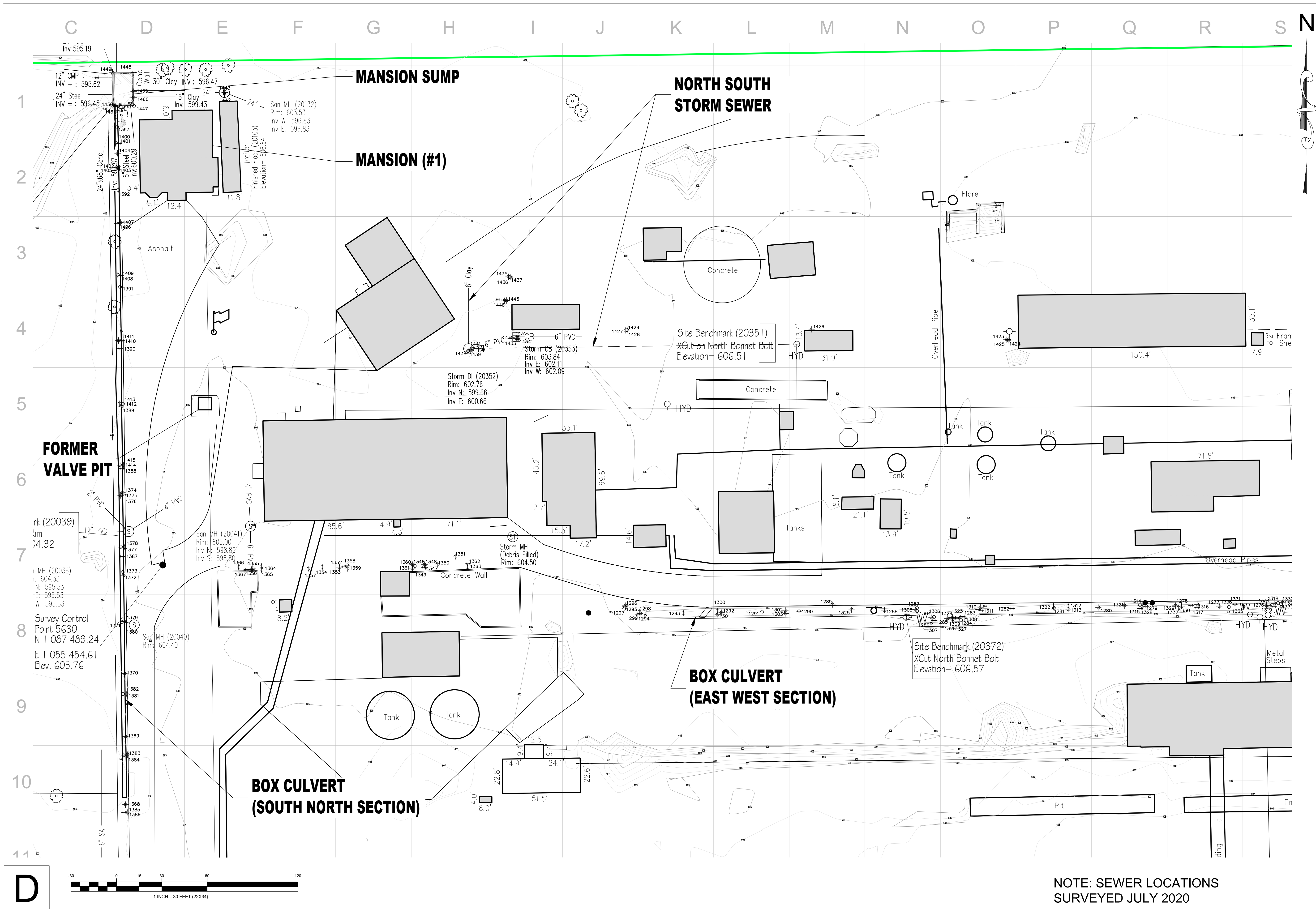


FIGURE 3
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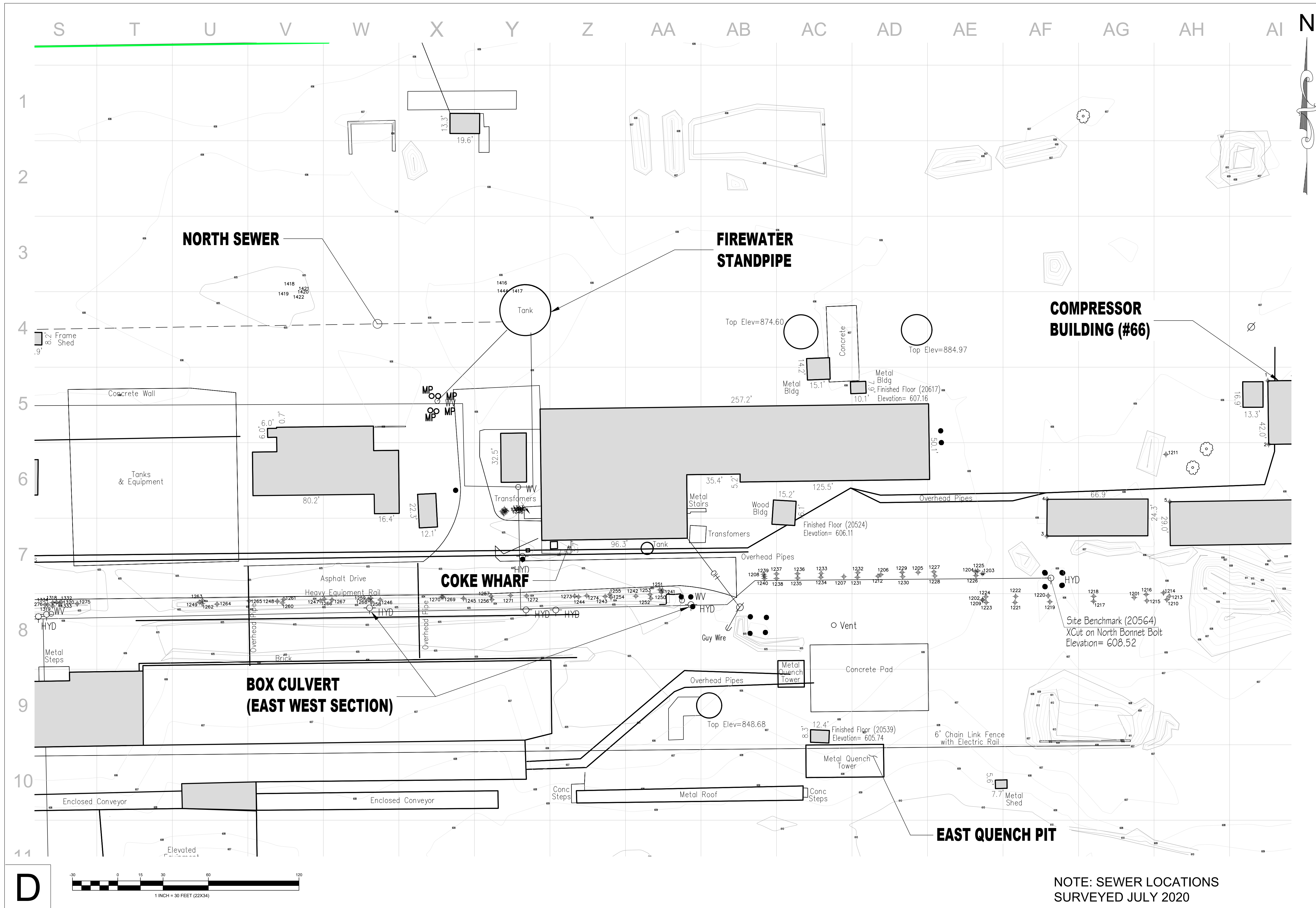
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FIGURE 4
 DRAWING NUMBER
NEW SET

NOTE: SEWER LOCATIONS SURVEYED JULY 2020



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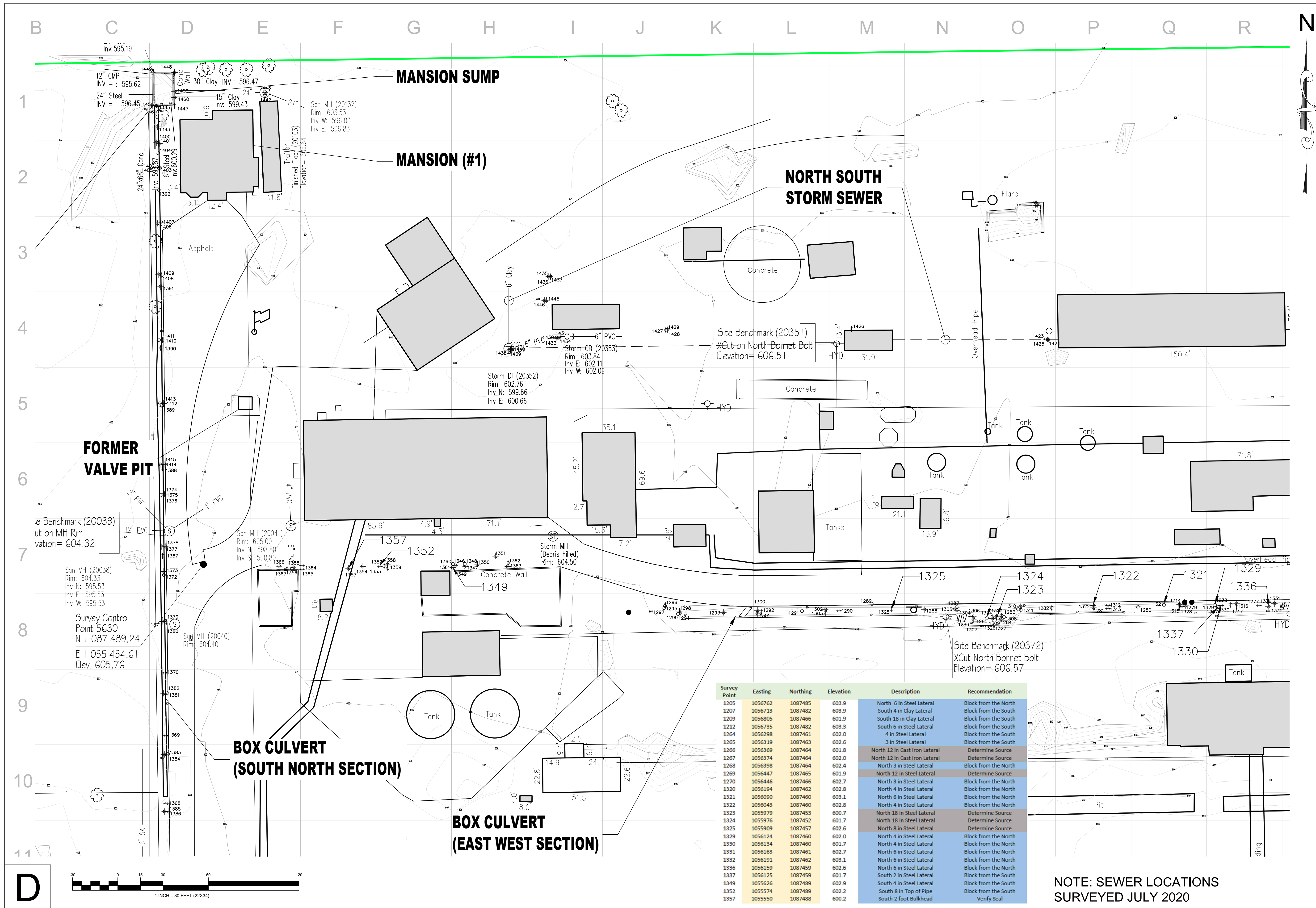
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FIGURE 5
 DRAWING NUMBER
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NOTE: SEWER LOCATIONS SURVEYED JULY 2020



Survey Point	Easting	Northing	Elevation	Description	Recommendation
1205	1056762	1087485	603.9	North 6 in Steel Lateral	Block from the North
1207	1056713	1087482	603.9	South 4 in Clay Lateral	Block from the South
1209	1056805	1087466	601.9	South 18 in Clay Lateral	Block from the South
1212	1056735	1087482	603.3	South 6 in Steel Lateral	Block from the South
1264	1056298	1087461	602.0	4 in Steel Lateral	Block from the South
1265	1056319	1087463	602.6	3 in Steel Lateral	Block from the South
1266	1056369	1087464	601.8	North 12 in Cast Iron Lateral	Determine Source
1267	1056374	1087464	602.0	North 12 in Cast Iron Lateral	Determine Source
1268	1056398	1087464	602.4	North 3 in Steel Lateral	Block from the North
1269	1056447	1087465	601.9	North 12 in Steel Lateral	Determine Source
1270	1056446	1087466	602.7	North 3 in Steel Lateral	Block from the North
1320	1056194	1087462	602.8	North 4 in Steel Lateral	Block from the North
1321	1056090	1087460	603.1	North 6 in Steel Lateral	Block from the North
1322	1056043	1087460	602.8	North 4 in Steel Lateral	Block from the North
1323	1055979	1087453	600.7	North 18 in Steel Lateral	Determine Source
1324	1055976	1087452	601.7	North 18 in Steel Lateral	Determine Source
1325	1055909	1087457	602.6	North 8 in Steel Lateral	Determine Source
1329	1056124	1087460	602.0	North 4 in Steel Lateral	Block from the North
1330	1056134	1087460	601.7	North 4 in Steel Lateral	Block from the North
1331	1056163	1087461	602.7	North 6 in Steel Lateral	Block from the North
1332	1056191	1087462	603.1	North 6 in Steel Lateral	Block from the North
1336	1056159	1087459	602.6	North 6 in Steel Lateral	Block from the North
1337	1056125	1087459	601.7	South 2 in Steel Lateral	Block from the South
1349	1055626	1087489	602.9	South 4 in Steel Lateral	Block from the South
1352	1055574	1087489	602.2	South 8 in Top of Pipe	Block from the South
1357	1055550	1087488	600.2	South 2 foot Bulkhead	Verify Seal

NOTE: SEWER LOCATIONS SURVEYED JULY 2020

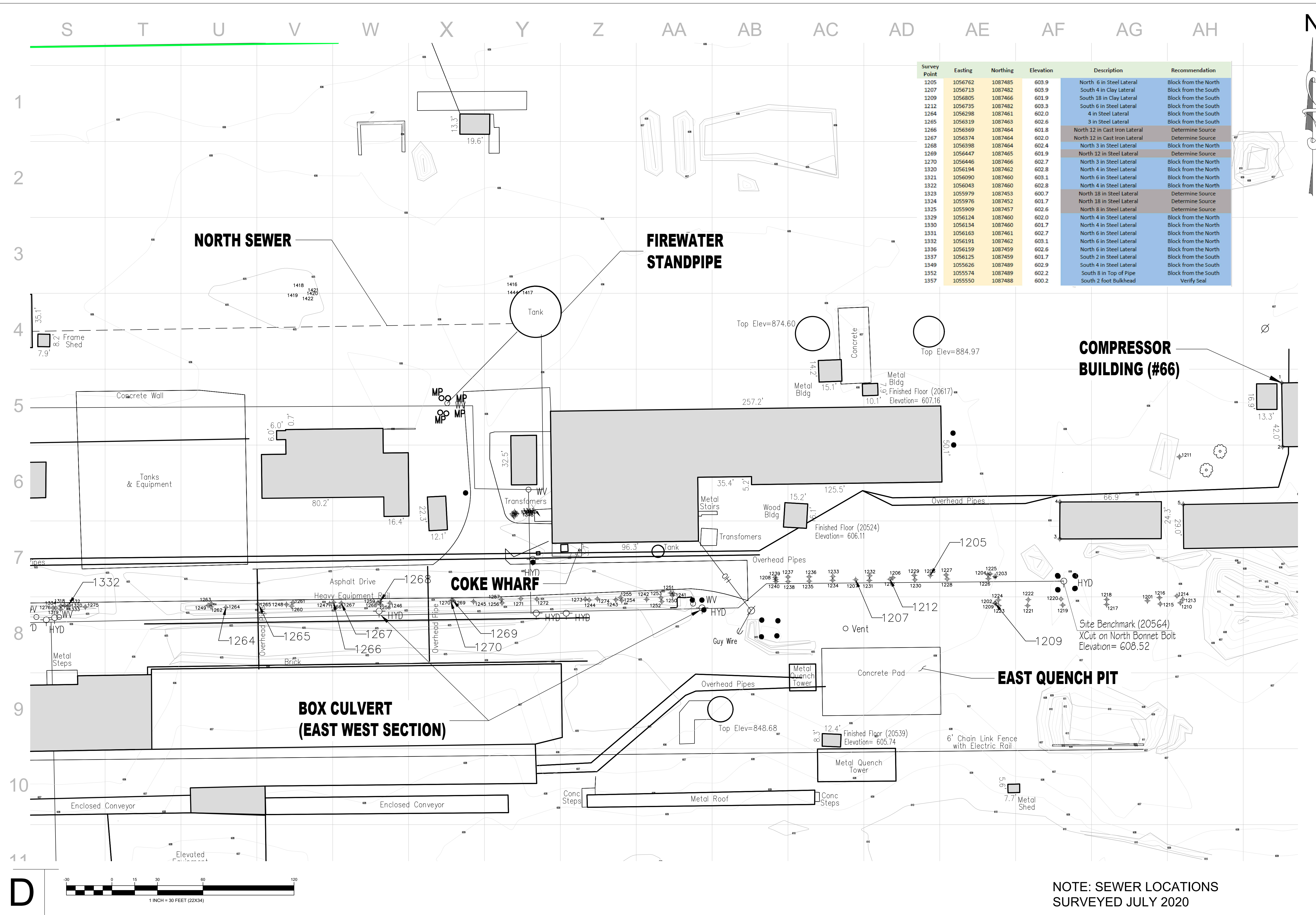
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FIGURE 6
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LATERALS
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FIGURE 7
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NOTE: SEWER LOCATIONS SURVEYED JULY 2020

Appendix

Appendix A
Partial Laboratory Result
December 2020



Lab Project ID: 205857

Client: Inventum Engineering, P.C.

Project Reference: Riverview

Sample Identifier: SWPPP-001-12102020

Lab Sample ID: 205857-01

Date Sampled: 12/10/2020

Matrix: Aq Liquid

Date Received: 12/11/2020

Total Cyanide

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Cyanide, Total	0.0651	mg/L		12/14/2020
Method Reference(s):	SM 4500 CN E - 2011 SM 4500 CN C - 2011			
Preparation Date:	12/14/2020			



Client: Inventum Engineering, P.C.

Project Reference: Riverview

Sample Identifier: MS-12102020

Lab Sample ID: 205857-04

Date Sampled: 12/10/2020

Matrix: Aq Liquid

Date Received: 12/11/2020

Total Cyanide

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Cyanide, Total	0.996	mg/L		12/14/2020
Method Reference(s):	SM 4500 CN E - 2011 SM 4500 CN C - 2011			
Preparation Date:	12/14/2020			



Client: Inventum Engineering, P.C.

Project Reference: Riverview

Sample Identifier: PB-12102020

Lab Sample ID: 205857-05

Date Sampled: 12/10/2020

Matrix: Aq Liquid

Date Received: 12/11/2020

Ammonia-N

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Ammonia	6.7	mg/L		12/15/2020
Method Reference(s):	SM 4500 NH3 BH			
Subcontractor ELAP ID:	11148			

Total Cyanide

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Cyanide, Total	0.194	mg/L		12/14/2020
Method Reference(s):	SM 4500 CN E - 2011 SM 4500 CN C - 2011			
Preparation Date:	12/14/2020			



Lab Project ID: 205857

Client: Inventum Engineering, P.C.

Project Reference: Riverview

Sample Identifier: PB-12112020

Lab Sample ID: 205857-06

Date Sampled: 12/11/2020

Matrix: Aq Liquid

Date Received: 12/11/2020

Low Level Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	11.7	ng/L		12/16/2020
Method Reference(s):	EPA 1631			
Subcontractor ELAP ID:	11148			



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

"(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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Report Prepared Monday, December 21, 2020

Partial

GENERAL TERMS AND CONDITIONS

LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation.

LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure.

Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling.

Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility.

LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment.

LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure.

LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law.

This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Monday, December 21, 2020

Partial



CHAIN OF CUSTODY

1 of 3
CP 12/11/2020

REPORT TO: <i>6P 12/14/2020</i>		INVOICE TO:	
CLIENT: <i>Todd Waldrop</i>	CLIENT: <i>Same</i>	LAB PROJECT ID: <i>20 5857</i>	
ADDRESS: <i>481 Carlisle Dr.</i>	ADDRESS:	Quotation #:	
CITY: <i>Herndon</i> STATE: <i>VA</i> ZIP: <i>20120</i>	CITY: STATE: ZIP:	Email: <i>todd.waldrop@inventumeng.com</i>	
PHONE: <i>(571) 217-3627</i>	PHONE:		
ATTN: <i>Todd Waldrop</i>	ATTN:		
Matrix Codes:			
AQ - Aqueous Liquid	WA - Water	DW - Drinking Water	SO - Soil
NQ - Non-Aqueous Liquid	WG - Groundwater	WW - Wastewater	SL - Sludge
		SD - Solid	WP - Wipe
		PT - Paint	CK - Caulk
		OL - Oil	AR - Air

PROJECT REFERENCE
Riverview

REQUESTED ANALYSIS									
DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRA B	SAMPLE IDENTIFIER	MATRIX	CONTAINER	ANALYSIS	REMARKS	PARADIGM LAB SAMPLE NUMBER
<i>12/10/20</i>				<i>SWPPP-001-12102020</i>	<i>AQ</i>	<i>5</i>	<i>TSS</i>	<i>Sub sent directly to</i>	<i>01</i>
				<i>SWPPP-001-12412020</i>	<i>1</i>	<i>1</i>	<i>SGT-HEM</i>	<i>Sub lab. 6P 12/11/2020</i>	<i>02</i>
				<i>SWPPP-002-12102020</i>	<i>1</i>	<i>2</i>	<i>NH3</i>		<i>03</i>
				<i>MS-12102020</i>		<i>3</i>	<i>T.Hg</i>		<i>04</i>
				<i>PB-12102020</i>	<i>1</i>	<i>2</i>	<i>Cyanide</i>	<i>low level mercury for sample</i>	<i>05</i>
					<i>per sub chains</i>			<i>PB-12102020 will be</i>	
					<i>CP 12/14/2020</i>			<i>on a separate chain.</i>	
								<i>The ammonia and cyanide</i>	
								<i>for that sample was transferred</i>	
								<i>to their appropriate containers.</i>	

Turnaround Time	Report Supplements	
Availability contingent upon lab approval; additional fees may apply.		
Standard 5 day <input checked="" type="checkbox"/>	None Required <input type="checkbox"/>	None Required <input type="checkbox"/>
10 day <input type="checkbox"/>	Batch QC <input checked="" type="checkbox"/>	Basic EDD <input type="checkbox"/>
Rush 3 day <input type="checkbox"/>	Category A <input type="checkbox"/>	NYSDEC EDD <input checked="" type="checkbox"/>
Rush 2 day <input type="checkbox"/>	Category B <input type="checkbox"/>	
Rush 1 day <input type="checkbox"/>		
Date Needed _____	Other <input type="checkbox"/>	Other EDD <input type="checkbox"/>
<small>please indicate date needed:</small>	<small>please indicate package needed:</small>	<small>please indicate EDD needed:</small>

<i>Keith Adorley</i>	<i>12/10/20</i>	Total Cost: <input style="width: 100px; height: 30px;" type="text"/>
Sampled By _____	Date/Time _____	
<i>Keith Adorley</i>	<i>12/10/20</i>	P.I.F. <input style="width: 100px; height: 30px;" type="text"/>
Relinquished By _____	Date/Time _____	
<i>Brian Z...</i>	<i>12/10/20 2:30</i>	
Received By _____	Date/Time _____	
<i>AP</i>	<i>12/11/2020 16:41</i>	
Received @ Lab By _____	Date/Time _____	
<i>5°C iced</i>	<i>12/11/2020 15:40</i>	

** Sample PB-12102020 due on 12/15/20*

By signing this form, client agrees to Paradigm Terms and Conditions (reverse side). Partial

See additional page for sample conditions.

2 of 3



CHAIN OF CUSTODY

REPORT TO:			INVOICE TO:			LAB PROJECT ID		
CLIENT:	Todd Waldrop		CLIENT:	Same				
ADDRESS:	481 Carlisle Dr. 20170		ADDRESS:					
CITY:	STATE:	ZIP:	CITY:	STATE:	ZIP:	Quotation #:		
	Herndon	VA				Email: todd.waldrop@inventumeng.com		
PHONE:	(571) 217-3627		PHONE:					
ATTN:	Todd Waldrop		ATTN:					
Matrix Codes:								
AQ - Aqueous Liquid	WA - Water	DW - Drinking Water	SO - Soil	SD - Solid	WP - Wipe	OL - Oil		
NQ - Non-Aqueous Liquid	WG - Groundwater	WW - Wastewater	SL - Sludge	PT - Paint	CK - Caulk	AR - Air		

PROJECT REFERENCE
Riverview

REQUESTED ANALYSIS									
DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX	COUNTAINERS		REMARKS	PARADIGM LAB SAMPLE NUMBER
12/11/20	11:00am		✓	PB - 12.11.2020	AQ	1	✓		06
								per sub chains of 12/14/2020	

Turnaround Time	Report Supplements	
Availability contingent upon lab approval; additional fees may apply.		
Standard 5 day <input type="checkbox"/>	None Required <input type="checkbox"/>	None Required <input type="checkbox"/>
10 day <input type="checkbox"/>	Batch QC <input checked="" type="checkbox"/>	Basic EDD <input type="checkbox"/>
Rush 3 day <input type="checkbox"/>	Category A <input type="checkbox"/>	NYSDEC EDD <input checked="" type="checkbox"/>
Rush 2 day <input checked="" type="checkbox"/>	Category B <input type="checkbox"/>	
Rush 1 day <input type="checkbox"/>		
Date Needed _____ please indicate date needed:	Other <input type="checkbox"/> please indicate package needed:	Other EDD <input type="checkbox"/> please indicate EDD needed:

Keith Addeley 12/11/20
 Sampled By Date/Time

Keith Addeley 12/11/20
 Relinquished By Date/Time

Brian Zund 12/11/20 2:40
 Received By Date/Time

Received @ Lab By Date/Time

Total Cost:

P.I.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse)

See additional page for sample conditions **Partial**



Chain of Custody Supplement

Client: Inventum Engineering Completed by: Glenn Pezzulo
 Lab Project ID: 205857 Date: 12/14/2020

Sample Condition Requirements
 Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt		
	Yes	No	N/A
Container Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		
Transferred to method-compliant container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Headspace (<1 mL)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	_____ _____		
Preservation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____ _____		
Chlorine Absent (<0.10 ppm per test strip)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	_____ _____		
Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____ _____		
Temperature	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	<u>5°C iced</u>		
Compliant Sample Quantity/Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	<u>Samples for TSS, NH₃, 26 Hg sent directly to sub lab.</u>		

L2055303



CHAIN OF CUSTODY

11148

REPORT TO:		INVOICE TO:	
COMPANY: Paradigm Environmental	COMPANY: Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: 179 Lake Avenue	ADDRESS:	TURNAROUND TIME: (WORKING DAYS)	
CITY: Rochester STATE: NY ZIP: 14608	CITY: STATE: ZIP:	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 5 <input type="checkbox"/> OTHER	
PHONE: FAX:	PHONE: FAX:	Date Due:	
ATTN: Reporting	ATTN: Accounts Payable		
COMMENTS: Please email results to reporting@paradigmenv.com			

PROJECT NAME/SITE NAME:
Riverview

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBER	REQUESTED ANALYSIS										REMARKS	PARADIGM LAB SAMPLE NUMBER					
							TSS	Ammonia	Low Level Hg														
12/10/20				SWPPP-001-12102020	AQ	3	X	X	X									Batch QC and NYSDEC					
12/10/20				SWPPP-001-12412020	AQ	1		X										EDD required.					
12/10/20				SWPPP-002-12102020	AQ	1	X																
12/10/20				MS-12102020	AQ	2		X	X									Ammonia is preserved with					
12/10/20				PB-12102020	AQ	1		X										H2SO4.					
																		Hg is preserved with HCl.					

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Preservation:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Holding Time:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		
Temperature:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments:		

Client

Sampled By	Date/Time
<i>Brian J. [Signature]</i>	12/10/20 16:20
Relinquished By	Date/Time
<i>B. J. [Signature]</i>	12/10/20 16:20
Received By	Date/Time
<i>B. J. [Signature]</i>	12/10/20 16:20
Received By	Date/Time
<i>[Signature]</i>	12/11/20 01:30
Received @ Lab By	Date/Time

Total Cost:

P.I.F.

Partial



CHAIN OF CUSTODY

L 2655605 11148

REPORT TO:		INVOICE TO:	
COMPANY: Paradigm Environmental	COMPANY: Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: 179 Lake Avenue	ADDRESS:	TURNAROUND TIME: (WORKING DAYS)	
CITY: Rochester STATE: NY ZIP: 14608	CITY: STATE: ZIP:	<input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 5 <input type="checkbox"/> STD <input type="checkbox"/> OTHER	
PHONE: FAX:	PHONE: FAX:	Date Due:	
PROJECT NAME/SITE NAME: Riverview	ATTN: Reporting	ATTN: Accounts Payable	
COMMENTS: Please email results to reporting@paradigmenv.com			

REQUESTED ANALYSIS										
DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER	Low Level Hg		REMARKS	PARADIGM LAB SAMPLE NUMBER
12/11/20	11:00		✓	PB-12112020		1	X		Hg is preserved with HCl.	

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments: _____		
Preservation:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments: _____		
Holding Time:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments: _____		
Temperature:	Y <input type="checkbox"/>	N <input type="checkbox"/>
Comments: _____		

Client		Total Cost:
Sampled By <i>Brian Zeech</i>	Date/Time 12/11/20 2:14:45	<input type="text"/>
Relinquished By <i>ARC</i>	Date/Time 12/11/20 14:45	
Received By <i>Biz</i>	Date/Time 12/11/20 14:45	P.I.F. <input type="text"/>
Received By <i>Relinquish</i>	Date/Time 12/11/20 02:10	
Received @ Lab By <i>[Signature]</i>	Date/Time	

Partial

