Jacobs

Memorandum

1999 Bryan Street, Suite 1200
Dallas, Texas 75201
United States
T +1.214.638.0145
F +1.214.638.0447
www.jacobs.com

Subject	**Interim Operations and Maintenance Plan/Periodic Review Report 2021, Gorham Street Area, Gabion Wall, and SWMU-1**
Project Name	Former Hampshire Chemical Corp. Facility, Waterloo, New York—Site No. 850001A
Attention	Hampshire Chemical Corp.
From	Jacobs Engineering Group Inc.
Date	November 2021

1. Introduction

This technical memorandum presents an interim operations and maintenance (O&M) periodic review for the Gorham Street Area, gabion wall, and Solid Waste Management Unit (SWMU)-1 at the former Hampshire Chemical Corp. (HCC) Facility in Waterloo, New York (facility). Evans Chemetics, a wholly owned subsidiary of Bruno Bock, currently owns and operates the facility.

At the Gorham Street Area, interim corrective measures (ICMs) were completed in fall 2013, and restoration activities, including grading adjustments, erosion repairs, and additional vegetation planting, were completed in spring 2014. The gabion wall installation was completed in June 2015. The SWMU-1 combination asphalt and soil cap were completed in fall 2016, but because of its late season completion, additional restoration was completed in spring 2017 to address minor winter impacts.

The activities included in this periodic review report will become a part of the Site Management Plan (SMP) after the sitewide Corrective Measures Study (CMS) and associated Statement of Basis is completed. This technical memorandum serves to bridge the gap in time between remedy completion and implementation of the SMP so the cover systems are maintained and performing as designed.

2. Site Description

The facility is located at 228 East Main Street in Waterloo, New York. The facility is bordered to the north by East Main Street, to the east by residential properties, to the west by East Water Street, and to the south by the Cayuga-Seneca Canal. South of the canal are some residences and warehouses, and further downstream is the Village of Waterloo wastewater treatment plant (WWTP). The facility also includes property on the eastern side of Gorham Street, where the employee parking lot for the site is located. The area around the parking lot was the subject of the ICM as described in more detail in the following subsection.

The gabion wall was installed along a portion of the southern edge of the facility property where a sediment removal project was performed. The gabion wall and associated restoration activities were performed to stabilize this portion of the canal bank. SWMU-1 is on the western edge of the facility

property and is positioned between the Cayuga-Seneca Raceway and Canal system (north and south edges), with East Water Street forming the western extent and facility WWTP located east of SWMU-1. The facility entry from East Water Street crosses SWMU-1 and is used as the asphalt portion of the cover system; the soil cap system covers the areas north and south of the road.

2.1 Gorham Street Area Description

The Gorham Street Area is defined as two areas with engineered soil caps and covers; one larger area is east of Gorham Street and one smaller area is west of Gorham Street. The portion east of Gorham Street is approximately 1.8 acres of land that extends approximately 365 feet east of Gorham Street and terminates at the adjacent residential parcel (Figure 1). The area extends from the northern property boundary to the canal located to the south. The New York State Canal Corporation owns a thin right-of-way extending along the canal. A thin right-of-way owned by the Village of Waterloo also extends along each edge of Gorham Street. The area on the western side of Gorham Street encompasses approximately 0.04 acre of land that Evans Chemetics owns. The Evans Chemetics employee parking lot covers most of the portion of the parcel east of Gorham Street. In August 2021, the employee parking lot was repaved with asphalt. Before Gorham Street corrective measures construction activities were conducted, the remaining area was wooded or covered by grass and undergrowth (CH2M HILL Engineers, Inc. [CH2M], 2014a).

2.2 Gorham Street Area Topography

Before Gorham Street corrective measures construction activities were conducted, the parcel west of Gorham Street sloped gently southeasterly toward the bridge abutment embankment and south toward the canal. East of Gorham Street, the land surface gently graded eastward across the parking lot and the adjacent wooded area to the eastern boundary of the facility.

The top of the canal bank was approximately 1 to 3 feet below the average grade of the parking lot, and a drainage swale trending west–east was present between the top of the canal bank and the parking lot. Beyond the swale, the grade dropped steeply to the canal where the bank was overgrown by vegetation and trees.

General overland flow from the parking lot and the extension area east of the parking lot was either south toward the canal or to the east. However, the canal bank berm was slightly higher in elevation than the grassy and formerly wooded area to the north and may limit some overland flow moving north to south. Precipitation that fell on the canal bank would potentially flow south toward the canal or north toward the grassy/vegetated area between the canal bank and the parking lot.

2.3 Canal Bank – Gabion Wall Description

The gabion wall was constructed on the canal bank south of the facility and north of the North Shore Deposit. The gabion wall is constructed with two layers of 3-foot by 3-foot by 6-foot galvanized wire mesh baskets with a polyvinyl chloride coating. The gabion baskets are filled with 3- to 5-inch-diameter stone. An 8-ounce geotextile fabric was placed in the over-excavated area and filled with self-compacting pea stone to provide a more stable subgrade. The canal bank side of the gabion wall was shaped, and an 8-ounce geotextile fabric was placed and filled with pea stone backfill to support the backside of the gabion wall.

Before intrusive work was performed, a comparison with the construction drawings was made, and adjustments to the gabion wall alignment were made to compensate for site conditions. Riprap was

placed on the canal bank in areas where construction of the gabion wall was determined not feasible. These areas include the eastern end of the gabion wall from approximately Station 22+30 to the east and the western end of the gabion wall from approximately Station 20+30 (Figure 2) to the west in an area commonly referred to as the "horseshoe area" south of the facility.

2.4 SWMU-1 Description

SWMU-1 comprises an approximately 2.3-acre area of waste and debris west of the facility WWTP, east of East Water Street, north of the Cayuga-Seneca Canal, and south of the Cayuga-Seneca raceway that supplies cooling and process water to the facility (Figure 3). A paved access road, which has been expanded as part of the capping project, runs from East Water Street through SWMU-1 and east into the facility and is used by large haul trucks for Evans Chemetics product transportation. In this area, several pole-barn structures house Evans Chemetics chemical and equipment storage areas. West of the structures, the expanded asphalt area is used for large haul trucks to pull to the side of the access road and idle before entering the facility, as needed.

A combination soil and asphalt cap was installed over the 2.3-acre SWMU-1 area. This capping system included placing the geosynthetic clay liner (GCL) cap system over approximately 1.4 acres, using the existing asphalt cap (approximately 0.65 acre), and an asphalt expansion area that encompasses approximately 0.25 acre. The GCL cap system was placed over a leveling layer and demarcation layer that separate the waste and cover materials. The overlying cap materials consist of a granular sodium bentonite GCL layer, a geocomposite drainage layer, an 18-inch-thick protective soil layer, and a 6-inch-thick topsoil layer to support vegetation.

The asphalt cap was constructed by milling and reworking the existing road surface and placing a 6-inch-thick asphalt layer consisting of a 4-inch-thick Type 3 binder course and a 2-inch-thick Type 6 top course. In areas where the asphalt road was expanded north of the original road surface, materials were excavated to allow the 8-inch gravel and 6-inch asphalt layers to be installed and match the elevation of the existing asphalt and overlay. The excavated material was used as a leveling layer below the cap. In the area north of the entry road, cover soil was placed over the existing ground surface to a depth of at least 6 inches and revegetated.

2.5 SWMU-1 Topography

Before construction, elevation across the site varied from approximately 453 feet above mean sea level (amsl) at the elevated mound area in the center of the unit to approximately 436 feet amsl in the southern and southeastern areas of SWMU-1. Placement of the cap followed a similar configuration, but the area toward the canal was reshaped to promote positive drainage to the perimeter and intermediate swale. The final elevation of the capped SWMU-1 ranges from 457 to 440 feet amsl in the drainage swales. The elevation along the canal beyond the cap grades sharply to the canal pool elevation of approximately 429 feet amsl.

3. Site Inspections

3.1 Inspection Frequency

Inspections are conducted at the frequency specified in the interim O&M plan submitted in 2014 (CH2M, 2014b). Accordingly, annual cover inspections and biennial gabion wall inspections will be performed until the SMP is in place as part of the sitewide CMS.

3.2 Inspection Forms, Sampling Data, and Maintenance Reports

A recent inspection was performed on August 3, 2021, following a mowing event at SWMU-1 on the same day. The inspection results are shown on the inspection forms in Attachment 1. Attachment 2 contains photographs of the site taken during the August 2021 inspection. As described in Section 4, deficiencies were noted and reported, and appropriate corrective actions were taken to remedy deficiencies. An additional mowing event is planned for fall 2021.

3.2.1 Gorham Street

The following areas were inspected for the Gorham Street Area:

- Soil cover
  - Stressed or dead vegetation
  - Observation as to whether mowing of vegetation is being performed at a suitable frequency
  - Erosion, furrows, ruts, penetrations, cracking, or animal burrows
  - Areas of ponding water
  - Evidence of vandalism to the cover
  - Evidence of slope movement along the canal
  - Signs of traffic on the soil cover area other than from mowing equipment
- Asphalt cap
  - Signs of erosion, furrows, ruts, penetrations, cracking, or animal burrows
  - Vegetation growth through the asphalt
  - Areas of ponding water
  - Evidence of vandalism to the cap
- Drainage swales
  - Observation as to whether drainage swales are still allowing for adequate flow toward the canal
  - Signs of erosion, furrows, ruts, penetrations, cracking, or animal burrows
  - Condition of check dams
  - Confirm flow is not bypassing check dams
  - Erosion issues at down chutes
- Perimeter security (fences and gates)
  - Gates are locked
  - Fence condition
  - Signs of vandalism
  - Signs of vegetation growing on fence or gates

3.2.2 Gabion Wall

The following gabion wall areas were inspected:

- Confirm that eroded soil has not built up on the top of the wall; remove materials, as necessary.
- Inspect for visual signs on vertical or horizontal alignment changes, bulging, or other changes since the last inspection. Take photographs for similar locations and directions for comparison over time.
- Inspect face of wall for broken or separated sections of the wire gabions and plant growth. Large vegetation/trees should be removed.

3.2.3 SWMU-1

The following areas were inspected at SWMU-1:

- Soil cover
  - Stressed or dead vegetation
  - Observation as to whether mowing of vegetation is being performed at a suitable frequency
  - Erosion, furrows, ruts, penetrations, cracking, or animal burrows
  - Areas of ponding water
  - Evidence of vandalism to the cover
  - Evidence of slope movement along the canal
  - Signs of traffic on the soil cover area other than from mowing equipment
  - Signs of damage to monitoring wells
- Asphalt cap
  - Signs of erosion, furrows, ruts, penetrations, cracking, or animal burrows
  - Vegetation growth through the asphalt
  - Areas of ponding water
  - Evidence of vandalism to the cap
- Drainage swales
  - Observation as to whether drainage swales are still allowing for adequate flow toward the canal
  - Signs of erosion, furrows, ruts, penetrations, cracking, or animal burrows
  - Exterior cleanout locations intact
  - Condition of check dams
  - Confirm flow is not bypassing check dams
  - Erosion issues at drainage layer outfall pipes or down chutes
- Perimeter security (fences and gates)
  - Gates are locked
  - Fence condition
  - Signs of vandalism
  - Signs of vegetation growing on fence or gates

Attachment 1 contains applicable inspection forms and other records generated for the site during the reporting period.

4. Conclusions and Corrective Measures Completed

Any deficiencies noted during inspections were corrected as noted in the inspection reports (Attachment 1). Each deficiency was addressed within 90 days as stipulated in the O&M plan (CH2M, 2014b).

During a site visit in May 2021, relatively small areas of bare soil and stressed vegetation were noted on the upper slope of SWMU-1; however, no erosion was apparent (Attachment 2). These conditions are believed to be the result of unusually dry weather in late 2020 and early 2021. The areas showed signs of recovery in August 2021 and will be inspected again in fall 2021 to determine whether corrective action is necessary.

While mowing through tall vegetation in August 2021, a plastic corrugated cleanout pipe along the southern base of SWMU-1 was damaged, resulting in the removal of approximately 6 vertical inches of pipe. Sufficient pipe remained to not require repair and a new cap was installed on the cleanout. To avoid future damage to the cleanouts and monitoring wells at SWMU-1 during vegetation removal, new 6-foot tall high-visibility snow stakes were placed at all monitoring wells, and similar stakes with high-visibility flags were placed at all cleanouts.

One burrow with signs of active digging was noted at Gorham Street during a May 2021 site. Two groundhogs were trapped and removed from the area in the summer of 2021 by Evans Chemetics. The burrow was refilled with gravel on August 19, 2021. In subsequent site visits the burrow will be monitored to determine activity.

A minor amount of grape vine was growing on the western terminus of the gabion wall (Attachment 2). The grape vine is planned to be removed by Evans Chemetics in early October 2021.

In general, the remaining issues that occurred in 2021 were associated with vegetation management. Additional effort was expended on eradicating Japanese knotweed, which included herbicide application by Cardno Corporation on August 19, 2021. Japanese knotweed is a hardy invasive species and may require further herbicide application and mechanical removal to eradicate. After allowing time for the herbicide to penetrate the knotweed, mechanical removal of knotweed at Gorham Street and SWMU-1 is planned for fall 2021.

Both cover systems and the gabion wall appear to be performing as designed, and no significant issues have been observed. HCC will continue annual cover and biennial gabion inspections until the SMP for the facility is finalized.

5. Report Submission

The periodic review report will continue to be submitted annually in hard copy and electronic format to the New York State Department of Environmental Conservation Central and Region 8 Office and the New York State Department of Health Central Office.

6. References

CH2M HILL Engineers, Inc. (CH2M). 2014a. *Construction Completion Report, Former Hampshire Chemical Corp., Gorham Street Corrective Measures, Waterloo, New York*.

CH2M HILL, Engineers, Inc. (CH2M). 2014b. *Interim Operations and Maintenance Plan for Gorham Street Area, Former Hampshire Chemical Corp. Facility, Waterloo, New York*.

Figures

N

0 50 100

Feet

Figure 1. Interim Operations and Maintenance Plan/ Periodic Review Inspection Area for Gorham Street Area
Former Hampshire Chemical Corp. Facility
Waterloo, New York

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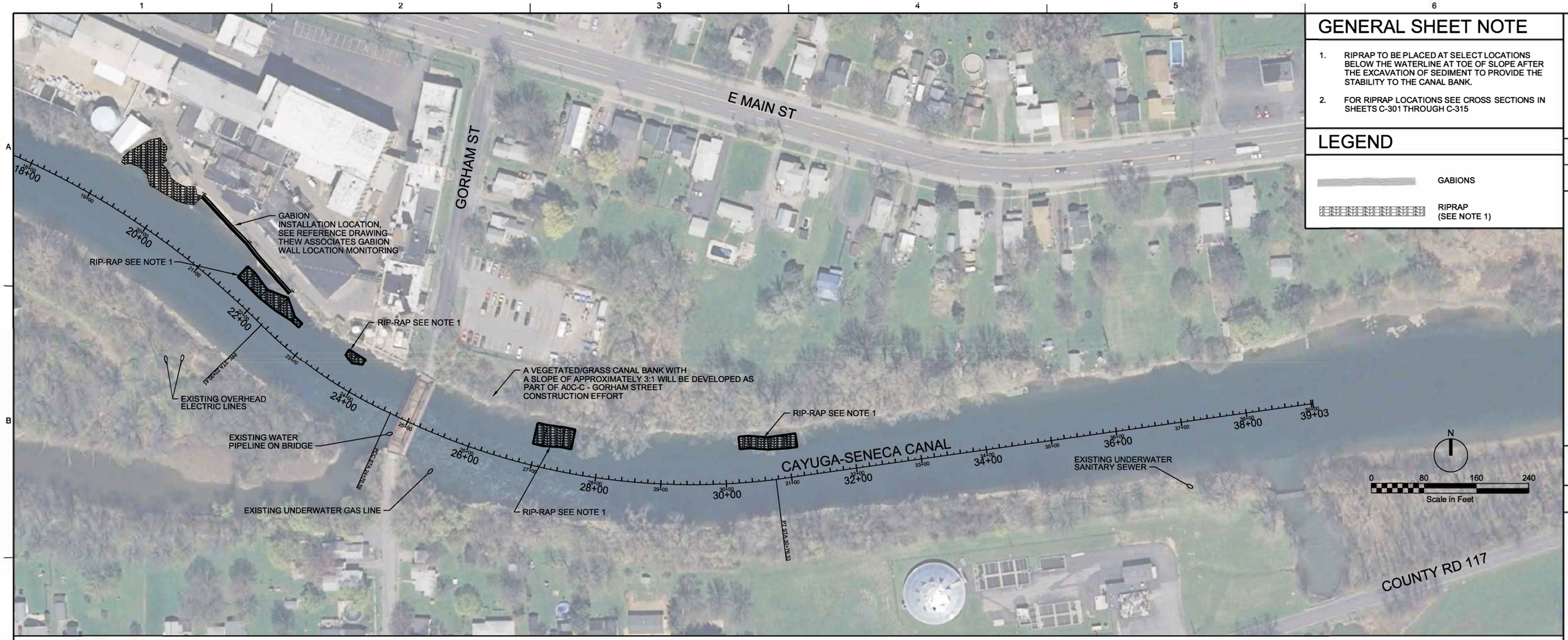
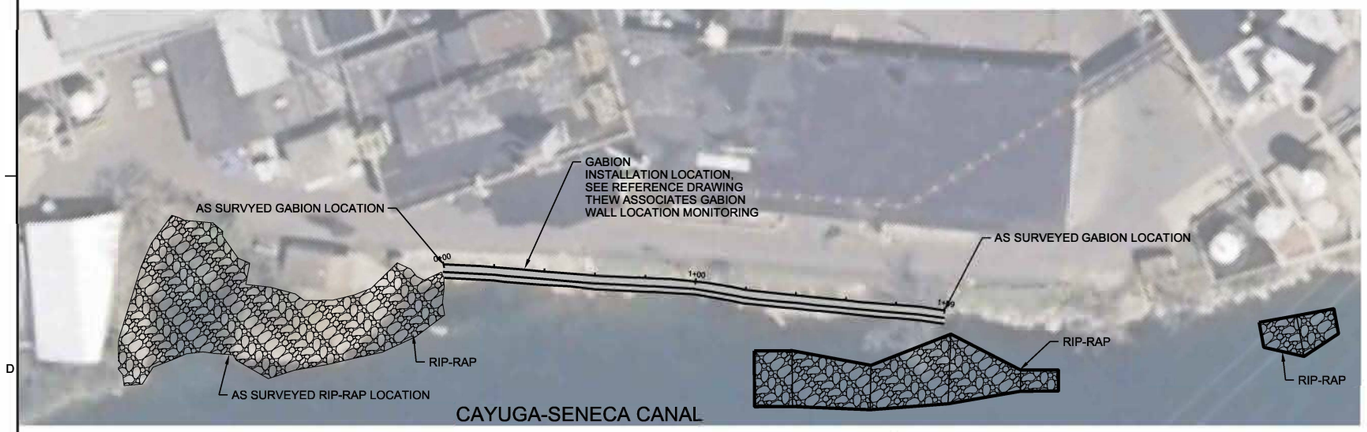
\\LAKEFRONT\PROJ\GIS\DOW\WATERLOO\REPORTS\2014\MISC\MAPFILES\FIGURE 01 - INTERIM OPS AND MAINTENANCE PLAN REVIEW INSPECTION AREA.MXD JHANSEN1 11/6/2017 1:34:30 PM





ENLARGED GABION PLAN

1"= 20'

GENERAL SHEET NOTE

1. RIPRAP TO BE PLACED AT SELECT LOCATIONS BELOW THE WATERLINE AT TOE OF SLOPE AFTER THE EXCAVATION OF SEDIMENT TO PROVIDE THE STABILITY TO THE CANAL BANK.
2. FOR RIPRAP LOCATIONS SEE CROSS SECTIONS IN SHEETS C-301 THROUGH C-315

LEGEND

GABIONS

RIPRAP (SEE NOTE 1)

GABION COORDINATE TABLE

STATION	NORTHING	EASTING
0+00.00	1057258.29	747770.49
0+20.00	1057244.05	747784.50
0+40.00	1057229.29	747797.99
0+60.00	1057214.63	747811.60
0+80.00	1057200.41	747825.65
1+00.00	1057185.88	747839.38
1+20.00	1057170.08	747851.63
1+40.00	1057155.06	747864.83
1+60.00	1057140.09	747878.09
1+80.00	1057125.29	747891.54
1+99.28	1057110.72	747904.13

NOTE:
FOR GABION INSTALLATION LOCATION SEE REFERENCE DRAWING THEW ASSOCIATES GABION WALL LOCATION MONITORING

Figure 2. Gabion Wall Record Drawing, Periodic Review Report for Gorham Street Area and Gabion Wall
Former Hampshire Chemical Corp. Facility
Waterloo, New York

RECORD DRAWINGS

Revisions Drawn By D SCHAUER Date 2015-08-11

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

NO.	DATE	REVISION	BY
DSGN	S RAMAMURTHY	DR D SCHAUER CHK W ANDRAE APVD	APVD G COLVIN

SEDIMENT REMOVAL CORRECTIVE MEASURES
FORMER HAMPSHIRE CHEMICAL CORPORATION FACILITY
WATERLOO, NEW YORK

JACOBS®

CIVIL

BANK STABILIZATION PLAN RESTORED BANK

1" = 60'

VERIFY SCALE

BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"

DATE	JULY 2014
PROJ	428287
DWG	C-212
SHEET	14 of 14

FILENAME: 005-C-2012_428287.dgn PLOT DATE: 2016\01\14 PLOT TIME: 2:24:22 PM

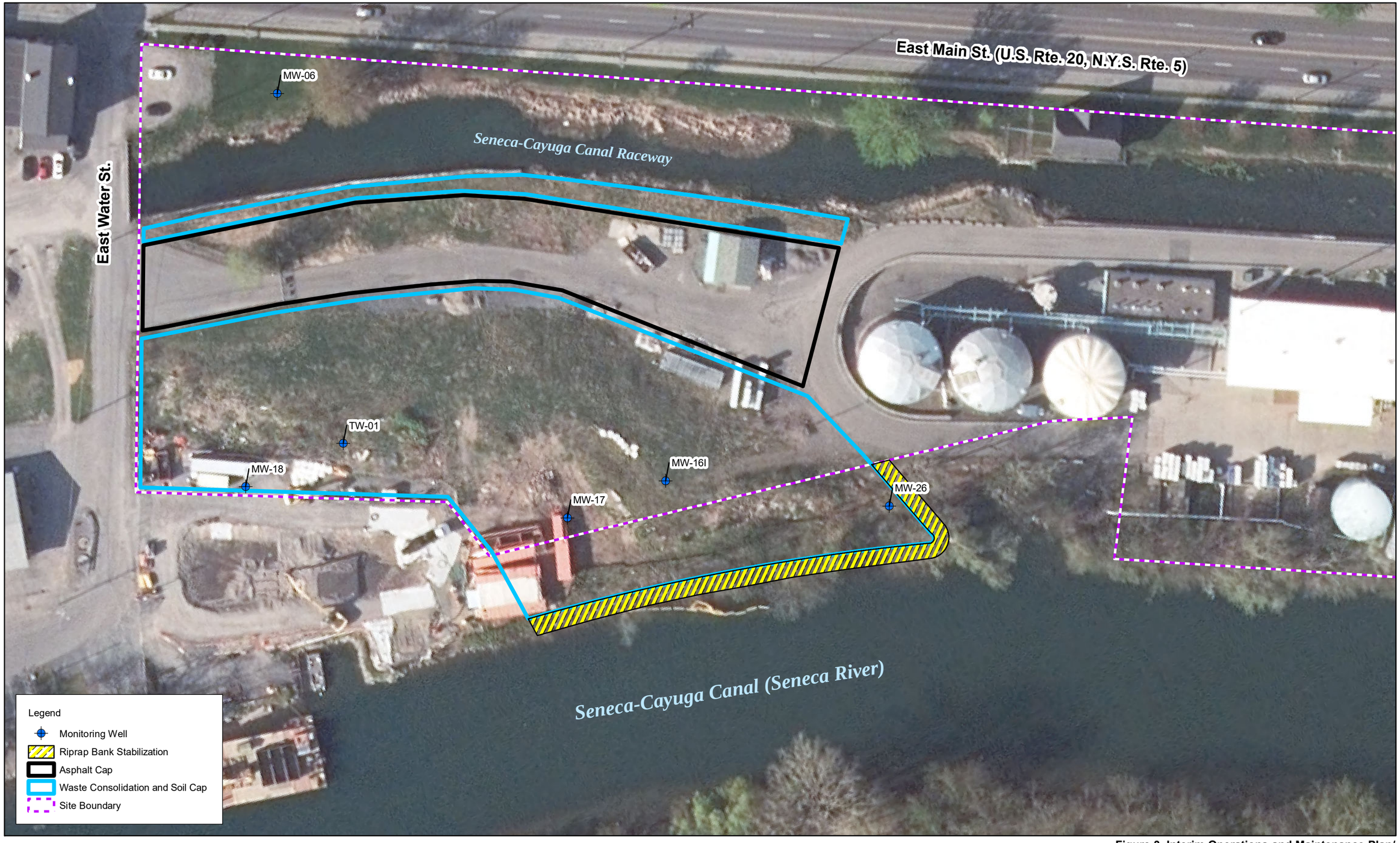


Figure 3. Interim Operations and Maintenance Plan/ Periodic Review Inspection Area for SWMU-1
Former Hampshire Chemical Corp. Facility
Waterloo, New York

JACOBS

\\LAKEFRONT\PROJGIS\DOW\WATERLOO\REPORTS\2017\MAINTENANCE_PLAN_REVIEWREPORT\FIGURE 3 - SWMU 1 INTERIM OPERATIONS AND MAINTENANCE PLAN.MXD JHANSEN1 11/7/2017 8:48:10 AM

Attachment 1
Inspection Forms

Attachment 1: Annual Inspection Form
Interim Operations and Maintenance Plan for SWMU 1
Former Hampshire Chemical Corp. Facility, Waterloo, New York

Inspection Date: 8/3/21 **Inspector Name:** C. Lettich

Soil Cover	Yes	No	N/A	Comments & Deficiencies Noted (Required if Shaded Area Selected)	CA Completion (Date/Initials)
Are there signs of stressed or dead vegetation?	✓			1-2' wide areas of thin cover	To be monitored Fall 2021, Spring 2022
Is mowing of vegetation being performed at a suitable frequency?	✓				
Are there signs of erosion, furrows, ruts, penetrations, cracking or animal burrows?		✓			
Are there any areas of ponding water?		✓			
Any evidence of vandalism to the cover?		✓			
Is there evidence of slope movement along the canal?		✓			
Are there signs of traffic on the soil cover area other than from mowing equipment?		✓			
Are the monitoring wells damaged?		✓			
Asphalt Cap	**Yes**	**No**	**N/A**	**Comments & Deficiencies Noted (Required if Shaded Area Selected)**	**CA Completion (Date/Initials)**
Are there Signs of Erosion, Furrows, Ruts, Penetrations, Cracking or Animal Burrows?		✓			
Is there any vegetation growth through the asphalt?		✓			
Are there any areas of ponding water?		✓			
Any evidence of vandalism to the cap?		✓			
Drainage Swales	**Yes**	**No**	**N/A**	**Comments & Deficiencies Noted (Required if Shaded Area Selected)**	**CA Completion (Date/Initials)**
Are the drainage swales still allowing for adequate flow towards the canal?	✓				
Are there any signs of erosion, furrows, etc?		✓			
Are exterior cleanout locations able to be located?	✓			One cleanout damaged, Missing cap	8/19: Replaced cleanout cover
Are check dams in good condition?	✓				
Is flow bypassing the check dams?		✓			
Any signs of excessive erosion from drainage layer outfall pipe and at down chutes?		✓			
Are there any signs of erosion, furrows, etc?		✓			
Perimeter Security (Fences & Gates)	**Yes**	**No**	**N/A**	**Comments & Deficiencies Noted (Required if Shaded Area Selected)**	**CA Completion (Date/Initials)**
Are all gates locked?	✓				
Is fence in good condition?	✓				
Are there signs of vandalism?		✓			
Is vegetation growing on fence or gates?		✓			

CA - Corrective Actions

Attachment 1: Annual Inspection Form
Interim Operations and Maintenance Plan for Gorham Street
Former Hampshire Chemical Corp. Facility, Waterloo, New York

Inspection Date: 8/3/21 **Inspector Name:** C. Lettich

Soil Cover	Yes	No	Comments & Deficiencies Noted (Required if Shaded Area Selected)	CA Completion (Date/Initials)
Are there signs of stressed or dead vegetation?		✓		
Is mowing of vegetation being performed at a suitable frequency?	✓		Knotweed removal to be performed	8/19: herbicide, October: mechanical removal
Are there signs of erosion, furrows, ruts, penetrations, cracking or animal burrows?		✓	overgrown inactive burrow	8/19: fill burrow with stone
Are there any areas of ponding water?		✓		
Any evidence of vandalism to the cover?		✓		
Is there evidence of slope movement along the canal?		✓		
Are there signs of traffic on the soil cover area other than from mowing equipment?		✓		
Asphalt Cap	**Yes**	**No**	**Comments & Deficiencies Noted (Required if Shaded Area Selected)**	**CA Completion (Date/Initials)**
Are there signs of erosion, furrows, ruts, penetrations, cracking or animal burrows?		✓		
Are there any vegetation growth through the asphalt?		✓		
Are there any areas of ponding water?		✓		
Any evidence of vandalism to the cap?		✓		
Drainage Swales	**Yes**	**No**	**Comments & Deficiencies Noted (Required if Shaded Area Selected)**	**CA Completion (Date/Initials)**
Are the drainage swales still allowing for adequate flow towards the canal?	✓			
Are there any signs of erosion, furrows, etc?		✓		
Perimeter Security (Fences & Gates)	**Yes**	**No**	**Comments & Deficiencies Noted (Required if Shaded Area Selected)**	**CA Completion (Date/Initials)**
Are all gates locked?	✓			
Is fence in good condition?	✓			
Are there signs of vandalism?		✓		
Is vegetation growing on fence or gates?		✓		

CA - Corrective Actions

Former Hampshire Chemical Corp. Facility

AOC A Sediment Removal Project

Gabion Wall Inspections

The gabion wall located on the Cayuga-Seneca Canal should be assessed and inspected biennially. The following items will be included in these routine visual inspections:

- Confirm that eroded soil has not built up on the top of the wall; remove materials as necessary
- Inspect for visual signs on vertical or horizontal alignment changes, bulging, or other changes since the last inspection. Take photos for similar locations and directions for comparison over time
- Inspect face of wall for broken or separated sections of the wire gabions and plant growth; large vegetation/trees should be removed.

If during inspections, individual wires or sections of the gabions are found to be broken, they must be repaired as soon as possible because they are structural elements of the wall. Repairs should include gabion wire repair materials (welded wire mesh, binding wire, rings, etc.) recommended by a reputable gabion manufacturer and supplier. All repairs will be performed in strict conformance to gabion manufacturer recommendations.

Inspection	Comments
Erosion at top or back of gabion wall	None
Horizontal alignment (bulging)	None
Vertical alignment (drop or deflection of top of wall)	None
Gabion basket wire (damage or breaks)	None
Vegetation (on face or top of wall)	Minor grape vine/brush western end

Inspection Completed by: C. Lettich

Inspection Date: Aug 3, 2021

Attachment 2
Photo Logs

Jacobs

Photo Log

Project Title	**Interim Operations and Maintenance Plan/Periodic Review Report 2021, Gorham Street Area, Gabion Wall, and SWMU1**
Location	Former Hampshire Chemical Corporation Facility, Waterloo, New York—Site No. 850001A
Date	November 2021

Gorham Street Area

Photograph 1. Inactive groundhog burrows filled with gravel (looking northwest).

Taken by: *T. Salsburg* ***Date taken:*** *November 19, 2020*

Photograph 1: Groundhog burrow with signs of activity (removed gravel) (looking southwest).

Taken by: *C. Lettich* ***Date taken:*** *May 27, 2021*

Photograph 2: Upper slope east of Gorham Street at its southern terminus with the bridge (looking south).

Taken by: *C. Lettich* ***Date taken:*** *May 27, 2021*

Photograph 4: Upper slope west of Gorham Street at its southern terminus with the bridge (looking southwest)

Taken by: *C. Lettich* ***Date taken:*** *May 27, 2021*

Photograph 5: View of cover system and swale with Japanese Knotweed occurring near the power pole (looking north from south-eastern corner).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 6: View of cover system, fence, and power poles surrounded by Japanese Knotweed (looking south from north-eastern quadrant).
Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 7: View of cover system, fence, and Evans' equipment laydown area (looking west from north-western corner).
Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 8: View of cover system open area and equipment laydown area (looking south).
Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 9: View of fence and Evans' equipment laydown area (looking southeast).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 10: View of cover system along the canal bank and perimeter fence (looking southeast).

Taken by: *C. Lettich* *Date taken:* *August 3, 2021*

Photograph 11: View new asphalt over south-eastern cover system (looking east).

Taken by: *T. Salsburg* *Date taken:* *August 19, 2021*

Gabion Wall

Photograph 12: View of gabion alignment, including the western terminus (looking east).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 13: View of gabion alignment (looking west).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 14: View of gabion alignment, including the eastern terminus (looking west).
Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 15: View of gabion alignment (looking west).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Solid Waste Management Unit 1

Photograph 36: Stressed vegetation along the upper slope (looking northwest).

Taken by: *C. Lettich* *Date taken:* *May 27, 2021*

Photograph 17: Northern slope of SWMU-1 (looking west).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 18: South-eastern area of cover system and lower swale (looking east).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 19: Western area of cover system in foreground and former sediment treatment pad between base of the slope and canal (looking southwest).

Taken by: *C. Lettich* ***Date taken:*** *August 2, 2021*

Photograph 20: Western portion of cover system (looking west).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*

Photograph 21: Southern portion of cover system and former sediment treatment pad with monitoring well MW-17 in the yellow monument (looking east).

Taken by: *C. Lettich* ***Date taken:*** *August 3, 2021*