Corrective Measures Remedial Design Work Plan

Supplemental Groundwater Suppression and Product Recovery System

ALCO – Maxon Site – Parcel B, BCP Site No. C447043

Maxon ALCO Holdings, LLC

220 Harborside Drive, Suite 300

Schenectady, NY 12305

Prepared For

Maxon ALCO Holdings, LLC

220 Harborside Drive, Suite 300

Schenectady, NY 12305

March 2022

Revised May 2022

Barton&Loguidice

Maxon ALCO Holdings, LLC.
Parcel B – BCP Site No. C447043
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Albany, New York 12205

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1.0 INTRODUCTION

On behalf of Maxon ALCO Holdings, LLC (Volunteer), (Schenectady, NY) Barton & Loguidice, D.P.C (B&L), has prepared the following Supplemental Groundwater Suppression and Product Recovery System Work Plan to address an area of residual petroleum contamination in the vicinity of the Diversion Structure 1 (DS-1) associated with the site's stormwater management system. This work plan builds on the results of the Corrective Measures investigation Report (February 2022) which summarized the work performed in the around the DS-1 structure and the subsequent remedial design decision of a groundwater recovery/treatment system agreed upon by the New York State Department of Environmental Conservation (NYSDEC). This work plan proposes the pre-design field investigations necessary to obtain data for the design of the groundwater recovery/treatment system, and also describes the NYSDEC requested supplemental investigation of the stormwater system associated with the harbor and Outfall #1. The work plan was prepared in accordance with the Parcel B Site Management Plan (SMP) and 6 NYCRR Part 375 regulations.

1.1 Project Background

Remedial action programs have been implemented during site development at the former ALCO industrial site to remove encountered areas of residual historical petroleum, along with Site Management Plan actions, including monitoring and maintenance activities which are part of the remedial action program. The approved and implemented site remedy included the placement of soil cover systems above site soils harboring residual petroleum compounds. Periodic occurrences of petroleum sheens to the Harbor surface have been observed during periods of intense rainfall and/or Mohawk River level fluctuations. These occasional sheens are suspected to be associated with residual aged subsurface petroleum mobilized from the soils during such events and entering the Harborside Drive stormwater network (Stormwater Network #1), which conveys flow to Outfall #1 located along the western end of the Harbor (Figure 1).

As a result of these periodic sheens, several investigations have been performed in order to isolate a section of Stormwater Network #1 where residual petroleum may be infiltrating the stormwater drainage system.

During an investigation of the interior condition of DS-1 on June 25, 2020 by Precision Industrial Maintenance, Inc. (PIM), grout deterioration and cracking at the bottom of the pipe penetration through the upstream wall was noted with seepage of contaminated groundwater into the structure. The structure was cleaned and sealed. It was then decided that further investigation of the surrounding conditions was warranted.

In accordance with the approved revised DS-1 Subsurface Investigation letter work plan to the NYSDEC dated July 23, 2020 and the Parcel B SMP, B&L field staff completed a subsurface investigation on August 10 and 11, 2020 around the exterior of DS-1. The purpose of the investigation was to assess the subsurface conditions immediately around the outside of the DS-1 stormwater structure. During the investigation, eight (8) soil borings and three (3) monitoring wells were installed (Figure 3). Soil and groundwater samples were collected and analyzed for

the presence of Volatile Organic Compounds (VOCs) and Semi-Volatile Organic Compounds (SVOCs). VOC and SVOC detections were noted in both the soil and groundwater samples. In addition, free-phase petroleum has been noted in monitoring well MW-3. As a result, and as anticipated by the SMP, remedial techniques can be implemented to treat the source area that appears to be infiltrating the stormwater system in the vicinity of DS-1.

In an effort to further improve the capturing of free phase oil, B&L installed a Whale Pump Model I submersible pump into monitoring wells MW-1, MW-2, and MW-3 on May 6, 2021. By aggressively pumping each well, although not instantaneously, it was determined that the product recovery could be temporarily increased using this drawdown method.

1.1.1 Project Location and Description

The site is located at 301 Nott Street, Schenectady, New York and had served for a century as an industrial and manufacturing facility. The site consists of three adjacent parcels (Parcel A, Parcel B, and Parcel C). The focus of this supplemental Remedial Design Work Plan is in the vicinity of the DS-1 structure located on Parcel B. Parcel B is approximately 30.62 (August 2016) acres and was part of the former American Locomotive Company property located at 301 Nott Street in Schenectady. This Parcel lies between Parcel A (C447042), that is adjacent to the Mohawk River, and Parcel C (C447044), which is adjacent to Front Street and Erie Boulevard (Figure 1).

The DS-1 structure is located north of River Street, west of Harborside Drive, and south of the Mohawk Harbor (Figure 1 and Figure 2).

1.2 Previous Investigation and Report

1.2.1 Corrective Measures Investigation Report

A Corrective Measures Investigation Report was submitted to the Department and subsequently approved on February 15, 2022, to evaluate the residual subsurface petroleum entering the storm system and review remedial treatment options. Based on the Corrective Measures Investigation Report and Department agreement, the corrective measures design determined most suitable to mitigate residual subsurface petroleum from entering the stormwater system is to install a groundwater recovery system in the immediate vicinity of the DS-1 area that would depress the groundwater table and allow for the capture and conveyance of free phase oil to an oil/water separator system. The groundwater recovery system will be equipped with a product removal mechanism (i.e., belt skimmer or equivalent method). The specific mechanism will be confirmed or an alternate identified in the design process. The remedial system would assist in treating the source area, minimizing the infiltration of petroleum into the stormwater system and reducing and/or eliminating the periodic sheens that have been observed in the Harbor.

1.3 Corrective Measure DS-1 Design Objectives

The corrective measure design objective will be to collect data necessary to assist in the development of groundwater/product recovery system design. This corrective measures system is expected to reduce the source area and volume of petroleum infiltration into the stormwater system, with the goal of reducing the periodic sheens that has been observed in the harbor. The design investigation is expected to include the tasks listed below.

- Survey the location and elevation of all site wells (including all monitoring wells, DS-1 area wells, riverbank injection wells, recovery wells, observation wells, etc.). Well riser elevations shall be surveyed to the nearest one-hundredth of a foot. The survey data will be utilized to produce site wide groundwater contour maps with stormwater system elevations overlaid to evaluate what portion of the drainage system is below the water table.
- Review as-builts and inventory the stormwater system access points to determine, in consultation with the Department, appropriate inspection/sampling locations.
- Determine, in consultation with the Department, the appropriate analytical methods for evaluating potential contaminant entry in stormwater sewer. As part of this task it is proposed that a sample from the surface water at Outfall 001 be collected and analyzed for VOCs, SVOCs, and DRO for potential finger print analysis. Additionally, the same suite of parameters shall be collected from MW-3 near the DS-1 structure.
- Conduct supplemental storm sewer inspection/sampling at a time meeting qualifying conditions, as defined in Section 2.1.4.
    - Observed structure conditions will be recorded (i.e. flowing or stagnant water, observable sheen, petroleum odors, depth to water, etc.).
    - Collect and run samples for appropriate analysis, as determined from previous tasks and in consultation with the Department.
- Conduct hydrogeologic evaluation to determine groundwater suppression and product recovery system design requirements.
    - Determine permeability through rising head slug testing and analysis of DS-1 area wells.
    - Estimate target drawdown/radius of influence from pumping in DS-1 area using the Thiem equation.
    - Determine hydraulic gradient across the site and in the vicinity of DS-1.
- Develop remedial system layout plan.
    - Confirm system layout/configuration (power source, delivery lines, discharge lines, treatment system shed, etc.) and compatibility with existing utilities and other infrastructure.
    - Determine oil/water separator discharge requirements with the City of Schenectady and/or evaluate pre-treatment, on-site treatment, or other handling and disposal methods.

- Determine permits needed to implement the design or have the Department waive the permit requirement as this work is being implemented in accordance with the approved SMP.
- The performance of a camera inspection may be considered in the future based on analytical results collected from the stormwater system. Surface water quality results collected from the stormwater system manhole structures will indicate the presence or absence of VOCs. Based on the analytical results, sections of pipe between the manhole structures that exhibit contamination (if any) could be considered for further evaluation.
- Continue to implement sheen mitigation measures and incident response protocol. A blank weekly inspection form that summarizes the ongoing routine tasks is included as Attachment A.

1.3.1 Corrective Measure

The installation of a product recovery/groundwater suppression system will promote a more aggressive extraction of residual petroleum product around the DS-1 structure. This method of recovery will create a slight depression of the water table in the vicinity of the DS-1 structure so that any free product is directed toward the pumping well and extracted from the ground, thereby preventing seepage into the stormwater system.

1.4 Corrective Measures Remedial Design Work Plan Organization

This report is organized into 6 major sections (including this introduction section), with appropriate subsections within each division. Figures are located following the text, prior to the appendices in the back of the document.

2.0 PRELIMINARY DESIGN INVESTIGATION

Based on the results of the Corrective Measures Investigation described in Section 1.3.1, the source area identified in the vicinity of the DS-1 structure has the potential to infiltrate stormwater network #1 and ultimately release sheen to the harbor surface. To remediate the source area and reduce sheen flow events to the harbor, the Department agreed with the recommended groundwater suppression and product recovery system as the remedy.

The recovery system would collect petroleum product in the vicinity of monitoring wells MW-2 and MW-3 located on the north side of the DS-1 structure, where residual free product has been noted during the DS-1 subsurface investigation (2019) and a subsequent pump test event. The recovery system is anticipated to lower the water table in the immediate vicinity of the DS-1 structure, thereby inducing a cone of depression and redirecting groundwater flow and free product toward the recovery system. The recovery system will be equipped with a petroleum collection system (e.g., belt skimmer, or skimmer pump) that will continuously remove free product, when present, from the groundwater surface that is drawn towards the system (Figure 5).

Further hydrogeologic evaluations will be completed, prior to the design of the recovery well system to help determine hydraulic conductivity, groundwater gradient, groundwater flow direction, pumping rates, and radius of influence of a pumping well. Each supplemental investigation is described in greater detail below.

2.1 Field Investigation

The following section provides the proposed methodologies required to collect necessary hydrogeologic data needed to assist in the design of a pumping system. The supplemental investigations will include the following;

- In-situ variable hydraulic conductivity testing will be performed within the three (3) DS-1 monitoring wells to assist in selection of the design pumping rate and pump size for the groundwater recovery well(s);
- A groundwater monitoring engineering control survey will be completed to determine the groundwater flow direction and groundwater elevation site wide. The groundwater elevations will be compared to the elevations of the upstream stormwater network #1 pipe elevations and assess where groundwater has the potential to intersect and possibly access the stormwater system. Sections of pipe that are constructed above the water table would be eliminated as a likely access point;
- Supplemental investigation of the stormwater network #1. This investigation will focus on the main header pipe and lateral connections to the main header pipe. An inventory of available access points to lateral connections and the main header will be evaluated as part of this investigation. In addition, this investigation will implement analytical testing for Diesel Range Organics from MW-3. Results collected from this location will be evaluated with the Department. Results will be used as a finger print analysis to determine if similarities exist between sampling points from the header and lateral

connections. Agreed upon sampling locations of the stormwater system will be confirmed with the Department subsequent to performing an inventory investigation of potential sampling points.

2.1.1 Hydraulic Conductivity Testing

The measure of hydraulic conductivity in the subsurface describes the ability of rock or soil to transmit water. Given sufficient continuity of the strata and known hydraulic gradients, it is the hydraulic conductivity that will control the migration pathway for groundwater. In-situ variable hydraulic conductivity testing will be performed within the three (3) DS-1 monitoring wells to assist in the determination of the design pumping rate and pump size for the groundwater recovery well.

To determine the in-place hydraulic conductivity of the unconsolidated material screened by the two-inch diameter monitoring wells, rising head slug tests will be performed at locations MW-1 through MW-3. These tests will involve lowering the water level in the well and measuring the change in head with respect to time as the well is allowed to recover to static conditions. Testing equipment will include an electronic water level probe, a 1-inch by 2 or 4-foot long solid PVC core, and an In-Situ LevelTroll Data Logger (In-Situ, Inc.). The LevelTroll Data Logger is an automated measuring device designed to record small changes in a depressed or elevated head of water within a well. The instrument is connected to a pressure transducer which, when lowered into the water column, converts the pressure exerted by the head of water above it into a linear measurement of the depth of submergence.

The static water level will be collected prior to commencement of inserting the core (slug) and will be used as the reference point from which the instrument will record test data. A rising head test will be performed by removing the slug from the water column and recording the increasing head data until the water level has recovered at least to within 90% of the static water level.

Rising head data collected from the In-Situ LevelTroll will be evaluated using Aqtesolv® Software. For each data set, the software will be used to generate a graph illustrating the displacement of the water column (as normalized head) plotted over the time necessary for the well to return to equilibrium. It is anticipated that the Bouwer-Rice (1976 and 1989) solution for unconfined aquifers will be used to determine the hydraulic conductivity. The solution formulas and variables are illustrated below:

Bouwer-Rice (1976)

$$\ln(H_0) - \ln(h) = \frac{2KLt}{r^2_{rc} \ln(r_e/r_{we})}$$

$$r_{we} = r_w\sqrt{Kz/Kr}$$

Where:

- h is displacement at time *t*
- H_0 is initial displacement
- K_r is radial hydraulic conductivity
- K_z is vertical hydraulic conductivity
- L is screen length
- r_c is nominal casing radius
- r_e is external radius
- r_w is well radius
- r_{we} is equivalent well radius
- t is time

Double strait-line effects for these wells (which are screened across the water-table) will be evaluated. If this phenomenon be present in the water level data, hydraulic conductivities will be determined by the later water level data after initial filter pack drainage effects are lessened.

2.1.2 Groundwater Gradient

The Parcel B Site Management Plan (November 2016) defines the horizontal hydraulic gradient from south to north across the Site as approximately 0.006 ft./ft. This value will be compared to calculated gradient determined subsequent to the completion of the environmental monitoring point survey. The most conservative value will be used to assist in calculating the pumping rate and pump size described in Section 2.2 below.

2.1.3 Groundwater Monitoring Engineering Control Survey

The location of each groundwater monitoring well sampled during quarterly monitoring, DS-1 area wells, existing Harbor groundwater recovery wells, and riverbank injection wells will be determined by a New York State-licensed surveyor. Locations will be reported in feet as horizontal coordinates referenced to the New York State plane coordinate system (NAD 1983), accurate to the nearest one-tenth (0.1) feet. Elevations will be reported in feet referenced to the USGS mean sea level datum; ground levels at wellheads will be accurate to at least one-tenth (0.1) feet, and the top rim of the PVC riser and the lid of the protective cover on each monitoring well will be accurate to one-hundredth (0.01) feet. Subsequent to the survey, groundwater contours/flow direction figures to be generated and provided to the Department.

2.1.4 Supplemental Stormwater System Investigation

On June 2, 2021, B&L investigated the conditions in DS-1 as well as upstream manhole/catch basin locations (refer to Figure 2) in accordance with the Harbor Operation and Maintenance letter submitted to the Department April 30, 2021, and subsequently approved on May 6, 2021 via email correspondence. The purpose of this investigation was to isolate section(s) upstream of the DS-1 structure, where residual

petroleum in the subsurface could potentially be entering the system, as specified in the NYSDEC approved letter. Two of the three stormwater structures downstream of the DS-1 structure (MH-7 and MH-13) were previously investigated by Precision Industrial Maintenance (PIM), and no obvious signs of infiltration into the stormwater system were noted and therefore eliminated from this investigation.

The methodology of this investigation included lowering a photoionization detector (PID) to the bottom of each structure to monitor for the presence of volatile organic compounds, supplemented by an internal swab around each pipe penetration and structure joint/or seal using sorbent pads and a PVC pole. In addition, a video log was captured for any structure that exhibited PID readings. The PID meter was lowered into each structure and hung at the surface of the water for approximately two minutes. The PID meter was set to log data at a one-minute interval.

Based on the stormwater system evaluation there was little to no indication that free product is entering the DS-1 structure via upstream locations; however, this investigation did not include any lateral connections or the collection of analytical samples. Based on the results of the stormwater system investigation and as requested by the Department in letter dated January 11, 2022, an additional inspection of stormwater network #1 is required.

The supplemental investigation will evaluate the conditions of stormwater network #1 main header as well as the lateral connections along Mohawk Harbor Way (Figure 2). Prior to an evaluation of the entire system, the supplemental investigation will begin with the collection of one groundwater sample from monitoring location MW-3 which will be analyzed for diesel range organics (DRO) to provide an analytical baseline from the area of contamination assumed to be entering the stormwater system. An inventory of catch basin/manhole structures associated with stormwater network #1 that are accessible for supplemental evaluation and possible sample collection will also be investigated at this time. The DRO results from MW-3 and the results of the stormwater system inventory, will be reviewed with the Department to discuss appropriate sample locations. Sections of the stormwater system and access catch basins/manholes found to be above the water table, as determined through the site survey, would not be considered for sampling.

To avoid the collection of stormwater samples from stagnant manholes or catch basins, it is proposed that the sampling event will be performed 2 days following a qualifying storm event (>.10 inches). This will allow the system to flush, yet allow time for petroleum product (if entering the stormwater network via groundwater) to collect, providing representative sample results.

Sample collection from the manholes and catch basins will be achieve through the use of an extendable swing sampler. The sample container will be attached to the swing sampler and extended until contact with the base of the manhole structure/catch basin.

Samples will be collected from the center of the structure where water collects in the structure basin prior to discharging via downgradient piping. Observations of structure conditions will be evaluated during sample collection, indicating if samples are collected from flowing or stagnant conditions, observable sheen, petroleum odors, or other noteworthy observations. Field data sheets will be maintained for each sampling location documenting water quality conditions. Collected samples will be placed in a cooler, on ice, and hand delivered to Pace Analytical Services, LLC (ELAP certified) service center located in Schenectady, NY under chain-of-custody.

2.2 Summary of Design Elements

The remedial design elements of the groundwater/product recovery system described below are conceptual and subject to change based on the information gathered from the pre-design investigations described in Section 2.1. The supplemental investigations will be utilized to complete a design process to identify the location of the recovery well(s), size and depth of the well(s), pumping system, product recovery system, and appropriate containment/disposal.

2.2.1 Groundwater Suppression and Product Recovery Treatment System

Conceptually, the pump system will consist of an electric submersible pump (rated for operation in a hydrocarbon environment), a liquid level sensor, a surface collection system (i.e., belt skimmer or surface skimming pump or vacuum skimmer), tie-in to an oil/water separator system, and possible pretreatment prior to release to the City of Schenectady sanitary sewer. Coordination with the City of Schenectady on acceptable discharge concentrations of collected groundwater will be required. The constructed treatment system will be housed in a protective shed and secured.

2.2.2 Remedial System Layout

The petroleum recovery well would be situated in a location to best capture free product, based on the conceptual site model, and modeling of the expected cone of depression and capture zone within the known areas of impact. It is likely to be in close proximity to MW-3, where the majority of free product has been documented during weekly inspections (Figure 4).

2.2.3 Pumping Rate, Well Diameter, and Pump Sizing

The hydraulic gradient, along with the assumed dimensions of the plume, saturated thickness, and hydraulic conductivity calculated during the slug test, will be used to estimate the groundwater flow rate using Darcy's Law.

$$Q_{gw} = W \cdot B \cdot K \frac{\Delta h}{\Delta L}$$

Where:

W = estimated width of the plume

B = saturated thickness of the aquifer

K = average hydraulic conductivity

Δh/ΔL = hydraulic gradient

Q = groundwater flow

The maximum pumping rate (Q_{max}) for a single well without interference will then be calculated using the Theim equation shown below.

$$Q_{max} = \frac{S_{max}(2\pi B K)}{\ln\left(W/r_w\right)}$$

Where:

r_w = the well radius

S_{max} = maximum allowable drawdown to minimize smearing

The maximum pumping rate will be compared to the total pumping rate to determine the range of pump sizes to be considered for the recovery well system. This will also provide information to help consider whether one recovery well will suffice to achieve the goal of reducing the periodic sheens. . It is important to note that the system should take precautions to minimize the drawdown in the well to avoid smearing and mobilizing the plume deeper within the aquifer.

2.2.4 Recovery Well Design

The recovery well design will be dependent on the supplemental field investigations described in Sections 2.1.2 and 2.1.3. Based on the current depths of monitoring wells MW-1, MW-2, and MW-3 located near the DS-1 structure and the proposed conceptual design agreed upon by the Department, it is anticipated that the recovery system would extend to a depth of 26 feet below grade with a screened interval of 16 to 26 feet below the ground surface. The diameter of the recovery well is to be determined. Installation

of a variable speed submersible pumping system will be situated at the bottom of the well to control the drawdown. Pumping rates will be adjusted to create a cone of depression influencing a flow gradient towards the well to promote product capture. A source of power to operate the pump will need to be evaluated and installed in close proximity to the recovery well. The analytical results from groundwater sampled from MW-1, MW-2, and MW-3 during the DS-1 subsurface investigation report were submitted to the City of Schenectady Waste Water Treatment Plant Operator for review. On March 22, 2022 via email correspondence, the City determined the groundwater could not be accepted into the sanitary sewer at current concentrations. Collected fluid will require pre-treatment prior to discharge to the sanitary sewer. Free product captured by the surface collection system will be contained within a holding system, which will be monitored regularly for proper handling and disposal of product.

2.2.5 Material Management

Any soil disturbance, removal, transport, disposal, or import/export of material to/from the site will be conducted in accordance with the NYSDEC approved site specific Excavation Work Plan (EWP) (September 2015), included in the Parcel B Site Management Plan (SMP) and 6 NYCRR Part 375 regulations.

2.2.6 Site Restoration

After the completion of soil removal and any other invasive activities, the cover system will be restored in a manner that complies with the requirements approved of the Remedial Design. For all components of the composite cover system, any constructed demarcation layer will be replaced to provide a visual reference to the top of the existing site soils. If the type of composite cover system changes, with NYSDEC approval, from that which exists prior to the excavation (i.e., a soil cover is replaced by asphalt), this will constitute a modification of the cover element of the remedy and the upper surface of the 'Remaining Contamination'. A figure showing the modified surface will be included in the subsequent Periodic Review Report and in any updates to the SMP.

2.3 Health and Safety Plan

All remedial activities will be performed in accordance with the existing Health and Safety Plan (HASP), December 2013.

2.3.1 Equipment and Personnel Decontamination Facilities

The remedial contractor will be required to install an equipment decontamination pad for the decontamination of equipment and vehicles during performance of the remedial construction. The decontamination pad will be large enough to contain wash water and debris from the largest-sized vehicles to be utilized, have a curbed perimeter and be underlain by an impervious liner. The remedial contractor will be required to ensure

that all heavy equipment is clean prior to crossing areas which do not require remediation or have already been remediated, handling imported fill materials and prior to demobilizing.

The water used to decontaminate the equipment will be containerized and disposed off-site, after waste characterization. Collected sediments will be managed and consolidated on-site with other fill material.

2.3.2 Community Air Monitoring

As detailed in the Parcel B approved SMP, Community Air Monitoring Program (CAMP) monitoring protocol will be implemented during intrusive activities (i.e., ground disturbances).

If necessary, dust control measures will be implemented to minimize the potential for dust generation during soil excavation and handling, and placement of fill.

2.3.3 Stormwater Management

Stormwater management, soil erosion and sediment control will be performed in accordance with New York State Standards and Specifications for Soil Erosion and Sediment Control and the most recent NYSDEC Stormwater regulations (SPDES General Permit for Stormwater Discharges for Construction Activities GP-0-20-001). The remedial contractor will be responsible for preventing off-site migration of stormwater during implementation of the remedy and compliance with all stormwater soil and erosion control measures. During excavation activities, the ground surface will be below the surrounding environment, preventing runoff from the site.

3.0 PERMITS AND OTHER AUTHORIZATIONS

Based on the design development process, the necessary permits required will be identified as part of the remedial design and discussion will be conducted with the DEC as to whether permits can be waived in light of the approved work being conducted in accordance with the approved SMP for the brownfield site.

4.0 SCHEDULE

4.1 Schedule Milestone

A preliminary schedule of key milestones for the construction of the treatment system is provided below. Note that the following schedule is generic in nature, given the unknown time period regarding review and approval of the work plan and the proposed remedial design. A schedule with estimated durations from the date of submittal of the work plan is included in the following table.

Milestone	Estimated time from Work Plan Submittal
Submit Draft Work Plan	March 31, 2022
Receive Comments from NYSDEC	April 28, 2022
Submittal of Final Draft Work Plan	May 16, 2022
NYSDEC Approval of Final Work Plan	May 20, 2022
Field Activity Performance (hydraulic conductivity testing, and supplemental stormwater system inspection)	June 2022
Development of Remedial Design Report	July 2022
Submit Draft Remedial Design Report to the NYSDEC for Review	August 2022
Receive Comments from NYSDEC	August 2022
Submit Final Remedial Design Report to the NYSDEC	September 2022
Draft Remedial Action Work Plan	September/October 2022
Submit Remedial Action Work Plan to the NYSDEC	October 2022
Receive Comments from NYSDEC	October 2022
Submit Final RAWP	October 2022
NYSDEC Approval of Final RAWP	November 2022
Release Contract Documents for Bidding	March 2023
Remedial Contractor Selection	April 2023
Contract Award	April 2023
Completion of Remedial Construction	June 2023
Submittal of the Draft Construction Completion Report and Revised Site Management Plan	July 2023
Receive NYSDEC Comments on Draft Construction Completion Report and Revised Site Management Plan	July 2023
Submittal of Certified Construction Completion Report and Final Site Management Plan	August 2023
NYSDEC Approval of Certified Construction Completion Report and Final Site Management Plan	August 2023

5.0 POST CONSTRUCTION PLANS

5.1 Site Management Plan Update

An updated Site Management Plan (SMP) will be prepared and submitted concurrent with completion of the remedial construction activities.

5.2 Construction Completion Report

A Construction Completion Report (CCR) will be prepared at the conclusion of the work noted in this Work Plan to document that the actions have been undertaken in regards to the groundwater recovery/treatment system. The report will be prepared in accordance with the DER-10, *Technical Guidance for Site Investigation and Remediation* (NYSDEC, 2010).

6.0 REFERENCES

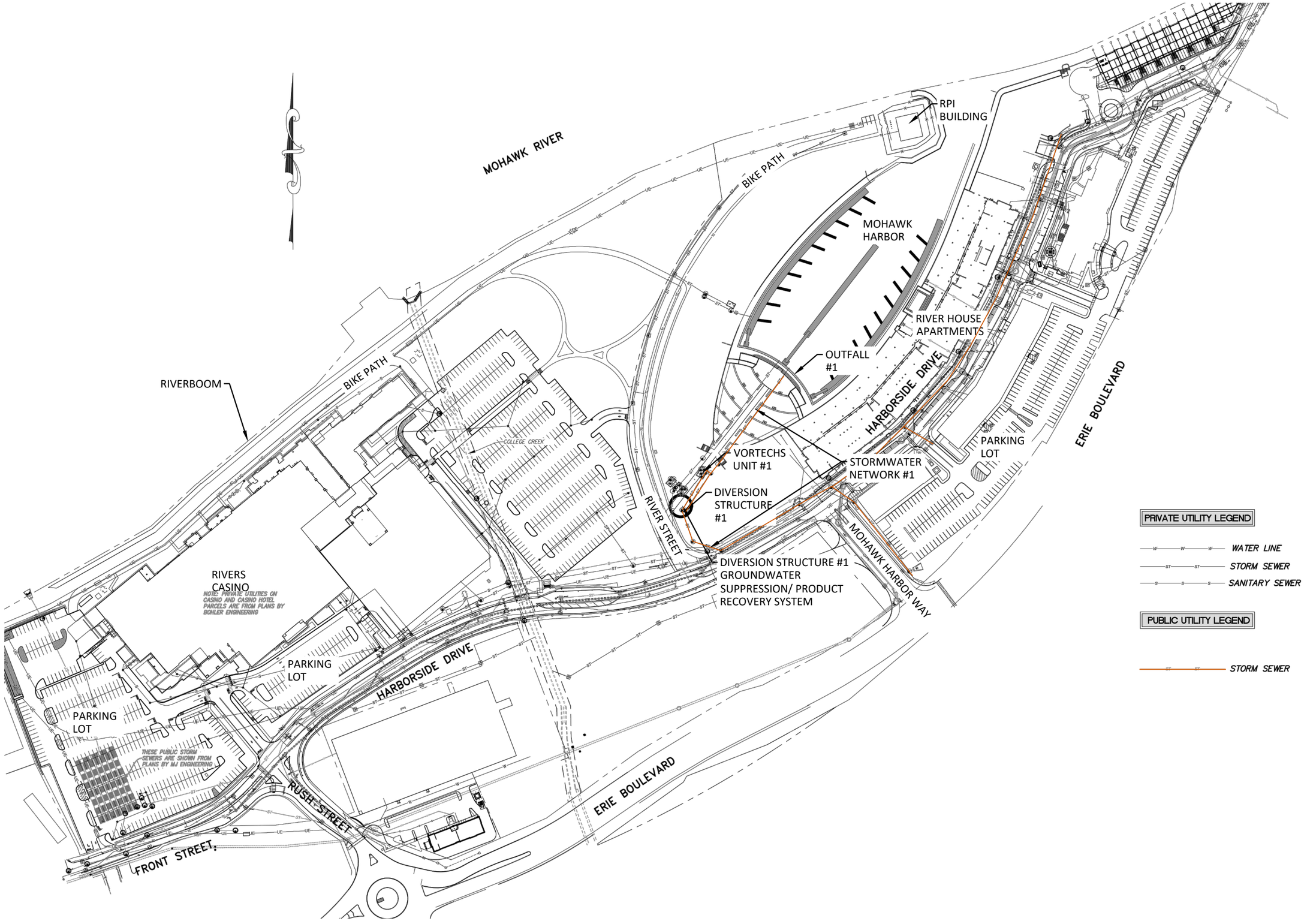
New York State Department of Environmental Conservation, May 2010. DER-10 / Technical Guidance for Site Investigation and Remediation. DEC Program Policy, Office of Remediation and Materials Management.

New York State Department of Environmental Conservation, December 2006. 6 NYCRR PART 375, Environmental Remediation Programs, Subparts 375-1 to 375- 4 & 375-6. Division of Environmental Remediation.

Environmental Protection Agency, September 1996. How to Effectively Recover Free Product at Leaking Underground Storage Tank Sites.

Barton & Loguidice, August 2015. Parcel B – Remedial Design Report (RDR), Former ALCO Site.

Figures



MAXON ALCO HOLDINGS, LLC.

CORRECTIVE MEASURES REMEDIAL ACTION WORK PLAN

SITE PLAN

SCHENECTADY COUNTY, NEW YORK

CITY OF SCHENECTADY

B&L

Barton & Loguidice, D.P.C.

10 Airline Drive
Suite 200
Albany, NY
12205

Date
MARCH 2022

Scale
NOT TO SCALE

Figure Number
1

Project Number
1368.001.005

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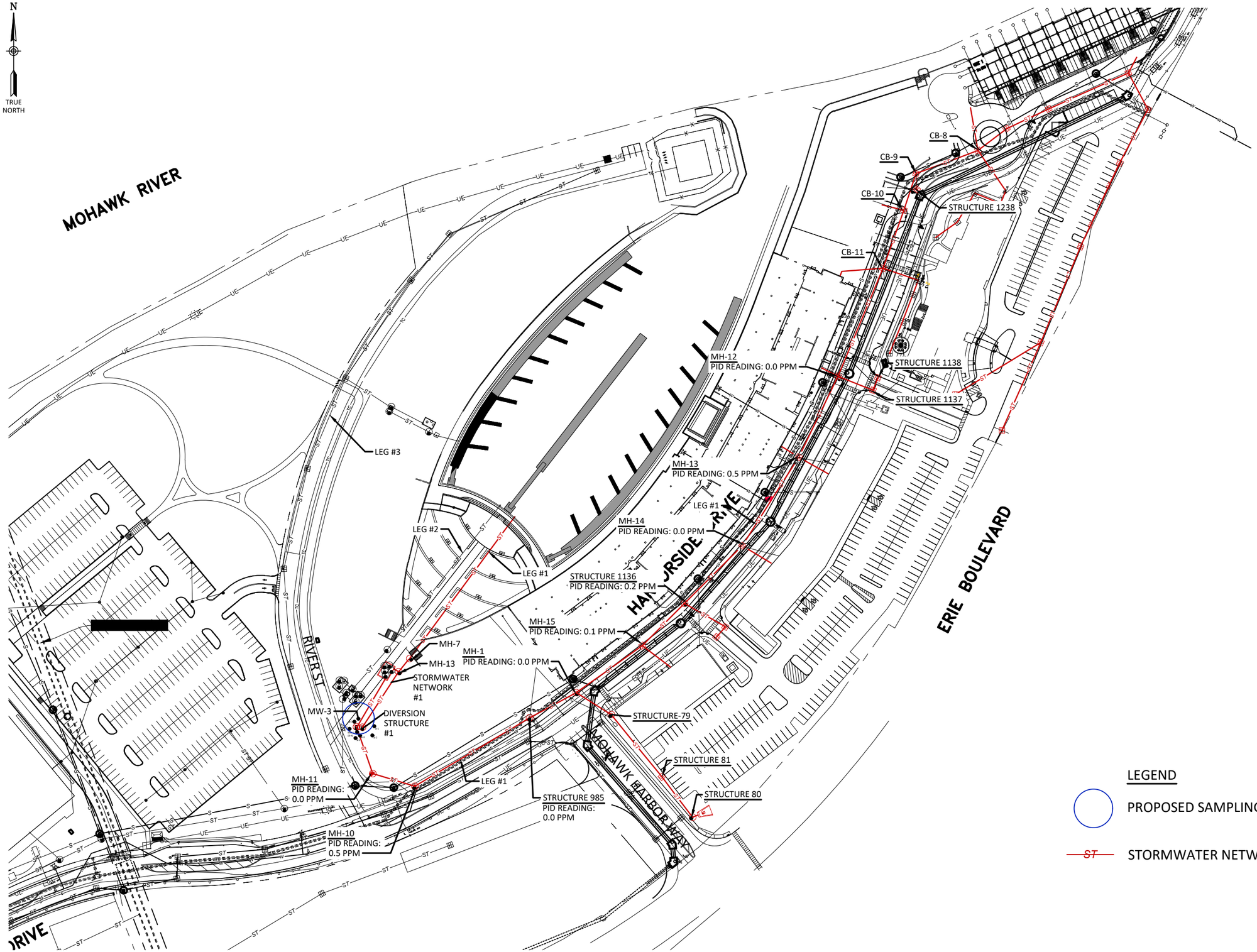

MAXON ALCO HOLDINGS, LLC

CORRECTIVE MEAUSRES REMEDIAL ACTION WORK PLAN

STORMWATER NETWORK #1 MAIN HEADER/ LATERAL/ STRUCTURE LOCATION PLAN

CITY OF SCHENECTADY SCHENECTADY COUNTY, NEW YORK

B&L

Barton & Loguidice, D.P.C.

443 Electronics Parkway
Liverpool, NY
13088

Date
MARCH 2022

Scale
NOT TO SCALE

Figure Number
2

Project Number
1368.001.005

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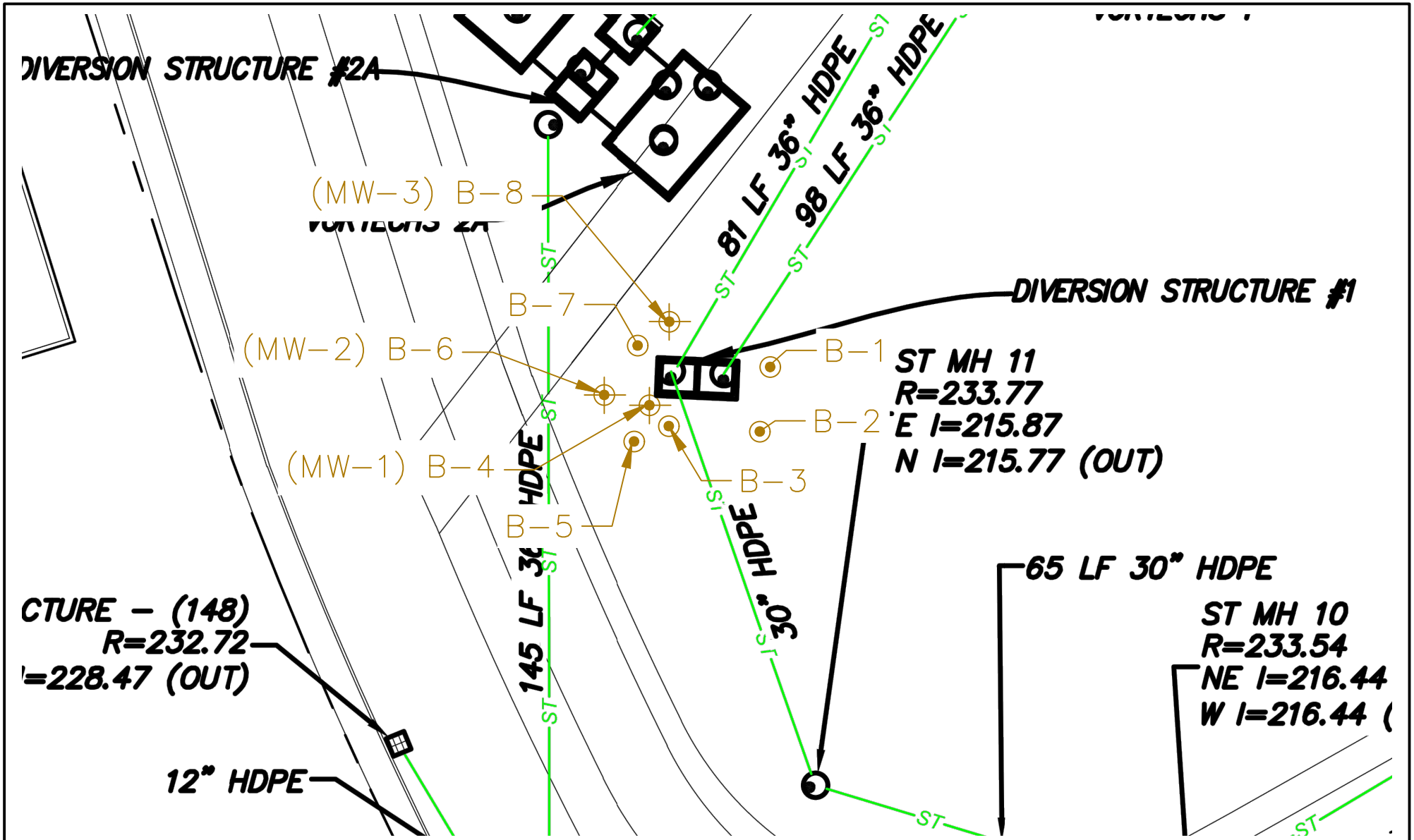
Z:\BL-Vault\ID2\18217AD2-1C71-4823-8927-99D5C4054147\0\2569000-2569999\2569703\L\L\FIGURE 3 – DS-1 SOIL BORING LOCATIONS (ID 2569703).dwg



Barton & Loguidice

Date	Scale
MARCH 2022	NOT TO SCALE

LEGEND

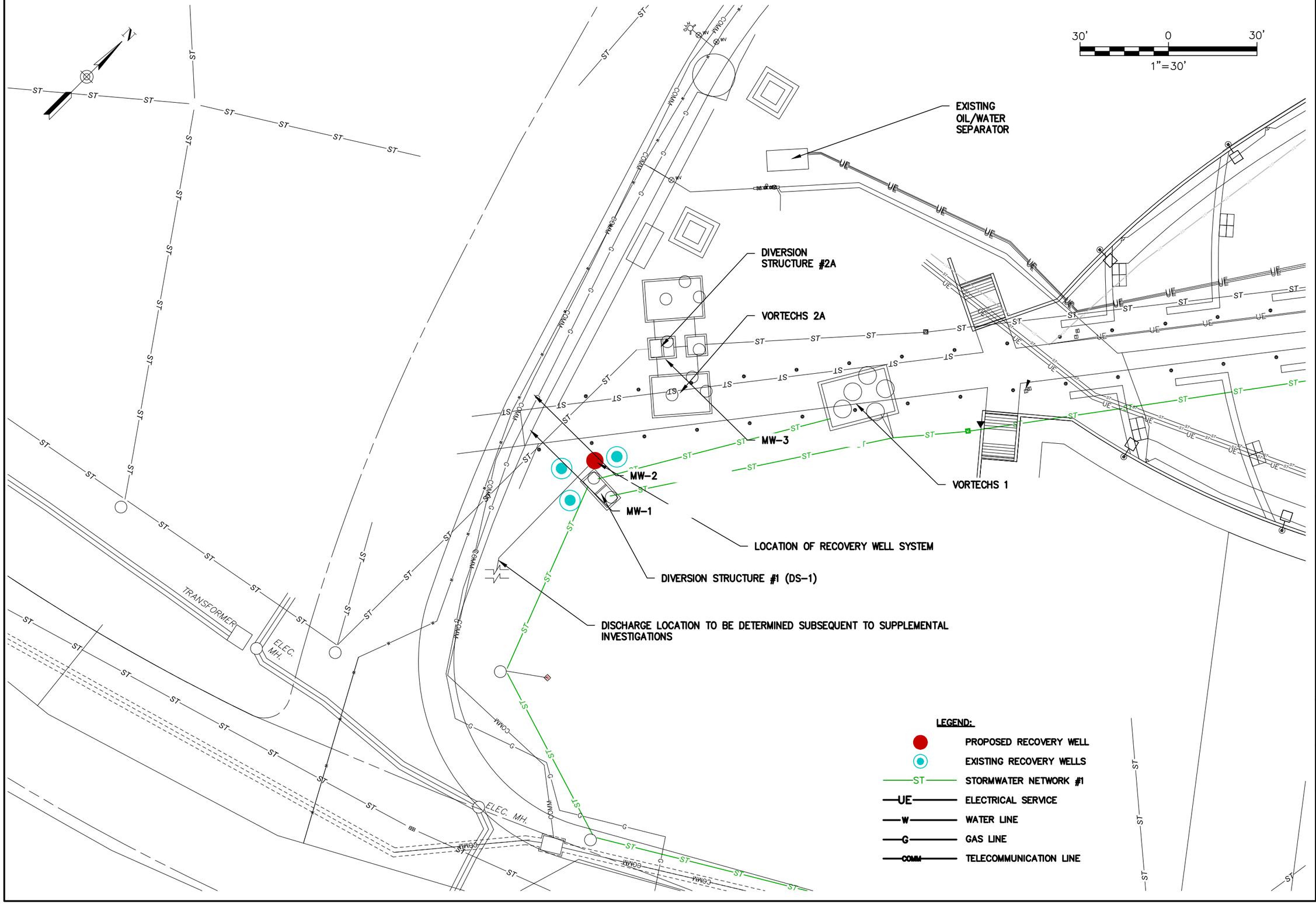
- APPROX. SOIL BORING LOCATION
- APPROX. MONITORING WELL LOCATION

MAXON ALCO HOLDINGS, LLC.
CORRECTIVE MEASURES
REMEDIAL ACTION WORK PLAN

DS-1 SUBSURFACE INVESTIGATION

CITY OF SCHENECTADY SCHENECTADY COUNTY, NEW YORK

Figure Number	Project Number
3	1368.001.005



RECOVERY WELL SYSTEM PLAN

MAXON ALCO HOLDINGS, LLC
CORRECTIVE MEASURES REMEDIAL ACTION WORK PLAN
SCHENECTADY COUNTY, NEW YORK
CITY OF SCHENECTADY

B&L
Barton & Loguidice, D.P.C.
10 Airline Drive
Suite 200
Albany, NY
12205

Date
MARCH 2022

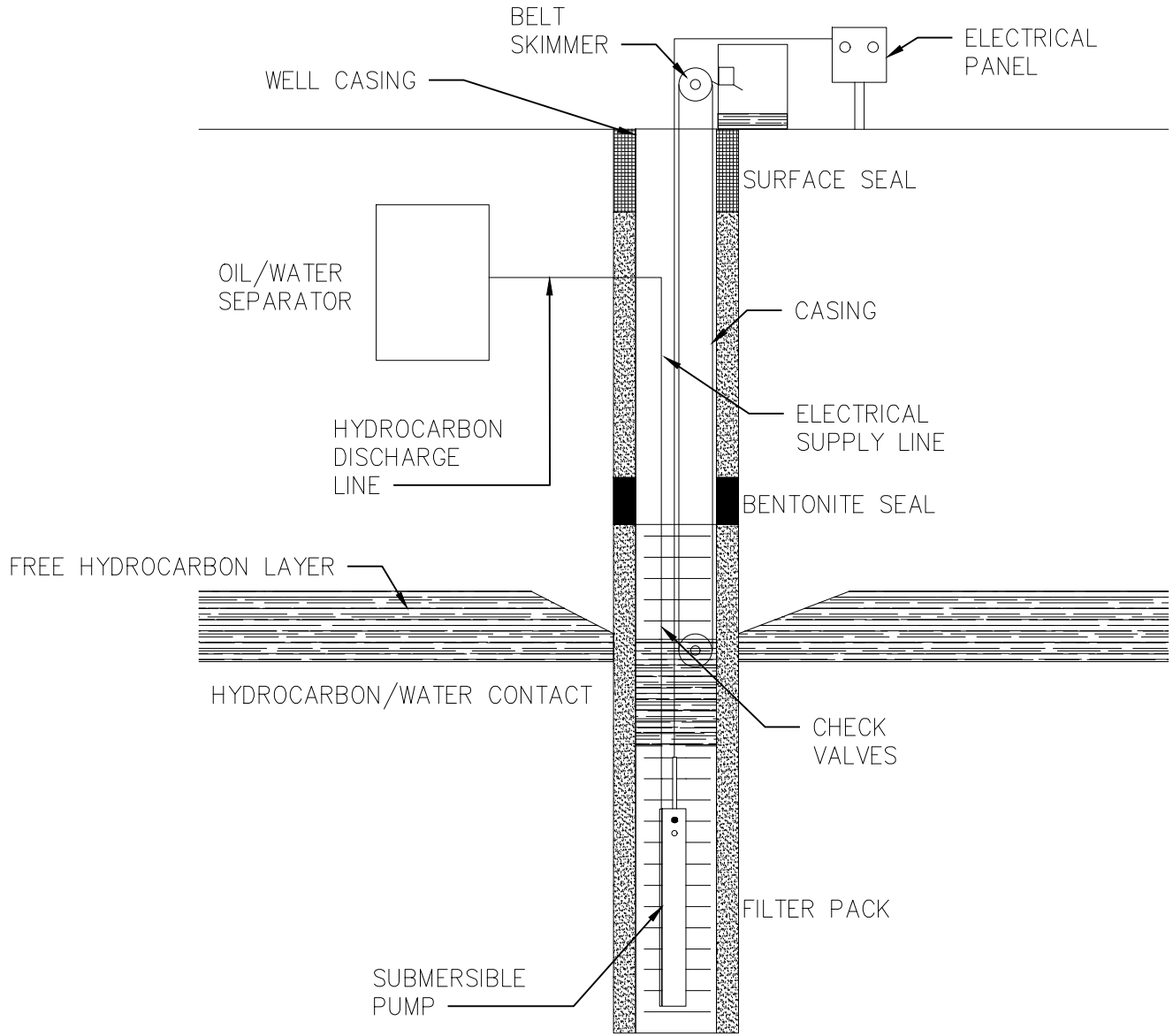
Scale
AS SHOWN

Figure Number
4

Project Number
1368.001.005

Plotted: Mar 22, 2022 - 4:38PM SYR By: bas
Z:\BL-Vault\D2\18217\D2-1C71-4823-8927-99D5C4054147\0\2550000-2550999\2550123\LL\FIGURE 5 - RECOVERY WELL CONCEPT (ID 2550123).dwg

Plotted: Mar 21, 2022 - 2:42PM SYR By: bas
Z:\BL-Vault\ID2\18217AD2-1C71-4823-8927-99D5C4054147\0\2550000-2550999\2550123\L\L\FIGURE 5 - RECOVERY WELL CONCEPT (ID 2550123).dwg



10 Airline Drive
Suite 200
Albany, NY
12205

B&L

Barton & Loguidice, D.P.C.

Date	Scale
MARCH 2022	NOT TO SCALE

MAXON ALCO HOLDINGS, LLC

CORRECTIVE MEASURES REMEDIAL ACTION WORK PLAN
CONCEPTUAL DESIGN

GROUNDWATER SUPPRESSION AND PRODUCT RECOVERY SYSTEM

CITY OF SCHENECTADY SCHENECTADY COUNTY, NEW YORK

Figure Number
5

Project Number
1368.001.005

Attachment A

Barton&Loguidice

ALCO - Weekly Site Inspection Report

Date: **Inspector(s)**

Weather Conditions:

PARCEL A

Item	YES	NO	N/A	Date(s) / Comments / Issues
River conditions checked?	☐	☐	☐	River Elevation (Freeman's Bridge):
Blowers and aerators operational	☐	☐	☐	
Was the riverbank boom in good condition?	☐	☐	☐	
Observed sheen within boom?	☐	☐	☐	
Floatable debris within boom?	☐	☐	☐	
Free product noted in monitoring well (MW-73)	☐	☐	☐	Depth to NAPL:_____ Depth to H2O:_____
Other Notable Items				

PARCEL B

Item	YES	NO	N/A	Date(s) / Comments / Issues
Are the harbor booms/sweeps secure and in good condition?	☐	☐	☐	
Was sheen noted in the harbor?	☐	☐	☐	
Did the absorbant socks in the baffles require changing? If so, how many?	☐	☐	☐	
Was the skirting near electrical panel/ RW-3 in good condition?	☐	☐	☐	
Was DS-1 Well #1 measured?	☐	☐	☐	Static Water Level: Measureable Product:
Was DS-1 Well #2 measured?	☐	☐	☐	Static Water Level: Measureable Product:
Was DS-1 Well #3 measured?	☐	☐	☐	Static Water Level: Measureable Product:
Was RW-3 measured?	☐	☐	☐	Static Water Level: Measureable Product:
Was static water level in RW-3A, RW-3B, or RW-3C measured?	☐	☐	☐	RW-3A: RW-3B: RW-3C:
Was there measureable product in RW-3A, RW-3B, or RW-3C?	☐	☐	☐	RW-3A: RW-3B: RW-3C:
Did the absorbant socks in RW-3A, RW-3B, or RW-3C require changing? If so, which ones?	☐	☐	☐	
Groundwater recovery system operating?	☐	☐	☐	
Quantity of oil in the oil-water separator?	☐	☐	☐	

NOTES

The experience to
listen
The power to
solve℠

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