SITE-SPECIFIC EXCAVATION MANAGEMENT PLAN PROPOSED EAST LOADING DOCKS PROJECT

1555 LYELL AVENUE ROCHESTER, NEW YORK

NYSDEC SITE #828099

Prepared for: Maguire Family Properties, Inc.

770 Rock Beach Road

Rochester, New York 14617

Prepared by: Day Environmental, Inc.

1563 Lyell Avenue Rochester, NY 14623

Project No.: 4935S-14

Date: April 2014

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ACRONYMS AND ABBREVIATIONS

AOR #1 Area of Review #1 Below Ground Surface

BTEX Benzene, Toluene, Ethylbenzene, Xylene

CAMP Community Air Monitoring Plan

DAY Day Environmental, Inc.
EMP Excavation Management Plan
GM General Motors Corporation
Haley & Aldrich Haley and Aldrich of New York

HASP Health and Safety Plan

ITT ITT Automotive Electrical Systems
LNAPL Light Non-Aqueous Phase Liquid
MFP Maguire Family Properties, Inc.

NYCRR New York Codes, Rules and Regulations

NYSDEC New York State Department of Environmental Conservation

NYSDOH New York State Department of Health

NYSDOT New York State Department of Transportation

PAH Polyaromatic Hydrocarbon PCBs Polychlorinated Biphenyls

Phase I ESA Phase I Environmental Site Assessment

PID Photoionization Detector

ppm Part Per Million

RI Remedial Investigation ROD Record of Decision SCOs Soil Cleanup Objectives

Site 1555 Lyell Avenue, Rochester, New York

sq. ft. Square Feet

SVOC Semi-Volatile Organic Compound

TCLP Toxicity Characteristic Leaching Procedure

URS URS Corporation

USEPA United States Environmental Protection Agency

UST Underground Storage Tank
Valeo Valeo Electrical Systems, Inc.
VOC Volatile Organic Compound

1.0 INTRODUCTION

This site-specific Excavation Management Plan (EMP) has been developed for a portion of the property located at 1555 Lyell Avenue, City of Rochester, County of Monroe, New York (Site), which is listed as Site #828099 in the Registry of Inactive Hazardous Waste Disposal Sites in New York State. A Project Locus Map is included as Figure 1.

Maguire Family Properties, Inc., (MFP) owner of the Site, plans to construct an approximate 60-foot by 48-foot (3–bay) loading dock addition and associated sloped ramp (East Loading Dock Project) on the east side of Building A between Buildings A1 and A2 within Area of Review #1 (AOR #1) of the Site (refer to Figure 3 from the New York State Department of Environmental Conservation [NYSDEC] 2012 Record of Decision [ROD]). As shown, this project also involves the relocation of a portion of the paved on-site roadway in the area of the loading dock addition. The requirements of the EMP to be implemented during the construction of the East Loading Dock project are described herein.

1.1 STATEMENT OF PURPOSE

The purpose of this EMP is to address the handling of subsurface media (e.g., soil, fill material, groundwater) that may be contaminated and encountered during the construction of the proposed East Loading Dock project. Specifically, this EMP addresses how to identify, characterize, handle, and dispose or re-use materials that are disturbed/displaced as a result of the construction project. The EMP establishes goals, procedures, appropriate response actions and contingency actions to be used by on-site personnel during the project.

1.2 SITE BACKGROUND

1.2.1 Site Location and Description

The Site is an approximately one-hundred-fifteen (115) acre parcel located on the western edge of the City of Rochester, New York.

There is a large building (approximately 1.5 million square feet [sq. ft.]) occupying the central portion of the Site. The remaining portions of the Site are largely paved parking areas. A small wooded area is located along the south western property line. A railroad line borders the eastern property line and the New York State Barge Canal is located at the western edge of the Site. The Abandoned Chemical Sales Site (Site #828105 in the Registry of Inactive Hazardous Waste Disposal Sites in New York State) is located on the opposite side of the railroad line along a portion of the eastern boundary of the Site.

This EMP focuses on the portion of the Site included in AOR #1 where the East Loading Docks are to be constructed. The area addressed under this EMP is located on the east side of Building A between Buildings A1 and A2.

1.2.2 Site History

The property is currently zoned for manufacturing. The on-site building is subdivided into multiple tenant spaces that are occupied by commercial and industrial businesses. The surrounding land use is commercial and industrial; however, a densely populated residential area is located east of the Site. The area is served by public water and public sewers.

Historically, the facility manufactured automotive parts from 1951 until 2008. The facility predominantly manufactured electric motors, wiper systems, and window regulator parts. The facility was owned by General Motors Corporation (GM) from 1951 to 1994, ITT Automotive Electrical Systems (ITT) from 1994 to 1998, and Valeo Electrical Systems, Inc. (Valeo) from 1998 to 2005. MFP purchased the Site in 2005 and leased it to Valeo from 2005 to 2008. Valeo ceased operations at the Site in June 2008. Historical manufacturing operations included metal finishing, stamping, heat treating, degreasing, and metal plating.

1.2.3 Summary of Environmental Work at AOR #1

For purposes of this EMP, the summary of RIs provided herein focuses on AOR #1 as documented in the April 2005 Report on RI Valeo/Former GM Delco Chassis Division Facility prepared by Haley & Aldrich of New York (Haley & Aldrich).

In 1994, GM conducted an environmental site assessment of the facility and identified several areas of soil and groundwater contamination. GM signed a consent order to complete a remedial investigation (RI)/feasibility study in 2002. Eight known and potential source areas of contamination were identified at the Site:

- AOR #1- Underground Storage Tank (UST) Farm Area
- AOR #2- Crane Bay Scrap Dock Area
- AOR #3- Oil Reclaim Area
- AOR #4- Railcar Scrap Dock Area
- AOR #5- Former Hazardous Waste Storage Area
- AOR #6- Former Land Disposal Area
- AOR #7- Fire Training/Southwest Property
- AOR #8- Drum Storage Area at the on-site wastewater treatment plant

Soil in AOR #1 has been impacted by past releases associated with the former UST systems. Impacted soil was removed in 1987 and 1995, but the soil around this area has been documented to be contaminated with volatile organic compounds (VOCs) compounds, polyaromatic hydrocarbon (PAH) semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and light non-aqueous phase liquid (LNAPL).

Groundwater contaminated by petroleum hydrocarbons and related aromatic VOCs including benzene, toluene, ethylbenzene, and xylene (BTEX), with lesser concentrations of ketones and chlorinated VOCs is present in the shallow (overburden and top-of-bedrock) horizon. Hydrocarbon-based LNAPL is present on the water table in the UST area and it extends to the west a short distance beneath the manufacturing building.

The extent of the soil contamination associated with past releases in AOR #1 is limited to the soil in the 60-foot by 120-foot outdoor area located between Building A1 to the north, Building A to the west and Building A2 to the south and to soil that surrounds a 150 foot long section of the 12-inch sewer that runs past the former UST fill station. Both areas are limited at depth to bedrock.

The RI groundwater sampling indicates that the groundwater contamination associated with past releases in AOR #1 is limited to almost the same area as the soil contamination footprint, except that it extends beneath Building A1.

In the immediate vicinity of the former UST farm, the water table occurs above the top of bedrock. The height of the LNAPL column in monitoring wells ranged from 0 to 9 inches during the RI.

The chemicals detected during the RI in AOR #1 were hydrocarbon-based LNAPL, VOCs including BTEX and isopropylbenzene, PAHs, and PCBs. Xylene was the primary VOC (concentrations of up to 6,600 parts per million [ppm]), and naphthalene was the primary PAH (concentrations of up to 400 ppm). PCBs were detected sporadically in AOR #1 LNAPL at concentrations ranging between 4 and 19 ppm.

PCBs were not detected in groundwater. VOCs were the principle groundwater contaminants in AOR #1.

Information provided in a Phase I Environmental Site Assessment (Phase I ESA) report dated November 18, 2005 prepared by URS Corporation (URS) documents a former UST farm was located outside the east wall of Building A with AOR #1. This area contained USTs for storage of solvents, lubricating oils, hydraulic oil, gasoline and waste since 1952. Twelve tanks were installed in 1968 and replaced with four tanks in 1987. These four USTs were removed in 2005 by Valeo.

A ROD for the Site was filed by NYSDEC in March 2012, which selected a remedy to address the Site's environmental issues, including those associated with AOR #1, which are described in Section 1.2.4.

1.2.4 Geologic Conditions

The Site is underlain by 2 to 21 feet of unconsolidated overburden deposits overlying dolomite and dolomitic-mudstone bedrock units of the Upper Silurian Lockport and Clinton Groups. Shallow groundwater is encountered within a few feet of the overburden/bedrock interface. In the area of the proposed East Loading Dock project, the top of the groundwater table has been documented to fluctuate between 4.12 feet and 6.58 feet below ground surface (bgs). There is an intermediate bedrock flow zone located between 10 and 30 feet below the top of bedrock. Utilities located along the eastern portion of the Site influence groundwater flow direction, including a 12-inch sewer line that runs south through the east side of AOR #1.

2.0 HEALTH AND SAFETY MONITORING

Day Environmental, Inc. (DAY) will provide an environmental project monitor to conduct environmental monitoring at the Site during construction activities that have the potential to disturb contaminated media associated with AOR #1. The environmental project monitor will follow the procedures outlined in the March 2014 site-specific Health and Safety Plan (HASP), including a Community Air Monitoring Program (CAMP), included in Appendix A.

The provisions of the HASP and CAMP will be followed during the completion of the East Loading Dock project. The HASP will be reviewed by DAY employees assigned to this project before starting work. Other entities involved with this project that have the potential to disturb contaminated media associated with AOR #1 can adopt the protocols set forth in the HASP or can develop their own HASP, which must, at a minimum, satisfy the requirements of the HASP prepared by DAY and approved by the NYSDEC and New York State Department of Health (NYSDOH).

Health and safety monitoring will be conducted until adequate information and monitoring data have been obtained to document conditions are safe and do not pose a risk to on-site occupants or construction workers, the nearby community or the environment.

VOCs monitoring using a photoionization detector (PID) will be conducted in the breathing zone, the downwind perimeter of the immediate work area, and upwind. The action levels for total VOCs are discussed further in the HASP and CAMP.

In addition, particulate monitoring using a real time aerosol monitor will be conducted in the breathing zone, the downwind perimeter, and upwind. The action levels for particulates are discussed further in the HASP and CAMP.

If the action levels are exceeded, or if drums, containers, soil of an unanticipated and contaminated nature, LNAPL, etc. are encountered, the appropriate response actions or contingency actions will be implemented as identified in the HASP.

3.0 MANAGEMENT OF SUBSURFACE MEDIA

3.1 SCREENING METHODS

Visual, olfactory and instrument-based screening of soil, fill material, LNAPL, and groundwater will be performed by a DAY representative during excavations or other disturbances into known or potentially contaminated material (remaining contamination). Screening will be performed on a continuous basis when these subsurface media are being disturbed. Based on conditions encountered, this may include segregating the material into piles that are being considered for re-use, disposal, soil cover, etc.

Subsurface materials (e.g., soil, fill, etc.) will be segregated based on previous environmental data and the screening results. Material that is screened and exhibits visible staining, free product, unusual odors, and/or photoionization detector (PID) readings greater than 10 parts per million (ppm) will be segregated and stockpiled separately from material that is screened and exhibits no visible staining, no free product, no unusual odors, and no PID readings greater than 10 ppm.

3.2 STOCKPILING METHODS

Subsurface materials that are suspected to be contaminated based on screening will be placed on minimum 10-millimeter plastic sheeting. Soil or fill stockpiles will be continuously encircled with a berm and/or silt fence. Stockpiles will be kept covered with appropriately anchored minimum 10-millimeter plastic sheeting. Stockpiles will be routinely observed, and damaged plastic sheeting covers will be promptly replaced.

3.3 MATERIALS CHARACTERIZATION

The following stockpiled materials require further characterization as outlined in this section, and to the extent deemed necessary.

- Materials that exhibit visible staining, free product, unusual odors, and/or PID readings greater than 10 ppm.
- Materials being considered for off-site re-use.
- Materials to be disposed off-site at a regulated landfill.
- Materials being considered for on-site re-use within the upper one foot of exposed surface soil.

Stockpiles of these materials will be characterized to determine their appropriate management (e.g., on-site re-use, off-site re-use, off-site disposal, etc.). Samples of soil and fill segregated for potential on-site or off-site re-use will be collected and analyzed following the recommended procedures in NYSDEC DER-10 guidance (included in Appendix B). Per the DER-10 procedures, discrete samples will be tested for VOCs (using United States Environmental Protection Agency [USEPA] method 8260), and composite samples will be tested for SVOCs, inorganics (i.e., metals), PCBs, and pesticides (using USEPA Methods 8270, 6010/7471, 8082, 8081, respectively).

Samples of soil and fill segregated for off-site disposal at a regulated landfill facility will be collected and analyzed based on the requirements of the approved off-site disposal facility. Test parameters may include, but are not limited to, Toxicity Characteristic Leaching Procedure (TCLP) VOCs, SVOCs, PCBs, and TCLP metals (using USEPA Methods 1311/8260, 8270, 8082, and 1311/6010/7470, respectively).

Stockpiled materials that exhibit no visible staining, no free product, no unusual odors, and no PID readings greater than 10 ppm do not require further characterization as outlined in this section if they are being considered for on-site re-use below an upper one foot of exposed cover soil layer or below an impervious cover material.

3.4 MATERIALS EXCAVATION

A DAY representative will oversee invasive work and the excavation and load-out of excavated material. The owner of the property and its contractors are solely responsible for safe execution of invasive and other work performed under this Plan.

Loaded vehicles leaving the Site will be appropriately lined, tarped, securely covered, manifested, and placarded in accordance with appropriate Federal, State, local and New York State Department of Transportation (NYSDOT) requirements (and other applicable transportation requirements).

The DAY representative will be responsible for ensuring that outbound trucks are free of debris before leaving the Site until the activities performed under this section are complete.

Locations where vehicles enter or exit the Site shall be observed daily for evidence of off-site soil tracking. Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials derived from the Site during intrusive excavation activities. Cleaning of adjacent streets will be performed as needed to maintain a clean condition with respect to site-derived materials.

3.5 MATERIALS TRANSPORT OFF-SITE

Transport of materials will be performed by licensed haulers in accordance with appropriate local, State and Federal regulations, including 6 New York Codes, Rules and Regulations (NYCRR) Part 364. Haulers will be appropriately licensed and trucks properly placarded.

Material transported by trucks exiting the Site will be secured with tight-fitting covers. Loose-fitting canvas-type truck covers will be prohibited. If loads contain wet material capable of producing free liquid, truck liners will be used.

If necessary, trucks will be washed prior to leaving the Site. Truck wash waters will be collected and disposed of off-site in an appropriate manner.

Truck transport routes will take into account: limiting transport through residential areas and past sensitive sites; use of city mapped truck routes (if available); prohibiting off-site

queuing of trucks entering the facility; limiting total distance to major highways; promoting safety in access to highways; and overall safety in transport.

Trucks will be prohibited from stopping and idling in the neighborhood outside the project Site.

Egress points for truck and equipment transport from the Site will be kept clean of dirt and other materials during Site development.

3.6 MATERIALS DISPOSAL OFF-SITE

Based on previous RI findings, soil screening, and/or characterization, soil/fill/solid waste excavated and removed from the Site may be treated as contaminated and regulated material and may be transported and disposed in accordance with local, State (including 6 NYCRR Part 360) and Federal regulations.

Off-site disposal locations for excavated soils will be identified in the pre-excavation notification. This will include estimated quantities and a breakdown by class of disposal facility if appropriate; i.e., hazardous waste disposal facility, solid waste landfill, petroleum treatment facility, construction/demolition recycling facility, etc. Actual disposal quantities and associated documentation will be reported to the NYSDEC. This documentation will include; waste profiles, test results, facility acceptance letters, manifests, bills of lading and facility receipts.

Non-hazardous historic fill and contaminated soils taken off-site will be handled at minimum, as a Municipal Solid Waste per 6 NYCRR Part 360-1.2. Material that does not meet Track 1 unrestricted soil cleanup objectives (SCOs) is prohibited from being taken to a New York State recycling facility (6 NYCRR Part 360-16 Registration Facility).

3.7 MATERIALS RE-USE

MFP may evaluate options for off-site re-use and/or on-site re-use of displaced materials (e.g., soil and fill) that are a result of the East Loading Dock project.

3.7.1 Off-Site Re-Use

If disposal of soil/fill from this Site is proposed for unregulated off-site disposal (e.g., clean soil removed for development purposes), a formal request with an associated plan will be made to the NYSDEC. Unregulated off-site management of materials from this Site will not occur without formal NYSDEC approval. The plan will identify the property proposed for off-site re-use, demonstrate that the soil/fill meets applicable 6 NYCRR Part 375 SCOs for the off-site property based on its zoning and use, and include appropriate mapping with property lines, and designated re-use areas. As part of the plan, written approvals for the re-use will be obtained from the owner of the off-site property and the municipality of the off-site property where the material is proposed to be re-used.

3.7.2 On-Site Re-Use

Chemical criteria for on-site re-use of material have not been approved by NYSDEC; however, the ROD specifies that if the upper one foot of exposed surface soil will exceed the applicable SCOs, then a Site cover, which may consist of either structures such as buildings, pavement, sidewalks or a minimum of one foot of soil, will be maintained. If a soil cover is required, it will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer.

The DAY representative will ensure that procedures defined for materials re-use in this EMP are followed and that material unacceptable to NYSDEC does not remain on-site. Contaminated on-site material exceeding applicable SCOs that is acceptable for re-use on-site will be placed below a demarcation layer or impervious surface, and will not be re-used within a cover soil layer, within landscaping berms, or as backfill for subsurface utility lines.

Any demolition material proposed for re-use on-site will be sampled for asbestos (if encountered) and the results will be reported to the NYSDEC for acceptance. Concrete crushing or processing on-site will not be performed without prior NYSDEC approval. Organic matter (wood, roots, stumps, etc.) or other solid waste derived from clearing and grubbing of the Site will not be re-used on-site.

3.8 FLUIDS MANAGEMENT

Any liquids to be removed from the Site, including excavation dewatering and decontamination water (if encountered or generated), will be handled, transported and disposed of in accordance with applicable local, State, and Federal regulations. Dewatering will not be recharged back to the land surface or subsurface of the Site, but will be managed off-site.

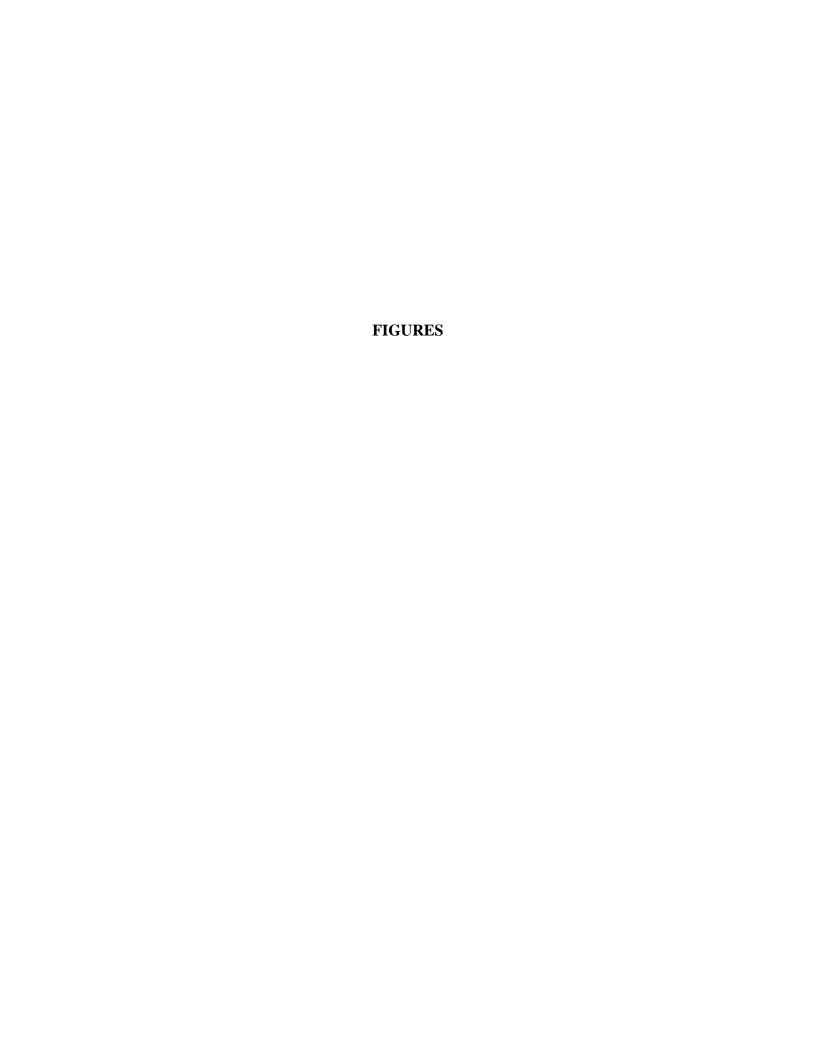
If LNAPL is encountered during development related construction, excavation activities will be suspended until sufficient equipment is mobilized and used to address the condition. Consistent with the ROD, any collected LNAPL will be separated from the collected groundwater and be transported off-site for disposal in accordance with applicable regulations.

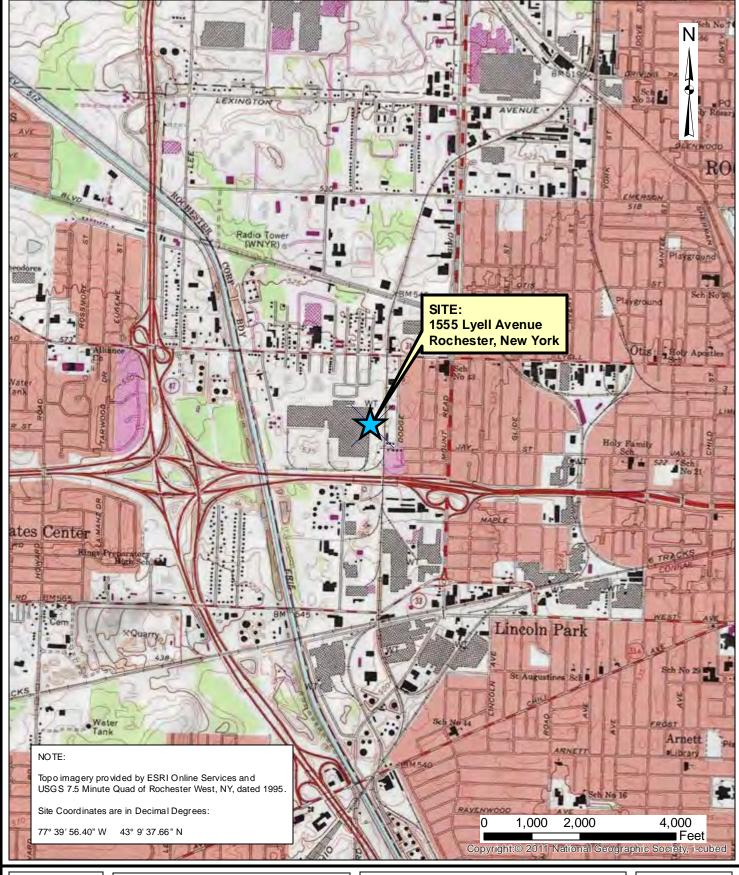
3.9 COVER SYSTEM RESTORATION

In accordance with the ROD, after the completion of soil removal and any other invasive activities, the cover system will be restored in a manner consistent with the existing cover system (i.e., buildings, pavement, sidewalks, or a soil cover), in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs.

Where a soil cover is required, it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted commercial or industrial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer.

Any fill material brought to the Site will meet the requirements for the identified Site use as set forth in 6 NYCRR Part 375-6.7(d).





Date

03-14-2014

Drawn By

CPS

Scale

AS NOTED

day day environmental, inc.

Environmental Consultants Rochester, New York 14606 New York, New York 10170 Project Titl

PROPOSED EAST LOADING DOCKS 1555 LYELL AVENUE ROCHESTER, NEW YORK

SITE-SPECIFIC EXCAVATION MANAGEMENT PLAN

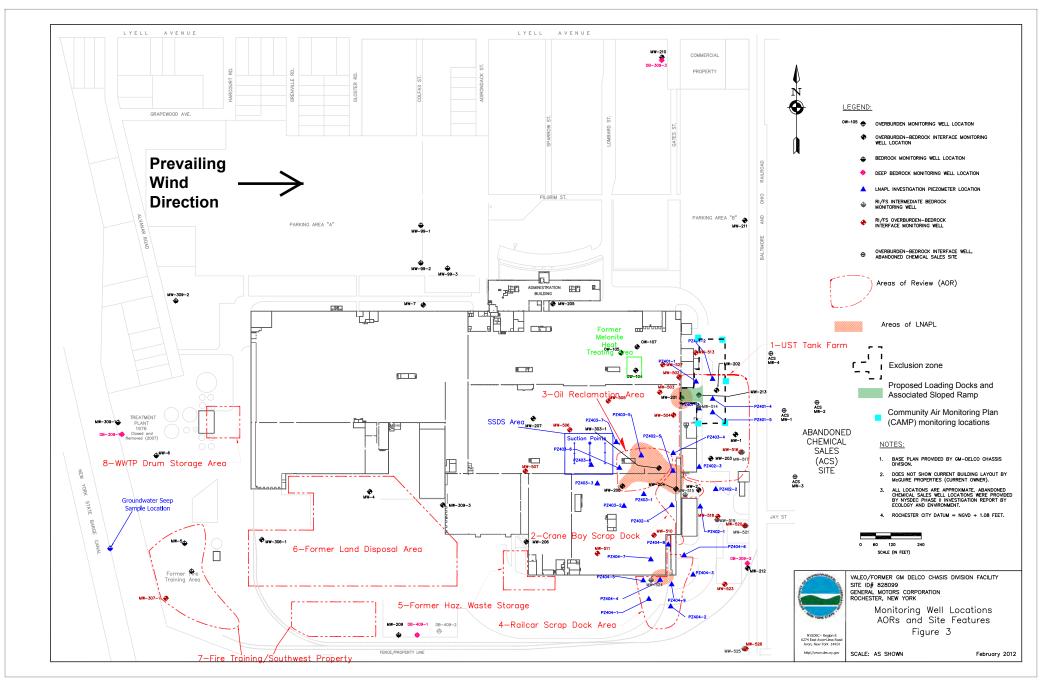
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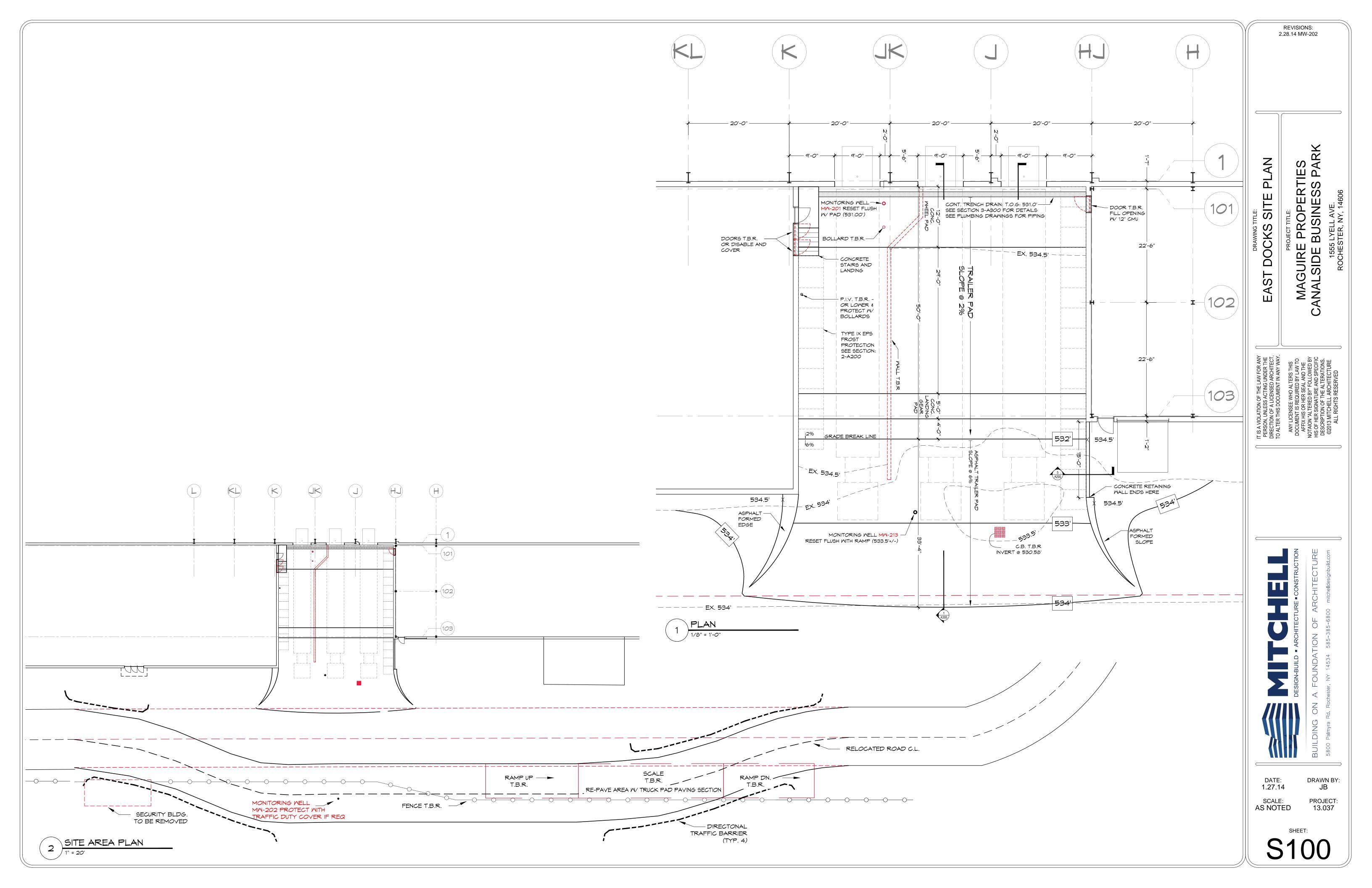
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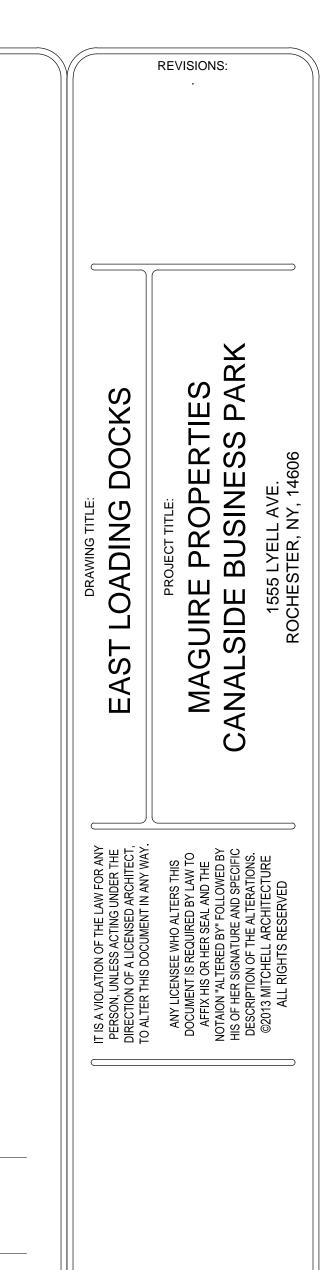
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FIGURE 1





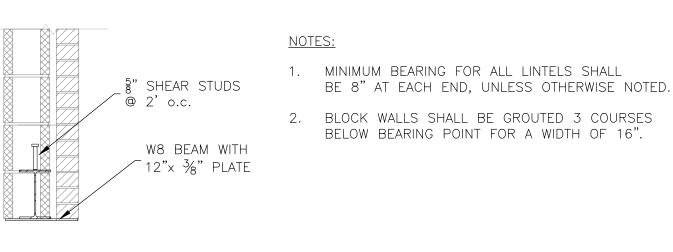


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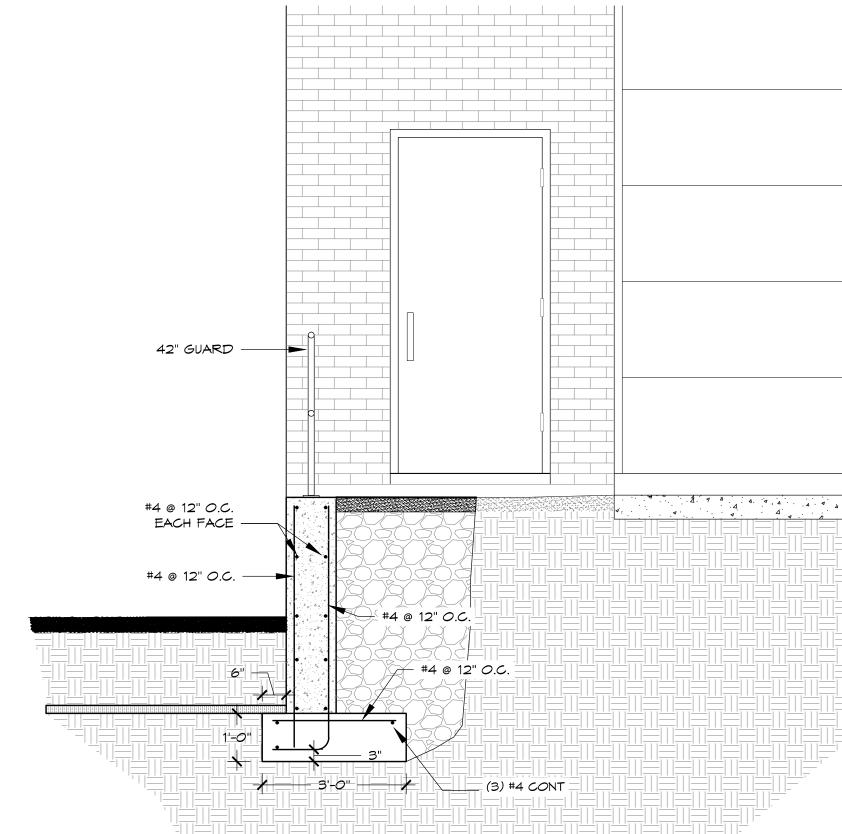
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STEEL BEAM LINTEL DETAIL

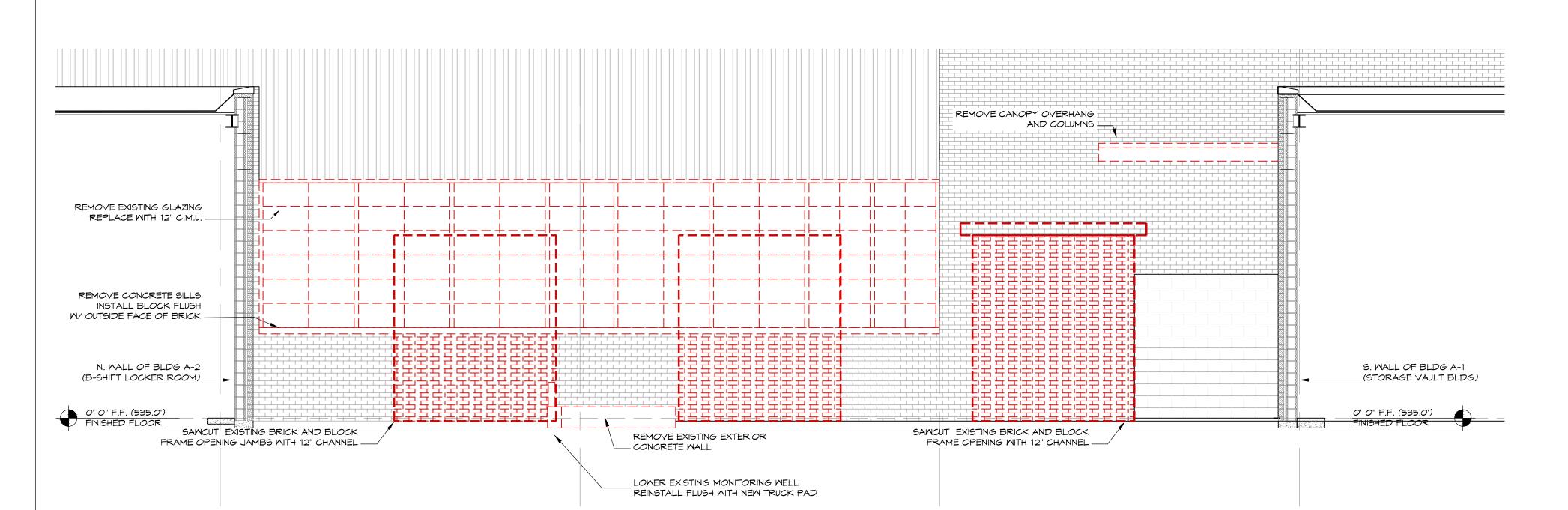
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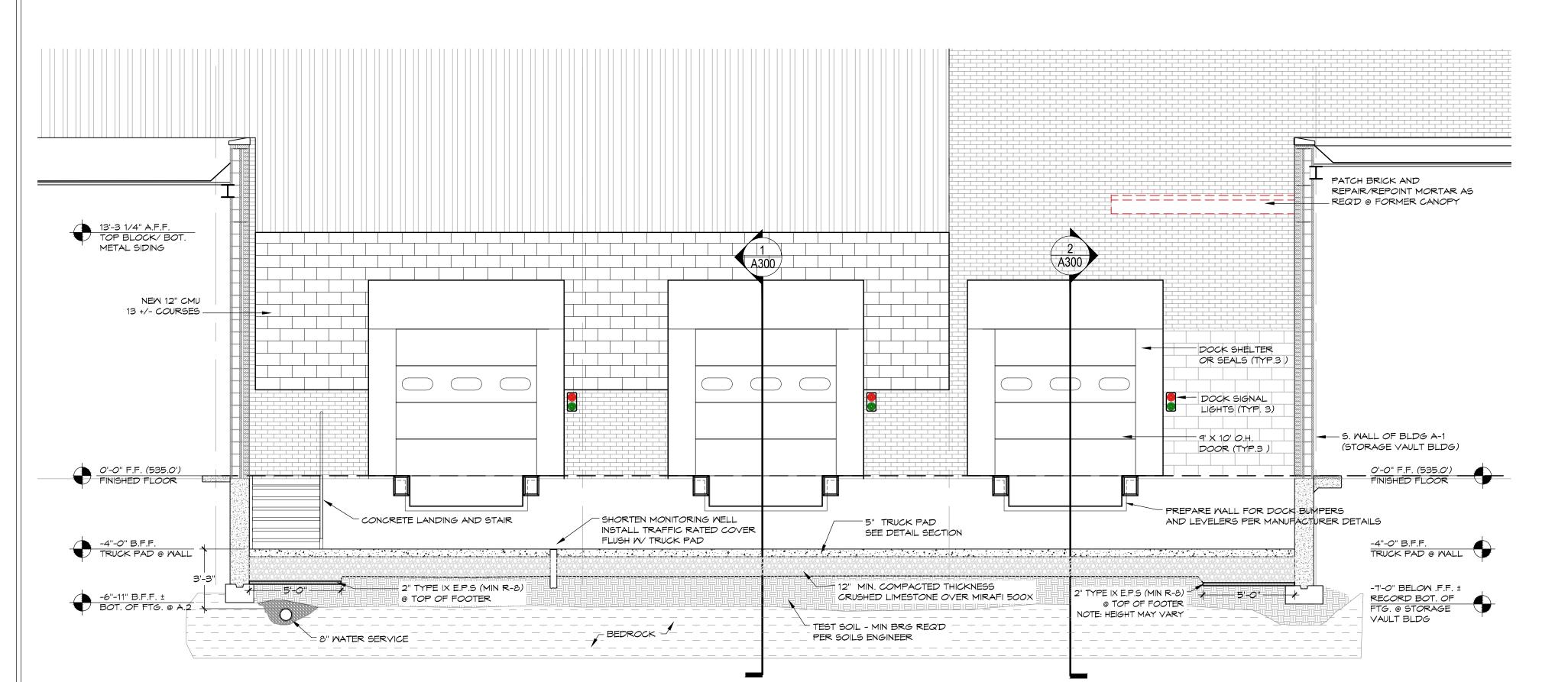
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TRUCK PAD ASPHALT PAYING SECTION



RETAINING WALL SECTION



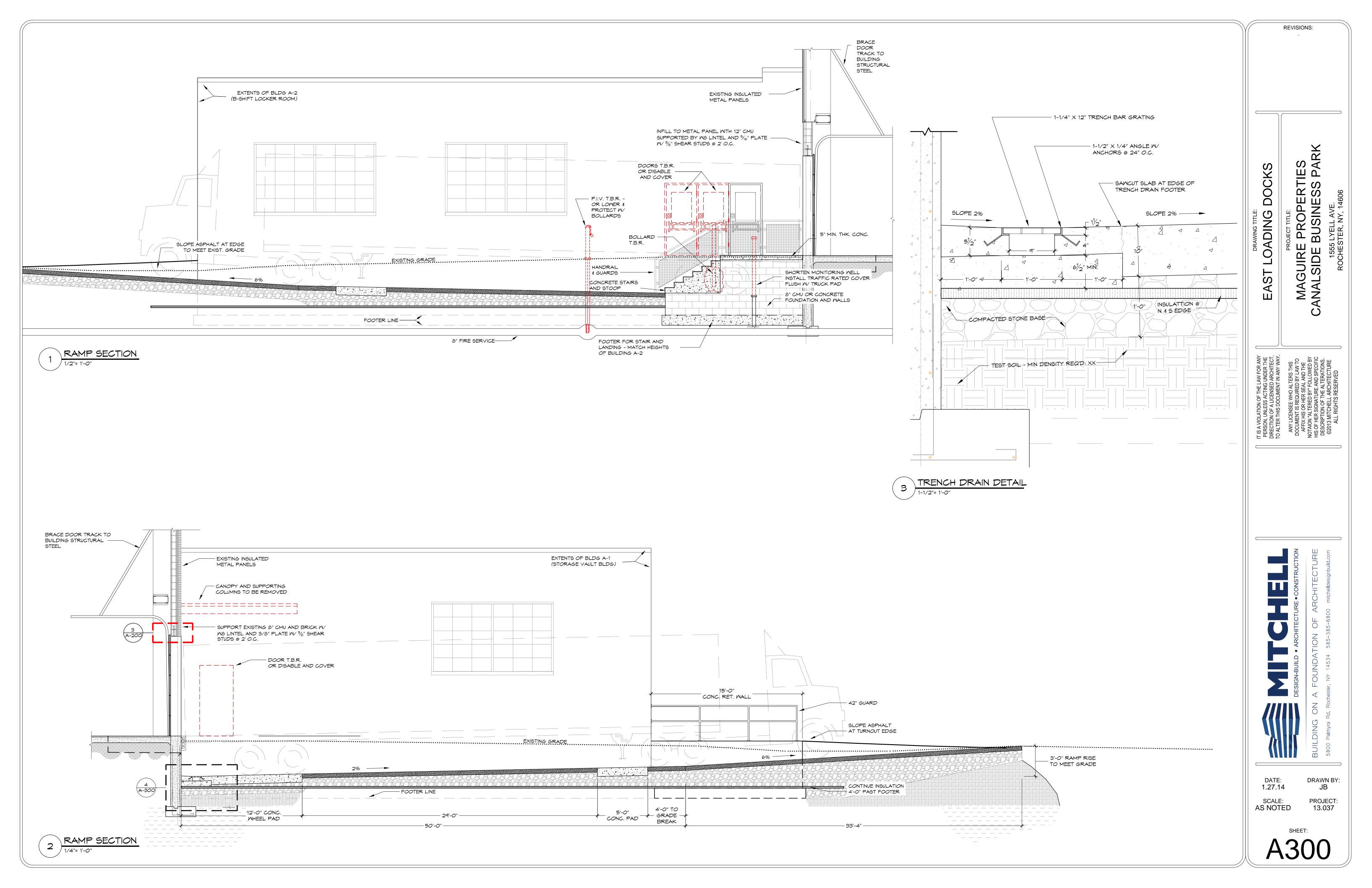


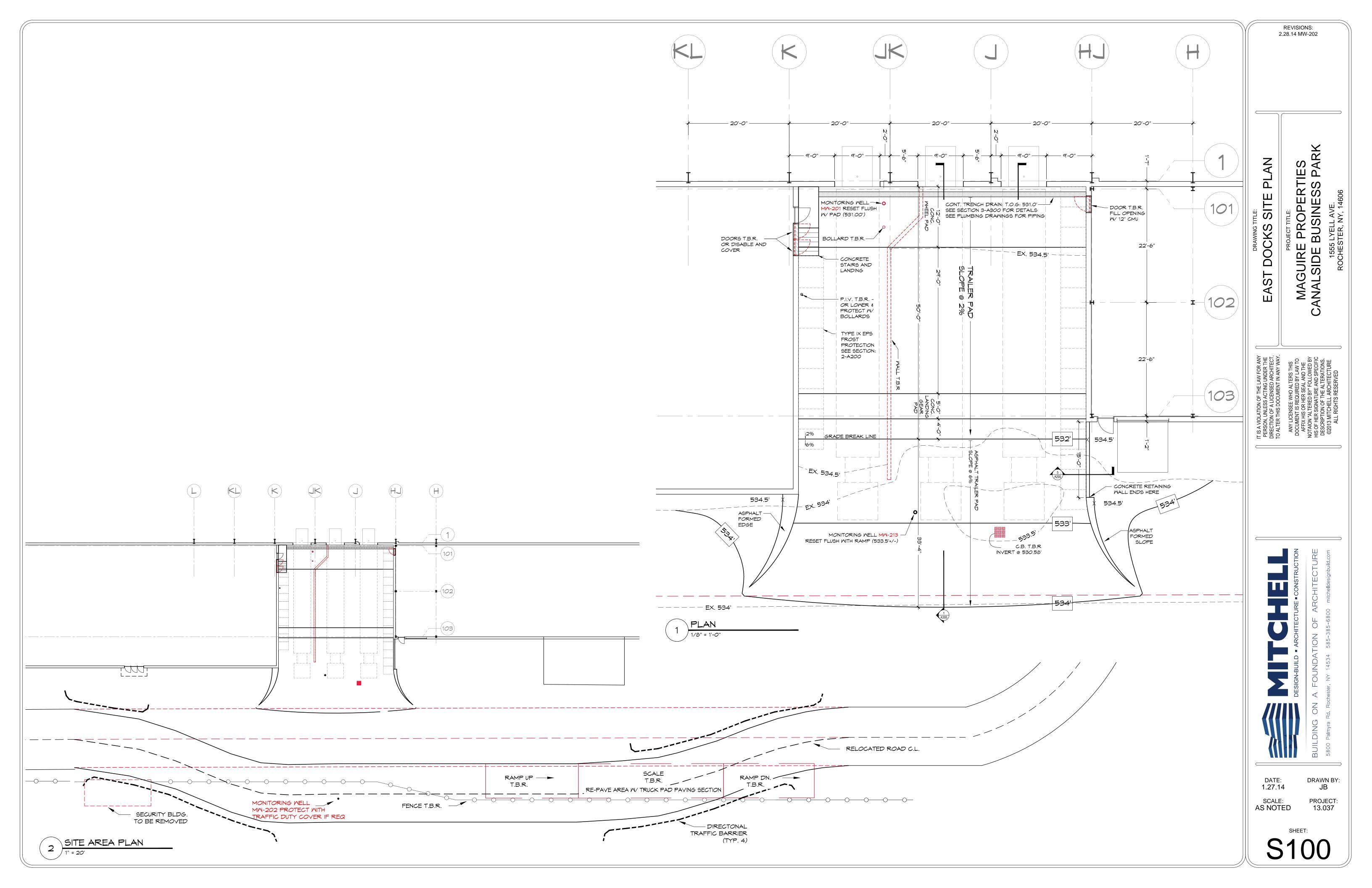


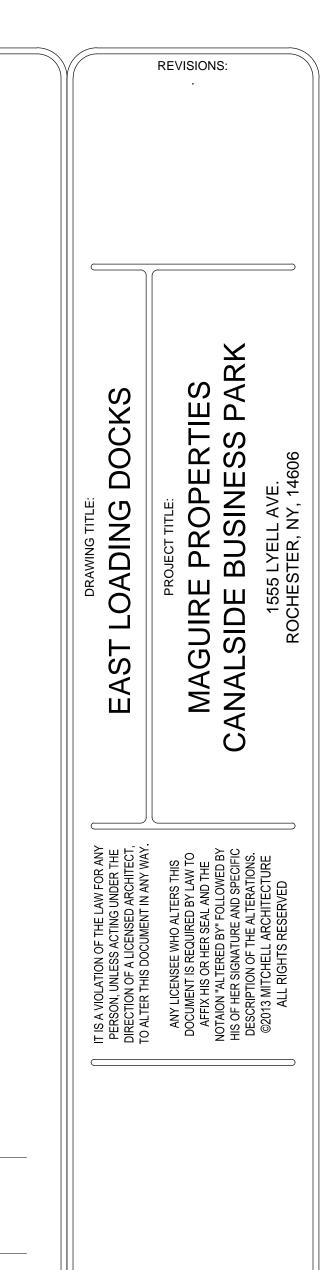
EXISTING BUILDING / DEMO ELEVATION

1/4" = 1'-0"

SHEET:





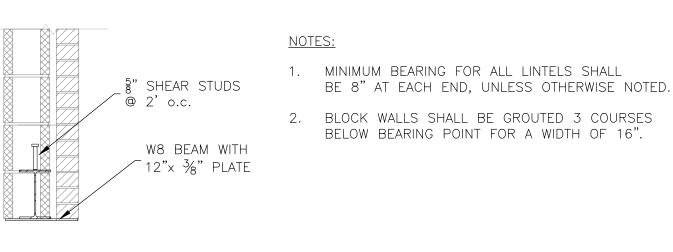


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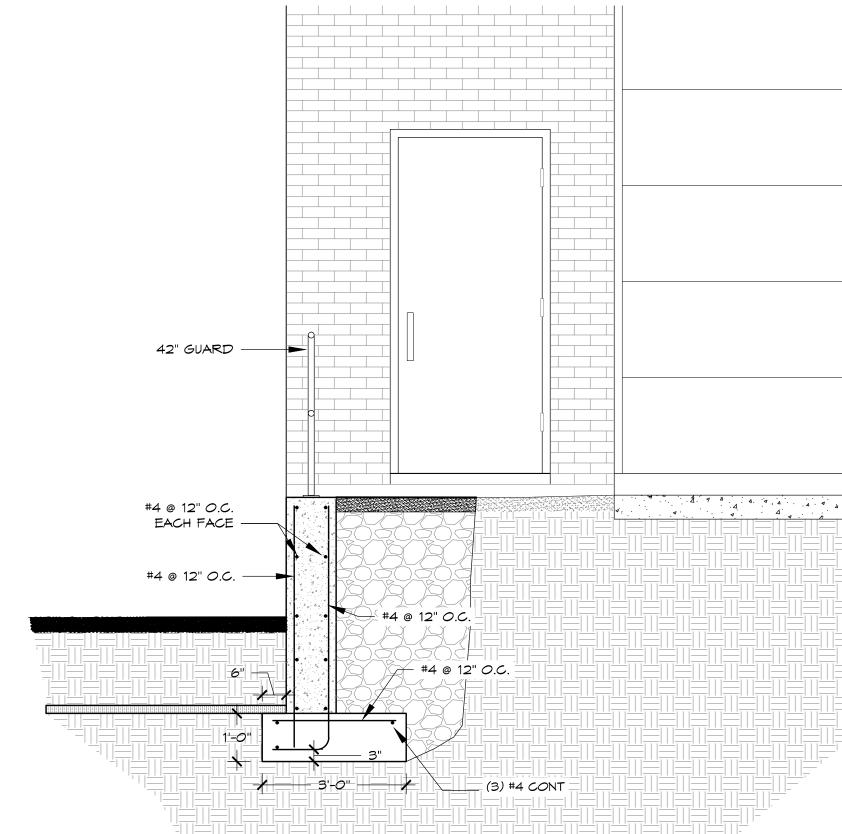
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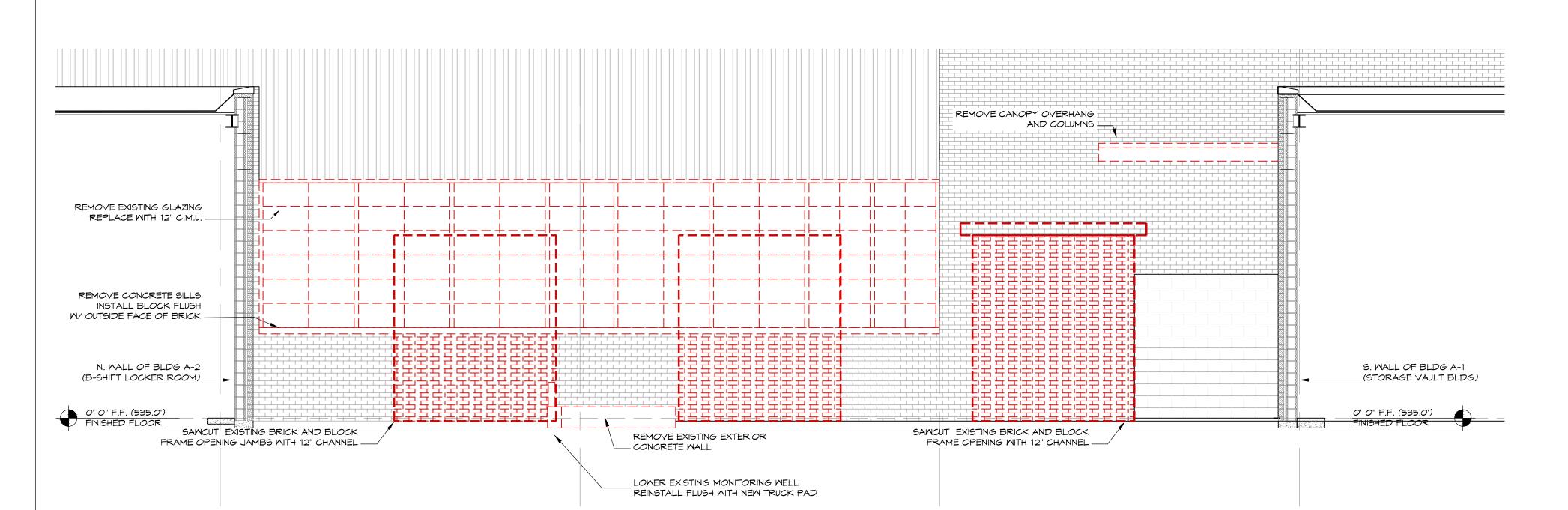
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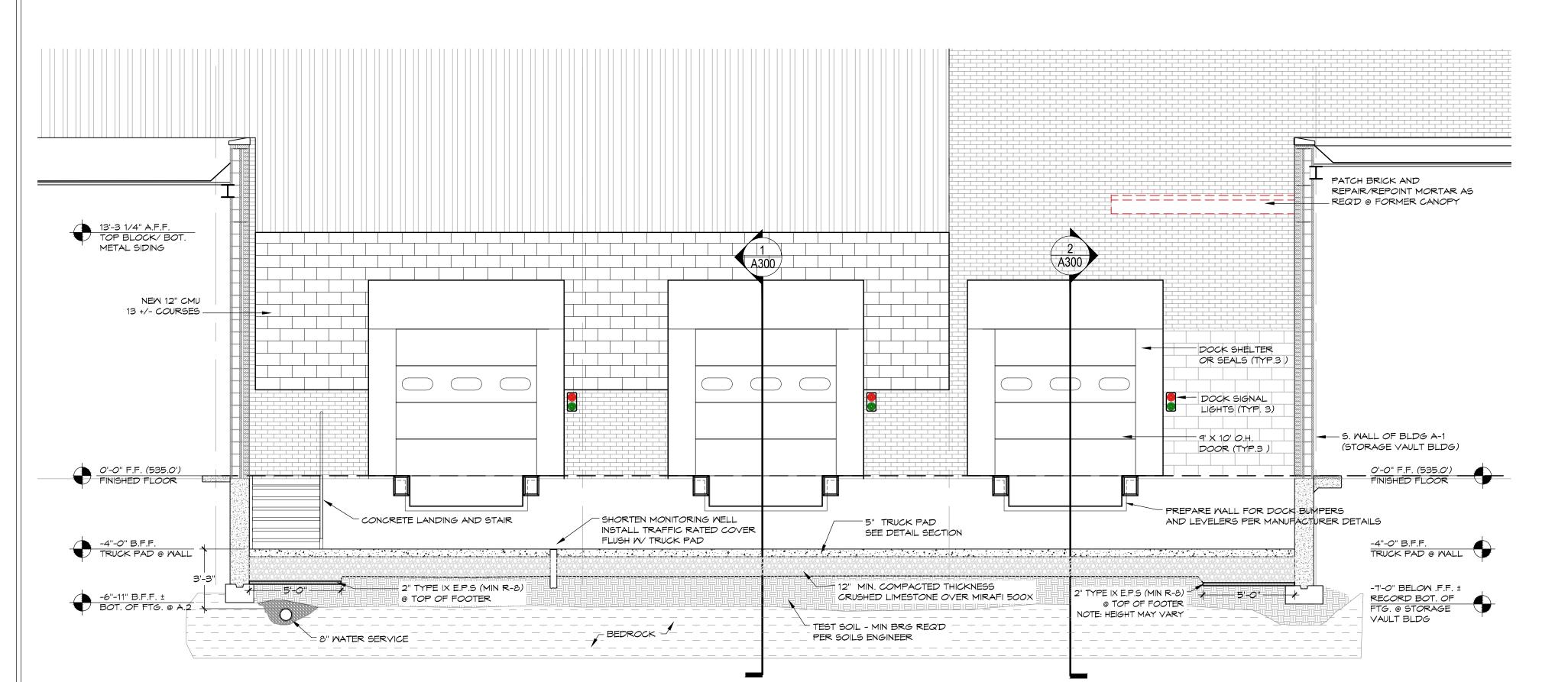
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TRUCK PAD ASPHALT PAYING SECTION



RETAINING WALL SECTION



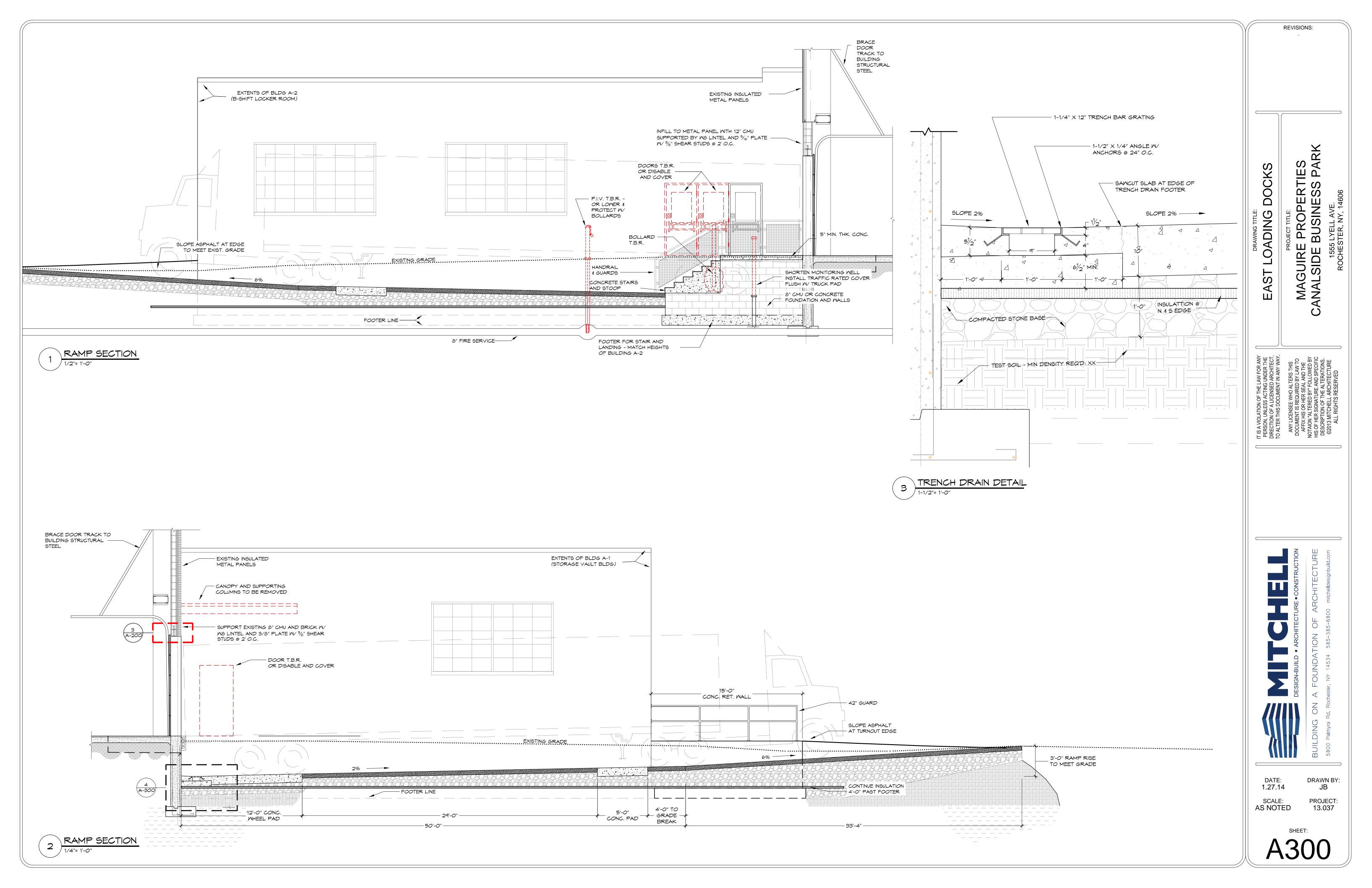




EXISTING BUILDING / DEMO ELEVATION

1/4" = 1'-0"

SHEET:



APPENDIX A

Health and Safety Plan with Community Air Monitoring Plan

HEALTH AND SAFETY PLAN PROPOSED EAST LOADING DOCKS PROJECT

1555 LYELL AVENUE ROCHESTER, NEW YORK

NYSDEC SITE #828099

Prepared for: Maguire Family Properties, Inc.

770 Rock Beach Road

Rochester, New York 14617

Prepared by: Day Environmental, Inc.

1563 Lyell Avenue

Rochester, New York 14606

Project No.: 4935S-14

Date: March 2014

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ATTACHMENTS

Attachment 1 Daily Air Monitoring Logs and Figure
Attachment 2 Figure 1 - Route for Emergency Services

1.0 INTRODUCTION

This Health and Safety Plan (HASP) outlines the policies and procedures to protect workers and the public from potential environmental hazards posed during construction of a loading dock addition and associated ramp on the east side of Building A between Buildings A1 and A2 in an area where there is a potential to disturb contaminated media (e.g., soil, fill, groundwater) associated with the Area of Review #1 (AOR #1) of 1555 Lyell Avenue, City of Rochester, County of Monroe, New York (Site), which is listed as Site #828099 in the Registry of Inactive Hazardous Waste Disposal Sites in New York State. Construction activities that entail the potential disturbance of AOR #1 contaminated media will be conducted in accordance with the site-specific Excavation Management Plan (EMP). In addition to the requirements outlined in the EMP and HASP, activities shall be conducted in a manner to reduce the probability of injury, accident, or incident occurrence.

1.1 SITE HISTORY/OVERVIEW

The Site is an approximately one-hundred-fifteen (115) acre parcel on the western edge of the City of Rochester (refer to Figure 1 included in Appendix A). The Site was previously known as the Valeo/Former GM Delco Chassis Division Facility and is currently improved with an approximate 1.5 million square-foot former manufacturing facility. The remaining portions of the Site are largely paved parking areas. A small wooded area is located along the south western property line. A railroad line borders the eastern property line and the New York State Barge Canal is located at the western edge of the Site. The Abandoned Chemical Sales Site (#828105) is located on the opposite side of the railroad line on along the eastern boundary of the Site.

Based on the remedial investigations conducted at the Site, eight known and potential source areas of contamination have been identified and addressed under the New York State Department of Environmental Conservation's (NYSDEC)'s 2012 Record of Decision (ROD) for the Site. Because the proposed East Loading Dock project will be conducted in one of these areas (AOR #1), this HASP concentrates on the issues pertaining to AOR #1.

AOR #1 includes the former underground storage tank (UST) area that contained USTs for storage of solvents, lubricating oils, hydraulic oil, gasoline and waste since 1952. Twelve tanks were installed in 1968 and replaced with four tanks in 1987. These four USTs were removed in 2005 by Valeo Electrical Systems, Inc. (Valeo). AOR #1 includes soil impacts associated with past releases from the USTs and from a former fill station and associated underground fill lines previously located east of the former USTs. Limited impacted soil was removed in 1987 and 1995 and impacted soil, groundwater and petroleum-related light non-aqueous phase liquid (LNAPL) remain in the area. Types of contaminants include petroleum hydrocarbon volatile organic compounds (VOCs), ketones, chlorinated VOCs, polyaromatic hydrocarbon (PAH) semi-volatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs).

1.2 PLANNED ACTIVITIES COVERED BY HASP

This HASP is to be implemented during the construction activities associated with the East Loading Dock project and it is intended to address contaminated soil, groundwater and LNAPL associated with AOR #1 that may potentially be disturbed during the project. This HASP is not intended to cover general health and safety regulations that are associated with normal construction activities. The owner of the property, its contractors, and other Site workers will be responsible for the development and/or implementation of health and safety provisions associated with normal construction activities or Site activities.

2.0 KEY PERSONNEL AND MANAGEMENT

The Project Manager (PM) and Site Safety Officer (SSO) are responsible for addressing health and safety requirements, and implementing the HASP.

2.1 PROJECT MANAGER

The PM has the overall responsibility for the project and will coordinate with the SSO to ensure that the goals of the project are attained in a manner consistent with the HASP requirements.

2.2 SITE SAFETY OFFICER

The SSO has responsibility for administering the HASP relative to Site activities, and will be in the field while activities are in progress. The SSO's operational responsibilities will be monitoring, including personal and environmental monitoring, ensuring personal protective equipment (PPE) maintenance and use, and identification of protection levels. The air monitoring data obtained by the SSO will be available in the field for review by the regulatory agencies, and other on-site personnel.

2.3 EMPLOYEE SAFETY RESPONSIBILITY

Each employee is responsible for personal safety as well as the safety of others in the area. Each employee will use the equipment provided in a safe and responsible manner as directed by the SSO.

2.4 KEY SAFETY PERSONNEL

The following individuals are anticipated to share responsibility for health and safety of Day Environmental, Inc. (DAY) representatives at the Site:

DAY Project Manager Jeffrey Danzinger

DAY Site Safety Officer William Battiste, Charles Hampton, or Christie Sobol

3.0 SAFETY RESPONSIBILITY

DAY is required to implement its on-site work in accordance with the provisions set forth in this HASP for the protection of its personnel. Contractors, consultants, state or local agencies, or other parties, and their employees that enter the Site will be responsible for their own safety while on-site and must adopt this HASP to cover their own work, or prepare their own HASP that is as protective as this HASP and is approved by the NYSDEC and the New York State Department of Health (NYSDOH).

4.0 JOB HAZARD ANALYSIS

There are many hazards associated with construction work, and this HASP discusses some of the anticipated hazards for this Site. The hazards listed below deal specifically with those hazards associated with the management of the contaminated soil

4.1 CHEMICAL HAZARDS

Chemical substances can enter the unprotected body by inhalation, skin absorption, ingestion, or through a puncture wound (injection). A contaminant can cause damage to the point of contact or can act systemically, causing a toxic effect at a part of the body distant from the point of initial contact.

VOCs, PAH SVOCs, PCBs and LNAPL have been detected in soil and/or groundwater within AOR #1. A list of selected constituents that have been detected at the Site and exceed soil or groundwater standards, criteria and guidance (SCG) values are presented below. This list also presents the Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs), National Institute for Occupational Safety and Health (NIOSH) recommended exposure limits (RELs), and NIOSH immediately dangerous to life or health (IDLH) levels.

CONSTITUENT	OSHA PEL	NIOSH REL	IDLH
Benzene	1 ppm	0.1 ppm	500 ppm
Toluene	200 ppm	100 ppm	500 ppm
Ethylbenzene	100 ppm	100 ppm	800 ppm
Xylene	100 ppm	100 ppm	900 ppm
1,1,1-Trichloroethane	350 ppm	350 ppm	700 ppm
Benzo(a)anthracene ¹	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Benzo(a)pyrene ¹	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Benzo(b)fluoranthene ¹	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Dibenzo(a,h)anthracene	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
PCBs	0.5 mg/m^3	0.001 mg/m^3	5 mg/m^3

NA = Not Available As coal Tar Pitch ppm = parts per million $mg/m^3 = milligram per meter cubed$

The potential routes of exposure for these constituents include inhalation, ingestion, skin absorption and/or skin/eye contact, which are dependent on the activity being conducted. The most likely routes of exposure for the activities that are to be performed during environmental activities at the Site include inhalation and skin/eye contact.

4.2 PHYSICAL HAZARDS

There are physical hazards associated with this project, which might compound the chemical hazards. Hazard identification, training, adherence to the planned remedial measures and development plans, and careful housekeeping can prevent many problems or accidents arising

from physical hazards. Potential physical hazards associated with this project and suggested preventative measures include:

- <u>Slip/Trip/Fall Hazards</u> Some areas may have wet surfaces that will greatly increase the possibility of inadvertent slips. Caution must be exercised when using steps and stairs due to slippery surfaces in conjunction with the fall hazard. Good housekeeping practices are essential to minimize the trip hazards.
- <u>Small Quantity Flammable Liquids</u> If small quantities of flammable liquids are brought on-site, they will be stored in "safety" cans and labeled according to contents.
- <u>Electrical Hazards</u> Electrical devices and equipment shall be de-energized prior to working near them. Extension cords will be kept out of water, protected from crushing, and inspected regularly to ensure structural integrity. Temporary electrical circuits will be protected with ground fault circuit interrupters. Only qualified electricians are authorized to work on electrical circuits. Heavy equipment (e.g., backhoe, drill rig) shall not be operated within 10 feet of high voltage lines.
- <u>Noise</u> Work around large equipment often creates excessive noise. The effects of noise can include:
 - Workers being startled, annoyed, or distracted.
 - Physical damage to the ear resulting in pain, or temporary and/or permanent hearing loss.
 - Communication interference that may increase potential hazards due to the inability to warn of danger and proper safety precautions to be taken.

If employees are subjected to noise exceeding an 8-hour time weighted average sound level of 90 d(B)A (decibels on the A-weighted scale), feasible administrative or engineering controls shall be utilized. In addition, whenever employee noise exposures equal or exceed an 8-hour, time weighted average sound level of 85 d(B)A, employers shall administer a continuing, effective hearing conservation program as described in OSHA Regulation 29 CFR Part 1910.95.

<u>Heavy Equipment</u> - Each morning before start-up, heavy equipment will be inspected to ensure safety equipment and devices are operational and ready for immediate use.

<u>Subsurface and Overhead Hazards</u> - Before any excavation activity, efforts will be made to determine whether underground utilities and potential overhead hazards will be encountered. Underground utility clearance must be obtained prior to subsurface work.

4.3 ENVIRONMENTAL HAZARDS

Environmental factors such as weather, wild animals, insects, and irritant plants always pose a hazard when performing outdoor tasks. Reasonable efforts will be made to alleviate these hazards should they arise.

4.3.1 Heat Stress

The combination of warm ambient temperature and protective clothing increases the potential for heat stress. In particular:

- Heat rash
- Heat cramps
- Heat exhaustion
- Heat stroke

Site workers will be encouraged to increase consumption of water and electrolyte-containing beverages such as Gatorade when the potential for heat stress exists. In addition, workers are encouraged to take rests whenever they feel any adverse effects that may be heat-related. The frequency of breaks may need to be increased upon worker recommendation to the SSO.

4.3.2 Exposure to Cold

With outdoor work in the winter months, the potential exists for hypothermia and frostbite. Protective clothing greatly reduces the possibility of hypothermia in workers. However, personnel will be instructed to wear warm clothing and to stop work to obtain more clothing if they become too cold. Employees will also be advised to change into dry clothes if their clothing becomes wet from perspiration or from exposure to precipitation.

5.0 SITE CONTROLS

To prevent migration of potential contamination caused through tracking by personnel or equipment, work areas, and personal protective equipment staging/decontamination areas will be clearly specified prior to beginning operations.

5.1 SITE ZONES

In areas where contaminated soil and groundwater or LNAPL presents a potential for worker exposure (work zone), personnel entering the area must wear the mandated level of protection for the area. A "transition zone" shall be established where personnel can begin personal and equipment decontamination procedures. This can reduce potential off-site migration of contaminated soil or groundwater or LNAPL. If contaminated soil or groundwater or LNAPL is encountered and equipment or clothing become contaminated, they will not be allowed outside the transition zone (e.g., on clean portions of the Site). Operational support facilities will be located outside the transition zone (i.e., in a "support zone"), and normal work clothing and support equipment are appropriate in this area. If possible, the support zone should be located upwind of project activities.

5.2 GENERAL

The following items will be requirements to protect the health and safety of workers during implementation of project activities that disturb impacted soil or groundwater or LNAPL.

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the
 probability of hand to mouth transfer and ingestion of contamination shall not occur in
 the work zone and/or transition zone during disturbance of contaminated soil or
 groundwater.
- Personnel admitted in the work zone shall be properly trained in health and safety techniques and equipment usage.
- No personnel shall be admitted in the work zone without the proper safety equipment.
- Proper decontamination procedures shall be followed before leaving the Site.

6.0 PROTECTIVE EQUIPMENT

This section addresses the various levels of PPE that are or may be required at this Site. Personnel entering the work zone and transition zone shall be trained in the use of the anticipated PPE to be utilized.

6.1 ANTICIPATED PROTECTION LEVELS

The following table summarizes the protection levels (refer to Section 6.2) anticipated for various tasks to be implemented during re-development activities.

TASK	PROTECTION LEVEL	COMMENTS/ MODIFICATIONS
Site mobilization	D	
Site preparation	D	
Extrusive work (e.g., surveying, etc.)	D	
Intrusive work (e.g., excavating, trenching, etc.)	C/Modified D/D	Based on air monitoring and SSO discretion
Support zone	D	
Site breakdown and demobilization	D	

During the project, air in the worker's breathing zone and on the Site (upwind, downwind, etc.) shall be monitored for dusts, aerosols, particulates, etc. using a real time air monitor (RTAM) and VOCs using a photoionization detector (PID). The air monitoring program will be used to assist in determining the level of PPE required (see Section 8.0).

It is anticipated that work conducted as part of this project will be performed in Level D or modified Level D PPE. If conditions are encountered that require higher levels of PPE (e.g., Level C, B, or A), the work will immediately be stopped. The appropriate regulatory authorities (e.g., NYSDEC, etc.) will be notified, and the proper health and safety measures will be implemented (e.g., develop and implement engineering controls, upgrade in PPE, etc.).

6.2 PROTECTION LEVEL DESCRIPTIONS

This section lists the minimum requirements for each protection level. Modifications to these requirements can be made upon approval of the SSO. If Level A, Level B, and/or Level C PPE are required, Site personnel that enter the work zone and/or transition zone must be properly trained in the use of those levels of PPE.

6.2.1 Level D

Level D consists of the following:

• Safety glasses with side shields

- Hard hat
- Hard-toed work boots
- Work gloves
- Work clothing as prescribed by weather

6.2.2 Modified Level D

Modified Level D consists of the following:

- Safety glasses with side shields
- Hard hat
- Hard-toed work boots
- Work gloves
- Outer protective wear, such as Tyvek coverall [Tyveks (Sarans) and polyvinyl chloride (PVC) acid gear will be required when workers have a potential to be exposed to impacted liquids or particulates.]

6.2.3 Level C

Level C consists of the following:

- Air-purifying respirator with appropriate cartridges
- Outer protective wear, such as Tyvek coverall [Tyveks (Sarans) and PVC acid gear will be required when workers have a potential to be exposed to impacted liquids or particulates.]
- Hard hat
- Hard-toed work boots
- Nitrile, neoprene, or PVC overboots, if appropriate
- Nitrile, neoprene, or PVC gloves, if appropriate
- Face shield (when projectiles or splashes pose a hazard)

6.2.4 Level B

Level B protection consists of the items required for Level C protection with the exception that an air-supplied respirator is used in place of the air-purifying respirator. Level B PPE is not anticipated to be required during this project. If the need for Level B PPE becomes evident, Site activities will be ceased until Site conditions are further evaluated, and any necessary

modifications to the HASP have been approved by the PM and SSO. Subsequently, the appropriate safety measure (including Level B PPE) must be implemented prior to commencing Site activities.

6.2.5 Level A

Level A protection consists of the items required for Level B protection with the addition of a fully-encapsulating, vapor-proof suit capable of maintaining positive pressure. Level A PPE is not anticipated to be required during this project. If the need for Level A PPE becomes evident, Site activities will be ceased until Site conditions are further evaluated, and any necessary modifications to the HASP have been approved by the PM and SSO. Subsequently, the appropriate safety measures (including Level A PPE) must be implemented prior to commencing Site activities.

6.3 RESPIRATORY PROTECTION

Any respirator used will meet the requirements of OSHA 29 CFR 1910.134. Both the respirator and cartridges specified shall be fit-tested prior to use in accordance with OSHA regulations (29 CFR 1910). Air purifying respirators shall not be worn if contaminant levels exceed designated use concentrations. The workers will wear respirators with approval for: organic vapors <1,000 ppm; and dusts, fumes and mists with a time weighted average (TWA) <0.05 mg/m³.

No personnel who have facial hair, which interferes with the respirator's sealing surface, will be permitted to wear a respirator and will not be permitted to work in areas requiring respirator use.

Only workers who have been certified by a physician as being physically capable of respirator usage shall be issued a respirator. Personnel unable to pass a respiratory fit test or without medical clearance for respirator use will not be permitted to enter or work in areas on-site that require respirator protection.

7.0 DECONTAMINATION PROCEDURES

This section describes the procedures necessary to ensure that both personnel and equipment are free from potential contamination when they leave the work Site.

7.1 Personnel Decontamination

As deemed necessary by the SSO, personnel involved with activities that involve disturbing potentially impacted media (soil, fill material, etc.) will follow the decontamination procedures described herein to ensure that material which workers may have contacted in the work zone and/or transition zone does not result in personal exposure and is not spread to clean areas of the Site. This sequence describes the general decontamination procedure. The specific stages can vary depending on the Site, the task, and the protection level, etc.

- 1. Leave work zone and go to transition zone
- 2. Remove soil/debris from boots and gloves
- 3. Remove boots
- 4. Remove gloves
- 5. Remove Tyvek suit and discard, if applicable
- 6. Remove and wash respirator, if applicable
- 7. Go to support zone

7.2 EQUIPMENT DECONTAMINATION

If equipment becomes contaminated, it shall be decontaminated in the transition zone before leaving the Site. Decontamination procedures can vary depending upon the contaminant involved, but may include sweeping, wiping, scraping, hosing, or steam cleaning the exterior of the equipment. Personnel performing this task will wear the proper PPE.

7.3 DISPOSAL

Disposable clothing will be treated as contaminated waste or solid waste and be disposed of properly. Liquids (e.g., decontamination water, etc.), if generated by project activities, will be disposed of in accordance with applicable regulations.

8.0 AIR MONITORING

Air monitoring will be conducted in order to determine airborne particulate and potential contamination levels. This ensures that respiratory protection is adequate to protect personnel against the chemicals that may be encountered and that potential chemical contaminants are not migrating off-site. Additional air monitoring may be conducted at the discretion of the SSO.

The following chart describes the direct reading instrumentation that will be utilized and the currently anticipated action levels.

Monitoring Device	Action level	Response/Level of PPE
	< 25 ppm in breathing zone	<u>Level D</u>
PID Volatile Organic Compound Meter	25-100 ppm in breathing zone	Cease work, implement vapor suppression techniques such as application of BioSolve. If levels are not reduced below 25 ppm in the breathing zone, then upgrade PPE to Level C.
	> 100 ppm in breathing zone	Stop work, evaluate the use of engineering controls, etc. If levels are not reduced below 100 ppm in the breathing zone, then upgrade PPE to Level A or Level B.
RTAM Particulate	< 100 ug/m³ (i.e., < 0.1 mg/m³) over an integrated period not to exceed 15 minutes.	Continue working
Meter	> 100 ug/m ³ over an integrated period not to exceed 15 minutes.	Cease work, implement dust suppression, changes in way work is performed, etc. If levels are not reduced below 150 ug/m³, then upgrade PPE to <u>Level C</u> .

PID = Photoionization detector

RTAM = Real Time Aerosol Monitor

 $ug/m^3 = microgram per meter cubed$

8.1 PARTICULATE MONITORING

During activities where contaminated materials (e.g., soil, fill, etc.) may be disturbed, real-time monitoring for particulates using a RTAM at the perimeter of the exclusion zone in accordance with the NYSDEC Final DER-10 Technical Guidance for Site Investigation and Remediation (DER-10) dated May 2010. DER-10 uses an action level of 100 ug/m³ (0.10 mg/m³) over background conditions for an integrated period not to exceed 15 minutes. If the action level is exceeded, or if visible dust is encountered, then work shall be discontinued until corrective actions are implemented.

Levels of particulates will periodically be measured in the air at active work areas within the exclusion zone, and at the contaminant reduction zone when levels are detected above background in the exclusion zone. If the action level is exceeded, or if visible dust is observed leaving the work site, then work shall be discontinued until corrective actions are implemented. Corrective actions may include dust suppression, changes in the way work is performed, and/or upgrade of personal protective equipment.

8.2 VOLATILE ORGANIC COMPOUND MONITORING

A PID will be used to monitor total volatile organic content of the ambient air. The PID will prove useful as a direct reading instrument to aid in determining if current respiratory protection is adequate or needs to be upgraded. The SSO will take measurements before operations begin in an area to determine the amount of VOCs naturally occurring in the air. This is referred to as a background level. Levels of VOCs will periodically be measured in the air at active work sites, and at the transition zone when levels are detected above background in the work zone.

During activities where contaminated materials may be disturbed, a PID will be used to monitor total VOCs in the ambient air. The PID will prove useful as a direct reading instrument to aid in determining if current respiratory protection is adequate or needs to be upgraded. The SSO will take background measurements before operations begin in an area to determine the amount of VOCs naturally occurring in the air. Levels of VOCs will periodically be measured in the air at active work areas within the exclusion zone, and at the contaminant reduction zone when levels are detected above background at the perimeter of the exclusion zone.

8.3 COMMUNITY AIR MONITORING PLAN

During intrusive activities, activities that have the potential to disturb contaminated soil or fill material, this Community Air Monitoring Plan (CAMP) will be implemented. The CAMP includes real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when activities with the potential to release VOCs or dust are being conducted at the Site. This CAMP is based on the NYSDOH Generic CAMP included as Appendix 1A of the NYSDEC DER-10. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of project activities. CAMP monitoring locations will be selected based on wind direction and actual areas where work that requires monitoring is being conducted. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air. Reliance on the CAMP should not preclude simple, common sense measures to keep VOCs, dust, and odors at a minimum around, and downwind of, the work areas.

<u>Continuous monitoring</u> will be conducted during ground intrusive activities involving potentially contaminated soil, fill material or groundwater. Ground intrusive activities include excavation.

<u>Periodic monitoring</u> for VOCs will be conducted during non-intrusive activities involving potentially contaminated soil, fill material or groundwater where deemed appropriate (e.g., during baseline monitoring, performance monitoring, management of excavated soil or fill material, etc.).

VOC and particulate 15-minute readings, and instantaneous readings (if collected), will be recorded on daily air monitoring logs that are accompanied by a daily figure, copies of which are included in Attachment 1. This documentation will be available for NYSDEC and NYSDOH personnel to review.

8.3.1 VOC Monitoring, Response Levels, and Actions

VOCs must be monitored at the downwind perimeter of the immediate work area (i.e., areas within the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 ppm above background for the 15-minute average, work activities must be temporarily halted and monitoring must be continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source or vapors identified, corrective actions taken to abate emissions (e.g., application of BioSolve), and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case less than 20 feet), is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the Site, activities must be shutdown.

8.3.2 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations must be monitored continuously at the upwind and downwind perimeters of the Site at temporary particulate monitoring stations. The particulate monitoring must be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (ug/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 ug/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 ug/m³ above the upwind level, work must be stopped and a reevaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 ug/m³ of the upwind level and in preventing visible dust migration.

The following chart summarizes the direct reading instrumentation and appropriate action levels that will be utilized during CAMP monitoring.

Monitoring Device	CAMP Action level	Response/Level of PPE
	< 5 ppm above background at Site perimeter, over an integrated period not to exceed 15 minutes.	Continue work.
PID Volatile Organic Compound Meter	5-25 ppm at Site perimeter over an integrated period not to exceed 15 minutes.	Stop work, identify vapor source, take corrective actions, and continue monitoring. Resume work if < 5ppm for 15-minute average at 200 feet downwind or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case < 20 feet).
	> 25 ppm at Site perimeter.	Stop work, further evaluate the use of engineering controls, etc.
	< 100 ug/m³ above background over an integrated period not to exceed 15 minutes, and no observable dust leaving the work area.	Continue working.
RTAM Particulate Meter	> 100 ug/m³ above background over an integrated period not to exceed 15 minutes, or if observable dust leaving the work area.	Cease work, implement dust suppression, change in way work performed, etc. Resume work if levels brought below 150 ug/m³ above background and no visible dust leaving the work area.

9.0 EMERGENCY RESPONSE

To provide first-line assistance to field personnel in the case of illness or injury, the following items will be made immediately available on the Site:

- First-aid kit
- Portable emergency eye wash
- Supply of clean water

9.1 EMERGENCY TELEPHONE NUMBERS

The following telephone numbers are listed in case there is an emergency at the Site:

Fire/Police Department: 911

Poison Control Center: 800-222-1222

NYSDEC Spills 800-457-7362

NYSDEC Contact 585-226-5350

Todd Caffoe

Day Environmental, Inc. 585-454-0210

Jeffery A. Danzinger

Nearest Hospital: Unity Hospital

1555 Long Pond Road Rochester, New York

Hospital Phone Number: 585-723-7000

Emergency Dept: 585-723-7070

Directions to the Hospital

(refer to map in Attachment 2): Exit Site and turn left onto Lyell Avenue. Follow Lyell Avenue for approximately 1.8 miles. Turn right onto Long Pond Road and travel approximately 1.5 miles. Unity Hospital is on the left. Follow signs

to the Emergency Room.

9.2 EVACUATION

Although unlikely, it is possible that a project area emergency could require evacuating personnel from the Site. If required, the SSO will give the appropriate signal for evacuation (See also Section 8.0 of this HASP).

Personnel shall exit the project area and shall congregate in an area designated by the SSO. The SSO shall ensure that personnel are accounted for. If someone is missing, the SSO will alert emergency personnel. The appropriate regulatory authorities will be notified as soon as possible regarding the evacuation, and any necessary measures that may be required to mitigate the reason for the evacuation.

9.3 MEDICAL EMERGENCY

In the event of a medical emergency involving illness or injury to one of the on-site personnel, the project area should be shut-down and immediately secured. The appropriate regulatory authorities should be notified immediately. The area in which the injury or illness occurred should not be entered until the cause of the illness or injury is known. The nature of injury or illness should be assessed. If the victim appears to be critically injured, administer first aid and/or CPR as needed. Instantaneous real-time air monitoring should be done in accordance with air monitoring outlined in Section 8.0 of this HASP.

9.4 CONTAMINATION EMERGENCY

It is unlikely that a contamination emergency will occur; however, if such a emergency does occur, the project area, and any other potentially affected areas of the Site, should be shut-down and immediately secured. If an emergency rescue is needed, notify, Police, Fire Department and EMS Units immediately. Advise them of the situation and request an expedient response. The appropriate regulatory authorities should be notified immediately. The area in which the contamination occurred should not be entered until the arrival of trained personnel who are properly equipped with the appropriate PPE and monitoring instrumentation (See also Section 8.0 of this HASP).

9.5 FIRE EMERGENCY

In the event of a fire on-site, the project area, and any other potentially affected areas of the Site, should be shut-down and immediately secured. The area in which the fire occurred should not be entered until the cause can be determined. Non-essential personnel should be evacuated from the project area to a safe, secure area. Notify the Fire Department immediately. Advise the Fire Department of the situation and identify any hazardous material involved. The appropriate regulatory authorities should be notified as soon as possible.

The four classes of fire along with their constituents are as follows:

Class A: Wood, cloth, paper, rubber, many plastics, and ordinary combustible materials.

Class B: Flammable liquids, gases and greases.

Class C: Energized electrical equipment.

Class D: Combustible metals such as magnesium, titanium, sodium, potassium.

Small fires on-site may be actively extinguished; however, extreme care should be taken while in this operation. Approaches to the fire should be done from the upwind side if possible. Distance

from on-site personnel to the fire should be close enough to ensure proper application of the extinguishing material, but far enough away to ensure that the personnel are safe. The proper extinguisher should be utilized for the Class(s) of fire present on the Site. If possible, the fuel source should be cut off or separated from the fire. Care must be taken when performing operations involving the shut-off values and manifolds, if present.

Examples of proper extinguishing agent as follows:

Class A: Water

Water with 1% aqueous film-forming foam (AFFF) Foam (Wet Water)

Water with 6% AFFF or Fluorprotein Foam

ABC Dry Chemical

Class B: ABC Dry Chemical

Purple K

Carbon Dioxide

Water with 6% AFFF Foam

Class C: ABC Dry Chemical

Carbon Dioxide

Class D: Metal-X Dry Powder

No attempt should be made against large fires. These should be handled by the Fire Department.

9.6 SPILL, AIR RELEASE OR UNKNOWN WASTE

In the event of encountering a spill or air release of hazardous materials, or encountering an unknown material on-site, the project area, and any other potentially affected areas of the Site, should be shut-down and immediately secured. The area in which the spill or release occurred should not be entered until the cause can be determined and area safety can be evaluated. Non-essential personnel should be evacuated from the project area to a safe, secure area. The appropriate regulatory authorities should be notified as soon as possible. The spilled or released material should be immediately identified and appropriate containment measures should be implemented, if possible. Real-time air monitoring should be implemented as outlined in Section 8.0 of this HASP. If the material is unknown, Level B protection is mandatory. Samples of the material should be acquired to facilitate identification of the material. If the material needs to be disturbed, it will be characterized, handled, transported and disposed of in accordance with applicable regulations.

9.7 LOCATING CONTAINERIZED WASTE AND/OR UNDERGROUND STORAGE TANKS

In the event that unanticipated containerized waste (e.g., drums) or USTs are encountered during construction activities, the project area should be shut-down and immediately secured. The area in which containerized wastes and/or USTs are discovered should not be entered until area safety can be evaluated. Non-essential personnel should be evacuated from the work zone to a safe,

secure area. The appropriate regulatory authorities should be notified as soon as possible. The SSO shall monitor the area as outlined in Section 8.0 of this HASP.

Prior to any handling, containers and/or USTs will be visually assessed by the SSO to gain as much information as possible about their contents. As a precautionary measure, personnel shall assume that unlabeled containers contain hazardous materials until their contents are characterized. If the material is unknown, Level B protection is mandatory. To the extent possible based upon the nature of the containers encountered, actions may be taken to stabilize the area and prevent migration (e.g., placement of berms, etc.). Subsequent to initial visual assessment and any required stabilization, an environmental contractor will sample, test, remove, transport, and dispose of any containers, USTs, and their contents in accordance with applicable regulations.

ATTACHMENT 1

Daily Air Monitoring Logs and Figure



AIR MONITORING REPORT SHEET

DATE:				PAGE:	OF
JOB #: 4935S-14					
SITE: 1555 Lyell A	Avenue				
BY:					
ON-SITE:					
WEATHER CONDI				WIND DIRE	CTION:
PERSONNEL ON-S					· · · · · · · · · · · · · · · · · · ·
NOTES:					_
					_
DESCRIPTION	TIME	LOCATION	PID (ppm)	PARTICI	JLATES (mg/m3)
DESCRIPTION	TIVIE	LOCATION	TID (ppin)	TARTICO	DEATES (mg/ms)
l			1	1	

DESCRIPTION: BZ = Breathing Zone, BG = Upwind Background, CAMP = Outside work area/at property boundary S:/fieldforms/Air Monitoring

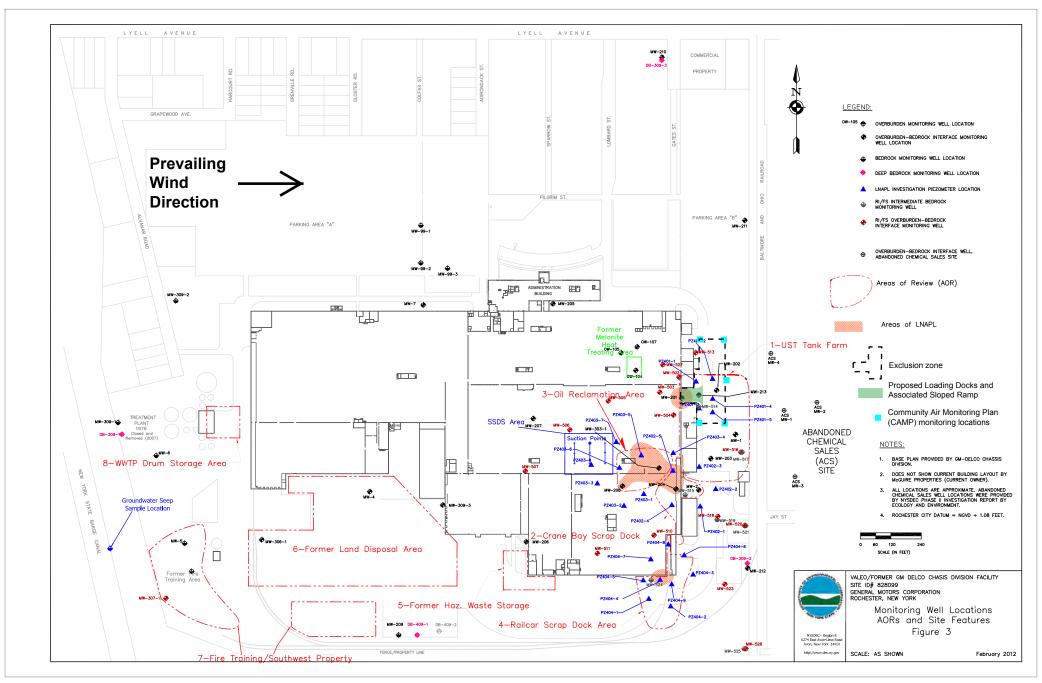


AIR MONITORING REPORT SHEET (Continued)

DATE:	PAGE:	OF	
JOB #: <u>4935S-14</u>			

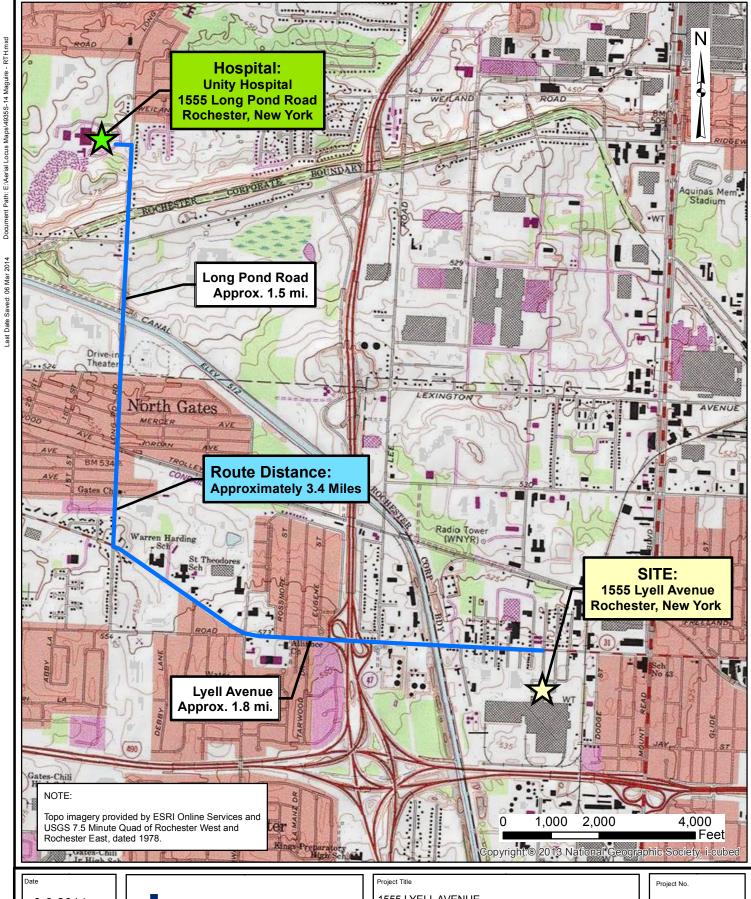
DESCRIPTION	TIME	LOCATION	PID (ppm)	PARTICULATES (mg/m3
			1	

DESCRIPTION: BZ = Breathing Zone, BG = Upwind Background, CAMP = Outside work area/at property boundary S:/fieldforms/Air Monitoring



ATTACHMENT 2

Figure 1 – Route to Emergency Services



3-6-2014

Drawn By

RJM

Scale

AS NOTED

dayDAY ENVIRONMENTAL, INC.

Environmental Consultants Rochester, New York 14606 New York, New York 10170 1555 LYELL AVENUE ROCHESTER, NEW YORK

HEALTH AND SAFETY PLAN

Drawing Title

Route to Emergency Services

4935S-14

FIGURE 1

APPENDIX B NYSDEC DER-10 Soil Re-Use Guidance

- ii. be free of extraneous debris or solid waste;
- iii. be recognizable soil or other unregulated material as set forth in 6 NYCRR Part 360 and materials for which DEC has issued a beneficial use determination, which comply with the requirements of paragraph 2 below;
- iv. not exceed the allowable constituent levels for imported fill or soil as described in paragraph 2 below, unless a site-specific exemption is provided by DER in accordance with paragraph 8 below; and
 - v. be tested as described in paragraph 3 below.
- 2. The fill material should not exceed the allowable constituent levels for imported fill or soil for the use of the site which are provided in Appendix 5, taking consideration that where the protection of ecological resources SCO is required for the site, the protection of ecological resources SCO must also be considered in selecting the lowest of the applicable SCGs. Where a compound is detected which is not on the Appendix 5 table the remedial party should:
- i. determine if the constituent of concern is included on the supplemental soil cleanup objective tables in CP-Soil and if so use the CP-Soil values as the allowable constituent level; or
 - ii. consult with DER to determine an allowable constituent level.
- 3. Sampling is required for all imported soil for use as backfill or cover material. Sampling frequency of the material will be determined by the remedial design or remedial action work plan:
- i. considering Table 5.4(e)10 and paragraph 10 below, and sampling will be performed consistent with sections 2.1 through 2.3;
- ii. with a minimum one sample analyzed from every new source, at the following sampling frequency for:
- (1) soil or sand imported from a virgin mine/pit, at least one round of characterization samples for the initial 100 cubic yards of material, in accordance with Table 5.4(e)10 below;
- (2) material sources other than a virgin mine/pit (e.g., a former manufacturing site), in accordance with Table 5.4(e)10; or
- (3) sites where large amounts of cover material/backfill are required, the sampling frequency can be reduced from that specified in Table 5.4(e)10 once a trend of compliance is established; and
- iii. the DER project manager may modify the number of samples required by subparagraph ii above based on the site being remediated and the source of the material, in accordance with the modification provisions set forth in section 1.6.
- 4. Reuse of soil from the site. Soil originating on the site may be reused on the site or exported for reuse provided sampling demonstrates compliance with SCGs as detailed in Table 5.4(e)4. Soil which is not going off-site for reuse will be disposed in a permitted treatment, storage or disposal facility, unless paragraph 10 below provides for such export.

Table 5.4(e)4 Reuse of Soil [for Paragraph 5.4(e)4]					
Soil on the Site Meets: Reuse on the Site:		Off-site Export & Reuse:			
Unrestricted Soil SCGs	Without restrictions	Without restrictions			
Meets the Applicable Use- based and Groundwater Protection SCG and where Appropriate Protection of Ecological Resources Soil SCGs for a Site w/ an IC & SMP.	In the soil cover/cap or as backfill within the area of the site subject to the IC.	Not Allowed, unless going to a site with IC subject to a 6 NYCRR Part 360 Beneficial Use Determination (BUD).			
Meets Site-Specific Background Soil Levels.	Without restrictions. (Does not apply to sites in the BCP.)	Not Allowed, unless going to a site with IC subject to a 6 NYCRR Part 360 BUD.			
Site-specific cleanup goals for subsurface soil	Placement below the soil cover/cap within the area of the site subject to the IC.	Not Allowed, unless going to a site with IC subject to a 6 NYCRR Part 360 BUD.			

- 5. Material other than soil imported to a site. The following material may be imported, without chemical testing, to be used as backfill beneath pavement, buildings or as part of the final site cover, provided that it contains less than 10% by weight material which would pass through a size 80 sieve and consists of:
- i. gravel, rock or stone, consisting of virgin material from a permitted mine or quarry; or
- ii. recycled concrete or brick from a DEC registered construction and demolition debris processing facility if the material conforms to the requirements of Section 304 of the New York State Department of Transportation *Standard Specifications Construction and Materials Volume 1* (2002).
- 6. The remedial party must provide documentation of the source of fill to DER for approval of the source of the material before it is used on the site, which should include:
- i. the name of the person providing the documentation and relationship to the source of the fill;
 - ii. the location where the fill was obtained;
 - iii. identification of any state or local approvals as a fill source; and
- iv. if no prior approval is available for the source, a brief history of the use of the property which is the source of the fill.
- 7. Bills of lading should be provided to DER to document that the fill delivered was from a DER-approved source(s).
 - 8. For all remedial programs except those developed pursuant to the BCP, DEC may issue a

site-specific exemption for one or more of the requirements set forth in this section, based upon sitespecific conditions, such as:

- i. use and redevelopment of the site;
- depth of the placement of the backfill material relative to the surface or subsurface ii. structures;
 - iii. depth of the placement of the backfill material relative to groundwater:
 - iv. volume of backfill material:
 - potential for odor from the backfill material; v.
 - presence of historic fill in the vicinity of the site; vi.
 - vii. DEC-issued beneficial use determination, pursuant to 6 NYCRR Part 360; or
 - background levels of contamination in areas surrounding the site.
- For remedial programs pursuant to the BCP, DEC can only provide a site-specific exemption for backfill consistent with the provisions of paragraph 8 above as follows:
- i. for Track 2 and Track 3 cleanups, for soils greater than 15 feet below ground surface; or
- for Track 4 cleanups, for soils beneath buildings, pavement and other improvements or for soils beneath the soil cover system or soil cap over exposed surface soils.
- 10. Sampling fill imported to or exported from a site. The remedial party will sample and analyze the fill being imported to the site in accordance with this subdivision and Table 5.4(e)10. Samples of the fill will be collected based on the soil quantity and type of constituents identified in the table and will be a combination of discrete and composite samples, handled as follows:
- for VOCs only, grab samples are allowed. These grab samples are one or more discrete samples taken from the fill, with the number as specified in the volatile column of Table 5.4(e)10 for the soil quantity in question, and analyzed for the VOCs identified in Appendix 5; or
 - ii. for SVOCs, inorganics and PCBs/pesticides:
- (1) one or more composite samples are collected from the volume of soil identified in Table 5.4(e)10 for analysis, with each composite from a different location in the fill volume;
- (2) each composite is prepared by collecting discrete samples from 3 to 5 random locations from the volume of soil to be tested; and
- the discrete samples are mixed, and after mixing, a sample of the mixture is analyzed for the SVOCs, inorganic and PCBs/pesticide constituents identified in Appendix 5.

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Table 5.4(e)10 Recommended Number of Soil Samples for Soil Imported To or Exported From a Site					
Contaminant	VOCs				
Soil Quantity (cubic yards)	Discrete Samples	Composite	Discrete Samples/Composite		
0-50	1	1	3-5 discrete samples from		
50-100	2	1	different locations in the fill		
100-200	3	1	being provided will comprise a		
200-300	4	1	composite sample for analysis		
300-400	4	2			
400-500	5	2			
500-800	6	2			
800-1000	7	2			
≻ 1000	Add an additional 2 VOC and 1 composite for each additional 1000 Cubic yards or consult with DER				

- Compliance for soil exported from a site for reuse. For soil that is being exported from a site to locations other than permitted disposal facilities, the handling requirements are set forth in this subdivision and in paragraph 5.4(e)4.
- Levels of contamination must not exceed the lower of the groundwater and residential use levels as shown in Appendix 5, absent a beneficial use determination issued by DEC. DER will coordinate with the Division of Solid & Hazardous Materials (DSHM), prior to the start of the remedial action, relative to whether the exported soil can be used beneficially in accordance with 6 NYCRR 360-1. The sampling and analysis requirements are set forth in paragraph 5.4(e)10.
- The number of required samples are specified in Table 5.4(e)10 and paragraph (e)10 above, which may be modified by the DER project manager based on various factors, including the location of the site receiving the soil.
- Compliance for the decommissioning of monitoring wells. All monitoring wells not required for site management should be decommissioned in accordance with paragraph (d)6 above prior to DER approval of the FER.

5.5 Underground Storage Tank Closure

- The first step for underground storage tank (UST) closure is the identification, removal, treatment, containment and/or stabilization of the contents to prevent contaminant exposure to receptors and to prevent further movement of contaminants through any pathway as set forth herein.
- A health and safety plan for the site is developed, as described in section 1.9, by a qualified individual in accordance with subparagraph 1.5(a)3.i.
- Underground tank closures not performed in accordance with this section will require a certification of the closure report by a professional engineer, as described in section 1.5.

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