

**AMERICAN REGENT, INC.
SHIRLEY, NEW YORK FACILITY
SOIL VAPOR INTRUSION SAMPLING TO BE
PERFORMED AT AMERICAN REGENT, INC.
SAMPLE COLLECTION PROCEDURE**

On behalf of American Regent, Inc., and at the request of the New York State Department of Environmental Conservation (NYSDEC), D&B Engineers and Architects (D&B) will perform soil vapor intrusion sampling at the American Regent, Inc. property located in Shirley, New York. The site is located at 26 Natcon Drive in Shirley, New York. A Site Location Map is provided as Figure 1 and a Site Plan is provided as Figure 2. Based on this request and discussion with the NYSDEC, the scope of the sampling activities will include the following:

- Prior to initiating field activities, the sub-slab depressurization system will be shut down for at least 60 days.
- Sub-slab soil vapor samples will be collected from eight locations beneath the warehouse area of the building. The sample locations consist of existing sub-slab sampling monitoring ports currently being utilized to monitor vacuum beneath the slab as part of routine operation of the system under the NYSDEC-approved Site Management Plan.
- One indoor air sample will be collected in the vicinity of each of the eight soil vapor sample locations (eight indoor air samples total).
- A sample location map is provided as Figure 3.
- The sampling procedures will be consistent with those described in the NYSDOH's "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York", dated October 2006 and subsequent revisions.
- Sub-slab samples will be collected at existing ports from the sub-slab monitoring program. Teflon tubing will be inserted onto the barbed end of the monitoring port and the tubing will be purged for one minute using a photoionization detector (PID) to evacuate soil vapor. PID readings will be recorded during the purging period at each sample point. Following purging, the tubing will be removed, a cap will be placed on the port and the sub-slab conditions allowed to equilibrate for approximately 20 minutes. Following the equilibration period, the cap will be removed, and the Teflon tubing will be re-inserted onto the barbed end of the vapor port. The area surrounding the port will be sealed by placing an inverted pail over the sample location, inserting the tubing through a vapor tight hole in the pail, and sealing the pail to the surface with modeling clay. Helium will then be injected into the pail through a second tubing and the port will be tested for tightness using a helium detector. The samples will be collected in batch certified 6-liter SUMMA canisters fitted with laboratory calibrated low-flow regulators set to collect the samples over an 8-hour period.

- At each indoor air sample location, the sample will be collected in a batch certified 6-liter SUMMA canister fitted with a laboratory calibrated low-flow regulator set to collect the sample over an 8-hour period. The canister will be placed to collect the sample from approximately 3 feet above the floor to simulate a typical worker's breathing zone while seated.
- In addition, two outdoor ambient air samples will be collected from areas where interference from outdoor activities (e.g., vehicle exhaust, vehicle fueling activities, etc.) is anticipated to be minimal. One of the samples will be collected north of the facility and the other will be collected south of the facility. The samples will be collected in batch certified 6-liter SUMMA canisters fitted with laboratory calibrated low flow regulators set to collect the samples over an 8-hour period.
- Following sample collection, the sample canisters will be properly labeled and transported utilizing standard chain-of-custody procedures via courier to a laboratory for analysis for volatile organic compounds utilizing United States Environmental Protection Agency (USEPA) Method TO-15, **Select Ion Monitoring (SIM) for trace analyses. Specifically, indoor, and ambient air sample laboratory reporting limits for five compounds, namely trichloroethene; cis 1,2-dichloroethene; 1,1-dichloroethene; carbon tetrachloride and vinyl chloride are required to be 0.20 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) or less. These detection limits can be achieved by using EPA Method TO-15, SIM.** The laboratory selected to perform the analyses will be a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. The laboratory will provide a NYSDEC Analytical Services Protocol (ASP) Category B data package as well as an electronic data deliverable (EDD) in EQuIS format. The SSDS will be turned on as soon as sampling is completed and remain on until determination can be made by the State.
- **At the time of sampling, a Building Questionnaire and Product Inventory document will be completed and submitted with the draft data, when available.**
- **The analytical results will be presented in tabular form and compared to the NYSDOH's Soil Vapor/Indoor Air Matrices, May 2017 to compare the sampling results to determine the recommended action to address current and potential exposures related to SVI.**
- Following receipt of the analytical results, D&B will prepare a letter report to document the field activities, provide the analytical results of the samples and present the findings of the sampling activities. **The data gathered will be used to determine whether the sub-slab depressurization system at the facility can be shut down and decommissioned.** Electronic copies of the letter report in PDF format will be submitted to the NYSDEC and NYSDOH.

Certification

Based on my inquiry of those persons directly responsible for preparing the SVI sampling procedure for the American Regent facility in Shirley, New York, the information submitted is, to the best of my knowledge and belief, true accurate and complete.

Independent Professional Engineer

Signature: _____



Name: _____

Matthew DeVinney, P.E.

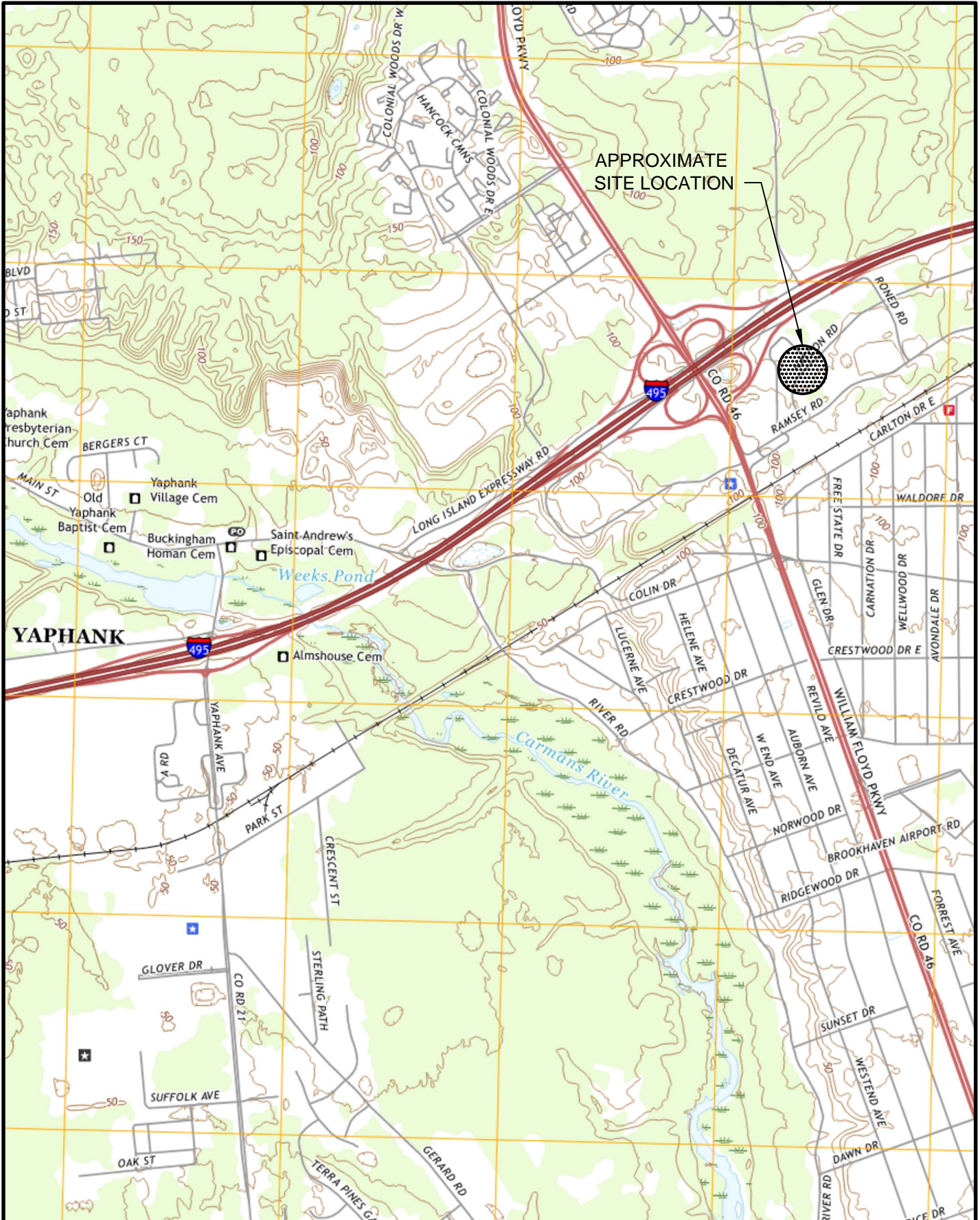
Title: _____

Vice President

Date: _____

February 20, 2024

F:\5723\5723-S22R\dwg\5723-S22R-C-LOCATION MAP_12-6-22.dwg, FIGURE 1, 12/16/2022 2:19:47 PM, rferrell



D&B ENGINEERS
AND ARCHITECTS

PRECISION CONCEPTS, INC. SITE
NYSDEC SITE NO. 152158

SITE LOCATION MAP

SCALE: N.T.S.

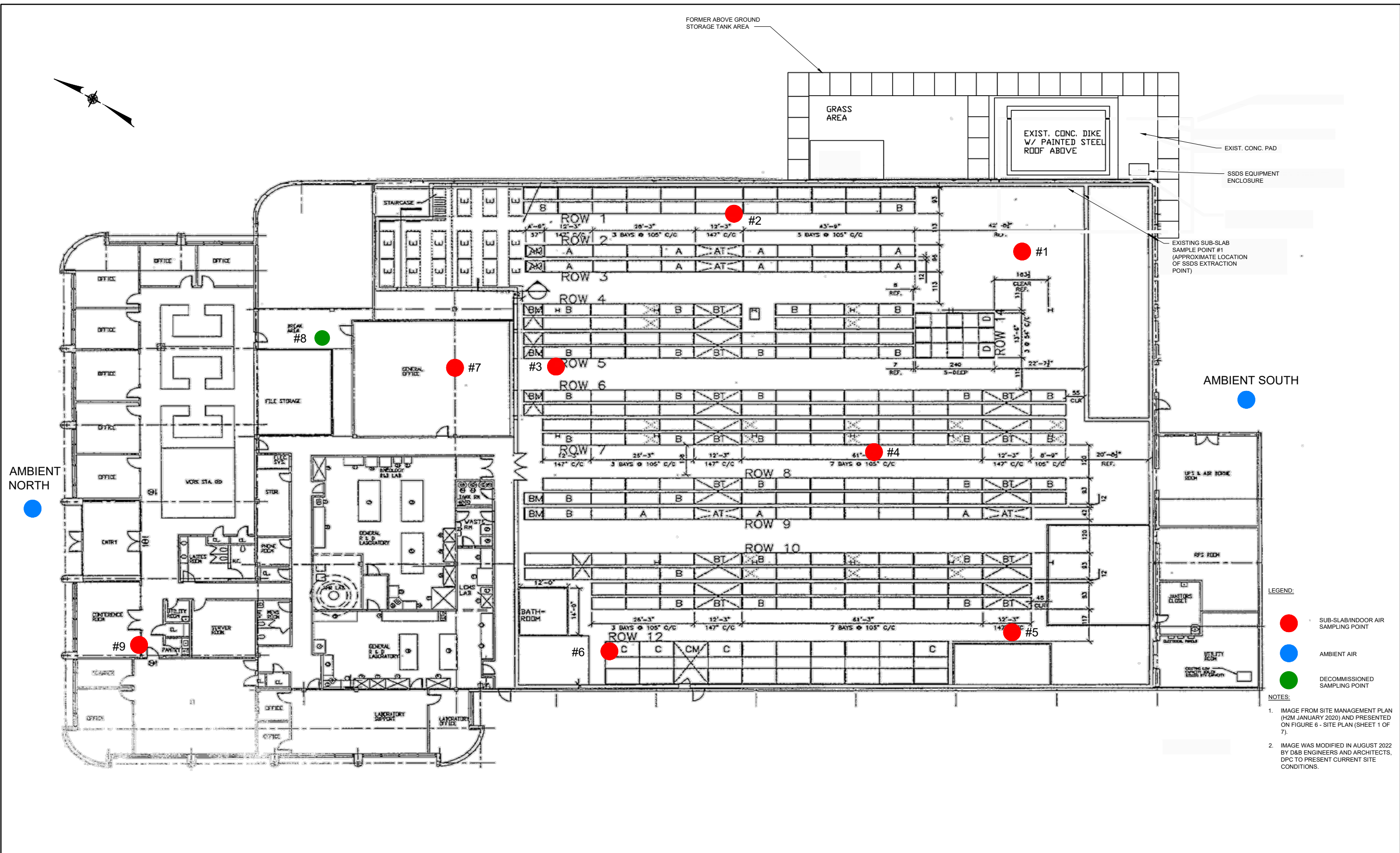
FIGURE 1

F:\5578\5578-03B\dwg\5578-C-FIG 4.dwg, Layout1, 11/23/2022 8:37:58 AM, rferrell



NOTE:
FIGURE FROM SITE MANAGEMENT
PLAN DATED JANUARY 2020.

AMERICAN REGENT SITE MANAGEMENT PLAN



F:\0721\aug523\523R\SP\02.dwg, FIGURE 3, 10/30/2023, 4:05:29 PM, zuplan