BRINKERHOFF
ENVIRONMENTAL SERVICES, INC.

1805 Atlantic Avenue
Manasquan, New Jersey 08736
Tel: (732) 223-2225
Fax: (732) 223-3666
www.brinkenv.com

November 25, 2020

Transmitted via email only to: katherine@madddequities.com

Joy Construction Corporation
40 Fulton Street, 22nd Floor
New York, NY 10038

Re: Geophysical Investigation Report
202-208 Tillary Street
Block 2050, Lot 100
Brooklyn, New York 11201
Brinkerhoff Project No. 15BR103

To Whom It May Concern:

Brinkerhoff Environmental Services, Inc. (Brinkerhoff) is pleased to present the following summary report of the Geophysical Investigation (GI) conducted on October 27, 2020 at the above-referenced property. The purpose of the GI was to attempt to identify subsurface anomalies indicative of fuel storage tanks. Electromagnetic induction and ground-penetrating radar (GPR) technologies were used in this investigation in accordance with the New Jersey Department of Environmental Protection's (NJDEP's) August 2005 *Field Sampling Procedures Manual.*

The following sections discuss the limits of the survey, methodologies, findings and conclusions of the geophysical survey performed at the subject property.

INTRODUCTION

Brinkerhoff conducted a GI at the subject property. (Refer to Figure 1 – Site Location Map). At the time of the investigation, the subject property contained a multi-story storage facility encompassing the majority of the western portion of the subject property.

METHODOLOGY AND LIMITATIONS

A. ***Electromagnetic Survey*** – Electromagnetic data were collected using a Geonics EM61-MK2A High Sensitivity Metal detector. The effective depth of data collection was approximately 10 feet. The field procedure involved device calibration and data production. Magnetic data were continuously produced along survey lines at approximately one-foot intervals. The data was analyzed in the field and auditory variations in the response allowed the location of metal objects.

B. ***Ground-Penetrating Radar (GPR) Survey*** - GPR data were collected with a Sensors and Software Inc. Noggin^{plus} SmartCart GPR System (SmartCart) utilizing a 250 MHz antenna. Data were collected continuously on 85 survey lines across selected open areas of the subject property. The survey lines were spaced approximately two (2) feet apart and oriented perpendicular to each other. The depth of investigation was from zero (0) to approximately six (6) feet with this antenna. The data were processed using Ekko Project 4 software. (Refer to Figure 2 – GPR Line Map.)

C. ***Limitations*** - Limitations encountered during the investigation included the presence of metal chain-link fencing, possible subsurface utilities, vegetation, reinforced concrete, metal signage, vehicles, dumpsters, debris and the onsite structure. Please note that electromagnetic induction and GPR are remote sensing methods and in some instances, due to interference or other geophysical limitations, do not reveal data which may be indicative of subsurface anomalies. The findings of this investigation should only be used as a tool in evaluating the possibility that buried features are present on the property and should not be considered a guarantee regarding the presence or absence of underground storage tanks (USTs).

GEOPHYSICAL RESULTS

Brinkerhoff conducted the GI of the subject property. Initially, a survey was conducted within reasonably accessible areas of the subject property utilizing the EM-61 equipment. The EM-61 data set identified several areas of anomalous change in magnetic susceptibility gradient.

Based upon the EM-61 data, no specific anomaly(s) could be selected and addressed individually, as a result, Brinkerhoff decided to collect GPR data in reasonably accessible areas of the site.

The majority of the collected GPR data in this area indicates subsurface anomalies indicative of disturbed areas and/or other buried objects located between the surface and five (5) feet below grade.

CONCLUSIONS

On October 27, 2020, Brinkerhoff performed a GI in open and reasonably accessible areas of the subject property. The results of the GI identified multiple anomalies indicative of subsurface debris or other buried object or objects located approximately between the surface and five (5) feet below grade. During the aforementioned geophysical investigation, Brinkerhoff did not detect the presence of an UST.

Respectfully submitted,

BRINKERHOFF ENVIRONMENTAL SERVICES, INC.

MATTHEW D. POWERS
Director of Geophysical Services
NJDEP Subsurface Evaluator No. 196431