



514 Hillcrest Industrial Boulevard
Macon, Georgia 31204
P (478) 757-1606
Terracon.com

October 3, 2023

Passero Associates
4730 Casa Cola Way, Suite 2004
St. Augustine, Florida 32095

Attn: Mr. Stan Price, P.E.
P: (478) 262-7750
E: sprice@passero.com

Re: REPORT OF GEOPHYSICAL EXPLORATION
Middle Georgia Regional Airport
New Georgia Corporate Terminal
Macon, Bibb County, Georgia
Terracon Project No. HN225215

Dear Mr. Price:

Terracon Consultants, Inc. (Terracon) performed Limited Ground Penetrating Radar (GPR) Services for the above-referenced project. This letter report discusses the methods utilized and findings for this limited-scope project. Terracon's work was performed in accordance with the scope of services discussed in Terracon Proposal PHN225215, dated September 30, 2022.

1.0 PROJECT INFORMATION

The property currently has an existing Lowe Aviation and Aviance building with asphalt and concrete paved areas. The project will consist of a proposed new terminal building within the existing buildings. The purpose of the geophysical exploration was to investigate the project area to aid in providing the following information:

- Presence of the existing utilities

2.0 FIELD EXPLORATION METHODOLOGY

The GPR was performed utilizing a Geophysical Survey Systems Incorporated (GSSI) UtilityScan 350 MHz Hyper-stacking antenna and a PDL RD8200 Utility Locator. This is the recommended equipment for the survey level requested and is typically effective in providing the required results. A 350 MHz Hyper-stacking antenna is typically used for underground

utility applications due to its signal depth penetration and high data resolution. A high-frequency antenna would have less signal depth penetration, and lower-frequency antennas would have lower data resolution.

The utility locator can locate utilities utilizing multiple modes using a radio spectrum scan, a passive frequency detection scan (50 to 60 Hz), and a metal detector scan. The instrument can also perform active signal detection by connecting directly to utilities accessible at the surface. Due to GPR relying on the size and composition of the utility to identify a utility, a radio detection locator is often used in tandem with GPR to identify utilities GPR may miss due to size or depth.

A free-scanning technique was used to scan the areas. This technique involved analyzing the data in the field so that results could be supplied in real-time without using software to post-process. Where we identified anomalies consistent with utilities, temporary markings were made in the field with spray paint, and markings were made on-center.

GPR data profiles are collected along transects, measured paths in which the antenna is moved. During a survey, the distance of the GPR transects is measured in real-time with a calibrated wheel encoder. This allows for a correlation between the GPR data and the antenna's position on the ground. Signal attenuation is greatest in materials with relatively high electrical conductivities, such as clays or groundwater with high dissolved solid content from natural or manmade sources. Signal attenuation is slowest in low-conductivity materials such as dry sand or rock.

The geophysical exploration was conducted as follows:

- A preliminary site walkthrough was conducted to confirm the scope of work and note any site conditions that would limit the GPR scanning (such as obstruction or debris) or constitute a safety hazard. Limited scanning was conducted in the areas of vegetation or landscape.
- The GPR unit was set up and calibrated for the local subsurface conditions.
- The depth of the GPR signal penetration is determined by the scan composition, current conditions, and the frequency of the antenna used. At this site, the 350 MHz antenna utilized was able to image the investigation depth ranging from 3 to 4 ½ feet.

3.0 FIELD EXPLORATION RESULTS

Utility Locate: Stormwater, gas, communication, underground electric, and unknown utilities were identified within the vicinity during the field exploration conducted on September 26, 2023, and September 29, 2023. Several utilities could not be further located due to soil conditions, vegetation, or signal interference due to the site located at an operational airport.

Global Positioning System (GPS) data points were collected during the field exploration utilizing a Trimble R2 system (sub-foot) and Real-time Kinematic positioning (RTK)

corrections. All data points are included in the AutoCAD drawing illustrating all findings. All utilities identified during the field exploration were marked with Rust-oleum water-based marking paint. Field photographs illustrating the utilities identified are included in the attachment to this report.

4.0 GENERAL COMMENTS

The locations of potential underground objects and anomalies are approximate. It is strongly recommended by Terracon that limited, light excavation, or "potholing", of areas identified to be near where potential underground objects are located be performed by others prior to the commencement of any significant excavation. It is recommended that such destructive work be conducted to determine that underground elements identified by GPR work will be bypassed.

It should be noted that, as with any geophysical testing method, the process relies on instrument signals to indicate physical conditions in the field. Signal information can be affected by onsite conditions beyond the operator's control, such as, but not limited to, soil types, soil moisture, and/or the size of the subsurface object. Interpretation of those signals is based on a combination of known factors combined with the experience of the operator and geophysical scientist evaluating the results. As with all geophysical methods, the geophysical results provide a level of confidence but should not be considered absolute. We cannot be responsible for the misinterpretation of unverified GPR results by others.

5.0 CLOSURE

This report is intended solely for Passero Associates or any of its representatives. Terracon is not responsible for others' opinions, conclusions, or recommendations based on this report's findings. Our services and any correspondence or collaboration through this system are intended for our Client's sole benefit and exclusive use for specific applications to the project discussed and are accomplished in accordance with generally accepted engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our Client. Reliance upon the services and any work product is limited to our Client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Terracon greatly appreciates the opportunity to serve you and remains available to further assist with your questions. If you have any questions about this report, please do not hesitate to contact our office at (478) 757-1606.

Sincerely,

Terracon Consultants, Inc.

Report for Geophysical Exploration

New Georgia Corporate Terminal | Macon, Georgia

October 4, 2023 | Terracon Project No. HN225215

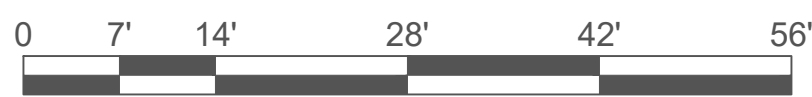
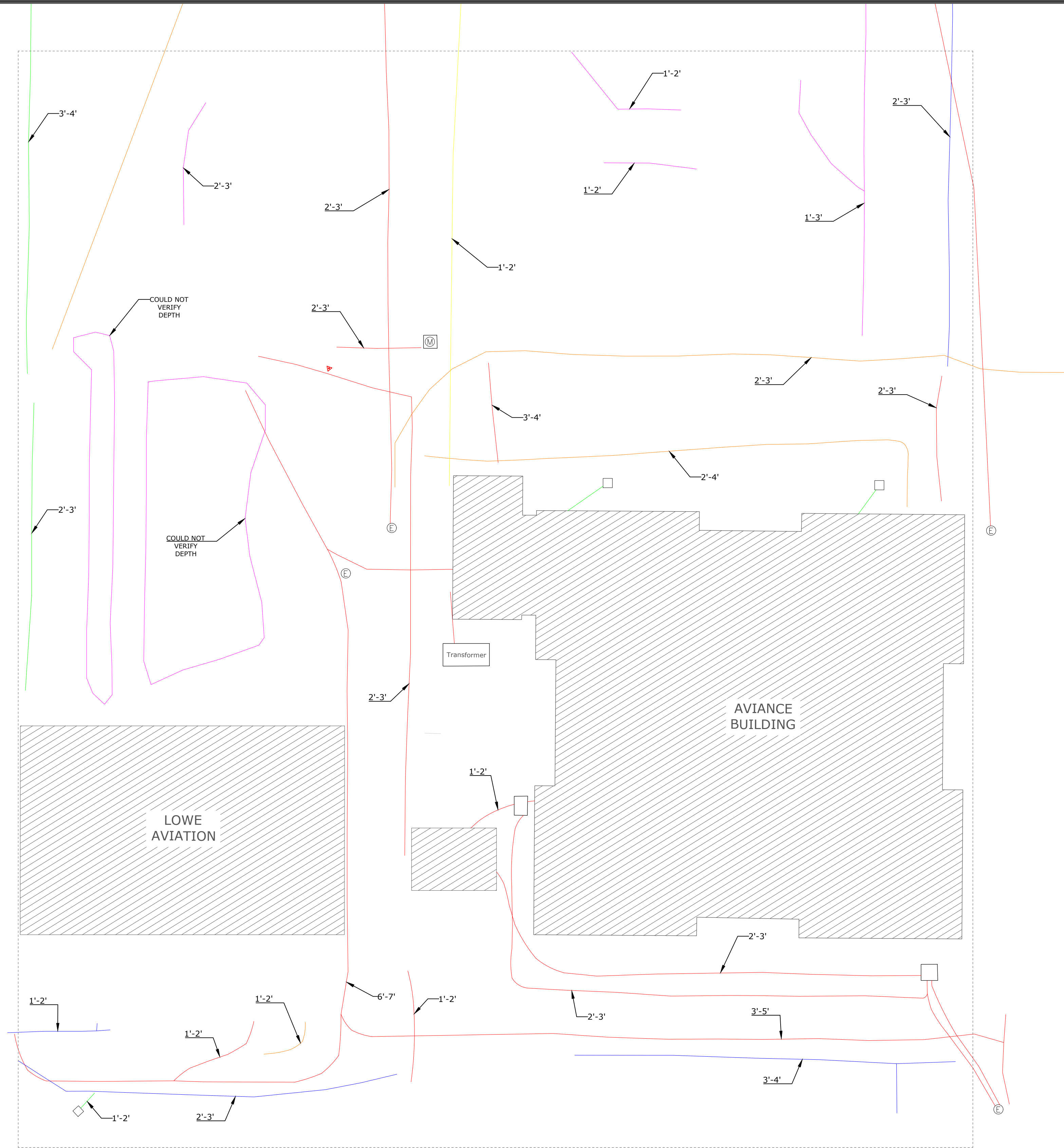
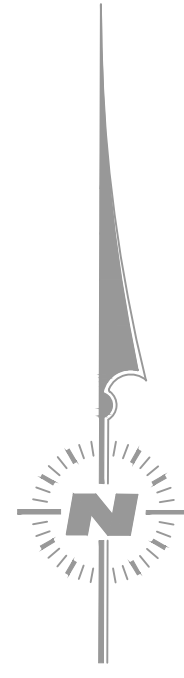


Jayro Lucas
Group Manager

Thomas E. Driver, P.E.
Senior Principal | Regional Manager

Attachments: Exhibit
Field Photographs

ATTACHMENTS



LEGEND OF SYMBOLS

- EXPLORATION LIMIT
- UNDERGROUND ELECTRIC
- UNKNOWN
- STORMWATER
- COMMUNICATION
- GAS
- ⊕ ELECTRICAL MANHOLE COVER
- ⊕ CONTROL POINT
- ▨ EXISTING BUILDING

DISCLAIMER: INDIVIDUAL NUMBERS SHOWN ADJACENT TO THE LINES INDICATE APPROXIMATE DEPTHS TO THE TOP OF THE LINE UNLESS VERIFIED. UTILITY LOCATIONS ARE APPROXIMATE. ALL GPS DATA POINTS COLLECTED RANGED FROM 3" - 6" HORIZONTAL ACCURACY.

THE DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES. SEVERAL UTILITIES COULD NOT BE FURTHER LOCATED DUE TO SOIL CONDITIONS, VEGETATION, OR SIGNAL INTERFERENCE DUE TO THE SITE LOCATED IN AN AIRPORT.

Project Manager:	JL	Project No.:	HN225215
Drawn By:	JL	Scale:	AS SHOWN
Checked By:	TED	File Name:	001
Approved By:	TED	Date:	OCT. 2023

514 Hillcrest Industrial Boulevard, Macon, Georgia 31204

GEOPHYSICAL EXPLORATION RESULTS

Middle Georgia Regional Airport

New Georgia Corporate Terminal
Macon, Bibb County, Georgia

Exhibit

1

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

Date Pictures Taken: September 29, 2023 | Terracon Project No. HN225215



Photo 1



Photo 2

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

Date Pictures Taken: September 29, 2023 | Terracon Project No. HN225215



Photo 3



Photo 4

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 5



Photo 6

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 7



Photo 8

Field Exploration Photograph Log

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Photo 9



Photo 10

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 11



Photo 12

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 13



Photo 14

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 15



Photo 16

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 17



Photo 18

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 19



Photo 20

Field Exploration Photograph Log

New Georgia Corporate Terminal | Macon, Georgia

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Photo 21



Photo 22

Field Exploration Photograph Log

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Photo 23



Photo 24