



Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

September 7, 2021

Edgemere Development, Inc.
277 Alexander Street, Suite 400
Rochester, New York 14607

Attention: Stephanie Benson

Reference: Apartment Project and Residential Project
Glenwood Avenue, Rochester NY
Geotechnical Engineering Evaluation, E5024.0

Dear Ms. Benson:

This report summarizes our geotechnical evaluation for the Apartment/Residential project located on Glenwood Avenue in Rochester, NY. We understand that the Phase I project will consist of a three to four story and two story multifamily structure as well as five, two-family and two one-family structures. We intend this report exclusively for use on this project. We base this evaluation on our review of U.S.G.S. geologic mapping; new exploration; old data; previous work on the parcel; laboratory testing and consultation with the design team.

Foundation Design, P.C. was retained to provide the services outlined in our July 9, 2021 *Geotechnical Engineering Proposal, P4797.0*. These services include reviewing the available soils data, bedrock and groundwater information; coordinating and executing the soil exploration program; and evaluating the collected data. This report outlines our findings, conclusions and recommendations. We provide foundation system recommendations (pile type and preliminary capacity) and seismic design criteria for the buildings. We also address site preparation; pavement subgrade conditions, fill and backfill materials; and compaction standards.

The project will be located at Glenwood Avenue in Rochester, New York. The old canal path (now filled in) lies to the northeast of the parcel. Residential homes lie to the south and west

Edgemere Development, Inc.
September 7, 2021
Page 2

of the parcel. A *General Location Plan*, depicting the site on 2019 U.S.G.S. topographic mapping, is attached. The site is currently Glenwood Gardens, an apartment complex. The surface grades remain relatively flat across the site.

Our exploration program consisted of five soil borings and fifteen soil probes scattered across the parcel. Trec Environmental, Inc. provided a Geoprobe 6620DT for the exploration work completed between August 17th and August 20th, 2021. Our staff observed the test boring/probe operations on a full-time basis; logging the subsurface profiles, collecting representative soil samples, and adjusting the program based on the field conditions encountered. BME Associates provided staked locations, with surface elevations, at each location. In addition to our exploration program, we reviewed old boring/probe logs associated with our 2014 study of the site, which was undertaken due to settlement issues with some of the units. The test boring/probe logs and a *Boring/Probe Location Plan* are attached.

The following interpretations of the soil, bedrock, and groundwater conditions are based on our test pits and our site observations. Variations from the inferred subsurface profile are possible. See the attached logs for soil descriptions at the test locations. Call us to the site if variations are encountered during construction so we can assess the impacts on these recommendations.

A generalized soil profile consists of topsoil over interbedded soil/ash-laden fill, glacial till, then bedrock. The near-surface fill material consists of sand fill with trace amounts of silt and trace gravel. The deeper fills consist of interbedded earth and white to black, wood-ash fill containing lesser amounts of brick and concrete. Typical fill depths were five to ten feet. Fill soils were loose to firm and generally showed limited hard particles such as chunks of concrete. The underlying native soil is a loose to very dense silty sand with gravel.

Edgemere Development, Inc.
September 7, 2021
Page 3

Notable exceptions to the described 'loose' conditions were at shallow refusal depths (soil probes B21-1 through B21-3.) We believe that B21-1 encountered an old slab from a previous structure located on the parcel. While the lower fill soil was fairly clean of debris, we believe old plat mapping shows a building in this area. Conversely, B21-2 and B21-3 we believe refusal was encountered on possible cobbles/boulders due to the varying refusal depths.

Groundwater was encountered at numerous locations during exploration. Groundwater depths were encountered 6.2 to 9.0 feet below grade. Expect water levels to fluctuate with seasonal changes.

Bedrock was encountered during exploration. Bedrock was encountered between 6.8 and 19.0 feet below grade. The bedrock is shallower towards the northwest (where Phase II is planned) and gradually drops as you head southeast. Geologic mapping shows the majority of the bedrock as the Decew Dolostone and Rochester Shale, part of the Clinton Group. This formation consists of black shales.

We conclude that the existing fill soil is not acceptable for support of new construction. The extent of fill depths reaches five to ten feet below grade in the large majority of locations. Based on the relatively deep fill depths and our understanding of the associated environmental concerns we believe that removal and replacement will not be a viable option. We recommend that helical piles be used to support the structures as it will alleviate the need to remove and/or handle the material.

We make the following specific recommendations:

Edgemere Development, Inc.
September 7, 2021
Page 4

1. Demolish the existing structures and relocate existing utilities to outside of the new building footprints. Remove slabs and foundations that would be a hindrance to excavation, pile installation, etc. In proposed building areas, backfill excavations with general fill compacted in lifts to a stable condition to allow for support of follow-on construction traffic. In pavement areas the geotechnical engineer or representative should observe proof-rolling of subgrades prior to backfill or subbase placement to confirm unsuitable material limits prior to new fill placement. The contractor should provide a loaded ten-wheel truck or similar heavy construction equipment for the proof-rolling. Rework, as directed, areas that rut, weave, quake, or are otherwise deemed to be unsuitable by the geotechnical engineer or representative. Backfill with structural fill, place and compact to standards outlined below.
2. Use an imported material, similar in gradation to NYSDOT Item 304.12 (No. 2 crusher-run stone) for new structural fill. Clean on-site soils could be used as structural fill as weather conditions allow but limited quantities are anticipated. Submit fill sources (including re-use of on-site soils) to the geotechnical engineer for review and approval on a case-by-case basis.

We define structural fill as fill under and around footings, floor slabs, sidewalks, and pavements. Moisture condition structural fill to within two percent of optimum moisture for compaction. Compact structural fill to at least 95 percent of maximum dry density as determined by the Modified Proctor method, ASTM D-1557. Compact other fill to at least 90 percent of Modified Proctor or as specified by the site engineer. Place fill in eight-inch loose lifts. Always maintain good surface drainage.

3. Support all buildings (structure and first floor) using helical piles that extend down to the bedrock or dense glacial till. For design purposes, we estimate that a 2.875 inch diameter shaft with a 12-inch helix will have a working capacity of 40 kips terminating in the bedrock or dense glacial till. Larger piles are available if a 60 kip or 90 kip capacity would be more efficient for the design loads in the larger building, and lateral or tension loads may also require adjustments in the pile size. Keep in mind that final design and installation of these piles is somewhat proprietary; allow the contractor some flexibility in submitting a helical pile structurally capable of supporting the actual design loads and/or to propose an alternate helical configuration. Piles should be installed with an as-built accuracy of four inches (horizontal). Require one load test (per pile and per load type) at the start of pile installation to calibrate the contractor's

Edgemere Development, Inc.
September 7, 2021
Page 5

equipment and procedures to the soil conditions. The load tests should include a pull out test if the design has the helical piles resisting uplift loads.

Both pile layout and confirmation of actual installed locations shall be done by the contractor. The contractor shall be responsible for any re-analysis and/or construction (modified pile cap, installation of additional pile, etc.) resulting from piles not installed within four inches of the planned location. Piles shall be installed so as to maintain a vertical alignment (tolerance of two inches in ten feet as estimated during installation).

Because of the subjective nature of the design and installation process we require that we review pile submittals and be on site during pile testing and production installation. We will compile a close-out summary of our construction observations and judgments concerning the acceptability of the work. This document should help with Code Enforcement review of the work prior to issuance of a Certificate of Occupancy. Forward the near-final plans for our review and schedule us as appropriate.

4. We recommend hanging the sub-floor utilities from the structurally supported slab to keep these lines from settling with the underground soils.
5. The NYS Building Code identifies various seismic design criteria for this project. Use a Site Classification of D (Stiff Soil Profile) for the Phase I buildings. Based on ASCE 7-16, we recommend using the following seismic design parameters.

Table No. 1 – Seismic Design Parameters					
Spectral Response Acceleration		Soil Factors		Design Spectral Response Acceleration	
S_s	S₁	S_{MS}	S_{M1}	SD_s	SD₁
0.161g	0.048g	0.258g	0.116g	0.172g	0.077g

6. Pavement subgrade will consist of the in-place fill soil or the native soil (in limited areas). Under ideal conditions you would be able to remove the fill soil and construct a 'normal' pavement section with its anticipated maintenance needs. We understand that this is impractical herein. Alternatively, we recommend that you install a stiffer pavement section and accept the potential for additional maintenance over the life of the pavement. Thicken the subbase to 18-inches and install a geogrid (Tensar BX 1200) between the subgrade and the subbase. The new Green Street is going to be a dedicated roadway, we defer to the City of Rochester on its construction but anticipate a similar approach. We point out that the new subbase is intended for long term

Edgemere Development, Inc.
September 7, 2021
Page 6

pavement support, if you use it for construction access/staging then you will have to replace a certain percentage of it due to contamination via the construction process.

7. Perform trenching and excavating work in accordance with the Occupational Safety and Health Administration (OSHA) and New York State Building Code Standards. The contractor is responsible for determining what measures are required to meet these Standards. Cut unsupported temporary excavations to a stable slope, but in no case steeper than 1 (H) on 1 (V). Remove water that accumulates in excavations using open sumps and/or pumps.
8. As the Geotechnical Engineer of Record, Foundation Design, P.C. should make periodic site visits to confirm that the conditions are as expected, provide recommendations to address areas where conditions differ, and make the engineering judgments concerning soil issues during construction (items not covered by standardized test methods). Specifically, we should observe the following:
 - A. Review helical pile design submittals and witness load testing. Observe the installation of the helical piles and consult on related issues that arise.
 - B. Observe the proof-rolling of the pavement subgrades to confirm unsuitable soil removal limits and check for subgrade stability.
 - C. Review and approve of materials used for structural fill. Review of lab testing of structural fill.
 - D. Consult on soils-related aspects of the project.
- The owner, or construction manager acting as their agent, should retain an independent test agency to perform periodic observation of mass fill placement and backfilling operations. Upon completion of the fill placement, we recommend that the testing agency submit a letter certifying that the work was performed in accordance with this report. This letter should contain a copy of all soils-related test reports. Specific testing requirements follow:

Edgemere Development, Inc.
September 7, 2021
Page 7

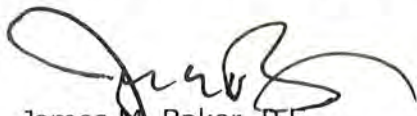
- A. Conduct at least one density test on each 2,500 square feet of mass fill placed under pavements and sidewalks with at least two tests for each partial lift.
- B. Conduct at least one density test per 50 lineal feet of foundation backfill and utility trench backfill on alternating lifts.
- C. Place fill in lifts not-to-exceed eight inches in loose thickness.
- D. Compact structural fill to at least 95 percent of the maximum dry density as determined by the Modified Proctor Test (ASTM D-1557). A new proctor will be needed for each material or change in material.
- E. Compact other fill to 90 percent of Modified Proctor or as otherwise determined by the site engineer.

Attached to the end of this text is a GBA paper entitled *Important Information about Your Geotechnical Engineering Report* that you should read. It describes how we intend this report to be used and discusses risks and risk allocation. We will continue to work cooperatively with you and other interested parties to achieve win/win solutions.

This concludes our design phase services. We are available to answer questions that you may have about the data or interpretations of the soil, bedrock, and groundwater conditions.

Very truly yours,

FOUNDATION DESIGN, P.C.



James M. Baker, P.E.
President
Enc.



Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared solely for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals' plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

conspicuously that you've included the material for information purposes only. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

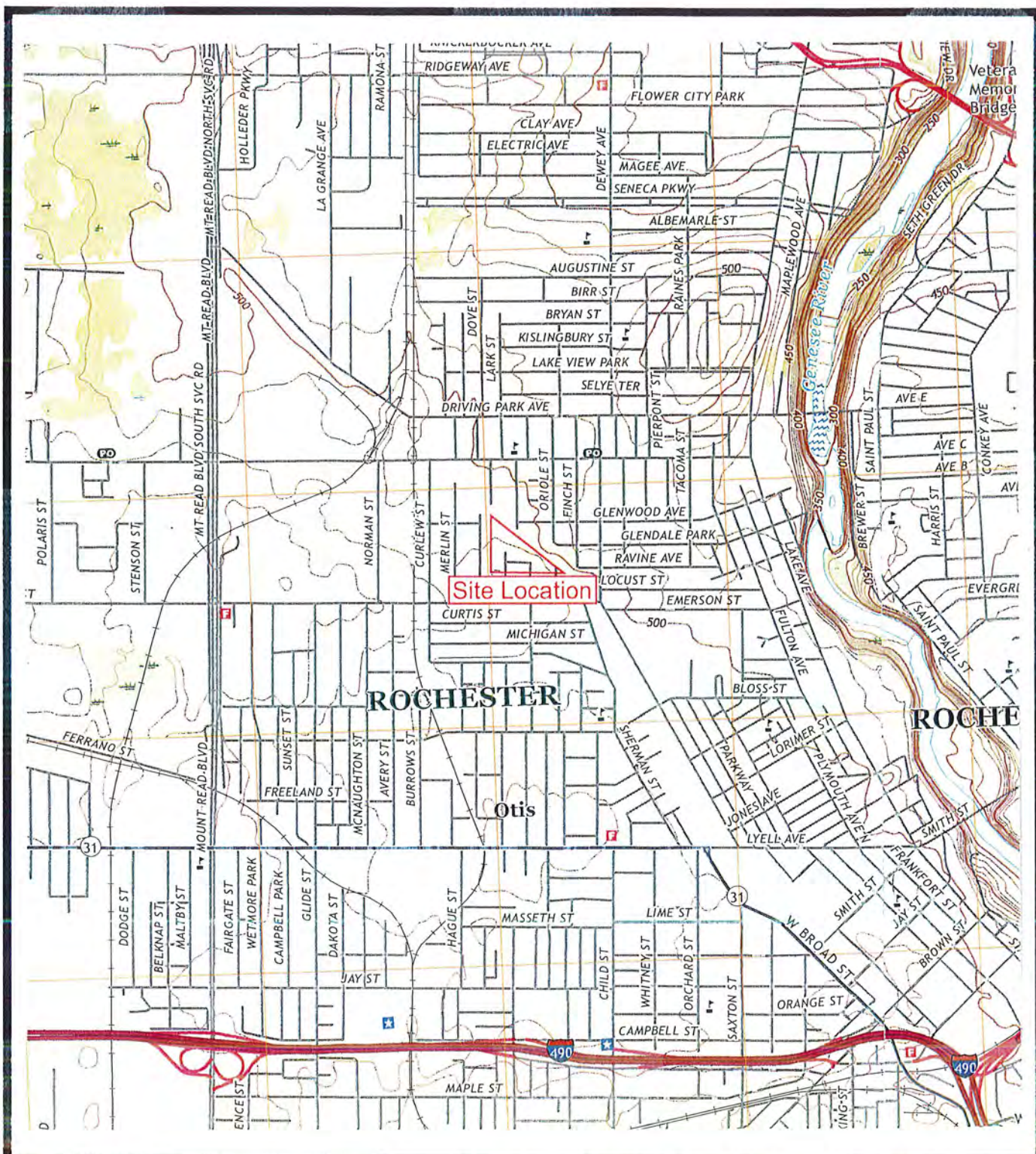
While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer's services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



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**Foundation
Design, P.C.**

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Phone (585) 458-0824
FAX (585) 458-3323

Apartment Project and Residential Project

Glenwood Avenue, Rochester, New York

General Location Plan

Adapted from: USGS Topographic Mapping
2019 Rochester East & West Quadrangle

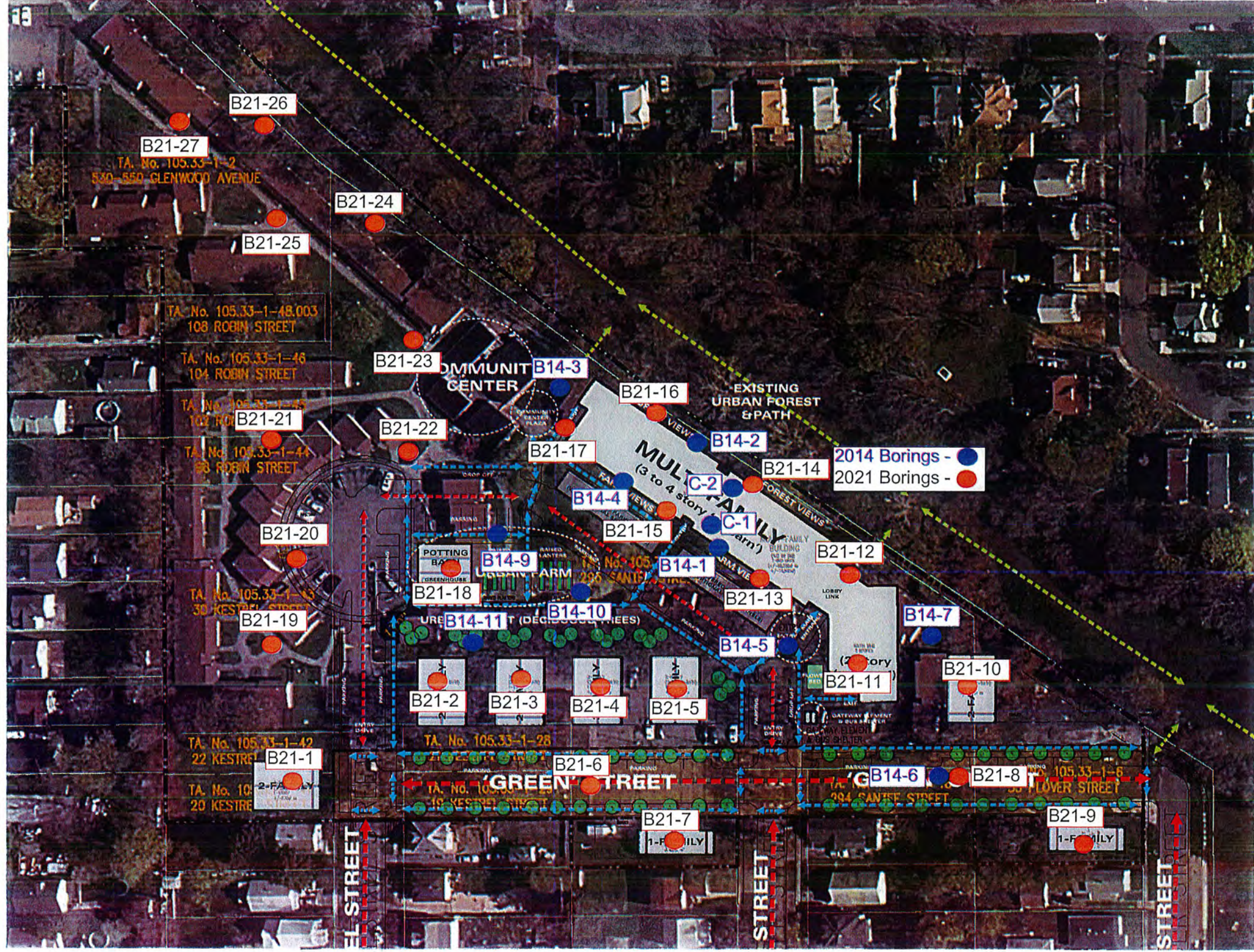
CHECKED BY: JMB

DRAWN BY: BJV

Scale 1" = 2,000'

DATE: 09-02-21

JOB NO.: 5024.0



Foundation Design, P.C.

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Rochester, New York 14607
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Apartment Project and Residential Project
Glenwood Avenue, Rochester, New York
Boring Location Plan
Adapted from: Plan Architectural Studio P.C.
Glenwood Conceptual Master Plan: Drawing No. as004

CHECKED BY: JMB
DRAWN BY: BJV

DATE: 09-02-21
JOB NO.: 5024.0

Scale 1" = 100'



SOIL DESCRIPTIONS

COHESIVE SOIL

Very fine grained soils. Plastic soils that can be rolled into a thin thread if moist. Clays and silty clays show cohesion.

<u>DESCRIPTION</u>	<u>STP –BLOWS/FOOT</u>
Very Soft	0-2
Soft	3-5
Medium	6-15
Stiff	16-25
Hard	26 or more

NON-COHESIVE SOIL

Soils composed of silt, sand and gravel, showing no cohesion or very slight cohesion

<u>DESCRIPTION</u>	<u>STP –BLOWS/FOOT</u>
Loose	0-10
Firm	11-25
Compact	26-40
Dense	41-50
Very Dense	51 or more

SOIL COMPOSITION

DESCRIPTION

ESTIMATED PERCENTAGE

and	50
some	30-49
little	11-29
trace	0-10

MOISTURE CONDITIONS

Dry, Damp, Moist, Wet, Saturated

Groundwater measured in the boring or test pit may not have reached equilibrium

SOIL STRATA:

TERM

DESCRIPTION

layer	Soil deposit more than 6" thick
seam	Soil deposit less than 6" thick
parting	Soil deposit less than 1/8" thick
varved	Horizontal uniform layers or seams of soil

GRAIN SIZE

MATERIAL

SIEVE SIZE

Boulder	Larger than 12 inches
Cobble	3 inches to 12 inches
Gravel - coarse	1 inch to 3 inches
- medium	3/8 inch to 1 inch
- fine	No. 4 to 3/8 inch
Sand - coarse	No. 10 to No. 4
- medium	No. 40 to No. 10
- fine	No. 200 to No. 40
Silt and Clay	Less than No. 200

Standard Penetration Test: The number of blows required to drive a split spoon sampler into the soil with a 140 pound hammer dropped 30 inches. The number of blows required for each 6-inches of penetration is recorded. The total number of blows required for the second and third 6 inches of penetration is termed the penetration resistance, or the "N" value.

Split Spoon Sampler: Typically a 2-foot long, 2-inch diameter hollow steel tube that breaks apart or splits in two down the tube length.

Refusal: Depth in the boring where more than 100 blows per 5-inches are needed to advance the sample spoon.

Core Recovery (%): The total length of rock core recovered divided by the total core run.

FQD (%): Rock Quality Designation – the total length of all the pieces of the rock core longer than 4-inches divided by the total length of the rock core run.



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Soil Probe Log

Project No. 5024.0 Page 1 of 1 Soil Probe # B21-1
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 522.5 Weather Rain 70s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 1'0" FILL: Loose-firm tan-brown-black mottled moist SAND and SILT, little gravel, trace ash, trace cinders
4	S-1	3'6"	2'0" Dense brown dry SAND and GRAVEL, little silt, rock fragments noted throughout (Possible fill)
6			Probe refusal encountered at 5'0", offset 7' north
8			4'9" Probe Refusal at 4'9"
10			
12			

Site Pictures

B21-1



Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



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Soil Probe Log

Project No. 5024.0 Page 1 of 1 Soil Probe # B21-2
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 515.7 Weather Rain 70s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
			TOPSOIL FILL: Loose brown-gray-white-black dry SAND and GRAVEL, trace ash, trace cinders
2			
4			Firm tan-brown damp SILT and SAND, little gravel, trace rootlets
			Firm to compact tan damp SAND, some silt, little gravel
6			
			Dense brown SAND and GRAVEL, little silt, rock fragments noted throughout
8			
			Terminated at 6'0" (probe refusal)
10			
12			

Site Pictures

B21-2



Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



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Design, P.C.

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Soil Probe Log

Project No. 5024.0 Page 1 of 1 Soil Probe # B21-3
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 515.1 Weather Sunny 70s Technician B. Valentino
Date Started 8/18/21 Completed 8/18/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			ASPHALT Dense bank-run GRAVEL, trace ash, trace cinders 1'0"
4			FILL: Loose to firm black-white-brown-orange mottled damp SAND and GRAVEL, trace ash, trace cinders, trace mortar 3'0"
			Loose orange dry SILT and SAND, trace gravel, trace black nodules 4'0"
			Firm tan-brown dry SAND, some silt, little gravel Obstruction from 3'6" to 5'0", refusal at 5'0" Offset 3' east, refusal at 4'0" Terminated at 5'0"
10			
12			

Site Pictures

B21-3



Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



Boring Log

Project No.	5024.0	Page 1	of 1	Test Boring No.	B21-4
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY				
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY				
Elevation	514.3	Weather	Rain 60s	Engineer	B. Valentino
Date Started	8/18/21	Completed	8/18/21	Driller	Chad
Drilling Company: Trec Environmental Inc.				Drilling Equipment: Geoprobe 6620DT	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
								ASPHALT 0'2"
								CRUSHER-RUN 1'3"
	2	2						FILL: Loose black-brown-white mottled SAND and GRAVEL, little silt, little ash, little cinders, little mortar
			2	1	4	S-1	2'-4'	
5	1	WH						
			WH	1	1	S-2	4'-6'	5'9"
	6	6						Firm light brown-brown mottled damp SAND, some silt, little gravel, little clay (Possible fill)
			5	2	11	S-3	6'-8'	
	1	1						
10			2	50/4"	3	S-4	8'-9'10"	S-4: Wet
	50/4"				50/4"	S-5	10'-10'4"	9'6"
								Very dense tan-brown wet highly weathered SHALE, some silt, some sand 10'6"
								Boring terminated at 10'6" (auger refusal)
15								
20								
25								
30								

Notes:

1. Water at 6'2" upon completion.
2. Advanced hole using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

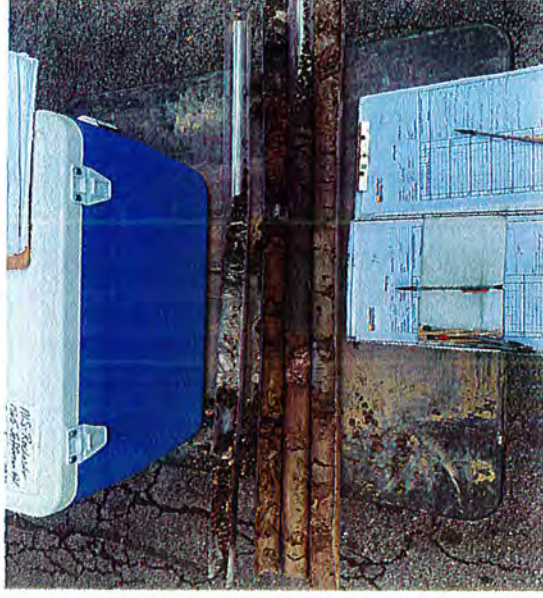
Soil Probe Log

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-5
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 514.5 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			ASPHALT CRUSHER-RUN STONE 0'4"
4			FILL: Loose brown-orange-white-black moist SAND, some silt, little gravel, trace brick, trace asphalt, trace cinders, trace ash, trace wood 1'6"
6	S-1	5'8"	FILL: Loose orange-tan-brown damp SAND, some silt, little to some gravel, trace clay 4'6"
			Possible buried topsoil 5'6"
			Firm orange-tan-brown moist SILT and SAND, little to some clay, little gravel 5'10"
8			Firm light brown wet SAND, little to some gravel, little silt 8'0"
10			
12			

Site Pictures

B21-5





SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-5
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 514.5 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-5

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
14			(Dense/damp below 12'0") Terminated at 16'0"	16'0"
16				
18				
20				
22				
24				



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-6
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 515.3 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-6



Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL FILL: Loose to firm brown-tan-black mottled damp SAND, some gravel, little silt, trace ash, trace brick, trace cinders, trace wood
4			
6			
8			Saturated below 8'0"
10			10'0"
12			FILL: Firm to compact light brown damp SILT and SAND, little gravel, trace metal 12'0"



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-6
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 515.3 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-6

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
14			Dense gray-black saturated weathered SHALE fragments Terminated at 12'6" (refusal on bedrock)
16			
18			
20			
22			
24			

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Site Pictures

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-7
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 516.7 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

B21-7

NO PHOTO

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
			TOPSOIL
2			FILL: Loose black-brown-white-tan-orange mottled moist SAND, some gravel, little silt, some cinders, some ash 1'0"
4			(Wet below 4'0")
6			
8			Black, saturated, little wood, little glass below 8'0"
10			
12			



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Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-7
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 516.7 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-7

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
14				
16				
18				17'5" 17'6"
20				Very dense black-gray saturated SHALE Terminated at 17'6" (refusal)
22				
24				

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-8
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 513.5 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/2021 Completed 8/17/2021 Operator
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
2			TOPSOIL FILL: Loose to firm tan-brown damp SAND, little to some gravel, little silt	0'6"
4			FILL: Firm black damp SAND, some gravel, some ash, some cinders, little silt	3'6"
6			BRICK Firm tan-brown moist SAND, some silt, little clay, little gravel	4'0" 4'9"
8			(Moist to wet below 7'6") (Firm to compact below 8'0")	
10				
12			(Dense below 12'0")	

Site Pictures

B21-8





SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-8
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 513.5 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/2021 Completed 8/17/2021 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-8

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
14			(Saturated)
16			Terminated at 16'0"
18			
20			
22			
24			



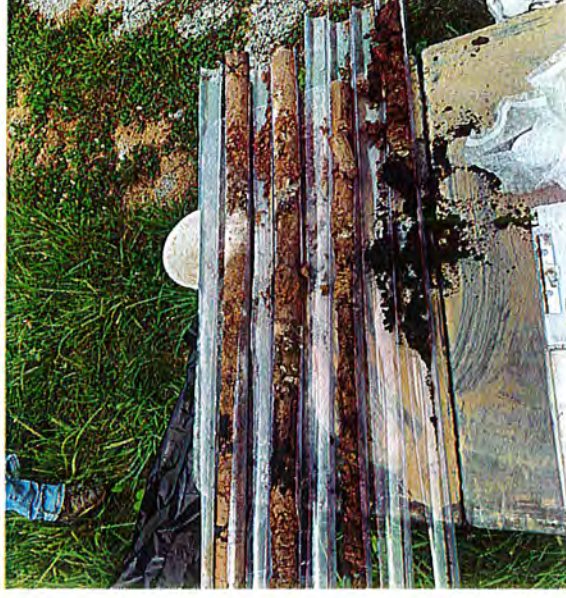
SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-9
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 511.4 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-9



Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
2			FILL: Loose to firm black damp CINDERS/ASH, some silt, little sand, little gravel	
4			Loose brown-orange-tan mottled damp SAND, some silt, little gravel, trace clay (Firm, tan-brown below 4'0")	2'0"
6				
8				(Compact, little to some silt below 8'0")
10				
12				



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Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-9
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 511.4 Weather Cloudy 80s Technician B. Valentino
Date Started 8/17/21 Completed 8/17/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-9

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
14			(Dense below 12'0")	
16			Terminated at 16'0"	16'0"
18				
20				
22				
24				



**Foundation
Design, P.C.**

Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-10
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation		Weather	Sunny 70s		Engineer	B. Valentino	
Date Started		Completed			Driller	Chad	
Drilling Company:	Trec Environmental Inc.				Drilling Equipment:	Geoprobe 6620DT	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
5								
10								
15								
20								
25								
30								

Notes:
1. Boring deleted in field.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-11
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation	515.9	Weather	Rain 60s		Engineer	B. Valentino	
Date Started	8/18/21	Completed	8/18/21		Driller	Chad	
Drilling Company: Trec Environmental Inc.					Drilling Equipment: Geoprobe 6620DT		

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	2	3						TOPSOIL 0'6"
			3	3	6	S-1	0'-2'	FILL: Loose red-brown dry SAND, some gravel, trace silt, trace wood, trace ash, trace cinders
	3	2						
			1	4	3	S-2	2'-4'	S-2: Brown-black-tan mottled
5	2	2						
			3	3	5	S-3	4'-6'	S-3: Trace glass, trace concrete, poor recovery
	1	1						
			1	1	2	S-4	6'-8'	S-4: Poor recovery 8'0"
	1	1						Loose tan-brown moist SAND, some silt, little gravel, little clay
10			1	1	2	S-5	8'-10'	(Brown staining noted 8'-8'3")
	2	1						
			3	5	4	S-6	10'-12'	S-6: Moist to wet
	4	7						
15			9	36	16	S-7	13'-15'	S-7: Firm, trace clay, little to some gravel
	11	33						
			43	43	76	S-8	15'-17'	S-8: Very dense dry, little to some silt, little to some gravel, trace clay 17'0"
								Boring terminated at 17'0"
20								
25								
30								

Notes:

1. Dry upon completion.
2. Advanced hole using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

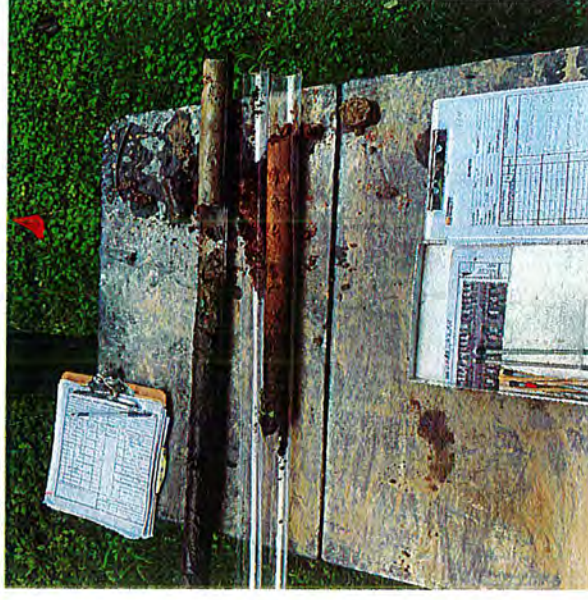
Soil Probe Log

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-12
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 516.1 Weather Rain 70s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 1'0"
4	S-1	3'0"	FILL: Loose to firm damp red-brown SAND, trace silt
6			FILL: Loose black damp SAND and GRAVEL, trace ash, trace cinders, trace glass 5'0"
8			(Poor recovery 8'-12')
10			
12			12'0"

Site Pictures

B21-12





SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-12
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 516.1 Weather Rain 70s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-12

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
14	S-2	14'0"	Soft black-gray damp SILT, some clay, trace sand (Poor recovery 12'-16') Dense red-brown wet SAND, little to some gravel, little to some silt Terminated at 20'0"	16'0"
16				
18	S-3	18'0"		
20				
22				
24				



**Foundation
Design, P.C.**

Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-13
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation		Weather	Sunny 70s		Engineer	B. Valentino	
Date Started		Completed			Driller	Chad	
Drilling Company:	Trec Environmental Inc.				Drilling Equipment:	Geoprobe 6620DT	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
5								
10								
15								
20								
25								
30								

Notes:
1. Boring deleted in field.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



**Foundation
Design, P.C.**

Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-14
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation		Weather	Sunny 70s			Engineer	B. Valentino
Date Started		Completed				Driller	Chad
Drilling Company:				Trec Environmental Inc.			
				Drilling Equipment:			
				Geoprobe 6620DT			

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
5								
10								
15								
20								
25								
30								

Notes:
1. Boring deleted in field.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-15
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 514.3 Weather Cloudy 80s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-15

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
			TOPSOIL
2			0'8" FILL: Loose to firm damp black-brown SAND and GRAVEL, trace brick, trace ash, trace cinders
4	S-1	3'9"	2'0" FILL: Loose red-brown moist SAND, little silt, trace gravel
6			3'6" FILL: Loose black damp SAND, some gravel, little silt, trace ash, trace organics, trace wood
			4'0" FILL: Loose tan-brown moist SILT, some sand, little clay, little gravel, trace ash, trace cinders
			(3" green layer noted 7'3"-7'6")
8			7'6" FILL: Loose black moist SAND, gravel, ash, cinders
10	S-2	10'0"	9'0" Loose black-brown moist SILT, little clay, trace sand, trace rootlets, trace organics
12			10'0" Firm to compact moist SILT, little to some sand, little to some clay, trace decayed roots
			12'0"





SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-15
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 514.3 Weather Cloudy 80s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-15

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
14			Dense tan moist SAND, some silt, little to some gravel	14'0"
16			Dense brown saturated highly weathered SHALE	16'0"
18			Terminated at 16'0"	16'0"
20				
22				
24				



**Foundation
Design, P.C.**

Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-16
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation		Weather	Sunny 70s		Engineer	B. Valentino	
Date Started		Completed			Driller	Chad	
Drilling Company: Trec Environmental Inc.					Drilling Equipment: Geoprobe 6620DT		

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
5								
10								
15								
20								
25								
30								

Notes:
1. Boring deleted in field.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



**Foundation
Design, P.C.**

Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-17
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation		Weather	Sunny 70s		Engineer	B. Valentino	
Date Started		Completed			Driller	Chad	
Drilling Company: Trec Environmental Inc.					Drilling Equipment: Geoprobe 6620DT		

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
5								
10								
15								
20								
25								
30								

Notes:
1. Boring deleted in field.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 2 Soil Probe # B21-18
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 515.9 Weather Cloudy 70s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-18



Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
			TOPSOIL	
2			FILL: Loose to firm brown-black moist SAND and GRAVEL, little silt, trace ash, trace cinders, trace brick	1'0"
4				
6			(Trace glass below 6'0")	
8			Loose brown-tan mottled moist SILT, little to some clay, little sand, little gravel	7'0"
			Firm to compact tan-brown moist SAND, little to some gravel, little silt	8'0"
10				
12			(Saturated below 11'6")	



Foundation
Design, P.C.

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Soil Probe Log

Project No. 5024.0 Page 2 of 2 Soil Probe # B21-18
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 515.9 Weather Cloudy 70s Technician B. Valentino
Date Started 8/19/21 Completed 8/19/21 Operator Chad
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Site Pictures

B21-18

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
14			Dense brown-tan dry highly weathered SHALE 13'0"
16			Terminated at 13'0" (probe refusal)
18			
20			
22			
24			

Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

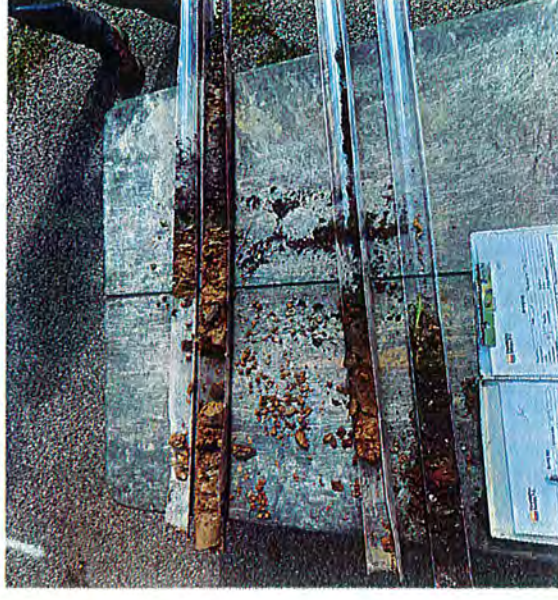
Soil Probe Log

Project No. 5024.0 Page 1 of 1 Soil Probe # B21-19
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 516.4 Weather Overcast 80s Technician B. Valentino
Date Started 8/20/21 Completed 8/20/21 Operator Kyle
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL FILL: Loose to firm brown-black moist SAND and GRAVEL, some silt, trace ash, trace cinders, trace brick
4			
6	S-1	6'0"	Loose tan-brown moist SILT, some sand, little to some clay, trace gravel
8			5'0"
			Firm to compact tan moist to wet SAND, some silt, little to some gravel
10	S-2	9'0"	8'0"
			Terminated at 11'0" (probe refusal)
12			11'0"

Site Pictures

B21-19



Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-20
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation	515.9	Weather	Sunny 70s		Engineer	B. Valentino	
Date Started	8/19/21	Completed	8/19/21		Driller	Chad	
Drilling Company:	Trec Environmental Inc.				Drilling Equipment:	Geoprobe 6620DT	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	2	1					0-2'	TOPSOIL, trace ash 0'6"
			4	4	5	S-1		FILL: Loose red-brown damp SAND, little gravel, trace silt
	2	1						3'0"
			1	1	2	S-2	2'-4'	FILL: Loose black-brown-orange mottled SAND and GRAVEL, little silt, trace ash, trace cinders, trace mortar
5	2	1						5'6"
			WH	WH	1	S-3	4'-6'	Loose brown-gray mottled moist to wet SILT, little to some clay, little sand
	WH	WH						7'0"
			3	3	3	S-4	6'-8'	Loose tan-brown moist to wet SAND, some silt, little to some gravel, trace clay
	3	7						S-5: Wet, shale fragments in shoe 9'5"
10			50/5"		57/11"	S-5	8'-9'5"	Boring terminated at 9'5" (auger refusal likely on bedrock)
15								
20								
25								
30								

Notes:

1. Water at 9'0".
2. Advanced hole using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 1 Soil Probe # B21-21
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 514.4 Weather Overcast 80s Technician B. Valentino
Date Started 8/20/21 Completed 8/20/21 Operator Kyle
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'8" FILL: Loose red-brown moist SAND, little to some gravel, little silt
4			2'0" FILL: Loose brown-black moist SAND and GRAVEL, little silt, trace ash, trace cinders
6	S-1	5'6"	5'0" Loose brown moist SILT, some sand, little to some clay, trace gravel (Tan below 6'0")
8	S-2	7'6"	7'0" Loose tan wet SAND, some silt, little to some clay, little gravel 8'0" Dense tan-brown dry highly weathered SHALE, some silt, little sand
10			9'6" Terminated at 9'6" (probe refusal)
12			

Site Pictures

B21-21



Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 1 Soil Probe # B21-22
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 514.7 Weather Overcast 80s Technician B. Valentino
Date Started 8/20/21 Completed 8/20/21 Operator Kyle
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
2			TOPSOIL FILL: Loose brown-black mottled damp SAND and GRAVEL, little silt, trace ash, trace cinders	0'6"
4				
6				
8			(Saturated, trace glass below 7'0") Firm to compact tan-brown damp SILT, some sand, little gravel, shale fragments noted	8'0"
10			Dense tan saturated SAND, little to some gravel, little silt Terminated at 10'6" (probe refusal)	10'0"
12				10'6"

Site Pictures

B21-22



Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-23
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation	512.8	Weather	Sunny 70s		Engineer	B. Valentino	
Date Started	8/19/21	Completed	8/19/21		Driller	Chad	
Drilling Company:	Trec Environmental Inc.				Drilling Equipment:	Geoprobe 6620DT	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	2	2					0'-2'	TOPSOIL 0'8"
			2	1	4	S-1		FILL: Loose black damp SAND and GRAVEL, trace ash, trace cinders
	1	WH						
			1	WH	1	S-2	2'-4'	S-2: Trace glass, trace mortar
5	WH	WH						
			WH	1	1	S-3	4'-6'	S-3: Poor recovery, saturated
	WH	1						
			WH	WH	1	S-4	6'-8'	7'0"
	9	50/3"			50/3"	S-5	8'-8'9"	Loose black-gray wet SILT, little to some clay, trace sand, trace organics, trace rootlets 7'8"
10								Very dense tan-brown wet SAND, little to some gravel, little silt 8'6"
								Very dense gray dry SHALE 9'3"
								Boring terminated at 9'3" (auger refusal)
15								
20								
25								
30								

Notes:

1. Water at 9'0" upon completion.
2. Advanced hole using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"



SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 5024.0 Page 1 of 1 Soil Probe # B21-24
Project Name Apartment Project and Residential Project, Glenwood Avenue, Rochester NY
Client Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY
Elevation 512.4 Weather Sunny 70s Technician B. Valentino
Date Started 8/20/21 Completed 8/20/21 Operator Kyle
Soil Probe Subcontractor Trec Environmental Inc Equipment Geoprobe 6620DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
			TOPSOIL	
2			FILL: Loose to firm red-brown moist SAND, little silt, little gravel	1'0"
4			FILL: Loose to firm black-brown moist SILT and SAND, little to some gravel, trace ash, trace cinders, trace brick	2'0"
6			FILL: Firm brown moist SAND, some silt, little to some gravel, trace cinders, trace ash	6'0"
8			Firm tan-brown moist to wet SAND, little to some silt, little to some gravel	8'0"
10			Dense tan-brown dry highly weathered SHALE, some silt, some sand	9'0"
12			Terminated at 10'6" (probe refusal)	10'6"

Site Pictures

B21-24



Notes:

1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location and elevation provided by BME Associates.



Boring Log

Project No.	5024.0	Page	1	of	1	Test Boring No.	B21-25
Project Name	Apartment Project and Residential Project, Glenwood Avenue, Rochester NY						
Client	Edgemere Development, Inc., 277 Alexander Street, Suite 400, Rochester, NY						
Elevation	512.6	Weather	Sunny 70s		Engineer	B. Valentino	
Date Started	8/19/21	Completed	8/19/21		Driller	Chad	
Drilling Company:	Trec Environmental Inc.				Drilling Equipment:	Geoprobe 6620DT	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	2	5						TOPSOIL 1'0"
			7	3	12	S-1	0-2'	FILL: Firm black-brown dry SAND and GRAVEL, little silt, trace ash, trace cinders, trace brick
	1	1						
			2	WH	3	S-2	2'-4'	S-2: Loose, trace wood, trace glass
5	1	WH						
			1	1	1	S-3	4'-6'	S-3: Loose, 2" silt seam noted
	3	50/3"			50/3"	S-4	6'-6'9"	6'0"
			100/4"		100/4"	S-5	6'9"-7'1"	Very dense tan-brown damp SILT, some sand, little to some shale fragments 6'9"
10								Very dense gray dry SHALE 7'1"
								Boring terminated at 7'1" (auger refusal at 6'9", spoon at 7'1")
15								
20								
25								
30								

Notes:

1. Dry upon completion.
2. Advanced hole using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow Hammer: Auto Size Rod: 2"

NOTHNAGLE DRILLING, INC.1821 Scottsville-Mumford Road
Scottsville, New York 14546

Phone (585) 538-2328

Fax (585) 538-2357

Test Boring No. B14-1

Page 1 of 1

ND Job # 144234

Project Glenwood Gardens, Santee Street, Rochester, New York

Client Foundation Design, P.C., 335 Street, Rochester, New York 14606

Elevation _____ Start 2/28/14 Completed 2/28/14 Driller N. Short

Water Level - During Drilling None Inspector J. Goggin

Water Level - At Completion None, Cave in 11'0"

Seasonal and climatic changes may alter observed water levels.

C	Blows on Sampler				Sample				Visual Soil and Rock Information Remarks
	0" 6"	6" 12"	12" 18"	18" 24"	N	Rec.	No.	Depth	
0	7	4							
	4	37	5	4	9		1	0'0"-2'0"	Loose brown damp sand, some silt, trace topsoil, trace brick, few roots
			27	12	64		2	2'0"-4'0"	Very dense brown damp (trace concrete, no roots)
5	5	5							
			4	4	9		3	4'0"-6'0"	Loose black wet (some ash)
	4	3							
			1	1	4		4	6'0"-8'0"	Loose black wet (and ash)
	3	4							
10			1	2	5		5	8'0"-10'0"	Loose black wet
	1	1							11'0'
			2	2	3		6	10'0"-12'0"	Loose tan saturated silt and fine sand
	1	1							
			4	9	5		7	12'0"-14'0"	Loose tan saturated
15	9	14							
			11	50/3	25		8	14'0"-15'9"	Firm tan saturated (trace rock fragments and medium to fine gravel) (spoon refusal @ 15'9")
									Auger refusal 17'6"
20									
25									
30									
35									
40									

N=No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea.

Blow C=No. of Blows to Drive Casing with lb. Wt. Ea.

Blow

Transitional Depths are Estimated Based on Field Observations

Boring terminated at 17'6"

Advanced test boring with hollow stem auger casing.

Boring backfilled with native material and supplied asphalt core material on completion.

NOTHNAGLE DRILLING, INC.

1821 Scottsville-Mumford Road

Scottsville, New York 14546

Phone (585) 538-2328

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Test Boring No. B14-2Page 1 of 1ND Job # 144234Project Glenwood Gardens, Santee Street, Rochester, New YorkClient Foundation Design, P.C., 335 Street, Rochester, New York 14606Elevation _____ Start 2/28/14 Completed 2/28/14 Driller N. ShortWater Level - During Drilling None Inspector J. GogginWater Level - At Completion None, Cave in 6'1"

Seasonal and climatic changes may alter observed water levels.

C	Blows on Sampler				Sample				Visual Soil and Rock Information Remarks
	0" 6"	6" 12"	12" 18"	18" 24"	N	Rec.	No.	Depth	
0									Auger to refusal, no sampling performed
5									Auger refusal
10									Boring terminated at 16'1" Advanced test boring with hollow stem auger casing. Boring backfilled with native material and topped with portland cement on completion.
15									Boring terminated at 16'1" Advanced test boring with hollow stem auger casing. Boring backfilled with native material and topped with portland cement on completion.
20									Boring terminated at 16'1" Advanced test boring with hollow stem auger casing. Boring backfilled with native material and topped with portland cement on completion.
25									Boring terminated at 16'1" Advanced test boring with hollow stem auger casing. Boring backfilled with native material and topped with portland cement on completion.
30									Boring terminated at 16'1" Advanced test boring with hollow stem auger casing. Boring backfilled with native material and topped with portland cement on completion.
35									Boring terminated at 16'1" Advanced test boring with hollow stem auger casing. Boring backfilled with native material and topped with portland cement on completion.
40									Boring terminated at 16'1" Advanced test boring with hollow stem auger casing. Boring backfilled with native material and topped with portland cement on completion.

N=No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea.

Blow C=No. of Blows to Drive ___ Casing ___ with ___ lb. Wt. ___ Ea.

Blow

Transitional Depths are Estimated Based on Field Observations

NOTHNAGLE DRILLING, INC.

1821 Scottsville-Mumford Road

Scottsville, New York 14546

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Test Boring No. B14-3Page 1 of 1ND Job # 144234Project Glenwood Gardens, Santee Street, Rochester, New YorkClient Foundation Design, P.C., 335 Street, Rochester, New York 14606Elevation _____ Start 2/28/14 Completed 2/28/14 Driller N. ShortWater Level - During Drilling None Inspector J. GogginWater Level - At Completion None, Cave in 11'7"

Seasonal and climatic changes may alter observed water levels.

C	Blows on Sampler					Sample				Visual Soil and Rock Information Remarks
	0"	6"	12"	18"	24"	N	Rec.	No.	Depth	
0										
	10	4						1	0'0"-2'0"	Loose red-brown moist sand, little silt
	4	3				8		2	2'0"-4'0"	Loose red-brown moist
5	2	2				5		3	4'0"-6'0"	Loose black moist silt, some ash, trace brick and concrete
						4		4	6'0"-8'0"	Loose black-white wet (with white ash)
	1	1				2		5	8'0"-10'0"	Loose black saturated
10	3	11						6	10'0"-12'0"	Firm black with orange staining saturated
						25		7	12'0"-13'3"	Firm tan saturated silt, some sand, few rock fragments
	8	19								Very dense tan wet (spoon refusal 13'3")
15			50/3			69/9				Auger refusal
20										
25										
30										
35										
40										

N=No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea.

Blow C=No. of Blows to Drive Casing with lb. Wt. Ea.

Blow

Transitional Depths are Estimated Based on Field Observations

Boring terminated at 13'7"
 Advanced test boring with hollow stem auger casing.
 Boring backfilled with native material and topped with portland cement on completion.

NOTHNAGLE DRILLING, INC.1821 Scottsville-Mumford Road
Scottsville, New York 14546

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Test Boring No. B14-4Page 1 of 1ND Job # 144234Project Glenwood Gardens, Santee Street, Rochester, New YorkClient Foundation Design, P.C., 335 Street, Rochester, New York 14606Elevation _____ Start 2/28/14 Completed 2/28/14 Driller N. ShortWater Level - During Drilling None Inspector J. GogginWater Level - At Completion None

Seasonal and climatic changes may alter observed water levels.

C	Blows on Sampler					Sample				Visual Soil and Rock Information Remarks
	0" 6"	6" 12"	12" 18"	18" 24"		N	Rec.	No.	Depth	
0										
5										
10										
	8	9								
			10	12	19			S-1	10'0"-12'0"	
	2	2								
			10	12	12			S-2	12'0"-14'0"	
15										
20										
25										
30										
35										
40										

Auger to 10'0"

Firm black silt with ash, trace brick and concrete

11'0"

Firm tan moist silt, some fine sand,
trace weathered bedrock

Firm tan moist

Auger refusal

14'8"

Boring terminated at 14'8"

Advanced test boring with hollow
stem auger casing.Boring backfilled with native material
and topped with portland cement on
completion.

N=No. of Blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea.

Blow C=No. of Blows to Drive Casing with lb. Wt. Ea.

Blow

Transitional Depths are Estimated Based on Field Observations



SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-5
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation Weather Light Rain Technician J. Goggin
Date Started 4.8.14 Completed 4.8.14 Operator S. Loranthy
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
2			Topsoil	0'6"
4			Loose Black with gray and white Ash	
6				
8				
10				
12			Firm tan wet to saturated SILT, little sand, trace gravel, trace Clay	11'0"
14				
16			Compact tan Saturated SAND and SILT, little gravel	14'0"

Site Pictures

B14-5





SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-5
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation 4.7.14 Weather Cloudy Technician J. Goggin
Date Started 4.7.14 Completed 4.7.14 Operator J. Schweitzer
Probe Subcontractor Notnaagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
18				
20				Refusal on Rock at 19'0" 19'0"
22				
24				
26				
28				
30				
32				

Notes:

1. Dry on completion.
2. Staked locations provided by Foundation Design.

Site Pictures



SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-6
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation Weather Cloudy Technician J. Goggin
Date Started 4.7.14 Completed 4.7.14 Operator J. Schweitzer
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL Firm red-brown Sand, little silt (FILL) 0'5"
4			Black TOPSOIL 2'0" Loose black ASH 2'6"
6			
8			
10			
12			Loose tan wet Clay, little silt, trace gravel 11'0"
14			
16			

Site Pictures

B14-6





SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-6
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation _____ Weather Cloudy Technician J. Goggin
Date Started 4.7.14 Completed 4.7.14 Operator J. Schweitzer
Probe Subcontractor Nothaagle Drilling Equipment 6610 Geoprobe

Site Pictures

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
18	S-1	16' - 19'	18'0"
20			Compact tan brown SAND, some silt, trace gravel
22			19'0"
24			Refusal on rock at 19'0"
26			
28			
30			
32			

Notes:

3. Dry on completion.
4. Staked locations provided by Foundation Design.



SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 page 1 of 1 Test Location No. B14-7
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation _____ Weather Cloudy Technician J. Goggin
Date Started 4.7.14 Completed 4.7.14 Operator J. Schweitzer
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
			TOPSOIL Firm red brown moist to wet SAND, little silt (FILL) 0'8"
2			
4			Loose black cinder ASH 3'6"
6			Loose tan, red, and black saturated ASH 5'0"
8			
10	S-1	8' - 12'	
12			
14	S-2	12' - 16'	Firm tan wet CLAY, little silt 13'0"
16			

Site Pictures

B14-7





SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-7
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation _____ Weather Cloudy Technician J. Goggin
Date Started 4.7.14 Completed 4.7.14 Operator J. Schweitzer
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Site Pictures

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
18			Loose gray saturated SILT and SAND	16'0"
20			Compact red brown SAND, little silt, trace gravel	17'6"
22			Refusal on rock at 18'8"	18'8"
24				
26				
28				
30				
32				

Notes:
1. Free water in the last sample.
2. Staked locations provided by Foundation Design.



SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-9
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation _____ Weather Cloudy Technician J. Goggin
Date Started 4.8.14 Completed 4.8.14 Operator S. Loranthy
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
2			TOPSOIL	0'6"
4			Loose black and gray ASH	
6				
8				
10			Compact tan saturated to dry SILT, little sand, little gravel	8'6"
12			Refusal on rock at 12'0"	12'0"
14				
16				

Notes:

1. Dry on completion.
2. Staked locations provided by Foundation Design.

Site Pictures

B14-9





SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-10
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation Date Started 4.8.14 Weather Cloudy Technician J. Goggin
Date Started 4.8.14 Completed 4.8.14 Operator S. Loran
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
2			TOPSOIL	1'0"
4			Soft black and gray ASH	
6				
8			TOPSOIL	8'6"
10			Compact tan wet SILT, little sand, trace gravel and clay	9'0"
12				
14				
16			Dense tan wet SILT, some gravel, little sand	15'0"
				16'0"

Site Pictures

B14-10





SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 Page 1 of 1 Test Location No. B14-10
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation 4.8.14 Weather Cloudy Technician J. Goggin
Date Started 4.8.14 Completed 4.8.14 Operator S. Loranity
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
18				
20				
22				
24				
26				
28				
30				
32				

Refusal on rock at 16'0"

Notes:

1. Dry on completion.
2. Staked locations provided by Foundation Design.

Site Pictures

B14-10



SOIL • BEDROCK • GROUNDWATER

Macro Core Log

Project No. 3827.1 page 1 of 1 Test Location No. B14-11
Project Name Floor Settlement Assessment, Glenwood Commons, Santee Street, Rochester, New York
Client SWBR Architects and Engineers, Eastman Place, 387 East Main Street, Rochester, New York 14604
Elevation 4.8.14 Weather Cloudy Technician J. Gogglin
Date Started 4.8.14 Completed 4.8.14 Operator S. Loranby
Probe Subcontractor Nothnagle Drilling Equipment 6610 Geoprobe

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	Remarks
			TOPSOIL	0'7"
2			Loose black gray ash	
4				
6				
8			Firm to compact tan SILT, little gravel, little sand, trace clay	7'6"
10			Compact tan saturated SILT and SAND, little gravel	8'6"
12	S-1	11' - 12'		12'0"
			Refusal on rock at 12'0"	
14				
16				

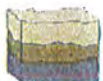
Notes:

1. Water in sample tube 8' - 12'.
2. Staked locations provided by Foundation Design.

Site Pictures

B14-11





Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Coring Log

Project No. 3827.0 Page 1 of 1 Test Boring No. C-1
 Project Name 322 Santee Street Floor Settlement, Rochester, NY
 Client SWBR Architects, Eastman Place, 387 East Main St. Rochester, NY
 Elevation _____ Weather Indoors Inspector J. Goggin
 Date Started 3-4-14 Completed 3-4-14 Drilling Company _____

Depth Below Surface	Sample Number	Blows Per Six Inches				N Values	Sample Depth	Soil and Rock Classifications
		0 to 6	6 to 12	12 to 18	18 to 24			Remarks
			6					Concrete 0'3¾" to 0'4"
	S-1			16	16	22	0'6"-2'	Fill: Compact red brown moist sand little silt
		15	11					3'3"
	S-2			12	12	23	2'-4'	Fill: Compact black ash and cinders
5		13	11					
	S-3			13		24	4' -5'6"	No recovery 5'6"
								Boring terminated at 5'6"
10								
15								
20								
25								
30								

- Concrete core dropped ¼ to ½" void under the floor slab.
- Mesh observed ½" from the bottom of the concrete core.
- Boring conducted with hand driven split spoon.
- Dry on completion.
- Floor was cored with a 8" core bit.

N=No. of blows to 2" spoon 12" with 40 lb. hammer.

Water Level – Casing In _____ Casing Out _____



Foundation
Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Coring Log

Project No. 3827.0 Page 1 of 1 Test Boring No. C-2
 Project Name 322 Santee Street Floor Settlement, Rochester, NY
 Client SWBR Architects, Eastman Place, 387 East Main St. Rochester, NY
 Elevation _____ Weather Indoors Inspector J. Goggin
 Date Started 3-4-14 Completed 3-4-14 Drilling Company _____

Depth Below Surface	Sample Number	Blows Per Six Inches				N Values	Sample Depth	Soil and Rock Classifications Remarks
		0 to 6	6 to 12	12 to 18	18 to 24			
		-	-	-	-			Concrete 0'3½" to 0'4½"
				-	-			Fill: Compact red brown moist sand little silt
		-	-					Hand excavated 3'6"
5	S-1	7	7	6	11	18	3'6" - 5'6"	4'0"
				6	22			Fill: Compact black ash and cinders
	S-2	10	8			32	5'6" - 7'6"	Same with white ash
				3	3			
	S-3	1	3			4	7'6" - 9'6"	Same
10				1	WH			
	S-4	WH	3			WH	9'6"-11'6"	Same
	S-5	2	6					
				6	9	12	12'6"-14'6"	13'3"
15	S-6	17	38			45	14'6"-15'6"	Black Topsoil 14'6"
								Compact tan moist to wet SILT, little sand
								15'6"
								Boring terminated at 15'6"
20								
25								1. Concrete core dropped ¼ to ½" void under the floor slab.
								2. Mesh observed ½" from the bottom of the concrete core.
								3. Boring conducted with hand driven split spoon.
								4. Dry on completion.
30								5. Floor was cored with a 4" core bit.

N=No. of blows to 2" spoon 12" with 40 lb. hammer. Water Level - Casing In _____ Casing Out _____