ROCKRIDGE GEOTECHNICAL

Prepared for **SM Martin Developer, LLC**

PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED MIXED-USE DEVELOPMENT
477 9TH AVENUE
SAN MATEO, CALIFORNIA

April 26, 2022
Project No. 22-2223

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ROCKRIDGE GEOTECHNICAL

April 26, 2022
Project No. 22-2223

Mr. William Johnstone
SM Martin Developer, LLC
1970 Broadway, Suite 745
Oakland, California 94612

Subject: Preliminary Geotechnical Investigation
Proposed Mixed-Use Development
477 9th Avenue
San Mateo, California

Dear Mr. Johnstone,

We are pleased to present our preliminary geotechnical investigation report for the proposed mixed-use development at 477 9th Avenue in San Mateo, California. Our preliminary geotechnical investigation was performed in accordance with our proposal dated March 28, 2022.

The subject property, San Mateo County Assessors Map Parcel 033281130, is located on the northern side of 9th Avenue, west of its intersection with S. Claremont Street. The site has plan dimensions of about 220 by 313 feet and is bordered by th Avenue to the south, S. Claremont Avenue to the east, an office building and driveway to the north, and Caltrain tracks to the west. Ground surface elevations across the site vary from about 24 feet (Google Earth, mean sea level) on the northwestern corner of the site to about 18 feet on the southeastern corner of the site. The site is currently occupied by a one-story office building on the eastern portion and a surface paved parking lot and landscaping on the western portion. There is also a driveway along the northern property line that leads to S. Claremont Street.

Plans are to redevelop the site by demolishing the existing structure and pavements and constructing a new mixed-use building. The proposed mixed-use building will be five stories constructed at-grade. The proposed building will have a footprint of about 180 by 293 feet and will be bordered by a 20 feet wide driveway along the northern property line and a 40 feet wide parking lot along the western property line. The proposed building will consist of three levels of residential units atop two levels of office space and parking garage.

Based on the results of our preliminary geotechnical investigation, we conclude there are no major geotechnical issues that would preclude development of the site as proposed. The primary geotechnical concern associated with the proposed project is providing

adequate vertical and lateral support for the proposed building. We preliminarily conclude the proposed building can be supported on spread footings bearing on firm native alluvium.

Prior to final design, additional borings and/or CPTs should be performed within the proposed building footprint to supplement existing subsurface information and to develop final geotechnical conclusions and recommendations.

We appreciate the opportunity to provide our services to you on this project. If you have any questions, please call.

Sincerely yours,
ROCKRIDGE GEOTECHNICAL, INC.

Timothy J. Forrest, P.E.
Project Engineer

Linda H.J. Liang, P.E., G.E.
Principal Engineer

Enclosure

ROCKRIDGE GEOTECHNICAL

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PRELIMINARY GEOTECHNICAL INVESTIGATION
PROPOSED MIXED-USE DEVELOPMENT
477 9TH AVENUE
San Mateo, California

1.0 INTRODUCTION

This report presents the results of the preliminary geotechnical investigation performed by Rockridge Geotechnical, Inc. for the proposed mixed-use development at 477 9th Avenue in San Mateo, California. The subject property, San Mateo County Assessors Map Parcel 033281130, is located on the northern side of 9th Avenue, west of its intersection with S. Claremont Street, as shown on the Site Location Map, Figure 1.

The site has plan dimensions of about 220 by 313 feet and is bordered by 9th Avenue to the south, S. Claremont Avenue to the east, an office building and driveway to the north, and Caltrain tracks to the west, as shown on the Site Plan, Figure 2. Ground surface elevations across the site vary from about 24 feet (Google Earth, mean sea level) on the northwestern corner of the site to about 18 feet on the southeastern corner of the site. The site is currently occupied by a one-story office building on the eastern portion and a surface paved parking lot and landscaping on the western portion. There is also a driveway along the northern property line that leads to S. Claremont Street.

Plans are to redevelop the site by demolishing the existing structure and pavements and constructing a new mixed-use building. The proposed mixed-use building will be five stories constructed at-grade. The proposed building will have a footprint of about 180 by 293 feet and will be bordered by a 20 feet wide driveway along the northern property line and a 40 feet wide parking lot along the western property line. The proposed building will consist of three levels of residential units atop two levels of office space and parking garage.

2.0 SCOPE OF SERVICES

Our preliminary geotechnical investigation was performed in accordance with our proposal dated March 28, 2022. Our scope of services consisted of reviewing available subsurface information and geologic maps of the site and vicinity, performing four cone penetration tests (CPTs), and

performing engineering analyses to develop preliminary conclusions and recommendations regarding:

- subsurface soil conditions
- design groundwater level
- site seismicity and seismic hazards, including the potential for liquefaction and lateral spreading, and total and differential resulting from liquefaction and/or cyclic densification
- the most appropriate foundation type(s) for the proposed building
- preliminary design criteria for the recommended foundation type(s)
- estimates of foundation settlement under static and seismic conditions
- 2019 California Building Code (CBC) site class and design spectral response acceleration parameters
- construction considerations.

3.0 FIELD INVESTIGATION

Our subsurface investigation consisted of performing four CPTs to provide continuous in-situ soil data. The CPTs, designated as CPT-1 through CPT-4, were advanced at the approximate locations shown on Figure 2. Prior to performing the CPTs, we filed a drilling notification form with San Mateo County Environmental Health (SMCEH) and contacted Underground Service Alert (USA) to notify them of our work, as required by law. We also retained C. Cruz Sub-Surface Locators, a private utility locator, to check for buried utilities at the CPT locations to reduce the potential for encountering buried utilities when advancing the CPTs.

The CPTs were performed on April 14, 2022 by Middle Earth Geo Testing, Inc. of Orange, California. The CPTs were advanced to a depth of about 50 feet below the existing ground surface (bgs) by hydraulically pushing a 1.7-inch-diameter cone-tipped probe with a projected area of 15 square centimeters into the ground. The cone-tipped probe measured tip resistance and the friction sleeve behind the cone tip measured frictional resistance. Electrical strain gauges within the cone continuously measured soil parameters for the entire depth advanced. Soil data, including tip resistance, frictional resistance, and pore water pressure were recorded by a

computer while the test was conducted. Accumulated data were processed by computer to provide engineering information such as the soil behavior types and approximate strength characteristics of the soil encountered. The CPT logs showing tip resistance and friction ratio, as well as interpreted soil behavior type, are presented in Appendix A on Figures A-1 through A-4.

Upon completion, the CPT holes were backfilled with cement grout in accordance with SMCEH requirements and patched with asphalt.

4.0 SUBSURFACE CONDITIONS

The regional geology map prepared by Graymer (2006), a portion of which is shown on Figure 3, indicates the site is underlain by artificial fill (af) along the southwestern perimeter of the site and underlain by Holocene-age alluvial deposits (Qha) at the remainder of the site. The results of our CPTs indicate the alluvium underlying the site is predominantly clay with variable amounts of silt and sand with thin layers of sand that extend to the maximum depth explored of 50 feet bgs. The clay is generally very stiff to hard. On the northwestern portion of the site (i.e., CPT-1 and CPT-2), the near-surface soil consists of between 12 to 14 feet of dense to very dense sand with varying silt content.

4.1 Groundwater

Groundwater was measured at a depth of 14 feet bgs in CPT-1 and CPT-2 and 18 feet bgs in CPT-4 prior to grouting. Due to the high clay content, these measured groundwater levels may not be stabilized groundwater levels. Additionally, groundwater was measured at a depth of 4 feet bgs in CPT-3. We anticipate the groundwater measured in CPT-3 may have been perched or may not be stabilized. According to the California Geologic Survey (CGS) report *Seismic Hazard Zone Report for the San Mateo 7.5-Minute Quadrangle, San Mateo County, California*, the historic high groundwater in the site vicinity is approximately 10 feet bgs.

The groundwater level at the site is expected to fluctuate several feet seasonally with potentially larger fluctuations annually, depending on the amount of rainfall. Based on available

information, we preliminarily conclude a design groundwater table at 10 feet bgs should be used for the site.

5.0 SEISMIC CONSIDERATION

The results of our preliminary evaluation regarding seismic considerations for the project site are presented in the following sections.

5.1 Regional Seismicity and Faulting

The site is located in the Coast Ranges Geomorphic Province of California that is characterized by northwest-trending valleys and ridges. These topographic features are controlled by folds and faults that resulted from the collision of the Farallon North American plates and subsequent strike-slip faulting along the San Andreas Fault system. The San Andreas Fault is more than 600 miles long from Point Arena in the north to the Gulf of California in the south. The Coast Ranges Geomorphic Province is bounded on the east by the Great Valley and on the west by the Pacific Ocean.

The major active faults in the area are the San Andreas, Hayward, Calaveras, and Monte Vista - Shannon faults. These and other faults in the region are shown on Figure 4. Numerous damaging earthquakes have occurred along these faults in recorded time. For these and other active faults within a 50-kilometer radius of the site, the distance from the site and estimated characteristic moment magnitude[1] [Petersen et al. (2014) & Thompson et al. (2016)] are summarized in Table 1. These references are based on the Third Uniform California Earthquake Rupture Forecast (UCERF3), prepared by Field et al. (2013).

[1] Moment magnitude (M_w) is an energy-based scale and provides a physically meaningful measure of the size of a faulting event. Moment magnitude is directly related to average slip and fault rupture area.

TABLE 1
Regional Faults and Seismicity

Fault Segment	Approximate Distance from Site (km)	Direction	Characteristic Moment Magnitude
Total North San Andreas (SAO+SAN+SAP+SAS)	5.8	West	8.04
North San Andreas (Peninsula, SAP)	5.8	West	7.38
Monte Vista - Shannon	9.6	South	7.14
San Gregorio (North)	17	West	7.44
Total Hayward + Rodgers Creek (RC+HN+HS+HE)	24	East	7.58
Hayward (South, HS)	24	East	7.00
Hayward (North, HN)	27	Northeast	6.90
Butano	29	South	6.93
Total Calaveras (CN+CC+CS+CE)	37	East	7.43
Calaveras (North, CN)	37	East	6.86
Mount Diablo Thrust North CFM	41	Northeast	6.72
Zayante-Vergeles (2011 CFM)	42	South	7.48
Mount Diablo Thrust	43	Northeast	6.67
Mount Diablo Thrust South	43	East	6.50
Las Positas	45	East	6.50
Calaveras (Central, CC)	46	East	6.85
Concord	47	Northeast	6.45
North San Andreas (North Coast, SAN)	48	Northwest	7.52
Hayward (Extension, HE)	49	East	6.18

Since 1800, four major earthquakes have been recorded on the North San Andreas Fault. In 1836, an earthquake with an estimated maximum intensity of VII on the Modified Mercalli (MM) scale occurred east of Monterey Bay on the San Andreas Fault (Toppozada and Borchardt 1998). The estimated moment magnitude (M_w) for this earthquake is about 6.25. In 1838, an earthquake occurred with an estimated intensity of about VIII-IX (MM), corresponding to an M_w of about 7.5. The San Francisco Earthquake of 1906 caused the most significant damage in the history of the Bay Area in terms of loss of lives and property damage. This earthquake created a surface rupture along the San Andreas Fault from Shelter Cove to San Juan Bautista approximately 470 kilometers in length. It had a maximum intensity of XI (MM), an M_w of about 7.9, and was felt 560 kilometers away in Oregon, Nevada, and Los Angeles. The Loma Prieta

Earthquake of October 17, 1989 had an M_w of 6.9 and occurred about 70 kilometers south of the site.

In 1868, an earthquake with an estimated maximum intensity of X on the MM scale occurred on the southern segment (between San Leandro and Fremont) of the Hayward Fault. The estimated M_w for the earthquake is 7.0. In 1861, an earthquake of unknown magnitude (estimated M_w of about 6.5) was reported on the Calaveras Fault. The most recent significant earthquake on this fault was the 1984 Morgan Hill earthquake, which corresponds to an M_w of 6.2.

As a part of the UCERF3 project, researchers estimated that the probability of at least one $M_w \geq 6.7$ earthquake occurring in the greater San Francisco Bay Area during a 30-year period (starting in 2014) is 72 percent. The highest probabilities are assigned to sections of the Hayward (South), Calaveras (Central), and the North San Andreas (Santa Cruz Mountains) faults. The respective probabilities are approximately 25, 21, and 17 percent.

5.2 Seismic Hazards

Because the site is in a seismically active region, we evaluated the potential for earthquake-induced geologic hazards including ground shaking, ground surface rupture, liquefaction,[2] lateral spreading[3] and cyclic densification[4]. We used the results of our field investigation to evaluate the potential of these phenomena occurring at the project site.

5.2.1 Ground Shaking

The ground shaking intensity felt at the project site will depend on: 1) the size of the earthquake (magnitude), 2) the distance from the site to the fault source, 3) the directivity (focusing of

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2 Liquefaction is a phenomenon where loose, saturated, cohesionless soil experiences temporary reduction in strength during cyclic loading such as that produced by earthquakes.

3 Lateral spreading is a phenomenon in which surficial soil displaces along a shear zone that has formed within an underlying liquefied layer. Upon reaching mobilization, the surficial blocks are transported downslope or in the direction of a free face by earthquake and gravitational forces.

4 Cyclic densification, also referred to as differential compaction, is a phenomenon in which non-saturated, cohesionless soil is compacted by earthquake vibrations, causing ground-surface settlement.

earthquake energy along the fault in the direction of the rupture), and 4) subsurface conditions. The site is approximately 5.8 kilometers from the San Andreas Fault. Therefore, the potential exists for a large earthquake to induce strong to very strong ground shaking at the site during the life of the project.

5.2.2 Fault Rupture

Historically, ground surface displacements closely follow the trace of geologically young faults. The site is not within an Earthquake Fault Zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults exist on the site. We therefore conclude the risk of fault offset at the site from a known active fault is very low. In a seismically active area, the remote possibility exists for future faulting in areas where no faults previously existed; however, we conclude the risk of surface faulting and consequent secondary ground failure from previously unknown faults is also very low.

5.2.3 Liquefaction and Associated Hazards

Liquefaction is a phenomenon in which saturated soil temporarily loses strength from the build-up of excess pore water pressure, especially during earthquake-induced cyclic loading. Soil susceptible to liquefaction includes loose to medium dense sand and gravel, low-plasticity silt, and some low-plasticity clay deposits. Flow failure, lateral spreading, differential settlement, loss of bearing strength, ground fissures and sand boils are evidence of excess pore pressure generation and liquefaction.

The site is **not** located within a mapped zone of liquefaction potential on the map titled *Earthquake Zones of Required Investigation San Mateo Quadrangle by California Geological Survey Released January 11, 2018* (Figure 5). We evaluated the liquefaction potential of soil encountered at the site using data collected from our CPTs.

Considering the soil encountered in our CPTs below the historic high groundwater level of 10 feet bgs generally consists of stiff to very stiff clay with variable sand content and dense to very

dense sand with variable silt and clay content, we judge the soil is not susceptible to liquefaction because of its cohesion and/or relative density. Therefore, we conclude the potential for liquefaction and associated hazards to occur at the site is low.

5.2.4 Cyclic Densification

Cyclic densification (also referred to as differential compaction) of non-saturated sand (sand above groundwater table) can occur during an earthquake, resulting in settlement of the ground surface and overlying improvements. The soil encountered above the groundwater table is not susceptible to cyclic densification due to its relative density or cohesion. Therefore, we conclude the potential for cyclic densification to occur at the site is nil.

6.0 PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our preliminary geotechnical investigation, we conclude there are no major geotechnical issues that would preclude development of the site as proposed. The primary geotechnical concern associated with the proposed project is providing adequate vertical and lateral support for the proposed building. Our preliminary conclusions and recommendations regarding this issue and other geotechnical concerns are presented in the following sections.

6.1 Foundation and Settlement

The foundation level of the proposed building constructed at-grade will be above the design groundwater table and underlain by dense to very dense sand along the northwestern portion of the site and very stiff to hard clay elsewhere on-site. We judge the native alluvium underlying the site can provide adequate foundation support for light to moderate building loads. Therefore, we preliminarily conclude the proposed building may be supported on spread footings bearing on firm alluvium.

Continuous footings should be at least 18 inches wide and isolated spread footings should be at least 24 inches wide. Footings should extend at least 24 inches below the lowest adjacent exterior soil subgrade grade and at least 18 inches below the lowest adjacent interior soil subgrade.

Footings may be designed using allowable bearing pressures of 4,000 pounds per square foot (psf) for dead plus live loads and 5,300 psf for total design loads, which include wind or seismic forces. The allowable bearing pressures recommended for dead-plus-live and total load conditions include factors of safety of at least 2 and 1.5, respectively. Our settlement analyses indicate total settlement of spread footings designed using the allowable bearing pressures presented in this section will be less than 3/4 inch and differential settlement will be less than 1/2 inch over a 30-foot horizontal distance.

Lateral loads can be resisted by a combination of passive pressure on the vertical faces of the footings and friction along the bottom of the foundation. Lateral resistance may be computed using a uniform pressure of 2,000 psf for transient loads and an equivalent fluid weight (triangular distribution) of 270 pounds per cubic foot (pcf) for sustained loads; the upper foot of soil should be ignored unless confined by a slab or pavement. Frictional resistance should be computed using a base friction coefficient of 0.30 where the footings are in contact with the soil. The passive pressure and frictional resistance values include a factor of safety of at least 1.5 and may be used in combination without reduction.

Footings should bottom on firm alluvium. Where fill or loose/weak soil is encountered at the bottom of footing excavations, it should be removed and replaced with engineered fill, controlled low strength material (CLSM) with a 28-day unconfined compressive strength of at least 100 pounds per square inch (psi) or lean concrete. Footing excavations should be free of standing water, debris, and disturbed materials prior to placing concrete. The bottoms and sides of the footing excavations should be moistened following excavation and maintained in a moist condition until concrete is placed. We should check footing excavations prior to placement of the reinforcement and concrete.

6.2 Seismic Design

The latitude and longitude of the site are 37.5629° and -122.3172°, respectively. Hence, in accordance with the 2019 CBC, we preliminarily recommend the following:

- Site Class D – stiff soil
- S_S = 1.853g, S_1 = 0.759g

The 2019 CBC is based on the guidelines contained within ASCE 7-16. Per ASCE 7-16, where S_1 is greater than 0.2 times gravity (g) for Site Class D, a ground motion hazard analysis is needed unless the seismic response coefficient (C_s) value will be calculated as outlined in Section 11.4.8, Exception 2 of ASCE 7-16. Assuming the C_s value will be calculated as outlined in Section 11.4.8, Exception 2 of ASCE 7-16, we recommend the following seismic design parameters:

- F_a = 1.0, F_v =1.7
- S_{MS} = 1.853g, S_{M1} = 1.290g
- S_{DS} = 1.235g, S_{D1} = 0.860g
- Seismic Design Category E for Risk Categories I, II, and III.

6.3 Construction Considerations

We anticipate construction of the proposed building at-grade will require minimal excavations, including footings, elevator pit, and utility trenches. Excavations that will be deeper than five feet and will be entered by workers should be sloped or shored in accordance with CAL-OSHA standards (29 CFR Part 1926). We judge that temporary cuts in on-site soil inclined in accordance to OSHA guidelines for Type B soil (maximum inclination of 1:1, horizontal to vertical) will be stable provided the excavation is not surcharged by equipment or building material.

7.0 ADDITIONAL GEOTECHNICAL SERVICES

Prior to final design, additional borings and/or CPTs should be performed within the proposed building footprint to supplement existing subsurface information and to develop final geotechnical conclusions and recommendations.

8.0 LIMITATIONS

This preliminary geotechnical study has been conducted in accordance with the standard of care commonly used as state-of-practice in the profession. No other warranties are either expressed or implied. The preliminary recommendations made in this report are based on the assumption that the subsurface conditions do not deviate appreciably from those disclosed in the CPTs. If any variations or undesirable conditions are encountered during construction, we should be notified so that additional recommendations can be made. The preliminary foundation recommendations presented in this report are developed exclusively for the proposed development described in this report and are not valid for other locations and construction in the project vicinity.

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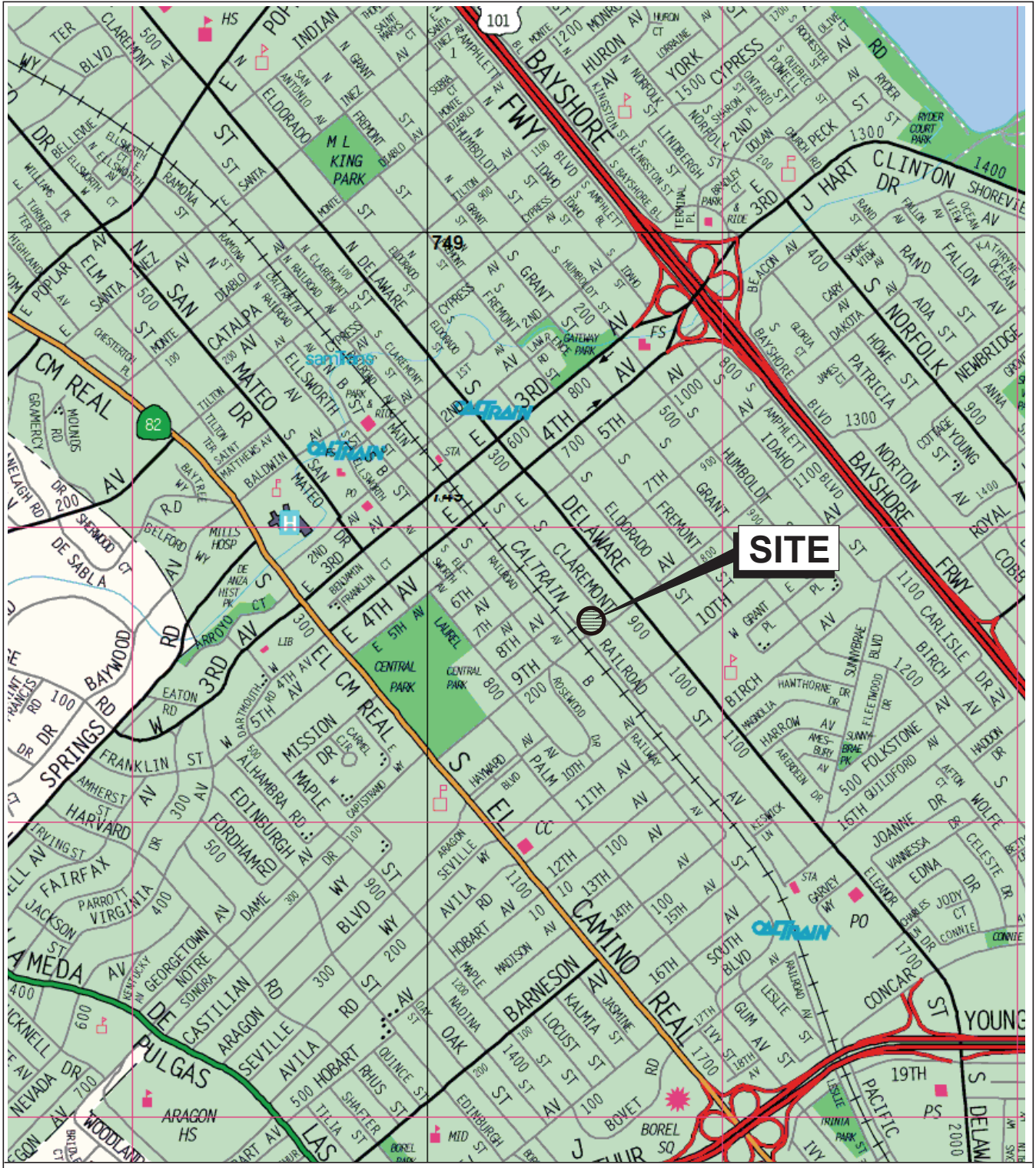
FIGURES



Base map: The Thomas Guide
San Mateo County
2002

0 1/4 1/2 Mile

Approximate scale

477 9TH AVENUE
San Mateo, California

ROCKRIDGE GEOTECHNICAL

SITE LOCATION MAP

Date 04/20/22	Project No. 22-2223	Figure 1

EXPLANATION

CPT-1 Approximate location of cone penetration test by Rockridge Geotechnical, Inc., April 14, 2022

Project limits

0 30 Feet

Approximate scale

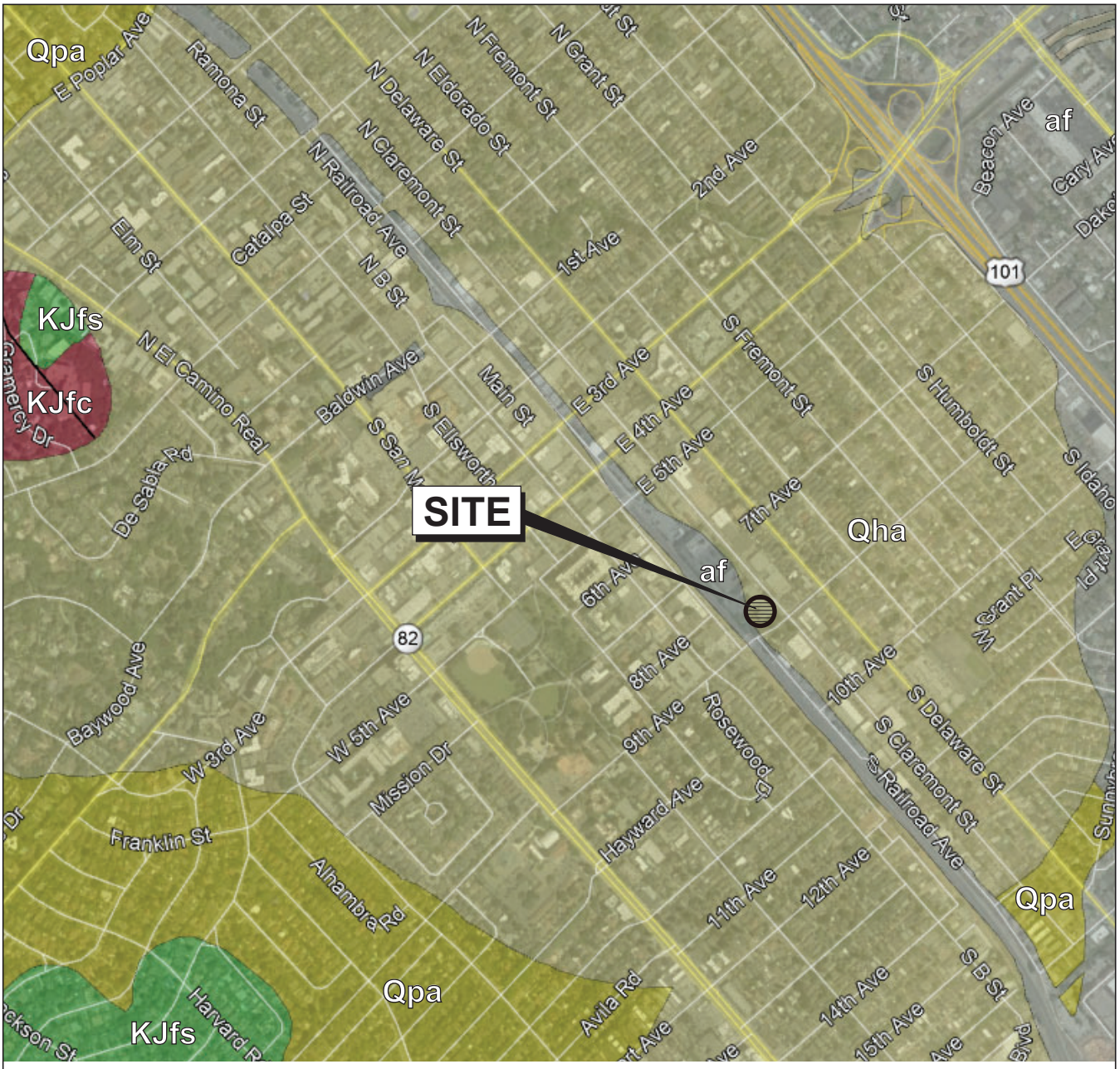
Base map: Google Earth, 2021.

477 9TH AVENUE
San Mateo, California

SITE PLAN

Date 04/26/22	Project No. 22-2223	Figure 2

ROCKRIDGE GEOTECHNICAL



Base map: Google Earth with U.S. Geological Survey (USGS), San Mateo County, 2018.

EXPLANATION

af	Artificial Fill
Qha	Alluvium (Holocene)
Qpa	Alluvium (Pleistocene)
KJfs	Franciscan Complex sedimentary rocks (Early Cretaceous and (or) Late Jurassic)
KJfc	Franciscan Complex chert (Early Cretaceous and (or) Late Jurassic)

Geologic contact: dashed where approximate and dotted where concealed, queried where uncertain

N

0 1000 2000 Feet

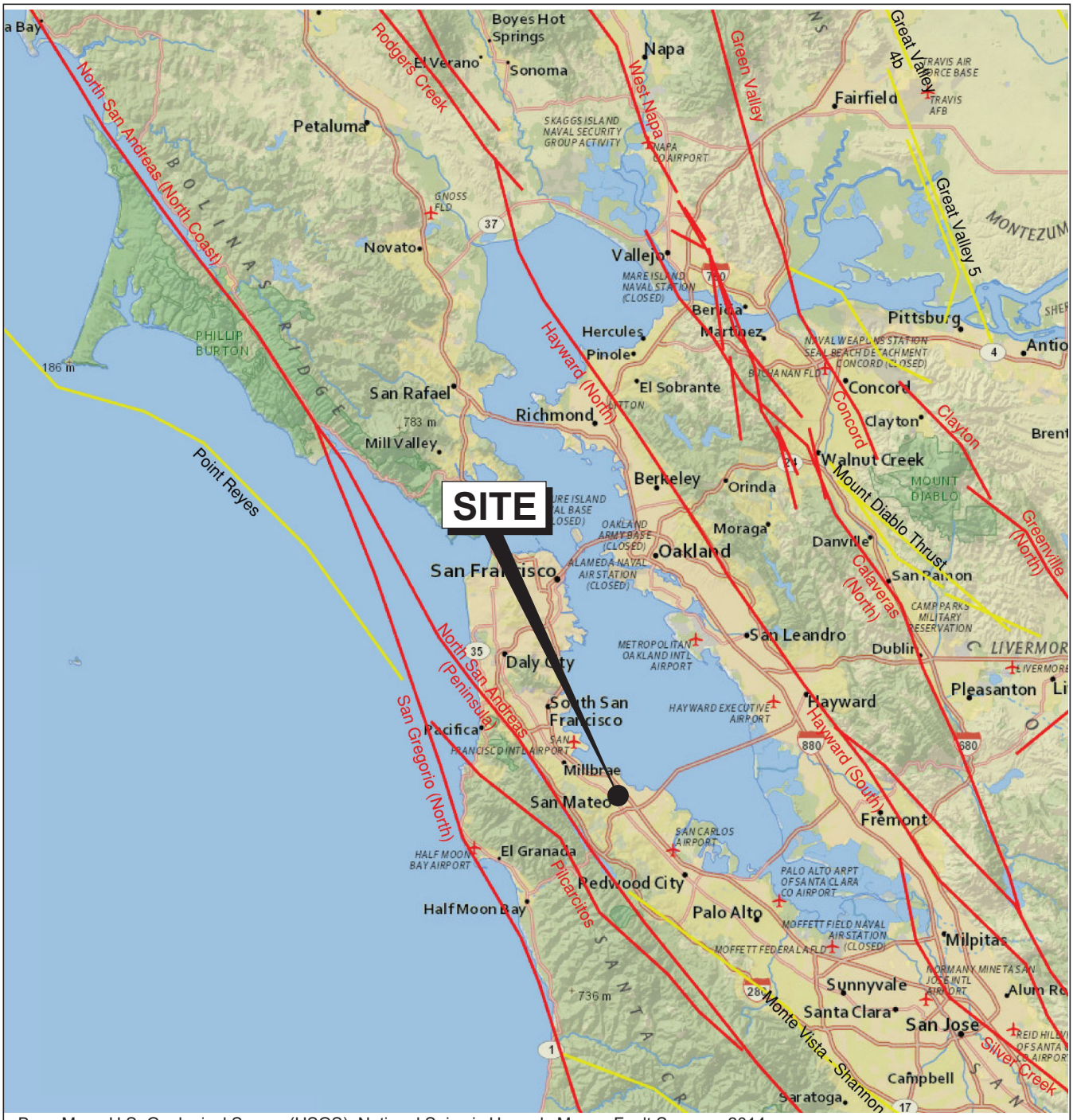
Approximate scale

477 9TH AVENUE
San Mateo, California

REGIONAL GEOLOGIC MAP

ROCKRIDGE GEOTECHNICAL

Date 04/20/22 | Project No. 22-2223 | Figure 3



Base Map: U.S. Geological Survey (USGS), National Seismic Hazards Maps - Fault Sources, 2014.

EXPLANATION

- Strike slip
- Thrust (Reverse)
- Normal

N

0 5 10 Miles

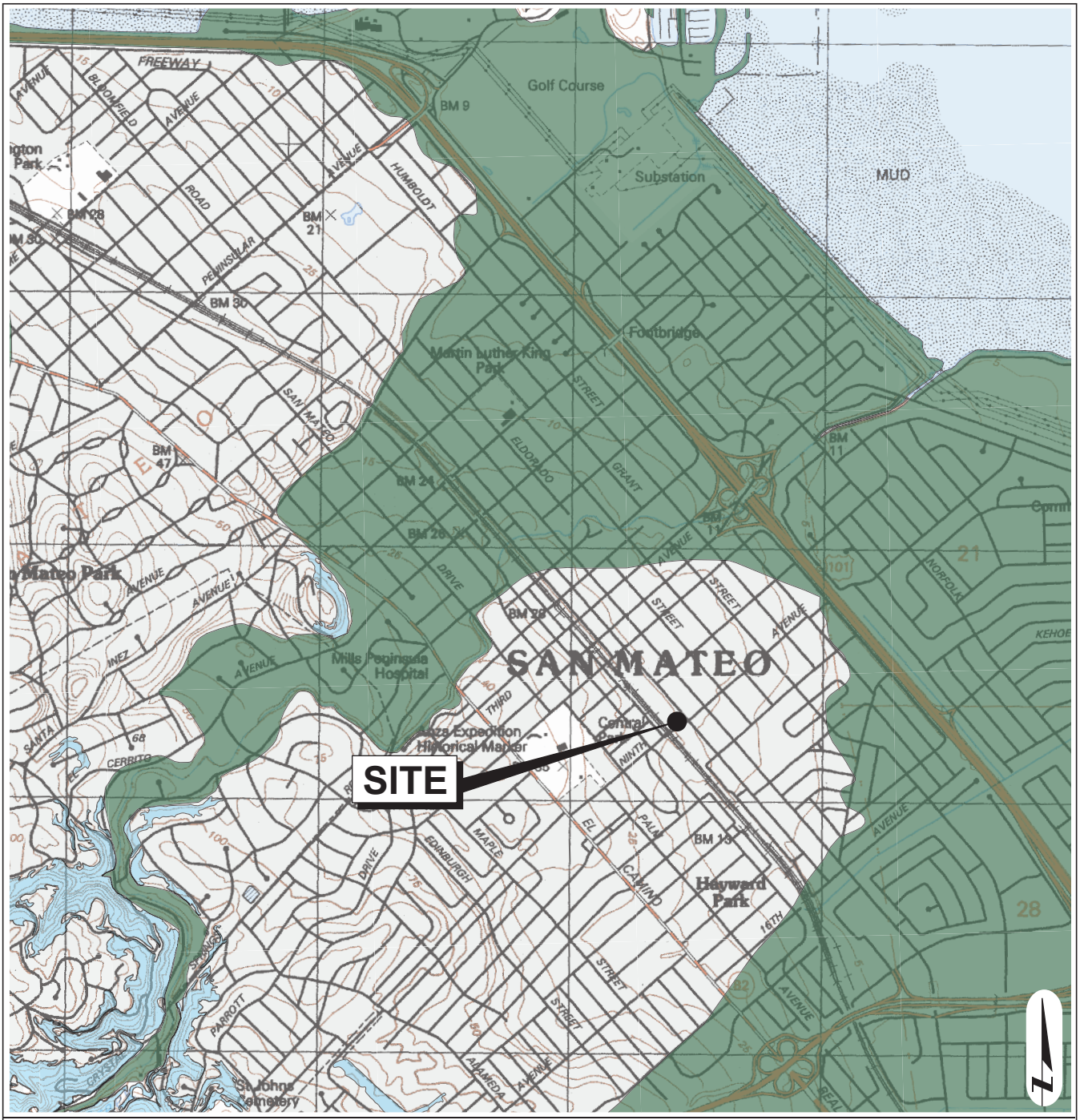
Approximate scale

477 9TH AVENUE
San Mateo, California

ROCKRIDGE GEOTECHNICAL

REGIONAL FAULT MAP

Date	Project No.	Figure
04/20/22	22-2223	4



Liquefaction Zones
Areas where historical occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Earthquake-Induced Landslide Zones
Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.

Reference:
Earthquake Zones of Required Investigation
San Mateo Quadrangle
California Geological Survey
Released January 11, 2018

0 2,000 4,000 Feet
Approximate scale

477 9TH AVENUE
San Mateo, California

ROCKRIDGE GEOTECHNICAL

EARTHQUAKE ZONES OF REQUIRED INVESTIGATION MAP

Date 04/20/22	Project No. 22-2223	Figure 5

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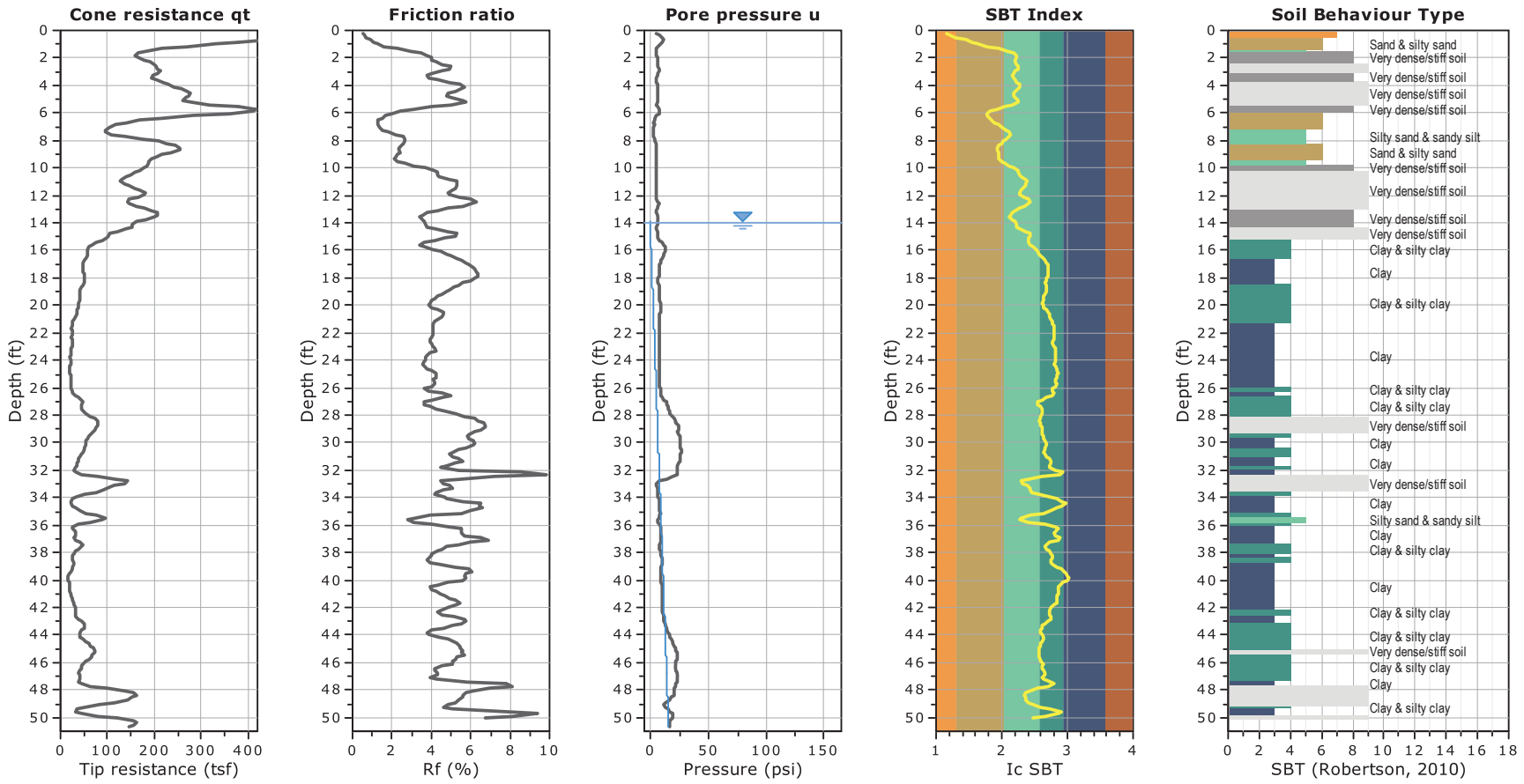
APPENDIX A

Cone Penetration Test Results



Total depth: 50.7 ft, Date: April 14, 2022
Depth to Groundwater: 14 feet (measured with a weighted tape)
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

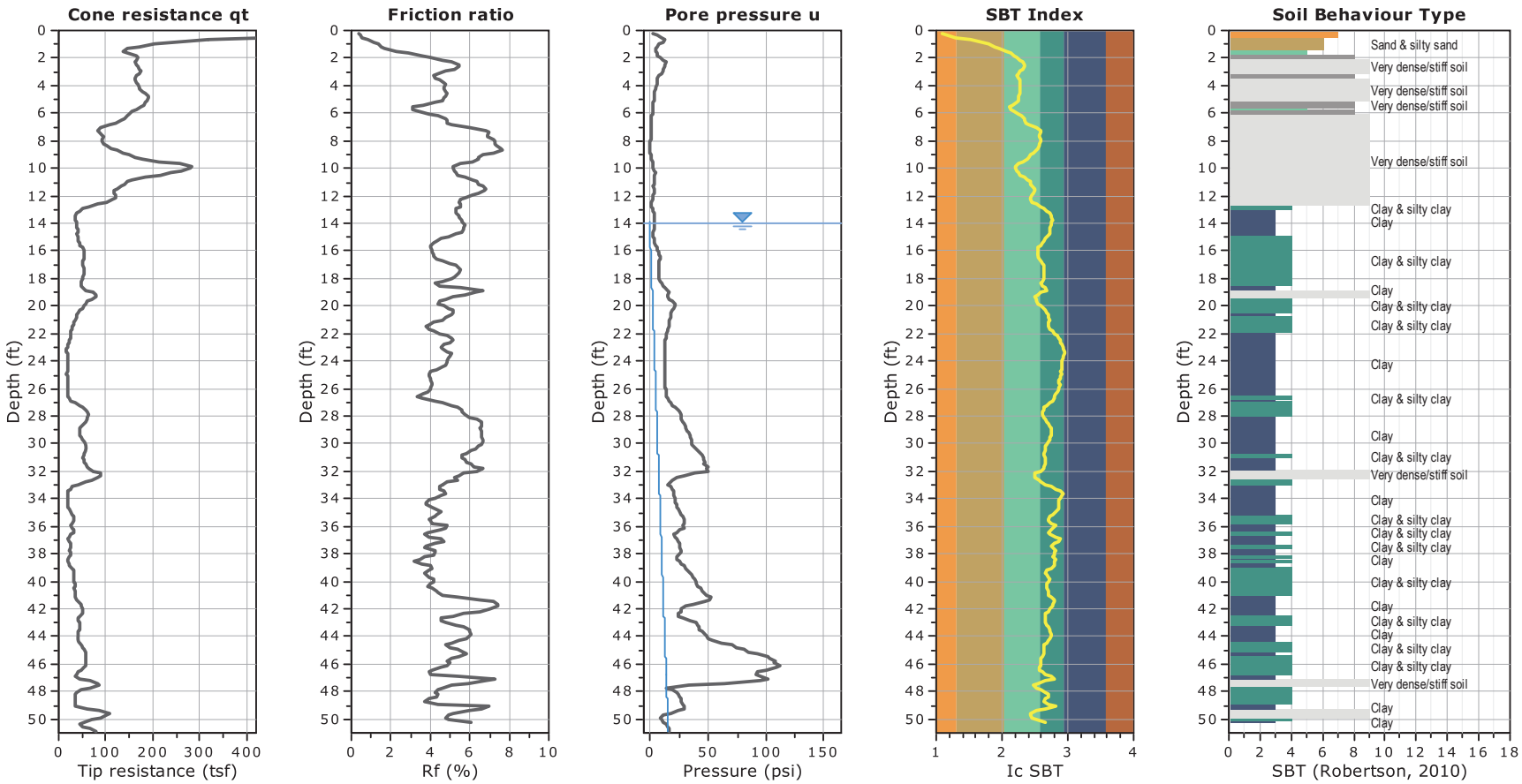
1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravelly sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

477 9TH AVENUE
San Mateo, California

ROCKRIDGE GEOTECHNICAL

CONE PENETRATION TEST RESULTS
CPT-1

Date 04/20/22	Project No. 22-2223	Figure A-1



Total depth: 50.9 ft, Date: April 14, 2022
Depth to Groundwater: 14 feet (measured with a weighted tape)
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravelly sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

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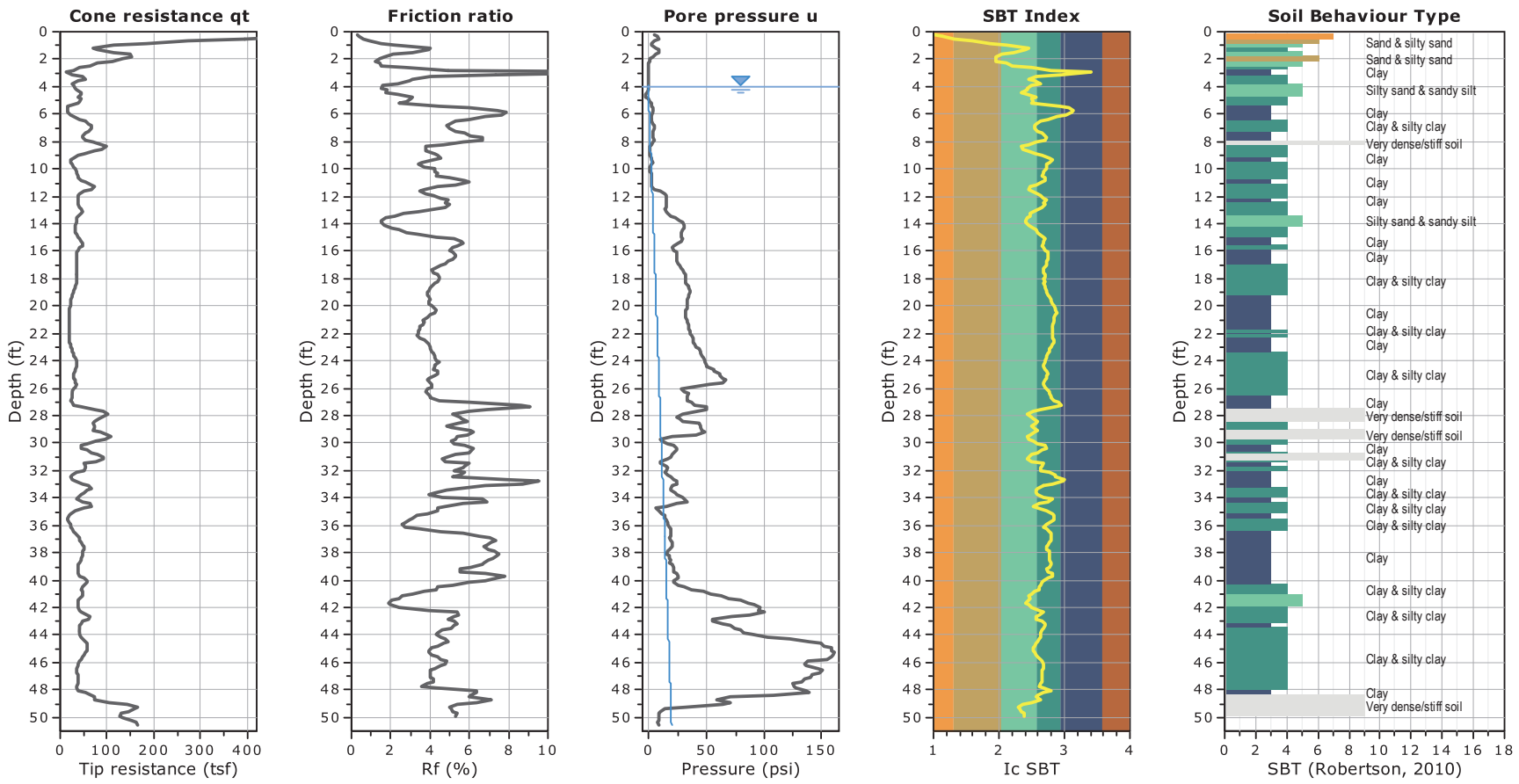
CONE PENETRATION TEST RESULTS
CPT-2

Date 04/20/22	Project No. 22-2223	Figure A-2



Total depth: 50.5 ft, Date: April 14, 2022
Depth to Groundwater: 4 feet (measured with a weighted tape)
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravelly sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

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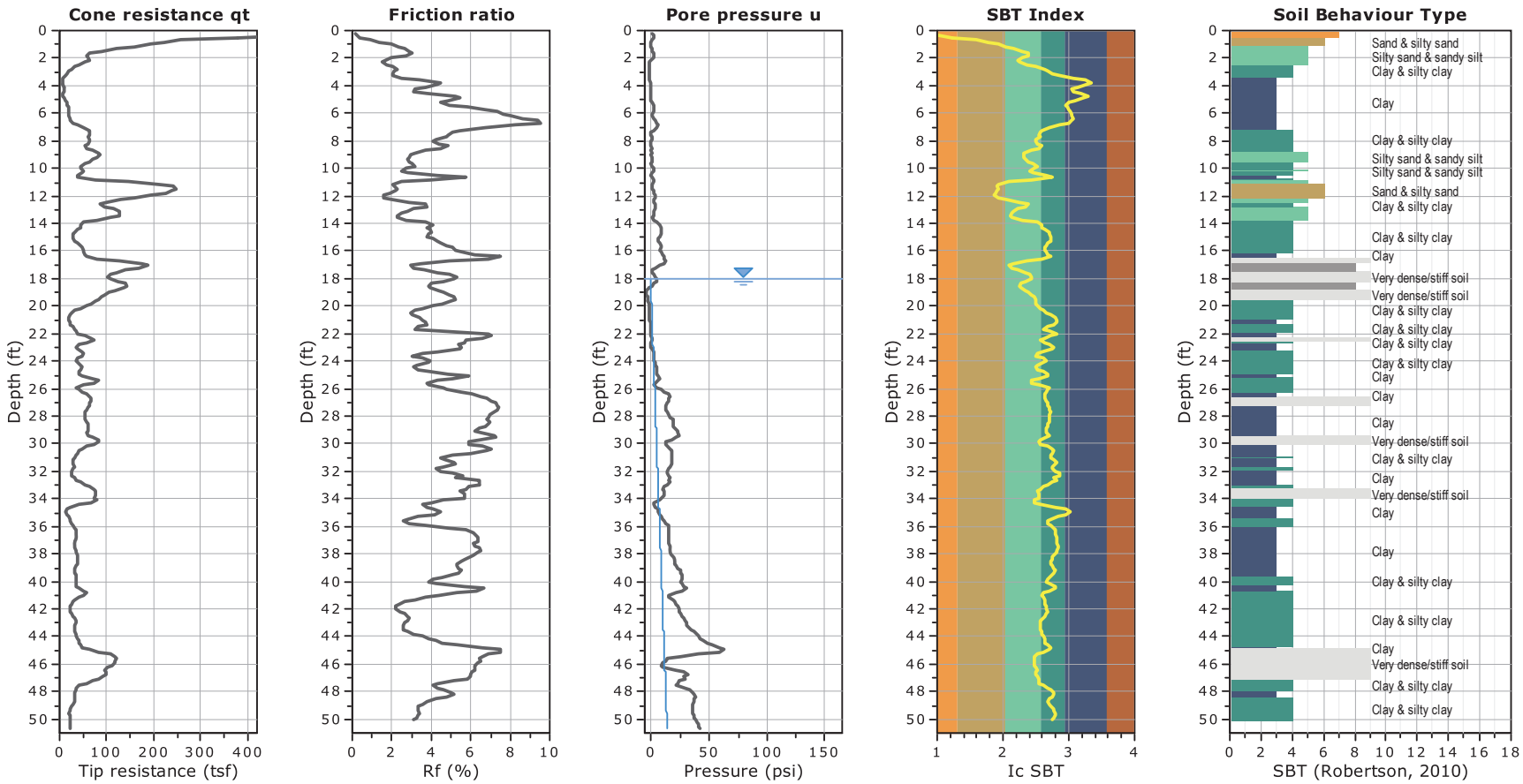
CONE PENETRATION TEST RESULTS
CPT-3

Date 04/20/22	Project No. 22-2223	Figure A-3



Total depth: 50.7 ft, Date: April 14, 2022
Depth to Groundwater: 18 feet (measured with a weighted tape)
Cone Operator: Middle Earth Geo Testing, Inc.

SBT legend

1. Sensitive fine grained
2. Organic material
3. Clay to silty clay
4. Clayey silt to silty clay
5. Silty sand to sandy silt
6. Clean sand to silty sand
7. Gravelly sand to sand
8. Very stiff sand to clayey sand
9. Very stiff fine grained

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CONE PENETRATION TEST RESULTS
CPT-4

Date 04/20/22	Project No. 22-2223	Figure A-4