

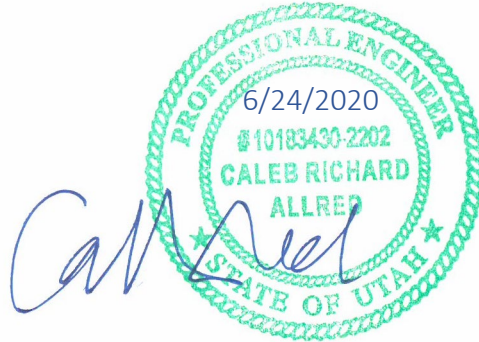
MEMORANDUM

To: RM Construction Services, LLC
Attention: Michael DeMarco
224 South Main Street
Springville, UT 84663

From: Caleb R. Allred, P.E.
Project Geotechnical Engineer

Date: June 24, 2020

Subject: Preliminary Geotechnical Information
Shramm Plat A
540 West 100 South
Payson, Utah
GeoStrata Job No. 1546-001



This memorandum has been prepared to provide a summary of a preliminary geotechnical investigation completed for the proposed Shramm Plat A development to be constructed at approximately 540 West 100 South in Payson, Utah (see Plate A-1, Site Vicinity Map). Based on information provided by the Client, the subject development is to consist of eight townhomes located to the south (rear) of the existing residences located on adjacent parcels. Construction plans were not provided at the time this report was prepared, however, GeoStrata has assumed that the structures will consist of wood-framed, 2-story, slab-on-grade buildings constructed on standard strip or spread footings. The purposes of our investigation were to provide preliminary geotechnical information including anticipated soil and groundwater conditions at the subject property. It is our understanding that a final design-grade investigation will be completed later.

GeoStrata visited the site on June 16, 2020 and completed a preliminary field investigation for the subject property. The subsurface soils were explored by advancing three (3) test pits at the development site to depths from 4 to 7 feet below the existing site grade. A map showing the location of our explorations may be found on Plate A-2, Site Exploration Map, attached to the end of this letter.

Based on the results of our preliminary field observations as well as on our cursory review of applicable surficial geologic maps, the site is overlain 6 inches of topsoil. It should be noted that several structures (barns, sheds, fences, etc) are on the property. Isolated areas of undocumented fill should be anticipated in these areas. The thickness of the fill will depend on the original topography of the site. Underlying the fill or topsoil, we encountered soils mapped as consisting of Holocene and Upper Pleistocene-aged younger alluvial-fan deposits. These soils persisted to the full depth of our explorations (approximately 7 feet). Where observed, this deposit consisted of fine-grained dominated soils composed of medium brown, stiff, SILT (ML) and SILTY CLAY (CL-ML) with varying amounts of fine sand. This unit was also observed to contain frequent fine pinholes and large root holes throughout.

Groundwater was not encountered in any of the test pits advanced as part of this preliminary investigation. Seasonal fluctuations in precipitation, surface runoff from adjacent properties, or other on or offsite sources may increase moisture conditions; groundwater conditions can be expected to raise several feet seasonally depending on the time of year. However, it is not anticipated that groundwater will impact the proposed development as currently envisioned.

Potentially collapsible soils were observed at the subject in each of the test pits advanced at the site. Collapse (often referred to as “hydro-collapse”) is a phenomena whereby undisturbed soils exhibit volumetric strain and consolidation upon wetting under increased loading conditions. Collapsible soils can cause differential settling of structures and roadways. Collapsible soils do not necessarily preclude development and can be mitigated by over-excavating porous, potentially collapsible soils and replacing with engineered fill and by controlling surface drainage and runoff. For some structures that are particularly sensitive to differential settlement, or in areas where collapsible soils are identified at great depth, a deep foundation system may need to be considered.

Soils that have a potential to collapse under increased loading and moisture conditions are typically characterized by a pinhole structure and relatively low unit weights. In general, potentially collapsible soils are observed in fine-grained soils that include clay and silt, although collapsible soils may include sandy soils. Results of our laboratory testing indicated that the subsurface soils have a low potential upon wetting, with the collapse potential ranging from 1.0 to 1.41 percent. Foundations should be constructed on a minimum of 18 inches of structural fill. Areas of localized higher collapse potential however may exist on site. If areas of fine-grained soils with large pinholes are encountered, GeoStrata should be consulted to conduct further localized collapse testing.

Based on the subsurface conditions encountered at the site, it is our opinion that the subject site is suitable for the proposed construction provided that the recommendations contained in a project specific report are complied with. Additional geotechnical parameters, such as settlement, bearing capacity, lateral earth pressures and pavement sections will be provided in our forth coming geotechnical investigation. The geotechnical report will be prepared upon acceptance of the proposed development concept.

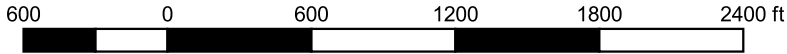
The conclusions and recommendations contained in this memorandum which include professional opinions and judgments, are based on the limited information available to us at the time of our evaluation, the results of our field observations, our limited subsurface exploration and our understanding of the proposed site development. All recommendations or conclusions in this memorandum are subject to change. This memorandum was prepared in accordance with the generally accepted standard of practice at the time the report was written. No other warranty, expressed or implied, is made.

This memorandum was written for the exclusive use of RM Construction Services, LLC and only for the proposed project described herein. It is the Client's responsibility to see that all parties to the project including the Designer, Contractor, Subcontractors, etc. are made aware of this memorandum in its entirety. We are not responsible for the technical interpretations by others of the information described or documented in this memorandum.



Legend

Site Boundary



1:9600



GeoStrata
Copyright, 2020

RM Construction Services LLC
Shramm Plat A
Payson, UT
Project Number: 1546-001

**Plate
A-1**

Site Vicinity Map

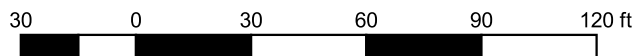
SHRAMM - PLAT 'A'

Located in Section 8,
Township 9 South, Range 2 East, Salt Lake Base and Meridian
City of Payson, Utah County, Utah



Legend

- Site Boundary
- Approximate Test Pit Location



1:600



GeoStrata
Copyright, 2020

RM Construction Services LLC
Shramm Plat A
Payson, UT
Project Number: 1546-001

Site Exploration Map

**Plate
A-2**