



yond the scope of this investigation. We believe this investigation was conducted in accordance with our Services Agreement dated September 22, 2016 (CTLT Proposal No. CS-15-0004-CM2-R1).

The following section summarizes the report. A more complete description of the conditions found, our interpretations, and our recommendations are included in the report.

EXECUTIVE SUMMARY

The entire site has been disturbed by previous gravel extraction activities and the production of asphaltic concrete. At the time of our recent field investigation, two dominate stockpiles of asphalt pavement millings existed in the eastern portions of the site. The stockpiles were about 50 feet high and underlain by what appeared to be 20± feet of sand and gravel fill containing asphalt debris. Fill of various types was encountered surficially throughout the site in two other of our six holes drilled on the property. Natural materials consisted of combinations of clay and sand and gravel. Exclusive of the stockpile area, bedrock was encountered at depths between 14 and 32 feet. Groundwater was encountered as shallow as 3.5 feet near the old production silo area and as deep as 17 feet on the west end of the site, exclusive of the stockpile area.

Our studies and those readily available from other sources indicate the steeper, east-facing slopes are potentially unstable. The irregular ground to the north of the stockpiles contains asphalt debris and some seasonal seepage. Historically, we have seen some evidence of soil creep in this area. We anticipate the ground to the east of the stockpiles also contains fill, but bedrock likely occurs at shallow depth. There was a shallow slope failure at the toe of this slope during the development of the commercial project east of the site. These slope issues should be further evaluated, but likely can be mitigated by careful site planning and grading.

Grading of the site will likely be extensive. We believe site grading and utility installation across the property can be accomplished using conventional, heavy-duty con-



struction equipment. The debris-laden and undocumented fills will need to be reconstructed or removed. The materials, if free from debris and organic matter, can be reused. The stockpiled millings could be used as fill in areas planned for parking and other “non-structural” purposes.

Conventional spread footing foundations and slab-on-grade floors will likely be appropriate for lightly loaded structures. Subgrade modification consisting of the placement of dense fills may be an attractive alternative where foundation loads are higher. Straight shaft drilled pier foundations will be appropriate for more heavily loaded structures. The risk of poor slab performance is variable, but normally in the unacceptable ranges where supported by debris fill or expansive soils/bedrock at shallow depth.

Overall plans should provide for the controlled conveyance of surface runoff to reduce issues related to the erosion of the surficial soils.

SITE CONDITIONS

The west side of the site is about 350 feet east of Centennial Blvd. The southern edge of the property fronts to West Fillmore St. in Colorado Springs, Colorado. The site extends easterly to an existing commercial development (Fillmore Heights). The ground to the north is currently vacant. The site is considered to lie on the east flank of a topographic area often referred to as “The Mesa”. Figure 1 contains a vicinity map of the site.

The ground surface slopes downward to the east at varying grades. Generally, the central portions of the site containing the old asphalt batch plant, are depressed in relationship to the surrounding ground. There is a fill earth berm along the west property line that also extends about 400 feet to the east along the north and south property lines. The main entrance into the site is at the east end of the southern berm. From the main entrance, West Fillmore St. slopes down to the east in a cut section relative to the property.