

**Condition 26****Geotechnical-Subsidence and Lurching**

Prior to completion of the improvement plans for the proposed facilities, a geotechnical report that addresses the potential for lateral spreading, ground subsidence, and ground lurching and provides measures to reduce potential impacts to less than significant shall be prepared and approved by the Planning Director. These recommendations shall be incorporated into the design of the improvement plans for the proposed facilities.

**Evidence of compliance:**

The potential for lateral spreading, ground subsidence (settlement), and ground lurching at the project site was evaluated by Fugro West, Inc., and the findings of their evaluation and their recommendations for design of the wastewater system to protect against significant impacts are contained in their project Geotechnical Report dated March 9, 2004, the Addendum and Update to Geotechnical Report, dated October 24, 2011.

Ground lurching occurs as the ground is accelerated during a seismic event when underlying stratigraphic units detach and allow near surface soils to move differently from the underlying soils. The difference in movement between surface and underlying soils can potentially cause damage to facilities and buried pipes. Seismically induced settlement, collapse, or lateral spreads can occur in soils that are loose, soft, or that are moderately dense and weakly cemented, or in association with liquefaction.

Since the project area is in a historically seismic area, and the underlying soils have the characteristics noted above, although negligible, the potential exists for lateral spreading, ground subsidence and ground lurching to occur at the site during a seismic event. Pertinent findings based on site specific soils investigations are contained within the Geotechnical Report and summarized as follows:

**Section 5.8.2 of Geotechnical Report (Pipeline Network):**

*"..... The estimated seismic settlement that could occur during the design basis earthquake is estimated to be approximately 1 inch, with a range of negligible settlement to about 1-1/2 inches of settlement."*

**Section 5.8.3 of Geotechnical Report (Pump Stations and Standby Power Buildings):**

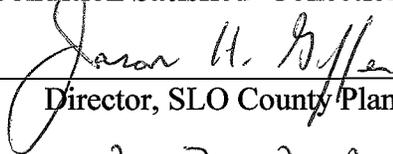
*"..... The grading recommendations of this report are intended to limit seismic settlement to less than 1 inch below structures, and maintain foundation support for the structure during the design basis earthquake."*

**Section 5.8.5.1 of Geotechnical Report (Broderson Disposal Site):**

*"..... there is a low potential for liquefaction to occur at the site or within the offsite areas downslope of Broderson as a result of the effluent disposal. There is essentially no change in the potential for liquefaction or seismic settlement to occur within the soils encountered as a result of the effluent disposal system and estimated mounding at Broderson."*

Design of the Los Osos Wastewater Project is based on recommendations contained within the above referenced Geotechnical reports which are intended to reduce potential impacts of lateral spreading, ground subsidence and ground lurching to less than significant. The design recommendations are contained in section 6 of the Geotechnical Report and section 4 of the Addendum to Geotechnical Report.

**Condition Satisfied—Collection System**

  
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Director, SLO County Planning

2 - 7 - 2012

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Date