

PROJECT NARRATIVE

Ongoing topographic comparisons made by the land surveyor indicate that the adjoining southerly property (18460 Coastline) has experienced movement for years. Recent survey readings indicate that the subject residence is now experiencing movement, therefore, it is proposed to construct an emergency row of soldier piles with a grade beam cap to enhance the existing stability of the level pad and residence. Studies, research, and photographic evidence have confirmed the non-conforming construction and grading (248 cubic yards of cut and cubic yards of fill) on the southerly property, including removal of lateral support from the subject property.

The non-conforming construction includes unpermitted expansion to 18460 Coastline, which was specifically disallowed by DPW (due to its increase in the driving force on the slope face), an unpermitted subterranean pool equipment vault constructed of unreinforced masonry, a series of unpermitted non-conforming railroad-tie retaining walls were utilized to extend the top of the slope (18460 Coastline) outward by backfilling the walls, and a series of unpermitted railroad tie platform steps backfilled on the descending slope to the lower lot. The leak in the pool equipment resulted in additional infiltration into the fill. The previously demolished pool had been filled allowing water from the pool to infiltrate into the fill and over the slope face. The excessive moisture in the fill (18460 Coastline) has likely included moisture migration laterally onto the subject property. Excessive moisture in the fill result in differential movement. On the adjoining southerly site, there was not an approved drainage plan implemented for the existing unpermitted work. An SWPCP was apparently not properly maintained.

The series of unrepaired slope failures on the southerly property and the subsequent movement, has negatively impacted the subject property. The proposed emergency pile cap is to be designed to act as a grade beam between the recommended soldier piles, further enhancing the stability of the existing subject level pad and residence, and is the most effective means to prevent further

movement of the pad and residence. The soldier piles with cap and water feature is required as it will reduce the cost of the stabilization project by decreasing the number and diameter of piles, provides for reasonable use of the area created by the construction of the soldier piles and grade beam cap while increasing stability by providing an axial load on the piles, and prevents infiltration of site irrigation/rainfall into the underlying fill (for footprint area). The proposed construction reduces the surcharge on the underlying earth materials at the top of the slope by not backfilling a retaining wall with compacted fill which is contraindicated.

The proposed project does not intend to and does not address the existing failures located downslope which will likely continue as long as the area is affected by the unpermitted structures, illegal grading, illegal retaining walls, non-permitted drainage, and lack of proper compaction for fill placed in the rear yard area remains unaddressed (18460 Coastline).