

CITY OF CLAYTON

OAKHURST GEOLOGIC HAZARD ABATEMENT DISTRICT

GHAD NEWSLETTER AUGUST 2002

Since our last Newsletter in March 2001, there have been several new developments in the soils investigations and the City's lawsuit filed against Presley Homes that we wish to communicate to you in this GHAD Newsletter.

Structural Damages

Other than some minor sidewalk damage observed along 5151 and 5177 Keller Ridge Drive, there has not been any additional reported damage to public improvements and open space areas beyond that described in previous Newsletters. We were informed about one house on Kelok Way above the North Valley Park (on Golden Eagle Place) where one end of the house settled approximately nine inches. Owners of the house re-leveled it by injecting grout underneath the foundation. This repair was completed by Geo Grout, Inc. Continued monitoring has not revealed other houses in the Kelok Way area impacted by this condition to this degree although minor movement has been reported in the patio slabs of two Kelok Way homes.

The property owner's Geotechnical Engineer reports that the differential settlement of this house is the result of "hydrocompression" of the deep engineered fill under this lot and the expansive nature of the near surface soils on this lot. That Geotechnical Engineer also reports that the hydrocompression process at this location will *continue* to take place over a period of about 7 years after the irrigation of houses in this area was underway.

Soils Investigation

The City, on behalf of the GHAD, continued monitoring surveys of the surface improvements through June of 2001. These surveys showed that there has been continual movement vertically and horizontally throughout the Eagle Peak subdivisions and the areas along Keller Ridge Drive up to Golden Eagle Place. During the last nine months of monitoring, this movement was in the range of fractions of inches, some of which is attributed to the swelling and shrinking characteristics of clay soils during wet and dry seasons.

Berlogar Geotechnical Consultants was retained by GHAD to perform borings and obtain soils samples to allow laboratory testing and evaluation. In the last Newsletter, we expressed concern that there was deep-seated ground movement occurring that would be very difficult, and expensive, to address and mitigate. Based upon this latest investigation, the good news is that there is not a deep-seated movement problem. The movement recorded is due to a phenomenon known as "hydrocompression".

Hydrocompression is a gradual process that is still underway in parts of the GHAD District. To date, hydrocompression has manifested itself by one or more of the following local surface impacts:

- a) differential settlement of individual homes;
- b) lateral extension between houses, driveways and sidewalks (various combinations) that result in open gaps that increase with time;
- c) distress to A.C. pavement in some roadways either by the development of open cracks (in the A.C. pavement) or by the bulging of the A.C. pavement adjacent to the curb and gutter.

With regard to differential settlement on individual houses, the detrimental effects of hydrocompression may manifest itself through one or more of the following impacts:

- a) sloping floors;
- b) cracking of interior wall and ceiling finishes (drywall) in the home;
- c) cracking of exterior stucco finish of the house;
- d) cracking of window and door openings, lateral separation between houses, patios, decks, sidewalks, driveways, and/or curbs and gutters.

Geotechnical Engineers retained by the GHAD believe that the hydrocompression process may be less than 50 percent complete in some portions of the Oakhurst Development and they expect as much as 14 inches of hydrocompression over the next ten years in some areas. This magnitude of hydrocompression could result in several inches of differential settlement to some homes, although most homes are unlikely to be significantly affected by this process.

Unfortunately, there is nothing anyone can do to either stop the process or accelerate it so that it completes its movement sooner. The City, GHAD, and/or homeowners can only perform aesthetic maintenance until the soils settlement process is complete. Consequently, the City will forego any additional investigation or inspections unless there are any significant changes noted.

City Lawsuit

We are pleased to announce the City has reached a settlement with William Lyon Homes (formerly, Presley Homes of Northern California). The City will receive a lump sum payment of \$628,500. In exchange, the City will drop its lawsuit that sought recovery for damage to the City's streets and open space. In addition, the City will accept the remaining open space parcels that were offered for dedication yet not previously accepted by the City.

On July 1st of 1999, the GHAD had approximately \$232,000 in its reserves. The GHAD was established because the City Council saw the potential for this movement. Funding for the GHAD was to come from small contributions from the affected areas. However, state law changed which now requires a vote by the people of the affected area to maintain or change these assessments. Due to the denial of any assessment increase over the past three years by the Oakhurst residents to fund this low-cost insurance, the GHAD has only been able to collect an additional \$62,000 in assessments and \$8,610 in interest. During this same period, the GHAD expended approximately \$485,000 for monitoring surveys, soils investigations, and legal services along with a minimal amount of routine maintenance and administration. Since the GHAD's reserves were exhausted near the end of 2000, the City advanced the monies for the required services with approximately \$182,390 from the City's General Fund.

The lawsuit settlement funds will first be disbursed to reimburse the City's General Fund for the money loaned to the GHAD. Next, funds will be expended to repair the slide above Obsidian Court, broken v-ditches above Antelope Court, and to investigate the potential slide below Kelok Way. Berlogar Geotechnical Consultants has estimated the cost for these projects to be \$75,000, \$75,000 and \$62,000, respectively. The remaining funds, approximately \$234,000 will be held by the City in a separate account to be used for future street repairs in the affected areas of the Oakhurst Development.

For additional information or questions regarding this Newsletter, please contact GHAD District Manager, Rick Angrisani at 925.672-9700, or Gary Napper, City Manager, at 925.673-7300.

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